

**RELATIONSHIP BETWEEN FINANCIAL VIABILITY AND PROFITABILITY OF  
PETROLEUM COMPANIES IN KENYA**

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**DECLARATION**

I declare that this project report is my original work and has not been presented for an award of a degree in any other university.

Signature.....

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**D61/73250/2009**

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

Signature .....

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I take this opportunity to first, thank God for good health and for bringing me this far. I wish to acknowledge everyone who assisted me in completing this study. I extend my gratitude to my supervisor Mrs. Kithinji for her encouragement and patience in reading, correcting, re-reading and refining this work, she is greatly appreciated. My classmates and friends, I look forward to many years ahead working with you and developing our friendships.

## **DEDICATION**

This work is dedicated to my family who provided me with the motivation and for their care and sacrifice throughout my studies. They gave me unconditional love, encouragement, and support. They provided me with strength, dreams, courage, and determination to move through the final stages of this process. My dream came true due to their love and sacrifices. There are so many friends and colleagues who gave me unselfish support. Thank you all and best of luck.

## **ABSTRACT**

Financial viability is important in evaluating organizations overall performance. Assessment of financial viability is an integrated process involving a review of a provider's audited financial statements, financial performance reports, business plan and other information that supports financial analysis (Henkel, 1992). The aim of this study was to establish the relationship between financial viability and profitability of petroleum companies in Kenya. To achieve the objectives of this study the research has adopted a survey design. This is because it seeks to capture information from the entire population of the major petroleum companies in Kenya. The questionnaire is used in the data collection.

The collected information is analyzed in descriptive statistics by the help of Statistical package for social sciences (SPSS). The study reveals that financial viability in the petroleum companies is supported by increased liquidity of company's assets; increased efficiency within the company; reduced financial risks; increased solvency; reliable managerial ownership and technological embracement. However financial viability is influenced by issues such as government legal & regulatory requirements and financial issues within the management of the companies. The common constraints in maintaining the profitability in the petroleum companies include the high costs of crude oil which was caused by depreciating Kenyan shilling; corruption within government agencies; and unreliable refinery (KPRL).

The findings of the study show that there is a strong relationship between the financial viability and the financial performance of the petroleum companies. Factors that support financial viability are strongly related to the profitability and thus high performance of the company. The constraints that hinder financial viability lower profitability of the company which largely depends on how the company manages the impacts of such constraints. The study concludes that there is a strong relationship between financial viability and profitability in the petroleum companies. The study recommends further studies on the effect of divestment on profitability and solvency of oil companies and applying hedging instruments against FOREX instability.

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## **LIST OF ABBREVIATIONS**

BP – British Petroleum

DCCBs - District Central Co-operative Banks

GNPA - Gross Non Performing Assets

IMF - International Monetary Fund

KPRL – Kenya Petroleum Refinery Limited

LPG - Liquefied Petroleum Gas

NNPA - Net Non Performing Assets

R&D – Research and Design

SPSS - Statistical package for social sciences

TQM – Total Quality Management

## **CHAPTER ONE: INTRODUCTION**

This chapter presents the background of the study whose aim is to establish financial viability of petroleum companies in Kenya. The chapter also entails the problem statement, objectives and significance of the study.

### **1.1 Background of the study**

The following is a discussion on financial viability and petroleum industry in Kenya.

#### **1.1.1 Financial viability**

Financial viability is a crucial aspect of evaluating organizations overall performance. Financial viability is about being able to generate sufficient income to meet operating payments, debt commitments and, where applicable, to allow growth while maintaining service levels. Assessment of financial viability is an integrated process involving a review of a provider's audited financial statements, Financial Performance Reports, business plan and other information that supports financial analysis. Henkel (1992) defines the concept as the ability of the organization to raise funds required to meet its functional requirements in the short run, medium and long term. The term also means being able to generate sufficient income to meet operating payments, debt commitments and, where applicable, to allow growth while maintaining service levels (Registrar of Community Housing, 2009). Walter (1957) relates technical solvency to the ability of a business unit to meet its current maturing obligations.

There are three dimensions to assessing financial viability of an organization. The first relates to the ability of the organization to generate enough cash to pay its bills or to be prosperous and profitable. The second deals with the sources and types of revenues on which the organization bases its costs. The third is the discipline for an organization to live within its means whereby its expenditure does not exceed its revenues (Henkel, 1992). The Registrar of Community Housing (op.cit. p. 8) argues that the assessment of financial viability is an integrated process involving a

review of a provider's audited financial statements, financial performance reports, business plan and other information that supports financial analysis. These are assets held to cover accrued promised liabilities level and is ascertained by ensuring that an optimum fund ratio is maintained and also that positive rates of return as determined in the actuarial projections are achieved in the longer term. The author suggests that the major sub objectives in achieving the above entails ensuring safety of selected investments, adequate yield and liquidity for meeting obligations when due in addition to guaranteeing diversification of the portfolio. Psaras, (2008) discerns that the level of funding of a pension fund defines whether a scheme is financially viable or not. If the assets held by a pension fund cover 100 percent of the accrued promised liabilities, given the valuation method adopted, then the fund can be defined as financially viable (Psaras, 2008).

### **1.1.2 Financial viability and probability of a firm**

Financial viability can be measured primarily by the probability of survival, while profitability can be measured by average annual net firm income. A profitable firm, primarily due to a high operating efficiency, can continue to perform profitably while assuming higher levels of debt, while an unprofitable firm, due to a weaker operating efficiency, significantly decreases its probability of survival as the debt level increases (Kent & Phillip, 1996). The implication is that the level of both firm profitability and debt contribute significantly in determining the firm's probability of survival. A positive relationship between firm profitability and the probability of survival is expressed, while an inverse relationship between the debt level and the probability of survival is shown (Kent & Phillip, 1996).

The risk constraint for a highly profitable firm allows a significant increase in the financial risk to the firm without adversely affecting the firm's probability of survival (Kent & Phillip, 1996). However, the risk constraint for a marginally profitable firm requires that the firm minimize its financial risk by minimizing its use of financed capital. Economies of size of the firm may be the primary factor affecting the firm's level of operating efficiency, concluding that small firms may need to expand. However, if the expansion requires assuming a significant amount of additional debt, the effects of altering the debt structure must also be considered. If the increase in

profitability increases the total risk constraint enough to compensate for the added financial risk associated with the additional debt, the firm should expand. However, if the increase in profitability does not increase the total risk constraint enough to compensate for the additional financial risk, the firm should not expand (Kent & Phillip, 1996).

### **1.1.3 Petroleum Industry in Kenya**

The oil industry in Kenya has come a long way. It has been established that the first venture by oil companies in Kenya started at the turn of the 20<sup>th</sup> century with operations in Mombasa which later spread to the rest of East Africa (Isaboke ,2005). During its early period, the oil industry was governed by regulations stipulated in the petroleum Ordinance-1911 and in the Petroleum Act 1948. This act of parliament made provisions for restricting and regulating the importation, transportation and storage of petroleum products (CAP 116).

Between 1963 and 1971, there was a partial deregulation of the oil industry. However, the Government of Kenya imposed a full price control regime on all petroleum products in 1971 which lasted up to 1994 when the industry was fully liberalized.

The liberalization of the industry in 1994 was done as part of the structural adjustment programme recommended to Kenya by the International Monetary Fund (IMF) and the World Bank, with the main objective of creating a more competitive market environment (Wairachu, 2000).The oil industry has witnessed several transformational developments since its full deregulation in 1994.

Firstly, there was a notable increase in the market in the number of oil industry players. New independent players such as Jovenna, Engen, Petro Kenya, Fuelex and Galana entered the market to join existing multinational players like Total, Shell, Caltex Agip and Mobil. Multinationals enjoyed 85% and independents 15% market share by 1994 (Chepkwony, 2001).

Secondly, there was a proliferation of independent dealer stations that were constructed with little regard to conformity to safety standards. Major effort was exerted by both multinationals and local oil marketers during this period to try and differentiate themselves from the

independent players in the area of product quality and product innovations especially in the area of product quality controls for both fuel and liquefied petroleum gas (LPG). This was as a result of increase in cases of product adulteration in the market.

These developments saw a rise in price wars and price undercutting in the petroleum market. There was heightened level of cut-throat competition based on pricing. This culminated in the partial exit of Multinationals from western Kenya in the retail sector especially Shell/BP and Caltex (Mbugua, 2005).

Diversification as a competitive strategy was also widely adopted by petroleum marketers as a way of differentiation and as a vehicle for improving retail profitability by the oil marketers. This has largely been witnessed in the service stations whereby convenience shops, tyre service centres, car wash bays, service bays and food courts have been added on as key features of retail outlets. It has been observed that Total came up with the Bonjour shop, Shell had the Shell Select, Caltex had the Star shop and Mobil had On The run (Apungu2003).

Fourthly, the petroleum industry also experienced changes due to global strategic realignment of Multinational companies that also have operations in Kenya. In 2001, Agip exited from Kenya and its interest was taken up by Shell/BP. Elf merged with Total in Kenya in 1999 after global buyout (Apungu 2003). This process has been accelerated in recent years. BP and Mobil exited from Kenya in 2007 and their interest were bought by Shell and Oil Libya respectively. Finally, the market in Kenya has recorded unprecedented sporadic rise in prices as a result of fluctuation of crude oil prices in the market which hit USD 143.9 a barrel in July 2008 but closed the year at 37.6USD per barrel (Economic Survey, 2009).

## **1.2 Problem Statement**

Financial viability is important in evaluating organizations overall performance. Assessment of financial viability is an integrated process involving a review of a provider's audited financial statements, financial performance reports, business plan and other information that supports financial analysis. According to Henkel (1992) financial viability includes the ability of the

organization to raise funds required to meet its functional requirements in the short run, medium and long term. Financial viability also entails the ability to generate sufficient income to meet operating payments, debt commitments and, where applicable, to allow growth while maintaining service levels.

Henkel (1992) cited three dimensions to assessing financial viability of an organization which include: the ability of the organization to generate enough cash to pay its bills or to be prosperous and profitable, the sources and types of revenues on which the organization bases its costs and the discipline for an organization to live within its means whereby its expenditure do not exceed its revenues.

Studies done in Kenya have not focused on financial viability of petroleum companies in Kenya, for example, Isaboke (2001) investigated strategic responses by major oil companies in Kenya to threat of new entrants, Wairachu (2000) studied marketing in a liberalized petroleum industry by focusing on changes in marketing mix of oil companies in Kenya, Chepkwony (2001) established strategic responses of petroleum firms in Kenya to challenge of increased competition in industry, Mbugua (2005) analyzed the critical success factors in petroleum product retailing in Nairobi and Apungu (2003) carried out survey of factors that influence customer choice of petrol station in Nairobi. This study sought to fill the knowledge gap by establishing the relationship between financial viability and profitability of petroleum companies in Kenya.

### **1.3 Objective of the Study**

To establish the relationship between financial viability and profitability of petroleum companies in Kenya

### **1.4 Significance of the study**

**Petroleum Companies:** Stakeholders in petroleum companies will gain additional knowledge in relation to factors influencing their financial viability. This will assist in formulating strategies that will enhance financial viability of petroleum companies in Kenya.



**Government of Kenya:** The government of Kenya will also be adequately informed on factors influencing financial viability of petroleum companies in Kenya. The findings will, therefore, be of great importance in strategic planning for finances in order to improve performance of petroleum companies.

**Academician and Researchers:** The findings of the study will contribute to the existing body of knowledge on financial viability of firms. Scholars and future researchers will therefore use the findings of the study as a reference in studies on financial viability.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Financial viability and performance**

Financial viability is about being able to generate sufficient income to meet operating payments, debt commitments and, where applicable, to allow growth while maintaining service levels. Assessment of financial viability is an integrated process involving a review of a provider's audited financial statements, Financial Performance Reports, business plan and other information that supports financial analysis. The initial focus of the financial viability assessment is a provider's audited financial statements for the previous financial year. The results are assessed with the budget and financial projections in the business plan. The trends in actual results over a three year period are then assessed and projected forward over one to three years (depending on the registration class of the provider). To place these results into a broader context, the provider's business plan is used in order to understand their future plans as well as their perspective on the business, growth (where applicable) and risks. The business plan will provide insights into the provider's resource management, growth plans (where applicable), capital structure and liquidity. The business plan provides the roadmap to guide the provider towards its long term goals. The financial plan is a vehicle to allow the provider to realize its long term goals. While it is imperative to ensure that providers do not operate with excessive levels of risk, the capacity of Class 1 and Class 2 providers to develop and increase the availability of community housing is also assessed. Therefore, in the assessment of financial performance, a view is gathered of the extent to which providers are optimizing (Antoniou et al, 2002).

Performance measurement is a fundamental building block of TQM and a total quality organization. Historically, organizations have always measured performance in some way through the financial performance, be this success by profit or failure through liquidation. However, traditional performance measures, based on cost accounting information, provide little to support organizations on their quality journey, because they do not map process performance and improvements seen by the customer. In a successful total quality organization, performance will be measured by the improvements seen by the customer as well as by the results delivered to

other stakeholders, such as the shareholders. For instance financial stability and strength of an insurance company should be a major consideration when purchasing an insurance contract. An insurance premium paid currently provides coverage for losses that might arise many years in the future. For that reason, the viability of the insurance carrier is very important. In recent years, a number of insurance companies have become insolvent, leaving their policyholders with no coverage (or coverage only from a government-backed insurance pool or other arrangement with less attractive payouts for losses).

## **2.2 Financial viability and factors affecting it**

The ultimate aim of an organization in financial management is to establish and maintain financial viability. Financial viability ensures that the organization can continue to implement its Mandate effectively without impairing its capital base. It also enables the firm to move towards self-sufficiency in meeting the growing demand for its operations. It contributes to the success of the establishment of and subscriptions to Special Funds for special purposes (Chandra, 2006).

When firms reach financial viability, they expand their capacity to influence their own development path. Financially viable can define long-term plans and are capable of investing resources to carry them out. They can anticipate and mitigate the impacts of growth, rather than having to constantly catch up. They have the resources at their disposal to improve services and to respond credibly to the consumers. But the path to financial viability is not an easy one. Pursuing it requires (1) reforming the processes, systems, and institutional roles of the local government and state-level agencies; (2) acquiring technical competence in numerous areas; and (3) resetting the relationship between local government, state government, and citizens to improve accountability and service delivery in both private and public companies.

### **2.2.1 Fixed Assets**

Fixed assets serve as collateral to the lenders for loan. Literature provided the evidences that companies having more fixed assets qualify for more loan as compared to the companies having less tangible assets. Fixed assets are considered as important factor for bank loan (Antoniou et al

2002). Agency cost of secured debt is lower as compared to unsecured debt (Scot1977). Tangibility of assets is an important determinant of corporate financing (Rajan and Zingales, 1995). Hence the optimal debt level of these companies increases comparatively and fixed assets serve as one of the determinants of the corporate financing. Fixed assets sometimes also include intangible assets like patents etc. which do not serve as collateral. The ratio for the tangibility of assets has been calculated as:

Tangibility of assets = Fixed tangible assets / Total Assets

### **2.2.2 Growth**

Growing companies need financing for expansion purposes. Literature provided evidences that a company, in order to cope with growth opportunities, has to go for financing. The option of financing growth opportunities through debt or equity rests with the management. Growth is one of the factors that have an impact on corporate financing (Booth et al 2001, Gonenc 2003, Gonenc 2005). Loan is sought to avail the growth opportunities (Graham et al 2004). Hence growth is considered as one of the determinants of corporate financing. Some of the international studies measured growth by change of current and previous year's assets while others measured by change of current and previous year's sales. There could be numbers of factors to measure growth in business like for example yearly changes in number of employees , in volume of production, in working capital, in gross profit and change in sales. Growth of a business can be measured by change in sales (Eriotis et al 2007).

Growth = (sales of current year-sales of previous year)/sales of previous year

### **2.2.3 Profitability**

Trade off theory suggests that lenders prefer profitable firms in lending as the profitability provides the confidence in loan recovery. However, Majloof (1984) argued that profitable firms use less debt and prefer using retained earnings for investments. Hence profitability in either way is one the determinants of corporate financing. Titman and Wessels, (1988) used profitability as ratio of operating income to sales. Jensen et al (1992) stated profitability as ratio of operating

income to total assets. Wald (1995) argued profitability as ratio of average earnings before interest and taxed over total assets. Ghosh (2006) used profitability ratio as operating profit divided by total assets. The most relevant definition of profitability in this study is the earnings before interest and taxes. The lenders are interested in recovering the interest and principal amount. This shows the earnings power of the firm before payment of interest and taxes. The taxes have also been ignored because in textile sector of Pakistan most of the companies are generating losses, hence paying no taxes.

Profitability = EBIT/ Total Assets

#### **2.2.4 Business Risk**

Business risk is associated with normal business operations like volatility in sales price, product demand, input cost and the firm's ability to adjust output prices for changes in input costs etc. When companies opt for debt financing, it further increases the risk level of firm. If there is an increased level of volatility in the above factors, it decreases the ability of borrowing because the lenders avoid lending to such firms. Hence professional lenders consider firm's business risk before taking the lending decision. This approach reduces the non-performing loan ratio of the lenders. Theoretically, all companies are exposed to certain risk attached to its operations. Titman and Wessels, (1988) stated that proxies that were usually used to reflect the firm's business risk included: the standard deviation of the percentage change in operating income. Crutchley and Hansen, (1989) and Booth et al., (2001) used variability of the return on assets over available time period. Financial distress arises at times commitments to creditors are not honored or face some sort of difficulty. Financial distress may cause bankruptcy. In times of financial distress there may be lower capital investment and R&D spending, loss of key employees and suppliers find new clients etc. Bradley et al., (1984) suggested the standard deviation of operating income before interest, taxes as a measure of business risk. Lenders consider firm's future earnings as measure of protection (Bradley 1984). If there is an increase in volatility, it decreases the ability of borrowing as lender will avoid lending to such firms. Gonenc (2005) in his study on Turkish, UK and German firms observed that firms having less variability

in profits have more debt financing due to low risk of bankruptcy and higher liquidity. Ghosh (2006) in his study on Bank debt concentration argued that proxy for default risk and firm's health were sales and profit. Firms with higher expected sales and profit were less likely to face default risk (Ghosh 2006). Dinis (2003) found borrower's credit quality as key determinant of debt as a source of financing. This study used standard deviation of previous three years as proxy for business risk because volatility in earnings before interest and taxes provides an insight to the lenders for recovery of their loan. In Pakistan, banks use last five years average profit as a measure of risk which is not an appropriate measure, average profitability may be predicted but the chances of default during the tenure cannot be predicted.

Business Risk= Standard of last three years.

### **2.2.5 Information Asymmetry**

Asymmetric information affects the choice between internal and external financing and using debt and equity securities, this leads to pecking order of financing. In case of Pakistan, managers/ executive directors have more reliance on bank loan. They have expertise in generating finance from the banks but have no experience in generating finance from capital market. Investment banks provide these services to the firms when desired. This may be one of the reasons of more reliance on banking sector and less on capital market. Where managers have professional skills to generate finance from market, they succeed in getting finance from the capital market at low cost. They focus the market activities and try to increase the shareholders wealth.

Theoretically a more traded stock is expected to be characterized by lower level of information asymmetries as it is more exposed to the investors in the market. Hargis (1997) showed increased trading volume as information symmetry. Ghaddar (2003) used proxy for information asymmetry as the number of days a stock traded on the stock exchange as a percentage of total trading days in a year. The higher percentage was interpreted as lower information asymmetry.

### **2.2.6 Managerial Ownership**

It is argued in the literature that if managers have no ownership stake in the firm, they indulge in activities that increase their benefits, incentives as high perquisites. Grossman and Hart (1980) argued that debt financing can serve as internal control mechanism to reduce agency cost. Managers are bound to pay cash in debt servicing and their discretion in cash utilization is minimized. Jensen and Meckling (1976) argued that agency cost can be reduced if managers are engaged in share ownership. However, after a certain point where the control shifts to the managerial ownership, entrenchment occurs. At high level of ownership stake, self interest involves in, hence, in order to reduce risk exposure, debt is reduced comparatively. Gonenc (2005) observed that agency cost of debt also affect financing. If there is concentrated ownership it will reduce the agency cost of debt hence these firms will have high level of debt. The lenders offer more debt as they have a strong monitoring system through managerial control.

### **2.3 Capital budgeting**

According to Mintz, *et. al.* (1993) capital budgets in governments have multiple objectives – as instruments of compensatory fiscal policy, as windows on the net worth of public bodies, and as vehicles of development, particularly in the area of economic infrastructure through greater reliance on debt than on the conventional sources of financing. Governments in the past have introduced them to serve these objectives, singly or collectively, depending on the context. In some cases, more attention was paid to capital budgets as a way of reducing deficits on the current account. Notwithstanding the seeming virtues of capital budgets, opinions continue to be divided, as they have been during the last seven decades, about their utility in governments.

In the present context, where several industrial countries are having budgetary surpluses and are using them to reduce levels of public debt, there is little incentive to revive the debate about the need for capital budgets. Elsewhere, in the developing world, however, where many governments continue to live on the edge of financial instability, there is a continuing debate about capital budgets and their equivalents. Experience shows that in the absence of properly organized capital budgets, there had been a proliferation of borrowing avenues, or resort to

borrowing without due consideration of the sustainability aspects (or intergenerational equity), an inadequate maintenance of assets and an overall poor management and performance of major projects (Mintz, *et. al.* 1993).

Moreover, for the countries that continue to depend on debt finance as a major instrument of budgetary resources, the issue arises whether capital budgets promote an improved process of decision making and an overall management culture that permits continuing attention to the government's net worth. For both these reasons, there are more debate on whether capital budgets provide an improved framework for resource allocation, utilization and resource use accounting and whether they contribute to a restraint in the growth of expenditure, or whether they prove to be too soft a constraint in the management of debt financed outlays (Mintz, *et. al.* 1993).

#### **2.4 Components of financial viability**

The five key financial viability areas (profitability, liquidity, solvency, efficiency and risk) can be evaluated considering the data from financial statements. Under each of these five categories of analysis four different ratios are calculated and analyzed.

**Profitability Analysis-** In the present study the profitability of any petroleum company is tested with four profitability ratios. These are I) Net worth ratio (Net Profit after Tax to Total Shareholders' funds), II) Return on Capital Employed (Net Profit after Tax to Total Assets), III) Profit Margin (Net Profit to Total Income) and IV) Net Interest Margin (Interest margin to Total Assets).

**Liquidity Analysis-** The liquidity of DCCBs is tested with four liquidity ratios. These are I) Cash-Assets ratio (Cash plus bank balance to Total Assets), II) Cash-Deposit ratio (Cash to Total Deposit), III) Cash-Demand ratio (Cash to Demand Deposit) and IV) Working funds to Assets ratio (Net Working Capital to Total Assets).

**Solvency Analysis-** The solvency is tested with four solvency ratios. These are I) Debt-Equity Ratio (Outsiders funds to shareholders funds), II) Capital Gearing Ratio (Owner's funds to Total



fixed interest bearing liabilities), III) Outside Liabilities to Total Assets (Total Borrowings to Total Assets), IV) Fixed Assets to Total Net worth ratio (Fixed Assets to Total Capital).

**Efficiency Analysis-** To measure the efficiency of DCCBs four ratios are calculated, viz. I) Operating Efficiency (Total Operating Expenses to Total Assets), II) Cost of funds (Total Interest Expenses to Total Borrowings), III) Income productivity per employee (Net Income after tax to Total Employees) and IV) Overhead Efficiency (Burden) ratio (Non-Interest Income to Non- Interest Expenses)

**Risk Analysis-** Four key ratios are applied to test risk level in DCCBs, these are- I) Equity Ratio (Total Equity to Total Assets), II) NNPA to Sales (Net Non Performing Assets to Total Advances), III) GNPA to Sales (Gross Non Performing Assets to Total Advances) and IV) GNPA to Asset Ratio (Gross Non Performing Assets to Total Assets).

## **2.5 Measures of Financial Viability**

A financial performance report is used to assess the viability of providers. The report reviews provider performance over a six year period for Classes 1 and 2 and a four year period for Classes 3 and 4 using a comprehensive suite of performance measures. Linked with the business plan, the report is a powerful tool for the assessment of provider performance and the impact of future decisions on provider viability. The Registrar's expectations of providers will vary, and will depend on a number of factors, including: whether the provider is registered as a Class 1, 2, 3 or 4 provider; the risks that impact on the provider; whether the provider has a major development or growth program relative to its; size and experience; and the range of activities undertaken by the provider. The majority of work undertaken to assess provider financial viability is desk based via the review of documents submitted to the Registrar. The nature of the review is determined by the risk assessment of each provider. A provider's most recent financial performance report will be regularly reviewed.

### **2.5.1 Assessing profitability and cash flow**

Longer term financial viability concerns the ability of a provider to meet future financial obligations as they fall due. The ultimate financial basis of viability is adequate profitability and cash generation cover the asset cycle together with the management of long term debt. Although registered providers may be 'not for profit' entities, the profitability of a provider is important from a number of perspectives, including: providing a 'buffer' against future adverse circumstances; allowing for the long term replacement/refurbishment of housing stock; funding growth (where applicable). Each provider's profitability is affected by its environment, condition of housing stock, growth projections and client requirements (Lipe and Salterio, 2000). Given the potential for significant discrepancies between accounting profit and cash flows, a provider's cash flow is also assessed.

The analysis of cash flows is likely to provide indicators subject to greater volatility due to the impact of capital expenditure and movements in working capital. Consequently, analysis is focused on trends and average movement over a number of periods. Trends are also reviewed before and after the removal of capital grants and non-recurring items. In analyzing profitability and cash flows, the focus is on: Sustainability – the extent to which historical cash flows and profits are sustainable, and not reliant on non-recurring items or capital grants; Growth – where applicable, the potential for growth and also the impact of growth on profitability and surpluses; Stability – the extent to which cash flows and profits provide a stable base for growth and debt service. The assessment of profitability and cash flow ensures a provider's operations offer sufficient resources to enable growth where applicable, replacement of assets as required and protection against adverse situations (Lipe and Salterio, 2000).

## 2.6 Empirical review

Conventional internal performance evaluation is based on current financial measures, which are reliable, comparable and well accepted. They are also backward looking. Management and boards of directors need to be able to identify those processes and activities that are likely to generate value over the long term. Attention to historic financial data is not enough. Sustainable shareholder value is driven by non-financial factors such as customer loyalty, employee satisfaction, internal processes and the organization's innovation.

The balanced scorecard (Kaplan and Norton, 2000) is a widely accepted system of integrating financial and non-financial measures to monitor critical activities in value creation. Briefly summarized, balanced scorecards tell you the knowledge, skills, and systems that employees will need (their learning and growth) to innovate and build the right strategic capabilities and efficiencies (the internal processes) that deliver specific value to the market (the customers), which will eventually lead to higher shareholder value (the financials) (Kaplan and Norton, 2000). For some, the costs of implementing and tailoring diverse indicators outweigh improvements in managerial decisions (Lipe and Salterio, 2000). It may be more prudent to focus on selective measures – those characteristic of the business unit's strategy, the industry in which it operates or the stage of its business cycle (Lipe and Salterio, 2000). Kaplan and Norton (2000) have drawn on the balanced scorecard to develop strategy maps to demonstrate the cause-and-effect links by which specific improvements create desired outcomes. Experimentation continues in the search for leading indicators that are relevant to operational activities, open to reliable measurement and easily understood by boards of directors.

Externally, much of the focus has been on predicting share value. In the new economy, financial reports are of limited use in predicting shareholder value. The limitations of the accounting model are even more pronounced for companies characterized by intangible assets such as patents, innovation, intellectual capital and relationships. SEC Chairman, Arthur Levitt (1999) notes, "As intangible assets continue to grow in both size and scope, more and more people are questioning whether the true value – and the drivers of that value – is being reflected in a timely

manner in publicly available disclosure.” An improved and standardized system of disclosure would help bring users and suppliers of capital together in a cost-effective way, thereby reducing the cost of capital.

## **2.7 Factors Affecting financial viability of petroleum companies**

For a given price of a petroleum product on the world market, a number of factors affect end-user prices net of tax. Some are under the control of the government to varying degrees; others are outside the control of the government and, in some situations, outside the control of any actor in the country.

### **2.7.1 Efficiency**

Productive efficiency is normally defined as maximizing the output associated with any given level of inputs. Measuring productivity in the oil industry, compared to a typical manufacturing industry, is difficult because geological factors enter into the process on the input side and may not be controllable by management in the normal sense. However, comparative econometric productivity studies within the oil industry do exist. Eller, Hartley, and Medlock (EHM) developed a series of empirical models to estimate the behavior of international private, as well as national, oil companies with respect to their relative efficiency.

### **2.7.2 The working capital**

The working capital meets the short-term financial requirements of a business enterprise. It is a trading capital, not retained in the business in a particular form for longer than a year. The money invested in it changes form and substance during the normal course of business operations. The need for maintaining an adequate working capital can hardly be questioned. Just as circulation of blood is very necessary in the human body to maintain life, the flow of funds is very necessary to maintain business. If it becomes weak, the business can hardly prosper and survive. Working capital starvation is generally credited as a major cause if not the major cause of small business failure in many developed and developing countries (Rafuse, 1996).

The success of a firm depends ultimately, on its ability to generate cash receipts in excess of disbursements. The cash flow problems of many small businesses are exacerbated by poor financial management and in particular the lack of planning cash requirements (Jarvis et al, 1996). While the performance levels of small businesses have traditionally been attributed to general managerial factors such as manufacturing, marketing and operations, working capital management may have a consequent impact on small business survival and growth (Kargar and Blumenthal, 1994). The management of working capital is important to the financial health of businesses of all sizes. The amounts invested in working capital are often high in proportion to the total assets employed and so it is vital that these amounts are used in an efficient and effective way. However, there is evidence that small businesses are not very good at managing their working capital. Given that many small businesses suffer from under capitalization, the importance of exerting tight control over working capital investment is difficult to overstate.

Because of the demands of the government and national treasuries, national oil companies may have a shorter time horizon for operational decisions than the international oil companies. The national oil companies may have an undue focus on earning current revenues and maximizing current production. This could result in mis-management of existing fields, which allows a smaller recovery percentage than theoretically possible, and a neglect of exploration and development. In the longer term, damage to the world oil market could be enhanced by the dominant position the national oil companies have in terms of potential reserve access. For consumers, the national oil companies' focus on current production may work to keep the world price of oil relatively lower in the near term. However, if the national oil companies ignore investment in exploration and development, it could mean higher oil prices in the future. Some estimates of the needs for oil industry investment total \$16 trillion over 30 years. (International Energy Agency, 2003) If the national oil companies do not undertake investment on this scale, and if they and their governments exclude the international oil companies from developing reserves in their countries, the world oil market could be supply-constrained in the future, and prices might be higher than if higher investment took place.

## **2.8 Financial Viability and Profitability**

The financial structure of a chosen farm can be analyzed by entering the financial information regarding those farms into a computer program. Financial information is derived from the balance sheets, income statements, and cash flow statements. Computer program generates the financial ratios of the farm based on the information from the financial statements. These financial ratios are the measures used to evaluate the financial structure of the farm (Clark and Johnson, 1996). The simulation method used in determining the effect of financial viability on profitability is called Farm Level Income and Policy Simulation Model (FLIPSIM). Input for FLIPSIM includes the financial, production, farm program history, and enterprise budget information for each case study farm, as well as projected market prices and market price variability (Kent & Phillip, 1996).

The model consists of a complex set of generally accepted accounting equations to keep track of the annual production and marketing activities for each crop produced on a farm (Kent & Phillip, 1996). The program calculates variable expenses such as the production, harvesting, and marketing costs for each crop based on acres planted and harvested, crop yield, and inflation rates. Fixed cash costs are computed based on their initial values, then adjusted for inflation. Cash receipts for sales are adjusted for share rental arrangements and then added to the operator's share of deficiency payments to calculate total receipts. The annual financial activities for a firm are simulated using standard financial equations to amortize simple interest loans. Net cash firm income is obtained by subtracting all cash expenses from all cash receipts. Firm machinery is updated annually by calculating each item's depreciation and replacing items that have outlived their specified economic life. The firm's ending cash balance for each year is obtained by subtracting principal payments, family living withdrawals, income taxes, and self-employment taxes from net cash farm income and the beginning cash balance. The year end cash balance is added to the updated value of land and machinery to calculate the firm's total assets (Kent & Phillip, 1996).

The updated liabilities for the firm are calculated after making the annual payments for land and machinery loan payments. If the firm experienced a cash flow deficit, long-term liabilities are increased to refinance the deficit. The annual planning horizon is simulated recursively so that the ending financial situation for year one is the beginning situation for the next year (Richardson, Smith and Gray, 1995). The simulation model generates information relating to the viability of the firms at the end of a ten year period, such as the probability of survival, ending leverage ratio, ending net worth, ending firm size, total assets, total debt, net present value of the farm, whether the firm remained solvent based on its financial ratios, and an increasing variability of cotton prices (Haynes, 1996).

The FLIPSIM model generated six different measures of financial viability and profitability. These six variables are used in analyzing the farms (Kent & Phillip, 1996). They include: the probability of survival is defined as the probability that a firm will remain solvent over the ten-year horizon. It is more specifically defined as the probability that the equity to assets ratio remains greater than 0.25 over the ten-year period; the probability of decreasing real equity is the probability of the firm decreasing in equity over the ten-year horizon, after adjusting for inflation; average annual net firm income is defined as net cash farm income minus depreciation. Net cash farm income is defined as gross receipts minus all cash production cost, including interest. Net cash farm income is used to pay family living expenses, principal payments, income taxes, and machinery replacement costs; average annual cash costs to receipts ratio is defined as the ratio of cash costs to cash receipts; return to assets is defined as net income divided by average total assets; and return to equity is defined as net income divided by average total equity.

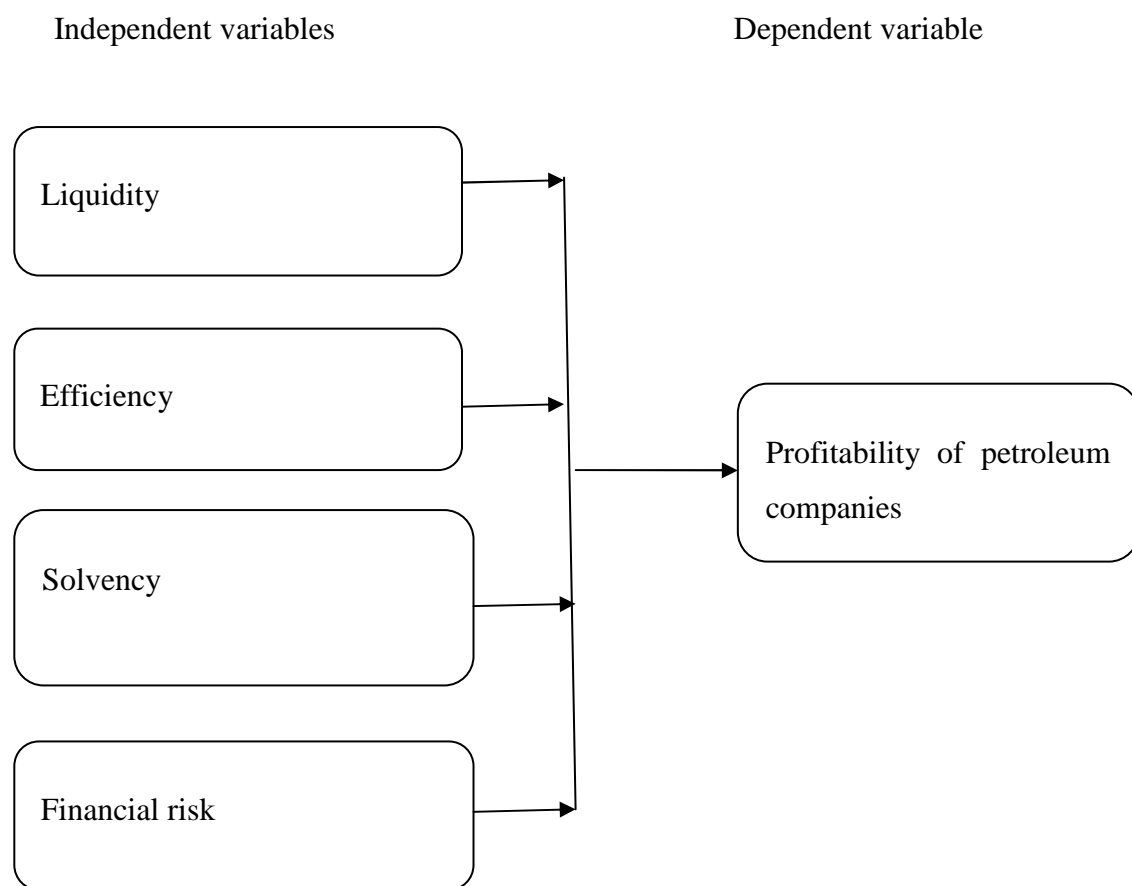
## **2.8 Summary**

The chapter has presented literature review on financial viability as tool to securing financial performance. The reviewed literature covered financial viability and performance, financial viability and factors affecting it, capital budgeting, components of financial viability, measures of financial viability and empirical review which covered factors affecting financial viability of

petroleum companies. The financial viability of an organization is integral to the financial performance, majorly profitability of an organization.

## 2.9 Conceptual frame work

This study is motivated by the need to establish the relationship between financial viability and profitability of the petroleum companies. The financial viability indicators are majorly four, which are the independent variables in the study and include efficiency, liquidity, solvency and financial risks. The dependent variable is profitability of the petroleum companies.



Source: Author, 2011



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 The research design**

Research design refers to the way a study is planned and conducted, the procedures and techniques employed to answer the research problem or question. Accordingly, a research design entails choosing the subjects who participate in the study, the techniques and approaches for collecting data from the subjects, and the procedures for collecting the information. UNCRD (2004) argues that the main objective of a research design is to enhance validity of research findings by controlling potential sources of bias that may distort findings. In designing one, therefore researchers are normally guided by such key issues like the type of data being collected, method of data collection and purpose of the study, the research environment and time dimension. To achieve the objectives of this study the research adopted a survey design. This is because it seeks to capture information on a nationwide phenomenon.

### **3.2 Population**

In research, population refers the entire group of people, events or things of interest that a researcher wishes to investigate. The target population refers to the complete group of specific population elements relevant to the research project. The target population for this study population is the major petroleum companies in Kenya.

### **3.3 Sampling**

This study used purposive method of sampling. This is because the study used data from specific respondents. The study targeted 30 petroleum companies. The questionnaire was administered to the senior financial officers from each petroleum company.

### **3.4 Data collection**

This study used the primary data. Primary data refers to data collected directly by the researcher through direct observation, interviews, and questionnaires for the purpose of the study. This study used questionnaires to collect the primary data. They included semi-structured and

unstructured (open-ended) questions and administered through drop and pick later method to respondents. The structured questions were used in an effort to conserve time and money as well as to facilitate easier analysis as they are in immediate usable form.

The unstructured questions were used to encourage the respondents to give an in-depth response without feeling held back in revealing any information. With unstructured questions, a respondent's response may give an insight to his feelings, background, hidden motivation, interests and decisions and give as much information as possible without holding back. At the same time, with the use of structured questions, if the researcher is after information that he finds easier for administration purposes, he would use this method since the questionnaires and interviews are followed by alternative answers. According to Mugenda (2003) the pre-requisite to questionnaire design is definition of the problem and the specific study objectives.

### **3.5 Data analysis**

Data analysis was done to ensure that the data used was adequately reflective, accurate and reliable for conclusion and realization of the research objective of this study. This study utilized the mean, standard deviation, frequency, percentages to analyze descriptive data. The analysis was be done by the help of a Statistical package for social sciences (SPSS) version 17. The researcher used statistics such as mean, standard deviation, frequencies and percentages.

## CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

### 4.1 Demographic information

The study targeted 30 petroleum companies in Kenya. Out of those companies 23 responded. The study needed to gather the demographic data so as evaluate their competence and reliability of the information obtained pertaining to the phenomenon of this research project. The participants were the financial managers from each petroleum company. The majority of them were male (69.6%) as compared to female (30.4 %%).

**Table 4. 1: Gender**

| Gender | Frequency | Cumulative Percent |
|--------|-----------|--------------------|
| male   | 16        | 69.6               |
| female | 7         | 100.0              |
| Total  | 23        |                    |

Source: Research Data

Most of the respondents indicated that they had worked in their respective petroleum company in a period between 1-5 years 69.6%. A lower percentage of them had worked for less than one year 21.7% but very few had worked for more than five years 8.7%.

**Table 4. 2: Job Experience**

| Job experience   | Frequency | Cumulative Percent |
|------------------|-----------|--------------------|
| less than 1 year | 5         | 21.7               |
| 1-5 years        | 16        | 91.3               |
| 5-10 years       | 2         | 100.0              |
| Total            | 23        |                    |

Source: Research Data

Most of the respondents were aged between 25-34 years old (77.3%) as it is tabulated in the table below. The minority were aged between 35-44 and 55-64 and followed by the least aged between 45-54 years old (see the table below).

**Table 4. 3: Age of the Respondents**

| <b>Age Bracket</b> | <b>Frequency</b> | <b>Cumulative Percent</b> |
|--------------------|------------------|---------------------------|
| 25-34              | 17               | 77.3                      |
| 35-44              | 2                | 86.4                      |
| 45-54              | 1                | 90.9                      |
| 55-64              | 2                | 100.0                     |
| Total              | 22               |                           |
| <b>Total</b>       | <b>23</b>        |                           |

Source: Research Data

The educational level of the participant in this study was varied. Majority were degree holders 43.5% while the rest had only attained master level 34.8% and diploma levels 17.4%. Only a small percentage of the respondents indicated other qualifications 4.3%.

**Table 4. 4: Educational Qualifications of the respondents**

| <b>Education Level</b> | <b>Frequency</b> | <b>Cumulative Percent</b> |
|------------------------|------------------|---------------------------|
| diploma                | 4                | 17.4                      |
| degree                 | 10               | 60.9                      |
| masters                | 8                | 95.7                      |
| others                 | 1                | 100.0                     |
| <b>Total</b>           | <b>23</b>        |                           |

Source: Research Data

## 4.2 Financial viability

According to the Registrar of Community Housing (2009) Financial viability means being able to generate sufficient income to meet operating payments, debt commitments and, where applicable, to allow growth while maintaining service levels. All the respondents (100%) in this study agreed with this fact and also pointed out that their respective petroleum company had strategic plans that support this factor in their normal businesses (M=3.8261, SD=0.38755). 82.6% of the companies had their strategic plans that support financial viability in a higher scale but the rest 17.6% indicated that their companies had supported financial viability at a moderate scale.

## 4.3 Financial performance of the petroleum companies of Kenya in the last 5 years

The study found that the financial performance of most of the petroleum companies in the last 5 years has been very consistent. The respondents were asked about this issue and the general comment was that their financial performance was fair 60.9% (M=2.6957, SD=0.5588). 34.8% had poor performance but only 4.3% of them had a good financial performance as analysed for the past five years of business (see the table shown below). A number of factors and constraints given in the sections below would help to explain the causes of this experience in financial performance.

**Table 4. 5: Financial performance of the petroleum companies of Kenya in the last 5 years**

| Financial performance | Frequency | Percent      | Cumulative Percent |
|-----------------------|-----------|--------------|--------------------|
| poor                  | 8         | 34.8         | 34.8               |
| fair                  | 14        | 60.9         | 95.7               |
| good                  | 1         | 4.3          | 100.0              |
| <b>Total</b>          | <b>23</b> | <b>100.0</b> |                    |

Source: Research Data

### 4.3.1 Causes of Distinct Financial Performances in Petroleum Companies

The study sought to gather the information on financial viability by evaluating the financial performance of the Petroleum Companies in Kenya. The respondents were asked to comment on the distinct financial performance among the petroleum companies and their responses were as tabulated below. The respondents were provided with a number of possible causes of varied financial performance level which whereby their scale of agreement was rated in a likert scale of 1-5. The mean and standard deviations of the comments were computed and the results shown in the table below.

**Table 4. 6: Causes of Distinct Financial Performance of petroleum companies**

| <b>Causes of Distinct Financial Performance</b>                            | <b>Mean</b> | <b>S. Deviation</b> |
|--|-------------|---------------------|
| There has been a lot of efficiency   | 3.7826      | 0.99802             |
| The working capital has been adequately maintained                         | 3.5652      | 1.12112             |
| The company has received government incentives                             | 2.1304      | 0.9197              |
| Cash requirement has been minimal  | 2.7619      | 0.62488             |
| The management is run by qualified professional                            | 4.2609      | 0.86431             |
| Chances of bankruptcy have been minimal                                    | 4.2174      | 1.34693             |
| The net profits have been increasing consistently                          | 4.087       | 0.90015             |
| A large number of managerial personnel are driven by company's objectives. | 4.2609      | 0.96377             |
| Reduced cases of corruption and mismanagement of funds.                    | 4.0435      | 1.14726             |
| Inferior information systems/ technological constraints                    | 3.2174      | 0.79524             |
| Foreign exchange rate fluctuations   | 4.0435      | 1.18622             |
| High financing costs/Excess loans  | 3.8696      | 1.09977             |
| Above/below optimal stock levels   | 3.7391      | 1.09617             |
| Fluctuations in world crude prices   | 4.5217      | 0.59311             |
| Reduced business risk  | 3.2609      | 1.00983             |
| Limited Size/number of company assets                                      | 3           | 1.12815             |

|                                       |        |         |
|---------------------------------------|--------|---------|
| Ineffective organizational plan       | 3.2174 | 1.24157 |
| Increased competition in the industry | 4.087  | 1.20276 |
| High insurance cover                  | 3.6957 | 1.06322 |

Source: Research Data

The findings shows that most of the respondents agreed on the efficiency of the petroleum companies evidenced with mean and standard deviation (M=3.7826, SD=0.99802). The working capital has been adequately maintained (M=3.5652, SD=1.12112) and most of the respondents strongly disagreed that the companies have received government incentives (M=2.1304, SD=0.9197). Findings show that respondents disagreed the cash requirement were minimal (M=2.7619, SD=0.62488). it was strongly agreed that the management was run by qualified professional (M=4.2609, SD=0.86431), chances of bankruptcy were minimal (M=4.2174, SD=1.34693); The net profits have been increasing consistently (M=4.087, SD=0.90015); A large number of managerial personnel are driven by company's objectives (M=4.2609, SD=0.96377); reduced cases of corruption and mismanagement of funds (M=4.0435, SD=1.14726); it was disagreed that there have been inferior information systems/ technological constraints (M=3.2174, SD=0.79524). Minimum foreign exchange rate fluctuations (M=4.0435, SD=1.18622); High financing costs/Excess loans (M=3.8696, SD=1.09977); strongly agree on fluctuations in world crude prices (M=4.5217, SD=0.59311); disagreed on reduced business risk (M=3.2609, SD=1.00983); disagreed that there was limited Size/number of company assets (M=3, SD=1.12815); disagreed that most of the petroleum companies had ineffective organizational plan (M=3.2174, SD=1.24157). Increased competition in the industry was noticed by most of the respondents (M=4.087, SD=1.20276) but insurance cover were relatively high (M=3.6957, SD=1.06322).

According to the respondents, the general views on other additional causes of varied financial performance in petroleum companies included; the Government controls; re-introduction of price control regime and price ceiling; poor road and pipeline network thus high transportation costs; transit goods insecurity; volatility of exchange rate in the past year; KPRLS low processing

capacity and inefficiency; withdrawal of the private imports by the government; heavy duty imposed by the KRA; competition from the multinationals; demand for other sources of energy; political instability both within the country and neighbouring countries; and the dynamic nature of the market trends.

#### **4.4 Operational constraints in Petroleum companies in Kenya**

The study found that the fact about the operational constraints in petroleum companies in Kenya is common. All the respondents (100%) accepted that their respective companies face the operational constraints in their businesses.

The researcher sought to know the effects of the common operational constraints in the financial viability of petroleum companies. The mean and standard deviations of the views from the respondents which were rated in a scale of 1-5 were computed. This helped to determine the level of effect of the sample operational constraints in the financial viability from different petroleum companies. This also helped to establish the most operational constraint which are experienced by many companies. The results are as shown in the table below.

**Table 4. 7: Operational Constraints**

| <b>Operational Constraints</b>                            | <b>Mean</b> | <b>S. Deviation</b> |
|---|-------------|---------------------|
| Infrastructural/ pipeline system constraints              | 4.3043      | 0.92612             |
| Storage capacity constraints/ hospitality agreements      | 4.3478      | 0.93462             |
| Long refining/replenishment lead time                     | 4.0435      | 0.92826             |
| Supply chain rigidity towards changing lead times         | 4           | 0.90453             |
| Short-range supply planning leading to stock outs         | 3.5217      | 1.03877             |
| Improper supply chain management leading to wastage       | 3.5652      | 0.89575             |
| Inadequate strategic collaboration amongst OMCs           | 4.0435      | 1.02151             |
| Focus on local market rather than global market           | 3.7391      | 1.00983             |
| Focus on cost rather than differentiation in supply chain | 3.8696      | 1.01374             |
| Product quality challenges due to improper handling       | 3.2609      | 1.00983             |



|  |        |         |
|--|--------|---------|
| Centralization of supply chain activities              | 3.4348 | 0.89575 |
| Government legal & regulatory requirements             | 4.2609 | 1.13688 |
| Delayed arrival of vessels (long routes due to piracy) | 4.2174 | 1.1264  |
| Inadequate financial & human resources                 | 3.7391 | 1.00983 |
| Tendering system's tendency to favor bigger companies  | 3.6957 | 1.14554 |

Source: Research Data

The findings tabulated above show that the petroleum companies faced infrastructural/ pipeline system constraints (M=4.3043, SD=0.92612); storage capacity constraints/ hospitality agreements (M=4.3478, SD=0.93462); long refining/replenishment lead time (M=4.0435, SD=0.92826); supply chain rigidity towards changing lead times (M=4, SD=0.90453); short-range supply planning leading to stock outs (M=3.5217, SD=1.03877); improper supply chain management leading to wastage (M=3.5652, SD=0.89575); inadequate strategic collaboration amongst OMCs (M=4.0435, SD=1.02151); focus on local market rather than global market (M=3.7391, SD=1.00983); focus on cost rather than differentiation in supply chain (M=3.8696, SD=1.01374); product quality challenges due to improper handling (M=3.2609, SD=1.00983); centralization of supply chain activities (M=3.4348, SD=0.89575); government legal & regulatory requirements (M=4.2609, SD=1.13688); delayed arrival of vessels (long routes due to piracy) (M=4.2174, SD=1.1264); inadequate financial & human resources (M=3.7391, SD=1.00983) and tendering system's tendency to favour bigger companies (M=3.6957, SD=1.14554).

The respondents were asked to give any additional view on the constraints that petroleum companies have experience during their operations. Their views were concluded that most of the companies experienced the high cost of crude made worse by depreciating Kenyan shilling; corruption within government agencies; unreliable refinery (KPRL); slow implementation of infrastructural enhancement projects e.g. KPC's line 4, AGOL's LGP import/storage facility at Mombasa; pumping capacity by KPC was low to satisfy current petroleum demand; busy port

delayed the discharging process; the fight and rivalry among industry players was also a constraint; the fear of new entrants; unexpected rule and legal notice from KRA and other government bodies; and poor implementation of strategies by most of the petroleum management.

#### **4.4.1 Organizational issues that affect performance of petroleum companies**

The research needed to acquire information on the extent of how issues related to management, technology, socio-economic, cultural, ownership and government policies affect financial viability hence profitability of the petroleum companies in Kenya. Their extent their effect was rated in a likert scale of 1-5 whereby 1 shows no extent at all, 2 for little extent, 3 for moderate extent, 4 for great extent and 5 stands for very great extent. The mean and standard deviations were computed and the results are as shown in the table below.

**Table 4. 8: Organizational issues that affect performance of petroleum companies**

| <b>Organizational issues</b>               | <b>Mean</b> | <b>S. Deviation</b> |
|--|-------------|---------------------|
| Managerial Services                        | 2.6522      | 1.07063             |
| Social                                     | 2.3913      | 1.3052              |
| Financial                                  | 3.4783      | 1.16266             |
| Cultural                                   | 2.3043      | 1.25896             |
| Ownership                                  | 2.6957      | 1.25896             |
| Technological                              | 2.8261      | 1.15413             |
| Government legal & regulatory requirements | 4.2174      | 1.04257             |

Source: Research Data

#### **4.5 Factors that support financial viability**

There are different factors which support financial viability of a company for instance, increased liquidity, efficiency, reduced financial risks, increased solvency, reliable management and

embracing the new technology. The researcher needed to find out from the respondents on how these factors had supported financial viability and profitability of their respective companies. Their responses rated in a likert scale of 1-5 gave the findings as shown in the table below.

**Table 4. 9: Factors that support financial viability**

|   | Mean   | S. Deviation |
|---|--------|--------------|
| Increased liquidity of company's assets | 3.3478 | 1.0273       |
| Increased efficiency within the company | 3.6818 | 0.83873      |
| Reduced financial risks                 | 3.5909 | 0.85407      |
| Increased solvency                      | 3      | 1.24316      |
| Reliable Managerial ownership           | 3.1818 | 1.18065      |
| Technological embracement               | 2.9545 | 0.89853      |

Source: Research Data

From the table above increased liquidity of company's assets enhanced profitability of the petroleum companies in a moderate extent (M=3.3478, SD=1.0273); increased efficiency within the company led to high profitability in a great extent (M=3.6818, SD=0.83873). Reduced financial risks (M=3.5909, SD=0.85407); Increased solvency (M=3, SD=1.24316); Reliable Managerial ownership(M=3.1818, SD=1.18065) and Technological embracement influenced the companies' profitability (M=2.9545, SD=0.89853).

With regard to the current financial status of the petroleum companies, the study sought to assess whether the current managers were willing to make any improvement measures to support profitability of their respective companies. Majority of the respondents viewed that their companies' financial status was satisfactory 52.2% (M=1.7826, SD=0.67126). The views from 13% of the respondents imply that some of the petroleum companies' financial status is characterized with high profits and excellent performance. 34.8% of the respondents suggested urgent improvement on the financial status of their respective companies.

**Table 4. 10: The current financial status**

| <b>Financial Status</b>               | <b>Frequency</b> | <b>Cumulative Percent</b> |
|---------------------------------------|------------------|---------------------------|
| it is requiring an urgent improvement | 8                | 34.8                      |
| it is satisfactory                    | 12               | 87.0                      |
| it is excellent                       | 3                | 100.0                     |
| <b>Total</b>                          | <b>23</b>        |                           |

Source: Research Data

#### **4.6 Summary of the chapter**

This chapter has presented the results of the study which was analysed according to the information gathered from the respondents. Most of the views from the respondents were analysed according to the computed weight in a likert scale of 1-5. This enabled the researcher to estimate the overall condition of the factors under investigation. Most of the petroleum companies were therefore observed to be having the common factors that affected their financial viability thus profitability. The common constraints in their operations include infrastructural/ pipeline system constraints; storage capacity constraints/ hospitality agreements; long refining/replenishment lead time; supply chain rigidity towards changing lead times; short-range supply planning leading to stock outs; improper supply chain management leading to wastage; inadequate strategic collaboration amongst OMCs; focus on local market rather than global market; focus on cost rather than differentiation in supply chain; and product quality challenges due to improper handling among others. The Government legal & regulatory requirements and financial issues were also deemed to have a great influence in the performance and thus profitability of the companies. Most of the petroleum companies have strategic plans which facilitate the financial viability and thus their profitability though their effectiveness in the performance of the companies has been at low scale.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Summary of the Findings and Conclusions**

This chapter is will give the summary of the findings, conclusions and the recommendations.

#### **5.1.1 Summary of the Findings**

This study commenced with an introduction chapter that described the study concept and gave the background against which this study was being carried out. The first chapter was composed of background of the study, statement of the problem, objective and the importance of the study. The second chapter reviewed related literature on theory and concepts of financial viability. The third chapter laid out how the study was to be carried out. It composed of the research design to be used, description of the study population, data collection and data analysis procedure. The fourth chapter covers data analysis, results and discussion of study findings. Finally, the fifth chapter presents the summary, conclusions and recommendations of the study.

According to the literature given, the aim of an organization in financial management is to establish and maintain financial viability. Financial viability ensures that the organization can continue to implement its Mandate effectively without impairing its capital base. It also enables the firm to move towards self-sufficiency in meeting the growing demand for it operations (Chandra, 2006). Financial viability in the petroleum companies is supported by increased liquidity of company's assets; increased efficiency within the company; reduced financial risks; increased solvency; reliable Managerial ownership and technological embracement. However in this study, financial viability of the petroleum companies is influenced by issues such as Government legal & regulatory requirements and financial issues within the management of the companies. The common constraints in maintaining the profitability in the petroleum companies include the high costs of crude oil which was caused by depreciating Kenyan shilling; corruption within government agencies; unreliable refinery (KPRL); slow implementation of infrastructural enhancement projects e.g. KPC's line 4, AGOL's LGP import/storage facility at Mombasa; pumping capacity by KPC was low to satisfy current petroleum demand; busy port which delay

the discharging process; the fight and rivalry among industry players; the fear of new entrants; unexpected rule and legal notice from KRA and other government bodies; and poor implementation of strategies by most of the petroleum management.

In general the causes of distinct financial performance of the petroleum companies was as a result of the Government controls which for instance re-introduce price control regime and price ceiling; poor road and pipeline network thus high transportation costs; transit goods insecurity; volatility of exchange rate in the past year; KPRLS low processing capacity and inefficiency; withdrawal of the private imports by the government; heavy duty imposed by the KRA; competition from the multinationals; demand for other sources of energy; political instability both within the country and neighbouring countries; and the dynamic nature of the market trends.

### **5.1.2 Conclusion**

The aim of the study was to establish the relationship between financial viability and profitability of petroleum companies in Kenya. The findings of the study show that there are several factors that influence financial viability of the petroleum companies. Their general effects determine the profitability of the companies. Factors that support financial viability are strongly related to the profitability and thus high performance of the company. The constraints that hinder financial viability lower profitability of the company which largely depends on how the company manages the impacts such constraints. The study therefore shows that there is a strong relationship between financial viability and profitability in the petroleum companies. This is a phenomenon that can be applied onto other forms of companies in evaluating their performances.

### **5.2 Recommendations**

The study focused on the petroleum companies in Kenya. It is recommended that an evaluation of the financial performance and factors influencing financial viability and profitability in other sectors should be done. This will bridge the knowledge gap that exists and thus enhance the understanding of the business and performance of companies in other industries. This will help the investors to have informed decisions when making investments in Kenya. Moreover

companies should embrace technology and align it with the company strategic plan to enhance their performance in modern business environment. There is need also to focus on the issues of compliance in regard to taxes. Companies should also review the constraints that hinder better financial performance and put measures consider the environmental conditions that support financial viability and profitability of the company.

### **5.3 Limitations of the Study**

The study encountered some limitations. Some of the respondents seemed unwilling to respond to the questions about the study. However, the researcher was able overcome this limitation by assuring the respondents' of confidentiality on the information provided and the information provided was for academic use only.

The respondents have busy work schedules and this caused them to have insufficient time to respond to the questions. These limitations were overcome by making advance booking and appointments with the respondents.

Some of the respondents could not be accessed without appointments or authorization letters. The researcher used the introductory letter and highly utilized the availability of the respondents whenever contacted.

### **5.4 Suggestions for Further Research**

Further studies can be done on;

- The effect of divestment on profitability and solvency of oil companies
- Applying hedging instruments against FOREX instability

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**APPENDICES**

**Appendix I: Research Questionnaire**

A) Name of the company .....

B) Gender.....

C) Indicate your age as below

25- 34 yrs [ ]      35-44 yrs [ ]      45-54 yrs [ ]      55-64 yrs [ ]

D) Indicate your qualification below

KCSE/O level [ ]    Diploma [ ]    Degree [ ]    Master [ ]    Other [ ]

E) For how long have you been working in this company?

Less than 1year [ ]    1-5 yrs [ ]    5-10 yrs [ ]    More than 10 years [ ]

F) Financial viability means being able to generate sufficient income to meet operating payments, debt commitments and, where applicable, to allow growth while maintaining service levels (**Registrar of Community Housing, 2009**). In your opinion, do you think that your company has strategic plans that support financial viability in the normal business?  
**(Tick where applicable)**

YES [ ]    NO [ ]

**G)** If yes in (F) above, to what scale has the company's strategic plan encouraged financial viability of the company? **Note that 1=Very low scale; 2=Low scale; 3=Moderate scale; 4=High scale and 5=Very high scale**

|                          |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1                        | 2                        | 3                        | 4                        | 5                        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**H)** How has been the financial performance of the company for the last five years?

Excellent     Very Good     Good     Fair     Poor     Very poor

**D)** In your own opinion, why do you feel that the company has been performing as stated in (H) above? **(Tick where applicable)**

**1 = Strongly Agree; 2 = Agree; 3 = Disagree; 4 = Strongly Disagree; 5 = N/A**

|  | 1                        | 2                        | 3                        | 4                        | 5                        |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| There has been a lot of efficiency                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The working capital has been adequately maintained | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The company has received government incentives     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

|  |                          |                          |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Cash requirement has been minimal  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The management is run by qualified professional                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Chances of bankruptcy have been minimal                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The net profits have been increasing consistently                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A large number of managerial personnel are driven by company's objectives. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Reduced cases of corruption and mismanagement of funds.                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Inferior information systems/ technological constraints                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Foreign exchange rate fluctuations   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| High financing costs/Excess loans  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Above/below optimal stock levels   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Fluctuations in world crude prices   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Reduced business risk  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

|                                       |                          |                          |                          |                          |                          |
|---------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Limited Size/number of company assets | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ineffective organizational plan       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Increased competition in the industry | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| High insurance cover                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**J) Other than the list above, what other factors have affected the performance of petroleum companies in Kenya?**

- (i) .....
- (ii) .....
- (iii) .....
- (iv) .....
- (v) .....

**K) Do petroleum companies in Kenya face operational constraints within their business operations?**

YES                       NO

**L) If yes in (K) above, how would you rate the effect of the factors listed below on the financial viability of petroleum companies? (Tick where applicable)**

**1 = Strongly Agree; 2 = Agree; 3 = Disagree; 4 = Strongly Disagree; 5 = N/A**

|   | 1                        | 2                        | 3                        | 4                        | 5                        |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Infrastructural/ pipeline system constraints              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Storage capacity constraints/ hospitality agreements      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Long refining/replenishment lead time                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Supply chain rigidity towards changing lead times         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Short-range supply planning leading to stock outs         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Improper supply chain management leading to wastage       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Inadequate strategic collaboration amongst OMCs           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Focus on local market rather than global market           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Focus on cost rather than differentiation in supply chain | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Product quality challenges due to improper handling       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Centralization of supply chain activities                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Government legal & regulatory requirements                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



|  |                          |                          |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Delayed arrival of vessels (long routes due to piracy) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Inadequate financial & human resources                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Tendering system's tendency to favour bigger companies | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

M) Other than the list in (L) above, what other constraints do petroleum companies face in Kenya?

- (i) .....
- (ii) .....
- (iii) .....
- (iv) .....
- (v) .....

N) Based on (L) above, what kinds of issues mostly affect the normal performance of your company? Kindly indicate with a tick to show the extent of the experienced issues.

**1 = No extent at all; 2 = Little Extent; 3 = Moderate Extent; 4 = Great Extent; 5 = Very Great Extent**

|                     | 1                        | 2                        | 3                        | 4                        | 5                        |
|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Managerial Services | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Social              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

|  |                          |                          |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Financial                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cultural                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ownership                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Technological                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Government legal & regulatory requirements | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**O) To what extent has financial viability led to enhanced profitability of the company in respect to the following? Tick appropriately using a likert scale of 5 where **1 = No extent at all;** **2 = Little Extent;** **3 = Moderate Extent;** **4 = Great Extent;** **5 = Very Great Extent****

|   | 1                        | 2                        | 3                        | 4                        | 5                        |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Increased liquidity of company's assets | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Increased efficiency within the company | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Reduced financial risks                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Increased solvency                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Managerial ownership                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Technological constraints

**P)** What is your comment in regard to the current financial status and profitability of your company?

It urgently requires improvement [ ]

Am satisfied [ ]

It is excellent [ ]

**Q)** Any other suggestions?

.....

.....

.....

.....

.....

.....

*Thank you for your participation!*

## **Appendix II: Petroleum Companies in Nairobi**

1. Kenya Shell Ltd
2. Total Kenya Ltd
3. Galana Oil Kenya Ltd
4. Engen Kenya Limited
5. Kobil Petroleum Limited
6. National Oil Corporation of Kenya
7. Kenya Oil Company Limited
8. Mobil Oil Kenya Limited
9. Hashi Empex Limited
10. Gulf Energy Limited
11. Hass Petroleum Kenya Ltd
12. Dalbit Petroleum Limited
13. Intoil Limited
14. Jade Petroleum Ltd
15. Riva Petroleum Dealers Ltd
16. Libya Oil Kenya Limited
17. Bakri International Energy Co. Ltd
18. Gapco Kenya Limited

19. Global Petroleum Limited
20. Fossil Petroleum Limited
21. Oilcom Kenya Limited
22. Ranway Traders Limited
23. Metro Petroleum Limited
24. MGS International Kenya Limited
25. RIVA Petroleum Dealers Limited
26. Trojan International Kenya Limited
27. Ainushamsi Energy
28. Essar Energy Kenya Limited
29. Olympic Petroleum Limited
30. Addax Kenya Limited

Source: PIEA (2011) Petroleum Institute of East Africa Membership, Available online at:  
<http://www.petroleum.co.ke>