HE EFFECT OF MERGERS AND ACQUISITIONS ANNOUNCEMENT ON SHARE PRICES – EVIDENCE ON THE NAIROBI STOCK EXCHANGE

BY:

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DECLARATION

I declare that this project is my original work and has not been presented for a degree in any other university.

Signed:..... Date: 17/11/2008

Barasa M.C

Candidate

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

Signed:..... Date: 17/11/2008

Joseph L.Barasa

Supervisor

DEDICATION

To my father

Mulondanome Maina, though gone, let your fruits live for ever. You taught me how to work hard in my studies.

To Fidelis Mukite,

My girlfriend, Maina, Mulondanome you shall regenerate.

You bore the brunt of the pressure of the MBA programme.

ACKNOWLEDGEMENT

I would not have completed this project without the support of many individuals who helped me in one way or another.

My Supervisor Joseph Lumumba Barasa for his guidance throughout the process and his patience and encouragement when despair seemed to set in. Thank you so much JL.

I wish also to thank the many individuals whom i shared with various MBA classes between 2004 and 2006 who kept encouraging me to complete this project.

To my colleagues at Diamond Trust Bank and Housing Finance for all the support and encouragement during the period I labored through the programme. God bless you.

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LIST OF ABBREVIATIONS AND SYMBOLS

BBK- Barclays Bank of Kenya Ltd
CAR- Cumulative Abnormal Returns
CEO – Chief Executive Officer
DTB- Diamond Trust Bank of Kenya Ltd
EABL- East African Breweries Ltd
KCB- Kenya Commercial Bank Ltd
Kenol- Kenya Oil Company Ltd
M & A- Mergers and acquisitions
NBK- National Bank of Kenya Ltd
NMG- Nation Media Group Ltd
NSE- Nairobi Stock Exchange
SCB – Standard Chartered Bank Ltd
$\bar{X}$ - Average/Mean
δ - Standard Deviation.

ABSTRACT

The main objective of this study was to evaluate market efficiency in relation to information content of merger announcement by companies quoted on the NSE.

The study covered 11 companies quoted on the NSE from 1997 - 2006, a period of 10 years. The methodology used is event study. The event in question was merger& acquisition announcements made by the firms during the study period. The market model approach was used in the event study. For testing whether there was significant variation in stock returns after the merger announcement, cumulative abnormal returns(CAR)graphs were constructed and t-tests used to establish whether the CAR were significant.

The findings of the study indicate that majority of the companies' stock returns did not experience a significant reaction to merger announcement which is not typical of stock markets in developing countries.

The main conclusion drawn from the study was that the reaction to the merger announcements was not significant .Some reactions to the merger announcements were positive while some were negative. Thus given that the market is efficient, investors can not expect significant variations in the stock prices/returns after merger announcement by firms.

CHAPTER 1

1.0 Background

1.1.Corporate Restructuring

Business restructuring has become an integral part of the new economic paradigm. As controls and restrictions give way to competition and free trade, rationalization and reorganization are a necessary concomitant. Rationale for business combinations, acquisitions, mergers and spin offs, divestiture and demergers exist without any contradiction (Ramanugam, 2000).

Restructuring is the corporate management term for the act of partially dismantling or otherwise reorganizing a company for the purpose of making it more efficient and therefore more profitable (Copeland and Weston, 1988)

Recent increase in M&A activities (as restructuring activities are commonly called) are compared with the metaphor of the end-game theory where managers act as if they are in the stage of closing the game of chess .They feel that unless they acquire quickly ,they may become prey to others. One can notice that many industries in many countries have consolidated into two or three major players with a number of smaller niche players (Martin, 1997).

M&A have consequences for the structure, behavior and performance of industries where it takes place. The major effect on structure is the degree of concentration and barriers to entry. Mergers increase the degree of concentration due to changes in the number and size distribution of firms. In the case 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 cases where economies of scale are realized through mergers, this will act as entry barriers to others. Mergers may also strengthen product differentiation due to intangible assets such as patents. Product

differentiation also leads to change in behavior of the merger. The larger firm with its resources can resort to non price forms of competition. Sometimes it may resort to predatory pricing against competitors (Shiva, 1998).

Copeland and Weston (1988) classify corporate restructuring into the following categories;

Expansion (growth of the firm) the objective of this form of restructuring is to grow the firm to compete for the best managerial talent by offering rapid promotions and broadened responsibilities. Under this classification we have mergers and acquisitions, tender offers and joint ventures. Merger means any transaction that forms one economic unit from two or more previous ones. The main types of mergers are; horizontal mergers – involving the combination of two firms operating in the same kind of business activity, vertical mergers that involve the combination of firms engaged at different stages of production operation and conglomerate mergers that involve the combination of firms engaged in unrelated types of business activities. Tender offers refer to an arrangement where one party takes the initiative in making a monetary offer directly to the shareholders of the target firm, with or without the approval of the Board of directors. Thus the acquiring firm (the bidder) makes an offer to the stockholders of the firm it is seeking to control (target) to submit or tender their shares in exchange for a specified price, expressed in cash or securities. Joint Ventures on the other hand involve the intersection of only a small fraction of the activities of the companies involved and for a limited duration of 10 to 15 years or less. They may form a separate entity in which each of the parties makes cash and other forms of investment.

Sell offs- several distinct types of sell offs should be distinguished; Spin offs involves the creation of a separate new legal entity(s). Its shares are distributed on a pro rata basis to existing shareholders of the parent company. Thus existing shareholders have the same proportion of ownership in the new entity as in the original firm. There is however a separation of control and overtime the new entity as a separate decision making unit may

develop policies and strategies different from those of the original firm. No cash is received by the original parent. Split off is an arrangement where a portion of the existing shareholders receive stock in a subsidiary in exchange for parent company stocks. Split up is where entire firm is broken up into a series of spin offs, so that the parent no longer exists and only the new offspring survive. The last form of sale off is the divestiture of a portion of the firm to an outside third party. Cash or equivalent consideration is received by the divesting firm. Variation of a divestiture is equity carve out that involves the sale of a portion of the firm via an equity offering to outsiders. That is new shares are sold to outsiders, which give them ownership of a portion of the previously existing firm. A new entity need not be the same as the equity holder in the original seller. A new control group is immediately created.

Corporate Control- under this sub classification we have; Premium buybacks that involve the repurchase of a substantial stockholder ownership interest at a premium above the market price (green mail),Standstill agreements are voluntary contracts in which the stock holder who is bought out agrees not to make further investment in the company in the future, when made without buyback , the substantial stockholder simply agrees not to increase his ownership, which presumably would put that individual in an effective control position and anti takeover amendments which are changes in the corporate bylaws to make an acquisition of the company more difficulty or more expensive; super majority voting provisions like 80% stakeholder to approve a merger, staggered terms for directors, which can delay change of control for a number of years, golden parachutes which award large termination payments to existing management if control of the firm is changed and management terminated and poison pill provisions which give present stockholders the right to buy at a substantial discount the shares of a successor company formed by a stock takeover. Proxy contest involve an outside group seeking to obtain representation of the firms BOD. The outsiders referred to as "dissidents" or "insurgents" who seek to reduce the control position of the "incumbents" or existing Board of directors.

Changes in ownership structure – Activities under this category will include; Exchange offers that involves the exchange of debt or preferred stock for common stock or conversely of common stock for the more senior claims; Share repurchase where the company buys back some fraction of its outstanding shares of common stock in some cases via "self tender offers"; "Going private" transaction whereby the equity interest in a previously public corporation is purchased by a small group of investors. These transactions typically include members of the incumbent management group who obtain a substantial proportion of the equity ownership of the newly private company.

One of the most common motives for mergers is growth. There are two broadways a firm can grow. Internal growth which can be slow and ineffective, if the firm is seeking to take advantage of a window of opportunity in which it has a short term advantage over competitors. The faster alternative is to merge and acquire the necessary resources to achieve competitive goals. Growth is essential for sustaining the viability, dynamism and value enhancing capability of a company. Baker (1999) looks at the similarities within across industries regarding merger motives. His empirical material consists of primary and secondary data collected from two mergers in three industries respectively; Manufacturing, Banking and IT. Their analyses make use of three different perspectives, the reason for this being to create understanding and furthermore illuminate the complexity of the problem. The results clearly demonstrate similarities. Using a multi perspective approach they have come up with a number of motives that include;

Enhanced profitability; when two or more companies' combine they result in rise in profit because they realize cost reduction and efficient utilization of resources.

Synergy – the combination of two firms will yield a more valuable entity than the value of the sum of the two firms if they were to stay independent;

$$V_{AB} > V_A + V_B$$

Although many merger partners cite synergy as the motive for their transaction, synergistic gains are often hard to realize. There are two types of synergy; that which is derived from cost economies and that which comes from revenue enhancements. Cost economies are easier of the two to achieve because they often involve eliminating duplicate cost duplicate cost factors such as redundant personnel and overhead. When synergies are realized the merged company generally has lower per unit costs.

Diversification of risk where companies seek to lower their risk and exposure to certain volatile industry segments by adding other sectors to their corporate umbrella. However this is the exception rather than the norm.

Reduction in tax liability- Under the Kenyan tax law, a company is allowed to carry forward its accumulated loss to offset against its future earnings for calculating its tax liability. A loss making company may not be in a position to earn sufficient profits in the future to take advantage of the carry forward provision. Thus by combining with a profit making company, the combined company can utilize the carry forward losses and save on tax.

Agency Problems- Jensen and Meckling (1976) in their seminal paper formulated the implications of agency problems. Agency problem arises when managers own only a fraction of the ownership shares of the firm. This partial ownership may cause managers to work less vigorously than otherwise and/or consume more perquisites (luxurious offices, company car, and club membership) because the majority owners bear most of the cost. The agency problem theory of mergers has two aspects; on the one hand the threat of takeover may mitigate the agency problem by substituting for the need for individual shareholders to monitor managers. The agency theory extends the previous work by Manne (1965). Manne emphasized that the market for corporate control and viewed mergers as a threat of takeover if a firm's management lagged in performance either because of inefficiency or because of agency problems. On the other hand, mergers may be a manifestation of agency problem rather a solution. Mueller (1969) hypothesizes

that managers are motivated to increase the size of the firm further. He assumes that the compensation to managers is a function of size of the firm and he argues there fore that managers will adopt a lower investment hurdle rate thereby exacerbating the agency problem.

Information/ signaling hypothesis-This refers to the revaluation of ownership shares of firms owing to new information that is generated during merger negotiations, tender offer process or joint venture planning. Alternative forms of signaling as discussed by Bradley, Desai and Kim (1983) include; "kick in the pants" where management is stimulated to implementation of a high valued operating strategy and "sitting on a gold mine" where the negotiations or tendering activity may involve the dissemination of new information or lead the market to judge that bidders have superior information. The market may revalue the previously "undervalued" shares.

1.2.Efficient Market Hypothesis

The efficient market hypothesis is concerned with the behaviour of prices in asset markets. The classic definition of an efficient market is due to Fama(1970), and is a market where prices fully reflect the information available, such that unusual profit cannot be earned through exploiting this information(information efficiency); puts available funds to their best possible uses (allocative efficiency); and undertakes transactions at the least unavoidable cost (operational efficiency). The market is efficient if the 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. Fama (1970) identified three forms of efficiency being; weak form market efficiency, semi strong form efficiency and strong form market efficiency each of which has different implications of how markets work.

The weak form efficient market theory stipulates that current prices already reflect past price and volume information. The information contained in past sequence of prices of a

security is fully reflected in the current price of that security. It is named weak form because the security prices are most publicly and easily accessible pieces of information.

The semi strong form efficient market theory states that all past and present information is similarly already incorporated in to asset prices but also data reported in a company's financial statements, co-announcements of dividend payouts and key management changes and economic factors.
The strong form efficient market theory stipulates that private information (insider information) too is quickly incorporated into market prices and therefore can not be used to reap abnormal trading profits. Thus all information whether public or private, is fully reflected in a security's current market price. The rationale behind it is that the market anticipates and in an unbiased manner, future developments and therefore information has been incorporated and evaluated in to the market price in a much more objective and informative way than insiders.

This theory has been met with a lot of opposition especially from technical analysts, Goodman (1979). Their argument against the efficient market theory is that many investors base their expectation on past prices, past earnings, track records and other indicators. Since stock prices are largely dependent on buyer expectations many believe. It only makes sense to believe that past prices do not influence future prices.

Grossman and Stiglitz (1980) identified a major theoretical problem with the hypothesis and termed it the paradox of efficient markets. They argue that stock returns are determined by fundamentals like national price levels, interest rates, and public debt levels and that information about these variables is costly for traders to gather and analyze. The traders must be able to make some excess returns by trading on this analysis or they will not do it. But if markets were perfectly efficient the traders would not be able to make excess returns on any available information. Therefore markets cannot be perfectly efficient in the sense of exchange rates always being exactly where the

fundamental can recover the costs of fundamental research by profiting from having marginally better information than the rest of the market where prices should be.
In this case equity prices remains close enough to its fundamental value to prevent less informed people from profiting from the difference. Partly because of these reasons Campbell, Lo and Mackinlay (1997) suggest that the debate about perfect efficiency is pointless and that it is more sensible to evaluate the degree of inefficiency than to test absolute efficiency.

Despite strong evidence that the stock market is highly efficient, there have been scores of studies that have documented long-term historical anomalies in the stock market that seem to contradict the efficient market hypothesis (Fields, 1931; Banz, 1981; Harris, 1986; Blume, Early and O'Hara, 1994; Conrad, Hamed and Niden 1994; Haugen and Jorion, 1996; Hensel and Ziemba, 1996; Reinganum,1997 among others). While the existence of these anomalies is well accepted, the question of whether investors can exploit them to earn superior returns in the future is subject to debate. Investors evaluating anomalies should keep in mind that although they have existed historically, there is no guarantee they will persist in the future. If they do persist, transactions and hidden costs may prevent out performance in the future. Investors should also consider tax effects in their taxable portfolios when evaluating stock strategies.

Studies by Firth (1980) in the United Kingdom have compared the share prices existing after takeover announcement with the bid offer. 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 e.g seasonal tendencies and divergent returns to assets with various characteristics for instance factor analysis and studies of returns to different types of investment strategies suggest that some types of stocks consistently outperform the market.

1.3. Statement of the problem

Corporate restructuring activity has been reported in many studies (Kelly, 1967; Hogarty,1979; Halpern,1973; Mandelker,1974; Ellert,1975,1976; Dodd and Ruback, 1977; Firth,1979 and Schipper and Thompson;1983 , Lichtenberg and Siegel,1990; Akhavein et all ,1997; Calomiris and Karceski,1998; Pilloff and Santomero,1998; Houston, James, and Ryngaert ,2001 and Cornett et al. ,2003 among many others) The results have been varied depending on the corporate restructuring activity studied. Some studies have concluded that mergers had little or no impact on the acquiring firm while others have concluded that mergers have a favorable effect on the market value of merging firms: the acquired firms shareholders earn large positive abnormal returns from the merger and the acquiring firms stock holders are affected little if at all (Mandelker, 1974, Langteig 1978, and Dodd, 1980). Perhaps the most interesting finding was by Hogarty (1970) who concluded that mergers resulted in negative synergy. 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 firms. Evidence regarding the directions and the magnitude of the announcement effect of corporate restructuring action is mixed and hence the call for more research.

The corporate restructuring market in Kenya can not be compared with that in the developed world as the market is still developing. However with recent instances of M & A activity in the country, the need for research in this area can not be overemphasized. Korir (2006) studied the effect of mergers on financial performance of merged firms breaking the ground in local research. No study has been carried the effect of the merger announcement on share prices came to the attention of this research. This study seeks to find out whether M & A announcement impact on share prices of stocks quoted on the NSE.

1.4.HYPOTHESIS

The following hypotheses have been set which this study will either reject or fail to reject:

H_O : μ=0: The average abnormal returns surrounding announcement date of a corporate restructuring action is not significant.

H_A : μ#0: The average abnormal returns surrounding announcement date of corporate restructuring action is significant.

1.5.Objective of the study

The objective of the this study is to explore the following;

- To determine whether stock prices adjust to merger announcement.

1.6.Importance of the study

Effect of M&A announcement on share prices are issues that have received wide attention in the finance 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 the 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 stocks quoted on the NSE, the study intends to benefit the following key stakeholders in the following ways;

Investment advisors: Investment advisors have the role of providing 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.

Academia: Add to the body of knowledge in the areas of market efficiency and corporate restructuring. My study will go along way in open more opportunities for further research in this area.

Traders: 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 return.

The NSE and Other regulators: Help in coming up with policy issues on that will help stabilizing the market during corporate restructuring Phases by listed companies.

Fund Managers: The study will enlighten the fund managers on the opportunities to maximize returns during corporate restructuring as they build diversified portfolios to reduce risk.

CHAPTER 2

2.0 Literature review

2.1.Corporate Restructuring

Restructuring is the corporate management term for the act of partially dismantling or otherwise reorganizing a company for the purpose of making it more efficient and therefore more profitable. It generally involves selling off portions of the company and making severe staff reductions. Restructuring is often done as part of a bankruptcy or of a takeover by another firm, particularly a leveraged buyout by a private equity firm. It may also be done by a new CEO hired specifically to make the difficult and controversial decisions required to save or reposition the company.

2.1.1. Nature of mergers and acquisitions.

Copeland and Weston (1988) classify corporate restructuring into the following categories, expansions, sell offs, corporate control and change in ownership.

A merger can be defined as any transaction that forms one economic unit from two or more previous ones. Takeovers and related activities in the 1980's are broader in scope and raise more fundamental issues than previous merger movements. Thus the traditional subject of mergers and acquisitions (M&A) has been expanded to include takeovers and related issues of corporate restructuring, corporate control and changes in ownership structure of firms. Weston (1992).

Many mergers have little or no negative impact on competition some may be pro-competitive, for instance by enhancing production efficiencies resulting from economies of scale or scope. Mergers may also create new synergies, lead to innovation by combining talents of different firms and provide additional resources to develop new products and services as found out in research by Chakrabarti and Burton (1983).

Concerns about mergers, acquisitions and other corporate combinations are generally based on the same concerns about anti- competitive behaviour. The main concern is that a larger merged firm may increase its market power. Baysinger and Hoskisson (1989). To the extent that a merger becomes more dominant in a market, there is greater potential to abuse the accumulation and exercise of market power to the detriment of competitors and consumers. According to Pfeiffer (1972) the basic rationale for merger control is that it is better to prevent firms from gaining excessive market power than to attempt to regulate abuses of their market power once such power exists. In practice merger reviews and exercises of related powers by competition authorities are usually based on an evaluation of the impact of specific merger on competition in the related markets.

2.1.2. Forms of Corporate restructuring.

Weston et all (2003) found that businesses have used a wide range of activities in seeking to exploit potential opportunities. The major objective of mergers, tender offers and joint ventures is to achieve expansion and growth. A merger is any transaction that forms one economic unit from two or more previous separate business units. Tender offers is a method of a making a takeover via direct offer to target firm shareholders to buy their shares , while a joint venture is a combination of subsets of assets contributed by two or more business entities for a specific purpose and a limited duration . Each of the venture partners continues to exist as a separate firm and the joint venture represents a new business enterprise.

Sell off is a general term for divestiture of part or all of a firm by any one of a number of means such as by an outright sale, liquidation, spin offs and so on .A Spin off is a transaction in which a company distributes on a prorata basis all the shares it owns in a subsidiary to its own shareholders. This creates a new public company with (initially) the same proportional equity ownership as the parent company. Divestiture is the sell of a segment of a company (assets, product line and/or subsidiary) to a third party for cash and/or securities. Equity carve outs refers to an arrangement whereby a parent firm offers

some of a subsidiary's common stock to the general public, to bring in a cash infusion to the parent without loss of control. Split offs is an arrangement where a portion of the existing shareholders receive stock in a subsidiary in exchange for parent company stocks while a split up is where the entire firm is broken up into a series of spin offs, so that the parent no longer exists and only the new offspring survive.

Under changes in ownership structure we have exchange offers, share repurchase and going private transactions. In exchange offers the firm exchanges debt or preferred stock for common stock or conversely of common stock for the more senior claims. Exchanging debt for common stock increases leverage, exchanging common stock for debt decreases leverage. Share Repurchase involves the corporation buys back some fraction of its outstanding shares of common stock in some cases via "self tender offers". The percentage of shares purchased may be small or substantial. If the latter the effect may be to change the control structure in the firm. In "Going private" transactions the entire equity interest in a previously public corporation is purchased by a small group of investors. These transactions typically include members of the incumbent management group who obtain a substantial proportion of the equity ownership of the newly private company. Usually a small group of outside investors provide funds and typically secures representation of the private company's Board of directors. These outsider investors also arrange other financing from third party investors. When financing from third parties involve substantial borrowing by the private company such transactions are referred to as leveraged buyouts.

Corporate Control is the other form of corporate restructuring actions and can take the form of Premium buybacks where there is the repurchase of a substantial stockholder ownership interest at a premium above the market price (green mail),Standstill agreements which are voluntary contracts in which the stock holder who is bought out agrees not to make further investment in the company in the future, when made without buyback , the substantial stockholder simply agrees not to increase his ownership, which presumably would put that individual in an effective control position,Anti takeover

amendments which are changes in the corporate bylaws to make an acquisition of the company more difficulty or more expensive; Super majority voting provisions like 80% stakeholder to approve a merger, Staggered terms for directors, which can delay change of control for a number of years, Golden parachutes which award large termination payments to existing management if control of the firm is changed and management terminated and Poison pill provisions which give present stockholders the right to buy at a substantial discount the shares of a successor company formed by a stock takeover. Finally, Proxy contest where an outside group seeks to obtain representation of the firms Board of Directors. The outsiders referred to as "dissidents" or "insurgents" who seek to reduce the control position of the "incumbents" or existing Board of directors.

It is clear from the above list that the strategies include expansion, contraction and efforts to improve efficiency of operations. Joint ventures represent a flexible method of exploring new areas with partners whose capabilities are complimentary. Joint ventures are particularly useful when one firm sells a segment to another. The joint venture can be used to have the seller transmit the knowledge about the operation and the buyer to learn more about what is being acquired. With regard to spin offs and split ups a firm may improve motivation and performance by creating separate operations when an activity does not fall into an effective organization structure of the parent.

2.1.3. Types of mergers

Horizontal mergers -This takes place between firms that are actually or potential competitors occupying similar positions in the chain of production. Merger reviews typically focus on horizontal mergers since by definition they reduce the number of competitors and the relevant market. Also concerns are mergers between a firm which is active in a particular market and another which is a potential competitor. In a horizontal merger the acquisition of a competitor could increase market concentration and increase the likelihood of collusion. The elimination of head to head competition between two leading firms may result in unilateral anti competitive effects.

The recent acquisition of ABSA (a big Bank in SA) by Barclays Plc. In many areas of SA the merger will reduce the number of competitors leaving Barclays as the only major Bank in the area. Owino (2005).

Vertical Mergers-This takes place between firms at different levels in the chain of production such as between manufacturers and retailers. Vertical mergers can also be of concern. Vertical mergers involve firms in a buyer – seller relationship. A manufacturer merging with a supplier of component products. A vertical merger can harm competition by making it difficult for competitors to gain access to an important component product to an important channel of distribution. A situation often termed "vertical foreclosure" or "bottleneck" problem.

An example of a vertical merger is the merger of Time Warner Inc. producers of HBO and other video programming and Turner Corporation, Producers of CNN, TBS and other programming. The USA Federal Trade Commission (FTC) was concerned that Time Warner could refuse to sell popular video programming to competitors of Cable TV companies owned or often to sell the programming at discriminatory rates. That would allow Time Warner – Turner affiliates could hurt competition in the production of video programming by refusing to carry programming produced by competitors of both Time Warner Turner. The FTC allowed the merger, but prohibited discriminatory access terms at both levels to prevent anti-competitive affects. Mantel (2002).

Conglomerate Mergers-According to Meshki (1999) conglomerate mergers between firms that are neither competitors nor potential or actual customers of each other which vary in types and attributes and they may be pure or mixed in form where by pure mergers have no economic relationships between the acquiring firm and the acquired firm. Mixed mergers have aspects of both pure conglomerate mergers and of horizontal mergers. This combination of firms engaged in unrelated lines of business activity. E.g different businesses like manufacturing of cement, fertilizers products, electronic products and advertising agencies.

2.1.4. Motive of Mergers

One of the most common motives for mergers is growth. There are two broadways a firm can grow. Internal growth which can be slow and ineffective, if the firm is seeking to take advantage of a window of opportunity in which it has a short term advantage over competitors. The faster alternative is to merge and acquire the necessary resources to achieve competitive goals. Growth is essential for sustaining the viability, dynamism and value enhancing capability of a company. During the 20^{th} century, M& A have occurred in waves where times of low activity frequently have turned into periods of high activities, what are the motives that have made M&A such a widely used strategy.

Baker(1999) looks at the similarities within and across industries regarding merger motives. His empirical material consists of primary and secondary data collected from two mergers in three industries respectively; manufacturing, Banking and IT. Their analyses make use of three different perspectives, the reason for this being to create understanding and furthermore illuminate the complexity of the problem. The results clearly demonstrate similarities. Using a multi perspective approach they have come up with a number of motives that include;

Enhanced profitability; when two or more companies' combine they result in rise in profit because they realize cost reduction and efficient utilization of resources.

Synergy – the combination of two firms will yield a more valuable entity than the value of the sum of the two firms if they were to stay independent;

$$V_{AB} > V_A + V_B$$

Although many merger partners cite synergy as the motive for their transaction, synergistic gains are often hard to realize. There are two types of synergy; that which is derived from cost economies and that which comes from revenue enhancements. Cost economies are easier of the two to achieve because they often involve eliminating

duplicate cost duplicate cost factors such as redundant personnel and overhead. When synergies are realized the merged company generally has lower per unit costs.

Diversification of risk- Companies seek to lower their risk and exposure to certain volatile industry segments by adding other sectors to their corporate umbrella. However this is the exception rather than the norm.

Reduction in Tax liability- Under the Kenyan tax law, a company is allowed to carry forward its accumulated loss to offset against its future earnings for calculating its tax liability. A loss making company may not be in a position to earn sufficient profits in the future to take advantage of the carry forward provision. Thus by combining with a profit making company the combined company can utilize the carry forward losses and save on tax.

Agency Problems- Jensen and Meckling (1976) in their seminal paper formulated the implications of agency problems. Agency problem arises when managers own only a fraction of the ownership shares of the firm. This partial ownership may cause manager to work less vigorously than otherwise and/or consume more perquisites (luxurious offices, company car, and membership) because the majority owners bear most of the cost. Furthermore, the argument goes that in large corporations with widely dispersed ownership there is not sufficient incentive for individual owners to expend the substantial resources required to monitor the behavior of managers. A number of compensation arrangements and the market for managers may mitigate the agency costs (Fama, 1980).

The agency problem theory of mergers has two aspects; on the one hand the threat of takeover may mitigate the agency problem by substituting for the need for individual shareholders to monitor managers. The agency theory extends the previous work by Manne (1965). Manne emphasized that the market for corporate control and viewed mergers as a threat of takeover if a firm's management lagged in performance either because of inefficiency or because of agency problems.

Information/ signaling hypothesis-This refers to the revaluation of ownership shares of firms owing to new information that is generated during merger negotiations, tender offer process or joint venture planning. Alternative forms of signaling as discussed by Bradley, Desai and Kim (1983) include; "kick in the pants" where management is stimulated to implementation of a high valued operating strategy and "Sitting on a gold mine" where the negotiations or tendering activity may involve the dissemination of new information or lead the market to judge that bidders have superior information. The market may revalue the previously "undervalued" shares.

Hubris Hypothesis- Roll(1986) argues that takeovers are motivated by bidders who get caught up in believing they can do no wrong and that their foresight is perfect . Hubris refers to an animal like spirit of arrogant pride and self-confidence. Such individuals are said not to have rational behavior necessary to refrain from bidding. They get caught up in the "heat of the hunt" where the prey must be had regardless of the cost. As a result, bidders pay too much for their targets. The hubris hypothesis suggests that the excess premium paid to the target company benefits those stakeholders but that stockholders of the acquiring company suffer a diminution in wealth.

2.1.5. Effects on Mergers and Acquisitions

Returns to shareholders- Some acquirers have developed processes that facilitate the achievement of highly impressive track records. For example, Anslinger and Copeland (1996) found that samples of both corporate and financial buyers were able to achieve superior performance. 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 a single acquisition event. If the time period over which the returns to the shareholders of acquiring firms 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 thirds of the cases, value was increased. Bruner (2005).

Effect to Bondholders- Billett., King and Mauer (2002), examine the wealth effects of mergers and acquisitions on target and acquiring firm bondholders for a sample of 940 offers involving 3,901 bonds during the period 1979-1997. They found strong evidence of a coinsurance effect for target bondholders, and traced target bondholder gains to a wealth-redistribution from target stockholders. During the announcement period, average acquirer excess bond returns are significantly negative while average target excess bond returns are significantly positive. For target bonds, the average excess return to below investment grade bonds is over 4%. Target bondholder returns are significantly larger when the merger reduces asset risk, when the target bond rating is below the acquirer bond rating, when the pre-merger leverage ratio of the target is greater than the pre-merger leverage ratio of the acquirer, and when the average target bond maturity is shorter than the average acquirer bond maturity. In addition, both target and acquirer excess bond returns are significantly smaller if the offer is hostile and are significantly larger in the 1990s, an era marked by increased bondholder event risk protection. Estimation of simultaneous equations models reveals that target stockholder dollar gains are significantly decreasing in target bondholder dollar gains, a result consistent with the view that target bondholder gains in takeovers come at the expense of target stockholders.

Competition effect- Most mergers actually benefit competition and consumers by allowing firms to operate more efficiently. But some are likely to lessen competition that can in turn lead to higher prices, reduced availability of goods of goods and services, lower quality of products and less innovation. Indeed some mergers create a concentrated market while others enable a single firm to raise prices.

Learning and Innovation from Acquisitions -Previous results concerning the relationship between acquisitions and learning and innovation are mixed. Several studies have found that acquisitions lead to reduced investments in research and development, lead to a focus on financial as opposed to strategic control and so reduce the innovative performance of corporations (Hitt, Hoskisson, Ireland, & Harrison, 1991; Hitt, Hoskisson, Johnson, & Moesel, 1996). Acquisitions might further reduce the productivity

of both the acquirer and the target by disrupting the established routines of both firms (Jemison & Sitkin, 1986).

A second stream of authors has emphasized the potential benefits from acquisitions. In an acquisition the focal firm might be able to absorb the knowledge base of the target firm. The so expanded knowledge base might allow the firm to reap economies of scale or might allow for novel combination and integration of knowledge (Ahuja & Katila, 2001). Acquisitions might thus allow two firms to combine their strength and so might allow creating innovations that would have been beyond the reach of each firm on its own (Gerpott, 1995). By integrating new knowledge into the knowledge base of the firm, acquisitions might allow the firm develop a knowledge base with sufficient complexity and flexibility to allow it to adapt to changes in the environment but also to create innovation (Vermeulen & Barkema, 2001).

Acquisitions can act as knowledge transfer channels. Acquisitions might be particularly well suited for the transfer or combination of tacit knowledge (Bresman, Birkinshaw, & Nobel, 1999). Acquisitions allow for the intense interaction and help to control the transaction cost that result from the transfer of tacit knowledge. To achieve these innovation and learning benefits might require careful management of the integration process (Haspeslagh & Jemison, 1991).

Taken together we expect the positive effects of acquisitions to outweigh the negative effects. We therefore expect an overall positive effect

2.1.6. Empirical Evidence on Mergers and Acquisitions

Several studies have been carried out on the Mergers and acquisition. Kelly, 1967; Hogarty,1979; Halpern,1973; Mandelker,1974; Ellert,1975,1976; Dodd and Ruback, 1977; Firth,1979 and Schipper and Thompson;1983 , Lichtenberg and Siegel (1990); Akhavein (1997); Calomiris and Karceski (1998); Pilloff and Santomero (1998);

Houston, James, and Ryngaert (2001) and Cornett et al. (2003). Some of these studies are considered in detail below to establish the general findings.

Halpern (1973) set out to directly measure buyer and seller premiums in mergers in a sample of approximately 75 acquisitions. 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: the price change that remains unexplained by market variations is that attributable 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. 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 not significant. This finding controverts the argument that acquiring firms overpay and loose from mergers. With respect to the efficient market hypothesis, Mendelker's findings are consistent with the view that the stock market operates efficiently with respect to the information on mergers.

Like the preceding studies , Ellert(1975,1976) , found that the impact on the market prices of merging firms takes place 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.

Schipper and Thompson (1983), 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. They concluded that merger programs are capitalised 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) examined UK active acquirer and found some evidence that companies undertaking mergers earned a higher rate of return than those that relied on internal growth. They were however unable to identify a positive relationship between the level of merger activity and profitability.

Akhavein (1997) studied merger profitability using financial measures including security price changes. The sample consisted of 42 firms matched in 21 pairs of one merging and one non merging firm. He compared pre and post merger performance based on five measures of profitability , percentage change in stock prices, Price earning ratio, Earnings Per share, Sales per share and profit margin. He used pre merger period calculated average returns (5 year pre and post) using stock return. 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

Studies on bank consolidations found little evidence of any significant, permanent increase in shareholder value. 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 where as that of the target bank increased. Houston, James, and Ryngaert,2001 found (like previous studies) 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 abnormal returns for whereas focusing whereas focusing acquisitions earn zero abnormal returns.

Though the results from various studies have been varied some generalization of findings can be inferred. Studies on mergers and tender offers conclude that for acquired firms from the period just before the merger announcement date the share holders achieve significant positive gains. In an earlier period the cumulative average residual (CAR) are negative, indicating that acquired firms had not been performing up to their potentials. On average for the period just before the merger announcement date the share holders of the acquiring firms neither gained nor lost. In earlier periods the CARs for acquiring firms are positive, indicating that acquiring firms have had a record of managing asset growth successfully.

Locally very little research has been undertaken in Merger & Acquisitions. Chesang(2002) explored financial performance of merged commercial banks in Kenya . She found out that merger restructuring did not improve the financial performance of merged banks as indicated by profitability and earnings ratios. She however found out that legal ratios (Capital adequacy and solvency ratios) improved after the mergers. Korir(2006) set out to find out the effect of mergers on the performance of the 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 significance value of less than 0.05 indicating that there was an improvement in performance after merger.

2.2.Efficient Market Hypothesis

The efficient market hypothesis is concerned with the behaviour of prices in asset markets. When the term 'efficient market' was introduced into the economics literature

thirty years ago, it was defined as a market which 'adjusts rapidly to new information' (Fama et al 1969).It soon became clear, however, that while rapid adjustment to new information is an important element of an efficient market, it is not the only one. A more modern definition is that asset prices in an efficient market 'fully reflect all available information' (Fama 1971). This implies that the market processes information rationally, in the sense that relevant information is not ignored, and systematic errors are not made. As a consequence, prices are always at levels consistent with 'fundamentals'.

The classic definition of an efficient market is due to Fama(1970), and is a market where prices fully reflect the information available, such that unusual profit cannot be earned through exploiting this information (information efficiency); puts available funds to their best possible uses (allocative efficiency); and undertakes transactions at the least unavoidable cost (operational efficiency). The market is efficient if the 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. Fama (1970) identified three forms of efficiency being; weak form market efficiency, semi strong form efficiency and strong form market efficiency each of which has different implications of how markets work. The weak form efficient market theory stipulates that current prices already reflect past price and volume information. The information contained in past sequence of prices of a security is fully reflected in the current price of that security. It is named weak form because the security prices are most publicly and easily accessible pieces of information. It essentially implies that;no excess returns can be earned by using investment strategies based on historical share prices or other financial data, the use of technical analysis will not be able to produce excess returns. It is sufficient to use statistical investigations on time series data of prices for test purposes and current share prices are the best, unbiased estimate of the value of the security. The only factor that affects these prices is the introduction of previously

unknown news. News is generally assumed to occur randomly, so share price changes must also therefore be random.

The semi strong form efficient market theory states that all past and present information is similarly already incorporated in to asset prices but also data reported in a company's financial statements, co-announcements of dividend payouts and key management changes and economic factors. It essentially implies; Share prices adjust instantaneously and in an unbiased fashion to publicly available new information so that no excess returns can be earned by trading on that information, and the use of fundamental analysis will not be able to produce excess returns .this indicates that a company's financial statements are of no help in forecasting future price movements and securing high investment returns. To test for semi strong form efficiency the adjustments to previously unknown news must be of a reasonable size and must be instantaneous. To test for this consistent upward or downward adjustment after the initial change must be looked for. If there are any such adjustments it would suggest that investors had interpreted the information in a biased fashion and hence in an inefficient way.

The strong form efficient market theory stipulates that private information (insider information) too is quickly incorporated into market prices and therefore can not be used to reap abnormal trading profits. Thus all information whether public or private, is fully reflected in a security's current market price. The rationale behind it is that the market anticipates and in an unbiased manner, future developments and therefore information has been incorporated and evaluated in to the market price in a much more objective and informative way than insiders. It essentially implies that share prices reflect all information and no one can earn excess returns. Even the company's management is not able to make gains from core private information it holds. It is not able to take the advantages to profit from information such as a takeover decision made ten minutes ago. If there are fund managers who have consistently beaten the market then it cannot be described as being strong form efficient.

2.2.1. Arguments concerning the validity of the Efficient Market Hypothesis.

This theory has been met with a lot of opposition especially from technical analysts, Goodman (1979). Their argument against the efficient market theory is that many investors base their expectation on past prices, past earnings, track records and other indicators. Since stock prices are largely dependent on buyer expectations many believe. It only makes sense to believe that past prices do not influence future prices.
Studies by Firth (1980) in the United Kingdom have compared the share prices existing after takeover announcement with the bid offer. 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 e.g seasonal tendencies and divergent returns to assets with various characteristics for instance factor analysis and studies of returns to different types of investment strategies suggest that some types of stocks consistently outperform the market.

Grossman and Stiglitz (1980) identified a major theoretical problem with the hypothesis and termed it the paradox of efficient markets, which they developed in the context of equity markets. As applied to foreign exchange markets the argument starts by noting that exchange rate returns are determined by fundamentals like national price levels, interest rates, and public debt levels and that information about these variables is costly for traders to gather and analyze. The traders must be able to make some excess returns by trading on this analysis or they will not do it. But if markets were perfectly efficient the traders would not be able to make excess returns on any available information. Therefore markets cannot be perfectly efficient in the sense of exchange rates always being exactly where the fundamental can recover the costs of fundamental research by profiting from having marginally better information than the rest of the market where prices should be.
In this case equity prices remains close enough to its fundamental value to prevent less informed people from profiting from the difference. Partly because of these reasons

Campbell, Lo and Mackinlay (1997) suggest that the debate about perfect efficiency is pointless and that it is more sensible to evaluate the degree of inefficiency than to test absolute efficiency.

Despite strong evidence that the stock market is highly efficient, there have been scores of studies that have documented long-term historical anomalies in the stock market that seem to contradict the efficient market hypothesis. While the existence of these anomalies is well accepted, the question of whether investors can exploit them to earn superior returns in the future is subject to debate. Investors evaluating anomalies should keep in mind that although they have existed historically, there is no guarantee they will persist in the future. If they do persist, transactions and hidden costs may prevent out performance in the future. Investors should also consider tax effects in their taxable portfolios when evaluating stock strategies.

Researchers that discover anomalies or styles that produce superior returns have two choices: to go public and seek recognition for discovering the technique; or use the technique to earn excess returns. It's common for money to flow into strategies that attempt to exploit anomalies and this in turn causes the anomaly to disappear.
Further, even anomalies that do persist may take decades to pay off. Investors evaluating historical data should also consider the potential pitfalls of data mining. When searching large amounts of data, correlations between variables may occur randomly and therefore may have no predictive value. Anomalies that have existed over the longest time frames and have been confirmed to exist in international markets and out of sample periods are particularly persuasive.

2.2.2. IMPLICATIONS OF MARKET EFFICIENCY

Since stock prices do seem to reflect public information, most stocks appear to be valued. This does not mean that new developments could not cause a stock's price to soar or

plummet, but it does mean that stocks in general are neither overvalued nor undervalued. They are fairly priced and in equilibrium. However, there are certainly case in which corporate insiders have information not known to outsiders.

If EMH is correct, it is a waste of time for most of us to analyze stocks by looking for those that are undervalued. If stock prices already reflect all publicly available information and hence are fairly priced, one can "beat" the market only by luck and it is difficult if not impossible for anyone to consistently outperform the market averages. Empirical tests have shown that EMH is, in its weak and semi strong forms, valid. However, people such as corporate officers who have inside information can do better than the averages and individuals and organizations that are especially good at digging information on small, new companies seem to do consistently well. In addition, some investors may be able to analyses and react more quickly than others to release of new information and these investors may have an advantage over others.

In an efficient market, a security's price will be a good estimate of its investment value, where investment value is the present value of the security's future prospects estimated by well-informed and capable analysts. In a well-developed and free market, major disparities between price and investment value will be noted by alert analysts who will seek to take advantage of their discoveries. Securities priced below investment value (known as overpriced or overvalued securities) will be sold, creating pressure for price decreases due to the increased supply to sell.

As investors seek to take advantage of opportunities created by temporary inefficiencies, they will cause the inefficiencies to be reduced denying the alert and the less informed a chance to obtain large abnormal profit. As a consequence of the efforts of such highly alert investors, at any time a security's price can be assumed to equal the security's investment value implying that security mispricing will not exist.

2.3. STUDIES ON THE NSE

A review of the empirical studies done in Kenya on the effects of Merger announcement on stock returns/prices, reveals that very little work has been done in this area.

Munga (1974) studied the history, organization and role of NSE in the Kenyan Economy. He found the NSE to be characterized by illiquidity and low turnover. Thirty years down the line and many things may have changed at the NSE. Kangethe (1999) set out to investigate the effect of government ownership on share price volatility of companies quoted at the NSE for the period 1997 to 1998. The specific objective of the study was to establish whether government ownership influences the share price volatility of the companies quoted at the NSE. He found that there was a significant difference in the share stock volatility between the companies in which the government had shareholding, and the market index.

Sifunjo (1999) researched on the causal relationship between exchange rates and stock prices in Kenya. For purposes of his study he used Granger's (1969) model as well as unit Root and co-integration tests. Empirical evidence from his study showed that exchange rates Granger-cause stock prices in Kenya. In particular, he established that there is unidirectional causality from exchange rates to stock prices. Onsomu (2003) carried out a study to establish whether there existed a relationship between debt and the value of firms quoted at the NSE. In analyzing the data collected she used simple regression analysis. Using T-tests to determine the significance of the prediction variables, she finds that there is significant relationship between debt and the value of the firm. Kerandi (1993) tested the predictive ability of the dividend valuation model at the NSE. He finds that the models have less predictive ability in the NSE. He collected data in form of share prices, market indices and dividend per share. These were used to predict price for the companies studied. Predicted prices were compared with actual prices and tested for significance of differences. He was interested in confirming whether share

prices can be predicted, implying that investors could be interested in correctly priced shares

Mwangi (1997) analyzed price movements for some selected stocks at the NSE. He sought to determine factors that affect share price movements in addition to developing a model that could be used to predict price movements. He concluded that it was not always possible to develop models that accurately predict prices at the NSE because the parameters used in forecasting vary over time due to changes in the underlying earnings' generating process. Iminza (1997) analyzed the share prices at the NSE, focusing on their relationship with dividend payments. She used correlation analysis to establish whether there is a relationship between changes in prices with changes in dividend payouts. She concludes that dividends have a significant impact on share price. She used chi-square distribution to test for independence of two variables she constructed on share prices 5 days before and after dividend announcement for companies quoted at the NSE. Nyamute (1998) sought to analyze whether or not macroeconomic factors affect the performance of the NSE. The macroeconomic variables taken into account were inflation, money supply, interest rates and exchange rates. He finds that macroeconomic variables do indeed impact on the performance of the stock prices. This is in line with the rationale for application of multifactor conditional asset pricing models in return or volatility prediction. Muriithi (2001) sought to establish whether interim dividends could be used to predict final earnings. The study used data from the NSE and was analyzed using regression analysis. He found that there was no relationship between interim dividends and eventual year-end earnings. Mwangi (1999) studied the NSE to identify the relationship between price earnings and the growth rate of earnings, the dividend payout ratios at the NSE, and the variations in the earnings growth of the companies at the NSE. He arrived at the conclusion that investors can improve their investment portfolio performance if they use P/E ratios as the earnings growth is positively related to P/E.

Two studies have been carried out on merger activity on the NSE. Chesang(2002) explored financial performance of merged commercial Banks in Kenya . She found out that merger restructuring did not improve the financial performance of merged Banks as indicated by profitability and earnings ratios. She however found out that legal ratios (Capital adequacy and solvency ratios) improved after the mergers. Korir (2006) set out to find out the effect of mergers on the performance of the 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 significance value of less than 0.05 indicating that there was an improvement in performance after merger.

CHAPTER 3

3.0 Research methodology

3.1.Research Design

A Survey study of companies listed on the NSE that have made merger announcements was carried out. A survey was preferred because a number of firms with different characteristics have carried out merger announcements hence any individual firm biases will be eliminated by looking at the trends that cut across the firms studied.

3.2.Population

The population of interest consisted of eleven (11) companies quoted at the NSE that have made merger announcements. The NSE was considered ideal for carrying out this study due to the availability, accessibility and reliability of the data.

3.3.Sampling plan

The sample consisted of all the 11 companies that made successful merger announcements in the period 1997- 2006. This is also consistent with the 10 year period studied by Korir (2006).

3.4.Data Collection

The research relied purely on secondary data obtained from the NSE, CMA and or other financial intermediaries. Data collection forms (Appendix 3) were used to aid in the retrieval of data for individual companies.

The data comprised of daily stock prices and the market index for 30 days prior to and 30 days after the merger announcement by the sampled company.

3.5.Data analysis

There are a number of methodologies used to test the efficiency of a market. This research applied the event study approach that 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.) An event study averages the cumulative performance of stocks over time, from a specified number of times of time periods before an event to a specified number of periods after. Performance for each stock is measured after adjusting for market- 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 by 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 this 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.

The methodology of event studies was applied as follows;

1. Collected a sample of firms that had a merger announcement(the event)

   The population of this study consists of all companies which have issued merger announcement between 1997-2006.From this researcher took all quoted companies. There are eleven (11) companies which fall in this category. The choice of quoted companies is due to the fact that it is only in quoted companies where you can be able to observe price changes.
2. Determined the price day of the announcement and designate this day as zero.

   The date the company announce to the public its intention engage in a merger either in a newspaper or a launch "dinner take" will be taken as the announcement day and designated as t = 0.
3. Define the period to be studied.

   The researcher used sixty one days, thirty before the event, the event date and thirty after the event. This is because it is assumed that before the announcement date there is likely to be some information leakage by those with access to it after the announcement there would be some delayed reaction.
4. For each of the firms in the sample, computed the return on each of the days being studied. Daily return is used as a measure of price impact as the daily return is to a very large extent influenced by the changes in price.

Return will be 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 the holding period.

Hence,

$$R_j = \frac{(P_1 - P_0) + D1}{P_0}$$

5. Computed the return for a market portfolio. The NSE 20 index was used as proxy for market portfolio. The daily index returns were computed as follows;

$$M_{Ri} = \frac{Mi - M0}{M0}$$

M_{Ri} is the market return for day i

Mi is the market index on day i

M_O is the market return for day i-1

6. Compute the "Abnormal" return for each of the days being studied for each firm in the sample.

   Abnormal return is actual return less the expected return. The researcher used the market model to derive expected returns. The market model simply argues that returns on security j, are linearly related to returns on a "market" portfolio (Copeland & Weston, 1992). The model starts with the simple linear relationship of returns and the market (Elton & Gruber, 1995).

   $$R_{jt} = a_j + b_j R_{mt} + \varepsilon_{jt}$$

   Where;

   R_j is the return on stock j on day t.

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

   R_m the return on the market index on date t.

ε_i is the unsystematic(residual) component of the firms returns.

In finance, the above equation is called the characteristic line and it is used as a proxy for the expected relationship between the two sets of excess returns. R_i is the return on security in question, a_i is known as the alpha and it is simply the intercept of the characteristic line on the vertical axis . b_i is the beta and is simply the slope of the characteristic line. It depicts the sensitivities of the security's return excess returns to that of the market portfolio. The beta represents the systematic risk of a stock due to the underlying movements in security prices, the risk cannot be diversified away by investing in more stocks because it depends on things such as changes in the economy and in the political atmosphere which affects all stocks .The beta of a stock represents its contribution to the risk of s highly diversified portfolio of stocks. ε_i is the unsystematic or avoidable risk of a security , which is unique to a particular company, being independent of economy, politics and other factors that affect securities in a systematic manner. Efficient diversification reduces the total risk of a portfolio (unsystematic and systematic) to the point where only systematic risk remains and hence investors are only compensated for the systematic risk only hence reducing the equation to

$R_{it} = a_i + b_i R_{mt}$

To arrive at the model equation, the returns of the stock selected were regressed with returns of the NSE 20 share index for the period of one month before and after the announcement dates.

7. Computed for each day in the event period the average abnormal return for all the firms in the sample.
8. The individual days abnormal return is added together to compute the daily cumulative abnormal return 30 days before the announcement to 30 days after the announcement. Normally average effect of the announcement is examined rather than each firm separately, because other events are occurring and averaging

across all firms should minimize the effect of those other events, thereby allowing a better examination of the event understudy.

9. Examine and discuss the result.

   The research determined whether the average abnormal returns were statistically different from zero and a t-test statistic was used with a significance level of 95%.

CHAPTER 4

4.0 Data Analysis and Findings

4.1.Introduction

This chapter presents the data analysis and findings .Out of the 55 companies listed on the NSE. Eleven (11) companies met the criteria for inclusion in the sample - they made merger announcement within the period 1997-2006. These companies are listed in Appendix 2. Three of the four segments of the main market were represented. Financial and investments had six (6) companies, Industrial and allied four(4) and Commercial and services one(1). The agricultural sector in the main market segment and the entire alternative investments market segment was not represented. Regression analysis was carried out on the data over the estimation window to estimate the expected returns for the various stocks over the event window. Abnormal returns and cumulative abnormal returns were then calculated and tested for significance using a t-test.

4.2. Market reaction to merger announcement

The cumulative abnormal returns (CAR) during the event window were graphed in order to observe the effect of merger announcements on the returns of the various companies in the sample 30 days prior to the merger announcement to 30 days after the date of announcing the merger. In order to establish whether the CAR was significant on a given date, t-tests were conducted on the data. The decision rule for significance of the t-value is if the absolute value of the calculated t-value is greater then two, then the CAR are significant; while if it is less than two, then the CAR are not significant. Other statistics such as mean and standard deviations were computed for the event periods in order to summarize the data over the event window.

4.2.1. Reaction to merger announcement by NIC Bank

National Industrial Credit Bank Ltd announced the announcement of the merger with African Mercantile Banking Corporation on 14 June 1997 to form NIC Bank Ltd. After both estimated and actual returns were obtained for the company, the difference between

the two returns was computed for the security and for each day. This difference is the residual (abnormal) return (ε_{jt}) computed as per equation 4.1 below.

$$\varepsilon jt = Rjt - E(Rjt) \quad \text{.....4.1}$$

Cumulative abnormal returns (CAR) for the merging firm were then computed as;

$$CARjt = \sum_{t+30}^{t-30} \varepsilon jt \quad \text{.....4.2}$$

Figure 4.2.1: Cumulative abnormal returns for NIC 1997 merger announcement

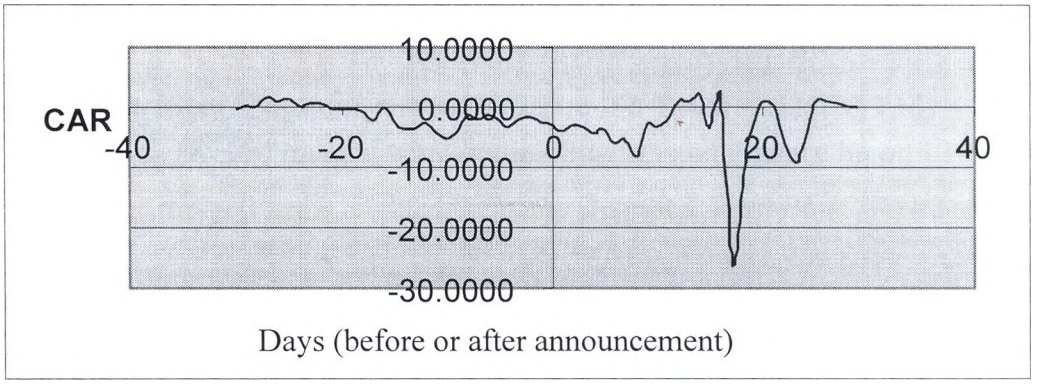

Figure 4.1 indicates presence of a negative CAR in during the event period, both before and after the merger and this gets worse after the announcement of merger. This effect is largely unexpected and it could be that some other negative information about the bank that impacted adversely on the share price.

Table 4.2.11: Summary statistics for NIC Bank year 1997 merger announcement

	X for the entire period	X 30 days before event	X 30 days after event	δ for entire event period	δ 30 days before event	δ 30 days after event
Market Returns	0.0764	0.1138	0.0403	0.5602	0.5453	0.5919
Company returns	0.4316	0.3882	0.4892	4.8480	1.2696	6.8559
Fit	0.4387	0.4819	0.3970	0.6470	0.6297	0.6836
Standard error of fit	4.8871	1.2310	7.0415			
Residual returns	0.0000	(0.0937)	0.1090	4.8456	1.2340	6.9189
Standardized residual returns	0.0000	(0.0193)	0.0225	1.0000	0.2547	1.4279
CAR	(2.4850)	(1.4207)	(3.5628)	4.1995	1.8372	5.5886
t- values	0.5503	1.3395	0.3378			

Table 4.1 confirms that the average CAR differed 30 days before and after the announcement. The returns had a value of -1.421 30 days before the announcement and -3.563 30 days after the announcement. The standard deviation for the company returns 30 days announcement of 1.2696 is lower than that for 30 days after the merger announcement 6.8559. This is again largely unexpected since in the post merger announcement period it would be expected that the stock price should already have adjusted for the new information. The t-value for 30days before announcement is 1.3395 and falls to 0.3378 in the post announcement period. Both these levels are less than 2 and thus not significant. Thus we conclude that after the announcement, the CAR was low and did not vary significantly from the expected returns.

4.2.2. Reaction to merger announcement by Diamond Trust Bank (K) Ltd

Diamond Trust Bank (K) Ltd merged with Premier Savings and Finance ltd on 12 February 1999. The merged firms retained the name Diamond Trust Bank (K) ltd after the merger.

Figure 4.2.2: Cumulative abnormal returns for 1999 DTB merger announcement.

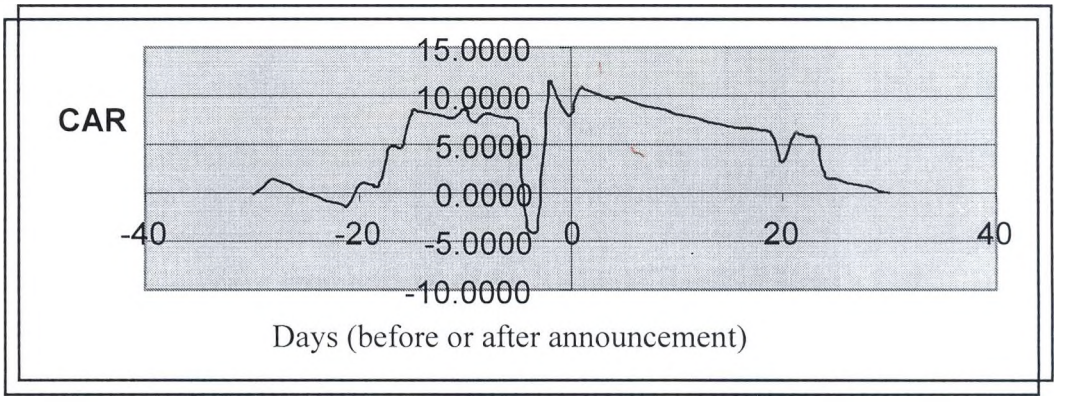

Figure 4.2 indicates presence of an effect on the CAR by the merger announcement. The CAR is largely positive during the event window except for a largely unexpected deep in CAR few days before announcement. Towards the end of the event window the CAR reduces possibly because of market price correction in the post event period.

Table 4.2.2: Summary statistics for DTB Bank year 1999 merger announcement

	X for the whole period	X 30 days before event	X 30 days after event	δ for the whole period	δ 30 days before event	δ 30 days after event
Market Returns	(0.0551)	(0.0151)	(0.0889)	0.6555	0.6491	0.6809
Company returns	0.2544	0.5675	(0.0178)	2.7359	3.7218	1.1853
Fit	0.2544	0.2613	0.2486	0.1130	0.1119	0.1174
Standard error of fit	2.7567	3.7867	1.2021			
Residual returns	(0.0000)	0.3062	(0.2664)	2.7336	3.7209	1.1814
Standardized residual returns	(0.0000)	0.1120	(0.0975)	1.0000	1.3612	0.4322
CAR	4.9755	3.7339	6.1164	4.0881	4.4648	3.3746
t- values	0.745086	0.8236	-0.0228			

It can be inferred from table 4.2 above that the average CAR was about 5% over the period, the average CAR 30 days after the event was about 6% which was higher than that for 30 days before the event (3.7%). Volatility in the CAR as measured by the standard deviation was higher in the pre-announcement period at 3.7218 than that after announcement (1.1853). This may be due speculation prior to the announcement, leading to variation in the stock returns. The t-value for 30days before announcement is 0.8236 and -0.0228 after announcement which is less than 2 and thus not significant. Thus we conclude that during period, the CAR was high and but did not vary significantly from the expected returns.

4.2.3. Reaction to merger announcement by National Bank of Kenya Ltd

On 24 May 2005 National Bank of Kenya Ltd announced the acquisition of Kenya National Capital Corporation. The effect of the merger announcement on the returns of National Bank of Kenya Ltd is considered in the following paragraphs.

Figure 4.2.3: Cumulative abnormal returns for NBK 1999 merger announcement

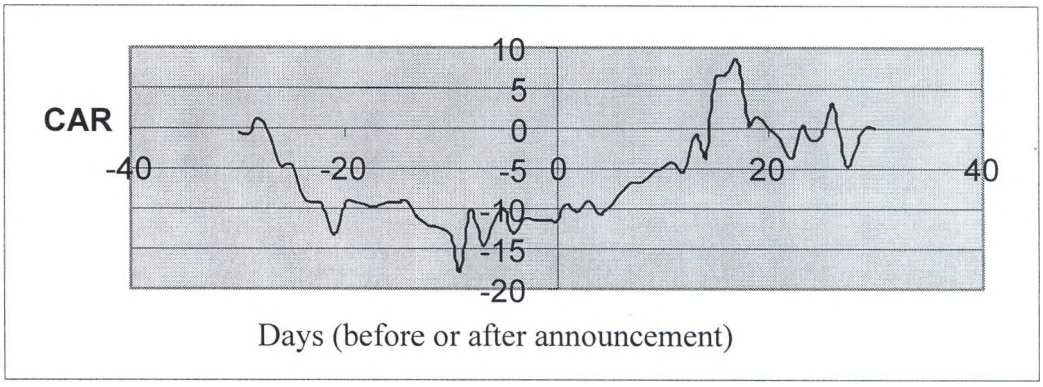

Figure 4.3 indicates presence of an effect on the CAR by the merger announcement. The CAR are negative during much of the period however there is marked increase in the post announcement period to just over 5% on the 20th day after announcement. The CAR reduces to match the expected returns at the end of the 30 days post announcement period.

Table 4.2.3: Summary statistics for NBK Ltd year 1999 merger announcement

	X for the whole period	X 30 days before event	X 30 days after event	δ for the event period	δ 30 days before event	δ 30 days after event
Market Returns	(0.0067)	(0.0726)	0.0609	0.4123	0.2977	0.5037
Company returns	(0.0869)	(0.3939)	0.2390	3.0837	2.7356	3.4892
Fit	(0.0571)	(0.0080)	(0.1076)	0.3075	0.2220	0.3757
Standard error of fit	3.0499	2.7840	3.3781			
Residual returns	(0.0000)	(0.3859)	0.3853	3.0243	2.7456	3.3283
Standardized residual returns	(0.0000)	(0.1276)	0.1274	1.0000	0.9078	1.1005
CAR	(6.1091)	(9.2594)	(2.7772)	5.7519	4.4756	5.0640
t- values	-0.1591	-0.7462	0.5676			

Table 4.3 indicates that the average CAR was negative both before and after the merger indicating the merger information was either not interpreted as positive by the market or that there was some other negative information in the market about the stock the effect of which was less than offset by the merger announcement. The average CAR was -9.254 30 days before the merger and -2.7772 after merger announcement. The standard deviation

for the company returns 30 days announcement of 2.7356 is lower than that for 30 days after the merger announcement 3.4892. The t-value for 30days before announcement is -0.7462 and 0.5676 after merger announcement this is less than 2 and thus not significant. The CAR varied from the market returns but not significantly.

4.2.4. Reaction to merger announcement by Standard Chartered Bank Ltd

Standard Chartered bank (K) Ltd announced the tie up with its sister company Standard Chartered Financial services on 17 November 1999 to form a single entity Standard Chartered Bank (K) Ltd. The impact of the announcement on the share price is discussed below.

Figure 4.2.4: Cumulative abnormal returns for SCB 1999 merger announcement

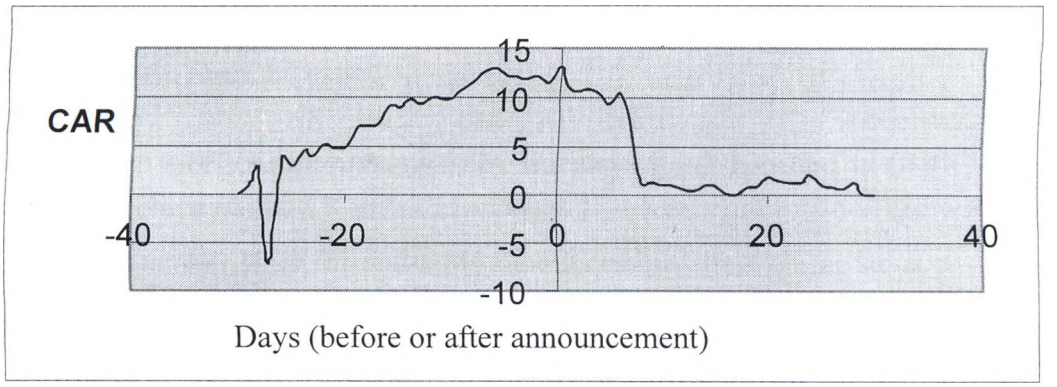

Figure 4.4 indicates presence of an effect on the CAR by the merger announcement. The rises steadily to peak at around 13% around the announcement date but falls sharply to even with the market in the post announcement period

Table 4.2.4: Summary statistics for SCB Bank year 1999 merger announcement

	X for the whole period	X 30 days before event	X 30 days after event	δ for the whole period	δ 30 days before event	δ 30 days after event
Market Returns	(0.0841)	(0.1967)	0.0273	0.4646	0.5776	0.2950
Company returns	0.0762	0.3389	(0.2407)	2.2967	3.0174	1.2420
Fit	0.0762	-0.0463	0.1973	0.5054	0.6283	0.3208
Standard error of fit	2.2593	2.8755	1.2464			
Residual returns	(0.0000)	0.3852	(0.4380)	2.2404	2.8581	1.3333
Standardized residual returns	(0.0000)	0.1719	(0.1955)	1.0000	1.2757	0.5951

	X for the whole period	X 30 days before event	X 30 days after event	δ for the whole period	δ 30 days before event	δ 30 days after event
CAR	5.3515	7.4452	2.9982	4.8872	4.6494	3.9300
t- values	0.5701	1.2590	-0.9695			

Table 4.4 confirms that the average CAR did differ 30 days before and after the announcement. The returns had a value of 7.445 30 days before the announcement and 2.9982 30 days after the announcement. The standard deviation for the company returns 30 days announcement (3.0174) is higher than that for 30 days after the merger announcement (1.2420). This may be due to speculation prior to the announcement, leading to variation in the stock returns. The t-value for 30days before announcement is 1.259 and -0.9695 30 days after announcement this was less than 2 and thus not significant. We there conclude that after the announcement, the CAR was high and did not vary significantly from the expected returns.

4.2.5. Reaction to merger announcement by Barclays Bank Kenya Ltd (BBK)

The merger of Barclays Bank of Kenya Ltd and Barclays Merchant Finance Ltd was announced on 22 October 1999. The possible announcement effect on the stock price of the company is considered below.

Figure 4.2.5: Cumulative abnormal returns for BBK 1999 merger announcement

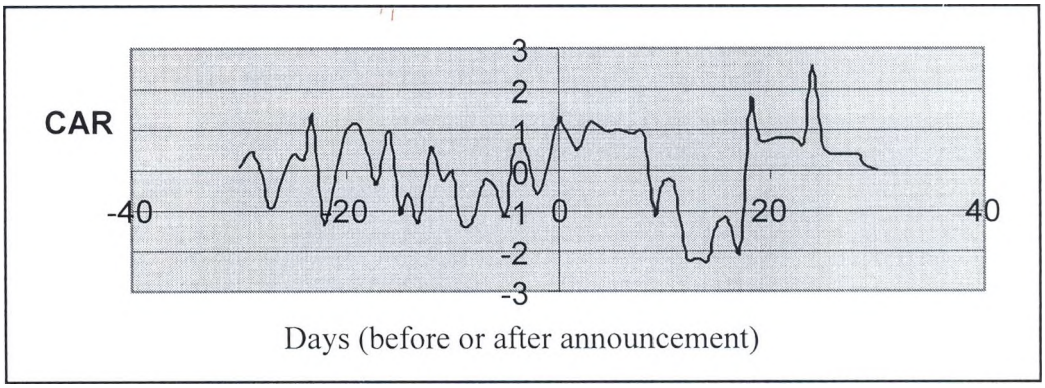

Figure 4.5 indicates presence of peculiar behavior of the CAR during the merger announcement period. The CAR is volatile during the period but with no particular direction.

Table 4.2.5: Summary statistics for BBK Ltd year 1999 merger announcement

	X for the whole period	X 30 days before event	X 30 days after event	δ for the whole period	δ 30 days before event	δ 30 days after event
Market Returns	(0.0289)	(0.0820)	0.0328	0.3455	0.3946	0.2865
Company returns	0.0328	0.0005	0.0325	1.1032	1.1316	1.0971
Fit	0.0328	-0.0034	0.0749	0.2356	0.2690	0.1953
Standard error of fit	1.0869	1.1055	1.1021			
Residual returns	0.0000	0.0039	-0.0424	1.0778	1.0873	1.0831
Standardized residual returns	0.0000	0.0036	-0.0393	1.0000	1.0089	1.0050
CAR	0.0472	-0.0955	0.1491	1.0321	0.7920	1.2220
t- values	0.3759	0.3219	0.0611			

The CAR during the period averaged 0.0472, it was -0.0955 30 days before merger and 0.1491 30 days after the merger announcement. The t- values both before and after the announcement was less than 2 hence not significant. The standard deviation 30 days before announcement was 1.1316 and 1.0971 30 days after announcement. The CAR for Barclays Bank did not vary significantly from the market returns.

4.2.6. Reaction to merger announcement by Kenya Commercial Bank

Kenya Commercial Bank and Kenya Commercial Finance Company merged on 21 March 2001. The merged entity assumed the name Kenya Commercial Bank Ltd. This section discusses the possible effect of the merger announcement on the stock price.

Figure 4.2.6: Cumulative abnormal returns for KCB 2001 merger announcement

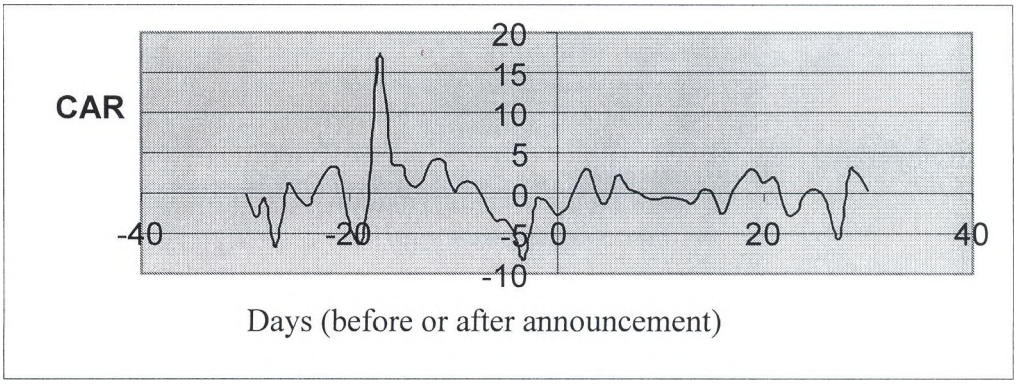

Figure 4.6 indicates presence of an effect on the CAR by the merger announcement. This is more pronounced 15days before the merger indicating some speculation about the merger announcement. It however stabilizes in the post merger period to just within ±5%.

Table 4.2.6: Summary statistics for KCB year 2001 merger announcement

	X for the whole period	X 30 days before event	X 30 days after event	δ for the whole period	δ 30 days before event	δ 30 days after event
Market returns	(0.1397)	(0.0989)	(0.1830)	0.3463	0.4006	0.2895
Company returns	0.4796	0.6030	0.4408	3.2054	4.2956	1.6017
Fit	0.4796	0.5584	0.3959	0.6690	0.7738	0.5592
Standard error of fit	3.1613	4.2267	1.6240			
Residual returns	0.0000	0.0446	0.0449	3.1348	4.1658	1.6509
Standardized residual returns	0.0000	0.0142	0.0143	1.0000	1.3289	0.5266
CAR	(0.0371)	(0.0075)	0.0217	3.5128	4.6236	1.9765
t- values	1.7150	1.0982	1.4952			

Table 4.6 indicates that the average CAR 30 days before were -0.0075 but rose to 0.0217 after the announcement. The standard deviation for the company returns 30 days announcement (4.2956) is higher than that for 30 days after the merger announcement (1.6017). This may be due to speculation prior to the announcement, leading to variation in the stock returns. The t-value for 30days before announcement is 1.0982 and that 30 days after the announcement was 1.495 both are less than 2 and thus not significant. Thus we conclude that the CAR for KCB shares did not vary significantly from the expected returns during both before and after the announcement.

4.2.7. Reaction to merger announcement by Nation Media Group

Nation Media Group (a Kenyan based media house) acquired Mwananchi Communications and Radio Uhuru Ltd on 12 December 2002. The merged entities now trade under the name Nation Media Group.

Figure 4.2.7: Cumulative abnormal returns for NMG 2002 merger announcement.

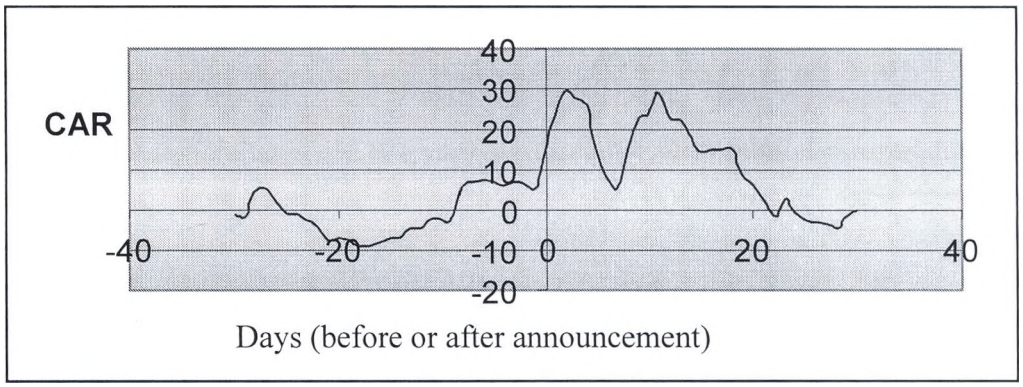

Figure 4.7 indicates presence of an effect on the CAR by the merger announcement. twenty days before the announcement, the CAR direction from a downward negative trend and rose sharply reaching a high of +30% in the early post announcement period but declining to match expected returns at the end of the 30 days post event period.

Table 4.2.7: Summary statistics for NMG year 2002 merger announcement

	X for the whole period	X days before event	X days after event	δ for the whole period	δ 30 days before event	δ 30 days after event
Market Returns	0.5742	0.3215	0.7862	1.4859	1.0965	1.7895
Company returns	1.0688	1.0294	0.7433	4.0906	2.3729	4.9749
Fit	1.0688	0.8431	1.2580	1.3269	0.9791	1.5980
Standard error of fit	3.9020	2.3355	4.7631			
Residual returns	0.0000	0.1863	(0.5147)	3.8694	2.3254	4.6811
Standardized residual returns	0.0000	0.0481	(0.1330)	1.0000	0.6010	1.2098
CAR	5.6224	(0.8274)	11.7449	10.8192	5.7033	11.1588
t- values	1.0369	1.9157	0.0025			

Table 4.7 shows large jump in the average CAR 30 days before after the announcement. The returns had a value of –0.8274 30 days before the announcement and rose to a high of 11.7449 30 days after the announcement. The standard deviation for the company returns 30 days announcement (2.3729) is higher than that for 30 days after the merger announcement (4.9749). This could be interpreted to mean that though the market did expect the merger announcement, the actual announcement details were not quickly

interpreted by the market hence high volatility and CAR in the post announcement period. The t-value for 30days before announcement is 1.9157 just short of the threshold level for significance by less than 0.1. The average t-value for 30 days after announcement date is 0.0025. This is also not significant. Thus we conclude that the returns of Nation Media shares did not vary significantly with market returns during the event period.

4.2.8. Reaction to merger announcement by Kenya Oil Co. Ltd (Kenol)

The merger between Kenol and Jovenna Zambia was announced on 14 February 2002. The merged entities adopted the name of the former as their trade name.

Figure 4.2.8: Cumulative abnormal returns for 2002 merger announcement

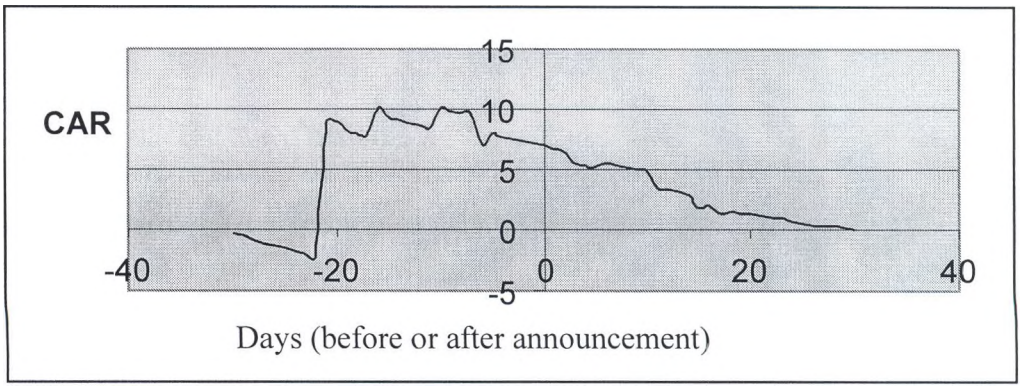

Figure 4.8 indicates presence of an effect on the CAR by the merger announcement. Twenty one days before the announcement ,the CAR direction rose sharply from -2% to about 10% indicating potential leakage into the market of the merger information before announcement. From about 5 days before announcement the CAR gradual decreases to zero at the end of 30 days post event period.

Table 4.2.8: Summary statistics for Kenol year 2002 merger announcement

	X for the whole period	X 30 days before event	X 30 days after event	δ for the event period	δ 30 days before event	δ 30 days after event
Market Returns	(0.2225)	(0.0674)	(0.3802)	0.6010	0.3465	0.7592
Company returns	0.2120	0.4782	(0.0483)	1.5838	2.2200	0.3420
Fit	0.2120	0.2403	0.1831	0.1099	0.0633	0.1388
Standard error of fit	1.5933	2.2568	0.3475			
Residual returns	(0.0000)	0.2379	(0.2314)	1.5800	2.2179	0.3615

	X for the whole period	X 30 days before event	X 30 days after event	δ for the event period	δ 30 days before event	δ 30 days after event
Standardized residual returns	(0.0000)	0.1506	(0.1465)	1.0000	1.4037	0.2288
CAR	4.2401	5.6298	2.7604	3.8962	4.7070	2.1765
t- values	1.1601	1.1875	(0.5368)			

Table 4.8 confirms that the average CAR did differ 30 days before after the announcement. The returns had a value of 5.6298 30 days before the announcement and 2.7604 30 days after the announcement. The standard deviation for the company returns 30 days announcement (2.22) is higher than that for 30 days after the merger announcement (0.3420). This may be due to speculation prior to the announcement, leading to variation in the stock returns. The t-value for 30days before announcement is 1.185 and 30 days after the merger announcement -0.5368 both are below the threshold for significance. Hence we conclude that CAR for Kenol varied insignificantly from the expected returns over the event period.

4.2.9. Reaction to merger announcement by Unga Limited

Kenya national Mills was acquired by Unga Ltd on 01 July 2002. The merged entity trades under the name Unga Group Limited.

Figure 4.2.9: Cumulative abnormal returns for Unga Ltd 2002 merger announcement

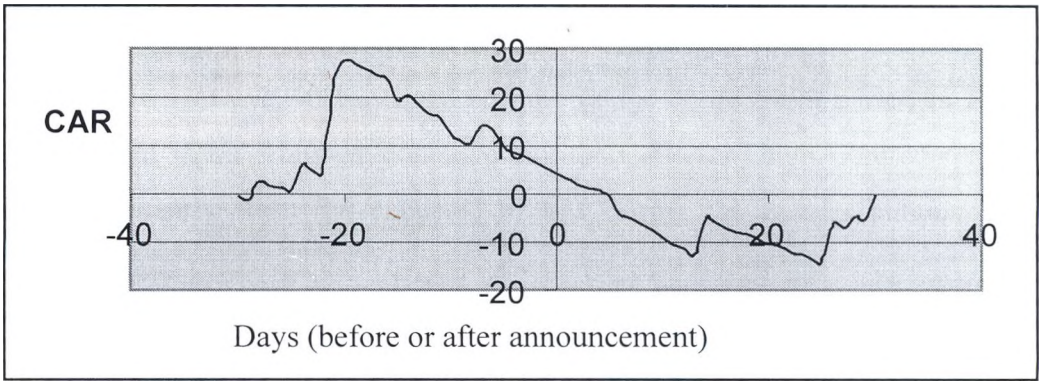

Figure 4.9 highlights the effect on the CAR by the merger announcement. At about 20 days before the announcement, the CAR rises sharply to over +20% levels. This could indicate speculation about the merger at this point. Subsequently however the CAR

reduces gradually to negative in the post announcement period indicating possibly that the merger details failed to meet market expectations.

Table 4.2.9: Summary statistics for Unga Ltd year 2002 merger announcement

	X for the whole period	X 30 days before event	X 30 days after event	δ for the whole period	δ 30 days before event	δ 30 days after event
Market returns	(0.0815)	(0.1064)	(0.0681)	0.5772	0.6743	0.4791
Company returns	0.9616	1.1290	0.8262	3.5184	4.3405	2.5867
Fit	0.9616	0.9466	0.9696	0.3454	0.4036	0.2867
Standard error of fit	3.5309	4.3284	2.6120			
Residual returns	0.0000	0.1824	-0.1434	3.5014	4.2783	2.6378
Standardized residual returns	0.0000	0.0521	-0.0410	1.0000	1.2219	0.7534
CAR	2.7907	12.1166	-6.5856	11.7142	8.8987	4.8706
t- values	2.2126	1.5815	1.6197			

Table 4.9 confirms that trend of the CAR depicted in the graph in that average CAR did differ 30 days before after the announcement. The returns had a value of 12.1166 30 days before the announcement and -6.5856 30 days after the announcement. The standard deviation for the company returns 30 days announcement (4.3405) is higher than that for 30 days after the merger announcement (2.5867). This may be due to speculation prior to the announcement, leading to variation in the stock returns. The t-value for 30days before announcement is 1.5815 and 1.6197 for 30 days after the merger both are less than 2 and thus not significant. However, the average t-value for the entire event period is 2.2126. This is a significant value .Thus we conclude that the CAR for Unga Limited was high and varied significantly from the expected returns during the merger announcement period.

4.2.10. Reaction to merger announcement by CFC Bank Ltd

CFC Bank ltd acquired Alico Kenya (the Kenyan subsidiary of the American International group-AIG) on 12 October 2004. The effect of the merger on the share price of CFC Bank is considered below.

Figure 4.2.10: Cumulative abnormal returns for 2004 merger announcement.

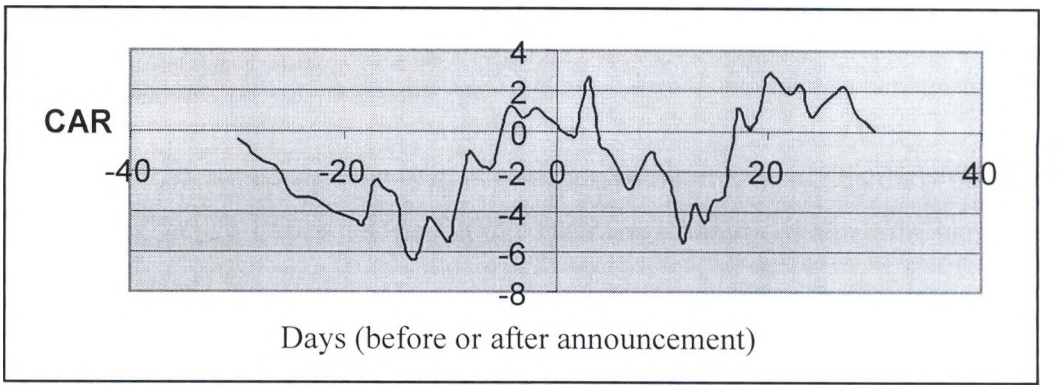

Figure 4.10 indicates presence of an effect on the CAR by the merger announcement. Seven days before the announcement, the CAR direction from a downward negative trend and rose sharply to reach a peak of +3% after announcement but then decline later to match the expected returns by the end of the 30 days post event period.

Table 4.2.10: Summary statistics for CFC Bank year 2004 merger announcement

	X for the entire period	X 30 days before event	X 30 days after event	δ for the whole period	δ 30 days before event	δ 30 days after event
Market returns	0.1060	(0.0480)	0.2635	0.4356	0.3544	0.4653
Company returns	0.4567	0.4223	0.5062	1.3376	1.1086	1.5691
Fit	0.4567	0.3987	0.5159	0.1639	0.1333	0.1751
Standard error of fit	1.3387	1.1273	1.5762			
Residual returns	0.0000	0.0235	(0.0097)	1.3275	1.1113	1.5507
Standardized residual returns	0.0000	0.0177	(0.0073)	1.0000	0.8371	1.1681
CAR	(1.4616)	(2.5346)	(0.4471)	2.4222	2.1328	2.2866
t- values	2.3617	2.0613	1.0960			

Table 4.10 confirms that the average CAR did differ 30 days before after the announcement. The returns had a value of -2.5346 30 days before the announcement and -0.4471 30 days after the announcement. The standard deviation for the company returns 30 days announcement (1.1086) is higher than that for 30 days after the merger announcement (1.5691). This indicates limited speculation in the pre- announcement period. The t-value for 30days before announcement is 2.0613 this is just more than 2 and

thus significant. The average t-value for 30 days after announcement date is 1.0960 which is not significant. We thus conclude that before the announcement, the CAR was high and varied significantly from the expected returns.

4.2.11. Reaction to merger announcement by East Africa Breweries Ltd

East African Breweries announced the twin acquisition of International Distillers (U) Ltd and Castle Brewing Kenya Ltd on 13 May 2002. The merged entity retained the name East African Breweries Ltd.

Figure 4.2.11: Cumulative abnormal returns for EABL 2002 merger announcement

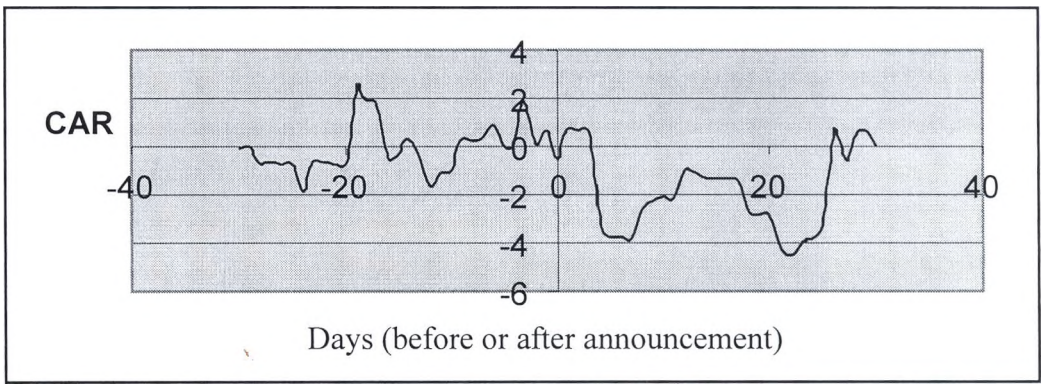

Figure 4.11 indicates presence of an effect on the CAR by the merger announcement especially in the pre-announcement period. The impact is however very low as the highest CAR reported was just over 2% and the CAR was negative on most days and especially after the event. This could indicate the merger announcement was perceived negatively by the market.

Table 4.2.11: Summary statistics for EABL year 2002 merger announcement

	X for the whole period	X 30 days before event	X 30 days after event	δ for the whole period	δ 30 days before event	δ 30 days after event
Market Returns	(0.1597)	(0.1750)	(0.1488)	0.5155	0.3434	0.6564
Company returns	0.0471	0.0669	0.0697	1.1487	1.0758	1.2313
Fit	0.0471	0.0436	0.0495	0.1158	0.0771	0.1474
Standard error of fit	1.1525	1.0609	1.2517			
Residual returns	(0.0000)	0.0233	0.0201	1.1429	1.0594	1.2332
Standardized residual returns	(0.0000)	0.0204	0.0176	1.0000	0.9269	1.0790
CAR	(0.9547)	(0.0555)	(1.8655)	1.6591	1.0384	1.7082
t- values	0.5365	0.9275	0.3533			

Table 4.11 confirms that the average CAR was negative over the period. The returns had a value of -0.0555 30 days before the announcement and -1.8655 30 days after the announcement. The standard deviation for the company returns 30 days before the announcement (1.0758) is slightly lower than that for 30 days after the merger announcement (1.2313). The t-value for 30days before announcement is 0.9275 and 0.3533 after the announcement are less than 2 and thus not significant. Thus the merger announcement did not cause EABL stock returns to vary significantly from the expected returns.

CHAPTER 5

5.0 Summary of Findings, Conclusions and Recommendations

5.1. Summary

The study was a cross sectional survey study that sought to establish whether there is a positive significant abnormal returns following announcement of mergers. The population was companies listed and trading on the NSE, 11 of which made merger announcement during the period were selected. Merger announcements for the 11 companies over the 10 years ranging from 1997-2006 were analyzed using event study methodology to answer the research hypothesis. All market segments were represented. However, the Financial and Investments sector had the higher representation. This could be because of the merger wave that was occasioned by the restructuring of banks that follow the bank crises in the 90's.

The market model was used to test the research hypothesis. The results indicated that there is no significant reaction in CAR following merger announcement by firms.

5.2. Conclusion

The null hypothesis was not rejected. This indicates that merger announcements do not affect share prices on the NSE quoted companies. This is not expected given that the NSE is perceived not to be efficient.

There was a presence of high fluctuation of CAR for some companies over the whole estimation window. This indicates the presence of other factors, beyond the control of the study, which were also causing changes in stock return.

Some companies had positive changes in stock returns after merger initiations while others had negative changes. Negative changes could have been due to some announcements not meeting the market expectations. There was evidence that the market receives positive information prior to the merger announcement by some firms. Also, some firms were shown to have negative information prior to merger announcements, after which CAR began to rise again. Some firms were noted to have peculiar trends that persisted over all the periods of the event (high but directionless fluctuations).

5.3. Recommendation

The stock market was found not to have significant reaction to the merger announcements. Therefore the use of merger announcement by investors to predict stock prices of firms could not be attempted accurately at the NSE. The result is unexpected for a developing market like NSE which is deemed inefficient.

5.4. Limitation

The NSE 20 index (applied as a proxy for market) has been found to fluctuate according to trading by a few companies (Odera,2000).Thus this may lead to some of the smaller companies stock returns differing in correlation to the market return.

Some other information such as earnings announcements and dividend announcements could have been released with the merger announcement that could have an effect on stock returns such and information could not be controlled.

5.5. Areas for further research

The study could also be conducted using the NASI (Nairobi all stocks index) or AIG indexes as proxy for market. This could address any biases introduced by the NSE 20 whose constituent counters may not fully represent the market as noted in a study by Odera(2000).

Event studies could be carried out to establish the effects of other variables on the NSE such as insider trading and changes in management policy that has not been examined in previous studies.

It was noted that the CAR for some companies fluctuated highly during the event period without conforming to any unidirectional pattern. Studies could be conducted to establish reasons for peculiar movement noted on such stocks.

6.0 APPENDICES/REFERENCES

APPENDIX 1: COMPANIES LISTED ON THE NSE

	NAME OF COMPANY
1.	Unilever Tea Kenya Ltd
2.	Kakuzi Ltd
3.	Rea Vipingo Plantations Ltd
4.	Sasini Tea & Coffee Ltd
5.	Car & General (K)
6.	CMC Holdings Ltd
7.	Hutchings Biemer Ltd
8.	Kenya Airways Ltd
9.	Marshalls (E.A)
10.	Nation Media Group
11.	Scangroup Ltd
12.	TPS Eastern Africa (Serena) Ltd
13.	Uchumi Supermarket Ltd
14.	Barclays Bank Ltd
15.	CFC Bank Ltd
16.	Diamond Trust Bank Kenya Ltd
17.	Housing Finance Co. Ltd
18.	ICDC Investment Co. Ltd
19.	Jubilee Insurance Co. Ltd
20.	Kenya Commercial Bank Ltd
21.	National Bank of Kenya Ltd
22.	NIC Bank Ltd
23.	Pan Africa Insurance Co. Ltd
24.	Standard Chartered Bank Ltd
25.	Equity Bank Ltd
26.	Athi River Mining
27.	BOC Kenya Ltd
28.	Bamburi Cement Ltd
29.	British America Tobacco Kenya
30.	Carbacid Investments Ltd
31.	Crown Berger Ltd
32.	Olympia Capital Holdings
33.	E.A Cables
34.	E.A Portland Cement
35.	East African Breweries Ltd
36.	Sameer Africa Ltd
37.	Mumias Sugar Ltd
38.	Kenya Oil Co. Ltd

	NAME OF COMPANY
39.	Total Kenya Ltd
40.	Unga Group Ltd
41.	Kengen Ltd
42.	A. Bauman & Co.
43.	City Trust Ltd
44.	Eagaads Ltd
45.	Express Ltd
46.	Williamson Tea
47.	Limuru Tea
48.	Kenya Orchards
49.	Kapchorua Tea
50.	Standard Group
51	Access Kenya Group
52	ScanGroup Ltd.
53	Equity Bank Ltd.
54	Eveready East Africa Ltd.
55	Kengen Ltd
56	Kenya Re
57	Safaricom Ltd

APPENDIX 2: MERGERS INVOLVING LISTED QUOTED COMPANIES

	Company	Merged with	Current Name	Event Date
1	National Industrial Credit Bank Ltd.	African Mercantile Banking Corp.	NIC Bank Ltd.	14.06.1997
2	Diamond Trust Bank (K) Ltd.	Premier Savings & Finance Ltd.	Diamond Trust Bank (K) Ltd.	12.02.1999
3	National Bank of Kenya Ltd.	Kenya National Capital Corp.	National Bank of Kenya Ltd.	24.05.1999
4	Standard Chartered Bank (K) Ltd.	Standard Chartered Financial Services	Standard Chartered Bank (K) Ltd.	17.11.1999
5	Barclays Bank of Kenya Ltd.	Barclays Merchant Finance Ltd.	Barclays Bank of Kenya Ltd.	22.11.1999
6	Kenya Commercial Bank	Kenya Commercial Finance Co.	Kenya Commercial Bank Ltd.	21.03.2001
7	Kenya oil company(Kenol)	Jovenna Zambia	Kenya oil Co. (Kenol)	14.02. 2002
8	East African Breweries	International Distillers Uganda Ltd(U) Ltd and	East African Breweries	13 .05.2002

	Company	Merged with	Current Name	Event Date
		Castle Brewing Kenya ltd		
9	Unga limited	Kenya National Millers Ltd	Unga Group Limited	01.07. 2002
10	Nation Media Group	Mwananchi Communications& Radio Uhuru Ltd	Nation Media Group	12 Dec 2002
11	CFC Bank ltd	Alico Kenya	CFC Bank	12.10.2004

APPENDIX 3: LETTER OF INTRODUCTION

Dear Sir/Madam

RE: Research Information

I am a postgraduate student at the faculty of Commerce, University of Nairobi pursuing my MBA course. As part of the requirements of the course, am undertaking a research project to establish the effect of Merger & Acquisition announcement on share prices of stocks on the NSE.

To fulfill information requirements for my study, I intend to collect secondary data from your institution. The information requested is needed purely for academic purposes and will be treated in strict confidence, and will not be used for any purpose other than for my research.

I would be most grateful if you would allow me access to all the relevant information pertinent to my research. Any additional information you might consider necessary for this study is most welcome. Thanks in advance for your assistance in accessing the much needed information.

Yours Sincerely,

MBA Candidate
Constantine Barasa

Supervisor
Mr. J.L Barasa
Lecturer
Department of Accounting
University of Nairobi

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