CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF COMPANIES
LISTED UNDER MANUFACTURING AND ALLIED SECTOR AT NAIROBI
SECURITIES EXCHANGE, KENYA

BY
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DECLARATION

This research project is my original work and has not been presented for a degree at any other university or for any other award.

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Lisy Marigu Mutua

D53/CTY/PT/38130/2017

Approval

This research project has been submitted with my approval as Kenyatta University Supervisor.

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DEDICATION

I dedicate this work to my parents Joshua Mutua and Beth Mutua for their everlasting love and support during my research project. To my husband Robinson Njeru for his patience and unfailing support during my study. To my sons Victor Kirathimo and Wisdom Mutoria, may this project be a motivation to them.
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OPERATIONAL DEFINITION OF TERMS

Capital structure: Capital structure is arrangement of the main sources of funding of an organization. In this study, the sources of funds are retained earnings, long term debt and equity. This is how a firm organizes to use the different sources of funds.

Retained earnings: Retained earnings are a source of fund that a firm may use after investors have received their disbursements. Therefore it is an internal source of finance.

Long term debt: This is the source of financing for firms in form of loans that is owed by a firm for duration that exceeds one year.

Equity: This is a source of finance referring to the amount attributable to the owners of a firm. In this study, the amount excludes the internal amount of retained earnings.

Financial performance: The ability of a firm to maximize on its wealth and profitability. Indicators of the financial performance may include: how well a firm is able to meet financial obligations, high revenues and operating efficiency among others.

Return on Assets (ROA): This is a financial ratio that is used to measure financial performance of the company through determining its ability to use its resources to make profits.

Return on Equity (ROE): This is a financial ratio that is used to measure performance of a firm by establishing the firm’s capacity to use the shareholders equity to create revenues.
# ABBREVIATIONS AND ACRONYMS

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<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>EPS</td>
<td>Earnings Per Share</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>KAM</td>
<td>Kenya Association of Manufacturers</td>
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<td>KITP</td>
<td>Kenya Industrial Transformation Programme</td>
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<td>KNBS</td>
<td>Kenya National Bureau of Statistics</td>
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<td>M&amp;M</td>
<td>Modigliani and Miller</td>
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<td>NSE</td>
<td>Nairobi Securities Exchange</td>
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<td>PPI</td>
<td>Producer Price Index</td>
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<td>ROA</td>
<td>Return on Assets</td>
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<td>ROE</td>
<td>Return on Equity</td>
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<td>ROI</td>
<td>Return on Investment</td>
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<td>SMEs</td>
<td>Small and Medium Enterprises</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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<td>VIF</td>
<td>Variance Inflation Factor</td>
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ABSTRACT

Capital structure is a prevalent subject that has continued to pose a challenge among the scholars in the field of finance and has increased remarkable attention since 1950’s. Capital structure is a word used to signify the composition of debt and equity that a firm uses to finance its operations. The capability of a firm to define its capital structure is a complex assignment to attain. The key sources that organizations may get their finances from are internal funding which are retained earnings, and the external funding which could either be equity or debt. Globally, the manufacturing and allied sector has had a major role in the development of the economy by motivating and supporting high industrious growth, enhancing employment prospects for semiskilled labor and constructing country competitiveness through exports. However, most of the developing countries have not been able to cultivate a strong manufacturing and allied sector. For instance, in Kenya, growth has mainly been determined by the agriculture and services sectors respectively. The manufacturing and allied sector’s contribution of Gross Domestic Product has remained stagnant with inadequate increases in the previous three decades, giving an average of 10% from 1964-73 and increasing slightly to 13.6% from 1990-2007 and averaging below 10% recently. Moreover, the Return on Equity and Return on Assets of most of the companies listed under Manufacturing and allied sector has been declining. The general objective of this study was to assess the capital structure and financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya. The specific objectives that guided the study included determining the influence of retained earnings; long term debt; and equity on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya. Theories that were used to underpin the variables of the study were: pecking order theory, Modigliani and Miller theory of capital structure, trade off theory and the agency theory. Data was analyzed, findings and conclusions based on secondary data which was obtained from published and audited financial statements of the target population. The study employed descriptive research design while data was analyzed using multiple regression analysis. The target population of interest in this study comprised of all the eight companies listed under manufacturing and allied sector at the Nairobi Security Exchange, Kenya for a period of six years from 2013 to 2018 and a census of the companies was taken. Retained earnings and equity were concluded to have negative influence on financial performance of firms listed under manufacturing and allied sector in Kenya. Long term debt however, was concluded to have a positive impact on financial performance of firms listed under manufacturing and allied sector in Kenya as measured by both Return on Assets and Return on Equity. The study recommended that the management of manufacturing and allied sector should adopt strategies that ensured optimum capital structure. It was also recommended that companies listed under manufacturing and allied sector should come up with more investing strategies and products diversification so as to increase their proceeds and hence shareholders expectation to maximize value would be met.
CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Capital structure is a prevalent subject that has continued to pose a challenge among the researchers in world of finance and has increased remarkable attention. Capital structure is the most significant decision in a company not only on the maximization of shareholders wealth, but also the decision determines the ability of the company to sustain a competitive edge (Arulvel & Ajanthan, 2013). Leon (2013) agrees with this ideology by asserting that a skill by company to meet the shareholders interest as well as be able to deal with the competitive environment is closely linked to its capital structure. Capital structure is a word used to signify the mixture of debt and equity which is used by a company to fund its operations. The capability of a company to define its capital structure is a complex assignment to attain. The key sources that organizations may get their finances from are internal funding which are retained earnings, and the external funding which could either be equity or debt (Nassar, 2016).

Retained earnings refer to the amount of company’s profit that remain after allotment of surpluses to the stockholders and then plowed back to the business. Retained earnings are quite significant source of internal funding in a company because they do not involve floatation costs as well as increasing financial responsibility and risk. Therefore, retained earnings promote growth of a company as well as its ability to maximize the shareholders wealth (Masood, 2018). Moreover, companies have access to various sources of borrowing which could either be long term or short duration obligation. Short period liability may be cheaper compared to long duration obligation however may pose a higher risk to a company
compared to long term debt because it may require periodic renewal. A company may find itself in a watershed if it is not able to renew its debt (Rai & Danilevskaia, 2005). Furthermore, the choice between debt and equity funding by a company is dependent on many factors that may include prevailing market circumstances, share prices etc. Equity may be in form of common stocks or preferred stocks. In instances where a company faces income shortages, it would be prudent for it to choose equity financing because obtaining debt and paying it back would be challenging (Salman & Munir, 2012).

Moreover, studies conducted on capital structure and financial performance of developed economies give varied source of knowledge on capital structure. A study that sought to determine the influence of capital structure on performance of companies by examining 272 American companies registered at New York Stock Exchange for a period of 2005-2007 revealed that there is a connection amid capital structure of a company and the firm’s productivity (Gill, Biger, & Mathur, 2011). Further, the same results were revealed using an experimental study of U.S regions by (Corey, Ying, & David, 2015). Furthermore, a study by Kang, Jyrki and Mervi (2018) on capital structure and firms’ yield of European SMEs revealed that SME borrowing threat regulates the correlation among capital structure and firm productivity. Additionally, a research focused on 5,050 enumerated firms in Eight European countries revealed that owners in small level of lawful shareholder safeguarded countries may use the firm’s capital structure to attend their individual benefits (El-Chaarani, 2015).

Further, Allen and Mizuno (1989) articulate that productivity of a firm is the most important cause of Japanese company capital structure. Moreover, there are also researches that were conducted on capital organization and financial presentation in developing countries. A
study using 136 quoted companies in South Africa revealed that full debt to overall equity and long period debt to whole assets were negatively linked to return on equity as a measure of performance (Abata, Migiro, Akande, & Layton, 2017). A study by Abor (2007) on wealth arrangement and performance of SMEs in South Africa and Ghana revealed that capital structure impacts financial performance although not completely. A study of a sample of 10 Nigerian listed banks in the period of 2005 - 2012 established that capital structure had weighty progressive association with the economic wellbeing of listed banks in Nigeria (Adesina, Nwidobie, & Adesina, 2015).

Recently, studies were conducted on financial position and commercial productivity in the Kenyan companies. For example, Mburu (2015) researched on the impression of financial structure on achievement of Non-financial recorded businesses at NSE. Ongombe (2018) examined financial structure decisions and economic health of sugar industrial companies in Kenya; Masavi, Kiweu, Kinyili (2017) researched on Capital position and business attainment of Agricultural firms registered at Nairobi Securities Exchange (NSE) in Kenya. The results of these studies plus many others are of significant importance in investors decisions.

1.1.1 Capital Structure

Financial position refers to composition of debt and equity that companies use to fund their developments. The company increases liable capital through distributing common and preferred stock whereas liability can be categorized in form of credits owed, bonds, debentures etc. Stock holders are the possessors of the company and therefore require longstanding obligation towards the company in expectation that its value will grow and therefore maximize their wealth. In distinction, the obligation holders are the creditors of the
company and they have no longstanding to the firm because their main interest is on opportunite settlement of their sum (Chadha & Sharma, 2016). Managers of a firm should then consider the interests of both equity and debt holders in order to make valuable financing decision that will help achieve the objectives of that firm.

Further, discussions on capital structure have increased significant consideration since the 1950s, great interest being to find out how a firm can have an ideal ratio regarding the equity and liability which could reduce the principal expense and make best use of the organization’s worth. Formation of capital position includes the sequence in settlements between the concerned parties of a company, each of them targeting on how to maximize their benefits. In this regard, managers should aim at growing their control, whereas shareholders should aim at growing the value of the firm (Nenu, Vintilă, & Gherghina, 2018). This would therefore mean that studies on capital structure are expected to continue on course considering that this is a major financing decision in any organization. A firm may not do without capital structure because this is what defines where the firm will acquire funds from and the different sources that include Equity and Debt financing.

According to Mwangi, Makau and Kosimbei (2014), communal failure amid corporations in Kenya has been linked to their funding patterns of the companies. Significant exertions to recover the poorly and liquidating enterprises have concentrated on economic reorganization. An excessive predicament for administration and stockholders similarly is whether there occurs an optimum capital structure and how it impacts financial performance. Further, the study revealed that the relationship between capital structure and financial performance was progressive but frail. The preceding studies show that capital structure strongly affects the financial performance of a firm either positively or negatively.
1.1.2 Financial Performance and its measures

Financial performance in view relating to shareholders refers to the measure in what an organization is doing in terms of making the best use of the shareholders’ wealth. Shareholders are the owners of the firm. This therefore necessitates many organizations to invest or focus on how to create more worth in order to satisfy the owners of that particular organization (Åhblom, 2017). Financial performance of a firm greatly contributes to potential investors decisions. It helps them make informed decisions on where or which organization to invest their wealth in. Moreover, financial achievement may also mean attainment of a corporation’s financial productivity in a given duration that includes assembling and distribution of finance measured by capital sufficiency, liquidity, solvency, efficiency, leverage and profitability (Fatihudin, Jusni, & Mochklas, 2018). Financial performance is therefore the degree relating to the capacity of a firm in generating wealth which can be seen on the financial statements of that organization.

Fatihudin, Jusni and Mochklas (2018) assert that there are numerous ratios that can be done to quantify financial attainment some of which comprise; Liquidity ratios in addition to Profitability proportions. Profitability ratios would include Return on Assets (ROA), Return on Equity (ROE) or Return on Investment (ROI) among others. Moreover, Liquidity ratios may include fast ratio, recent ratio and currencies ratio. Furthermore, profitability ratios remain indicators of how successful the administration of a firm is as well as give the firm’s supervisory authority information on how the different divisions of the organization perform. Additionally, equity and debt holders assess their investments using the profitability ratios. ROA demonstrates capability of a business to make use of its resources in generating income while ROE shows the proportion of a firm to generate income from shareholders’ equity. It
is therefore important to note that even if the two ratios are measures of profitability, they are unlike in indicating the performance of a firm (Şamiloglu, Oztöp, & Kahraman, 2017). A firm obtains funds from stockholders and liability holders so as to finance its savings. Efficient usage of finance from all sources shows that the management in an enterprise is successful.

1.1.3 Capital Structure and Financial Performance

The capability that a business has in fulfilling the shareholders’ interests is closely connected to its structure or composition of its capital. This is mainly so because capital structure is crucial on how the organization’s funds its general processes and development by using debt, equity or mixture of securities (Arulvel & Ajanthan, 2013). Amah and Ken (2016) agrees with this analogy by asserting on the relevance of financial structure in relation to the capacity of an organization to meet its stakeholder’s needs (Amah & Ken, 2016). The capital structure decisions may have influence on the achievement of a company regarding its value and concern moreover by fluctuating the expected income or the cost of capital or both.

The connection amongst capital position and financial fulfillment has established much consideration in world of funding literature. This means that there yet many answers that researchers seek as far as capital structure and performance are concerned. Various scholars have established a positive rapport concerning capital structure and productivity although others have instituted out that the liaison is negative (Pratheepkanth, 2011). This is a heated debate that finance scholars are faced with. For example, in their study Otieno and Ngwenya (2015) it was observed that companies that have high financial performance engage more debt than companies that are less gainful perhaps because gainful companies have a lower
financial risk. The examination likewise revealed that those corporations that consume additional of debt financing performed better compared to those that used low debt financing. Moreover, a study by Al-Qudah (2017) stood piloted towards determining a link amid capital arrangement and economic achievement using the debt ratio to check on capital structure while productivity percentages remained castoff to check on the business attainment. It emerged that there existed a constructive association among debt ratio and ROA. However, there was an adverse link amongst debt ratio plus ROE and therefore a weighty connection existed between capital position and the organization achievement. This clearly displays that different researchers have come up with different findings on whether there is any linking amid the financial structure of a business and its positive attainment.

1.1.4 Nairobi Securities Exchange (NSE)
The Nairobi Securities Exchange (NSE) stands prominent African Interchange, established in Kenya some of rapidly emergent markets in Sub-Saharan Africa. Started back trendy 1954, NSE has a six era culture in listing equity and debt securities. It bids world class transaction ability for local and international investors seeking to gain exposure to Kenya and Africa’s financial growth. NSE demutualized and self-listed in 2014 and has a significant part in growth of Kenya’s economy by boosting investments as well as assisting local and international firms’ access gainful capital. Moreover, NSE works under the authority of the Capital Markets Authority of Kenya. The institution stands to be complete affiliate of the World Coalition in Exchange, an author participant in African stocks interactions link and the East African Securities connections relationship. Further, companies listed at NSE fall under 14 sectors which include: Agricultural; Automobile; Banking; Commercial and Services; Construction and Allied; Energy and Petroleum; Insurance; Investment; Investment Services;
Manufacturing and Allied Sector; Telecommunication and Technology; Real Estate Investment trust; and Exchange traded fund sector (NSE N. S., 2019).

1.1.5 Companies listed under manufacturing and allied sector at Nairobi Securities Exchange (NSE), Kenya

Manufacturing and allied sector has Eight companies listed at NSE which include: BOC Kenya Ltd whose major activity is the creation and transaction of engineering gases, health fumes and bonding merchandises; British American Tobacco Kenya Ltd which deals with tobacco farming, tobacco processing, manufacturing and selling of tobacco products; Carbacid Investments Ltd which is involved in mining and sale of carbon dioxide gas; East African Breweries Ltd which has alcohol beverage business; Flame Tree Group Holdings Ltd that stays involved in the commerce of industrial, importing, distributing, purchasing, marketing, distributing and dealing in all kinds of dry cells; Kenya Orchards Ltd which produces food products; Mumias Sugar Co. Ltd whose major undertakings of the corporation are the fabrication and auction of sugar, ethanol, liquid in addition to the production and trade of energy; and Unga Group Ltd deals with the assembly and publicizing of a extensive collection of social diet, animal sustenance and animal wellbeing yields (NSE N. S., 2017-18).

1.1.6 Financial performance of manufacturing and allied sector in Kenya

Manufacturing and allied sector in Kenya has been growing at a slower rate than the economy in the country. Additional price increased slightly by 0.2% in 2017 in relation towards a progress of 2.7% in 2016 (KNBS, 2018). This indicates that the portion of manufacturing in GDP has been sinking with time. The Economic Survey reports for the last five years also continue to confirm that firms in the sector have continued to face growth
challenges. For instance, Producer Price Index (PPI) improved by 3.91 percent in 2015 in association with an upturn of 3.03 in 2014, largely owing to increased expenses incurred in importation of raw resources. Advances to the sector amplified from KSh 237,422 million in 2014 to KSh 290,069 million in 2015 (KNBS, 2016). Further, the sector documented a slowdown progress of 3.5 per cent in 2016 from a reviewed development of 3.6 per cent in 2015. Close immobility in the evolution of that sector stood evident in the unhurried acceptance of credit from KSh 290.1 billion (KNBS, 2017).

Furthermore, the NSE (2017) asserts that most of the manufacturing and allied companies listed at NSE have continued to register decline in their net profits. For instance, BOC Kenya PLC had a net profit of Ksh 255,041,000 in 2016 while at Ksh. 127,847,000; British American Tobacco Kenya PLC had a net profit of Ksh. 4,976,256,000 in 2015, Ksh. 4,234,334,000 in 2016 and Ksh. 3,336,066,000 in 2017; Carbacid Investment PLC had profit after tax at Ksh. 393,863,000 in 2015, Ksh. 375,568,000 in 2016 and 352,300,000 in 2017, all of them indicates a decline in the profits. Carbacid company also issued a profit warning in 2019 (NSE, 2019). Mumias Sugar has continued to make losses over the last five years (2014-2018).

1.2 Statement of the problem

Globally, the manufacturing and allied sector has had a major part in the expansion of the economy by motivating in addition to supporting high industrious growth, enhancing employment prospects for semiskilled labor and constructing country competitiveness through exports. However, most of the developing countries have not been able to cultivate a strong manufacturing and allied sector. In Kenya, economic growth has mainly been determined by the agriculture and services sectors respectively. The country has therefore
gone through an untimely deindustrialization as revealed by the decline in GDP contribution by the manufacturing and allied sector which was at 9.2% in 2016 and 8.4% in 2017. The sector has experienced momentous challenges in the last 15 years. The Vision 2030, the Kenya Industrial Transformation Programme (KITP) and most lately the Big 4 Agenda are key government development plans to help restore the manufacturing and allied sector in Kenya by 2022 along with increasing GDP from the current 8.4% to 15% (KAM, 2018).

The sector’s contribution of GDP has remained stagnant with inadequate increases in the previous three decades, giving an average of 10% from 1964-73 and increasing slightly to 13.6% from 1990-2007 and averaging below 10% recently (KAM, 2018). The latest NSE year hand book (2017-2018) reveals that financial performance as measured by ROE and ROA of most of the companies registered under the sector has been declining. For instance, financial performance as measured by ROA for Mumias company was at 2.5% in 2014, 0.6% in 2015 and at 0.02% in 2016. Further, the financial performance as measured by ROE for the East African Breweries was at 0.6% in 2014, 0.5% in 2015, and 0.7% in 2016 and at 0.6% in 2017. Consequently, the financial performance of those companies has been deprived. Even though there stands numerous studies done in relation to capital position and financial performance in the scope of finance not many researchers focused on how capital structure and financial performance of manufacturing and allied sector as a whole relate. Most of them have looked at all the firms listed at NSE whereas Leon (2013) asserts that the effect of capital structure on financial performance is a dynamic process and is dependent on a sector. For instance, Ogebe and Alewi (2013) studied the influence of financial position of Nigerian companies; Gathogo and Ragui (2014) examined the determinants of capital structure of organizations in Kenya and adopted stratified sampling technique; Masavi,
Kiweu and Kinyili (2017) focused on structure of farming companies registered at NSE by adopting longitudinal research design; Makori and Jagongo (2013) researched on operating capital management and company viability of the companies registered under the manufacturing and construction at NSE.

Moreover, there existed conceptual and empirical gaps that this study sought to address by focusing on capital structure and financial performance in the manufacturing and allied sector in relation to its retained earnings, long duration obligation and equity since they were major bases of finance in most of the companies in the sector according to the NSE Handbook (2017-2018). The methodological gap was addressed by adopting census and descriptive research design. Additionally, most of studies done were not within the Kenyan context. Ajibola, Wisdom and Qudus (2018) studied on capital position and achievement of listed manufacturing firms in Nigeria by adopting the Panel methodology. This research sought to address the contextual gap by assessing the capital structure and financial performance in the Kenyan context.

1.3 The objectives of the study

The general objective of this study was to establish the effect of capital structure on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya.

The specific objectives were:

1. To determine the effect of retained earnings on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya.
2. To establish the effect of long-term debt on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya.

3. To determine the effect of equity on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya.

1.4 Research questions

1. What is the effect of retained earnings on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya?

2. What is the effect of long-term debt on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya?

3. What is the effect of equity on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya?

1.5 Scope of the study

The main intention of this study was limited to examining capital structure and financial performance in the context of the companies listed under manufacturing and allied sector at NSE in Kenya in duration of 6 years from 2013 to 2018. To justify why the period under study was of six years 2013-2018, the researcher found out that most of the companies in the sector faced financial decline each year as illustrated on the statement of the problem obtained from the NSE (2017-18) hand book. The content scope was majorly on the influence of capital structure on the financial performance. This was informed by the fact that capital structure is a major financial decision that a firm has to make. Moreover, the geographical scope was mainly within the city of Nairobi. This was because most of the companies head offices were located in Nairobi. The population scope of the study included all the 8 companies listed under manufacturing and allied sector at the Nairobi securities
exchange in Kenya. This study concentrated on the matters raised in the research questions. It was founded on secondary figures gathered on evaluation of records that included the NSE handbooks, Economic Survey documents; annual reports of the companies listed at NSE, Kenya under manufacturing and allied sector.

1.6 Significance of the study

Given that the concept of capital structure is a significant choice in attainment of a firm, this study was conducted towards educating organizations on the fundamental importance of capital structure to its performance. This was achieved through the analysis of the various components of capital structure as indicated in the specific objectives of this study. The study was of much significance to Kenya Association of Manufacturers (KAM) and their concern on why the productivity of companies listed in the sector was declining was answered. Further, KAM’s tactical aim on enhancing manufacturing development and apprehension of 15% contribution of the sector to the economy GDP would be realized through the knowledge of the effects of capital structure on performance of its companies.

The study was also timely considering that the government was trying to put on strategies on how the sector could be revamped. Questions as to whether the capital structure would be influencing the financial performance of companies listed under manufacturing and allied sector were answered. Moreover, the research was significant to business managers because they are involved in making financing decisions which is mainly the aspect of capital structure. It would help them understand that the decision of capital structure was critical and heavily determined the future of that firm. It motivated managers to know that capital structure may greatly influence their performance either positively or negatively.
Additionally, business managers would have a wide knowledge to apply in their day to day business operations majorly on the optimal deployment of the firms’ capitals.

1.7 Organization of the study

This study was arranged in five sections that included: the preceding chapter one which makes available background of the study, statement of the problem, justification of the study, and the period of coverage. Chapter two provided the literature review of the capital structure and financial performance. Chapter three gave the methodology used in the study, while Chapter four provided the analysis and findings of the study and their interpretation. Finally, chapter five included the summary and conclusions of the study.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter analyses the collected works related to the study. It includes the theoretical review, empirical review, summary of the literature review and the conceptual framework. The basis of the study is to evaluate the capital structure and financial performance of companies listed under manufacturing and allied at NSE, Kenya. The literature being reviewed is acquired from online journal articles, websites, books and printed academic resources.

2.2 Theoretical Review
The theoretical review provides the main theories that were found to underpin the variables of this study. A theoretical study has the findings engrossed to the prevailing theories in order to develop new hypothesis that can be tested. This study reviews the pecking order theory, trade-off theory, Modigliani & Miller theory of capital structure and the agency theory.

2.2.1 Pecking Order theory
Pecking order theory was the main theory of the study because it explained the preferred order of funding using all the sources of fund (retained earnings, long term debt and equity). The theory as hypothesized by Myers and Majluf (1984) asserts that there is irregular information between the insiders of a company and the outside investors. Managers know the true position of a firm as far as its value is concerned compared to outside investors. Pecking order theory has various limitations which include: it does not take into account the consequence of levies; charge of allotting fresh shares; intervention costs; and economic
anguish of the venture prospects. Assumptions involve; existence of perfect market; organizations with advanced productivity use interior funding more than debt; and there is no objective capital structure (Khan & Nafees, 2013). According to Myers (1984), organizations fund their projects with retained earning when likely. When the retained earnings remain inadequate, at that time debt is employed. It is only in risky cases when organizations use new equity funding. Therefore, the order of monetary sources preferred is the internal financing from profits (retained earnings) then debt then the chosen stock and then ordinary stock is the last choice. The theory forecasts that the issuance of equity (common stock) is the last alternative sources of funding. It claims that there is not at all ideal debt proportion. Organizations will prefer internal financing of retained earnings because there are no floatation costs as is the case with the external financing. It is only at the point when the reserved incomes stand not enough when an organization may choose debt funding as its second option (Bhama, Jain, & Yadav, 2017).

Retained earnings may be defined as incomes that are internally obtainable cash flows. They may also mean; the outstanding profits of an organizations, firm reserves or free cash flows. Retention decisions are important in any organization that considers savings culture as a way of enhancing growth of that firm (Tirmizi & Ahmad, 2013). The pecking order concept is applicable to the research because it advocates for retained earnings financing as the first option compared to other external financing because no overheads (bankruptcy in addition to transaction outlays) linked using it. The study sought to define the influence of retained earnings on financial productivity. Moreover, in an ideal situation, the pecking order theory may not apply especially on the part argument that insiders of an organization may have more information than the outside investors. This is because some of the external investors
are able to analyze the financial progress of a firm and anticipate decline or progress in financial performance of a company. Further, a company may opt to use debt funding even when the retained earnings are available.

**2.2.3 Modigliani and Miller theory of capital structure**

The famous Modigliani-Miller (henceforth MM) proposition that the worth of an enterprise rests on the productivity and not on its capital structure is openly a claim to the field of finance of the principle that money is neutral. This theory was developed by two professors namely Modigliani and Miller in 1958 (Miller, 1977). The MM proposition is the original theory about capital structure and was hypothesized under a perfect market condition. It states that business worth may be no chance related to capital structure or financing decisions (Mostafa & Boregowda, 2014). In an ideal situation, the price of a company may perhaps be linked with the capital structure of that firm since debt holders are paid first before the shareholders in an event of a financial leverage. According to Miller (1977) there were several assumptions that they made which included; principal arcades are impeccable when no bankruptcy and operation expenditures are present; there is symmetry of market data and without impact of obligation in a firm’s income past charges and tax. However, it is important to note that in an ideal capital market, there exists bankruptcy and transaction costs, asymmetric information and the impact of debt on income before interest and tax is there.

Modigliani and Miller developed dual proposals beneath an ideal capital market. The first was that the importance of a business is not at all associated to its capital position while the subsequent suggestion state that the fee of equity of a leverage establishment is equivalent to the charge of equity of an unleveraged corporation and an additional first-rate for economic
risk. Therefore, the insignificance notion of Modigliani and Miller hypothesized that there is no connection between financial structure and its productivity. However, their position changed in 1963 when they considered the effect of tax shield and other imperfection in the capital market (Maxwell & Kehinde, 2012). Further, the initial proposal through duties by Modigliani and Miller now states that owing to the elimination of interest after the compensation of excises, organizations with extra debt in the capital structure have greater significance than organizations have no obligation on their capital composition which is referred to as the tax safeguard outcome. (Ahmeti & Prenaj, 2015). The theory was relevant towards the study mainly considering the first proposal that states that with the concept of taxes, organizations will prefer debt because of tax shield effect since they are deemed to perform better than those with no debt. This helped explain the impact of long-term debt on financial performance. Further, the theory was significant in this study because there was adequate enlightenment on the effect of tax shield and by extension the effect of long term debt on financial performance.

2.2.3 Trade off theory

The key assumption in the Modigliani and Miller (1958) is that there are no bankruptcy and tax costs. The trade-off theory is an advancement of the MM proposition but captivating into account impact of taxes and bankruptcy costs (Cekrezi, 2013). The tradeoff philosophy was proposed by Robichek and Myers in (1966). The theory proposes that an organization should relate the costs of debt (for instance debt overhang) to its paybacks in order to determine its optimal capital structure, and at that point implement this optimal (Myers, 2016). The main assumptions of trade off theory include: capital markets are perfect; no costs on tax, agency and transaction (Adair & Adaskou, 2015). The theory attempts to argue that there exists
prime capital structure which can maximize the worth of a company. However, in an ideal situation it may not be possible to have an optimal capital position. Moreover, according to Myers (1984) an organization which uses that concept establishes a goal obligation ratio and then progressively moves near the goal. The mark is regulated by harmonizing debt tax guards in contradiction of rates of insolvency. Benefits and costs may be attained in many different ways (Frank & Goyal, 2009). The tax-bankruptcy tradeoff viewpoint is that organizations poise the levy benefits of debt contrary to the burden expenses of bankruptcy.

Further, static trade off model asserts that there is an ideal capital configuration which exploits the significance of an organization during matching the expenditures and paybacks of an extra piece of duty, are categorized as simulations of trade-off. On the other hand, dynamic trade off theory organizations let their leverage ratios fluctuate within an optimal range (Ghazouani, 2013). This concept is important to the study for the reason that its aim tries to show how organizations choose goal control ratios grounded on profits versus expenses, economic anguish budgets and assistance outlays. Trade off theory is significant in the sense that it helps to articulate that organizations are partially funded with debts and partly with equity. In a going concern situation, the firm may have inadequate reserves to back all its ventures. Therefore, the principle helps to demonstrate the effect of equity and its influence on financial performance.

2.2.4 Agency theory

Agency problem in organizations was perhaps identified by Adam Smith (1937) which set a platform to foster the aspect of agency theory. Agency theory rotates about the matter of the agency problem and its answer. The problem of encouraging an agent to act as if he were maximizing the principal’s wellbeing is quite general that occurs in all firms and in all levels
of management (Jensen & Meckling, 1976). Moreover, Agency problem is one of the ancient issues that continued since the development of the combined stock companies. It cannot be overlooked because every firm perhaps hurts from this problem in diverse ways. Therefore, agency theory highlights the problems that arise in organizations in consequence of separation of investor’s roles as well as directors and stresses on how these problems can be minimized.

Furthermore, Jensen & Meckling (1976) described an organization as a black box that functions to maximize the value of the shareholders and its profits. The maximization of the profits can be realized through an appropriate harmonization and cooperation among the parties involved in the organization. However, the objectives of the parties vary, the conflict of interest rises, and it can only be reduced having administrative possession and regulation (Panda & Leepsa, 2017). The self-centered parties are aware that their interest could perhaps only be achieved if the firm is operational. Therefore, they perform well for the existence of the organization. The agency theory is quite noteworthy in the study because it demonstrates clearly the problem which exists in the principal (owners) and agents (managers) relationship and how these problems could be minimized. This therefore helps explain the aspect of throughput of a business by emphasizing that the ambition of every firm would be to maximize the value of that firm or rather the shareholders wealth.

2.3 Empirical Review

This section provides an evaluation of recent studies conducted in relation to capital structure and financial performance. The section provides the author(s) and the specific study that was conducted and their findings. An empirical review in literature is a significant practice because it provides evidence-based and exhaustive analysis of a topic. Further, it is a critical
evaluation of the recent combined knowledge on a topic. Therefore, it should be an enlightening, particular but impartial outline of the information, giving a sensible interpretation that comprises contradictory findings and variations, as well as recognized and up-to-date intelligence (Winchester & Salji, 2016).

2.3.1 Retained earnings and financial performance

Retained earnings are one of the main factors in financial performance of a firm and have a major part in policy formulation. According to Bassey, Edom and Alfred (2016), the great price of floating outside funding such as interest fee on credits, debentures and hires, disbursements compensation on stocks, lease and royalty sum, settlement of advance amounts, refurbishment of convertible debentures, reclamation of convertible preference stocks, etc. works as a blight for levitation capitals through this source.

Thirumalaisamy (2013) conducted a research on organization development and recollected incomes using a selected case of companies in India for duration of 1996-2010 through a help of parallel and manifold regression. It was revealed that cash flow and dividends are the greatest prompting variables on internal reserves. Further, the results indicated that organizations with few investment prospects for development and enlargement select to allocate abundant of their retributions as dividend. The outcomes therefore show that firms that intend to invest more on projects will reduce dividend payout ratio and use the earnings to finance those projects. The study further reveals that retained earnings are key sources of funds in corporations since they do not attract bankruptcy and transaction costs. The amount of earnings retained by a firm is purely determined by its growth speed.

Javed and Shah (2015) examined the effect of retained earnings and the main variables were
stock returns, capital gains/cost return, ordinary amounts, and currency bonus each portion during the period of 2009-2014. The method of analysis that was used was linear regression and association exploration. The study revealed a fragile and irrelevant connection between retained earnings and cash surplus per segment. The study established that the withholding of incomes takes a frail and irrelevant relationship with stock proceeds. This study is contrary to the one carried out by Thirumalaisamy (2013) that showed that there exist correlations between the retained earnings with cash dividends of corporations that require fewer projects.

Bassey, Edom and Alfred (2016) carried out a research on the impact of retained earnings on business performance. The results revealed that the prospective earnings volume of firms depends on the retained earnings and they help enhance forthcoming earnings. Further, the study recommended that firms should invest in retaining more of their profits than to just allot them all to shareholders because it will promote the ability of that firm to sustain a competitive advantage above the opponents although this perhaps would affect dividend disbursement.

Yemi and Seriki (2018) assessed the retained earnings and the value of the firm market in the period of 2003-2014. Descriptive and multiple regression methods stood adopted. The study shown that there was a progressive and sizable connotation between the retained earnings, paychecks per share dividend payout and value of organizations whereas market assessment is completely on the other hand unsubstantially linked with financial leverage. The results of this study clearly point out that retained earnings and earnings per share have control on the value of a business. It is clear that retained earnings have a major part in fulfilling the shareholders interest of maximization of wealth.
2.3.2 Long term debt and financial performance

Debt is tax-deductible expenditure and therefore it is a low cost source of funding in relation to equity funding. Therefore, it is important to note that long term debt is a factor in financial performance and managers should enhance optimal capital structure in order to stabilize the tax redeemable advantage and insolvency cost, since great leverage lead to rise in price of capital and eventually decline in the worth of a company (Sohail & Ulfat, 2019).

Hatem (2017) observed the bearing of debt maturity on structural performance during 2005 and 2011 in Malaysia and Mexico. The main debt indicators were long, short term capital structure and financial structure. The study revealed that companies with higher short-term capital structure are less productive. The results of this study clearly show financial leverage had a key place in performance of a firm. The higher the leverage, the more gainful a firm would be. Consequently, the lengthier the maturity of a debt is, the further beneficial it would stand to a company.

Aziz and Rahman (2017) assessed the relationship between debt and productivity of a firm in the period of 2012-2014. The research was done on nutrition manufacturing corporations in Amman Bursa. The study revealed a negative connection between both ratios of solvency and profitability ratios. The results of this study are inconsistent with results found by Zhu (2012) that indicated firms with higher leverage are more profitable. Solvency in this context meant the facility of a corporation to meet the long span debts. According to the study, the aptitude of a firm to clear its long term loans has no effect on the achievement of a firm and therefore no affiliation between solvency and profitability. In an ideal situation, the financial structure of a firm which is its debts maturity would perhaps have an effect on economic position because debt holders are given priority compared to shareholders.
Abeywardhana and Magoro (2017) did comparative research on debt investment and organizational attainment of Sri Lankan and South African listed companies for a period of 2011-2015. The research tried to find about upshot of debt capital on financial position of a firm using a regression model. It was revealed that debt had undesirable power on the performance of companies at South Africa while at Sri Lanka, short time debt had a bad result and long term debt has constructive influence on achievement of companies. The outcome established that both small and stretched debt financing had a deleterious control on performance of a firm. Moreover, finance managers of a firm need to thoroughly examine impact that debt financing would cause to their firms since different companies at different sectors have unlike effects. Perhaps this is an area that companies need to take into account so as to make sound decisions on the debt to employ in a given period of time (Abeywardhana & Magoro, 2017).

Examination of long term debt and financial performance was conducted by Omete and Isabwa (2017) using a retrospective research design. The study employed a simple linear regression model for analysis of data. The results revealed a substantial negative connection of long period debt and productivity of a firm. Outcomes of this study were consistent with the results of Abeywardhana and Magoro (2017). It therefore possibly means that finance managers should adopt a well-structured assortment of debt so as to lessen threats linked with the use of long term debt. Firms may consider investing in retained earnings or equity financing more than long term debt to ensure that its proportion does not negatively affect its financial statements. A lot of caution is required by firms that solely depend on extensive loan as basis of financing (Omete & Isabwa, 2017).
Sohail and Ulfat (2019) studied debt financing on financial achievement of a firm in 14 sectors of Pakistan in period of 2006-2014. It emerged that debt backing had damaging but substantial bearing on financial status of firms. The discoveries of the analysis recommended that companies should depend on inside funding because it does not attract costs and is fairly cheap compared to debt financing. Furthermore, increase in short term and long term funding decreases the incomes of business. Results clearly point out that companies should rely more on internal funding which is barely the reserve instead of using debts for funding their investments. Finance managers may therefore restrict themselves from allotting all the profits earned in businesses to the shareholders and instead come up with policies that promote retention of earnings in a firm. This would go quite some miles in saving the costs and risks associated with long term debts (Sohail & Ulfat, 2019).

2.3.3 Equity and financial performance

Equity is a factor in financial performance of a firm because it is one of the major sources of funding of firm’s operations. Moreover, financing choices might affect the worth of the firm if they would make the wrong decisions. For instance, high contact to debt will lead to insolvency. The main objective of a firm is to maximize the value of the stockholders. Conversely, the administrator is required to use appropriate mixture of debt and equity (Hasliyawani & Othman, 2016).

Said (2013) determined the weight of possession arrangement on debt to equity during 1997-2007. He carried out an empirical study highlighting on the part of within and without rights in defining the debt equity fraction. The outcomes revealed that linear connection between managerial ownership and debt equity proportion does not exist. This means that capital composition is not subjective to ownership structure of an enterprise. The study further
enlightens that the level of ownership of a company is adversely associated to debt/equity percentage. Perhaps in an ideal situation, the debt ratio would be determined by the ownership structure given the fact that shareholders interest is to maximize their wealth. Moreover, it was also found out that low levels of administrative possession, outside investors are adversely linked to leverage in static and dynamic structures. There is also an adverse and major impact of external investors on the debt to equity ratio for high levels of administration.

John, Wekesa and Peter (2015) sought to find out the relationship between internal funding plan and the success of lesser and average enterprises’ in Kenya. Study adopted expressive survey strategy and questionnaires were distributed to gather the required facts on the subjects. Results revealed strong bond in the middle of equity support scheme and the accomplishment of small and medium enterprises. According to the study, a financing strategy comprises of both debt and equity as sources of funds. Equity holders pursue to maintain a huge share of possession in the firm as much as possible, in order to attain returns on the assets and expansion and to sustain business regulation. The findings determined positive connection although equity was not preferred to debt and retained earnings strategies. The findings concur with the pecking order theory that retained and debt sources of finance are cheaper and more preferred to the equity financing (John, Wekesa, & Peter, 2015).

Hasliyawani and Othman (2016) assessed the expansion of debt to equity in capital structure. The study used regression model to analyze debt in micro franchising. The dependent variable was debt to equity ratio while independent variables were growth, tangibility, profitability, firm size, liquidity and age. The study revealed that expansion of capital
structure model was essential to assist in improving financial performance. Financing decisions are critical to a firm because if wrong decisions are made then financial performance will be adversely affected. Great proportion of debt may upsurge risks of bankruptcy because a firm may fail to handle its long term responsibilities. In this regard, a finance manager needs to obtain an optimal proportion of debt and equity which may not an easy decision to make. It can be concluded that developing a capital organization model would go a long way in promoting a robust financial performance and hence minimize the overall risk of the firm (Hasliyawani & Othman, 2016).

Sung and Jang (2017) sought to understand the restaurants companies in relation to their debt and equity using the fixed-effects regression simulations in analyzing data. It was revealed that restaurant companies issue non-current debt to offset existing debt. The research articulates that restaurant firms prefer debt to equity financing. To decide on the type of funding that a company may adopt, finance managers weigh downsides and upsides relating to debt and equity. Firms that issue equity are found to have less financial leverage than those using debt. The study concluded that unequal debt financing often leads to extra financial costs, including extra business expenditures. Further, it was found out that restaurant firms employed more equity financing than debt so as to minimize the financial leverage.

Njagi, Maina and Kariuki (2017) carried out a research on funding from reserves and realization of SMEs through use of descriptive assessment inquiry plan while multiple regressions were adopted to scrutinize the documents. It appeared that SMEs preferred donations from friends and plowing back earnings as equity financing. Thus, equity financing seemed to possess an upward association with achievement of SMEs. Business
administrations intend to develop on their production and procedures competence and to grow their profit edge. Finance managers have various options to select their funds from but they are faced with dilemma when it comes to making a choice on whether to use debt or equity. Equity funding may include retained earnings, own savings, contributions from well-wishers or friends and cash flows from the business operations. The results of the study suggested that businesses had better venture in angel financiers as part of core financing because they assist businesses with capital or funding, management skills and entrepreneurial capabilities during the startup stage (Njagi, Maina, & Kariuki, 2017).

Achieng, Muturi and Wanjare (2018) pursued to understand impact of equity backing on all non-financial listed companies in Kenya for the period of 2009-2015. The study revealed that total equity ratio has progressive link with accomplishment of a firm as scaled by return on assets. It concluded that managers should employ internal funding of perhaps retained earnings while minimizing the use of common shares to raise equity because it has an adverse effect on shareholders wealth. The ultimate goal of managers in any corporate firm is to maximize the savers capital and promote the worth of that company. Equity financing is obtained by issuing common and preferred shares. Shareholders receive earnings in form of dividends and therefore no payment of interests or settlements are required. The findings of the study pinpoint out that firm managers should adopt the use of retained earnings as a form of equity financing and minimize the use of ordinary shares because they have a negative impact on the assets of equity holders. However, the study emphasizes on the need to balance between the common shares and retained earnings to have an optimal mix (Achieng, Muturi, & Wanjare, 2018).
2.3.4 Financial Performance

Mwangi, Makau and Kosimbei (2014) conducted a research on connection of capital structure and financial success in the period 2006-2012. The study implemented expounding non experimental investigation method. It was found that there exists an adverse connection of financial control and economic performance of a business. Moreover, the study recommended that financial managers should not use huge proportions of widespread debt for processes. The concept of financial leverage implies the percentage of loan employed by a firm in capital structure. Although the assignment of determining ideal structure of business is complex task, managers should be careful on the proportions assigned to different sources of funds. The study resolved that bigger monetary force undesirably disturbs the financial performance of a firm as it was measured by ROE. Thus, the study advocates for use of other sources of funds in optimal proportions. Other sources of funds include retained earnings and equity and may not be enough to meet all the companies operations and investments. Further, the study proved that there was improvement on performance on usage of short stretch debt in funding the business properties as compared to long span debt (Mwangi, Makau, & Kosimbei, 2014).

Ganga, Kalaiselvan, Suriya (2015) examined financial performance in the period of 2008-2012. It was found out that there was an adverse connection between the company’s incomes and expenses. The study concluded that financial analysis was a significant tool that assisted in regulation of the business resources. In organizations, finance has to do with every operation of the business. Financial reports of an organization give material that is critical in evaluating the financial performance within a specified period of time. However, the financial reports may not give all the information that is required to evaluate performance.
Therefore, much care should be taken by managers and stakeholders when conducting financial scrutiny. It is apparent that financial analysis is critical and firms should regularly conduct it so as to enhance financial performance that determines the future prospects of the organization. When carrying out financial analysis, concentration should be on the statistics found on the financial statements and proper interpretation made to enhance informed decisions. That will help comprehend the financial health and position of the business and therefore come up with strategies that will facilitate maintenance of a competitive edge (Ganga, Kalaiselvan, & Suriya, 2015).

Chashmi and Fadaee (2016) conducted a study with an objective of establishing power of organization health on progression prospects or failures of the firms at Tehran securities. The study revealed that there is a substantial connection between EPS and the ROA with achievement or disappointment, but there is no considerable connection between ROE and success or failure, and there is no noteworthy connection between growth opportunities and realization or letdown. Therefore, from the results, it is evident that the determinants of financial performance of an organization would be EPS and ROA while ROE has no relationship with the performance and prospects of a firm. It is critical for managers to understand the significant processes for measuring financial performance of a firm by continuously assessing it. Competition has raised to higher levels in the market today and hence the reason to have proper policies in place that will work towards promoting financial performance and growth. Therefore it is important for managers to put up measures in place since potential investors of a firm mainly focus on firm’s published records to make an informed decision.

Bulle and Omagwa (2017) studied on financial managing and attainment for the period of
2011-2016. The study revealed that there was a positive and substantial influence of the working capital, capital arrangement and capital investment on the financial performance. The results show that the aspect of financial management as a whole is critical to a firm’s performance. The study settled that management of capital is key in manufacturing companies to facilitate the day to day operations that need a set amount of cash so as to meet the unforeseen expenditures. Capital structure offers a dynamic mode of acquiring funds. However, it is quite a complex task for firm managers to come up with an optimal capital structure. The study acclaimed that corporations should employ additional debt funding in their operations so as to increase leverage which eventually will promote the financial performance of a firm. Further, it was recommended that firms should try as much as possible to minimize the use of debt but rather make use of internal funding so as to minimize on the costs associated with borrowing and the risks of bankruptcy (Bulle & Omagwa, 2017).

Pinto, Hawaldar, Rahiman, Rajesha and Sarea (2017) researched on performance of profitable banks for a period of 2005-2015. The study adopted regression and correlation for analysis of data. It was found out that productivity has an effect on capital adequacy and financial leverage and at the same time; huge proportions of capital adequacy would negatively affect the productivity of banks. Further, the study was not able to establish the connection productivity and proficiency of banks. Financial performance of banks provides a guideline on examining the strategies put in place, proficiency and effectiveness in a given period of time. Moreover, bank managers have a major role in determining the capital adequacy levels so as to minimize the adverse effects associated with it. Accomplishment is a reflection of efficiency by an enterprise in terms of using its resources and savings from the
shareholders (Pinto, Hawaldar, Rahiman, Rajesha, & Sarea, 2017).

Al-Qudah (2017) investigated the association between funds assembly and financial presentation during 2008-2015. The study results revealed that there was a substantial affiliation between funds organization and success. The conclusions of the study clearly articulate that capital structure contributes a major part in financial performance which is consistent with similar other studies conducted previously. Further, the study suggests that majority of the shareholders are indifferent as far as the matter of obtaining an optimal capital structure is concerned. The results pin point that structure of capital is a critical area in the area of finance since it greatly influences the performance and needs thorough exploration. The findings of the study recommended that managers should be keen to select the right debt ratio so as to enhance performance and also they should correctly examine the funding option to ensure that more profits are achieved in return.

Eklof, Podkorytova and Malova (2018) determined the link between customer satisfaction and financial performance in the period of 2004-2014. The study revealed that there is a constructive association between customer satisfaction and wellbeing of a firm. The concept of customer satisfaction is critical in any organization that is focused on creating a competitive advantage in the current market environment. It is a major area that has a lot of weight in marketing department of any organization. The study highlights that extraordinary points of customer fulfillment eventually cause better performance in terms of huge volumes of sales. Most of the organizations have changed their approach to marketing and rather preferred to be customer centric so as to boost the performance. In a going concern situation, managers should invest in customer loyalty among other strategies because it has gradual control on the performance of business operations. Further, the study articulates that using
client satisfaction approach is a treasured tool not only to the company’s administration but also to the outside investors which can function as a potential device of growth. Managers should therefore include client satisfaction among the key performance indicators (Eklof, Podkorytova, & Malova, 2018).

Aly, El-Halaby, Hussainey (2018) evaluated quality disclosure and success of firm. The manual content analysis was used in the study. The period covered was 3 years of 2011 to 2013. The research revealed up relationship between story revelation of noble/corrupt update and financial performance founded on ROA. The results clearly indicate that disclosure by a firm whether voluntary or compulsory has effect on the performance of that firm. Disclosure reduces information asymmetries problems because both managers and outside investors have the true picture of the position of a firm as far as its value is concerned. Investors rely on the information published on the financial statements so as to make informed decisions. The concept of disclosure by firms is significant in today’s competitive environment. Managers ought to make a deliberate decision to give accurate and reliable information to the outside investors so as to promote confidence and enhance investors’ confidence. The link between disclosure and firm performance provides a platform for companies to set out policies that focus on how disclosure processes should be done. Outcomes signpost that performance by a company financially is determined by several factors given that the environment is dynamic, developing through unlike economic and political structures that demand disclosure.

Matar and Eneizan (2018) assessed determinants of financial performance of industrial firms in the period of 2005-2015 and adopted regression model for data analysis. The study revealed that variables of liquidity, profitability and revenue are positively connected to
return on assets. The aspect of financial performance of a firm is significant to both shareholders and scholars since it enlightens on the factors that influence it. Performance is the most appropriate device to measure the degree to which a firm is productive. It is the extent of the financial fitness of the organizations and demonstrates the performance of the managerial governance of the company. The greater financial performance of the business is the more operative and proficient the business is in using the assets and future contributes at the macro level in nation’s economy. Today, investors are keener on how firms perform in their bid to attain their main goal of maximization of wealth. Moreover, financial performance can be measured by progress in productivity, production volume, transactions advancement and consumption of the capital and financial assets. The answers found illustrate that performing well is inclined to multiple factors that managers should take care of (Matar & Eneizan, 2018).

Ray and Mitra (2018) evaluated the financial performance and its sustainability efforts. The study included different performance variables such as ROE, ROA, ROCE and many others. The research required to examine the connection between voluntary community societal responsibilities and performance. The study revealed that there was a positive relationship between corporate social activities and financial performance. Corporate social activities are highly practices in developed countries compared to the developing economies. Investors and other stakeholders are more attracted to socially vigorous firms than those that are not. However, it was established that social activities were practiced by firms that had encouraging financial performance. The results of the study therefore pinpoint that social activities are significant to a firm. The study recommended on having productive firms to consider investing in social activities so as to establish competitive advantage path. This
would go a long way in upholding investors’ confidence and other stakeholders since social activities lead to long term value establishment.

2.4 Summary of Literature review

This section gives the overview of the literature review and the researcher has used study by study approach of identifying the author and date, topic, findings and the knowledge gap in a table format.

Table 2.4: Summary of literature review

<table>
<thead>
<tr>
<th>Author and Date</th>
<th>Objective</th>
<th>Findings</th>
<th>Research gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sohail and Ulfat (2019)</td>
<td>To examine the association of different debt financing on firm’s performance in 14 sectors of Pakistan</td>
<td>Debt financing has a negative but significant impact on firm performance in Pakistan.</td>
<td>Content gap: The study was limited to association of different debt funds while this study seeks to determine the effect of long term debt on financial performance.</td>
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<tr>
<td>Yemi and Seriki (2018)</td>
<td>To examine the effects of retained earnings on market value of listed firms after controlling for earnings per share,</td>
<td>The study revealed that there was a positive and substantial association between</td>
<td>Contextual gap: The study was conducted in the context of Nigerian firms. This study looked at the retained</td>
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<tr>
<td>Authors</td>
<td>Study Title</td>
<td>Main Findings</td>
<td>Conceptual and Content Gaps</td>
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<tr>
<td>Doaa Aly, Sherif El-Halaby, Khaled Hussainey (2018)</td>
<td>To examine the extent to which financial performance (FP) represents one of the main determinants for tone disclosure (TD) in Egyptian annual reports.</td>
<td>The research revealed a positive relationship between the story disclosure of good/bad news and financial performance founded on return on assets.</td>
<td>Conceptual gap: The study is limited to disclosure of information and financial performance. Content gap: This study looked at capital structure and performance.</td>
</tr>
<tr>
<td>Achieng, Muturi and Wanjare (2018)</td>
<td>To examine the effects of equity financing options namely common stock (CS), retained earnings (REN) and total equity (TED) as ratios of total</td>
<td>There is a positive relationship between equity financing and financial performance of firms.</td>
<td>Content gap: The study was conducted on all the non-financial firms listed at NSE. This study concentrated on the companies listed.</td>
</tr>
<tr>
<td>Authors</td>
<td>Objective</td>
<td>Variables</td>
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<tr>
<td>Matar and Eneizan (2018)</td>
<td>To investigate the factors affecting the financial performance of the Jordanian manufacturing industrial firms.</td>
<td>Variables of liquidity, profitability and revenue are positively related to return on assets.</td>
<td>Content gap: The study sought to generally find out the determinants of financial performance. This study assessed the capital structure and financial performance.</td>
</tr>
<tr>
<td>Eklof, Podkorytov and Malova (2018)</td>
<td>To identify empirically relationships between customer loyalty and satisfaction and profitability measured as ROA, ROE, profit margin and operating income, as well as market</td>
<td>There is a positive relationship between customer satisfaction and financial performance.</td>
<td>The study sought to determine the aspect of customer satisfaction. This study focused on capital structure and financial performance.</td>
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</tr>
<tr>
<td>To determine firm’s financial performance and sustainability efforts: Application of Classifier Models</td>
<td>It was found that there is a positive relationship between Corporate Social Responsibilities and financial performance</td>
<td>Conceptual and contextual gaps: The study was conducted under the Indian context and concentrated on social activities. This study was conducted under the Kenyan context focusing on capital structure.</td>
<td></td>
</tr>
<tr>
<td>To understand restaurant firms – debt to equity financing</td>
<td>Restaurant companies issue long term debt to offset the existing debt.</td>
<td>Conceptual gap: The study was limited to restaurant companies and how they use debt-equity financing. This study looked at the influence equity financing in manufacturing companies listed at NSE, in Kenya.</td>
<td></td>
</tr>
<tr>
<td>Author(s)</td>
<td>Title and Focus</td>
<td>Findings</td>
<td>Gap</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------</td>
<td>----------</td>
<td>-----</td>
</tr>
<tr>
<td>Aziz and Rahman (2017)</td>
<td>To examine the relationship between solvency ratios and profitability ratios: Analytical study in food industrial companies listed in Amman Bursa</td>
<td>The study revealed a negative connection between both ratios of solvency and profitability ratios.</td>
<td>Content gap: The study focused on all the solvency ratios to produce results that there was a negative relationship between solvency and profitability. This study concentrated on the long-term debt ratio and its influence on financial performance.</td>
</tr>
<tr>
<td>Hatem (2017)</td>
<td>To assess the influence of debt maturity on firm performance: An international comparison</td>
<td>Companies with higher short-term capital structure are less profitable.</td>
<td>Contextual gap: The study applied an international comparison approach. This study was limited to the local approach.</td>
</tr>
<tr>
<td>Bulle and Omagwa (2017)</td>
<td>To determine the effects of working capital investment, capital structure and capital investment on financial</td>
<td>The study revealed that there was a positive and substantial impact of the working capital,</td>
<td>Conceptual gap: The study sought to find out the concept of financial management as a whole on</td>
</tr>
<tr>
<td>Study</td>
<td>Objective</td>
<td>Findings</td>
<td>Contextual Gap</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
<td>----------</td>
<td>----------------</td>
</tr>
<tr>
<td>Abeywardhana and Magoro (2017)</td>
<td>To examine whether debt capital affects the financial performance of the wholesale and retail sector companies in South Africa and Sri Lanka</td>
<td>Debt financing – short term and long term had a negative impact on the financial performance of a firm.</td>
<td>Contextual gap: The study was limited to companies at Sri Lankan and South Africa. This study assessed the impact of long term debt on manufacturing companies in Kenya.</td>
</tr>
<tr>
<td>Omete and Isabwa (2017)</td>
<td>To analyze the effect of long term debt on financial performance of state owned Sugar Firms in Kenya.</td>
<td>There is a negative relationship between long term debt and financial performance of a firm.</td>
<td>Methodological gap: The study adopted a retrospective research design and was limited to stated owned sugar firms. This study adopted a descriptive research design.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Research Objectives</td>
<td>Findings</td>
<td>Contextual and Conceptual Gaps</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Njagi, Maina and Kariuki (2017)</td>
<td>To assess equity financing and financial performance of small and medium enterprises in Embu town, Kenya.</td>
<td>Equity financing has a positive relationship with financial performance of SMEs.</td>
<td>Contextual and conceptual gaps: The study was limited to the SMEs at Embu town while this study sought to determine the effect of equity in manufacturing and allied sector.</td>
</tr>
<tr>
<td>Pinto, Hawaldar, Rahiman, Rajesha and Sarea (2017)</td>
<td>To evaluate financial performance of commercial banks</td>
<td>Profitability has an impact on capital adequacy and financial leverage.</td>
<td>Content gap: The study evaluated the financial performance of banks. This study assessed the financial performance of manufacturing firms in relation to capital structure.</td>
</tr>
<tr>
<td>Al-Qudah (2017)</td>
<td>To determine the relationship between capital structure and financial performance</td>
<td>There is a positive relationship between capital structure and financial performance</td>
<td>Contextual gap: The context of the study was companies listed in Abu Dhabi while this study looked at the Kenyan context.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Research Objective</td>
<td>Findings</td>
<td>Conceptual Gap</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>----------</td>
<td>----------------</td>
</tr>
<tr>
<td>Chashmi and Fadaee (2016)</td>
<td>To investigate the impact of the financial performance and growth opportunities on success or failure of listed companies in The Tehran Stock Exchange</td>
<td>There is a substantial connection between earnings per share (EPS) and the rate of return on assets (ROA) with success or failure, but there is no substantial connection between rate of return on equity (ROE) and success or failure, and there is no noteworthy connection between growth opportunities and success or failure.</td>
<td>Conceptual gap: The study is limited to companies listed at Tehran stock exchange. It is important to investigate further using other firms the relationship between ROE and success or failure of a firm. This study employed both ROE and ROA as a measure of performance.</td>
</tr>
<tr>
<td>Hasliyawan i and Othman (2016)</td>
<td>To develop a capital structure model in micro franchising within Malaysia's perspective.</td>
<td>Expansion of capital structure model will help in improving financial performance.</td>
<td>Conceptual gap: The study is not clear on how the model will be developed and how it will improve financial</td>
</tr>
<tr>
<td>Authors</td>
<td>Objective</td>
<td>Findings</td>
<td>Contextual Gap</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
<td>----------</td>
<td>---------------</td>
</tr>
<tr>
<td>Bassey, Edom and Alfred (2016)</td>
<td>To examine the impact of retained profit on corporate performance of Niger Mills Company Ltd Calabar-Nigeria.</td>
<td>Prospective earnings volume of firms depends on the retained earnings and they help enhance forthcoming earnings.</td>
<td>There is a contextual gap because the study was limited to Niger mills company. This study however, addressed the gap by assessing the influence of retained earnings in the Kenyan context.</td>
</tr>
<tr>
<td>Javed and Shah (2015)</td>
<td>To assess the impact of retained earnings on stock returns of food and personal care good industry listed in Karachi</td>
<td>There is weak and irrelevant connection between retained earnings and cash dividend per share and capital gain/loss yield. The study concluded that the retention of earnings has a weak and Conceptual gap: The study aimed at assessing the influence of retained earnings on stock returns. This study looked at the influence of retained earnings on firm’s financial performance.</td>
<td></td>
</tr>
<tr>
<td>Author(s)</td>
<td>Objectives</td>
<td>Findings</td>
<td>Methodological/Conceptual Context</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>----------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>John, Wekesa and Peter (2015)</td>
<td>To examine equity financing strategy and the performance of small and medium enterprises in Kenya.</td>
<td>There is a strong relationship between equity financing and performance of small and medium enterprises.</td>
<td>Contextual gap: The study was limited to small and medium enterprises. This sought to determine the effect of equity on manufacturing companies listed at NSE.</td>
</tr>
<tr>
<td>Ganga, Kalaiselvan, Suriya (2015)</td>
<td>To evaluate financial performance</td>
<td>There is a negative relationship between incomes and expenditures of a company</td>
<td>Conceptual gap: The study aimed at evaluating the financial performance of a company from a general perspective. This study aimed at assessing the capital structure in relation to financial performance.</td>
</tr>
<tr>
<td>Mwangi, Makau and</td>
<td>To establish the relationship between</td>
<td>There is an adverse relationship between</td>
<td>Methodological gap: The study adopted an</td>
</tr>
<tr>
<td>Author</td>
<td>Title</td>
<td>Methods</td>
<td>Findings</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Kosimbei (2014)</td>
<td>capital structure and performance of non-financial companies listed in the Nairobi securities exchange, Kenya.</td>
<td>financial leverage and financial performance.</td>
<td>explanatory non-experimental research design and focused on all non-financial companies. This research employed a descriptive research design and focus on manufacturing companies.</td>
</tr>
<tr>
<td>Said (2013)</td>
<td>To establish the impact of ownership structure on debt equity ratio: A static and Dynamic Analytical framework</td>
<td>There is no linear connection between managerial ownership and capital structure.</td>
<td>The study sought to find out whether the ownership structure influences debt equity ratio. This study aimed at determining the influence of equity on performance.</td>
</tr>
<tr>
<td>Ravi Thirumalai samy (2013)</td>
<td>To determine firm growth and retained earnings behavior – A study on Indian firms.</td>
<td>Organizations with few investment prospects for development and expansion prefer to</td>
<td>Contextual and conceptual gaps: The study was done on Indian firms which rely mainly on retained</td>
</tr>
</tbody>
</table>
allocate abundant of their earnings as dividend.

earnings to finance their projects. This study looked at retained earnings in manufacturing companies listed at NSE in Kenya.

Source: (Author, 2019)
2.5 Conceptual framework

Following a thorough review of literature, the conceptual model here below was drawn to analyze the capital structure and financial performance of companies listed under manufacturing and allied sector at Nairobi Securities exchange in Kenya. The conceptual framework is a breakdown of the variables of the problem under study. There were two main variables in the study. Financial performance was the dependent variable and capital structure was the independent variable. The capital structure was analyzed using the retained earnings, long term debt and equity. It is important to note that the study had no specific measures of retained earnings and long term debt because they were obtained directly from the financial statements. However, for equity, retained earnings were deducted from it so as to ensure that the aspect of retained earnings was not repeated.

Moreover, the researcher thought that ROE and ROA would sufficiently measure financial performance and also the measures were found to be significant accounting as established and commonly acknowledged ration of financial performance. ROE could be regarded as a degree of administration's proficiency in using equity to generate returns while ROA indicates the degree to which a firm is able to generate income using its assets.
Independent variable

Capital Structure

Retained Earnings
- Net income less disbursements to investors

Long term debt
- Outstanding debt of more than 12 months maturity

Equity
- Equity less Retained earnings

Dependent variable

Financial performance
- ROA
- ROE

Source (Author, 2019)

Figure 2.5: Conceptual Framework Model
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This section provides details of the research design, target population, sampling design, data collection instruments, data collection procedure, data analysis and presentation, empirical models specification, diagnostic tests, operationalization and measurement of variables and ethical considerations. The chapter analyses the methods that were used to assess capital structure and financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange in Kenya.

3.2 Research design

Research design is said to be a structure of study that gathers together all the components of a project. It can therefore be defined as the plan, structure and strategy of the proposed research activity (Akhtar, 2016). This study employed descriptive research design because it was relevant to the study. The relevance of the design to this study was that it helped observe and describe the characteristics of the given population without interfering with them in any manner. The overall goal of this study was to evaluate the capital structure and financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange in Kenya. Descriptive research is defined as an investigation technique used to describe the prevailing occurrences as precisely as probable. The foremost objective of descriptive study is to define methodically the present phenomena beneath the study. (Atmowardooyo, 2018). Therefore, descriptive research design was employed in this study to help describe systematically and accurately the characteristics of the given population.
3.3 The target population

All the 8 companies listed under manufacturing and allied sector at NSE in Kenya were included in the target population as long as they had six years annual reports for the period of 2013 - 2018. Further, in this study, the unit of analysis and the unit of observation were the 8 companies listed under manufacturing and allied sector at Nairobi securities exchange. Moreover, the target population of this study was relevant to the study because the findings and conclusions of the study would be made from the entire population. The target population could be well-defined as the whole group of personnel to which a researcher is interested to apply and draw conclusions from (Kazerooni, 2001). The target populace of this study encompassed of the eight firms listed under manufacturing and allied sector at NSE, Kenya (see Appendix III).

3.4 Sampling Design

Sampling design may be defined as a way of choosing the main component of data collection which is suitable for the specific research hypothesis or question. A sampling design is the outline that guides on the data collection from all cases. In this study, a census of the 8 companies listed under manufacturing and allied sector at Nairobi securities exchange was taken. The census of the 8 companies was taken because the population was small and therefore significant to the study.

3.5 Data Collection

To enhance accuracy and reliability of the study, secondary data was used and was gathered 2018-2018 annual reports. The required data was collected by evaluation of documents, the NSE handbooks, and yearly reports of the companies. Secondary data that was assembled was in the form of soft protected copy and hence high reliability. This collection method was
used because it was economical, valid and accurate. Information gathered was examined using a statistical package for the social sciences (SPSS version 20).

3.6 Data Collection instrument

The instrument that was adopted in this study was a data collection guide that helped to give the information category, dimension, and interval period of data pertinent to the study (see appendix iv). The yearly economic figures were collected from the annual reports that covered a span of 6 years (2013-2018). The survey instrument in this study was important because the research employed a descriptive research design.

3.7 Data collection procedure

The procedure that was used to collect data involved first gathering the audited financial statements of the eight manufacturing companies listed at NSE from their website. Secondary data collected was in the form of soft protected copy and hence high reliability. Secondly, all documents were copied to excel sheets per company using the data collection guide mentioned in the earlier section. Finally, the data on excel sheets was transferred to the SPSS package for analysis.

3.8 Data analysis

The data collected in this study was corrected for steadiness, accuracy and comprehensiveness and organized to help coding and classification to enhance adequate analysis. The quantitative data was presented using figures and tables while analysis was done by use of a descriptive statistics of standard deviation, and mean and multiple regressions using SPSS (version 20). The multiple regression analysis of a period of six
years (2013-2018) was used to assess the capital structure and financial performance of companies listed under manufacturing and allied sector at NSE, Kenya.

3.9 Empirical models

The study had two measures of the dependent variable (financial performance) which were ROA and ROE. Therefore, there were two models that were developed using the multiple regression analysis.

Financial performance was measured as follows:

Financial performance \( (Y_{it}) = \text{ROE} ; \text{ROA} \) ........................1

Therefore, the regression models were projected as below:

\[
\text{ROE} = \alpha + \beta_1X_{1it} + \beta_2X_{2it} + \beta_3X_{3it} + \epsilon ..........................2
\]

\[
\text{ROA} = \alpha + \beta_1X_{1it} + \beta_2X_{2it} + \beta_3X_{3it} + \epsilon ..........................3
\]

Where:

\( i \) represented the company listed under manufacturing and allied sector

\( t \) = time period in years

\( Y_{it} \) represented financial performance of the companies listed under manufacturing and allied sector at NSE for the period \( t \)

\( X_{1it} \) represented the retained earnings for the period \( t \)

\( X_{2it} \) represented long term debt for the period \( t \)

\( X_{3it} \) represented equity for the period \( t \)

\( \alpha \): represented a Constant which described financial performance without insertion of independent variables i.e. the value of \( Y \) when the value of \( X \) is zero

\( \beta_1 \) was Factors of variable \( i \) which measured the degree to which the dissimilarity in \( Y \) was described by the deviations in \( X \)
\( \varepsilon = \) was the error term of the test equation

3.10 Diagnostic Tests

Diagnostic tests were carried out on the variables of the study so as to enhance accuracy and ensure that the study met its objectives. Such tests included multicollinearity test on similarity of independent variables; normality test to ensure that the data used was normally distributed; and heteroscedasticity test to check if the error term on the model was diverse among the independent variables of the study.

3.10.1 Multicollinearity test

Multicollinearity occurs when more than one autonomous variable in regression model are interconnected. Small portion of multicollinearity may raise concerns but if it is reasonable then the issue can be sorted. To identify multicollinearity variance inflation factors (VIF) indicator is used. To interpret the VIF the rule given should apply; VIF -value would mean conclusion; VIF = 1 not correlated; 1<VIF\leq5 moderately correlated while VIF>5 would mean highly correlated (Daoud, 2017).

3.10.2 Normality test

The normality tests are additional to the graphical valuation of normality. The normality test is done using the marks in the model to an ordinarily circulated set of marks with a similar mean and standard deviation. It is recommended that normality tests be conducted to examine normality through the use of Shapiro-Wilk test which was provided by the SPSS software (Ghasemi & Zahediasl, 2012).
3.10.3 Heteroscedasticity test

Heteroscedasticity is found if the amount of error word varies through values of an independent variable. The influence of disrupting the assumption of homoscedasticity is a matter of degree, increasing as heteroscedasticity increases. It also leads to bias standard errors. Heteroscedasticity, may occur due to misspecification of disregarded nonlinear predictor terms or to overlooked predictors not counted in the model (Klein, Gerhard, Büchner, Diestel, & Schermelleh-Engel, 2016). This study adopted Glejser test for heteroscedasticity.

3.11 Operationalization and measurement of variables

This section gives the definition of the variables of this study into measurable factors as below:

Table 3.11 Operationalization and measurement of variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of variable</th>
<th>Operationalization</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained earnings</td>
<td>Independent</td>
<td>Retained earnings is the amount of funding that remain after a firm has paid out</td>
<td>Figures were obtained directly from the financial</td>
</tr>
<tr>
<td></td>
<td>variable</td>
<td>its dividends to the shareholders.</td>
<td>statements.</td>
</tr>
<tr>
<td>Long term debt</td>
<td>Independent</td>
<td>This is the source of financing for firms in form of loans which is payable for</td>
<td>Figures were obtained from the financial</td>
</tr>
<tr>
<td></td>
<td>variable</td>
<td>a period of</td>
<td>statements.</td>
</tr>
<tr>
<td>Equity</td>
<td>Independent variable</td>
<td>This is a source of finance referring to the amount attributable to the owners of a firm. This amount will not include the retained earnings.</td>
<td>Equity less Retained earnings</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Financial performance</td>
<td>Dependent variable</td>
<td>The ability of a firm to maximize on its wealth and profitability</td>
<td>Return on Assets (ROA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Return on Equity (ROE)</td>
</tr>
</tbody>
</table>

**Source:** (Author, 2019)

### 3.12 Ethical considerations

Ethics is a division of philosophy that is concerned with the behavior of people and directs the customs or standards of conduct of people and associations with one another. Researchers are professionals and therefore, research principles as a division of practical ethics has well recognized guidelines and procedures which define their behavior. Research ethics are critical in everyday life research endeavors and necessitates that researchers should guard the dignity of their subjects and circulate well the information that is studied (Akaranga & Makau, 2016). This study was conducted with honesty and it was not intended for personal gain or to hurt the respondents. Information gathered was purely used for the purposes of this research and was not used for abuse of confidentiality of the subjects. The privacy of all
respondents was very much guaranteed in the process of the study. The findings of the study were only used for the purpose that the research was intended for.
CHAPTER FOUR
DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction
This chapter provides details of the descriptive statistics, regression analysis and diagnostic tests. The chapter also provides a discussion of results that were obtained after the data analysis of companies listed under manufacturing and allied sector at Nairobi Securities Exchange in Kenya.

4.2 Descriptive statistics
Descriptive statistics was done to help present the raw data in a more expressive manner and to aid in visibility of that data through the statistics of mean and standard deviation with the help of SPSS version 20. The specific objectives that the study sought to achieve included: determining the influence of retained earnings, the impact of long term debt, and the effect of equity on financial performance of companies listed under manufacturing and allied sector at Nairobi securities exchange, Kenya. The study adopted descriptive research design to meet the specific goals. Retained earnings and long term figures were obtained directly from the financial statements of all the companies listed under manufacturing and allied sector during 2013-2018. However, equity was obtained after taking away retained earnings from the equity amount on the statements. Descriptive statistics data of all the variables was presented as shown on the table below:
Table 4.1 Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained earnings</td>
<td>-23177404000</td>
<td>22501939000</td>
<td>2015346990.50</td>
<td>6096932461.156</td>
</tr>
<tr>
<td>Long term debt</td>
<td>265000</td>
<td>33811022000</td>
<td>5103053933.86</td>
<td>9481808392.594</td>
</tr>
<tr>
<td>Equity</td>
<td>-13401091000</td>
<td>10054958000</td>
<td>2215098291.37</td>
<td>4493133470.374</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>-.2094</td>
<td>.4119</td>
<td>.147157</td>
<td>.1289326</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>-8.9534</td>
<td>1.1063</td>
<td>.100817</td>
<td>1.3854381</td>
</tr>
</tbody>
</table>

Source: Research data, 2019

The above table 4.1 shows that long term debt had the highest mean of 5103053933.86 followed by equity with a mean of 2215098291.37 and then retained earnings was the least with a mean of 2015346990.50 as independent variables. The dependent variables reflect that return on assets had the highest mean of 0. 147157 while return on equity had a mean of 0. 100817. The equivalent standard deviation of long term debt was 9481808392.594, equity 4493133470.374, retained earnings had 6096932461.156 and return on equity had 1.3854381. This suggests that the data for ROE was extremely spread from the mean. However, the standard deviation for return on assets was 0.1289326 which was not very far from the mean which shows that the data was concentrated close to the mean.

The outcomes of the research attested that long term debt had the uppermost impact on financial performance of a firm. Moreover, the means were used to measure the central tendency of the data. From table 4.1, it was evident that the data for long term debt, retained earnings, equity and ROE was spread away from the mean as opposed to ROA in comparison with the standard deviation for each. Further, all the independent variables have quite substantial means which expresses that they have a momentous influence on firms productivity. The results are consistent with those of Hatem (2017) which revealed that
those firms that engage in long term debt are more profitable to those that adopt short term. Additionally, Al-Qudah (2017) established that capital structure has a progressive association with performance of an enterprise. However, the findings differ with those of Sohail and Ulfat (2019) which demonstrated that debt has a negative effect on performance.

4.3 Regression analysis

Regression analysis is a statistical technique used to compute value of dependent variable (Y) grounding on an independent variable (X). Linear regression examines the relationship between two variables. It is the greatest extensively used compared to other statistical techniques (Kumari and Yadav, 2018). This study adopted multiple regression technique using the SPSS version 20 software.

4.3.1 Diagnostic tests

Diagnostic tests were carried out on the research variables as part of regression analysis in order to measure the degree of study to achieve its objectives as intended.

4.3.1.1 Multicolinearity tests

Multicolinearity tests were conducted to test the level of similarity between the independent variables as follows:

4.3.1.1.1 Retained earnings

A test was conducted using retained earnings as the dependent variable to measure multicolinearity level with other independent variables as shown below:

Table 4.2 Multicolinearity test Retained earnings

Coefficients
The outcomes of 4.2 revealed that the VIF of long term debt and equity as independent variables was 1.000 using retained earnings as the dependent variable. This means that there was no correlation between the independent variables. This test was then followed by that of long term debt.

### 4.3.1.1.2 Long term debt

The researcher conducted a multicolinearity test using long term debt as the dependent variable and the results were as shown below:

#### Table: 4.3 Multicolinearity test Long term debt

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
</tr>
<tr>
<td>1 Equity</td>
<td>.624</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>.624</td>
</tr>
</tbody>
</table>

Dependent Variable: Long term debt  
**Source: Research data, 2019**

Results of 4.3 indicated that the VIF of the coefficients was 1.603. This means that the correlation of long term debt with equity and retained earnings was higher than that of retained earnings with other independent variables. The VIF shows that there was very low multicolinearity. After this test was complete, the Equity multicolinearity test followed.
4.3.1.3 Equity

Multicolinearity test was done using equity as the dependent variables versus other independent variables as shown below:

Table 4.4 Multicolinearity test Equity

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 Retained earnings</td>
<td>.830</td>
<td>1.204</td>
</tr>
<tr>
<td>1 Long term debt</td>
<td>.830</td>
<td>1.204</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Equity

Source: Research data, 2019

The results of 4.4 indicated that the VIF was 1.204 and tolerance level was 0.830 when equity was the dependent variable. This indicates that there was very little multicolinearity.

4.3.2 Normality test

Table 4.5 Normality test

<table>
<thead>
<tr>
<th>Tests of Normality</th>
<th>Kolmogorov-Smirnova</th>
<th></th>
<th>Shapiro-Wilk</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
<td>Sig.</td>
<td>Statistic</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>.099</td>
<td>42</td>
<td>.200*</td>
<td>.961</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>.181</td>
<td>42</td>
<td>.001</td>
<td>.941</td>
</tr>
</tbody>
</table>

a. Lilliefors Significance Correction

Source: Research data, 2019

The above table 4.5 indicates the results of tests done for normality using the SPSS version 20. The researcher used Shapiro-Wilk to test for normality because it was more suitable for sample sizes <50. The outcome disclosed that the data was normally distributed because the
significance values of both ROA and ROE were 0.167 and 0.30 respectively and hence larger than 0.05.

4.3.1.3 Heteroscedasticity test

Heteroscedasticity test is significant because the researcher is able to establish whether there exists dissimilarity in the residual variance of the observation period to another period of observation. There are many methods that could be used to carry out the test but this study employed Glejser test. Moreover, if the significant value is > 0.05 then there is no problem of heteroscedasticity and vice versa. The findings are as shown below:

Table 4.6 Heteroscedasticity test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.188</td>
<td>.033</td>
<td>5.613</td>
</tr>
<tr>
<td></td>
<td>Retained earnings</td>
<td>7.270E-012</td>
<td>.000</td>
<td>.304</td>
</tr>
<tr>
<td></td>
<td>Long term debt</td>
<td>-3.987E-012</td>
<td>.000</td>
<td>-.263</td>
</tr>
<tr>
<td></td>
<td>Equity</td>
<td>8.902E-012</td>
<td>.000</td>
<td>.270</td>
</tr>
</tbody>
</table>

a. Dependent variable: Financial performance

Source: Research data, 2019

The above table 4.6 shows the results of heteroscedasticity test that was done using SPSS version 20. The outcomes illustrated that retained earnings had a sig. value of 0.208, long term debt 0.183 and equity 0.213 and hence there was no problem of heteroscedasticity. This is because all the significant values were >0.05.
4.3.2 Model summary

The research had two measures of performance (ROA and ROE) and therefore two models as shown below.

Table 4.7 ROA model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.538*</td>
<td>.290</td>
<td>.291</td>
<td>.3921500</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Equity, Long term debt, Retained earnings
Source: Research data, 2019

The above table 4.7 indicates the results of the regression analysis using the ROA as the dependent variable. The R value shows the correlation which is 0.538. This means that the degree of correlation 53.8 % is high and that there is a positive correlation between ROA and equity, long term debt and retained earnings during the period under study. R square column shows the level of Return on Assets that can be expounded by the predictors (Equity, long term debt and retained earnings) which is 0.290. This suggests that there was a variation of 29% of financial performance of companies listed under manufacturing and allied sector in Kenya and therefore 71% of the sector’s performance could be explained further using factors that are not part of the study. Given the value of R square, it was explicit that 29% of the financial performance was explained from the study.

The results of this study are similar to those of Aruvel and Ajanthan (2013) which revealed that the model summary showed that all the variables studied did not explain the financial performance in totality since there were other factors that would also affect performance and they were not part of the study. Further, the factors of their study included Gross profit, Net Profit, ROE and Earnings Per Share. Moreover, an evaluation of both the model summary and the ANOVA table shown here below indicated that the model expounded on the greatest
likely mixture of the independent variables that could add to the connection with the dependent variables.

**Table 4.8 Analysis of Variance (ANOVA) – ROA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.763</td>
<td>3</td>
<td>.921</td>
<td>5.324</td>
<td>.002b</td>
</tr>
<tr>
<td>Residual</td>
<td>6.766</td>
<td>39</td>
<td>.173</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9.529</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Return on Assets  
b. Predictors: (Constant), Equity, Long term debt, Retained earnings

**Source: Research data, 2019**

Table 4.8 above shows the ANOVA results of how fine the data fits the regression equation. The significance level was at 0.002 an indication that the model fits well and it was statistically relevant because it was below 0.05.

**Table 4.9 Coefficients table - ROA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.236</td>
<td>.077</td>
<td>3.067</td>
<td>.004</td>
</tr>
<tr>
<td>1</td>
<td>Retained earnings</td>
<td>-5.818E-011</td>
<td>-.773</td>
<td>-4.119</td>
</tr>
<tr>
<td>1</td>
<td>Long term debt</td>
<td>2.180E-011</td>
<td>.444</td>
<td>2.936</td>
</tr>
<tr>
<td>1</td>
<td>Equity</td>
<td>-4.043E-011</td>
<td>-.403</td>
<td>-2.363</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Return on Assets

**Source: Research data, 2019**

The above table 4.9 gives information on how the model helps to predict ROA from retained earnings, long term debt and equity and whether the independent variables contribute significantly to the model. The beta values indicate that long term debt had a positive and
significant outcome while retained earnings and equity had a negative impact on financial performance of firms listed under manufacturing and allied sector in Kenya. This is because retained earnings had $t=-4.119$, $p<0.05$; long term debt $t = 2.936$, $p<0.05$; and equity $t = -2.363$, $p<0.05$. Further, the results indicate that the constant in the model was characterized by 0.236 which shows the value of financial performance of companies listed under manufacturing and allied sector in Kenya when the predictors’ values are equal to 0.

The results of this study were consistent with those of Al-Qudah (2017) which revealed that there existed a positive relationship between the Debt Ratio and financial performance while there was a significant relationship between capital structure and financial performance of the companies listed in Abu Dhabi Securities Exchange

**Regression function (ROA)**

$$Y=0.236-5.818X_1+2.180X_2-4.043X_3$$

Where $Y = \text{ROA}$

$X_1 = \text{Retained earnings}$

$X_2 = \text{Long term debt}$

$X_3 = \text{Equity}$

The regression function is based on the unstandardized beta coefficients from the model. The coefficients explain the dependent variable per unit contribution of the independent variables. The findings show that putting other predictor variables constant, a unit increase in retained earnings will decrease the financial performance with 5.818; a unit increase in long term debt will increase performance with 2.180 while a unit increase in equity will decrease performance with 4.043.
Moreover, the significance of capital structure components statistically is shown by the P-values on table 4.9. Retained earnings had a p-value of 0.000 < 0.05 which means it is statistically significant, long term debt p-value of 0.005 < 0.05 and therefore statistically significant and equity a p-value of 0.023 < 0.05 was also statistically significant. Consequently, the results indicate that all the predictors have a significant influence on financial performance of firms listed under manufacturing and allied sector in Kenya as measured by ROA. The results of this study were consistent with those of Nirajini and Priya, (2013) who discovered that capital structure had a considerable effect on financial performance. Further, their results indicated that Debt Asset ratio, Debt Equity ratio and long term debt correlated with Gross Profit Margin, Net Profit Margin, Return on Capital Employed, Return on Asset & Return on Equity at significant level of 0.05 and 0.1.

Table 4.10 ROE model summary

<table>
<thead>
<tr>
<th>Mode</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.564a</td>
<td>.319</td>
<td>.263</td>
<td>.3378384</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Equity, Long term debt, Retained earnings

Source: Research data, 2019

The above table 4.10 indicates the outcomes of a regression analysis using the ROE as the dependent variable. The R value illustrates a correlation of 0.564 which is 56.4% and therefore high. R square expresses the level of Return on Equity which could be explained by the predictors at 0.319. It shows a variation of 31.9% of financial performance of companies listed under manufacturing and allied sector in Kenya while 68.1% could be enlightened by other factors not part of this research.
Table 4.11 Analysis of Variance (ANOVA) - ROE

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.975</td>
<td>3</td>
<td>.658</td>
<td>5.768</td>
<td>.002</td>
</tr>
<tr>
<td>Residual</td>
<td>4.223</td>
<td>37</td>
<td>.114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6.198</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Return on Equity
b. Predictors: (Constant), Equity, Long term debt, Retained earnings

Source: Research data, 2019

Table 4.11 above illustrates results of how well the statistics fits the regression function. The significance level was at 0.002 a suggestion that the model fits sound and was statistically appropriate because it was below 0.05. The results of the analysis of variance are supported by the findings of a study that was carried out by Das and Swain, (2018) which revealed that there was a significant impact of capital structure on financial performance of a firm.

Table 4.12 Coefficients table - ROE

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.363</td>
<td>.074</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Retained</td>
<td>-3.484E-011</td>
<td>.000</td>
<td>-.551</td>
<td>.009</td>
</tr>
<tr>
<td>Long term</td>
<td>2.490E-011</td>
<td>.000</td>
<td>.618</td>
<td>.000</td>
</tr>
<tr>
<td>Equity</td>
<td>-4.270E-011</td>
<td>.000</td>
<td>-.506</td>
<td>.008</td>
</tr>
</tbody>
</table>

Source: Research data, 2019

The above table 4.12 provides results to assist forecast ROE from the predictors (retained earnings, long term debt and equity). The unstandardized coefficients beta values portray that long term debt had a significant and positive association with ROE. The results are consistent with those of Muchiri, Muturi and Ngumi (2016) that sought to establish the
connection between financial organization and financial performance and revealed that long term debt had a positive relationship with ROE. However, this study also revealed that retained earnings and equity had a negative but significant influence on financial performance of companies listed under manufacturing and allied sector in Kenya. The results were also supported by a study carried out by Nassar (2016) which revealed that capital structure had a negative significant effect on financial performance. The t-values show that retained earnings = -2.776, p-value = <0.05; long term debt t=3.846, p <0.05; and equity t= -2.826, p<0.05. Additionally, outcomes signpost that the constant was described by 0.363 which demonstrates the value of financial performance of companies listed under manufacturing and allied sector in Kenya when the independent values were equal to 0.

**Regression function (ROE)**

\[ Y=0.363-3.484X_1+2.490X_2-4.270X_3 \]

Where \( Y \) = ROE

\( X_1 = \) Retained earnings

\( X_2 = \) Long term debt

\( X_3 = \) Equity

The coefficients elucidate the dependent variable of one unit contribution by independent variables. It is clear that when all other independent variables are constant, a unit increase in retained earnings will decrease the financial performance with 3.484; a unit increase in long term debt will increase performance with 2.490 while a unit increase in equity will decrease performance by 4.270.

Statistical significance of components of capital structure is shown through P-values on table 4.12. Retained earnings had a p-value of 0.009, long term debt p- 0.000 and equity a p-value
Therefore, the upshots designate all independent variables were statistically significant on financial performance of companies listed under manufacturing and allied sector in Kenya as measured by ROE because they had a p-value of <0.05. The findings of this study are supported by a study carried out by Bulle and Omagwa (2017) which indicated that capital structure had a significant impact on financial performance of firms listed under manufacturing and Allied sector at NSE. Further, their study found that working capital; capital structure and capital investment singly had a positive and substantial effect on the financial performance of the firms studied.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This section entails the summary of findings obtained in data analysis, provides conclusions and recommendations in relation to the general and specific objectives of the research. This involved the aim to assess the influence of capital structure on financial performance as far as retained earnings; long term debt and equity were concerned. Further, the limitations faced during this study were given in this chapter as well as suggestions for further research.

5.2 Summary of the findings of the study
The study used secondary data from published financial statements to carry out analysis based. The analysis was done using a Statistical Package for the Social Sciences (SPSS) version 20 and findings generated thereof. This study employed two measurements of financial performance (ROA and ROE) and therefore two model regressions were obtained.

5.2.1 Aim of the study
The aim of the study was to determine the effect of capital structure on financial performance. The results of the study revealed that capital structure was quite significant in financial performance of companies listed at manufacturing and allied sector in Kenya which was demonstrated by different components of capital structure although they had unlike effects on performance.

5.2.2 Study problem
The research problem as detailed on the statement of the problem was that the latest NSE year hand book (2017-2018) revealed that the financial performance of most of the
companies registered under the manufacturing and allied sector was declining for the past 5 years.

5.2.3 Study objectives

1. To determine the effect of retained earnings on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya.
2. To establish the effect of long-term debt on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya.
3. To determine the effect of equity on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya.

5.2.4 Research questions

1. What is the effect of retained earnings on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya?
2. What is the effect of long-term debt on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya?
3. What is the effect of equity on financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange, Kenya?

5.2.5 Study findings objective wise

5.2.5.1 Retained Earnings

The study sought to determine the influence of retained earnings on financial performance of companies listed under manufacturing and allied sector, Kenya. The results highlighted that retained earnings had a negative effect on financial performance based on t-value of 4.119 as measured by ROA and 2.776 as measured by ROE with a P-value <0.05. The mean of
2015346990.50 indicated that companies had significant amount retained from profits that could be used on investments. Retained earnings are a source of finance that a firm holds after apportioning payouts to shareholders. The findings indicated that increase in one unit of retained earnings would decrease financial performance by 5.818 and 3.484 respectively.

### 5.2.5.2 Long term debt

The specific objective to establish the impact of long term debt on financial performance of companies listed under manufacturing and allied sector in Kenya was met when the findings revealed that long term debt had the highest mean of 5103053933.86 compared to other independent variables. Companies listed under manufacturing and allied sector were found to largely rely on long term debt as a source of finance. Further, it was discovered that long term debt had a positive influence on performance as shown by t-values of both ROA and ROE which were 2.936 and 3.846 correspondingly with p-values of <0.05. The debt was not found to negatively affect the performance of manufacturing companies in Kenya which means that the relationship between long term debt and performance was positive.

### 5.2.5.3 Equity

The study required to find out the effect of equity on financial performance of firms listed under manufacturing and allied sector. Equity in this study implied the amount that was attributable to the owners of the firm but deducting the amount of retained earnings. It was established that equity had a negative impact on financial performance of manufacturing and allied companies listed at NSE in Kenya. The results showed negative t values of 2.363 and 2.826 on both measures of performance ROA and ROE respectively but the p<0.05. Further it was revealed that the mean was at 2215098291.37 an indication that companies had quite a significant value of equity.
5.3 Conclusions

The study examined capital structure and financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange. From the findings of the study, it was concluded that capital structure had a significant effect on financial performance. Further, on the study objectives the study concluded that different components of capital structure had unlike effects on financial performance. For instance, it was concluded that some companies listed under manufacturing and allied sector depended on retained earnings as was indicated by the descriptive statistics mean regardless of its negative impact on financial performance of a firm. The negative effect could have arisen due to low equity although it would be preferable because it is the cheapest source of finance compared to equity and debt.

Moreover, the study concluded that long term debt played a positive role in productivity of manufacturing and allied companies listed at NSE and that most of the companies relied on it as the mode of funding. This was evident in both measures of performance (ROA and ROE). Moreover, it was concluded that perhaps most of the companies relied on debt as a source of funding because they did not have sufficient returns to preserve as shown by the low mean of return on equity.

Furthermore, the findings of the study concluded that equity was more preferred by manufacturing and allied listed companies to retained earnings. Equity had a higher mean linked to retained earnings although it was revealed that it had a negative effect on financial performance. Since both equity and retained earnings had negative influences on firms’ productivity, perhaps it was imperative to conclude that finance managers of companies listed under manufacturing and allied sector in Kenya consider restructuring their capital
structure so as to curb these effects. It was noteworthy observing that regardless of the effect of any given source of finance, all the sources (retained earnings, long term debt and equity) as found in the study were significant in performance of those firms.

5.4 Recommendations of the study

Given that the findings of the study affirm that capital structure was so substantial in financial performance of companies listed under manufacturing and allied sector in Kenya, the study recommended that the management of the sector should come up with strategies of ensuring that there was optimal capital in their operations. The results of the study showed that retained earnings would negatively affect financial performance as was measured by both ROA and ROE. Consequently, the study recommended that in their endeavor to have optimal capital structure, manufacturing companies should ensure that there was no too much reliance on the use of retained earnings as the source of funding.

Further, the results of this study revealed that long term debt had a positive relationship with financial performance as explained in the findings. Therefore, it would be prudent to recommend that companies listed under manufacturing and allied sector adopt the use of long term debt as a source of finance in most of their operations as compared to other sources of funds so as to maintain the positive relationship between capital structure and financial performance. Additionally, the companies should come up with more investing strategies and products diversification so as to increase their proceeds and hence shareholders expectation to maximize value was met as well as would be able to meet the financial obligations.
Moreover, the study revealed that although equity was significant to the performance of a firm, it had negative impact on finance performance of the firm. Therefore, this study recommended that the manufacturing and allied sector use equity to maximize the shareholders’ value but not to use it as the only source of funding. The negative effect of equity on performance would affect the sector’s contribution to the GDP. Further, this study also recommended that the government should invest in subsidization of the sector’s products by policy formulation so as to boost its growth. Since manufacturing sector is one of the key government’s plans in Kenya by 2022, local manufacturers should be strengthened so as to make this a reality. The call to revamp the sector by the government would go long way if more strategies on increasing investment opportunities were put in place through Kenya Association of Manufacturers (KAM). The association in its bid to uphold trade and investment should develop comprehensive policies that relate to capital structure since this study has proven that it is significant to financial performance and hence expedites a competitive commercial atmosphere plus minimizes the cost of running operations.

5.6 Contribution to knowledge

The study contributes greatly to the manufacturing and allied companies listed at NSE by creating awareness that the major components of capital structure (retained earnings, long term debt and equity) are significant in firms’ productivity. Further, the findings of the study are generalizable that other companies will benefit from the information that optimal capital structure is essential since if not well taken care of; some sources of funds may have adverse effects to performance. KAM is also enlightened that apart from policy formulation on qualitative matters such as skill based employment making, quantitative policies on capital formation are important. Moreover, the study has given other finance scholars’ added
knowledge on the critical focus of capital structure and the findings could be compared using different methodologies or under dissimilar sectors.

5.7 Recommendations for areas of further research

This research recommended that more research on the manufacturing and allied sector be conducted relating to working capital management to see whether it also affects the performance. This is because the findings indicated that there were other factors not studied but influenced productivity. Moreover, the study was limited to companies listed at NSE under the manufacturing and allied sector. Further research on other firms not listed could perhaps give more universal results and be compared to the findings of this study. A comparative study was also suggested by this study on the capital structure and financial performance of companies listed under different sectors. This would probably give an overview of how sectors structure their capital and the influence on the financial performance.

Although there were numerous realizations that were achieved, the study also presented a few limitations. Given that there could be a variation in the way things were measured, the financial performance data relied on the annual statistics recorded annually with a supposition that the figures were uniformly spread during the year. Information disclosure was an issue that may be facing some of the listed companies for fear of influencing investors’ decisions. Nevertheless, the researcher was able to deal these drawbacks by using the publicly audited statements. Additionally, the researcher had limited statistical knowledge to do the analysis but this limitation was overcome by use of online statistical tutorials.
REFERENCES


E-mail: dejan-graduate@ku.ac.ke  
Website: www.ku.ac.ke

FROM: Dean, Graduate School  
DATE: 9th September, 2019

TO: Mutua Lisy Marigu  
C/o Accounting and Finance Dept.

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 4th September, 2019 approved your Research Project Proposal for the M.B.A Degree Entitled, “Capital Structure and Financial Performance of Companies listed under Manufacturing and Allied Sector at Nairobi Securities Exchange, Kenya”.

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University’s Website under Graduate School webpage downloads.

Thank you.

ANNBELL MWANIKI  
FOR: DEAN, GRADUATE SCHOOL

C.C. Chairman, Accounting and Finance.

Supervisors:

1. Mr. Gerald Atheru  
   C/o Department of Accounting and Finance  
   Kenyatta University
Appendix II: NACOSTI details of the Approval letter

NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 393506  Date of Issue: 23/September/2019

RESEARCH LICENSE

This is to Certify that Ms. Lisy Mutua of Kenyatta University, has been licensed to conduct research in Kakamega, Nairobi on the topic: CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF COMPANIES LISTED UNDER MANUFACTURING AND ALLIED SECTOR AT NAIROBI SECURITIES EXCHANGE, KENYA for the period ending : 23/September/2020.

License No: NACOSTI/P/19/1663

Applicant Identification Number 393506

Director General
NATIONAL COMMISSION
FOR SCIENCE,
TECHNOLOGY &
INNOVATION

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Appendix III: List of manufacturing companies listed at NSE

<table>
<thead>
<tr>
<th></th>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>BOC Kenya PLC</td>
</tr>
<tr>
<td>2.</td>
<td>British American Tobacco Kenya PLC</td>
</tr>
<tr>
<td>3.</td>
<td>Carbacid Investment PLC</td>
</tr>
<tr>
<td>4.</td>
<td>East African Breweries Ltd</td>
</tr>
<tr>
<td>5.</td>
<td>Flame Tree Group Holdings Ltd</td>
</tr>
<tr>
<td>6.</td>
<td>Kenya Orchards Ltd</td>
</tr>
<tr>
<td>7.</td>
<td>Mumias Sugar Company Ltd</td>
</tr>
<tr>
<td>8.</td>
<td>Unga Group Ltd</td>
</tr>
</tbody>
</table>

Source: (NSE handbook, 2017-18)
## Appendix IV: Data Collection guide

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained earnings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long term debt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity less retained earnings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total Assets</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial performance (ROA)</td>
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<td>Net income / total assets</td>
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<td>Total equity</td>
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<td>Financial performance (ROE)</td>
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<td>Net income / total equity</td>
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Source: (Author, 2019)