

**THE IMPACT OF MERGER AND ACQUISITION ANNOUNCEMENTS  
ON SHARE PRICES OF COMPANIES LISTED AT THE NAIROBI  
SECURITIES EXCHANGE**

**BY**

**RAJAB BARASA**

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## DECLARATION

This research project is my own original work and has not been submitted in any institution of higher learning for examination or award of a degree. Proper citation and referencing has been done to acknowledge the works of authors whom their material has been referred in this paper.

Signed..... Date.....

**Rajab Barasa**

D61/70151/2007

This research project has been submitted for examination with my approval as the University Supervisor

Signed..... Date.....

**Mr. Herick Ondigo**

Lecturer

Department of Finance and Accounting,

School of Business

University of Nairobi

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## **LIST OF ABBREVIATIONS**

<b>AIMS</b>	-	Alternative Investment Market Segment
<b>CAPM</b>	-	Capital Asset Pricing Model
<b>CAR</b>	-	Cumulative Average Residual
<b>CMA</b>	-	Capital Markets Authority
<b>EPS</b>	-	Earnings per Share
<b>FISMS</b>	-	Fixed Income Securities Market Segment
<b>GEMS</b>	-	Growth Enterprise Market Segment
<b>M&amp;A</b>	-	Mergers and Acquisitions
<b>MIMS</b>	-	Main Investment Market Segment
<b>NPV</b>	-	Net Present Value
<b>NSE</b>	-	Nairobi Securities Exchange
<b>P/E</b>	-	Profit-Earnings ratio
<b>ROA</b>	-	Return on Assets
<b>ROE</b>	-	Return on Equity
<b>UK</b>	-	United Kingdom

## **ABSTRACT**

Many companies have different strategies for growth ranging from making new investments in capital projects to identifying a suitable target to merge or to acquire in their pursuit to deliver greater value to the shareholders of their respective companies. Mergers and acquisitions benefit companies wanting to reposition themselves in the market. By adding capabilities to their product offerings, companies can rapidly expand their market coverage and modify their market position. When a merger or an acquisition is announced, a significant amount of information is revealed about that particular deal and this information can be used to evaluate the reaction of stock market to a merger or an acquisition announcement. The objective of the study was to determine the impact of mergers and acquisition announcement on share prices of companies listed at the Nairobi Securities Exchange. The associated effect was measured by the event study methodology whereby secondary data was used for analysis. The research findings showed that there were changes in stock prices immediately after merger and acquisition announcement was made. However, in some instances, the share prices dropped after the announcement whereas in some cases the prices went up. In essence, abnormal returns were witnessed in some of the listed firms. For some companies however the announcement did not in any significant manner influence the share returns and accumulated returns. The study found out that that the mergers and acquisitions announcements had significant effects on total accumulated share returns for the various listed companies before and after the announcements. Therefore, they were indeed wealth creating projects for investors at the Nairobi Securities Exchange since they were able to positively influence share returns even in the short term. In essence, merger and acquisition announcements resulted to build ups of shareholders wealth after they took effect. Nevertheless, the positive impact of the mergers on returns not occurring to a number of listed firms should not be mistakenly interpreted to mean that the mergers were not wealth creating projects in the long run. The study therefore vehemently concluded that firms will take some grace period before they can actually profit from consolidations. The study recommends that listed companies should carefully make consolidation decisions before undertaking a merger and acquisition take-over. To the regulators, they ought to impose full disclosures with regards to bidding firms on the rationale behind their intended takeovers so that discrepancies can be detected early. The study recommends that regulators should actually deploy tools of synergy assessment that are non-market based in a bid to assess the performance of bidding companies and the acquiring companies. This may help to establish possible reasonable scepticisms before and after merger event.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background to the Study

Many companies have different strategies for growth ranging from making new investments in capital projects to identifying a suitable target to merge or to acquire in their pursuit to deliver greater value to the shareholders of their respective companies. Valuing control or synergy that is realized following a merger is however challenging, though the common understanding is that it aids in firm growth, and growth is a major value driver. M&A affects the structure, behavior and performance of industries where it takes place. Major effect on structure is the degree of concentration and barriers to entry. Mergers increase the degree of concentration due to change in number and size distribution of firms in an industry concerned. Where economies of scale are available to more than two firms there may be competition and it will promote efficiency. Otherwise there is a possibility of using potential market power advantages. In case where economies of scale are realized through mergers, this will act as entry barriers to others. Product differentiation may also strengthen through mergers due to intangible assets such as patents. Differentiation of product also leads to change in behavior of the merger. According to Shiva (1998) larger firm with its resources can resort to non-price form of competition. Sometimes it may resort to predatory pricing against competitors.

According to Copeland and Weston (1988), corporate restructuring is the act of partially dismantling or otherwise reorganizing a firm for purpose of making it more efficient and hence more profitable. As controls and restrictions give way to competition and free trade, rationalization and reorganization is necessary concomitant in the modern world. Ramanugam (2000) noted that the rationale for business combinations, acquisitions, mergers and spin offs, is those divestitures exist without any contradiction.

### 1.1.1 Merger and Acquisition Announcements

A merger or acquisition is a transaction where two or more firms are combined to become one (Weston & Copeland, 1992). A merger is a transaction between more or less equal partners, while acquisitions are used to denote a transaction where a substantially bigger firm (the bidder) takes over a smaller firm (the target). Mergers and acquisitions benefit companies wanting to reposition themselves in the market. By adding capabilities to their product offerings, companies can rapidly expand their market coverage and modify their market position.

In this study, no distinction is made between mergers and acquisitions and the two notions are treated as one. Thus traditional subject of mergers and acquisitions has been expanded to include takeovers and related issues of corporate restructuring, control and changes in ownership structure of firms. Charkrabart and Burton (1983) found out that some mergers may create new synergies, lead to innovation by combining talents of different firms and provide additional resources to develop new products and services. Concerns about mergers, acquisitions and other corporate combinations are generally based on the same concerns about anti-competitive behaviour. According to Baysinger and Hoskisson (1989) the main concern is that a larger merged firm may increase its market power. M&A are important as they may define the strategic direction of a firm which is critical for long term creation of value for the shareholders who are the legal owners of the firm.

Mergers and Acquisitions are motivated by a number of factors, (Morck, Shleifer and Vishny, 1988). The motives include growth, enhancing profitability, synergy purposes, diversification of risk and reduction in tax liability. Another important motive which is investigated in this study is information signalling. The fact that M&A, may send signal to the market upon announcement and which may have an impact on share price movement. When a merger or an acquisition is announced, a significant amount of information is revealed about that particular deal and this information can be used to evaluate the reaction of stock market to a merger or an acquisition announcement. MacKinlay (1997), Brown & Warner (1985) define the M&A announcement as moment the firm announces the M&A transaction to the public via a press release.

### **1.1.2 Share Prices**

Share prices represent the observable equilibrium market prices which emerge when the demand and supply side converge during the trading process at the exchange. Return refers to a gain or loss on a security held by an investor for a particular period. Stock return consist two major components which include dividend as the income component and capital gains which are very critical when the investor is choosing which stocks to buy. Dividends refer to the proportion of the firm's net incomes that gets distributed to the shareholders.

The dividends can be quoted in monetary terms or as a percentage of the current market price. The latter is referred to as the dividend yield. Dividends can also be defined as the mandatory distributions of income or the gain realized in form of capital gains. In that context therefore, capital gains refer to the earning accruing to the investor upon selling an asset. In

other words, the capital gains refer to as the excess of returns realized above the buying of a given assets such as a firm's common stock (Investopedia, 2015)

### **1.1.3 Effect of Mergers and Acquisition on Share Prices**

The movement of share prices of companies in exchanges may be attributed to the nature of information accessible to all or a particular group of investors depending on the state of market efficiency from perspective of information economics. M&A announcements a times may transmit information that lead to share price reaction to it. The returns to the acquiring firms are influenced by a number of factors. Many firms engage in a series of M&A activities overtime thus making it difficult to isolate the influence of single acquisition event. If the time period over which the returns to the shareholders of acquiring firm includes a year or two before a specific acquisition, on average the acquiring firm earn at least their cost of capital. But studies reveal that for the largest combinations during the period of strategic mergers (1992 – 1998), in at least two third of the cases, value was increased as documented by Bruner (2005).

Most mergers result into benefits to competition and consumers by allowing firms to operate more efficiently after merger. However, some are likely to lessen competition that can in turn lead to higher prices, reduced availability of goods and services, lower quality products and less innovation. Indeed some mergers create a concentrated market while others enable a single firm to raise prices. In an acquisition, the focal firm might be able to absorb the knowledge base of the target firm. The expanded knowledge base might allow the firm to reap economies of scale or might allow for novel combination and integration of knowledge (Ahuja & Katil, 2001). Acquisitions might thus allow two firms to combine their strength and allow creating innovations that would have been beyond the reach of each firm on its own (Gerpott, 1995).

### **1.1.4 Nairobi Securities Exchange**

NSE is one of the most vibrant markets in Africa which traces its genesis back to 1951 as a private stock broking firm owned by an estate Agent by the name of Francis Drummond. The year 1988 saw the first privatization through the NSE, of the successful sale of a 20% government stake in Kenya Commercial Bank. There has been increased activity in the NSE over the last eight years prompting the Kenyan government to prevail the CMA to adopt a demutualization scheme of the exchange. With buoyed levels of activity there has been need to continue upgrading the systems used in running the NSE operations over time. There are about sixty listed companies in the NSE. The listed companies are grouped in array of nine

categories according to their core activities in the economy. These companies are obligated to operate within the CMA and NSE framework so as to continue being listed; this is in terms of financial reporting and handling of shareholder affairs (NSE, 2015).

In Kenya, various changes have been instituted including the establishment of a fixed income securities trading segment at the stock exchange, tax incentives and other factors that reduce the transaction costs, diversification of the maturities especially for the treasury bonds and the modernization of the trading system especially for the treasury bonds. It is also important to note the deliberate effort that the government took in boosting development of the bonds market in 2001.

There are four investment market segments at NSE namely; Main Investment Market Segment (MIMS), Alternative Investment Market Segment (AIMS), Fixed Income Securities Market Segment (FISMS) and Growth Enterprise Market Segment (GEMS) each with its own eligibility criteria. The firms discussed in this study have all listed their securities under MIMS. The MIMS is further divided into 10 sectors namely; automobile and accessories; banking; construction and allied; energy and petroleum; insurance; manufacturing and allied; telecommunication and technology; agricultural; commercial and services and investment, (NSE listing manual, 2013)

In the recent past Kenya has seen increased activities in M&A mainly in the banking, insurance, ICT and manufacturing sectors. In the banking sector, M&A has greatly been motivated by need to increase firm's capital base and entry into new markets. Some of the banking institutions that have recently gone through M&A process are CFC and Stanbic banks in 2009, Savings and Loans (K) and Kenya Commercial banks in 2010, City Trust and I&M bank in 2014. Mergers and acquisitions in the other sectors have mainly been motivated by need for growth and entry into new markets by different firms. For instance in 2014, East African and Serengeti Breweries went through M&A process for growth purposes and entry into new markets. Other firms that have gone through successful M&A process include Car & General and Premier Power Products; NIC and Savings & Finance banks; Scan and Cavendish Square Holdings; Centum Investment and Genesis Kenya; and British American Investment and Real Insurance Kenya (NSE 2015, CMA 2015)

## **1.2 Research Problem**

Share price movement in any stock market is attributed to news, company fundamentals or noise all of which constitute source of information. M&A announcement may send information to the market and as a result it changes the belief system of the market participants in terms of supply and demand side. This may in the end lead to movement in share prices of those firms that make M&A announcements. This study attempts to study generally the information content of M&A announcements and whether they have an impact on the share prices of those firms listed at the NSE and which have made M&A announcements.

Despite strong evidence price reaction to M&A announcements, there has been scores of studies that have documented some anomalies. Keown and Pinkerton (1981) found that excess returns earned by investors in acquired firms prior to the first public announcement of planned mergers points to presence of insider trading in these forms. Evidence regarding the directions and the magnitude of the announcement effect of corporate restructuring action is mixed and hence the call for more research. Popovici (2014) set out to analyze the impact of M&A on the performance of the bidder bank during 2000-2011. The researcher found out that M&A does not improve the value market of the shares of the bidder bank.

Kenya's corporate restructuring market cannot be compared with that in the developed world as the market is still developing. The NSE has a small number of firms listed and is also characterised by thin trading which could have an impact on its efficiency. Reaction of share prices to M&A announcement is a pointer of presence of market anomalies which contradicts the traditional view of finance of efficient capital market. Nevertheless, with recent instances of M&A activity in the country, the need for research in this area cannot be overemphasized. Korir (2006) studied the effect of mergers in financial performance of merged firms while Mureithi (2013) carried out a study on the effect of M&A on financial performance of commercial bank in Kenya and found positive relationship and profitability generally increased following post merger activity. This study looks at share price reaction and not financial performance as measured by ROA. Mitema (20014) studied the effect of M&A on the value creation focusing on the insurance companies in Kenya and found a positive impact on both book and fundamental value of the listed firms while Rono (2014) undertook a study on the effect of M&A on shareholder's value of commercial banks in Kenya and found a positive impact on ROA, EPS and ROE. However, in the study there was no proper proxy for

shareholders value since ROA, EPS and ROE are measure of firm's profitability and not shareholders value.

Constantine (2008) undertook a study on the effect of M&A announcement on share prices at the NSE and which engaged in M&A between the 1997 and 2006 and found that majority of the company's stock returns did not experience a significant positive reaction following M&A announcement implying that M&A announcements are not significant in moving share prices. Gathecha (2014) looked at the information content of M&A announcement for listed companies at the NSE found that M&A positively affect shareholders wealth as evidenced by abnormal returns around the declaration date of M&A. The finding contrasts that of Constantine (2008). The current study investigates if share prices move upon M&A announcement for firms that have made such announcements for period after automation of NSE trading process which has changed the market landscape and information flow in the market. To this end there is no study within the knowledge of the researcher that looks at the effect of the merger announcement on share prices. This study intends to address the research question which is does M&A announcement have an impact on share prices of stocks quoted on the NSE?

### **1.3 Objective of the Study**

To determine the impact of mergers and acquisition announcement on share prices of companies listed at the NSE.

### **1.4 Value of the Study**

Effect of M&A announcement on share prices are issues that have received wide attention in the literature. Developed markets have received a bulk of undertaken studies. Emerging markets have not been exhaustively considered and are undergoing changes both in terms of infrastructure and the investment climate. This calls for more studies both to appraise the previous studies and explore new areas not considered in the previous studies. In looking at the effect of merger announcement on share prices of stock quoted on the NSE, the study will contribute to the existing body of knowledge through theory testing and the empirical evidence.

Investment advisors have the role of proving appropriate advice to their clients on what stocks to invest in or divest from. This study will provide guidance on how best to advise clients on appropriate stocks to invest in given their investment objectives. Furthermore, information on share price impact of corporate restructuring will help traders in making

decisions on actions to take in the face of corporate restructuring so as to maximize their returns.

The study will be of value to the academic community and market regulator. It will add to the body of knowledge in the areas of market efficiency and corporate restructuring and thus opening more opportunities for further research in this area. The study will aid regulators in coming up with policy issues on what will help stabilizing the market during corporate restructuring phases by listed companies.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

In this chapter, the researcher presents the theoretical paradigm relevant to the study, general and pertinent empirical literature review of studies.

### **2.2 Theoretical Review**

The various theories on mergers and acquisitions include the efficient market hypothesis, free cash flow theory, oligopolistic reaction theory and signalling theory.

#### **2.2.1 Efficient Market Hypothesis**

The efficient market hypothesis (EMH) is concerned with the behaviour of prices in asset markets. Fama (1970) defines EMH as a market where prices fully reflect the information available, such that unusual profit cannot be earned through exploiting this information. The market is efficient if reaction of the market prices to the arrival of new information is instantaneous and unbiased. Efficient market theory is the idea that new information is quickly and efficiently incorporated into asset prices at any point in time so that old information cannot be used to foretell future price movements. According to Fama (1970) there are three forms of efficiency being; weak form market efficiency, semi strong form efficiency and strong form market efficiency, each with different implications of how market works. The weak form efficiency market theory stipulates that current prices already reflect past price and volume information. The semi strong form efficient market theory states that all past and present information is similarly already incorporated into asset prices but also data reported in firm's financial statements, firm's announcements of dividend payouts, key management changes and economics factors. The strong form efficient market theory stipulates that private information (insider information) is rapidly incorporated into market prices and therefore cannot be used to reap abnormal trading profits.

This theory has been met with a lot of opposition especially from technical analysts, Goodman (1979) argues against the efficient market theory. He notes that many investors base their expectations on the past prices, past earnings, track records and other indicators. Since stock prices are largely dependent on buyer expectations many believe.

#### **2.2.2 Free Cash Flow Theory**

Free cash flow to equity represents the cash available for distribution to the shareholders of the firm. Easterbrook (1984) notes that diverting free cash flow from shareholders allows

managers avoid having to use capital markets when in need of new capital. According to Jensen (1986), there is a conflict of interest related to the distribution of free cash flow between managers and the shareholders they are supposed to represent.

This theory prompts the need to improve financial performance of firms through mergers and acquisitions. Return on shareholder equity is affected when managers divert the free cash flow from dividends thus affecting the financial performance of a company. This is because return on equity measures a corporation's profitability by revealing how much profit a company generates with the funds invested by shareholders.

### **2.2.3 Oligopolistic Theory**

Knickerbocker (1973) defines oligopolistic reaction as "a corporate behaviour by which rival firms in an industry composed of a few large firms counter one another's moves by making similar moves themselves". Thus, if two firms in an oligopolistic industry merge, others might react by merging in turn (Cantwell, 1992), independently of whether shareholders will gain or lose as a result.

This behaviour of oligopolistic reaction could cause a chain of mergers to take place, and therefore this can then help explaining the empirical evidence that seem to show that mergers happen in waves. In the case of petroleum firms in Kenya, various industry players are engaging in M&A in a bid to improve financial performance. Consequently, rival firms are engaging in mergers and acquisition deals as their competitors in order to realize these oligopolistic goals.

### **2.2.4 Signalling Theory**

The signalling theory argues that markets are not fully efficient. The management has access to better information than the remaining shareholders and may act from it. The signals that management sends out can illustrate the future direction of the firm and which results the company faces. The management signals to demonstrate what it is doing to maximize the value of the firm (Van Horne & Wachowicz, 2005). The market is in need of information and reacts not only on what the management communicates but also on how it performs.

For example, the market reacts on dividends; if increasing the dividend of the firm, investors generally react positively. When the management shows that it believes in a positive future and that it goes from words to action, the signalling theory can explain the market's positive reaction (Brealey, Myers & Allen, 2006).

Through its actions, the management sends out signals to the market and M&A transactions constitute signals that influence expectations of the investors. If there is a strong confidence in the management and the information about the transaction is explicit, it should be reflected in the reaction of the investors. If the signals are interpreted by the market as the management has an optimistic belief in the future, this should cause the stock price rise. This is also true for the reverse, when there is pessimistic belief in the future the opposite reaction is expected.

### **2.3 Determinants of Share Prices**

Investment in ordinary shares is one of the major avenues of investment that may yield considerable returns to investors besides being a source of finance of firms. Returns from such equity investments are subject to vary owing to the movement of share prices, which depend on various factors. The factors can be classified broadly as firm specific and macroeconomic factors

#### **2.3.1 Firm Specific Factors**

Share prices of companies may move or react based on the size of the company, financial fundamentals, previous earnings per share, share turnover ratio, leverage, earnings announcements, dividends, share splits, book value, dividend yield, dividend cover and price earnings ratio of firms. Apart from merger announcements, the above listed factors are determinants of share price movements.

Change on above firm specific factors may influence the expectation of investors hence triggering the need to buy, sell or hold onto the shares. For instance, if EPS ratio improves an investor may hold onto the shares or even buy more shares with expectation that firms earnings would continue to improve. This act would trigger the share prices to rise due to increased demand or fall in supply of the shares.

#### **2.3.2 Macroeconomic Factors**

Stock prices in a given market are influenced by market expectations but in the short run. However, asset prices should be based on economically justifiable rates of return in the long run. A number of studies have been undertaken to determine the effect of macroeconomic factors on share prices of companies. The factors include GDP growth, rate of interest, inflation, financial depth, stock prices and the degree of market efficiency.

For instance growth in GDP would lead to positive change in the share prices. High inflation would erode the purchasing power hence limiting investors from buying shares while those

who have shares may sell the shares and use cash on other expenditures. This may lead to low share demand hence fall in the share prices.

## **2.4 Event Study Methodology**

The event study methodology is based on Efficient Market Hypothesis (EMH) developed by Fama et al. (1969) and Fama (1970). Event study methodology has been widely applied in studying the price reaction to an event of interest, (Fama et al 1969, Brown and Warner, 1985, Elton and Grubber 1995, Njogu 2003 and Onyango 2004). According to this, a market is efficient if “prices fully reflect all available information”. One important assumption is that capital markets are sufficiently efficient to react on events (new information) regarding expected future profits of affected firms. Efficiency is classified as “weak form” when information set includes past prices, “semi – strong form” when information set includes all publicly available information and “strong form” when information set includes all publicly and privately available information. Event studies are mostly rested upon the analysis of the so-called “normal” and “abnormal” returns which are estimated on the basis of asset pricing model.

An event study averages the cumulative performance of stocks over time, from a specified number of time periods before an event to a specified number of periods after. Performance for each stock is measured after adjusting for markets-wide movement in security prices. The first event study was undertaken by Fama, Fisher, Jensen and Roll (1969), although the first to be published was Ball and Brown (1968). Using the market model or capital asset pricing model as the benchmark these event studies provide evidence on the reaction of share prices to stock splits and earnings announcements respectively. In both cases the market appears to anticipate the information and most of the price adjustment is complete before the event is revealed to the market. When news is released the remaining price adjustments take place rapidly and accurately.

Event studies can be carried out to see just how fast security prices actually react to the release of information. Do they react rapidly or slowly? The returns are also looked into after announcement of some information, to see if they are normal, high or low. Normal returns of a security are determined by use of some equilibrium-based asset-pricing model. An improperly specified asset-pricing model can invalidate a test of market efficiency. Event studies therefore are joint tests that involve asset pricing model’s validity and tests of market efficiency.

When information arrives in the perfectly efficient market prices will react instantaneously and in doing so will immediately move to their new investment value. If good information is released into the market then stock prices should rise up and if bad news is released into the market then the share prices will come down. In an efficient market if information causes security prices to be under priced, investors will rush to buy it and thus will force the security to rise up to its equilibrium price. If a security is selling above its fair value investors will proceed to sell it if they own it or short sell it if they don't own it. This will correct the value of the security.

Event studies have been made about the reaction of security prices, particularly stock prices, to the release of information such as news on earnings and dividends, share repurchase programs, stock splits, stock and bond sales, stock listings, bond rating changes, mergers and acquisitions and divestitures.

## **2.5 Empirical Review**

In this section, the researcher undertakes a review of pertinent empirical studies done internationally and locally.

### **2.5.1 International Studies**

Halpern (1973) set out to directly measure buyer and seller premiums in mergers in a sample of approximately 75 acquisitions. The study employed modern asset pricing methodology. His method is to adjust the observed market prices of acquiring and acquired firms for general market variations during the period when merger information affect their share prices. He notes that the price change that remains unexplained by market variations is due to the merger. He found out that on average merger information is available seven months before the announcement date as evidenced by the positive cumulative average residual.

Mendelker (1974) set out to test whether mergers took place in a market under condition of perfect competition and also the efficient capital market hypothesis with respect to information on acquisitions. Using CAPM approach, he proved that stock holders of the acquired firms received cumulative average residuals that were positive indicating that they earned abnormal returns. The average residuals for the acquiring firms were generally positive but not significant. The finding contradicts the argument that acquiring firms overpay and loose from mergers. In reference with efficient market hypothesis, Mendelker found consistency with the view that the stock market operates efficiently with respect to the information on mergers.

Similarly to the preceding studies, Ellert (1975, 1976), found that the impact on the market prices of merging firms takes place between 7 to 12 months prior to the actual merger. The announcement necessarily precedes the merger, and there are leaks even before the public announcement. He established that stock holders of the acquired firms received cumulative average residuals that were positive indicating that they earned abnormal returns. The average residuals for the acquiring firms were generally positive but small and not significant.

Firth (1980) in the United Kingdom compared the share prices existing after takeover announcement with the bid after. Firth found that the UK stock market was semi strong form efficient. Within the financial markets there is knowledge of features of the markets that can be exploited. For example, seasonal tendencies and divergent returns to assets with various characteristics for instance factor analysis and studies of returns to different types of investment strategies that some types of stock consistently outperformed the market.

Schipper and Thompson (1983), set out to examine the market reaction to announcement of a major acquisition program. They propose that the stock price at the time of the announcement fully capitalizes the expected value of the program – the net benefits of the anticipated mergers and the probability that it will occur. Therefore, they concluded that merger programs are capitalized as positive NPV projects. The positive pre-merger performance found in previous studies is viewed as response to merger program announcement.

Lichtenberg and Siegel (1990) set out to examine UK market and found some evidence that companies undertakings mergers earned a higher rate of return than those that relied on internal growth. However, they were not able to identify a positive relationship between the level of merger activity and profitability.

Akhavain (1997) set out to study merger profitability using financial measures including security prices changes. He compared pre and post merger performance based on five measures of profitability, percentage change in stock prices, price ratio, earnings per share, sales per share and profit margin of 42 firms matched in 21 pairs. He used pre merger period calculated average returns (5 year pre and post) using stock return. He concluded that operational restructuring as a result of merger activity positively affects profitability due to renewed attention to business, improved management, accounting legal regulatory systems, better credit assessment and approval techniques and reduced branches and staffing levels.

Bank consolidations have little evidence of any significant, permanent increase in shareholder value as found out by Calomiris and Karceski (1998) and Pilloff and Santomero (1998). They reviewed the literature and concluded that although some event studies found that acquirers increased their market value, most studies found that the market value of the acquiring bank declined whereas that of the target bank increased. Similarly with other previous studies, Houston, James, and Ryngaert, 2001 found that the market value of the acquiring bank declined, on average, whereas that of the target bank increased. However, compared with the 1980s, the 1990s were a period of higher average abnormal returns for both bidders and targets. Results also suggested that the realization of anticipated cost savings was the primary source of gains in the majority of recent bank mergers. Cornett et al. (2003) found that diversifying bank acquisitions earn significantly negative period abnormal - period returns for whereas focusing acquisitions earn zero abnormal returns.

Moffett and Naserbakht (2012) investigated the stock price behavior of targets and acquirers based on the M&A announcement over the period 2000-2010. The researchers using event study as its main method for measuring the impact of merger and acquisition deals, found out that M&A announcements generated positive average actual return for both target and acquirer banks.

Dilshad (2012) used event study methodology to analyze the effects of banks mergers and their announcements on the prices of stocks, in Europe, from 2001 to 2010. The findings reveal that there is definitely action in the prices of stocks around Day 0, but the analysis also shows that the merger may not be significant in determination of the reason for the particular behaviour.

Liang (2013) looked at impact of M&A announcement and more specifically on whether Hong Kong firms acquire domestic firms or cross border firms within Hong Kong stock market from 2007 till 2012 have been wealth creating or wealth reducing events for acquiring firms. Using the event study methodology, the analysis found evidence that acquiring firms receive a positive and significant abnormal return. The impact of M&A announcement on stock price movements are mainly depends on market expectations.

Popovici (2014) set out to analyze the impact of M&A on the performance of the bidder bank during 2000-2011. Using the event study methodology, the researcher found out that M&A does not improve the value market of the shares of the bidder bank.

Khanal, Mishra and Mottaleb (2014) used an event analysis method to explore the recent M&A on the stock prices and value of the firm of publicly traded ethanol-based biofuel industry between 2010 and 2012 in the United States. Results of analysis showed average cumulative abnormal returns of acquiring firms implying that the market positively responded toward recent M&A in the industry.

Akinyomi and Olutoye (2014) examined the effect of M&A on the profitability of Nigerian banks. The results of the regression analysis conducted revealed that there is a significant difference between pre- mergers and acquisitions return on equity on one hand; and a significant difference between pre and post- mergers and acquisitions return on assets on the other hand. Specifically, the results of the study revealed a decline in financial performance at the post mergers and acquisitions when compared with that of the pre mergers and acquisitions dispensation. In other words, M&A in the Nigerian banking sector is yet to show any improvement in the profitability of the banks.

### **2.5.2 Local Studies**

Chesang (2002) examined the financial performance of merged commercial banks in Kenya. In her study, she found out that merger restructuring did not improve the financial performance of merged banks as indicated by profitability and earnings ratios. However, she found out that legal ratios (Capital adequacy and solvency ratios) improved after a merger.

Korir (2006) set out to find out the effect of mergers on the performance of companies listed on the NSE. He used four measures of performance: Turnover, volume, market capitalization and profit. The study was undertaken by comparing the financial performance of merged companies in the pre-merger and post-merger periods. The results showed that all the values; turnover, volume, market capitalization and profit had a low significant value of less than 0.5 indicating that there was an improvement in performance after merger.

Constantine (2008) undertook a study on the effect of mergers and acquisition announcement on share prices using eleven firms listed at the NSE and which engaged in M&A between the 1997 and 2006. The study adopted the event study methodology and found that majority of the company's stock returns did not experience a significant positive reaction following M&A announcement implying that M&A announcements are not significant in moving share prices. However the current study looks at a period after 2006 when automation was adopted which has changed the NSE landscape and also improved information efficiency.

Odhiambo (2013) undertook a study on the effect of cross border M&A on the value of firms listed at the NSE using the event methodology and causal design. The sample included five listed firms which had cross border M&A. It focused on effect of M&A on Return on Assets based on Earnings Before Interest and Tax and Earnings Before interest tax depreciation and amortization and return on sales. Return on Assets based on Earnings before interest and tax and Earnings Before interest tax depreciation and amortization show that acquiring companies gain in cross border M&A. Using return on sales as a measure of financial performance showed negative results. The study used Return on Assets and return on sales as proxy for value. The current study will utilize observable market price per share to measures returns.

Mureithi (2013) carried out a study on the effect of M&A on financial performance of commercial bank in Kenya. The study used causal research design. Sixteen (16) commercial banks engaged in M&A between 2000 and 2012 constituted the unit of analysis for the study. Return on assets and return on equity used as indicators of financial performance. Study found positive relationship and profitability generally increased following post merger activity.

Mboroto (2013) studied the effect of mergers and acquisitions on the financial performance of petroleum firms in Kenya and he found that petroleum firms performed better in the post-merger/acquisition era as compared to the pre-merger/acquisition era. This is supported by the fact that merging/acquisition had a significant impact on the ROA, which is the overall standard measure of financial performance due to the statistical significance it has on ROA as well as total asset ratio.

Kurui (2014) undertook a study on the relationship between M&A on the financial performance of listed firms at the NSE using descriptive design. The population consisted of ten firms which participated in the M&A between 2000 and 2013. The study focused on pre-merger and post-merger and found a positive relationship in the post-merger period. This study looks at share price reaction and not financial performance as measured by ROA which was the focus of the study by Kurui.

Mitema (2014) studied the effect of M&A on the value creation focusing on the insurance companies in Kenya. The study findings show positive significance relationship an indication that M&A create value and also have positive impact on both book and fundamental value of the listed firms who engaged in M&A. Descriptive research design and regression analysis

was used. This study looks at firms listed and uses event study methodology to see if M&A sends any signal to the market which may impact on the stock returns.

Rono (2014) undertook a study on the effect of M&A on shareholder's value of six commercial banks in Kenya involved M&A between 2000 and 2013 using descriptive research design. It was found that M&A have positive impact on Return of Assets, Earnings per Share and Return on Equity. The measures used are generally measures of firm's profitability. However, in the study there was no proper proxy for shareholders value since Return of Assets, Earnings per Share and Return on Equity are measure of firm's profitability and not shareholders value.

Gathecha (2014) looked at the information content of M&A announcement for listed companies at the NSE using descriptive research design and the standard risk adjusted event study methodology. Five firms were sampled and all were studied over the period of study. The study found that M&A positively affect shareholders wealth as evidenced by abnormal returns around the declaration date of M&A. The findings contrast that of Constantine (2008) who found that M&A announcement do not have any positive significant relationship. The results are thus mixed.

Mailanyi (2014) studied the effect of M&A on the financial performance of oil companies in Kenya using causal research design. The sample included four oil companies engaged in M&A between 2003 and 2013. Study found positive significant relationship of M&A on financial performance. Financial performance was measured using return on equity. This study will investigate if there is any relationship between M&A and the share price.

## **2.6 Summary of Empirical Literature Review**

The literature review encompasses the theories to be reviewed, the different classifications of mergers and acquisitions, the motivations for mergers and acquisitions, the determinants of mergers and acquisitions as well as the empirical review of related studies. Empirical literature reviewed in this section reveal mixed findings as to the determinants of share prices and especially whether stock prices react to announcement of mergers and acquisitions. Most of studies are on developed markets with minimal information asymmetry and structure.

Most of local studies have concentrated on no-listed firms and with focus on relationship between M&A and financial performance of the firms. Chesang (2002), Mureithi (2013), Mboroto (2013), Mitema (2014) and Rono (2014) studies did not focus on listed firms but

rather economic sectors like banking, petroleum and insurance sectors. The studies focused on the effects of M&A on financial performance on firms in the different economic sectors. A few studies have focused on mergers and acquisitions of firms listed at the NSE. These studies have concentrated on the relationship between M&A and financial performance and earnings of the firms. Korir (2006), Odhiambo (2013) and Kurui (2014) looked at effects of mergers on performances of listed companies. These studies have concentrated on the relationship between M&A and financial performance of the firms. The studies used turnover, profitability, earning ratios, returns on assets as measure of performance. Share prices movement is largely attributed to internal and external factor for a given firm. In this study we will focus on the effects of M&A on the shares prices on the listed firms.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

In this chapter, the researcher presents the research design, research methods that were utilized in an attempt to provide an answer to the research question and eventually the research objectives.

### **3.2 Research Design**

This study aimed at establishing the impact of announcements of mergers and acquisitions on the share prices of companies listed at the NSE. The research design for the study was the event study methodology. Event study has been dominant approach since the 1970s and is broadly applied in M&A research.

It is designed to measure whether there is an “abnormal” stock price effect associated with an unanticipated event (M&A), which holds that stock returns reflect quick, unbiased, rational, and risk-adjusted expectations of the value of the firm in forthcoming period based on the arrival of new information. It was used to gauge the acquiring firm’s success or failure in value capture for its shareholders from M&As.

### **3.3 Population**

The study looked at a period after 2006 when automation was adopted which has changed the NSE landscape and also improved information efficiency. A total of nine (9) mergers and acquisitions took place during the period. (Appendix I). The NSE was considered ideal for carrying out this study due to the availability, accessibility and reliability of the data. This was a census study and hence entire population of companies that have made successful M&A announcements during the period of 2007-2014 at the NSE were considered.

### **3.4 Data Collection**

The research relied purely on secondary data obtained from the NSE, CMA and or other financial intermediaries. This was so as to have reliable data that enabled the study make an empirical conclusion on the effect of M&A announcements on share prices of companies listed at the NSE.

Data comprised of daily stock prices and the market index for 30 days prior to and 30 days after the merger announcement. Event period of 60 days was selected since NSE is still

developing and has a small number of firms listed and is also characterised by thin trading which could have an impact on its efficiency.

### 3.5 Data Analysis

This study used an event study for the research methodology. This methodology was designed to investigate the effect of an event on a specific dependant variable. In this study, the dependent variable was the stock price. The basic idea of this study was to determine whether there is an abnormal stock price effect that are associated with a specific event by comparing the performance with the event and without the event. The key assumption of event study methodology is that the market must be efficient. The theory of the EMH indicates that any change in stock price caused by the event will happen immediately.

#### 3.5.1 Analytical Model

A number of statistical models are available to calculate the abnormal return. For example, the risk-adjusted model, the multi-factor model, and CAPM model. This study used CAPM model to test whether the firms generated abnormal return or not. The following steps were involved:

- I. Determined the day of the announcement and designated this day as zero.
- II. Defined the period to be studied. In this case, it was sixty one (61) days, (30 days before the event, the event date and 30 days after the event)
- III. Computed daily returns for each of the firm.  
Return was measured by the sum of the change in the market price of a security plus any dividend income received over a holding period divided by the price of a security at the beginning of holding period.

a. Hence,

$$i. R_j = \frac{(P_1 - P_0) + DI}{P_0}$$

- IV. Computed the return for a market portfolio.

The NSE 20 index was used as proxy for market portfolio. The daily index returns was computed as

$$i. MR_i = \frac{M_i - M_0}{M_0}$$

b.  $MR_i$  is the market return for day  $i$

c.  $M_i$  is the market return for day  $i$

d.  $M_o$  is the market return for day  $o$

V. Computed the “Abnormal” return for each of the days studied for each firm. Abnormal return is actual return less the expected return. The CAPM was used to derive expected returns.

i.  $R_{jt} = a_j + b_j R_{mt} + \epsilon_j$

ii. Where;

iii.  $R_j$  is the return on stock  $j$  on day  $t$

iv.  $a_j$  and  $b_j$  are the intercept and slope respectively of the linear relationship between the returns of stock  $j$  and returns of general market.

v.  $R_m$  is the return on the market index on date  $t$ .

vi.  $\epsilon_j$  is the unsystematic (residual) component of firm’s returns.

Efficient diversification reduces the total risk of a portfolio (unsystematic and systematic) to the point where only systematic risk is left hence reducing the equation to

vii.  $R_{jt} = a_j + b_j R_{mt}$

VI. Constructed abnormal returns, denoted  $AR_{jt}$ , which are calculated by subtracting an expected return from the actual return  $AR_{jt} = R_{jt} - MR_i$

VII. Cumulative abnormal return (CAR) was estimated by adding average abnormal return (Avg\_AR) from each day from -30 to +30 days.

1.  $t_2$

$$b. CAR(t_1, t_2) = \sum_{t=t_1}^{t_2} AR_t$$

### 3.5.2 Test of Significance

To determine if abnormal returns are significant, the t test on the event windows for all stock was constructed as follows:

$$t = (CAAR(t_1, t_2) - \mu) / S(CAR(t_1, t_2))$$

Where  $\mu$  is the Abnormal Return being tested for significance and takes the value of zero. The test statistics for standard error of prediction  $S(CAR(t_1, t_2))$  is calculated by dividing the

Average Abnormal Return of all stock over all stock over a specified event period (t1,t2) by the standard deviation of estimation using Z statistics.

$$CAAR = 1/n \sum_{i=1}^n CAR(t1, t2)$$

$$S(CAR(t1,t2)) = \sqrt{\sigma^2/n}$$

Where  $\sigma^2$  is the estimator of variance,  $n$  is the number of stocks whose excess returns are available at day  $t$ . CAAR is calculated by averaging the CAR data for firms for each day.

Similarly, Standard Deviation for CAR is calculated for the firms for each day. T test is done for 61 days interval (-30,30) thirty day interval of (-30, -1) and (0, 30) days.

The statistics is assumed to follow a standard normal distribution. This study analysed whether M&A announcements have significant impact on share prices. If the impact is significant, the t statistics is significantly different from zero.

## CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION

### 4.1. Introduction

This chapter presents the results of data analysis on the basis of the share prices of companies that underwent M&A and are listed at the NSE. The study made use of the NSE 20 Share Index as a favourable supplement of the market index. The researcher used event study methodology and descriptive statistics in a bid to compare the abnormal share price returns before and after M&A of the listed companies. This methodology was appropriate since it helped determine whether listed firms can generate abnormal return or not after M&A.

### 4.2. Descriptive Statistics

The study carried out was to determine the impact of M&A announcement on share prices of companies listed at the NSE. Data on daily market price and individual company share prices was collected for the period 2009 to 2014. The researcher used the Statistical Package for Social Sciences (SPSS) version 20 to carry out the analysis for each of the listed firms. The existence of abnormal returns was tested at 5% significance level.

Data was analyzed using descriptive statistics. The results of the descriptive statistics are discussed in Table 4.1.

*Table 4.1: Descriptive Statistics*

Company	Minimum	Maximum	Mean	Std. Deviation
CFC Stanbic Holdings	107.44	126.15	115.7918	3.70806
Car & General	35.00	44.00	37.9945	2.83942
NIC Bank	37.17	49.43	43.3511	2.74721
KCB	20.05	23.13	21.2559	.87321
Scan Group	59.10	73.27	62.9582	3.57330
Centum Investment	4.47	4.97	4.7007	.12719
I & M Holdings	93.50	100.97	96.6607	1.86797
British American Investments	10.13	19.38	14.1718	2.62958
East African Breweries	179.96	225.32	204.1598	11.58928
NSE 20	2950.25	5477.70	4446.6606	683.76066

#### Source: Research Findings

During the study period, the 20 NSE Share Index market recorded a minimum value of 2950.25 and a maximum value of 5477.70. It depicted a mean of 4446.6606 with a standard

deviation of 683.76066. The CFC Stanbic bank showed a minimum share value of 107.44 and a maximum of 126.15. The mean was 115.7918 with a standard deviation of 3.70806. Car and General had a minimum value of 35.00 and a maximum value of 44.00. The mean was 37.9945 with a standard deviation of 2.83942. NIC Bank had a minimum value of 37.17 and a maximum value of 49.43, the mean was 43.3511 with a standard deviation of 2.74721. The Kenya Commercial Bank had a minimum share return of 20.05, a maximum of 23.13, mean of 21.2559 and a standard deviation of 0.87321. Scan Group had a minimum share price of 59.10, a maximum of 73.27, the mean was 62.9582 and a standard deviation of 3.57330. Centum Investment share price showed a minimum value of 4.47 and a maximum of 4.97. The share price mean return was 4.7007 with a standard deviation of 0.12719. The I & M bank showed a minimum share price of 93.50, a maximum of 100.97, a mean of 96.6607 and a standard deviation of 1.86797. Britam had a minimum price of 10.13, a maximum of 19.38. These returns however had a mean of 14.1718 with a standard deviation of 2.62958. Lastly, the EABL group had a minimum share price of 179.96 and a return of 225.32 as the maximum. The returns had a mean of 204.1598 with a standard deviation of 11.58928.

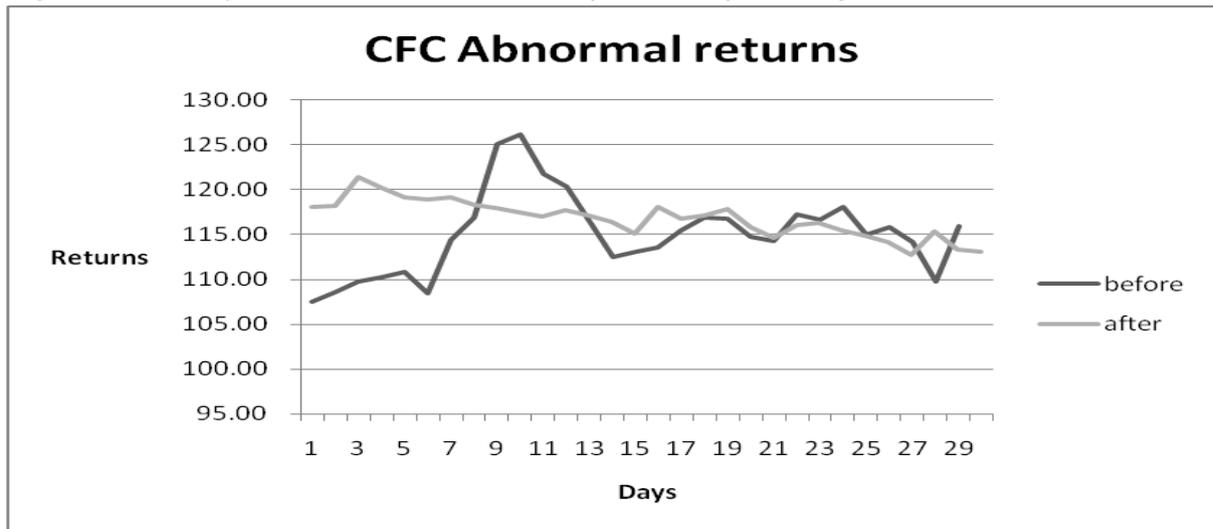
### **4.3 Graphical representations**

#### **4.3.1 CFC Stanbic bank**

In order to compare the daily returns of the firms before and after the announcement of mergers, the researcher plotted a line graph to depict any change in overall trend of the returns of the affected companies.

Figure 4.1 presents a plotted graph that compares the daily abnormal returns of CFC Stanbic bank before and after the announcement of a merger. The graph shows that the share performance before the announcement was shaky and it fluctuated more around the mean of 115.8. After the announcement, the returns were much better and fluctuated above the mean abnormal return. On the basis of this chart, an abnormal return rate was realised only to a small extent after the announcement. This finding was in agreement with the Paired t-test findings in Table 4.2 whereby the confidence interval included zero thus the conclusion that there was no difference in returns before and after merger announcement at CFC Stanbic bank in the studied sample.

**Figure 4. 1: Daily CFC abnormal returns before and after merger announcement**

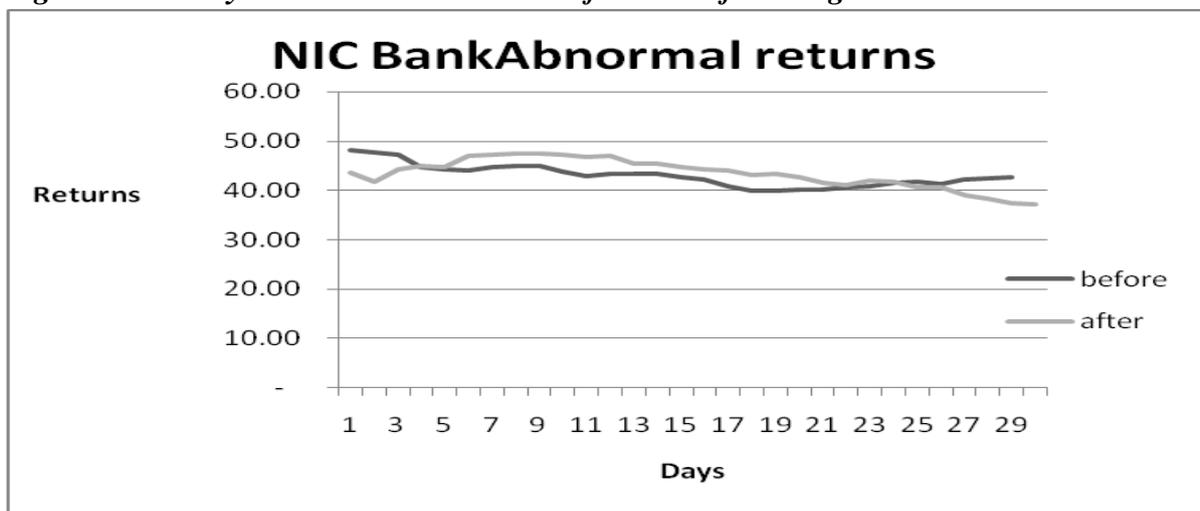


**Source: Research Findings**

**4.3.2 NIC Bank**

Figure 4.2 presents a plotted graph that compares the daily abnormal returns of NIC bank before and after the announcement of a merger. The graph generally shows that the share performance before and after the announcement did not fluctuate much around the mean of 43.4. Therefore, based on this chart, an abnormal return rate was not realised after the announcement of a merger at NIC bank. This finding is in agreement with the Paired t-test findings in Table 4.2 whereby the 95% confidence interval included zero thus the deduction that there was no difference in returns before and after merger announcement at NIC bank in the studied sample.

**Figure 4. 2: Daily NIC abnormal returns before and after merger announcement**

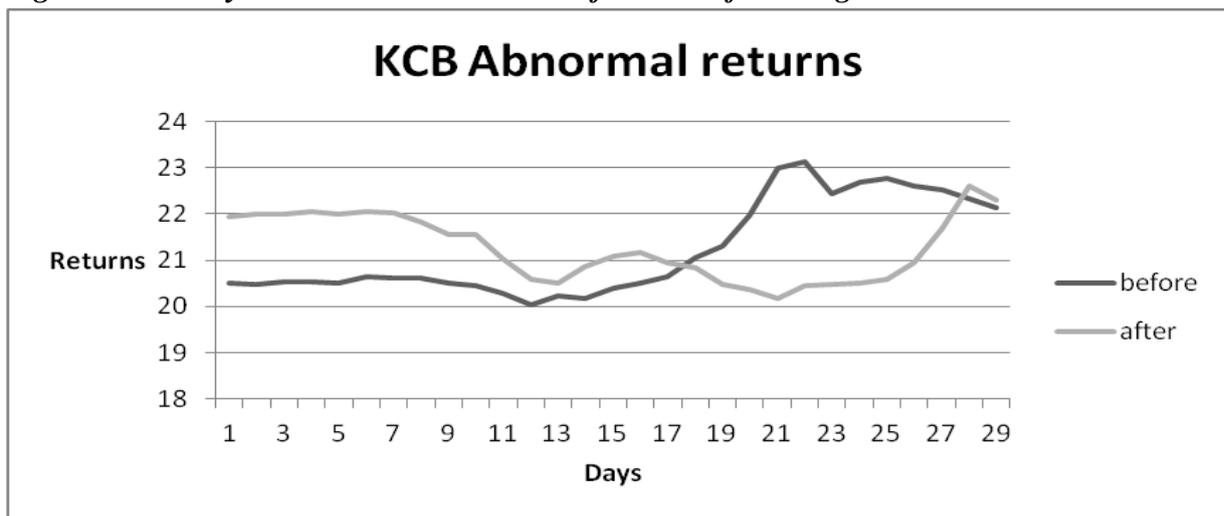


**Source: Research Findings**

### 4.3.3 Kenya Commercial Bank

The general trend in share price returns before merger announcement at KCB showed a general increasing trend before the merger announcement. Nevertheless, after the merger announcement, the returns showed a decreasing trend before taking an upward trend. The prices declined immediately after the merger announcement. According to the Paired t-test findings in Table 4.2, the 95% confidence interval included zero therefore there was no difference in returns before and after merger announcement at KCB.

*Figure 4. 3: Daily KCB abnormal returns before and after merger announcement*

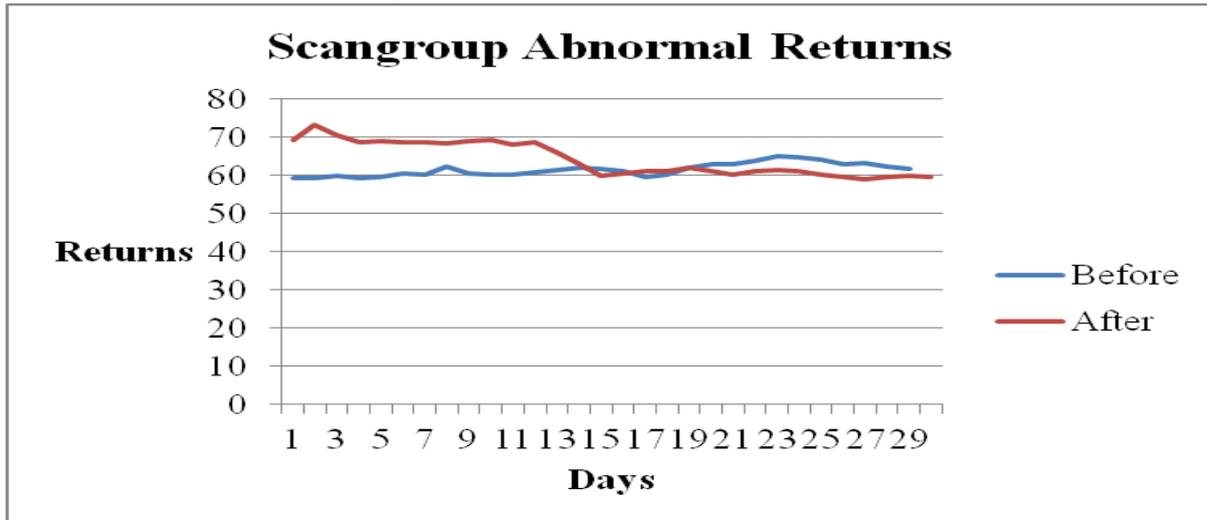


Source: Research Findings

### 4.3.4 Scan Group

Just like KCB, the Scan group's returns before merger announcement showed an increasing trend. However, after the merger announcement, the returns depicted a more stable trend. The news of the merger led to a more stable return on the shares of Scan Group. The results of the paired t test in Table 4.2 did not include a zero, the two samples of share returns before and after announcement in Scan Group were therefore statistically different and hence the merger announcement had an impact on the share performance.

**Figure 4. 4: Daily Scan Group abnormal returns before and after merger announcement**

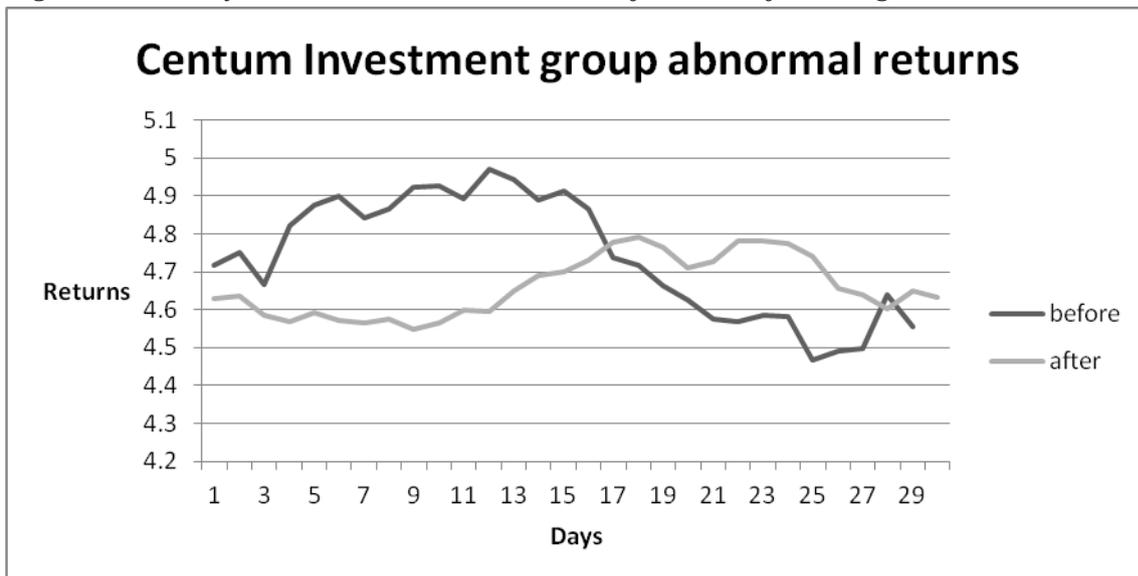


Source: Research Findings

#### 4.3.5 Centum

Figure 4.5 shows a general decreasing trend before the announcement of the merger at Centum. After, the announcement, abnormal returns were realised since an upward trend in share price was observed. The 95% confidence interval in Table 4.2 included zero thus the two Centum samples were not statistically different and hence there was no impact on the share prices after the merger.

**Figure 4. 5: Daily Centum abnormal returns before and after merger announcement**

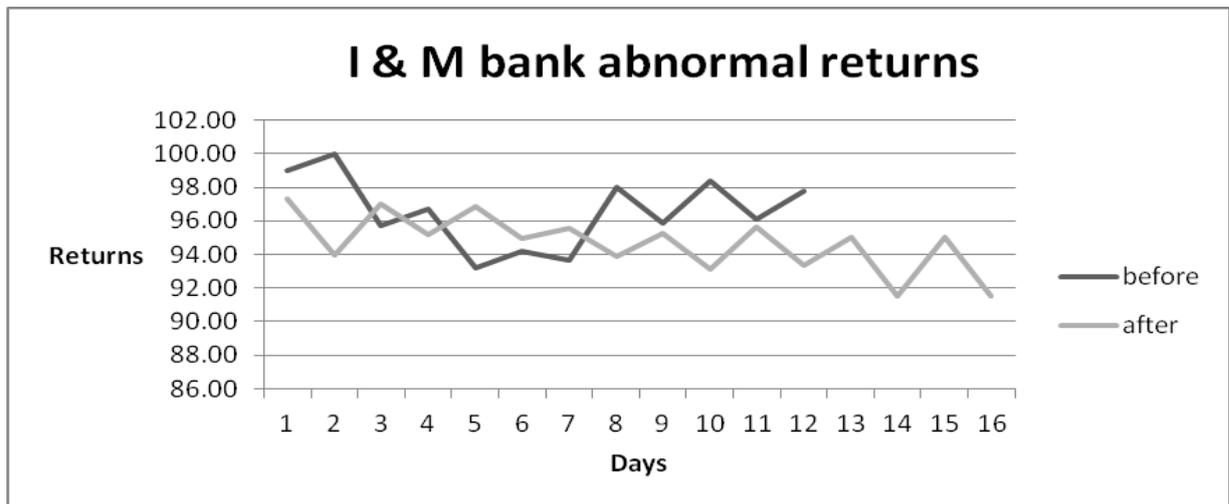


Source: Research Findings

### 4.3.6 I&M Bank

Figure 4.6 shows the plotted daily share returns of I&M bank before and after merger announcement. Before the announcement was made, the returns increased slightly for a few days before decreasing below the mean of 96. The returns increased and decreased slightly below the mean before increasing and then fluctuating again while above the mean before the announcement. Returns decreased below the mean after the merger before slightly increasing and then showing a decreasing trend below the mean of 96. The return movements were however not steady in terms of trend. The graph concurs with Table 4.2 whereby the 95% confidence interval included zero. This showed that the two samples of share returns before and after the merger were therefore not statistically different and thus the merger had no impact on the share performance of I&M Bank.

*Figure 4. 6: Daily I & M abnormal returns before and after merger announcement*

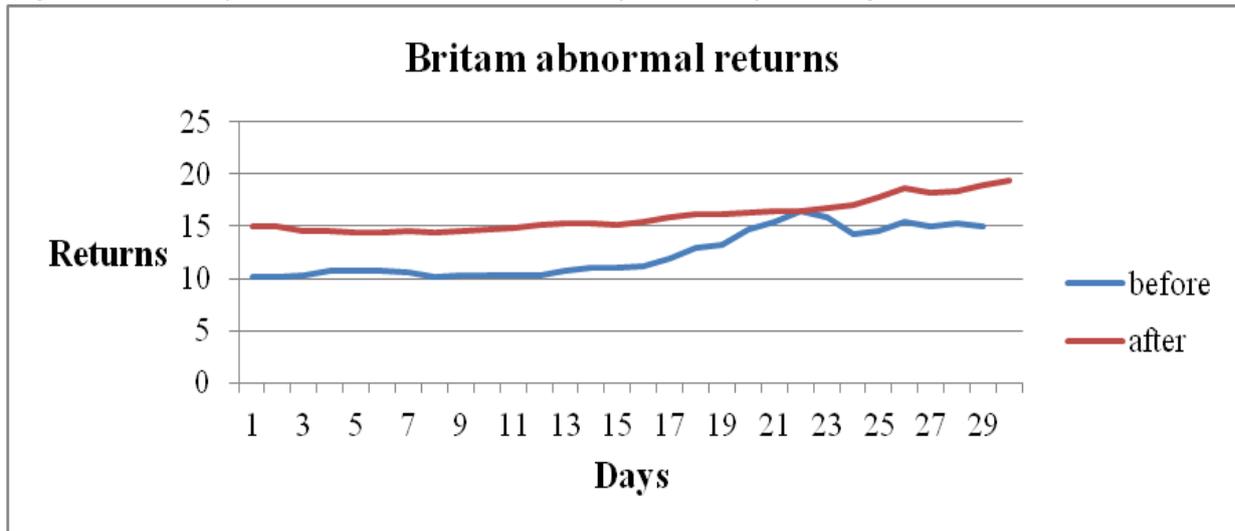


Source: Research Findings

### 4.3.7 Britam

Figure 4.7 shows the plotted graph of the Britam share returns in the prior and after period of merger announcement. From the graph, the share prices were generally increasing before the announcement. After the announcement, the trend continued to steadily increase above the mean. Therefore, the returns improved overall in performance after the acquisition. The 95% confidence interval in Table 4.2 did not include a zero thus further supporting that indeed there was a difference in the returns before and after the merger announcement. Therefore, for Britam the merger had an influence on the share prices.

**Figure 4. 7: Daily Britam abnormal returns before and after merger announcement**

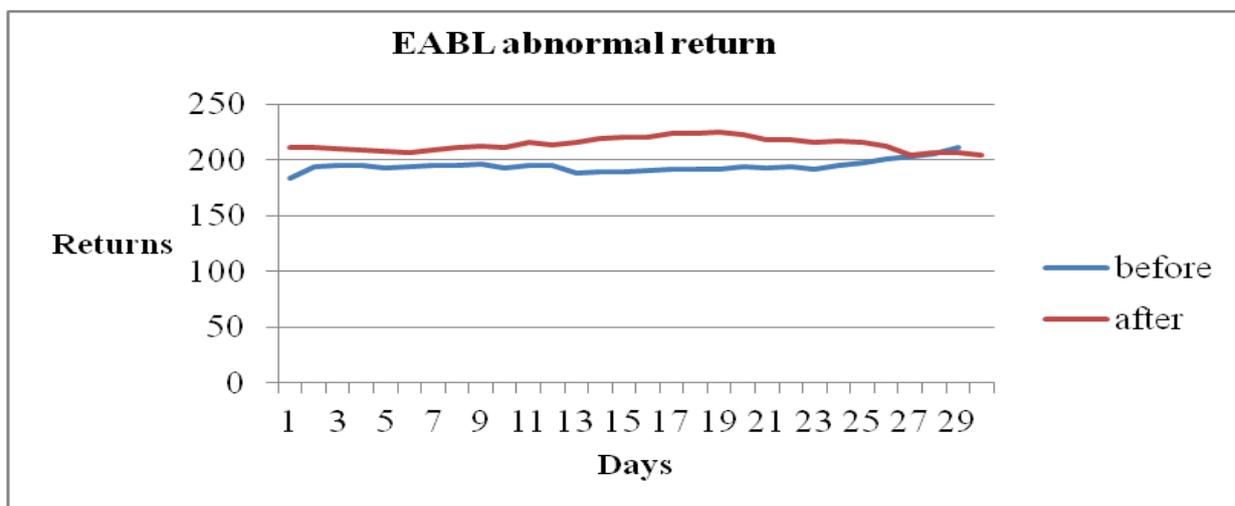


Source: Research Findings

**4.3.8 EABL**

The plotted graph of the returns of EABL in Figure 4.8 shows that the share prices before the merger were increasing but still at a rate below the mean. However, after the announcement the returns indeed increase above the mean of 204.16. It implied that the prices generally remained stable after the M&A news were made. This finding is in agreement with the 95% confidence interval in Table 4.2 of the difference in means which excluded zero showing that the merger announcement had an impact on the returns of the shares of EABL leading to abnormal returns.

**Figure 4. 8: Daily EABL abnormal returns before and after merger announcement**



Source: Research Findings

#### 4.4 Paired t-Test

Paired t-test results for the comparison of the share prices before (denoted with a 1) and the prices after news about mergers were made (denoted with a 2) in a span of 60 days. The two samples for each listed firm were of size 30 that is before and after merger news. The difference in returns deemed as abnormal returns was tested using the 5% significance level. This is illustrated in the table 4.2 below:

**Table 4. 2: Paired t-test results**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	CFC1 - CFC2	-1.92172	5.34085	.99177	-3.95327	.10983	-1.938	28	.063
Pair 2	NIC1 - NIC2	-.46655	2.92669	.54347	-1.57981	.64670	-.858	28	.398
Pair 3	KCB1 - KCB2	-.03783	1.42436	.26450	-.57963	.50397	-.143	28	.887
Pair 4	Scan1 - Scan 2	-2.90113	5.69942	1.05836	-5.06907	-.73318	-2.741	28	.011
Pair 5	Cent1 - Cent2	.07840	.21171	.03931	-.00213	.15893	1.994	28	.056
Pair 6	I&M1 - I&M2	1.37833	3.06150	.88378	-.56685	3.32352	1.560	11	.147
Pair 7	Britam1 - Britam2	-3.51082	1.21762	.22611	-3.97398	-3.04766	-15.527	28	.000
Pair 8	Eabl1 - Eabl2	-19.78816	9.83151	1.82567	-23.52787	-16.04846	-10.839	28	.000
Pair 9	Cg1 - Cg2	5.24316	1.80817	1.27857	-11.00261	21.48892	4.101	1	.152

**Source: Research Findings**

The results showed that the mean difference in the two sample returns of CFC shares was - 1.92172 with a standard deviation of 5.34085. The results also showed with 95% confidence that the difference in mean lied between -3.95327 and 0.10983. However, this interval includes zero thus we conclude that there was no difference in returns before and after merger announcement at CFC Stanbic bank in the studied sample.

For NIC Bank, the difference in the two sample means was - 0.46655 with a standard deviation of 2.92669. The 95% confidence interval for the difference in the mean was that the mean would be between -1.57981 and 0.64670. This interval however includes zero thus

there was no difference in the returns before and after announcement. Therefore, for NIC Bank the announcement had no significant statistical influence on the share prices.

The Kenya Commercial Bank had a mean difference of - 0.03783 with a standard deviation of 1.42436. The 95% confidence interval for the difference in the two mean was that the mean would be between - 0.57963 and 0.26450. Since the interval included zero, then there was no significant difference in the returns of shares of KCB even after the announcement of the merger.

The Scangroup's two samples showed a mean difference of - 2.90113 with a standard deviation of 5.69942. The 95% confidence interval for this difference in mean was between - 5.06907 and - 0.73318. Nonetheless, since this interval did not include a zero, the two samples of share returns before and after announcement were therefore statistically different and hence the announcement had an impact on the share performance.

Accordingly, a difference of 0.07840 in the means of the two sample means of Centum was noted. This difference in mean had a standard deviation of 0.21171 and a 95% confidence interval of between - 0.00213 and 0.15893. The interval included zero thus the two samples were not statistically different and hence there was no impact on the share prices after the merger.

For Britam, the difference in the two sample means was - 3.51082 with a standard deviation of 1.21762. The 95% confidence interval for the difference in the mean was that the mean would be between - 3.97398 and - 3.04766. This interval did not include a zero thus there was a difference in the returns before and after announcement. Therefore, for Britam the announcement had an influence on the share prices.

The I&M Bank two samples showed a mean difference of 1.37833 with a standard deviation of 3.06150. The 95% confidence interval for this difference in mean was between - 0.56685 and 3.32352. Nonetheless, since the interval included zero, the two samples of share returns before and after announcement were therefore not statistically different and thus the announcement had no impact on the share performance of I & M Bank.

For EABL, a mean difference of - 19.78816 in the two samples was recorded with a standard deviation of 9.83151. The lower limit for the 95% confidence interval for this difference in mean was -23.52787 whereas the upper limit for the 95% confidence interval was -16.04846. This confidence interval of the difference in means excluded zero thus the two samples were

statistically different. This implied that the announcement had an impact on the returns of the shares of EABL.

Lastly, for Car and General, the mean difference was 5.24316 which had a standard deviation of 1.80817. The lower limit for the 95% confidence interval for the difference in the two sample means was -11.00261 whereas the upper limit for the 95% confidence interval was 21.48892. This confidence interval of the difference in means included zero thus the two samples were not statistically different. This actually meant that the announcement had no impact on the returns of the shares of Car and General.

#### **4.5 Interpretation of the Findings**

The research findings showed that there were changes in stock prices immediately after mergers were formed. In some instances the share prices dropped after the mergers whereas in some cases the prices went up after successful takeovers took effect. In essence, abnormal returns were witnessed in some of the listed firms for instance Scan Group, EABL and Britam. Centum, I &M, KCB, Car and General, CFC and NIC did not exhibit any abnormal returns even after the mergers took place. These findings concur with previous studies done to study effects of mergers on share return performance. Ellert (1976) observed that stock holders of newly acquired firms received cumulative positive returns which are a clear indication that they actually earned abnormal returns after mergers. In some instances however, the returns after mergers were positive but not significant.

The research findings for this study were both sided. First, it was established that the returns of the nine sampled firms exhibited significant changes in returns within the 60-day study period. The results imply that the various mergers for the listed companies were indeed wealth creating projects to the shareholders of the combined entities.

These research findings concur with study of Mailanyi (2014) who investigated the effects of mergers and acquisitions on the financial performance of oil companies in Kenya using causal research design. The study found that a positive significant relationship existed between of mergers and acquisitions and subsequent financial performance. Gathecha (2014) also looked at the information content of mergers and acquisitions announcement for listed companies at the NSE and found that indeed these announcements positively affect shareholders wealth as evidenced by abnormal returns around the declaration date of mergers and acquisitions.

However, for some few companies the returns after merger announcements showed no improvement after the take-overs. In conclusion, successful mergers proved to positively influence the share returns to shareholders. This study observed a weak relationship between cumulative share returns before and after merger announcement. In essence, for a majority of the companies no significant changes in returns were realized. These findings concur with previous studies on the effects of mergers announcements on share returns. Constantine (2008) found that mergers and acquisitions` announcements did not have any positive significant relationship with returns implying that merger announcements are not significant in moving share prices. Popovici (2014) set out to analyze the impact of mergers on the performance of the bidder bank during 2000-2011 periods. The research findings revealed that mergers and acquisitions did not improve the market value of the shares of the bidder bank.

## **CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

The aim of the study was to determine the impact of mergers and acquisition announcement on share prices of companies listed at the NSE. The associated effect was measured by event study methodology. This chapter presents the discussions, summary of findings, conclusions and recommendations made thereon.

### **5.2 Summary**

The researcher had undertaken to determine the effect of merger and acquisition announcements on share prices of companies listed at the Nairobi Securities Exchange. The study compared the data sets of share returns of the companies that undertook consolidations before and after mergers. The intention was to determine if the two data sets were statistically different by checking the inclusion or exclusion of zero in the 95% confidence interval of the difference in means of the before and after mergers. The study also undertook to establish the short term behavior of share returns just before and after merger and acquisition announcements.

The associated effect of merger and acquisition announcement on share prices was measured by event study methodology. The study readily adopted secondary data obtained from the Nairobi Securities Exchange and Capital Markets Authority.

The research findings showed that there were changes in stock prices immediately after merger and acquisition announcement. In some instances the share prices dropped after the merger and acquisition announcements whereas in some cases the prices went up. For some companies however, no changes were noted since the plotted graphs showed no notable differences in the curves for the before and after periods. In essence, abnormal returns were witnessed in some of the listed firms for instance Scan Group, EABL and Britam. Centum, I &M, KCB, Car and General, CFC and NIC did not exhibit any abnormal returns even after the merger and acquisition announcements.

### **5.3 Conclusions**

The study concluded that merger and acquisition announcements had effects on share price valuations in the securities market. In some instances the share prices went up after merger and acquisition announcements. This therefore translated to returns on investments made by the acquiring firm's shareholders. However, for a majority of the companies the merger and acquisition announcements had no effect on the share returns of the listed companies. In essence, this meant that shareholders of the parent companies did not attain returns on investments in the short term. This does not imply that the mergers were not profitable ventures. The 30 day period is small in assessing the viability in terms of share returns of the newly acquired companies.

The study concluded that the merger and acquisition announcements had significant effects on total accumulated share returns for the various listed companies before and after the announcements. Therefore, they were indeed wealth creating projects for investors at the Nairobi Securities Exchange since they were able to positively influence share returns even in the short term.

In essence, the study concluded that merger and acquisition announcements resulted to build ups of shareholders wealth after they took effect. Nevertheless, the positive impact of the mergers on returns not occurring to a number of listed firms should not be mistakenly interpreted to mean that the mergers were not wealth creating projects in the long run. The study therefore vehemently concluded that firms will take some grace period before they can actually profit from consolidations.

### **5.3 Recommendations for Policy**

The research findings show that mergers should not be treated as a short-term predictor for capital gains in the short term for both by the combined entities. The study recommends that listed companies should carefully make their decisions before undertaking M&A. To the regulators, they ought to impose full disclosures by bidding firms on the rationale behind their intended takeovers.

The primary reason for M&A is to realise profits and competitiveness in the long run. This leads to the assertion that that merging companies make a big gamble to undergo mergers in an attempt to gain a new market share, improve on products offered and to continue operating as a going concern for the foreseeable future. On this basis, future mergers should be based

primarily on realizable future benefits and not immediate profits. Therefore, management of the various companies intending to merge should clearly evaluate post-merger synergies carefully without bias to short term benefits.

The study recommends that regulators should actually deploy tools of synergy assessment that are non-market based in a bid to assess the performance of bidding companies and the acquiring companies. This may help to establish possible reasonable scepticisms before and after merger event. Proper mechanisms should be made and employed by companies and the securities exchange so as to reduce insider trading activities to increase the integrity in securities trading.

### **5.5 Limitations of the Study**

It is only a handful of companies that actually merged in the study period thus leading to an insufficient data set. The study period was limited to only 61 days, which are 30 days before the merger and 30 days after the merger. This study period was too short and this study duration may not be a sufficient representation of the merger effects on the listed companies.

The researcher used secondary data in analyzing the effects of mergers on share performance of listed firms. It is vital to note that these data had been primarily collected for other purposes and as such the research findings are entirely dependent on the accuracy and validity of the secondary data gathered.

The researcher used share returns and cumulative share returns to measure the changes in profitability before and after merger announcement. The researcher did not assess the effects of mergers on non-financial performance indicators for instance increased customer and market share. Additionally, other measures of financial performance for instance profitability ratios were not addressed by this research.

### **5.6 Suggestions for Further Studies**

Future assessment on the effects of insider trading on the performance and speculations in the securities should be studied. This would help to understand the reactions of potential share buyers when there are merger speculations circulating. The stock market is all about speculations whereby insider trading significantly influences trading through the provision of vital inside knowledge.

Future studies can be conducted using other measures of firms profitability for instance dividends yield, profits before and after tax, return on assets and return on equity could be used by future researchers. Additionally, non financial performance indicators for instance larger customer base, wider market presence, acquisition of quality staff and acquisition of winning corporate culture can be studied after consolidation agreements.

Further studies ought to be done so as to help understand the factors that come into play when managers and shareholders are contemplating consolidation. These future studies would also reveal reasons behind the non achievement of economies of scale after consolidations. Lastly, the effects of managerial and corporate culture changes on financial performance after mergers ought to be conducted.

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### **Appendix I: List of Mergers and Acquisitions between 2007 and 2014**

<b>No.</b>	<b>Merged / Acquired Firms</b>		<b>Year of M&amp;A</b>
1	CFC Bank Ltd.	Stanbic Bank Ltd.	2009
2	Car & General	Premier Power Products	2009
3	NIC Bank	Savings & Finance Bank (T) Ltd	2009
4	Savings and Loan (K) Limited	Kenya Commercial Bank Limited	2010
5	Scan group	Cavendish Square Holdings BV	2013
6	Centum Investment	Genesis Kenya Ltd.	2013
7	City Trust	I & M Bank	2014
8	British American Investments	Real Insurance Kenya Ltd	2014
9	East African Breweries	Serengeti Breweries	2014

**Source: Capital Markets Authority**

## Appendix II: Share Returns before M&A Announcements

CFC1	NIC1	KCB1	CENT1	BRIT1	EABL1
107.44	48.28	20.51	4.72	10.13	184.02
108.53	47.92	20.48	4.75	10.17	193.61
109.66	47.34	20.55	4.67	10.36	194.99
110.14	44.96	20.53	4.82	10.71	195.12
110.8	44.43	20.5	4.88	10.81	193.2
108.34	44.21	20.64	4.9	10.8	194.49
114.33	44.96	20.6	4.84	10.55	195.07
116.91	45.09	20.61	4.87	10.22	195
125.13	45.03	20.52	4.92	10.33	195.95
126.15	44.03	20.46	4.93	10.29	193.11
121.75	42.91	20.29	4.89	10.25	194.86
120.36	43.45	20.05	4.97	10.34	195.71
116.41	43.46	20.22	4.94	10.81	188
112.47	43.55	20.16	4.89	11.03	189.13
113.1	42.72	20.39	4.91	11.06	189.62
113.55	42.32	20.49	4.87	11.22	190.23
115.44	41.02	20.65	4.74	11.97	191.49
116.83	40.05	21.06	4.72	12.87	191.4
116.75	40.12	21.31	4.66	13.2	191.5
114.67	40.25	21.96	4.63	14.69	193.66
114.18	40.3	22.98	4.57	15.41	192.61
117.18	40.75	23.12	4.57	16.41	194.14
116.6	40.98	22.45	4.59	15.84	191.2
118	41.6	22.68	4.58	14.28	195.34
115.01	41.83	22.79	4.47	14.51	197.56
115.83	41.44	22.6	4.49	15.43	201.24
114.16	42.37	22.53	4.5	15.05	203.69
109.76	42.62	22.32	4.64	15.3	205.35
115.87	42.77		4.56	15.02	211

Source: Nairobi Securities Exchange

### Appendix III: Share Returns after M&A Announcements

CFC2	NIC2	KCB2	CENT2	BRIT2	Ebl2
118.06	43.69	21.95	4.63	15.04	211.61
118.26	41.74	22.01	4.64	14.96	210.82
121.39	44.23	22	4.59	14.61	210.46
120.2	44.98	22.07	4.57	14.57	209.12
119.12	44.67	22.01	4.59	14.48	208.19
118.96	47.08	22.07	4.57	14.46	206.64
119.2	47.14	22.02	4.57	14.49	208.56
118.36	47.41	21.83	4.58	14.48	211.2
117.95	47.46	21.55	4.55	14.59	211.91
117.47	47.31	21.56	4.56	14.69	211.44
117	46.85	21.03	4.6	14.84	215.44
117.79	46.94	20.58	4.59	15.18	213.74
117.13	45.51	20.52	4.65	15.34	216.32
116.47	45.36	20.88	4.69	15.27	219.18
115.1	44.6	21.08	4.7	15.2	220.79
118.09	44.15	21.17	4.73	15.42	219.92
116.79	44.09	20.96	4.78	15.85	223.75
117.11	43.2	20.83	4.79	16.12	224.1
117.87	43.24	20.48	4.76	16.21	225.32
115.83	42.73	20.36	4.71	16.35	222.23
114.62	41.4	20.17	4.73	16.49	217.9
116.07	41.12	20.45	4.78	16.46	218.02
116.3	41.9	20.48	4.78	16.74	216.32
115.44	41.72	20.5	4.77	17.07	216.75
114.87	40.63	20.58	4.74	17.84	215.93
114.2	40.61	20.95	4.66	18.64	212.6
112.78	38.99	21.7	4.64	18.21	204.43
115.32	38.22	22.61	4.6	18.32	206.68
113.33	37.32	22.31	4.65	18.93	206.79

Source: Nairobi Securities Exchange