

**THE EFFECT OF OIL PRICE REGULATION ON THE FINANCIAL
PERFORMANCE OF OIL COMPANIES IN KENYA**

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DECLARATION

STUDENT'S DECLARATION

This research project is my original work and has not been submitted for a degree in any other university or college for examination/academic purposes.

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This Research Project has been submitted for examination with my approval as

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DEDICATION

I dedicate this project to my ever supportive family and colleagues.

ABSTRACT

Kenya experienced sharp increase in prices of petroleum products between 2007 and 2011. It was observed oil firms were taking advantage of international prices changes to exploit the public. Due to public outcry and the need to protect consumers, the government introduced price controls on pump prices in December 2010. The objective of this study was to establish whether there exists a relationship that exists between price regulation and financial performance of firms in the Kenyan oil sector.

This research study used causal research design. The target population for this study constituted five oil companies which had over five percent market share in the retail network were sampled for the purpose of this study. The study used secondary sources of data from published financial statements, Ministry of Energy statistics and industry reports. Financial data from statements of financial position, income statements and cash flow statements from January 2010 to December 2011 was used. Collected data was analyzed and presented using SPSS and Microsoft office 2007 applications.

The study concluded that indeed price regulation on pump have affected financial performance of oil firms in Kenya. The local prices were found to lag behind international price quotations after introduction of price controls in 2011 by an average of 16%. A look at variance between margins allocated to OMCs as compared to Actual realized margins by oil firms reveals that oil firms have been losing part of their allocated margins to stock effects and volatility in exchange rates and financing costs. The study recommends that ERC formula should be revised in consultation with all oil marketers to cushion them from costs not factored in the gazetted formula.

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ABBREVIATIONS

AGO	Automotive Gas Oil-Diesel
COTU	Central Organization of Trade Unions
EBIT	Earnings Before Interest and Tax
ERB	Energy Regulatory Board
ERC	Energy Regulatory Commission
GDP	Gross Domestic Product
GM	Gross Margin
IK	Illuminating Kerosene
KK	Kenol Kobil Ltd
KPC	Kenya Pipeline Company
MOE	Ministry of Energy
NOCK	National Oil Corporation of Kenya
NSE	Nairobi Securities Exchange
OMCs	Oil Marketing Companies
OPEC	Organization of Petroleum Exporting Countries
OTS	Open Tender System

PIEA	Petroleum Institute of East Africa
PLATTS	International Price Quotations
PMS	Premium Motor Oil Spirit- Super
RMS	Regular Motor Spirit
ROCE	Return on Capital Employed

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

1.1.1 Concept of Price Regulations

Price control is a law passed by government that dictates price of a good or service. It can either put a price ceiling where the price cannot go above a certain point or a price floor where the price cannot go below a certain point (Yang, Hwang and Huang, 2002). According to Barsky and Kilian (2004), higher oil prices lower effective household income at the microeconomic level because households pay more for petroleum products they consume directly. At the macroeconomic level, oil price levels can affect the balance of payments; gross domestic product (GDP); and, where fuel prices are subsidized, government budgets, contingent liabilities, or both.

When the competitive forces are insufficiently developed, the free market mechanism may fail to facilitate optimal outcomes. It is therefore necessary to intervene in such instances, in order to provide the regulatory support needed to correct such market failures normally done through government intervention (Angelier, 1991).

Price regulations pay closer attention to the relationship between the industry and the general public. Most important is that, the regulator will need a criterion upon which to base the choice of regulated price. In this case, the regulator pursuing consumer interests is aiming at achieving an average cost price on grounds that this is the minimum price achievable that the market cannot make losses. Linking prices to costs in this way,

however, creates bargaining problems similar to those encountered with the rate of return of regulation as regulators will not have the detailed knowledge of cost condition that is available to the firm (Wasike et.al., 2007).

1.1.2 Determinants of Oil Prices

Today, oil prices like the prices of virtually all other bulk commodities, are determined by the marketplace. The introduction of a free market for crude in 1987, with its price now serving as a benchmark for virtually all international transactions, has resulted to price fluctuations which are unprecedented in the oil industry (Kilian, 2008a).

Angelier (1991) show that, in the short term, the interaction of supply and demand produces oil price fluctuations of severity and frequency largely determined by current marketing arrangements for crude oil. In the medium term, the structure of the industry may allow a dominant group of players to implement a strategy aimed at insulating the market from competitive forces, leading to a rise in oil prices. Finally, in the long term, the price of oil will tend to reflect the real cost of producing enough oil to satisfy demand. Demand is influenced by factors other than price, such as the current level of economic activity in a country. Another important variable that mediates between price and demand is the level of inventories. Large inventories make the demand for oil more upwardly rigid; conversely, low inventories reduce that rigidity.

Cost of production is another critical variable because the market price cannot deviate from it by very much for very long. When the market price falls below the cost of production, the industry does not earn a profit, as it must in order to invest in new equipment and engage in exploration activities. Producers with the highest costs will drop

out of the industry, reducing supply and putting upward pressure on prices. When, on the other hand, the market price is higher than the cost of production for any appreciable length of time, new capital will flow into the industry, increasing supply and exerting downward pressure on prices (Porter, 1985)

1.1.3 Determinants of Financial Performance

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues (Brigham, 1983). He continues to say that the term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. There are many different ways to measure financial performance, but all measures should be taken in aggregation.

Movement in international oil prices and exchange rates between local currency and American dollar impacts on the cost of the product. The reflection of these costs on the prices of the product determines the level at which OMCs are able pass them to consumers (Aress, 2011).

The efficiency of the supply chain affects the level of service delivery by OMCs to its customers. Faster product availability is key to increasing sales and substantial profit advantage for the extra time that you are in the market and your competitor is not (Sibley et al., 1991).

According to Bator, (1958), the level and nature of competition in the industry matters for the efficiency of production and delivery of products to customers, the quality of products and the degree of innovation in the sector. Excessive price competition reduces the

profitability of the company while low price competition enables OMCs adjust prices in line with their operational strategies.

Stability of macroeconomic variables for example, Interest rates, inflation, Gross Domestic Product growth rate and strength of the local currency in comparison with foreign currencies is another critical factor in the management of working capital. High interest rates regime coupled with volatile local currency translates to high financing costs and foreign exchange losses and vice versa. High inflation on the other hand, translates to an increase in fixed costs while low and stable inflationary measures reduce volatility of fixed expenses while enhancing accurate forecasts and budgeting (ERC, 2012).

Price controls on regulated OMCs are an attempt to combat cartel pricing through capping of revenue, profits or costs. They are government instruments for overcoming the disadvantages of imperfect competition, unbalanced market operation, missing markets and undesirable market results (Breyer, 1982).

1.1.4 Relationship between Price Regulation and Financial Performance

Price regulations serve as prudential measures that mitigate the effects of economic crises on the stability of the oil industry and subsequent accompanying macroeconomic results (Arrow, 1985). On the other hand, excessive regulations may increase the cost of intermediation and reduce the profitability of OMCs. Price regulations use parameters which are historical in nature and forecast averages which distort true cost of the product leading to losses (Pirog, 2012).

Maximum retail price may not capture all the elements of cost of supply chain for example, cost of financing imports, demurrage fees costs and hospitality fees. Simultaneously, as OMCs become more constrained, their ability to expand their market and contribute to economic growth will be hampered during normal times (Total Kenya Ltd, 2012).

1.1.5 Kenya's Oil Industry

The oil industry in Kenya has witnessed numerous reforms which have allowed greater participation of the private sector, particularly in the importation, distribution and supply of services. According to Ministry of Energy (2012) petroleum products account for twenty two percent of national energy requirements and the sector have about forty six import and marketing firms. Since 1994, the procurement, distribution, and pricing of petroleum products were liberalized with a view to enhancing operational efficiency of the industry and also attracting private capital.

According to news published on Capital FM website, Kenya experienced sharp increase in prices of petroleum products between 2007 and 2011. It was observed that when international price quotations were rising, oil marketing companies quickly passed on the increased costs to the consumer long before receiving the quoted product but took long to pass on the benefit to the consumer when prices dropped. This behavior by oil marketing companies (OMCs) caused a public outcry from Central Organization of Trade Unions (COTU) and the civil society. Kenya Association of Manufacturers warned of passing on the additional costs by increasing the cost of basic commodities, sparking inflation fears.

In 2009, with extensive stakeholder consultations, as required by the Energy Act, Energy Regulatory Commission (ERC) drafted regulations for setting the maximum pump prices for petroleum products namely Premium Motor Spirit (PMS), Automotive Gas Oil (AGO), Regular Motor Spirit (RMS) and Kerosene. These regulations were effected in December 2010 and they included a formula for capping the maximum pump prices after incorporating all prudently incurred cost inputs (ERC, 2012).

Compared with other industries, Kenyan petroleum industry has had the smallest margins due to competition, price controls and high operational costs. Regulation of oil prices has been viewed to impact negatively on the profitability of OMCs hence slowing down industry growth (Wasike et.al.,2007).

The Kenyan oil industry is controlled by the major oil companies which include; Total Kenya limited, Kenol Kobil Limited, Shell Kenya limited, Oil Libya limited and National Oil Corporation of Kenya. According to information posted on ERC website, the five companies control a market share of over seventy five percent.

1.1.6 Control of Oil Prices

According to information published on ERC website, the mode adopted to control oil prices by the Kenyan government was to cap revenue generated since it is easily verifiable unlike profit and costs. The maximum wholesale prices and retail pump prices of petroleum product at depot or retail dispensing sites are determined in accordance with gazetted formula. The prices determined using the formula set out are the maximum wholesale and retail price which all industry players sell their products. These prices take

effect on the 15th day of every calendar month and remain in force until 14th of the following month (ERC, 2012).

Energy Regulatory Commission (ERC) is a single sector regulatory agency, with responsibility for economic and technical regulation of electric power, renewable energy, and downstream petroleum sub-sectors, including tariff setting and review, licensing, enforcement, dispute settlement and approval of power purchase and network service contracts (ERC, 2012).

It is noteworthy to know that price regulation set by the ministry do not affect the following products in the oil industry; fuel oil, liquefied petroleum gas (LPG), lubricants, special fluids, jet fuel and export sales. The prices of these products are determined by market dynamics which include; demand and supply forces, intensity of competition, movement in international oil price quotations and efficiency of the supply chain (Ministry of Energy, 2012).

1.2 Research Problem

There is general agreement that price regulations are necessary when there exists imperfect competition, unbalanced market operations, missing markets and undesirable market results (Arrow, 1985). It is an employment of legal instruments that a government uses to compel operators to comply with prescribed behavior under penalty of sanctions. Corporations can be forced, for example, to observe certain prices, to supply certain goods, to stay out of certain markets, to apply particular techniques in the production process or to pay the legal minimum wage (Mitnick, 1980).

While Pigou (1932) and Bronfenbrenner (1947) findings support the argument that price controls may be welfare optimizing in the case where markets are not perfect, Chang (2002) finds that price ceiling can be harmful to the industry output and consumer surplus.

The oil industry which is a critical sector of the economy has undergone numerous reforms since independence. These reforms have yielded mixed results, particularly with regard to competitive pricing and protection of consumers from exploitation by OMCs (Sasol, 2007). Trends in the sale or consumption of petroleum fuels indicate that retail pump outlets and road transport constitute the single largest consumer of petroleum fuels followed by aviation and power generation (ERC, 2012).

Wabobwa (2011) did a study on the impact of oil price regulation on financial performance of National Oil Corporation (NOCK) and found out that gross profit margin reduced tremendously thus shrinking the company's gross profits after introduction of oil price caps. Kusewa (2007) looked at the impact of regulation of retirement benefits sector on financial performance of occupational pension schemes in Kenya and noted that there was a significant positive impact in the financial performance of occupational retirement benefit schemes in the period in which the regulations have been in place.

Ikiara (2010) concluded that direct price controls will not be beneficial in the long term while Nyangito and Ndirangu (2002) warned of collapse of the sectors targeted due to depressed profitability. The conclusions of these researchers have not been supported by a rigorous academic research on the financial performance of top oil companies in Kenya.

Wabobwa (2011) recommended for a similar study to be carried out on other oil companies not owned by the government since different oil marketers have diverse marketing strategies. His study was limited to six months before and after introduction of price cap. The period under which the study was carried out is too short to evaluate the full impact of price regulations on the financial performance of a company. Further, his study was based on National Oil Corporation of Kenya (NOCK) which is a state owned company with less than four percent market share. Being an instrument of government policy in matters related to oil, NOCK is not a representative of the industry since it is not driven by profitability ambitions. This study therefore sought to fill this knowledge gap shown above on how price regulations have affected financial performance of oil firms in Kenya.

The research question that guided this research is; what is the effect of oil price regulation on the financial performance of oil companies in Kenya?

1.3 Objective of the study

To determine the effect of oil price regulation on the financial performance of oil companies in Kenya.

1.4 Value of the study

This study provides the most up to date evidence concerning the impact of price regulation on the financial performance of oil companies in Kenya. Researchers and other scholars will then use the findings as basis for conducting further research on relevantly related topics.

To the government through the Energy Regulatory Authority (ERC), this study provides an objective understanding of the market dynamics in price regulated regime and its impact on the industry players.

This study augments and validates the implementation of regulation of retail oil prices by oil marketing companies. An assessment of the financial parameters affected by price regulation within the energy sector is necessary to inform on-going reforms in the sector that will make it possible for greater government and private sector participation in provision of energy-related services eventually leading to enhancement of consumer welfare.

To the industry's stakeholders and potential entrants to the market, it provides an understanding of the challenges and opportunities created by the dynamism of the oil industry and how to address them.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, previous studies related to the topic were reviewed. This chapter begins with literature on theoretical framework of price regulation, empirical studies and lastly summary and conclusions.

2.2 Theoretical Framework

2.2.1 Price Regulations

A distinction is often made between economic and social regulation. Economic regulation consists of two types of regulations: structural regulation and conduct regulation (Kay and Vickers, 1990). Structural regulation is used for regulating market structure. Examples are restrictions on entry and exit and rules against individuals supplying professional services in the absence of recognized qualifications. Conduct regulation is used for regulating behavior in the market. Examples are price control, rules against advertising and minimum quality standards. Economic regulation is mainly exercised on natural monopolies and market structures with limited or excessive competition.

2.2.2 Public Interest Theory of Regulation

In western economies, the allocation of scarce resources is to a significant extent coordinated by the market mechanism. In theory, it can even be demonstrated that, under certain circumstances, the allocation of resources by means of the market mechanism is optimal (Arrow, 1985). Because these conditions are frequently not adhered to in



practice, the allocation of resources is not optimal and a demand for methods for improving the allocation arises (Bator, 1958). One of the methods of achieving efficiency in the allocation of resources is government regulation.

In the first place, regulation can improve the allocation by facilitating, maintaining, or imitating market operation. The exchange of goods and production factors in markets assumes the definition, allocation and assertion of individual property rights and freedom to contract (Pejovich, 1979). The guarantee of property rights and any necessary enforcement of contract compliance can be more efficiently organized collectively than individually. Furthermore, the costs of market transactions are reduced by property and contract law.

Antimonopoly legislation is aimed at maintaining the market operation through monitoring the creation of positions of economic power and by prohibiting competition limiting agreements or punishing the misuse thereof. Imperfect competition can also result from the special characteristics of the production process in relation to the magnitude of the demand in the market. At a given magnitude of demand average total costs would be minimized if the production were to be concentrated in one company.

In that case a natural monopoly exists. If several companies produce the same total quantity of goods, the unit costs of production rise. An example of how such a situation arises is when the production process requires a great deal of capital. In that case, the fixed costs can continue to decline as production increases. Especially in the case of modest marginal costs that hardly rise, if at all, average total costs may persistently fall (Baumol, 1977).

2.2.3 Price Controls for Welfare Optimization

Welfare economists argue that free market equilibrium prices sometimes may not be welfare optimizing and, therefore, price controls or at least some kind of price regulation may be necessary even when markets work perfectly well. When the demand and supply forces set prices of essential commodities at levels that are well above the reach of the majority of the people, then the government would be obliged to intervene in the market to protect the welfare of its citizens. For instance, when forces of demand and supply of labour set wage rates at levels where the labourers can barely live on the wages, there is a likelihood of industrial, economic and political instability as workers agitate for higher wages. The government would be obliged to intervene in such situations to establish wage floors. This, in essence, is the spirit of minimum wage rates imposed by most governments.

While Pigou (1932) and Bronfenbrenner (1947) findings support the argument that price controls may be welfare optimizing in the case where markets are not perfect, Chang (2002) finds that price ceiling can be harmful to social welfare even though it increases industry output and consumer surplus. No conclusive consensus, therefore, has been reached on the effects of price controls on society welfare.

2.2.4 Regulation for Stabilization of Unbalanced Market Operations

Regulation is capable of contributing to the stabilization of market operation and the earlier achievement of market equilibrium. Imbalances within an economy occur at the level of separate markets and on a macro level. In separate markets, what is known as

destructive or excessive competition can arise, often as a result of long-term over-capacity.

The development of a new equilibrium can take a long time if the individual participants are in a prisoner's dilemma. For all market parties jointly, efficiency is achieved if the existing over-capacity can be rationalized. For an individual producer, however, the 'sunk costs' can mean that it is rational to wait until other suppliers have sorted out the capacity. Because this consideration applies to all producers, the over-capacity can persist for a considerable time. Over-capacity situations can also arise when the production capacity is adjusted to the demand during peak moments or peak periods. Excessive or ruinous competition can finally also arise in a natural oligopoly. In that case efficiency is achieved if only a few companies supply the market.

A consequence of excessive competition is not only that the price level sinks below the average total costs, but also that the price level fluctuates more widely. This causes insecurity and inefficient decision making on the part of both producers and consumers. Finally, excessive competition can be at the expense of safety and reliability when consumers are not in a position to assess the quality of goods (Kahn, 1988). In the past it was assumed that the situation of excessive competition applied to sectors such as air travel and passenger or goods transport by road or water. For these sectors, business licensing restrictions were devised and the capacity was pruned, sometimes in combination with minimum price regulation. However, modern regulatory theory considers the collection of excessive competition-rationales of government intervention to be 'an empty box' (Breyer, 1982, pp. 29-32). Stabilization of the trade cycle is

desirable to prevent the decline of production and employment such that different social groups are unequally affected by the economic rise and fall.

2.2.5 Price Regulation for Political Support

In 1971 a start was made on the development of a theory of regulation called by some the economic theory of regulation (Posner, 1974) and by others the Chicago theory of government (Noll, 1989). 'The Theory of Economic Regulation' by George Stigler (1971) appeared in that year. His central proposition was that 'as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit'.

The benefits of regulation for a branch of industry are obvious. The government can grant subsidies or ban the entry of competitors to the branch directly so that the level of prices rise. In the second place, the government can maintain minimum prices more easily than a cartel. In the third place, the government can suppress the use of substitutes and support complements. An example of support to complements is the subsidizing of airports for the benefit of airlines. A demand will therefore arise on the one hand for government regulation. The political decision-making process on the other hand makes it possible for branches of industry to exploit politics for its own ends. In the political decision-making process, interest groups will exercise political influence, as opposed to individuals. Individuals will not participate because forming an opinion about political questions is expensive in terms of time, energy and money, while the benefits in terms of political influence will be negligible.

A representative democracy would more readily honor the strongly felt preferences of majorities and minorities than the less passionately expressed preferences. This is related

to the costs of organization of such minority and majority groups. Some groups can organize themselves less expensively than others. Small groups have the advantage because the transaction costs are lower and the 'free-rider' problem is smaller than is the case with large groups. Furthermore, in small groups the preferences will be more homogeneous than in large groups. Small groups also have the advantage in that for the same total yield, the yield per member of the group is greater. The fact that apparently large branches can still be well organized is explained by Stigler through concentration and asymmetry (Stigler, 1974). The large companies in a concentrated branch will see themselves as a small group.

Politicians will honor the demand for regulation by branches because it is not worth the while of the majority of opponents to gather the information and organize. The conclusion is that regulation is not directed at the correction of market failures, but at setting up income transfers in favor of the industries in exchange for political support.

2.2.6 Information Asymmetry

Asymmetries can be of an ex ante nature, generating adverse selection, they can be interim generating moral hazard, and they can be an ex post nature, resulting in auditing or costly state verification and enforcement. The information asymmetries generate market imperfections like deviations from the neoclassical framework. Many of these imperfections lead to specific forms of transactions cost. Oil marketers appear to overcome these costs, at least partially (Healy and Palepu, 2001). For example, according to Healy and Palepu (2001), frictions that relate more to investor's information sets, numerous authors have stressed the role of asymmetric information as an alternative

rationalization for the importance of oil prices. An intermediary can signal its informed status by investing its wealth in assets about which it has special knowledge. Diamond (1984) has argued that organizations overcome asymmetric information problems by acting as “delegated monitors”.

2.2.7 Financial Performance

Financial performance of a corporation is of vital interest to many different groups and individuals. Harrington and Wilson (1989) noted that lenders, purchasing agents and potential agents are concerned with the liquidity position of the company. In addition to these, external analysts, managers within the corporation are also concerned with analyzing its financial performance.

The primary sources of information used to evaluate firm’s performance are its financial statements, the historical record of its performance. While past performance is interesting, many managers and analysts are more interested in what will happen in the future. The past performance of a company, as shown in its financial statements, may be used to help predict future performance (Harrington and Wilson, 1989).

According to information posted on Investopedia website, financial analysts consider the ROCE (return on capital employed) measurement to be a more comprehensive profitability indicator because it gauges management's ability to generate earnings from a company's total pool of capital. The ROCE ratio narrows the focus to gain a better understanding of a company's ability to generate returns from its available capital base. It is a useful measurement for comparing the relative profitability of companies.

According to information posted on Investopedia website, gross margin ratio which is one of the analytical tool used measure firm's profitability, represents the percent of total sales revenue that the company retains after incurring the direct costs associated with producing the goods and services sold by a company. The higher the ratio, the more the company retains on each dollar of sales to service its other costs and obligations.

$$\text{Gross Margin (\%)} = \frac{\text{Revenue} - \text{Cost of Goods Sold}}{\text{Revenue}}$$

2.2.8 Theoretical difficulties with Price Controls

Due to lack of adequate information, no entity is well informed enough to be able to exactly identify the imperfection in the market, choose the correct price to rectify the situation, and then provide continuous and consistent adjustment and enforcement of the controls or interventions, whether direct price controls, quantity or administrative interventions. Haley (1950) points out that one critical information that the government would need in determining controlled prices would be costs of production. He notes that the accounting difficulties of determining costs of production are well known, and the price controllers would end up without a satisfactory price level even if competent accountants not susceptible to influence exerted by the interested parties could be readily obtained by government in the large numbers that would be required.

Without the capacity or the ability to identify the source and magnitude of the imperfection, and worse still to determine the right prices to correct the imperfection, it is difficult for price controllers to set prices at the optimal level. Prices set by controllers may, therefore, end up being more distortionary than the imperfect market prices themselves, and may have more adverse welfare impact than those the market, even with

its imperfections, would have set. The history of price controls in most countries, including Kenya, are full of cases where controls had to be abandoned because the controlled prices were not optimum, were not welfare optimizing or their execution and enforcement became a nightmare for the authorities (Ikiara, 2010).

2.3 Empirical Studies

Pirog (2012) analyzed the financial performance of the major oil companies (ExxonMobil, Chevron, BP plc, Royal Dutch Shell plc, and ConocoPhillips) 2007-2011 and concluded that the oil industry tends to become highly profitable when the price of crude oil rises. Since increases in the world price of oil tend to reflect general economic conditions, political developments, and the emergence of new markets, the increases in company profitability can be viewed as windfall gains. Alternatively, the returns in periods of high oil prices could be looked at as the other side of the lower returns earned in periods of lower prices.

Wabobwa (2011) studied the impact of oil price regulation on the financial performance of National Oil Corporation of Kenya and found out that price caps had significant impact on revenues generated by the company. The period of study was between July 2010 and June 2011 being six months before introduction of price controls and six months after. The study showed that gross profit margin for the first six months before introduction of price regulation showed growth in the profitability of the company and decline after introduction of controls.

Oduor (2010) points out that the high fuel and food prices sparked debates in Kenya with consumer turning to protests as the issue was being discussed in parliament. He notes that

these prompted response from treasury in form of tax reduction on kerosene and diesel. However, with the looming battle on minimum wages and the seeming failure of long rains, the measures by the government were unlikely to end the rising inflation problem.

Ikiara (2010) notes that an attempt to address the problem of erratic increase in consumer prices, parliament on June 23, 2010 passed a bill that proposed to control prices of essential goods including maize, rice, wheat, sugar, cooking oil, petrol, diesel and paraffin. The president declined to sign the bill and returned it to parliament for revision. Prices of many goods in Kenya have risen sharply in the last three years prompting the government to control prices of petroleum products.

Kusewa (2007) observed that there is significant positive impact of regulations on the financial performance of occupational pension schemes in Kenya. The period of study was between 1995 and 2005 being five years before and after the establishment of Retirement Benefits Authority (RBA). The results indicated consistent improvements in the financial performance of the pension schemes after implementation of the regulatory guidelines. In conclusion, he notes that introduction of the regulatory guidelines for the pension industry increased the credibility of insurance players which led to increased savings by Kenyans.

Kilian (2008b) analyzed the impacts of the regulation of petroleum prices on the financial performance of Total South Africa Limited. He observed that there was significant negative impact in the financial performance of the company for three years after introduction of price regulation. He used ratio analysis to measure the performance three years before and after introduction of price caps.

India introduced direct price controls on 354 drugs in 2006. This was meant to lower the price of drugs but reports indicate that this did not happen. The Financial Express of August 2006 reported that drugs that were under price control either vanished from the companies' list or were sub-contracted. Sustained reduction in prices by the regulator forced almost all players to exit production, leaving the government with no choice but to depend on expensive imports. The Financial Express report (2006) indicated that growth of counterfeits and increased seizures of sub-standard products in India were a result of the controls.

Johannsen (2003) measured the formal independence of energy regulators in eight European countries namely, Austria, Ireland, Italy, Luxembourg, Northern Ireland and Spain. According to the survey, the energy regulator in Italy proves to be the organization with the largest degree of independence followed by Ireland, while Spain and Luxembourg had the lowest scores. The study draws conclusions reflecting on the fact that the main emphasis has been on creating independent bodies rather than independent regulation and that greater emphasis should be on the actual activities of regulators rather than theoretical designs.

Killick (1973) did a study on the impact of price controls in Africa: The Ghanaian experience and concluded that the controls were largely ineffective, with the controlled prices tending to rise nearly as fast as the actual prices. This resulted from periodic upward adjustment by controllers who were under pressure from larger trading companies to respond to changing local and international market conditions. He noted that the price controls created shortages and avenues for corruption with government price inspectors buying the commodities at controlled prices and selling at a premium.

The controls were in general largely ignored, observed by few shops in rural and urban areas and were abandoned eventually in the early 1970s. The main problem was that the government sought to administer a complex price control scheme with limited information, staff and other implementation structures.

2.4 Summary and Conclusions

The public interest theory of price regulation supports the argument that government regulation is the instrument for overcoming the disadvantages of imperfect competition, unbalanced market operation, missing markets and undesirable market results. The Chicago theory of price regulation on the other hand, assumes that regulation is not directed at the correction of market failures, but at setting up income transfers in favor of the industries in exchange for political support.

Empirical studies have been carried out to deduce findings by various scholars on price regulations. Wabobwa (2011) concluded that there was significant impact on the profitability of the company after the government introduced price controls. Other studies carried out on African countries with price controls have concluded that price controls without proper institutional structures created shortages and avenues for corruption.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter highlights the methodology that was adopted by the researcher in order to execute the study and realize its objective. It includes research design, data collection and data analysis.

3.2 Research Design

This is a causal study that shall rely on control factors. Causal studies are concerned with learning why, that is, how one variable produces changes in another (Cooper & Schindler 2003). They noted that, in causal research design, the emphasis is on specific objectives about the effects of changes in one variable on another variable and it involves an experiment where an independent variable is changed or manipulated to see how it affects a dependent variable. The study sought to establish and explain the relationships among variables, in this case, price regulation on petroleum products against financial performance of oil companies. A population census was applied in this study.

3.3 Population and Sample Design

According to ERC, there are over 40 oil companies registered in Kenya. The target population for this study constituted oil companies with over five percent market share in the retail network. This study analyzed the financial performance of oil companies over a period of two and half years in two phases; one year before price regulation and one after price regulation starting from January 2010 to December 2012.

3.4 Data Collection

The study used secondary sources of data from published financial statements, Ministry of Energy statistics and industry reports. Financial data from balance sheets, income statements and cash flow statements from January 2010 to December 2011 was used in addition to, quarterly published journals by the Petroleum Institute of East Africa (PIEA) and Ministry of Energy.

The research further collected secondary data from published sources such as newspaper and websites so as to compare and enrich the above mentioned data sources.

3.5 Data Analysis

The financial performance of oil companies before and after introduction of price controls was analyzed. The researcher analyzed the relationship between price regulation and financial performance trend analysis and multiple regression model.

The multiple regression model took the form of:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where: Y = Return on Capital Employed (ROCE)

β_0 = Constant Term;

β_1 = Beta coefficient;

X_1 = Gross margin ratio

ε = Error term

The information was analyzed in SPSS and Microsoft office 2007 application and presented in figures, bar charts, graphs and pie charts.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the information processed from the data collected during the study on effect of oil price regulation on the financial performance of oil companies in Kenya. The sample composed of 5 oil firms which control over 80% of the retail network market share, which is price controlled. Out of the 5 sampled companies, the researcher obtained data from the following three companies; Total Kenya, Kenol Kobil and National Oil Corporation. The researcher was unable to obtain information from Shell Ltd and Oil Libya Ltd due to their restrictive information sharing policies therefore the data analyzed represent companies constituting retail market share of 60%.

4.2 Descriptive Statistics

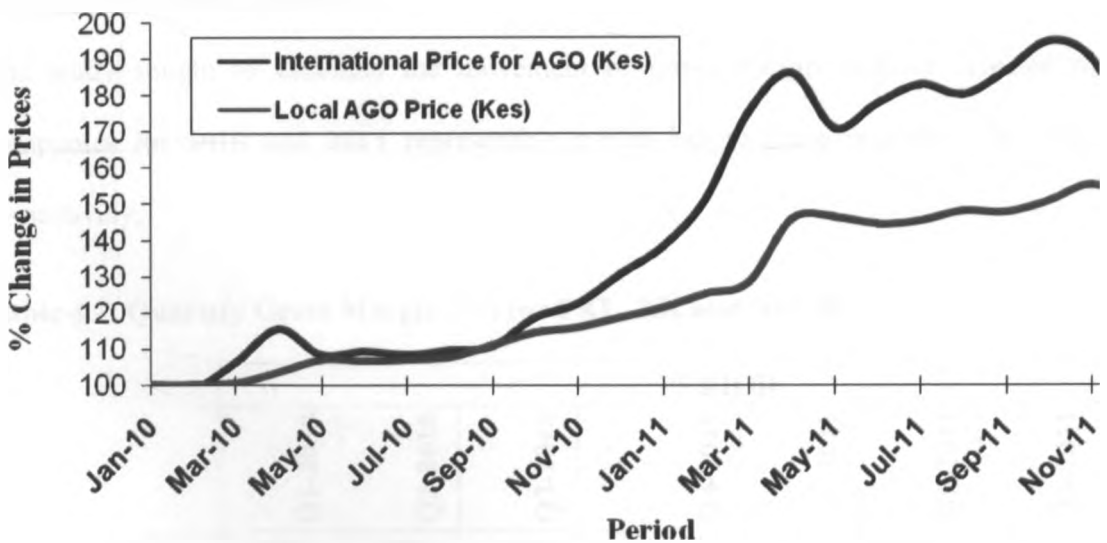
Table 4.1: Descriptive Statistics

		TOTAL KENYA		KENOL KOBIL		NOCK	
		ROCE	GM RATIO	ROCE	GM RATIO	ROCE	GM RATIO
	N	4	4	4	4	4	4
BEFORE PRICE CONTROL-2010	MEAN	0.05	0.08	0.08	0.08	0.05	0.05
	STD DEVIATION	0.0229	0.0134	0.0379	0.0172	0.0133	0.0096
	N	4	4	4	4	4	4
AFTER PRICE CONTROLS- 2011	MEAN	0.03	0.05	0.11	0.05	0.05	0.04
	STD DEVIATION	0.0269	0.0100	0.0260	0.0123	0.0058	0.0084

The data analyzed comprised of quarterly data for 2010 and 2011 for the three companies. The study established that the mean ROCE and gross margin ratio before price regulation for TKL were 0.05 and 0.03 respectively while the mean score after price regulation were 0.08 and 0.05 respectively. The mean score for Kenol Kobil for ROCE and GM ratio before price regulation were 0.08 each and 0.11 and .05 after price regulation respectively. NOCK on the other hand recorded mean score on ROCE and GM ratio of 0.05 each in 2010 and 0.05 and 0.04 respectively in 2011. A reasonable level of consistency is observed between the mean and standard deviation for all variables before and after oil price regulation.

4.2.1 Evolution of Pump Prices and International Price Quotations

Figure 4.1: Movement of AGO average international prices vs. Pump price



Source: Research Data, 2012

The study sought to establish the movement of local prices as compared to the international prices in 2010 and 2011. From the findings (Figure 4.1), pump prices have been lagging behind international price quotations. In the 1st quarter of 2011, the pump price for AGO was in line with international prices while price differentials increased in the second quarter and 4th quarter. The study sought to establish the movement in AGO pump price before introduction of price controls in 2010 and after introduction of price controls in 2011 as compared to movement in international prices. In February 2010, the price variance between international prices and local pump was less than 5%. In April and May 2010, the price differential increased to 7% then stabilized from June 2010 to October 2010. After introduction of price controls in 2010 in December 2010, the price lag increased drastically, varying from 10% to 30% in 2011.

4.2.2 Gross Margin (%)

The study sought to establish the movement of gross margin ratio of selected oil companies for 2010 and 2011 representing period before price regulation and after respectively.

Table 4.2: Quartely Gross Margin (%) for TKL, KK and NOCK

		PERIOD							
		Q1-2010	Q2-2010	Q3-2010	Q4-2010	Q1-2011	Q2-2011	Q3-2011	Q4-2011
FIRM	TKL	7%	8%	8%	10%	5%	4%	5%	6%
	KK	8%	6%	9%	10%	4%	6%	4%	7%
	NOCK	5%	4%	6%	6%	5%	4%	4%	3%

Source: Research Data, 2012

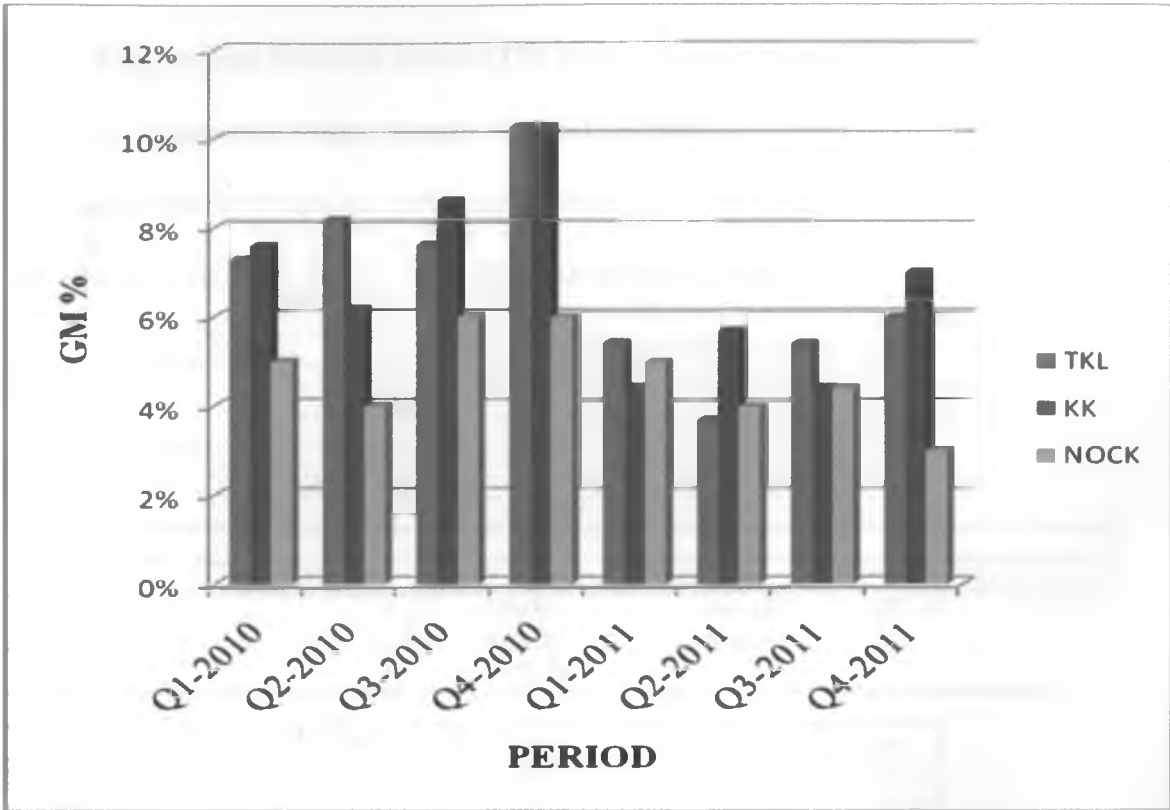
The study sought to establish the movement in the quarterly gross margin ratio for TKL, KK and NOCK in 2010 and 2011, that is, before and after price regulation respectively. In 2010, the TKL recorded gross margin ratio average of 7% in quarter 1 and 8% in quarter 2 with an improvement in quarter 4 to record an average of 10% gross margin. In 2011, after the introduction of price controls on pump prices, the company recorded a decline by 5% to 5% in quarter one with further decrease in quarter 2 to 4%. The trend improved slightly in quarter 3 and 4 to record gross margin ratio of 5% and 6% respectively.

From the findings (Table 4.2 and Figure 4.2), gross margin ratios recorded by KK in 2010 showed level of consistency with an average of 7%. Quarter 1,3 and 4 recorded consistent improvement with quarter recording the highest ratio of 10%. This trend was however reversed in 2010 after introduction of price controls on retail network with gross margin dropping by 6% to settle at 4% in quarter 1. There was slight improvement in quarter 2 by 2% as compared to quarter one but the increase was reversed in quarter 3 which recorded a drop of 2%.

The gross margin (%) for NOCK started the year with quarterly average of 5% then a slight drop in the second quarter and an average of 6% in quarter three and four. After introduction of price controls in 2011, the company recorded a slight decrease in its gross margin recording an average of 5% in quarter one and 4% for the rest of the year.

The above findings were represented using bar graphs as shown in figure 4.2

Figure 4.2: Quarterly Gross Margin (%) for TKL, KK and NOCK



Source: Research Data, 2012

4.3 Regression Results

4.3.1 Regression Results before Oil Price Regulation (2010)

Table 4.3: Regression Model Results for TKL in 2010

Dependent variable: Financial Performance-ROCE (Quarterly data used)

Independent variable: Gross margin ratio (Quarterly data used)

<i>Regression Statistics</i>					
Multiple R		0.816536			
R Square		0.666731			
Adjusted R Square		0.500096			
Standard Error		0.016209			
Observations		4			
ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.00105	0.00105	4.00115	0.18346
Residual	2	0.00053	0.00026		
Total	3	0.00158			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	
Intercept	-0.07155	0.05895	-1.21366	0.34875	
GM RATIO	1.40166	0.70073	2.00029	0.18346	

Table 4.4: Regression Model Result for KK in 2010

<i>Regression Statistics</i>					
Multiple R		0.89239			
R Square		0.79636			
Adjusted R Square		0.69454			
Standard Error		0.02095			
Observations		4			
ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.00343	0.00343	7.82140	0.10761
Residual	2	0.00088	0.00044		
Total	3	0.00431			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	
Intercept	-0.081962572	0.058362827	-1.404362621	0.29536886	
GM RATIO	1.968179646	0.703756694	2.796676268	0.10760827	

Table 4.5: Regression Model Result for NOCK in 2010

<i>Regression Statistics</i>	
Multiple R	0.4724
R Square	0.2231
Adjusted R Square	- 0.1653
Standard Error	0.0143
Observations	4

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.0001	0.0001	0.5745	0.5276
Residual	2	0.0004	0.0002		
Total	3	0.0005			

	<i>Coefficient</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.0176	0.0459	0.3842	0.7378
GM RATIO	0.6545	0.8636	0.7579	0.5276

The data findings before introduction of oil price control were analyzed and the SPSS output presented in Table 4.3, Table 4.4 and Table 4.5 above. From the ANOVA statistics, which are the population parameters, had a significance level of 0.183, 0.108 and 0.528 for TKL, KK and NOCK respectively. The standard errors which measure the standard deviation of financial performance around its fitted value were 0.016, 0.021 and 0.014 for TKL, KK and NOCK respectively. Since the p-value is not less than 0.05 we do not reject the null hypothesis that the regression parameters are zero at significance level 0.05. The R^2 , also called the coefficient of multiple determinations, is the percentage of the variance in the dependent variable explained uniquely or jointly by the independent variables. This means that 67%, 80% and negative 22% for TKL, KK and NOCK are explained by the changes in the independent variable in the model. The ratios of the changes in the ROCE are explained by other factors not in the model.

The established multiple linear regression equations become

$$\text{ROCE} = -0.0715 + 1.4\text{GM for TKL}$$

$$\text{ROCE} = -0.0820 + 2.0\text{GM for KK}$$

$$\text{ROCE} = 0.0176 + 0.655\text{GM for NOCK}$$

From the model, taking all factors constant (GM ratio) at zero, financial performance as measured by ROCE would be negative 0.0715, negative 0.082 and 0.0176 for TKL, KK and NOCK respectively. The data findings analyzed also showed that a unit increase in GM ratio for TKL, KK and NOCK would lead to 1.4, 2.0 and 0.655 increase in ROCE respectively.

4.3.2 Regression Results after Oil Price Regulation (2011)

Table 4.6: Regression Model Results for TKL in 2011

<i>Regression Statistics</i>	
Multiple R	0.98412
R Square	0.96850
Adjusted R Square	0.95275
Standard Error	0.00584
Observations	4

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.002097	0.002097	61.493945	0.015876
Residual	2	0.000068	0.000034		
Total	3	0.002165			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	-0.102969	0.017581	-5.856693	0.027938
GM RATIO	2.649193	0.337829	7.841808	0.015876

Table 4.7: Regression Model Results for KK in 2011

<i>Regression Statistics</i>	
Multiple R	0.55459
R Square	0.30757
Adjusted R Square	0.03865
Standard Error	0.02650
Observations	4

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.00062	0.00062	0.88836	0.44541
Residual	2	0.00140	0.00070		
Total	3	0.00203			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.04808	0.06800	0.70701	0.55284
GM RATIO	1.16802	1.23923	0.94253	0.44541

Table 4.8: Regression Model Results for NOCK in 2011

<i>Regression Statistics</i>	
Multiple R	0.826273671
R Square	0.68272818
Adjusted R Square	0.52409227
Standard Error	0.003982912
Observations	4

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.0001	0.0001	4.3037	0.1737
Residual	2	0.0000	0.0000		
Total	3	0.0001			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.011750906	0.011382398	1.03238	0.41038875
GM RATIO	0.566727238	0.273181273	2.07455	0.17372633

The data findings for 2011, after introduction of price controls, were processed using SPSS and the output presented in Table 4.6, Table 4.7 and Table 4.8. According to ANOVA statistics, the significance of F for TKL and NOCK were 0.016, and 0.17 respectively which means that the validity of their regression of their output was more significant as compared to significance F for KK at 0.45. From the statistics, 97% and

68% of changes in ROCE for TKL and NOCK respectively are explained by changes in independent variable in the model while 31% of the changes in ROCE for KK are explained by changes in GM ratio. The regression models drawn from the above tables are:

$$\text{ROCE} = -0.103 + 2.6\text{GM (for TKL)}$$

$$\text{ROCE} = 0.048 + 1.7\text{GM (for KK)}$$

$$\text{ROCE} = 0.012 + 0.6\text{GM (for NOCK)}$$

According to the regression models above, holding GM ratio constant at zero, TKL would be the most affected in its financial performance with negative ROCE of 0.103 while KK and NOCK would record 0.048 and 0.012 respectively. Further, when GM ratio increases by one unit, ROCE would increase by 2.6 and 1.7 for TKL and KK respectively and ROCE for NOCK would increase by a smaller margin of 0.5.

4.4 Chapter Summary and Conclusions

An analysis of movement of international price quotations and local prices in 2010 and 2011 revealed that local prices regulated by ERC, lagged behind the movement of international prices by an average of 9% to 20%. In addition, the actual margins realized by OMCs were less than those allocated by ERC an average of 20% on PMS and AGO.

The study found that the regression equations for the period 2010 to 2011 related price regulation to financial performance of oil companies. From the models in 2010 and 2011, financial performance is directly related to gross margin ratio. Taking all factors (gross

margin) constant at zero, the financial performance of NOCK was better than that of KK and TKL, however after introduction of price controls, the financial performance of TKL improved significantly and was higher than the financial performance of KK and NOCK, taking GM ratio constant at zero. NOCK recorded the highest drop on its financial performance after introduction of price control holding GM ratio constant at zero.

A comparison of the effect of GM ratio on the financial performance before and after price regulation indicated an increase for TKL and a decrease for KK after introduction of price regulation. On the other hand, the effect of GM ratio on the financial performance of NOCK remained relatively stable after price regulation as compared to before price regulation. These show that GM ratio for TKL had a stronger correlation as compared to financial performance in 2011 as compared to 2010 while GM ratio for KK had a weaker correlation with financial performance. The correlation of GM ratio with ROCE for NOCK changed marginally in 2011 as compared to 2010.

A look at the goodness of fit (R^2) for 2011 output, it reveals improvements for TKL and NOCK by 30% and 40% respectively in 2011 as compared to 2010. There is however decrease in (R^2) for KK in 2011 by 49% as compared to 2010. The study therefore recommends further study to be carried to on financial performance of KK in 2011 to establish major factors affecting its ROCE. In addition, further study to be carried out to investigate other factors (3% for TKL and 32% for NOCK) that contribute to the financial performance of the companies.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

Price regulation is a government instrument for overcoming the disadvantages of imperfect competition, unbalanced market operation, missing markets and undesirable market results. Between 2007 and 2010, the Kenya experienced sharp increases in retail pump prices causing public outcry from Central Organization of Trade Unions and the civil society. In December 2010, the government introduced price controls to cap the maximum pump prices in order to protect the general from exploitation by oil firms. The objective of this study therefore, was to establish whether the financial performance of oil firms in Kenya have been affected by price regulation introduced in 2010.

The target population for this study was all oil firms in Kenya. As per information posted on ERC website, there were over 40 oil firms registered in Kenya, however, four oil firms control over 80% market share of retail network and which were considered for purpose of this study. The study used secondary sources of data from published accounts, industry reports, and product movement statistics from the depots and Kenya Pipeline Corporation. Collected data was analyzed using percentage statistical method, multiple regression model and tested using chi square test. Statistical Package for Social Sciences (SPSS) and Microsoft excel 2007 were used to analyze and present the data.

The study found that GM ratio for TKL had a stronger correlation with financial performance in 2011 as compared to 2010 while GM ratio for KK had a weaker

correlation with financial performance. The correlation of GM ratio for NOCK changed marginally after introduction of price controls as compared to pre-price control regime.

A look at the goodness of fit (R^2) for 2011 output reveals that 97%, 31% and 68% of changes in ROCE for TKL, KK and NOCK are explained by changes GM ratio. These represent improvements for TKL and NOCK by 30% and 40% respectively in 2011 as compared to 2010. There is however decrease in (R^2) for KK in 2011 by 49% as compared to 2010.

5.2 Conclusions

This study examined the effect of oil price regulation on the financial performance of oil companies. This study concludes that the financial performance for TKL was the most affected after introduction of price controls. The effect of GM ratio on the financial performance increased by 1.2 in post price control regime as compared to pre-price control regime. The effect of gross margin on the financial for KK dropped after introduction of price controls in 2011 by 0.3 for every increase in GM ratio. A look at the goodness of fit, however, revealed that GM ratio represents 31% of changes in ROCE.

The analysis on gross margin (GM) (%) revealed that Total Kenya, Kenol Kobil and NOCK recorded decline in its gross margin (%) in 2011 as compared to 2010. TKL gross margin decreased from an average of 8% in 2010 to 5% in 2011, KK and NOCK on the other hand recorded decline by 2% and 1% respectively in 2011 as compared to 2010.

A look at the movement in local prices as compared to movement in international price quotations reveals that local prices lag behind by an average of 16% hence decreasing

margins allocated for OMCs. In 2010, before introduction of price controls, price lag was 0% to 7% but in 2011, the price lag increased to an average of 9% to 20%.

The findings of this study are consistent with findings of Wabobwa (2011) who carried out a similar study on the impact of price regulation on the financial performance of NOCK using profitability ratios. The findings are also consistent with what was revealed by Kilian (2008b) who analyzed the impacts of the regulation of petroleum prices on the financial performance of Total South Africa Limited. He observed that there was significant negative impact in the financial performance of the company for three years after introduction of price regulation. He used ratio analysis to measure the performance three years before and after introduction of price caps.

5.3 Policy Recommendations

The Ministry of Energy controls key sector players in the supply chain of Kenya and regulatory institutions, as such, ERC and OMCs should consult further to improve the suitability and applicability of ERC formula in order to protect profitability of the sector. The formula has been criticized as not capturing all elements of supply chain such as financing costs for imports, depot costs and demurrage.

The government should improve efficiency of supply chain infrastructures in the country to reduce direct supply costs incurred by oil firms. On the other hand, OMCs should reduce operational costs so as to increase their profitability as well as diversifying their channels of business.

The government should cushion oil firms from externalities directly affecting importation of oil products. Stabilization of the Kenyan shilling and interests rates is critical in

enabling OMCs have a clear forecasts of landed costs as well as reducing financing costs related to oil products.

5.4 Limitations of the Study

The study is based on data that is historical. Therefore the findings of the study may not be fully applicable at the time of the study due to the dynamic operating environment in the Kenyan market.

The study focused on the gross margin ratio as the only variable affected by price regulation. This alone may not adequately measure financial performance of the company without considering other financial parameters not directly affected by pricing, for example, working capital requirement, fixed costs, stock holding costs, foreign exchange impact and product supply costs.

Another major limitation in my study was to conclusively obtain financial statements from all the market players in the oil sector. This is stemmed from the fact that it's only two of the sixteen firms that are listed in the stock market, and as such revealing their annual reports was not a challenge to them. As for most the rest, access to annual financial reports was restricted to the directors only.

The financial performance for KK was found to include other non-oil results which are not reflected by other oil firms. KK acquired several subsidiaries in Africa and sold idle assets in some countries. On the other hand, NOCK was undergoing a major expansion program on its retail network and its operations are subsidized by the government.

Besides, this study was carried out at a time when there were serious strategic market wits in the oil sector, especially the big players who were repositioning themselves in order to make the right strategic market moves after entry and exit of some big players. As such, some of the respondents were very cautious with the information they gave. At some point the researcher felt that some information was being withheld.

5.5 Suggestions for Further Studies

The study recommends that a study to be carried out to determine the relationship between international oil price movement and the local pump prices. This is because the changes in the local prices of petroleum products as set by the ERC are based on the international oil price quotations

The study further recommends for a study to be carried out measuring the effects of oil price regulation on the cost of living of Kenyans to measure whether it has served its main objective.

The study recommends that another study to be carried to establish the relationship between price regulation and product supply in the oil sector

This study has reviewed the relationship that exists between price regulation and financial performance firms in the Kenyan oil sector. To this end therefore, a further study should be carried out to establish the challenges faced by the government when implementing these policies.

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APPENDICES

APPENDIX 1: LETTER OF INTRODUCTION



UNIVERSITY OF NAIROBI SCHOOL OF BUSINESS MBA PROGRAMME

Telephone 020-2035142
Telegrams Varsity, Nairobi
Telex 22091 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE 11/10/12

TO WHOM IT MAY CONCERN

The bearer of this letter SAMUEL MISOI

Registration No DB1/60074/2011

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.


IMMACULATE OMANO
MBA ADMINISTRATOR
MBA OFFICE, AMBANK HOUSE



APPENDIX II: LIST OF OIL COMPANIES IN KENYA

1 ADDAX	26 KEROKA
2 AINUSHAMSI	27 MOGAS (K)
3 ALBA	28 MULOIL
4 AL-LEYL	29 NAFTON
5 ASTROL	30 NOCK
6 BAKRI	31 OILCITY
7 BANODA	32 OILIBYA
8 CITY OIL	33 OLYMPIC
9 E.A GASOIL	34 ONE PETRC
10 ENGEN	35 ORIX
11 ESSAR	36 PETRO
12 FAST ENERGY	37 PREMIUM
13 FOSSIL	38 RIVAPET
14 FUTURES	39 ROYAL ENE
15 GALANA	40 SHELL
16 GAPCO	
17 GLOBAL	
18 GULF ENERGY	
19 HASHI	
20 HASS	
21 INTOIL	
22 JADE	
23 KAMKIS	
24 KENOLKOBIL	
25 KENCOR	

Source: ERC, 2012

APPENDIX III: DATA TABULATIONS

TKL			
PERIOD	CAPITAL EMPLOYEE D	EBIT	ROCE
Q1-2010	12,759	603	5%
Q2-2010	13,295	421	3%
Q3-2010	13,166	334	3%
Q4-2010	12,856	987	8%
Q1-2011	12,887	603	5%
Q2-2011	12,599	-87	-1%
Q3-2011	12,420	514	4%
Q4-2011	12,215	619	5%

KK			
PERIOD	CAPITAL EMPLOYED	EBIT	ROCE
Q1-2010	11,832	502	0.04
Q2-2010	12,578	677	0.05
Q3-2010	11,874	1,102	0.09
Q4-2010	11,055	1,386	0.13
Q1-2011	13,989	1,102	0.08
Q2-2011	14,936	2,116	0.14
Q3-2011	12,420	1,326	0.11
Q4-2011	13,180	1,536	0.12

NOCK		
PERIOD	ROCE	GM RATIO
Q1-2010	0.04	0.05
Q2-2010	0.05	0.04
Q3-2010	0.05	0.06
Q4-2010	0.07	0.06
Q1-2011	0.04	0.05
Q2-2011	0.03	0.04
Q3-2011	0.04	0.04
Q4-2011	0.03	0.03

MOVEMENT IN AGO AND PMS LOCAL AND INTERNATIONAL PRICESPRICES							
	Crude	AGO Platts (Kes)	PMS Platts	PMS Pump Price	Gasoil Pump price (Kes)		Variance
Jan-10	100.00	100.00	100.00	100.00	100.00		-
Feb-10	96.89	99.10	98.42	100.13	100.00		0.90
Mar-10	102.57	106.42	109.05	101.50	100.61	-	5.81
Apr-10	111.53	115.57	112.60	104.51	103.57	-	12.00
May-10	104.06	108.34	103.24	106.84	107.10	-	1.24
Jun-10	103.22	109.33	104.96	106.66	106.78	-	2.55
Jul-10	101.20	108.53	104.70	106.62	106.95	-	1.58
Aug-10	102.14	109.69	102.88	107.59	107.82	-	1.87
Sep-10	104.56	110.63	105.75	110.39	111.05		0.42
Oct-10	111.17	118.51	115.34	111.88	114.65	-	3.86
Nov-10	116.18	122.55	116.67	113.70	116.09	-	6.46
Dec-10	124.86	130.54	124.48	112.56	118.82	-	11.72
Jan-11	131.47	138.38	131.78	114.52	121.29	-	17.09
Feb-11	142.77	151.25	138.03	117.34	125.08	-	26.17
Mar-11	164.92	175.11	158.81	121.83	128.13	-	46.97
Apr-11	172.69	186.14	172.09	132.23	145.68	-	40.47
May-11	164.54	170.82	166.89	137.14	146.30	-	24.52
Jun-11	171.55	177.51	166.67	136.70	144.33	-	33.18
Jul-11	175.06	182.74	178.14	137.25	145.17	-	37.56
Aug-11	172.77	179.98	176.80	139.33	147.96	-	32.02
Sep-11	181.78	186.46	179.41	139.93	147.64	-	38.81
Oct-11	187.13	194.82	182.48	143.23	150.58	-	44.24
Nov-11	181.15	190.19	161.29	147.57	155.19	-	34.99
Dec-11	163.50	169.35	146.78	141.55	150.32	-	19.03