THE EFFECT OF MERGERS AND ACQUISITIONS ON FINANCIAL PERFORMANCE OF INSURANCE COMPANIES IN KENYA

JUSTIN ORANG’I OMBUI
D61/72755/2014

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

OCTOBER 2016
DECLARATION

This research project proposal is my original work and has not been presented for examination to any other University.

Signature…………………………….          Date……………………………….
Justin Orang’I Ombui
D61/72755/2014

This research Project has been submitted for examination with my approval as University Supervisor.

Signature…………………………….          Date……………………………….
Onesmus Mutunga
Department of Finance and accounting
School of business
University of Nairobi.
DEDICATION

I dedicate this research project to my Mom Jemimah Bosibori, my wife Rodah Mbithe and Son Nigel Osogo. I appreciate their support, understanding and love during the entire MBA course. I will always remain indebted to them.
ACKNOWLEDGEMENT

I want to give my utmost appreciation to individuals from different quarters of my life who were able to support me in one way or another either directly or indirectly. Many thanks to you all for because of you and your inspiration that this work was able to be completed on time.

First and foremost, I start by giving thanks to God for gifting me with life and ability to accomplish these task. I also thank my Mom and my family for their understanding, support and encouragement that they gave me in ensuring that I complete this exercise within the required period.

I am also most grateful to my Supervisor Mr, Onesmus Mutunga. Not only did he impart me knowledge during my MBA course, but he was God given during my MBA project. I sincerely pass my gratitude to you and may God bless you abundantly for without your honest guidance and getting time to guide and correct me I wouldn’t have made it these far.

Last but not least, I appreciate all the friends who assisted me in one way or another to complete my MBA course. God bless you all.
# TABLE OF CONTENTS

DECLARATION .................................................................................................................. ii

LIST OF TABLES ........................................................................................................... vii

LIST OF FIGURES ......................................................................................................... viii

ABBREVIATIONS AND ACRONYMS ........................................................................... ix

CHAPTER ONE .................................................................................................................1

INTRODUCTION ............................................................................................................ 1

1.1 Background of the Study .......................................................................................... 1

1.1.1 Mergers and Acquisitions ...................................................................................... 2

1.1.2 Financial Performance ............................................................................................ 3

1.1.3 Effects of Mergers and Acquisitions on Financial Performance .............................. 4

1.1.4 Insurance Industry in Kenya .................................................................................... 5

1.2 Research Problem ..................................................................................................... 6

1.3 Research Objective .................................................................................................. 7

1.4 Value of the Study .................................................................................................... 7

CHAPTER TWO .............................................................................................................. 9

LITERATURE REVIEW .................................................................................................... 9

2.1 Introduction .............................................................................................................. 9

2.2 Theoretical Review .................................................................................................. 9

2.2.1 The Efficiency Theory ............................................................................................ 9

2.2.2 Empire Building Theory ....................................................................................... 11

2.2.3 Hubris Theory ....................................................................................................... 12

2.2.4 Corporate Control Theory .................................................................................... 14

2.2.5 Market Power Theory ......................................................................................... 14

2.2.7 Free Cash-flow Theory ....................................................................................... 16

2.3 Determinants of Financial Performance .................................................................. 17

2.3.1 Leverage ............................................................................................................... 17

2.3.2 Liquidity ............................................................................................................... 18

2.3.3 Company size ...................................................................................................... 18
LIST OF TABLES
Table 4. 1 Shapiro-Wilk Test for Normality................................................................. 29
Table 4. 2 Shapiro-Wilk Test for Normality.................................................................. 32
Table 4. 3 Correlation Matrix before Merger and Acquisition................................. 35
Table 4. 4 Post Merger and acquisition correlation matrix........................................ 36
Table 4. 5 Mean and Standard Deviation Before and After Mergers and Acquisitions... 37
Table 4. 6 Equality of Means....................................................................................... 39
Table 4. 7 ANOVA....................................................................................................... 40
LIST OF FIGURES

Figure 4. 1 Box-Plots for pre-merger and acquisition ratios ........................................ 30
Figure 4. 2 Detrended Normal Q-Q Plot for ROE .......................................................... 31
Figure 4. 3 Box Plot for post-merger and acquisition ratios .......................................... 33
Figure 4. 4 Detrended Normal Q-Q plot of ROI ............................................................. 34
# ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKI</td>
<td>Association of Kenya Insurers</td>
</tr>
<tr>
<td>DPS</td>
<td>Dividend Per Share</td>
</tr>
<tr>
<td>EPS</td>
<td>Earnings Per Share</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>ICEA</td>
<td>Insurance Company of East Africa</td>
</tr>
<tr>
<td>IRA</td>
<td>Insurance Regulatory Authority</td>
</tr>
<tr>
<td>KCB</td>
<td>Kenya Commercial Bank</td>
</tr>
<tr>
<td>LBO</td>
<td>Leveraged Buy Out</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>Mergers and Acquisition</td>
</tr>
<tr>
<td>NPV</td>
<td>Net Present Value</td>
</tr>
<tr>
<td>NSE</td>
<td>Nairobi Securities Exchange</td>
</tr>
<tr>
<td>RJR</td>
<td>Robert James Reynolds</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on Assets</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on Equity</td>
</tr>
<tr>
<td>ROI</td>
<td>Return on investment</td>
</tr>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
</tr>
</tbody>
</table>
ABSTRACT
Mergers and Acquisitions have been happening in the Kenyan insurance industry for many years now. ICEA LION GROUP was incorporated in 2012 after Lion of Kenya Insurance Company Limited and the Insurance Company of East Africa Limited (both Kenyan) merged their operations to form an East African regional insurance company. Saham Group acquired Mercantile Insurance in April 2014, Union Insurance of Mauritius acquired Phoenix of East Africa Co. Ltd in May 2014 and in April 2015 Barclays Plc acquired First Assurance Company Ltd. It would be of importance to study the financial performance of these amongst others after the merger and acquisition. The study sought to determine the effects of mergers and acquisitions on the financial performance of Insurance companies in Kenya. The study took a causal research design. Causal research design is consistent with the study objective. The process of data collection involved the use of audited accounts used to estimate the relationship between pre and post-merger and acquisition. Normality tests were conducted for the data and the data was found to be normal hence parametric tests were performed. The study found out that the mean for ROE reduced from 2.538 to 0.883 also the Standard deviation also reduced from 3.756 to 1.373 implying the return on equity decreased and the level of risk also reduced the mean for ROI increased from 2.568 to 3.176 at the same time the Standard deviation increased from 2.242 to 2.766. The return on Investments increased implying that the companies performed better after the merger and acquisition. The mean size of the insurance companies increased from 16.457 to 17.926, this was expected because of the synergies obtained through mergers and acquisitions. The size of insurance companies is expected to grow after mergers and acquisition. The study failed to accept the null hypothesis and thereby concluding that mergers and acquisition affects the performance of insurance companies. The study recommends similar studies to be done in other industries and across the region.
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Mergers and Acquisitions (M&A) are dealings in which company ownership, supplementary business organizations or their operating units are transferred or combined. According to Boateng and Bjørntuf (2008), a merger is the combination of businesses which occurs when two companies, more or less on equal footing, decide to join forces. Acquisitions are business combinations which occur when one company takes over another company. For the entire M&A process to be a success, there must be a transfer of the capabilities and knowledge for cost effective synergies to become a reality (Rani, Yadav & Jain, 2013).

The study will be anchored on the following theories; Efficiency theory, Empire building theory, Hubris theory, Corporate control theory, Market power theory and Free cash flow theory. Efficiency theory suggests that mergers will only occur when they are expected to generate enough realizable synergies thus making the deal beneficial to both parties. Empire building theory on the other hand states that mergers are planned and executed by managers who thereby maximize their own utility instead of their shareholders’ value. The Hubris hypothesis suggests that managers may have good intentions in increasing the firm’s value, but being overconfident, they over estimate their abilities to create synergies (Roll, 1986). Corporate control theory (Jensen, 1988) argues that takeover is an efficient means to scuttle the reliance of inefficient managers of target companies. The target firm
may underperform either because its managers pursue their own interest at the expense of owner’s interest or because they lack the knowledge and skills to maximize firm value. Market power theory following the argument of Choi and Weiss (2005), states that M&A’s can also create value if they increase firm market power, allowing the post-merger entity to earn higher economic rents. Thus, if the stock market can identify production-efficient firms, it should reward such firms with higher market-value gains from acquisitions relative to the gains (or losses) of inefficient acquirers (Hattori, 2004). Last but not least, the free cash-flow theory (Jensen, 1986) suggests that firms whose internal funds are in excess of the investments required to fund positive NPV projects, are more likely to engage in large scale actions without prudent analysis unlike their cash-strapped peers.

Mergers and Acquisitions have been happening in the Kenyan insurance industry for many years now, ICEA LION GROUP was incorporated in 2012 after Lion of Kenya Insurance Company Limited and the Insurance Company of East Africa Limited (both Kenyan) merged their operations to form an East African regional insurance company.

1.1.1 Mergers and Acquisitions

Gaughan (2007) defines merger as ‘a combination of two or more corporations in which only one corporation survives’. He further stated that, the acquiring company assumes the assets and liabilities of the merged firm. Okonkwo (2004) writes that, a merger may be achieved through an acquisition, in this case, the shareholders of the acquired company are paid off and the acquirer becomes the owner of all or a substantial part of the assets of the acquired company.
Sudarsanam (2003) described a merger as the process whereby corporations come together to combine and share their resources to achieve common objectives with the shareholders of the merged firms still retaining part of their ownership. This may sometimes lead into a new entity being formed while acquisition resembles more of an arm’s-length deal, with one firm purchasing the assets or shares of the other and the shareholders of the acquired firm ceasing to be owners of the new firm. The views of Sudarsanam conforms with those of Okonkwo (2004), who maintained that the major difference between a merger and acquisition is essentially what the fate of shareholders becomes: ‘shareholders of acquired firms are paid off in the case of acquisition; there is no disinvestment of the shareholders of the amalgamating companies in the case of merger’.

The reasoning behind M&A 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 (Brigham, 1986; Cybo-Ottone & Murgia, 2000; Brealey & Myers, 2003).

1.1.2 Financial Performance

Financial performance is a measure of how well a firm can use assets from its primary mode of business and generate revenues. Financial performance metrics provide a
relative basis for comparing a company with itself over time or with competitors within its industry. Financial performance analysis must also include consideration of strategic and economic developments for the firm’s long-run success. Financial managers as well as senior managers are demanding evaluative standards by which they can rapidly measure the firm’s performance and chart an appropriate course (Prassad & Maher, 2012). In our case, pre and post-merger financial performance of various insurance companies operating in Kenya in particular those that have merged will be gauged by way of performing investigative analyses.

Profitability ratios and insurance ratios are used in studying the financial performance of insurance companies. These Insurance ratios may include; Loss Ratio, Expense Ratio, Combined Ratio, Ratio of Net Written Premiums to Policyholders Surplus. The profitability ratios that will be used are; Return on Revenues, Return on Assets, Return on Equity and Investment Yield.

1.1.3 Effects of Mergers and Acquisitions on Financial Performance

Pandey (2011) on his book entitled financial management, asserts that a combination of two or more firms may result into cost reduction due to operating economies. A combined firm may avoid or reduce overlapping functions and facilities. It can consolidate its management functions such as marketing, research and development and reduce operating costs. In practice, it has been found that the management of a number of acquiring companies paid an excessive price for acquisition to satisfy their urge for high growth and large size of their companies (Luypaert, 2008). The definition of success may vary, but any activity that fails to enhance shareholders interest and value cannot be deemed as a success (Straub, 2007).
A long term decline in shareholder wealth of a merger and acquisition can term the combination process to be a failure (Pike & Neale, 2006). Financial performance of the company can be expressed in terms of income generated from its operations, after offsetting expenses when the profitability of the firm is arrived at, Lucey (2000). There were companies that had sound acquisition records. Their targets were carefully selected and they rarely got involved in competitive auctions. What these companies had in common was a strategic approach to acquisition (Pike & Neale, 2002). Successful acquisitions were part of a long term strategic process designed to contribute towards overall corporate development. Firms were attracted by the opportunity to fully utilize tax shields, increase leverage, and exploit other tax advantages.

1.1.4 Insurance Industry in Kenya

According to the 2015 AKI insurance report the insurance industry had 49 licensed companies at the end of 2015. 24 companies wrote non-life insurance business only 10 wrote life insurance business only and 15 insurance companies were composite(wrote non-life and life business). The penetration rate of insurance in Kenya is estimated to be 3% (AKI 2015). Kenya’s insurance industry leads within the East Africa Community and is a key player in the COMESA region (Rand, 2004).

Various mergers and acquisitions occurred in Kenya in the recent past. UAP and Old Mutual agreed on a merger ahead of listing. This came after Old Mutual raised its shareholding to 60% from 23% after buying 37% from private equity (PE) firms Aureos, Africinvest and Swedfund for around Kshs 14 billion. Old Mutual opted not to buy out the other 1,000 minority shareholders (who are staff & agents). Old Mutual first bought into UAP in January by acquiring a 23.3% stake from Centum Investments and
businessman. Centum sold its stake to get funding needed for its massive real estate, financial services and power projects. KCB Group is said to be considering a takeover of Madison Insurance. Pan Africa Insurance shareholders approved the acquisition of at least 51% percent of Gateway Insurance. Through its acquisition, the company was poised to enter into general insurance business. Kenya’s competition authority approved the acquisition of 61.2% of Resolution Health East Africa by Leapfrog II Holdings (AKI, 2014).

1.2 Research Problem

According to Straub (2007), mergers and other types of acquisitions are performed in the hopes of realizing an economic gain. Some of the potential advantages of mergers and acquisitions include achieving economies of scale, combining complementary resources, garnering tax advantages, and eliminating inefficiencies. Achin (2015) reviewed latest trends in the study of mergers and acquisitions based on the most recently published papers and suggested that potential authors to start approaching other sectors than the banking one. This is because each sector has its own specificities that may be extremely different, but also extremely important. Hence, how mergers influence firms performance lacks experiential backing as the few studies that have been conducted on the same provide mixed results.

As compared to developed markets the number of mergers and acquisition in Kenya is low, sixty one companies are listed in the NSE, which is the only securities exchange market in the country. Currently there are 49 registered insurance Companies but so far only six have listed with the bourse namely; Jubilee Holdings Ltd, Pan Africa Insurance Holding Ltd, Kenya Re- Insurance Corporation Ltd., Liberty Kenya Holdings Ltd, British
American Investments Company (Kenya) Ltd, and finally CIC Insurance Group Ltd. Some companies have merged but they are not listed (Sirikwo, 2014).

Ireri (2011) conducted a survey on effects of mergers and acquisitions on financial performance of oil companies in Kenya and from the researcher’s finding, financial performance was positively correlated with financial performance after the merger. Thus, according to the researcher’s context, the oil firms performed better financially after the resulting merger and/or acquisition. Lole (2012) conducted a study on the effects of mergers and acquisitions on the financial performance of APA insurance in Kenya and found out that there was a strong relationship between mergers and financial performance. This study therefore seeks to fill this research gap by broadening the scope of mergers and acquisitions to include more insurance companies in the industry thus answering the research question: what are the effects of mergers and acquisitions on the financial performance of the Insurance companies in Kenya?

1.3 Research Objective
To determine the effects of mergers and acquisitions on the financial performance of Insurance companies in Kenya.

1.4 Value of the Study
To the supervisory body, Insurance Regulatory Authority (IRA), to understand how better to alleviate the risks that enthralls the insurance industry in Kenya. Mergers can be used as a strategy to thwart laws on demergers involving composite insurers. IRA is mandated to ensure that mergers and acquisitions within the insurance industry enhance economic efficiency and provide better or higher value for consumers as a result of these
mergers. The inability to do so will raise efficiency questions on the part of the regulatory body as it’s mandated to protect consumers within the same industry from incurring unwarranted losses.

To the shareholders, the study will help to widen their knowledge when faced with decision on mergers and acquisition and how a merger will boost their overall wealth and eventually the value of the firms. This study will enable shareholders understand the impact a merger or acquisition has on the value of its shares, assets and liabilities and even the value of the new formed business thus enlightening them on whether they would prefer such a business or not depending on its effect on the above mentioned variables which affects their investment value in one way or another whether positively or negatively.

For corporate managers, this study will enable them determine whether mergers and acquisitions are value creating or not. If they are, then it would be considerable for them to invest more time and resources to facilitate the same. If they are not, then it would be much better for the managers to put more effort in improving efficiency and productivity in order to improve the financial performance of the company. This study can also enable managers come up with new strategies to compete and improve the general performance of the company.

To the scholar, this study will be as source of empirical evidence and literature review. It will provide a basis of further research. It will facilitate a researcher to identify research gaps in the area and carry out further research on the same.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covers the theoretical review, determinants of financial performance, empirical studies and summary of literature review.

2.2 Theoretical Review

Mergers and acquisitions are important strategies adopted by corporate organizations in order to be competitive and remain relevant within their respective industries. Various theories have been developed to explain this concept of mergers and acquisitions. The major theories in this category involve “value maximizing theories” and ”managerial theories.

The hubris hypothesis suggests that managers may have good intentions in increasing their firm’s value, but being overconfident, they over estimate their abilities to create synergies (Roll, 1986). Empire building theory (Marris, 1963), states that mergers are planned and executed by managers who thereby maximize their own utility instead of their shareholder’s value.

2.2.1 The Efficiency Theory

Banerjee and Eckard(1998) promotes this theory which suggests that, mergers will only occur when they are expected to generate enough realizable energies to make the deal
beneficial to both parties. In general, three types of synergies can be distinguished. First, financial synergies result in lower costs of capital. One way to achieve this is by lowering the systematic risk of a company's investment portfolio by investing in unrelated businesses. Another way is increasing the company's size, which may give it access to cheaper capital. A third way is establishing an internal capital market. An internal market may operate on superior information and therefore allocate capital more efficiently.

Secondly, Operational synergies can stem from combining operations of hitherto separate units (for example a joint sales force) or from knowledge transfers (Porter, 1985). Both kinds of operational synergies may lower the cost of the involved business units or may enable the company to offer unique products and services. These potential advantages have to be weighed against the cost of combining or transferring assets.

Last but not least, managerial synergies are realized when the bidder's managers possess superior planning and monitoring abilities that benefit the target's performance. A sideline to this argument are the positive motivation effects ascribed to LBOs (Jensen & Murphy, 1988). The idea of financial synergies has received sharp theoretical criticism. The main argument is that financial synergies of any kind cannot be achieved in an efficient capital market. Research has shown that indeed there is no evidence for a lower systematic risk or a superior internal capital market (Rumelt, 1986; Montgomery & Singh, 1984). Size advantages, however, seem to exist in the capital market (Scherer et al., 1975). The efficient theory will help determine what kind of synergy the mergers and acquisition processes in the study adhered to.
2.2.2 Empire Building Theory

According to this theory, mergers are planned and executed by managers who thereby maximize their own utility instead of their shareholders' value. This approach has its roots in the original study on the separation of ownership and control in the corporation (Berle & Means, 1933). The common thread of the managerial theories of the firm is the maximization of managers' goals subject to constraints put upon them by the capital market. In Baumol's model managers maximize revenues subject to a minimum profit requirement. Marris' model overcomes this static perspective and instead postulates the financially sustainable growth rate of assets as the goal pursued by managers. Williamson introduced the concept of managers' expense preference, which he modeled as a compound variable containing factors such as company cars, excess staff or prestigious investments. Mueller built on Marris' work and developed a growth maximization model of mergers. Interestingly, Marris excluded mergers from his model because he regarded them as a financially unsustainable strategy. Another recent development in this field is Black's (1989) overpayment hypothesis. Black postulates that managers overpay for targets because they are overly optimistic and because their interests diverge from those of their stockholders.

In an efficient capital market, the overpayment should result in a drop in the bidder's stock price. Black argues that this does not occur because investors anticipate the overpayment (or other means of cash waste). With this interesting argument Black can reconcile the assumption of information efficiency with the theory of managerialism. Again, it is not too surprising to find no instances where managerial goals are cited to justify a merger. But the empire-building theory enjoys a popularity in the business press
that seems to grow proportional with the size of a merger. In the case of Philip Morris' bid for Kraft, observers seemed to be divided between management's synergy explanation and a competing one that involved management's desire for growth and new fields of activity, fueled by excess cash (Dunkin, 1988; Friedman and Gibson, 1988; Rothman, 1988; Smith and Sandler, 1988). In the case of the LBO proposed by RJR Nabisco's management, the reactions were almost entirely in favor of an explanation in terms of managerial abuse (Bartlett, 1988; Dobrzynski, 1988a, b). This theory will enable the researcher establish whether the merger or acquisition was for the benefit of the management or the shareholders.

2.2.3 Hubris Theory

The hubris hypothesis formulated by Roll (1986) postulates that managers systematically commit error of optimism in evaluating merger opportunities due to their excessive self-confidence. The higher valuation of the bidders, compared to the true value of the target, would not have been made by rational bidders. Thus managerial motives are important determinants for the outcome of the mergers and acquisitions as managers may act to maximize their own utility and engage in ‘empire building’ (Trautwein: 1990, Zalewski: 2001) instead of their shareholders’ value. Jensen (1986, 1988) explains that managers may invest the free cash flow in projects such as acquisitions with negative NPV if that would lead to increased personal utility rather than maximize shareholder value. These free cash flows. Which are generally found in the reserves, should rather be paid out as to shareholders in the form of dividends if the firm is to be effective and to maximize the stock price. (Jensen: 1986)
Black (1989) argue that managers in conglomerate mergers face an ‘employment risk’ because their future employment and earnings potential are highly correlated with the firm’s risk. As a result risk averse managers may undertake M&A to reduce their employment risk, rather than benefit shareholders, because such risk cannot be diversified in their own portfolio.

Mueller (1969) developed a growth maximization model of mergers and acquisitions based on the argument that manager’s bonuses, social status, salary, and promotions are related to size of the firm. He argues that because of this relationship, managers are more likely to accept a return on the investment that is lower than shareholders requirements. Therefore managerial hubris can be viewed as an agency problem that arises due to separation of ownership and control and resulting divergence between the interest and motives of managers and shareholders.

Whether managers act to maximize their own utility or shareholder’s wealth has been tested empirically in a small number of studies. Lewellen and Rosenfield (1985) studied the stock returns of 191 acquiring firms during the period 1963 -1981 and concluded that there exists positive significant relationship between abnormal stock returns from M&A and the percentage of management ownership in the acquiring firm. He found that, managers with large personal ownership in the firm were less likely to engage in M&A that would reduce the acquirer’s shareholder’s wealth. Similarly, Firth (1991) tested the relationship between executive reward and M&A and found that, if shareholder values is increased then so are the executive rewards. Contrary, when shareholder wealth is destroyed then executive still seem to gain from M&A. This theory establishes how the merger or acquisition affects the share value of the firms.
2.2.4 Corporate Control Theory

This theory was first proposed by Manne (1965). The theory states that a firm is undervalued due to inefficient management and that any bidder can detect this, acquire that firm and replace the management. Thus, such a market operates efficiently in eliminating managers who either pursue goals that do not go into the shareholder’s interests or are simply incompetent. If the bidder who obtains the target replaces the pre-merger management with better ones, the target will increase its value.

Therefore, 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 market fails to eliminate them.’ Hostile’ takeovers should, as a result, be observed amongst poorly performing firms, and amongst those whose internal corporate governance mechanisms have failed to discipline their managers. This theory enables the researcher to establish how the merger or acquisition took place.

2.2.5 Market Power Theory

Feinberg (1985) came up with the market power theory which suggests that increased allocative synergies, offers the firm positive and significant private benefits because holding all other factors constant, firms with greater market power charge higher prices and earn greater margins through the appropriation of consumer surplus.

Eckbo and Wier (1985) states that horizontal mergers are a central aspect when considering the relationship between takeovers and increased market power. The
argumentation is as follows: The incentive for different businesses to adjust their production levels to match one another depends upon the monitoring costs of collusive agreements from the industry’s perspective. Horizontal mergers reduce the number of independent suppliers in the market place. When fewer suppliers are active in a market, the actions of the individual market actors are more visible and the probability that a non-conform increase in production levels (“cheating”) is discovered, is higher. The lower the monitoring costs (i.e. the greater the likelihood that “cheating” is discovered), the better the stability, profitability and therefore the attractiveness of cartel agreements (Edwards, 1955).

If agreements are not explicitly agreed, one speaks of “tacit collusion”. Likewise, for this form of agreement the easier it is to predict the influence of a few market players on product prices and profits, the stronger the attraction to lower production levels. Whether explicit or implicit, such collusion promises monopoly-like returns for all suppliers as a result of higher market prices across the board (EIA, 2001). In a production-cost-oriented price regulated market, the attraction of building up market power is much reduced: even underpricing agreements with competitors, the utilities are not in a position to increase their prices autonomously without first obtaining permission from the regulation authorities, who base their recommendations on the cost of provision (EIA, 2002). According to this argumentation, mergers between two competitors will have a positive effect on all other suppliers in the relevant market, as the probability of stable price agreements being reached rises. Whether the relevant market is regional, national or international is often the subject of intensive debate during cartel discussions. This theory
helps the researcher establish whether horizontal mergers took place as it mainly majors on horizontal mergers and not vertical.

2.2.7 Free Cash-flow Theory

Jensen (1986) is credited with coming up with the free cash-flow theory. This theory suggests that, firms whose internal funds are in excess of the investments required to fund positive NPV projects, 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.

Like the hubris theory, the theory of free cash-flow suggest that otherwise well intentioned managers 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.

Jensen (1986) suggests that in the presence of large free cash flow, the agency conflicts between managers and shareholders become more severe (that is, the free cash flow hypothesis). This is because retaining excess cash flow reduces the ongoing need for raising finance from the capital markets, thereby giving managers the freedom from capital providers’ monitoring. From the shareholders’ point of view, they would prefer this cash to be distributed back to them through dividends or share repurchase programs if firms have limited growth potential and the cash could not be better invested elsewhere.

Khan et al. (2012) find that firm leverage plays an important role in reducing the agency costs of free cash flow. Based on a sample of US firms over the period 1950-1994,
Harford (1999) finds evidence supporting the free cash flow hypothesis. Cash rich acquirers have negative share-market returns at the takeover announcement period and the combined firms have poor operating performance. Schwetzler and Reimund (2004) who examine the cash holdings of German firms also find evidence consistent with the free cash flow hypothesis. They find that compared to a sample of firms matched on industry and firm size, firms with persistent excess corporate cash holdings over a three-year period have significantly lower operating performance, proxy by the operating cash flow. This theory enables the researcher to know whether the mergers or acquisitions were catapulted by the desire to enjoy free cash flow after the mergers or acquisitions.

2.3 Determinants of Financial Performance

Financial performance refers to the measure on how companies carry out their activities to achieve the set financial goals. Financial performance measures on how well companies do in terms of financial returns. This is done through various evaluation methods and financial indicators (Weston, 2001). In insurance, performance is normally expressed in net premiums earned, profitability from underwriting activities and annual turnover. Profit performance includes the profits measured in monetary terms namely the difference between revenues and expenses. Revenue and expenditure are in turn influenced by firm specific characteristics, industry features and macroeconomic variables.

2.3.1 Leverage

Leverage is the proportion of debt to equity in the capital structure of a firm (debt/equity ratio). This ratio shows the degree to which a business is utilizing borrowed money. It reflects insurance companies’ ability to manage their economic exposure to unexpected
losses. It represents the potential impact on capital and surplus of deficiencies in reserves due to financial claims (Adams and Buckle, 2000). The financial or leverage decision is a significant managerial decision because it influences the shareholder’s return and risk and the market value of the firm.

2.3.2 Liquidity
Liquidity refers to the degree to which debt obligations coming due in the next 12 months can be paid from cash or assets that will be turned into cash. It is usually measured by the current assets to current liabilities (current ratio). Liargovas and Skandalis (2008), argues that firm can use liquid assets to finance its activities and investments when external finance are not available. On the other hand, higher liquidity can allow a firm to deal with unexpected contingencies and to cope with its obligations during periods of low earnings.

2.3.3 Company size
The size of the firm affects its financial performance in many ways. Large firms can exploit economies of scale and scope and thus being more efficient compared to small firms. In addition, small firms may have less power than large firms, hence they may find it difficult to compete with the large firms particularly in highly competitive markets. On the other hand, as firms become larger, they might suffer from inefficiencies, leading to inferior financial performance. Theory, therefore, is equivocal on the precise relationship between size and performance (Majumdar, 1997).

2.3.4 Companies’ age
Age is another determinant of firm performance. Older firms are more experienced, have enjoyed the benefits of learning, are not prone to the liabilities of newness, and can
therefore enjoy superior performance. Older firms may also benefit from reputation
effects, which allows them to earn a higher margin on sales. On the other hand, older
firms are prone to inertia, and the bureaucratic ossification that goes along with age; they
might have developed routines, which are out of touch with changes in market
conditions, in which case an inverse relationship between age and profitability or growth
could be observed (Liargovas & Skandalis, 2008).

2.3.5 External Factors

This factors include inflation, Gross domestic product, interest rate and political stability.
A high GDP means a country is performing well financially thus economically stable.
The higher the GDP of a country the higher the savings from its population as most
people tend to do well financially. Interest rate is also another important economic
variable thus it influences on how a company performs in terms of borrowing from the
public and saving for its shareholders. Political stability is also very important in
ensuring that businesses thrive and companies do well financially.

2.4 Empirical Studies

There has been an empirical proof of worse post-merger performance of Indian firms.
The research was carried out for the time period 1992 -1995 using data retrieved from
Capitoline- Ole database. Regression results indicated better performance of non-
merging firms than merging firms over the defined time period. Moreover, the
characteristics of all thirty six mergers showed that liquidity, leverage, profitability
growth and tax savings did not show any remarkable significant change after mergers
(Pawaskar, 2001).
Ramaswamy and Waegelein (2003) tested the long-term post-merger financial performance of merged companies in Hong Kong to determine the relationship between post-merger performance, firm size, compensation plan, method of payment, and the industry type. The sample consisted of a sample of 162 merging firms from 1975 to 1990 and the analysis covers the five years pre- and post-merger (using operating cash flow returns on market value of assets as a measure of performance). The results have concluded that there is a positive significant improvement in the post-merger performance. There is a significant association between post-merger performance and differences in relative sizes of the combining firms. Firms acquiring relatively larger firms have a more difficult time digesting those firms and in effectively assimilating them into company’s operation. Firms with long-term compensation plans have more positive post-merger financial performance. Firms in dissimilar industries ‘Conglomerate mergers’ experience better post-merger financial performance than firms in similar industries. Mergers during the years 1983 to 1990 experience poor post-merger performance in comparison to those before 1983. It can be noted that the study is an extensive one that not only determines the effects on mergers on long-term performance but pinpoints factors behind such performance. It employed a financial performance measure that is considered as an effective measure in evaluating the long-term financial performance.

In the study ‘Economic Impact of Corporate Mergers and Acquisitions on acquiring firm shareholder’ Coontz (2004) stated that the companies failed to perform well after mergers and acquisitions in all parameters under the study. The performance was different from different industry, and performance of company depends on the type of industry in which merger and acquisitions take place.
In 2008, Mantravadi and Reddy tested whether the relative size of the target and acquiring firms has an impact on the post-merger operating performance in India. The sample consists of all the acquiring transactions that occurred in the period from 1991 to 2003. The financial ratios employed cover a period of three years pre-mergers and five years post-merger are; operating profit margin, gross profit margin ratio, net worth, return on capital employed, and debt equity ratio. The analysis of pre and post-merger operating performance ratios for acquiring small size firms has indicated that the relative size does not make the difference to post merger performance. For firms whose relative medium size, there were a decline in net profit margin ratio and return on capital employed along with an increase in financial performance. For firms whose relative size of the target firms was greater than that of acquiring firms, there was a significant decline in returns of net worth and capital employed and marginal increase in financial leverage.

Kumar (2009) examined the post-merger operating performance of a sample of 30 acquiring companies involved in merger activities during the period from 1999 to 2002 in India. The study attempts to identify synergies, if any, resulting from mergers. The study uses accounting data to examine merger related gains to the acquiring firms. It was found that the post-merger profitability, assets turnover and solvency of the acquiring companies, on average show no improvement when compared with pre-merger values.

Ismail, Abdou and Annis (2010) examined operating performance of a sample of Egyptian companies involved in Merger and Acquisitions (M&A) in the period from 1996 to 2003 in the construction and technology sectors. Empirical results reveal that some measures of corporate performance such as profitability suggest statistical significant gains in the years following M&A especially in the construction sector. Other
performance measures as efficiency, liquidity, solvency and cash flow position do not show significant improvements after mergers in the short run in both sectors. They concluded that the analysis revealed different results than those of a sector level, where total sample analysis indicated in M&A did not affect the operating performance of the Egyptian merged companies. With respect to sector level, the finding suggest that M&A in the construction sector has contributed in improving firm’s profitability but failed to improve efficiency, liquidity, solvency and cash flow position. In the technology sector, no improvement was evidenced.

Vanitha and Selvam (2010) argued that the liquidity, leverage and productivity ratios have an impact on company’s financial performance. In addition, the higher liquidity shows that the company is in good condition, while the higher leverage is a warning sign that the company is at risk. However the rule of thumb is that the higher the risk, the higher the expected return. Moreover, they also agreed the higher profitability means that the company is highly efficient. Leepsa and Mishra (2012) found that merged firm’s show significant improvements in operating performance. They view that, to a large extend, firms engage in M&A to achieve economies of scale, reduced expenses, increased market share, consolidation of operations and synergies.

Angela and Maina (2007) examined the effects of merger restructuring on the financial performance of twenty (20) Kenyan banks that had merged between 1993 and 2000. This study investigated the effects of merger restructuring on the financial performance of commercial banks in Kenya. That is how Market Power Theory would be explained in Kenyan banking industry in analysis of mergers. The research compared the pre-merger and post-merger financial performance of twenty Kenyan banks that had merged between
1993 and 2000. The results indicated that, the financial performance ratios that have legal implications (capital adequacy and solvency ratios) improved after the merger. However profitability ratios indicated that, the majority of the merged banks reported a decline in financial performance.

To determine the relationship between merger restructuring and financial performance of commercial banks in Kenya and using ratio analysis, Chesang (2002) concluded that, even though there was improved performance in some cases, the extent of the contribution was not significant.

Korir (2006) carried out a study on Effects of Mergers on Financial Performance of Companies listed at the Nairobi Stock Exchange. The population used in this study was 48 companies listed on the Nairobi Stock Exchange. It was concluded that mergers improve financial performance of companies listed at the Nairobi Securities Exchange.

On his conclusion on research carried out to determine the effect of mergers on financial performance of firms listed at the NSE, Kiarie (2012) observed that mergers have significant positive effect on DPS, where merging of listed companies lead to increase in DPS. The rise in DPS would be due to the need to create investor’s confidence and synergy related to mergers. The study also concludes that mergers have positive but significant effect on EPS which leads to positive but insignificant effect on return on equity.

Kariri (2013) studied on the effect of mergers and acquisitions on shareholders wealth and found out that there was no significant effect on the valuation of shares in the
secondary market after the announcement of mergers in the market. In addition, the announcements have no significant effect on the total cumulative return for shareholders.

2.6 Summary of Literature Review

From the literature review discussed it is evident that mergers and acquisitions affect the financial performance of firms. Studies have shown that most companies perform well after mergers and acquisitions, and this performance is usually positive and significant.

Kumar (2009) examined the post-merger operating performance of a sample of 30 acquiring companies involved in merger activities during the period from 1999 to 2002 in India. The study found that the post-merger profitability, assets turnover and solvency of the acquiring companies, on average showed no improvement when compared with pre-merger values. Leepsa and Mishra (2012) found that merged firm’s shows significant improvements in operating performance. Locally, Angela and Maina (2007) examined the effects of merger restructuring on the financial performance of twenty (20) Kenyan banks that had merged between 1993 and 2000. The results indicate that the financial performance ratios that have legal implications (capital adequacy and solvency ratios) improved after the merger. Kariri (2013) on the effect of mergers and acquisitions on shareholders wealth, found out that there was no significant effect on the valuation of shares in the secondary market after the announcement of mergers in the market.

From the literature review above there is no study that has directly analyzed the relationship between financial performance of insurance companies in Kenya and mergers and acquisitions. This study will therefore seek to ascertain whether mergers and acquisitions have an effect on financial performance of Insurance Companies in Kenya.
The study will be conducted in the Kenyan Market since no such study has been done to include all insurance companies in the industry.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter discusses the research design, target population, data collection methods and data analysis methods.

3.2 Research Design

The study adopted a descriptive survey design. This design serves best in studies that collect descriptive data. The study shall largely be descriptive in nature and that’s why this design was preferred. The design is used when describing the characteristics of a phenomenon in a particular situation (Kothari, 2008).

3.3 Population of the Study

The population were all mergers and acquisitions that took place in Kenya between January 2014 and December 2015. According to the Insurance Regulatory Authority Annual Report (2015) there were 9 mergers and Acquisitions in the Insurance Industry in Kenya between the said period. This period has been chosen since it is the most relevant period with the most up to date data that is recorded concerning mergers and acquisitions in the insurance industry in Kenya. The mergers that happened in the first quarter of 2016 were yet to be documented and were not included in this study since there was no financial statement that could have been reported. The Mergers and acquisitions are as shown in Appendix I.
3.4 Data Collection

The study used secondary data on net profits and total assets of the merged company before and after the merger. The financial performance was compared before and after the merger. Secondary data was obtained from the Insurance Regulatory Authority annual reports as well as from the financial statements of insurance companies available on the insurance companies’ official websites.

3.5 Data Analysis

An event analysis was used to determine if the merger or acquisition had any significant effect on the financial performance of the merged or acquired companies. This is a statistical method that analyzes the impact of a merger and acquisition announcement to determine whether investors believe in its value creation or not. The secondary data of the mentioned nine insurance companies was taken from the annual audited reports from 2014 to 2015. Financial data was taken from the profit and loss statement, balance sheet and cash flow statements which shall be used for the calculation and analysis of financial performance through test of differences.

Analysis of Variance (ANOVA) and T-test for equality of means was used in the analysis. The T-test was used to determine if the means were significantly different between mergers and acquisitions and firm performance. ANOVA was used in order to test the significant difference in means of leverage, liquidity, size, age and ROA, ROI, ROE variables. For means that was significantly different, the Scheffe multiple comparison tests was further conducted in order to determine where the differences lie.
The indicators of the effect of mergers and acquisition (Independent variable) were management efficiency, firm characteristics and risk management.

The t-test therefore tested the chance that, the observed association between the two variables has occurred by probability, i.e. due to sampling error. In this case the hypothesis to be tested at 5% significance level was:

H₀: Financial performance is not affected by pre-mergers and acquisitions

H₁: Financial performance is affected by post-mergers and acquisitions

The mean and standard deviation of each variable before and after the merger was computed and comparison made. T-value for each variable was computed to determine if the effect was significant or not.
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND FINDINGS

4.1 Introduction

This chapter details the data analysis, findings and interpretations of the research study. The data was checked for normality. One way ANOVA, Correlation, T-test and the Scheffe Test; results and findings are respectively discussed. Data was obtained for all Insurance firms that underwent a merger or acquisition in Kenya between the year 2014 and 2015.

4.2 Check for Normality of Data

The data was subjected to various tests before the analysis to check whether it was normal so as to enable subsequent analyses.

4.2.1 Normality test for pre-merger and acquisition variables

Table 4.1 below shows the Shapiro-Wilk and Kolmogrov-Smirnov tests which were conducted using the age of the insurance companies before the merger and acquisitions against the ratios ROE, ROI and ROA. Since the variables are $8 < 2000$ the Shapiro Wilk test was used and the data was found to be normally distributed because the p-values for all the dependent variables (ratios) were less than 0.05 at 5% level of significance.

Table 4. 1Shapiro-Wilk Test for Normality

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>.276</td>
<td>8</td>
<td>.073</td>
<td>.711</td>
<td>8</td>
<td>.003</td>
</tr>
<tr>
<td>ROI</td>
<td>.231</td>
<td>8</td>
<td>.200</td>
<td>.850</td>
<td>8</td>
<td>.094</td>
</tr>
<tr>
<td>ROA</td>
<td>.258</td>
<td>8</td>
<td>.124</td>
<td>.750</td>
<td>8</td>
<td>.008</td>
</tr>
</tbody>
</table>

Source: Researcher 2016
at 0.05 level of significance

Subsequent test for normality were also done, with the box-plot shown in figure 4.1 below revealing that the data was symmetrical for all the three variables. The symmetry of data, is a confirmation of normality of data.

**Figure 4.1 Box-Plots for pre-merger and acquisition ratios**

![Box-Plots for pre-merger and acquisition ratios](image)

Source: Researcher 2016

A look at the detrended normal Q-Q plot for the ROE from the same analysis, shown in figure 4.2 below discloses that all the variables lie between the range of +1 to -1. This again is a confirmation of the normality of data.
4.2.2 Normality test for post-merger and acquisition variables

Table 4.2 below shows the Shapiro-Wilk and Kolmogorov-Smirnov tests which were conducted using the age of the insurance companies before the merger and acquisitions against the ratios ROE, ROI and ROA. Since the variables are $\leq 2000$ the Shapiro Wilk test was used and the data was found to be normally distributed because the p-values for all the dependent variables (ratios) were less than 0.05 at 5% level of significance.

Source: Researcher 2016
Table 4.2 Shapiro-Wilk Test for Normality

<table>
<thead>
<tr>
<th>AGE</th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>ROE</td>
<td>2</td>
<td>.420</td>
</tr>
<tr>
<td>ROI</td>
<td>2</td>
<td>.217</td>
</tr>
<tr>
<td>ROA</td>
<td>2</td>
<td>.263</td>
</tr>
</tbody>
</table>

Source: Researcher 2016

Further test for normality was also conducted revealing that the data was symmetrical for all the three variables. Hence a confirmation of normality of the data. Data symmetry serves as a confirmation of normality. The results are indicated in the table below.
Figure 4.3 Box Plot for post-merger and acquisition ratios

Observing the detrended normal Q-Q plot for the ROI from the same analysis, shown in figure 4.3 below discloses that all the variables lie between the range of +1 to -1 also a confirmation of the normality of data.
After coding of the data in SPSS, it was necessary to check for normality of the data. The data was found to be normal. This was done by using box-plots, detrended Q-Q plots and Shapiro Wilk test for normality. All these tests concluded the same thing. Having established that the data is normal, parametric tests were then conducted.

4.3 Correlation Analysis

To identify whether there is a correlation between the dependent and independent variables a correlation analysis was conducted. The aim of correlation was to determine whether there is a relationship between variables and the direction of the relationship,
namely: whether the relationship is positive, negative or zero. The pre-merger and acquisition correlation and post-merger and acquisition correlation were done separately and analyzed.

4.3.1 Pre-merger and acquisition

Age as an independent variable was eliminated in order to remain with symmetric matrix of three dependent and three independent variables. Table 4.3 below shows the pre-merger and acquisition correlation matrix.

**Table 4.3 Correlation Matrix before Merger and Acquisition**

<table>
<thead>
<tr>
<th></th>
<th>ROE</th>
<th>ROI</th>
<th>ROA</th>
<th>SIZE</th>
<th>LEVERAGE</th>
<th>LIQUIDITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.435</td>
<td>.069</td>
<td>-.298</td>
<td>-.316</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.281</td>
<td>.870</td>
<td>.473</td>
<td>.446</td>
<td>.633</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>ROI</td>
<td>Pearson Correlation</td>
<td>.435</td>
<td>1</td>
<td>-.333</td>
<td>-.475</td>
<td>-.257</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.281</td>
<td>.420</td>
<td>.234</td>
<td>.539</td>
<td>.851</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>ROA</td>
<td>Pearson Correlation</td>
<td>.069</td>
<td>-.333</td>
<td>1</td>
<td>.075</td>
<td>-.284</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.870</td>
<td>.420</td>
<td>.860</td>
<td>.495</td>
<td>.170</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>SIZE</td>
<td>Pearson Correlation</td>
<td>-.298</td>
<td>-.475</td>
<td>.075</td>
<td>1</td>
<td>.728’</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.473</td>
<td>.234</td>
<td>.860</td>
<td>.040</td>
<td>.455</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>Pearson Correlation</td>
<td>-.316</td>
<td>-.257</td>
<td>-.284</td>
<td>.728’</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.446</td>
<td>.539</td>
<td>.495</td>
<td>.040</td>
<td>.686</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>Pearson Correlation</td>
<td>.201</td>
<td>.080</td>
<td>-.536</td>
<td>-.310</td>
<td>.171</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.633</td>
<td>.851</td>
<td>.170</td>
<td>.455</td>
<td>.686</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Researcher 2016
All the values of the variables in the matrix exhibit Pearson Correlation values below the 0.8 threshold. This shows that there is no multi-collinearity between the variables and thus the data was deemed fit to be subjected to further parametric tests. The same correlation was done for the post-merger and acquisition variables.

### 4.3.2 Post-merger and acquisition correlation

The ratios for the post-merger and acquisition were further subjected to an analysis and the results are indicated in Table 4.4 below

**Table 4.4 Post Merger and acquisition correlation matrix**

<table>
<thead>
<tr>
<th></th>
<th>ROE2</th>
<th>ROI2</th>
<th>ROA2</th>
<th>SIZE2</th>
<th>LEVER. 2</th>
<th>LIQUI. 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>1</td>
<td>.059</td>
<td>.531</td>
<td>-.052</td>
<td>-.333</td>
<td>-.163</td>
</tr>
<tr>
<td><strong>ROE2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.890</td>
<td>.176</td>
<td>.030</td>
<td>.420</td>
<td>.699</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td><strong>ROI2</strong></td>
<td>.059</td>
<td>1</td>
<td>-0.201</td>
<td>.641</td>
<td>-.122</td>
<td>-.064</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td><strong>ROA2</strong></td>
<td>.531</td>
<td>-.201</td>
<td>1</td>
<td>.229</td>
<td>-.499</td>
<td>.129</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.176</td>
<td>.632</td>
<td>.585</td>
<td>.208</td>
<td>.761</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td><strong>SIZE2</strong></td>
<td>-.052</td>
<td>.641</td>
<td>.229</td>
<td>1</td>
<td>-.261</td>
<td>-.445</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.903</td>
<td>.087</td>
<td>.585</td>
<td>.533</td>
<td>.269</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td><strong>LEVERAGE</strong></td>
<td>-.333</td>
<td>-.122</td>
<td>-.499</td>
<td>-.261</td>
<td>1</td>
<td>-.027</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.420</td>
<td>.773</td>
<td>.208</td>
<td>.533</td>
<td>.950</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td><strong>LIQUIDITY</strong></td>
<td>-.163</td>
<td>-.064</td>
<td>.129</td>
<td>-.445</td>
<td>-.027</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.699</td>
<td>.880</td>
<td>.761</td>
<td>.269</td>
<td>.950</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

*Source: Researcher 2016*
All the values of the variables in the matrix exhibit Pearson Correlation values below the 0.8 threshold. This shows that there is no multi-collinearity between the variables and thus the data was deemed fit to be subjected to further parametric tests.

The Mean and Standard Deviation for the Insurance companies before and after the merger and acquisitions were obtained and are explained as below;

**Table 4.5 Mean and Standard Deviation Before and After Mergers and Acquisitions**

<table>
<thead>
<tr>
<th></th>
<th>BEFORE</th>
<th></th>
<th>AFTER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
<td>Standard Deviation</td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>2.5381981</td>
<td>3.75781794</td>
<td>.8831981</td>
<td>1.37348645</td>
</tr>
<tr>
<td>ROI</td>
<td>2.5675000</td>
<td>2.24232501</td>
<td>3.1762500</td>
<td>2.76616257</td>
</tr>
<tr>
<td>ROA</td>
<td>.2517749</td>
<td>.32236753</td>
<td>.5053821</td>
<td>.40813986</td>
</tr>
<tr>
<td>SIZE</td>
<td>16.4570551</td>
<td>5.13451550</td>
<td>17.9262415</td>
<td>1.49374238</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>6.9562500</td>
<td>3.09453406</td>
<td>7.6025000</td>
<td>2.89269894</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>1.1187500</td>
<td>.50608970</td>
<td>1.2575000</td>
<td>.50717002</td>
</tr>
</tbody>
</table>

*Source: Researcher 2016*

The mean for ROE reduced from 2.538 to 0.883. The Standard deviation also reduced from 3.756 to 1.373. The mean for ROI increased from 2.568 to 3.176 at the same time the Standard deviation increased from 2.242 to 2.766. A further look at the ROA the mean increased from 0.252 to 0.505. Increase in the Standard deviation from 0.322 to 0.408 was also observed. The mean size of the insurance companies increased from 16.457 to 17.926. This was expected because of the synergies obtained through mergers and acquisitions, although the Standard deviation dropped from 5.135 to 1.494. A look at the leverage of the insurance companies reveals an overall mean of 6.956 which increased to
7.603 implying that companies were more leveraged after the merger and acquisitions than before. The standard deviation reduced to 2.893 from 3.095. This would have happened as a result of asset diversification resulting from putting together the assets of both the acquirer and the acquired. A risk reducing merger allows a firm to increase its leverage thus taking advantage of tax shield provided by debt. Lastly on liquidity there was a slight increase in the mean from 1.119 to a mean of 1.256, the standard deviation also increased slightly from 0.506 to 0.507.

4.5 T-Test for Equality of Means

To determine whether there is a significant difference between the means of the various variables in the study, T-test for equality of means was conducted and the results tabulated as shown in table 4.6 below. The comparisons were for the pre-merger and acquisition and post-merger and acquisition means. To differentiate the pre-merger and post-merger ratios, arbitrarily, a 2 was assigned to the post-merger ratios while pre-merger ratios were not assigned any. A good example is that Return on Equity was abbreviated as ROE2 while that of pre-merger was coded as ROE and so forth.
Table 4.6 Equality of Means

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>1.910</td>
<td>.098</td>
<td>2.53819810</td>
<td>-.6034163 - 5.6798125</td>
</tr>
<tr>
<td>ROE2</td>
<td>1.819</td>
<td>.112</td>
<td>.88319810</td>
<td>-.2650653 - 2.0314615</td>
</tr>
<tr>
<td>ROI</td>
<td>3.239</td>
<td>.014</td>
<td>2.56750000</td>
<td>.6928694 - 4.4421306</td>
</tr>
<tr>
<td>ROI2</td>
<td>3.248</td>
<td>.014</td>
<td>3.17625000</td>
<td>.8636802 - 5.4888198</td>
</tr>
<tr>
<td>ROA</td>
<td>2.209</td>
<td>.063</td>
<td>2.5177492</td>
<td>-.0177311 - .5212809</td>
</tr>
<tr>
<td>ROA2</td>
<td>3.502</td>
<td>.010</td>
<td>.50538212</td>
<td>.1641687 - .8465956</td>
</tr>
<tr>
<td>SIZE</td>
<td>9.066</td>
<td>.000</td>
<td>16.45705508</td>
<td>12.1644927 - 20.7496175</td>
</tr>
<tr>
<td>SIZE2</td>
<td>33.944</td>
<td>.000</td>
<td>17.92624148</td>
<td>16.6774416 - 19.1750414</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>6.358</td>
<td>.000</td>
<td>6.95625000</td>
<td>4.3691548 - 9.5433452</td>
</tr>
<tr>
<td>LEVERAGE2</td>
<td>7.434</td>
<td>.000</td>
<td>7.60250000</td>
<td>5.1841432 - 10.0208568</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>6.252</td>
<td>.000</td>
<td>1.11875000</td>
<td>.6956484 - 1.5418516</td>
</tr>
<tr>
<td>LIQUIDITY2</td>
<td>7.013</td>
<td>.000</td>
<td>1.25750000</td>
<td>.8334953 - 1.6815047</td>
</tr>
</tbody>
</table>

Source: Researcher 2016

From the table above, there is a significant difference between the pre and post-merger and acquisition ratios. However, the difference in ROE was insignificant because the p-values were greater than 0.05. Due to this, it was necessary to determine the difference between the pre and post-merger and acquisition groups using ANOVA.

4.6 Analysis of Variance

Consequently from the T tests above, we can ascertain whether there is a difference between the means of more than two groups. Thereby ANOVA was conducted and the results were tabulated in Table 4.6 as below;
Table 4.7 ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>12.976</td>
<td>4</td>
<td>3.244</td>
<td>42.393</td>
<td>0.06*</td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>.230</td>
<td>3</td>
<td>.077</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13.205</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Researcher 2016*

at 0.05 level of significance

The table above clearly shows that the ratio of regression to residuals is positive, implying there was a significant relationship between the dependent and independent variables used in the study. From the ANOVA above, it was established that mergers and acquisitions affect the performance of insurance companies.

**Hypothesis Testing**

At 5% significance level the following hypotheses were tested:

Hₐ: Financial performance is not affected by mergers and acquisitions

H₁: Financial performance is affected by mergers and acquisitions

The p-value (0.06>0.05) and therefore we reject the null hypothesis. We conclude that financial performance is indeed affected by mergers and acquisitions. The model summary below provides further analyses.
Table 4.8 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.991a</td>
<td>.983</td>
<td>.959</td>
<td>.27662336</td>
</tr>
</tbody>
</table>

Source: Researcher 2016

The value of R-square implies that 98.3% of the total variance of financial performance is explained by the model. This means that only 1.7% of the total variance of financial performance values cannot be explained by the model.

4.7 Coefficients of the regression model

The dependent variables were transformed into one by finding their aggregate, to get one

Variable financial performance this was regressed against the aggregates of ROE, ROI and ROA. The resultant co-efficient are as tabulated below;

Table 4.9 Coefficients of the regression model

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>7.657</td>
<td>1.201</td>
<td>6.374</td>
</tr>
<tr>
<td></td>
<td>ROEagg</td>
<td>-.070</td>
<td>.266</td>
<td>-.143</td>
</tr>
<tr>
<td></td>
<td>ROIagg</td>
<td>-.133</td>
<td>.260</td>
<td>-.275</td>
</tr>
<tr>
<td></td>
<td>ROAagg</td>
<td>-.964</td>
<td>1.965</td>
<td>-.260</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Financial Performance

Source: Researcher 2016
The regression equation fit with the coefficients becomes:

\[ Y = 7.657 - 0.070X_1 - 0.133X_2 - 0.964X_3 \]

Where:

- \( Y \) = Financial Performance
- \( X_1 \) = Return on Equity
- \( X_2 \) = Return on investment
- \( X_3 \) = Return on assets

When the financial ratios are all zeros, this means that financial performance of the insurance companies is 7.657. When ROE increases by one unit, financial performance reduces by 0.070. When ROI increases by one unit, the financial performance reduces by 0.133 and finally when ROA increases by one unit financial performance reduces by 0.964 units. The relationship between the dependent and independent variables in the study is negative although significant.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter captures the summary of the findings, conclusion and also recommendations for further study. It is entirely derived from the findings and results of this study in chapter four.

5.2 Summary

The idea to investigate the outcome of mergers and/or acquisitions of the financial performance of insurance companies in Kenya was informed by their increasing number in the insurance sector in Kenya. Up to 2013, only three insurance companies in Kenya had undergone a merger.

The research design was a case study that relied heavily on secondary data from published financial statements of insurance companies. Data was analyzed on the basis of descriptive statistics. The study sought to establish the association (significance) between the means of the pre and post-merger and acquisition performances of insurance companies in Kenya using a paired t-test statistic. The study used a five-year average annual profitability of the insurance companies, pre and post-merger. To compare the two paired profit before tax values (such as in a before-after situation) where both observations are taken from the same or matched subjects, a paired t-test was performed.

The mean for ROE reduced from 2.538 to 0.883 also the Standard deviation also reduced from 3.756 to 1.373 implying the return on equity decreased and the level of risk also
reduced the mean for ROI increased from 2.568 to 3.176 at the same time the Standard deviation increased from 2.242 to 2.766. The return on Investments increased implying that the companies performed better after the merger and acquisition. The mean size of the insurance companies increased from 16.457 to 17.926, this was expected because of the synergies obtained through mergers and acquisitions. The size of insurance companies is expected to grow after mergers and acquisition. From the ANOVA it was established that mergers and acquisitions affect the performance of insurance companies. This performance is attributed by 98.3% R-square.

5.3 Conclusion

The study can attest to the fact that indeed mergers and acquisitions affect the financial performance of insurance companies in Kenya. This was shown at 5% confidence level the null hypothesis was rejected.

The study also concluded that the independent and dependent variables had significant effect before and after mergers and acquisitions. There was no multi-collinearity between the variables.

5.4 Limitations of the Study

Care must be taken to generalize the results of this study as there were some limitations involved. The study was limited because not many insurance companies have undergone mergers and acquisitions within the insurance industry under the period of study in Kenya, this made the sample size to be very small.
The study period also limited the research since not all companies had published full year results in their financial statements. The number of years (age) as a variable was also affected by this.

5.5 Recommendation for Further Study

The current study focused on insurance companies in Kenya. This excludes other industries, and future studies should consider other sectors such as returns on unit trusts, pension funds and other institutional investors. Further study can be done including variables such as loss ratios, reinsurance ratios, commission ratios fiscal ratios, etc. Do these variables influence the financial performance of insurance companies or these other industries?

The research also investigated the financial performance of insurance companies that transacted in only general insurance class of business thus excluding those that transacted in life assurance class of business. A research should be done for those that transact in life assurance and a comparison done to offer better information to scholars and stakeholders.

The research also recommends studies to be done across the region and compare the findings. It would be interesting to find out how the results of the same study would be in other economies.
REFERENCES

Association of Kenya Insurers (2014), Annual Reports and Accounts


Dobrzynski, Judith H. 'Are RJR and Philip Morris putting stockholders first?' Business Week, 7 November 1988a, p. 34.

Dobrzynski, Judith H. 'Was RJR's Ross Johnson too greedy for his own good?' Business Week, 21 November 1988b, p. 95.


APPENDICES

Appendix I. Mergers and Acquisitions in the Insurance Industry in Kenya between 2014 and 2015

<table>
<thead>
<tr>
<th>Acquiring Company</th>
<th>Company Acquired</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saham Group</td>
<td>Mercantile Insurance</td>
<td>April 2014</td>
</tr>
<tr>
<td>Union Insurance of Mauritius</td>
<td>Phoenix of East Africa Co. Ltd</td>
<td>May 2014</td>
</tr>
<tr>
<td>Prudential Plc</td>
<td>Shield Assurance Company Ltd</td>
<td>September 2014</td>
</tr>
<tr>
<td>Metropolitan Insurance Group</td>
<td>Cannon Assurance Ltd</td>
<td>November 2014.</td>
</tr>
<tr>
<td>Leap Frog Investments</td>
<td>Resolution Insurance Company Ltd</td>
<td>November 2014.</td>
</tr>
<tr>
<td>Britam Investment Group</td>
<td>Real Insurance Company</td>
<td>December 2014</td>
</tr>
<tr>
<td>Pan Africa Insurance Holdings</td>
<td>Gateway Insurance Company</td>
<td>Jan 2015</td>
</tr>
<tr>
<td>Barclay Plc</td>
<td>First Assurance Company Ltd</td>
<td>April 2015</td>
</tr>
</tbody>
</table>

Source: Insurance Regulatory Authority