THE EFFECT OF MERGERS AND ACQUISITIONS ANNOUNCEMENTS ON STOCK PRICES OF COMPANIES LISTED AT THE NAIROBI SECURITIES EXCHANGE

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## DECLARATION

I declare this research project is my original work and has not been submitted to any other college, institution or university
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This research project has been submitted for examination with my approval as university supervisor

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## DEDICATION

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## LIST OF ABBREVIATIONS

| NSE | Nairobi Securities Exchange |
| :--- | :--- |
| M\&A | Mergers and Acquisitions |
| CBK | Central Bank of Kenya |
| CMA | Capital Markets Authority |
| NPV | Net Present Value |
| BOD | Board of Directors |
| ICAEW | Institute of Chartered Accountants in England and Wales |
| ESM | Event Study Methodology |
| CAR | Cumulative Abnormal Returns |
| CAAR | Cumulative Average Abnormal Returns |
| CAPM | Capital Asset Pricing Model |
| EABL | East African Breweries Limited |
| FTG | Flame Tree Group |


#### Abstract

Mergers and acquisitions continue to be a trend in the financial field in Kenya. The study aims to find out the effect of mergers and acquisitions announcements on stock prices of companies listed at the NSE. The NSE comprises of 63 companies and the sample contains 8 companies that have merged between 2014 and 2019 across 7 Sectors. They are; Britam in the insurance sector, Longhorn Publishers in the commercial industry, Centum in the investment industry, Total in the energy industry, Equity Group Holdings in the banking sector, NCBA in the banking sector, EABL in the manufacturing sector, Flame Tree Group in manufacturing and allied sector. The different sectors were to ensure that the results have a general feel of the effect of mergers and acquisitions in the market and not to any unique industry that may have some form of character that may lead to specific results. The study used secondary data from an online site known as EMIS- Emerging Markets Information Service that had all the stock prices and merger dates from the NSE. The research design used was the Event Study Methodology that looked at a 50-day estimation period and a 2 -month event window ie -30 , +30 . The long event window was to cater for any prior leakages and anticipations prior the announcement and to capture the reactions of conservative shareholders who tend to hold to see if there is additional information over a few weeks to react. The results showed that 6 out of the 8 companies had small positive abnormal returns while 2 out of the 8 companies had small negative abnormal returns. The overall cumulative average abnormal return was $11.9 \%$ which was deemed insignificant with a T-test. The $t$-test provided that there were no significant changes to the share prices pre-merger and post-merger and thus answering the research question. From the graphical representation, the study noted that most of the companies had very volatile abnormal returns pre-merger as compared to post-merger, an indication that there were a lot of trading activities pre-merger. This signifies a lot of anticipation reactions by investors that may be an indication of semi strong form efficiency at the NSE. The study encourages companies to carefully consider M\&A transactions before participating in them since evidence proves that there has not been a lot of value creation for the shareholders. The study recommends that the policymakers need to formulate and implement policies that can handle positive speculative trading. The study also encourages NSE to build a culture among its companies in training on how to push the demand and supply ethically. The study also recommends that investors should not shy off from investing from companies that have merger and acquisitions prospects since the evidence shows the market fundamentals remain unaffected and positive abnormal returns can be enjoyed by the shareholders during the event windows.


## CHAPTER ONE <br> INTRODUCTION

### 1.1.Background of the Study

When a Merger and Acquisition transaction takes place, it means that there is a direct impact on the stock of a company that is; for the acquiring company the stock increases while for the target reduces. The stock price is influenced by forces of supply and demand in the market at a basic level, so this means shareholders hold the power to determine the stock prices. With new information of a merger and acquisition announcement, this means different shareholders may react differently causing a shift in the demand and supply of stocks and thus impacting on the share price. Shareholders tend to review their goals and expectations in light of new information on the profitability of the company in future which affects the stock prices (Panayides \& Gong, 2002).

In the Efficient Market Hypothesis, asset prices are a good representation of the market in that they reflect fully all available information (Fama,1970), which means that stock prices will change upon new information. The theory assumes that all investors are rational so a merger announcement would bring up a positive reaction to the stock prices, while behavioural finance (Daniel, 2002) asserts that investors make their decisions based on emotions so mergers and acquisition transactions are reacted upon based personal judgement. According to this theory, a merger and acquisition announcement may or may not cause a reaction which conflicts with the Efficient Market Hypothesis.

In the 11 sectors across the NSE, the Banking, Insurance and Petroleum products sector taking the lead in merger activity have seen up to $70 \%$ of the companies participating in the mergers and at least in each sector, there has been an average of 3 companies using $M \& A$ as a corporate strategy. Just in 2019, the Competitive Authority of Kenya announced that it had received 148
merger requests in their financial year 2017/2018 with $55.3 \%$ having an international dimension. The trend is estimated to thicken especially with the impact of Covid-19 pandemic on companies to try to stay afloat (Xinhua, 2020).

### 1.1.1. Mergers and Acquisitions

Mergers and acquisitions are the amalgamations of entities. A merger is the voluntary combination of two existing companies to form one and acquisition is where a company takes over another in terms controlling the ownership interest, or selected assets of another firm. In this research paper, the contrast of the meaning "merger" and "acquisition" will not be a point of focus since the net results are the same. Gaughan (2007) looks at mergers as a form of transaction where an acquiring company takes in the balance sheet items of the merged company and only one organization lives while the other seizes. The various types of merger include; Horizontal merger where 2 companies of the same industry who are competitors consolidate (Chunlai Chen and Findlay, 2003) to attain cost saving and increase market, vertical merger where 2 companies combine in the value chain in that they have business relationships in terms of the upstream supplier or downstream buyer to take advantage of economies of scale and reduction of overhead cost (Chunlai Chen and Findlay, 2003) and Conglomerate merger were two unrelated companies merge intending to diversify the capital investments which in turn will reduce the company risk (Gaughan, 2002).

The effect of mergers and acquisitions have been measured by various factors. Onyango (2016) measured the effect of mergers and acquisitions on the competitive advantage of ICEA and Lion Group and found a positive increase on the variable. Another common measure is how mergers and acquisitions have impacted the profitability of companies. Ndunyu(2018) did a study on this using determinants; synergy, market share and risk diversification and found that they all had a positive notable impact on the financial performance of companies listed in the NSE. Another key measure of the effect of M\&A is its effect on the shareholder's wealth.

Oirere(2020) found that M\&A had no significant effect on the shareholder's wealth. This study looks at stock prices as an indicator of the effect of Mergers and Acquisitions. My focus mainly on stock prices is because it represents the basis of all the other measurements in terms of if looking at profitability or market share or shareholders wealth, they all boil down to how well the stock prices are doing and thus it is a starting point measure to facilitate the rest of the measures.

### 1.1.2. Share prices/Stock Returns

Share price in simple terms refers to the loftiest amount a stockholder is willing to pay for a stock or the lowest amount that an asset can be bought. Share prices are set by a perceived supply of, and demand for the company's stock through an initial public offering. Stock prices are variables that look forward. They precipitate information concerning the expected value of a company. A share price is viewed as a function of expected future earnings because they reflect investor's expectations regarding future earnings (Olaoye et al., 2016). The price of Stock reflects the company's value and responds only to real changes in its prosperity in realtime, as determined by supply and demand, the basis of economics (Ojow, 2015).

Returns refer to the earnings or diminution on an asset held by an investor at a particular time (Baker, 2006). Stock returns have 2 major components; dividend and capital gain. Dividends refer to a portion/whole of profits that a company pays out to shareholders and is determined on per share basis. Capital gains refer to the rise of the worth of a capital asset that is higher than the purchase price and is realized by the investor upon selling the asset.

The price movement of Stock shows investor's feelings about the worth of a company. Share prices are driven by Indexes, world national news, economic trends, industry information and a company's financial health (Wolski, 2019).

### 1.1.3. Effect of Mergers and Acquisitions announcements on Stock return

The Mergers and Acquisition announcement, in this case, reflect the independent variable in the study while the stock prices represent the dependent variable. A Merger and Acquisition announcement is new information in the market and various shareholders may have different views about the announcement. Possible views may include; one may view it as a company being in trouble and is trying to save themselves while another shareholder may interpret this as an expansion of the company thus better value for their share. The reaction of the individual shareholder may be to dispose of the shares, retain them or not react at all. These reactions affect the demand and supply of the shares and can cause a shift in the stock prices.

This study looks at the stock prices within the time of the merger and acquisition of companies in listed in the NSE and observes if there were any significant reactions to it which give a general feel of how shareholders perceive mergers and acquisitions. From previous studies, the results of M\&A effect on stock prices have been a mixed bag. Literature indicates that there have been both positive and negative effects on Stock return. Goddard (2012) found that M\&A had again effect on the stock return of the target company while causing no effect on the acquiring company on research he did in 132 events of Asia and Latin America which are developing countries. On the other hand, Soongwang (2011) found there are positive returns on the shareholders' value in the target company while the acquiring company experienced negative effects.

### 1.1.4. Nairobi Securities Exchange

The Nairobi Securities Exchange (NSE) then known as the Nairobi Stock Exchange was registered under the societies act in 1954. The NSE is among the most vibrant markets in Africa with the directive of providing a trading platform for listed securities and overseeing its member firms. The NSE performs under the dominion of the Capital Markets Authority. The main functions of the NSE include; acting as an economic barometer for the country i.e it measures the economic conditions, provides a safety line on transactions while providing strict
rules and guidelines of operations of trading, liquidity, pricing of securities among others. There are 66 listed companies in the NSE.

Over the years, NSE has had some mergers and acquisition happening with its listed firms in various industries. In the petroleum industry, companies such as Kenol Kobil and Total have experienced merger activities. In the Banking Industry CBA Bank and NIC bank have had a recent merger among others. The use of companies listed in the NSE is to ensure several industries are represented in the research for a more general result of the effect of mergers and acquisitions on stock prices.

### 1.2. Research Problem

Taking into account the new challenging changes and dynamic business environment; companies are using corporate restructuring tool as Mergers and Acquisition to reposition themselves in the market. Mergers and Acquisitions are undertaken to improve the financial performance of the company which will lead to better stock prices and returns to the shareholders. Previous research has however not justified significantly that the merger effect has automatically had a positive outcome on stock prices since the results have been a mixed bag as will be seen in paragraph 3 and 4 .

There has been a notable increment of the M\&A deals in Africa as equated to the rest of the world as reported by the Global Merger Activity Report 2019. Particularly the Kenyan Market has seen many companies turn to Mergers \&Acquisition strategy due to drastic changes such as rapid technology development and disruptors, competition in the industry from international companies such as the Chinese, new regulatory requirements that some firms have not been able to sustain e.g. the lending rates change by the CBK among many other issues as the economic effects of a global pandemic. With this trend in the country of M\&As, there is an importance of researching further of whether it is the best route for companies and evaluating the stock prices will help in assessing that.

Globally, there are many studies done on the effect of M\&A on stock returns. Abdeladi (2017) made a merger comparison on international transactions while sampling 3,094 completed merger transactions from all over the world. Her results showed evidence that there is a positive effect on stock prices for both the target and acquiring companies around the announcement date but the shift changes and becomes more beneficial on the target companies in a 3-day window period around the announcement date. The 3-day window period, she lists as a major limitation as it may not accurately exhibit the actual reaction of shareholders. There is a significant group of shareholders who have the strategy of buying and holding shares for a while as they observe the trends and don't react immediately (Investopedia,2020). She suggests a longer time frame would give better results.

In Kenya, Kemunto (2017) did similar research focusing on 15-days pre-merger and postmerger announcement with a 16-day estimation period and found a positive effect on stock prices. Her study pointed out that research needed to be further done on a longer period of more than 15 days' post-merger for more accurate results. Ogeto (2017) did a study of the effect of mergers and acquisitions on insurance companies in Kenya and found a positive effect on stock returns. He suggests a further study of the incorporation of more companies in different industries to ensure that any bias that may come from one industry can be eliminated in the other. Based on these studies, there is a duration gap in that the researchers suggest a longer estimation window for the regression and a longer event window. There is also the need to incorporate several companies from various industries to ensure that several sectors of the economy are covered. There is also a time gap of companies that have merged recently between 2017 and 2019 and due to the drastic economic changes the country is facing, it is key to see if the new developments may cause a change to the stock prices. My research will cover a 50day estimation period and 60day event window (a total of 110days) to bridge the gap of shorter timelines and incorporate the conservative shareholders who tend to react later after
observation of new information. My research will also incorporate some companies from different sectors in the NSE to have a general overview of many industries. This led to the research question, what was the effect of mergers and acquisitions on stock prices of companies listed in the Nairobi Securities Exchange?

### 1.3. Research Objective

To determine the effect of mergers and acquisitions announcements on the stock prices of companies listed at the NSE.

### 1.4. Value of the Study

This research will benefit many stakeholders in the financial arena. The study will pay attention to specifically stock prices, which determine shareholders return; thus, this will help investors have a better judgment on stock prices after a merger acquisition.

Secondly, this research will aid the policy formulators and regulators in the market, such as CMA and NSE. It will inform them of possible behavioural changes in stock prices that will enable to come up with strategic policies that can cushion reactions not to crush the market.

Corporates can also benefit from this research as many turns to strategies of M\&A to boost their portfolios. An early understanding of the effect of M\&A will help organizations evaluate better on the policy before undertaking it. Finally, other scholars and researchers can use this as a basis of their research to refer to as their secondary data source.

## CHAPTER TWO <br> LITERATURE REVIEW

### 2.1.Introduction

This chapter looks at the literature written to why mergers and acquisitions occur. It will also look at the empirical evidence and the determinants of stock prices from other scholars and researchers on the NSE. This will act as the basis of my research paper.

### 2.2.Theoretical Review

Several theories have attempted to explain the reason behind mergers and acquisitions. These theories offer possible drivers for causes of mergers. They are clustered into four groups. The first one is that mergers are caused on the part of individual decision-makers. This means managers of acquiring firms attempt to create value for shareholders for their self-interest or due to their overconfidence. The second one is industry-level factors e.g. industry shocks, changes in technology among others. The third reason that these theories attempt to explain is economic conditions and the fourth is the behavioural studies e.g. miscalculation drives mergers. Below are several theories by different scholars expanding various issues on mergers and acquisitions.

### 2.2.1. Synergy Theory

Synergy theory advanced by Ansoff (1965) states the utility of two combined firms is greater than the aggregate of each firm. Ansoff building blocks of this theory was from a point of Return on Investment (ROI). Ansoff argues that a firm resulting from M\&A operations can realize scale effects leading to a lower level of operating costs and investment as compared to a firm with independent operating units while maintaining the same level of sales (Karenfort, 2011). He uses the ROI formula to break down the financial synergy on sales, operating and investment synergies. The theory explains that M\&A are conducted on consideration of efficient improvement by value creation and synergy effects. Myers and Majluf (1984) added to this theory, stating that a firm with inadequate liquid assets may not be able to undertake all
valuable investments and thus firms experiencing financial distress but have enormous investment opportunities are more likely to take part in M\&A activities.

Ansoff (1988) concluded that although companies may enjoy positive results post-merger, synergy achieved may be quite different, i.e. $2+2=3$ showing a negative effect on the impact of synergies. This theory explains that the impact of Mergers \& Acquisitions is to cause a financial synergy effect but in the later add-ons to his theory after years says that the results can also be negative causing a worse effect than compared to the companies operating individually. This study will help shed some light on the actual effect of the M\&As with these two contrasting possibilities from this theory.

### 2.2.2. Hubris Hypothesis Theory

The Hubris Hypothesis was postulated by Roll (1986). The theory attempts to explain the relationship between managers' overconfidence and the results of the merger. The term "|hubris" can be traced back in the 1960s in psychology which meant overconfidence coupled with excessive pride and though confidence grows upon additional information it reaches a peak on the predictive precision which causes an individual to take in information in a noncritical fashion (Oskamp, 1965). Roll build on this and explains the aspect of behavioural finance that investors are very irrational contrary to the efficient market hypothesis and thus act on their personal feelings of overconfidence. Due to this overconfidence, managers make irrational decisions and buy companies at overpriced values. This grossly individual behaviour causes a false economic value of a merger, which in turn destroys projects that rational managers would never undertake. Due to this, the managerial rationale is important factors to determine the outcome of the M\&A as they may act to maximize their interest instead of the shareholders' value. This theory underpins my study in investigating whether shareholders react to M\&A announcement as rational beings or as to how they perceive M\&As. The stock price movement will assist in understanding this aspect.

### 2.2.3. Agency Cost Theory

The Agency cost theory can be traced back to Ross and Mitnick (1973) who talk about the conflict that occurs when an agent hired to protect the interest of the principal starts to serve their interest. In the context of mergers and acquisitions, the works can be traced to Shleifer \& \& Vishnyl (1989) who state that mergers take over motivator may be management acting in their interest and not shareholders. The pay out of dividends to shareholders creates a conflict because it reduces the resources controlled by managers that also means a reduction in their power. The battle becomes severe when there is free cash flow. Free cash flow is the excess of that required to fund all projects that have a positive NPV. Due to this conflict, managers may act in their self-interest other than the firms (Shleifer \& Vishnyl,1989 ). Mergers and acquisitions motives are driven by the managers' interest other than building operating and financial synergies to create value (Berkovitech,1993). The purpose of agency costs and free cash flow destroys the shareholders' value by triggering the stock prices to move falsely.

### 2.2.4. Industry Shock Theory

This neoclassical view is a rational approach that assumes that there is a separation of control and ownership. Jarrad Harford (2005) proposed the theory, mergers occur due to shocks in the industry's economic, technological or regulatory environment. Shock is defined as an unpredicted turn of events in the economy due to an introduction of something that causes a major change. This can be an introduction to new technology commonly known as disruptors or a change in the monetary and fiscal policies of a country among others. It could either behave positive or negative effects. Michelle \& Mulhrin(1996) state that M\&As are the cheapest ways of dealing with such shocks. Managers take M\&A activities to cushion shareholders on any abnormal changes which have a direct impact on stock prices.

### 2.3.Determinants of Stock Prices

Generally, the forces of supply and demand in a market determine stock prices. These forces are triggered by several factors, which include;

### 2.3.1. Firms Performance

A firm's performance is primarily determined by how much profit a company is generating. It is a product of the firm's activities and returns on the investment at a given period. A company's profit/loss will pick the interest of both management and shareholders. A shareholder buys a stock with the aim of a future stream of earnings through dividends or reinvestment on the gains. For the shareholder to have these earnings, profit needs to be made by the organization. If a company makes profits, then the share price will rise and if it makes a loss so will shareholders (Olaoye et al,2016). According to Dalve and Baghi (2014), an organization's profit level acts as a prediction of future earnings. A firm's performance is a fundamental factor on the stock prices through company earnings and profitability. The fundamental is a combination of two things; an earning base and a valuation multiple. An example of the earning base is the EPS and the valuation model is the P/E. They are ways of determining the present value of future earnings.

### 2.3.2. Macro-Economic factors

Andrew Bloomenthal (2019) defines macro-economic factors as an influential fiscal, natural, or geopolitical event that broadly affects a regional or national economy. They include inflation, interest rates and exchange rates. Inflation refers to a general increase in prices on goods or the cost of living in a country. It represents how much more expensive the relevant set of rights andlor services have become over a certain period (Ceyda,2010). An increase in prices discourages consumption of products by consumers decreasing the company's productivity, which in turn affects the profit levels. This relationship then causes a drop in the share prices of a company. Interest rates refer to the charge on borrowed money, which is proportional to the amount borrowed. It is the cost of acquiring a loan. The Central Bank uses
fiscal policies such as control of interest rates to regulate the economic conditions in the country. This means, when the interest rates charged are high, it reduces the disposable income of the borrower, which has a ripple effect on the profits of the public company causing the stock prices to be affected negatively. Other macroeconomic factors, such as government intervention also affect stock prices. Government policies that change over time move the stock prices.

### 2.3.3. Corporate Governance

Corporate governance refers to how a firm is directed and controlled. The BOD who are elected by the shareholders has the responsibility of corporate governance. It involves setting the company strategies, supervision of management to put the plan in effect and reporting to shareholders on their stewardship. The purpose of corporate governance according to ICAEW is to facilitate entrepreneurial and sensible direction to deliver long term success of the company. Good corporate governance means that the strategies put forward are for the best interest of the shareholders. It means that the information available is reflected in the share prices and insider trading is not taking place in an organization. No arbitrage profits are made because the data is open to the public through good corporate governance practices. Good corporate governance means the cost of capital is lowered increasing the sources of funds for future projects, which leads to higher demand of shares and in turn leads to growth in the share price (Talal and Mustapha, 2014).

### 2.3.4. Mergers and Acquisitions

To understand how mergers and acquisitions are a determinant of the stock price, one needs to understand the motive of a merger. Companies merge as a strategic effort to boost shareholders value by delving into new business lines and/or to capture greater market share (Investopedia, 2020). Looking at a typical curve of the behaviour of stock prices between the acquiring
company and the target company, the acquiring company stock prices drop temporarily during the acquisition due to the amount paid for the target company, while that of the acquired company shoots up due to the increase in shares. Over the long haul, an acquisition tends to boost the acquiring company's share price (Investopedia, 2020). The general relationship of mergers and acquisitions and stock prices is a mixed bag of reactions as shown by the empirical evidence below.

### 2.4. Empirical Evidence

This section will look at both the international and local studies done on mergers and acquisitions.

### 2.4.1. International Studies

Zahroon, Arshid and Khalil (2017) did a study on the effect of mergers and acquisitions on stock price behaviour in the banking sector of Pakistan from 2002 to 2012. They used the market study method to compute abnormal returns for the pre and post events effect on the phenomenon of share prices. The results of the study showed that the majority of the firms in M\&A did not perform well and added the reason for this was poor decision making on the management side. Their study concluded that firms needed to study their potential benefits carefully, not overlooking any factors related to it.

Goddard et al. (2012) used 132 events of M\&As in Latin America and Asia and found that M\&A had a positive relationship with the shareholder's wealth. These results are in line with another study conducted in the US in the biofuel industry by Aditya (2012) that used the event study methodology and found that a $4 \%$ growth was attributed to the merger after 60 days.

Akinyomi and Olutoye (2014) from Nigeria, examined their local banks using regression analysis in the case of M\&A. On the Return on Assets, they found a significant difference on the pre-merger and post-merger while on the return on equity the difference was on the pre-
merger and acquisitions. The overall observation was a decline in financial performance at the post mergers and acquisitions when compared with that of the pre mergers and acquisitions dispensation (Rajab, 2015).

### 2.4.2. Local Studies

Oirere(2020) who studied the effect of mergers and acquisition on shareholders wealth in firms listed in NSE, found that there was no significant change in the investor's stock returns after the merger announcement. He states there were no abnormal reactions from shareholders that caused any changes in the stock prices. The event study method was used on six firms on the NSE. He concludes that the M\&A announcement had no relationship with the valuation of shares. The study also put out that the Mergers in Kenya were not wealth-creating projects for shareholders. He identifies that his sample was small and recommends further research with a larger sample to get accurate results.

Bananuka and Musimenta (2017) from the Zhongnan University in Wuhan, China did a research paper on the effect of M\&A deals on the financial performance of East African Firms. Their sample was 330 observations from 234 M\&A's that happened all over East Africa, Kenya being on the top of that list with 134 out of the 234 tested. Their study calculated abnormal returns to determine the firms' performance together with regression models that compared the firms' performance model variables with M\&A activities. From the regression models, they found that M\&A performance estimates a significant and negative relationship between the acquirer returns and the M\&A activities. They further found that there is a positive relationship between M\&A deals and firm performance activities. Domestic M\&A perform better than the cross border M\&A. Their study involved private firms that they found difficult to access information, thus being limited in their research.

Rajab Barasa (2015) did a similar study on the effect of M\&A on the share prices of companies listed by the NSE. He studied 61 days; 30days prior, the acquisition and 31 days post the
purchase. His research found three results on the companies, the first was some share prices post mergers, the second was prices went up, and in the final, some remained the same. The results were a mixed bag suggesting further research into it. He concluded the stock prices were based on the perception of stakeholders of what the merger meant for the company.

Mureithi (2013) carried out a study on 16 commercial banks in Kenya listed in the NSE using causal research design to investigate the impact of mergers and acquisitions on their financial performance. He focused on M\&A between 2000 and 2012 as his unit of analysis. He used return on assets and equity as the performance indicators and found a positive relationship. He added that profitability generally increased post-merger. Mboroto (2013) had similar research but focused on petroleum firms in Kenya and found the same results as Mureithi. The two studies concluded that mergers had a significant effect on the Return on Assets.

### 2.5. Summary of the Literature Review

The empirical evidence of the literature review is a mixed bag. Some exhibiting that mergers and acquisitions have a positive relationship on share prices; while some were stating that the result is negative. In 10 years in the Kenyan Market, a lot of new economic changes have happened with significant technological advancements that are affecting the economies and are driving companies to take robust actions such as Mergers and acquisitions. There is little research done with the recent changes. This study will help bridge the gap of the latest mergers and acquisitions and their effect on share prices with the economic advancements that have taken place. This study will also look into a longer time-frame; 2 months' pre-merger and two months' post-merger, as compared to the 15 days' pre-merger and 15 -day post-merger as most studies have showcased to help achieve more precise results. The empirical evidence also shows a focus in specific industries, but this research will sample from several sectors to be able to ensure an overall view of the results.

## CHAPTER THREE RESEARCH METHODOLOGY

### 3.1.Introduction

This chapter covers the research design that has been used on the data, the population and narrows it to a sample in terms of the time and concludes with the data collection and analysis.

### 3.2.Research Design

The Event Study Method (ESM) is the research design that has been used for this study. The ESM looks at special events in the organization and determines the effect on the various dependent variable. In this case, The ESM looked at the mergers and acquisitions as the event and how affected the dependent variable, i.e. the stock prices. The event study method checks on abnormal returns for a window period which is a specific time before the event and a specified period after the fact. The variables of interest were the cumulative average abnormal returns (CAARs). This will help determine if the mergers and acquisition event has any significant impact on the stock prices in that if the results of the CAARs are positive this means a positive effect of the event $M \& A$ on stock prices and vice versa for negative returns.

### 3.3.Sample

The sample comprised of eight companies listed in the NSE that had merger and acquisition transactions between the years 2014-2019. The population of the NSE currently stands at 63 companies distributed among 11 sectors. The eight companies came from different areas to ensure that the conclusion drawn will have a diverse aspect on no specific industry but the national impact of the merger and acquisition transaction on most trades. The sectors included; insurance sector, investment industry, banking sector, energy sector, commercial sector, manufacturing and allied industry.

### 3.4.Data Collection

This research used secondary data. The merger and acquisition dates and stock prices were retrieved from various financial articles. The business daily newspaper and the company-
specific websites had the details for the merger and acquisitions announcement and the stock prices, they were extracted from a site data known as the Emerging Markets Information Service (EMIS) and Thomson One that have data from the Nairobi Securities Exchange.

### 3.5.Data Analysis

The event study methodology, as stated earlier, calculates abnormal returns that derive the conclusions of the study.

There are three necessary steps that were taken on the calculation of the abnormal returns.

The first step was the determination of the announcement date of the Merger and Acquisitions. Once that was done, a 2-month event window of the study was determined pre and post announcement while monitoring any other significant effect on the event window that would affect the stock prices.


The second step was the calculation of the actual daily return. The stock prices for the market and the for the firms were all converted to percentage changes as shown in the formula below $\mathrm{AR}=\frac{\text { Current Day Close Price-Previous Day Close price } * 100}{\text { Previous Day Close Price }}$ for the 60 days in the event window period.

The third step was determining expected returns. A benchmark of the expected returns was identified. Brown and Warner (1980) give suggestions of ways this can be achieved. Their first method suggests a mean adjusted model where the benchmark is considered an average return on a given period and to get this you will need a y-intercept and a beta (slope) over a long
estimation period of the event window. The second method is a market-adjusted return where the returns are equal to the performances of a market index, which was being used for this research.

For the 60 -day window period, the NSE share Index (Rm) was used as the market rate.

$$
\mathrm{Rm}=\frac{\text { Current day market price-previous day market price } * 100}{\text { previous day market price }}
$$

A regression analysis was then performed where the actual daily return of each firm (R) was the dependent variable and the corresponding NSE share index ( Rm ) was independent variable over the pre-event period (the 50 day estimation period) to obtain the intercept alpha and standardized beta for each sample bank separately to now be able to use risk-adjusted method. This is by use of Capital Market Pricing model (CAPM) for each day for the 60 days. CAPM formula;
$\mathrm{ER}=$ Alpha + Beta $(\mathrm{Rm})$

Where; ER -Expected Return

Alpha- Risk-free rate (calculated in the regression)

Beta - Relationship at the slope intersection (calculated in the regression)

Rm- NSE Index

The third and final step was the actual calculation and analysis of the returns. The basic formula is; Abnormal Return $(A R)=$ Expected Return(ER) - Actual Return

Cumulated Abnormal Returns; $\mathrm{CAR}=\sum_{t=60}^{t=1} A R$.

To determine the overall effect in the market an average of the 8 cumulated abnormal returns to get the CAAR.

After performing the event analysis and getting all the abnormal returns, to test their significance the $t$-test paired sample was used. The $t$-test compares at the 2 periods before the event and after the event and evaluates if there are any significant changes.

The null hypothesis used in this test is, there is no significant difference of the abnormal returns pre-merger and post-merger ie the difference between abnormal returns pre-merger and postmerger is zero.

## CHAPTER FOUR

## DATA ANALYSIS, RESULTS AND INTERPRETATION

### 4.1.Introduction

This chapter captures the data findings from the analysis of the stock prices over the specified period. The results are shown through graphs to show the trends of the abnormal returns during the event window of the event study, descriptive statistics, inferential statistics and interpretation of the findings. The data contains 8 merged firms from different sectors of the economy that were listed during the time of announcement. They are; Britam in the insurance sector, Longhorn Publishers in the commercial industry, Centum in the investment industry, Total in the energy industry, Equity Group Holdings in the banking sector, NCBA in the banking sector, EABL in the manufacturing sector, Flame Tree Group in manufacturing and allied sector.

### 4.2.Descriptive Statistics

The application of descriptive studies is used as an analysis tool for the study. The average share price of the stock and market, the minimum and maximum abnormal return, the average and cumulative abnormal returns for each of the company is represented in this section. An overall cumulative average abnormal return to see the overall effect is also presented in the table below.

Table 4.1: Descriptive Statistics

| Company <br> name | Average <br> share <br> price | Average <br> NSE <br> market <br> price | Minimum <br> return <br> during the <br> event <br> window | Maximum <br> return <br> during the <br> event <br> window | Average <br> abnormal <br> returns | Cumulative <br> abnormal <br> returns <br> (CAR) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Britam | 18.62 | 140.76 | -0.087 | 0.072 | -0.0065 | -0.2709 |
| Longhorn | 5.27 | 143.84 | -0.096 | 0.088 | 0.0065 | 0.254 |
| Centum | 45.22 | 153.49 | -0.032 | 0.065 | 0.0053 | 0.223 |
| Total | 17.06 | 124.48 | -0.052 | 0.064 | -0.0026 | 0.100 |
| Equity | 48.27 | 157.62 | -0.037 | 0.077 | 0.00841 | 0.345 |
| NCBA | 26.90 | 145.84 | -0.050 | 0.098 | 0.007 | 0.266 |
| EABL | 2.76 | 149.06 | -0.082 | 0.131 | 0.0027 | 0.108 |
| FTG | 4.87 | 162.63 | -0.098 | 0.087 | -0.0018 | -0.073 |
| Cumulative Average Abnormal Return(CAAR) for all the 8 companies | $\mathbf{0 . 1 1 9}$ |  |  |  |  |  |

## Source: Research Findings

The results show that for Britam with an average stock price(y) of 18.82 and an average market price( x ) of 140.76 during the event period got a minimum return was -0.087 and a maximum return of 0.072 while averaging the abnormal returns at -0.065 and cumulatively having an abnormal return of -0.279 . For Longhorn, the average stock price and market within the $60-$ day window period were Kshs. 5.27 and Kshs. 143.84 respectively. The minimum and maximum return for the company was -0.096 and 0.088 sequentially while the average and cumulative abnormal return were 0.065 and 0.254 respectively. Centum had an average stock price of Kshs. 45.22 while the average market price during their merger period was Kshs. 153.49 as the minimum and maximum return were -0.032 and 0.065 . The results of the average abnormal return 0.0053 while the cumulative returns came to 0.223 . In Total, the average price for the stock was Kshs. 17.06 and during the same period the market prices was Kshs. 124.48. The minimum and maximum return for the company was -0.052 and 0.064 individually. The average abnormal return was -0.0026 and cumulative abnormal return was a flat 0.1 . The banking sector represented by Equity and NCBA had average share prices of Kshs. 48.24 and 26.90 in that order. Their average market rates were Kshs. 157.62 and Kshs. 145.84 during the event window. The minimum returns of the 2 companies respectively were -0.037 and -0.050 while the maximum returns stood at 0.077 and 0.098 on each company. The average abnormal return and cumulative abnormal return for Equity was 0.00841 and 0.345 apiece while that of NCBA stood at 0.007 and 0.26 . The Diageo subsidiary EABL had an average stock price of Kshs. 2.76 and a market price of 149.06 during the window. With an average abnormal return of 0.0027 cumulative one 0.108 , the minimum and maximum return levelled at -0.082 and 0.131. The final company Flame tree group had an average stock price, average market price, minimum and maximum return and the average/ cumulative abnormal return of 4.87,162.63, -
0.098, - 0.0018 and -0.073 successively. The overall Cumulative Average Abnormal Return (CAAR) was a positive 0.119 .

### 4.3.Graphical Representation of the Abnormal Returns

### 4.3.1. NCBA Bank

The graph below shows the trend of abnormal returns during the event window.


Figure 4.1: NCBA Bank Abnormal Returns
The red line represents the exact date of the merger and acquisition announcement which was on $27^{\text {th }}$ September 2019. Before the date of the announcement, the volatility of returns is not as vigorous compared to after the announcement date. On the $18^{\text {th }}$ of October the abnormal returns short to a new high because that was the actual day of listing of the shares at the NSE.

### 4.3.2. East African Breweries Limited



Figure 4.2: EABL
On the date of the announcement of the acquisition, there was a steady rise in abnormal returns for one day then the lowest drop is recorded in the event window 3 days after the announcement. The distinct increase in abnormal returns on the 8th of August as seen in the graph may be a cause of profit announcement by EABL during the period.

### 4.3.3. Equity Bank



Figure 4.3: Equity Bank

The general trend of Equity bank shows a higher volatility of returns pre-announcement period as compared to the post. The highest and lowest abnormal returns are seen before the announcement date. The stock price shot up from Kshs. 46.5 to Kshs 50.75 on the $1^{\text {st }}$ of November thus the drastic movement of the abnormal returns.

### 4.3.4. Flame Tree Group



Figure 4.4: Flame Tree Group
The Flame Tree Group shows significant volatility at the early periods of the event window but no vigorous changes after the announcement date and in some dates showing no abnormal returns towards the end of the event period.


Figure 4.5: Total Kenya
The Total Kenya trend line shows very volatile abnormal returns during the event period. The company witnessed a lot of movement in their stock prices. The pre and post-merger announcement periods generally had similar reactions.

### 4.3.6. Longhorn Publishers



Figure 4.6: Longhorn Publishers
The series of Longhorn Publishers abnormal returns shows a more vigorous trend line premerger as compared to the post-merger announcement. However, there is generally an up and downtrend of the abnormal returns throughout the 2 months.

### 4.3.7. Centum Investment



Figure 4.7: Centum Investment

Centum investment trend-line shows drastic change at the days around the merger announcement where the highest abnormal return is recorded on the day and drops drastically the next day after the announcement date. The abnormal returns after the merger announcement are also seen to be more negative as compared to pre-merger.
4.3.8. Britam Insurance


[^0]The abnormal returns pre-merger announcement during the event time was volatile moving through positive and negative returns however after the announcement, there were constant negative returns on the series of Britam.

### 4.4.Inferential Statistics- Paired Sample T-test

In this section, the study uses the t -test to analyse the abnormal returns during the event window. The $t$-test analyses if there is a significant difference in the movement of the abnormal returns during the event window i.e. the difference pre-merger announcement and post-merger. The t-test is run on excel and the null hypothesis used in the formula is, there is no significant difference in the abnormal returns pre-merger announcement versus post-merger announcement.

Table 4.2: $T$-tests

| Company | T-statistic | T- Critical | Significance <br> at 95\% confidence interval (P) | Result |
| :--- | ---: | ---: | :---: | :--- |
| Britam | 1.2696 | 2.09 | 0.2195 | Accept Ho |
| Longhorn | 0.0246 | 2.12 | 0.9806 | Accept Ho |
| Centum | 1.09428 | 2.11 | 0.2890 | Accept Ho |
| Total | -0.6926 | 2.11 | 0.4979 | Accept Ho |
| Equity | 0.8234 | 2.10 | 0.4210 | Accept Ho |
| NCBA | -0.962 | 2.12 | 0.3504 | Accept Ho |
| EABL | -0.7208 | 2.11 | 0.4608 | Accept Ho |
| FTG | -0.0166 | 2.11 | 0.9869 | Accept Ho |

For Britam, the company needs a T critical of 2.09 to show there is a significant difference in abnormal returns between the pre and post era but its T statistic was 1.2696 which is less thus there is no significant difference in the 2 seasons. To add on these results, the P -value is 0.2195 which is more than the alpha 0.05 making it clearer to accept the null hypothesis. The rest of the 7 companies show similar results in the T-Statistic being lower than the T critical and the P values were all higher than $0.05(95 \%)$ which is confidence alpha showing that there were no differences in abnormal returns between the pre-merger and the post-merger period in the event window.

### 4.5.Discussion and Interpretation of Results

From the data analysis, there was indeed abnormal returns registered throughout the window period though not significant. Longhorn, Centum, Total, Equity, NCBA and EABL registered positive cumulative abnormal returns while Britam and Flame Tree Group registered overall negative cumulative returns. The presence of abnormal returns either negative or positive is an indication that there was a bit of unusual movement of the stock prices during the event window meaning that a few shareholders were reacting to new information. The positive abnormal returns can be interpreted that shareholders may view the merger and acquisition as a value creation project them while the negative abnormal returns may not be well viewed by the shareholders as was the case of Britam and Flame Tree Group. The overall CAAR for the 8 companies showed a positive $11.9 \%$. This means that the overall market view of mergers and acquisitions has been positive and are seen as a sign of value addition for companies across all sectors. The wealth creating project view is in line with Kemunto (2017) who concluded in her study that shareholders indeed viewed the M\&A project as wealth generating.

The movement in the graphs shows volatile trend-lines throughout the window period ie premerger and post-merger. In the case of Equity, Flame Tree Group, Britam, Longhorn and Centum, the series seems more volatile pre-merger as compared to post-merger. This is an indication that there were possible leakages or anticipation of the event before the actual announcement was done. NCBA, EABL and Total show a trend line that seems to have the same volatility pre and post-merger announcement.

Adding on to this series, the paired T-test shows that there were no significant changes in the abnormal returns throughout the window period. This is clear evidence that some shareholders had prior information before the actual announcement and there is a considerable amount of conservative shareholders who reacted days after the information was availed on different reasons as waiting on additional information. These results are in line with Nyalanda (2016)
who found that there were positive insignificant abnormal returns on shareholders returns during the mergers and acquisitions time. She also noted that there was a huge trading activity before the announcement, an indication of the possible leakages within the market.

## CHAPTER FIVE <br> SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1.Introduction

This chapter looks at the summary of the whole study, the conclusions drawn from the analysis and possible recommendations. This is the section that sorts to answer the research question and fulfil the research objective of the study.

### 5.2.Summary

The study sought to answer the question of what is the effect of mergers and acquisitions on stock prices of companies listed in the NSE. It looks at eight companies in 7 sectors of the NSE to ensure that a general conclusion is met to avoid industry-specific issues that may yield certain results. The Event Study Methodology has been used for the data model to check for abnormal returns which signal the movement of stock prices during the $M \& A$ announcements.

The study incorporated 2 months i.e. 1-month prior the merger and acquisition announcement date to take in account any leakages or anticipation by shareholders before the announcement date that may have caused a reaction and 1 month after the mergers and acquisitions to incorporate the conservative shareholders who tend to react way later in the month after searching for additional information. Also, Merger and Acquisitions process may be very complex and lengthy and to address this, 2 months were selected for the event window. This was done to address the gap mentioned by various scholars of having short event window frames of between 3-15 days. Confounding factors have also been considered such as earnings announcement around the same period e.g. EABL had an earnings announcement days after the Merger announcement that saw an unusual abnormal return also after the period.

From the data analysis of the Event Study, $75 \%$ of the companies showed a positive Cumulated Abnormal Return while the $25 \%$ exhibited negative abnormal returns however they were insignificant as illustrated by the t-test which found there was not much change in the abnormal returns when compared for pre-merger and post-merger. The overall Cumulative Average

Abnormal Return stood at $11.9 \%$ which means that the stock prices were affected positively but not significantly.

### 5.3.Conclusion

To answer the research question, mergers and acquisition announcements have an insignificant effect on stock prices. Although there were abnormal returns witnessed throughout the window period of all the companies examined, specifically, For NCBA, EABL, Longhorn, Total, Equity Bank and Centum the cumulative abnormal returns were positive while for Britam and Flame Tree Group were negative the $t$-test deemed them insignificant since they were little to have an impact of the stock prices. This is however in the short term and early stages to fully understand the impact on the value of a firm.

With a majority of the companies having positive abnormal returns, it is safe to conclude that shareholders enjoy a certain share of abnormal returns in the short run of a merger and acquisition announcement and thus M\&A are wealth generating venture for shareholders in the short term. Looking at the level of volatility of returns for the companies there seems to be more movement on the abnormal returns pre-merger which is an indication that the market seems to have a lot of speculations and that is an indication of the semi strong form of efficiency at the NSE. The T-test statistic also shows not much change on the pre-merger and post-merger abnormal returns in that they seem to be similar throughout the event window drawing the same conclusion of the speculations in the market. These results are in line with Oirere (2020) who found that the sampled mergers had no significant effect on the share prices in the bidding firms. The results of this study conclusively show that in Kenya a developing country the event of an M\&A don't cause any major changes in the market scene. A lot of shareholders seem to not react to the announcement in the short term. This is also a signal of a higher percentage of conservative shareholders trading in the NSE. The study proves that NSE is an efficient market
in the semi strong form in that shareholders are able to speculate correctly since they react to future information pre and post the event as shown in the study.

### 5.4.Recommendations

The study recommends that companies wishing to venture to M\&A transactions need to carefully consider the implications on the value. Proper due diligence is needed and NSE should assist the firms to conduct their business ethically to meet their demand and supply. The results show an insignificant impact on the stock prices of the company during the event period. One of the aims of an M\&A transaction is to create value for the shareholders and that needs a positive impact on the stock prices yet evidence from the NSE shows that there is not much in the short term.

The study also recommends that the policymakers and regulators such as the Capital Market Authority need to formulate and implement policies that can handle the speculative trading in a positive way that is happening in the NSE and is playing a major role in the movement of the abnormal returns i.e. a lot of movement pre-merger compared to post-merger. Since the evidence shows a semi-strong efficient market then this can push the market efficiency to strong form of efficiency. The authority should not back away from stopping proposed mergers that have anticipated reactions and focus on how to increase the returns for the Shareholders.

The study recommends that investors should not be worried about firms planning to acquire another firm since from the evidence, the fundamentals from the market do not significantly change and thus not shy off in investing in them if they seem fit in their perception. They can also take advantage of the abnormal returns that are experienced during the merger event since even though little is present as shown by the overall cumulative average abnormal return of $11.9 \%$.

### 5.5.Limitations of the Study

The study mainly focused on stock prices which is not the only area of understanding the effects of mergers and acquisitions. This was because the study incorporates 2019 companies which would be difficult to gain access to their 2019 financial statements that may be published end of the year so assessing the impact of M\&A's on financial performance would be difficult. Another key limitation is the presence of confounding events noted during the study e.g EABL had an earnings announcement days after the merger announcement and thus the reactions witnessed may not have been clear to what the shareholders were reacting to.

The Event Study methodology assumes an efficient market and with the evidence of data leakages, the amount taken by investors to react to information varies showing that the NSE is not an entirely efficient market and thus the prices do not necessarily reflect all the information at a given time. Another limitation is the time period of the study which looks at a recent 5year period, which means the companies maybe in a similar economic state that has not changed much over the 5 years and thus programming the results to be a certain way matching with the economy weather making the results limited a specific economic climate within the country. The fifth limitation was the use of companies only in the NSE which may not give an overall understanding of the effects of mergers and acquisitions around different sectors of the economy that are always feeling the wave of mergers and acquisitions. It is a challenging task accessing the information of private sector companies due to lack of systemised information available to the general public for viewing by the said companies.

### 5.6.Suggestions for Further Research

Being the year 2020, there has been a massive event of the Corona Virus Pandemic that has affected businesses all over the world. A major corporate strategy that is likely to be used by companies to stay afloat would be mergers and acquisitions. With that, this is an area that will need to build on the level of research as to various implications of the mergers and acquisitions
move by companies. Monitoring how stock prices and other financial performance in this area may draw new results as to what it means to shareholders.

Secondly, the private sector has seen a lot of mergers and acquisitions with an international dimension e.g Kenol Kobil was acquired by Rubis a French firm and stopped trading in the NSE, Giant Private Schools such a Makini School have been acquired by Advertech a South African firm so there is still a huge pool of knowledge that has been untapped and can prompt a study on the effects of this mergers and acquisitions of firms that have been acquired from an international dimension.

## REFERENCES

Harder, S.(2010). The Efficient Market Hypothesis and its Application to Stock Markets. Grin Publishing.

Onyango, M.O.(2016). The Effect of Merger Strategy on Competitive Advantage of ICEA and Lion Group Kenya. Unpublished MBA in Finance Thesis, University of Nairobi.

Oirere, D. (2020). The Effect of Merger and Acquisition Announcements on Shareholders' wealth. IOSR Journal of Economics and Finance, 2, 24-32

Ndunyu, T.K. (2018) "the influence of mergers and acquisitions on the financial performance of companies listed in the NSE", Unpublished MBA proposal, Strathmore University.

Ansoff, H. I., McDonnell, E. J. (1988) The new corporate strategy. John Wiley \& Sons Inc, 75-78

Malmendier, U., Tate, G. \& Yan, J. (2011). Overconfidence and early-life experiences: The effect of managerial traits on corporate financial policies. Journal of Finance, 66(5), 1687-1733

Kemunto, O.N. (2017). The Effect of Mergers and Acquisitions on Stock Returns on Companies Listed on NSE. Unpublished MBA Proposal, University of Nairobi

Zahoor, R., Arshad.A ., Khalil, J. (2017). The Effects of Mergers and Acquisitions on Stock Price Behavior in Banking Sector of Pakistan. The Journal of Finance and Data Science. Vol 4

Gwaya, O. J. (2015). The Effect of Mergers and Acquisitions on Financial Performance of Banks (A Survey of Commercial Banks in Kenya). International Journal of Innovative Research \& Development, 4(8)

Abdeladi, F. (2017). The effects of mergers and acquisitions on stock prices: Evidence from international transactions from 2001-2016. MSC Finance. Tilburg University.

Mureithi, N. (2013). The effect of Mergers and Acquisition on Financial Performance on Commercial Banks in Kenya. The University of Nairobi. Unpublished MBA project.

Bananuka, J. \& Musimenta, D.(2017). The Impact of Merger and Acquisition on Firm Performance in East Africa. Makerere Business Journal, 13(2)

Barasa. (2015). The Impact of Mergers and Acquisitions and Acquisition Announcements on Share Prices of Companies Listed in NSE. Unpublished MBA Project, University of Nairobi.

Jensen, M.C. (1986). Takeovers: Their Cause and Consequences. Journal Economic Perspectives, 2, 21-48

Mundia, W. I. (2016). Relationship between Free Cash Flows and Stock Prices of NonFinancial Firms Listed at the Nairobi Securities Exchange. Unpublished MBA Project. University of Nairobi

Nyalanda, (2016). The Impact of Mergers and Acquisitions on Shareholders' returns on Companies listed in the NSE. Unpublished MSC Project. University of Nairobi

## APPENDICES

## Appendix I: List of Firms with Mergers and Acquisitions from 2014-2019

| Company Name | Merged or acquired | Date of Merger/ Acquisition |
| :--- | :--- | :---: |
| Flame Tree Group | Poly Play Group | $25 / 09 / 2017$ |
| Longhorn | Law Africa Publishing Grp | $13 / 07 / 2016$ |
| Britam | Real Insurance | $19 / 02 / 2014$ |
| Centum | K-Rep Bank | $30 / 07 / 2014$ |
| Total | Gapco | $04 / 07 / 2017$ |
| EABL | Serengeti Breweries | $29 / 07 / 2019$ |
| EquityGroup | Banque Commercial Du Congo | $19 / 11 / 2019$ |
| NCBA | NIC-CBA | $27 / 09 / 2019$ |

## Appendix II: Abnormal Returns

| Event Day | FTG | Longhorn | Britam | Centum | Total | Equity | EABL | NCBA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | -0.0984 | 0.0446 | 0.0390 | -0.0026 | -0.0094 | 0.0010 | -0.0018 | -0.0003 |
| 2 | 0.0869 | 0.0016 | -0.0333 | 0.0039 | 0.0107 | 0.0134 | 0.0108 | 0.0054 |
| 3 | -0.0099 | -0.0093 | 0.0098 | 0.0289 | -0.0148 | 0.0129 | -0.0328 | 0.0092 |
| 4 | -0.0693 | 0.0302 | 0.0130 | -0.0321 | -0.0042 | 0.0223 | 0.0081 | -0.0057 |
| 5 | -0.0432 | 0.0413 | 0.0174 | 0.0041 | 0.0026 | -0.0114 | -0.0217 | 0.0382 |
| 6 | 0.0103 | 0.0190 | 0.0201 | 0.0225 | 0.0049 | 0.0544 | -0.0118 | -0.0365 |
| 7 | 0.0555 | 0.0178 | -0.0275 | -0.0266 | -0.0004 | 0.0643 | 0.0179 | -0.0043 |
| 8 | 0.0095 | -0.0007 | -0.0407 | 0.0103 | 0.0039 | 0.0769 | -0.0182 | 0.0049 |
| 9 | 0.0303 | -0.0032 | -0.0164 | -0.0021 | 0.0064 | -0.0163 | 0.0002 | 0.0083 |
| 10 | -0.0007 | -0.0213 | -0.0061 | -0.0024 | -0.0003 | -0.0374 | -0.0023 | 0.0076 |
| 11 | 0.0002 | -0.0965 | -0.0101 | 0.0043 | -0.0142 | 0.0487 | -0.0101 | -0.0100 |
| 12 | -0.0007 | -0.0214 | 0.0095 | 0.0043 | -0.0002 | -0.0302 | -0.0120 | 0.0079 |
| 13 | -0.0006 | 0.0879 | 0.0012 | 0.0037 | 0.0009 | 0.0183 | -0.0032 | 0.0048 |
| 14 | 0.0002 | -0.0178 | 0.0083 | 0.0277 | 0.0640 | 0.0010 | -0.0360 | 0.0203 |
| 15 | 0.0090 | 0.0124 | -0.0874 | -0.0017 | -0.0437 | 0.0121 | 0.0403 | -0.0047 |
| 16 | -0.0008 | 0.0027 | 0.0721 | 0.0035 | -0.0096 | -0.0199 | 0.0380 | -0.0020 |
| 17 | -0.0212 | 0.0521 | 0.0117 | 0.0092 | -0.0360 | -0.0049 | -0.0779 | 0.0046 |
| 18 | 0.0098 | -0.0309 | -0.0100 | 0.0036 | 0.0534 | 0.0069 | 0.0935 | 0.0112 |
| 19 | -0.0005 | 0.0273 | -0.0011 | 0.0156 | 0.0070 | 0.0137 | -0.0620 | 0.0005 |
| 20 | 0.0197 | 0.0126 | 0.0078 | 0.0650 | -0.0045 | 0.0008 | -0.0030 | 0.0051 |
| 21 | 0.0097 | 0.0117 | 0.0041 | -0.0170 | 0.0182 | 0.0038 | -0.0046 | 0.0026 |
| 22 | 0.0296 | 0.0003 | -0.0238 | 0.0141 | -0.0114 | 0.0056 | -0.0815 | 0.0333 |
| 23 | -0.0290 | 0.0090 | -0.0289 | -0.0012 | 0.0253 | 0.0124 | 0.0465 | 0.0398 |
| 24 | -0.0101 | -0.0026 | -0.0059 | 0.0300 | 0.0105 | 0.0062 | -0.0744 | -0.0032 |
| 25 | -0.0009 | -0.0221 | -0.0178 | -0.0025 | -0.0011 | 0.0018 | 0.0332 | -0.0503 |
| 26 | -0.0004 | -0.0119 | -0.0308 | -0.0129 | 0.0203 | 0.0194 | 0.0525 | -0.0104 |
| 27 | -0.0004 | -0.0068 | -0.0210 | 0.0030 | -0.0113 | 0.0052 | 0.1306 | 0.0282 |
| 28 | -0.0005 | 0.0534 | -0.0091 | -0.0021 | 0.0329 | 0.0118 | 0.0909 | -0.0258 |
| 29 | -0.0107 | 0.0064 | -0.0139 | -0.0020 | 0.0079 | -0.0101 | 0.0443 | 0.0002 |
| 30 | -0.0207 | 0.0170 | -0.0075 | -0.0118 | -0.0238 | 0.0099 | 0.0376 | 0.0181 |
| 31 | 0.0101 | -0.0228 | -0.0056 | -0.0124 | 0.0201 | 0.0169 | 0.0581 | 0.0054 |
| 32 | -0.0106 | 0.0359 | -0.0035 | -0.0019 | 0.0606 | 0.0056 | 0.0407 | -0.0140 |
| 33 | -0.0006 | -0.0012 | -0.0280 | -0.0071 | -0.0102 | 0.0017 | -0.0625 | 0.0980 |
| 34 | -0.0004 | 0.0355 | -0.0291 | -0.0019 | -0.0524 | -0.0023 | -0.0440 | 0.0525 |
| 35 | -0.0002 | -0.0062 | -0.0036 | -0.0126 | -0.0041 | 0.0010 | -0.0031 | -0.0043 |
| 36 | -0.0003 | -0.0024 | 0.0122 | -0.0127 | -0.0070 | -0.0096 | 0.0044 | 0.0050 |
| 37 | -0.0206 | 0.0046 | 0.0209 | -0.0073 | 0.0019 | -0.0031 | -0.0726 | 0.0020 |
| 38 | -0.0006 | 0.0008 | -0.0041 | -0.0180 | 0.0476 | -0.0002 | 0.0136 | 0.0248 |
| 39 | -0.0010 | 0.0072 | -0.0152 | 0.0253 | -0.0402 | 0.0200 | -0.0569 |  |
| 40 | -0.0013 |  | -0.0119 | 0.0191 |  | 0.0138 | 0.0389 |  |
| 41 | -0.0006 |  | -0.0142 | 0.0609 |  | 0.0088 |  |  |
| 42 |  |  | -0.0116 | 0.0545 |  |  |  |  |

## Appendix III: Accumulated Abnormal Returns

| Event Day | FTG | Longhorn | Britam | Centum | Total | Equity | EABL | NCBA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | -0.0984 | 0.0446 | 0.0390 | -0.0026 | -0.0094 | 0.00098 | -0.0018 | -0.0003 |
| 2 | -0.0115 | 0.0463 | 0.0058 | 0.0013 | 0.0014 | 0.01442 | 0.0090 | 0.0051 |
| 3 | -0.0215 | 0.0369 | 0.0156 | 0.0302 | -0.0135 | 0.02729 | -0.0238 | 0.0143 |
| 4 | -0.0908 | 0.0671 | 0.0286 | -0.0019 | -0.0177 | 0.0496 | -0.0157 | 0.0086 |
| 5 | -0.1341 | 0.1084 | 0.0460 | 0.0022 | -0.0151 | 0.03818 | -0.0374 | 0.0468 |
| 6 | -0.1238 | 0.1275 | 0.0661 | 0.0247 | -0.0102 | 0.0926 | -0.0493 | 0.0103 |
| 7 | -0.0683 | 0.1453 | 0.0386 | -0.0019 | -0.0105 | 0.15691 | -0.0314 | 0.0059 |
| 8 | -0.0588 | 0.1445 | -0.0021 | 0.0084 | -0.0067 | 0.23378 | -0.0495 | 0.0108 |
| 9 | -0.0285 | 0.1413 | -0.0185 | 0.0062 | -0.0003 | 0.21744 | -0.0493 | 0.0191 |
| 10 | -0.0292 | 0.1201 | -0.0246 | 0.0038 | -0.0006 | 0.18004 | -0.0516 | 0.0267 |
| 11 | -0.0290 | 0.0236 | -0.0346 | 0.0081 | -0.0148 | 0.2287 | -0.0617 | 0.0167 |
| 12 | -0.0297 | 0.0022 | -0.0251 | 0.0124 | -0.0150 | 0.19846 | -0.0737 | 0.0246 |
| 13 | -0.0302 | 0.0901 | -0.0239 | 0.0161 | -0.0140 | 0.21672 | -0.0768 | 0.0294 |
| 14 | -0.0300 | 0.0723 | -0.0156 | 0.0438 | 0.0499 | 0.21775 | -0.1129 | 0.0496 |
| 15 | -0.0210 | 0.0847 | -0.1030 | 0.0421 | 0.0062 | 0.22985 | -0.0725 | 0.0449 |
| 16 | -0.0218 | 0.0874 | -0.0309 | 0.0455 | -0.0034 | 0.20995 | -0.0345 | 0.0429 |
| 17 | -0.0430 | 0.1395 | -0.0193 | 0.0547 | -0.0394 | 0.20507 | -0.1124 | 0.0475 |
| 18 | -0.0332 | 0.1086 | -0.0292 | 0.0583 | 0.0140 | 0.21194 | -0.0189 | 0.0587 |
| 19 | -0.0338 | 0.1359 | -0.0304 | 0.0739 | 0.0210 | 0.22567 | -0.0809 | 0.0592 |
| 20 | -0.0140 | 0.1485 | -0.0226 | 0.1389 | 0.0165 | 0.22649 | -0.0839 | 0.0643 |
| 21 | -0.0043 | 0.1602 | -0.0185 | 0.1219 | 0.0347 | 0.2303 | -0.0885 | 0.0669 |
| 22 | 0.0254 | 0.1605 | -0.0423 | 0.1360 | 0.0233 | 0.23593 | -0.1700 | 0.1002 |
| 23 | -0.0037 | 0.1695 | -0.0713 | 0.1349 | 0.0486 | 0.24835 | -0.1235 | 0.1400 |
| 24 | -0.0138 | 0.1669 | -0.0771 | 0.1649 | 0.0591 | 0.25458 | -0.1978 | 0.1369 |
| 25 | -0.0147 | 0.1447 | -0.0950 | 0.1623 | 0.0580 | 0.25635 | -0.1646 | 0.0865 |
| 26 | -0.0151 | 0.1328 | -0.1258 | 0.1494 | 0.0784 | 0.27578 | -0.1121 | 0.0762 |
| 27 | -0.0155 | 0.1260 | -0.1468 | 0.1524 | 0.0671 | 0.28095 | 0.0184 | 0.1044 |
| 28 | -0.0159 | 0.1795 | -0.1559 | 0.1503 | 0.1000 | 0.29273 | 0.1093 | 0.0785 |
| 29 | -0.0266 | 0.1859 | -0.1698 | 0.1483 | 0.1078 | 0.28262 | 0.1536 | 0.0787 |
| 30 | -0.0473 | 0.2029 | -0.1773 | 0.1365 | 0.0841 | 0.29253 | 0.1912 | 0.0967 |
| 31 | -0.0372 | 0.1801 | -0.1829 | 0.1241 | 0.1042 | 0.30939 | 0.2493 | 0.1022 |
| 32 | -0.0478 | 0.2160 | -0.1864 | 0.1222 | 0.1648 | 0.315 | 0.2900 | 0.0882 |
| 33 | -0.0484 | 0.2148 | -0.2144 | 0.1151 | 0.1546 | 0.31667 | 0.2275 | 0.1862 |
| 34 | -0.0488 | 0.2503 | -0.2435 | 0.1132 | 0.1022 | 0.31436 | 0.1836 | 0.2386 |
| 35 | -0.0490 | 0.2441 | -0.2471 | 0.1007 | 0.0981 | 0.31531 | 0.1805 | 0.2343 |
| 36 | -0.0493 | 0.2416 | -0.2349 | 0.0879 | 0.0911 | 0.30569 | 0.1849 | 0.2393 |
| 37 | -0.0699 | 0.2462 | -0.2140 | 0.0807 | 0.0930 | 0.30258 | 0.1123 | 0.2413 |
| 38 | -0.0709 | 0.2471 | -0.2181 | 0.0627 | 0.1406 | 0.30234 | 0.1259 | 0.2660 |
| 39 | -0.0721 | 0.2543 | -0.2332 | 0.0880 | 0.1005 | 0.32229 | 0.0690 |  |
| 40 |  |  | -0.2452 | 0.1070 |  | 0.33614 | 0.1079 |  |
| 41 |  |  | -0.2593 | 0.1679 |  | 0.34491 |  |  |
| 42 |  |  | -0.2709 | 0.2224 |  |  |  |  |

Note: The 2 month 60-day period includes weekends which had no stock price since NSE does not trade then thus the 39-42 day event window period.

Appendix IV: Companies listed at the NSE

| AGRICULTURAL |
| :---: |
| Eaagads Ltd Ord 1.25 AIM |
| Kakuzi Plc Ord.5.00 |
| Kapchorua Tea Co. Ltd Ord Ord 5.00 AIM |
| The Limuru Tea Co. Plc Ord 20.00AIMS |
| Sasini Plc Ord 1.00 |
| Williamson Tea Kenya Ltd Ord 5.00 AIM |
|  |  |
|  |
| Car \& General (K) Ltd Ord 5.00 |
|  |
| BANKING |
| ABSA Bank Kenya Plc Ord 0.50 |
| BK Group Plc Ord 0.80 |
| Diamond Trust Bank Kenya Ltd Ord 4.00 |
| Equity Group Holdings Plc Ord 0.50 |
| HF Group Plc Ord 5.00 |
| I\&M Holdings Plc Ord 1.00 |
| KCB Group Plc Ord 1.00 |
| National Bank of Kenya Ltd Ord 5.00 |
| NIC Group Plc Ord 5.00 |
| Stanbic Holdings Plc ord.5.00 |
| Standard Chartered Bank Kenya Ltd Ord 5.00 |
| The Co-operative Bank of Kenya Ltd Ord 1.00 |
|  |  |
|  |
| Deacons (East Africa) Plc Ord 2.50AIMS |
| Eveready East Africa Ltd Ord.1.00 |
| Express Kenya Ltd Ord 5.00 AIMS |
| Kenya Airways Ltd Ord 5.00 |
| Longhorn Publishers Plc Ord 1.00AIMS |
| Nairobi Business Ventures Ltd Ord. 1.00 GEMS |
| Nation Media Group Ltd Ord. 2.50 |
| Sameer Africa Plc Ord 5.00 |


| Standard Group Plc Ord 5.00 |
| :---: |
| TPS Eastern Africa Ltd Ord 1.00 |
| Uchumi Supermarket Plc Ord 5.00 |
| WPP Scangroup Plc Ord 1.00 |
| CONSTRUCTION \& ALLIED |
| ARM Cement Plc Ord 1.00 |
| Bamburi Cement Ltd Ord 5.00 |
| Crown Paints Kenya Plc Ord 5.00 |
| E.A.Cables Ltd Ord 0.50 |
| E.A.Portland Cement Co. Ltd Ord 5.00 |
| ENERGY \& PETROLEUM |
| KenGen Co. Plc Ord. 2.50 |
| Kenya Power \& Lighting Co Ltd Ord 2.50 |
| Kenya Power \& Lighting Co Ltd 4\% |
| Kenya Power \& Lighting Co Ltd 7\% |
| Total Kenya Ltd Ord 5.00 |
| Umeme Ltd Ord 0.50 |
| INSURANCE |
| Britam Holdings Plc Ord 0.10 |
| CIC Insurance Group Ltd ord.1.00 |
| Jubilee Holdings Ltd Ord 5.00 |
| Kenya Re Insurance Corporation Ltd Ord 2.50 |
| Liberty Kenya Holdings Ltd Ord.1.00 |
| Sanlam Kenya Plc Ord 5.00 |
| INVESTMENT |
| Centum Investment Co Plc Ord 0.50 |
| Home Afrika Ltd Ord 1.00 |
| Kurwitu Ventures Ltd Ord 100.00 |
| Olympia Capital Holdings ltd Ord 5.00 |
| Trans-Century Plc Ord 0.50AIMS |


| INVESTMENT SERVICES |
| :---: |
| Nairobi Securities Exchange Plc Ord 4.00 |
| MANUFACTURING \& ALLIED |
| B.O.C Kenya Plc Ord 5.00 |
| British American Tobacco Kenya Plc Ord 10.00 |
| Carbacid Investments Ltd Ord 1.00 |
| East African Breweries Ltd Ord 2.00 |
| Flame Tree Group Holdings Ltd Ord 0.825 |
| Kenya Orchards Ltd Ord 5.00 AIM |
| Mumias Sugar Co. Ltd Ord 2.00 |
| Unga Group Ltd Ord 5.00 |
| TELECOMMUNICATION |
| Safaricom Plc Ord 0.05 |
| REAL ESTATE INVESTMENT TRUST |
| STANLIB FAHARI I-REIT |
| EXCHANGE TRADED FUNDS |
| NEW GOLD ETF |
| NTA |


[^0]:    Figure 4.8:Britam Insurance

