

**FINANCIAL LEVERAGE AND PERFORMANCE OF THE ENERGY AND
PETROLEUM SECTOR COMPANIES LISTED IN THE NAIROBI
SECURITIES EXCHANGE, KENYA.**

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DECLARATION

I declare that, this study project is my original work and has not been presented for award of any degree in any university.

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This research project has been submitted for examination with my approval as the university supervisor.

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DEDICATION

I dedicate this study project to my parents. Thank you for your support and God

Bless You

ACKNOWLEDGEMENT

I am grateful to God for strength to pursue my education. And to my supervisor Mr. Gerald Atheru who guided me through the whole process. I would like to thank my parents and friends for encouraging and supporting me tirelessly throughout my studies.

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OPERATIONAL DEFINITIONS OF TERMS

- Capital Structure** This is the composition of a company's equity and debt which serve as its finances.
- Debt Capital:** This refers to capital raised by a company by taking up loans from banks and or other individuals or institutions.
- Debt Ratio** This is the proportion of total long-term and short-term of a firm to its debt to total an asset, which is expressed as a percentage or decimal.
- Equity capital:** Capital which include surplus earnings and shares which is free from debt.
- Hybrid securities:** These refer to securities that have debt and equity securities elements in them.
- Interest coverage ratio:** This is a ratio used to ascertain how a firm can pay its interest expenses on its outstanding debt.

LIST OF ABBREVIATIONS AND ACRONYMS

CMA	Capital Markets Authority
D/E	Debt Equity Ratio
DR	Debt Ratio
IRC	Interest Cover Ratio
KENGEN	Kenya Power Generation Co. Ltd
MBVE	Market Book Value of Equity
NSE	Nairobi Securities Exchange
P/E	Price/Earnings Ratio
ROE	Return on Equity
SME	Small and Medium Enterprises

ABSTRACT

Financial leverage and financial performance are fundamental issues in corporate finance. In Kenya, some companies listed at the Nairobi Securities Exchange have had performance improvement. However, most of them have experienced declining fortunes which has been attributed to the fact that corporate managers another practitioner lack adequate guidance required to attain optimal financing decisions. Financial leverage comprises of loans and other forms of debts where the proceeds from these loans are reinvested to earn higher return than the cost of loans. Financial use is the company's capacity to utilization of settled money related charges to amplify the impacts of changes in the profit before premium and duty on the company's income per share. The extent of obligation to value is a vital decision for corporate supervisors. The poor performance of Energy and Petroleum sector companies is of great concern. Financial leverage ranges from debt ratio, debt/equity ratio and interest coverage ratio which are vital since they directly affect the financial performance of firms. The general objective as to determine the effect of financial leverage on the financial performance of energy and petroleum sector companies listed in the NSE. While the specific objectives were; to establish the effect of debt ratio, debt -equity ratio and interest coverage ratio on financial performance of energy and petroleum sector companies recorded in the NSE. The research was anchored on the following theories; Modigliani-Miller theorem, Pecking Order Theory and Trade-off Theory. The empirical literature review was based on the three objectives of the study and gaps established. The study adopted a descriptive research design. Management of all the 5 energy and petroleum companies listed with the NSE was involved in the study which mainly used secondary data to conclude. Data was analyzed using regression analysis. Analyzed data was presented using tables. Confidence interval of 95% was used by the researcher. The study adopted a multiple regression model ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$). The findings indicate that the independent variables Debt ratio, Debt to Equity ratio and interest cover ratio affected the financial performance of the firms in the Energy and petroleum sector. Their effect was up to 75.4%. Debt ratio and Debt to Equity ratio had a positive relationship whereas Interest cover ratio had a negative relationship to the firms in the Energy and petroleum sector listed in the NSE. This study recommends that the firms handle their capital structure decisions prudently as the changes in the factors like Debt ratio, Debt to Equity ratio and Interest cover ratio enhance profitability of firms when prudently employed and hence affect the performance of Energy and petroleum firms listed at the Nairobi Securities Exchange. This study also recommends that firms control the amount of interest expense since an increase in interest expense has an effect in that it reduces the financial performance of firms in the Energy and petroleum sector listed in the NSE.

CHAPTER ONE: INTRODUCTION

1.1 Background of Study

The health and survival of any organization points to management's ability to efficiently and effectively use the company's resources which contribute to the country's economy (Naser & Mokhtar, 2004). Therefore, owing to the implications that financial performance has on these organizations, firm's financial performance has raised a lot of interest and concerns to the management and other stakeholders of all organizations. Measuring financial performance of a firm assists the firm's management obtain information about the use of finances and funds flow within and outside the organization. Besides, the managers can make best decisions from the information on firm's performance (Almajali *et al.*, 2012).

Globally, the achievements of organizations are of vital importance for its continuation. Salman and Yazdanfar (2012) forward that the performance of firms is primarily affected by several features, one of the significant one is capital structure. Similarly, Chadha and Sharma (2015) asserts that capital structure is among the top most important decisions taken by an organization as its sole purpose is ascertaining the perfect capital structure for the organization. Hasan, Ahsan, Rahaman and Alam (2014) put forward that capital structure comprises of retained earnings.

According to Almajali *et al.*, (2012), financial report related factors are the focus of financial performance. These focus on the financial structure of firms. These are factors relating to liquidity, leverage and equity of a firm. Shubita & Alsawalhah (2012) noted that it is difficult to determine the optimal financial structure of a firm as this entails analysis of their risk and profitability among other factors. Almajali *et*

al., (2012) studied financial performance of Jordanian Insurance Companies listed at Amman Stock Exchange during period (2002 – 2007). The results showed that the leverage, size and liquidity have a positive statistical effect on the financial performance of Jordanian Insurance Companies. The financing decisions are also affected by the environments within which the firms operate and which exhibit high degree of instability. The study period starting 2007 was characterized with harsh economic climate because of the financial crisis that faced the world. Past studies on financial structure relationship with financial performance have concentrated on investigating the direct relationship between financial structure and financial performance of companies and mainly investigating one component of financial structure at a time. However, authors documented different results and explained various rationales in this respect. Some authors found (Abor, 2010) positive leverage-performance relationship, while others believe conversely and described debt as negative connotation. Mwangi *et al.*, (2014) concluded that increased financial leverage has a negative effect on performance.

The worldwide money related emergency has affected the capital structure of two or three organizations around the world, to a great extent to a great degree turned organizations independent of the disparity in the tremendousness of the effect because of the distinctions in monetary market creation and different components (Zarebski and Dimovski, 2012). They demanded that most firms were very fluid amid the monetary blast, prompting high rates of guaranteeing, loaning and renegotiating by money related establishments. This was ended by the land advertise disintegrate in the US which caused the loss of such a significant number of advantages, making the exceedingly turned organizations to bomb in paying their obligations (Zarebski and Dimovski, 2012). Iqbal and Kume, (2014) found that the

aggregate use proportions were low after the emergency and high before the emergency in Germany, UK and France.

In Africa, the impact of money related use on organizations' esteem contrasts cross nations as a result of the dissimilarities in expense sections and assessment laws (Obradovich and Gill, 2012). Mireku, Mensah and Ogoe, (2014) found that a high level of organizations in Ghana favored obligations that are here and now to obligations that are long haul as a point of supply of pay to fund their creation and resources. Then again Enekwe *et al.* (2014) inferred that money related use has no critical effect on pharmaceutical organizations' execution in Nigeria. Adesina, Nwidobie and Adesin (2015) recommended that administration of some cited banks in Nigeria always use value and obligation as a type of improving profit, a flag of a significant relationship among money related execution and capital structure of organizations. Firms in South Africa are recognized by proprietorship structures where the proprietor of the organization is at the highest point of the pyramid which is otherwise called the best down level of leadership (Fosu, 2013). He included that the above sort of structure demonstrates the kind of organisational issues experienced by South African organizations from different nations because of the way that they exist among greater part and minority top administration. The best down structure depends on value as methods for money and obligation contracts may just be used as a proportion of mitigating the issues of the Agency (Fosu, 2013).

In Kenya, recorded firms have been described as poor money related execution. Yegon, Cheruiyot and Cheruiyot (2014) in their exploration shown that the linkage existing between long haul obligation and firm productivity is negative and the linkage between an association's fleeting obligation and its gainfulness is certain.

They pointed the finger at it on the way that fleeting obligation is more reasonable than long haul obligation. Along these lines, expanded productivity is an aftereffect of here and now an obligation. All things considered, adding up to obligation has no essential effect on the organization's execution due to the exceptional highlights of here and now and long-haul obligations (Yegon *et al.*, 2014).

1.1.1 Financial Leverage

Financial leverage refers to the ability of firms to utilize their fixed financial charges to cushion the impacts of fluctuations in the earnings of the firms. Organizations may supplement the shareholders equity by employing debt. Additional financing requirements may therefore be achieved by increasing the owners' claim through issuing of ordinary shares or use of retained earnings or by increasing creditors claim through borrowing. Electing to utilize both equity and debt culminates into a firm's capital structure. The ratio between equity and debt is signified by the term capital structure. Leverage refers to the debt component in a firm's capital structure (Pandey, 2009).

The linkage existing between capital structure and the capability of firms to service the interests of its different stakeholders has given eminence to leverage. How the firm's capital structure is formed impacts its governance and subsequently the flexibility a company has in passing critical decisions (Jensen, 1986). Financial leverage is the portion of the firm's capital financed with debt. It follows that highly indebted firms have higher leverage in their capital structure. It in addition reflects the proportion of capital shareholders and creditors have contributed. Leverage could also be viewed as that portion of a firm's fixed costs which exposes the firm to risks. Financial leverage which indicates a measure of financial risk refers to a long-

term financing with fixed financing charges on the company's assets. High financial leverage means high financial risk and inherently high capital cost to the firm. Capital structure according to Firer, Ross, Westerfield & Jordan (2004) implies the relative amount of equity and debt utilized by the firm to finance its operational activities.

Leverage is measured using various ratios. Within the capital structure of the firm, the ratios indicate the ability of the firm to satisfy the interests of its various stakeholders and to quantify debt the firm has. The financial statements provide information used to derive the ratios which mainly focus on the firm's stockholders' equity and liabilities to debt holders (Yahaya & Lamidi, 2015). In addition, they are used to assess the ability of the firm to service its fixed payments associated with its debts.

1.1.2 Financial Performance

The degree to which destinations of the organization and for this situation money related goals will be met or have been met is alluded to as monetary performance (Yahaya and Lamidi, 2015). Kajirwa (2015) derived that the association's monetary execution is worried about how proficient an organization uses its quality from its significant obligation of doing business and its succeeding age of pay. Monetary execution can likewise be viewed as the overall welfare of an organization with regards to back over a specific timeframe. Money related execution is utilized to gauge the extent of organizations from a similar class of industry or diverse businesses with the end goal of examination. Money related execution in outline is a primary target that groups mainly the organizations that are benefit situated need or go for to achieve (Yahaya and Lamidi, 2015).

Monetary execution focuses more things that impact the cash related decrees or reports of a firm direct. The cash related execution examination can oversee things, for instance, benefit advancement, bargains turnover, capital used, asset base among others about the firm (Omondi and Muturi, 2013). The fiscal execution is a basic pointer or extent of some monetary units' success for example on achievement that characterize targets and goals (Xu and Wanrapee, 2014). Firms' accomplices are generally motivated by the organization's execution to the degree support is concerned (Nyamita, 2014). The current examination embraced return on value and profit for resources as proportions of budgetary execution.

1.1.3 Financial Leverage and Financial Performance

Several empirical and theoretical explanation have been done on the link existing between leverage and firm performance. Theoretically, the pecking order hypothesis which contends that companies got an order of preference as far as financing is concerned. The order of financing is based on cost related to such finance types and their availability (Mule & Mukras, 2015). The Modigliani and Miller theory (1958) affirms that in a perfect market, value of the firm is not affected by the capital structure mix of debt and equity. A Trade-off theory proposes that an ideal structure of capital is only reached when the cost of debt financing is balanced with the debt benefits to the firm (Raza, 2014). Agency theory supports that the leverage can be used as a solution to any agency problem that might arise (Jensen & Meckling, 1976).

A firm's financial performance refers to a firm's ability to generate new resources from day-to-day operations over a given period (Bora, 2008). It involves enhancing shareholders' wealth and profit making which are among the major objectives of a

firm (Pandey, 2005). Accounting ratios derived from the balance sheet and income statement and also from data on stock market prices, are used to measure how better off a shareholder has become over time (Berger & Patti, 2002). The growth in firms' sales, the improvement in their profit margin, their capital investment decisions and capital structure decisions mainly influence the shareholder's wealth (Arnott & Asness, 2003).

Various indicators have been used to measure the financial performance of the firms by various scholars. The various ways of measuring company's financial performance are reflected in the company's ratios of Return on Investment (ROI), Return on Assets (ROA), Return on Equity (ROE), value added, among others which measure whether the owners „objectives are being met; the objectives of increasing shareholders“ wealth through investing in business. Therefore, financial performance is a general measure of a firm's overall financial health over a given period, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation.

A study by Okwo et al., (2012), used operating profit margin to measure financial performance of firms within the brewery sector. Olatunji et al., (2014) used Net profit of the commercial banks as the measure of their financial performance. A study by Wamugo *et al.*, (2014), on the relationship between capital structure and performance of non-financial listed firms, used ROA and ROE as the indicators of Firm performance. The current study developed an all profitability ratios index for financial performance by computing a simple average for return on assets, return on equity and profit margin (return on sales) of the firms under study. This approach was also taken by the study on the effects of asset structure on the financial

performance of listed manufacturing firms where an evaluation of financial performance of these firms was through the use of ROA and ROE (Mawih, 2014).

The role of leverage on performance of firms was studied by Moghadam and Jafari (2015). The research showed that leverage positively and significantly impacts on firm performance. As such, the study concluded that firms having higher levels of debt are more profitable than those with lower debts. Similarly, the effect of leverage on firm performance was looked at by Rehman (2013). The study concluded that sales growth, debt equity ratio affects the return on assets of firms.

1.1.4 The Nairobi Securities Exchange

According to NSE (2015), trading in securities was informal, manual and was purely on a gentleman's agreement until 1954 when the Nairobi Stock Exchange was constituted as a voluntary association of stockbrokers registered under the Societies Act. From the first privatization of 20% government stake in Kenya Commercial Bank (KCB) in 1988, NSE has grown in trading volumes, boosted by among others efficient settlement of deals through automated trading system introduced in September 2006. The market capitalization of the already demutualized (on July 2014) NSE as at the last day of trading in 2014 was over sh. 2.2 Trillion with 64 firms listed.

The Nairobi 20-Share Index had as at end of 2014 surpassed the 5000 points mark, an indication of the huge capital mobilization through NSE. Bonds of sh. 494 billion were issued in 2014 up from sh. 253 billion in 2013 (NSE, 2015). Nairobi Securities Exchange plays an important role in the process of economic development and helps in mobilizing domestic savings which bringing about the reallocation of financial

resources. It has also facilitated transfer of securities between shareholders by making long-term liquid. It also enabled companies to engage local participation in their equity, thereby giving Kenyans a chance to own shares. Companies can also raise extra finance which is essential for expansion and development. Nairobi Securities Exchange also enhances the inflow of international capital. They can also be useful tools for privatization programs.

1.2 Statement of the problem

Financial leverage and financial performance are fundamental issues in corporate finance (Mule & Mukras, 2015). As per the pecking order theory, an optimal structure of capital is derived a tough balancing of the costs that are related to debt financing and tax advantage benefit for use of debt finance. Jensen and Meckling (1976) purports that financial leverage affects the firm's capital structure in that it has an impact on managers' financial decisions and that these resolutions have a consequent effect the corporate performance (Ku & Yen, 2013). However, the Modigliani and Miller (1958) proposition argues that the value of the firm is only determined by the level of real assets and not equity and debt in their capital structure (Al-Tally, 2014). Thus, there is no generally agreed theoretical underpinning on the effect of leverage and corporate performance hence an unresolved puzzle (Ku & Yen, 2013).

In Kenya, some companies listed at the Nairobi Securities Exchange have had performance improvement. However most of them have experienced declining fortunes which has been attributed to the fact that corporate managers another practitioner lack adequate guidance required to attain optimal financing decisions (Ayako, Kungu & Githui, 2015). According to Mwangi, Makau and Kosimbei

(2014), most collapse of many petroleum and energy firms or firms in Kenya has been due to financing issues or behavior of firms in general.

The connection between leverage and performance of firms in terms of finance has been examined by several authors. Empirical studies by Olayinka and Taiwo (2012) studied the impact of leverage on firm profitability of Nigerian firms. The study revealed that leverage had a negative effect thus low debt ratios enhance firm profitability. Akbarian (2013) explored the influence of leverage on firms' performance in Tehran stock exchange and found that there exist an inverse linkage between leverage and free cash flow per share but the study also found a significant positive relationship with return of equity. Another study by Barakat (2014) examined the effect of financial leverage and profitability in Saudi industrial firms and established an insignificant inverse relationship between financial leverage and share value.

The above studies show that little has been done concerning financial performance and financial leverage of petroleum and energy sector firms recorded in the NSE. Previous studies were mostly centered on other countries and other sectors rather than Kenya and the energy and petroleum sectors respectively. This study therefore attempted to elaborate the relation between financial leverage and performance of the energy and petroleum sector companies in the NSE.

1.3 Objectives of the study

1.3.1 General Objective

To determine the effect of financial leverage on the financial performance of energy and petroleum sector companies listed in the NSE.

1.3.2 Specific Objectives

The study was guided by the following objectives;

- i. To determine the effect of debt ratio on financial performance of energy and petroleum sector companies listed in the NSE, Kenya.
- ii. To determine the effect of debt-equity ratio on financial performance of energy and petroleum sector companies listed in the NSE, Kenya.
- iii. To determine the degree to which interest coverage ratio affect financial performance of energy and petroleum sector companies listed in the NSE, Kenya.

1.4 Research Questions

Below were the research questions:

- i. What is the effect of debt ratio on the financial performance of energy and petroleum sector firms recorded in the NSE Kenya?
- ii. What is the relationship between debt-equity ratio and financial performance of energy and petroleum sector companies listed in the NSE, Kenya?
- iii. How does interest coverage ratio affect financial performance of energy and petroleum sector companies listed in the NSE, Kenya?

1.5 Significance of the Study

This study is helpful to listed firms as it shows how financial leverage relates to the performance of firms. The discoveries will be utilized to control recorded firms on money related choices in the zones of the board and the utilization of assets to

amplify the market estimation of the business which is a key budgetary objective of generally firms.

Firms in different divisions can take in the advantages of using money related use and how it impacts on productivity. The findings of this study might be used as a reference point to firms seeking to finance their projects using financial leverage. This research will add to the existing body of knowledge on the significance use of financial leverage to the firm and how this contributes to profitability of the firm. In addition, this study can be used as a base for future research.

1.6 Scope of the Study

This research was done among the energy and petroleum companies listed with the Nairobi Securities Exchange. The time scope of the study comprised of the period 2011 to 2015. Multiple regression analysis was utilized in the study. The study sought to examine the role of financial leverage on the financial performance of energy and petroleum recorded companies in NSE, Kenya.

1.7 Limitations of the Study

The financial statements of some energy and petroleum firms are reported in dollars and Ugandan shillings. The rest of the energy and petroleum firms have their financial statements reported in Kenyan shillings. These differences in currencies may bring about a problem in the determination of effect of financial leverage on financial performance. The researcher took care of the exchange rate risk converting the financial statements reported in dollars to Kenyan shillings at the current rate of exchange to obtain the correct results.

1.8 Organization of the Study

The document is structured as follows; chapter one describes the background information, problem statement, objectives, scope, the significance, the limitations and how the limitations will be handled. Chapter two presents all the analyzed theories explaining the predicted and predictor variables. It additionally presents the pictorial view of the interrelationships between variables. Chapter three of the proposal discloses how to gather, research design to be used, population targeted, tools used and procedure on data collection. Chapter four presents data analysis and discussion of findings and lastly chapter five presents the summary, conclusion and recommendations of the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents research from other scholars conducted from the same field of study, the literature review on financial leverage and financial performance of firms and the conceptual framework, the theoretical review, the research gaps, empirical review and the summary.

2.2 Theoretical Framework

The theories that support the link between the independent and dependent variables are covered in this section. They are: Resource Dependence Theory, Modigliani-Miller theorem, Trade-off Theory as well as Pecking Order Theory.

2.2.1 Modigliani-Miller Theorem

Modigliani-Miller propounded the theory in 1958. The theory maintains that the value of market of a company is determined by the danger identified through the hidden assets of the company and on the firm's capacity to earning. Additionally the theory states that the company's market value is not influence by the decisions of distributing the dividends or the choice of financing the investments. The three different ways that an organization can back the speculations are reinvesting the benefits, obtaining outside capital and issuing the offers. The hypothesis expressed that it has no effect under some market suspicions regardless of whether the firm speculations are financed with value or obligation. The Modigliani-Miller hypothesis is regularly alluded to as the capital structure unimportance guideline.

This suggests the estimation of an association isn't vital to the organization's capital structure. Modigliani and Miller in 1963 states that a firm doesn't matter to its esteem whether it is very utilized or it has bring down obligation part in the financing blend. Modigliani and Miller Approach also opine that the esteem or an organization's market is affected by its prospects development later on beside the threats related with the financing. The hypothesis states the organization's esteem does not rely upon the financing choice or decision of capital structure of the organization. Companies with high growth prospects have higher market value and consequently, its prices of stock would be high. The value of market of a firm would be poor if people willing to invest do not see encouraging growth prospects in a company. According to Miller. (1977), capital structure does not have an influence on the evaluation of a firm base on the predictions of this theory on no taxes. This means that leveraging the firm will not increase the company's market value. Equally split earnings is a priority commonly shared by equity share holders and debt holders in a company.

Because of the current study, this theory's advocates maintain that cost of equity is in direct portion with financial. Therefore, in return, a higher return is expected by the shareholders, hence the cost of equity is increased. The theory asserts that as far as claim on earnings is concerned debt holders have an upper hand therefore debt cost reduces.

2.2.2 Pecking Order Theory

This theory was first initiated by Donaldson in 1961, and was improved later in 1984 by Myers and Majluf. The theory opines that firms make sources of financing their priority in accordance to the financing cost, using raise of equity as a means

of financing last resort. Thus, internal money is used and exhausted, debt is issued, and equity is issued when it is not sensible to issue any more debt. The pecking order theory states that the three available sources of funding firms are: equity, retained earnings and debt (Myers, 1994).

The pecking order theory doesn't adopt the best capital structure as the origin, instead it establishes the verifiable fact that companies display clearly that they prefer to adopt interior fund (as held income or overabundance fluid resources) over outer back. Firms might get outer financing if interior assets are insufficient to fund speculation openings and on the off chance that they do, they will pick among the diverse outside back sources in a way that will diminish additional expenses of uneven data. The last-made reference to costs mirror the "lemon premium" (Akerlof, 1970) that financial specialists from outside request the likelihood of disappointment for the standard organization in the market. Coming up next are the emerging pecking structure of financing: share financing, inside produced supports first and pursued by separately generally safe obligation financing.

In 1984 Myers and Majluf display expresses that, speculators from outside legitimately deduct the organization's stock cost when the board gives value instead of obligation without hazard. The executives avoid value in each conceivable method to maintain a strategic distance from this decrease.

The Myers and Majluf display estimates that a pecking request will be trailed by the executives, spending unsafe obligation, at that point inner assets and utilizing value at last. Firms keep up benefits and develop budgetary slack without speculation chances to abstain from raising future outer fund.

The market-to-book is respected by the pecking request hypothesis proportion as an appraisal of speculation openings. Because of this clarification, Myers in 1984 and Fama and French in 2000 acclaimed that a contemporary relationship among the market-to-book proportion and capital structure is difficult to incorporate with the settled pecking request demonstrate. Accentuation on the settled form likewise suggests that high venture periods openings will push use upward toward obligation limit. It will get to the dimension that expanded past market-to-book truly compares with past venture that is high; results anyway show that particular periods are equipped for pushing influence lower.

The pecking request hypothesis theorizes that the objective of capital structure is missing. Because of ominous determination, organizations pick inner to outside fund. Firms incline toward obligation to value when assets from outside are vital because of little data costs identified with issues of obligation. This hypothesis guaranteed that organizations comply with a request of financing cause and when accessible favor inner financing and obligation is picked instead of value if outer financing is fundamental (value would mean giving offers which implies embracing outside possession into the firm). Subsequently, the sort of obligation an organization embraced can go about as a sign that it needs outer back (Myers, 2001).

2.2.3 Trade-Off Theory

This theory was propounded by Myers (1984). The hypothesis alludes to the possibility that a firm decides how much obligation fund and how much value back to use by striking a harmony among advantages and cost. Myers in 1984 expressed that exchange off hypothesis of capital structure includes adjusting the obligation

cost against the obligation advantage. The Trade-off hypothesis considers distinctive corporate fund decisions that a partnership encounters.

Diverse specialists have utilized the term exchange off hypothesis to depict a group of speculations that are related. A person that decides against running a company analyzes the different benefits and costs of other leverage plans. Frequently there is an assumption that an interior solution is acquired for the balance of marginal costs and marginal benefits. A relevant function of the trade-off theory of capital structure is to describe the fact that corporations are normally financed partly with debt and equity respectively. (Kraus & Litzenberger, 1973). In this study the theory indicates that the main sources of financing are debt and equity.

2.2.4 Agency Cost Theory

This theory by Jensen and Meckling (1976) is concerned with the diverging interest when the firm ownership and management are separated. The theory argues about the relationship between the agent (manager), and the principal (shareholders). The agency theory is based on the notion that managers will not always act in the best interest of the shareholders. Jensen and Meckling (1976) further elaborate on this concept by identifying two main conflicts between parties to a company, firstly, between the managers and shareholders, and secondly, between the shareholders and the creditors. In the first instance, managers are tempted to pursue the profits of the firms they manage to their gain at the expense of the shareholders. In the latter instance, debt provides shareholders with the incentive to invest sub-optimally. Harris and Raviv (1991) argue that if an investment yields returns higher than the face value of the debt, the benefits accrue to the shareholders. Conversely, if the investment fails, the shareholders enjoy limited liability by exercising their right to

walk away. This leaves the debt holders with a firm whose market value is less than the face value of the outstanding debt.

The major assumption of this theory is that the separation of ownership and management creates conflicts among principals and agents. The main argument behind the agency theory is that the corporate managers act in their interest. They are looking for job security, prerequisites, in the worst cases getting hand on assets and cash flows. The ethics of the free cash flow theory has been built due to the agency cost approach. Managers have incentives to decrease the firm value unless the free cash flow distributes between stakeholders. Jensen (1986) argues that the problem is how to motivate managers to disgorge the cash rather than investing it below the cost of capital or wasting it on organization inefficiencies. One solution to this problem is to apply more debt in capital structure to confine the managers. This strategy would force the firm to limit its spending or perks to avoid the default risk.

Also the agency cost theory does not offer an operable solution on dealing with agency problem between firm managers and shareholders. For instance investors would like to reward effort, commitment and good decisions, but these inputs are imperfectly observable. Even if good performance on these dimensions were observable by some informed monitor, the performance would not be verifiable. A contract offering a bonus for, say, good decisions investment decisions made by firm managers would not be enforceable, because the decisions could not be evaluated by a disinterested outsider or by a court of law. In other words, "complete contracts" cannot be written (Myers, 2011).

2.3 Empirical Literature Review

This section stipulates the three objectives which include debt ratio, debt-equity ratio and interest coverage ratio and their influence on financial performance of a firm.

2.3.1 Debt ratio and financial performance of firms in energy and petroleum sector

Mahnoor (2010) did a study on impact of financial leverage on firms' performance in Fuel and Energy sector in Iraq. The study applied DR as a proxy to measure financial leverage and ROA/ROE as a proxy to measure firms' performance. Through application of least squares method, the study results showed that debt ratio has positive significant influence on the firms' performance financially. The research was based on Energy companies in Iraq. The current research will be based on recorded Petroleum and Energy Firms listed on the NSE, Kenya.

Hamza Khaled (2012) did a research on how capital structure influence financial performance of firms recorded in Libya. The research analyzed the connection between total debt, short-term debt and long-term debt to financial performance and equity return. The study showed that total debt measured using debt ratio (DR) significantly affected financial performance and return on equity. However, the study focused on listed firms in Libya unlike this study which will focus on listed Petroleum and Energy Firms listed on the NSE, Kenya.

Abegunde Orimogunje (2012) researched the connection between corporate financial performance and capital structure of companies in Nigerian energy sector. Using regression model the study showed that debt ratio statistically and negatively affects return on assets. The study also concluded that there is no significant

difference between firms with low debt ratio and high debt ratio in their financial performance. However, the study was centered on the Energy sector of Nigeria.

Akhtar, *et al* (2012) studied the link between firm performance and financial leverage for Fuel and Energy sector in Pakistan. Research results showed that debt ratio positively affect financial performance (ROA) and return on equity (ROE) of companies in fuel and energy sector in Pakistan. In general the study showed that most of financial performance indicators have a positive relationship with the financial leverage indicators. Similarly, the study was based on performance of Fuel and Energy sector in Pakistan. In filling this gap, the current study will be conducted in the context of Kenya.

Mikhailov (2013) studied the effects of financial leverage and corporate governance on financial value of petroleum sector companies in Russia. The study used data for the year between 2009 and 2011. The study concluded that debt ratio (DR) positively affect financial performance (ROA) and financial value of Russian. In general the study concluded that large board size negatively affects the value of Russian firms while financial leverage, firm size and financial performance positively affects the value of Russian firms. The current study will be carried out in the Kenyan context.

Hoi Seon Yoon (2013) researched the connection between financial performance and financial leverage of petroleum firms recorded in Kuwait. Findings of the research indicated that a productive relationship exist between debt ratio (DR) and financial performance (ROA) and sales growth of these firms. The study concluded that financial leverage positively affect financial performance of listed petroleum

firms in Kuwait. However, the research was conducted in the context of Kuwait. The current research will be conducted in the context of Kenya.

Mahmoudi (2014) researched to examine the effect of leverage on profitability of companies recorded in Tehran Stock exchange between the years 2008 to 2011. In the study he measured leverage using debt ratio (DR) while profitability was measured using financial performance (ROA) and return on equity (ROE). In the study Mahmoudi also studied part of the energy sector companies in Tehran stock exchange. The study showed that there is a significant negative relationship between debt ratio and financial performance and return on equity.

Mustafa Zuthimalim *et al* (2015) studied effect of financial leverage on financial performance of fuel and energy sector companies in Algeria. Using multiple regression analysis, the study found out that debt ratio (DR) has insignificant negative connection with financial performance (ROA). The research focused on Energy companies in Algeria, therefore the findings cannot be extended to Energy firms in Kenya. This is attributed largely to the different economic conditions across countries.

Amenophis Hanbal (2015) researched the connection between financial leverage and financial performance of petroleum and mining sectors firms in Egypt. The study used debt ratio and Debt equity ratio as proxy to measure financial leverage and financial performance (ROA) / return on equity (ROE) as the proxy to assess financial performance. The study results showed that no significant relationship that exist between debt ratio (DR) and return on asset (ROA) / return on equity (ROE).

Zulaika (2016) researched the influence of financial leverage on financial performance fuel and petroleum sector companies in Angola. In his research he

analyzed the financial statements of these firms from the year 2011-2015. The study results showed debt ratio (DR) has a negative relationship with return on asset ratio (ROA). Similarly, that research was conducted in the context of Angola. The current research will be conducted in the context of Kenya.

2.3.2 Debt Equity Ratio and financial performance of firms of firms in energy and petroleum sector

Mahnoor (2010) did a study on impact of financial leverage on firms' performance in Fuel and Energy sector in Iraq. The study applied debt equity ratio (DER) as a proxy to measure financial leverage and return on asset (ROA) / return on equity (ROE) as a proxy to measure firms' performance. Through application of least squares method, the study results showed that debt equity ratio has insignificant positive impact on the firms' financial performance. Interestingly, the study was carried out in Iraq unlike this study which will focus on Kenya.

Shehla, Benish, Atiya and Haleema (2012) established that in measuring financial performance the study used several variables including: Financial performance (ROA), return on equity (ROE), dividend cover ratio (DCR), net profit margin, and earnings per share (EPS) among others. The study found out that debt equity ratio (DER) is negatively related to financial performance (ROA) and positively related to return on equity (ROE). The study concluded that financial leverage is positively correlated to financial performance. The current research will be conducted in Kenya.

Hoi Seon Yoon (2013) studied the linkage between leverage and financial performance of petroleum firms listed in Kuwait. In the study DER and DR were used as the measure for financial leverage while financial performance (ROA) was

used to measure financial performance of these companies. Research results showed a strong relationship amongst debt equity ratio (DER) and financial performance (ROA) and sales growth of petroleum firms listed in Kuwait. The study concluded that financial leverage positively affect financial performance of listed Petroleum firms in Kuwait. In addressing this contextual gap, this study will focus on Kenya.

Mustafa Zuthimalim *et al* (2015) studied effect of financial leverage on financial performance of fuel and energy sector companies in Algeria. The study used debt ratio, debt equity ratio and interest coverage ratio as proxy to measure financial leverage and return on asset as a proxy to measure financial performance. The study found an insignificant negative relationship between debt equity ratio and return on asset ratio, thus concluding that DER is not an important determinant of financial performance of pharmaceutical firms. The research was focused on the Energy sector of Algeria. This research will be focusing on the Petroleum and Energy Sector in Kenya

Amenophis Hanbal in 2015 researched the relation between financial leverage and financial performance of petroleum and mining sectors firms in Egypt. The study found out that significant bad relationship exists amongst DER and ROA/ROE. Unlike like Petroleum and Mining Sectors in Egypt, the current study will be based on Petroleum and Energy Firms listed on the NSE, Kenya.

2.3.3 Interest Coverage Ratio and financial performance of firms in energy and petroleum sector

Mustafa Zuthimalim *et al* (2015) considered the job of money related use on monetary execution of fuel and vitality division organizations in Algeria. The examination utilized obligation proportion, obligation value proportion and intrigue

inclusion proportion as intermediary to quantify monetary use and profit for resource as an intermediary to gauge money related execution. The outcomes demonstrated that there is unimportant positive connection between intrigue inclusion proportion and profit for resource. Likewise, the investigation depended on the fuel and vitality part of Algeria.

Tasneem (2016) did a study on the responsiveness of financial leverage on profitability of energy sector in South Africa. The study results showed that ICR has negative relationship with ROA and ROI. The current study will be based on the Petroleum and energy sector in Kenya thereby addressing the research gap.

Zulaika (2016) did a study on the influence of financial leverage on financial performance fuel and petroleum sector in Angola. In his study he analyzed the financial statements of these firms from the year 2011-2015. The study results showed that ICR has an insignificant positive relationship with ROA however these firms didn't use ICR in making financing decisions. The study was on fuel and petroleum firms in Angola. This study will be on Petroleum and energy companies recorded on the NSE Kenya.

Research conducted by Adongo in 2012 to examine the impact of financial leverage on profitability and profitability of firms listed at the NSE Kenya. An easygoing exploration configuration was embraced for the examination. Populace comprised of fifty-eight organizations out of which thirty organizations were inspected. The example avoided 15 recorded organizations under banks and protection because these organizations are managed and are to meet certain liquidity and use proportions. The examination secured a multi year time frame January 2007 to December 2011. The discoveries uncovered an immaterial connection between returns balanced by hazard and money related use. This negated with the theory of

the examination which had anticipated a positive connection between budgetary use, productivity and danger of recorded firms.

2.3.4 Financial Performance

There exists many empirical and theoretical explanation of how leverage and firm's performance are related. Theoretically, the pecking order hypothesis which contends that companies got an order of preference as far as financing is concerned. The order of financing is based on cost related to such finance types and their availability (Mule and Mukras, 2015). The Modigliani and Miller theory (1958) affirms that in a perfect market, value of the firm is not affected by the capital structure mix of debt and equity. A Trade-off theory proposes that an ideal structure of capital is only reached when the cost of debt financing is balanced with the debt benefits to the firm (Raza, 2014). Agency theory supports that the leverage can be used as a solution to any agency problem that might arise (Jensen and Meckling, 1976).

Numerous analysts have contemplated firm particular and full scale monetary determinants from various dreams and in various ways. Concentrates that bargain with inward determinants abuse factors, for example, measure, substantial quality, development and obligation to value proportion.

The level of which different monetary, legitimate and different factors, for example, defilement influence budgetary execution is emphatically identified with firm size (Bhutta and Hasan, 2013). The span of an organization is essentially identified with capital proportions (Goddard, Molyneux, and Wilson, 2004; Bikker and Hu, 2002). The development openings are estimated regarding the portion of a company's esteem spoken to for by resources set up; the littler the extent of a company's esteem described by resources set up, the bigger are the company's development openings (Myers, 1977). The organizations with development openings have reasonably

greater improvement ventures, new product offerings, acquisitions of different organizations and fix and substitution of existing resources. Additionally, development openings and firm size are emphatically identified with money related execution (Abor, 2005). Those organizations with low development openings shelter demonstrate high budgetary execution and firms amidst the development openings grade to affirm little monetary execution (Myers, 1977).

2.4 Summary of Literature Review

Table 2:1 Summary of Literature Review

Author	Title	Findings	Gap
Manhoor (2011)	The impact of financial leverage on firms' performance in Fuel and Energy sector in Iraq.	Positive relationship between financial leverage and financial performance	Influence of ICR on financial performance was not covered and only Iraq companies were considered
Shehla, Benish, Atiya and Haleema (2012)	The relationship between financial leverage and financial performance fuel and energy sector in Pakistan.	Positive correlation between financial leverage and financial performance	Only Pakistan companies were covered.
Akhatar, <i>et al</i> (2012)	The relationship between leverage and financial performance of top 100 SMEs in Kenya	Financial performance indicators have a positive relationship with the financial leverage indicators	Only Pakistan companies were covered
Adongo (2012)	Effect of financial leverage on profitability or risk of firms listed at the NSE	There is an insignificant relationship between returns adjusted by risk and financial leverage	Out of 58 firms 24 were excluded and a short period considered. This contradicted with the study hypothesis
Hamza Khaled (2012)	Influence of capital structure on financial performance of firms recorded in Libya	Total debt measured using debt ratio significantly affected financial performance return on equity	The study focused on capital structure while the current is on financial leverage and financial performance

Abegunde Orimogunje (2012)	Corporate financial performance and Capital structure of companies in Nigerian energy sector	Statistically, debt ratio and negatively affects return on assets	The study indicates an inverse relationship and is based on the Nigerian energy sector firms
Mikhailov (2013)	Effects of financial leverage and corporate governance on financial value of petroleum sector firms in Russia	Debt ratio positively affect financial performance and financial value of firms	The study only focused on debt ratio leaving out other aspects of financial leverage
Hoi Seon Yoon (2013)	Relation linking financial leverage and financial performance of petroleum firms recorded in Kuwait	A positive relationship exist amongst debt ratio and financial performance and sales growth of firms	The study focused on firms in Kuwait
Mustafa Zuthimalim et al (2015)	Effects of financial leverage on financial performance of fuel and energy sector companies in Algeria	There is an insignificant negative relationship between debt equity ratio and return on asset ratio	The study focused on Algerian firms

Amenophis Hanbal (2015)	Relationship between financial leverage and financial performance of petroleum and mining sector firms in Egypt	There is a significant negative relationship between debt equity ratio and financial performance	The study focused also on mining sector firms in Egypt while the current is based on petroleum firms in Kenya
Zulaika (2016)	Effect of financial leverage on financial performance of fuel and petroleum sector firms in Angola	Interest coverage ratio has an insignificant positive relationship with financial performance	The study was based on Angolan firms

Source: Literature Review (2018)

Mahmoudi (2014) and Amenophosis (2015), the hypothesis for this study projects a bad relationship amongst financial leverage and profitability of listed companies. This is backed by the theories anchoring this study.

Most studies in the local setting for example Adongo (2012) that have investigated the relationship between financial leverage; profitability and financial performance in the context of listed firms are inconclusive since they have relied on a sample to generalize the findings. Secondly, most investigations have tried the connection between use with budgetary execution and benefit which estimates obligation to value proportion not at all like money related use which estimates add up to obligation. This makes a need to explore the connection between money related use and monetary execution of vitality and oil enterprises recorded at the NSE.

2.5 Conceptual Framework

The conceptual framework of the study shows the link between the study variables. The independent variables which are debt ratio, debt to equity ratio and Interest Coverage Ratio are proposed to affect the dependent variable as denoted by ROE AND ROA.

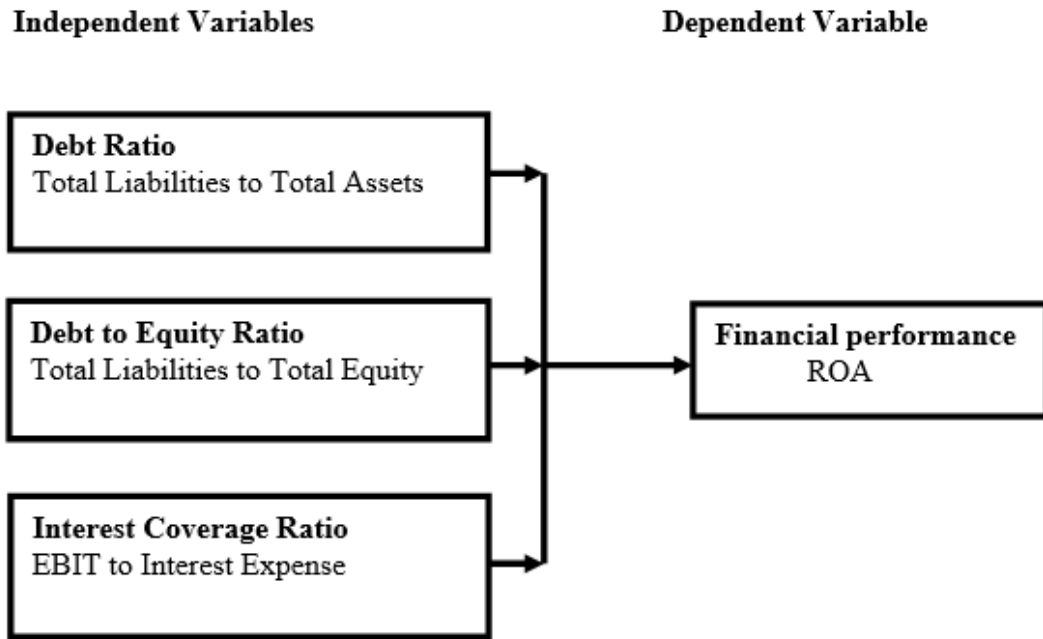


Figure 2.1: Conceptual Framework

Source: Researcher (2018)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

Chapter three provides an overview of the proposed research methodology. Additionally, it explains the type of data, how the data was gathered and analyzed, the source(s) of data, the population that was targeted, methods of sampling and the techniques adopted to select the sample size.

3.2 Research Design

The fundamental proposition that gives details of the necessary activities needed to carry out the research is the research design. Descriptive research design was utilized to study the research problem. Cooper & Schindler in 2009 stated that, the main objective of a descriptive study is finding out a phenomenon's how, what and where. Therefore, the current research is fit to generalize the discovery to all the activities. This method involved the extreme appraisal of situations that require problem solving and the problems are important to the research problem.

The study targets the influence of financial leverage on the financial performance of energy and petroleum companies recorded in the NSE. The highlighting concept was to place many cases that are targeted, where a thorough analysis distinguishes the practicable substitute for answering the research questions on the premise of the existing explanation tested in some chosen case study. The study seeks to give details on a subject frequently by establishing a profile of some problems (Cooper & Schindler, 2006).

3.3 Target Population

Mugenda & Mugenda in 2013 states that a total set of people, cases or objects with a few accepted noticeable features is defined as population, 5 firms that are currently listed with the NSE from the energy and petroleum sector in Kenya were the study population (NSE, 2019). These firms are Kenol Kobil, Kenya Power Limited Company Ltd, Total Kenya Ltd, Umeme and KenGen.

3.4 Sampling Design

Sampling techniques gives a variety of ways that aids the reduction of the number of needed data to gather by acknowledging data only from a mini-class instead of other likely elements or instances. Due to a small target population, all the companies listed with the NSE from energy and petroleum sector were included in the study to provide information on financial leverage and allow access to secondary data within the firms' financial statements.

3.5 Operationalization and Measurement of Variables

Table 3.1: Operationalization and measurements of variables

Variable	Type of variable	Operationalization	Measurement
Financial Performance	Dependent Variable	Return on Equity	ROE in millions
		Return on Asset	ROA in millions
Debt Ratio	Independent Variable	It is the proportion of a company's assets that are financed by debt.	Total liabilities to total assets
Debt to Equity Ratio	Independent Variable	A ratio that compares a company's total debt to total equity.	Total liabilities to total equity

Interest Coverage Ratio	Independent Variable	A ratio that measures a company's ability to make interest payments on its debt promptly.	EBIT to interest expense
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Source: Researcher (2021)

3.6 Data Collection Instruments

The study made use of both primary and secondary data in respect to the duty of financial leverage on financial performance of energy and petroleum firms listed with the Kenyan NSE. Primary data collection was aided by a questionnaire. Kombo and Tromp (2006), assert that questionnaires enable collection of information from a large sample and diverse regions. They comprised both open-ended and closed-ended questions. Secondary data entails collecting and analyzing of materials that are published and information from sources which includes annual reports or data that is published. Secondary data from the company's financial statements was collected for the research. The secondary data are usually gotten from the NSE website company reports.

3.7 Data collection procedures

Data collection procedures are the steps carried out by the researcher while collecting data using data collection instruments (Ng'anga, 2012). Secondary data was sourced from Capital Market Authority from years 2011 to 2015.

3.8 Pilot Study

A pilot study was necessary for this research study because it helped in achieving validity and reliability of the research instruments and tools (Reaven *et al.*, 2009). Simple random sampling was used to select five respondents used for the pilot

study. The sampled respondents not part of the sample for the study. The pilot study enabled the researcher to familiarize with research administration procedures and to identify items that require modification, addition or deletion. The efficiency in data collection was tested using researcher produced instruments and matching these tools with the research objectives and questions.

3.8.1 Validity

Validity is defined as the accuracy and meaningfulness of inferences, which are based on the research results (Golafsheni, 2005). To ensure that the information to be collected from the field was accurate and reliable, there was a need for the researcher to determine content validity of the instruments. Content validity of the instruments was determined by going through the items one at a time and comparing the contents to ensure that they contained all the information in line with the study objectives and variables of the study. Expert judgments were sought from university supervisors.

The research instruments were scrutinized by the departmental supervisors to judge the items on their appropriateness of content, and need for modification to achieve the objectives of the study. The supervisors determined whether the elements of the research instruments evoked the intended responses. The feedback obtained was then incorporated into the final instruments before the actual study. All the research instruments were tested for validity. Additionally, the researcher ensured the validity of the data to be collected by administering the instruments personally as well as with the assistance of a well-trained research assistant.

3.8.2 Reliability

Golafsheni (2005) defines reliability as the extent to which results are consistent over time. In this case, reliability is concerned with the extent to which the instruments yield the same results on trials. Test-retest method was used to establish the reliability of the instruments. To achieve this, the researcher administered a questionnaire to five respondents that were sampled in the final study. After one week, the researcher visited the same respondents and administered the questionnaires for the test-retest. The scores were then correlated using Pearson-product moment correlation formula to determine the reliability coefficient. The collected data were then analyzed by comparing the responses of the two tests to find out whether there is any correlation and because the respondents were similar, the instruments were considered reliable at 0.7 reliability index.

3.9 Data Analysis and Presentation

Descriptive statistics was used to analyze the quantitative data collected using SPSS (Version 22) and was presented through frequencies, percentages, standard deviations and means. This was carried out by computing percentages of variations in response, computing up results as obtained, explaining and interpreting the data in agreement with the objectives of the research and speculation through utilizing the SPSS (Version 22) to convey findings of the research. Data that is qualitative or characteristics of the data gathered from the open ended questions was tested by content analysis. The study in addition carried out a multiple regression analysis.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$$

Where;

Y = Financial performance of energy and petroleum firms listed with the NSE

B0 - constant

ε – error term

X1 – Debt Ratio

X2 – Debt-Equity Ratio

X3 – Interest coverage ratio

β_1 - β_3 =coefficients

3.10 Ethical Consideration

The researcher pursued a data collection letter approval from the Kenyatta University, graduate school. Likewise, permission from the NACOSTI to carry out the survey was sought. It will also be pertinent for the researcher to get respondents' consent before their involvement in the research. Confidentiality and anonymity of the information from the participants was ensured throughout the study period. The participants were informed that the responses they give will be used for no other purposes than the study. This ensured that they give honest and truthful responses.

CHAPTER FOUR: RESEARCH FINDING AND DISCUSSIONS

4.1 Introduction

This chapter covers data analysis, results and discussions. The data is summarized and presented in table form. The research design adopted was cross-sectional study in which data was gathered over the period 2011 to 2015. The study was carried out through the use of secondary data as detailed in oil industry in Kenya annual reports. The researcher obtained the data from the financial statements in their annual report. The population of the research consisted of five energy and petroleum firms listed in Nairobi stock exchange for 5 years. The data collected was analyzed by use of Statistical Package for Social Sciences (SPSS). Regression analysis was used to determine the relationship between debt ratio and financial performance of firms listed under Energy and petroleum sector at the NSE.

4.2 Descriptive statistics

Table 4.1: Average Return on Equity

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
FP	25	.01	1.62	.3102	.44223
DR	25	.01	.74	.0842	.14617
D	25	.51	5.70	.9701	1.05830
IRC	25	.06	149.05	20.2298	30.78911
Valid N (listwise)	25				

Table 4.1 above shows that the average financial performance for the 25 observations made from five companies for the years 2011-2015 is 31.027% a standard deviation of 44.22% with minimum at 0.01 and maximum at 1.62. The average Debt ratio is 0.0842 a standard deviation of 0.14617 with a minimum of 0.01 and a maximum of 0.74, the average debt to equity ratio is 0.9701 with a standard deviation of 1.0583, a minimum of 0.51 and a maximum of 5.70, average interest cover ratio is 20.23 with a standard deviation of 30.79 a minimum of 0.06 and a maximum of 149.05.

4.3 Regression Results

In addition to descriptive analysis, the study conducted a cross-sectional OLS multiple regression on several firm characteristics over the period 2011–2015.

Table 4.2: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.868 ^a	.754	.719	.23437

a. Predictors: (Constant), IRC, DR, DER

The correlation and the coefficient of determination of the dependent variables (financial performance of listed Energy and oil firms when all the three independent variables Debt ratio, Debt to equity ratio and Interest cover ratio are combined) was measured and tested. From the findings 75.4% of the Energy and petroleum firms performance at the NSE were attributed to the independent variables investigated in this study. This indicates that about 75.4% of Debt to Equity ratio, Interest Cover and Debt ratio is explained by the variability in performance, the other 24.6% is not

explained by the model. This indicates that financial performance is very much affected by these factors.

Table 4.3: Anova

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.540	3	1.180	21.483	.000 ^b
	Residual	1.154	21	.055		
	Total	4.694	24			

a. Dependent Variable: FP

b. Predictors: (Constant), IRC, DR, DER

Source: Research Findings

From the data findings in table 4.3 above, the sum of squares due to regression is 3.540 while the mean sum of squares is 1.180 with 3 degrees of freedom. The sum of squares due to residual is 1.154 while the mean sum of squares due to residual is 0.055 with 21 degrees of freedom. The value of F calculated is 21.483 and the significance value is 0.005. The p value is 0.000. Since the p value is less than 0.05 it implies that the relationship is significant at 95% level of significance; the model is therefore significant for the study and prediction.

Table 4.4: Correlation Analysis

		FP	DR	D	IRC
FP	Pearson Correlation	1	.808**	.064	-.089
	Sig. (2-tailed)		.000	.759	.672
	N	25	25	25	25
DR	Pearson Correlation	.808**	1	-.095	-.058
	Sig. (2-tailed)	.000		.652	.784
	N	25	25	25	25

DER	Pearson Correlation	.064	-.095	1	.827**
	Sig. (2-tailed)	.759	.652		.000
	N	25	25	25	25
IRC	Pearson Correlation	-.089	-.058	.827**	1
	Sig. (2-tailed)	.672	.784	.000	
	N	25	25	25	25

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

The findings show positive correlation between financial performance and debt ratio with a correlation coefficient of 0.808. This implies that the firms listed under energy and petroleum sector at the Nairobi securities exchange can improve their performance by improving on their Debt ratio. The findings also show a positive correlation between performance with Debt-to-Equity ratio with a correlation of 0.064. This implies a very low correlation between Debt to Equity ratio and performance this can firm growth.

The study shows a negative correlation between performance and Interest cover ratio with correlation of-.089. This implies that decreasing the Interest cover ratio can significantly increase a firm's performance of the firms listed under energy and petroleum sector at the Nairobi securities exchange. These findings illustrate the results obtained from correlation analysis for the sampled firms for the period of study at 0.05 percent level of significance.

Table 4.5: Coefficients of Determination

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.017	.072		.242	.811
	DR	2.519	.329	.833	7.656	.000
	DER	.234	.081	.561	2.906	.008
	IRC	-.007	.003	-.505	-2.623	.016

a. Dependent Variable: FP

Source: Research Findings

According to the model the Debt ratio variable is significant with a significance value that is less than 0.05. The other variables (Debt to Equity ratio and Interest cover ratio) are also significant. The Debt ratio and Debt to Equity ratio are positively correlated with financial performance while Interest cover ratio is negatively correlated with performance. From the model, taking all factors (Debt ratio, Debt to Equity ratio and Interest cover ratio) constant at zero, financial performance had an autonomous value of 0.017. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in Debt will lead to a 2.519 increase in performance. A similar increase in debt will also lead to a 0.234 increase in financial performance. A unit increase in Interest cover ratio will lead to a 0.007 decrease in firm performance. This indicates that Debt ratio and Debt to Equity ratio have a positive effect to the performance of the listed Energy and petroleum firms at the NSE while the Interest Cover ratio had a negative contribution on the performance on the Energy and petroleum firms listed on the NSE. The coefficient table above was used in coming up with the model: Financial performance = $0.017+2.519X_1+0.234 X_3-0.007$.

4.4 Financial Leverage and financial performance

From the findings of the study the regression equations for the period 2011 to 2015 related financial performance of the Energy and petroleum firms listed at the NSE to their Debt ratio, Debt to Equity ratio and Interest cover ratio .From the findings of the model summary from 2011to 2015, 75.4% of performance of the Energy and petroleum firms at the NSE were explained by the independent variables (Debt ratio, Debt to Equity ratio and Interest cover ratio) investigated in the study while other factors not studied in this research contributed 24.6%. Since the significance level of

0.000 is less than 0.5 therefore the study was significant at 0.05 level of significance. From the coefficient table of 2011 to 2015, taking all factors (Debt ratio, Debt to Equity ratio and Interest cover ratio) constant at zero, Performance will be 0.017. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in Debt ratio will lead to a 2.519 increase in firm performance. A similar increase in debt concerning total equity will lead to a 0.234 increase in financial performance while a unit increase in interest cover ratio will lead to a 0.007 decrease in financial performance of the Energy and petroleum firms listed in the NSE.

From the summary of findings, it is evident that the Debt ratio and Debt to Equity ratio affected the financial performance of the Energy and petroleum firms listed at the NSE as indicated by the coefficients of determination of year 2011 to 2015. The study found that the three independent variables in the study (Debt ratio and Debt to Equity ratio) influenced the financial performance of the Energy and petroleum firms in Kenya for the period under study. Interest cover ratio negatively influenced the financial performance for the period of study. These findings are in line with that of Kuria (2010) who in studying the effect of capital structure on the financial performance of commercial Banks in Kenya established that various capital structure decisions undertaken by firms in the country over the years have directly and indirectly affected financial performance of the various firms in the NSE in several ways. He further confirmed that efficiency of bank's performances depends on the instruments used by a firm in undertaking sound capital structure decisions to help put firms in the path to profitability.

These findings agree with the position held by Kiprop (2013) who established that capital structure decisions largely affects firms' profitability thus influencing firms to change their investment decisions. He further indicated that when firms change their investment decisions based on their capital structure, their financial performance is also likely to change or be affected due to the changes in capital structure. His study concluded that sound capital structure decisions should be undertaken by firm managers to help put firms on the path to profitability and efficient use of capital.

CHAPTER FIVE: SUMMARY CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusions and recommendations derived from the findings of the study. The chapter also introduces the limitations that are encountered in the study with suggestions for further research. This chapter is divided into section 5.2 on summary of the study. Section 5.3 on conclusion, section 5.4 on policy recommendation, section 5.5 on limitations of the study and section 5.6 on recommendation for further research

5.2 Summary of Findings

The dependent variables financial performance of the Energy and petroleum firms listed at the NSE (when all the three independent variables (Debt ratio, Debt to Equity ratio and Interest cover ratio) are combined was measured. The study found out that 75.4% of the financial performance of the Energy and petroleum firms listed at the NSE at the NSE in the study period of 2011 to 2015 was attributed to the three independent variables investigated in this study. The value of F calculated is 21.483 and the significance value is 0.05.

The p value is 0.000, since the p value is less than 0.05 implies that the relationship is significant at 95% level of significance. The variable was significant as its significance value was less than 0.05. Similarly, Debt ratio, Debt to Equity ratio and Interest cover ratio are significant too as their significance value is also less than 0.05. Debt ratio and Debt to Equity ratio were positively correlated with financial

performance while Interest cover ratio was negatively correlated with financial performance of the Energy and petroleum firms listed at the NSE.

Taking all factors (Debt ratio, Debt to Equity ratio and Interest cover ratio) constant at zero, financial performance had an autonomous value of 0.017. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in Debt ratio will lead to a 2.519 increase in financial performance the Energy and petroleum firms listed at the NSE. A unit increase in Debt ratio while taking into consideration of the firm total equity will lead to a 0.234 increase in financial performance of the firms in the Energy and petroleum firms listed at the NSE. However, a unit increase in Interest cover ratio will lead to a 0.05 decrease in financial performance.

5.3 Conclusions of the Study

From the analysis, it can be noted that the three independent variables (Debt ratio, Debt to Equity ratio and Interest cover ratio) had varying degrees of influence on the Return of Equity ROE and Return on Assets of firms in the Energy and petroleum sector listed on the NSE. The study concludes that Debt ratio influences the financial performance of the Energy and petroleum firms listed at the NSE positively.

The study also deduced that Debt ratio taking into consideration of the total equity negatively influenced the financial performance of firms in the Energy and petroleum sector listed at the NSE. The results are similar to the work of studies in the past, which suggests a relationship between capital structure decisions and financial performance of firms. Kiprop (2013) suggested that firms that use sound

capital structure set them on sound financial standing hence promoting the profitability of those firms

The study also revealed that financial leverage generally influences financial performance of the listed Energy and petroleum firms listed at the NSE. These findings are consistent with the works of Muema (2013) who stated that capital structure decisions are useful to firms both as an instrument to promote sound capital structure and as a means of promoting profitability. Muema (2013) further stated that capital structure decisions are attractive as instrument for firms' use as a means of enhancing financial performance.

The study therefore concludes that working financial leverage is a very sensitive area in the field of financial management which involves the decision of the amount and composition of Debt ratio, amount liabilities a firm should possess and other capital structure decisions factors that inform, firm financing need to greatly taken into consideration by firm managers. Furthermore, the total amount assets owned by firm largely affects its growth and profitability.

5.4 Recommendations for Policy and Practice

There is need for a more comprehensive sector wise study on the relationship between capital structure or financial leverage and financial performance of all the Energy and petroleum firms including those not listed at the NSE. This could be necessary since the firms that are not listed at the NSE not enjoy similar benefits as those that are listed in terms of access to various forms of firm financing. Another study is also recommended that would take into account the macroeconomic factors

such as inflation and prevailing interest rates which would be more representative of the real business environment.

This study established that Debt ratio, Debt to Equity ratio and Interest cover ratio play a key role on the financial performance of the Energy and petroleum firms listed at the NSE. This study therefore recommends that the firms handles their capital structure decisions prudently as the changes in the factors like Debt ratio, Debt to Equity ratio and Interest cover ratio enhance profitability of firms when prudently employed and hence affect the performance of Energy and petroleum firms listed at the Nairobi Securities Exchange.

This will ensure stability at the NSE which promotes fair trade. This study also established that Debt ratio and Debt to Equity ratio were positively correlated with the financial performance of the Energy and petroleum firms listed at the NSE while Interest cover ratio negatively influenced financial performance. This study therefore recommends that firms control the amount of interest expense since an increase in interest expense has an effect in that it reduces the financial performance of firms in the Energy and petroleum sector listed in the NSE.

REFERENCES

- Abor, J. (2005). The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana. *The journal of risk finance*.
- Abor, J., & Biekpe, N. (2009). How do we explain the capital structure of SMEs in sub- Saharan Africa? Evidence from Ghana. *Journal of Economic Studies*.
- Abu- Tapanjeh, A. M. (2006). An empirical study of firm structure and profitability relationship: The case of Jordan. *Journal of Economic and Administrative Sciences*.
- Adongo, J. (2012). *The effect of financial leverage on Profitabilty and risk of firms listed at the Nairobi securities exchange* (Doctoral dissertation).
- Adongo, J. (2012). *The effect of financial leverage on Profitabilty and risk of firms listed at the Nairobi securities exchange* (Doctoral dissertation).
- Agrawal, A., & Nagarajan, N. J. (1990). Corporate capital structure, agency costs, and ownership control: The case of all- equity firms. *The Journal of Finance*, 45(4), 1325-1331.
- Ahmad, Z., Abdullah, N. M. H., & Roslan, S. (2012). Capital structure effect on firms performance: Focusing on consumers and industrials sectors on Malaysian firms. *International review of business research papers*, 8(5), 137-155.
- Akhtar, S., & Oliver, B. (2009). Determinants of capital structure for Japanese multinational and domestic corporations. *International review of finance*, 9(1- 2), 1-26.
- Al- Najjar, B. (2011). The inter- relationship between capital structure and dividend policy: empirical evidence from Jordanian data. *International Review of Applied Economics*, 25(2), 209-224.
- Al- Najjar, B., & Taylor, P. (2008). The relationship between capital structure and ownership structure: New evidence from Jordanian panel data. *Managerial Finance*.
- Al- Sakran, S. A. (2001). Leverage determinants in the absence of corporate tax system: the case of non- financial publicly traded corporations in Saudi Arabia. *Managerial Finance*.

- Baskin, J. (2002). An empirical investigation of the pecking order hypothesis. *Financial management*, 26-35.
- Bhunia, A. (2012). Leverage impact on firms investment decision: A case study of Indian pharmaceutical companies. *Contemporary Business Studies*.
- Cheng, M. C., & Tzeng, Z. C. (2011). The effect of leverage on firm value and how the firm financial quality influence on this effect. *World Journal of Management*, 3(2), 30-53.
- Cooper, D. R., & Schindler, P. S. (2008). *Business research methods*. Boston: McGraw-Hill Irwin.
- Daskalakis, N., & Psillaki, M. (2008). Do country or firm factors explain capital structure? Evidence from SMEs in France and Greece. *Applied financial economics*, 18(2), 87-97.
- Dittmar, A. (2004). Capital structure in corporate spin-offs. *The Journal of Business*, 77(1), 9-43.
- Eunju, Y. & SooCheong, J. (2005). The effect of financial leverage on profitability and risk of restaurant firms, *The Journal of Hospitality Financial Managements*, 13,200-210
- Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *The review of financial studies*, 15(1), 1-33.
- Frank, M. Z., & Goyal, V. K. (2011). *Trade-off and pecking order theories of debt, handbook of empirical corporate finance: Empirical Corporate Finance*. Elsevier, 135–202
- Gu, Z. (1993). Debt use and profitability: A reality check for the restaurant industry. *Foodservice Research International*, 7(3), 135-147.
- Harris, M., & Raviv, A. (1990). Capital structure and the informational role of debt. *The Journal of Finance*, 45(2), 321-349.
- Hussain, J., & Matlay, H. (2007). Financing preferences of ethnic minority owner/managers in the UK. *Journal of Small Business and Enterprise Development*.
- Kale, A. A. (2014). *The impact of financial leverage on firm performance: the case of non financial firms in Kenya* (Doctoral dissertation, University of Nairobi).
- Kayo, E. K., & Kimura, H. (2010). Hierarchical determinants of capital structure. *Journal of banking & finance*, 35(2), 358-371.

- Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The journal of finance*, 28(4), 911-922.
- Miller, M. H. (1977). Debt and taxes. *the Journal of Finance*, 32(2), 261-275.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American economic review*, 48(3), 261-297.
- Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: a correction. *The American economic review*, 53(3), 433-443.
- Myers, S. C. (1984). The capital structure Puzzle. *The journal of capital structure puzzle*. *J. Finance*, 39(3).
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, 13(2), 187-221.
- Myers, S.C. (1982). Determinants of capital borrowing, *Journal of Finance Economics*, 5, 5147-5175.
- Nduati, M. (2010). The relationship between leverage and financial performance of companies quoted at the Nairobi stock exchange, Unpublished MBA Project, University of Nairobi.
- Padrón, Y. G., Apolinario, R. M. C., Santana, O. M., Martel, M. C. V., & Sales, L. J. (2005). Determinant factors of leverage: An empirical analysis of Spanish corporations. *The Journal of Risk Finance*.
- Pearson, K. (1907). *On further methods of determining correlation* (Vol. 16). Dulau and Company.
- Pouraghajan, A., Malekian, E., Emamgholipour, M., Lotfollahpour, V., & Bagheri, M. M. (2012). The relationship between capital structure and firm performance evaluation measures: Evidence from the Tehran Stock Exchange. *International journal of Business and Commerce*, 1(9), 166-181.
- Rafique, M. (2011). Effect of profitability & financial leverage on capital structure: A case of Pakistan's automobile industry. *Available at SSRN 1911395*.
- Rehman, S. S. F. U. (2013). Relationship between financial leverage and financial performance: Empirical evidence of listed sugar companies of Pakistan. *Global Journal of Management and Business Research*.
- Shyam-Sunder, L., & Myers, S. C. (1999). Testing static tradeoff against pecking order models of capital structure. *Journal of financial economics*, 51(2), 219-244.
- Singh, Y. K., & Nath, R. (2010). *Research methodology*. New Delhi: Publishing Corporation

- Soumadi, M. M., & Hayajneh, O. S. (2012). Capital structure and corporate performance empirical study on the public Jordanian shareholdings firms listed in the Amman stock market. *European Scientific Journal*, 8(22).
- Subaii, B. (2012). The relationship between financial leverage and return on investment in Kuwaiti public shareholding companies.
- Suhaila, A. M. (2014). *The effect of liquidity and leverage on financial performance of commercial state corporation sin the tourism industry in Kenya* (Doctoral dissertation, University of Nairobi).
- Tale, N. W. (2014). *Relationship between capital structure and performance of non financial firms listed at the Nairobi securities exchange* (Doctoral dissertation, University of Nairobi).
- Upneja, A., & Dalbor, M. C. (2001). An examination of capital structure in the restaurant industry. *International Journal of Contemporary Hospitality Management*.
- Vasiliou, D., Eriotis, N., & Daskalakis, N. (2009). Testing the pecking order theory: the importance of methodology. *Qualitative Research in Financial Markets*.
- Wainaina, J. N. (2014). *The relationship between leverage and financial performance of top 100 small and medium enterprises in Kenya* (Doctoral dissertation, University of Nairobi).
- Wainaina, J. N. (2014). *The relationship between leverage and financial performance of top 100 small and medium enterprises in Kenya* (Doctoral dissertation, University of Nairobi).

APPENDICES

Appendix I: Data Collection Schedule

Data will be collected from the followings:

- i. Statement of Comprehensive Incomes of Kengen, Kenolkobil ltd, KPLC Company Ltd, Total Kenya Ltd and Umeme for the years 2011,2012,2013, 2014 and 2015.
- ii. Statement of financial position of Kengen, Kenolkobil ltd, KPLC Company Ltd, Total Kenya Ltd and Umeme as at the end of financial years 2011,2012, 2013,2014 and 2015.
- iii. Statement of changes in equity of Kengen, Kenolkobil ltd, KPLC Company Ltd, Total Kenya Ltd and Umeme as at the end of financial years 2011,2012,2013,2014 and 2015.
- iv. Statement of cash flows Kengen, Kenolkobil ltd, KPLC Company Ltd, Total Kenya Ltd and Umeme as at the end of financial years 2011,2012,2013,2014 and 2015.
- v. Statement of retained earnings Kengen, Kenolkobil ltd, KPLC Company Ltd, Total Kenya Ltd and Umeme as at the end of financial years 2011, 2012, 2013,2014 and 2015.

Kengen	DEBT	EQUITY	TOTAL ASSETS	TOTAL INTEREST EXPENSE	NET INCOME	EBIT
2011	400,007,000	204,399,00	8,152,812,000	5,198,000	701,430,000	981,768,000
2012		555,871,607	5,059,029,000	9,148,000	812,167,300	998,127,600
2013	930,057,000	940,652,000	4,162,469,000	7,543,000	746,126,000	905,256,689
2014	5,064,414,000	3,025,108,000	4,162,469,000	7,103,000	564,414,000	874,567,541
2015	462,469,000	327,281,000	3,668,487,000	7,281,000	668,487,000	812,996,000
Kenolkobil Ltd	DEBT	EQUITY	TOTAL ASSETS	TOTAL INTEREST EXPENSE	NET INCOME	EBIT
2011	969,868,000	355,614,000	4,355,614,000	6,578,000	325,108,000	668,727,000
2012	290,867,000	410,749,000	4,162,469,000	8,379,000	457,454,000	533,163,000
2013	351,225,000	462,469,000	4,162,469,000	4,162,469,000	617,543,000	627,281,000
2014	462,469,000	327,281,000	3,668,487,000	7,281,000	668,487,000	812,996,000

2015	668,487,000	412,996,000	1,445,793,000	2,996,000	751,225,000	969,868,000
KPLC Company Ltd	DEBT	EQUITY	TOTAL ASSETS	TOTAL INTEREST EXPENSE	NET INCOME	EBIT
2011	228,669,000	761,165,000	8,931,395,000	2,078,475,000	343,007,000	375,032,453
2012	223,838,000	429,934,000	8,558,558,000	8,475,000	510,534,000	779,575,823
2013	320,956,000	445,793,000	8,539,200,000	8,193,000	551,198,000	641,897,928
2014	633,093,000	505,074,000	2,030,309,000	7,768,000	603,935,000	877,922,000
2015	922,802,000	364,127,000	2,144,587,000	8,600,000	515,116,000	780,525,000
Kenolkobil Ltd	DEBT	EQUITY	TOTAL ASSETS	TOTAL INTEREST EXPENSE	NET INCOME	EBIT
2011	930,010,782	689,320,000	9,400,007,000	1,768,000	559,029,000	748,406,000
2012	862,315,696	752,559,000	9,705,198,000	8,727,000	539,148,000	884,143,000
2013	718,636,085	685,019,000	8,988,047,000	3,163,000	752,814,000	889,496,000

2014	364,448,641	281,680,000	8,152,812,000	4,399,000	245,434,000	409,265,000
2015	140,436,328	486,072,000	6,901,430,000	1,607,000	738,421,000	940,652,000
Total Kenya	DEBT	EQUITY	TOTAL ASSETS	TOTAL INTEREST EXPENSE	NET INCOME	EBIT
2011	278,475,000	558,558,000	2,078,475,000	3,007,000	831,395,000	925,108,000
2012	539,148,000	539,200,000	1,282,193,000	5,534,000	558,558,000	857,454,000
2013	852,814,000	230,309,000	2,313,768,000	1,198,000	539,200,000	717,543,000
2014	945,434,000	705,198,000	2,533,163,000	9,200,000	282,193,000	410,534,000
2015	281,680,000	988,047,000	2,204,399,000	8,680,000	852,812,000	904,399,000
Umeme	DEBT	EQUITY	TOTAL ASSETS	TOTAL INTEREST EXPENSE	NET INCOME	EBIT
2011	445,793,000	204,399,000	2,510,534,000	3,163,000	705,198,000	858,558,000
2012	505,074,000	871,607,000	3,551,198,000	4,399,000	788,047,000	839,200,000

2013	364,127,000	940,652,000	8,931,395,000	2,559,000	552,812,000	745,434,000
2014	539,148,000	225,108,000	8,558,558,000	5,019,000	533,163,000	681,680,000
2015	852,814,000	445,793,000	8,539,200,000	1,680,000	204,399,000	364,127,000

Appendix II: List of Firms Listed in the Energy and Petroleum Sector in Kenya

- i) Kengen
- ii) Kenolkobil Ltd
- iii) KPLC Company Ltd
- iv) Total Kenya
- v) Umeme