THE IMPLICATIONS OF PRICE REGULATION BY THE ENERGY REGULATION COMMISSION ON THE OIL MARKETING STRATEGIES IN KENYA

BY

DADOH BETTY OMBUNGU

D61/60768/2011

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

OCTOBER 2013

DECLARATION

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

Signed…….. Date……

DADOH BETTY OMBUNGU

D61/60768/2011

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

Signed…….. Date……

DR. JACKSON MAALU

DEPARTMENT OF MANAGEMENT

UNIVERSITY OF NAIROBI

ACKNOWLEDGEMENT

First and foremost, I offer my sincerest gratitude to God for giving me the wisdom and courage and for guiding me throughout my life for without Him I would not have come this far. Special thanks go to my supervisor Dr. Jackson Maalu for providing unlimited, invaluable and active guidance throughout the study. His immense command and knowledge of the subject matter enabled me to shape this research project to the product that it is now. I extend my sincere thanks to the staff in University of Nairobi School who offered support in my study.

Secondly, I owe my gratitude to a number of people who in one way or another contributed towards completion of this project especially my fellow colleagues at work and students. Finally, and most importantly, I offer all my love and my deepest thanks to my family for their unconditional love and support. They gave me the opportunity to study and nurtured my desire to learn. I will always have the greatest and most sincere love for them.

DEDICATION

This work is dedicated to my family especially my parents who have always encouraged me to be the best that I can be.

ABSTRACT

The implications of price regulation, whether it is economic regulation or social regulation, are likely to depend on a variety of factors. Price regulation is adopted in order to increase consumer welfare by putting a cap on the maximum price that can be charged on petroleum products and in turn lowering supplier profits. This study was guided by two objectives: to establish the implications of price regulation on the oil marketing strategies in Kenya; and to determine the effectiveness of oil marketing strategies adopted to cope with price regulation in Kenya. A descriptive survey of all oil marketing companies in Kenya was conducted. The target population of this study was all the 45 registered oil marketers in Kenya from which all were targeted but only 35 firms took part in the survey (response rate is 78%). Primary data was collected through structured questionnaires administered by the researcher to the marketing managers using a drop-and-pick later method. The analysis was done using paired t-tests and descriptive analysis (percentages, mean and standard deviations). Results were presented in tables and charts. The study found that pricing regulations significantly affected the pricing strategy but not the entire marketing strategy of oil marketing firms as they were still effective, although the effectiveness had marginally reduced. The study also concludes that marketing strategies before and after the introduction of pricing regulations were not significantly different in terms of their effectiveness and therefore the regulations did not significantly influence the effectiveness of marketing strategies of oil marketing firms in Kenya. It also found that improved service quality and offering high quality products were the most adopted strategies by most firms while innovation and pricing strategy where oil marketers price lower than their competitors were the least employed strategies. The study also found that the intensity of competition was low after the introduction of price regulations and that the price of fuel in the regulation era was marginally lower than the period before price regulations. The study recommends that oil marketing firms should focus on innovation, quality of products, and superior customer service in order to compete in the market. A marketing strategy that focuses on building better customer relationships would provide a better avenue for oil firms to compete.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

SIB	Standard Investment Bank Research
PRC	Price Cap Regulation
OPEC	Organization of the Petroleum Exporting Countries
NOCK	National Oil Corporation of Kenya
LPG	Liquefied Petroleum Gas
KPRL	Kenya Petroleum Refinery Limited
ERC	Energy Regulation Commission

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The Economic Glossary (2012) defines price regulation as Government oversight or direct government control over the price charged in a market, especially by a firm with market control. Price regulation may be done by government agency, legal statute or regulatory authority. Economists believe that market prices should, as a general rule, be left alone by government. Prices in market economies are established by the interplay of supply and demand. Goods and services are allocated to those who value them most, but competition ensures that consumers face the lowest possible prices. Government intervention, however, might improve overall economic efficiency if prices do not reflect total costs or if the market in question is not competitive. “Might” is the key word because no matter how imperfect markets may be, government intervention poses its own set of problems. Frequently interventions to correct “imperfect” markets (however rightly or wrongly defined) do more economic harm than good. Accordingly, evidence that market imperfections exist is a necessary but not sufficient condition for government intervention. Evidence must still be presented that the proposed intervention will on balance improve economic efficiency (Wolf, 1991).

Price regulations go hand in hand with Cost leadership. Cost leadership is a concept used in business strategy and provides a process by which to establish competitive advantage for a company. In a price controlled industry, oil marketers’ can gain competitive advantage by focussing on different strategies including leadership in cost, quality, innovation or customer service. Strongest advantage comes through leadership in a factor that is important to customers and difficult for competitors to

match. Cost leadership means the firm is the producer with the lowest costs in their chosen market sector. That gives them the ability to set lower prices than competitors while offering customers the same benefits.

For companies in many nations, regulatory policy increasingly shapes the structure and conduct of industries and sets in motion major shifts in economic value. In network industries such as airlines, electricity, railways, and telecommunications, as well as in banking, pharmaceuticals, retailing, and many other businesses, regulation is the single biggest uncertainty affecting capital expenditure decisions, corporate image, and risk management. Since regulation has a profound and lasting impact on a firm's financial choices, it is considered as a key driver in the oil industry, providing either incentives or disincentives. One primary regulatory goal is to promote competition and to enhance social welfare (Meran & Hirschhausen, 2009).

1.1.1 Price Regulation

Regulation is the sustained and focused control, normally exercised by a public agency, over activities that are valued by a community. It can either prevent undesirable behaviour, actions and activities or enable and facilitate desirable ones. One form of regulation involves establishing specific rules or commands which have to be complied with. However, regulation also embraces those actions designed to affect activities of companies, organizations or individuals and include taxation, subsidization, contractual requirements, licensing and franchising (Selnick, 1985).

The intention behind regulation is the desire to maintain affordability of staple foods and goods, prevent price gouge during shortages, slow inflation and to ensure a minimum income for providers of certain goods. There are two primary forms of price

control, a price ceiling, the maximum price that can be charged, and a price floor, the minimum price that can be charged (Selnick, 1985).

Majumdar (2003) argued that whether externally mandated by regulatory authorities or internally mandated as a consequence of top management vision, price caps are mechanisms that provide firms with incentives to be competitive. They help firms set targets that are translated into action plans throughout the organisation. Every activity is assessed and taken into account in meeting profit goals. They help firms work harder and smarter. They help firms alter the contours of industry competition. They help consumers toward getting better and cheaper products. As a result, human welfare is maximized.

A study by Bijl and Peitz (2001) found that, in the short run, asymmetric access price regulation is an effective instrument to make the entrant and consumers better off. Thus price regulation would stir competition in the short run. Biglaiser and Riordan (2000) argued that price-cap regulation leads to more efficient capital replacement decisions compared to rate-of-return regulation and showed that finite price cap horizons distort capital replacement.

1.1.2 Firm Responses to Regulation Strategies

In a world where a cartel, such as OPEC, is able to raise world crude oil prices by constraining production, price controls are not warranted from an economic perspective. Domestic price controls will not reduce OPEC's market power. The manner in which domestic price controls were implemented in the United States in the 1970s actually increased the demand for OPEC imports and thus increased its profits and punished domestic producers who were not responsible for OPEC production

decisions. Price controls also reduce incentives to increase production and, thus, reduce supply whether OPEC is strangling the market or not. Domestic price controls thus assist the cartel's attempts to restrict supply (Cabral & Riordan, 1989).

Since regulation has a profound and lasting impact on a firm’s financial choices, it is considered as a key driver in the oil industry, providing either incentives or disincentives. One primary regulatory goal is to promote competition and to enhance social welfare. A common conflict of social and private interests may arise when, for example, a pro-competitive regulatory measure that restricts the incumbent’s monopoly behavior also undermines the firm’s incentive to invest. Laffont and Tirole (2000) point out that there is in general a trade-off between promoting competition to increase social welfare once the infrastructure is in place and encouraging the incumbent to invest and maintain the infrastructure. Hence, many studies investigate this issue both theoretically and empirically, trying to shed some light on policy making. Most of them revolve around incentive regulation and distribution regulation in the oil marketing industry.

In many respects, regulation reflects an explicit, formal contract between business and society. Even in the absence of laws and regulations, informal agreements may call upon companies to meet certain social responsibilities (Panteghini & Scarpa, 2008).

Despite the increasing importance of regulation, many businesses, even in heavily regulated industries, treat regulatory strategy as more art than science. Many lobby and conduct public relations on an ad hoc basis without the benefit of hard facts or a clear understanding of the trade-offs; others adopt a confrontational approach to industry regulators. Many companies, focused as they are on next quarter's earnings,

view regulatory issues as a longer-term challenge that will either go away on its own or be dealt with in the future. (Panteghini & Scarpa, 2008).

Companies struggle with their responses to regulatory challenges for several reasons. First, the issues are often extremely complex and interdependent. Moreover, when deciding on a regulatory stance, companies must consider complicated trade-offs between maximizing profits and broader social and economic factors while at the same time taking into account the interests of a number of stakeholders. Finally, the job is made no easier by constant uncertainty about future regulatory changes, uncertainty exacerbated by tensions among stakeholders and by unforeseen events, such as the emergence of disruptive technologies, rapidly evolving social trends, natural disasters, and changes in governments. Companies can overcome these obstacles by making regulation a core element of strategy. Doing so requires a deep knowledge of the economic, social, and strategic impact of regulation, an understanding of other stakeholders so that coalitions can be built to support a chosen regulatory strategy, and a new organizational approach that puts regulation on the agenda of the CEO and the top team (Panteghini & Scarpa, 2008).

1.1.3 Marketing Strategies

A strategy is the direction and scope of an organization over a long term; which gives advantage for the organization through its configuration of resources within a challenging environment to meet the needs of markets and to fulfil owners' expectation. The business strategy perspective argues that achieving competitive advantage hinges on pursing a coherent competitive strategy. Laffont and Tirole (2000) propose that firms should have the inside to outside approach, whereby

strategies are realigned towards making of the goods and services that cultivate their own niche in the market and format structures that sustain those markets.

Organizations gain market leadership by understanding consumer needs and finding solutions that delight consumers. If customer value and satisfaction are absent, no amount of promotion or selling can compensate. Hence the aim of marketing is to build and manage profitable customer relationship. This is a part of the strategic marketing done by every company to achieve its objectives and goals. To maximize profits and long term plans every organization has to follow a strategic plan. Marketing is a philosophy that guides the entire organization towards sensing, serving and satisfying consumer needs. In addition companies need to define their customer relationship management strategies and support structures to ensure improved customer satisfaction and retention. Companies develop these strategies across the value chain from distribution and merchandising to branding, advertising and promotions. (Laffont and Tirole, 2000).

Companies respond differently to environmental challenges through such strategies as keeping low overhead costs so as to maintain competitive prices, ensuring product availability, use of exclusive distribution channels, investment in human resource development to ensure good customer care, extension of credit to retain customers, outsourcing services, adopting strategies to increase market share, branding their service stations, quality offering, marketing capabilities, technological leadership, efficient delivery system, ensuring market penetration and development. In a price controlled industry and where the product is homogenous then companies can compete by improving service delivery. This can be done by; designing services to fit the needs of customers; ensuring that services are always of high quality without

compromise; having competent employees in place; on time delivery of services and ensuring that services are driven by customers to increase acceptance and satisfaction.

Oil companies in Kenya adopt various strategies to try and gain competitive advantage. These strategies include; cost leadership, on time delivery, market penetration, competent employees and ensuring that services are driven by customers to increase acceptance and satisfaction. Other strategies like differentiation, focus, product development and market development have not been used a lot by the companies. (PwC, 2012)

1.1.4 Oil Industry in Kenya

The oil industry that is the concern of this paper is the petroleum sector in Kenya. There are three main players in the petroleum sector in Kenya. First are various petroleum companies involved in the distribution of petroleum products. There are about 10 main oil marketing companies in Kenya and a growing number of independent oil distribution companies that have sprung up since the liberalization of the sector. Secondly is the Kenya Petroleum Refinery Limited (KPRL), which operates the only oil refinery in the country. Third is the Kenya Pipeline Company Limited, which operates the pipeline that runs from Mombasa to Nairobi, Kisumu and Eldoret. There are plans to extend the pipeline to Uganda (PwC, 2012).

The petroleum sector was deregulated in late 1994 with the deregulation of retail prices of petroleum products and of the importation of crude oil and refined products. However, the sub-sector could not be fully deregulated mainly because of the market's dependence on KPRL for liquefied petroleum gas (LPG), and the absence of a viable infrastructure for its importation. Therefore, the Government requires oil companies to import and process crude oil through the refinery to satisfy the

requirements for LPG. The government introduced an open tender system for the importation of crude to the refinery. Under this system a tender for importation of crude is awarded to an individual oil company, which then imports crude for the whole industry and supplies to the other oil companies (PwC, 2012).

The petroleum processing and delivery infrastructure is fairly elaborate and consists of the Kenya Petroleum Refinery, the pipeline and the storage facilities. The government and the oil marketing companies in the country jointly own the Kenya Petroleum Refinery Limited. Specifically, the government owns 50% of the facility while the rest is divided up among the other oil marketing companies. On the other hand, the oil pipeline of 890 kilometres provides a network into the interior of Kenya by passing through Nairobi and leading westwards to Kisumu and Eldoret. The oil pipeline is fully owned by the government as a state corporation and forms a significant part of the infrastructure for inland distribution. The imported crude petroleum is processed at the petroleum refinery plant at Mombasa and thereafter sold into the local market. Hitherto the liberalization of the sector, the importation of refined petroleum was subject to government approval. Due to liberalization in 1994, the importation of crude oil as compared to refined oil has reduced because of the freedom to import oil either in crude or refined form (SIB, 2012).

At the retail level, there are a number of subsidiaries to foreign based and local companies of varied sizes who have outlets through which petroleum products are sold directly to consumers. The subsidiaries of foreign oil marketing companies are by far the largest players in the sub-sector despite the liberalization of the industry which allowed for the entry of a more players in the market. However, the National Oil Corporation of Kenya (NOCK) acts as an industry watchdog and is at the same

time engaged in commercial activities within the industry. This dual role leads to a conflict of interest because in its commercial activities, the National Oil Corporation of Kenya becomes an industry player hence a competitor to the firms that it should regulate. This state of affairs attests to the fact that the liberalization of the petroleum sub sector is yet to be completed (SIB, 2012).

Although the oil was discovered in Kenya in 2012, it will take more than three years before the country can become an oil producer. The British-based Tullow Oil Company that has been carrying out exploration says the finds at Ngamia-1, Twiga South and Etuko-1 wells in the Lokichar basin hold more than 250 million barrels of oil. Tullow in partnership with Africa Oil will drill about 10 wells this year in Kenya and Ethopia to explore the Turkana Rift Basin (PwC, 2012).

The challenges that may face Kenya due to oil discovery include collusion with large oil companies, corruption, increased political patronage, lower capacity for investment and entrepreneurship. Politics, policy and administration besides the ability of the country economically plays key role in establishing structures that will oversee implementation of related activities effectively. Kenyan politics remain confrontational with democracy gaining mileage while ethnic differences remain rife within select communities

Oil finds in Kenya will add impetus on the country's economic growth, speed up reduction of inflation and make the local currency stronger hence making cost of imports cheaper. While this may be very good for East African powerhouse, the international players such as United Kingdom, United States, France and other European countries may find a strong and oil rich Kenya not good for their strategic

goals in the region. Upon confirmation of how big the oil deposits are, a significant shift in how the West relates and views Kenya will manifest with renewed diplomatic efforts and economic-military ties (PwC, 2012).

1.2 Research Problem

The implications of price regulation, whether it is economic regulation or social regulation are likely to depend on a variety of factors: the motivation for regulation, the nature of regulatory instruments and structure of the regulatory process, the industry's economic characteristics, and the legal and political environment in which regulation takes place (Wolf, 1991). Price regulation is adopted in order to increase consumer welfare by putting a cap on the maximum price that can be charged on petroleum products and in turn lowering supplier profits. This is the main motivation behind price regulation. Since the market has few players, they can establish 'competition-free' oligopoly that is characterized by tacit collusion. Therefore introduction of price regulation makes the market more competitive. Where price as a strategy is controlled, firms have to look for other competitive strategies such as cost leadership and innovativeness. Firms are affected in that the industry attractiveness reduces, the sales margins reduces and therefore lower returns to equity shareholders.

The Government of Kenya introduced price controls in the energy sector in 2011. Through this policy, the price of fuel is set by the Energy Regulatory Commission (ERC). The ERC sets maximum prices (price ceiling) for diesel and petrol every 15th of every month to be observed by the petrol stations for the entire month. This has seen fuel retailing at similar prices across all petrol stations regardless of the petrol company. Consumers therefore pay the same price for fuel in any petrol station. It is therefore important to understand how firms compete in such a price regulated market

in terms of the strategies that they adopt and how the performance of these firms is affected.

Various studies have been carried out all over the world on price regulation. Hemmasi and Kemnitz (2002) investigated the quality implications of an upper limit on product prices in a vertically differentiated duopoly and found that a price ceiling diminishes the incentives for strategic product differentiation, thereby improving average quality in the market. Namusonge (1983) did a study on the attitude of manufacturers towards price controls and their administration in Kenya and the findings suggest that price controls in Kenya are essential to the extent that they protect consumers' and control monopoly powers of companies. Studies on the oil firms include; Wahito (2011) who studied Porter's value chain model and competitive advantage in the oil industry in Kenya and found that the oil companies have used the value chain to create competitive advantage in different ways. Barua (2010) carried out a study on the challenges facing supply chain management in the oil marketing companies in Kenya and the findings showed that challenges occur in one or more of the supply chain components that is, transportation, equipment, communication, suppliers, customers.

So far, Namusonge (1983) is the only study locally available on price controls in Kenya. This is due to the fact that price controls were banned and were just re-introduced in 2011. It is therefore clear that there are no studies on the effects of price regulations on oil marketers and the few that have been done were not on the oil marketing companies. There is therefore a gap in literature as concerns the implications of price regulation by the Energy Regulation Commission on the oil marketing strategies in Kenya. The present study will therefore be guided by the

following question; what are the implications of price regulation by the energy regulatory commission on oil marketing strategies in Kenya?

1.3 Research Objectives

This study was guided by the following two objectives;

i) To establish the implications of price regulation on the oil marketing strategies in Kenya.

ii) To determine the effectiveness of oil marketing strategies adopted to cope with price regulation in Kenya

1.4 Value of the Study

This study is important to the theory and practice of strategic management in organisations. The study adds on to the growing concept of price regulation in organisations by focusing on a developing country in Africa – Kenya. The results will show how firms in the oil industry strategize in a price regulated regime.

The study is also important to the practice of strategic management in organisations since it will shed more light on how companies can still compete in a regime where prices are regulated by the Government or its agency. It will show the various strategies that companies use to compete in a price regulated industry.

The study will also be important to future researchers and scholars interested in undertaking research on price regulation as it will be a basis upon which other studies in Kenya will be undertaken. The findings should be understood and evaluated in the light of the limitations of the study

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature review. First, a theoretical review is provided focusing on theories that explain the need for price regulations in the economy. The theories are public interest theories of regulation that states that regulation of firms or other economic actors contributes to the promotion of the public interest and general economic theories of regulation. Secondly, the empirical review of the studies that have been done on the effects of price regulations on oil marketers is made.

2.2 Theoretical Review

This study is based on an overview of two main traditions of economic theories. These are the public interest theories of regulations and the general economic theories of regulation.

2.2.1 Public Interest Theories of Regulation

The first group of regulation theories proceeds from the assumptions of full information, perfect enforcement and benevolent regulators. According to these theories, the regulation of firms or other economic actors contributes to the promotion of the public interest. This public interest can further be described as the best possible allocation of scarce resources for individual and collective goods and services in society. 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 do frequently not apply in practice, the allocation of resources is not optimal from a theoretical perspective and a quest for methods of improving the resource allocation arises

(Bator, 1958). This situation is described as a market failure. A market failure is a situation where scarce resources are not put to their highest valued uses. In a market setting, these values are reflected in the prices of goods and services. A market failure thus implies a discrepancy between the price or value of an additional unit of a particular good or service and its marginal cost or resource cost.

Ideally in a market, the production by a firm should expand until a situation arises where the marginal resource cost of an additional unit equals its marginal benefit or price. Equalization of prices and marginal costs characterizes equilibrium in a competitive market. If costs are lower than the given market price, a firm will profit from a further expansion of production. If costs are higher than price, a firm will increase its profits by curtailing production until price again equals marginal cost. Market equilibrium, and more generally equilibrium of all markets is thus a situation of an optimal allocation of scarce resources. In this situation supply equals demand and under the given circumstances can market players do no better. A great number of conditions have to be satisfied for an optimal allocation in a competitive market economy to exist (Boadway and Bruce, 1984).

One of the methods of achieving efficiency in the allocation of resources when a market failure is identified is government regulation (Arrow, 1985). In the earlier development of the public interest theories of regulation, it was assumed that a market failure was a sufficient condition to explain government regulation (Baumol, 1952). But soon the theory was criticized for its Nirwana approach, implying that it assumed that theoretically efficient institutions could be seen to efficiently replace or correct inefficient real world institutions (Demsetz, 1968). This criticism has led to the development of a more serious public interest theory of regulation by what has been

variously referred to as the “New Haven” or “Progressive School” of Law and Economics (Noll, 1989). In the original theory, the transaction costs and information costs of regulation were assumed to be zero. By taking account of these costs, more comprehensive public interest theories developed. It could be argued that government regulation is comparatively the more efficient institution to deal with a number of market failures (Whynes and Bowles, 1981). For example, with respect to the public utilities it could be argued that the transaction cost of government regulation to establish fair prices and a fair rate of return are lower than the costs of unrestricted competition (Goldberg, 1979).

Equivalently, it could be argued that social regulation in some cases would be a more efficient institution to deal with the pollution of the environment or with dealing with accidents in the workplace than private negotiations between affected parties could. Regulators would not be plagued by failures in the information market and they could more easily bundle information to determine the point where the marginal cost of intervention equalizes the marginal social benefits (Asch, 1988). These more serious versions of the public interest theories do not assume that regulation is perfect. They do assume the presence of a market failure that regulation is comparatively the more efficient institution and that for example deregulation takes place when more efficient institutions develop. These theories also assume that politicians act in the public interest or that the political process is efficient and that information on the costs and benefits of regulation is widely distributed and available (Noll, 1989).

Summarizing, the public interest theories of regulation depart from essentially three assumptions: the prevalence of a market failure, the assumption of a ‘benevolent regulator’ or, alternatively, an efficient political process and the choice of efficient

regulatory institutions. Starting from the allocation of scarce resources by a competitive market mechanism, four types of market failures can be distinguished. Discrepancies between values and resource costs can arise as a result of imperfect competition, unstable markets, missing markets or undesirable market results. Imperfect competition will cause prices to deviate from marginal resource cost. Unstable markets are characterized by dynamic inefficiencies with respect to the speed at which these markets clear or stabilize. These instabilities waste scarce resources. Missing markets imply the demand for socially valuable goods and services for which total value exceeds total cost but where prices or markets do not arise. And finally, even if the competitive market mechanism allocates scarce resources efficiently, the outcomes of the market processes might still be considered being unjust or undesirable from other social perspectives (Hertog, 2010).

2.2.2 General Economic Theories of Regulation

In legal and economic literature, there is no fixed definition of the term ‘regulation’. Some researchers consider and evaluate various definitions and attempt through systematization to make the term amenable to further analysis (Morgan and Yeung, 2007). Others almost entirely abstain from an exact definition of regulation (Ekelund, 1998). In order to delineate the subject and because of the limited space, a further definition of regulation is nevertheless necessary. In this article, regulation will be taken to mean the employment of legal instruments for the implementation of social-economic policy objectives. A characteristic of legal instruments is that individuals or organizations can be compelled by government 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. Sanctions can include fines, the publicizing of violations, imprisonment, an order to make specific arrangements, an injunction against withholding certain actions, divestiture of businesses or closing down the business.

A distinction is often made between economic and social regulation, for example Viscusi, Vernon and Harrington (2005). Two types of economic regulations can be distinguished: structural regulation and conduct regulation (Kay and Vickers, 1990). Structural regulation concerns the regulation of the market structure. Examples are restrictions on entry or exit, and rules mandating firms not to supply professional services in the absence of a recognized qualification. Conduct regulation is used to regulate the behavior of producers and consumers in the market. Examples are price controls, the requirement to provide in all demand, the labeling of products, rules against advertising and minimum quality standards. Economic regulation is mainly exercised on so-called natural monopolies and market structures with imperfect or excessive competition. The aim is to counter the negative welfare effects of dominant firm behavior and to stabilize market processes. Social regulation comprises regulation in the area of the environment, occupational health and safety, consumer protection and labor (equal opportunities and so on). Instruments applied here include regulations dealing with the discharge of environmentally harmful substances, safety regulations in factories and workplaces, the obligation to include information on the packaging of goods or on labels, the prohibition of the supply of certain goods or services unless in the possession of a permit and banning discrimination on race, skin color, religion, sex, or nationality in the recruitment of personnel.

The economic literature distinguishes between positive and normative economic theories of regulation. The positive variant aims to provide economic explanations of regulation and to provide an effect-analysis of regulation. The normative variant investigates which type of regulation is the most efficient or optimal. The latter variant is called normative because there is usually an implicit assumption that efficient regulation would also be desirable; for the distinction between positive and normative theories see the discussion between Blaug (1993) and Hennipman (1992). This article will concentrate on general explanatory and predictive economic theories of regulation. In this respect two preliminary remarks are in order. First, the mainstream economic literature is implicitly or explicitly critical of the public interest theories of regulation. These theories are often thought to be 'normative theories as positive analysis' (Joskow and Noll, 1981), implying that the evaluative theoretical and empirical analysis of markets has been used to explain actual regulatory institutions in practice.

The public interests theories of regulation are described as rationalizing existing regulations, while private interest theories are discussed as theories that explain existing regulation (Ogus, 2004). According to some other authors, there even is no such thing as public interest theories of regulation or they are a misinterpretation and have lost validity (Hantke-Domas, 2003). To have a proper discussion on the evaluation and appraisal of economic theories of regulation, it would be desirable to explicitly proceed from evaluation criteria that have been developed and are subject of debate in the methodological literature on the appraisal of theories (Dow, 2002). Some of these criteria would be for example internal consistency, empirical

corroboration, plausibility and more. By making the evaluation criteria explicit, the appraisal of economic theories of regulation would become more precise and explicit.

The second remark pertains to the concept of regulation. A distinction is often made between legislation and regulation. Usually in legislation regulatory powers are allocated to lower level institutions or officials. The result of the use of that power by these officials or institutions is then called regulation. Within the perspective of some explanatory theories, the distinction between regulation and legislation does not always add much additional explanatory or predictive value to regulatory theories. The explanatory power of a market failure as a driving force of public interest regulation for example, does not really depend on whether decision making powers have been centralized or decentralized. From other perspectives, the distinction is important. The explanatory power of variables like rent seeking and capture may differ according to the level of regulatory decision making. According to some theories, delegation may help to prevent inefficient rent extraction by politicians (Shleifer and Vishny, 1998). According to others, that is where problems of unaccountable regulators begin (Martimort, 1999).

2.3 Price Regulation and Marketing Strategy

Price cap regulation adjusts the operator's prices according to the price cap index that reflects the overall rate of inflation in the economy, the ability of the operator to gain efficiencies relative to the average firm in the economy, and the inflation in the operator's input prices relative to the average firm in the economy. Price regulation is most commonly used for public utilities characterized as natural monopolies. If allowed to maximize profit without restraint, the price charged would exceed marginal cost and production would be inefficient. However, because such firms, as

public utilities, produce output that is deemed essential for the public, government steps in to regulate or control the price.

From Porter's (1983) competitive model, there are a number of strategies that firms can use to compete in the market. When pricing as a strategy is controlled through regulation, it then ceases to be a competitive factor. Firms therefore have to come up with other strategies like cost and quality leadership, innovativeness and customer service.

2.4 Empirical Review

Chen (2006) studied the evolution of and the underlying considerations of China's oil pricing policies. The researcher aims to analyze how and why China takes such an approach in reforming its oil pricing mechanisms, and why China can't realistically remove the market distortions arising from government intervention. Market solutions only wreak chaos due to the petroleum market's underdevelopment in China. When market disorder arises, the government has to resort to administrative means.

Hertog (2010) reviewed the economic theories of regulation. It discusses the public and private interest theories of regulation and the criticisms that have been leveled at them. The paper reviews rate of return regulation, price-cap regulation, yardstick regulation, interconnection and access regulation, and franchising or bidding processes. The primary aim of those instruments is to improve the operating efficiency of the regulated firms. Huge investments will be needed in the regulated network sectors. The question is brought up if regulatory instruments and institutions primarily designed to improve operating efficiency are equally well placed to promote the necessary investments and to balance the resulting conflicting interests between for example consumers and investors.

Seo and Shin (2010) study the impact of PCR on productivity growth in the US telecommunications industry between 1988 and 1998. The authors identify a "pronounced positive effect of PCR on growth." They find that 24 of the 25 firms in the sample "experienced an increase in mean technological change" and that 23 of the 25 firms "experienced an increase in annual productivity growth following the implementation of regulation". In her study of exchange markets in the US between 1991 and 2002, Eckenrod (2006) corroborates earlier findings that price cap regulation is associated with higher earnings for regulated suppliers. She observes that the higher earnings reflect reductions in both prices and production costs. Eckenrod (2006) concludes that both the mean marginal cost for basic residential service and the mean real residential price decreased following the shift to PCR.

Tardiff & Tailor (2003) carried out a study on Aligning Price Regulation with Telecommunications Competition. They discuss theoretical and practical aspects of the evolution of price regulation as retail competition increases and as regulators mandate extensive availability of wholesale services. Particular issues include (1) adjusting price change or productivity expectations as the proportion of services subject to price regulation decreases, (2) whether earnings's sharing is compatible with more limited price regulation, and (3) compatibility among wholesale and retail price and quality regulation. The paper concludes by describing recent developments in specific jurisdictions and recommends directions for future incentive regulation.

Majumdar (2010) evaluated the impact of the introduction of incentive regulation on firm growth among the population of local exchange carriers in the United States telecommunications industry between 1988 and 2001. The results show that the rate of return method has a negative impact on firm growth while the introduction of pure

price caps schemes had a positive and significant impact on firms' growth. These results highlight the importance of proper and appropriate incentive compatible mechanism design in motivating firms to strive for superior performance.

Bijl & Peitz (2001) carried out a study on price regulation in the retail and wholesale market and answer to what extent such regulatory policy can stimulate competition. Our main finding is that, in the short run, asymmetric access price regulation is an effective instrument to make the entrant and consumers better off.

Kverndokk & Rosendahl (2010) carried out a study on the effects of transport regulation on the oil market and whether the market power matters in such a case. Popular instruments to regulate consumption of oil in the transport sector include fuel taxes, biofuel requirements, and fuel efficiency. Their impacts on oil consumption and price vary. They show that if market power is present in the oil market, the directions of change in consumption and price may contrast those in a competitive market. As a result, the market setting impacts not only the effectiveness of the policy instruments to reduce oil consumption, but also terms of trade and carbon leakage. In particular, they show that under monopoly, reduced oil consumption due to increased fuel efficiency will unambiguously increase the price of oil.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology that was used in the collection of data and analysis in order to help attain the objectives of the study. It is divided into research design, population of study, data collection, and data analysis methods.

3.2 Research Design

A descriptive survey of all oil marketing companies in Kenya was conducted. This study aimed to establish the effects of price regulations on oil marketing companies. According to Mugenda & Mugenda (1999) the purpose of descriptive research is to determine and report the way things are and it helps in establishing the current status of the population under study. Borg & Gall (1996) note that descriptive survey research is intended to produce statistical information about aspects of a study that interest policy makers.

3.3 Population of study

The population of this study was all the registered oil marketers in Kenya. According to the ERC (2013) there are 45 oil marketers operating in the country. This was the population. Since the population was small, the researcher decided to use a census of all the firms.

3.4 Data Collection

In this study primary data was used to investigate the relationship between price regulation and oil marketers in the country. Primary data was obtained through a questionnaire which is the most appropriate method of data collection as it allows access to large databases and the use of advanced statistical techniques (Borg & Gall 1996). The questionnaires were structured to meet the objectives of the study. The

closed ended questions helped capture the results that were quantified during analysis and were based on a likert scale. The questionnaires were then administered by the researcher in order to capture all the issues required and also to avoid low response rates. The questionnaire had two sections, the demographics section and the study information section. Marketing managers were the respondents in this study.

3.5 Data Analysis

After collecting data, the data was analysed using two methods based on the objectives of the study. To determine the implications of price regulation on the oil marketing strategies of firms, a before-after analysis was required. To competently undertake this therefore, the study used paired t-test to establish whether there are any significant differences in pricing strategies as well as overall marketing strategies of firms before and after the introduction of price caps in the oil industry. These differences, if significant at 5% level of significance, were interpreted accordingly for whether price regulations had led to the differences in marketing strategies.

To analyse the second objective of the study which sought to establish the effectiveness of oil marketing strategies adopted by firms to cope with the price regulations, the study adopted a descriptive analysis where percentages and mean score values were used to interpret the results. The results are presented in tables and graphs where necessary.

CHAPTER FOUR: RESULTS AND INTERPRETATION

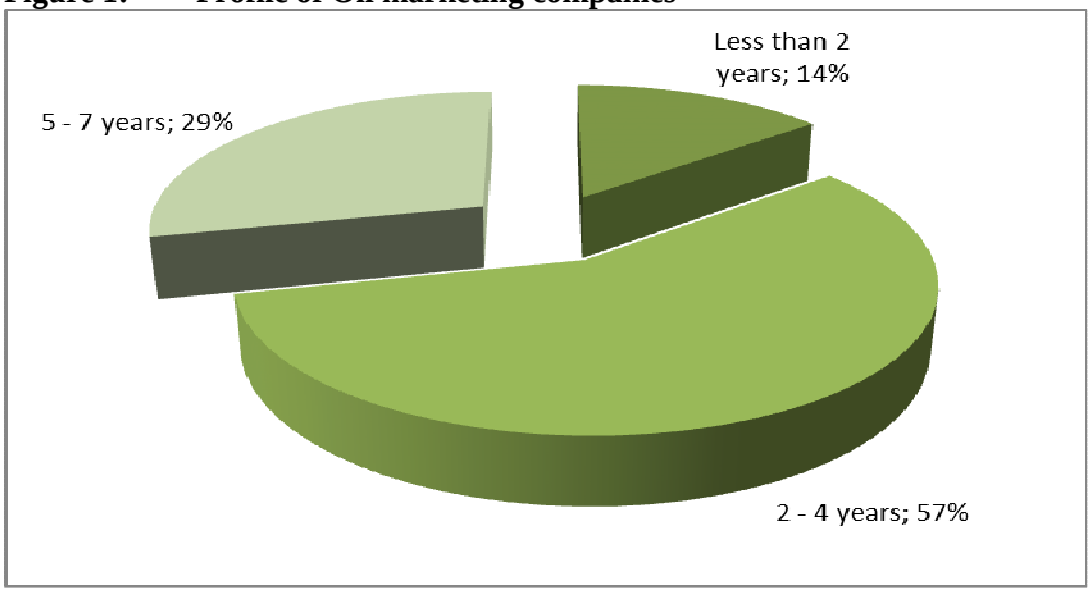
4.1 Introduction

This chapter presents the results of the study. The chapter is organised as follows. The first section presents the results of bio-data followed by the results on the implication of price regulations on marketing strategies of oil marketing firms in Kenya then lastly effectiveness of Marketing Strategies of Oil Companies.

4.2 Profile of Oil marketing companies

A company profile allows the firm to inform customers and the general public what kind of company it is, its core business, the kind of products and services it offers, how it takes on risks, how its performance is and how long it has been in business and is also responsible for creating a good image to interested parties. The purpose of this section was to find out how long the oil marketing firms had been in operation to be able to establish if the firms had been in business long enough to be able give accurate information on the effects of the price regulations. The study was carried out on all the 45 registered oil marketing firms. Data was captured using the interval scale where the respondents were asked to state the year when their company begun its operations in Kenya. The results are shown in Figure 1.

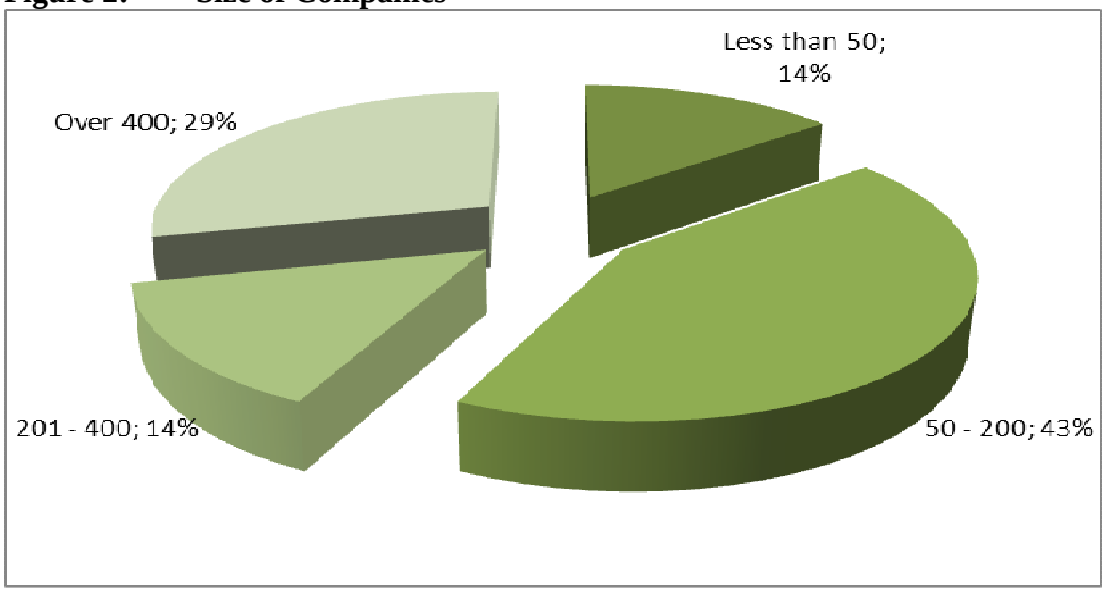
Figure 1: Profile of Oil marketing companies



As shown above, 14% of the companies surveyed had been in operation in Kenya for less than 2 years, 57% had operated for 2 – 4 years and 29% for 5 – 7 years. This shows that most of the oil firms surveyed had been in operation for more than 2 years and therefore were capable of giving true picture of the effects of price regulation since they had been in operation before and after the price caps were introduced.

Company size is dependent on what one wants to emphasize. It can either be total revenue, number of employees or total assets. Size of the company was important to be able to establish the composition of the industry. To be able to know if the industry is mostly composed of small, medium or large companies. The respondents were asked to state the number of employees their companies had at the time of the study. The results are shown in Figure 2.

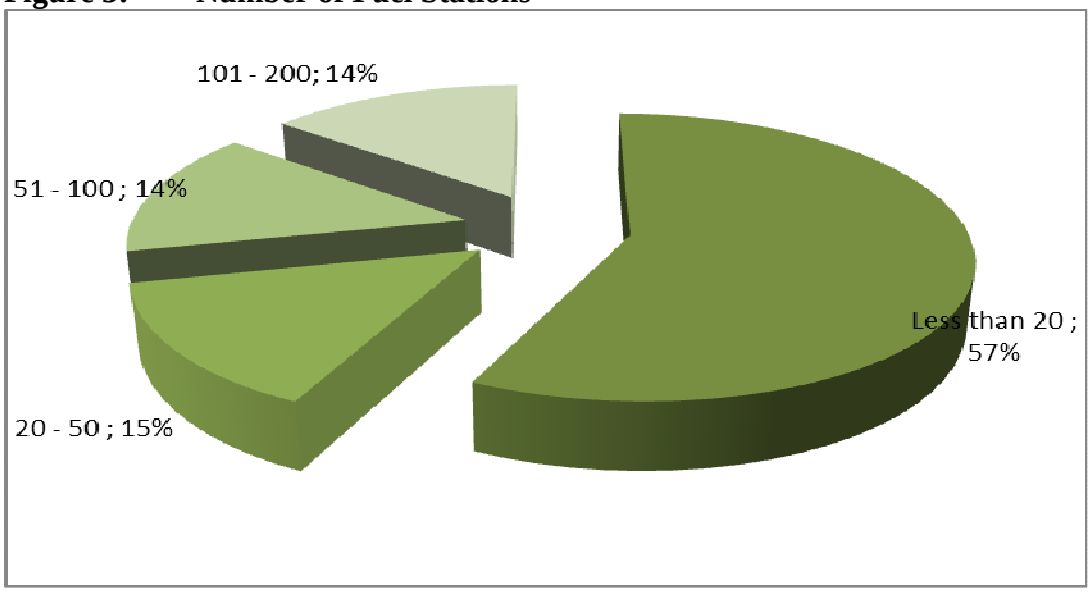
Figure 2: Size of Companies



As the results show, 14% had less than 50 employees, 43% had 50 – 200 employees, 14% had 201 – 400 employees, and the remaining 29% had over 400 employees. Since these numbers depict the size of the firms, it can be noted that the composition of firms that took part in the survey was a mixed one ranging from mid-sized to large firms.

Market coverage is the number of active retail and wholesale petrol stations that a company has relative to a saturation level that sell petroleum products in a given market. The aim of this section was to examine the different market coverage of all the firms that took part in the study by examining the number of stations each of them had in Kenya. Data was captured by asking the respondents to state the number of stations the firm had minimum number being 20 and maximum being over 200. The results are shown in Figure 3.

Figure 3: Number of Fuel Stations



The results shown in the figure above show that 57% of the firms had less than 20 stations, 15% had 20 – 50 stations, 14% had 51 – 100 stations, and another 14% had 101 – 200 stations. Thus, the market was dominated by small firms with less than 20 stations in Kenya.

4.3 Implications of Price Regulations on Marketing Strategies

Pricing is a very important marketing strategy that oil marketing firms use to compete in the market since the product is homogenous therefore cannot be differentiated. When pricing as a strategy is controlled through regulation, it then ceased to be a competitive factor. In the absence of price strategy therefore, firms have to adopt other competitive strategies to gain an edge over their competitors is regulated, then pricing as a strategy is affected.

An effective pricing strategy is important to enable oil marketing firms to achieve the desired level of profitability regardless of their marketing or sales efforts. The study sought to determine the effectiveness of pricing strategy before and after the

introduction of price caps by the government through the Energy Regulatory Commission. The results are presented in Table 1.

Table 1: Effectiveness of Pricing Strategy before and after price regulations

	Effective (%)	Mean	SD
Effectiveness of pricing before price caps	72	4.00	0.77
Effectiveness of pricing after price caps	14	3.00	0.54

Respondents were asked to state how effective their pricing was before and after the introduction of the regulations by choosing one of the following; very in effective, ineffective, moderate, effective or highly ineffective. The results show that 72% of the total number of respondents agreed that the pricing strategy was effective before the regulations and only 14% agreed that it was effective after the introduction of regulations. The mean of 3.00 for after introduction of price caps as compared to 4.00 of before suggests that regulations highly and negatively influenced the effectiveness of their pricing strategies. The standard values also confirm the percentages.

Table 2: Effectiveness of Pricing Strategy after Regulations

Paired Differences					t	df	p-value
Mean	SD	SE Mean	95% Confidence Interval of the Difference				
			Lower	Upper			
1.00000	.93934	.15878	.67733	1.32267	6.298	44	.01

A paired sample t-test for the mean scores before and after the introduction of pricing regulations showed that the differences in the mean were significant at the 1% level of confidence ($t = 6.298$, $df = 44$, $p < 0.01$). Therefore, the results suggest that pricing regulations significantly led to the ineffectiveness of using pricing as a strategy for oil marketing firms to compete in the market hence the need to use other marketing strategies to compete.

Companies used various marketing strategies before the introduction of price controls to gain a competitive advantage. The study sought to establish the various marketing strategies that had been adopted before the introduction of price caps by the government through the Energy Regulatory Commission. Respondents were asked on a scale of 1 to 5 to rank which strategy was least employed and which one was the most employed. The results are in table 3.

Table 3: Marketing Strategies before Price Regulations

Strategy	Mean	SD
Pricing strategy where we price lower than our competitors	4.57	0.74
Offering high quality products	4.00	1.08
Improved service quality	3.43	0.74
Low cost strategy	3.14	1.37
Innovation	3.00	0.94
Focus strategy by targeting specific market segments	3.00	1.63

The results show that the marketing strategies that were highly employed were pricing strategy where oil marketers priced lower than their competitors (mean = 4.57; SD =

0.74) and offering high quality products (mean = 4.00; SD = 1.08). The results further show that focus strategy by targeting specific market segments and innovation were the least employed each with a mean of 3.00. This leads to the assertion that before price caps were introduced by the Government of Kenya, pricing was a strategy that was most employed by oil marketing firms to compete in the market.

After introduction of price regulation, companies had to adopt other marketing strategies since their main strategy which was pricing could not be effectively applied because it was regulated. The study sought to further examine the marketing strategies adopted by the firms after the introduction of price caps by the government through the Energy Regulatory Commission. Respondents were again asked on a scale of 1 to 5, to rank the strategies that were least adopted and which ones were most adopted after the price caps were introduced. The results are in Table 4.

Table 4: Marketing Strategies after Price Regulations

Strategy	Mean	SD
Improved service quality	4.57	0.74
Offering high quality products	4.43	0.50
Low cost strategy	3.71	0.71
Focus strategy by targeting specific market segments	3.71	1.04
Innovation	3.29	1.41
Pricing strategy where we price lower than our competitors	2.71	1.41

The results reveal that the most favoured strategies were improved service quality (mean = 4.57; SD = 0.74) and offering high quality products (mean = 4.43; SD =

0.50). The least employed strategies were pricing (mean = 2.71; SD = 1.41) and Innovation (mean = 3.29; SD = 1.41).

The introduction of price caps influenced the various marketing strategies to different extents. The aim of this section was to establish to what extent the price caps influenced the marketing strategies of the oil marketing firms. The respondents were further asked to state the extent to which they thought the marketing strategies of oil marketing firms in Kenya have been influenced by the introduction of price regulations by the Government. The results are in Table 5.

Table 5: Extent to Which Regulations Influence Marketing Strategies

Extent	Frequency	Percentage
Moderate extent	7	16
Large extent	23	51
Very large extent	15	33
Total	**45**	**100**

The results reveal that 16% thought the regulations influenced their marketing strategies to a moderate extent, 51% thought they did so to a large extent and 33% noted that they did so to a very large extent. Thus, most (84%) of the respondents were of the opinion that their marketing strategies were largely influenced by the price regulations introduced by the Government.

4.4 Effectiveness of Marketing Strategies of Oil Companies.

Oil companies in Kenya adopt various strategies to try and gain competitive advantage. For this goal to be achieved, the strategies adopted must be effective. The business strategy perspective argues that achieving competitive advantage hinges on pursuing a coherent competitive strategy. This section presents the results of analysis on the effectiveness of marketing strategies used by oil companies in Kenya. The data was captured using a 5-point Likert scale in the questionnaires where respondents were asked to state whether they felt their marketing strategies were very ineffective, ineffective, moderate, effective or highly effective.. Analysis was done using percentages, mean, standard deviation, and paired t-test. The results are in Table 6.

Table 6: Effectiveness of Marketing Strategies before and after Regulations

	Effective (%)	Mean	SD
Effectiveness of marketing strategies before price caps	72	4.00	0.77
Effectiveness of marketing strategies after price caps	43	3.57	0.74

The results above show that 72% of all the 35 respondents agreed that the marketing strategies were effective before the regulations and only 43% of all the 35 respondents agreed that they were effective after the introduction of regulations. The mean of 4.00 out of 5 before price caps and 3.57 out of 5 after price caps suggests that regulations highly and negatively influenced the effectiveness of their marketing strategies and this could be attributed to one aspect of marketing which is pricing which was greatly affected. The standard deviations also confirm the percentages.

Table 3: Effectiveness of Marketing Strategies after Price Regulations

Paired Differences					t	df	p-value
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper			
.42857	1.31251	.22186	-.02229	.87944	1.932	44	.062

A paired sample t-test for the mean scores before and after the introduction of pricing regulations showed that the differences in the mean were significant at the 10% level of confidence ($t = 1.932$, $df = 44$, $p < 0.1$) but insignificant at 1% and 5% levels of significance. Given that this study chooses a significance level of 5%, it can therefore be deduced that marketing strategies before and after the introduction of pricing regulations were not significantly different in terms of their effectiveness and therefore the regulations did not significantly influence the effectiveness of marketing strategies of oil marketing firms in Kenya.

Price regulation by the government through Energy Regulation Commission affected oil marketing strategies in different ways depending on the strategies that the firms had adopted prior to price caps. This study sort to establish the extent to which this price caps had affected the marketing strategies of various firms. The data was captured using a 5-point Likert scale in the questionnaires where respondents were asked to state the extent to which they thought that the marketing strategies of oil marketing firms in Kenya are effective especially after the introduction of price regulations by the Government. The results are shown in Table 8.

Table 8: Extent to Which Strategies are Effective after Regulations

Extent	Frequency	Percentage
Low extent	12	27
Moderate extent	13	29
Large extent	20	44
Total	**45**	**100**

The results shown in the table above reveal that 29% of the respondents agreed that the marketing strategies were effective to a low extent, 20% to a moderate extent, and 43% to a large extent. These results show that the marketing strategies of oil marketing firms in Kenya were not effective as much as they did before the price regulations and the results corroborate those of Table 6 above.

4.5 Discussion of Findings

The study sought to establish the implications of price regulation on the oil marketing strategies in Kenya. The results showed that pricing regulations significantly led to the ineffectiveness of using pricing as a strategy for oil marketing firms to compete in the market hence the need to use other marketing strategies to compete. This is consistent with the findings of Eckenrod (2006) that both the mean marginal cost for basic residential service and the mean real residential price decreased following the shift to Price Cap Regulation.

The study sought to determine the effectiveness of oil marketing strategies adopted to cope with price regulation in Kenya. It was revealed that marketing strategies before and after the introduction of pricing regulations were not significantly different in

terms of their effectiveness and therefore the regulations did not significantly influence the effectiveness of marketing strategies of oil marketing firms in Kenya. This is inconsistent with Majumdar (2010) who found that the introduction of pure price caps schemes had a positive and significant impact on firms' growth.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusions made from the study, limitations of the study, recommendations for policy and practice, and areas for further research.

5.2 Summary of Findings

The study found that most of the oil firms (86%) had been in operation for more than two years. The results also showed that 86% of the firms had more than 50 employees. It was revealed that 57% of the firms had less than 20 stations. The study found that 72% of the respondents agreed that the pricing strategy was effective before the regulations and only 14% agreed that they were effective after the introduction of regulations. A paired sample t-test for the mean scores before and after the introduction of pricing regulations showed that the differences in the mean were significant at the 1% level of confidence ($t = 6.298$, $df = 44$, $p < 0.01$).

The study showed that the marketing strategies that were highly employed were pricing strategy where marketers price lower than their competitors (mean = 4.57) and offering high quality products (mean = 4.00). The results further showed that offering credit to customers and focus strategy by targeting specific market segments were the least employed each with a mean of 3.00. The study found that the most favoured strategies after the introduction of price regulations were improved service quality (mean = 4.57) and offering high quality products (mean = 4.43). The least employed strategies were pricing (mean = 2.71) and Innovation (mean = 3.29). The study found that most (84%) of the respondents were of the opinion that their marketing strategies

were largely influenced by the price regulations introduced by the Government. The study revealed that 72% of the respondents agreed that the marketing strategies were effective before the regulations and only 43% agreed that they were effective after the introduction of regulations. A paired sample t-test for the mean scores before and after the introduction of price regulations showed that the differences in the mean were insignificant at the 5% level of confidence ($t = 1.932$, $df = 44$, $p > 0.05$). The study revealed that after the introduction of pricing regulation, 43% of the respondents agreed that the marketing strategies were still effective.

5.3 Conclusions

The study concludes that pricing regulations significantly led to the ineffectiveness of using pricing as a strategy for oil marketing firms to compete in the market hence the need to use other marketing strategies to compete. The regulations had a significant impact on the pricing strategies of oil marketing firms in Kenya. The study also concludes that marketing strategies before and after the introduction of pricing regulations were not significantly different in terms of their effectiveness and therefore the regulations did not significantly influence the effectiveness of marketing strategies of oil marketing firms in Kenya.

The study further concludes that the marketing strategies of oil marketing firms in Kenya were not as effective currently as they were before price regulations. This is attributed to the fact that pricing, which is an essential component of marketing strategies, had been regulated and therefore the effectiveness of entire marketing strategy was affected.

5.4 Recommendations

This study recommends that Government regulations on prices should be undertaken with care as these go a long way in affecting the ability of firms to compete especially on pricing, a major component of marketing, and therefore affect marketing strategies of organisations. Oil marketing firms should focus more on innovation, quality of products, as well as superior customer service in order to compete in the market. A marketing strategy that focuses on building better customer relationships would provide a better avenue for oil firms to compete.

Other firms which are at the risk of being regulated in terms of price caps should take lessons from the oil marketing firms and focus on other marketing strategies that can enhance their competiveness in the market and not just focus on pricing. But should pricing still be a major component of the same, it is important that cost reduction strategies be put in place to enable them produce at lower costs than others and therefore enable firms to compete on pricing even with price caps in place.

5.5 Suggestions for Further Research

The study suggests that more studies be carried out especially with a longitudinal design in mind in order to establish the evolution of marketing strategies over the period of price regulation. The study also suggests that more than one source of data be used in future for such studies in order to allow for triangulation of data from various data sources.

REFERENCES

Arrow, K. J. (1985), The Potentials and Limits of the Market in Resource Allocation, *in Feiwel, G.R. (ed.), Issues in Contempory Microeconomics and Welfare,* London, The Macmillan Press, 107-124.

Asch, P. (1988), *Consumer Safety Regulation,* Oxford, Oxford University Press.

Bator, F. M. (1958), The Anatomy of Market Failure, *72 Quarterly Journal of Economics,* 351-379.

Baumol, W.J. (1952), *Welfare Economics and the Theory of the State,* Cambridge Massachusetts, Harvard University Press.

Biglaiser, G. & Riordan, M. (2001): Dynamics of price regulation, *RAND Journal of Economics,* 31, 4, 744–767.

Blaug, M. (1993), Pieter Hennipman on Paretian Welfare Economics: a Comment, *1 De Economist*, 127-129.

Boadway, R & Bruce, N. (1984), *Welfare Economics*, Oxford, Basil Blackwell.

Borg, W. R., & Gall, J. P. (1996). *Educational research:* An introduction. White Plains, NY: Longman.

Cabral, L. & Riordan, M. (1989): Incentives for cost reduction under price cap regulation, *Journal of Regulatory Economics,* 1, 93-102.

De Bijl, P. & Peitz, M., (2001). Dynamic regulation and competition in telecommunications markets – A framework for policy analysis. *Mimeo.,* CPB Netherlands Bureau for Economic Policy Analysis.

Demsetz, H. (1968), Why Regulate Utilities?, *Journal of Law and Economics,* 55-65.

Dow, S. (2002), *Economic Methodology: An Inquiry,* Oxford, Oxford University Press.

Ekelund, Robert B. (ed.) (1998), *The Foundations of Regulatory Economics,* Cheltenham, Edward Elgar.

Goldberg, V. P. (1979), Protecting the Right to be Served by Public Utilities, *Research in Law and Economics*, 145-156.

Hantke-Domas, M (2003), The Public Interest Theory of Regulation: Non-Existence or Misinterpretation, *European Journal of Law and Economics*, 165-194.

Hennipman, P. (1992), The Reasoning of a Great Methodologist: Mark Blaug on the Nature of Paretian Welfare Economics, *4 De Economist*, 413-445.

Joskow, P. L. & Noll, R. C. (1981), Regulation in Theory and Practice: An Overview, *in Fromm, Gary (ed.), Studies in Public Regulation, Cambridge*, MA, The MIT Press, 1-66.

Kay, J. A. & Vickers, J.S. (1990), Regulatory Reform: An Appraisal, *in Majone, Giandomenico (ed.), Deregulation or Re-regulation*, London, Pinter Publishers, 223-251.

Laffont, J. & Tirole, J. (2000). *Competition in Telecommunications.* Cambridge and London: MIT Press.

Majumdar, S.K (2003). Incentive Compatible Mechanism Design and Firm Growth: Experiences from Telecommunications Sector Regulation, *Telecommunications Policy*, 32, 587-599

Martimort, D. (1999), The Life Cycle of Regulatory Agencies: Dynamic Capture and Transaction Costs, *The Review of Economic Studies*, 929-947.

Meran, G., & Hirschhausen, C. V. (2009). A modified yardstick competition mechanism. *Journal of Regulatory Economics*, 35(3), 223-245.

Mugenda, O.M & Mugenda, A. G (1999) *Research Methods: Qualitative and Qualitative Approaches,* Acts Press, Nairobi

Noll, R. (1989), Economic Perspectives on the Politics of Regulation, *in Schmalensee, Richard and Willig, Robert D. (eds.), Handbook of Industrial Organization II,* Amsterdam, North Holland, 1253-1287.

Ogus, A.I. (2004), *Regulation: Legal Form and Economic Theory,* Oxford, Hart Publishing.

Panteghini, P. & Scarpa, C. (2008). Political pressures and the credibility of regulation: Can profit sharing mitigate regulatory risk*? International Review of Economics*, 55(3), 253–274.

Shleifer, A. & Vishny, R.W. (1998). *The grabbing hand of government,* Cambridge Massachusetts, Harvard University Press.

SIB (2012). Kenya Oil and Gas Sector Overview: Initiation of coverage, *Standard Investment Bank Research,* retrieved on 09 July 2013 from http://www.sib.co.ke/media/docs/Kenya-Oil-and-Gas-IOC-report.pdf

Viscusi, W. K, Vernon, J.M. & Harrington, J. E., Jr (2005), *Economics of Regulation and Antitrust,* Cambridge, MA, MIT Press.

Whynes, D. L. & Bowles, R. A. (1981), *The Economic Theory of the State,* Oxford, Martin Robertson.

APPENDICES

Appendix 1: Research Questionnaire

Section A: Demographics

1. Company name:

   ……..

2. Your position in the company:

   ……

3. When did your company begin its operations in Kenya? State the year.

   ……

4. How long have you been working in the company?

   Less than 2 years [ ]
   2 – 4 years [ ]
   5 – 7 years [ ]
   Over 7 years [ ]

5. How many employees does the company have?

   Less than 50 [ ]
   50 - 200 [ ]
   201 - 400 [ ]
   Over 400 [ ]

6. How many stations does the company have in Kenya?

   Less than 20 [ ]
   20 – 50 [ ]
   51 - 100 [ ]
   101 - 200 [ ]
   Over 200 [ ]

Section B: Implications of Price Regulations on Marketing Strategies

7. What can you say about the effectiveness of your ***pricing before*** the introduction of price caps by the government through the Energy Regulatory Commission?

   Very ineffective [ ]
   Ineffective [ ]
   Moderate [ ]
   Effective [ ]
   Highly effective [ ]

8. What can you say about the effectiveness of your firm's ***pricing strategies after*** the introduction of price caps by the government through the Energy Regulatory Commission?

   Very ineffective [ ]
   Ineffective [ ]
   Moderate [ ]
   Effective [ ]
   Highly effective [ ]

9. What marketing strategies had you adopted ***before*** the introduction of price caps by the government through the Energy Regulatory Commission? Tick the extent to which each strategy had been employed where **1 = least employed strategy while 5 = highly employed strategy**.

Strategy	**1**	**2**	**3**	**4**	**5**
Offering high quality products					
Innovation					
Improved service quality					
Low cost strategy					
Focus strategy by targeting specific market segments					
Pricing strategy where we price lower than our competitors					

10. What marketing strategies have you adopted ***after*** the introduction of price caps by the government through the Energy Regulatory Commission? Tick the extent to which each strategy has been employed where **1 = least employed strategy while 5 = highly employed strategy**.

Strategy	**1**	**2**	**3**	**4**	**5**
Offering high quality products					
Innovation					
Improved service quality					
Low cost strategy					
Focus strategy by targeting specific market segments					
Pricing strategy where we price lower than our competitors					

11. To what extent do you think that the marketing strategies of oil marketing firms in Kenya have been influenced by the introduction of price regulations by the Government?

    Very low extent [ ]

    Low extent [ ]

    Moderate extent [ ]

    Large extent [ ]

    Very large extent [ ]

Section C: Effectiveness of Marketing Strategies of Oil Companies

12. How effective were your marketing strategies ***before*** the introduction of price caps by the government through the Energy Regulatory Commission?

    Very ineffective [ ]

    Ineffective [ ]

    Moderate [ ]

    Effective [ ]

    Highly effective [ ]

13. How effective are your marketing strategies ***after*** the introduction of price caps by the government through the Energy Regulatory Commission?

    Very ineffective [ ]

    Ineffective [ ]

    Moderate [ ]

    Effective [ ]

    Highly effective [ ]

14. To what extent do you think that the marketing strategies of oil marketing firms in Kenya are effective especially after the introduction of price regulations by the Government?

    Very low extent [ ]

    Low extent [ ]

    Moderate extent [ ]

    Large extent [ ]

    Very large extent [ ]

The End

Appendix 2: List of Oil Marketing Companies

1. Kenol Kobil
2. Total Kenya
3. Vivo Energy
4. LibyaOil
5. Gulf Energy
6. National Oil
7. Hass Petroleum
8. Dalbit
9. Towba
10. Gapco
11. Hashi Energy
12. Bakri
13. Addax
14. Fossil
15. Royal
16. Galana Oil
17. Oryx Energies
18. Global
19. Eco Oil
20. Ainushamsi
21. Mogas Kenya Ltd
22. Olympic
23. Petro Oil
24. Banoda
25. Al-leyl
26. Oil City
27. Intoil
28. Kamkis
29. Tosha
30. Alba
31. One Petroleum

32. Regnol
33. Rivapet
34. Ranway
35. Essar
36. Jade
37. E. A Gasoil
38. Keroka
39. Afrioil
40. Fast Energy
41. City Oil Kenya Ltd
42. Ramji
43. Trojan
44. Kencor
45. Emkay

Source: Petroleum Institute of East Africa (2012)

http://www.petroleum.co.ke/index.industrydata