THE RELATIONSHIP BETWEEN EQUITY FINANCING AND FINANCIAL PERFOMANCE OF THE ENERGY AND PETROLEUM COMPANIES LISTED AT THE NAIROBI SECURITIES EXCHANGE

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DECLARATION

This research project is my original work and has not been submitted for a degree in any other university

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DEDICATION

I dedicate my study to my dear parents for their unwavering support and encouragement in academic pursuit

TABLE OF CONTENTS

ABSTRACT

The main objective of the study was to establish the relationship between equity financing and financial performance for firms in the energy and petroleum sector listed at the Nairobi Securities Exchange. The firms listed in the energy and petroleum sector include KenGen ltd, Kenya power ltd, Umeme ltd, Total Kenya ltd, Kenol Kobil ltd. Financial performance of firms using seasoned equity issues has received little attention in Nairobi Securities Exchange studies hence this study will add to the body of existing knowledge. The study was descriptive in nature and the research analyzed the data selected within a specified period of time. The population for the study consisted of the five firms in the energy and petroleum sector listed at Nairobi Securities Exchange from the year 2005 to 2014 period. The sample was the same as the population. The study used secondary data from published audited annual reports of accounts for the sample firms and these were obtained from Nairobi Securities Exchange and Capital Market Authority. Financial data from balance sheets, profit and loss accounts and cash flow statements were used to calculate and analyze return on equity which is the dependent variable, while growth opportunities; firm size, liquidity ratio and equity ratio are independent variables. The study used a regression model to analyze the relationship between equity financing and financial performance of the firms. Control variables namely growth opportunities, liquidity ratio, and firm size were used in the regression model. F-test was used to determine the fitness of the regression model in analyzing the relationship. The coefficient of determination was used to explain how much of the variations in financial performance were explained by equity financing. The results of the study showed an insignificant but positive relationship between equity financing and financial performance. The study also showed a significant positive relationship between financial performance and growth opportunities and equity ratio. It can be concluded that firms which invest resources towards increasing growth in asset base show greater improvement in financial performance. Equity financing are important especially as far as raising capital for growth, expansions or acquisitions is concerned. The study recommends that firms to use equity financing in increasing asset base and growth since this translates to improved financial performance. Policies regarding equity issues should be reviewed and made flexible to encourage firms to participate in equity issues. The study concentrated on listed firms whose findings cannot be generalized for all firms' hence further studies can be to include non listed firms to compare the findings.

LIST OF TABLES

LIST OF ABBREVIATIONS

CMA: Capital Market Authority

EMH: Efficient Market Hypothesis

IPO: Initial Public Offering

NPV: Net Present Value

NSE: Nairobi Securities Exchange

ROA: Return on Assets

SEO: Seasoned Equity Offerings

PER: Price Earnings Ratio

EPS: Earnings per Share

EMH: Efficient Market Hypothesis

PIEA: Petroleum Institute of East Africa

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Floegel (1990) defined equity financing as where by corporations raise money by selling ownership interests (represented by shares of stock) to investors. There are two types of equity issuance, the first is initial public offering, and it occurs when a company "goes public," selling its stock on a major exchange for the first time. The second is called a "seasoned issue," occurring when an established public company sells shares from its supply of authorized but unissued stock. Financial theory suggests that financing by equity presents the most costly means of attracting capital. The decision by a firm's management to attract funds by issuing equity is undertaken if funds can't be attracted in any other way or if the shares are overvalued such that the benefits of an issue outweigh the costs (Rad &Tsai, 2006).

When the market is inefficient, financing policy becomes relevant in that when equity prices are high, existing shareholders benefit by issuing overvalued equity and when prices are low, debt becomes preferable (Baker & Wurgler, 2002).The asymmetric information between investors and insiders in the firms brought about by market inefficiencies bring about market timing which results in equity being mispriced. Managers have privileged information over investors about the firm regarding cash flows, retained earnings, sales prospects and the need for capital and research expenditure which causes a firm to be overvalued (Myers & Majluf, 1984). Signaling Theory suggests that an issuer, through the action of pricing an issue, signals the quality of the Firm. Proponents of signaling theory also argue that security issuers of high quality firms are more likely to set a relatively higher price, while the opposite is expected from low quality firms. The Leland and Pyle (1977) signaling theory effect implies that sales of shares by better-informed investors signal that they believe shares are overpriced. Miller and Rock (1985) further

add that secondary equity issuance may signal a fall in earnings which may be interpreted negatively by investors resulting in lower stock prices. Consistent with this timing hypothesis, firms issuing IPOs and SEOs have poor subsequent performance. While some managers may use

proceeds from SEOs to invest in value adding activities, Jensen (1986) finds that other managers may retain excess cash from proceeds to invest in negative net present value projects and in this case the issuance of seasoned equity may affect financial performance adversely. Modigliani and miller (1958) was of the view that, the value of a firm, as measured using stock price, does not depend on the capital structure of the firm but market value of all financial assets issued by a firm and the risk and return of the firm's real assets. Modigliani and Miller (1963) went further to hypothesize that the value of a firm, in a world with corporate taxes, is positively related to its debt due to tax shield .Myers and Majluf (1984) pecking order theory suggests that investments are first financed by internal funds, then external debt, and, as a last resort, external equity in such cases, the financing method can serve as a signal to outside investors.

The Nairobi securities exchange (NSE) founded in 1954 has provided a platform for many firms to be publicly listed through IPOs and to raise additional equity by method of rights offers. Firms which are already listed are viewed by investors as less risky since their operations are open to public scrutiny. NSE is regulated by the capital markets authority and has gone through various changes including automation. Seasoned equity issue by way of rights offers has gained popularity with major firms such as Kenya Airways, KCB, and KPLC actively turning to this method to raise additional capital. Although empirical studies as documented by (Asquith and Mullins, 1986; Eckbo and Marsulis, 1992) show poor post issue performance, recent IPOs have recorded oversubscriptions.NSE IPO was oversubscribed by 763.92% making it the most oversubscribed share offer in the NSE's 60-year history. KenGen IPO attracted a historic

236% oversubscription. Safaricom was oversubscribed by 532 percent by both local and international investors.

1.1.1 Equity Financing

Equity financing according to Abraham and Harrington (2011) comprise of initial public offering and SEOs issues of stock by a firm as means to raise funds through the sale of stock rather than the issuance of additional debt. The offering for common stock may be done using a rights offer or a cash offer. SEOs differ from IPOs in that they are made by firms that have matured beyond the IPO with a significant track record of financial performance and with shares already actively trading in the equity market while IPO involve selling stock on a major exchange for the first time, Floegel (1990).Capital need by firms for investment in projects such as acquisitions of heavy machinery, research and development and availability of debt, firm's current cash flow, investment opportunities at hand are some of the motivating factors for firms to issue equity, Pandey (2009). Long term debt affects future cash flows which in turn affects liquidity which prompts managers to issue seasoned equity.

Managers often view the equity offers as an effective way of increasing firm size and offers incentives to grow their firm beyond optimal size since their compensation is dependent on asset size rather than profitability Jensen (1986). McLaughlin and Vassudevan (1996) found that firms with more investment and growth opportunities opt for equity issuance to avoid debt which is tied to periodic interest payments. Equity financing add value to shareholders by way of improving capital structure of firms to an optimal level so as to balance the benefits of the tax shield and the costs of financial distress, Myers (2001).

3

1.1.2 Financial Performance

A company's financial performance, in the view of the shareholder, is measured by how better off the shareholder is at the end of a period, than he was at the beginning and this can be determined using ratios derived from financial statements; mainly the balance sheet and income statement, or using data on stock market prices (Berger & Patti, 2002). These ratios give an indication of whether the company is achieving the owners' objectives of making them wealthier, and can be used to compare a company's ratios with other companies or to find trends of performance over time.

Rosemary peavler (2008) observed that, measuring of return on investment involves use of ratios. The commonly utilized are ROA, which measures the efficiency with which the company is managing its investment in assets and using them to generate profit and ROE which measures the return on funds that investors have put into the company. Companies use financial indicators to measure, report and improve performance. Barber and Lyon (1996) advocate for return on assets (ROA) as the preferred measure of financial performance. ROA is the general purpose financial ratio used to measure the relationship of profit earned to the investment in assets required to earn that profit. This study will use return on equity financial performance indicator to investigate whether similar or varied results between the equity and financial performance will be obtained.

Market based financial performance measures are determined by comparing the security's price to different fundamentals such as earnings and dividends. Return on equity is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment. A business that has a high return on equity is more likely to be one that is

capable of generating cash internally. Thus, the higher the ROE the better the company is in terms of profit generation. It is further explained by (Khrawish, 2011) that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital. It represents the rate of return earned on the funds invested in the company by its stockholders. ROE reflects how effectively a firm management is using shareholders‟ funds. Thus, it can be deduced from the above statement that the better the ROE the more effective the management in utilizing the shareholders capital.

1.1.3 Equity Financing and Financial Performance

Modigliani and Miller‗s (1958) capital structure irrelevance theory states that the firms overall market value and the WACC is independent of capital structure in a perfect market without taxation. However, the tax free perfect market does not hold in the real world. Later, Modigliani and Miller (1963) proposed the modified capital structure relevance theory which analyzed the present value of interest tax shield at the corporate level and found that the higher the debt ratio, the higher the firm value. Miller (1977) extends the MM model to personal as well as to corporate taxes, and introduced the Miller theory which considered the relative advantage of debt over equity.

Pandey (2009) observed that a company should plan its capital structure to maximize the use of funds and to be able to adapt more easily to the changing conditions. It is therefore important that as the modern companies embrace themselves in conducting their business in a highly complex and competitive business environment, they should consider what impact capital structure decision will have on the overall profitability of their respective companies.

Mesquita and Lara (2003), in their study found that the relationship between rates of return and debt indicates a negative relationship for long-term financing. They however, found a positive relationship for short-term financing and equity. Abor (2007) in his scholarly works on debt

policy and performance of Medium Sized Enterprises found the effect of short-term debt to be significantly and negatively associated with gross profit margin for both Ghana and South African firms. This indicated that increasing the amount of short-term debt would result in a decrease in the profitability of the firms.

1.1.4 Energy and Petroleum Companies listed at Nairobi Securities Exchange

The energy and petroleum companies in Kenya comprise of both the local and the multinational companies. They include Kenol Kobil ltd, Total Kenya ltd, KenGen ltd, Kenya power and lighting ltd, Umeme ltd. The industry is mainly regulated by the Energy Regulatory Commission (ERC 2014). It is governed by the Kenyan law which covers operations from crude importation, refining and retailing. It is an oligopolistic structure dominated by about three major players controlling 54.9% of the total market share as at March 2014 (Total Kenya controlling 21.7%, Vivo Kenya 18.9% and Kenol Kobil 13.9%) according to PIEA (2014). The sector is very competitive characterized by price controls, common non-differentiable products and strict taxation structure within a liberalized economy therefore requiring adoption of other strategies besides price and its related derivatives as a competitive strategy. Amongst the strategies in use is working capital management to have an edge over their competition and merger & acquisitions to attain economies of scale as well as proper capital structure decision that the study targets to unravel PIEA (2014).

The Kenyan Energy and Petroleum sector is considered as one of the key segments of the economy constituting the main source of commercial energy in Kenya. Kenya is a net importer of petroleum products. Growth in the profits of the energy sector will depend upon identifying all the variables that can influence profit of a firm including proper management of capital structure PIEA (2014). This forms the main objective of this study. Energy and petroleum sector has been

avoided by many studies since its split from industrial and allied sector recently NSE (2014).Most of the studies on capital structure decisions didn't narrow down on particular component of financing instead dealt with capital structure as a whole. Therefore results from this study on investigating the relationship between equity financing and financial performance using market based indicators will be compared with previous similar studies to determine whether similar or varied results will be obtained.

The Nairobi securities exchange was constituted in 1954 as the Nairobi stock exchange which was a voluntary association of stock brokers in the European community registered under the Societies Act (NSE, 2014) The Nairobi Securities Exchange is a full service securities exchange which supports trading, clearing and settlement of equities, debt, derivatives and other associated instruments. It gives investors the opportunity to access current information and provides a reliable indication of the Kenyan equity market's performance through the companies in the bourse. In the last 10 years, 9 public enterprises have been successfully privatized through the NSE where the government has raised about Ksh. 5-billion

1.2 Research Problem

Equity financing being a component of capital structure generally aims at strengthening Capital structure and to finance investments opportunities that require large funds which cannot be financed internally, such as expansions or acquisitions, (Myers & Majluf 1984).Therefore announcements of equity should signal good news to investors since it would be seen that the firm has identified value adding projects to invest in. However as seen in studies of (Ndatimana (2008; Asquith and Mullins, 1986; Eckbo and Marsulis, 1992) equity financing in form of SEO announcements are followed by a share price drop which is inconsistent with the efficient market hypothesis (EMH) which advocates that if capital markets are efficient share prices should be

correctly priced with no under or overpricing (Fama, 1970).Growth of firms that use proceeds obtained from equity financing is certain if the proceeds are invested in positive NPV projects. Poor investments lead to deterioration of firm performance due to presence of free cash flows or if the proceeds are used to finance debts. Loughran and Ritter (1997) and McLaughlin et al. (1998) posit that, equity financed firms tend to perform poorly in the long run. However these results for mature stock markets cannot be generalized for emerging markets due to institutional differences.

The Kenyan securities market has recently witnessed listed firms actively raising capital through equity offers by way of rights offerings instead of using debt which is more costly due to interest factors and adverse selection problems involved. Nairobi securities exchange, Safaricom, and KenGen IPO were oversubscribed by 763.92%,532%, and 236% and banks such as DTB and KCB have recorded oversubscriptions of 17.8% and 14.6% respectively (CMA 2014).Financial performance of any firm is largely driven by the ability of managers to utilize assets efficiently and invest in value adding activities while maintaining sound liquidity levels. The aspect of whether proceeds generated by these equity financing are used solely to improve shareholder wealth and improve financial performance has received little attention.

The NSE is regulated by Capital Markets Authority which provides surveillance for regulatory compliance. In September 2011, NSE converted from a company limited by guarantee to a company limited by shares and adopted a new Memorandum and Articles of Association reflecting the change, CMA (2011). NSE oversees the conduct of Central Depository Agents comprised of stockbrokers and investments banks which are members of NSE and have made significant steps to the capital markets in providing liquidity, CDSC (2004).

Review of empirical studies on equity financing and firm performance has shown mixed results. Healey and Palepu (1990) examined changes in earnings and changes in risk for a sample of 93 issuers and found no earnings change relative to the prior year's earnings either before or after adjusting earnings to an industry mean. In contrast, Hansen and Crutchley (1990) found a negative relationship between financial performance as measured by ROA and equity issuance in their sample of 109 issuing firms during 1975-1982. Friday and Howton (2000) found a positive relationship between firm performance and SEOs conducted by 200 US real estate investment trusts in the period 1990-1996.These results contrasted with industrial firm results where financial performance changes were found to be negative, following an equity issue. Njoroge (2003) studied the impact of equity financing in form of rights issue documented a negative abnormal return prior to the announcement day of the equity rights issue. Gatundu (2007) and Mwangangi (2011) studied the effect of announcement of secondary equity offerings on stock prices of firms listed at the NSE. Their studies documented that the offerings did not have any significant impacts on stock returns.

From the reviewed studies on the relationship between fund structure and financial performance of firms listed at the NSE, equity financing and financial performance using return on equity has received little attention. This study seeks to address this gap by conducting a study on the relationship between equity financing and financial performance of the energy and petroleum sector companies listed at the Nairobi securities exchange. In particular, the study will be seeking to answer the following research question: What is the relationship between equity financing and financial performance of the energy and petroleum companies listed at the NSE?

1.3 Research Objectives

The objective of this study was to establish the relationship between equity financing and financial performance of the energy and petroleum companies quoted at the NSE.

1.4 Value of the Study

The study value is to benefit management of the energy and petroleum firms in planning how and when to issue seasoned equity so as to invest in projects that shall improve shareholder wealth and financial performance of their firms. Shareholders will be enlightened on how performance of firms is affected by IPO, SEO and RE decisions and can come up with strategies to monitor the use of proceeds whenever SEO or IPO announcements are conducted.

Investors are to benefit from the study by understanding firms motives of issuing equity and willl be able to make rational investment decisions. Policy makers such as the government bodies such as the capital market authority (CMA) will be able to formulate and implement new set of policies on capital structure decisions and management in the energy and petroleum sector and use information from this study to formulate policies governing the issuance of seasoned equity. The regulator will gain information that can be used to enhance the protection of minority investors and shareholders.

The Petroleum Institute of East Africa will use the findings to enhance its curriculum. Regulatory bodies like Energy Regulation Commission and the Ministry of Energy can use the findings to improve on the framework for regulation of oil marketers in Kenya. Creditors will be able to make informed decision on the riskiness of these firms before giving out any form of financing as well as keeping track on their interest in the firms.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature that forms the basis of the study. It will highlight theoretical framework where theories/hypothesis and model relating to the study are discussed. Review of Empirical literature on capital structure and financial performance will be discussed. Lastly a summary of literature review highlighting the gaps in the literature that the present study seeks to bridge shall serve as the conclusion for this chapter

2.2 Theoretical Review

The section discusses the irrelevance theory, free cash flow theory the trade-off theory, the pecking order theory and market timing theory. The section focus on the assumptions, the prepositions and the critics of each of the theories

2.2.1 MM (1958) Irrelevance Theory

Modigliani and Miller (1958) proposition concluded that the value of the firm, that is, its stock price, does not depend on the capital structure of the firm. The main idea behind Modigliani and Miller's theory is that, a rational investor can create any capital structure on his/her own through homemade leverage substitution."Capital structure irrelevance" is based on assumptions that include perfect capital markets, homogenous expectations, no taxes, and no transaction costs; all earnings are paid out as dividend. Modigliani and Miller (1963) stated that borrowing will only cause the value of the firm to rise by the amount of the capitalized value of the tax subsidy. The introduction of tax deductibility of interest payments has an implication on the choice of capital structure. Profitability increases, non-debt tax shields reduce and liquidity increases.

Modigliani and Miller's capital structure theory is not completely right in its assumption that a firm's value is independent of its capital structure in a perfect capital market (Xiaodong & Birge, 2008). A firm's capital structure plays a crucial role in the ability of the firm to generate value for the company and for stockholders. Without financing activities and the acquisition of debt, the firm cannot operate if it lacks the necessary cash. Firms in an imperfect and perfect market do require equity and debt. Making efficient use of debt and equity can help a firm generate value and increase stockholders' wealth. (Xiaodong & Birge, 2008) different view to MM theory on importance of equity a firms financing makes theory relevant to the study. Elements contributing to MMs` failure include consideration of taxes, transaction costs, bankruptcy costs, and agency conflicts. Different theories have been proposed to address these limitations of Modigliani and miller (Luigi & Sorin, 2009).

According to Frank and Goyal (2008), there are two fundamentally different types of the capital structure irrelevance proposition. The classic foundation of the Modigliani-Miller hypothesis is an arbitrage process, which enables investors to pursue homemade leverage by switching their investments from an unlevered firm to a levered firm or vice versa. By borrowing on a personal account at a risk-free rate and buying shares of the unlevered firm investors can create homemade leverage. The other way around, investors can undo undesirable leverage by buying fewer stocks of the levered firm and lending at a risk-free rate. As investors have this opportunity, they are not willing to pay a premium for levered firms over unlevered firms. Hence, the values of two companies, identical in all aspects except their capital structures, should be equal.

The second type of capital structure irrelevance is related to multiple equilibrium (Frank & Goyal ,2008). Miller (1977) considers both personal and corporate taxes, which determine the

equilibrium level of aggregate corporate debt and, hence, an equilibrium debt-equity ratio for a whole corporate sector. However, Miller's (1977) model does not specify how aggregate quantities are split up among individual firms. Although tax considerations establish an economy-wide leverage ratio, there are multiple equilibrium in which debt is issued by different firms (Frank & Goyal 2008). Miller (1977) concludes that it would be still true that the value of any firm, in equilibrium, would be independent of its capital structure. In a subsequent paper, Modigliani & Miller (1963) relax one of their assumptions and recognize the importance of corporate taxes. Because interest expenses are tax deductible, they introduce an interest tax shield in their model. Due to the interest tax shield, the value of the levered firm increases or the cost of capital decreases. Every extra dollar of debt lowers tax payments. If debt is assumed to be risk-free and there are no offsetting costs associated with leverage, firms will try to shield as much taxable income as possible. Yet, in the real world there are no companies using exclusively debt financing. Hence, other factors, such as bankruptcy costs or agency costs, which increase in the present value of costs as the proportion of debt increases, were considered and led to the trade-off theory of capital structure.

2.2.2 Free Cash Flow Theory

The free cash flow model of Jensen (1986) presents the difference in interests between manager and shareholders regarding excess cash flows. Managers would often want to retain the excess cash flow even when they do no not have any positive NPV projects to invest in. Debt normally commits the firm to pay out cash as opposed to equity issues such as IPOs and SEOs which increase free cash flow available to managers. The free cash flow ends up being detrimental to the firm since the managers may not use it to increase shareholder wealth. Capital structure is one of the means of controlling managerial behavior.

A major problem for a shareholder is how to force managers to pay out cash flows rather than retain them. Using debt reduces cash flow available to managers for spending and forces them to pay out future cash flows. However, shareholders cannot force the payment of dividends and therefore the theory predicts that announcements of equity offerings has a negative effect on stock returns and performance since it increases the free cash flow available for poor spending. An empirical prediction of the free cash flow theory is that the change in performance following the equity issue is negatively related to the existing free cash flow, making the theory relevant to the study. The theory also predicts that as long as the number of positive-NPV opportunities is limited, these firms will experience a decline in operating performance subsequent to issuing equity.

Free cash flows are net cash flows that are at the management's discretion without affecting corporate operating activities, (Dittma 2000). Free cash flow have also been described as a measure of a company's performance and shows cash that the company possesses after spending for maintenance or development of the property (Shahmoradi, 2013). Jensen (1986) defined free cash flows as net operating cash flows less capital expenditure, inventory cost and dividend payment. Another definition by (Brush, Bromile and Hendrickx, 2000) stated that they are undistributed cash flow in excess of that needed for positive net present value projects. An advantage of free cash flows as a performance measure unlike earnings is that they are not easily subject to manipulation by firm managers (Mehrani & Baqeri, 2009).

Free cash flows signal past favorable financial performance of a firm and indicate a firm's liquidity and financial slack. Free cash flows are significant as they enable firms to pursue investment opportunities without external monitoring which applies to debt and avoids the possibility of lack of funds or highly priced funds for projects (Jensen, 1986). Investments in

growth opportunities will lead to increased earnings as well as increases in firm and share values. Jensen (1986) however argued that since managers tend to waste free cash flows by either investing below the cost of capital or through organizational inefficiencies projects should not be financed through free cash flows but through debt. Copland (1968) stated that corporate free cash flow consists of operating income after tax plus non-cash expenses after deduction of the investments on property, plant, equipment and other assets.

2.2.3 Pecking Order Theory

Donaldson (1961) followed by Myers (1984) suggests that management follows a preference ordering when it comes to financing. His work suggests that the costs of issuing risky debt or equity overwhelm the forces that determine optimal leverage in the trade-off model; the result is the pecking order. He also argued that the trade-off theory fails to predict the wide degree of cross-sectional and time variation of observed debt ratios. The pecking order theory is mainly a behavioral explanation of why certain companies finance the way they do. It is consistent with some rationale arguments, such as asymmetric information and signaling, as well as with flotation costs. Moreover, it is consistent with the observation that the most profitable companies within an industry tend to have the least amount of leverage and more of equity (Khan & Jain, 2004).This observation that profitable firms mostly adopt equity financing by using least debt amounts makes this theory relevant to the study.

The pecking order theory explains why the bulk of external financing comes from debt; why more profitable firms borrow less: not because their target debt ratio is low. The order followed is that firms prefer internal finance and if external finance is required, firms issue the safest security first. They start with debt, then possible hybrid securities such as convertible bonds then

perhaps equity as a last resort (Pandey, 2009).Corporate managers are more likely to follow a financing hierarchy than to maintain a target debt- equity ratio (Pinegar & Wilbricht, 1989).

A theory by Myers (1995) stated that the equity of a firm will be mispriced by the market when the management of that firm holds more information about the future prospects of the firm and condition of its assets as compared to outside shareholders. According to Myers and Majluf (1984), the market tends to conclude that the shares of an issuing firm are overvalued, which in turn leads to lower proceeds for a share issuing firm. The important fact here is that managers will only issue shares when they are overvalued in order to protect the interests of existing shareholders.

Issuing underpriced shares would actually result in the transfer of wealth from old to new shareholders. Since the market is aware of this, an issue of shares by a firm will thus be construed as a signal that the shares are overvalued, or as bad information about an issuing firms" quality. The result is that the price of shares tends to fall after a share issue. This can be so severe as to force the managers to pass-up positive NPV projects (Jensen & Meckling, 1976). Studies by Scherret (1993), Holmes et al. (1991) and Quan (2002) considered the pecking order theory as an appropriate description of Medium Sized Enterprises' financing practices because debt is by far the largest source of financing and that small and medium enterprise managers tend to be owners of the business who do not normally want to dilute their ownership. In addition, they concurred that firms consequently tend to prefer internal financing to external financing of any sort and if they must obtain external funding, they have a preference of debt over equity. They also noted that the order of preference reflected the relative costs of various financing options. Firms therefore would prefer internal sources of finance as compared to expensive or costly external finance and that firms that are profitable and therefore generate

earnings are expected to use less debt than those that do not generate high earnings. The pecking order theory assumes that management behavior and actions are in the best interests of existing shareholders and any equity issues are due to current equity being

Overvalued and such value is to be transferred to existing shareholders upon the new issue (Myers, 2001:95). But Myers and Majluf (1984) were unable to prove whether or not managers care if a new stock issue is over-or undervalued which brings the pecking order theory under scrutiny. Also, they make no mention of how management incentives schemes affect the choice between debt and equity issues as mentioned under signaling theory by (Ross 2002). Later studies by Frank and Goyal (2003) tested the pecking order theory by analyzing the financing patterns of American firms for the period 1971 to 1998. In their findings Frank and Goyal found little evidence to support the pecking order theory and argued that equity issues are more closely correlated with financing deficits rather than debt.

2.2.4 Market Timing Theory

Baker and Wurgler (2002) in their market timing theory argued that firms time their equity issues in the sense that they issue new stock when stock price is perceived to be overvalued and repurchase when they are undervalued. The fluctuations in stock prices affect firms' capital structure. The theory assumes that economic agents are rational. Companies are assumed to issue equity directly after positive information release which reduces the asymmetry problem between firm management and stockholders. The decrease in information asymmetry coincides with an increase in the stock price. In response, firms create their own timing opportunities.

Graham and Harvey (2001) noted that, managers admitted that trying to time the equity market and most of those that have considered issuing common stock report that the amount by which

our stock is undervalued or overvalued was an important consideration. This study support the assumption of the market timing theory that its managers believe they can time the market but does not immediately distinguish between the mispricing and the dynamic asymmetric information version of market timing.

Market timing theory has been questioned by many other studies. Havokimian (2006) provides confirmation that even if the market timing exists, it doesn't encompass long run impact on corporation power and that business does keenly rebalance their leverage fractions toward several target point. Most of the evidences support market timing theory in a sense that manager wait for the market condition to get better, that stocks' position in the market get better before the new issuance and before issuing new stocks firms try to make their performance better (Jahanzeb et al., 2013). These timings for market conditions to get better before issuing new equity to try making firms performance better makes the timing theory relevant to the study.

2.2.5 Trade- off Theory

Myers (2001) noted that a company would borrow up to the point where the marginal value of tax shields on additional debt is offset by the increase in the present value of possible costs of financial distress. Trade off theory explains the friction between costs of financial distress and tax deductibility of the costs of finance, Chirinko & Singha (2000). It suggests that firms trade-off several aspects, including the exposure of the firm to bankruptcy and agency costs against the tax benefits associated with debt usage, offsetting these considerations is the tax benefits encourage debt use by firms (tax deductibility interest) and the final capital structure adopted by a firm will be a trade-off between these tax benefits and costs associated with bankruptcy and agency.

The theory is relevant to the study as it implies that there is target or optimal debt-equity ratio for a firm (Rotnano et al. 2000) that changes only as benefits and costs alter over time. The main benefit of debt is the tax advantage of interest deductibility (Modigliani & Miller 1963). The primary costs are those associated with financial distress and the personal tax expense bondholders incur when they receive interest income (Miller, 1977). The trade-off theory of capital structure therefore predicts that firms will choose their mix of debt and equity financing to balance costs and benefits of debt. The tax benefit of debt and control of free cash flows problems push firms to use more debt financing while bankruptcy costs and other agency problems provide firms with incentives to use less. The trade-off theory has been criticized on the basis that it is not adequately descriptive of observed capital structures (Myers, 1984). Further observation by Myers (2001) noted that the firm would borrow up to the point where the marginal value of tax shields on additional debt is offset by the increase in the present value of possible costs of financial distress.

According to Modigliani and Miller (1958), the attractiveness of debt decreases with the personal tax on the interest income. A firm experiences financial distress when the firm is unable to cope with the debt holders' obligations. If the firm continues to fail in making payments to the debt holders, the firm can even be insolvent. The theory can be explained by costs of financial distress and agency costs. In reality, bankruptcy costs can be quite onerous and can be incurred not only when bankruptcy proceedings are in process, but also when the threat of bankruptcy is imminent. Firms that are experiencing bankruptcy issues have high legal and accounting related expenses, costs of debt covenants as well as the potential loss of clients/suppliers, impaired ability to conduct business. The trade-off theory attempts to incorporate the costs of financial distress into the capital structure decision. According to the trade-off theory, a firm must decide

on a target debt ratio which maximizes its value and then slowly move towards that target debt ratio. The optimal capital structure is found when the marginal benefit of each incremental unit of debt thus interest tax shields is equal to marginal cost of each incremental unit of debt thus financial distress costs (Jensen & Meckling, 1976).

2.3 Determinants of Market Based Performance

2.3.1 Introduction

Performance is the function of the ability of an organization to gain and manage the resources in several different ways to develop competitive advantage. There are two kinds of performance, financial performance and non-financial performance(Deloof, 2003). There have been various measures of financial performance. For example return on sales reveals how much a company earns in relation to its sales, return on assets determines an organization's ability to make profits by utilizing assets and return on equity reveals what return investors take for their investments (Demirgunes, 2008).

2.3.2 Firm Size

Liargovas and Skandalis (2008) did a study on the financial performance and size of manufacturing firms in Greece. They found that financial performance of majority of the firms was affected by firm size. The study concluded that firm size is a basis of competitive advantage in the sense that larger companies tend to be more efficient than their smaller counterparts and have better resources to survive economic downturns. Natural logarithm of total book value of total equity will be used to measure size of the firms. Asymmetric information problems are likely to be less severe for large firms. High growth, smaller firms have a tendency to issue equity while for low growth, larger firms are the ones that tend to issue equity (Liargovas ,2008).

2.3.3 Growth Opportunities

Growth opportunities are measured in terms of the fraction of firm's value represented for by assets in place; smaller the proportion of firm's value narrated by assets-in-place, the larger are the firm's growth opportunities (Myers, 1977). The firms with growth opportunities have moderately more development projects, new product lines, acquisitions of other companies and repair and replacement of existing assets. Moreover, growth opportunities and firm size are positively related to profitability (Abor, 2005). Those firms with growth opportunities lean to show high profitability and firms in the middle of the growth opportunities incline to confirm small profitability (Serrasqueiro, Maria & Paulo, 2007).

2.3.3 Equity Ratio

Firms with higher leverage seek to avoid higher costs of financial distress and are more likely to issue equity. If firms seek to maintain a target leverage ratio then high leverage is likely to be associated with a desire to issue equity (McLaughlin et al., 1996).Dagon (2013) examined the impact of size, age, liquidity and leverage on profitability for 200 companies listed in Istanbul Stock Exchange for the years 2008 to 2011. The results indicated a positive relationship.

Luper and Isaac (2012) examined the impact of capital structure on the performance of manufacturing companies in Nigeria. The annual financial statements of 15 manufacturing companies listed on the Nigerian Stock Exchange were used for this study which covers a period of five years from 2005-2009. Multiple regression analysis was applied on performance indicators that included return on asset ROA) and profit margin .Short-term debt to total assets, long term debt to total assets and total debt to equity were used as capital structure variables. The results show that there was a negative and insignificant relationship between short-term debt to

total assets and long term debt to total assets on ROA and profit margin respectively; while total debt to equity is positively related with ROA and negatively related with profit margin. Leverage will be measured by the ratio of total debt to total equity.

2.3.4 Liquidity

The working capital management theories of Baumol (1952), Tobin (1956) Miller-Orr (1966) Dash and Ravipati (2009), Stone (1972) emphasize the role of liquidity on firm's performance as characterized by a high level of trading activity. Assets that can be easily be bought or sold are referred to as liquid assets and the ability to convert such assets to cash quickly (Kim 986).

According to Adam and Buckle (2003), liquidity measures the ability of managers in companies to fulfill their immediate commitments to policyholders and other creditors without having to increase profit from investment activities and or liquidate financial assets. Therefore, having high liquidity obviates the need for the management of the companies to improve their financial performance. The ration of current assets represented by oil products inventories, to current liabilities will be used as measure for liquidity

2.4 Empirical Review

2.4.1 Introduction

This sub topic provides summary of the similar and previously carried out studies on equity financing and financial performance both locally and globally. The studies featured the sample size, study design employed, data analysis and time in years each the study covered.

2.4.2 Global Empirical Studies

Healy and Palepu (1990) studied a sample of 93 large equity financed firms by examining changes that occur around equity offering in firm risk, leverage, and earnings levels. They found no evidence of actual earnings changes or changes in analysts' forecasts. However, they found a significant increase in both asset and equity betas subsequent to the offer. Their study concluded that the information conveyed by equity offerings pertains to changes in risk, rather than changes in earnings levels.

Ritter (1991) found a significant long run under performance at the end of three year following equity offering for a sample of 1526 IPOs over the period 1975- 1984. He found that the result appeared to be time sensitive. He observed a positive mean for the period 1975-1980 and negative mean performance for the period 1981-1984. This suggested that seasoned offering performed well in certain periods than in others.

Loughran and Ritter (1995) in their study on the new issues puzzle used a sample of companies issuing IPOs and SEO during 1970 -1990 found that firms issuing IPOs and SEOs significantly underperformed relative to non issuing firms for five years after the offering date. Later, Loughran and Ritter (1997) studied the operating performance of firms using equity financing on New York Stock exchange market. The median return on assets fell from 15.8% to 12.1%.The declines were found to be much larger than for corresponding non issuing firms matched by asset size, industry and operating performance. While these patterns were both large for large and small issuers, the post issue deterioration was more severe for smaller issuers.

McLaughlin et al. (1996) analyzed a sample of 1296 industrial firms listed in the NYSE that issued seasoned equity during the period 1980-1991 for changes in operating performance. Their

sample of equity offering firms exhibited significant improvements in financial performance prior to the issue. However they experienced a sharp, significant decrease in profitability following the equity offering in both industry-adjusted and unadjusted comparisons. In addition they reported decline in profitability was greater for firms that had higher free cash flow, and that equity offering firms that invested in new fixed assets performed better. They also found firm size, leverage and growth opportunities to be determinants of the decision to issue additional equity.

Cai and Loughran (1998) examined Japanese firms conducting 1389 equity offering during 1971-1972 and found that they significantly underperform various benchmarks over a subsequent five-year period. This poor stock performance is accompanied by a deterioration of the matching-firm adjusted operating performance. These results from the Japanese financial markets were found to be inconsistent with an agency explanation for the new issues puzzle. These findings were supported by Kang, Kim and Stulz (1999) who found post equity offering underperformance using Japanese data.

Friday et al. (2000) examined the financial performance of 200 US real investment trusts following equity offer made in the period 1990-1996.The sample showed flat to increasing levels of operating performance changes prior to the equity offering and flat industry adjusted performance changes following the equity offering. These results contrasted with industrial firm results where performance changes are found to be negative following a equity offering. They attributed the difference to the structural differences in REITs that limit the levels of internal capital available to REIT managers.

Sibilkov (2009) tested the alternative effect of asset liquidity on capital structure and used data from abroad sample of 7,486 U.S public companies, available from the Compustat Industrial Annual Research. The study covered the period between1982 to 2005 and used descriptive statistics by performing multivariate regression analysis of the level of leverage on the liquidity. He concluded that leverage is positively related to asset liquidity. Further analysis reveals that the relation between asset liquidity and secured debt is positive, whereas the relation between asset liquidity and unsecured debt is curvilinear.

2.4.3 Local Empirical Studies

Jumba (2002) studied the relationship between performance and equity issuance in NSE for the period 1992-2000 and concluded that in the short run SOE over perform the market while in the long run SEO underperformed the market using three year holding period. Ndatimana (2008) analyzed the financial performance following seasoned offering for the period 1992–2007 and reported that underperformance for the first three years reverses by the fifth year using Market adjusted Buy and Hold Return (MABHR) as measure of performance.

Njoroge (2003) studied the impact of rights issue announcements on share prices of companies listed at the NSE. Her study composed a sample of six rights issues made in the period 1996-2002. The study was investigating whether the average abnormal returns surrounding the rights issue announcement was statistically different from zero. Using the market model, negative results of abnormal return prior to the announcement day of the rights issue was documented. Abnormal returns on the event date were insignificantly negative implying that the announcement did not bring any surprises to the stock market.

Gatundu (2007) studied the effect of announcement of secondary equity offerings on stock prices of firms listed at the NSE. He conducted an event study with a sample based on 10 companies that had made equity offerings in the period 1996-2006.The results of the study showed that abnormal returns were insignificant and hence the announcement did not shock the market significantly.

Mwangangi (2011) sought to answer whether the market reacts to announcements of equity offering and whether size of the issue influences the stock prices. Using event study methodology she analyzed a sample of 23 companies listed at the NSE that had issued equity offering in the period 2001-2010.The study concluded that the offering did not experience a significant reaction to the announcements and that the size of the offering did not have any significant impact on stock returns.

Mwathi (2013) analyzed the relationship between on the subscription rate of IPO's and long term performance of IPO's at the NSE. Subscription rate was measured in monetary terms. He analyzed twelve IPO's that happened at the NSE between the years 1992 and 2009 and used a regression model to determine the relationship between IPO performance and IPO subscription. The study established a weak positive relationship between IPO subscription rate and the long term performance.

2.5 Summary of Literature Review and Research Gaps

The theories of equity financing and equity issuance predict a negative performance for firms that issue seasoned equity due to negative signals that are issued to investors. In contrast, the literature reviewed highlighted mixed results as far as financial performance of equity offering firms is concerned, (Palepu 1990 & Njoroge 2003).Some studies showed no change in earnings

27

for seasoned issuers while others presented either a positive or negative change in financial performance, Slovin, Shushka and Lai (2000) and Friday et al. (2000) .The results obtained from the studies above cannot be generalized for emerging stock markets such as the NSE due to differences in policies, structures and the fact that, rights offers have become the most preferred and popular method of raising equity capital for expansions and growth of firms listed at the NSE. The financial performance of seasoned equity offering firms at the NSE has received little attention with existing studies focusing on all firms listed at NSE. Such findings are too general to guide investors in choosing the stocks to include in an equity portfolio. This study therefore sought to fill this gap by establishing the relationship between equity financing and financial performance on a particular sector: - energy and petroleum companies listed at the NSE.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter systematically provides an explanation of the research design that was adopted by this research, the target population, the data sample, data collection method and techniques that was used to analyze data.

3.2 Research Design

The main purpose of this research is to determine the relationship between equity financing and financial performance in the Energy and Petroleum firms in Kenya. Therefore a descriptive research was used to study whether this relationship exists between equity financing and financial performance in the energy and petroleum firms listed at the NSE.

According to Kothari (2004) research design is concerned with determining cause and effect relationship and to understand dependent and independent variables. It aimed to explore the relationship between equity financing and financial performance of energy and petroleum sector firms explaining the empirical evidences that help address the research objectives which should clearly be stated in a research proposal.

3.3 Population

The population of interest in this study constitute all companies quoted at the NSE for the period of ten years from 2005 to 2014.This period will put in to account the period before and after this sector recently split from the Industrial and Allied sector and capture more data points to make the study more robust .The study was limited to listed companies due to lack of readily available data from companies not listed in NSE. The listed companies in the energy and petroleum sector

which this study will investigate include KenGen Ltd, KenlKobil ltd, Keya power & lighting co ltd, Total Kenya ltd, Umeme which also forms my sample size.

3.4 Data Collection

The study used Secondary data extracted from annual financial reports of the listed non financial firms in Kenya for the period 2005 to 2014. The Financial reports were obtained from the Nairobi Securities Exchange, firm's publications and websites. Return on equity was the financial measure of performance used in the study which was calculated for the five firms listed in the energy and petroleum sector.

3.5 Data Analysis

The model used multiple linear regression which include independent, dependent and control variables. Correlation analysis was carried out to find out the association between variables. The following tests were carried by use of SPSS software before regression analysis to test for spurious correlation, multicollinearity and heteroskedasticity among Independent variables in order to decide what variables to be used in regression model.

Statistical tests using variance inflation factor (VIF) (Scores of 10) to test for multicollinearity. Kurtosis and Skewness of the distribution of the data shall be examined to test for normality of the data. Weighted Generalized Least Square (GLS) shall be carried to test for heteroskedasticity. Individual coefficients of the independent variables shall be tested for significance using the t-test. The F- test shall be used to test the significance of the overall regression model.

3.6. Analytical Model

The following Multiple Regression Equation Model was applied in this study, to test the relationship between equity financing and financial performance. The regression model that was used in the analysis is similar to the one used by McLaughlin et al. (1998) and was of the form:

Financial Performance (ROE) = β0+ β1 FSize +Eqr + β3 LQration + β4 Gwopp + εt

Return on equity (ROE) will be used to measure the financial performance and indicates the profitability of the company.ROE measures the rate of return on common stockholder's investment.

Return on Equity (ROE) = (Earnings after Interest and Taxes / Equity)

β_0 = The intercept of equation.

$\beta_1, \beta_2, \beta_3$ and β_4 = Coefficients of the Independent Variables

ε_t = The Error Term

Independent Variable and control variables were as indicated below;

Independent variable

Eqr = Equity ratio measured by Total Equity/ Total Financing

Control Variables;

Gropp = Growth opportunities brought about by equity financing measured by Market value to book value of equity

LQration = Liquidity ration measured by current assets/current liabilities

$FSize$ = Firm Size measured by natural logarithm of book value of total equity

Financial performance represented by the return of equity was the dependent variable, equity financing represented by equity ratio level was used as the independent variable while Growth opportunities, firm size and liquidity ratio are control variable.

3.6.1 Test of Significance

T-test was used to test significance on the individual predictor variable; to determine whether they are linearly related to the response variable .F-test was used to test for the significance of the whole model.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter detailed the data analysis, findings and interpretations of the results. Descriptive statistics and regression analysis are respectively discussed. Analysis results and findings are also discussed.

4.2 Descriptive Statistics

The descriptive statistics for the variables in the study, were calculated and the results of the same tabulated as shown in the table 4.1 below,

Table 4.1 Descriptive statistics

	RETURN ON EQUITY	FIRM SIZE	EQUITY RATIO	GROWTH FINANCING	LIQUIDITY RATIO
Mean	7.0194	16.6186	.3986	3.1069	1.4345
Median	8.1100	16.2500	.3900	1.0400	1.2800
Mode	5.24[a]	17.96[a]	.39	.45[a]	1.30
Std. Deviation	12.96409	1.13314	.09730	6.31935	.74785
Minimum	-76.49	14.91	.20	.00	.90
Maximum	22.47	18.16	.64	29.57	4.71
Sum	343.95	814.31	19.53	152.24	70.29

Source: Author 2015

The factor with the highest maximum value was growth financing with a value of 29.57 followed by return on equity which has a maximum value of 22.47, also return on equity had the lowest minimum value of -76.49 followed by growth financing with a minimum of 0.00.In terms of means, the factor with the highest mean was firm size which had a mean of 16.6186, followed by return on equity which had a mean of 7.0194 and lastly equity ratio had the lowest mean of 0.3986.

4.3 Correlation Analysis

To get the relationship between variables, 2 tailed correlation analyses was carried out and the results were tabulated as shown in table 4.2 below

Table 4.2 Correlation Analysis of Variables

		RETURN ON EQUITY	FIRM SIZE	EQUITY RATIO	GROWTH FINANCING	LIQUIDITY RATIO
RETURN ON EQUITY	Pearson Correlation	1	-.018	.205	.194	.016
FIRM SIZE	Pearson Correlation		1	.300[*]	-.379[**]	.339[*]
EQUITY RATIO	Pearson Correlation			1	-.011	.368[**]
GROWTH FINANCING	Pearson Correlation				1	-.069
LIQUIDITY RATIO	Pearson Correlation					1

Source: Author 2015

The variables in this matrix reveal there are no two values that have a Pearson Correlation coefficient of ☐ 0.8 to confirm strong correlation. Return on Equity relates positively with all factors except the firm size which has a value of -0.18.Firm size relates with equity ratio and liquidity ratio positively but negatively with growth financing with a value of -.379 Growth financing relates with liquidity ratio negatively with a value of -0.69.

4.4 Regression Analysis

Regression analysis was carried out, and the results are as shown in Table 4.3

Table 4.3 model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.289[a]	.083	.000	12.96436	2.173

Source: Author 2015

The value of R is 0.289 portrays a positive but weak association between equity financing and financial performance between the variables i.e Return on equity and independent variables based on the regression equation. This implies that there is indeed association between the Return on equity and firm size, equity ratio, growth financing and liquidity ratio. R^2 reveals a figure of 0.083 which represents the proportion of changes in return on equity that explained by changes in equity ratio, firm size, growth opportunities, and liquidity ratio from the regression equation.

Autocorrelation was tested using Durbin-Watson value. From table 4.3, the value of Durbin-Watson was 2.173 hence there was no existence of autocorrelation since the value was far below the threshold for autocorrelation of 7.

Further, Analysis of Variance was carried out and the results shown in Table 4.4 below,

Table 4.4 Analysis of Variance

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	671.965	4	167.991	1.000	.418
Residual	7395.284	44	168.075		
Total	8067.250	48			

Source: Author 2015

35

The variance of the dependent variable return on equity is partitioned into two sources; the part predictable from the regression equation (Regression) and the part not predictable from the regression equation (Residual), here the F-test is not significant with a value of 0.418 $\square$ 0.05.Another table that was produced from the regression analysis was the table of co-efficient which is as shown below

Table 4.5 co-efficient of the model

Model	Un standardized Coefficients		Standardized Coefficients	T	Sig.	Co linearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-6.137	30.898		-.199	.843		
FIRM SIZE	.078	1.946	.007	.040	.968	.720	1.389
EQUITY RATIO	30.098	21.219	.226	1.418	.163	.822	1.217
GROWTH FINANCING	.401	.322	.195	1.243	.221	.843	1.186
LIQUIDITY RATIO	-.962	2.786	-.055	-.345	.732	.806	1.240

Source: Author 2015

Multicollinearity of predictor variables was tested using variance inflation factors (VIFs). Multicollinearity is the undesirable situation where the correlations among the independent variables are strong. It exists in the model if VIF $\geq$ 10. From table 4.5 the VIF for firm size was 1.389, VIF for equity ratio was 1.217, VIF for growth financing was 1.186 and VIF for liquidity ratio was 1.240. This meant that variance inflation factors for all predictor variables were less than 10 hence Multicollinearity was not in existence. For the significance of the t-test all the values were above the p-value (0.05) threshold, which shows insignificance.

To measure the relationship between the financial performance and the equity financing following, the linear regression equation was developed from table 4.5

ROE =-6.137+0.078Fsize+30.098Eqr- 0.962 LQratio +0.401 Growth opp.

The regression coefficients shows that b_0 (the value of financial performance when firm size, equity ratio, growth financing and liquidity ratio are all rated zero) is equal to -6.137. A unit increase in firm size led to an increase in financial performance of 0.078 units. Likewise a unit increase in equity ratio led to increase in financial performance (ROE) of 30.098 units. A unit increase in liquidity ratio led to decrease in financial performance by 0.962 units while a unit change in growth financing led to increase in financial performance of 0.401 units.

4.5 Interpretations

From the descriptive statistics growth financing has a range of 29.57 while liquidity ratio has a range of 3.81, equity ratio has a .44, and firm size has a range of 3.25 and 98.96 which is the difference between maximum values. Firm size has the highest concentration of value measures of central tendencies for both mean median and mode.

In the correlation between variables table 4.2, equity ratio and liquidity portrays the strongest relationship of .368 while growth financing and firm size has the weakest correlation. Regression analysis as shown by coefficient of determination of .083 explains the variations of the return on equity that is as result of changes in the equity ratio, firm size, liquidity ratio, and growth opportunities as shown in table 4.3 in the model summary. Table 4.4 shows analysis of variance in which return on equity is portioned in to two sources, the part predictable from the regression equation and the part not predictable from residual's test was found not significant with value of 0418>0.05.table 4.5 shows the elasticity analysis indicating that equity ratio is the only key determinant of financial performance given the 30.098 contribution.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarized the analysis in chapter four and underlined the key findings. It also drew conclusions and implications from the finding. Limitations of the study were discussed. Finally, recommendations and suggestions for further studies were outlined.

5.2 Summary of findings

Correlation and regression analysis carried out in chapter four were summarized as follows

5.2.1 Correlation Analysis

From table 4.2 the variables in the matrix reveal there are no two values that have a Pearson Correlation coefficient of $\square$ 0.8 to confirm strong correlation. Return on Equity relates positively with all factors except the firm size which has a value of -0.18.Firm size relates with equity ratio and liquidity ratio positively but negatively with growth financing with value of -.379 Growth financing relates with liquidity ratio negatively with a value of -0.69.

5.2.2 Regression Analysis

This study was to establish the relationship between equity financing and financial performance of the energy and petroleum companies quoted at the NSE.ROE was regressed against firm size, equity ratio, growth financing and liquidity ratio for a period of ten years from 2005-2014.The two sets of data were then subjected to a regression analysis. The elasticity analysis indicates that equity ratio is the only key determinant of financial performance given the 30.098 contribution.

5.3 Relationship between Equity Financing and Financial Performance

From the results of the study in chapter four, it was found that there is a positive relationship between the independent variables (firm size, equity ratio, growth financing and liquidity ratio) used in the model and the dependent variable (ROE). There exists a relationship between equity financing (represented) by the independent variables and financial performance represented by ROE which is not that strong as no value reached the benchmark of 0.8 from the correlation table in Table 4.2.On individual significance all the variables were found to be insignificant with values 0.968, 0.163, 0.221 and 0.732 all greater than the p-value 0.05, on overall significance of the whole model , it was found out that there was no significance. Since the F-value was 0.418.

5.4 Conclusion

From the findings above, the study concludes there is no significant relationship between equity financing and financial performance. The firms under study were considered to be large firms which do not suffer from high information asymmetry. As a result, the size effect on equity financing would not have a significant impact on performance.

Other factors found to affect financial performance include asset growth and leverage and the prevailing macroeconomic factors. Firms that focus their resources on asset growth are likely to show improvements in financial performance.

5.5 Limitations of the study

The study used data from 5 sampled firms; Umeme Ltd had some missing data for three years since it was quoted recently at the NSE which limited the research. This consists of a limited population for the purposes of research. The study also covered a short period of time yet for

better results the time period could be extended to 10 years to capture the effect of the variables more comprehensively.

The study used regression analysis while other methods could have been considered to enhance good interpretation of the factors in consideration. Lastly the study was limited to the NSE and hence the findings cannot be generalized for other developing countries in the East African Region as well as the African stock markets.

5.6 Recommendations

Equity financing is important to any firm if the proceeds are used to invest in projects which eventually bring growth to a firm. The study recommends that more firms participate in equity financing as a way of raising capital for major expansions, asset growth or acquisitions which may require heavy funding. In this way firms will be assured of improvement in performance as well as high growth. More years should be incorporated to capture the various economic cycles and the impact on return on equity.

For policy makers, regulations regarding equity issuance need to be reviewed in order to be flexible enough to encourage more firms to participate in seasoned equity issues.

5.7 Suggestions for further research

Further investigation may be done to establish if the relationship between equity financing and financial performance would change if proxies such as firm age and ownership concentration were used. The study may be replicated using a different methodology and incorporating a larger period of time.

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APPENDICES

APPENDIX I: FIRMS LISTED IN THE PETROLEUM AND ENERGY SECTOR

1. Umeme ltd

2. KenGen Ltd

3. Kenya power and lighting company ltd

4. Total Kenya ltd

5. Kenol Kobil ltd

APPENDIX II: REGRESSION DATA OUTPUT

MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.289[a]	.083	.000	12.96436	2.173

a. Predictors: (Constant), LIQUIDITY RATIO, GROWTH FINANCING, EQUITY RATIO, FIRM SIZE

b. Dependent Variable: RETURN ON EQUITY

ANOVA OUTPUT

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	671.965	4	167.991	1.000	.418[b]
	Residual	7395.284	44	168.075		
	Total	8067.250	48			

a. Dependent Variable: RETURN ON EQUITY

b. Predictors: (Constant), LIQUIDITY RATIO, GROWTH FINANCING, EQUITY RATIO, FIRM SIZE

COEFFICIENTS OF THE MODEL

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-6.137	30.898		-.199	.843		
	FIRM SIZE	.078	1.946	.007	.040	.968	.720	1.389
	EQUITY RATIO	30.098	21.219	.226	1.418	.163	.822	1.217
	GROWTH FINANCING	.401	.322	.195	1.243	.221	.843	1.186
	LIQUIDITY RATIO	-.962	2.786	-.055	-.345	.732	.806	1.240

a. Dependent Variable: RETURN ON EQUITY

RESIDUALS STATISTICS

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.4818	19.9492	7.0194	3.74156	49
Residual	-77.97184	12.99706	.00000	12.41243	49
Std. Predicted Value	-1.480	3.456	.000	1.000	49
Std. Residual	-6.014	1.003	.000	.957	49

a. Dependent Variable: RETURN ON EQUITY

COEFFICIENTS OF THE MODEL

Model		Correlations		
		Zero-order	Partial	Part
1	FIRM SIZE	-.018	.006	.006
	EQUITY RATIO	.205	.209	.205
	GROWTH FINANCING	.194	.184	.179
	LIQUIDITY RATIO	.016	-.052	-.050

a. Dependent Variable: RETURN ON EQUITY

COLLINEARITY DIAGNOSTICS

Model	Dimension	Eigen value	Condition Index	Variance Proportions				
				(Constant)	FIRM SIZE	EQUITY RATIO	GROWTH FINANCING	LIQUIDITY RATIO
1	1	4.046	1.000	.00	.00	.00	.01	.01
	2	.775	2.285	.00	.00	.00	.81	.01
	3	.144	5.301	.00	.00	.01	.02	.87
	4	.033	11.021	.02	.01	.97	.00	.05
	5	.002	48.261	.98	.99	.02	.16	.06

a. Dependent Variable: RETURN ON EQUITY

CORRELATION ANALYSIS OF VARIABLES						
		RETURN ON EQUITY	FIRM SIZE	EQUITY RATIO	GROWTH FINANCING	LIQUIDITY RATIO
RETURN ON EQUITY	Pearson Correlation	1	-.018	.205	.194	.016
	Sig. (2-tailed)		.901	.157	.181	.911
	N	49	49	49	49	49
FIRM SIZE	Pearson Correlation	-.018	1	.300[*]	-.379[**]	.339[*]
	Sig. (2-tailed)	.901		.036	.007	.017
	N	49	49	49	49	49
EQUITY RATIO	Pearson Correlation	.205	.300[*]	1	-.011	.368[**]
	Sig. (2-tailed)	.157	.036		.942	.009
	N	49	49	49	49	49
GROWTH FINANCING	Pearson Correlation	.194	-.379[**]	-.011	1	-.069
	Sig. (2-tailed)	.181	.007	.942		.638
	N	49	49	49	49	49
LIQUIDITY RATIO	Pearson Correlation	.016	.339[*]	.368[**]	-.069	1
	Sig. (2-tailed)	.911	.017	.009	.638	
	N	49	49	49	49	49
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						