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**IMPACT OF LAYOFF ANNOUNCEMENTS ON STOCK
PERFORMANCE OF FIRMS LISTED ON THE NAIROBI SECURITIES
EXCHANGE**

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ABSTRACT

Despite vast research on the impact of layoff announcements on stock price performance in developed markets, little is known of the same with regard to the Kenyan market. To this end, this study sought to determine the strength and nature of the relationship between layoff announcements and stock price performance for firms listed on the NSE. The study also set out to investigate the nature of the relationship between the reason for the layoff, as provided by management, and stock price reaction. To conduct the research, a sample of ten firms that had made layoff announcements over the period spanning 2011-2016 were studied so as to check whether there were any abnormal returns observed during the period surrounding the layoff announcement. To facilitate this, an event study methodology was used with an estimation period of 120 days and a 21-day event window. The findings of the study reveal that there exists no statistically significant relationship between layoff announcements and stock price reaction. However, the reason guiding the layoff decision has an impact on stock price movement. For layoffs that are proactive in nature, stock prices react positively but in cases where the layoff is reactive in nature, there is no impact on the stock price reaction.

List of Abbreviations

AAR	Average Abnormal Returns
CAR	Cumulative Abnormal Returns
CAAR	Cumulative Average Abnormal Returns
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CMA	Capital Markets Authority
EABL	East African Breweries Limited
KCB	Kenya Commercial Bank
KQ	Kenya Airways
NMG	Nation Media Group
NSE	Nairobi Securities Exchange
OLS	Ordinary Least Squares
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment

1 INTRODUCTION

1.1 Background of the Study

For many workers, long term employment with one company used to be a common occurrence with employers turning to layoffs as a last resort (Center for Advanced Human Resource Studies, 2010). This reality is however shifting to accommodate the fact that employee loyalty to one firm as well as lifetime employment are quickly fading. As such, it is increasingly becoming commonplace to read of news reports highlighting a layoff plan by employers in an attempt to cut down on costs or streamline business operations. Shareholders too, have come to accept layoff practices as the new norm.

An employee layoff is defined as “the announcement of the permanent termination of a significant number of employees from the payroll of an organization” (Hillier, Marshall , McColgan, & Werema, 2007, p. 498). Hallock (2009, p. 71) further adds that when at least fifty workers are made redundant by the same employer at the same time, then it is regarded as a mass layoff. If and when such an announcement is made, it usually attracts a great deal of public attention with the story making headlines especially in financial press with reporters quick to seek audience with the Chief Executive Officer (CEO) of the firm in question so as to gain deeper insight into the matter.

A number of reasons are usually put forward by management to justify why layoffs are the preferred alternative to downsizing. Hallock (2009) categorizes the reasons given by management as falling in either of the following: reorganization of firm operations, closure of plant, slump in demand for a firm’s products, cost related concerns, other reasons (these include increased competition, mergers and acquisitions or bankruptcy) while other firms do not give a justification for the layoff hence categorized as “missing”. Included in the cost category are reasons such as improvement in firm profitability, increasing profits, cutting down on costs, or the firm posting losses.

Despite the fact that numerous benefits are set to be enjoyed by the firm as a result of the layoff, thought must be given to the employees to be affected by the move as they will have been rendered jobless, without a means of earning income. To counter this, a number of alternatives have been suggested aimed at benefiting both the employer and employee. Cascio (2014) proposes elimination of overtime, an offer of voluntary early retirement to workers, a freeze in hiring, a postponement or elimination of bonuses, a delay in salary increase, a cut in wages or

an increase in employee contributions to benefit plans. In situations where the layoff is permanent rather than temporary, he proposes redeployment of workers, relocation to other departments or branches and retraining of the employees so as to improve their skills thus making them relevant in the job market.

With regard to the nature of the relationship of layoff announcements and share price response, there are two opposing sides. On one hand, some studies find a negative relationship while on the other, the relationship can be either positive or negative depending on the rationale behind the layoff. A positive relationship is found where the market perceives a potential benefit from the layoff while a negative relationship is observed if the firm making the announcement is in financial distress. The mixed findings prove that studies carried out on this topic are inconclusive.

1.2 Statement of the Problem

Pursuit of downsizing techniques has become an emerging trend in corporate practice in Kenya with firms seeking to cut down on operating costs and improve on operational efficiency. To do this, a number of firms have laid off a proportion of their employees so as to remain with a lean and efficient team. Firms such as East African Breweries (EABL), Kenya Commercial Bank (KCB), KenolKobil, Barclays, Co-operative Bank of Kenya as well as Standard Chartered Bank have all pursued staff layoffs as a strategy aimed at reducing costs and improving staff efficiency. Consistent with these aims is the implicit belief that the layoffs will result in improved financial indicators hence improved share price performance. The underlying basis is that layoffs will lead to improved earnings and make the firm more competitive relative to its peers. With that, increased earnings are expected which should drive up the share price as a result of the improved financial position of the firm.

However, this is not always the case. A number of firms record negative abnormal returns after a layoff announcement as documented by (Blancard & Couderc, 2007), (Schweizer & Bilsdorfer, 2008) among others. Other studies have found a positive stock price movement and have attributed this to the reason given for pursuing the layoff. As such, a consensus does not exist as to the nature of this relationship.

Further, a majority of these studies reflect the reality for firms listed in the United States of America (USA), United Kingdom (UK) and Canada. However, Kenyan firms do also carry out these layoffs and yet the existing literature does not cover the market. This study therefore attempts to bridge that gap by investigating the nature of this relationship for firms that have

made such announcements and are listed on the Nairobi Securities Exchange (NSE). To this end, the study investigates the impact of layoff announcements on share price performance and whether the rationale for the layoff as given by management has an influence on the magnitude and direction of the share price movement.

1.3 Research Objectives

The objectives of this study are as follows:

1. To determine the strength and nature of the relationship between layoff announcements and stock price performance for firms listed on the NSE
2. To investigate the nature of the relationship between the reason for the layoff, as provided by management, and stock price reaction.

1.4 Research questions

The following research questions shall guide the study:

1. What is the nature of stock price reaction to layoff announcements?
2. How does the justification for the layoff impact on the share price movement?

1.5 Research Hypothesis

Listed below are the research hypotheses for this study:

H₀₁: There is no relationship between layoff announcements and stock prices for firms listed on the NSE

H_{A1}: There is a relationship between layoff announcements and stock prices for firms listed on the NSE

H₀₂: Stock price reaction does not vary in relation to the reason for the layoff as provided by management

H_{A2}: Stock price reaction varies with the reason for the layoff as provided by management

1.6 Scope of the Study

The proposed study shall cover firms that have made layoff announcements and are listed on the NSE- All Share Index. The time period under consideration is between 2011-2016 so as to arrive at results which are up-to-date.

1.7 Significance of the Study

In light of the increased occurrences of firms adopting layoffs as the preferred means to improve operational efficiency, there is need to understand the nature of the relationship that may exist between layoff announcements and stockholder wealth. Increased automation of

services in firms has further worsened the problem as a significant proportion of employees are rendered redundant by use of the automated machines. This study would therefore be of value to: scholars, shareholders, regulators, management and investment advisors.

With the findings of this research, scholars will be provided with a source of reference material for further studies on the topic. Shareholders will also be made aware of how layoff announcements will affect their wealth that is held up in the firms making the announcement. Further, management of the listed firms will be better placed to choose the best alternative to downsizing, one that will not result in a decline in share price performance. The regulators namely the Capital Markets Authority (CMA) and the NSE, will also be in a position to recommend suitable approaches and timings when the announcements can be made known to members of the public thereby protecting shareholders against adverse outcomes when the stock market responds to the news.

2 LITERATURE REVIEW

2.1 THEORETICAL FRAMEWORK

2.1.1 Systems Theory Based Framework

The systems theory is grounded on the association between the system and the environment. In this regard, the firm announcing the layoff is referred to as a focal system and as such, warrants an analysis (Schweizer & Bilsdorfer, 2008). Present in the outside world of the firm are horizontal, vertical and lateral relationships which are external to the system. The horizontal relationship exists between the focal company and investors and included in this relationship are the techniques used by the firm to gain market shares. On the other hand, the vertical relationship associates the firm with the capital market and it covers the means used by the firm to raise equity capital. Lastly, the lateral relationship covers the relationship between a firm and other stakeholders such as the Government, trade unions and the society. These relationships existing between the system and the environment are all impacted in one way or another by a corporate layoff announcement. Of relevance to this study is how the layoff affects the vertical relationship as examined through the stock price reaction.

2.1.2 Resource Dependence Theory

The major underlying basis of this theory is that external providers of resources to a firm are in a position which enables them to exert undue influence over an organization and how it is run. Reliance on equity capital as the preferred means of raising finance has left corporations at the mercy of institutional investors who control a significant portion of a firm's shares (Jung J. , 2015). This has therefore empowered the institutional investors and with this power, they can pressure management of a firm to increase the bottom line and improve stock performance. Consequently, these firms undertake layoffs in a bid to improve profitability and efficiency of operations under the oversight of the institutional investors, suggesting an element of coercion on the part of the investors. From this theory as put forward by Jung, it can be seen that redundancies can arise as a result of pressure exerted by institutional investors.

2.1.3 Theory of Conceptions of Control

This theory proposes persuasion, rather than coercion, as a tool used to refocus managerial behaviour toward maximization of shareholder value. This shift towards shareholder wealth maximization is largely attributed to agency theory. Proponents of agency theory called for corporate governance reforms that would act as an incentive for managers to seek out wealth

maximization. Three suggestions were put forward; it was suggested that managers become shareholders of the firm or at least have their compensation tied to the wealth of shareholders, for example, through stock options. Changes to board composition were also proposed so as to include a majority of independent and non-executive directors. Lastly, the inclusion of a chief finance officer (CFO) in management whose role would be to improve transparency and be the bridge between investors and other market participants and the firm. Currently, all three reforms are being implemented by firms (Jung J. , 2015). He further argues that the three propositions serve as an incentive to management to cut costs. A way of doing this is through laying off employees. For instance, managers on a stock-based compensation arrangement will be motivated to pursue maximization of profits and one of the ways of doing this is through layoffs.

Therefore, this paper studies the stock market reaction to layoff announcements using the systems theory based framework. This is grounded on the fact that the main objective of this paper is to establish the nature of the relationship between stock prices and job loss announcements. Thus, the study aims to uncover the underlying relationship between the firm making the announcement (referred to as the focal system) and its environment, in this case, the capital market and investors. These represent the vertical and horizontal relationships respectively as per the systems theory framework.

2.2 EMPIRICAL REVIEW

2.2.1 Stock Price Reaction to Layoff Announcements

Quite a number of previous studies have carried out extensive research on this topic so as to come up with a definitive answer as to the relationship between layoff announcements and share prices. Worrell, Davidson and Sharma (1991) is arguably the most referenced work with regard to this association. The study sought to find out the nature of the relationship between stock prices and announcements of staff layoffs. To this end, an event study on stock returns was done over a period of 90 days prior to and post the announcement date, that is (-90, +90) so as to examine the time period over which the abnormal returns were significant. The study narrowed its focus to 194 layoff announcements made by large firms over a nine-year period, that is, 1979-1987. The results revealed a significant negative relationship between stock price reaction and layoff announcements.

A similar study was done with a focus on Canadian firms and the findings were consistent with those of Worrell et al. Ursel and Stassen (1995) studied firms making layoff announcements

during the recession that spanned 1989 to 1992 in Canada. To assess market reaction to the announcements, an event study was carried out on 137 announcements made by 57 firms. The reaction was measured with regard to deviations from expected return given no announcement. The findings reveal that the market reacts negatively to layoff announcements and these negative returns are statistically significant. They therefore caution management against pursuing such a measure as investors view such announcements negatively.

Filbeck and Webb (2001) further added their voice to the research by studying the effect that announcements of staff layoffs have on stock price returns with regard to the number of laid off staff and size of the firm. To examine the response of the share price, an event study methodology was used. The period of study was 1990-1997 and a total of 366 announcements were studied. Consistent with prior research, they found that share prices react negatively to layoff announcements. Additionally, the returns are statistically significant. They further find that the stock price reaction is more negative where the layoff is set to affect a larger percentage of the firm's workforce. This is also true for small firms.

The topic is further applied to the South African context by (Bhana, 2002). The study focused on the impact of layoff announcements on companies changing their structure of manufacturing operations. To fulfil the aim of the study, the investigation focused on 88 companies listed on the Johannesburg Stock Exchange (JSE) which had made such announcements between 1980-1997. An event study was used with three alternative event windows. These are: two-day window, three-day window and a 12-day window. This was to evaluate whether there was any consistency in abnormal returns. From the findings obtained from the research, it was found that a layoff announcement can either result in an increase or a decrease in share prices of affected firms. These findings therefore take a departure from the previous studies as the results suggest that the stock price reacts depending on the reason given for the layoff rather than an outright negative reaction.

McKnight, Lowrie and Coles (2002) also carried out an investigation on the impact of layoff announcements on shareholder wealth but with a particular focus on listed firms in the United Kingdom (UK) between 1980-1994 and 1990-1995. An event study carried out over a five-day event window revealed that the market generally reacted negatively to layoff announcements made by firms. Subsequent research also covered the reaction in UK markets and arrived at mixed results. For instance, (Hillier, Marshall, McColgan, & Werema, 2007) studied UK firms that had announced layoffs between 1990-2000 and found a significant negative stock price

response to the announcement over a 3-day event window. Marshall, McColgan and McLeish (2012) further expanded research on this area by comparing the market reactions to layoff announcements during two periods; that of economic boom (2005-2006) and the global financial crisis of 2008. During the financial markets boom, stock prices reacted positively. However, announcements made during the financial crisis elicited a negative response. Further, stock prices show significant negative abnormal returns in 2008 regardless of the reason given by management for undertaking the move.

Abraham (2004) adds to the depth of the research by examining the response of share prices to layoff announcements made by 154 American firms that laid off workers between 1993-1994. Similar to his predecessors, the author uses an event study methodology to arrive at the response shown by the stock market over a 21-day window. Consistent with prior results, he finds a negative stock price reaction in firms that announce the layoffs.

Blancard and Couderc (2007) concur with the above results albeit with a different approach. Rather than studying the stock price responses of firms making the redundancy announcements, they selected a sample of 41 studies that have covered the relationship between announcements and stock prices between 1996-2006. To do this, they used a meta-analysis, a tool used to summarize and sum up empirical results from a number of research works. Their findings reveal an overall negative stock market reaction to job loss announcements and this remains the case regardless of the country in which the firm is based, the type of firm or the period under study.

Shorter event windows have also been studied though the results remain consistent as those with much longer event windows. For instance, (Schweizer & Bilsdorfer, 2008) studied the impact of layoff announcements on stock price reaction within a framework grounded on systems theory. To achieve this goal, an event study methodology was applied in the study of 222 layoff announcements. Stock returns were observed over a 2-day event window, that is, the day prior to the announcement date and the announcement date itself. The findings reveal a negative stock market reaction to layoff announcements.

Taking on a different approach from prior studies, (Bhabra, Bhabra, & Boyle, 2011) examined whether layoff announcements by any given firm has the potential to affect the stock prices of rival firms within its industry of operation. To do this, they investigated a sample of 403 announcements and studied the reaction of the stock prices of affected firms using the event

study methodology. They find a significant negative stock price reaction on the announcement date for the affected firms.

The association between layoff announcements and stock price performance has also been studied over long time periods so as to establish whether the relationship has been affected with the passage of time. Farber and Hallock (2008) investigated a sample of 4,273 job loss announcements from companies listed in the *Fortune 500*. To conduct this study, they carried out an event study with a three-day event window over which cumulative abnormal returns were analysed. It was found that the market reaction had changed with the passage of time. In the prior years studied, stock price reaction was the most negative but as time went by, the reactions became less negative. This suggests that the negative stock market reaction has become weaker over time. Another paper by (Hallock, Strain, & Webber, 2011) looked at market responses to layoff announcements over a 38-year period beginning from 1970-2007 and found a similar result. To establish the effect of layoffs on stock prices of firms, they conducted an event study, calculating the abnormal returns of stocks over a 3-day event window. They find that stock price reactions were negative in the 1970s but with the passage of time, the abnormal returns have become less negative with the results in the 2000s not being statistically significant.

Consistent with the findings of (Bhana, 2002) is the work of (Wertheim & Robinson, 2011) who investigated market reactions to corporate layoffs with respect to two conditions; economic impact and the level of pre-disclosure information. Size of the layoff was taken to represent the economic impact while firm size served as a proxy for pre-disclosure information. To conduct the research, they studied firms which had announced staff layoffs within the period 1987-1994, resulting in a sample of 607 firms. Their findings reveal that some firms experience a negative share price reaction on the date the announcement is made while a more negative reaction is seen the larger the size of staff affected and the smaller the firm size. The market is therefore incorporating previously unknown less favourable information into the stock price of a firm resulting in the negative reaction. Likewise, firms with a positive share price on the date of the announcement experience a more positive reaction the larger the size of the layoff and the smaller the firm size. Thus, the market is incorporating favourable information into the stock price about the benefits to be achieved as a result of the layoff hence the positive share price reaction.

Mixed results are further seen in the work of (Abraham, Khan & MacDonald, 2013) who studied firms that had made layoff announcements in 1993 and 1994 and found that the market generally responded negatively to a layoff announcement though announcements by some firms brought about a positive reaction. To establish the reason behind the difference in the market reaction generated, Abraham and his team studied a number of operational and performance variables pre-and post-layoff. To measure firm performance, they looked at variables such as return on assets (ROA), return on equity (ROE), return on investment (ROI), sales figures, net income, net profit margins as well as costs of the firms. From the results, they obtained, firms with positive abnormal returns following the announcement were found to have stronger performance measures unlike those that had negative returns. The study seems to indicate that the financial health of the firm plays a role in determining how the market will respond to a layoff announcement.

UK and American firms have been the major focus of researchers in their study of this relationship. However, the impact of layoff announcements on Finnish markets has been studied by (Peltola, 2014) and has yielded different results. The author goes further to test whether specific firm characteristics have a role to play in determining the type of market reaction that will be observed. The time period under investigation is June 2008 to December 2013. The event study used a 21-day event window and studied abnormal returns from 102 layoff announcements. Contrary to previous findings of other authors, the study finds that stock prices exhibit positive abnormal returns prior to the actual announcement dates but on the date of the layoff announcement, a negative stock price reaction is observed. The days after the announcement show a statistically insignificant market reaction.

In sum, previous research generally documents a negative association between corporate layoff announcements and stock price returns. In the same vein however, other researchers have come up to suggest that the reason behind the layoff determines the magnitude and direction of the stock market response.

2.2.2 Reason for the layoff and share price performance

While a negative relationship has been seen in some markets, mixed results abound in other studies. To explain these mixed results, some researchers have gone ahead to examine the justification for the layoff and whether this is incorporated in the market reaction.

Worrell, Davidson and Sharma (1991) found that the negative association between share prices and layoff announcements is much worse when looking at firms that pursue the staff layoff due to financial distress. In contrast, firms taking up a staff layoff with the aim of restructuring and streamlining operations experience less negative returns. The investors therefore see the reason behind the layoff as a signal for share price movement. This viewpoint was further advanced by (Wertheim & Robinson, 2011) who looked at two divergent schools of thought: the financial distress theory versus the potential benefit theory. For a firm facing financial distress, the market responds negatively and the reaction is more severe where the event was not anticipated. On the contrary, firms set to enjoy benefits resulting from the layoff for example, through lower cost of operation, will record positive reactions to the stock prices. The reaction is more positive where the event was not anticipated.

From his findings, (Bhana, 2002) found that the market can react either positively or negatively to a layoff announcement. He documents that the main determinant as to the reaction that the market will have is the reason guiding the layoff decision. Firms carrying it out due to declining demand of its products or increase in their input costs will exhibit negative abnormal returns of their share prices. On the other hand, layoff decisions triggered by anticipated efficiency gains will have positive abnormal returns. This was consistent across the alternative event windows. Therefore, it is seen that the market perceives the reason given by management for the layoff decision as a signal that aids in evaluating impact of the decision on shareholder value.

Further still, a number of studies have divided types of layoff announcements into two categories; reactive and proactive announcements. Reactive announcements are those whose rationale for layoffs is with regard to a period of financial slump and other adverse conditions while proactive announcements are grounded on positive reasons for pursuing a layoff such as improved efficiency and improvement in financial status (Abraham, 2004). He further found that the market reacts more negatively to reactive announcements as opposed to proactive announcements. Supporting these findings is (Hillier, Marshall , McColgan, & Werema, 2007) who found that share prices react negatively to reactive announcements but where the

announcement is of a proactive nature, the stock price responds minimally. They further added more reasons that can fall in either category. They considered reasons such as declining profitability and closures of plants as falling in the reactive category while restructuring and cost cutting measures are proactive in nature. A slight departure from the above findings is observed in the work of (Schweizer & Bilsdorfer, 2008) who find that proactive layoff announcements do not evoke significant price reaction of the affected firms. However, reactive announcements result in a significant negative stock price reaction.

In studying the changing relationship between layoff announcements and market reaction over time, (Farber & Hallock, 2008) attributed the reason given by management for the layoff decision as a key contributor to variation in price reactions. Layoffs triggered by a decline in the demand for a firm's products are viewed as a negative signal by the market and this would be reflected in the form of negative abnormal returns. On the other hand, if the reason behind the layoff is due to reorganization of the firm, then the market views this as a positive signal as it is expected that management are undertaking the layoff so as to improve efficiency of operations and cut down on costs. Consequently, positive abnormal returns will be seen. Blancard and Couderc (2007) observed a similar trend and found that defensive layoffs elicit very strong negative market reactions while offensive layoffs will ease the reaction. Defensive layoffs are those resulting from financial difficulties faced by firms while offensive layoffs refer to restructuring or reorganization of firm operations.

These results are further replicated by (Hallock, Strain, & Webber, 2011) who find that layoff announcements resulting from reorganization of the firm and/or cutting down on costs evoke strong, positive and statistically significant returns. Marshall, McColgan and McLeish (2012) also find that the magnitude of the stock price reaction depends on the reason behind the layoff as given out by management. They find that in cases where the announcement is connected with falling future investment possibilities and/or less favourable information about the operations of the firm, the share price registers the strongest negative reaction.

When looking at layoff announcements in an industry context, (Bhabra, Bhabra, & Boyle, 2011) still arrive at similar conclusions from prior studies. Layoffs brought on as an efficiency-enhancing measure result in a positive movement in stock prices. This is not the case for layoffs motivated by adverse industry and company events as these evoke a downward movement in the share prices. The net effect of the announcements on the entire sample is negative proving

that adverse conditions bring on greater negative responses that override the positive responses triggered by the efficiency enhancing reason.

Peltola (2014) found that layoffs triggered by plant or office closures are the only announcements which result in a statistically significant positive market reaction. On the other hand, announcements due to a decline in demand of a firm's output and other economic conditions have a more negative market reaction on the actual date of the announcement and less positive returns during the pre-announcement window.

Recent work by Jung et al. suggests that shareholders do not respond to the reasons behind the layoff. This paper departs from prior research by bringing in an entirely new concept- that of layoff efficiency. Layoff efficiency is described as a measure used to "assess whether, and to what extent, a layoff pushes an excessive labour force down to the optimal level" (Jung, Kim, Lee, & Yoo, 2016) The team sought to establish whether the stock market incorporates information regarding layoff efficiency when reacting to layoff announcements by corporations. Two key findings are revealed from this study. The first is that cumulative abnormal returns (CAR) do not have a significant correlation with the stated reason for the layoff. Additionally, layoff efficiency evokes a positive reaction in the stock market.

Overall, prior studies suggest that the rationale for layoffs is a key determinant of how the market reacts to a layoff announcement.

3 RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methods of data collection and analysis. It forms the framework of how the research was conducted. Included in this section are the data type and sources, population, data analysis as well as limitations of the methodology applied.

3.2 Event Study Methodology

To conduct this research, an event study methodology was used. The event study approach is appropriate for a study of this nature owing to the suitability of an event study in measuring the impact of a given event on firm value (MacKinlay C. A., 1997). This is due to the fact that, given rational investors, outcome of an event will be reflected immediately in the price of a stock. Therefore, impact of an event can be measured by studying the security prices over the period surrounding the announcement of the event. In the field of finance, event studies have been applied to the study of a number of events such as mergers and acquisitions, stock splits, appointment of a new CEO, earnings announcements and many others.

Event studies are founded on a number of assumptions. These assumptions are mentioned below (Peltola, 2014):

- i. The basic theory underpinning the event study process is the efficient market hypothesis. Fama (1991) states that “security prices reflect all available information”. Thus, it is expected that all relevant information affecting the prices of securities will be reflected in their prices once the information is made public. The implication of this is that stock prices become good measures of testing market reaction to a given piece of information.
- ii. The event is not anticipated, that is, it is unforeseen
- iii. During the event window, no other confounding event takes place

3.3 Data Type and Sources

Data which was of interest to this study included the share prices of the relevant firms as well as the dates when the layoff announcements were made. Daily stock prices are a form of quantitative data. The source of information on daily share prices were obtained from the Thomson Reuters terminal.

The layoff announcement dates were obtained from online sources most especially financial press such as the *Business Daily*. The study used data on companies that have made the layoff announcements during the period 2011-2016.

3.4 Population

The population of this study comprised of the companies that had made layoff announcements and were listed on the All-Share Index of the NSE. The sample size of 10 included companies that had made such layoff announcements over the indicated period. In this way, the nature of the underlying relationship between the announcements and stock price performance was determined by studying the stock prices recorded around the announcement date. Companies were also categorized into two subsamples: proactive announcements (layoffs carried out to improve operational efficiency) and reactive announcements (layoffs triggered by adverse market conditions and financial distress). A similar categorization was adopted by (Abraham, 2004).

3.5 Data Analysis

The event study followed an approach similar to that identified by (Sitthipongpanich, 2009, pp. 62-65). The steps are as outlined below:

Step 1; identification of the event of interest

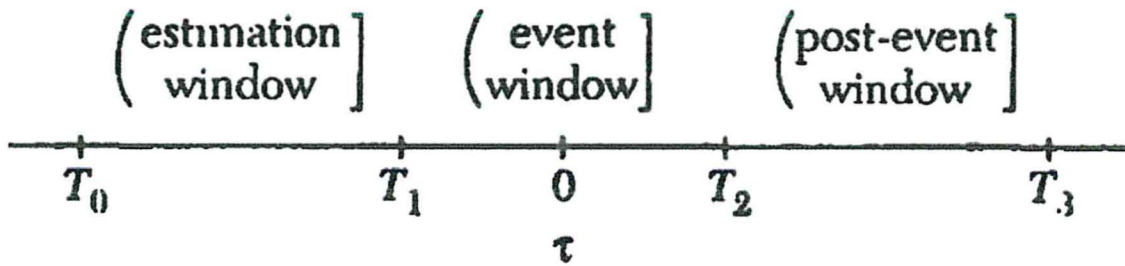
To conduct an event study, it is important to first define the event of interest. For purposes of this research, the event of interest was the announcements of staff layoffs by firms. Firms usually disclose such information, letting investors and other market participants know the number of employees to be affected by the move, the motivation behind the layoff, the fate of the affected employees and in some cases, the cost implication to the firm.

Step 2; definition of the time line of the event study/ event window

The event window refers to “the number of days before and after the announcement date over which the abnormal returns is calculated” (Konchitchki & O’Leary, 2011). This timeline is usually depicted as $[-x, +y]$ where x refers to the number of days before the announcement date and y refers to the number of days after the date of the announcement. The actual date of the announcement is denoted as “day 0”. A number of studies have denoted their “day 0” as the day of publication in the relevant press for example (Schweizer & Bilsdorfer, 2008). Billger and Hallock (2005) recorded their announcement date as the day it was reported on the *Wall Street Journal* as did (Farber & Hallock, 2008). Similarly, this study assumed that the market became aware of the layoff on the day it was published on the *Business Daily*. This therefore becomes the announcement date.

It is important to include a number of days before the actual announcement because a leak could occur either from members of the press or an insider working for the affected company.

Likewise, it may take time for the information to be received and acted upon by investors hence the reason for including days after the actual announcement date. The timeline is illustrated below:



In this study, the timeline chosen was 10 days before the event and 10 days after the event, that is, $[-10, +10]$. A similar event window was used by (Peltola, 2014). Hence, the study focused on the impact of the event over a short event window.

Step 3; estimating the expected return for each affected stock over an estimation period

The estimation period covers the period over which returns for a stock are estimated. It is much longer than the event window. Previous studies have used varying number of days ranging from 100 to 300 days. For this research, the estimation period covered was 120 days. A similar estimation window was used by (Marshall, McColgan, & McLeish, 2012).

The expected return $E(R_{it})$ over the estimation period was used as the benchmark return that was compared against the return during the event window so as to establish any abnormal returns. To obtain this expected return, a number of approaches can be used: the mean-adjusted return, market-adjusted return, market model adjusted return, CAPM-adjusted return and the reference portfolio.

This study used the market model adjusted return to obtain the expected return over the estimation period.

$$E(R_{it}) = \alpha_i + \beta_i R_{mt}$$

In the formula above, α_i and β_i were estimated using the Ordinary Least Squares (OLS) regression analysis over the estimation period. R_{mt} represents the market return which was taken to be the return on the All-Share Index for purposes of this study.

Step 4; calculation of abnormal/excess returns

Abnormal return represents the excess return of a stock's actual return over its expected return. It is denoted below:

$$AR_{it} = R_{it} - E(R_{it})$$

Alternatively:

$$AR_{it} = R_{it} - \alpha_i - \beta_i R_{mt}$$

Once the abnormal returns for each individual stock were obtained, they were aggregated over the event window (-T₂ to T₃) so as to get the cumulative abnormal return (CAR). The CAR indicates the extent to which the market adjusts the company's value as a result of the new information obtained from the relevant announcement (Konchitchki & O'Leary, 2011).

$$CAR_{(-T_2 T_3)} = \sum_{t=-T_2}^{T_3} AR_{i,t}$$

Average abnormal returns were calculated thus:

$$AAR = \frac{1}{N} \sum_{i=1}^N AR_{i,t}$$

Step 5; tests of significance

Stock market reaction to layoff announcements for individual firms were tested using the equation below

$$\frac{AR_{it}}{\sqrt{VarAR_{it}}}$$

In measuring the impact of reason for the layoff on stock price performance, the measure used to test for significance was the CAAR which is an aggregate of the abnormal returns over the event window and across the securities. The t-statistic was measured thus:

$$\frac{CAAR_t}{\sqrt{T * S(AAR_t)}}$$

If investors expect the announcement to result in increased cash flows to the firm, then the CAAR is expected to be positive. If, however investors expect decreased cash flows brought on as a result of the event, then the CAAR is expected to be negative. Thus, statistically

significant negative CAARs indicate a negative relationship between layoff announcements and share price performance while statistically positive CAARs indicate a positive relationship. Additionally, the CAARs of the two subsamples (reactive and proactive) were calculated and tested so as to establish whether the reaction was significantly positive or negative. A significant reaction indicates that the reason for the layoff has an impact on stock price reaction.

3.6 Limitations of the event study methodology

Event studies are not without shortcomings. Key among them is the assumption that markets are efficient. Owing to market inefficiency, security prices may not quickly and fully incorporate all information. Additionally, events may be expected or anticipated in some cases while in others, confounding events may take place leading to a bias in the stock returns. (Sitthipongpanich, 2009)

The second challenge is in selecting an appropriate estimation period and event window. It is difficult to determine accurate estimation windows as a researcher has to consider the fact that the longer the periods, the more difficult it is to control for confounding events. Sitthipongpanich (2009) further adds that event windows which are too short may not be able to capture the returns accurately.

The choice of model used to estimate expected return for a stock during the estimation window will have an impact on the magnitude and significance of excess returns (Sitthipongpanich, 2009). For example, when the market is bearish, then the mean-adjusted return approach will result in abnormal returns that are biased downwards.

Another challenge as given by (Sitthipongpanich, 2009) is the fact that not all stocks trade on a daily basis. As such, low volume trading during the estimation period as well as the event window will prove to be difficult when getting the abnormal returns. For example, using the Fama-French three factor model to estimate expected returns will result in unavailable information on the selected days during estimation.

4. RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the results on stock market reaction to layoff announcements carried out by firms. The study narrowed its focus to corporate layoff announcements made during the period 2011-2016 by companies listed on the NSE-All Share Index. The event study was carried out over a 21-day period with an estimation period of 120 days. Data was collected from a sample of ten companies that had the event dates clearly outlined and easily accessible. The initial size of the population was 14 companies but due to unavailability of the exact event dates for some of the companies, the final sample was down to 10.

4.2 Nature of stock price reaction to layoff announcements

Below is a list of the ten companies together with their respective event dates as well as the industry they fall under.

Firm	Industry	Event Date
Kenya Commercial Bank	Banking	21 st February 2013
Barclays	Banking	16 th June 2011
Standard Chartered Bank	Banking	27 th November 2015
Cooperative Bank of Kenya	Banking	11 th December 2014
East African Breweries Limited	Manufacturing and Allied	17 th March 2014
Kenya Airways	Commercial and Services	31 st March 2016
Nation Media Group	Commercial and Services	1 st July 2016
Uchumi	Commercial and Services	7 th July 2015
Mumias	Manufacturing and Allied	14 th April 2015
Eveready	Manufacturing and Allied	29 th September 2014

Table 1: Sample Companies used in the study

As seen from *Table 4.1* above, none of the event windows overlap. This is an important result as it facilitates the calculation of the variance of the aggregated cumulative abnormal returns across securities without concern about covariance among the securities. (MacKinlay C. , 1997)

To arrive at the expected returns during the event window, a market model adjusted return was applied over the estimation period. The table below shows the market model equation for each of the ten companies studied, together with their betas. This was obtained from running an OLS regression on Microsoft Excel.

Firm	Market Model Equation
Kenya Commercial Bank	$R_{it} = 0.000973561 + 0.896898684 R_{mt}$
Barclays	$R_{it} = 0.001679817 + 0.988014789 R_{mt}$
Standard Chartered Bank	$R_{it} = -0.002262452 + 0.686397004 R_{mt}$
Cooperative Bank of Kenya	$R_{it} = -2.1906E-05 + 0.660474323 R_{mt}$
East African Breweries Limited	$R_{it} = -0.00255771 + 1.47787416 R_{mt}$
Kenya Airways	$R_{it} = -0.0077 + 3.69E-05 R_{mt}$
Nation Media Group	$R_{it} = -0.00129 + 0.490996 R_{mt}$
Uchumi	$R_{it} = -0.00102 - 0.04279 R_{mt}$
Mumias	$R_{it} = 0.001536982 - 0.38684136 R_{mt}$
Eveready	$R_{it} = -0.00099 - 0.53461 R_{mt}$

Table 2: Market Model Equations

With the equations in *Table 4.2* above, it is observed that the firms are less volatile than the market as indicated by the beta coefficient. Kenya Airways is the only exception to this with a beta of 1.478 indicating that it is more volatile than the market.

Using the equations obtained, expected returns for each of the firms were calculated over the event window and then compared against the actual return realized so as to arrive at the abnormal returns. This was done using the equation:

$$AR_{it} = R_{it} - \alpha_i - \beta_i R_{mt}$$

To get R_{it} (the actual returns realized), logarithmic returns were used using the specification below:

$$R_{it} = \ln \left[\frac{P_{it}}{P_{i,t-1}} \right]$$

The abnormal returns for each of the ten companies for each day over the 21-day event window are as presented:

ABNORMAL RETURNS OVER THE EVENT WINDOW											
Day	KCB	Barclays	Stan Char	Coop Bank	EABL	KQ	NM G	Uchu mi	Mu mias	Ever eady	
-10	0.04762	-0.01209	-0.00963	0.008322	0.00758	0.01887	-0.03173	-0.07694	-0.00129	-0.02628	
-9	0.00468	-0.00792	0.002786	0.033902	0.00059	0.0077	0.039291	-0.00511	-0.04916	0.052675	
-8	-0.0108	-0.00692	0.020302	-0.01081	0.01076	0.0077	-0.0618	0.007079	0.000644	0.068284	
-7	-0.0225	-0.00247	-0.01949	-0.00882	-0.00381	0.01899	0.028404	-0.01806	0.020463	0.013137	
-6	-0.0639	0.001043	-0.01859	0.00111	0.06669	-0.0036	-0.03603	-0.04101	-0.02664	-0.0553	
-5	-0.0105	0.002761	-0.00265	0.011439	-0.03002	0.0077	0.011029	-0.03957	-0.00314	-0.10222	
-4	-0.0271	0.003036	0.021188	0.011773	0.01025	0.01899	0.035024	0.012344	-0.00047	-0.10306	
-3	0.05108	0.005356	-0.01561	0.015592	0.01012	-0.0036	-0.06906	0.029968	0.024594	-0.07508	
-2	0.01562	0.019849	-0.04431	0.007819	-0.00507	-0.0035	0.000732	-0.00502	0.022582	0.003532	
-1	0.0053	0.002091	-0.00033	0.004659	-0.01342	0.0077	0.002658	0.012318	-0.02387	0.578784	
0	-0.0084	0.024633	-0.00282	0.023448	0.0052	0.0416	0.001782	-0.00473	0.022519	-0.06577	
1	1E-04	0.008377	0.008196	0.038327	0.00611	-0.015	-0.0032	0.030855	-0.06739	0.05459	
2	-0.0089	0.001857	0.01908	-0.00994	-0.01786	-0.0035	0.002419	-0.05804	-0.00347	-0.03992	
3	0.01296	-0.02879	-0.005	-0.0118	-0.00955	0.01887	0.004412	-0.01057	-0.00231	-0.00473	
4	0.00666	0.001823	0.007896	-0.02323	0.00225	0.00769	0.013022	-0.01053	0.042123	0.001277	
5	-0.0325	-0.01557	0.008445	-0.02175	0.00378	0.00769	0.016087	0.001368	-0.05102	-0.02457	
6	0.00333	-0.01483	-0.01728	-0.0092	-0.01198	0.07749	-0.02256	-0.0044	-0.04816	0.023406	
7	0.03186	-0.01259	0.007971	-0.00617	-0.00227	0.03209	0.005368	0.006547	-0.02191	0.004883	
8	0.02582	-0.00324	0.018735	-0.01067	0.00509	0.0077	-0.00219	-0.00452	0.062261	0.001823	
9	0.00322	-0.00649	0.00451	0.000423	0.01152	-0.0046	-0.00472	-0.00995	0.021927	-0.01542	

Table 3: Abnormal Returns Over the Event Window

Outlined in *Table 4.3* above are the abnormal returns recorded on each day of the event window for each security. For many of these securities, actual returns were less than the expected returns hence the negative abnormal returns recorded. However, the deviation between the abnormal returns and expected returns are negligible seeing as the abnormal returns with the values ranging from 0.0001 to 0.06906.

Once obtained, the variances of the abnormal returns were calculated for the ten securities so as to obtain the t-statistic to be used in testing for statistical significance. This was done so as to identify the nature of the relationship between layoff announcements and stock prices for individual firms. The t-statistic was calculated for each day in the event window for every firm in the following way;

$$\frac{AR_{it}}{\sqrt{Var(AR_{it})}}$$

To get the variance, the following equation was used:

$$Var (AR_{it}) = \frac{\Sigma(AR_{it})^2}{L_1 - 2}$$

Where L_1 represents the number of days in the event window, that is, 21 days for purposes of this research.

The resultant t-statistics for the ten companies over the event window is as provided below:

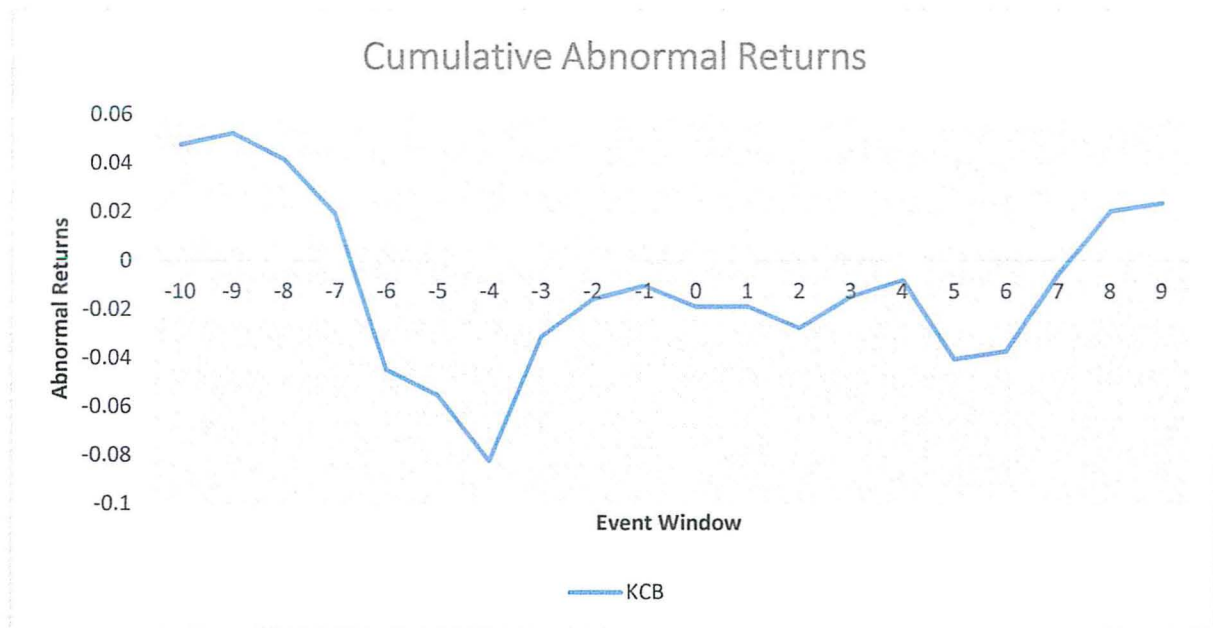
T-statistics of the Abnormal Returns over the Event Window										
Day	KCB	Barclays	StanChart	Coop Bank	EABL	KQ	NMG	Uchumi	Mumias	Eveready
-10	1.764257	-0.97997	-0.58038	0.488384	0.402208	0.787409	-1.10611	-2.68977	-0.03802	-0.18497
-9	0.173402	-0.64184	0.167853	1.98966	0.031098	0.321133	1.36982	-0.17867	-1.44989	0.370807
-8	-0.39993	-0.56032	1.223344	-0.63469	0.570803	0.321144	-2.15449	0.247461	0.018989	0.480686
-7	-0.83524	-0.20022	-1.17472	-0.51748	-0.20187	0.792691	0.990268	-0.63137	0.603544	0.092481
-6	-2.36613	0.084487	-1.12038	0.065167	3.537819	-0.15041	-1.25602	-1.43366	-0.78561	-0.38931
-5	-0.38954	0.223743	-0.15996	0.671376	-1.59271	0.321128	0.384513	-1.38338	-0.09273	-0.71961
-4	-1.00451	0.245986	1.276744	0.690945	0.543751	0.792681	1.221071	0.431529	-0.01376	-0.72547
-3	1.8925	0.433964	-0.94061	0.915088	0.53702	-0.15041	-2.40783	1.047618	0.725387	-0.52852
-2	0.57871	1.608286	-2.66977	0.458898	-0.26903	-0.14515	0.025521	-0.17543	0.666039	0.024862
-1	0.196474	0.169405	-0.01964	0.273409	-0.71193	0.321138	0.09266	0.430617	-0.70405	4.074388
0	-0.31284	1.995867	-0.16971	1.376161	0.276037	1.735893	0.062117	-0.16528	0.664183	-0.463
1	0.003695	0.678712	0.493883	2.249361	0.324228	-0.62735	-0.11149	1.07863	-1.98751	0.384291
2	-0.33062	0.150434	1.149748	-0.58326	-0.94759	-0.14514	0.084337	-2.0291	-0.10237	-0.281
3	0.480156	-2.33294	-0.30135	-0.69241	-0.50652	0.787411	0.15382	-0.36947	-0.06807	-0.0333
4	0.246908	0.147695	0.475804	-1.36333	0.119104	0.321121	0.453987	-0.36806	1.242407	0.008993
5	-1.20363	-1.26175	0.508886	-1.27669	0.200761	0.321123	0.560849	0.047837	-1.50479	-0.17299
6	0.123265	-1.20134	-1.04155	-0.54001	-0.63529	3.233832	-0.78653	-0.15383	-1.42041	0.164765
7	1.180444	-1.02028	0.480324	-0.36221	-0.12046	1.33903	0.187162	0.228873	-0.64633	0.034377
8	0.956582	-0.26229	1.12896	-0.626	0.269851	0.32113	-0.07629	-0.15796	1.836377	0.012833
9	0.119298	-0.52549	0.271748	0.024807	0.61099	-0.19092	-0.16464	-0.34792	0.646741	-0.10854

Table 4: T-statistics of the Abnormal Returns over the Event Window

From *Table 4* above, it is observed that a majority of the abnormal returns are not significant at the 95% confidence level as they are less than -1.96 and 1.96 which is the critical value at the 95% confidence level. The significant values are highlighted in bold.

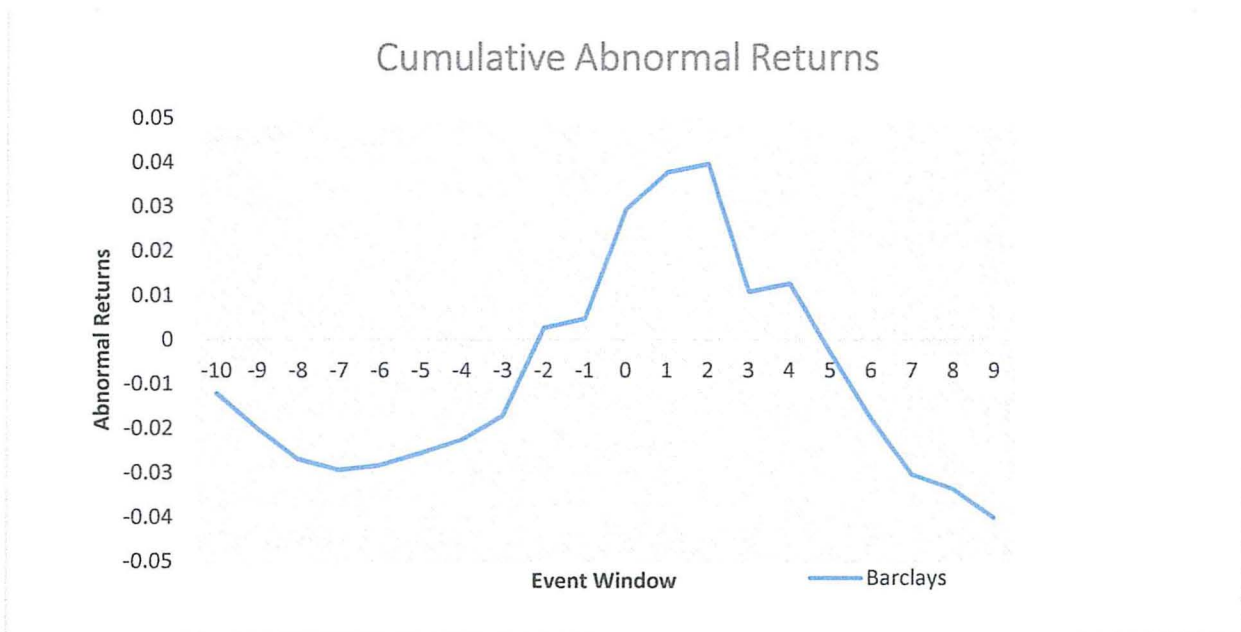
The abnormal returns for each individual security were also aggregated over the event window so as to obtain the CARs. A graphical representation of the same is provided in the pages that follow. This serves to show the trend of the observed abnormal returns to establish whether the abnormal returns for each security were negative or positive.

Figure 1: Kenya Commercial Bank Stock Performance during the Layoff Announcement



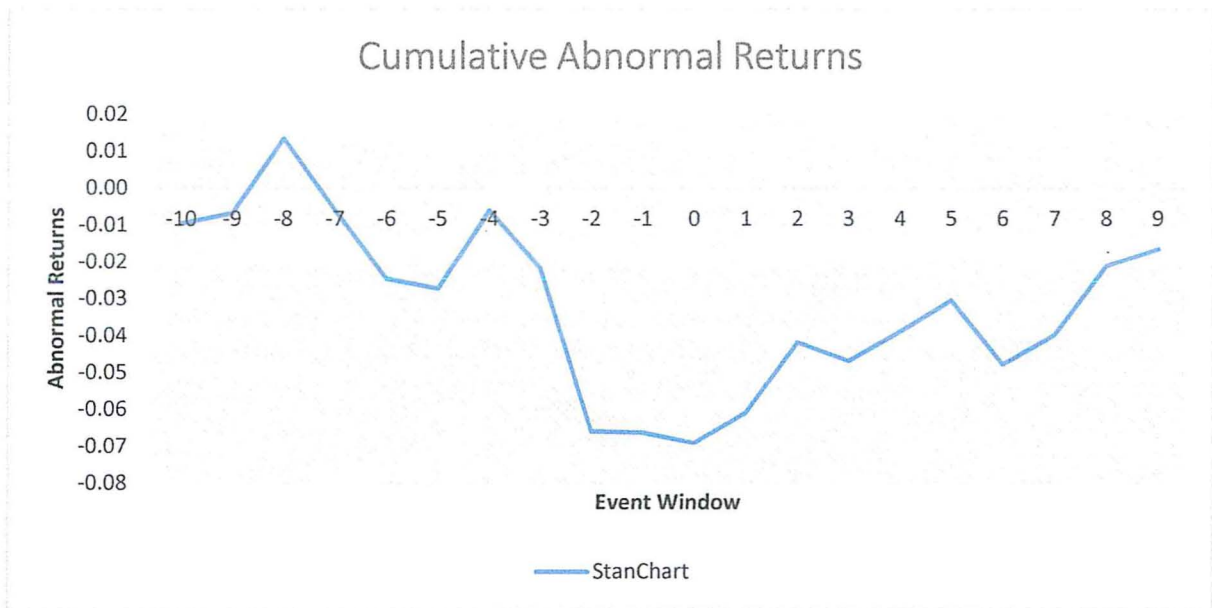
Despite negative abnormal returns between the period (-7, +7), the CAR for KCB is positive showing that on an aggregate basis, actual returns realized were greater than the expected returns over the event window.

Figure 2: Barclays Bank of Kenya Stock Performance during the Layoff Announcement



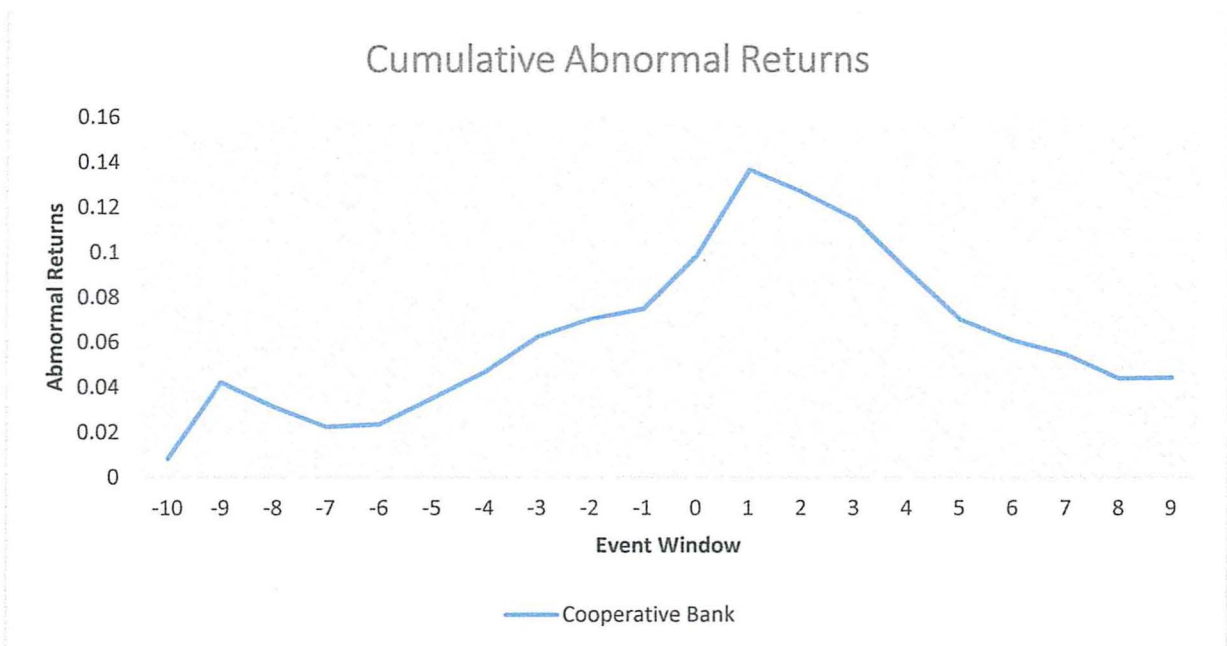
A sharp positive increase is observed on the date of the layoff announcement though this trend is not sustained throughout the remaining days of the event window. The abnormal returns undergo a steady decline resulting in a negative CAR over the entire event window

Figure 3: Standard Chartered Bank Stock Performance during the Layoff Announcement



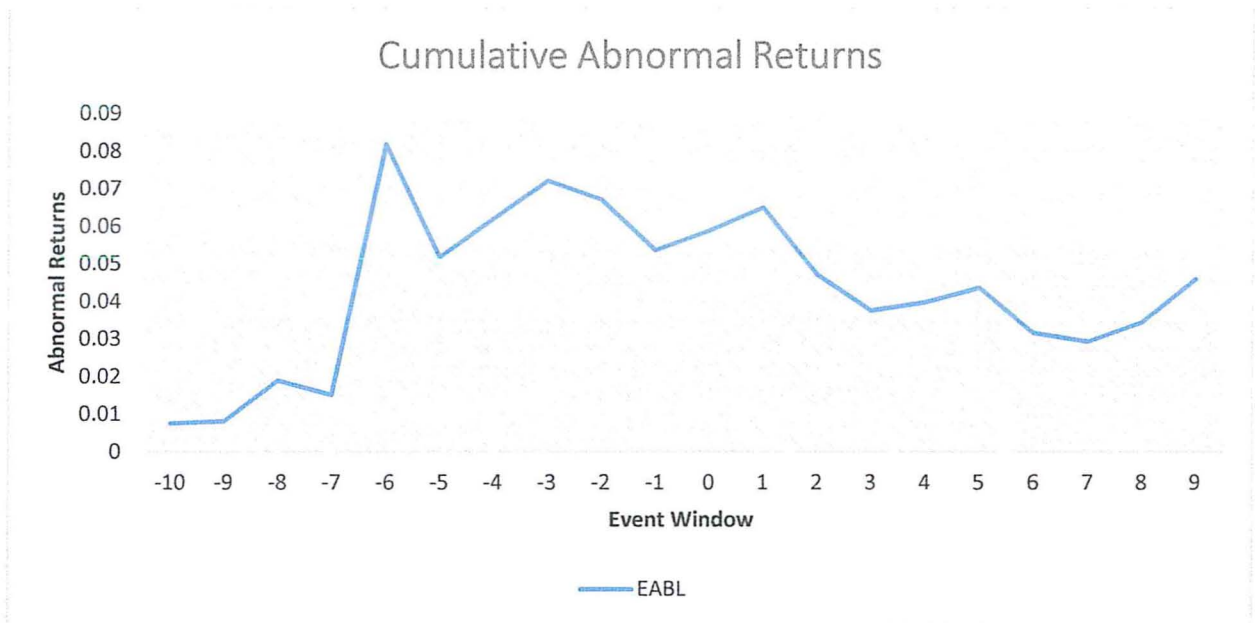
CAR undergoes a sharp decline two days prior to the announcement date and this lasts until the event date before the abnormal returns start to increase. However, the CAR remains negative as the higher abnormal returns are not enough to push the CAR to a positive figure.

Figure 4: Cooperative Bank Stock Performance during the Layoff Announcement



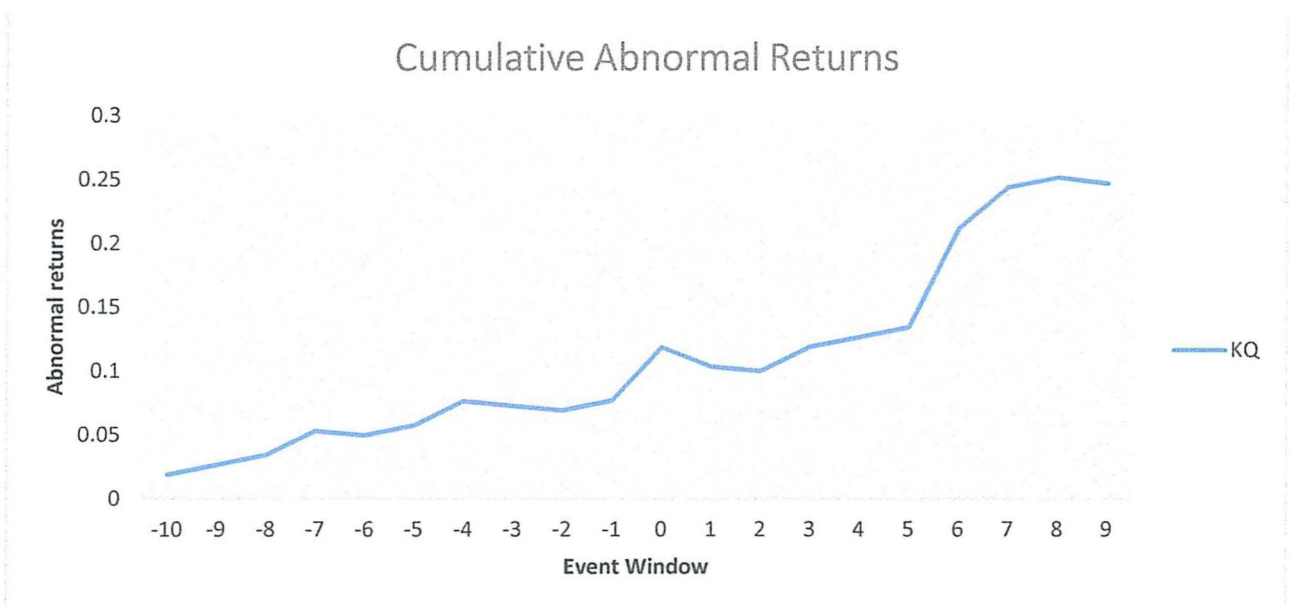
Cooperative Bank, on the other hand, records positive abnormal returns over the entire period of the event window with a significant abnormal return a day after the event date, denoted as day (+1).

Figure 5: EABL Stock Performance during the Layoff Announcement



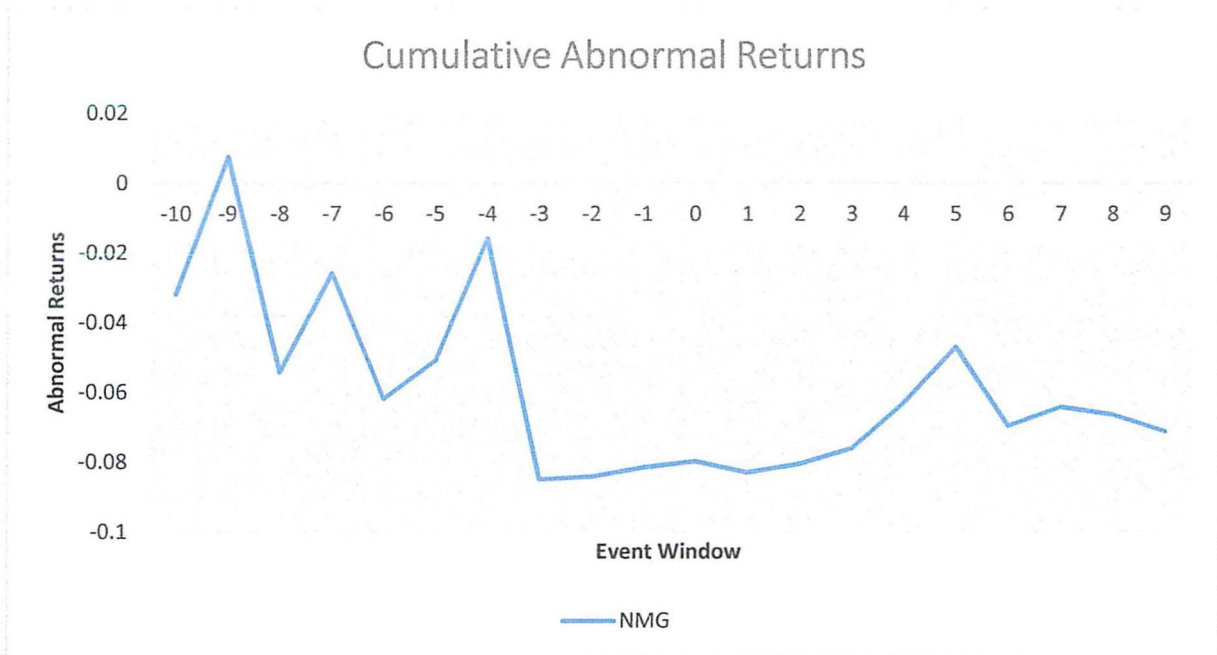
Similar to Cooperative Bank, EABL posts positive CARs throughout the event window although the returns prior to the event date were more positive than the returns observed after the event window, which reduce slightly. This could hint at an anticipation by the market of the layoff announcement probably due to an information leak on the impending announcement.

Figure 6: Kenya Airways Stock Performance during the Layoff Announcement



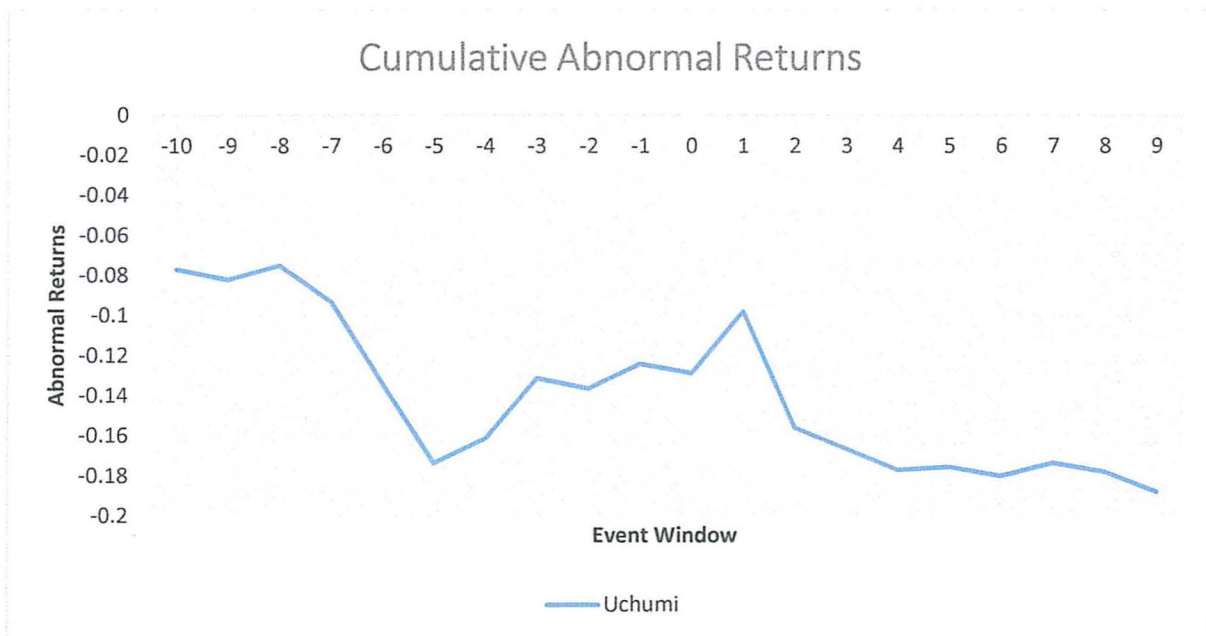
A steady increase in the abnormal returns over the entire event window.

Figure 7: Nation Media Group Stock Performance during the Layoff Announcement



CARs for NMG are negative with a sharp decline observed three days prior to the announcement. This trend is observed until three days after the event when the abnormal returns start to pick up, although at a much slower pace.

Figure 8: Uchumi Stock Performance during the Layoff Announcement



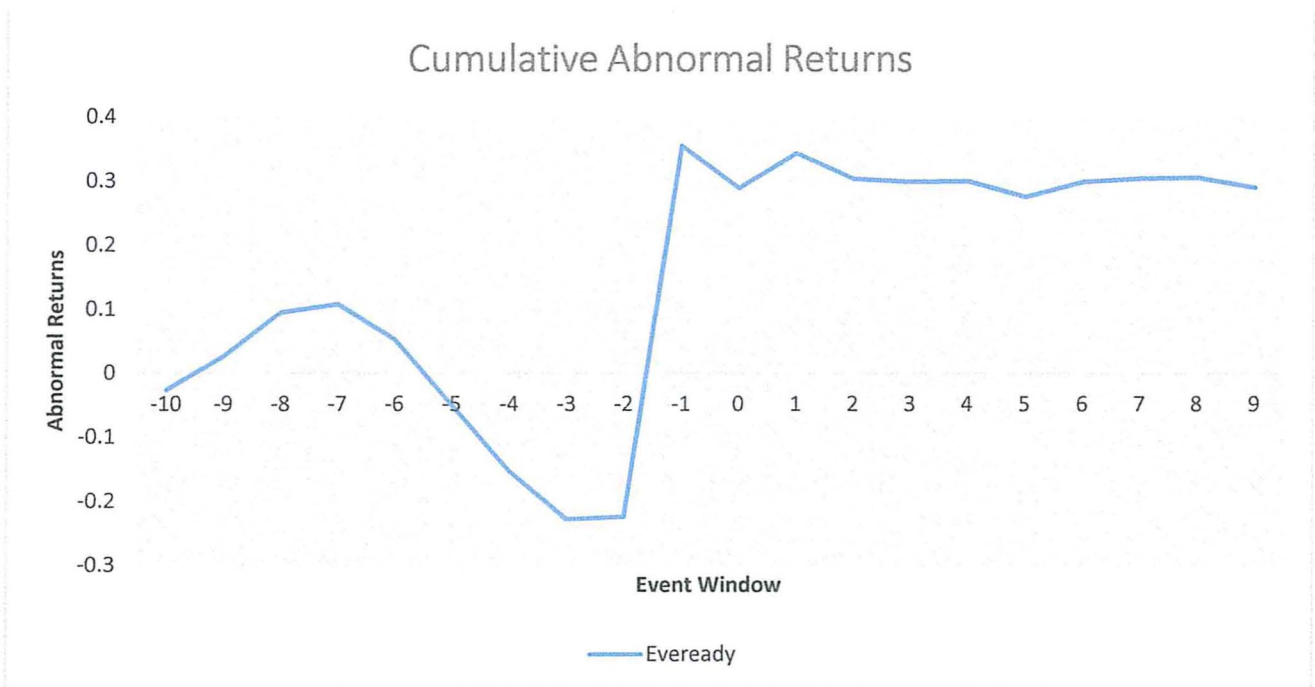
Uchumi records negative CARs over the entire event window with the results becoming more negative after the announcement. This could indicate that news of the announcement was perceived negatively by the market resulting in a negative stock price reaction

Figure 9: Mumias Stock Performance during the Layoff Announcement



The graph of CARs over the event window shows an erratic pattern. However, the abnormal returns still remain negative.

Figure 10: Eveready Stock Performance during the Layoff Announcement



For Eveready, the CARs begin a positive trend a day prior to the announcement and this is sustained till the end of the event window. This is denoted as (-1, +9).

The findings reveal different results for each firm as no observable pattern is seen in the analysis of the abnormal returns. On the event day for instance, majority of the firms post positive abnormal returns though they prove to be largely insignificant.

Day 0	KCB	Barclays	StanChart	Coop Bank	EABL	KQ	NMG	Uchumi	Mumias	Eveready
AR	-0.00844	0.024633	-0.00282	0.0234482	0.005203	0.041597	0.001782	-0.00473	0.022519	-0.06577
t-stat	-0.31284	1.995867	-0.16971	1.3761613	0.276037	1.735893	0.062117	-0.16528	0.664183	-0.463
Significant?	No	Yes	No	No	No	No	No	No	No	No

Table 5: Abnormal Returns on the Event Day

Barclays is the only exception to this, posting a positive abnormal return on the event day, significant at the 95% confidence level. Six of the firms on the other hand, post positive abnormal returns on the event day with the remaining four posting negative abnormal returns.

Aggregating the abnormal returns across the 10 securities reveals a CAAR of 0.025356023 with a test statistic of 0.555096934. This result is also not significant at the 95% confidence level.

With this result, one of the objectives of this study has been met. The study sought to find out the nature of stock price reaction to layoff announcements. To answer this, the following null hypothesis was formed:

H₀₁: There is no relationship between layoff announcements and stock prices for firms listed on the NSE

H_{A1}: There is a relationship between layoff announcements and stock prices for firms listed on the NSE

From the findings obtained, the study fails to reject the null hypothesis as the positive CAARs are not significant. Therefore, there exists no relationship between layoff announcements and stock prices for firms listed on the NSE.

4.3 Reason for the Layoff and Share Price Performance

The second objective of this study was to find out whether the justification for the layoff, as provided by management, has an impact on the share price movement.

To do this, the firms were categorized into two broad groups: proactive announcements and reactive announcements. Proactive announcements contain layoffs triggered by the need to improve operational efficiency and to boost profitability while reactive announcements are

those firms whose layoffs were triggered by adverse market conditions and/or financial distress. The categorization was as follows:

Proactive Announcements	Reactive Announcements
Kenya Commercial Bank	Standard Chartered
Barclays	Kenya Airways
Cooperative Bank	Nation Media Group
East African Breweries Limited	Uchumi
	Mumias
	Eveready

Table 6: Categorization of Layoff Announcements

To establish the extent to which reason for layoff impacts stock price reaction, an analysis was done using cumulative average abnormal returns (CAAR) as opposed to the abnormal returns as it involves the comparison between two sub-samples. The CAAR sums the abnormal returns across securities and over the event window, that is,

$$CAAR(\tau_1, \tau_2) = \frac{1}{N} \sum_{i=1}^N CAR(\tau_1, \tau_2)$$

N represents the number of securities in the sample.

For this study, CAARs for both sub-samples were calculated. Sub-sample 1 (proactive announcements) had four securities while sub-sample 2 (reactive announcements) had six securities. Obtaining the CAARs for the two groups was followed by calculating their respective t-statistic using the formula:

$$t_{CAAR} = \frac{CAAR_t}{\sqrt{T * S(AAR_t)}}$$

The $CAAR_t$ for both subsamples is presented below:

	Proactive Announcements	Reactive Announcements
CAAR	0.018467393	0.029948443
t-statistic	3.130438393	0.666191988
Significant?	Yes	No

Table 7: CAARs for the subsamples

Evidently, layoff announcements result in positive stock price reaction when the abnormal returns are aggregated across securities. However, layoff announcements resulting from adverse market conditions post less positive abnormal returns when compared with those resulting from improvement in operational efficiency. Additionally, reactive announcements do not have significant results. This is in contrast to proactive announcements which are significant at the 95% confidence level showing that justification for the layoff as provided by management does have an impact on stock price reaction.

The hypothesis guiding this objective was as follows:

H₀₂: Stock price reaction does not vary in relation to the reason for the layoff as provided by management

H_{A2}: Stock price reaction varies with the reason for the layoff as provided by management

Given the findings of the study, the study fails to reject the null hypothesis for firms with proactive announcements. Therefore, stock price reaction varies with the reason for the layoff where the layoff is triggered by positive reasons.

However, this study fails to reject the null in cases where the layoff is triggered by adverse market conditions as no significant relationship is observed between the two.

5. DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a discussion of the key findings as presented in the preceding chapter. The parts will be structured as follows: Discussion, Conclusions, Limitations of the Study and Areas for Further Research.

5.1 DISCUSSION

5.1.1 Nature of Stock Price Reaction to Layoff Announcements

The study aimed at establishing the nature and strength of the relationship between layoff announcements and stock price reaction of firms.

Contrary to majority of the previous research on the topic, the findings reveal that layoff announcements have no impact on share price performance. Previous work done by (Hallock, Strain, & Webber, 2011) who studied market responses to layoff announcements over a 38-year period from 1970-2007 supports these findings. He found that stock price reactions were negative in the 1970s but with the passage of time, the abnormal returns have become less negative with the results in the 2000s not being statistically significant. Continuing with that trend therefore, it would be assumed that later years would record positive abnormal returns that are not statistically significant as is the case with the findings of this research.

The findings of this study are also consistent with those of (Abraham, Khan, & MacDonald, 2013) who found that the market responds either negatively or positively for different firms though the results prove to be largely insignificant indicating no relationship between layoff announcements and stock price reaction.

However, much of the previous work done on the subject reveal a negative significant relationship between stock price performance and layoff announcements. Some of these studies include (Worrell, Davidson III, & Sharma, 1991), (Ursel & Stassen, 1995), (Filbeck & Webb, 2001), (Abraham, 2004) among others. However, it should be noted that before reaching this conclusion, the studies covered many layoff announcements. Farber and Hallock (2008) for instance, investigated a sample of 4,273 job loss announcements. Wertheim and Robinson (2011) on the other hand studied a sample of 607 firms. This is far much more than the sample size for this study. Therefore, the small sample size could be a contributor to the difference in stock price reaction between this study and previous work. A larger sample size could have possibly resulted in significant results.

5.1.2 Reason for the Layoff and Share Price Performance

Another objective for this study was to establish whether there exists a relationship between the reason for the layoff as provided by management, and stock price reaction. From the findings of this research, layoff announcements triggered by negative news such as loss making or poor product performance have no impact on stock price movement. However, layoffs as a result of expected positive outcomes such as improvement in operational efficiency or increase in the firm's competitiveness have a significant positive impact on stock price movement.

These findings are consistent with the work done by (Hallock, Strain, & Webber, 2011) who found that layoff announcements resulting from reorganization of the firm and/or cutting down on costs evoke strong, positive and statistically significant returns. Similarly, (Wertheim & Robinson, 2011) found that firms set to enjoy benefits resulting from the layoff for example, through lower cost of operation, will record positive reactions to the stock prices. A similar study conducted in the South African market also arrived at a similar result. Bhana (2002) found that layoff decisions triggered by anticipated efficiency gains will have positive abnormal returns and this was consistent across alternative event windows.

A departure from these findings is observed in the work of (Schweizer & Bilsdorfer, 2008) who found that proactive layoff announcements do not evoke significant price reaction of the affected firms. However, reactive announcements result in a significant negative stock price reaction. Peltola (2014) on the other hand, found that layoffs triggered by plant or office closures are the only announcements that result in a statistically significant positive market reaction.

For firms resulting to layoffs as a result of adverse market conditions, previous studies find that those layoffs result in a negative stock price reaction. For instance, (Hillier, Marshall, McColgan, & Werema, 2007) found that share prices react negatively to reactive announcements and where the announcements are of a proactive nature, the stock price responds minimally. Farber and Hallock (2008) also found that layoffs triggered by a decline in the demand for a firm's products are viewed as a negative signal by the market and this would be reflected in the form of negative abnormal returns.

Despite varying outcomes, it is clear that the reason given by management for the layoff decision is a key contributor to variation in price reactions. As such, it is seen that the market

perceives the reason given by management for the layoff decision as a signal that aids in evaluating impact of the decision on shareholder value.

5.2 CONCLUSION

More often than not, managers usually turn to layoffs as the preferred means of cutting down on costs so as to improve performance. The study reveals that such layoffs have a positive impact on share price reaction and this could serve as a justification for the layoff. On the other hand, firms faced with difficulties could consider other alternatives as opposed to layoffs that do not result in employees losing their source of livelihood given that such announcements do not have an impact on stock prices. This is due to the fact that the firm will end up spending a lot of money compensating the employees- money that may be hard to come by given their financial position. Some of these alternatives include having a hiring freeze, retraining employees so that their skills remain relevant in the job market, offer of voluntary early retirement as well as a reduction in salaries and bonuses. These will go a long way in reducing costs incurred by the firm.

5.3 LIMITATION OF THE STUDY

The study used a small sample size of ten owing to unavailability of data regarding the actual event dates. Some firms had carried out layoffs but the date of the announcement was not clearly outlined. Examples of such firms include: Equity Group Holdings, KenolKobil, National Bank of Kenya and Bamburi Cement.

5.4 AREAS FOR FURTHER RESEARCH

The study could be carried out in other markets probably across East Africa or the continent so as to arrive at a bigger sample size. This is in light of the fact that previous studies covering developed markets have sample sizes which are over 100. Therefore, doing this study across markets would improve the generalizability across firms.

Additionally, other variables could be studied so as to identify whether they also have an impact on stock price reactions to layoff announcements. For example, financial performance of the company, size of the layoff or the state of the economy whether it is an economic boom or recession.

A post-layoff study of performance of the firms also provides grounds for further research so as to assess whether layoffs actually result in improved performance.

The study could also be carried out with a much longer estimation period so as to observe whether the results will be similar to that obtained using a 120-day period.

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