THE EFFECT OF MERGERS AND ACQUISITIONS ON SHAREHOLDER WEALTH OF LISTED PETROLEUM COMPANIES IN KENYA

BY
JANET NYAMBURA
D63/67709/2013

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

NOVEMBER, 2014

DECLARATION

I declare that this Project is my original work and has not been submitted for an award of a degree in any other University for examination/academic purposes

SIGNATURE…………………………… DATE………………………….

JANET NYAMBURA

D63/67709/2014

This projects project has been submitted for examination with my approval as the university supervisor

SIGNATURE…………………………… DATE………………………….

DR. J.O ADUDA

ACKNOWLEDGMENTS

This study is as a result of hard work in which I have been supported by many people to whom I am sincerely indebted. First and foremost I would like to thank the Almighty God for the grace that he gave me to undertake and complete this study.

In particular, I would like to express my sincere appreciation to my supervisor, Dr Aduda for his time, patience, and constructive advice. He shared with his scholarly and scientific experience which made this report a worthwhile undertaking. He was indeed very instrumental for consultation, his professional guidance and supervision provided valuable enrichment to this study.

I would like to express my appreciation to the management of the NSE data centre and the CMA reference library that provided the valuable historical time series data needed for the study. The support of the University Library staff at Jomo Kenyatta Memorial Library was notable.

Finally, I would like to acknowledge the hospitality accorded to me by the Dean and the staff of School of Business, the Chairman, Business Administration department during my period of study. To all others who contributed to this thesis, I say thank you and may God bless you all abundantly

DEDICATION

This work is dedicated to my Family Lucy, Chris, and Hari, for their un-relentless support, encouragement and patience with me as I spent time away from them to work on this project, without which I would not have been able to complete this challenging task.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

AR- Abnormal Return

CAR-Cumulated abnormal returns

EPS-Earnings per share

ESM-Event study methodology

FCF-Free cash flow

M&A-Mergers and acquisitions

MAAR : Market Adjusted Abnormal Return

NSE : Nairobi Securities Exchange

R&D : Research and Development

ABSTRACT

The purpose of this study was to establish the effects of mergers and acquisitions on shareholder wealth of listed petroleum companies in Kenya. The population comprised of the listed petroleum companies in Kenya. The sample comprise of two companies that are listed in the NSE at the time of the merger, kenolkobil and total. The observations were centered within an 11-day event window surrounding when the announcement for merger was made.

Following Brown and Warner (1985), this study employed event study market methodology to determine the effect of shareholders wealth. The Market Model was used and residuals were tested to determine whether or not merger events provided positive or negative abnormal returns to the participants. It also provided a basis for examining the issue of whether or not shareholder wealth was enhanced by mergers.

Key findings of the study were two-fold. First, the study established that the share prices of the two sampled firms did not exhibit significant changes within an 11-day event window. The results imply that the past Kenyan petroleum industry M&As were not wealth creating projects for the shareholders of both the bidding entity and the combined entity. Secondly, the findings showed that the shareholders‟ total cumulated return had not significantly changed due to announcement (or approval) of a takeover bid. The study concludes that past Kenyan Petroleum companies M&As were not wealth creating projects for the shareholders of both the bidding entity and the combined entity. The study recommends that listed companies should be careful when deciding to undergo merger and acquisition activity.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The terms merger, acquisition and takeover can be used interchangeably, because they have a similar meaning one to another (Berkovitch and Khanna, 1991). According to Weston and Copeland (1992) merger or acquisition is a transaction where two or more companies are combined to become one. A merger is a transaction between more or less equal partners while acquisitions are used to denote a transaction where a substantially bigger company takes over a smaller company. According to Nakamura (2005) an acquisition takes place when a company attains all or part of the target company's assets and the target remains as a legal entity after the transaction whereas in a share acquisition a company buys a certain share of stocks in the target company in order to influence the management of the target company.

The reasons why companies engage in mergers and acquisitions are many and varied. One of the main reasons that companies use to justify mergers and acquisitions activity is that when firms combine they pursue improved financial performance. This improved financial performance may be manifested through varied means including Economy of scale, where there is lowered cost of doing business for the combined firm. These lowered costs can be through; enjoying huge discounts on bulk buying since more supplies are now needed. The new firm is also able to use the expert professionals to a larger capacity hence save on cost. Synergy, where the combined company can often reduce its fixed costs by removing redundant workers, lowering the costs of the company relative to the same revenue stream, thus increasing profit margins, increasing its market share this is possible because by merging the companies are able to capture the customers of both companies combined. Cross-selling, in cases where the mergers and acquisitions deal is vertical like cases where a car manufacturing company merges with a tire company the car manufacturing company could be able to sell cars to the tire company customers, and vice versa. In other instances a large scale miller can acquire shipping companies or bulk handling firms to handle the shipping and the loading of the supplies to the mills or the finished products shipping to different locations in the world Taxation is also another motivation. In some instances a profitable firm may acquire a loss making company to utilize the target's accumulated tax losses to their advantage by reducing their tax liability. This move is however in check in many economies to control the ability of profitable companies to "shopping" for loss making companies, limiting the tax motive of the combined company (Barney, 1991; Carney, 2000).

Geographical or other diversification is designed to smooth out the earnings results of a company, which over the long term improves the stock price of a company, giving conservative investors more confidence in investing in the company. However, this does not always deliver value to shareholders. Resource transfer where resources are unevenly distributed across firms and the interaction of target and combined firm resources can create value through either overcoming information asymmetry or by combining scarce resources. (King, Slotegraaf, and Kesner, 2008).Vertical integration occurs when an upstream and downstream firm merges (or one acquires the other). There are several reasons for this to occur. One reason is to internalize an externality problem. A common example is of such an externality is double marginalization. Double marginalization occurs when both the upstream and downstream firms have monopoly power; each firm reduces output from the competitive level to the monopoly level, creating two deadweight losses. By merging the vertically integrated firm can collect one deadweight loss by setting the upstream firm's output to the competitive level. This increases profits and consumer surplus. A merger that creates a vertically integrated firm can be profitable (Maddigan and Zaima, 1985).

The reasoning behind mergers and acquisitions is that two companies together are more valuable than two separate companies. The key principle behind buying a company is to create shareholder value over and above that of the sum of the two companies. This rationale is particularly alluring to companies when times are tough. Strong companies will act to buy other companies to create a more competitive, cost efficient company. The companies will come together hoping to gain a greater market share or achieve greater efficiency. Because of these potential benefits, target companies will often agree to be purchased when they know they cannot survive alone (Brealey and Myers, 2003).

According to Ferraz and Hamaguchi(2002)For a merge to create wealth it should provide something that the shareholders cannot get by simply holding onto their individual shares of the merging firms. The anticipated returns from the merger are known as synergy and can be captured by abnormal sock returns to the shareholders. There has been an increase in the number of mergers acquisitions over the past few decades. Whether mergers and acquisitions create value for the shareholders of the acquiring firms has become a very important issue for researchers. Mergers and acquisitions are economically relevant if they promote massive reallocation of resources in a short period of time, both within and across industries and regions, and potentially leading to wide-ranging institutional and organizational changes

1.1.1 Shareholder Wealth

Shareholder wealth can be defined, at any time, as the market capitalization of the public corporation. This market cap is the number of equity shares out-standing multiplied by the share price at the time of calculation. Market cap is an estimate, by capital markets, of the net worth of the firm. The market cap reflects the firm's tangible assets plus the future expected residual revenues, which may be distributed as dividends or kept as retained earnings. The estimate thus includes the future expected dividend stream. Higher earnings per share (EPS) of common stock will tend, ceteris paribus, to increase the market price of each share (and thus the market value of the firm) and to permit in principle either additional investments in profitable projects or higher dividends. (Frydman 2002)

1.1.2 Mergers and Acquisitions

As discussed in chapter one a merger or acquisition is a transaction where two or more companies are combined to become one (Weston and Copeland, 1992). A merger is a transaction between more or less equal partners while acquisitions are used to denote a transaction where a substantially bigger company takes over a smaller company. Additionally, Gaughan (2002) defines a merger as the process in which two firms combine and only one endures and the merged entity cease to exist. Nakamura, (2005) asserts that an acquisition takes place when a company attains all or part of the target company's assets and the target remain s as a legal entity after the transaction whereas in a share acquisition a company buys a certain share of stocks in the target company in order to influence the management of the target company.

There are several types of mergers a horizontal merger involves the combination of two companies operating in the same industry and at a similar stage of productions. Forming a larger firm may have the benefit of economies of scale. Horizontal mergers are regulated by the government for their potential negative effect on competition. The number of firms in an industry is decreased by horizontal mergers and this may make it easier for the industry members to collude for monopoly profits. Horizontal mergers are also believed by many as potentially creating monopoly power on the part of the combined form enabling it to engage in anti-competitive practices.

Conglomerate Mergers are a combination of two companies operating in different areas of business; any combination that is not vertical or horizontal. Three types of conglomerate mergers have been distinguished. Product-extension mergers broaden the product lines of firms. These are mergers between firms in related business activities and may also be called concentric mergers. A geographic market-extension merger involves two firms whose operations have been conducted in non-overlapping geographic area while a pure conglomerate merger involves unrelated business activities. Conglomerate firms differ fundamentally from investment companies in that they control the entities to which they make major financial commitments. Two important characteristics define a conglomerate firm. One, it controls a range of activities in various industries that require different skills in the specific managerial functions of research applied engineering, production and marketing. Two, diversification is achieved mainly by external acquisitions and mergers not by internal development.

Vertical mergers occur between firms in different stages of production operation within the same industry. In the oil industry, for example, distinctions are made between exploration and production, refining, and marketing to the ultimate consumer. In the pharmaceutical industry one could distinguish between research and the development of new drugs, the production of drugs and the marketing of drug products through retail drug stores.

Muia (2010) advances various reasons for vertical mergers. First, there are technological economies such as the avoidance of retreating and transportation costs in the case of an integrated lion and steel producer. Second, transactions within a firm may eliminate the cost of searching for prices, contracting, payment collecting, and advertising and may also reduce the costs of communicating and of coordination production. Three, planning or inventory and production may be improved due to more efficient information flowwithin a single firm. Finally, when assets of a firm are specialized to another firm, thelatter may act opportunistically to expropriate the quasi-rents accruing to the specializedassets. Expropriation can be accompanied by demanding supply of a good or service produced from the specialized assets at a price below its average cost to avoid the costs of haggling, which arise from the expropriation attempt. The assets are owned by a single vertically integrated firm. Divergent interest of parties to transaction will be reconciled by common ownership.

A vertical takeover can involve a more forward in the production process to secure a distribution outlet, or a more backward in the production process to secure the supply of raw materials e.g. a toy manufacturers merges with a chain of toy stores (forward integration; an auto manufacturers merges with a tire company (back integration).

1.1.3 Mergers and Acquisitions and Shareholder Wealth

The theory of finance states that maximization of shareholder wealth should be the goal of every business organization. It is not clear, however, whether maximization of shareholder wealth is the main motivation behind Mergers and acquisitions. This has generated a lot of research interest the area. Unfortunately decades of intensive research have not been able to conclusively establish the impact of Mergers and acquisitions on shareholder wealth.

Jensen and Ruback (1983) in a comprehensive article reviewing the empirical work presented in over forty papers concluded that the evidence indicates that corporate takeovers generate positive gains, that target firm shareholders benefit, and that bidding firm shareholders do not lose.

The desire to merge with or acquire other companies would not be pursued until the management of the company believes that it would bring benefits to the company. Carper (1990) use economist argument to support the reason why the management of the company engages in Mergers and acquisitions. According to him, managers engage in Mergers and acquisitions because it can enhance the shareholders' wealth.

1.1.4 Petroleum Companies in Kenya

The energy sector has been an influx in the past three decades, with grand shifts occurring in supply, demand, infrastructure, economics and international competition, which together have created "perfect storm" for realignment and consolidation - and therefore greater mergers and acquisitions activities. The Kenyan oil industry has experienced mergers and acquisitions among various players since the late 90s. Major mergers and acquisitions in the oil industry in Kenya include the Kenol-Kobil merger, Shell-BP, Total Kenya Ltd – Chevron (Caltex) (Nov, 2009) acquisition among others (Njoroge, 2008 and PWC, 2010).

The effects of mergers and acquisitions within the oil industry in Kenya are not well known.

There are 70 companies in Kenya that are engaged in the oil and petroleum sector. Some of the major players include Shell Kenya, Total Kenya, Oilibya Kenya Limited, KenolKobil Kenya, National Oil Corporation, and Hass Petroleum among many others. Some petroleum companies in Kenya that have been engaged in mergers and acquisitions include; takeover of Mobil Oil by Oilibya Kenya, Total Kenya acquisition of Chevron Kenya, the merger of Kenya Oil and Kobil Kenya to form KenolKobil. Additionally, Shell Kenya acquired BP Kenya, in a deal that saw the former take full ownership.

1.2 Research Problem

Different studies have been done but there is still controversy as to whether Mergers and acquisitions increase shareholder wealth or not. There is substantial evidence to support the view that Mergers and acquisitions, in general, can add value to combined entity. Studies such as (Selvam et al 2009); (Kling, 2006) provide evidence on the positive impact of corporate mergers and acquisitions by merger on firms. However, it is crucial to note that merger and acquisition are capable of having adverse effect as suggested by (Yook, 2004), and (Ismail, Abdou and Annis, 2010). A high level of wealth gain is often achieved by target firms, while the insignificant and even negative wealth changes are generated by bidder firms (Kaplan and Weisbach 1992). Hence shareholder wealth effects of Mergers and acquisitions are still an area not fully understood, especially for the shareholders of acquiring firms.

Whether acquiring company shareholders experience a wealth effect from mergers and acquisitions is a matter of ongoing debate among academic researchers. Weston, Mitchell and Mulherin, (2004) argue that mergers and acquisitions create synergies that benefit both the acquiring company and the consumers. Jensen, (1986) argues that M&A activities create agency problems, resulting in less than optimal returns. Because the net effects of M&A activity remain unclear, despite a number of studies, a need exists for continued research on this subject.

Locally studies on mergers and acquisitions have produced mixed results. Kithitu (2012) researched on the role of mergers and acquisitions on the performance of commercial in Kenya. The results were inconclusive. Njenga (2006) also conducted a survey on investigation into whether the demerger of coffee marketing societies have created or eroded owners' wealth in parts of Central Kenya. Njenga found mixed results on whether demergers' leads to wealth creation or erosion of coffee firms as depicted by both positive and negative returns on post-8 merger firms. Muya (2006) carried out a survey of experiences of mergers and found that mergers do not add significant value to the merging firms. Owing to the afore-mentioned mixed and inconclusive results, this study seeks to establish the effect of merger and acquisition on shareholder wealth of listed petroleum companies in Kenya.

1.3 Objective of the Study

The objective of this study is to establish the effects of mergers and acquisitions on shareholder wealth in petroleum companies in Kenya

1.4 Value of the Study

This project is aimed at helping the following people Scholars by being a source of empirical references and literature and a ground of further research to the scholars. To the customers the study will bring out the positives and negatives of mergers and acquisitions and enable consumer's welfare union to air their views when faced with a merger. This will ensure that customers' interests are taken care of as mergers for monopoly only reduces the value that customers get. To the government this study will help the anti-trust authorities in controlling the activities of mergers. The study will help Shareholders to widen the knowledge of the stakeholders when faced with decision on mergers and acquisition by analyzing the effects of mergers on financial performance of the firm's involved. Employees will be in a position to establish the stability of the firms and hence their job security. Managers of various organizations engaging in joint operations will be in a position to highlight the effects that are characteristic of such operations and make wise decisions.

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 of study along with the theories that this project is based on. It will also discuss in detail the two variables that are being discussed that is mergers and acquisition and shareholder wealth.

2.2 Review of Theories

2.2.1 The Theory of Efficiency

The theory of efficiency suggests that mergers will only occur when they are expected to generate enough realizable synergies to make the deal beneficial to both parties. It is the symmetric expectations of gains which results in a friendly merger being proposed and accepted. If the gain in value to the target was not positive, it is suggested the target firm's owners would not sell or submit to the acquisition, and if the gains were negative to the bidders, the bidder would not complete the deal.

Klein (2001) suggests that if we observe a merger deal, efficiency theory predicts value creation with positive returns to both the acquirer and the target. Following Chatterjee (1986), we must, however, distinguish between operative synergies or efficiency gains achieved through economies of scale and allocative synergies or collusive synergies resultant from increased market power and an improved ability to extract consumer surplus when commenting on value creation in mergers and acquisitions. Most of the more recent literature concludes that operating synergies are the more significant source of gain (Devos 2008) although it does also suggest that market power theory remains a valid merger motive. Increased allocative synergies is said to offer the firm positive and significant private benefits (Feinberg, 1985) because, ceteris paribus firms with greater market power charge higher prices and earn greater margins through the appropriation of consumer surplus. Indeed, a numberof studies find increased profits and decreased sales after many mergers (Cefis, 2008) a finding which has been interpreted by many as evidence of increasing market power and allocative synergy gains (Gugler 2003). From a dynamic point of view too, market power is said to allow for the deterrence of potential future entrants (Besanko, 2006) which can again afford the firm a significant premium, and so offer another long-term source of gain.

In an efficient merger market the theory of corporate control provides a third justification, beyond simply synergistic gains, for why mergers must create value. It suggests that there is always another firm or management team willing to acquire an underperforming firm, to remove those managers who have failed to capitalize on the opportunities to create synergies, and thus to improve the performance of its assets (Weston et al 2004). Managers who offer the highest value to the owners, it suggests will take over the right to manage the firm until they themselves are replaced by another team that discovers an even higher value for its assets.

Hence, inefficient managers will supply the ‘market for corporate control’ (Manne, 1965), and managers that do not maximize profits will not survive, even if the competitive forces on their product and input markets fails to eliminate them. ‘Hostile’ takeovers should, as a resultbe observed amongst poorly performing firms, and amongst those whose internal corporate governance mechanisms have failed to discipline their managers. Once again the empirical evidence again seems to support this conclusion (Palepu, 1986).

2.2.2 Theory of Corporate Control

From the bidder's perspective, the theory of corporate control is partially based on efficiency theory, although there are two important differences. First, it does not assume, per se, the existence of synergies between the corporate assets of both firms, but rather between the bidder's managerial capabilities and the targets assets. Hence, corporate control predicts managerial efficiencies from the re-allocation of under-utilized assets. Second, it implies that the target's management team is likely to resist takeover attempts, as the team itself and its managerial inefficiency is the main obstacle to an improved utilization of assets. Typical bidders are either private investors or corporate raiders who bringin more competent management teams, or more efficient firms.

2.2.3 Hurbis Theory

The impact of mergers and acquisitions on the performance of the acquiring firm remains, however, at best, inconclusive and, at worst, systematically detrimental (Dickerson 1997). Mergers fail to create value, it is suggested with somewhere between 60% and 80% classified as 'failures' (Puranam and Singh, 1999) and a number of value destroying theories have been put forward in explanation. Generally speaking, these value-destroying theories can be divided into two groups: the first assumes that the bidder's management is 'boundedly rational', and thus makes mistakes and incurs losses due to informational constraints despite what are generally value-increasing intentions. The second assumes rational but self-serving managers, who maximize private utility function, which at least fails to positively affect firm value.

Within the first category, the theory of managerial hubris(Roll, 1986) suggests that managers may have good intentions in increasing their firm's value but being over confident, they over estimate their abilities to create synergies. Over confidence increases the probability of overpaying (Malmendier and Tate, 2008), and may leave the winning bidder in the situation of a winner's curse, which dramatically increases the chances of failure (Dong 2006).

Empirically speaking, Berkovitch and Narayanan (1993) find strong evidence of hubris in US takeovers, and Goergen and Renneboog (2004) find the same in a European context. The latter estimate that about one third of the large takeovers in the 1990s suffered from some form of hubris. Malmendier and Tate (2005) show that overly optimistic managers, who voluntarily retain in the-money stock options in their own firms, more frequently engage in less profitable diversifying mergers, and Rau and Vermaelen (1998) find that hubris is more likely to be seen amongst low book-to-market ratio firms that is, amongst the so called glamour firms than amongst high book to market ratio value firms. Jensen's (1986) theory of managerial discretion claims that it is not over-confidence that drives unproductive acquisitions, but rather the presence of excess liquidity, or free cash flow (FCF).

Firms whose internal funds are in excess of the investments required to fund positive net present value projects, it is suggested, are more likely to make quick strategic decisions, and are more likely to engage in large-scale strategic actions with less analysis than their cash-strapped peers. High levels of liquidity increase managerial discretion, making it increasingly possible for managers to choose poor acquisitions when they run out of good ones (Martynova and Renneboog, 2008).

Indeed, several empirical studies demonstrate that the abnormal share price reaction to takeover announcements by cash-rich bidders is negative and decreasing in the amount of FCF held by the bidder (Harford, 1999). Moreover, it is suggested that the other stakeholders in the firm will be more likely to give management the benefit of the doubt in such situations, and to approve acquisition plans on the basis of fuzzy and subjective concepts such as managerial instincts, gut feelings and intuition, based on high past and current cash flows (Rau and Vermaelen, 1998). Thus, like the hubris theory, the theory of FCF suggests that otherwise well-intentioned mangers make bad decisions, not out of malice, but simply because the quality of their decisions are less challenged than they would be in the absence of excess liquidity. Of course, as the degree of managerial discretion increases in FCF, or in high market valuations (as in the case of 'glamour firms' above), or in other proxies, so, too, does the opportunity for self-interested managers to pursue self-serving acquisitions (Jensen, 2005).

It is generally agreed that managerial self-interest does play a role in Mergers and acquisitions. Research has shown that bidder returns are, for example, generally higher when the manager of the acquiring firm is a large shareholder (Lewellen1985), and lower when management is not (Harford 1999). This suggests that managers pay more attention to an acquisition when they themselves are financially concerned. Further, it supports the notion of agency cost and the managerial theories of the firm (Marris, 1963), which broadly suggest that managers pursue self-serving acquisitions, and it is this fact that leads to value-destruction.

2.2.4 Theory of Managerial Entrenchment

The theory of managerial entrenchment (Shleifer and Vishny, 1989), claims that unsuccessful mergers occur because managers primarily make investments that minimize the risk of replacement. It suggests that managers pursue projects not in an effort to maximize enterprise value, but in an effort to entrench themselves by increasing their individual value to the firm. Entrenching managers will, accordingly make manager-specific investments that make it more costly for shareholders to replace them, and value will be reduced because free resources are invested in manager-specific assets rather than in a shareholder value maximizing alternative. Amihud and Lev (1981) empirically support this notion, and suggest that managers pursue diversifying mergers in order to decrease earnings volatility which, in turn, enhances corporate survival and protects their positions. Of course, entrenchment is not only pursued for job security itself, but also because entrenched managers may be able to extract more wealth, power, reputation and fame. While entrenchment theory primarily explains the process of how managers position themselves to achieve these objectives, the theory of empire-building and other related, well-tested theories provide both the motivations and evidence behind these objectives (Black, 1989). According to empire theory, managers are explicitly motivated to invest in the growth of their firm's revenues or asset base, subject to a minimum profit requirement (Marris, 1963)

2.3 Determinants of Shareholder Wealth

The determinants of shareholder wealth are cost o debt financing, cost of equity to the company, the effective tax rate of the company and the specific composition of the company's capital structure. These can be said to be internal. The external determinants are the exchange rate, inflation rate and the level of unemployment.(Allen 1996)

2.4 Review of Empirical Studies

Studies of the impact of mergers and acquisitions on the share price performance have a long history. In the US, Dodd and Ruback (1977) examined a sample set of 172 cases of mergers and takeovers between 1973 and 1976. They concluded that during the month of the tender offer announcement, successfully (unsuccessful) bidding firms were associated with significantly positive cumulated abnormal return (CAR) of 2.83% (0.58%). The cumulated abnormal returns of target firms were much higher, ranging from 20.58% for successful firms to 18.96% for unsuccessful firm. Slightly different from Dodd and Ruback's (1977) results, Dodd (1980) studied 71 successful mergers and 80 unsuccessful mergers in the period 1971-1977, and argued that irrespective of the outcome of the proposal, stockholders of target firms earn large positive abnormal returns of over 13% from the announcement of merger proposals.

In contrast, for stockholders in bidding firms, the cumulated abnormal returns were 7.22% for successful bidders and 5.5% for unsuccessful bidders. According to Jensen and Ruckback (1983) the share price reaction over merger activities and concluded that up to that time, successful mergers brought approximately 20-30% of abnormal return to the target firms' shareholders, but very small amount of abnormal return to the bidder firms. Jarrell, Brickley and Netter (1988) agreed with their results, and added that amongst the 663 merger activities from 1962 to 1985, the average premium paid to target firms were approximately 19% in the 60s, 35% in the 70s and 30% in the 80s.

There are also studies that were based entirely on unsuccessful or successfully defended takeover bids. In her study covering the period 1975-1984, Parkinson (1991) showed significant positive cumulated abnormal return of 47.85% obtained by shareholders in target companies in the month of the bid, and the gains were maintained up to two years. Shareholder in the bidding firms also obtained positive gains of 7.91%. Bagnoli, Gordon and Lipman (1989) reached the same result in their signaling model of share repurchase as a defense against takeovers.

Martin (1992) investigated 304 mergers and 155 acquisitions that took place from 1965-1986 and document a negative but statistically insignificant abnormal return over the five subsequent years (significant measured over three years) for mergers and positive but an insignificant abnormal return for acquisitions. Using a market model with a moving average method for beta estimation, Firth (1980) finds an insignificant abnormal return of 0.01 percent over the 36 months following the bid announcement by examining 434 successful bids and 129 unsuccessful bids in the UK over the period 1965-1975. In contrast Jean-Francois (2004) document significant and negative announcement period abnormal returns post M&A.

Existing evidence on long-term acquirer performance is also mixed but suggests negative post-merger performance. Agrawal, Jaffe and Mandelker (1992) using data for 973 mergers find significant negative abnormal returns over 5 years after merger. Loughran and Vijh (1997) report a statistically significant return of 15.9% for buying and holding the stocks of the acquiring companies for five years. Andre, Kooli, and Jean-Francois (2004) examine 267 Canadian mergers and acquisitions for 1980-2000 using different calendar-time approaches including and excluding overlapping cases. They report significant negative returns for Canadian acquirers over the three-year post-event period. In contrast, Healy, Palepu and Ruback (1992) examine post acquisition performance for the 50 largest U.S. mergers between 1979 and mid-1984 and note that merged firms show significant improvements in asset productivity relative to the respective industry average, leading to higher operating cash flow return.

Some researchers have investigated cross-border mergers and acquisitions and, again, the results are mixed but predominantly negative. Black, Carnes and Jandik (2001) document significant negative returns to US bidders during the three and five years following cross-border mergers. Gugler, Mueller, Yurtoglu and Zulehner (2003) also demonstrate that cross border acquisitions create a significant decrease in the market value of the acquiring firm over a fiveyear post acquisition period. In contrast, Conn, Cosh, Guest and Hughes (2001) do not find evidence of post-acquisition negative returns for cross-border acquisitions.

Moeller, Schlingemann, and Stulz (2004) studied the effect of firm size on abnormal returns from acquisitions. The study used over 12,000 acquisitions from 1980-2001 in the U. S, and found acquisitions by smaller firms lead to statistically significant higher abnormal returns than acquisitions by larger firms. It speculated that the larger firms offer premium prices on their acquisitions and end up having net wealth loss.

Tse and Soufani (2001) investigated the effect of wealth on both the bidders' and the targets' performance by using the sample of 124 deals collected from the period 1990 to 1996. The sample also was divided into two sub-periods based on the economic status: the recession from 1990 to 1993 and the recovery from 1994 to 1996. To evaluate the performance of firm, they employed the event study to compute the cumulative abnormal returns, then concluding about the effect of economic performance on the abnormal return. The results show that the deals carried out in the recovery period make positive returns while the deal during recession create negative returns. More important, the results revealed that the acquired firms experienced positive gains while the acquiring firms showed the unclear gains. However, the conclusion from this study just explained by the impact of economic condition, regardless other determinants.

Andre, Kooli and L'Her (2004) studied the long-term performance of 267 Canadian mergers and acquisitions that took place between 1980 and 2000, using different calendar-time approaches with and without overlapping cases. Their results suggested that Canadian acquirers significantly underperform over the three-year post-event period. Further analysis showed that their results are consistent with the extrapolation and the method-of-payment hypotheses, that is, glamour acquirers and equity financed deals underperform. Andre, Kooli and L'Her also found that cross-border deals perform poorly in the long run. Franks, Harris, and Titman (1991) studied companies' performance following corporate takeovers of 399 acquisitions during the 1975-1984 periods. The study used multifactor benchmarks from the portfolio evaluation literature that overcome some of the known mean-variance inefficiencies of more traditional single-factor benchmarks. After adjusting for systematic risk and size, but not for the book-to-market ratio, they found positive and significant long-term abnormal returns only for small transactions. The study concluded that previous findings of poor performance after takeover were likely due to benchmark errors rather than mispricing at the time of the takeover.

Loderer and Martin (1992) studied the post-acquisition performance of acquiring firms of 304 mergers and 155 acquisitions that took place between 1966 and 1986. They observe a negative but insignificant abnormal return over the five subsequent years for the mergers and positive but insignificant abnormal return for the acquisitions. They observed evidence of negative performance in the second and third post-acquisition years, but that performance occurs mainly in the 1960s and 1970s, and disappears in the 1980s. Thus, especially in the later years, the post-acquisition years do not provide convincing evidence of wasteful corporate acquisitions, or strong evidence that contradicts market efficiency.

Agrawal, Jaffe and Mandelker (1992) examined the post-merger performance of acquiring firms. find negative and significant abnormal returns for 937 mergers over the five subsequent years, and positive but insignificant abnormal returns for 227 tender offers that occurred between 1955 17 and 1987. Ansof, Bradenburc, Porter and Radosevlch (1991) found that after an acquisition, low sales growth companies showed significantly higher rates of growth, whereas, high sales growth companies showed lower rates of growth. However, even though low sales growth companies showed higher rates of growth after acquisitions, they actually suffered decreases in their mean P/E ratios, mean EPS and mean dividend payouts. The similar pattern of inconsistency found in the high sales growth companies whereby their performance levels for EPS, PE ratio, earnings and dividend payouts were greater. Low sales growth companies financed their acquisitions through decreased dividend payouts and the use of new debts. In contrast, high sales growth companies with other strategies tended to decrease debts but increase dividend payouts. Acquisitions were in general unprofitable, as they did not contribute to increases in all of the variables of the companies' growth. Acquiring firms registered lower rates of growth as compared to the non-acquiring firms and this was more pronounced for low sales growth acquiring firms.

Selvam (2009) conducted a study on the impact of mergers on the corporate performance of acquirer and target companies in India. A sample of companies which underwent merger in the same industry during the period of 2002-2005 listed on the Bombay Stock Exchange. The study focused on comparing the liquidity performance of the thirteen sample acquirer and target companies before and after the period of mergers by using ratio analysis and t-test. It was found out that the shareholders of the acquirer companies increased their liquidity performance after the merger event.

Maranga (2010) sought to determine the effect of mergers and acquisitions on the scale and cost efficiency of the combined commercial banks in Kenya. The findings indicated that firm which engaged in take-over of subsidiaries had no significant changes in levels of their cost efficiency after mergers. However, some of the firms that merged with other banking institutions demonstrated significant declines in their cost efficiency that would most likely be attributable factors such as overstaffing due to the combined workforce, the long learning curve of management on how to best use technology to reduce costs, and increase operational costs occasioned by the integration of operations from the two previously independent institutions. He also noted a decline (or no change) in cost efficiency does not necessarily translate to profit efficiency for the combined bank because the staff who are responsible for bringing new business are not able to generate revenues to offset their expenses which are fixed and this affects both the cost efficiency and profit efficiency. He also noted that after the mergers and takeovers, the combined commercial banks continued to realize profits against declining cost efficiency and relatively low profit efficiency because they are key players in lending to the government through the low risk treasury bonds and bills, from which they realize good returns.

Muthiani (2007) studied the cross cultural perspective of mergers and acquisitions done by GlaxoSmithKline Kenya PLC (GSK) by conducting the study on the 50 senior and middle managers at GSK. It was established that the GSK's staffs were highly motivated and performance driven inherent from organizational culture evolving from the merger. The study thus concluded that culture is a very important element for the success of merger as it is also a key to success of a business and a good culture also leads to better performance of a business.

Muchae (2010) studied challenges of cross border mergers and acquisitions and the factors influencing the same in Tiger Brands Limited. Muchae found that performance related factors such as perceived synergies, wider product scope, and new market for products were the driving factors for merger and acquisition of Tiger Brands Limited (HACO). The study however found that following acquisition the staff were less motivated with loss of incentives and there uncertainty regarding their job security and challenges experienced in bedding down the new structure were such as redundancy which was were addressed by offering retirement package and excess capacity was deployed which negated performance.

Chesang (2002) studied how merger commercial banks in Kenya influence their financial performance. Chesang found that firm size and financial performance of acquiring firms can be the determinants of poor performance in thepost-acquisition period. Muya (2006) carried out a survey of experiences of mergers and found that mergers do not add significant value to the merging firms. Njenga (2006) also conducted a survey on investigation into whether the demerger of coffee marketing societies have created or eroded owners' wealth in parts of Central

Kenya. Njenga found mixed results on whether demergers leads to wealth creation or erosion of coffee firms as depicted by both positive and negative returns on post-merger firms.

Ndora (2010) studied the effects of mergers and acquisitions on the financial performance of insurance companies in Kenya. A sample of six insurance companies that had merged between the year 1995 and 2005 were used from a population of 42 registered insurance companies in the country as at that time. To measure financial performance, profitability ratios, solvency ratios as well as capital adequacy ratios were computed for the firms. The information for five years before and after the merger was compared and the results tabulated. The findings indicated an increased financial performance by the firms for the five years after the merger than it was five years before the merger. It was concluded that mergers and acquisition would result to an increase in the financial performance of an insurance company.

Ndung'u (2011) sought to determine the effects of mergers and acquisitions on the financial performance of commercial banks in Kenya. The research focused on the financial performance 24 of commercial banks in Kenya which merged between 1999 and 2005. Comparative analysis of the bank's performance pre and post-merger periods was conducted to establish whether mergers lead to improved financial performance. He concluded that there was improvement in financial performance after banks merger. The study also found that there was general increase in the profitability of the banks after merger and also increase in solvency and capital adequacy.

Njoroge (2007) conducted a survey of mergers & acquisitions experiences by financial institutions in Kenya. The analysis of the financial institutions performance for pre and post-merger periods sort to establish whether there was significant improvement of financial 23performance on areas of profitability, investment and liquidity. The results of the data analyzed showed that Return on Asset and Return on Investment indicate an insignificant difference while Return on Equity and Debt Equity Ratio indicate significant difference between measures of performance before and after merger.

2.5 Summary of Literature Review

This Chapter looked at in the literature review which included the discussion of the theoretical framework. Theories relating to mergers and acquisitions were explained. The chapter also presented empirical studies where it discussed the research done by other scholars relating to mergers and acquisition. Also advanced in this chapter are the various types of mergers and acquisitions and an understanding of shareholder wealth.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter details the blueprint that was followed in this research to establish the impact of mergers and acquisition on shareholder wealth in petroleum companies in Kenya. It specifically details the research design, population of study, data collection instrument and finally the data analysis

3.2 Research Design

The research design of this study was Event Study Methodology which is a method for testing the impact that an unanticipated, new corporate event in this case a merger and acquisition on the wealth of the shareholders of that firm (Fama, 1969).Mackinlay (1997) suggest that ESM involves identifying the event of interest, defining the event date, event windows, estimation period, choosing a model for calculating abnormal returns, aggregation of abnormal returns, applying statistical tests and testing significance of results and drawing conclusions based on the significance and overall findings.

3.3 Population

Target population in statistics is the specific population about which information is desired. According to Mugenda and Mugenda (2003), a population is a well-defined or set of people, services, elements, events, group of things or households that are being investigated. In this study, the target population was the two listed petroleum companies in Kenya. Hence the population of this study was the same as the sample of the study. The two listed companies are

Total Kenya acquisition of Chevron Kenya, KenolKobil (Merger of Kenya Oil and Kobil Kenya).

3.4 Data Collection

The study use data from secondary sources mainly the financial statements. These were obtained from the NSE library and the respective company's websites.

3.5 Data Analysis

Following Brown and Warner (1985), this study employed event study market model analysis method to determine the effect of mergers and acquisitions on shareholders wealth. This methodology is based on the fundamental idea that stock prices represent the discounted value of firm future stream of profits. Hence, when observing a stock market reaction to the announcement of a merger and acquisition the change in the equity value of firms affected by this event (merging firms and their rivals) can then be taken as a measure of the (discounted) additional wealth that they are expected to accrue as a consequence of the merger and acquisition Using the actual returns and the expected returns, the average accumulative abnormal returns over the select time will be calculated

The event window of the study was the event 11-day (5 days prior to the event day and 5 days after the event date). These window lengths was appropriate to capture any news that might have leaked shortly before the official announcement was made and also considers any short-term stock price reactions linked to the event after the announcement

The third step was the prediction of a "normal" return during the event window in the absence of the event. The model used in this study to estimate the expected returns was the market model. It is a linear time-series model where dependent variable, security returns, is regressed against percentage changes in a market index. The market model used in this study for security *i* for the period *t* can be expressed by the following linear time-series model (Equation 1).

Rit ;□□i □□□iRmt+*eit*……………………………….………………….. (1)

Where;

Rit= daily return on the security *i* during time *t*

□i, □i= are market model parameters for security *i*, security-specific intercept and slope coefficients

Rmt= return of the market (NSE index) for time t

eit= error term for security i for year j at period t. It is assumed that *eit* fulfills the assumptions of the linear regression model. Namely *eit* has the mean of zero over the regression period, and has a variance independent over time. This yields estimates for □i, the elasticity of returns on the stock against returns on the index.

The fourth step is the calculation of the abnormal return within the event window, where the abnormal return is defined as the difference between the actual and predicted returns. Abnormal returns, *ARit* for firm *i*, on day t are estimated as the difference between the actual return on day *t* and the return expected from the market model. It thus represents the impact of firm specific event (M&A announcements in this study) on shareholder wealth, net of market effects. If M&A announcements have an effect on company performance, the value of *ARit* should be different from zero. It can be obtained as in Equation (2) below.

ARit= Rit-(□i,+□iRmt)…………………………….….………………….. (2)

Then, for any day *t* within the event period the average residuals mean abnormal return (*MARt*) across sample members was calculated. Average residuals are defined as in Equation (3) below

$(MAR)_{it}=\sum_{i=1}^{Nt}\frac{\boldsymbol{ARit}}{\boldsymbol{Nt}}$………………………………….…………………………… (3)

Where

ARit= abnormal return of security *i* on day *t*

Nt= number of securities with abnormal returns on day *t*

The cumulative abnormal returns over several holding periods from day t1 to day t2 will be calculated according to the following formula (Equation 4)

$(CAR)_{it}=\sum_{t=t1}^{t=t2} MAR\mathrm{it}$……………………………………………………… (4)

Finally to test the hypothesis, the following t-statistic was used (Equation 5).

$$T(AR)_{it}=\frac{ARit}{s(ARit)/\sqrt{NT}}$$

Where

S(*eit*) = the standard deviation of the excess returns on day *t* in the event period

Nt= number of securities with abnormal returns on day *t*

The event window was eleven days five days before and after the event, the estimation window was thirty days and the post-event window was thirty days.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter provides an analysis of data collected from various sources. The results are presented in tables to highlight the major findings. They are also presented sequentially on effect of mergers and acquisitions on shareholders wealth of listed petroleum companies in Kenya. This chapter provides various sections. Section 4.2 shows data presentation in form of graphs and tables and 4.3 shows the summary and interpretation of the findings

4.2 Data presentation

4.2.1: Total Kenya

Total Kenya acquired chevron Kenya on 1st November 2009. The event window that was used in this study is eleven days five days before and after the event date. The share prices used are listed in appendix 1.

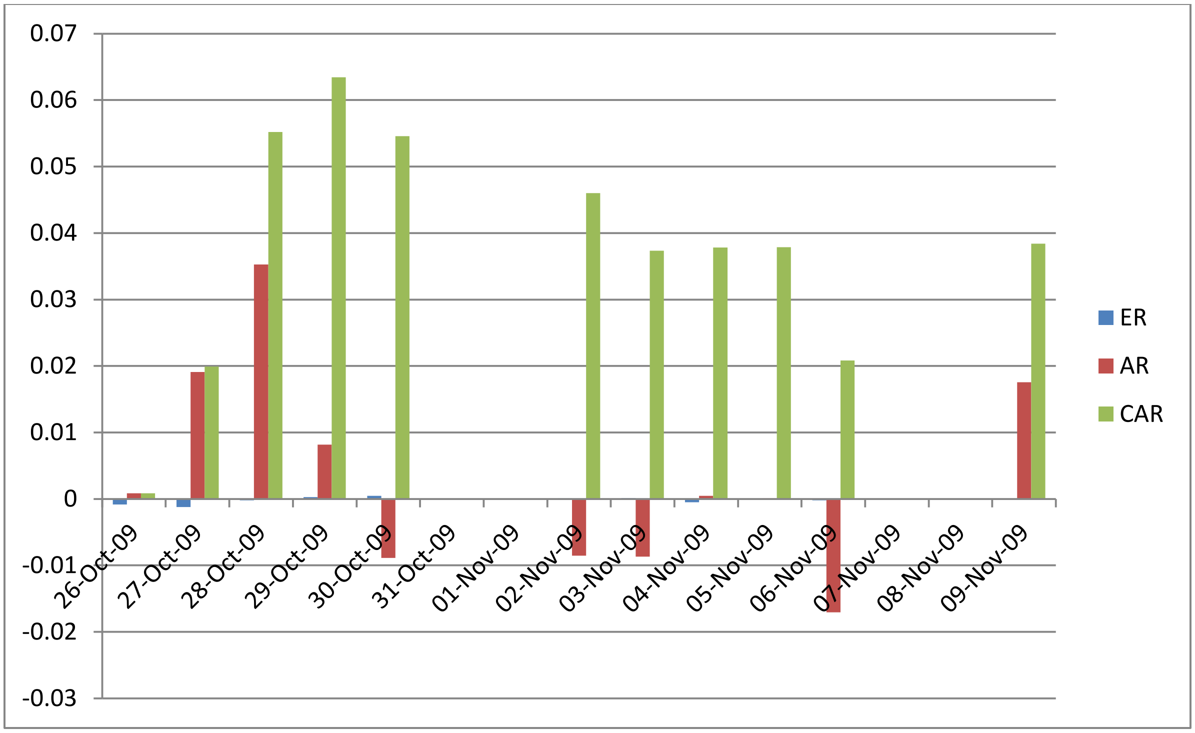

Figure 1: Total Kenya expected returns, abnormal returns and cumulative abnormal returns

After obtaining the expected returns ([E]R), abnormal returns (AR) and cumulative abnormal returns (CAR), the AR t-test statistic was obtained and then summed to yield the CAR t-test statistic, which would then be compared to the critical value from the t-tables.

4.2.2: Kenol kobil

Kenolkobil came to being when Kenya Oil and Kobil Kenya merged in 1st January 2008. The event window that was used in this study is eleven days five days before and after the event date. The share prices used are listed in appendix 1.

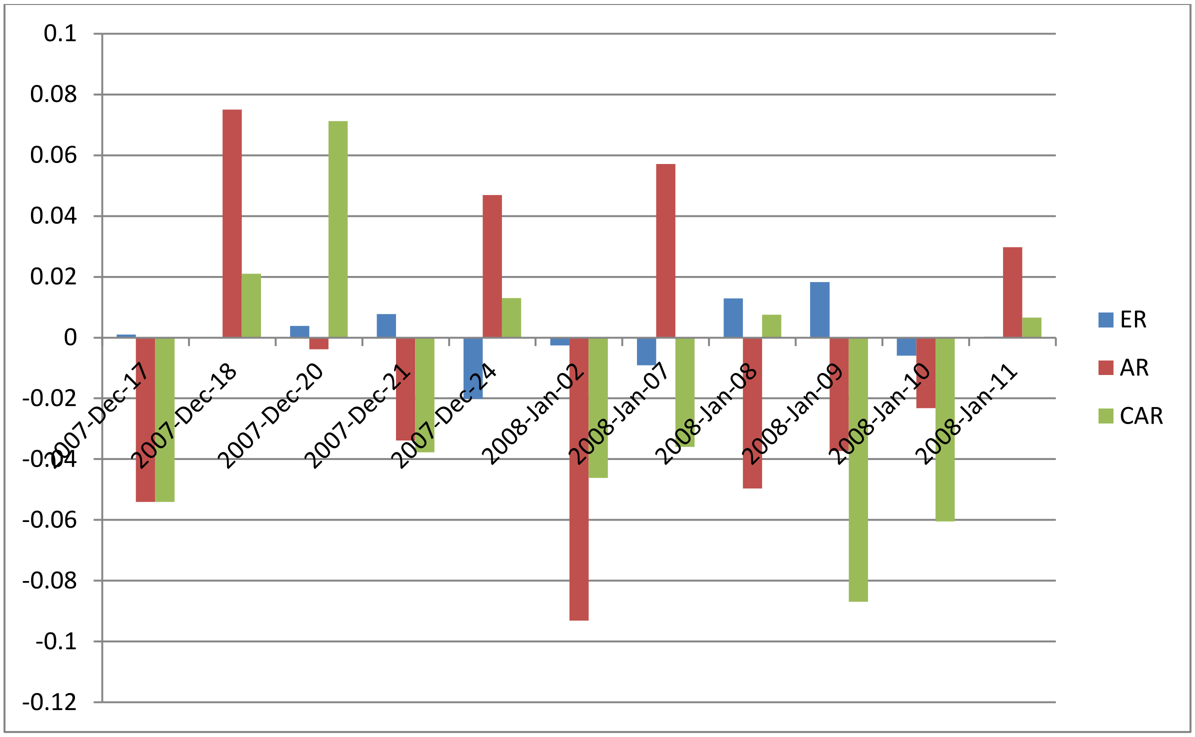

Figure 2: KenolKobil expected returns, abnormal returns and cumulative abnormal returns

After obtaining the expected returns ([E]R), abnormal returns (AR) and cumulative abnormal returns (CAR), the AR t-test statistic was obtained and then summed to yield the CAR t-test statistic, which would then be compared to the critical value from the t-tables.

4.2.3: Market Reactions around the Select Event Dates

Table 1: Market Reactions around the Select Event Dates

COMPANY MERGER	T_0 EVENT DATE	% CHANGE IN SHARE PRICE FROM		% CHANGE IN MARKET INDEX FROM	
		T-5 to T_0	**T_0 to T+5**	**T-5 to T_0**	**T_0 to T+5**
TOTAL KENYA AND CHEVRON KENYA	1.11.2009	4.46%	-0.85%	0.55%	0.59%
KENYA OIL AND KOBIL KENYA	1.1.2008	-2.8%	-0.97%	2.94%	2.96%

The results show that in both instances the share prices decreased while the market index increased. The increase in market indices prior to event date was attributed to the increased bid activities by investors positioning themselves to gain from the benefits of the impending merger as well as the skeptical investors who engage in profit-taking.

4.2.4. Effect on Stock Value

In order to study the impact of M&A on market value of shares, the daily market-adjusted abnormal return was used. The market adjusted abnormal return (MAAR) shows the change in individual stock's value after a major corporate event's announcement date

Parametric T-test was applied to establish whether there were significance deviations in the mean values of MAAR over the five days before the event dates, when compared to the MAAR of the five days after the event dates. T-test is used in comparing the changes in means across various events or groups. The event date was excluded because the trading rules are relaxed on the first day of trading to allow for market forces of demand and supply to determine the value of shares of the newly-merged entity. The findings are presented in Table 2 below. Table 2 presents t-test statistics that were used to determine whether the changes in MAAR (hence market valuation of shares), were significantly different within the 5 days preceding the event date as well as the 5 days after the event date.

Table 2: T-test for changes in MAAR after Event Date

FIRM	MEAN CHANGE IN MAAR OVER T+5 DAYS	MEAN CHANGE IN MAAR OVER T+5 DAYS	T STATISTIC	DECISON
TOTAL KENYA	-0.0011516928834	0.0060461124948	-0.995	Accept H0
KENOL KOBIL	-0.0032796350337	0.0007132491031	-0.231	Accept H0

H0: There was no significant change in valuation of shares before and after the event date
H1: There was significant change in valuation of shares between pre-event and post-event dates

The findings indicate that the null hypotheses were accepted for all the firms at both 95% and 99% levels of confidence. The P-values (smallest values of probability at which the null hypothesis is rejected) were greater than the critical level of the test of 1% (0.01). Hence the null hypotheses were accepted based on this criterion. This indicates that the share prices had not exhibited significant changes over the 11-days event windows. This implies that there were no significant deviations in the values of shares around the merger events.

4.2.5. Effect on Investors' Total Return

The second measure used was cumulative abnormal returns (CAR), which measured the investors' total return over the 11-days event windows for each firm. The changes in cumulated abnormal return were tested using t-test against the value of zero, to find out whether or not there was significant gain in the total investors' returns over the sample event windows.

Table 3

FIRM	MAAR (T=-5DAYS)	MAAR (T=-DAY 0)	MAAR (T=+5DAYS)	CARt 11 days	T STATISTIC	DECISON
TOTAL KENYA	-0.011188	-0.013046	0.006764	0.011425823	-0.497	Accept H0
KENOL KOBIL	-0.000997	0.014722	0.024524	0.001890725	-1.474	Accept H0

H0: There was no significant increase in CARt over the event window
H1: There was significant increase in CARt over the event window

The findings presented in Table 3 indicate that the null hypotheses for no significant change in the CARs over the 11-day event windows were accepted for all the sampled firms. The findings concur with earlier findings in Table 3 above which had shown that the share valuation over the event windows had not significantly changed. The findings therefore indicate that the shareholder total cumulated return had not significantly changed due to announcement (or approval) of a takeover bid.

4.3 Discussion of Research findings

The aim of the study was to explore the effect of mergers and acquisitions on shareholders wealth. Table 1 assesses whether or not the bidding petroleum company realized capital gains over the event windows and whether or not the markets exhibited a bullish or a bearish trend over the event windows. We observe that prior to merger and acquisition announcement and especially five days before [-5; 0], the shareholders of the bidders receive considerable and significant positive cumulative abnormal returns (CARs).

The next stage of analysis approached the subject matter from two perspectives. First was to explore the effect of mergers and acquisitions on shares valuation and secondly was the effect of mergers and acquisitions on total investors return. The results are presented in Tables 2 and 3 where changes in share valuation and total shareholders returns are examined and tested for significance using t-test. The findings from both approaches showed that the sampled mergers had no significant effect on changes in the bidding firms share prices and the changes in total investors' returns.

Key findings of the study were two-fold. First, the study established that the share prices of the sampled firms did not exhibit significant changes within an 11-day event window. The results imply that the petroleum companies M&As were not wealth creating projects for the shareholders of both the bidding entity and the combined entity. The findings are consistent to a recent study by Barasa (2008) which had sought to evaluate market efficiency in relation to information content of merger announcement by companies quoted on the NSE. The study had showed that a majority of the companies' stock returns did not experience a significant reaction to merger announcement which is not typical of stock markets in developing countries. The main conclusion drawn from both studies is that the price reaction to the merger announcements was not significant. Some reactions to the merger announcements were positive while some were

.

The findings showed that the shareholders total cumulated return had not significantly changed due to announcement (or approval) of a takeover bid. These findings concur to a recent study by Omayio (2012) which had sought to examine the information content of mergers and acquisitions announcement for companies quoted at the Nairobi Securities Exchange. Testing for significance using 95 % confidence level, both studies have found that there was weak relationship between company returns for the period before and after the mergers and acquisition announcements.

There are a number of reasons why companies will merge with, acquire, or be acquired by another company. Sometimes, companies can provide services more efficiently if they combine their efforts and facilities. These efficiency gains may come simply by virtue of the size of the combined company; it may be cheaper to serve customers on a larger scale. Collaborating or sharing expertise may achieve gains in efficiency, or a company might have underutilized assets the other company can better use. Also, a change in management may make the new entity more profitable. Other reasons for acquisitions have to do more with hubris and power. The management of an acquiring company may be motivated more by the desire to manage ever-larger companies than by any possible gains in efficiency. The first finding above shows that mergers and acquisitions in Kenya are motivated by non-market-based fundamentals, but rather to gain more efficiency and to enjoy the benefits of large-scale production

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

This chapter presents summary of findings, conclusions and recommendations based on the findings. The aim of the study was to explore the effect of mergers and acquisitions on shareholders wealth of listed petroleum companies in Kenya. This effect was measured by using the event study methodology. The chapter is organized as follows: Section 5.2 presents a discussion of findings; Section 5.3 presents the conclusions; and Section 5.4 presents recommendations for policy and further research.

5.2 Summary of finings

An analysis to determine market reaction s around the time of the event dated showed that share prices decreased while the market indices increased. This is because investors were positioning themselves to gain from the benefits of the impending merger as well as the skeptical investors who engage in profit-taking.

An analysis in the valuation of shares did not seem exhibit significant changes over the 11 days event window this implies that there were no significant deviations in the values of shares around the merger events.

Cumulative abnormal returns which measured the investors' total return over a period of 11 days were measured and there was also not a significant change over the eleven days. This means that shareholder total cumulated return had not significantly changed due to announcements of mergers or takeover bids.

The study establishes that share prices of the sampled firms did not exhibit significant changes within an 11 day event window. This implies that the mergers and acquisitions in the petroleum companies were not were not wealth creating projects for the shareholders.

The reasons why companies will merge with, acquire, or be acquired by another company. Sometimes, companies can provide services more efficiently if they combine their efforts and facilities. These efficiency gains may come simply by virtue of the size of the combined company; it may be cheaper to serve customers on a larger scale. Collaborating or sharing expertise may achieve gains in efficiency, or a company might have underutilized assets the other company can better use. Also, a change in management may make the new entity more profitable. Other reasons for acquisitions have to do more with hubris and power. The management of an acquiring company may be motivated more by the desire to manage ever-larger companies than by any possible gains in efficiency. The first finding above shows that mergers and acquisitions in Kenya are motivated by non-market-based fundamentals, but rather to gain more efficiency and to enjoy the benefits of large-scale production.

5.3. Conclusions

The study concludes that petroleum company's mergers announcement had no significant effect on the valuation of shares in the secondary market. In addition, the announcements have no significant effect on the total cumulated return for shareholders. This leads to the conclusion that past Kenyan petroleum companies M&As were not wealth creating projects for the shareholders of both the bidding entity and the combined entity. The findings of the study concur with past studies conducted at the NSE which had shown that a majority of the companies' stock returns did not experience a significant reaction to merger announcement which is not typical of stock markets in developing countries. The main conclusion drawn from the study was that the reaction to the petroleum companies' merger announcements did not result to significant build-up of shareholders' wealth for both the bidding and the combined entities.

Having compared this study's results to other findings in the petroleum industry merger literature, mainly in developed countries, it is evident that in many cases the present results for bidder's shareholder returns are lower. In principle the market reaction to an M&A announcement should be to reflect the value of the expected benefit to each party from the merger, the purpose of event studies being to measure the abnormal share price changes around the announcement date as an indicator of the perceived economic effects of the merger (Jensen and Ruback, 1983). The return to the bidding entity's shareholders is a function of two main factors, namely the offer terms and the expected synergy gains from the merger, the latter reflecting the forces of change that have affected the competitive environment in the petroleum industry.

The trend of increasing profitability in developed nations for mergers in the petroleum industry has been lauded by past researchers as an indicator that acquirers would be tempted to pay higher prices for the targets, causing the market to react more favorably to a merger announcement leading to high target abnormal returns. Conversely, given the scenario of stagnated or marginal profitability increases in the Kenyan petroleum markets post-merger, acquirers in petroleum industry mergers have not demonstrated willingness to pay high prices for the target companies (or internal entities), leading to lower returns for the target company compared to those in the developing world. This explains the concurrence of the present findings to recent findings by Barasa (2008) and Omayio (2012).

5.4. Recommendations

In light of the study's findings, fund managers, investment banks, the Nairobi Stock Exchange and other stakeholders in financial services sectors should not be jittery about proposed petroleum company mergers in regards to the anticipated markets reaction. The findings show that petroleum company merger announcement should not be treated as an unbiased predictor of short-term capital gains for both the bidding and the combined entities. Therefore, the study recommends that companies should be careful when deciding to undergo merger and acquisition activity.

Past studies have shown that a merger can bring about enthusiasm or despair as demonstrated by the reaction of the stock prices of the listed firm after the announcements of the mergers and acquisitions. However, the present study has shown a possibility of disquiet. Therefore, the regulators ought to enforce full disclosure by the bidding firms on the reasons behind the impending takeovers since this could be the reason why the announcements did not trigger notable significant reactions.

The goal of this study was to determine if mergers and acquisitions affect shareholder wealth in order to invest accordingly. In the sample of mergers studied, there is evidence that an investor should not be jittery to invest in Petroleum Companies that are planning to acquire another because the market fundamentals do not significantly change. This leads to assertion that that the merging petroleum companies' are mature, and they could have undertaken these mergers to gain a new product or region to continue to perform at growing company levels. Therefore, future petroleum companies' mergers should be pegged on the benefits to be realized from the post-merger synergies.

Finally, the study recommends that the regulators should further deploy non-market based assessment tools that will help in assessing past performance of both the bidding petroleum company and the petroleum company to be acquired as a way of establishing possible reasonable for markets skepticism before and after the event dates.

5.5. Limitations of the Study

The study was limited to only the listed petroleum companies by the time the merger was taking place this was a challenge because only two of this companies are listed hence providing a very small sample for analysis.

Obtaining data on the companies was difficult and most of the information ie the share prices and market share index had to be purchased from the NSE. Also data was only available for the listed companies hence it was not possible to analyze the mergers of companies that occurred privately.

The study was also limited to effects of speculative tendencies that are characterized by information leakages around the event windows, where the trading patterns are at times not driven by market fundamentals but speculative behavior due to huge participation by retail investors engaging in profit-taking and those positioning themselves for the post-merger purchase bids.

Only two companies were analyzed this could prove to be a challenge to the true representation of the market.

5.6. Suggestions for Further Research

Further future research could be done to study the long-term return to the bidder of firms where it is assumed that the markets take time to evaluate the consequence from a merger. In a long-term study of mergers, the results were highly affected by the model chosen to calculate the normal returns, and it is highly recommended to adjust for beta risk and firm size (Raghavendra 1998). Future studies may consider making improvements to the current model approaches applied.

This study made use of a simple methodology based on the market model to determine abnormal returns. There is need for further study in this area and a need to include more independent variables such as those relating to firm size and dividend expectations so as to determine whether when other factors are considered there market would still react positively to mergers and acquisitions announcements.

The dominant rationale used to explain M&A activity is that acquiring firms seek improved financial performance. Apart from this, other important reasons are, economy of scale, economy of scope, cross-selling, synergy, tax benefit, geographical or other diversification, resource transfer, vertical integration, hiring, absorption of similar businesses under single management, diversification, Manager's hubris etc. In light of the present findings, further research may be sought to identify the motivational factors behind mergers for listed petroleum companies.

Furthermore, past studies have shown that payment of the acquisition in cash in comparison to payment in shares provides better returns on average to both the shareholders of the bidding company and the takeover target. Mergers in Kenya have been characterized by both cash and shares payouts. Further researcher may be conducted to assess the effect of the merger payout policy on shareholders' wealth

REFERENCES

Agrawal, A., Jaffe, J., & Mandelker, G. (1992). The Post-Merger Performance of Acquiring Firms: A Re-Examination of An Anomaly. *Journal of Finance* 47, 1605-1621.

Allen, F., Santomero M.A., (1996) *The Theory of Financial Intermediation*; The Wharton Financial Institutions Center

Andre, P. Kooli, M., & L'Her, J.F. (2004). Buy Stock or Sell Stock: The long-run performance of mergers and acquisitions: evidence from the Canadian stock market. *Financial Management*, 33, 27-43.

Bagnoli, T. K., Gordon H., and Lipman H. K., (1989) "Merger Motives and Target Valuation: A Survey of Evidence from CFO‟s". *Journal of Applied Finance* 14: 7-24.

Barasa, M. C., (2008),*The effect of mergers and acquisitions announcement on share prices – evidence on the Nairobi Stock Exchange*; Nairobi: University of Nairobi, School of Business

Barney, L. J., (2003), "Inside the black box: What explains differences in the efficiencies of financial institutions", *Journal of Banking and Finance*, July, (21)7, 895-947

Beena P. L., (2004), Towards Understanding the Merger Wave in the Indian Corporate Sector – a Comparative Perspective, *Working Paper* 355, February, CDS, Trivandrum, pp 1-44

Berger, A. N., (2000), The Integration of the Financial Services Industry: Where are the Efficiencies? FEDS Paper No. 2000-36.

Berger, A. N., Demsetz, R. S., &Strahan, P.E., (1999) The consolidation of the financial services industry: Causes, consequences, and implications for the future,*Journal of Banking & Finance* 23, 135-194.

Berkovitch, A., and Khanna, E.W., (1991) “Are mega-mergers anticompetitive? Evidence from the first great merger wave”. *Rand Journal of Economics*, 29: 803-827.

Besanko, T., (2006). The impact of country diversification on wealth effects in crossborder mergers. *The Financial Review*, 35, 37-58

Black, B., (1989), Bidder Overpayment in Takeovers, *Stanford Law Review*.

Black, M., Cranes, P., and Jandik, J.E. Jr (2001), "Mergers and productivity", Journal of Economic Literature, Vol. XL pp.540-1.

Brealey, W., and Myers G. L., (2003) “Stockholder gains from focusing versus diversifying bank mergers,” *Journal of Financial Economics* 59, 221-252.

Brickley, V, and Netter, P., V.A., (1998) “Post-Merger Performance of Acquiring Firms from Different Industries in India” *International Research Journal of Finance and Economics* Issue 22 Carney, W. J., (2000) *Mergers and Acquisitions*; New York: Foundation Press

Carper, J., (1990) “Corporate Cash Reserves and Acquisitions”, *Journal of Finance* 54 (6), 1969-1997.

Cartwright, S., & Schoenberg, R., (2006).Thirty Years of Mergers and Acquisitions Research: Recent Advances and Future Opportunities.*British Journal of Management*.

Cefis, E., Rosenkranz, S., Weitzel, U., (2008) Effects of coordinated strategies on product and process R&D, *Journal of Economics*, Chatterjee, S., (1986) Types of Synergy and Economic Value: The Impact of Acquisitions on Merging and Rival Firms, *Strategic Management Journal* 7, 119-139.

Chesang, C.J., (2002) *Merger Restructuring and Financial Performance of Commercial Banks in Kenya*Unpublished Dissertation, School of Business, University of Nairobi

Chowdhury, E.K., (2012), *The Impact Of Merger On Shareholders' Wealth*.

Conn, C., Cosh, A., Guest. P., and Hughes., A., (2001). „Long Run Share Performance of UK firms engaging in cross border acquisitions", University of Cambridge, Centre for Business Related Research Working Paper No. 214

DePamphilis, D., (2008). *Mergers, Acquisitions, and Other Restructuring Activities*. New York: Elsevier, Academic Press.

Devos, E., Kadapakkam, P.R., and Krishnamurthy, S., (2008) How Do Mergers Create Value? A Comparison of Taxes, Market Power, and Efficiency Improvements as Explanations for Synergies, *Review of Financial Studies,*

Dickerson, A., Gibson, A.H., and Tsakalotos, E., (1997) "The Impact of Acquisitions on Company Performance: Evidence from a Large Panel of UK Firms", *Oxford Economic Papers* 49 (3), 344-361.

Dodd, I., and Ruback, M., (1997). Do long-term shareholders benefit from corporate acquisitions?
Journal of Finance, 52, 1765-1790.

Feinberg, R. M., (1985) Sales at Risk: A Test of the Mutual Forbearance theory of Conglomerate Behaviour, *Journal of Business* 58, 225-241.

Firth, M. (1979). The profitability of takeovers and mergers. *The Economic Journal*, 89, 316-328.

Frydman, H., (2002) Financial Buyers in Takeovers: Focus on Cost Efficiency*Managerial Finance*,

Gaughan, L., (2002) “Shareholder Wealth Effects of European Domestic and Cross-Border Takeover Bids”, *European Financial Management* 10(1), 9-45.

Genesove, D., & Mayer C., (2001), Loss aversion and seller behavior: Evidence from the housing market,*Quarterly Journal of Economics* 116, 1233-1260.

Gugler, K., Mueller, D.C., YurtogluB.B., and Zulehner, C., (2003) The effects of mergers: an international comparison, *International Journal of Industrial Organization* 21, 625-653.

Goergen, M., & Renneboog, L., (2004) “Shareholder Wealth Effects of European Domestic and Cross-Border Takeover Bids”, *European Financial Management* 10(1), 9-45.

Hamaguchi, A., (2002) “Does operating performance really improve following corporate acquisitions?” *Journal of Corporate Finance* 7 pp 151-178

Hayford, J., (1999) “Corporate Cash Reserves and Acquisitions”, *Journal of Finance* 54 (6), 1969-1997.

Hayward, M. L. A., and Hambrick, D.C., (1997) Explaining the premiums paid for large acquisitions: Evidence of CEO hubris. *Administrative Science Quarterly*, 42: 103-127.

Healy, P.M., Palepu, K.G., & Ruback, R.S. (1992). Does corporate Performance improve after mergers?. *Journal of Financial Economics*

Hitt, M.A., Harrison J.S., and Ireland R.D., (2001) *Mergers and Acquisitions: A Guide to*

Creating Value for Stakeholders, Oxford University Press, Oxford

Houston, J. F., James C. M., and Ryngaert M.D., (2001) Where Do Merger Gains Come From? Bank Mergers from the Perspective of Insiders and Outsiders*Journal of Financial Economics* 60: 285-331.

Ingham, H., Kiran, I., and Lovestam, A., (1992). Mergers and profitability: a managerial success story? *Journal of Management Studies*, 29, 195-208

Ireri, J. K., (2011) *Effects of mergers and acquisitions on financial performance of oil companies in Kenya*. Unpublished Dissertation, School of Business, University of Nairobi

Ismail, D., and Abdou, R., and Annis, b., (2010). Valuation consequences of cash tender offers. *Journal of Finance*, 33, 505-516.

Jaffe, J., & Mandelker, G. (1992). The Post-Merger Performance of Acquiring Firms: A Re-Examination of An Anomaly. *Journal of Finance* 47, 1605-1621.

Jensen, M. C., (1986) Agency Costs of Free Cash Flow, Corporate Finance and Takeovers, *American Economic Review*, 76, 323-329

Kaplan, R., and Weisbach, R., (1992) “A Test of the Free Cash Flow Hypothesis: The Case of Bidder Returns”, *Journal of Financial Economics* 29(2), 315-335.

Katuu, J.M., (2003) *A survey of Factors Considered Important in Merger & Acquisition Decisions by Selected Kenyan Based Firms* Unpublished Dissertation, School of Business, University of Nairobi

Kim, E. H., and Singal, V. (1993) Mergers and market power: Evidence from the airline industry. *American Economic Review*, 83: 549-569.

King, D. R., Slotegraaf, R., &Kesner, I., (2008) Performance implications of firm resource interactions in the acquisition of R&D-intensive firms *Organization Science* 19 (2): 327–340.

Kiplagat, E., (2006) *Effects of Mergers on Financial Performance of Companies Listed at the NSE* Unpublished Dissertation, School of Business, University of Nairobi.

Kithitu, M., (2007) "*Effects of Mergers on Financial Performance of Non Listed Banks in Kenya"* Unpublished Dissertation, School of Business, University of Nairobi.

Klein, P. G., (2001) Were the acquisitive conglomerates inefficient?*Rand Journal of Economics,* 32: 745-761

Kling M.D., (2006) "The overall gains from large bank mergers," *Journal of Banking & Finance* 18, 1155-117

Lewellen, W., Loderer, C., and Rosenfeld, A., (1985) "Decisions and Executive Stock Ownership in Acquiring Firms", *Journal of Accounting and Economics* 7, 209-231.

Loderer, C. & Martin, K. (1992). Post-Acquisition Performance of Acquiring Firms. *Financial Management* 21, 69-79.

Loughran, I., and Vijh, M., (1997). Do long-term shareholders benefit from corporate acquisitions?
Journal of Finance, 52, 1765-1790.

Lutbatkin, M., (1987).Merger strategies and stockholders value.*Strategic Management Journal*, 8, 39-53.

Maddigan, R., &Zaima, J., (1985) The Profitability of Vertical Integration. *Managerial and Decision Economics* 6 (3): 178–179

Malmendier, U., and Tate, G., (2005) CEO Overconfidence and Corporate Investment, *Journal of Finance* 60(6), 2661-2700

Manne, H.G., (1965) “Mergers and the Market for Corporate Control”, *Journal of Political Economy* 73, 110-120.

Maranga, C., (2010) Effects of mergers and acquisitions on cost and scale efficiency of the combined commercial banks in Kenya, Unpublished Dissertation, School of Business, University of Nairobi

Marris, R.L., (1963) “A Model of „Managerial" Enterprise”, *Quarterly Journal of Economics* 77(2), 185-209

Martin, R. A., (1992) “The effects of horizontal mergers on competition: The case of the Northern Securities Company”. *Rand Journal of Eco*

Martynova, M., and Renneboog L., (2008) “A Century of Corporate Takeovers:What Have We Learned and Where Do We Stand?” *Journal of Banking and Finance* 32(10), 2148-

Motta, M., (2004) *Competition Policy Theory and Practice,* Cambridge University Press, Cambridge

Muchae, G.M. (2010). Challenges Of Cross Border Mergers and Acquisition: A Case Study of Tiger Brands Limited (HACO). *Unpublished MBA Thesis* of the University of Nairob

Mueller, D.C., (1969) A Theory of Conglomerate Mergers, *Quarterly Journal of Economics* 83, 643-659.

Muia, M., (2010) *Effects of Mergers on Financial Performance of Non Listed Banks in Kenya*

Unpublished Dissertation, School of Business, University of Nairobi 53

Mugenda, O.M. & Mugenda, A.G (2003). Research Methods: Quantitative and Qualitative Approaches. Acts Press, Nairobi

Muthiani, M.N. (2007). Cross Cultural Perspective of Mergers and Acquisitions: The Case Of GlaxoSmithKline Kenya PLC. *Unpublished MBA Thesis* of the University of Nairobi.

Muya, C. M., (2006) A Survey of Experiences of Mergers Unpublished Dissertation, School of Business, University of Nairobi

Nakamura T., (2005) "Predicting bank failure using DEA to quantify management Quality". Federal Reserve Bank of Dallas, *Financial Industry Studies Working Paper* No. 1-94

Ndungu, B. M., (2011) Effects of mergers and acquisitions on the financial performance of commercial banks in Kenya, Unpublished Dissertation, School of Business, University of Nairobi

Ndura, K.M, (2010) Effects of mergers on financial performance of insurance companies in Kenya Unpublished Dissertation, School of Business, University of Nairobi.

Njenga, M., (2006) "*Effects of Mergers on Financial Performance of Non Listed Banks in Kenya"*
Unpublished Dissertation, School of Business, University of Nairobi

Njoroge, F. W., (2007) A Survey of Mergers & Acquisitions Experiences by Commercial Banks in Kenya" Unpublished Dissertation, School of Business, University of Nairobi

Nyagah, B.W., (2007) Doctor's perception of mergers & acquisitions in the pharmaceutical industry in Kenya Unpublished Dissertation, School of Business, University of Nairobi

Omayio V.M., (2012) *The information content of mergers and acquisitions announcement for companies quoted at the Nairobi Securities Exchange*; Nairobi: University of Nairobi, School of Business

Palepu, K. G., (1986) “Predicting Takeover Targets: A Methodological and Empirical Analysis”, *Journal of Accounting and Economics* 8, 3-35.

Parkinson, M., and Renneboog L., (1991) “A Century of Corporate Takeovers:What Have We Learned and Where Do We Stand?” *Journal of Banking and Finance* 32(10), 2148-2177.

Pawaskar, V., (2001) Effect of Mergers on Corporate Performance in India, *Vikalpa*,

Peristiani, S., (1997) Do Mergers Improve the X-Efficiency and Scale Efficiency of U.S. Banks? Evidence from the 1980s, *Journal of Money, Credit, and Banking* 29, 326-337.

Puranam, P., and Singh H., (1999) “Rethinking M&A for the high technology sector”, Wharton School Working Paper, Presented at AOM 2000 meetings.

Rau, P.R., and Vermaelen T., (1998) “Glamour, Value and the Post-Acquisition Performance of Acquiring Firms”, *Journal of Financial Economics* 49, 101-116

Ravenscraft, D.J., and Scherer F.M., (1987) *Mergers, Sell-offs and Economic Efficiency*. The Brookings Institution: Washington,D.C.

Republic of Kenya (1999) *Republic of Kenya/Monopolies and Prices Commission*; Annual Report, p.16

Republic of Kenya/Monopolies and Prices Commission, (1990) *A Simplified Guideline to Restrictive Trade Practices, Monopolies and Price Control Act, 1988*, Nairobi: Government Printers.

Rhoades, S. A., (1983) *Power, Empire Building and Mergers,* D.C Heath & Co, Lexington MA.
Rhoades, S. A., (1994) A Summary of Merger Performance Studies in Banking, 1980-1993, and an Assessment of the Operating Performance and Event Study Methodologies, Federal Reserve Board, Staff Study 169.

Roll, R., (1986) The Hubris Hypothesis of Corporate Takeovers, *Journal of Business* 59, 197-216.

Sapienza, P., (2002) The Effects of Banking Mergers on Loan Contracts. *The Journal of Finance* LVII: 329-367.

Schlingemann, B., and Stulz. S ., (2004). The Timing and Terms of Takeovers Motivated by Economies of Scale. *Journal of Financial Economics,* 72, 41-62

Scmidt, D.R. and Fowler, K.L., (1990). Post acquisition financial performance and executive compensation. *Strategic Management Journal*, 11, 559-569.

Seballos, L.D., & Thomson, J.B., (1990) Underlying Causes of Commercial Bank Failures in the 1980s Economic Commentary, Federal Reserve Bank of Clevelend

Selvam, J., (2009) “The Characteristics of Takeover Targets: Q and Other Measures”, *Journal of Banking and Finance* 9, 351-362.

Shleifer, A., and Vishny, R.W, (1989) Management Entrenchment: The Case of Manager-specific Investments, *Journal of Financial Economics* 25(1), 123-139.

Singh, A. (1971). *Take-overs, their relevance to the stock market and the theory of the firm*. Cambridge: The University Press Theis,

Surjit, K., (2002) A Study of Corporate Takeovers in India, PhD Thesis Abstract, submitted to University of Delhi, pp 1-11

Trimbath, S., Frydman H., &Frydman R., (2001) Cost Inefficiency, Size of Firms and Takeovers,*Review of Quantitative Finance and Accounting*, 17(4), p. 397-420.

Tse, B., & Soufani, S. (2006). A Theory of Takeovers and Disinvestment. *Journal of Finance.*

Wesonga, M., (2006) A Survey of the Factors that Determine the Choice of Mergers & Acquisition Partners in Kenya Unpublished Dissertation, School of Business, University of Nairobi 56

Weston, F.J., Copeland, M.L, and H.J. Mulherin, (1992) *Takeovers, Restructuring and Corporate Governance*, Pearson Prentice Hall, Upple Saddle River, New Jersey

Williamson, O. E., (1964) *The Economics of Discretionary Behavior*, Prentice-Hall, Englewood Cliffs: New Jersey

Yash, P. B., (2005) *Process & Challenges in the Merger Between Apollo & Pan Africa General Insurance Companies*

Yook., (2004). The impact of country diversification on wealth effects in crossborder mergers. *The Financial Review*, 35, 37-58.

APPENDIX

TIME SERIES DATA

Total Kenya

DATE	TOTAL	RETURN	MARKET	RETURN	EXPECTED RETURN	ABNORMAL RETURN	ACCUMULATED AR	Ar(t-test)
11-Sep-09	28.75		3,096.15					
26-Oct-09	28.00	0	3,156.71	0.007690049	-0.00084584	0.00	0.00	0.04
27-Oct-09	28.50	0.017857143	3,191.93	0.011157186	-0.00122719	0.02	0.02	0.90
28-Oct-09	29.50	0.035087719	3,197.84	0.001851544	-0.00020365	0.04	0.06	1.67
29-Oct-09	29.75	0.008474576	3,189.55	-0.00259237	0.00028514	0.01	0.06	0.39
30-Oct-09	29.50	-0.008403361	3,176.45	-0.00410716	0.00045175	(0.01)	0.05	-0.42
02-Nov-09	29.25	-0.008474576	3,174.22	-0.00070204	7.7218E-05	(0.01)	0.05	-0.41
03-Nov-09	29.00	-0.008547009	3,170.51	-0.00116879	0.00012856	(0.01)	0.04	-0.41
04-Nov-09	29.00	0	3,184.55	0.00442831	-0.00048707	0.00	0.04	0.02
05-Nov-09	29.00	0	3,186.64	0.000656294	-7.2187E-05	0.00	0.04	0.00
06-Nov-09	28.50	-0.017241379	3,192.04	0.001694575	-0.00018639	(0.02)	0.02	-0.81
09-Nov-09	29.00	0.01754386	3,192.98	0.000294483	-3.239E-05	0.02	0.04	0.83

Kenol Kobil

Date	kenol kobil	Return	Market	Return	ER	AR	CAR	Ar t test
2007-Dec-17	107	-0.0531	5291.69	0.002455	0.0009682	-0.05407	-0.0540655	-4.035302006
2007-Dec-18	115	0.074766	5287.93	-0.00071	-0.00028	0.075047	0.02098104	5.60126906
2007-Dec-20	115	0	5339.75	0.0098	0.0038645	-0.00386	0.07118209	-0.288433413
2007-Dec-21	112	-0.02609	5444.83	0.019679	0.0077603	-0.03385	-0.0377117	-2.52626476
2007-Dec-24	115	0.026786	5167.18	-0.05099	-0.020109	0.046895	0.01304753	3.500096482
2008-Jan-02	104	-0.09565	5133.48	-0.00652	-0.002572	-0.09308	-0.0461855	-6.947255971
2008-Jan-07	109	0.048077	5015.5	-0.02298	-0.009063	0.05714	-0.0359403	4.264771283
2008-Jan-08	105	-0.0367	5180.14	0.032826	0.0129449	-0.04964	0.00749781	-3.70515503
2008-Jan-09	103	-0.01905	5419.93	0.04629	0.0182544	-0.0373	-0.0869442	-2.784120962
2008-Jan-10	100	-0.02913	5338.77	-0.01497	-0.005905	-0.02322	-0.0605232	-1.73316089
2008-Jan-11	103	0.03	5341.82	0.000571	0.0002253	0.029775	0.00655359	2.222302827