THE EFFECT OF MERGERS AND ACQUISITIONS ON PROFITABILITY OF THE CONSOLIDATED FIRMS IN THE PETROLEUM INDUSTRY IN KENYA

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DECLARATION

I declare that this research project is my own work and it has not been submitted for any degree or examination in any other University.

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This Research Project has been submitted for examination with my approval as the **University Supervisor**

Signed …………………………….. Date………………………
Dr. Mirie Mwangi

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DEDICATION

This research project is dedicated to my parents Yusuf and Maryam for their love and support towards my education and to my wife Naima without whose caring support it would not have been possible.

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ABBREVIATIONS

BV	Book Value
EBITDA	Earnings before Interest, Tax, Depreciation, Amortization
EPS	Earnings per Share
FCF	Free Cash Flow
M&A	Mergers and Acquisitions
MNCs	Multinational Corporations
NSE	Nairobi Securities Exchange
OMCs	Oil Marketing Company
PIEA	Petroleum Institute of East Africa
QR	Quick Ratio
ROCE	Return on Capital Employed

ABSTRACT

A Merger alludes to the blend of at least two firms, in which the subsequent firm keeps up the personality of one of the organizations, generally the bigger. A procurement, otherwise called a takeover or a buyout, is the purchasing of one company (the 'target') by another. The study set out to find the how mergers and acquisition impact on profitability of companies in the oil industry in Kenya. This was by conducting an industry examination of the oil industry in Kenya. The study was limited to publicly listed companies in the Kenyan business environment between the years 2000-2015 that merged/acquired. Data from Annual Reports of the firms comprised: Return on Assets, board size, board independence, board expertise, board diligence, firm age and firm leverage The comparison was on 15 year period comprising of years before merger and after M&A. The year succeeding merger is referred to as post-merger and the one preceding merger is referred to as pre-merger coded as one and zero respectively. The study used Random Effects Regression Model in estimating the relationship. The results revealed that mergers and acquisitions and crisis period have a positive effect on profitability of the consolidated firms in the petroleum industry in Kenya. On the other hand, diversifying deals was found to have a negative effect on profitability of the consolidated firms in the petroleum industry in Kenya. Other determinants were found to have no statistical relationship with profitability of the consolidated firms in the petroleum industry in Kenya

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In today's worldwide surroundings where business is turning out to be increasingly mind boggling, organizations may need to develop to survive; and one of the most ideal approaches to develop is by converging with another organization or getting the other organization (Baneerjee, 2007). Sudarsanam (2003) discovered that the principle motivation behind doing M&A is to build the shareholders' esteem.

As opposed to this Ghosh (2001) demonstrates comes about inconsistent with the view that mergers and acquisitions enhance their execution. An investigation by the Hay Group in 2007 of more than 200 noteworthy European M&As over the first three years found that senior business pioneers trust that exclusive 9 percent were "totally fruitful" in accomplishing their expressed goals. A decent illustration is Daimler-Chrysler's $38 billion merger, where share values dropped by around 40% (Dion et al, 2007).

1.1.1 Mergers and Acquisitions

Wolff (2008) characterized the term merger as the combination of at least two accomplices along these lines making an absolutely new business element or proceeding with the operation of the accomplices 'under the rooftop' of any of them. In any case, procurement shows that one gathering assumes control over the shares, value intrigue or resources of another element. David (1997) clarified a merger as a procedure that happens when two associations of about equivalent size join to frame one venture. In this way, mergers include inviting rebuilding of the benefits and assets for the organizations required in the mix. Lion's shares of mergers are well disposed and are suggested by the chiefs and shareholders of both organizations (Hill and Jones, 2001).

A takeover or an obtaining is characterized as a securing by one organization of the share capital (Pike and Neale, 2002). Slope and Jones (2001) called attention to that a takeover is the point at which the obtaining organization picks up control of another without the co-operation of its current administration. The acquirer gains power of lion's share of the stock and removes the current administration. The getting organization more often than not unites with the key shareholders, or buy stock on open market or by requesting intermediaries. Therefore, as highlighted by Pike and Neale (2002) numerous takeovers are fervently by shareholders and the administration of the elements. Drawing a line between acquisition & takeover is essential. The term ‘takeover’ denotes hostility.

1.1.2 Profitability of Firms

Profitability is measures a firm’s ability to sustain income, stability and growth. The influences of profitability and leverage on firm value have long been critical with regard to financial decision making. The more prominent the gainfulness of a firm, the more assignable benefit there is, and the higher is the estimation of the organization. Gainfulness accordingly affects firm esteem (Li-Ju and Shun-Yu, 2011). Lucey (2000) demonstrated that the budgetary execution of an organization can be communicated as far as wage produced from its operations subsequent to balancing costs when the productivity of the firm is touched base at. Money related Performance indicates how an organization uses its benefits. Firm execution can be measured in various courses and by applying diverse techniques; in any case, a standout amongst the most generally connected strategies eludes to budgetary investigations that utilization gainfulness proportions as key measures of association's general productivity and execution.

Execution proportions ordinarily utilized are: ROA, ROE, ROCE and Earnings per Share (EPS).ROA, ROE and ROCE measures how viably the organization is using its assets to augment benefits while EPS measure how much the financial specialist acquires from every share (Lucey, 2000). Hairdresser and Lyon (1996) recommend utilizing income based execution measures instead of bookkeeping measures for examining unusual working execution, for example, post mergers and acquisitions.

1.1.3 Mergers, Acquisitions and Profitability

Barbara and Kenneth (2013) noticed that associations make acquisitions for a not inconsequential summary of reasons. Some of these reasons are awesome, in that the motivation for the trade is to open up shareholder regard. Shockingly, extraordinary reasons are awful, or potentially flawed. Theoretically, associations should look for after an obtainment just if it makes regard—that is, if the estimation of the acquirer and the goal is more unmistakable in case they fill in as a single substance than as apportioned ones. Put another way, a merger or acquirement is supported if helpful energies are associated with the trade. Cooperative energies can take three structures: working, money related, or administrative. Working Synergies emerge from the mix of the acquirer and target's operations as income improvement or cost diminishment.

Sherman et al (2011) expressed that mergers and acquisitions are a standout amongst the best approaches to quicken the execution of an arrangement to become quickly.

The effect of innovation has expanded the pace of the mergers and acquisitions. At the point when a merger or a securing is reported, a lot of data is uncovered about that specific arrangement and this data can be utilized to assess the response of securities exchange to a merger or an obtaining declaration. Mergers and Acquisitions have made an exceptional rivalry for every one of the organizations. In this period, acquisitions are expanding at a fast pace and are being offered up at a higher rate.

1.1.4 Petroleum Industry in Kenya

Petroleum industry in Kenya is currently dominated by the following major companies: Vivo (Shell) Energy, Total Kenya, Kenol/Kobil, Oil Libya, National Oil Cooperation (NOC) and Mapco. The small players comprise: Tisha, Engen, Dalit, Galena, Trojan, Petro Oil, Fossil, Silcom, Hash Energy, Hass, Smoke and Gulf Oil among others. The major oil companies control about 70% of the market share and own oil infrastructures within the country (PIEA, 2001)

Despite Liberalization in 1994, which resulted in increase in number of independent oil marketing companies in Kenya, the major oil companies have maintained their status through acquisitions and mergers. A market share for Shell rose from 15% to 25% by 2008 after acquiring the Shareholding of BP. Oil Libya acquired Exxon Mobil shareholding in 2007; Total Kenya acquired all the assets of Chevron in Kenya (Kenya Oil Company Limited, 2008). All the mergers and acquisitions among oil marketing companies in Kenya have been undertaken by Multinationals with the exception of Kenya Oil Company Limited (Kenol) which merged with Kobil to form Kenol/Kobil Ltd in 2007.

1.2 Research Problem

Mergers and acquisitions around the world speak to an enormous reallocation of assets, inside and crosswise over nations and along these lines, it has been the enthusiasm of observational studies for a long time. This is a movement that has pulled to specialists' advantage, in back as well as in other related learning zones. Lichtenberg et al (1990) in their exploration of mergers in UK found out that firms earned greatly due to M&A than those that deployed on internal growth measures.

In spite of the expanding prevalence of M&A it was accounted for that more than 66% of huge merger bargains neglected to make esteem for shareholders in the medium term. They for the most part brought about esteem devastation as demonstrated by Weston et al (2004). Kemal (2011) led a study to discover the gainfulness of the regal bank of Scotland 2006-2009 when he figured 20 proportions and presumed that the merger neglected to pull up productivity accordingly ended up being a disappointment.

Multinational oil organizations in Kenya have created through mergers particularly in times of emergency (PIEA, 2001). As indicated by the PIEA (2001) this is as yet incident up and coming and is the thing that has empowered them to pick up control of the business by expanding their capital and a portion of the huge oil organizations from creating nations have likewise needed to consolidate. As indicated by Bhargava (1999), joint ventures amongst multinationals and indigenous private business people are inadequate. Absence of vertical mix will even now remain an obstruction to indigenous oil organizations' development, (Bhargava, 1999); notwithstanding, multinationals are vertically incorporated, as well as expanded into comparative items along their line of operation (Bhargava, 1999).

Most studies on the local scene have focused on the Financial Sector. Research by Marembo (2012), Rose (2012), Koech (2013), and Murieithi (2013) found that post-merger performance improved for the period under study. Ireri (2011) researched sample consisted of oil companies that had experienced merger and acquisition in the oil industry. He concluded that there was an improvement in performance.

However, in his study, he never factored in the industry strength of the companies under study in terms of financial strength and asset mix. It can be noted that most of the local works has focused more on trends, policies and human aspect whereas profitability and financial analysis has not been given due importance. The present study on will attempt to answer the question, “Do M&As enhance profitability for the consolidated firms?”

1.3 Objective of the Study

The objective of the study is to determine the impact of mergers and acquisitions on profitability of the consolidated firms in the petroleum industry.

1.4 Value of the Study

This study will be beneficial to shareholders as it will widen their awareness when it comes to decision on mergers and acquisitions and potential effects by assessing performance of existing mergers. Thus firms that have merged or participated in an acquisition can develop strategies for effective resource allocation for better financial performance.

This study is also of great significance to scholars as it will shed light and provide literature that can be developed further about how a mergers and acquisitions can affect the financial performance of firms. The study will hence form academic data that can be used in learning institutions and research institutions for further research. It will also aid the government in policy making to provide incentive to local entrepreneurs by encouraging them to merge so that they can compete effectively with the MNCs. It will also enable them to put in place the necessary control to regulate against monopolistic behaviors.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter summarizes the information from other researchers who have carried out their research in the same field.

2.2 Theories of Mergers and Acquisitions

Monetary investigators have propelled a couple fighting speculations of M&As. Among them are space building (Baume, 1967), advancing against centered activities, for instance, controlling base control (Mueller, 1993), organization entrenchment (Shleifer and Vishny, 1989), and an overestimation of a chief's ability to improve the execution of a target he or she sees to neglect to meet desires (Roll, 1986). Alternate theory is of is that inefficient plants and firms are accepted control and compelling firms survive (Manne, 1965). Speculations of M&As are not absolutely inconsequential. A firm could, for example, hope to get advertise control and meanwhile be building a domain and trust that it can more capably manage the matter of a firm or plant it has engaged as a potential securing.

Different explanations behind why firms combine have been proposed. The rundown incorporates effectiveness related additions, training target administration, spreading new innovation, and changes in industry structure. While there is a progressing banter about the benefits and insufficiencies of each of the proposed clarifications of mergers, there is by all accounts an agreement on some critical parts of merger movement: mergers happen in waves and, inside every wave; they tend to group by industry. However, why this is the situation remains an open question. Brealey, Myers and Allen (2006) go so far as to propose that why merger waves happen is one of ten most critical uncertain inquiries in corporate fund. A few speculations have been advanced to clarify merger waves. Lambrecht (2004) looks at mergers roused by operational collaborations and predicts professional patterned mergers. In his model, mergers are probably going to happen in times of monetary development.

Maksimovic and Phillips (2001) demonstrate that mergers and resource deals are more probable after positive request stuns, bringing about star repetitive merger and procurement waves in impeccably aggressive ventures. In their paper, higher quality firms purchase bring down quality ones when the minor comes back from adding limit are sufficiently awesome to exceed diminishing comes back to administrative ability. Myers (2006), contentions prompt takeover exchanges happening for the most part in ventures that have encountered negative monetary stuns. Some late papers connect takeover action to securities exchange misevaluation. In Shleifer and Vishny (2003), normal administrators misuse the misevaluation of not as much as objective financial specialists. Rhodes-Kropf, Robinson and Viswanathan (2006) indicate hypothetically and exactly that merger action is associated with high market valuations, making exaggerated bidders make stock offers that will probably be acknowledged by targets.

Above hypotheses can widely be organized into two noteworthy classes; Value expanding speculations and esteem diminishing speculations. As indicated by the regard extending school, mergers occur, thoroughly, in light of the way that mergers make coordinated efforts hence, constructs the estimation of the firm, (Hitt, 2001). Cases of these hypotheses are the Theory of Efficiency, Corporate Control Theory, Enhanced Profitability Theory, Market Power Theory and Risk diversification hypothesis.

Value-Destroying Theories then again advocate that mergers may neglect to make esteem; it is recommended – with some place somewhere around 60% and 80% delegated "disappointments" (Singh, 1999). Cases of these hypotheses incorporate the hubris hypothesis, Theory of administrative attentiveness and the hypothesis of administrative entrenchment.

2.2.1 Theory of Efficiency

This hypothesis recommends that mergers to produce enough feasible collaboration to make the arrangement valuable to both sides, (Trautwein, 1990). It is the symmetric desires of increases which bring about a "cordial" merger sought. In case the pickup (regard) is negative, it is prescribed, the goal organization's proprietors would not offer or submit to the securing, and if the augmentations were negative to the acquiring firm, the bidder would not complete the plan.

Chatterjee (1986) recommends that there is a refinement between 'operator agreeable energies' and 'capability augmentations' expert through economies of scale and degree. The capability grabs amass from working joint efforts which are proficient through the trading of data, economies of scale and economies of degree.

2.2.2 Corporate Control Theory

It proposes that there is constantly another firm or association gather willing to obtain a fail to meet goals firm, to expel those chiefs who have neglect to benefit by the chances to endeavor joint endeavors, and in this way to enhance the execution of its central focuses (Weston, 2004). Administrators who offer the most raised respect to the proprietors, it recommends, will acknowledge control over the advantage to deal with the firm until they themselves are supplanted by another social occasion that finds an on a very basic level higher respect for its focal points.

Couple of bidders, unmistakably, clearly report the objective of amplified market control as an express merger inspiration, yet the way that even mergers – that is, mergers between contenders – charge the M&A business (Gugler, 2003) is no two ways about it typical for exactly how without a doubt comprehended it is as a merger desire. In this way, wasteful boss will supply the 'market for corporate control' (Manne, 1965), and chiefs that don't upgrade benefits won't survive, paying little personality to the probability that the connected with forces on their thing and information markets neglects to do without them. "Debilitating" takeovers ought to, in this way, be seen among inadequately performing firms, and among those whose inside corporate association portions have neglect to train their supervisor (Hasbrouck, 1985).

2.2.3 Market Power Theory

As indicated by the market control hypothesis, M&As can build the piece of the pie of the combined firm. Mergers and Acquisitions might be completed keeping in mind the end goal to accomplish syndication over the market. It is a clarification of flat and combination M&As. Level mergers and acquisitions is a mix of at least two companies in comparative sort of creation, appropriation or zone of business. This builds the market control, secures the strength of a current firm, misuses economies of scale, to broaden through discrete markets and gives distinctive administrations. E.g. General engine utilized this approach as a part of its underlying stage by blending numerous little producers Pandey (2005).

Market influence can be proficient through the think decrease of supply, cross-sponsoring items and discouraging potential market contestants (Trautwein, 1990). These advantages are additionally alluded to as deceitful cooperative energy (Chatterjee, 1986).Monopoly abatements rivalry; firms could build the costs they charge their clients for their items as well as reduction the costs they pay their providers for crude material.

2.2.4 Hubris Theory

The hypothesis of administrative hubris (Roll, 1986) proposes that administrators may have great aims in expanding their company's esteem in any case, being arrogant; they over-gauge their capacities to make cooperative energies. The Hubris hypothesis constitutes a mental based way to deal to clarify Mergers and Acquisitions. It expresses that the administration of getting firms over rates their capacity to assess potential securing targets. This administrative over positive thinking regularly brings about wrong choices which are overrated (Trautwein, 1990). Vainglory develops the likelihood of overpaying (Tate, 2008), and may leave the triumphant bidder in the circumstance of a winner's-reprimand which basically builds the odds of thwarted expectation (Dong, 2006).

Specifically, the hubris theory imparts that when a merger or securing explanation is made, the shareholders of the offering firm get a misfortune to the degree the share cost while those of the objective firm taking all things into account esteem a converse impact. The prime elucidation for this is the time when a firm purports a merger offer to the objective, the share cost of the objective firm increases since shareholders in the objective firm are set up to move partakes in light of the high premium that will be offered by the getting firm (Machiraju, 2010). The risk of potential thwarted expectation, in perspective of exaggerated obtaining cost which in a general sense beats the sensible estimation of the objective affiliation, increases in a closeout. This consider is the introduction of the champ's chide speculation that fights that the estimation of an objective exchanged a closeout is ordinarily lower than the securing regard (Karenfort, 2011).

2.2.5 Theory of Managerial Discretion

Jensen's (1986) speculation of administrative prudence ensures that it is not affectedness that drives insufficient acquisitions, but rather the proximity of wealth liquidity, or free wage (FCF). Firms whose inside resources are in excess of the hypotheses required to hold positive net present regard wanders, it is prescribed, will presumably settle on smart key decisions, and will most likely take an interest in gigantic scale crucial exercises with less examination than their urgent allies. Hoisted measures of liquidity addition authoritative reasonability, making it logically achievable for bosses to lift poor acquisitions when they miss the mark on extraordinary ones (Martynova and Renneboog, 2008). Like the hubris hypothesis, the theory of FCF suggests that generally genial troughs settle on appalling choices, not out of vindictiveness, but rather fundamentally in light of the way that the method for their choices are less attempted than they would be without wealth liquidity.

It is by and large concurred that legitimate self-premium has affect in M&A; examine has shown that bidder returns are, for instance, by and large higher when the official of the expanding firm is a clearing shareholder(Lewellen 1985), and chop down when association is not (Lang , 1991). This proposes heads give careful thought to a securing when they themselves are monetarily concerned. Empower, it strengthens the likelihood of 'office cost' (Marris, 1963), which thoroughly recommend that executives search for after self-serving acquisitions, and it is this reality that prompts regard demolition.

2.2.6 Theory of Managerial Entrenchment

The speculation of regulatory entrenchment (Shleifer and Vishny, 1989), claims that unsuccessful mergers happen in light of the way that chiefs on a very basic level make wanders that minimize the threat of substitution. It suggests that boss look for after endeavors not with a true objective to grow undertaking regard, but instead with a true objective to delve in themselves by extending their individual regard to the firm. Settling in boss will, in like manner, make executive specific ventures that make it all the more costly for shareholders to supplant them, and regard will be diminished in light of the way that free resources are placed assets into chief specific assets rather than in a shareholder regard enhancing elective.

Amihud and Lev (1981) prescribe that managers look for in the wake of expanding mergers remembering the ultimate objective to reduction pay precariousness which, accordingly, overhauls corporate survival and guarantees their positions. Clearly, entrenchment is looked for after for business steadiness itself, and also because delved in boss may have the ability to focus more wealth, impact, reputation and notoriety.

2.3 Determinants of Profitability

Literary works identified with the determinants of gainfulness for various sorts of ventures are bottomless. Notwithstanding, the vast majority of them have created a blended results. For example, Grinyer and McKiernan (1991) looked into the determinants of benefit for 45 UK electrical associations using different backslide examinations. The results exhibit that bit of the general business, capital drive, advancement of offers; working capital and decentralization expect an imperative part in elucidating corporate efficiency. Of course, Bennenbroek and Harris (1995) examined the determinants of efficiency for New Zealand creating industry covering the year 1986-1987. Their revelations reveal that market power and market capability are basic components that effect profit.

On the other hand, Goddard, Tavakoli, and Wilson (2005) examined the determinants of benefit for gathering and organization firms in Belgium, France, Italy and the UK. The results give affirmation of negative relationship between size, the preparing extent and advantage. Curiously, the results show a positive relationship between bit of the general business and profitability.

In like manner, Amir Shah and Sana (2006) attempted the advantage of the oil and gas division in Pakistan. Their disclosures reveal a negative relationship between profitability, time of stock, ordinary social occasion period and arrangements improvement. Chowdhury and Amin (2007) examined the competence of pharmaceutical associations recorded in Dhaka stock exchange. The results gave evidence of working capital approach influences benefit as measured by Return on Assets (ROA).

2.3.1 Working Capital

Firms confront various vital choices in their operations and one of these critical choices concerns the effective administration of liquidity. As indicated by Gupta (2002) working capital administration gives the firm data on the liquidity expected to work productively. Gitman (2005) portrays working capital administration as the direction, change, and control of the adjustment of current resources and current liabilities of a firm with the end goal that developing commitments are met, and the altered resources are legitimately overhauled.

A firm can either receive a forceful working capital administration arrangement or a traditionalist working capital administration approach. As per Nazir and Afza (2008) a forceful Investment Policy is an approach that outcomes in insignificant level of interest in current resources versus settled resources. This has the desire of higher productivity however more noteworthy liquidity chance. As an option, a more traditionalist approach puts a more noteworthy extent of capital in fluid resources, however at the give up of some benefit. To gauge the level of forcefulness the present resource for aggregate resource proportion is utilized, with a lower proportion meaning a generally more forceful strategy.

As indicated by Pandey (2007), aggressive financing strategies use more elevated amounts of typically lower cost transient obligation and less long haul capital. Albeit bringing down capital costs, this expands the danger of a transient liquidity issue. A more moderate strategy utilizes higher cost capital however puts off the primary reimbursement of obligation, or keeps away from it altogether by utilizing value. The aggregate current risk to aggregate resource proportion is utilized to gauge the level of forceful financing approach, with a high proportion being moderately more forceful.

2.3.2 Leverage

There are various observational tackles the relationship among impact and profitability. In any case, the revelations from these studies are mixed. A couple concentrates on found positive associations among impact and profitability while others recognized a negative relationship. A study by Abor (2005) reported an on an extremely fundamental level positive relationship between aggregate duty and aggregate resources and preferred standpoint measured as advantage for regard.

In like manner, Chandrakumarmangalam and Govindasamy (2010) found that effect is emphatically identified with benefit and shareholders riches are helped when firms can utilize more responsibilities. As opposed to the above view, a couple looks at have discovered negative relationship among effect and preferred standpoint (Negash, 2001; Phillips and Sipahioglu, 2004; Myers, 2001).

2.3.3 Firm Size

By far most of the studies measuring the impact of firm size on effectiveness have discovered results with positive bearing between firm size and preferred standpoint. According to this, a positive relationship between firm size and preferred standpoint was found by Vijayakumar and Tamizhselvan (2010).The investigators utilized unmistakable measures of size (courses of action and aggregate resources) and productivity (net pay and favorable position on aggregate resources) while applying model on a case of 15 affiliations working in South India in their study, which depended on upon an essential semi-log number juggling particular of the model.

Ozgulbas et al (2006) have considered the impacts of firm size on execution over the affiliations working in Istanbul Stock Exchange between the years of 2000 to 2005. As a result of their study, they have found that huge scale firms have a higher execution when showed up contrastingly in connection to little scale firms. Essentially, Johnson (2007) has reviewed the relationship among gainfulness and size of the affiliations working in Iceland. Consequences of the examination displayed that more significant firms have higher efficiency when wandered from more modest firms. Banchuenvijit (2012) concentrated on components influencing presentations of the affiliations working in Vietnam. A positive affiliation has been found between aggregate game plans and favorable position of the affiliations yet truly, a negative affiliation has been found among profitability and aggregate resources. What's more, the producer has discovered really non-giant results between number of operators and benefit.

2.4 Empirical Studies

Mandelker (1974) considers the arrival got by both shareholders of the getting and procured affiliations. He takes an instance of every single basic stock that exchanged the NYSE from February 1926 to June 1968 and utilizes month to month rate returns balanced for advantages, stock parts and capital additions. He takes the day the merger happens as the reference date. One of the vital interests in this study is the framework utilized.

Utilizing the Fama and MacBeth procedure, he assesses betas, from 1926 to 1934 of month to month returns, for creature securities to allot them in one of the twenty portfolios. After that, he uses the accompanying five years to recalculate betas and typical them to gain portfolio betas. The accompanying step is to run month to month cross sectional backslides for each portfolio, procuring γo and γ1.This waiting measures the abnormal execution of the stock j in the month t. The ordinary extra is the total of most of the remaining got by combined firms in date over the amount of firms in that date. The total of the typical residuals from month –K to month T is the joined irregular return (C.A.R).The comes to fruition got are that shareholders of the getting firm increase common benefit for the acquisitions with no sign that acquiring firms overpay for them. Of course, shareholders of the increased firm get abnormal returns, around 14% in the seven months going before the merger. One astounding result is the efficiency of the market to make a translation of information to stock expenses capably.

Dodd (1980) enhances Mandelker's examination; he utilizes every day perceptions rather than month to month perceptions and measures the sporadic returns around the approach presentation date, not the powerful date of the merger. He utilizes an instance of open presentations of proposal to center (by securing) amidst a seven-year time traverse finishing in December 1977. The illustration is 151 conceivable mergers, of which 71 were done and 80 were wiped out. Dodd utilizes the security broadcasts line method, with the gauge blunder as the measure of odd return. After that, he acquires the run of the mill evaluate mistake for day t as the total of all the yearning blunders that day over the measure of firms which have guess mess up in date t. The total of the customary longing bungles is the joined gauge mess up, over a window of 100 days (t= - 50 to t= 50).

The outcomes are that dealers get positive aggregate sporadic advantages for common, free of the last result from the merger, while purchasers get negative, however little, mean intriguing return. Over the term of the merger proposal (t= - 10 to t= 10), in an intense merger, the objective's shareholders get a 33.96% sporadic returns, while grabbing shareholders get - 7.22% remarkable returns. On drop mergers, when the choice is taken by the objective affiliation, its shareholders get a 10.95% interesting return and the bidder encounters a - 3.12% sporadic return. Precisely when the cancelation is an immediate aftereffect of different components, target shareholders encounter an erratic return of 0.18%, while bidders encounter a shocking return of - 6.46%.

Asquith (1983) eviscerates the strange returns for both bidders and focuses amidst the general merger get prepared, for effective and unsuccessful mergers offers. In both cases, the goals are recorded in the NYSE, and the period of examination is July 1962 to December 1976for fruitful mergers and 1962-63, 1967-68 and 1974-75 for unsuccessful offers. He picks two dates: the squash date, which is the time when the offer is represented and the result date, which is the confirmation date. Utilizing orderly returns, he figures the regulated sporadic returns as the contrast between the advantages of the joining firm and the arrival of a control portfolio with comparative beta. To shape this control portfolio, every one of the stocks are arranged once and are combined into one of 10 portfolios in light of their betas. These outcomes strengthen the hypothesis of wasteful association of the objective firm. In light of this question, stockholders of the objective affiliation recoup those sporadic starts from the merger by goodness of a more profitable association.

Schipper and Thompson (1983) battle that for getting associations, a securing is one and just movement in a perpetual key game plan of acquisitions. Accordingly, the essential impact would have been conveyed toward the begin of the statement of this course of action. Asquith et al (1983) concentrate on the impact of mergers on the abundance of the offering firms 'shareholders. Earlier studies did not address the refinement in size among bidder and target affiliations and the examination of mergers as a sorted out program of acquisitions.

Healy et al (1992) considered the post-obtaining execution of the 50 biggest U.S. mergers somewhere around 1979 and 1984. They utilized bookkeeping information basically however tried their outcomes by utilizing market valuation measures too.

They examined both working attributes and venture qualities, the initial two measures of working attributes are the income edge on deals and resource turnover. Their third factor measured the impact of the merger on work. This tried the speculation that additions in mergers are accomplished by scaling down and decreasing the quantity of workers. Their fourth measure was annuity cost per representative. Once more, this was to test whether picks up from mergers came to the detriment of diminishing annuity insurance for workers. They additionally considered various impacts on speculation; they tried whether picks up originated from under contributing for the future, from auctioning off resources, or constrain decreasing innovative work exercises.

Their discoveries were that; industry business diminished which infers that the blending firms accomplished more rebuilding and rearrangement than different firms in the business. In any case, the income edge on deals did not essentially change. In any case, resource turnover altogether made strides. The arrival available estimation of advantages additionally enhanced fundamentally. Annuity cost per representative was diminished to some degree yet not by measurably huge degree. None of the speculation qualities were essentially changed on the premise of industry-balanced execution. Their concentrate just found a noteworthy change on resource turnover and vocation.

Eckbo (1981) found that on the declaration of the mergers, there were certain residuals for both the members and their real adversaries. This gave off an impression of being predictable with the imposing business model hypothesis. It was vague however, in light of the fact that one could likewise contend that the declaration of the proposed merger passed on data to opponents and open doors for expanded proficiency by extending scale. He reasoned that the positive execution of mergers at the season of the first merger declaration reflected data passed on by the proposed merger that efficiencies can be accomplished by extending scale either inside or remotely.

Mukele (2006) led a study on the elements that decide the decision of M&A accomplices in Kenya. He was hoping to build up the determinants of selection of firms that had been through Mergers from 2001 to 2004. He found that organizations in the market that had selected mergers added up to 53.1% while those that decided on acquisitions were 46.9%. He inferred that the elements that decided the decision included learning exchange and administration, social separation, hierarchical separation, asset redeployment and income based synergistic contemplations.

He found that the impacts after M&A included asymmetry between the organizations regarding joint basic leadership and political process, area particular securing execution, administration styles, reward and assessment frameworks. Furthermore, he found that possession was separated between privately claimed (34.3%), remote (34.4%) and a part of both locally and outside possessed (31.3%). Different discoveries in the study demonstrated that organizations will get into M&A with an accomplice who will encourage exchange of information based assets. Accomplices were additionally worried about social contrasts and similitudes. It was found that organizations that had coordinating center qualities were the favored accomplice. The concentrate additionally demonstrated that the nearer the hierarchical separation the better since business hones, institutional qualities, company and expert societies are comparative. It was presumed that expected economies of scale drive firms into M&As. Asset organization and income based synergistic contemplations demonstrated that M&As expected increment in the market normal through geographic cover and augmentation of creation line.

Agrawal et al (1992) examined post-merger execution. They built up a bigger example of 937 mergers and 227 delicate offers. Their example included firms littler than those of the Healy et al. concentrate on, which concentrated on the 50 biggest mergers. They utilized information examination technique for chronicled information. They balanced for size impact and for beta-weighted market returns. They found that shareholders of picking up firms experienced a wealth loss of around 10% over the five years taking after the merger climax. This spoke to an inconsistency as in it gave a chance to a positive strange speculation return. In the event that gaining firms constantly lost after a merger, these proposed financial specialists short the getting firm on a long haul premise at the season of a merger declaration.

Houston and Ryngaert (1994) inspected anomalous comes back from four days before the objective was at first pronounced a takeover applicant (by any bank) to the declaration day. In their specimen of 153 mergers declared somewhere around 1985 and 1991, acquirers endured a misfortune in esteem and targets appreciated a pick up. Notwithstanding, there was no noteworthy total impact on the general estimation of the two associations. The measure of significant worth that was made was most noteworthy when acquirers were solid pre-merger entertainers and when considerable cover existed. This relationship of significant worth creation with the level of cover is steady with the market expecting mergers most appropriate for enhanced proficiency as well as expanded market energy to encounter the best level of post-m.

Korir (2006) finished a study on Effects of Mergers on Financial Performance of Companies recorded at the Nairobi Stock Exchange. The objective of this study was to find the effects of mergers, if any on execution of associations recorded at the NSE. The time span watched was from 1994-2005. The populace utilized as a part of this study was 48 organizations recorded on the Nairobi Securities Exchange. Shares of some of these inspected organizations were intensely exchanged at the NSE. An example of 20 recorded organizations was reached, it comprised of 10 organizations that blended and 10 that never combined and were in operation for the period partners were consolidated. Measures of execution utilized were turnover, volume, advertise capitalization and benefit. They were investigated on the premise of illustrative measurements. Clear insights depict information on factors with single numbers while analysis of variance (ANOVA) tests for any criticalness distinction between mean estimations of factors. It was inferred that mergers enhances execution of organizations recorded at the NSE. This is clarified by low variety in combined t-test underneath 0.005 for turnover, volume, advertise capitalization, and benefit.

Fuentes and Sastre (1998) did an investigation of the effect of the mergers and acquisitions on the fiscal transmission components, the level of rivalry in saving money markets and the execution of keeping money organizations in the Spanish managing an account framework. The effect on the execution of banks was surveyed utilizing a contextual investigation approach in light of the progressions in money related proportions somewhere around 1988 and 1997. Examination of these proportions amid the pre and post-merger periods gave a few bits of knowledge on the impacts of mergers and acquisitions on the productivity, gainfulness, rivalry and quality of solidified organizations.

A few pointers were chosen to try to quantify the impacts of the merger on different parts of bank movement. Initially were those which endeavor to gauge benefit creating limit; second, were pointers concerning the level of proficiency and profitability; third markers were those managing changes in piece of the pie; fourth pointer was managing business structure and the keep going pointers were on capital sufficiency. Under benefit creating limit, the study concentrated on pre and post-merger changes in all out wage, intrigue costs, working costs and net salary. Under proficiency and profitability, the study took a gander at aggregate costs turn over proportions, working costs to aggregate resources proportion, efficiency per worker and efficiency per office. Pointers managing changes in piece of the pie and aggregate resources development were estimations of pieces of the pie at various eras and development rate of aggregate resources. Pointer of business structure was loaning store action as a rate of aggregate resources. Pointers of capital sufficiency were money to aggregate resources proportion.

The study discovered that in every one of the cases investigated, there seems to be a slight change in the proportion of working expenses to normal aggregate resources after merger in the Spanish managing an account framework. It was likewise discovered that M&A don't reduce the level of rivalry. The concentrate additionally demonstrated that in spite of the fact that the mergers broke down give no unmistakable sign as respects upgrades in the benefit creating limit or effectiveness levels of the combined organizations, from the perspective of the managing an account division, they can be for the most part viewed as palatable. In any case, the progressions seen were, as a rule, scarcely noteworthy and if the examination was restricted to those mergers in which huge changes were watched, the outcomes were a great deal more questionable since they were repudiating.

2.5 Conceptual Framework

Conceptual framework is a diagrammatical representation that demonstrates the relationship between ward variable and free factors. Autonomous factors are the factors which influence different factors to change and the scientist had control over them. The dependent variable demonstrated the impact of controlling the independent factors (Gwaya, 2015).

Figure 2.5.1: Conceptual framework

2.6 Summary of Literature Review

Some M&A are not inspired by the objective of making the value of shareholders. Inquire about has demonstrated that a few chiefs take care of their own self-enthusiasm rather than shareholders'. They may utilize M&A to construct realms and differentiate their human capital, regardless of the possibility that next to zero esteem is connected with the merger or the obtaining. Administrators additionally now and again experience the ill effects of hubris; they are arrogant in their capacity to arrange a decent arrangement for their shareholders and after that run the joined substance. Accordingly, they have a tendency to overpay for their acquisitions. Last, a few supervisors experience an obtaining spree to convey development and income targets, regardless of the possibility that the acquisitions are not deliberately solid or negatively affect the organization's benefit and capacity to make shareholder value.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents research design, data sources, and data gathering tools and analysis techniques.

3.1 Research Design

This will be an event study. An event study is designed to examine how a specific dependent variable is affected by an event. This involved a review of the firms' performance during premerger and compares it with the performance post-merger.

3.2 Population

The population under study consisted of all the oil firms in Kenya. There are 75 oil firms in Kenya currently. Some of the companies in this segment participated in mergers and acquisitions in endeavors to enhance money related execution and augment shareholder esteem. This study focused on listed firms that have engaged in mergers and acquisitions between the years 2000-2015. They are Total Kenya acquisition of Chevron Kenya in 2009 and the Merger of Kenya oil with Kobil to form KenolKobil in 2007.

3.4 Data Collection

Information from financial statements of the firms that merged before and after the merger; constituted the secondary data used by the study. The Secondary data was obtained from the Nairobi Securities Exchange and the Capital Markets Authority annual reports as well as from the companies' official websites. Data to be collected will include: total sales/revenue, gross profit, net profit, interest accrued (finance cost), tax obligation, depreciation, amortization, current assets, current liabilities, long term liabilities, net worth and total assets.

3.4 Data Analysis

Data of the periods before and after merger was obtained to help in comparing financial performance before and after the merger. The comparison was on 15 year period comprising of years before merger and after M&A. The year succeeding merger is referred to as post-merger and the one preceding merger is referred to as pre-merger coded as one and zero respectively. Return on Asset (ROA) on monetary information gathered was attempted keeping in mind the end goal to think about and learn the money related execution over the two time frames in accordance with the technique indicated (Agorastos, *et al*., 2012).

3.5 Analytical Model

Following Healy et al (1992), we employed the dummy variable approach as operating measures to compare pre-and post-acquisition performance. Comparing the post-merger performance with the pre-merger performance provides a measure for the change in performance. However, the difference between pre-merger and post-merger performance could also be in part due to economy-wide and industry factors, or to a continuation of firm-specific performance before the merger (Healy et al, 1992).

In this study, we considered all explanatory variables in the model due to their main focus in the long run relationship with the profitability of the firms in the petroleum industry.

$$ebitdas_{it} = \beta_0 + \beta_1 preebitdas_{it} + \beta_2 cbr_{it} + \beta_3 div_{it} + \beta_4 pay_{it} + \beta_5 crisis + \varepsilon_{it} \dots \dots \dots 1$$

Where $ebitdas$ is earnings before interest, taxes, depreciation and amortization (EBITDA) to sales ratio post-merger period, $preebitdas$ is EBITDA during pre-merger period, cbr is dummy variable for cross border deals, div is dummy variable for diversifying deals, pay is dummy variable which consists of stock transactions and cash-and-stock, $crisis$ is dummy variable for financial crisis.

β_0 is the constant coefficient and β_1 to β_5 are the coefficients for respective variables while ε_{it} is the error term.

3.5.1 Diagnostic Tests

The study used a panel data estimation technique which has two main approaches, namely; the Fixed Effects Model (FEM) which assumes omitted effects unique to cross-sectional units are constant over time and the Random Effects Model (REM) which assumes the overlooked effects are random over time. In order to choose between the fixed effects and random effects; a Hausman test was conducted. It examines whether the different errors are correlated with the regressors; the null hypothesis is that they are not (Greene, 2008). If the null hypothesis can't be rejected, then the random effect is preferred because it is a more efficient estimator.

The specified model was thus be estimated using statistical program (STATA) and the study objects was investigated through regular tests. Other primary assumptions that were examined before the regression analysis include unit root test, linearity, homoscedasticity, normality, and independence of the error terms. Before assumptions testing, the study investigated the presence of multicollinearity and outliers. For Unit root test, the study used Levin Lin Chu unit root test.

3.5.2 Tests of Significance

Parametric tests were estimated to determine the importance of the relationship instead of the two variables under the study among petroleum firms listed at Nairobi Securities Exchange. The study employed the coefficient of determination (R^2), the coefficient of multiple correlations (R) and F-Test to test for overall significance. Correlation coefficients, r, measures the strength and the direction of a linear relationship between the two variables (also predicts presence or absence of multicollinearity). The coefficient of determination, R^2, determines the degree of direct correlation between variables (goodness of fit) in regression analysis. The coefficient of multiple correlations R measures how well a dependent variable could be predicted in accordance with a linear function of a set of other variables (covariates). Further, the F-test shows if variances of two variables are equal and the two-tailed test was used to verify against the alternative that the variances are not equal.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter details the results from the two listed petroleum firms at NSE (KenolKobil and Total Kenya) for the period between 2000 and 2015 inclusive. A comprehensive fundamental regression is undertaken in exploring mergers and acquisition of petroleum firms on the expected profitability of these firms. The findings are presented in the form of tables.

4.2 Descriptive Statistics

The study considered descriptive statistics for overall panels. Descriptive statistics of earnings before interest, taxes, depreciation and amortization (ebitda) to sales, cross border deals, diversifying deals, and pay and crisis period during pre-merger period is illustrated. Distribution of a series can be determined by evaluating various statistical measures as shown in table 4.1.

Table 4.1: Premerger Descriptive Statistics

Variable	Observation	Mean	Standard Deviation	Minimum	Maximum
ebidtas	16	0.208	0.538	0.018	2.211
cbr	16	0.438	0.512	0	1
div	16	0.625	0.5	0	1
pay	16	1.813	0.75	1	3
crisis	16	0.625	0.5	0	1

Table 4.1 depicts ebidtas of an average of 20.8% with a minimum of 1.8% and a maximum of 22.11%. The study found out that for the two firms, the period for mergers and acquisition was on average equal. However, further cross tabulation indicates that by 2015, Kenolkobil had been in a merger for approximately nine years while Total Kenya was for seven years.

The features of these petroleum firms showed different distribution. Post-merger statistical measures are illustrated in table 4.2

Table 4.1: Post merger Descriptive Statistics

Variable	Observation	Mean	Standard Deviation	Minimum	Maximum
ebidtas	16	0.101	0.160	0.003	0.500
cbr	16	0.688	0.479	0	1
div	16	0.625	0.5	0	1
pay	16	1.938	0.772	1	3
Crisis	16	0.5	0.517	0	1

Table 4.2 shows that post-merger period ebidtas was 10.1% on average with a minimum of 0.3% and a maximum of 50%. The study elucidates the contribution of mergers and acquisition on profitability of consolidated firms in the petroleum industry. The descriptive statistics show how variations across firms and among the parameters elucidate this predisposition. In this objective, the study mainly concentrates on exploring how the said variables with their stochastic nature relate with the profitability which is measured by EBITDA to sales ratio. The

conceptualized model was estimated by panel data model with pre-estimation of multicollinearity, unit roots and Hausman model specification test.

4.3 Pre-Estimation Diagnostic Tests

4.3.1 Correlation Analysis

Correlation analysis is used to determine the extent of the correlation of different pairs of variables under study. It measures/calculates the correlation coefficient between 1 and -1. This further predicts presence or absence of multicollinearity which is considered to exist when there is perfect linear relationship between the variables under the study. The correlation matrix was used to determine if any pair of independent variables was highly collinear through the magnitude of the correlation coefficient of the pairs of variables established. This bias arises when one or more pairs of independent variables are perfectly correlated to each other. Most pairs were found to be highly correlated leading multicollinearity.

Table 4:3: Correlation Matrix

	preebi~a	posteb~a	cbr	div	stt	cashstt	crisis
preebidta	1.0000						
postebidta	-0.1133	1.0000					
cbr	-0.2209	0.0912	1.0000				
div	0.0964	0.0832	-0.0325	1.0000			
stt	0.2658	-0.2351	-0.2901	-0.1189	1.0000		
cashstt	-0.1621	-0.0313	0.0159	0.0325	-0.6383	1.0000	
crisis	-0.1755	-0.1266	0.1111	-0.0325	0.2404	0.1429	1.0000

Multicollinearity would be considered present if the correlation coefficient was equal to or above 0.8 as it may lead to spurious regression. As indicated in Table 4.3, the study did not find any pair with a correlation of more than 0.8 implying that all variables were to be retained.

4.3.2 Unit root test

Presence of unit root leads to spurious regressions. To avoid change of the estimates over time due to non-stationarity, unit root tests were applied to investigate or detect non stationarity in all the study variables which in turn leads to spurious estimates. In this case, only two variables namely (preebitdas and postebitdas) under study were subjected to Levin-Lin-Chu unit-root test. The rest were not subjected to unit root test since they are dummy variables. The null hypothesis in this case was that the variable under consideration was non-stationary or has unit root and in this study, it was stated as; Null hypothesis (H_0): Panels contain unit roots and alternative hypothesis (H_1): Panels are stationary. From Table 4.4, the Levin-Lin-Chu unit-root test revealed that almost all variables had p values less than significance level of 0.05 which led to rejection of the null hypothesis (that the variables had unit root)

Table 4:4: Unit Root Tests

Variables	**Unadjusted t-statistic and p values**	**Unadjusted t-statistic and p values after first difference**
preebidtas	-26.6349 (0.0000)	-
postebidtas	-1.8999 (0.0287)	-

Source: Author’s computation. Significance pegged at 5% and 10% levels.

4.3.3 Hausman Specification Tests

In order to determine the best fitting model of profitability as measured by ebidta to sales ratio, this study adopted Hausman specification test where the fixed effects model specification was compared to the random effects model. The null hypothesis was that the differences in coefficients are not systematic. Consequently, on conducting the test, it was shown that P-value of 51.22%, at 5% level of significance, implied that the individual level effects are best modelled using the random effects method.

Table 4:5: Hausman Specification Test for model selection

Test: Ho: Difference in coefficients not systematic
chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 0.53
Prob>chi2 = 0.9974
(V_b-V_B is not positive definite)

In this study, the Hausman test preferred random effects model to fixed effects model which restricts estimation effects of the mean of the distribution effects to one true effect. Despite varied information about a different effect size of each of the two firms represented in the study, it was thus necessary to ensure that all these effects size are represented in the summary estimate.

4.3.4 Normality, Heteroscedasticity and Autocorrelation Tests

Due to time series component, the random effects model makes assumptions on normal distribution of the stochastic random error term, linearity, constant variance of error terms across observations and no serial autocorrelation of the error terms. However, regarding heteroscedasticity and autocorrelation, Waldinger (2011) suggests that standard regression packages (such as STATA) will do the adjustment of standard errors automatically if one specifies a random effects model. This implies that panel data approach takes care of the presence of varying variance of the error terms across all the observations in the panels and any suspected or proved correlation between random error terms of the subsequent time periods. To proceed with estimation, this study applied the Shapiro Wilk test for normal data or distribution of the stochastic random error terms. Normality results are shown in Table 4.6.

Table 4:6: Shapiro Wilk Test for Normality

Variable	Obs	W	V	z	Prob>z
Residual	35	0.97021	1.369	0.647	0.0197

Table 4.6 indicates the p-value of the residuals less than 5% level of significance implying that the null hypothesis of normality of residuals is rejected. Therefore, data was not normally distributed and the study applied non-linear model (log-linear) as a solution.

4.4 Regression Results for Random Effects Model

After undertaking necessary pre-estimation diagnostic tests and model selection test, the random effects model is considered valid for interpretation. Note that in this model, there is no strict assumption of exogeneity as suggested by Anderson and Hsiao, (1982). Random effects can inform about parameters of interest. To determine the effect of mergers and acquisitions on profitability of the firms in the petroleum industry, two regressions were done. The first one analyzes profitability of firms when there were no mergers and acquisition deals. The second regression analyzes profitability of the firms when mergers and acquisitions deals were executed. Table 4.7 indicates results of the estimated model for the period before merger and acquisitions.

Table 4.7: Results for Random-Effects GLS Regression Model (Pre-merger and Acquisition)

lnebidtas	Coefficient.	Standard Error	t	P>t
preebidta	1.84	0.37	5.00	0.200
cbr	0.72	0.47	1.54	0.124
div	-0.82	0.39	-2.12	0.034
stt	0.91	0.68	1.33	0.183
cashstt	0.69	0.60	1.14	0.255
crisis	-0.47	0.45	-1.04	0.297
constant	-3.20	0.59	-5.43	0.000

Random-effects GLS regression Number of observations = 16

Group variable: company code Number of groups = 2

R-squared: within = 0.7895 Obs per group: min = 7

between = 1.0000 avg = 8.0

overall = 0.8201 max = 9

Wald chi2(7) = 41.02

corr(u_i, X) = 0 (assumed) Prob > chi2 = 0.0000

The results in Table 4.7 shows the total variations of 78.95% and 82.01% explaining profitability of the consolidated firms within and on overall in the petroleum industry while the other proportion (21.05% and 17.99%) may have been factored in by other factors not considered by this study. The study revealed overall significance of 0.0000 which means that all variables (pre mergers and acquisition period captured by preebitdas, crossborder transactions, diversifying deals, pay which consists of stock transactions and cash-and-stock, and crisis period) utilized in the model were statistically significant at the selected significance levels (0.1, 0.05 and 0.01) in explaining the profitability of the consolidated firms in the petroleum industry in Kenya.

Further, the results specifically indicated that the coefficients of the pre mergers and acquisition period captured by preebitdas as being individually statistically insignificant in influencing profitability of the consolidated firms in the petroleum industry since the probability (*p*) value (0.200) is insignificant. This implies that profitability of the consolidated firms in the petroleum industry was determined by other factors. In addition, the results showed that the coefficient of diversifying deals is individually statistically significant in determining profitability of the consolidated firms in the petroleum industry since the probability (*p*) value (0.034) is significant at all levels of significance. The rest of the variables were statistically insignificant. Further, the results revealed absence of correlation between the error terms and the regressors. To determine whether mergers and acquisitions had an impact in the profitability of consolidated firms in the petroleum industry, model for post mergers and acquisitions was estimated and the results are indicated in Table 4.8.

Table 4.8: Results for Random-Effects GLS Regression Model (Post-merger and Acquisition)

lnebidtas	Coefficient	Standard Error	t	P>t
postebidta	1.72	0.40	4.28	0.003
cbr	-0.64	0.44	-1.45	0.181
div	-0.26	0.45	-0.57	0.583
stt	-0.33	0.75	-0.44	0.674
cashstt	-0.36	0.60	-0.59	0.568
crisis	0.16	0.54	0.30	0.769
constant	2.89	0.67	4.35	0.002

Random-effects GLS regression Number of observations = 16

Group variable: company code Number of groups = 2

R-squared: within = 0.7928 Obs per group: min = 7

between = 1.0000 avg = 8.0

overall = 0.8162 max = 9

Wald chi2(7) = 43.23

corr(u_i, X) = 0 (assumed) Prob > chi2 = 0.0193

The results in Table 4.8 shows the total variations of 79.28% and 81.62% explaining profitability of the consolidated firms within and on overall in the petroleum industry while the other proportion (20.72% and 18.38%) may have been factored in by other factors not considered by this study. The study revealed overall significance of 0.0193 which means that all variables (post mergers and acquisition period captured by postebitdas, cross border transactions, diversifying deals, pay which consists of stock transactions and cash-and-stock, and crisis period) utilized in the model were statistically significant at the selected significance levels (0.1 and 0.05) in explaining the profitability of the consolidated firms in the petroleum industry in Kenya.

Further, the results specifically indicated that the coefficients of the post mergers and acquisition period captured by postebitdas as being individually statistically significant in influencing profitability of the consolidated firms in the petroleum industry since the probability (*p*) value (0.003) is significant. This implies that mergers and acquisitions are important determinants of profitability of the consolidated firms in the petroleum industry.

4.5 Discussion of the findings from Random effects model

Upon specifying the random effects model, the findings are ready for discussion. The study explores significant determinants of profitability of the consolidated firms in the petroleum industry as revealed in Tables 4.7 and 4.8. The insignificant determinants of profitability of the consolidated firms in the petroleum industry are not discussed as they do not contribute to any working policy in this study. The results revealed that mergers and acquisition as important determinant of profitability of the consolidated firms in the petroleum industry. From table 4.7, it is evident that when all factors are held constant, one unit increase in diversifying deals leads to approximately 82% decrease in profitability of the consolidated firms in the petroleum industry in Kenya. From table 4.8, if all factors were kept constant, EBITDA to sales ratio as proxy for profitability of the consolidated firms in the petroleum industry would be KES 776.25 million (Antilog of 2.89).

The results further revealed that holding all other factors constant, one unit increase in mergers and acquisition leads to approximately 172% increase in profitability of the consolidated firms in the petroleum industry in Kenya. The findings are in agreement with economic theory that advocate for mergers and acquisition. Profitability of the consolidated firms in the petroleum industry is likely to increase since firm that was not performing well due to management problems benefit from the other that that is doing well in terms of management and therefore leading to improved performance. This study concurs with the study findings of Fuentes and Sastre (1998) while investigating the effect mergers and acquisition on profitability of Spanish banking system. The findings are also in line with a study by Mandelker (1974) which studied the impact of mergers and acquisition on the profitability of companies listed in the NYSE.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings of the study. Conclusions are thereafter made with a key focus on the established linkage between profitability of the consolidated firms in the petroleum industry and mergers and acquisitions. Later, relevant recommendations and areas of further research are suggested.

5.2 Summary of Findings

The study was carried out with an objective of determining the impact of mergers and acquisitions on profitability of the consolidated firms in the petroleum industry in Kenya. This was an event study which focused on M&As that occurred between 2000 and 2015 within the industry. The population under study comprised of publicly listed petroleum companies that had undergone mergers and acquisitions namely KenolKobil and Total Kenya.

Literature reviewed showed that mergers and acquisitions are important for profitability of firms. However, most of the local studies presented inconclusive findings with regard to mergers and acquisition in the petroleum industry. This study considered descriptive statistics for overall panels. Random Effects Regression Model was used in estimating the relationship. The results indicated that the coefficients of the pre mergers and acquisition period captured by preebitdas as being individually statistically insignificant in influencing profitability of the consolidated firms in the petroleum industry. While results on post-merger and acquisition revealed that holding all other factors constant, one unit increase in mergers and acquisition leads to approximately 172% increase in profitability of the consolidated firms . The results revealed that mergers and acquisitions and crisis period have a positive effect on profitability of the consolidated firms in the petroleum industry in Kenya. Other determinants were found to have no statistical relationship with profitability of the consolidated firms in the petroleum industry in Kenya.

These findings are in agreement with economic theory that advocate for mergers and acquisition. It concurs with the study findings of Fuentes and Sastre (1998) while investigating the effect mergers and acquisition on profitability of Spanish banking system. The findings are also in line with a study by Mandelker (1974) which studied the impact of mergers and acquisition on the profitability of companies listed in the NYSE

5.3 Conclusion and Recommendations of the Study

As indicated in the literature, mergers and acquisitions are important for firms' growth. Mergers and acquisitions results to increased profitability of firms due to synergies associated with the transactions. According to literature, mergers and acquisitions increases shareholder value since shareholder of the target firm and acquired firm come together. In addition, mergers and acquisitions results to efficiency in finances and management.

The findings also confirms how M&As enhances: economies of scale, higher bargaining power, and general business expansion. A firm with poor management system benefit from that of good management system resulting to increased profitability. This is in tandem with Palia's (1993) findings that equity of both the two firms engaging in merger and acquisition changes positively thereby affecting their economies of scale and bargaining power, which translates to business expansion.

Kenya’s petroleum industry has maintained status quo despite liberalization of the sector in 1994. This has been enhanced through mergers and acquisitions. The dominant players in the Kenya’s petroleum industry are Kenol/Kobil, Vivo Energy, Total Kenya, Oil Libya, Gapco and National Oil. In the last decades, Kenya’s petroleum sector has witnessed changes as results of mergers and acquisitions. In 2006, Kenya Shell acquired BP thus increasing Kenya Shell market share from 15 percent to 25 percent. In 2007, Oil Kenya acquired Exxon Mobil. In 2008, Total Kenya acquired Chevron.

Petroleum sector’s contribution to economic growth of Kenya is substantial. Based on the results, that is the positive and statistical significance of mergers and acquisition on profitability of the consolidated firms, the study recommends mergers and acquisitions in petroleum firms since financial and management synergies result to increased profitability. However, for mergers and acquisition to have a robust impact on the profitability of firms in the petroleum industry, there is need to establish the factors that determine their success. Identification of these factors is important since they will provide critical insights to target and acquirer firms during the process of merging and acquisition. Identification of these factors will also ensure there is mutual agreement between target and acquiring firms.

Based on the study findings, mergers and acquisition significantly influence profitability of the firms in the petroleum industry. This action may however be harmful to consumers since they may be deprived of competitive prices. To ensure consumers are protected, there is need for Energy Regulatory Commission to be vigilant and carry out analysis of the mergers and acquisitions to ensure that they do not harm the consumers.

5.5 Limitations of the Study

This study concentrated on exploring the effect of merger and acquisitions on profitability of the consolidated firms in the petroleum industry in Kenya captured by EBITDA to sales ratio. However, the factors considered are not the only ones that influence profitability of the consolidated firms in the petroleum industry. There is need for consideration of other factors in future studies like political environment as well as other socioeconomic factors. Further studies are required making use of other parameters of profitability like Return on investment, Tobin's Q, Return on equity among others.

The Time frame of the study was not specific and thus it was done over a mixed period of time. Kenol merged with Kobil in 2007 while Total Kenya Ltd acquired Chevron in 2009 which means that the effects observed related to different time periods thereby impacting the outcome of the results and limiting the findings to above firms only. Furthermore; four companies had undergone M&As between 2000-2007 yet only Kenolkobil and Total were factored in this study.

The study took on a causal research design which was to determine the relationship between merger/acquisition and profitability. However, the difference between pre-merger and post-merger performance could also be in part due to economy-wide and industry factors, or to a continuation of firm-specific performance before the merger. Factors such as fluctuation of crude oil prices and foreign exchange rates, government policy among others could have lend to the changes rather than the variable being tested

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