THE EFECT OF MERGERS AND ACQUISITIONS ON VALUE CREATION OF INSURANCE COMPANIES IN KENYA

BY

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D63/60415/2013

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE AT THE SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI.

OCTOBER 2014

DECLARATION

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

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ACKNOWLEDGEMENTS

DEDICATION

I dedicate this research project to my family members who assisted me and encouraged me throughout the entire Msc. Finance course.

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LIST OF ABBREVIATIONS

AKI	Association of Kenya Insurers
BCG	Boston Consulting Group
BPS	Book Value per Share
CAPM	Capital Asset Pricing Model
DPS	Dividends per Share
EPS	Earnings per Share
ERM	Enterprise Risk Management
GDP	Gross Domestic Product
IRA	Insurance Regulatory Authority
M&A	Mergers and Acquisitions
RIV	Residual Income Valuation
ROI	Return on Investment
ROE	Return on Equity

ABSTRACT

Mergers and acquisitions continue to enjoy importance as strategies among insurance companies for achieving growth. However, their success in creating shareholder value remains contested. According to a 2009 study by Boston Consulting Group, only 46% of insurance industry mergers and acquisitions in North America and Western Europe have created value for shareholders .Nonetheless, the insurance industry in Kenya has witnessed a number of mergers and acquisitions over the recent years. The aim of this research was to evaluate whether these mergers and acquisitions have created value or destroyed value. The research used a sample of 4 insurance companies in Kenya that had gone through a merger or acquisition over the period 2000 to 2014. The research used the intrinsic valuation approach. To measure the effect of the merger and acquisition, the research examined the difference between the pre-merger fundamental values and the post-merger fundamental value of the combined entities over a time horizon of four years. The valuation method used to measure fundamental value was the residual income valuation model. The variables for the residual income valuation model consisted of book value at year 0, dividends at year 0, residual incomes over years one and two and forecast terminal value. Year 0 was the year of consolidation, the accounting year following the completion date of the merger or acquisition. The research found that mergers and acquisitions have a statistically significant effect on book value and fundamental value of the merged entity. The research found no significant effect on dividends, residual income and terminal value of the merged entity. Overall, the research found mergers and acquisitions created value. The study recommends that insurance companies seeking growth should seek to consolidate their establishments through mergers and acquisitions – mergers and acquisitions enable insurers to expand their pool of policyholders and reduce underwriting risk more rapidly than other growth strategies hence creating value.

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Mergers and Acquisitions (M&A) in the insurance industry are a big deal. Insurance companies range from small, regional private companies to large, international publicly-traded corporations with market capitalizations in the billions of dollars. According to Tchajkov (2014) when two companies decide to merge, or one company purchases part of another company, transactions can reach multi-billion dollar levels. In a fiercely competitive industry with mature and established businesses, such transactions can be quite attractive because of the growth they offer. For example, Cummins and Xie (2006) find that M&A provide an opportunity to expand market presence into another region, or new line of business. Tchajkov (2014) further adds that purchasing similar lines of business from a competitor can also be an attractive way of adding new customers thereby improving margins and the bottom-line.

Despite these promising sources of opportunity, according to a study by Boston Consulting Group only 46% of insurance industry M&A in North America and Western Europe have created value for shareholders of the acquiring company (BCG, 2009). The BCG study is a sobering reminder that although some opportunities' may appear attractive to an acquirer, ensuring a good strategic fit is essential. This paper aims to look at the effect of M&A on value creation of insurance companies in Kenya. Although forecasts vary, the expectation is that M&A in the Kenyan insurance industry will continue at healthy levels for the near and medium term, as industry players ranging from small to large seek growth or divestiture opportunities.

1.1.1 Mergers and Acquisitions

A merger is defined as a voluntary amalgamation of two firms on roughly equal terms into one new legal entity. An acquisition or takeover occurs when one company purchases another. Following an acquisition the target firm becomes subject to the acquirer's management. There are three types of mergers: horizontal mergers, vertical mergers and conglomerate. A horizontal merger is a merger between two firms potentially active in the same market at the same level of activity e.g. between two insurance companies. A vertical merger involves firms operating at different levels of the supply chain e.g. an insurance

company acquiring a brokerage. A conglomerate is a merger between firms that are involved in totally unrelated business activities. (Competition Authority of Kenya, 2014)

In Kenya, examples of notable mergers and acquisitions include the merger of Lion of Kenya Insurance Company and Insurance Company of East Africa to form ICEA LION Group, the merger of Apollo Insurance Company Ltd, and Pan Africa Insurance Company to form APA Insurance (2003). The acquisition of Mercantille Insurance company ltd by Colina holdings to form Sacham Insurance company Ltd and the ongoing acquisition of Real Insurance Company Ltd by Britam Ltd.

1.1.2 Value Creation

The main aim of an organization is to create value. Koller, Goedhart and Wessels (2005) argue that companies that are dedicated to value creation are healthier and build stronger economies, higher living standards and more opportunities for individuals. The legal framework in most countries state shareholders as the owners of the firm. Thus it is the objective of the firm to maximize shareholder value. Koller et al. (2005) further argues that pursuing shareholder value does not mean neglecting other stakeholders' interest like employees and customers. Creating value for customers helps sell products and services, while creating value for shareholders, in the form of increased stock price, insures the future availability of investment capital to fund operations.

There are various strategies used to create value. In today's uncertain economic environment, most strategies (for example, branding campaigns, mergers, various initiatives, etc.) must show a strong Return on Investment (ROI). Economic value creation occurs when the sum of all sources of revenue exceeds the sum of all expenses, with time value reflected. If the income on invested assets is more than the cost of those funds, then value added is positive. If the income on invested assets is less than the cost of those funds, then value added is negative. (Copeland, Koller and Murrin, 1995)

1.1.3 Effect of M&A on Value Creation

A common view of M&A is that they are stimulated by the firms' objectives to obtain more benefit from the merged firms compared to their total value if they were independent. Some studies such as Caves (1989) indicate that mergers are profitable activities and socially desirable, because they create value and are economically efficient. Increased efficiency may

arise through synergistic effects which mean that synergistic gains such as operating synergy and financial synergy can also be reached through M&A (Maquieira, Megginson and Nail, 1998). Furthermore Sudarsanam, Holl and Salami (1996) argue that there are three sources of value creation in mergers: operational synergy, managerial synergy and financial synergy.

Lev (1993) finds that financial synergy can be achieved in short term and long term goals. Short term financial synergies are, for example, price-earning effects, improved liquidity, and tax effects. The long term financial synergies include increased debt capacity, improved capital redeployment, and stabilized earnings. Lev (1993) also points out that motives for mergers are not only based on financial purposes, but also on such managerial motives as executive compensation, power needs, power growth, human capital and risk diversification. Bradley, Desai and Kim (1983) find that mergers can generate an operating synergy resulting from efficient management, economies of scale, improved production techniques, the combination of complementary resources, increased market power and the redeployment of assets to more profitable uses.

1.1.4 Insurance Industry in Kenya

The main players in the Kenyan insurance industry are insurance companies, reinsurance companies, intermediaries such as insurance brokers and insurance agents, risk managers or loss adjusters and other service providers. The statute regulating the industry is the insurance Act; Laws of Kenya, Chapter 487. There is also a self-regulation of insurance by the Association of Kenya Insurers (AKI). AKI was established in 1987 as a consultative and advisory body to insurance companies (AKI, 2014). The regulator of the industry is the Insurance Regulatory Authority (IRA). IRA was established with the mandate to supervise and regulate the insurance industry players (IRA, 2014) .As at 2013 there were 46 operating insurance companies. 23 companies wrote non-life insurance business only, 11 wrote life insurance business only while 12 were composite (both life and non-life).

According to the Kenya Insurance Survey (KPMG, 2004), the insurance industry is facing two major challenges. The first challenge is to come up with a solution for companies whose viability is threatened by their inability to meet policy holder claims. The second major challenge is how to generate growth for an industry that has significant potential for growing as a percentage of GDP but has been stagnant. These challenges are especially pronounced

where growing pricing pressure as the market softens will drive a need for cost-cutting and greater efficiency amongst insurance companies.

1.2 Research Problem

M&A seem to be on a developing trend in the insurance industry. As in other segments of the financial services industry, the most common argument for the M&A is the belief that they create value. Such value may result from the insurers' will to increase their geographical reach, their products' range, additional benefits from scale economies and financial synergies. Although M&A enjoy importance as strategies for achieving growth, their success in creating value remain contested. A study by Bruner (2002) found that long run value creation has on average, eluded shareholders of acquiring companies. In contrast, studies by Powell and Stark (2005) found evidence of post acquisition performance in excess of the industry average. Local studies by Lole (2012) and Marembo (2012) found that M&A increased the financial performance of insurance companies and commercial banks in Kenya. Furthermore a BCG study (2009) found that only 46% of insurance industry M&A transactions in North America and Western Europe have created value for shareholders of the acquiring company.

Upon closer evaluation of the above mentioned reports, it becomes obvious that the myriad of post acquisitions performance metrics, variations in research methodologies, event time study windows and research characteristics have resulted in mixed results around whether M&A create or destroy value. A recent publication from Ma, Whidbee and Zhang (2011) questioned the event based research methodologies and metrics that had been adopted by numerous researchers including that by Bruner (2002). Ma et al. (2011) indicated the tendency for share price regression models to underestimate post acquisition performance. Ma et al. (2011) further proposed the use of the intrinsic value as an alternative to share price regression models.

Thus the use of questionable research propositions, methods, hypotheses, and potentially biased and mixed post merger results provides motivation for this study. This study therefore contributes to the understanding of M&A and value creation by building and improving on research methodologies of Bruner (2002), Powell and Stark (2005) ,BCG (2009) , Lole (2012) and Marembo (2012). As per Lole (2012) this study establishes the effect of M&A in insurance companies using the intrinsic value creation measure as proposed by Guest, Bild and Runsten(2010) and Ma et al. (2011) .We use this approach to estimate the fundamental

value of acquirers before acquisition and compare this valuation with their fundamental value following the acquisition. From the perspective of acquiring firms, a question of paramount importance is whether the present value of the financial benefits from an acquisition are greater than the present value of the costs. In other words, is the acquisition a positive net present value investment?

1.3 Objective of the Study

To establish the effects of mergers and acquisitions on value creation of insurance companies in Kenya.

1.4 Value of the Study

Studying the market-value effects of insurance mergers is important for a number of reasons. Firstly, analyzing whether M&A create value has implications for future regulatory policy in Kenya. The objective of the regulatory changes in Kenya is to move away from a restrictive regulatory system that primarily focused on solvency towards a system that enhances economic efficiency and provides better value for consumers by harnessing market forces. Because M&A activity is costly, serious questions would be raised about the efficiency effects of regulatory policy if the resulting M&A fail to create value or actually destroy value for the firms involved in the transactions.

Studying M&A transactions also has implications for anti-trust policy. Value-creation can have both positive and negative effects from an anti-trust perspective. If merged firms gain value because of market power that allows them to charge super-competitive prices, then positive market value gains from mergers might be adverse from an anti-trust perspective. On the other hand, if firms gain value because they become more efficient and competitive and take market share away from less efficient rivals, then M&A would not be a serious concern for anti-trust regulators. Although determining whether any market value gains from M&As are due to market power or more economically desirable effects is beyond the scope of the present study, our research contributes by providing evidence on whether market value gains are occurring and on what types of transactions are most likely to lead to market value gains.

Finally, studying insurance mergers has important implications for managers of financial services firms. If mergers tend to be value-creating, then it may be worthwhile for managers to devote scarce time and resources to further consolidation activities. If, on the other hand,

mergers have little or no impact on value or possibly destroy value, then managerial efforts might be more profitably directed towards other activities such as improving efficiency and productivity. Also, information on whether some types of transactions are more likely to create value than others should help managers in formulating M&A strategies.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This section draws on literature in the area of M&A. The chapter builds on the background research problem. The chapter discusses relevant literatures from a broader perspective to bring out the motives for M&A transactions. The material is of importance to this study as it forms a basis for theory which will be made during the study in line with the study objectives.

2.2 Theoretical Review

The following are some of the theoretical frameworks concerning the rationale for M&A.

2.2.1 Value Maximizing Hypothesis

This hypothesis originates in economic theory (Manne, 1965) which views M&A as an activity that may generate a valuable asset. Under this hypothesis, the managers of firms have a primary goal of maximizing shareholder wealth (Sudarsanam et al., 1996). According to this hypothesis, a merger or acquisition should generate a positive economic gain to the merging firms or at least non negative returns. Hence, any merger or acquisition activity should meet the same criteria as any other investment decision (Halpem, 1983). Most mergers and acquisitions are value maximizing activities whose aim is to boost shareholder wealth. If this objective cannot be met by the managers of firms engaging in mergers and acquisitions, they may not proceed with the merger proposal or may reject any merger offer, and therefore, in this case, the ability to pick a good takeover target is essential (Powell, 1997)

Managers should not conduct any merger or acquisition if there are no positive gains expected through the merger of their firms. If the firms' value increases as a result of a merger or acquisition, it indicates that the firms involved in a merger or acquisition are assumed to be value maximizers (Malatesta, 1983). Even if, for example, at the beginning of making a merger proposal shows a negative net present value investment, it does not mean that this merger proposal does not generate any gain to the shareholders of merging firms. The gain raised from mergers and acquisitions may come after the announcement of merger offers or after the outcome of mergers is known.

Financial motivations and synergy effects are among those which are consistent with the value maximizing hypothesis (Halpem, 1983). Maquieira et al. (1998) argue that financial synergies can arise from various aspects of the merging firms, such as from a reduction of default risk which finally reduces borrowing costs and diversification of equity risk for shareholders. Haugen and Langetieg (1975) conclude that it is possible to minimize the risks of insolvency and bankruptcy by merging with another firm. In addition, Berger et al. (1998) point out that mergers and acquisitions can generate a static effect which means the combination of assets of merging firms becomes bigger than before. The bigger the assets, the greater the possibility of the merging firms displaying a better wealth effect for the shareholders.

2.2.2. Non-Value Maximising Hypothesis

This hypothesis, proposed by Halpem (1983), takes the view that any merger or acquisition has no economic gains for the merging firms. The positive returns are not the objective of the firm conducting a merger attempt, and therefore, the bidding firms are not interested in the profitability of a merger. According to Halpem, it is not necessarily important for the managers of the firms who engage in mergers and acquisition to display positive returns for their shareholders. In this type of merger, the merging firms, especially the acquiring ones, will seek some other objectives beyond the positive economic gains for their firms, such as to maximize sales growth, to control a conglomerate empire, to lift company image, to enter a new market which is not possible without a merger or acquisition due to government regulations, to change the target market, to expand to a new geographic market, to acquire qualified managers and expertise, and so on.

Meanwhile, a study by Healy, Palepu and Ruback (1997) finds that strategic takeovers that can be categorized as non-value maximizing activity (takeovers that typically involved stock payment for firms in similar businesses) generate more gains than financial takeovers (takeovers that generally involved cash payments for firms in unrelated businesses). This result is very interesting because, in fact, the non-value maximizing merger often outperforms the value maximizing merger. Most non-value maximizing mergers are horizontal mergers which are subject to government restrictions and regulations because the non-value maximizing mergers sometimes create monopoly and oligopoly. The involvement of governments, as part of an antitrust policy, is essential to protect public interests against an increase in the use of market power in setting prices. A study by Berger et al. (1998)

discovered that some mergers and acquisitions in the U.S. Banking Industry are also driven by some non-value maximizing objectives, for example, to consolidate the merging firms, to refocus small business lending. Studies by Kaplan and Weisbach (1992) point out operating synergies can only be created in mergers between firms in the same or related industries.

2.2.3. Managerial Hypothesis

The managerial hypothesis proposed by Mueller (1969) views that mergers can be used by the managers of firms as a tool to achieve their own personal interests. Under this hypothesis, managers conduct mergers or acquisitions if they contribute to their personal wealth. These objectives, however, basically do not always maximize shareholder returns. Lev (1983) also argues that the increase in the power of the managers boosts their own interest at the expense of that of their companies' shareholders. Furthermore, Amihud and Lev (1981) comment that manager engage in mergers and acquisitions to minimize their human capital risk. In addition, merger activities can be seen by the managers as an attempt to diversify their human capital risks. Mergers and acquisitions allow managers to limit their risks by creating larger but less risky firms (Maquieira et al., 1998). This argument is logical when the risk to the new merging firm is divided and shared to some people, leading managers to reduce their risks to the minimum possible.

The managerial hypothesis is consistent with the argument from Larcker (1983) who states that managers focus on the short term, and always try to maximize their available utility in their firm. Again, this argument is logical because most managers are hired for a certain period of time, and consequently they will try to maximize their wealth before at the end of a contract. Therefore, when a merger or acquisition provides a manager with large personal benefits, he is more willing to sacrifice the market value of the firm. On the other hand, shareholders prefer to maximize the share price, which is more a long term outlook. To minimize this conflicting interest between managers and shareholder objectives, it is very common for firms to provide their managers with share options. By holding shares or options in their firms managers have a vested interest and are morally responsible for maximizing their own interests as well as shareholder wealth.

2.2.4. Inefficient Management Hypothesis

Mergers or acquisitions can also be viewed as a response to inefficient management. This scenario is seen by investors as a response to a situation where the incumbent management

has pursued inefficient policies, and consequently, the firm becomes an acquisition target (Malatesta, 1983). Inefficient management can be identified from several indicators, for example, poor earnings, undervalued shares and low P/E ratio.

If the firm is acquired, the bidding firm will employ a new management team who will manage the resources more efficiently. Organization effectiveness can be considered as part of efficient management. Mergers maximize the resources from the combining firms, thus, the organization's performance becomes effective. It also increases productivity through combining two or more resources one of which is underutilized. This change makes the organization more effective in handling day to day activity, because it can react more quickly to problems which arise. If an organization can work efficiently, it maximizes its available resources

2.2.5 Industry Shock Theory

Mitchell and Mulherin (1996) state that M&A activities within an industry are not merely firm-specific phenomena but the result of the adaptation of industry structure to a changing economic environment or "industry shocks" such as changes in regulation, changes in input costs, increased foreign or domestic competition, or innovations in technology . They further argue that corporate takeovers are the least costly means for an industry to restructure in response to the changes brought about by economic shocks but that post-takeover performance of firms should not necessarily improve, especially when compared to a pre-shock benchmark or to the industry average. Although a shock to an industry can impact all firms in the industry, firms with smaller size, relatively low growth prospects, higher insolvency risk, or vulnerable capital structures are believed to be more affected by shocks than financially healthier firms.

In Kenya, the bill passed by IRA, designed to raise capital standards in the industry and improve solvency of insurers, may have forced some relatively weak insurers to find a way out of financial distress by merging with other insurance companies to avoid incurring regulatory costs. Though no evidence is available to support this, we believe further rises in capital may result in increase of mergers.

2.3 Determinants of Value Creation of Insurance Companies

As in any other industry there is a real incentive for insurance companies to maximize shareholder value. This consideration significantly frames the decision making process and strategies on insurance company management. Fiordelisi (2010) finds there are few "pure value creator" actions that companies can take to increase value. He further points out that these actions may have both positive and negative effects on shareholder value creation and it is the net effect that will determine whether any action is value enhancing. Value determinants are comprehensively discussed in the literature. For insurance companies, we identify three strategies that may lead to value creation for shareholders. These include enterprise risk management (Liebenberg and Hoyt, 2003) the use of debt (Sandberg, Lewellen and Stanley, 1987) and growth strategies such as M&A (Cummins and Xie, 2006)

In recent years, enterprise risk management (ERM) has become increasingly relevant for managing corporate risk for insurance companies. In contrast to the traditional silo-based risk management, ERM considers the company's entire risk portfolio in an integrated and holistic manner. It further constitutes a part of the overall business strategy and is intended to contribute to protecting and enhancing shareholder value. The consideration of the company's entire risk portfolio in a holistic process is said to contribute to reduced earnings volatility, stock price volatility and external capital costs as well as higher capital efficiency, where the consideration of risk dependencies further allows companies to exploit synergy effects in the risk management process (Liebenberg and Hoyt, 2003). However, the necessary financial and human resources, as well as the required IT systems, constitute an obstacle for ERM (McShane et al., 2011). In addition, establishing a strong risk culture and the development of adequate (compensation) incentive systems are needed for the successful implementation of ERM (Rochette, 2009). Furthermore, as part of the global corporate strategy, ERM shifts risk management to a more offensive function that also accounts for emerging and strategic opportunities and involves a better decision process with respect to operational and strategic decisions in order to eventually increase shareholder value.

Sandberg et al. (1987) argue that the presence of debt financing in a firm's capital structure may contribute positively to firm value. Hence, an insurance company may try to increase its value by reducing capital invested and, consequently, increasing its financial leverage. However, Fiordelisi (2010) argues this strategy may reduce equity capital available by

increasing business risk. Furthermore it may result in a higher cost of capital. Hence it is not certain that increasing leverage will increase shareholder value.

Growth strategies such as M&A, investing in capital projects etc. have also been used as tools to create value for share holders. For insurance companies, important fixed costs include computer systems and software development costs. The actuarial, underwriting, and investment operations of insurers also have fixed cost components. These fixed costs can be sources of scale economies. Another source of scale efficiency that is expected to be particularly important for insurers is earnings diversification (Cummins, Tennyson and Weiss, 1999). The basic principle of insurance is "the law of large numbers," which holds that expected losses become more predictable as the size of the insured pool increases. Enhanced predictability implies that large insurers have less volatile earnings and thus need to hold less equity capital per policy underwritten, providing a potentially powerful source of cost reduction. Increasing underwriting diversification also may permit insurers to engage in higher risk, higher return investment strategies without increasing their costs of capital or probability of financial distress. M&A enable insurers to expand their pool of policyholders and reduce underwriting risk more rapidly than is usually possible through organic growth. (Cummins and Xie, 2006)

2.4 Measures of Post Acquisition Performance

Over the years, several studies have been done by researchers and practitioners to understand the significance of adopting M&A strategy by organizations. The motivation has been to understand whether the perceived benefits from this strategy have accrued or not. They have studied whether these acquisitions are value enhancing or destructive strategies for acquiring organizations. The methods used to measure this parameter have been varied. We have reviewed the literature to identify three common methodologies used to measure post acquisition performance and the benefits and limitations of these methodologies.

2.4.1 Event Study Returns

Event Study is the most popular methodology adopted by researchers. Share return event studies examine the share price impact of the acquisition on the acquired and acquiring firms. Since these studies measure returns over very short time periods, they have the advantage of being less subject to problems of noise and benchmark error (Guest et al., 2010). Zollo, and Degenhard, (2007) reviewed 87 research papers on acquisition performance from top

Management and Finance Journals between 1970 and 2006, and found that 41% used the short-term event study method, while 16% used the long term event study method.

2.4.2 Accounting Returns

Accounting Returns studies involve the analysis of the accounting performance of the combined entity measured in terms of Return on Assets or Return on Equity; two to three years post acquisition. Accounting studies typically compare results for the sample firms with control firms to discount any industry wide phenomenon. Healy et al. (1997) largely contributed to the growth of accounting returns or operating performance methodology

2.4.3 Residual Income Approach

Guest et al. (2010) observed that both the event study methodology and the accounting returns methodology had limitations that did not determine the true fundamental valuation of an acquisition. They proposed an alternative approach which they called the residual income approach, wherein they compare the fundamental value of acquirers before acquisition with the fundamental value post acquisition.

2.4.4 Critical Analysis of Methodologies

The proponents of each of the methodologies described above have stated that the methodology selected in their study, though with some limitations is the best suited for the specific purpose under review. However, there are some shortcomings in the techniques. Event study methodology has been used to a large extent in international studies. The primary justification as described by Lubatkin (1986) is that this gives a direct measure of shareholder value, it is not prone to manipulation, it is easy to measure for listed firms and it shows the impact not only of the firm action but also of rivals in the market. However, the use of event study assumes capital market efficiency which may not be the case in all markets, specifically in countries such as Kenya. Event studies measure the impact of an acquisition on stock market expectations and not actual performance. There can be situations of market mispricing or inability of the market to comprehend the complexities involved in an acquisition. The event study results are sensitive to the selection of time frame selected for study, and the estimations period. In case of acquisitions of firms relatively smaller than the acquiring company, the impact of an acquisition on stock price would be difficult to detect. Harrison et al. (1991) have stated that market may not react accurately to news concerning acquisitions if information concerning uniquely valuable synergies are kept private.

The next most popular technique is the Accounting Performance measure. Harrison et al. (1991) have justified the use of accounting returns as it is not subject to market inefficiency or perception of the market, but measures the actual outcome of an acquisition. Managers' use accounting returns for evaluating diversification strategies or making strategic decisions. However, it is difficult to compare accounting returns for companies from different geographical regions across the globe due to differences in regulation and accounting practices. This measure does not take into account the market value of the firm, and is open to manipulation. Differences in method of accounting for the acquisition either Purchase or Pooling would result in differences in asset base which need to be taken into account.

To address the impact of acquisitions on the fundamental value of acquirers, the residual income approach to fundamental valuation has been proposed. In recent years, accounting research has explored fundamental approaches to corporate valuation and models based on residual income have attained a widespread use (Lee, 1999).

2.5 Empirical Review

The effect of M&A on value creation has been widely studied in the financial sector. The motivation has been to understand whether the perceived benefits from this strategy have accrued or not.

2.5.1 International Evidence

Cummins et al. (1999) examined the relationship between mergers and acquisitions, efficiency, and scale economies in the US life insurance industry over the period 1988 to 1995. They estimated cost and revenue efficiency using data envelopment analysis (DEA). Their results found that acquired firms achieved greater efficiency gains than firms that had not been involved in mergers or acquisitions. Furthermore, they found firms operating with non decreasing returns to scale and financially vulnerable firms were more likely to be acquisition targets. From their results they concluded, mergers and acquisitions in the life insurance industry had a beneficial effect on efficiency.

Cybo-Ottone and Murgia (2000) analyzed merger transactions in 13 European countries over the period 1988 to 1997. Their sample included 54 deals, either the target or the acquiring firm had to be a bank. The share price impact of the acquisition on the combined performance

of both the bidder and the target was tested statistically. Their results found significant market value gains for within-country, bank-to-bank acquisitions, and for transactions where banks acquired insurance companies. However, they did not find market value gains for cross-border transactions or transactions involving banks and securities firms.

Akhigbe and Madura (2001) measured the valuation effect of Intra-industry US insurance company mergers. They applied the event study methodology to a sample of 68 mergers during the period 1985 to 1995. Their results found value-creation for both acquirers and targets, however value-creation for targets was significantly larger than for acquirers. They reported positive and significant abnormal return for acquiring insurers and concluded that this favorable valuation effect was driven by the similarity of services provided by both the acquirers and the acquired. In other words, the somewhat standardization in their products made the merger of operations, for both parties, easier. Interestingly, Akhigbe and Madura (2001) document a higher positive and significant market reaction for acquirers who are "non-life insurers."

Floreani and Rigamonti (2001) examined the stock market valuation of mergers in the insurance industry between 1996 and 2000 in Europe and the US. They formed a sample of 56 deals in which the acquiring company was listed. The used an event study methodology. Their data analysis revealed that insurance company mergers enhanced value for bidder shareholders. Over the event window (-20,+2) their abnormal return was 3.65%. Furthermore, they found the abnormal returns for acquiring firms increased as the size of the deal increased. They also found that mergers occurring between insurance companies located in the same European country were not valued positively by the market, while cross-border deals appeared to increase shareholder's wealth. An analysis of a sub-sample of simultaneously listed bidders and targets revealed that the combined insurance companies experienced significantly positive abnormal returns and consistent with previous findings, target shareholders substantially increased their wealth. Indeed, Cummins and Weiss (2004) report a small negative valuation effect on the bidder's shares following transactions that do not involve pure insurance partners.

Cummins and Rubio-Mises (2003) studied the effects of deregulation and consolidation in the Spanish insurance industry over the period 1989 to 1998 .The sample period 1989-1998 spanned the introduction of the European Union's Third Generation Insurance Directives,

which deregulated the EU insurance market. Deregulation led to dramatic changes in the Spanish insurance market; the number of firms declined by 35 percent and average firm size increased by 275 percent. They analyzed the causes and effects of consolidation using modern frontier efficiency analysis, as well as Malmquist analysis to measure the total factor productivity change. Their results showed that many small, inefficient, and financially under-performing firms were eliminated from the market due to insolvency or liquidation and acquirers preferred relatively efficient target firms. As a result, the market experienced significant growth in total factor productivity over the sample period. Furthermore, consolidation reduced the number of firms operating with increasing returns to scale but also increased the number operating with decreasing returns to scale. They concluded many large firms should focus on improving efficiency rather than on further growth.

Cummins and Xie (2006) analyzed the productivity and efficiency effects of mergers and acquisitions in the U.S. property-liability industry during the period 1993-2003. They used data envelopment analysis (DEA) and Malmquist productivity indices. Their aim was to determine whether M&As are primarily driven by value maximizing versus non-value-maximizing objectives. The analysis examined the efficiency and productivity change for acquirers, acquisition targets, and non-M&A firms. Their results indicated that M&A in property-liability insurance were primarily associated with value-maximization. Acquiring firms achieved more revenue efficiency than non-acquiring firms, and target firms experienced greater cost and allocative efficiency growth than non-targets. They also found evidence that M&A were motivated by earnings diversification, but there was no evidence that scale economies played an important role in the insurance M&A merger wave. They concluded that the deals lead to a significant positive valuation effect for the acquiring insurers.

Guest et al. (2010) examined the financial impact of 303 acquisitions of UK public companies, completed between January 1985 and December 1996. They wanted to address whether takeovers yield a positive net present value for the acquiring company. They analyzed the sample using two methodologies- accounting returns and residual income approach. Their findings showed that while the accounting returns showed significant improvement in performance, the residual income approach finding was that acquisitions had a small and insignificant effect on fundamental value, relative to control firms.

2.5.2 Local Evidence

Marangu (2007) studied the effects of mergers and acquisition on financial performance of non-listed commercial banks in Kenya. The research focused on the profitability of non -listed banks which merged from 1994 to 2001 and used four measures of performance: profit, return on assets, shareholders equity/total assets, and total liabilities/ total assets. Comparative analysis of the bank's performance for the pre and post merger periods was conducted to establish whether mergers lead to improved financial performance before or after merging. The results of the data analysis showed that three measures of performance: profit, Return on Assets and shareholders' equity/total assets had values above the significance level of 0.05 with exception of total liabilities/total assets. His results concluded that there was significant improvement in performance for the non-listed banks which merged compared to the non-listed banks that did not merge within the same period.

Lole (2012) set out to investigate the effects of the merger of Apollo Insurance Company Ltd, and Pan Africa Insurance Company to form APA Insurance in 2004. Lole used accounting analysis regression models and found that the merger was effective on the financial performance of the insurance company. Lole (2012) further recommended that insurance companies should opt for mergers and acquisitions to enable the insurer to alleviate the challenges that face the Kenyan insurance industry.

Marembo (2012) set out to investigate the impact of mergers and acquisition on the financial performance of commercial banks in Kenya over the period 1994 to 2010. Marembo used accounting analysis regression models and found that the new financial institution formed after the merger was more financially sound. He further recommended that commercial banks with a weak and unstable capital base should seek to consolidate their establishments through mergers and acquisitions.

2.6 Summary of Literature Review

There are several theories that explain the rationale for mergers and acquisitions. According to the value maximizing hypothesis, a merger or acquisition should generate a positive economic gain to the merging firms or at least non negative returns. The non value hypothesis, proposed by Halpem (1983), takes the view that any merger or acquisition has no economic gains for the merging firms. Managerial hypothesis proposes that mergers can be used by the managers of firms as a tool to achieve their own personal interests or as a

response to inefficient management. Although M&A enjoy importance as strategies for achieving growth, their success in creating value remain contested. Consequently a lot of studies have been done to determine the post acquisition performance. Many of these studies have adopted various research methods. These include share price return studies (both long and short term), accounting analysis or profitability studies, intrinsic value studies etc. The proponents of each of the methodologies described above have some benefits and shortcomings in their techniques, leading to potentially biased and mixed post acquisition results.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This section discusses the data sources as well as the selection of the sample of M&A that were included in the analysis. It specifically details the research design, population of study, data collection and finally the data analysis model.

3.2 Research Design

The design chosen for this research was a descriptive design. In a descriptive study, the researcher examines the phenomenon under investigation to explain it or describe the characteristics of a population (Lodico, Spaulding and Voegtle ,2006). This design was suitable since the intent of this research was to understand the effects of a merger and acquisition over the fundamental value of the combined entity.

3.3 Population of the Study

The population of the study consisted of all insurance companies that had merged between 2000 and 2014. There were seven M&A and merger notifications since 2000 related to the insurance industry in Kenya .These formed the researcher's population (See Appendix 1). The sample selection criterion for M&A was as follows. To be consistent with takeover theories, where a takeover must involve a change in the ownership of a firm, we excluded from our sample M&A deals that were pending or non-binding, vertical mergers that have no competitive effects, as well as acquisitions of a minority interest. Firms that were registered as insurance brokerages and acquisitions of lines of business that do not involve a change in the ownership of firms were also excluded. The resulting sample consisted of two cases representing complete mergers and acquisitions of a majority interest over the period 2000 to 2014.

3.4 Data Collection

The study used secondary data on financial statements of the merged company before and after the merger. The fundamental or intrinsic value was then compared before and after the merger. Secondary data was obtained from the IRA annual reports as well as from the companies' official websites.

3.5 Data Analysis

The study was conducted using the fundamental valuation approach. Section 3.5.1 describes the residual income approach, section 3.5.2 describes the estimation of variables and section 3.5.3 describes the test of significance.

3.5.1 Residual Income Approach

To measure the effect of takeover on fundamental value, we examined the difference between the sum of the pre merger fundamental values of both firms, and the post merger fundamental value of the combined entity. If the merger or acquisition created value, then the difference would be positive. The valuation method used to measure the fundamental value was the residual income valuation model developed by Guest et al. (2010). In their model, they used a time horizon of four years . They estimated the forecast fundamental value post acquisition of the combined entity, as follows:

$$Vpost = \frac{(DPS_0)}{1+r_e} + \frac{(BPS_0)}{1+r_e} + \frac{(EPS_1 - r_e.BPS_0)}{(1+r_e)^2} + \frac{(EPS_2 - r_e.BPS_1)}{(1+r_e)^3} + \frac{(EPS_3 - r_e.BPS_2)}{(1+r_e)^3 r_e} \ldots..(1)$$

Where
Vpost- Value post acquisition of combined entity
DPS_t- Dividends per share year T
BPS_t- Book value per share year T
EPS_t-Earnings per Share year T
re -cost of equity capital

The fundamental value pre acquisition for each company was as follows

$$Vpre = \frac{(DPS_{-3})}{1+r_e} + \frac{(BPS_{-3})}{1+r_e} + \frac{(EPS_{-2} - r_e.BPS_{-1})}{(1+r_e)^2} + \frac{(EPS_{-1} - r_e.BPS_{-2})}{(1+r_e)^3} + \frac{(EPS_0 - r_e.BPS_{-1})}{(1+r_e)^3 r_e} \ldots.(2)$$

Where
Vpre- Value pre acquisition
DPS_t- Dividends per share year T
BPS_t- Book value per share year T
EPS_t-Earnings per Share year T
re = cost of equity capital

Year 0 was the year of consolidation, the accounting year following the completion date of the acquisition. The second, third and fourth terms described residual income. The fifth term described the terminal value, which were the abnormal earnings of year 3 discounted in perpetuity.

A comparison of equations (1) and (2) was done to give the impact of the merger or acquisition on the fundamental value

$$\Delta V = Vpost - Vpre...(3)$$

If the above formula was positive, then the takeover created value for shareholders. In order to make the measure comparable across firms, the percentage change in value for each merger was calculated as follows:

$$\% \Delta V = (Vpost - Vpre)/Vpre ....(4)$$

Using a percentage change measure allowed the researcher to compare firms with different valuations

3.5.2 Estimation of Variables for RIV Model

The variables for RIV model consisted of book value at year T, dividends at year T, residual incomes over years T and T+1 and forecast terminal value. The estimation techniques involved required a number of assumptions. The techniques and assumptions that were employed were designed to be consistent with those used in other RIV studies. For post-acquisition valuation, we estimated future EPS by multiplying forecast ROE by predicted beginning of year book value per share in each future year. Our forecast of future ROE is the acquirer's average historical ROE. Using pre-acquisition historical ROE to predict future ROE is consistent with takeover profitability studies and previous applications of the residual income model (Lee et al., 1999). We estimated book value per share for year 0 as book value per share in year −1, to which we added forecast EPS in year 0 minus expected dividends per share in year 0. We estimated book value per share for year 1 as estimated book value per share in year 0, to which we added forecast EPS less expected dividends per share in year 1, and so on for years 2 and 3. We estimated future dividends per share as forecast EPS multiplied by estimated dividend payout ratio. Our estimated payout ratio is the average

dividend payout ratio in years −3 to −1. If any of the years −3 to −1 have negative earnings, we excluded these years from the calculation.

For the cost of equity (*re*) we calculated a firm-specific, time-varying discount rate using the Capital Asset Pricing Model (CAPM). For the CAPM discount rate, at the financial year end in years −1 to 3, sample firm betas were obtained from Bloomberg. The risk free rate was the current yield on 91 day Treasury bill at each financial year end (see Appendix 3) and the average market risk premium was taken as 8% (PWC, 2012). The cost of equity at year −1 was used for the pre-takeover valuation, whilst the average cost of equity over years 0 to 3 was used for the post-takeover valuation. According to Guest et al. (2010) it is important to allow for a time-varying, firm-specific discount rate because firms experience a significant increase in leverage and the cost of equity following mergers and acquisition.

3.5.3 Test of Significance

To establish the strength of the model, a two tailed paired sample t test, at 5% level of significance, was used to test statistically significant differences of means between the pre acquisition and post acquisition event variables. Statistical analysis was then completed using SPSS software package.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research objective and research methodology. The study findings are presented on the effect of mergers and acquisition on value creation of insurance companies in Kenya. The population consists of all insurance company mergers and acquisitions in Kenya over the period 2000 to 2014. The final sample - ICEA, Lion, Apollo and Pan Africa General Insurance company- was chosen after the application of the selection criteria as stated in chapter 3, section 3.3. Appendix 2 contains detailed financial statements of the selected sample four years before and after the merger. Based on the data requirements of the RIV approach, data was gathered and the analysis carried out.

4.2 Findings

4.2.1 ICEA Lion Insurance Company Ltd

The study sought to establish the fundamental value of ICEA Insurance Company Ltd and Lion Kenya Insurance Company Ltd before the merger in 2012. The study also sought to establish the fundamental value of the combined entity after the merger in 2012. Data required for the RIV approach included dividends per share, earnings per share and book value per share for the pre and post merger period. We chose a forecast horizon of four years of accounting performance before and after the merger .These figures are well illustrated in table 4.1 to 4.3 below.

Table 4.1: ICEA Insurance Company Ltd- Pre Merger Data
KShs '000

	2008	**2009**	**2010**	**2011**
Dividends	137,500	120,000	127,500	122,500
Earnings	163,399	205,278	261,033	438,204
Book Value	1,086,045	1,171,323	1,304,875	1,620,569

Source : Research Findings

Table 4.1 shows ICEA Insurance Company's data pre merger. Before the merger, ICEA dividends decreased from 2008 to 2011. However, the earnings and Book value increased each year with the highest growth in 2011. The cost of equity at year 2010 (before the merger) was used as the discount rate. This was calculated using a risk free rate of 2.28% in 2010 (see Appendix 3), beta of 1 and market risk premium of 8%. The fundamental value of the company pre merger based on the RIV model was approximately Kshs 1.5 billion

Table 4.2: Lion Kenya Insurance Company Ltd- Pre Merger Data

Shs '000

	2008	2009	2010	2011
Dividends	107,500	132,500	145,000	157,500
Earnings	391,202	254,656	438,345	530,517
Book Value	1,314,705	1,499,536	1,924,240	2,329,872

Source : Research Findings

Table 4.2 shows Lion Kenya Insurance Company's data pre merger. Before the merger, Lion Kenya dividends increased from 2008 to 2011. The earnings and Book value increased each year with the company showing a growth of 20% from 2010 to 2011. The cost of equity at year 2010 (before the merger) was used as the discount rate. This was calculated using a risk free rate of 2.28% in 2010 (see Appendix 3), beta of 1 and market risk premium of 8%. The fundamental value of the company Pre merger based on the RIV model was Kshs 1.8 billion

Table 4.3: ICEA Lion Insurance Company Ltd- Post Merger Variables

Shs '000

	2011	2012	2013	2014
Dividends	280,000	142,500	860,000	
Earnings	968,721	1,252,989	1,021,274	
Book Value	3,950,441	5,391,795	9,958,824	

Source : Research Findings

Table 4.3 shows ICEA Lion Insurance Company data post merger. After the merger, dividends increased significantly with the highest dividends being recorded in 2013. The earnings and Book value similarly increased each year. The average cost of equity over years 2011 to 2014 (post merger) was used as the discount rate. The fundamental value of the combined entity post merger based on the RIV model was approximately Kshs 4 billion.

Table 4.4 reports the results of estimating equation 1 and the components parts. Panel A reports the sum of the pre merger valuation, Panel B the post merger valuation and Panel C the difference between the two. For each sample, the pre and post merger value components parts and total values are normalized by the total pre merger value and multiplied by 100. Thus for each sample the normalized total pre merger value is 100. The differences in panel C are the differences between each of these normalized values. Hence the difference in total is a difference in percentages and the difference in components show how this is divided among the individual component

Table 4.4 : Effect of M&A on Fundamental Value- ICEA Lion Insurance Company

Variable	Fundamental Value
Panel A : Pre merger Value- ICEA +LION	
Book Value Per Share in year -3	65.53
Dividends Per Share in year -3	6.68
Residual Incomes in year -2 and -1	14.81
Terminal Value	12.96
Total Value	100.00
Panel B : Post merger Value- ICEA LION	
Book Value Per Share in year 0	99.74
Dividends Per Share in year 0	7.07
Residual Incomes in year 1 and 2	10.17
Terminal Value	3.03
Total Value	120.02
Panel C : Difference between Pre and Post merger Value	
Book Value Per Share	34.21
Dividends Per Share	0.39
Residual Incomes	-4.64
Terminal Value	-9.93
Total Value	20.02

Source : Research Findings

From above, it can be seen that the fundamental value of ICEA Lion Insurance company post merger was greater than the fundamental value of ICEA and Lion Insurance Company's combined Pre merger values.

4.2.2 APA Insurance Company Ltd

The study sought to establish the fundamental value of Apollo Insurance Company Ltd and Pan Africa General Insurance Company Ltd before the merger in 2003. The study also sought to establish the fundamental value of the combined entity after the merger in 2003. Data required for the RIV approach included dividends per share, earnings per share and book value per share for the pre and post merger period. We choose a forecast horizon of four

years of accounting performance before and after the merger .These figures are well illustrated in table 4.5 to 4.7 below.

Table 4.5: Apollo Insurance Company Ltd- Pre Merger Data

Shs '000

	2001	2002	2003	2004
Dividends	2,700	4,500	6,000	0
Earnings	4,188	6,980	190,962	35,179
Book Value	50,000	150,000	150,000	150,000

Source : Research Findings

Table 4.5 shows Apollo Insurance Company's data pre merger. Before the merger, Apollo's dividends increased from 2008 to 2011. The earnings and Book value increased each year from 2001 to 2003. In 2004, earnings fell as this was the year of the merger. The cost of equity at year 2003 (before the merger) was used as the discount rate. This was calculated using a risk free rate of 1.46% in 2003 (see Appendix 3), beta of 1 and market risk premium of 8%. The fundamental value of the company Pre merger based on the RIV model was Kshs 199 million.

Table 4.6: Pan Africa General Insurance Company Ltd- Pre Merger Data

Shs '000

	2001	2002	2003	2004
Dividends	0	0	0	0
Earnings	15,000	2,146	(85,340)	0
Book Value	150,000	373,400	373,400	0

Source : Research Findings

Table 4.6 shows Pan Africa General Insurance Company's data pre merger. Before the merger, Pan Africa did not distribute dividends. The earnings decreased each year from 2001 to 2003. The book value increased each year. This was calculated using a risk free rate of

1.46% in 2003 (see Appendix 3), beta of 1 and market risk premium of 8%. The fundamental value of the company Pre merger based on the RIV model was Kshs 397 million

Table 4.7: APA Insurance Company Ltd- Post Merger Data

Shs '000

	2004	**2005**	**2006**	**2007**
Dividends	15,000	-	18,000	21,000
Earnings	62,989	60,546	161,105	95,143
Book Value	425,695	878,126	1,669,915	1,601,448

Source : Research Findings

Table 4.7 shows data for the combined entity APA Insurance Company post merger. After the merger, dividends increased with the highest dividends recorded in 2007. The earnings and Book value similarly increased each year. The average cost of equity over year 2004 to 2007 (after the merger) was used as the discount rate. The fundamental value of the combined entity post merger based on the RIV model was Kshs 137 million

Table 4.8 reports the results of estimating equation 1 and the components parts. Panel A reports the sum of the pre merger valuation, Panel B the post merger valuation and Panel C the difference between the two. For each sample, the pre and post merger value components parts and total values are normalized by the total pre merger value and multiplied by 100. Thus for each sample the normalized total pre merger value is 100. The differences in panel C are the differences between each of these normalized values. Hence the difference in total is a difference in percentages and the difference in components show how this is divided among the individual component.

Table 4.8 Effect of M&A on Fundamental Value- APA Insurance Company

Variable	Fundamental Value
Panel A : Pre merger Value- APOLLO +PAN	
Book Value Per Share in year -3	54.30
Dividends Per Share in year -3	0.73
Residual Incomes in year -2 and -1	40.61
Terminal Value	4.34
Total Value	100
Panel B : Post merger Value- APA	
Book Value Per Share in year 0	109.84
Dividends Per Share in year 0	3.87
Residual Incomes in year 1 and 2	4.50
Terminal Value	0.01
Total Value	118.23
Panel C : Difference between Pre and Post merger Value	
Book Value Per Share	55.54
Dividends Per Share	3.14
Residual Incomes	-36.11
Terminal Value	-4.33
Total Value	18.23

Source : Research Findings

From the table above, it can be seen that the fundamental value of APA Insurance company post merger was greater than the fundamental value of Apollo and Pan Africa General Insurance Company's combined Pre merger values

4.3 Test of Significance

To establish the strength of the model, a two tailed paired sample t test, at 5% level of significance, was used to test statistically significant differences of the components between the pre and post merger using SPSS software package. The results are summarized below in table 4.9.

Table 4.9 Paired Sample T–Test

	Mean		Std. Deviation				
	Pre	Post	Pre	Post	Difference	t-value	p-value
Book Value (%)	59.97	104.79	6.54	5.83	44.82	7.246	0.005
Dividends (%)	3.71	5.47	3.43	1.84	1.77	2.22	0.113
Residual Incomes (%)	27.71	7.34	14.89	3.27	-20.37	-2.243	0.111
Terminal Value (%)	8.65	1.51	4.97	1.75	-7.14	-4.42	0.021
Total Value (%)	100.00	119.12	0.00	16.47	19.12	37.012	0.000

Source : Research Findings

4.4 Interpretation of the Findings

The merged entity experienced a significant increase in book value per share. Of the 19.12% increase in total value, 44.82% is due to an increase in book value. Dividends per share are also higher than for the merged entity, but the differences are not significant. Forecast terminal value and residual incomes post merger decreased significantly compared to the pre merger firms. However, the decrease is not significant. The difference in total fundamental value for post merged entity is 19.12%, which is significantly different from zero, the difference is significant ($t = 37.012$).

Therefore, our main conclusion from the study was that mergers and acquisitions in Kenyan insurance companies have a statistically significant effect on the fundamental value.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presents a summary of the results on the effect of mergers and acquisition on value creation of insurance companies in Kenya.

5.2 Summary

The study aimed at establishing whether M&A lead to value creation of insurance companies in Kenya. This study constructively contributed to the understanding of M&A and value creation by building and improving on research methodologies of Bruner (2002), Powell and Stark (2005) ,BCG (2009) , Lole (2012) and Marembo (2012). The objective of the study was to establish the effect of mergers and acquisition on value creation by comparing and evaluating pre and post merger performance within a four year time horizon using the Residual Income Valuation model. From the data analysis discussed in chapter four above, the study established that following the merger and acquisition, the fundamental value of the combined entity improved as the book value of the new entity increased. These differences were significant. Dividends were also higher for the merged entity whereas the residual income and terminal value decreased. These differences were not significant. The research results were similar to the results of Lole (2012) who adopted a different approach with a different sample size. The study found mergers and acquisitions in Kenyan insurance companies have a statistically significant effect on the fundamental value.

5.3 Conclusion

The study concludes based on the data presentations in chapter four and the summary of the findings above that value creation improves with a merger or acquisition. This is because the merger and acquisition brings about higher capital which is an important ingredient in firm performance. This is evidenced from the increase in book value following the merger. Increased capital results in increased stability and capacity to take on new risks, thus the merged insurance companies created value.

5.4 Policy Recommendations

From the findings presented in chapter four and summary above, this study recommends that insurance companies seeking growth should seek to consolidate their establishments through

mergers and acquisitions. For insurance companies, important fixed costs include computer systems and software development costs. The actuarial, underwriting, and investment operations of insurers also have fixed cost components. These fixed costs can be sources of scale economies. The basic principle of insurance is "the law of large numbers," which holds that expected losses become more predictable as the size of the insured pool increases. Enhanced predictability implies that large insurers have less volatile earnings. M&A enable insurers to expand their pool of policyholders and reduce underwriting risk more rapidly than is usually possible through organic growth.

5.5 Limitations of the Study

The main limitations of this study were the data used was secondary data generated for other purposes. In addition the data availability was limited as the organizations meant to provide the data referred the researcher to their website and study a few reports. Thus only scanty data was available hence forcing the researcher to work with somewhat incomplete records. The empirical application of the residual income model employed in this research required a number of important assumptions. The use of scanty data makes inferences for the total population of mergers and acquisitions impossible. Finally, there are some potential concerns about the estimated cost of equity. The researcher noted the betas estimated could be downward biased because of thin trading.

5.6 Recommendation for Further Studies

Further research work is recommended since this research did not investigate any specific deal characteristics or the impact of these characteristics on value creation, such as payment methods, differences between vertical integration and horizontal diversification mergers and acquisitions. Further studies should also be carried out for longer event periods to determine whether there is significant impact of mergers on value creation in the long term for shareholders. Further research could examine whether the Residual Income Valuation methodology stands the test of further exploration of this or more recent data. One worthwhile approach would be to use analyst forecasts (rather than historical earnings) to predict future (post-acquisition) earnings per share, which would avoid any problems of dirty surplus accounting in the pre-acquisition period.

Future research could extend the analysis to a more recent sample of acquisitions, to ensure that our results are robust across different time periods. The insurance industry in Kenya is

experiencing a change in regulations governing their operations. IRA are in the process of implementing a new regime known as the Risk based supervision regime which will require insurance companies to calculate the capital requirements based on their risk profile and size. This change in regulation may result in increased mergers and acquisitions. Research could be extended to the effect of value creation following implementation of the new regime.

REFERENCES

Akhigbe, A., & Madura, J. (2001). Intra-industry signals resulting from insurance company mergers. *The Journal of Risk and Insurance,68*, 489-506.

AKI. (2014). Retrieved from AKI : http://www.akinsure.com

Amihud, Y., & Lev, B. (1981). Risk Reduction as a Managerial Motive for Conglomerate Mergers. *Bell Journal of Economics 12*, 605 - 617.

Berger, A., Saunders, A., Scalise, J., & Udell, G. (1998). The effects of Bank mergers and Acquisitions on Small Business Lending. *Journal of Financial Economics 50*, 187-229.

Bloomberg. (2014). *Largest Mergers and Acquistions of All Time: Deals*. Retrieved from Bloomberg Visual Data: http://www.bloomberg.com

Boston Consulting Group. (2009). *Value Creation in Insurance. Laying a foundation for succesful M&A.* Boston. Retrieved July 10, 2014, from http://www.bcg.com/documents/file27121.pdf

Bradley, M., Desai, A., & Kim, E. (1983). The Rationale Behind Interim Tender Offers. *Journal of Financial Economics 11,* 183-206.

Bruner, R. F. (2002). Does M&A Pay? A survey of evidence for the decision- maker. *Journal of Applied Finance ,12(1)*, 48.

Caves, R. (1989). Mergers, Takeovers, and Economic Efficiency. *International Journal of Economics*, 151 174.

Competition Authority of Kenya. (2014). *Competition Authority of Kenya*. Retrieved 06 30, 2014, from Competition Authority of Kenya: http://www.cak.go.ke

Copeland, T., Koller, T., & Murrin, J. (1995). *Valuation.Measuring and managing the value of companies*. New York: Wiley.

Cummins, D., & Rubio-Misas, M. (2003). *Deregulation, Consolidation and Effeciency: Evidence from Spanish Insurance industry.* Philadelphia: Wharton Financial Institution Center.

Cummins, D., & Weiss, M. (2004). *Consolidation in the European Insurance Industry. Do mergers and acquisiions create value for shareholders?*Philadelphia: The Wharton Financial Institutions Center.

Cummins, D., & Xie, X. (2006). Mergers and Acquisitions in the US Property-Liability Insurance.Productivity and Efficiency Effects. Philadelphia: Wharton Financial Institutional Center

Cummins, D., Tennyson, S., & Weiss, M. (1999). Consolidation and efficiency in the US life. *The Journal of Banking and Finance 23*, 325-357.

Cybo-Ottone, A., & Murgia, M. (2000). Mergers and Shareholder Wealh in European Banking. *Journal of Banking and Finance, 24*, 831-859.

D'Mello, R., & Shroff, P. (2000). Equity Undervaluation and Decisions Related to Repurchase. *Journal of Finance 55*, 2399-2424.

Fiordelisi, F. (2010). The determinants of shareholder value in European banking. *Journal of Banking and Finance, 34*(6), 1189-1200.

Floreani, A., & Rigamonti, S. (2001). *Mergers and shareholders wealth in the Insurance industry, Working Paper.* Universita Cattolica Coredel S.

Guest, P., Bild, M., & Runsten, M. (2010). The effect of takeovers on the fundamental value of acquirers. *Cranfield School of Management, Cranfield University.*

Halpem, P. J. (1983). Corporate Acquisitions : A Theory of Special Cases? A Review of Event Studies Applied to Acquisitions. *The Journal of Finance, 2*, 297-317.

Harrison, J., Hitt, M., Hoskisson, R., & Ireland, R. (1991). Synergies and Post-Acquisition Performance: Differences versus Similarities in Resource Allocations. *Journal of Management, 17(1)*, 173.

Haugen, R., & Langetieg, T. (1975). An Empirical Test for Synergism in Merger. *The Journal of Finance, 4*, 1003 - 1014.

Healy, P., Palepu, K., & Ruback, R. (1997). Which Takeovers Are Profitable ? Strategic or Financial ? *Sloan Management Review*, 45 - 57.

IRA. (2014, June 30). Retrieved from IRA: http://www.ira.go.ke

Jensen, M. C. (1988). Takeovers: Their Causes and Consequences. *The Journal of Economic Perspectives 2*, 21-48.

Kaplan, S., & Weisbach, M. (1992). The Success of Acquisitions : Evidence from Divestiture. *The Journal of Finance, XLVII, . I*, 107 - 138.

KPMG & IIK. (2004). *Kenya Insurance Survey.* Nairobi.

Koller, T., Goedhart, M., & Wessels, D. (2005). *Valuation: Measuring and managing the value of companies* (4th ed.). New Jersey: John Wiley & Sons, Inc.

Larcker, D. (1993). Managerial Incentives in Mergers and Their Effect on Shareholder Wealth . In D. H. Chew, *The New Corporate Finance : Where Theory Meets Practice* (pp. 380 - 386). McGraw-Hill.

Lee, C. (1999). *Accounting-Based Valuation: Impact on Business Practices and Research.* Accounting Horizons.

Lev, B. (1993). *Observations on the Merger Phenomenon and a Review of the Evidence in Chew, Donald. H., The New Corporate Finance : Where Theory Meets practice.* McGraw-Hill.

Liebenberg, P., & Hoyt, E. (2003). The Determinants of Enterprise Risk Management Evidence from the Appointment of Chief Risk Officers. *Risk Management and Insurance Review, 6(1)*, 37-52.

Lodico, M., Spaulding, D., & Voegtle, K. (2006). *Methods in educational research:From theory to practice.* San Francisco: Jossey-Bass.

Lole, T. (2012). The effect of Mergers and Acquisitions on Financial Perfomance of Insurance Companies in Kenya. A case study of APA insurance Ltd. *MBA thesis .* Un*published MBA thesis. University of Nairobi.*

Lubatkin, M. (1986). Merger Strategies and Stockholder Value. *Strategic Management Journal ,8(1)*, 39-53.

Ma, Q., Whidbee, D., & Zhang, A. (2011). Value creation and the long run perfomance of merged firms. *Journal of Corporate Finance 17(1)*, 1-17.

Malatesta, P. (1983). The Wealth Effect of Merger Activity and The Objective Functions of Merging Firms. *Journal of Financial Economics 11*, 155 - 181.

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

Maquieira, C., Megginson, W., & Nail, L. (1998). Wealth Creation versus Wealth Redistribution. *Journal of Financial Economics 48*, 3-33.

Marangu, K. (2007). The Effects of Mergers and Acquisitions on the Financial perfomance of Non Listed Commercial Banks in Kenya. Un*published MBA thesis. University of Nairobi.*

Marembo, J. (2012). The Impact of Mergers and Acquisitions on the Financial perfomance of Commercial Banks in Kenya. Un*published MBA thesis. University of Nairobi.*

McShane, K., Nair, A., & Rustambekov, E. (2011). Does Enterprise Risk Management Increase Firm Value? *Journal of Accounting, Auditing & Finance, 16(4)*, 641-658.

Mitchell, M. L., & Mulherin, H. (1996). The Impact Of Industry Shocks On Takeover And Restructuring Activity. *Journal of Financial Economics 41*, 193-229.

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

Powell, R. (1997). Modelling Takeover Likelihood. *Journal of Business Finance & Accounting, 24 (7) & (8)*, 1000 - 1030.

Powell, R., & Stark, A. (2005). Does operating perfomance increase post -takeover for UK takeovers? A comparison of perfomance measures and benchmarks. *Journal of corporate finance ,11(1-2)* , 293-317.

PWC (2012). *An African Perspective: Valuation Methodology Survey 2012.* Johannesburg: PwC Corporate Finance. Retrieved from http://www.pwc.co.za/valuation-survey

Ravenscraft, D., & Scherer, F. (1989). The Profitability of Mergers. *International Journal of Industrial Organisation*, 101 - 116.

Rhoades, S. A. (1998). The Efficiency Effects of Bank Mergers: An Overview of Case Studies. *Journal of Banking and Finance 22*, 273-291.

Rochette, M. (2009). From Risk Management to ERM. *Journal of Risk Management in Financial Institutions, 2(4)*, 394-408.

Roll, R. (1986). The hubris hypothesis of corporate takeovers. *Journal of Business*, 197-216.

Sandberg, C. M., Lewellen, W. G., & Stanley, K. L. (1987). Financial Strategy: Planning and managing the corporate leevarage position. *Strategic Management Journal, 8*, 15-24.

Shleifer, A., & Vishny, R. (1989). Management entrenchment: The case of manager-specific investments. *Journal of Financial Economics 25*, 123-139.

Sudarsanam, S., Holl, p., & Salami, A. (1996). Shareholder Wealth Gains in Mergers : Effect of Synergy and Ownership Stmcture. *Journal of Business finance 56*, 673 - 698.

Tchajkov, A. (2014, February 28). *M&A in the Insurance Industry* . Retrieved from Mondaq: http://www.mondaq.com

Zollo, M., & Degenhard, M. (2007). Understanding the performance of corporate acquisitions. *INSEAD Working Paper*.

APPENDIX I: LIST OF M&A IN INSURANCE INDUSTRY BETWEEN 2000 & 2014

1. The merger of general businesses of Apollo Insurance Company Ltd, and Pan Africa Insurance Company to form APA Insurance (2003)

2. The merger of ICEA Company Ltd, and Lion of Kenya to form ICEA LION Group (2012)

3. 10% acquisition of Pan Africa Holdings by Hubris holdings Ltd (2012)

4. 100% acquisitions of Alexander Forbes Healthcare by Zanele investments (2012)

5. 66.67% acquisition of Mercantille Insurance by Colina Holdings Ltd (2012).

6. 60% Acquisition of Tanzania's Century Insurance Company by UAP Group (2013)

7. 99% acquisitions of Real Insurance by Britam (2014)

Source: Competition Authority of Kenya Annual Reports

APPENDIX II: FINANCIAL STATEMENTS

Financial Statements ICEA Insurance Company Ltd

Shs '000

	2008	2009	2010	2011
Common Sockholders Equity	1,086,045	1,171,323	1,304,875	1,620,569
Profit /Loss from Revenue	175,000	86,723	160,950	461,710
Investment Income	189,481	226,186	236,165	318,232
Management Expenses	-	-	8,326	132,686
Other Expense	120,281	12,796	3,666	16,774
Profit or loss before tax	243,361	300,113	386,123	630,482
provision after Taxation	79,962	94,835	124,090	192,278
Profit or Loss after Tax	163,399	205,278	261,033	438,204
Profit available for Distribution	923,545	991,323	982,356	1,293,059
Dividends	137,500	120,000	127,500	122,500

Financial Statements Lion of Kenya Insurance Company Ltd

Shs '000

	2008	2009	2010	2011
Common Sockholders Equity	1,314,705	1,499,536	1,924,240	2,329,872
Profit /Loss from Revenue	(776)	(7,542)	146,652	96,633
Investment Income	-	369,290	455,869	631,023
Other Income	573,327	-	-	-
Management Expenses	-	-	-	-
Other Expense	-	-	-	-
Profit or loss before tax	572,461	361,748	602,621	727,656
provision after Taxation	181,259	107,092	164,176	197,139
Profit or Loss after Tax	391,202	254,656	438,345	530,517
Profit available for Distribution	965,731	1,114,706	1,322,371	1,710,841
Dividends	107,500	132,500	145,000	157,500

Financial Statements ICEA Lion Insurance Company Ltd
Shs '000

	2011	2012	2013	2014
Common Sockholders Equity	3,950,441	5,391,795	9,958,824	
Profit /Loss from Revenue		668,732	582,853	
Investment Income		1,251,600	800,747	
Other Income		-	88,545	
Management Expenses		297,585	178,268	
Other Expense		77,024	32,254	
Profit or loss before tax		1,545,723	1,261,622	
provision after Taxation		292,735	240,348	
Profit or Loss after Tax	968,721	1,252,989	1,021,274	
Profit available for Distribution		3,980,185	4,562,095	
Dividends	280,000	142,500	860,000	

Financial Statements APOLLO Insurance Company Ltd
Shs '000

	2001	2002	2003	2004
Common Sockholders Equity	50,000	150,000	150,000	150,000
Profit /Loss from Revenue	5,270	8,783	22,716	17,494
Investment Income	18,112	30,186	41,633	18,494
Other Income	-	-	-	-
Management Expenses	-	-	8,326	1,380
Other Expense	14,000	28,097	(129,055)	-
Profit or loss before tax	6,523	10,872	193,404	34,608
provision after Taxation	2,335	3,892	2,442	(571)
Profit or Loss after Tax	4,188	6,980	190,962	35,179
Profit available for Distribution	57,571	95,952	190,962	35,179
Dividends	2,700	4,500	6,000	-

Financial Statements Pan Africa General Insurance Company Ltd
Shs '000

	2001	2002	2003	2004
Common Sockholders Equity	150,000	373,400	373,400	-
Profit /Loss from Revenue	(28,569)	(47,615)	(199,710)	-
Investment Income	40,477	67,462	161,393	-
Management Expenses	7,709	12,848	35,394	-
Other Expense	-	-	4,101	-
Profit or loss before tax	30,000	6,999	(77,812)	-
provision after Taxation	15,000	4,853	7,528	-
Profit or Loss after Tax	15,000	2,146	(85,340)	-
Profit available for Distribution	382,037	636,728	(79,194)	-
Dividends	-	-	-	-

Financial Statements APA Insurance Company Ltd
Shs '000

	2004	2005	2006	2007
Common Sockholders Equity	425,695	878,126	1,669,915	1,601,448
Profit /Loss from Revenue	(87,536)	(21,343)	10,335	(13,230)
Investment Income	155,150	77,216	99,932	106,187
Other Income	-	-	101,718	33,128
Management Expenses	11,216	3,574	18,115	553
Other Expense	12,486	32,151	23,579	24,045
Profit or loss before tax	82,066	60,546	170,291	101,487
provision after Taxation	19,077	-	9,186	6,344
Profit or Loss after Tax	62,989	60,546	161,105	95,143
Profit available for Distribution	180,161	60,546	786,410	1,455,201
Dividends	15,000	-	18,000	21,000

Source : IRA Statistics

APPENDIX III: RISK FREE RATE OF RETURN

YEAR	MONTH	Repo	Interbank	91-Day Tbill	182-days Tbill	364-days Tbill
CENTRAL BANK RATES						
2000	JAN	17.76	10.78	20.3	19.67	-
	FEB	12.63	9.42	14.84	15.22	-
	MAR	9.11	7.56	11.28	11.61	-
	APR	9.85	6.39	12.44	-	-
	MAY	10.09	7.95	11.22	11.75	-
	JUN	9.85	6.73	10.47	-	-
	JUL	9.61	6.7	9.9	-	-
	AUG	9.37	9.89	9.25	-	-
	SEP	10.26	8.47	10.36	-	-
	OCT	10.16	8.26	10.65	-	-
	NOV	10.95	10.24	11.17	-	-
	DEC	12.26	9.79	12.9	12.1	-
2001	JAN	14.47	11.84	14.76	14.4	-
	FEB	14.92	11.95	15.3	15.36	-
	MAR	14.75	9.3	14.97	14.88	-
	APR	11.75	8.53	12.9	12.9	-
	MAY	11.14	10.85	10.52	11.31	-
	JUN	11.92	10.71	12.07	-	-
	JUL	12.37	10.78	12.87	12.58	-
	AUG	12.44	11.98	12.84	-	-
	SEP	11.52	10.67	12.39	-	-
	OCT	11.16	10.45	11.63	-	-
	NOV	11.16	10.13	11.5	-	-
	DEC	11.05	10.42	11.01	-	-
2002	JAN	10.81	10.29	10.85	-	-
	FEB	10.51	9.79	10.61	11.12	-
	MAR	10.19	10.05	10.14	10.6	-
	APR	10.07	9.64	10.01	10.47	-
	MAY	9.12	8.54	9.04	9.98	-
	JUN	8.11	8.19	7.34	8.8	-
	JUL	8.2	7.63	8.63	9.36	-
	AUG	8.2	8.25	8.34	9.49	-
	SEP	7.56	7.29	7.6	8.62	-
	OCT	7.84	8.3	8.07	8.54	-
	NOV	7.91	8.12	8.3	8.76	-
	DEC	8.14	8.69	8.38	8.79	-
2003	JAN	8.17	9.04	8.38	8.73	-
	FEB	7.17	7.06	7.77	8.14	-
	MAR	6.23	6.22	6.24	6.64	-
	APR	5.94	5.88	6.25	6.83	-

	MAY	5.5	5.67	5.84	6.68	-
	JUN	0.84	1.62	3	4.12	-
	JUL	0.78	0.45	1.54	2.95	-
	AUG	0.48	0.43	1.18	2.12	-
	SEP	0.47	0.54	0.83	1.35	-
	OCT	0.56	0.69	1	1.61	-
	NOV	0.64	0.73	1.28	1.88	-
	DEC	0.78	0.81	1.46	2.09	-
2004	JAN	1.06	0.82	1.58	2.35	-
	FEB	1.13	0.9	1.57	2.33	-
	MAR	1.27	1.27	1.59	2.53	-
	APR	1.56	1.72	2.11	3.12	-
	MAY	1.56	2.05	2.87	3.61	-
	JUN	1.29	1.29	2.01	3.15	-
	JUL	1.49	1.52	1.71	2.98	-
	AUG	1.94	2.1	2.27	3.49	-
	SEP	2.5	2.95	2.75	4.03	-
	OCT	2.76	3.56	3.95	5.16	-
	NOV	4.95	4.66	5.06	6.03	-
	DEC	8.97	9.41	8.04	8.19	-
2005	JAN	7.25	8.72	8.26	8.76	-
	FEB	7.23	8.14	8.59	8.96	-
	MAR	7.26	8.13	8.63	8.91	-
	APR	7.28	8.28	8.68	8.92	-
	MAY	7.26	8.3	8.66	9.02	-
	JUN	7.34	7.37	8.5	8.96	-
	JUL	7.43	7.51	8.59	9.08	-
	AUG	7.67	7.77	8.66	9.09	-
	SEP	7.77	8.03	8.58	8.9	-
	OCT	7.8	7.98	8.19	8.52	-
	NOV	7.72	7.64	7.84	8.37	-
	DEC	7.74	7.79	8.07	8.49	-
2006	JAN	7.81	7.78	8.23	8.84	-
	FEB	7.78	7.73	8.02	8.85	-
	MAR	7.5	7.52	7.6	8.52	-
	APR	6.78	6.97	7.02	7.36	-
	MAY	6.68	8.11	7.01	7.48	-
	JUN	6.39	6.41	6.6	7.32	-
	JUL	5.73	5.74	5.89	6.42	-
	AUG	5.94	5.66	5.96	6.47	-
	SEP	6.16	6.02	6.45	7.45	-
	OCT	6.23	6.08	6.83	8.31	-
	NOV	6.33	6.18	6.41	7.99	-
	DEC	6.34	6.34	5.73	7.32	-
2007	JAN	6.43	6.43	6	8.28	-

	FEB	6.75	6.52	6.22	8.56	-	
	MAR	6.7	6.55	6.32	7.97	-	
	APR	6.84	6.81	6.65	7.93	-	
	MAY	7.03	7.11	6.77	7.98	-	
	JUN	7.07	6.98	6.53	7.19	-	
	JUL	7.19	7.07	6.52	7.17	-	
	AUG	7.49	7.38	7.3	7.99	-	
	SEP	7.81	7.59	7.35	7.82	-	
	OCT	7.44	7.65	7.55	7.84	-	
	NOV	6.42	6.5	7.52	8.04	-	
	DEC	7.13	7.05	6.87	7.87	-	
2008	JAN	7.75	7.66	6.95	8.09	-	
	FEB	6.9	7.18	7.28	8.3	-	
	MAR	6.46	6.35	6.9	7.82	-	
	APR	6.67	6.59	7.35	8.3	-	
	MAY	7.42	7.72	7.76	8.75	-	
	JUN	7.61	7.79	7.73	8.84	-	
	JUL	7.41	8.07	8.03	9.09	-	
	AUG	6.35	6.92	8.02	8.75	-	
	SEP	6.06	6.7	7.69	8.08	-	
	OCT	6.03	6.81	7.75	8.32	-	
	NOV	6.27	6.83	8.39	8.86	-	
	DEC	6.36	6.67	8.59	9.08	-	
2009	JAN	5.1	5.95	8.46	8.93	-	
	FEB	5.08	5.49	7.55	7.89	-	
	MAR	4.62	5.57	7.31	7.91	-	
	APR	4.05	5.81	7.34	8.34	-	
	MAY	6.18	5.55	7.45	8.77	-	
	JUN	0	3.08	7.33	8.28	-	
	JUL	0	2.69	7.24	8.14	-	
	AUG	0	3.68	7.25	8.12		8.71
	SEP	0	3.38	7.29	8.09		
	OCT	0	2.57	7.26	7.98		8.44
	NOV	0	3.11	7.22	8.02		
	DEC	0	2.95	6.82	7.38		8.01
2010	JAN	0	3.69	6.56	7.02		
	FEB	0	2.39	6.21	6.61		7.38
	MAR	0	2.21	5.98	6.34		
	APR	0	2.46	5.17	5.58		6.01
	MAY	0	2.16	4.21	4.41	-	
	JUN	0	1.15	2.98	2.86		4.14
	JUL	0	1.35	1.6	1.72	-	
	AUG	0	1.66	1.83	2.03		2.96
	SEP	0	1.18	2.04	2.14	-	
	OCT	0	0.98	2.12	2.1		3.06

	NOV	0	1.01	2.21	2.28	-
	DEC	0	1.18	2.28	2.59	3.36
2011	JAN	0	1.24	2.46	2.7	3.69
	FEB	0	1.13	2.59	2.76	3.72
	MAR	1.66	1.24	2.77	3.06	4
	APR	4.5	3.97	3.26	3.51	5
	MAY	5.72	5.54	5.35	4.57	6.77
	JUN	5.73	6.36	8.95	9.93	-
	JULY	0	8.61	8.99	9.85	10.22
	AUG	0	14.29	9.23	10.15	11.07
	SEP	0	7.46	11.93	11.28	12.54
	OCT	18.89	14.95	14.8	14.68	14.5
	NOV	0	28.9	16.14	15.9	16.62
	DEC	17.75	21.75	18.3	18.3	20.96
2012	JAN	17.88	19.27	20.56	20.69	21.96
	FEB	13.78	18.15	19.7	19.88	20.96
	MAR	0	24.02	17.8	18.24	17.04
	APR	15.47	16.15	16.01	16.92	16.92
	MAY	16.97	17.16	11.18	12.71	12.43
	JUN	17.6	17.09	10.09	10.67	12.43
	JULY	14.31	13.71	11.95	12.21	13
	AUG	9.65	8.97	10.93	11.77	12.85
	SEP	8.42	7.02	7.77	9.36	10.34
	OCT	9.74	9.14	8.98	10.33	10.57
	NOV	8.3	7.14	9.8	10.47	11.94
	DEC	6.39	5.84	8.3	9.25	11.71
2013	JAN	6.6	5.86	8.08	8.09	11.67
	FEB	9.1	9.25	8.38	8.4	11.66
	MAR	9.35	8.93	9.88	9.89	12.54
	APR	9.14	7.9	10.38	10.75	12.49
	MAY	7.96	7.16	9.46	10.04	11.29
	JUNE	7.93	7.14	6.21	7.12	8.57
	JULY	7.48	7.93	5.92	6.23	8.81
	AUG	0	8.88	10.03	9.57	11.35
	SEP	7.11	7.52	9.58	10.15	10.91
	OCT	0	10.66	9.72	10.28	10.75
	NOV	0	10.77	9.94	10.54	10.97
	DEC	7.95	8.98	9.52	10.41	10.69
2014	JAN	0	10.43	9.26	10.36	10.65
	FEB	0	8.83	9.16	10.35	10.67
	MAR	0	6.47	8.98	10.08	10.46
	APR	0	7.4	8.8	9.83	10.2

Source: Central Bank of Kenya