

**THE EFFECTS OF MERGERS AND AQUISITIONS ON FINANCIAL
PERFORMANCE OF INSURANCE COMPANIES IN KENYA:
A CASE STUDY OF APA INSURANCE LIMITED**

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DECLARATION

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

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This research project has been submitted for examination with my approval as university supervisor.

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DEDICATION

I dedicate this research project to my parents Japheth and Lenah for their love, care and support during the entire MBA course. To them, I will always remain indebted.

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ABBREVIATION

AKI – Association of Kenya Insurers

ANOVA – Analysis of Variance

COMESA - Common Market for Eastern and Southern Africa

DEA – Data Envelopment Analysis

EAC – East African Community

GCR - Global Credit Ratings

GDP – Gross Domestic Product

GWP – Gross Written Premium

ICEA – Insurance Company of East Africa

IRA – Insurance Regulatory Authority

LOK – Lion of Kenya Insurance Company Limited

M&A – Mergers and Acquisitions

NOI – Net Operating Income

PCF - Policy holders’ Compensation Fund

ROA – Return on Assets

ROCE – Return on Capital Employed

ROE – Return on Equity

ROR – Return on Revenue

SIC – Standard International Classification

US – United States

USA – United States of America

ABSTRACT

An insurance company's primary objective is to restore the insured / policy holder back to the condition the insured was in before a loss and to spread risk through reinsurance. But at the back of it all, an insurance company's main role is to make a profit as they are a business. A merger is a combination of two or more companies in which the resulting firm maintains the identity of the firms, usually the larger. Companies merge for many reasons some of which are that they are worth more together than. Others do to cut costs through vertical integration where a company merges with either its supplier or consumer purposely to enable the resulting company to acquire raw materials at the marginal cost, others merge for growth and market power and to eliminate competition mainly through merging with a competitor to create more power in the market. Other companies merge to diversify, like acquiring another company in a seemingly unrelated industry in order to reduce the impact of a particular industry's performance on its profitability.

According to “Africa Reinsurance Corporation 2011, Annual Reports and Accounts”, in the year 2011 was in many ways very bad for property / casualty insurers and reinsurers. Surprisingly, heavy catastrophe losses hit the industry even where they were not expected, in the previously called “cold spots”. It is believed that the earthquake and tsunami in Japan (above US\$ 35billion incurred losses), the earthquake in New Zealand, the floods in Thailand and other natural perils caused over 30,000 deaths and US\$350 billion total economic losses compared with US\$226 billion in 2010. Insured catastrophe losses of above US\$103 billion could be the costliest year for the industry. Regulation is also forcing new requirements of sophisticated risk management, possible capital increase and high compliance costs. Keeping up with the focus on growth with profitability and to grow premium income by a greater percentage across all business lines, effort to deal with claims expeditiously and pro-actively, to settle claims and outperform the market, make adequate provisions for outstanding claims, develop new products that are not only flexible but also targeted at the uninsured populace of the society whilst adding value, are part of challenges that engulf the insurance industry and its players.

The study set out to investigate the effects of Mergers and acquisition on the financial performance of insurance industry in Kenya. The study took a causal research design. Causal research design is consistent with the study objective which is to determine the effects of mergers on financial performance of insurance industry in Kenya which can be measured through long-run profitability, stability, leverage and liquidity. Gay and Airasian (2003) noted that causal research designs are used to determine the causal relationship between one variable and another. In this study, the population was insurance companies in Kenya with keen interest on those that have gone through mergers and acquisitions. The process of data collection involved the use of audited accounts used to estimate the relationship between pre and post merger, and liner regression model to enhance the analysis of the effects of M & A on financial performance. A paired t-test was performed to determine if a merger was effective. The mean profit before tax was 316.2, with standard deviation of 405.598 for 5 observations was significantly greater than zero, $t(4)=1.74$, two-tail $p = 0.16$, providing evidence that the merger is effective on the financial performance of the insurance company. A 95% confidence interval about mean weight loss is (187.42, 820.02). By carrying out regression tests, it was possible to confirm the relationship between mergers and financial performance where it was found out that the two have a strong relationship. However, the regression analysis could not be used exclusively since it was found out to be much lower than the residual figures hence confirming that financial performance of insurance companies were affected to a large extent (67%) by other factors other than mergers/acquisitions (33%). Based on the evidence collected from the study, as above, the researcher is for policy that insurance companies should opt for mergers / acquisitions to enable the insurer / reinsurer alleviate the above challenges among others that engross the insurance industry.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Mergers and acquisitions have acquired increasing societal importance in recent years. Owing to the presence of well-developed financial markets, mergers are a common occurrence in the advanced economies of the world, with a particularly high level of activity in the United States. Usually, mergers and acquisitions are procedure conducted in order to maximize returns of the firms or generally enhance their operations. The trend is becoming widely desired by many organizations globally due to the financial benefits it has on the firms that practice it. Usually, firms that merge operate in the same industry or under similar market structures (Franke, 2005). Baldwin (1998) argues that merged firms may also increase their bargaining power over suppliers by pooling their prices and forcing suppliers to sell their supplies to the combined firm. Higher prices to customers and lower prices charged on supplies imply that the merging firms are able to make higher profits and as a result many mergers are often successful.

The study seeks to situate mergers and acquisitions in the Kenyan insurance industry. In order to achieve this effectively, the study also seeks to uncover the relationships that exist between Mergers or/ acquisition and the financial performance of the resulting merged firm. In examining mergers and acquisition and in revealing these relationships, the study draws on financial data gained from audited books of accounts of merged insurance firms in Kenya. The study will enable a better understanding of whether a firm's current approach to management of its operating arrangement is sufficient in aiding it success in its current operating environment.

1.1.1 Mergers and Acquisitions

A merger is generally referred to as the combination of forces by two or more firms in order to operate as one (Kovacich & Halibozek, 2005). In business or economics, it is a voluntary combination of two or more companies into one larger company. It involves stock swaps or cash payments to the target company. Stock swaps allow the shareholders of the companies to share the risk in the deal.

Example of international mergers in the recent years include those of accounting firms Price Waterhouse and Coopers & Lybrand to form PriceWaterhouseCoopers; motor vehicle manufacturers Chrysler Corporation (USA) and Daimler Benz (Germany) to form DaimlerChrysler; and most recently between pharmaceutical giants Glaxo Wellcome and SmithKline Beecham to form GlaxoSmithkline. Much closer at home, ICEA LION GROUP 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.

Kovacich and Halibozek (2005) describe an acquisition also known as a takeover, or buyout or a purchase business combination as a situation where one company known as a predator or acquirer takes over another company known as the target firm. In acquisitions, one firm proposes the purchase of another firm in the same industry, where if it accepts, it becomes subject to the acquirer's management (McLaughlin, 2010). A firm that seeks to acquire another firm is known as the acquiring company, and the one that it seeks to acquire is known as the target company. In most acquisitions, one firm (usually the larger of the two) simply decides to buy another company, negotiates a price with the management of the target firm, and then acquires the target company.

Once an acquiring firm has identified a possible target, it must first establish a suitable price (or a range of prices) and then tentatively set the terms of payment e.g. cash, shares, bonds or a combination of these. The acquiring firm's managers must then decide how to approach the target company's managers. If the acquiring firm is convinced that the target's management will approve the merger, then it will simply propose a merger and try to work out some suitable terms. If there is an agreement,

then the two management groups will issue statement to their shareholders indicating that they approve the merger, and that target firm's management will recommend to its shareholders that they agree to the merger. In general terms, the shareholders are asked to surrender their shares to a specified financial institution, along with a signed power of attorney, which transfers ownership of the shares to the acquiring firm. The target firm's shareholders then receive the specified payment – either common stock of the acquiring company (which means the target company shareholders become shareholders of the acquiring company), cash and bonds, or a combination of cash and other securities. This is a friendly merger (or takeover), and it is defined as a merger whose terms are approved by the management of both companies.

There have been cases where the target company's management resists the merger. It could be because they feel the price offered is too low or simply want to keep their jobs. Whatever the reason, the acquiring firm's offer is said to be hostile rather than friendly and the acquiring firm is forced to make a direct appeal to the shareholders of the target firm. A hostile merger is therefore defined as a merger in which the target firm management resists acquisition (Kihanda, 2006). In such a merger, the acquiring firm may again make a tender offer, which is the offer to one firm to buy the share of another by going directly to the shareholders, usually over the opposition of the target company's management. The acquiring firm then asks the shareholders of the target firm to tender their shares in exchange for the offered price. However, this time the target firm's managers may urge shareholders not to tender their shares because the price offered is too low.

1.1.2 Financial Performance

Financial performance is one of the many different mathematical measures used to evaluate how well a company is using its resources to make profit. Common examples of financial performance include operating income, earnings before interest and taxes, net asset value. Financial performance is a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry through performing analytical reviews or to compare industries or sectors in aggregation or firm's performance across time. In this case pre and post merger financial performance of various insurance companies

operating in Kenya in particular those that have merged will be evaluated by way of performing analytical reviews.

Ratio is the simple mathematical statement of the relationship between two items listed in financial statements (Akguc, 1995). Thanks to ratios, it is possible to measure the power of the company's loan payment power, fertility of assets, usage of foreign capital and its profitability.

Insurance ratios and Profitability ratios are used in analyzing the effects of M&A on financial performance of an insurance company. Such Insurance ratios are; *Loss Ratio, Expense Ratio, Combined Ratio, Ratio of Net Written Premiums to Policyholders Surplus*. Profitability ratios that are calculated and analyzed in measuring financial performance are; *Return on Revenues, Return on Assets, Return on Equity and Investment Yield*.

1.1.3 Effects of Mergers and Acquisitions on Financial Performance

The fundamental aim of mergers and acquisitions (M&A) is the generation of synergies that can, in turn, foster corporate growth, increase market power, improve production efficiencies, boost profitability, and improve shareholders' wealth. Accordingly, M&A should constitute positive net present value projects. However, studies depict a different picture on the results of mergers and acquisition involving failures and poor financial returns. Researchers have indicated that approximately 70-80% of mergers and acquisitions do not create significant value above the annual cost of capital (Bruner, 2002). Even conservative estimates place M&A failure rates at approximately 50% or higher for nearly four decades (Coffey, Garrow, & Holbeche, 2003). Despite this, global M&A activity continues to increase at a phenomenal rate climbing from \$1.9 trillion in 2004 (Susan Cartwright & Schoenberg, 2006) to a record-breaking \$4.35 trillion in 2009 (Reuters, 2010). Only the 2008 global financial crisis could slow down M&A activity with 2008 activity topping out at \$2.89 trillion, ending 5 years of spectacular growth (Vranceanu, 2009). With trillions of dollars in transactions at risk each year, it is imperative for researchers and practitioners to find ways to curb M&A failures.

Overextension tends to make the organization unruly. Managers' overconfidence about expected synergies from M & A (managerial hubris) may result in over payment for the target company (Irer, 2011). In the past, certain executive management teams had their payouts based on the total amount of profits made by the company, instead of the profit per share, thus giving the team a perverse incentive to buy companies in order to increase the local profit while decreasing the profit per share hence managers' compensation maybe setback. Another setback is empire building that involves managers growing big companies in order to have more power but not for economic purposes.

1.1.4 Insurance Industry in Kenya

The Kenyan insurance industry is governed by the Insurance Act and regulated by the Insurance Regulatory Authority ("IRA"). The market is relatively mature in comparison with its regional counterparts, and dominates insurance activities across the East African Community ("EAC") and COMESA region. Specifically, the Kenyan insurance market is more than five times the size of the Tanzanian market and around ten times that of Uganda. In 2010, a total of 46 companies were licensed to transact insurance operations in Kenya, of which 23 companies functioned as general insurers, 14 as composite players, and 9 as pure life assurers. During 2010, consolidated gross written premiums ('GWP') continued to register double digit premium growth, evidencing a 23% increase to KShs79.1bn. Note is, however, taken of the impact of elevated inflation levels on growth, with the industry generally evidencing single digit growth in real terms over recent years. Accordingly, market penetration is estimated to have increased only marginally, from 2.4% of GDP in 2003 to 3.1% in 2010. (Marc, Joffe 2011)

According to the "GCR – Kenya Insurance Credit Rating Report (2011) ", 2(3), 1-6, from a premium perspective the market is dominated by motor, which cumulatively accounted for 46% of industry GWP in 2010. This can be further classified into private (19%) and commercial (27%) sub segments. Medical represents a further 14% of gross premiums, followed by fire industrial risks at 10%. With respect to private motor, a sustained period of sub-optimal rates and elevated claims frequency saw this class return increasing levels of underwriting losses, thus constraining overall

underwriting profitability, with the average underwriting margin in Kenya remaining well below 4% for several years. This has been primarily driven by large losses emanating from private motor (2010: negative 11.3% underwriting margin). According to “AKI annual Industry Report 2010”, The Kenyan Industry recorded a gross premium of Kshs 52.35 billion (2009 – 43.11 billion), an increase of 21.4% (2009 – an increase of 16.8%). The top eleven general insurers in the market were;

Position	Insurer	Market Share Year 2011	Market Share Year 2010	Market Share Year 2009
1st	Jubilee	11.0%	9.6%	9.2%
2nd	APA	8.2%	8.8%	9.1%
3rd	UAP	7.8%	7.4%	7.6%
4th	CIC	7.6%	5.7%	4.1%
5th	Kenindia	5.9%	6.4%	7.1%
6th	Heritage	5.4%	4.7%	4.78%
7th	Chartis	4.6%	5.0%	5.1%
8th	First Assurance	3.9%	4.0%	3.6%
9th	Britam	3.8%	3.4%	3.1%
10th	ICEA	3.2%	3.7%	4.1%
11th	LOK	3.1%	3.5%	4.3%

Source: AKI annual Industry Report 2011

The 11 companies account for 64.4% (2010 – 61.6%) of the market share leaving the other 26 companies with 35.6% (2010- 38.4%). As was the case in 2009 and 2010 more than half of the companies had less than average market share of 3.0%.

The Kenyan insurance industry continues to embrace information technology, research and innovation, thereby expanding its capacity to exploit the existing untapped insurance market. While this is likely to see sustained cost pressures, together with an improvement in the regulatory environment this is expected to enhance insurance penetration. (Global Credit Rating Co. – Kenya Insurance Credit Rating Report, 2011), 1-6

1.2 Research Problem

The world is in a state of flux, being influenced by the forces of globalization and fast technological changes and as a result firms are facing intense competition. To face the challenges and explore the opportunities, firms are going for inorganic growth through various strategic alternatives like mergers and acquisitions (M&A), strategic alliances, joint ventures etc. The M&A are arguably the most popular strategy among firms who seek to establish a competitive advantage over their rivals. Vasilaki and O'Regan (2008) noted that in 2006, globally, the total value of acquisitions undertaken reached unprecedented levels, totaling 1,774 billion.

There are various reasons behind firms going for mergers and acquisitions. The main corporate objectives are to gain greater market power, gain access to innovative capabilities, thus reducing the risks associated with the development of a new product or service, maximize efficiency through economies of scale and scope and finally in some cases, reshape a firm's competitive scope (Hitt et al., 2007). Other reasons include a short-term solution to finance problems that companies face due to information asymmetries (Fluck and Lynch, 1999), revitalize the company by bringing in new knowledge to foster long-term survival (Vermeulen and Barkema, 2001) and to achieve synergy effects (Lubatkin, M., 1987 and Vaara, E., 2002).

Straub (2007) argues that mergers and other types of acquisitions are performed in the hopes of realizing an economic gain. For such a transaction to be justified, the two firms involved must be worth more together than they were apart. Some of the potential advantages of mergers and acquisitions include achieving economies of scale, combining complementary resources, garnering tax advantages, and eliminating inefficiencies. Although all these reasons are meant to increase firm's performance, yet, as Bansal and Kumar (2008) put it, confirmatory research linking

merger and acquisition to firm's performance has been little developed. Hence, how mergers influence firms' performance lacks empirical backing as the few studies that have been conducted on the same provide mixed results.

According to Kwoka (2002), mergers have often failed to add significantly to the value of the acquiring firm's shares. Loderer and Martin (1992) studied 304 mergers and 155 acquisitions that took place between 1965 and 1986 and observed a negative but insignificant abnormal return over the five subsequent years after the mergers and positive but insignificant abnormal return for the acquisitions. Locally, the relationship between M & A and firm's performance has been the subject of abundant research in several fields and it has produced mixed results. Katuu (2003) conducted a survey of factors considered important in merger and acquisition decisions by selected Kenyan based 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 lead to wealth creation or erosion of coffee firms as depicted by both positive and negative returns on post-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.

Ileri (2011) conducted a survey on effects of mergers and acquisitions on financial performance of oil companies in Kenya and from the researcher's finding on respondent opinion on M&A, financial performance were 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. The present study seeks to establish and fill the research gap by conducting a study and answering the question: what are the effects of merger and acquisition on financial performance in the context of Insurance companies in Kenya?

Mergers are on an increasing trend in the Kenyan insurance industry. As per "Republic of Kenya Budget Statement for the Fiscal year 2012 / 2013", the trend globally is towards converging of financial services where banking, insurance and stock brokerage are being offered under one roof. In order to facilitate a "one stop shop" financial solution. In addition, insurance companies in Kenya to have

consolidated supervision to enhance oversight in this part of the financial sector and its players. Thus to achieve this, insurance companies should opt to consolidate their businesses and operations through merges.

1.3 Objective of the Study

To analyze the effects of mergers and acquisition on the financial performance of Insurance companies in Kenya.

1.4 Value of the Study.

As mentioned earlier, very few studies have been conducted on the effects of M & A besides the same having generated inconclusive and mixed results. This study would therefore be of interest to scholars, customers (policyholders), shareholders, employees, managers, the regulator, reinsurers and government.

To the scholar, the study would be as source of empirical reference and literature review. It will provide a ground of further research to the scholar. To the policyholder, mergers can create monopolies and affect customer welfare through reduction of competition and hence unfair prices to the policyholder. Thus the study will bring out the positives and negatives and enable policyholder's welfare union e.g. the Policy holders' Compensation Fund (PCF) for insurance companies to air their views when faced with a merger. This will ensure that customer interests are taken care of as mergers monopoly only reduce the value that customer gets.

To the regulator, Insurance Regulatory Authority (IRA), to understand how better to mitigate the risks that engrosses the insurance industry in Kenya. With the existence of the current IRA law on demergers involving composite insurers where by insurance companies are to separate their life portfolios from their general insurance portfolios for better risk management and to do away with mismanagement, mergers will be seen as the only effective strategy in achieving this.

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. To the employees, the study will enable them to assess the stability of the firm and hence their job security. To the managers, the study will enable them understand the importance of engaging in joint operations which will put the merged entity in a

competitive position not only in Kenya but also across borders, covering the wider COMESA region which will in turn enable that company effectively mitigate risk (especially political risk) and boost profitability. To the reinsurer, to understand the need of increased underwriting capacity, treaty and facultative, as a result of increased capacity of its underlying underwriter as a consequence of the merger.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section draws on literature in the area of M&A. Secondary materials such as books, journals and articles which carry precious research work on the study topic are analyzed. The material is of importance to this study as it forms a basis for observation which will be made during the study in line with the study objective.

2.2 Theoretical Review

This section looks into the theories on M&A. It looks at the different schools of thought of different scholars and how they view mergers and acquisitions. There are three broad categories of arguments about the value relevance of M&As namely: production theory, market imperfections theory, market power theory and corporate control theory among others.

2.2.1 Production Theory

In terms of economic production theory, firms operate with cost, revenue, and profit functions, all of which could be affected by M&As. One rationale often given for M&As is economies of scale, usually associated with the cost function. The argument is that firms operating at sub-optimal scale may be able to achieve scale gains more quickly through M&As than through normal growth. Although evidence on the potential for scale economy gains in various industries is mixed (Cummins & Xie 2008), scale economies may provide a potentially valid motivation for M&As. Economies of scope provide another production theory rationale for mergers and acquisitions. Scope economies can be present for costs, revenues, and for profits. Cost economies of scope generally arise from the joint use of inputs such as managerial expertise, customer lists, computer technologies and brand names. Revenue economies of scope are often said to arise due to reductions in consumer search / acquisition costs and improvements in service quality from the joint provision of related products such as life insurance and automobile insurance. In some US insurance industry for example Berger (2007) provides evidence that scope economies are present.

Potential gains in across company efficiency provide another production-based rationale for M&As. Across company inefficiency arises when firms fail to operate on the cost, revenue, or profit frontiers but rather incur higher costs or earn lower revenues because of various inefficiencies. A potentially important justification for M&As is to improve the efficiency of the merger target, e.g. by replacing inefficient managers or introducing superior technology possessed by the acquiring firm. There is some evidence that insurance M&A transactions have led to efficiency gains in the US life and personal lines insurance industries (Cummins & Xie 2008), and the Spanish insurance industry (Cummins & Rubio-Misas, 2006).

2.2.2 Market Imperfections Theory

According to Cooper et al. (2000) M&As also may be value-relevant due to the existence of various market imperfections / information asymmetries. One important market imperfection is the existence of costs of financial distress. Financial services firms such as banks and insurers face stringent solvency regulation which creates the potential for financial distress costs. Insurers that are over-leveraged or in weakened financial condition for other reasons incur increased regulatory costs and potential operating restrictions. Moreover, because buyers of insurance are especially sensitive to insolvency risk, insurers in deteriorating financial health are likely to lose their best customers to rivals. Because larger insurers have lower insolvency probabilities (Cummins et al., 1999) argue that, M&As can be beneficial to the extent that increases in scale are accompanied by reductions in income volatility due to enhanced diversification. The existence of corporate income taxation also provides a rationale for M&As as a possible mechanism for increasing net cash flows.

Financial synergies theory in yet another way puts it that, with asymmetric information in financial markets, a firm with insufficient liquid assets or financial slack may not undertake all valuable investment opportunities (Myers and Majluf, 1984). In this case, the firm can increase its value by merging with a slack-rich firm if the information asymmetry between the two firms is smaller than that between the slack-poor firm and outside investor.

2.2.3 Market Power Theory

Choi and Weiss (2005) argue that M&As can also create value if they increase firm market power, allowing the post-merger entity to earn higher economic rents. However, this rationale for market-value gains is questionable in some industries such as the US personal lines insurance industry. The study by Choi and Weiss (2005) do not support the structure-conduct-performance hypothesis that concentration and larger firm size lead to market power and anti-competitive conditions.

All companies are subject to Federal laws that prohibit certain actions from taking place during a horizontal merger (an acquisition of a firm in the same industry as the acquiring firm, where the firms compete with each other in their product). When a horizontal merger takes place, the loss of a competitor in the market creates benefits for companies that have merged; while at the same time serves to drive prices up for the customers. Federal law protects the consumer.

There are also non-value-maximizing motives for consolidation. Evidence exists that real world managers do not always act in the best interests of shareholders but rather tend to pursue their own interests to varying degrees. Instead of taking actions to maximize firm value, managers may act to maximize their own net worth and incomes, engage in excessive perquisite consumption, and take other actions not consistent with value maximization. Moreover, and of special relevance for M&As, managers may engage in projects of questionable value that increase the scale of the firm to increase their compensation and prestige (Jensen, 1986). Managers may also engage in defensive acquisitions to resist hostile takeovers of the firm that would threaten their jobs. To the extent that managers engage in non-value-maximizing acquisitions, M&As can be expected to have adverse market-value effects. M&As also may reduce value to the extent that firms are unsuccessful or inefficient in conducting post-merger integration. Post-merger integration is likely to be especially difficult for cross-industry mergers due to larger corporate cultural differences that must be overcome (Datta et al., 2003).

If M&As are value-maximizing, the next question is whether we expect efficient or inefficient firms to benefit most from these transactions. Mergerstat (2007) argues that the answer is potentially different for acquirers, targets and divesting firms. For

acquirers, there exist a positive relationship between efficiency and the stock price response to M&A transactions. Efficient firms have demonstrated their ability to perform more effectively in minimizing costs and maximizing revenues in the sense that they have chosen superior technologies, have succeeded in operating closer to the efficient frontier, and are more effective in choosing cost minimizing combinations of inputs and revenue maximizing combinations of outputs. Hence, such firms are more likely to be able to exploit scale and scope economies and to realize other potential gains from acquisitions. In addition, corporate control theory suggests that the management teams of efficient buyers can enhance the efficiency of the combined firm. 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).

2.2.4 Corporate Control Theory

Corporate control theory (Jensen, 1988 and Shleifer and Vishny, 1988) argues that takeover is an efficient means to reliance inefficient managers of target companies. The target firm may underperform either because its managers pursue their own interest at the expense of owners' interest or because they lack the knowledge and skills to maximize firm value. If managers of acquiring firms are more capable than those of acquired firms, they can improve the efficiency of target. This theory predicts that poorly performing firms are more likely to be acquired and that the performance of targets will improve after a takeover. Acquiring firms are also expected to gain from the takeover activity if they have the ability to bring operating synergy to the post-takeover entity.

2.4 Financial Performance Measures

Kaplan & Norton (1992) argues that modern managers want a balanced presentation of both financial and operational performance. The balanced score-card includes financial measures that tell the results of actions already taken and it complements the financial measures with operational measures on customer satisfaction, internal processes and the organization's innovation & improvement activities – operational measures that are the drivers of future financial performance. Some of the

performance measures for an insurance company are the Insurance ratios and profitability ratios.

2.4.1 Insurance Ratios

The loss ratio shows what percentage of payouts is being settled with receipts. The lower the ratio the better. Higher loss ratios may indicate that an insurance company may need better risk management policies to guard against future possible insurance payouts / claims.

$$\text{Loss Ratio} = \frac{\text{Loss Adjustment Expenses}}{\text{Premiums Earned}}$$

The expense ratio measures the percentage of premium used to pay all the costs of acquiring, writing, and servicing insurance and reinsurance. There are two methodologies to measure the expense ratio; a trade basis, which is expense divided by written premium and on a statutory basis when the expense is divided by earned premium. Most typically, the ratio is calculated using written premium. Expense ratios are an integral part of retrospective rating basic premiums, i.e. the final premium is based on the insured's actual loss experience during the policy term, sometimes subject to a minimum and maximum premium, with the final premium determined by a formula.

$$\text{Expense Ratio} = \frac{\text{Management Expenses}}{\text{Premiums Earned}}$$

The Combined Loss / Expense Ratio measures claims losses and operating expenses against premiums earned. The lower the figure the better. A ratio below 100 percent represents a measure of profitability and the efficiency of an insurance firm underwriting efficiency. Ratios above 100 percent denote a failure to earn sufficient premiums to cover expected claims. High ratios can usually occur either because of under-pricing and / or because of unexpected high claims.

$$\text{Combined Loss/Expense Ratio} = \frac{\text{Total Claims Incurred} + \text{Total Expenses}}{\text{Premiums Earned}}$$

Net Written Premiums to Policyholder Surplus ratio is designed to measure the ability of the insurer to absorb above-average losses and the insurer's financial strength. The ratio is computed by dividing net premiums written by surplus. An insurance company's surplus is the amount by which assets exceed liabilities. For example, a company with \$2 in net premiums written for every \$1 of surplus has a 2-to-1 premium to surplus ratio. The lower the ratio, the greater the company's financial strength.

$$\text{Net Written Premiums to Policyholder Surplus} = \frac{\text{Net Premium Written}}{\text{Policyholders' Surplus}}$$

2.4.2 Profitability Ratios

Return on Revenues figure determines the profitability of an insurance company. It is the profits after all expenses and taxes are paid by the insurance company. It is measured by dividing the Net Operating Income (NOI) by the Total Revenues. Intrinsically, the difference between net income and revenue is expenses, such that an increasing ROR implies less expense for higher net income.

A corporation's ROR is useful in comparing profitability from year to year and evaluating its profitability performance, by comparing the net income and the revenue. When ROR decreases, it may indicate that expenses are rising. Conversely, when ROR increases, it may provide an indication that expenses are being handled efficiently.

$$\text{Return on Revenues} = \frac{\text{Net Operating Income}}{\text{Total Revenues}}$$

Return on Assets is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total

assets. The assets of the company are comprised of both debt and equity. Both of these types of financing are used to fund the operations of the company. The ROA figure gives investors an idea of how effectively the company is converting the money it has to invest into net income. The higher the ROA number, the better, because the company is earning more money on less investment.

$$\text{Return on Assets} = \frac{\text{Net Operating Income}}{\text{Total Assets}}$$

Return on Equity (ROE) measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. The ROE is useful for comparing the profitability of a company to that of other firms in the same industry. It is the amount of net income returned as a percentage of shareholders equity.

$$\text{Return on Equity} = \frac{\text{Net Operating Income}}{\text{Shareholders' Equity}}$$

Investment Yield given as Average Investment Assets divided by Net Investment Income. The Average Investment Assets will be given by the opening Assets plus the Closing Assets divided by two, while the Net Investment Income will be given by the income received from investment assets (before taxes) such as bonds, stocks, mutual funds, loans and other investments (less related expenses). The higher the Investment Yield, the better the company is performing on its investments.

$$\text{Investment Yield} = \frac{\text{Average Investment Assets}}{\text{Net Investment Income}}$$

2.5 Empirical Evidence

The impact of M&As on subsequent performance has been widely studied, and many studies have identified adverse effects of M&As (Berkovitch & Narayanan, 1993). Nonetheless, the key result emerging from the majority of empirical studies, mainly concentrated in the United States and the United Kingdom, is that acquiring firms' shareholders experience either normal returns or significant losses around the announcement of acquisitions involving publicly listed targets (Cooper et al, 2000).

Studies by Zander and Kogut (1996) that was conducted in Pennsylvania, USA, where qualitative analysis of managers attitude towards mergers and acquisitions established that the fundamental aim of mergers and acquisitions (M&As) is the generation of synergies that can, in turn, foster corporate growth, increase market power, boost profitability, and improve shareholders' wealth. Accordingly, M&As should constitute positive net present value projects.

This study's findings concur with both Production and Market Power Theories of mergers and acquisitions as tools for modern corporate control. This is supported by Zander and Kogut (1996) argument that firms engage in M & As to deal with the dilemma of how to achieve superiority over markets as "productivity grows with the division of labor but specialization increases the costs of communication and coordination". The findings also support the Market Power Theory based on the argument that a firm is distinct from a market because coordination, communication, and learning are situated not only physically in locality, but also mentally in an identity.

Empirical evidence aimed at testing the validity of market imperfections theory was conducted by Alam and Sickles (2006). They evaluated technical efficiency of the US airline industry, which had either merged or undergone acquisitions, and explored the link between market structure and economic performance. DEA scores of technical efficiency for a sample of eleven (11) U.S.A carriers were quarterly observed, during the time period 1970-1990. The results indicated that the scores moved together and, in fact, the firms were becoming more alike one another in terms of efficiency. According to the study, there is significant positive relationship between stock market returns and changes in technical efficiency scores in the US airline industry.

A study by Sharma and Thistle (1996) was carried out to test the validity of market power theory of mergers in USA. The study looked into the motives of horizontal mergers by utilizing a sample of acquiring firms based on same SIC codes. The goal of the study was to examine the role of the market power in influencing the mergers and acquisitions. A three factor Arbitrage pricing model was utilized, with Tobin's q ratio as a measure of market power, to study the performance of the firms involved in the mergers. The results indicate the acquisition of market power not to be a significant motive for the mergers

On their part, Wu and Ray (2005) analyzed mergers in the US manufacturing industry and found significant relationships between abnormal returns from mergers and technical efficiency. This study tested the Market Imperfections Theory in M & As. For example, for acquirers there is a negative relationship between efficiency and abnormal returns, which the authors explain by saying the market interprets mergers as attempts to improve efficiency, such that less efficient firms have the most to gain. This interpretation is at odds with the usual rationale, which suggests that efficient acquirers are more likely to gain because they can improve the efficiency of the targets and are more likely to avoid inefficiencies in post-merger integration.

A study by Angela & 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 indicate that the financial performance ratios that have legal implications (capital adequacy and solvency ratios) improved after the merger. However profitability ratios indicate that the majority of the merged banks reported a decline in financial performance.

A study by Obaid (2010) supports the production theory, that is, potential gains in across company efficiency provide another production-based rationale for M&As. This study investigates the effects of mergers on the financial performance of financial institutions in Pakistan. The operating performance, capital adequacy and

solvency measures were compared for 4-years pre and post-merger from the financial statements of the sample companies. The financial performance of Faysal bank limited improves insignificantly in terms of profitability and decreases insignificantly in terms of capital adequacy measures, while its solvency measure reports significant deterioration during the post-merger years

Study by Kaplan and Weisbach (1992) supports the market imperfections theory, based on the premise that an important market imperfection is the existence of costs of financial distress. This research studied a sample of large acquisitions completed between 1971 and 1982 in the USA. By the end of 1989, acquirers have divested almost 44% of the target companies. The researchers characterized the ex-post success of the divested acquisitions and consider 34% to 50% of classified divestitures as unsuccessful. Acquirer returns and total (acquirer and target) returns at the acquisition announcement are significantly lower for unsuccessful divestitures than for successful divestitures and acquisitions not divested. Although diversifying acquisitions are almost four times more likely to be divested than related acquisitions, the researchers did not find strong evidence that diversifying acquisitions are less successful than related one.

2.6 Conclusion

There are several theories that explains mergers and acquisitions which are corporate control theory which argues that mergers and acquisitions are conducted to replace inefficient managers of target companies, financial synergy which portends that firm with insufficient liquid assets or financial slack can increase its value by merging with a slack-rich firm which would put it in a good position to take valuable investment opportunity (Myers and Majluf, 1984 and Jensen, 1988). Agency cost theory argues that through self interests' managers, motivated to increase their compensation can increase the size of the firm through non-value enhancing mergers which will unlikely generate operating or financial synergies that lead to improvements in efficiency or productivity (Shleifer and Vishny, 1988)

According to the managerial hubris hypothesis, owing to the poor judgment, acquisitions could simply be a poor strategic decision where benefits are overestimated or costs are underestimated (Roll, 1986). Industrial shock theory puts it

that while mergers and acquisitions can be understated as a less costly means for an industry to restructure in response to market or economic changes, post-takeover performance of firms should not necessarily improve, compared to a pre-shock benchmark (Mitchell and Mulherin, 1996).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out various stages and phases that were followed in completing the study. It is a blue print for the collection, measurement and analysis of data. It gives the plan and structure envisaged to aid the researcher in answering the raised research question. Specifically, the following subsections should; research design, target population, data collection instruments, data collection procedures and finally data analysis.

3.2 Research Design

This study adopted a survey research design. Kraemer (1991) defined as survey research design as a research design used to quantitatively describe specific aspects of a given population by examining the relationships among variables. Survey research uses a selected portion of the population from which the findings can later be generalized back to the population. As at the year 2012, only 3 insurance companies in Kenya had undergone a merger and data for only one insurance firm namely APA Insurance was readily available and complete. Consequently, the researcher considered a survey research design as ideal as at that present time.

3.3 Population of the Study

According to the Insurance Regulatory Authority Annual Report (2012) there were 35 general insurance companies registered to transact insurance business in Kenya. This being a case study, the population of the study was APA Insurance Company Limited. This was because only 3 Insurance firms had undergone M&A as at that time, i.e. UAP Insurance (1994), APA Insurance (2003) and ICEA LION Group (2012). The pre merger financial data for UAP insurance, before its merger in 1994 was not readily available to the researcher while the post merger financial data for ICEA LION Group formed in 2012 did not exist by the time the research was carried out.

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 which were obtained from APA's official website, and from the Association of Kenya Insurers (AKI) historical market statistics. The data sought in these documents was the financial data.

3.5 Data Analysis

Ratio is the simple mathematical statement of the relationship between two items listed in financial statements (Akguc, 1995). The financial figures in the financial statements of the two independent insurers was consolidated and evaluated five years before the merger / acquisition and compared five years later after the merger (when the two insurance companies are operating as one). The resulting ratios once calculated, analyzed and evaluated enabled the researcher to assess the effects of mergers and acquisitions on the financial performance of the various insurance firms. Thanks to ratios, it is possible to measure the power of the company's loan payment power, fertility of assets, usage of foreign capital and its profitability.

Insurance ratios and Profitability ratios were used in analyzing the effects of M&A on financial performance of the sampled insurance companies operating in Kenya. Such Insurance ratios were; *Loss Ratio, Expense Ratio, Combined Ratio, Ratio of Net Written Premiums to Policyholders Surplus*. Profitability ratios that were calculated and analyzed were; *Return on Equity*

The study also established the association between pre-merger or acquisition performance by using a paired t-test statistic which was used to determine whether an association existed between these two variables in the population or if there is a difference between these two variables. It thus tested the probability that the observed association between the two variables has occurred by chance, i.e. due to sampling error. In this case the hypothesis that will be tested at 5% significance level was:

Ho: Merger and acquisitions is not associated with increase in financial performance.

3.5.1 Analytical Model

A regression model of the form $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$ was used in analyzing the effects of mergers and acquisitions on financial performance of insurance companies. Whereby Y was the dependent variable which was the profit before tax, α the regression constant, β_1 and β_2 the coefficients of the regression model, X_1 the first independent variable, i.e. underwriting profit / loss ratio and X_2 was the second independent variable i.e. the expense ratio and ε was the error term which is signified by the model's significance.

Ileri (2011) conducted a survey on effects of mergers and acquisitions on financial performance of oil companies in Kenya using a regression model of the same form and from the researcher's finding on respondent opinion on M&A, financial performance were 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.

From the foregoing, the regression model was to be of the form;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where;

Y = profit before tax

α = the regression constant / intercept

β_1 = a measure of tendency of a profit before tax returns to respond to swings in
the underwriting profit (loss) ratio

β_2 = a measure of tendency of a profit before tax returns to respond to swings in the
expense ratio

X_1 = underwriting profit (loss) ratio

X_2 = expense ratio

ε = error term

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 perform at 95% confidence interval. By carrying out regression tests, it was possible to confirm the relationship between mergers and financial performance.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

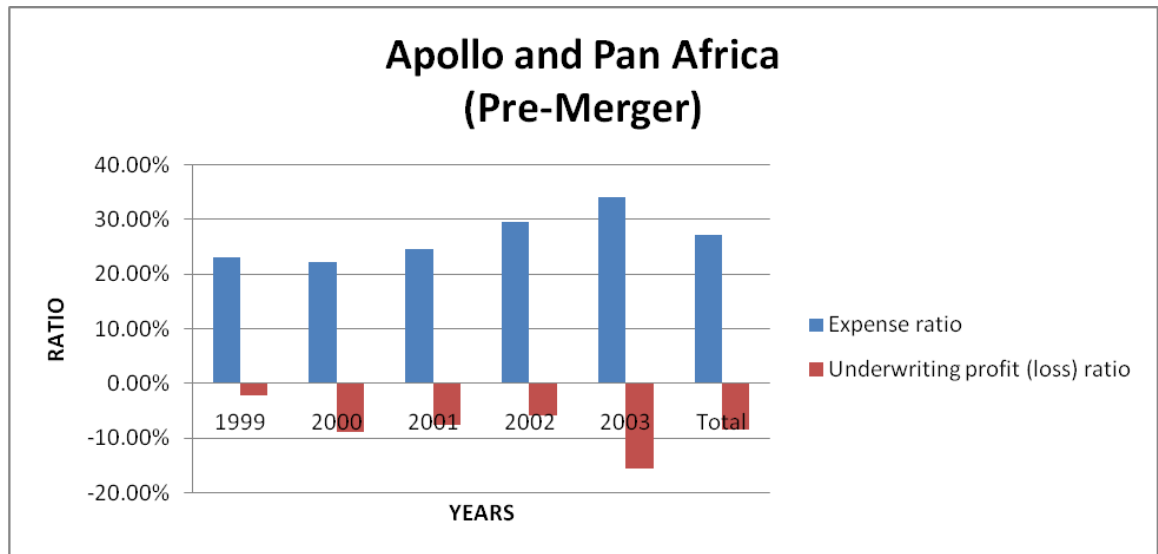
This chapter presents analysis of the data found. The study used the data obtained for APA Insurance Company Limited to represent all insurance companies that had undergone a merger and / or acquisition making a representative rate of 100%. To date only three insurance companies in Kenya had undergone a merger.

4.2 Pre & Post Merger Insurance Ratios - APA Insurance

These are the ratios calculated after consolidating the individual insurance companies' financial figures before the merger. The insurance ratios calculated were the underwriting ratio, loss ratio and expense ratio. The profitability ratio calculated were the return on equity represented by the profits before taxation.

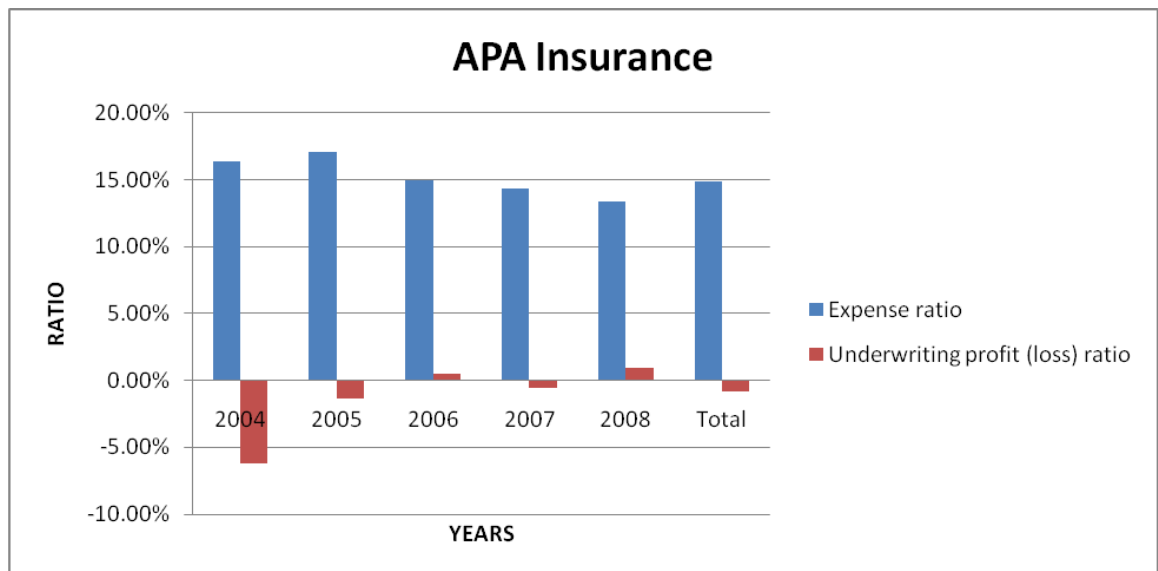
APA Insurance Company Limited formed in 2003 following the merger of Apollo and Pan-Africa General divisions. The data finding and consolidated corresponding ratios were recorded in the table below. Here the study seeks to establish the general performance of the insurer pre and post merger. The data finding were recorded in the table 1 and figure 1 (for Apollo and Pan Africa combined) and figure 2 (for APA Insurance) below.

Figure 4.1: Five Year Financial Performance



Source: APA Insurance Company Limited (2008) Annual Report & Audited Accounts

Figure 4.2: Five Year Financial Performance



Source: APA Insurance Company Limited (2008) Annual Report & Audited Accounts

4.3 Relationship between Pre and Post-Merger or Acquisition Performance

The study sought to establish the association (significance) between the means of the pre and post-merger and acquisition performances the insurance company 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 perform. The hypotheses for this test were:

H_0 : PBT = 0 (The average profit before tax was 0)

H_a : PBT \neq 0 (The average profit before tax was different from 0)

Table 4.1: Profit before tax and Resulting Mean differences

Profit before tax (Kshs. Millions)			
	Before Merger	After Merger	Mean difference
1	55	44	11
2	-26	459	-485
3	-138	811	-949
4	-7	3	-10
5	117	265	-148
			-316.2

Source: APA Insurance Company Limited (2008) Annual Report & Audited Accounts

The results are shown in the output table below;

Table 4.2: t-Test: Paired Two Sample for Means

t-Test: Paired Two Sample for Means

	<i>Variable</i>	
	<i>Variable 1</i>	<i>2</i>
Mean	0.2	316.4
Variance	9120.7	110006.8
Observations	5	5
	-	
Pearson Correlation	0.716360611	
Hypothesized Mean Difference	0	
Df	4	
	-	
t Stat	1.743215635	
P(T<=t) one-tail	0.078124871	
t Critical one-tail	2.131846782	
P(T<=t) two-tail	0.156249743	
t Critical two-tail	2.776445105	

Source: Analysis of APA Insurance Company Limited (2008) Annual Report & Audited Accounts

Thus, the two-tail p-value for this t-test is $p=0.16$ (.156249743) and $t=1.74$

The paired t-test is actually a test on the difference between the two values. To report these results properly, the researcher needed to calculate both the mean difference and standard deviation. This was done by calculating descriptive statistics on the difference values at 95% confidence interval options. The results were in the following output table:

Table 4.3: Paired t-Test at 95% confidence interval option

<i>Column1</i>	
Mean	-316.2
Standard Error	181.3889192
Median	-148
Mode	#N/A
Standard Deviation	405.5979536
Sample Variance	164509.7
Kurtosis	0.416039192
Skewness	-1.184642606
Range	960
Minimum	-949
Maximum	11
Sum	-1581
Count	5
Confidence Level (95.0%)	503.6163768

Source: Analysis of APA Insurance Company Limited (2008) Annual Report & Audited Accounts

The mean divided by the standard error ($316.2/181.39 = 1.743$) is same as the value of the “t Stat” in the previous table at 95% confidence interval. Using the confidence level (95%) value of 503.616 in the table, the confidence interval is the mean plus or minus this value. Thus, a 95% confidence interval about mean difference is (187.42, 820.02).

A paired t-test was performed to determine if a merger was effective. The mean profit before tax was 316.2, with standard deviation of 405.598 for 5 observations was significantly greater than zero, $t(4)=1.74$, two-tail $p = 0.16$, providing evidence that the merger is effective on the financial performance of the insurance company. A 95% confidence interval about mean weight loss is (187.42, 820.02).

4.4 Effect of Merger and Acquisition on the Financial Performance.

The study also used liner regression model in analyzing the effects of merger and acquisition on the financial performance of insurance companies. The regression model was of the form $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \epsilon$, Whereby Y is the dependent variable which will be the profit before tax, α the regression constant, β_1 and β_2 are the coefficients of the regression model, X_1 will be the first independent variable, i.e. underwriting profit / loss ratio and X_2 will the second independent variable i.e. the management expense ratio and ϵ is the error term which is signified by the model's significance.

4.5 Regression Analysis

Table 4.4: ANOVA Statistics

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.496602313
R Square	0.246613857
Adjusted R Square	0.031360673
Standard Error	279.6195101
Observations	10

ANOVA

		<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression		2	179156.6069	89578.30345	1.14569203	0.371160455	
Residual		7	547309.4931	78187.07044			
Total		9	726466.1				

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	335.4657441	401.9543033	0.834586771	0.431507498	615.0051493	1285.936637	615.0051493	1285.936637
U/W profit (loss) Ratio	2368.78078	3257.932795	0.727080922	0.490771513	5335.006116	10072.56768	5335.006116	10072.56768
Expense Ratio	314.8719658	2443.307279	-0.12887121	0.901084157	-6092.37561	5462.631678	-6092.37561	5462.631678

The coefficient table in table 4.4 above was used in coming up with the model below

$$Y = 335.47 + 2368.78 X_1 - 314.87X_2$$

From the ANOVA statistics in table 4.4 above, the processed data which were the population parameters, had a significance level of 37.12% that shows that the data was ideal for making a conclusion on the population's parameter. The R is known as correlation value that shows the strength of relationship between the independent and dependent variable. From the above table there was strong relationship between merger and acquisition and financial performance of the insure by correlation factor of 0.4966

R Square 24.7% tells how well the regression line approximates the real data. This number tells you how much of the output variable's variance is explained by the input variables' variance. The adjusted R² is known as coefficient of determination and it shows the variation in effect of merger and acquisition and financial performance. From the above table there was 3.13% variation in merger and acquisition and financial performance of the insurer.

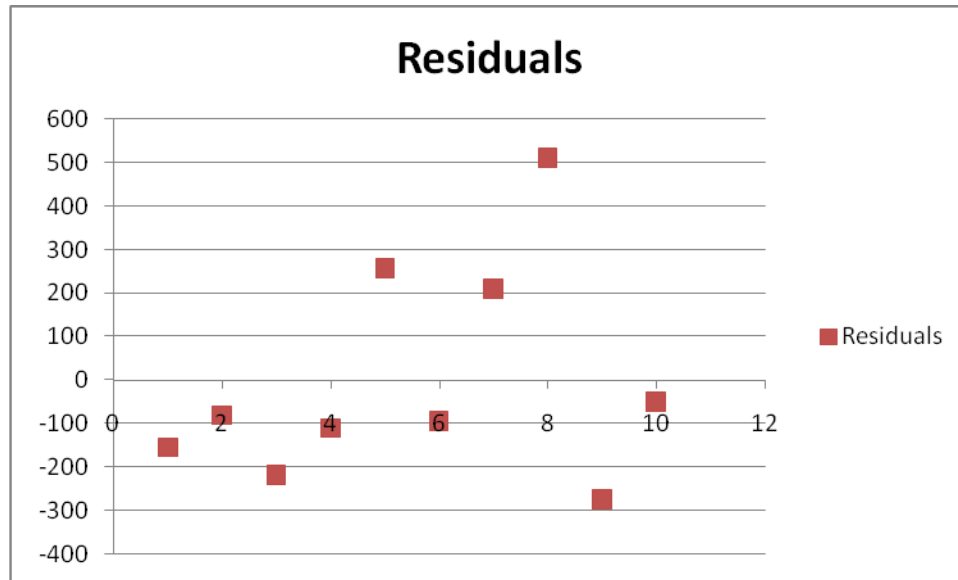
Table 4.5: Coefficients of Results

RESIDUAL OUTPUT

<i>Observation</i>	<i>Predicted PBT</i>	<i>Residuals</i>	<i>Standard Residuals</i>
1	209.0405392	-154.0405392	-0.624654387
2	54.91975258	-80.91975258	-0.328140103
3	78.68645112	-216.6864511	-0.878691694
4	103.2126591	-110.2126591	-0.446926643
5	-140.5104735	257.5104735	1.044238405
6	137.2998934	-93.29989336	-0.378343182
7	248.5864279	210.4135721	0.853254355
8	300.063028	510.936972	2.071915761
9	277.0889416	-274.0889416	-1.111466246
10	314.6127806	-49.61278063	-0.201186267

Source: Analysis of APA Insurance Company Limited (2008) Annual Report & Audited Accounts

Chart 4.3: The Residual Chart



Source: Analysis of APA Insurance Company Limited (2008) Annual Report & Audited Accounts

The residuals are the difference between the regression's predicted value and the actual value of the output variable. A scatter plot chart of the outcome was as shown in chart 4.3 above. Looking at the pattern in the scatter plot, more random (without pattern) and centered around zero the residuals appear to be, thus the more likely it is that the regression equation is valid.

4.5 Discussion of Findings

According to the model, mergers and acquisition were positively correlated with financial performance after the merger. A unit increase in underwriting ratio and decrease in management expense ratio would lead to an increase in application of financial performance by factor of 2368.78 on underwriting ratio and (314.84) at the expense ratio. Overall mergers and acquisition and financial performance coefficients are significant indicating firms performing better financially after the resulting merger and / or acquisition.

On a paired t-test statistic test, the study established an association between mergers and financial performance of insurance companies in Kenya with a P value of $P=0.16$ and t-test $t=1.74$ at 95% confidence level. The findings show that insurance company performed well over the period of study after the merger.

However, from the sum of squares, we can see that regression model (179156.6069) is lower than the residual value of (547309.4931) by 67% which implies that there are other factors that determine the financial performance of insurance companies other than regressing the financial performance to that of a merger/acquisition (33%)

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The essence of this last chapter is to give an overview of the research paper, make significance conclusions based on the findings of the study and make recommendations in regards to the effects of mergers and / or acquisitions on the financial performance of insurance companies in Kenya.

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. To date, three insurance companies in Kenya had undergone a merger.

UAP Insurance Company Limited formed in 1994 after the merger of Union Insurance and Provincial Insurance following the merger of their parent companies, UAP of France and Provincial of the UK; APA Insurance Company Limited formed in 2003 following the merger of Apollo and Pan-Africa General divisions; ICEA LION Group formed in 2012 after the merger of Lion of Kenya Insurance Company Limited and Insurance Company of East Africa.

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 perform.

Carrying out paired t-test statistic, the mean profit before tax was 316.2, with standard deviation of 405.598 for 5 observations was significantly greater than zero, $t(4)=1.74$, two-tail $p = 0.16$, providing evidence that the merger is effective/significant on the financial performance of the insurance company. A 95% confidence interval about mean weight loss was (187.42, 820.02) hence rejecting the null hypothesis. By carrying out regression tests, it was possible to confirm the relationship between mergers and financial performance where it was found out that the two have a strong relationship. However, the regression analysis could not be used exclusively since it was found out to be much lower than the residual figures hence confirming that financial performance of insurance companies were affected to a large extent (67%) by other factors other than mergers/acquisitions (33%)

5.3 Conclusion

Given the desire of the Kenyan insurance industry to embrace information technology, research and innovation, thereby expanding its capacity to exploit the existing untapped insurance market, this is likely to see sustained cost pressures, together with stringent advancements in the regulatory environment this is expected to enhance insurance penetration and risk management will in turn put a lot of pressure on the independent local insurer. Statutory demands for a stronger capital base and solvency margins, demand for insurance which is also expected to rise as the recent natural catastrophes in Japan and Oceania have highlighted the importance of insurance in mitigating financial impact of catastrophes events; all this put together will see mergers as the only strategic option to the independent insurer in order to remain competitive and profitable in the long-run.

On a paired t-test statistic test, the study established an association between mergers and financial performance of insurance companies in Kenya with a P value of $P=0.16$ and t-test $t=1.74$ at 95% confidence level. The findings show that insurance company performed well over the period of study after the merger.

5.4 Recommendation for Policy

According to “Africa Reinsurance Corporation 2011, Annual Reports and Accounts”, the year 2011 was in many ways very bad for property / casualty insurers and reinsurers. Surprisingly, heavy catastrophe losses hit the industry even where they were not expected, in the previously called “cold spots”. It is believed that the earthquake and tsunami in Japan (above US\$ 35billion incurred losses), the earthquake in New Zealand, the floods in Thailand and other natural perils caused over 30,000 deaths and US\$350 billion total economic losses compared with US\$226 billion in 2010. Insured catastrophe losses of above US\$103 billion could be the costliest year for the industry. As a result of this, struggles to maintain a stable outlook for 2012 from major credit rating agencies (CRA), the uncertainty of the pricing improvement level, the low investment return environment and the limitations of the reserves release to support future earnings will see mergers among other common avenues such as the strength of surplus capital and enterprise risk management capabilities a viable option for the insurer.

In addition, according to “Africa Reinsurance Corporation 2011, Annual Reports and Accounts”, regulation is believed to be another big issue weighing down on the insurance and reinsurance industry in the years to come. As the implementation deadlines approaches, insurers and reinsurers are bracing to face the new requirements of sophisticated risk management, possible capital increase and high compliance costs. Keeping up with the focus on growth with profitability and to grow premium income by a greater percentage across all business lines, effort to deal with claims expeditiously and pro-actively, to settle claims and outperform the market, make adequate provisions for outstanding claims, develop new products that are not only flexible but the are also targeted at the uninsured populace of the society whilst adding value, are part of challenges that engulf the insurance industry and its players.

The fundamental aim of mergers and acquisitions (M&A) is the generation of synergies that can, in turn, foster corporate growth, increase market power, improve production efficiencies, boost profitability, and improve shareholders’ wealth. Accordingly, M&A should constitute positive net present value projects. The synergies that come by as a result of the merger will alleviate the above mentioned challenges facing the insurer / reinsurer.

In this study, by carrying out regression tests, evidence obtained supported and confirmed the relationship between mergers and financial performance where it was found out that the two have a strong relationship. The resulting merged entity performed better financially after the merger.

The paired t-test statistic, the mean profit before tax was 316.2, with standard deviation of 405.598 for 5 observations was significantly greater than zero, $t(4) = 1.74$, two-tail $p = 0.16$, providing evidence that the merger is effective/significant on the financial performance of the insurance company. Based on this evidence collected from the study, the researcher is for policy that insurance companies should go for for mergers / acquisitions to enable the insurer / reinsurer alleviate the above challenges among others engulfing the insurance industry in Kenya.

5.5 Limitations of the Study

Care must be taken to generalize the results of this study as there were some limitations. The use of regression analysis assumes that there is an assumption of linearity with the various models, these observations are independent of each other, homogeneity of variances exist which may not be the case.

It is also within the period of study (2004-2008) that elections were held and this may have an impact on the financial performance of APA insurance. Given that it offered a political risk insurance cover package, the post election violence that locked many parts of the country (2007/2008) caused the Kenya insurance industry to experience very high loss ratios with respect to their political risk insurance business class thus eating out on the other well performing insurance classes and the overall underwriting result. The findings may therefore be compromised. APA Insurance could have performed even better.

5.6 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, 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.

One may also be interested to know the kind of strategies used by the insurance company to come up with ROI decisions that accounts for part of the profits before tax. Investment portfolio mix of the insurance company that makes the company experience superior performance on investment income may be very significant. For example, in the financial year 2010/2011, those insurance companies that invested in fixed income securities in capital markets performed better than those that invested in the money market. It is also worthy to note that losses paid by insurance companies reduce the ROE and they vary from insurance company to another. Reinsurance treaty programs also affect ROE as it dictates the amount of claim the basic underwriter would eventually end up bearing in terms of the deductible. Technical reinsurance competence would hence be a factor to consider in determining and negotiating the reinsurance treaty programs which would affect the company's ROE in a given treaty period.

REFERENCES

- Africa Reinsurance Corporation 2011, Annual Reports and Accounts
- Akguc, (1995). Analysis of financial Toblolar, 9 Printing, Istanbul:
Accounting Directorate Publication No. 64, Accounting Education and Research
Foundation Broadcast Institute. No. 16
- APA Insurance Company (2008) Annual Report & Audited Accounts
- Barney, J (1991), Frim Resources and Sustained Competitive Advantage,
Journal of Manageemnt, 17, 99-120
- Baldwin, J.R., (1998). *The dynamics of industrial competition*, Cambridge, U.K.:
Cambridge University press.
- Bansal, L.K. & Kumar, S. (2008). The impact of mergers and acquisitions on corporate
performance in india. *Management Decision Journal*, 46(10), 1531-1543
- Barber, B.M., & Lyon, J. D. (1996). Detecting abnormal operating performance;
*The empirical power and specification of test statistics. Journal of Financial
Economics*, 41, 359 – 399
- Berger, A.N. (2007), “International comparisons of banking efficiency”,
Financial Markets, Institutions & Instruments, Vol. 16, No. 3, pp. 119-144.
- Brealey, R., Myers S., & Allen, F. (2006). *Principals of Corporate Finance*, 8th Edition.
New York, NY: McGraw-Hill Irvine
- Cartwright, S., & Schoenberg, R. (2006). Thirty Years of Mergers and Acquisitions.
Research: Recent Advances and Future Opportunities, ISSN 1467 – 8551. *British
Journal of Management*, 17(s1), S1 – S5.
- Cartwright, S. (2005). Mergers and Acquisitions: An update and Appraisal.
International Review of Industrial and Organizational Psychology, ISSN 0886 –
1528, 20.
- Choi, B.P.& Weiss, M.A. (2005), “An empirical investigation of market structure,
efficiency, and performance in property–liability insurance”, *Journal of Risk and
Insurance*, Vol. 72 pp.635-73.
- Coffey, J., Garrow, V. and Holbeche, L. (2003). *Reaping the Benefits of Mergers and
Acquisitions: In Search of the Golden Fleece*,

- Cooper, W.W., Seiford, L.M., Tone, K. (2000), *Data Envelopment Analysis: A Comprehensive Text with Models, Applications, References and DEA-Solver Software*, Kluwer Academic Publishers, Norwell.
- Cummins, J.D., Xie, X. (2008), "Mergers and acquisitions in the US property–liability insurance industry: productivity and efficiency effects", *Journal of Banking and Finance*, Vol. 32 pp.30-55.
- Cummins, J.D., Grace, M.F., Phillips, R.D. (1999a), "Regulatory solvency prediction in property–liability insurance: risk-based capital, audit ratios, and cash flow simulation", *Journal of Risk and Insurance*, Vol. 66 pp.417-58.
- Cummins, J.D., Weiss, M.A. (2004), "Consolidation in the European insurance industry: do mergers and acquisitions create value for shareholders?", *Brookings-Wharton Papers on Financial Services: 2004*, pp.217-58.
- Cummins, J.D., and Rubio-Misas, M., (2006), "Deregulation, Consolidation, and Efficiency: Evidence from the Spanish Insurance Industry. *Journal of Money, Credit and Banking* 38, 2, 323 - 356.
- Davis, S. I. (2000). *Bank mergers: Lessons for the future*. Basingstoke, Hampshire: Macmillan.
- Datta, S., Iskandar-Datta, M., Raman, K. (2003), "Value creation in corporate asset sales: the role of managerial performance and lender monitoring", *Journal of Banking and Finance*, Vol. 27 pp.351-75.
- Fluck,Z., & Lynch, A.W. (1999). Why do firms Merge and Then Divest? A Theory of Financial Synergy. *Journal of Business*,. 72(3), pp319-46
- Franke, Michael E.S. *Mergers and acquisitions basics: The key steps of acquisitions, divestitures, and investments*. New York: John Wiley and Sons, 2005, pp.308.
- Gay, L.R., Airasian, P. (2003). *Educational research: Consequences for analysis and applications* (7th ed.). Upper Saddle River, NJ: Pearson.
- Global Credit Rating Co. – Kenya Insurance Credit Rating Report. (2011). Kenya Insurance Analysis. *Kenya Insurance Credit Rating Report* , 1-6.
- Hattori, H. (2004). The acquisition of wh-movement by Japanese Advanced Learners of English. Hajime Hattori, University of Essex 2004
- Hitt et al., (2007) Antecedents and Performance Outcome of Diversification: A review and assessment; *Dunkin's Brand to Divest Togo's franchise Time*

- Ileri, J.K. (2011). Effects of Mergers and Acquisitions on Financial Performance of Oil Companies In Kenya. *Unpublished MBA Thesis*. University of Nairobi.
- IRA 2012 statistical bulleting.
- Jensen, Michael C. (1986). “The Takeover Controversy: Analysis and Evidence” *Midland Corporate Finance Journal* 4, no. 2 (summer): 6-32
- Jensen, M.C. (1988). Takeovers: Their Causes and Consequences. *Journal of Economic Perspectives*, 2: 21-48
- Katuu J.M (2003) “A Survey Of Factors Considered Important In Merger & Acquisition Decisions By Selected Kenyan Based Firms”. MBA Project, University of Nairobi.
- Kaplan & Norton (1992) “The Balanced Scorecard - Measures That Drive Performance *Harvard Business Review; January – February 1992*
- Kihanda, Einstine. (2006). Coporate Mergers. *ICEA May 2006 Issue* , 23-25.
- Korir E K. (2006) Effects off Mergers on Financial Performance of Companies Listed at the Nairobi Stock Exchange. MBA Project, University of Nairobi
- Kovacich, G., & Halibozek, E. *Mergers and acquisitions security: Corporate restructuring and management*. UK: Butterworth-Heinemann, 2005 pp.250
- Kraemer, K. L. (1991). Introduction. Paper presented at the Information Systems Research. Challenges: Survey Research Methods.
- Kwoka, J.E. Jr (2002), “Mergers and productivity”. *Journal of Economic Literature*, Vol. XL pp.540-1
- Lambrecht T.R. (2004) Strategic merger waves: a theory of musical chairs, Center for the Study of Rationality, Hebrew University of Jerusalem Working Paper no. 259, 2004.
- Loderer, C & Martin, K. (1992). Post-Acquisition Performance of Acquiring Firms, *Financial Management* 21, 69-79
- Lutbatkin, M. (1978). Merger strategies and stakeholders value. *Strategic Management Journal*, 8, 39-53
- Marc, Joffe (2011, October). Global Credit Rating, GCR – Kenya Insurance Credit Rating Report. *Kenya Insurance Analysis* . 2-4
- McLaughlin, T. A. (2010). *Nonprofit mergers and alliances*. Hoboken, N.J: Wiley.

- Mitchell, H.L., & Mulherin, J.H. (1996). The Impact of Industry Shocks on Takeover and Restructuring Activity. *Journal of Financial Economics*, 41, 193-229
- Muya, C.M. (2006). A survey of Experiences of Mergers. *Unpublished MBA Thesis*. University of Nairobi.
- Mergerstat (2007), *Mergerstat Review*, W.T. Grimm & Co., Chicago, IL
- Myers, S.C., & Majluf, N.S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*
- Njenga, F.K. (2004). An investigation into whether the demerger of coffee marketing societies has created or eroded owners wealth in parts of Central Kenya. *Unpublished MBA Thesis*. University of Nairobi.
- Paruchuri, S., Nerkar, A.& Hambrick, D.C. (2006), “Acquisition integration and productivity losses in the technical core: disruption of inventors in acquired companies”, *Organization Science*, Vol. 17 No.5, pp.545-62.
- Republic of Kenya, Budget Statement for the Fiscal Year 2012 / 2013 (1st July – 30th June) by Hon. Robinson Njeru Githae, Minister for Finance on 14th June 2012
- Reuters. (2008). *Reuters.com, from*
<http://www.reuters.com/article/2007/12/17/idUS108430+17-Dec-2007+BW20071217>
- Straub A. J., (2007). *Corporate Takeovers: Causes and Consequences*. Chicago: university of Chicago press
- US Business Reporter, Understanding Insurance Ratios – Course 166
http://www.activemedia-guide.com/busedu_insure.htm
- Vaara, E. (2002). On the discursive construction of success/failure in narratives of post-merger intergration. *Organizational Studies*, 23(2), pp.211-48.
- Vasilaki, A., & O’Regan, N. (2008). Enhancing post-acquisition organizational performance: the role of the top management team. *Team Performing management*, 14(3/4), pp. 134-45
- Vermeulem, F., & Barkema, H., 2001. Learning through Acquisitions. *Journal of the Academy of management* 44, 457-476

Vranceanu, C. (2009). "Biggest mergers and acquisitions in 2008," Retrieved from <http://www.wallstreet.ro/articol/English-Version/56433/Biggest-mergers-and-acquisitions-in-2008>, html.

Appendix 1: Merged Insurance Companies in Kenya between 1994-2012

1. ICEA LION Group formed in 2012 after the merger of Lion of Kenya Insurance Company Limited and Insurance Company of East Africa.
2. APA Insurance Company Limited formed in 2003 following the merger of Apollo and Pan-Africa General divisions
3. UAP Insurance Company Limited formed in 1994 after the merger of Union Insurance and Provincial Insurance following the merger of their parent companies, UAP of France and Provincial of the UK

Source: IRA (2012) Statistical Bulletin

Appendix II: APA Insurance Five year financial performance synopsis;

<i>All figures in Sbs millions</i>	1999	2000	2001	2002	2003	Total
Apollo Insurance (General)						
Gross written premium	378	413	512	583	818	2,704
Management Expenses	99	105	135	189	289	817
Underwriting profit / (loss)	7	26	22	-14	-4	37
Profit before taxation	25	39	14	8	186	272
Pan Africa General Insurance						
Gross written premium	536	563	593	454	484	2,631
Management Expenses	110	110	134	117	152	623
Underwriting profit / (loss)	-28	-113	-106	-47	-199	-494
Profit before taxation	30	-65	-152	-15	-69	-271
Apollo & Pan Africa General Consolidated						
Gross written premium	914	976	1,105	1,037	1,302	5,335
Management Expenses	209	215	269	306	441	1,440
Underwriting profit / (loss)	-21	-87	-84	-61	-203	-457
Profit before taxation	55	-26	-138	-7	117	1
Expense ratio	22.87%	22.04%	24.36%	29.51%	33.87%	27.00%
Underwriting profit (loss) ratio	-2.30%	-8.91%	-7.60%	-5.88%	15.59%	-8.57%
<i>All figures in Sbs millions</i>						
	2004	2005	2006	2007	2008	Total
APA Insurance Limited						
Gross written premium	1,407	1,504	2,008	2,356	3,003	10,278
Management Expenses	231	257	301	339	402	1,530
Underwriting profit / (loss)	-87	-21	10	-13	27	-84
Profit before taxation	44	459	811	3	265	1,582
Expense ratio	16.42%	17.09%	14.99%	14.39%	13.39%	14.89%
Underwriting profit (loss) ratio	-6.18%	-1.40%	0.50%	-0.55%	0.90%	-0.82%

Source: APA Insurance Company Limited (2008) Annual Report & Audited Accounts