# THE EFFECTS OFFINANCIAL ANNOUNCEMENT RESULTSON SHARE RETURNSAND VOLUME OF SHARES TRADED FOR COMPANIES LISTED AT THE NAIROBI SECURITIES EXCHANGE

 $\mathbf{BY}$ 

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# **DECLARATION**

I declare that this research project is my original work and has not been presented for any award

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Many thanks go to the Nairobi Securities Exchange for their assistance during data collection. Their assistance and the information availed remains the centre around which the success of this study revolves.

# **DEDICATION**

This dissertation is dedicated to my parents for the support and encouragement during the project.

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# **ABBREVIATIONS**

AAR - Average Abnormal return

AR - Abnormal Return

CAR - Cumulative Abnormal Return

DAS - Domestic Accounting Standards

GAAP - Generally Accepted Accounting Standards

IAS - International Accounting Standards

ICPAK - Institute of Certified Public Accountants, Kenya

NSE - Nairobi Stock Exchange

SFAS - Statement of Financial Accounting Standards

#### **ABSTRACT**

The research objectives for the study were to determine the effects of financial results announcements on share returns and volume of shares traded for companies listed at the Nairobi Securities Exchange. The study used a descriptive cross-sectional study design and data was collected from the Nairobi Securities Exchange. The data collected was analyzed using Microsoft Excel 2007 and event study was done for a window period of 31 with 15 days prior to announcement and 15 days after the announcement. With regards to the first objective of the study, the overall results showed that there was no significant return in the stock market as a result of end-year financial return using both abnormal returns (AR) and cumulative abnormal returns (CAR). With regards to the second objective of the study, the findings indicated that there were no abnormal significant shares traded on the announcement dates, but there was significant trading within the range of  $\pm 5$  days before and after announcement dates and finally no significant trading volumes within the  $\pm 15$  days. The study recommended that there should be a centralized database where company financial results announcement dates properly kept, and also the Nairobi Securities Exchange should educate the public on securities investments and attract more institutional investors and foreign investors.

#### **CHAPTER ONE**

#### INTRODUCTION

## 1.1 Background of the Study

Financial results for a company are important for investors to make investment decisions as they show how they have been performing. Investors react in different ways upon the announcement of financial performance. As companies transact throughout the year they are required to provide the outcomes of these transactions through financial statements. Financial statements summarize these transactions and the company presents them in a way that can be comprehensive to all the stakeholders to analyze them.

Stock prices and trading volume can rise and fall based on a company's earnings performance, because profits reveal the financial health of a business and also indicate the economic conditions for earning profits more broadly. Investors generally are perceived to be value maximizing personalities. Therefore, positive earnings announcements should be associated with good and positive expectation while a negative earnings announcement is expected to generate bad and negative expectation (Sare, Akuoko and Esumanba, 2013). Long-term investors may not be swayed by one quarter of disappointing earnings, but some investors think more immediately and favor short-term profits. Earnings are not the only development investors focus on, but they are relevant during and before earnings season (Terzo, 2014).

A positive earnings announcement is expected to create a high demand for the individual company stock, which in turn will push the price up. In Kenya some sectors such as banks have an increase in demand for the shares thereby increasing the share price. This is because banks in Kenya are known to perform well in terms of profitability and also in dividend payment.

#### 1.1.1 Financial Results Announcements

In Kenya, the main legislation governing companies, including financial reporting, is the Companies Act. However, there are other laws that have an incidence on financial reporting. These deal with specialized sectors such as the insurance sector, banks and listed companies. The Companies Act requires all limited liability companies to prepare and keep proper books of accounts as are necessary to give a true and fair view of the state of the companies' affairs and to explain its transactions. The Act further requires companies to present an income statement and a balance sheet each year during its annual general meeting and prescribes in detail what should be included in the income statement and the balance sheet. It is therefore mandatory for the management of publicly listed companies to announce their financial performance to the public since they are the agents of the shareholders.

Some of the information that is required to be present in the financial result announcement includes the statement of comprehensive income or the income statement shows the ability of a company to generate profits. These gains in fact contain transactions with other entities, but not only them. The revenues and expenses that are not related to the actual transactions, but caused by the accounting policies, also have impact on the financial result. The way of recognizing and measuring components of the balance sheet has a very large impact on the ingredients of profit and loss account. The valuation of assets and liabilities has recently become the most controversial, in particular the valuation using the fair value method.

The Balance Sheet, also called a statement of financial position, is an important statement which reports a company's financial position based on its assets, liabilities and equities at a single moment in time. The Cash flow statement is another important statement which summarizes how changes in balance sheet accounts affect the cash account during the accounting period. It also

reconciles the beginning and ending cash and cash equivalents account balances. The statement of shareholders' equity displays how equity changes from the beginning of an accounting period to the end. It displays all the equity accounts that affect the ending equity balance including common share, net income, paid in capital, and dividends.

Some of the important information that investors use from the financial statements include net profit or net income which refers to a company's financial position when total revenues exceed total expenses. Another ratio of importance to investors is Earning per share which (EPS) is a market prospect ratio that measures the amount of net income earned per share of stock outstanding. It is the amount of money each share of stock would receive if all of the profits were distributed to the outstanding shares at the end of the year.

Dividend per share (DPS) is a ratio that measures the amount of dividend paid per share of stock outstanding. The amount of money per outstanding share that management decides to pay from the profits made, and it can be fixed amount or a certain percentage of profits made. The Return on equity (ROE) is a profitability ratio that measures the ability of a firm to generate profits from its shareholders investments in the company. In other terms, it is a ratio that shows how much profit each shilling of common shareholders' equity generates.

Return on assets (ROA) is also an important ratio that measures the net income produced by total assets during a period by comparing net income to the average total assets. It therefore measures how efficiently a company can manage its assets to produce profits during a period. Price earnings (P/E) ratio is a market prospect ratio that calculates the market value of a stock relative to its earnings by comparing the market price per share by the earnings per share. It shows what the market is willing to pay for a stock based on its current earnings.

This information is used by investors to gauge the performance of a company and assists the investor to decide whether to invest in the company or not. Differences arising in these information values as a result of accounting standards need to be identified. In Kenya, the NSE share trading is mostly comprised of international investors who hold majority of shares. Discrepancies in the preparation and presentation of financial statements as a result of accounting standards, local and international, would lead the investors not have confidence in the stock market which would lead to a decline in stock prices due to the demand and supply nature of the stock market.

#### 1.1.2Share Prices and Volume

Shares are traded on the stock exchange with the price represents the buyers' value of the company. An organization's value is comprised of both tangible and intangible values and the share prices traded are expected to follow market fundamentals when being traded. At times, stock prices are traded on speculation about an event that may occur in the company. When stock prices deviate from market fundamentals, imperfections take place and a market correction takes place.

A stock price, considering an efficient market contains past, present and future information about a company. Various factors affect the movement of a share price. These include the profitability of a company, the change of company management, general demand for the stock, and expected major announcement by the company. These together with speculative factors affect stock price movement. Macroeconomic performance affect the level of investment in the stock market since in a growing economy more people are likely to invest in the market while an ailing economy will have people shy away from stock market investment.

Volume of shares traded refers to the demand for a stock and how many shares are traded. This could be either buy or sell orders. Trading volume is one of important factors that investors concern when they decided to invest in particular countries.

#### 1.1.2 Financial Statement Announcement, Share Return and Volume Reaction

Returns of shares traded at the stock market react to different information given to investors and it has been noted that different accounting standards may lead to difference in the information given to various groups. Investors react differently to information given to them and slight misinterpretation of the provided information may influence their actions. The study should be able to analyze whether the differences in accounting standards are substantial.

Information present in the financial statements provides different sentiments to investors and this information in an efficient market brings about purchase, hold, or sell reactions. The profitability, dividends per share, earnings per share, return on assets and other profitability and investment ratios provide a guideline to investors. The management of the company has an obligation to provide the information in the required standards. Empirical evidences shown by Patell and Wolfson (1984) documented that huge or immense abnormal returns occurred mostly when stock market analysts obtained immediate knowledge within thirty (30) minutes of the announcement with basically a substantial part of the returns taking place within the first 5 to 10 minutes. The preliminary response of stock prices to earnings announcement whether it has full or partial reflection could be corrected in the long run.

#### 1.1.4 Companies Listed at the Nairobi Stocks Exchange

A stock market is where shares or securities are issued and traded through exchanges or overthe-counter markets. It is also known as the equity market and is one of the important areas of a market economy as it provides access to capital to companies, ownership in the company for primary investors and the potential of gains based on the firm's future performance for secondary investors (Gatua, 2013).

The Nairobi Securities Exchange was constituted in 1954 as a voluntary association of stockbrokers registered under the Societies Act. Over the years, the number of companies listed has increased to the current number of 62 (NSE website, 2014). The companies listed at the NSE are categorized under agricultural, commercial and services, telecommunication and technology, automobiles and accessories, banking, insurance, investment, and manufacturing and allied sectors. These categories are listed under four investment market segments namely: Main Investment Market Segment (MIMS), Alternative Investment Market Segment (AIMS), Fixed Income Securities Market Segment (FISMS) and Growth Enterprise Market Segment (GEMS) each with its own eligibility criteria.

#### 1.2 Research Problem

Shareholders of a company want the maximization of their wealth and that duty is with the directors of the company. The directors as agents of the company have a responsibility towards maximizing shareholder wealth and also custodians of the company assets.

Several studies have been done on the effects of financial results announcement on share prices (Kiremu, Galo, Wagala and Mutegi, 2013; Sare, Akuoko and Esumanba, 2013; Beaver, 1968; Patell and Wolfson, 1984; Ball and Brown, 1968; Bernard and Thomas, 1989). The studies conducted by Kiremu et al. (2013) was done for banks listed at the NSE while the studies conducted by Sare *et al.* (2013), Beaver (1968), Patell and Wolfson (1984), Ball and Brown (1968), and Bernard and Thomas, (1989) were conducted under different contextual environment and periods while only emphasizing on share price and not the volume traded. Our study

analyzes the effects of effects of financial results announcement on share price for companies listed at the NSE.

The research gap in the studies earlier provided on effects of financial results announcement on share price and share volume is what this study is meant to fill and ask the following questions "What is the effect of financial results announcements on share prices of companies at the NSE?" and "what is the effect of financial results announcement on the volume of shares traded for companies listed at the NSE?" Information given to investors about financial performance of a company is expected to be reflected in its share price.

# 1.3 Objectives of the Study

- To determine the effects of financial result announcement on share price of NSE-listed companies.
- To determine the effects of financial result announcement on volume of shares of NSE-listed companies.

# 1.4 Value of the Study

The study will be of value to the management board which has been given authority by the owners of the company to provide accurate information that is useful to users of the financial statements. The importance of financial results announcement is known to managers and it would help managers to know the timing and what to provide to the shareholders. The study will also be of importance to accountants who have the responsibility of preparing the financial statements for a company. They are expected to provide the necessary information while preparing the financial statement in order to help investors make good decisions with respect to investment.

The study should also be important to company owners (shareholders) and investors, both local and international, who may need to know how the company is performing and for investors, the important variables they need to look for when making investment decisions. Also they will be able to understand how release of financial information may affect their current net worth in an organization or not. Finally, the study would be of importance to scholars to further the study and also serve as a literature in other studies related to it. This will help to increase the general knowledge of the subject and also provide useful reference to future studies.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

The study will review the theoretical and empirical literature of the effects of financial results announcement on share price of companies listed at the NSE. Section 2.2 will discuss the theoretical literature, which discusses the various theories that are foundation of the study. Section 2.3 discusses the relevant literature that is used. Empirical review of previous studies is done in Section 2.4where previous studies are reviewed in order to fill the research gap, and the summary of the literature review is done in Section 2.5.

#### 2.2 Review of Theories

The theories used provide a framework which was used in conducting the study. The theories used in the study were the Efficient Market Hypothesis, the Agency Theory, and the Random Walk Theory. These are explained as below:

#### 2.2.1 Efficient Market Hypothesis

An efficient capital market is one in which security prices adjust rapidly to the arrival of new information and therefore the current prices of the securities reflect all the information about the security. What this means is that the price for which the investor will be paying for the financial asset truly reflects fair or true information about the intrinsic value of this specific asset. In this paper we assume that the stock market is an informationally efficient market. This is reinforced by the fact that first, these markets have a large number of profit maximizing participants who each analyze and value the securities independent of each other, Secondly, information enters the market in a random manner and the timings of one announcement is generally independent of the other. Finally, investors in both the markets adjust the asset prices rapidly to reflect the effect of

new information. Security prices are able to adjust rapidly because of the many investors who compete against each other (Brealey, et al., 2001).

There are three forms of efficiency under the efficient market hypothesis. First is the weak form of efficiency where stock prices are assumed to reflect information that may be contained in the past history of the stock prices. Therefore, if a market is characterized by weak form of efficiency, then no one investor or group of investors should be able to earn over the defined period of time abnormal returns using information about historical prices or by technical analysis.

Second is the semi-strong form of efficiency where all publicly information is reflected in the stocks prices. Publicly available information includes the firm's financial reports, reports of competing firms' e.t.c. Finally is the strong form efficiency which asserts that stock prices fully reflect all information including private or inside information as well as that which is publicly available. Prices under this efficiency adjust rapidly to both private and public information hence no investor will be able to earn abnormal rates of return.

#### 2.2.2 The Agency Theory

The study made use of the agency theory to understand more of the concept. Agency relationship is defined as one in which one or more persons (the principal(s)) engage another person (the agent) to perform some services on their behalf which involves delegating some decision-making authority to the agent (Jensen and Meckling, 1976; Ross, 1973). The central idea of this theory is that there exists a conflict of interest between owner and management. Eisenhardt (1989) discussed two main causes of agency problems namely, conflict of interests, and different attitude towards risk between owner and management.

Berle and Means (1932) argued that when shareholders are not able to monitor management properly, the company assets might be used for the welfare of management instead for maximizing shareholders' wealth. Chrisman, Chua and Litz (2004) noted that this conflict arises from information asymmetry between owners' and mangers and there exists a gap between them.

This theory is relevant to the study as it shows the relevance of management in providing relevant information to the different stakeholders and especially to shareholders. Managers who are agents of shareholders have an obligation to improve the wealth of the shareholders and it shows how transparent information through quality financial statements affects the share price.

#### 2.2.3 Random Walk Hypothesis

The random walk hypothesis states that stock market prices evolve according to a random walk and thus cannot be predicted. The theory of random walks implies that a series of stock price changes has no memory, and the past history of the series cannot be used to predict the future in any meaningful way. The successive price changes in individual securities are independent and the hypothesis is unlikely to provide an exact description of the behavior of stock market prices.

The independence assumption of the random walk model is valid as long as knowledge of the past behavior of the series of price changes cannot be used to increase expected gains. More specifically, if successive price changes for a given security are independent, there is no problem in timing purchases and sales of that security. A simple policy of buying and holding the security will be as good as any more complicated mechanical procedure for timing purchases and sales. This implies that, for investment purposes, the independence assumption of the random walk model is an adequate description of reality as long as the actual degree of dependence in series of price changes is not sufficient to make the expected profits of any more "sophisticated"

mechanical trading rule or chartist technique greater than the expected profits under a naïve buyand-hold policy (Fama, 1995).

This hypothesis will be of importance to the study as the effects of financial results announcement on share price of companies listed at the NSE will be analyzed on whether they follow a random walk model or follow a different path such as information present in the financial statements.

#### 2.2.4 The Information Content Theory

Claude Shannon (the father of modern information theory) was at the fore front of this revolution. His landmark 1948 paper, 'A Mathematical Theory of Communication', was the first paper to formally describe a communication system in which information plays a central role. Concepts such as the capacity of an information channel, uncertainty of a source and the optimal rate of information transmission in a noisy environment revolutionized how we think about information. These concepts laid the groundwork for much of the technology we appreciate today (e.g. the computer, cryptography, telecommunications, television etc).

The general purpose of accounting is to communicate to interested users regarding events that occurred in the past. We judge this communication to have been successful if these users are able, ex post, to "see" those events that transpired ex ante. To this end, we account for these events through time and at some point summarize this accounting by giving the user a set of summary reports. Accounting is therefore simply a modified classical communication system. This theory was important to the study as it indicated how information from the financial results helps investors make decision on shares, whether to buy or sell.

#### 2.3 Determinants of Share Prices

The share price of a company as at a particular day of trading is dependent on both micro economic and macroeconomic factors, financial and non-financial factors. Several studies have been done and some of the determinants of share prices identified include:

Dividend: A portion of firm's profit is distributed to the shareholders as dividend. Dividend is the return that shareholders receive on their shareholdings and is a source of regular income for the investors. Dividend seeking investors who prefer current income in the form of dividend to capital appreciation would favour stocks that pay out higher dividends. Their preference for higher dividend paying stocks result in greater demand for such stocks, thereby enhancing their market price. Dividend is therefore expected to be positively related to share prices. As a surrogate for dividend, dividend per share (DPS) computed as annual dividend amount paid to equity shareholders upon number of equity shares outstanding is used. Dividend per share so computed is deflated by the wholesale price index and is adjusted for the varying face value of the shares.

Profitability: One of the important criteria that is used to assess a firm's financial performance is the profitability of the firm. The profit that is left over with a firm after paying tax and preference dividend is the earnings available to the equity shareholders of the firm, and firms utilize these earnings to distribute dividends to shareholders. Higher the profit after tax, higher is the earnings available to the equity shareholders and hence, higher is the scope for increased dividend payouts. The higher dividend payouts would in turn enhance the market price of the firm's share and this way, a positive relationship is expected to exist between share price and profitability. To examine the influence of profitability on share prices, return on assets (ROA) i.e. the ratio of profit after tax to total assets is used.

*Price-Earnings ratio*: Another major firm specific fundamental variable that could influence the share prices is the price-earnings ratio (PE). Price-earnings ratio indicates the price that investors are willing to pay for the net profit per share earned by the firm. It is computed as market price per equity share upon earnings per share of the firm. It reflects the market expectations about the firm's future performance; a high PE ratio suggests that investors are expecting the firm to have higher earnings in the future and are willing to pay more for the shares of such firms. This way, price-earnings ratio is expected to have a positive relationship with share price.

Leverage: Leverage, measured as debt-equity ratio (DE), indicates the relative proportion of equity and debt that a firm is using to finance its assets. It is a measure of how much a firm is relying on debt. Since raising capital via debt involves periodic interest payments on part of firms, increased use of debt by firm would result in higher interest payments by the firm. This would in turn lower the earnings that are available to the equity shareholders of the firm and hence, investors generally prefer firms that have lower debt content in their capital structure. This way a negative relation between share price and leverage is hypothesized.

Management changes: Management changes explain when a new CEO took over. This is expected to have a negative sign due to uncertainty of the effectiveness of the new CEO. This is another variable that could go either way if the new CEO turns out to be stronger than the old CEO. Depending on the sign of impact, it will give interesting information as to what tends to happen when CEO's are replaced.

Sunde and Sanderson (2009) undertook a study to identify the factors that influence share prices in Zimbabwe. The study reported corporate earnings, management, lawsuits, mergers and takeovers, market liquidity and stability, availability of substitutes, government policy,

macroeconomic fundamentals, investor sentiments, technical influences and analyst reports as factors influencing share prices. These factors listed are non-financial aspects of share price changes.

#### 2.4 Determinants of Volume of Shares Traded

Liquidity, a fundamental concept in finance, can be defined as the ability to buy or sell large quantities of an asset quickly and at low cost. Recent financial crises, however, suggest that, at times, market conditions can be severe and liquidity can decline or even disappear. Such liquidity shocks are a potential channel through which asset prices are influenced by liquidity. Levine and Zervos (1996) showed that stock market liquidity is positively associated with long-run economic growth after controlling for economic and political variables. Amihud and Mendelson (1986) and Jacoby, Fowler, and Gottesman (2000) provide theoretical arguments to show how liquidity impacts financial market prices.

Past stock-price behavior: Individuals focus on past stock price behavior in making trading decisions. For example, studies like Shefrin and Statman (1985) and Ferris et al. (1988) document investor trading behavior consistent with a focus on reference points equal to the stock price at the time of purchase. In the context of option exercise, Heath, Huddart and Lang (1999), Core and Guay (2001), and Potesh man and Serbin (2001) argue that past high prices also explain financial decision making.

Behavioral factors: As discussed in Statman and Thorley (1999), determinants of trading volume are poorly understood; models of rational utility-maximizing economic agents do not fit observed patterns well. As Statman and Thorley noted, behavioral models offer predictions about the causes of volume. For example, Odean (1998b) develops a model in which trader

overconfidence is reflected in high volume. Barber and Odean (2002) presented evidence that small individual investors are net purchasers of stocks on days when stocks are in the news, experience extreme volume, or experience extreme returns. Our results are generally consistent with the notion that a fixation on an extreme point in a stock price path affects trading decisions.

Past stock-price maximums: The widely-reported 52-week high in the business press of the fifty-two week high is remarkable, given there is little reason to believe that it is helpful in making investment decisions. The Wall Street Journal, for example, reports only a small set of data on each stock, so it is striking that a statistic as apparently useless as the prior maximum is reported. Highs may be prominently reported because they satisfy some demand, investors are interested in knowing prior extreme share prices and the media responds to that demand. Causality may well run in the other direction, however. Because the media report these data, investors may use them in reaching trading decisions because it is too difficult or costly to gather more relevant or useful information

# 2.5 Review of Empirical Studies

Glezakos, Mylonakis and Kafouros (2012) did a study examining the impact of earnings and book value in the formulation of stock prices on a sample of 38 companies listed in the Athens stock market during the 1996-2008 period. The logarithms of the yearly stock prices, earnings per share and book values per share were used throughout the examined period. The resulting evidence suggested that the joint explanatory power of the above parameters in the formation of stock prices increased over time.

Kumar (2008) examined the determinants of trading volume for individual stocks in the emerging India's stock markets. The study results demonstrated that stock-specific characteristics explain a significant portion of the variation in Indian stock trading volume. The study showed

that weekly turnover, expressed as a percentage of shares outstanding, is significantly related to firm's alpha and beta estimated from OLS market model, the standard deviation of residuals from the OLS market model, average price, size, first order auto covariance of returns, its institutional ownership and whether or not options trade is permitted on this stock. Stock trading volume first increases in the level of institutional ownership, reaching its peak at 33% (47%) respectively for the BSE (NSE) stocks and then decreases. He found the evidence that past price extremes influence investors' trading decisions. The study documented that trading volume is higher when a stock trades above the highest or below the lowest price attained during a 52 weeks benchmark period and then gradually subsides. This result suggests that behavioral factors affect investors' trading decisions in the Indian equity markets.

Ding et al., (2007) did a study to explain stock price synchronicity by using accounting standards, while controlling for other institutional factors. They used an extensive list of differences between DAS and IAS from a sample of 30 companies. The results of the study showed that stock prices were more likely to move together in a country where there is less credible firm-specific information available for pricing individual stocks. Thus, idiosyncratic factors influence the changes of stock prices to a lesser extent.

In another study, Jin and Myers (2006) showed that information opaqueness affects the division of risk bearing between insiders and outside investors. Their model predicted that opaque stocks are more likely to deliver large negative returns. Crashes occur when insiders have to absorb too much firm-specific bad news and decide to give up (Jin and Myers, 2006). Lack of transparency shifts firm-specific risk to insiders and reduces the amount of firm-specific risk absorbed by outside investors (Jin and Myers, 2006). In the absence of firm-specific information, macroeconomic news is expected to influence stock prices considerably, therefore the level of

synchronicity increases. Accounting opacity induces a low level of disclosure. Lower quality accounting and disclosure implies a poorer firm-specific information environment, which could lead to higher synchronicity in stock prices.

Grossman and Stiglitz (1980) in their study argued that market participants spend resources to collect and process information until the marginal benefit of such spending is equal to its marginal cost. Intuitively, the costs involved in obtaining and processing information are inversely related to the availability and quality of information. According to this view, the improved firm-specific information that is due to the application of high-quality accounting standards should lead to an increase in firm-specific return variation, thus resulting in the higher-level information content of stock prices. However, under the market efficiency hypothesis, rational investors are able to decipher masked accounting information, thus rendering differences in accounting quality largely irrelevant.

Chae (2005) investigated the impact on trading volume prior to scheduled and unscheduled announcements, and concluded that trading volume actually decreased significantly before scheduled announcements and increased significantly before unscheduled announcements. The finding on the impact of scheduled announcements on trading volume contrasted with that of Morse (1981), who concluded that there was "a definite lack of activity in the stock market in anticipation of the earnings announcement"

Uwuigbe, Olusegun and Godswill (2012) examined the determinants of share prices in the Nigerian stock exchange market. Using the judgemental sampling technique, they examined a total of 30 companies and data (2006 to 2010) collected from the stock exchange and annual reports of the firms. The paper modelled the effects of financial performance, dividend payout

and financial leverage on share price of listed firms by using regression analysis. The study concluded that financial performance and dividend payout had a significant positive relation with share prices while financial leverage (proxied by debt-equity ratio) had significant negative influence on the market value of share prices in Nigeria. Further studies could be conducted incorporating the independent variables under current analysis as well as having other internal and external variables.

Oseni (2009) did a study on the determinants of equity prices in the stocks market. He used a model developed by Al-Tamimi to regress the variables (stock prices, earnings per share, gross domestic product, lending interest rate and foreign exchange rate) after testing for multicollinarity among the independent variables. The multicollinarity test revealed very strong correlation between gross domestic product and crude oil price, gross domestic product and foreign exchange rate, lending interest rate and inflation rate. From his study, there was a positive correlation of the variables to stock prices with the exception of lending interest rate and foreign exchange rate.

#### 2.6Review of Local Studies

Local studies in relation to effects of financial result announcements on share returns and trading volume assisted in analyzing the content and outcome in relation to our study. Gatua (2012) did a study to analyze the share price of companies listed at the Nairobi Securities Exchange. The study analyzed seven companies, Equity Bank, Kengen, Kenya Airways, Kenya-Re, Mumias Sugar, Safaricom and Sameer with Interest rate, Foreign exchange, Equity turnover, NSE 20-share index, NSE All-share index and lagged share price being used as the independent variables. The results of the study showed that with the exception of Equity bank share prices which showed a positive relationship with interest rates, foreign exchange rates, NSE All-share index

and lagged share price, all the other firms indicated a negligible or no relationship with the variables. While all the other variables had a slight significant relationship to the dependent variable, equity turnover and NSE 20-share index were in all cases negligible determinants of share price.

Kiremu *et al.* (2013) also did a study to examine the effect of annual earnings announcement of banks listed at the Nairobi Securities Exchange (NSE) by analyzing changes in share prices and trading volumes for the period from 2006 to 2010. This was determined using event study methodology employing the market model on data from five listed companies. Their study results indicated that abnormal returns and trading activity ratio were not significant, indicating that the NSE is of semi-strong efficiency where it is not possible to earn abnormal returns using the publicly available information.

Kakiya, Mugo, Onyuma, Owuor and Bosire (2013) did a study on whether earnings announcement have an effect on the level of efficiency of the Nairobi Securities Exchange. The study was obtained from 31 companies listed at the Nairobi Securities Exchange, which traded and announced their earnings in 2007 and market indices, daily closing share prices and traded volumes for a period of 15 days before and after earnings announcement. From the study it was seen that earnings announcement had a significant effect on stock returns when CAR was evaluated indicating market inefficiency but AR was not significant for individual companies. From the findings of the study, it was concluded that the Nairobi Securities Exchange is not semi-strong form efficient.

# 2.7Summary of Literature Review

The chapter started with a review of the theories relevant to the study which includes the efficient market hypothesis, the agency theory, and the random walk theory. These theories are

relevant to the study as they indicate the circumstances in which share prices change in the stock market and also the responsibility of management towards providing relevant to the stakeholders.

The chapter also looked at the determinants of share prices and volumes of shares traded. Studies showed that both microeconomic factors and macroeconomic factors affected the share price of companies. The studies however tried to come up with general models for determining share prices as a result of financial statement release. Various empirical literature related to the study were analyzed, stating the objective of the study, research methodology, and findings. Most of the literature indicated an effect of financial result announcement on share price. In this study, we expect to have an abnormal increase in share price and/or increase volume of shares traded as a result of financial statement announcement.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter contained the methodology, which was used in the study. Section 3.2 began with discussion of the overall research design, while section 3.3 discussed the target population and the sampling procedure, which were used to arrive at the appropriate sample size. Section 3.4 presented the data collection techniques and instrument used in data collection and the justification for the choices. The technique of data analysis is contained in section 3.5.

## 3.2. Research Design

According to Bryman and Bell (2007), research design is a general plan that provides a framework for the choice of data collection techniques and data analysis procedures. The descriptive study is one which information is collected without changing the environment while a cross sectional study is one which involves a one-time interaction (snapshot) with the unit of analysis, in this case the companies. A descriptive cross-sectional research design was suitable for this study as it analyzed different companies listed in the stock exchange and analyzed their stock price and volume trade reaction to the announcement of financial results. The study therefore analyzed the full year financial results for the companies for the year 2013 to see the effect of the announcement on share price and share volume traded.

# 3.3 Population

The study's population included all the companies listed at the NSE which is currently 62. This population was the target population.

# 3.4 Sampling

The study employed a stratified random sampling technique to identify companies that were analyzed. The companies were stratified according to the industry of operation and in those strata the companies selected were randomly selected. These companies had therefore 'qualified' for sampling. According to Mugenda and Mugenda 2003, 10% of accessible population is sufficient to represent the total population if properly randomized. This study therefore randomly sampled 10% from each strata.

	Population Size	Sample Size
Agricultural	7	1
Automobiles & Accessories	4	1
Banking	11	2
Commercial and Services	9	2
Construction & Allied	5	1
Energy & Petroleum	5	1
Insurance	6	1
Investment and Investment Services	4	1
Manufacturing & Allied	9	1
Telecommunication and Technology	1	1
Growth Enterprise Market Segment	1	1
TOTAL	62	13

#### 3.5 Data Collection

Data collection stage showed what type of data was collected, whether primary or secondary, the instrument of data collection used, and the period of which the data was collected. Our study used secondary data which was used to analyze the effects of accounting standards on share price and volume on NSE-listed companies. Secondary data was collected from annual reports, newspapers, journals, and websites to provide more information and understanding to the study.

## 3.6 Data Analysis

#### 3.6.1 Conceptual Method

This stage showed how data collected was analyzed, including the techniques and software used. The data collected was coded, processed, cleaned, and tabulated. The study thereafter did analysis using Microsoft Excel 2007. The study considered an event window of 30 days focusing on 15 days before the event (t = -15) and 15 days after the event date (t = 15) with the event day represent by t = 0. The 30 days period was considered to be sufficient for the estimation of the abnormal return of the model with good level of accuracy based on previous studies that carried out research on a similar period.

The study variables were the share price returns as the independent variable while company financial results announcement was the dependent variable. The study therefore sought the extent to which the share price returns are affected by the announcement of financial results for companies listed at the Nairobi Securities Exchange. The share price of the company was taken fifteen days before and fifteen days after the announcement of the financial results in order to analyze the effect on the share returns.

#### 3.6.2 Analytical Model

Descriptive statistics such as mean and standard deviation was extracted, and inferential statistics used in order to infer the sample to the population. The study employed event study to determine the effect of financial result announcement on share price and share volume for companies listed at the NSE.

To test for efficiency of share returns, the market model was used to calculate abnormal returns around the event date. It was computed as follows:

$$R_{it} = \alpha_i + \beta_i R m_t + \varepsilon_{it}$$

Where:

 $R_{jt}$  = actual daily return on security j at day t

 $Rm_t$  = the daily market return of the NSE 20 on day t

 $\alpha_j$  = ordinary least square intercept, the average rate of return of stock when the market return is neutral which can be expressed as  $E(R_i) - \beta E(Rm_t)$ 

 $\beta_i$  = stock sensitivity to the market

 $\varepsilon_{jt}$  = the error term for security j at day t

The market return will be computed as:

$$Rm_t = Log \ \frac{I_t}{I_{t-1}}$$

Where:

 $I_t$  is the 20 share index on day t

 $I_{t-1}$  is the 20 share index on day t-1

The daily return for security j will be calculated using the equation:

$$R_{jt} = Log \left(\frac{R_t}{R_{t-1}}\right)$$

Where:

 $R_t$  is the stock price on day t

 $R_{t-1}$  is the daily stock price on day t-1

The  $\alpha_j$  and  $\beta_j$  were calculated for each share in the sample by regressing the share's daily logfunction share price return against the daily market returns over one year prior to the event window.

The expected returns for security *j* at day *t* were be defined as:

$$ER_{it} = \alpha_i + \beta_i Rm_t$$

The abnormal returns were summed and averaged cross-sectionally for each day t as follows:

$$AAR_t = \frac{\Sigma AR_{jt}}{N}$$

Where:

N = Number of earnings announcements in the sample at day t

 $AR_{jt}$ = Abnormal return for security j at day t

The calculated abnormal returns will be aggregated to draw an overall conclusion on the earnings announcement event. To accommodate a multiple period event window, the study will make use of the Cumulative Average Abnormal Return (CAAR). The cumulative average abnormal returns  $(CAAR_t)$  for all firms for 30 days will then be calculated as the sum of the abnormal returns.

$$CAAR_t = \sum_{\tau=\tau_1}^{t_2} AAR_t$$

t = -15 to +15

To test for significance of the average abnormal returns Brown &Warner, (1985) procedure was followed. It is formulated as follows:

$$tAAR = \frac{AARt}{\sigma AAR/\sqrt{n}}$$

The statistical significance for the cumulative abnormal returns was calculated as:

$$tCAAR = \frac{CAARt}{\sigma(AAR)\sqrt{d}}$$

Where:

 $\sigma AAR$  = the estimated standard deviation;

d =is the total number of days that AAR is cumulative; and

n = number of earnings announcement in the sample on day t

The measure of trading volume in this study will be calculated as follows:

$$Log \ Turnover(\tau_{i,t}) = Log \ \left(\frac{Trading \ volume_{i,t}}{Outstanding_{i,t}}\right)$$

The difference between log turnover during the test period and the estimation period isour measure of abnormal trading volume near announcements. This is calculated as:

Abnormal Turnover 
$$(\xi_{i,t}) = \tau_{i,t} - \bar{\tau}_i$$

where 
$$\bar{\tau}_i = \frac{\sum_{t=-15}^{t=+15} \tau_{i,t}}{30}$$

#### **CHAPTER FOUR**

#### DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1 Introduction

The objective of the study was to analyze the effects of financial result announcement on share price of companies listed at the Nairobi Stocks Exchange. This chapter contains the summary statistics in chapter 4.2, while the empirical model will be discussed in chapter 4.3. The study discussions were contained in chapter 4.4 and chapter 4.5 summarized the data analysis findings, results and discussions.

## **4.2 Summary Statistics**

The study analyzed the effects of financial result announcement on share returns and trading volume of companies listed at the Nairobi Securities Exchange and determined whether the changes as a result of financial result announcement were statistically significant. The study sampled listed companies for the financial year 2013 and these were Kenya Commercial Bank, Equity Bank, Kenya Airways, Nation Media, Athi River Mining, East Africa Cables, Pan Africa Insurance, East Africa Breweries, Safaricom and Home Afrika.

#### **4.2.1 Descriptive Data**

Descriptive statistics was calculated for the companies for a window period of 31 days, 15 days before, event day, and 15 days after the event to test whether there are significant changes in share returns and trading volume as a result of financial result announcement. The study did not include weekends and public holidays as there were no shares trading in these days. The results were as follows:

**Kenya Commercial Bank**The window period for the bank was from 6<sup>th</sup> February 2014 to 7<sup>th</sup> March 2014.

Share Price	NSE 20 Index			
Mean	44.83870968	Mean	4883.425806	
Standard Error	0.177174807	Standard Error	9.790827063	
Median	44.75	Median	4902.72	
Standard Deviation	0.986467577	Standard Deviation	54.513018	
Sample Variance	0.97311828	Sample Variance	2971.669132	
Skewness	0.441007913	Skewness	-0.150224577	
Minimum	43.75	Minimum	4786.1	
Maximum	46.5	Maximum	4983.83	
Confidence Level(95.0%)	0.361839227	Confidence Level(95.0%)	19.99553637	

Kenya Commercial Bank had a mean share price of Sh.44.8387, the highest price being Sh.46.50 and the lowest price being Sh43.75 in the 31-day window period of the year-end financial result announcement. The NSE 20 share index had a mean of 4883.425 with the highest index value of 4983.83 and lowest index value of 4786.10.

**Equity Bank**The window period for the bank was from 6<sup>th</sup> February 2014 to 20<sup>th</sup> March 2014.

Share Price	NSE 20 Index				
Mean	32.43548387	Mean	4883.425806		
Standard Error	0.137649109	Standard Error	9.790827063		
Median	32.25	Median	4902.72		
Standard Deviation	0.766397802	Standard Deviation	54.513018		
Sample Variance	0.587365591	Sample Variance	2971.669132		
Skewness	0.461085986	Skewness	-0.150224577		
Minimum	31.25	Minimum	4786.1		
Maximum	34	Maximum	4983.83		
Confidence Level (95.0%)	0.281116982	Confidence Level (95.0%)	19.99553637		

Equity Bank had a mean share price of Sh.32.435, the highest price being Sh.34.00 and the lowest price being Sh31.25 in the 31-day window period of the year-end financial result announcement. The NSE 20 share index had a mean of 5005.45 with the highest index value of 5137.21 and lowest index value of 4883.425.

**Kenya Airways**The window period for the bank was from 4<sup>th</sup> June 2014 to 16<sup>th</sup> July 2014.

Share Price	NSE 20 Index			
Mean	10.77903226	Mean	4857.76	
Standard Error	0.114435834	Standard Error	7.919340692	
Median	10.7	Median	4856.35	
Standard Deviation	0.63715176	Standard Deviation	44.09302288	
Sample Variance	0.405962366	Sample Variance	1944.194667	
Skewness	1.087798552	Skewness	0.008988179	
Minimum	10.1	Minimum	4764.11	
Maximum	12.35	Maximum	4956.15	
Confidence Level (95.0%)	0.233709152	Confidence Level (95.0%)	16.17345131	

Kenya Airways had a mean share price of Sh.10.779, the highest price being Sh.12.35 and the lowest price being Sh10.10 in the 31-day window period of the year-end financial result announcement. The NSE 20 share index had a mean of 4857.76 with the highest index value of 4956.15 and lowest index value of 4764.11.

Nation Media
The window period for the bank was from 27<sup>th</sup>February 2014 to 10<sup>th</sup> April 2014.

Share Price	Share Index			
Mean	313.2258065	Mean	4931.050968	
Standard Error	0.844602951	Standard Error	5.497330992	
Median	313	Median	4933.56	
Standard Deviation	4.702550212	Standard Deviation	30.60784359	
Sample Variance	22.11397849	Sample Variance	936.840089	
Skewness	0.656240524	Skewness	-0.1658252	
Minimum	306	Minimum	4869.75	
Maximum	325	Maximum	4983.83	
Confidence Level (95.0%)	1.724909338	Confidence Level (95.0%)	11.22704763	

Nation Media had a mean share price of Sh.313.225, the highest price being Sh.325.00 and the lowest price being Sh.306.00 in the 31-day window period of the year-end financial result announcement. The NSE 20 share index had a mean of 4931.051 with the highest index value of 4983.83 and lowest index value of 4869.75.

**Athi River Mining**The window period for the bank was from 11<sup>th</sup> March 2014 to 24<sup>th</sup> April 2014.

Share Price	NSE 20 Index				
Mean	87.11290323	Mean	4929.313548		
Standard Error	0.42038748	Standard Error	5.495469856		
Median	87	Median	4923.71		
Standard Deviation	2.340618428	Standard Deviation	30.59748122		
Sample Variance	5.478494624	Sample Variance	936.205857		
Skewness	-0.019001667	Skewness	0.024870606		
Minimum	83	Minimum	4869.75		
Maximum	91	Maximum	4983.83		
Confidence Level (95.0%)	0.858545768	Confidence Level (95.0%)	11.22324668		

Athi River Mining had a mean share price of Sh.87.113, the highest price being Sh.91.00 and the lowest price being Sh.83.00 in the 31-day window period of the interim financial result announcement. The NSE 20 share index had a mean of 4929.313 with the highest index value of 4983.83 and lowest index value of 4869.75.

**East Africa Cables**The window period for the bank was from 24<sup>th</sup> February 2014 to 7<sup>th</sup> April 2014.

Share Price	NSE 20 Index			
Mean	15.68064516	Mean	4930.215484	
Standard Error	0.054461065	Standard Error	5.875763722	
Median	15.8	Median	4933.56	
Standard Deviation	0.303226378	Standard Deviation	32.71486786	
Sample Variance	0.091946237	Sample Variance	1070.262579	
Skewness	-1.173374406	Skewness	-0.495205911	
Minimum	15	Minimum	4848.71	
Maximum	16	Maximum	4983.83	
Confidence Level (95.0%)	0.111224333	Confidence Level (95.0%)	11.99991037	

East Africa Cables had a mean share price of Sh.15.68, the highest price being Sh.16.00 and the lowest price being Sh15.00 in the 31-day window period of the interim financial result

announcement. The NSE 20 share index had a mean of 4930.215 with the highest index value of 4983.83and lowest index value of 4848.71.

Pan Africa Insurance
The window period for the bank was from 10<sup>th</sup> February 2014 to 24<sup>th</sup>March 2014.

Share Price	NSE 20 Index			
Mean	118.6451613	Mean	4891.328065	
Standard Error	2.148166704	Standard Error	10.26067244	
Median	118	Median	4906.7	
Standard Deviation	11.96048602	Standard Deviation	57.12900638	
Sample Variance	143.0532258	Sample Variance	3263.723369	
Kurtosis	-0.531026167	Kurtosis	-1.141957691	
Skewness	0.214770703	Skewness	-0.332469005	
Minimum	98.5	Minimum	4786.1	
Maximum	141	Maximum	4983.83	
Confidence Level (95.0%)	4.387141676	Confidence Level (95.0%)	20.95508865	

Pan Africa Insurance had a mean share price of Sh.118.64, the highest price being Sh.141.00 and the lowest price being Sh.98.50 in the 31-day window period of the year-end financial result announcement. The NSE 20 share index had a mean of 4891.328 with the highest index value of 4983.83 and lowest index value of 4786.10.

East Africa Breweries

The window period for the bank was from 16<sup>th</sup> July 2014 to 28<sup>th</sup> August 2014.

Share Price	NSE 20 Index			
Mean	294.9677419	Mean	4977.533871	
Standard Error	1.261066174	Standard Error	12.84176644	
Median	295	Median	5010.13	
Standard Deviation	7.021319301	Standard Deviation	71.49992954	
Sample Variance	49.29892473	Sample Variance	5112.239925	
Kurtosis	0.885752882	Kurtosis	-1.501520542	
Skewness	0.403745707	Skewness	-0.272338664	
Minimum	280	Minimum	4863.87	
Maximum	313	Maximum	5089.16	
Confidence Level (95.0%)	2.575440703	Confidence Level (95.0%)	26.2263858	

East Africa Breweries Limited had a mean share price of Sh.294.96, the highest price being Sh.313.00 and the lowest price being Sh.280.00 in the 31-day window period of the end-year financial result announcement. The NSE 20 share index had a mean of 5005.45 with the highest index value of 5137.21 and lowest index value of 4849.30.

**Safaricom**The window period for the bank was from 16<sup>th</sup> April 2014 to 3<sup>rd</sup> June 2014.

Share Price	NSE 20 Index			
Mean	12.96612903	Mean	4929.798387	
Standard Error	0.026678804	Standard Error	5.468118528	
Median	13	Median	4930.63	
Standard Deviation	0.148541294	Standard Deviation	30.44519547	
Sample Variance	0.022064516	Sample Variance	926.9099273	
Kurtosis	0.773802364	Kurtosis	-0.988817718	
Skewness	-0.74373017	Skewness	-0.264663711	
Minimum	12.6	Minimum	4866.71	
Maximum	13.2	Maximum	4978.2	
Confidence Level (95.0%)	0.054485386	Confidence Level (95.0%)	11.16738782	

Safaricom Ltd had a mean share price of Sh.12.966, the highest price being Sh.13.20 and the lowest price being Sh12.60 in the 31-day window period of the interim financial result announcement. The NSE 20 share index had a mean of 4929.798 with the highest index value of 4978.20 and lowest index value of 4866.71.

**Home Afrika**The window period for the bank was from 1<sup>st</sup> April 2014 to 16<sup>th</sup>May 2014.

Share Price		NSE 20 Index				
Mean	5.080645161	Mean	4931.383871			
Standard Error	0.040339781	Standard Error	5.40680226			
Median	5.2	Median	4933.56			
Standard Deviation	0.224602397	Standard Deviation	30.10380094			
Sample Variance	0.050446237	Sample Variance	906.2388312			
Kurtosis	-0.240052942	Kurtosis	-0.952308015			
Skewness	-1.020191407	Skewness	-0.31976887			

Minimum	4.55	Minimum	4869.75
Maximum	5.3	Maximum	4978.2
Confidence Level (95.0%)	0.082384824	Confidence Level (95.0%)	11.0421633

Home Afrika Ltd had a mean share price of Sh.5.08, the highest price being Sh.5.30 and the lowest price being Sh.4.55 in the 31-day window period of the year-end financial result announcement. The NSE 20 share index had a mean of 4931.38 with the highest index value of 4978.20 and lowest index value of 4869.75.

# 4.3 Event Study Results

The event study analyzed the effects of financial result announcement on share price return and trading volume which was the objective of the study. The results of the event study analysis were as follows:

# **4.3.1** Share Price Returns to Year-End Earnings Announcement

The share price returns to earnings announcements was done for each of the sampled company listed at the securities exchange. The share price returns to year end results for the year 2013 was as follows:

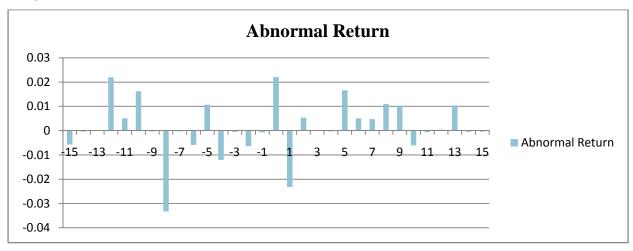
Company	Announcement Date	Log Share Price	Log NSE 20	Expected Return E(R)	Abnormal Return (AR)	Cumulative Abnormal Return	t-values
Kenya Commercial							
Bank	27-Feb-14	0.0226	0.0025195	0.0005074	0.0220924	0.0106181	4.869979
Equity Bank	27-Feb-14	0	0.0025195	0.000778	-0.000778	0.0071694	-0.19234
Kenya Airways	25-Jun-14	-0.06252	-0.0225582	-0.00205	-0.06047	-0.02765	-8.52111
Nation Media	20-Mar-14	-0.00617	0.00084432	-0.0001883	-0.0059846	0.0503235	-1.32941
Athi River Mining	1-Apr-14	-0.00557	0.002863	0.0003935	-0.005965	0.0221599	-1.46234
East Africa Cables	17-Mar-14	0.00316	-0.012352	0.0004921	0.0026675	0.0030761	0.567977
Pan Africa Insurance	3-Mar-14	-0.00712	0.000324267	0.0007059	-0.0078233	0.3869126	-1.71645
East Africa Breweries	7-Aug-14	-0.01286	-0.00216	0.00129516	-0.0141571	0.00193456	-3.78406
Safaricom Limited	12-May-14	0.003884	0.002905	-0.0001654	0.0040489	0.0078998	1.230954
Home Afrika	24-Apr-14	-0.104261	0.00387654	7.0921E-05	-0.1043319	-0.1641551	-29.8656

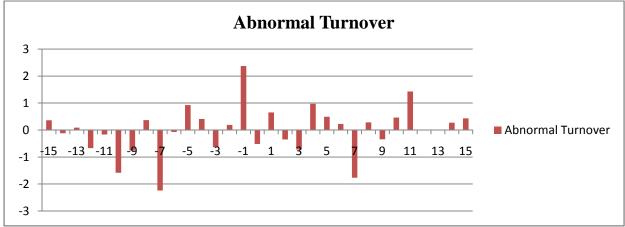
# **4.3.2** Trading Volume Reaction to Year-End Earnings Announcement

The turnover reaction to earnings announcements was done for each of the sampled company listed at the securities exchange. The trading volume reaction to year end results for the year 2013 was as follows:

Company	Announcement Date	Trading Volume (t=0)	Log Trading Volume	Average Trading Volume $(\sum_{t=-15}^{t=+15})/31$	Abnormal Turnover	Cumulative Abnormal Turnover (AR)
Kenya Commercial Bank	27-Feb-14	1,085,100	-7.919424887	-7.403762754	-0.5156621	9.76996E-15
Equity Bank	27-Feb-14	2,933,000	-7.140813378	-7.544553157	0.4037398	-0.3222631
Kenya Airways	25-Jun-14	313,100	-8.740952331	-9.35751201	0.6165597	-1.2442839
Nation Media	20-Mar-14	126,300	-7.308405436	-9.443142576	2.134737141	-1.8E-15
Athi River Mining	1-Apr-14	131,300	-8.235373566	-8.887908465	0.652534899	-1.86517E-14
East Africa Cables	17-Mar-14	16,200	-9.656607721	-9.506022704	-0.15058502	5.862E-14
Pan Africa Insurance	3-Mar-14	50,500	-7.550130134	-8.457402536	0.9072724	-8E-15
East Africa Breweries	7-Aug-14	871,500	-7.503700072	-9.527539274	2.023839202	6.83897E-14
Safaricom Limited	12-May-14	4,138,900	-9.177839095	-8.035085324	-1.1427538	4.79616E-14
Home Afrika	24-Apr-14	1,255,600	-5.77690374	-6.6649019	0.88799816	4.17444E-14

**Kenya Commercial Bank** 

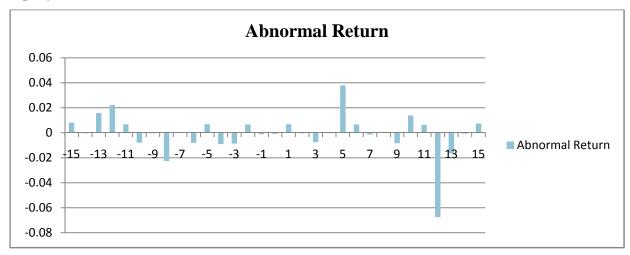


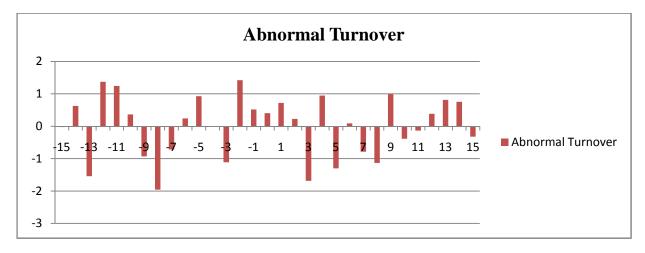


The event study analysis for Kenya Commercial Bank in the 31-day window period indicated an abnormal return (AR) of 0.0220924 with a corresponding t-value of 4.869979 at day t=0, and a cumulative abnormal return (CAR) of 0.0433012. The result of the study showed that the abnormal return for Kenya Commercial Bank was less than the t-statistic value (4.869979) indicating that the share returns were significant to the announcement of the year-end results.

The volume traded for KCB was 1,085,100 shares on the year-end financial result announcement day, an abnormal turnover of -0.5156621 and a cumulative abnormal turnover of 9.76996E-15 in the 31 days around the announcement day.

**Equity Bank** 

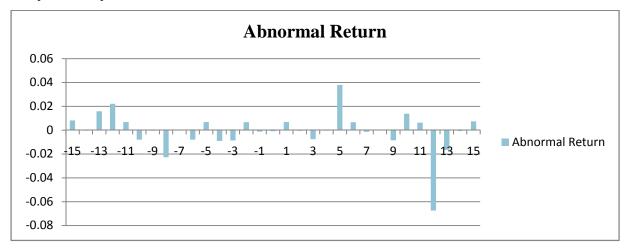


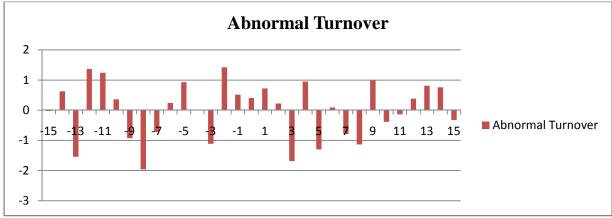


The event study analysis for Equity Bank in the 31-day window period indicated an abnormal return (AR) of-0.000778 with a corresponding t-value of-0.19234 at day t=0, and a cumulative abnormal return (CAR) of-0.0161722. The abnormal return, however, on the following day (t=1) was significant at 0.0068737 with a t-value of 1.699412. The result of the study showed that the abnormal return for Equity Bank was less than the t-statistic value (-0.19234) indicating that the share returns were significant to the announcement of year-end results considering substantial increase in share return at day t=1.

The volume of shares traded by Equity Bank was 2,933,000 on the year-end financial result announcement day, an abnormal turnover of 0.4037398 and a cumulative abnormal turnover of 8.882E-15 in the 31 days around the announcement day.

### Kenya Airways

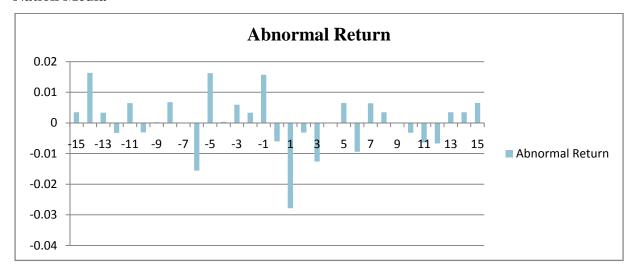


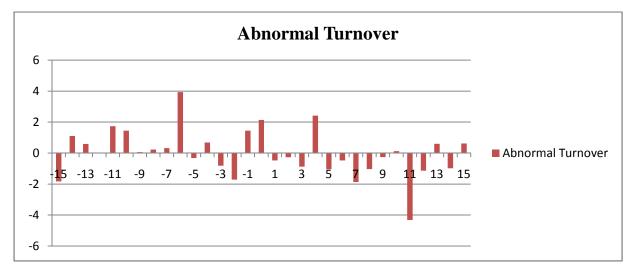


The event study analysis for Kenya Airways in the 31-day window period indicated an abnormal return (AR) of-0.06047 with a corresponding t-value of-8.52111 at day t=0, and a cumulative abnormal return (CAR) of-0.099888. The result of the study showed that the abnormal return for Kenya Airways was more than the t-statistic value (-8.52111) indicating that the share returns were not significant to the announcement of year-end results.

The trading volume for Kenya Airways was 126,300 shares on the year-end financial result announcement day, an abnormal turnover of 2.134737141 and a cumulative abnormal turnover of -1.7764E-15 in the 31 days around the announcement day.

#### **Nation Media**



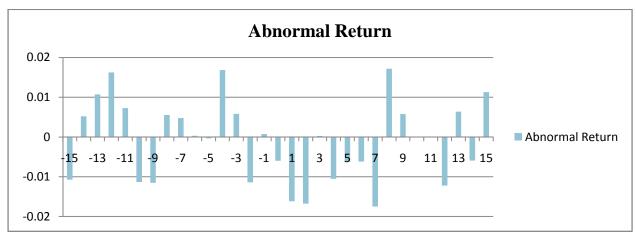


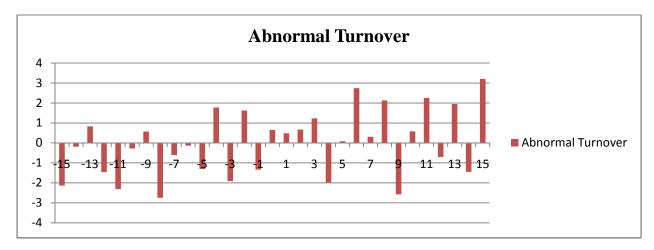
The event study analysis for Nation Media in the 31-day window period indicated an abnormal return (AR) of-0.0059846 with a corresponding t-value of-1.32941 at day t=0, and a cumulative abnormal return (CAR) of0.011031. The result of the study showed that the abnormal return for Diamond Trust Bank was less than the t-statistic value (-1.32941) indicating that the share returns were significant to the announcement of interim results. However, it can be seen there

was a significant return on share price at day t=-1 indicating that the expectation of announcement may have triggered the share price increase.

The trading volume for Nation Media was 126,300 shares on the year-end financial result announcement day, an abnormal turnover of 2.134737141 and a cumulative abnormal turnover of -1.7764E-15 in the 31 days around the announcement day.

# **Athi River Mining**



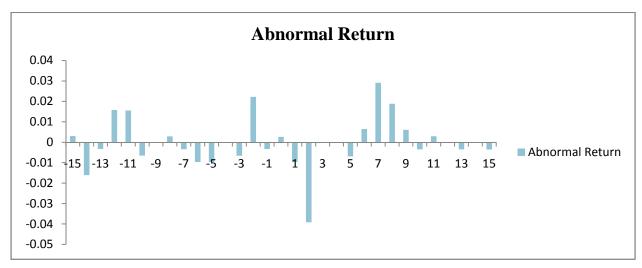


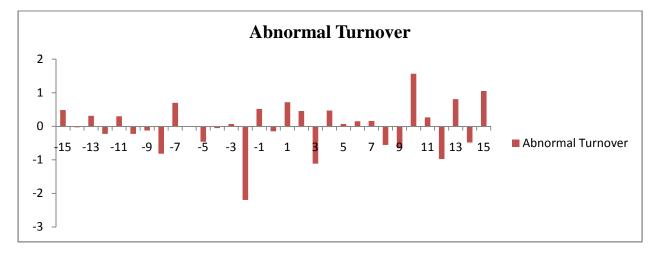
The event study analysis for Athi River Mining in the 31-day window period indicated an abnormal return (AR) of-0.005965 with a corresponding t-value of-1.46234 at day t=0, and a cumulative abnormal return (CAR) of-0.028402. The result of the study showed that the

abnormal return for Athi River Mining was more than the t-statistic value (-1.46234) indicating that the share returns were not significant to the announcement of year-end results.

The trading volume for Athi River Mining was 131,300 shares on the year-end financial result announcement day, an abnormal turnover of 0.652534899 and a cumulative abnormal turnover of -7.99361E-15 in the 31 days around the announcement day.

### **East Africa Cable**



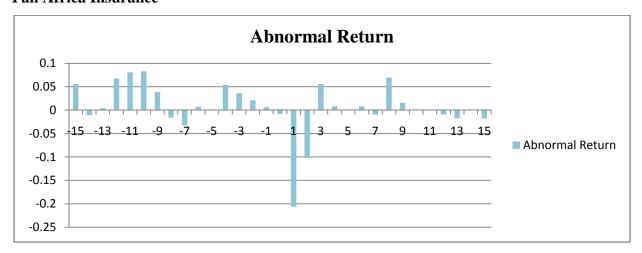


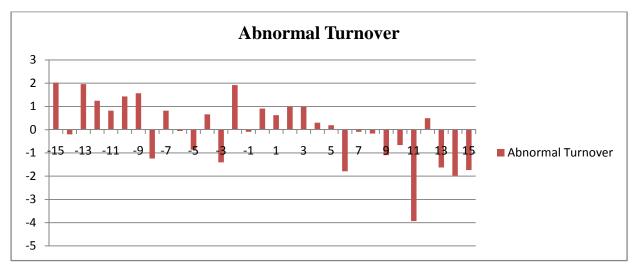
The event study analysis for East Africa Cable in the 31-day window period indicated an abnormal return (AR) of 0.0026675 with a corresponding t-value of 0.567977 at day t=0, and a cumulative abnormal return (CAR) of -0.0005615. The result of the study showed that the

abnormal return for East Africa Cable was slightly less than the t-statistic value (0.567966) indicating that the share returns were slightly significant to the announcement of year-end results.

The trading volume for East Africa Cable was 38,600 shares on the announcement day, an abnormal turnover of 0.717656016 and cumulative abnormal turnover of 5.862E-14 in the 31 days around the announcement day.

### Pan Africa Insurance



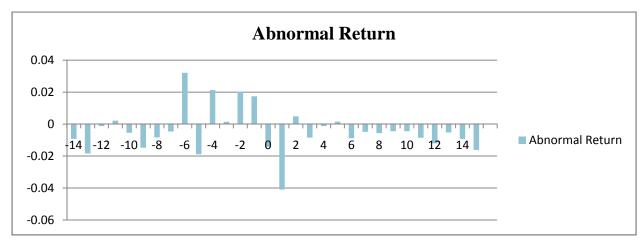


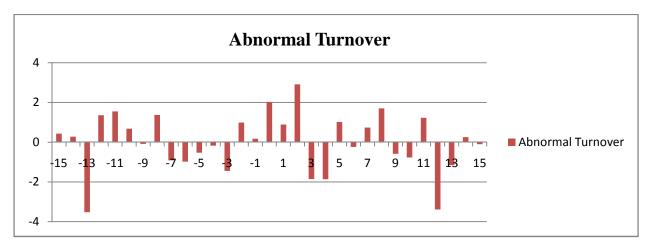
The event study analysis for Pan Africa Insurance in the 31-day window period indicated an abnormal return (AR) of-0.0078233 with a corresponding t-value of-1.71645 at day t=0, and a

cumulative abnormal return (CAR) of 0.17961. The result of the study showed that the abnormal return for Pan Africa Insurance was more than the t-statistic value (-1.71645) indicating that the share returns were significant to the announcement of year-end results. However, the CAR shows that in overall the share price returns were positively significant over the window period.

The trading volume for Pan Africa Insurance was 50,500 shares on the year-end financial result announcement day, an abnormal turnover of 0.9072724 and cumulative abnormal turnover of -7.99361E-15 in the 31 days around the announcement day.

### **East Africa Breweries**



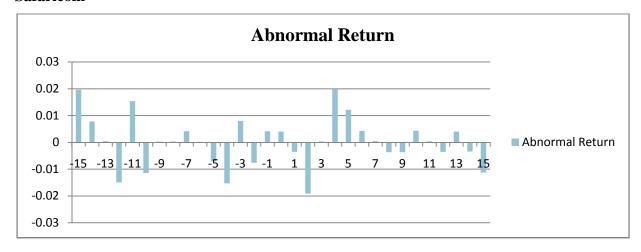


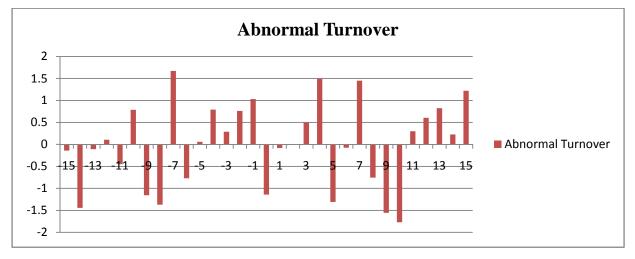
The event study analysis for East Africa Breweries in the 31-day window period indicated an abnormal return (AR) of-0.0141571 with a corresponding t-value of-3.78406 at day t=0, and a

cumulative abnormal return (CAR) of-0.1216237. The result of the study showed that the abnormal return for East Africa Breweries was more than the t-statistic value (5.126045). However, the returns for the two days prior to the announcement date (t=1, 2) had significant increase indicating that the share returns were significant as there was expected announcement of year-end results.

The trading volume for East Africa Breweries was 871,500 shares on the year-end financial result announcement day, an abnormal turnover of 2.023839202 and cumulative abnormal turnover of 6.83897E-14 in the 31 days around the announcement day.

#### Safaricom

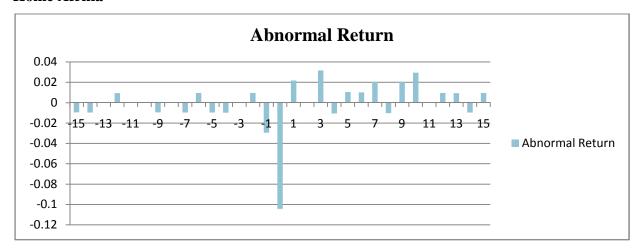


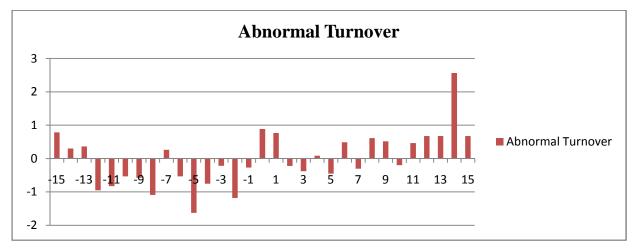


The event study analysis for Safaricom Limited in the 31-day window period indicated an abnormal return (AR) of 0.0040489 with a corresponding t-value of 1.230954 at day t=0, and a cumulative abnormal return (CAR) of 0.005359. The result of the study showed that the abnormal return for Safaricom Limited was less than the t-statistic value (1.230954) indicating that the share returns were significant to the announcement of year-end results.

The trading volume for Safaricom Limited was 4, 138,900 shares on the year-end financial result announcement day, an abnormal turnover of-1.1427538 and cumulative abnormal turnover of4.79616E-14 in the 31 days around the announcement day.

#### Home Afrika





The event study analysis for Home Afrika in the 31-day window period indicated an abnormal return (AR) of-0.1043319 with a corresponding t-value of-29.8656 at day t=0, and a cumulative abnormal return (CAR) of-0.0228969. The result of the study showed that the abnormal return for Home Afrika was more than the t-statistic value (-29.8656) indicating that the share returns were negatively significant to the announcement of year-end results.

The trading volume for Home Afrika was 1,255,600shareson the year-end financial result announcement day, an abnormal turnover of 0.88799816 and cumulative abnormal turnover of 4.17444E-14 in the 31 days around the announcement day.

#### The Stock Market Abnormal Return

The cross-sectional abnormal average return for the stock market was calculated by adding the individual abnormal returns and dividing by the number of listed companies analyzed:

TEST= 
$$(AAR / (\delta_{AR}/sqrt(N)))$$

The test of the cross sectional analysis was done by dividing the AAR by the standard deviation and checked whether the value is statistically significant from zero at 5% level which is 1.96. The value of 1.96 comes from the standard normal distribution with a mean of 0 and a standard deviation of 1. It is known that 95% of the distribution lies between  $\pm 1.96$ .

$$AAR_{t} = \frac{0.02209 - 0.00077 - 0.06047 - 0.00598 - 0.0059 + 0.00266 - 0.00782 - 0.014157 + 0.00404 - 0.1043}{10}$$

$$= \frac{-0.1707011}{10}$$

$$= -0.01707011$$

$$TEST = \frac{-0.01707011}{0.011772422}$$

$$= -1.45$$

Since the test is two-tailed and the absolute value is less than 1.96, it indicates that the interim result announcements for companies listed at the NSE does not have a significant impact on share returns.

The average cumulative abnormal return (ACAR) for the analyzed share prices was:

$$\frac{4.8699 - 0.1923 - 8.5211 - 1.3294 - 1.4623 + 0.5679 - 1.7164 - 3.784 + 1.2309}{9}$$

$$= \frac{-10.3368}{9}$$

$$= -1.14853$$

The average cumulative abnormal return calculated (-1.14853) is less than 1 indicating that the share returns for the market is not significant as a result of financial results announcement.

# 4.4 Summary and Interpretation of the Findings

The analysis of the event study on the share returns on the year-end announcement shows different outcomes. Ten companies were analyzed on the reaction of their year-end financial report and there were mixed results on the share results. In terms of the share returns, there was significant share price return on Kenya Commercial Bank, East Africa Cables, and Safaricom. Pan Africa Insurance, East Africa Breweries, Equity Bank Limited and Nation Media had slight significant increase since the abnormal return was less than the corresponding t-values. Pan Africa Insurance, however, had a significant cumulative abnormal return over the event window period. Kenya Airways on the other hand had no significant change in the share return while Home Afrika had a significant negative return on the share return on their year-end announcement.

In overall, there was a slight abnormal positive return over the window period for stocks listed in the Nairobi Securities Exchange. This shows that the Nairobi Stocks Exchange has a semi-strong market model where all public information is reflected in the stocks prices. There was reaction in the price adjustment but there were companies whose share prices changed as a result of anticipation of the announcement. This is partly because the market is not perfect hence information asymmetry.

With regards to trading volume, Kenya Commercial Bank had significant turnover on the day before announcement, with Nation Media also having significant turnover on the announcement day. East Africa Breweries Limited and Home Afrika also had significant share volume traded on the announcement day. Companies that had slightly significant trading volume on their end-year announcement day were Equity Bank, Kenya Airways, and Athi River Mining, with Equity Bank not having significance over the window period while Kenya Airways had a high trading significance over the event window period. Listed companies which had no significant change in trading volume on their announcement day were East Africa Cables, Pan Africa Insurance and Safaricom Limited. However, Pan Africa Insurance had significant share turnover on day t=-2.

The trading volume reaction as a result of end-year announcement was not significant especially for companies with high outstanding shares. This may be because of the number of shareholders in the market who are mostly institutional and they do not avail their shares for transaction during the information period. The supply of these shares may be low making the market illiquid, hence no significant change in trading volume.

### **CHAPTER FIVE**

## SUMMARY AND CONCLUSION

### **5.1 Summary**

The study was able to identify a research gap and formulated research objectives that were able to fill the research gap. From the research objectives and research questions, the study did a literature review providing the theories that were deemed as important framework. The study used the efficient market hypothesis, agency theory, and random walk theory and from the theories, empirical reviews were done. Empirical literature review was also carried out with both local and international studies being analyzed and relevant comparisons done and expectations noted.

The study used event study analysis to answer the research questions and therefore did a stratified random sampling where companies were randomly selected from each sector at the NSE. Secondary data was then collected for these companies, mainly the daily share prices and the corresponding volume of shares for the event window period which was 31 days in total. The analysis was done using Microsoft Excel where the information was input and analyzed.

From the first research objective, study findings indicated that the share price returns were not significant on the financial results announcement day and within the event window period. This was the case for both abnormal returns (AR) and cumulative abnormal returns (CAR). With regards to the second research objective, the study findings also indicated that there were no abnormal share volumes trading on the announcement day and during the event window period.

The study recommended that the prices of shares of a listed company should result from an increased number of shares traded and not the current number of 100 shares. Also the study

recommended that the Nairobi Securities Exchange should document properly all the event dates and results announcements so that proper analysis can be done with relation to market efficiencies. The study finally recommended public education on how the stock market works in order to increase market participation and improve liquidity of the market.

## **5.2 Conclusion**

The share price of companies in an efficient market should contain public information so that no investor will be able to earn abnormal return. The Nairobi Securities Exchange has undergone a transformation over the years from manual system to automated trading so as to enhance efficiency in the stock market. It is therefore in the interest of the increasing investors that a research gap was identified and enabled us to come up with the research objective which was the effects of financial results announcement on share price of companies listed at the Nairobi Securities Exchange.

The objective of the study was to analyze the effects of financial results announcements on share price returns of companies listed at the Nairobi Securities Exchange. Our study was able to analyze the 2013 financial results announcements and analyze the effects of the announcements on share returns. The study results showed that there were different reactions on share returns with respect to end-year financial returns. The overall results showed that there was no significant return in the stock market as a result of end-year financial return using both abnormal returns (AR) and cumulative abnormal returns (CAR). The results indicate that the market follows a semi-strong form EMH as stock prices fully reflect all public information making it difficult for investors to make abnormal profits at the Nairobi Securities Exchange, hence no investor will be able to earn abnormal rates of return.

The second objective of the study was to determine the effects of financial results announcement on volume of shares traded for companies listed at the Nairobi Securities Exchange. The study findings indicated that there were no abnormal significant shares traded on the announcement dates, but there was significant trading within the range of  $\pm 5$  days before and after announcement dates and finally no significant trading volumes within the  $\pm 15$  days. This showed that in the long run the market follows a semi-strong EMH as there is no impetus to buy more shares at the market.

# **5.3 Recommendations to Policy and Practice**

The study firstly recommends some changes in determination of share price where the volume traded should be increased so that the share prices can be determined using a substantial number of shares. Currently a share price of a company is determined by a minimum trading volume of 100 shares and for companies with very large outstanding shares this might misrepresent the true value of a company temporarily before the market corrects the price.

The study also recommends that the Nairobi Securities Exchange should keep easily accessible records with regards to events and announcements dates so that proper analysis can be done. Availability of events and announcement dates would enable the stock market and/or independent researchers identify the market efficiency and abnormal trading volume can help detect insider trading. The market should also educate the public on securities investments and attract more institutional investors and foreign investors. This will enable more people to participate in the stock market and make the market more liquid.

Lastly, the Nairobi Securities Exchange should work towards ensuring compliance to insider trading laws by market participants. They need to strengthen their capacity to effectively monitor

activities in the market, and to effectively deal with offenders. Insider trading can be monitored through event studies and any abnormal trading investigated.

## **5.4 Limitations of the study**

The limitations of the study included not having the information with regards to shares demanded but only on shares traded. This may not provide accurate information needed for the analysis as there would be high demand for a particular stock but no transactions done due to low supply.

The second limitation of the study was accessing the announcement dates for some companies which would have provided greater insight of the study. This lack of announcement dates limited our study to analyze only companies whose announcement dates were known hence reducing the analyzed sample size.

The third limitation of the study was the separation of other factors that may influence share price returns other than financial results announcements. A share price is determined by several factors and the study was not able to identify other factors affecting share returns in order to take care of them when analyzing the data.

# 5.5 Suggestions for further Study

Based on the findings, the study recommends that other studies should be done based on the Nairobi All Share Index (NASI) which includes all companies listed at the Nairobi Securities Exchange. Currently, the NSE 20 is an index that comprises the main top 20 companies listed at the NSE and a rise in a company in the NSE 20 index would not give accurate information as the NASI index.

Also, the study suggests the use of other analytical techniques such as regression analysis and correlation tests which would give us other insights. Event studies are important because they can view the immediate reaction to financial results announcements, but other data analytical techniques would affirm to the results that event study has indicated.

Other markets within the East Africa region may also be a consideration for analysis with a comparison of the markets being possible. Since the East Africa Community is in the process of integration, investors will look into these markets and therefore analysis needs to be done with respect to the country's securities market efficiency. A study in these markets would be recommended by this study.

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# APPENDIX I: COMPANIES LISTED AT THE NSE

AGRICULTURAL	
Eaagads	
Kakuzi	
Kapchorua Tea	
Limuru Tea	
Rea Vipingo	
Sasini Ltd	
Williamson Tea	
COMMERCIAL AND SERVICES	
Car & General	
CMC Holdings	
Marshalls E.A	
Sameer Africa	
BANKING	
Barclays Bank	
CFC Stanbic	
Cooperative Bank	
Diamond Trust Bank	
Equity Bank	
Housing Finance	
I & M Holdings	
KCB Bank	
National Bank	
NIC Bank	
Standard Chartered	
COMMERCIAL AND SERVICES	
Express Kenya	
Hutchings Biemer	
Kenya Airways	
Longhorn Kenya	
Nation Media Group	
Scangroup	
Standard Group	
TPS EA Serena	
Uchumi Supermarket	
CONSTRUCTION AND ALLIED	
Athi River Mining	
Bamburi Cement	
Crown Paints Kenya	
E.A Cables	
E.A Portland Cement	
ENERGY AND PETROLEUM	
KenGen	
KenolKobil	
Kenya Power - KPLC	
Total Kenya	
Umeme Ltd	
omomo Eta	

INSURANCE				
British American Inv				
CIC Insurance				
Jubilee Holdings				
Kenya Re				
Liberty Kenya Holdings				
Pan Africa Ins.				
Centum Investments				
INVESTMENT				
Olympia Capital				
Trans-Century				
A.Baumann & Co.				
Nairobi Securities Exchange				
MANUFACTURING AND ALLIED				
B.O.C Kenya				
BAT Kenya				
Carbacid Inv.				
East Africa Breweries				
Eveready E.A				
Kenya Orchards				
Mumias Sugar				
Unga Group				
TELECOMMUNICATION AND TECHNOLOGY				
Safaricom Ltd				
GROWTH ENTERPRISE MARKET SECTOR				