

**THE RELATIONSHIP BETWEEN EARNINGS ANNOUNCEMENTS AND
STOCK PRICES AT THE NAIROBI SECURITIES EXCHANGE**

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EGERTON UNIVERSITY

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DECLARATION AND RECOMMENDATION

This research project is my original work and it has not been presented either in part and full, for any study program in any university or college for the award of a degree or a diploma.

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APPROVAL

This Research project has been submitted for examination with my approval as the university's supervisor.

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DEDICATION

I dedicate this project to my Mother, Brother Mabior Garang and Sister Apajok Garang for their support throughout my studies.

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I thank almighty God for enabling me to do this study, and giving me strength and good health throughout the study period. I am grateful to Egerton University for according me the opportunity to study in the Institution.

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ABSTRACT

The purpose of this study was to establish the relationship between earnings announcements and stock prices at the Nairobi Securities Exchange. The specific objectives of the study were to determine the effect of interim earnings announcements on stock prices at the Nairobi Securities Exchange, to determine the effect of annual earnings announcements on stock prices at the Nairobi Securities Exchange and to determine the relationship between the interim and annual earnings announcements on stock prices at the Nairobi Securities Exchange. This study adopted a descriptive design. Descriptive design explains the relationship between two or more variables of the study. It helps in explaining the relationship between interim and annual earnings announcement at the Nairobi Securities Exchange. The target population for this study was all the 64 companies listed at the Nairobi Securities exchange from 2012 to 2016 study period. The sample consisted of 7 companies that continuously announced interim and annual earnings during the study period. A purposeful sampling method was employed for the study. This study used secondary data from the Nairobi Securities Exchange database. This method of data collection was chosen because stock prices of listed companies were readily available at the NSE library. The study found out that at all the companies studied, both interim and annual earnings announcements had significant effects on stock prices. A conclusion was therefore drawn that both announcements carry relevant information that influences stock prices. The study found inefficiency in the stock market and therefore recommended the government to strive towards attaining sustainable levels of market efficiency. Policy makers are recommended to act as a key to determining a clear policy framework for the Kenyan stock market. The government through its regulatory bodies; Capital Market Authority and Nairobi Securities Exchange are recommended to ensure that laws governing insider trading are adhered to by all participants in the stocks market. The study also recommended the government to design training programs to create more awareness in stock markets activities. The study also recommended the companies to ensure that they release timely and accurate information to enable investors to make accurate decisions. The study further suggested more research to be done on the efficiency of Nairobi Securities Exchange by incorporating more companies, lengthening the study duration, lengthening the event window, and incorporating more emerging markets in Africa

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LIST OF ABBREVIATIONS AND ACRONYMS

ALTX	:	Alternate Exchange
AR	:	Abnormal Return
ATS	:	Automated Trading System
CAR	:	Cumulative Abnormal Return
CDS	:	Central Depository System
CMA	:	Capital Market Authority
EMH	:	Efficient Market Hypothesis
NASI	:	Nairobi Securities Exchange All Share Index
NSE	:	Nairobi Securities Exchange
PEAD	:	Post Earnings Announcement Drift
JSE	:	Johannesburg stock exchange

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The theory of stock market efficiency and how stock prices adjust to reflect new information in the market has been one of the fundamental arguments in finance literature. Fama (1970) examined efficient market hypothesis (EMH) concept and states that a market is efficient if security prices immediately and fully adjust to reflect all available information. Stock market response to information disclosure is immense and covers a wide range of information disclosures such as dividend announcements, stock splits, merger announcements and macroeconomic policy changes. The influence of earnings information release on security prices has received considerable attention. There is however consistency with the EMH amongst researchers that earnings announcements do contain value-relevant information and the stock markets react quickly and efficiently to this information.

Kipronoh (2014) argued that Earnings announcements are one of the critical components of testing market efficiency. Management further uses earnings information to inform both shareholders and investors about the state of health of a firm. In other words, earnings announcements provide a yardstick that can be utilized by the market to assess the wealth and profitability of a firm. If the market is efficient, then any new information released is instantaneously reflected in the share price. Therefore, as earnings are publicly announced, the share price should immediately reflect this announcement and therefore deny investors any above-average risk-adjusted profits.

Fabozzi and Modigliani (2009) found out that, for any economy to utilize scarce resources for development, it must have an efficient capital market. A capital market brings together investors and sellers of capital securities and, therefore, enables corporations to raise long-term capital to finance a multitude of projects. Thomas et al (1995) in their policy paper titled 'Restructuring Economies in Distress,' The World Bank noted that an efficient and effective capital market would result in greater resource mobilization and more productive investment. They emphasized the need to develop the non-bank financial sector, especially the capital and money market. Developing economies therefore need to develop efficient capital markets in order to mobilize savings from households and channel them to investments.

Samuel and Yacout (1981) assert that the nature of emerging stock markets in terms of information availability is such that prices cannot be assumed to fully reflect all available information. It can also not be assumed that investors in emerging markets will correctly interpret the information that is released. As a result, the corporation in such markets has a greater potential to influence its own stock market price, and there is a greater possibility that its price will move about in a manner not justified by information available. Liaw (2004) also observes that emerging stock markets are characterized by high price volatility. As a result, investors earn high returns for investing in this highly volatile market, which contradicts the basic assumption underlying the efficient market hypothesis.

The efficient market hypothesis asserts that for a market to be efficient, prices must at all times fully reflect all available relevant information. Dixon and Holmes (1996) explain that a response to new information in terms of a price adjustment must be both almost instantaneous and of a direction and size which fully reflects the significance of the information. However, Ondari (2008) argues that share prices at the Nairobi Stock Exchange (NSE) tend to react to information in a manner that does not reflect the fundamentals underlying companies. Sometimes, there are extreme price movements, as was the case of CFC Bank in January, 2008 when its shares failed to trade for a week after price shot from Ksh. 110 to Ksh. 900 in a day.

Pandey (2009) pointed out that, an inefficient stock market can distort share prices, and consequently shareholder value, and hinder the wide participation of investors. Chandra (2003) found out that the semi strong-form sub-hypothesis of the efficient market hypothesis suggests that security prices adjust rapidly and accurately to the release of all public information, and therefore speculators cannot use this information to make returns in excess of the market return. Muiruri (2009) reported that at the NSE, there have been cases of prices reacting to new information and remaining unstable for many days, raising doubts about the market's ability to instantaneously and accurately reflect the correct significance of that information. For example, after Crown Berger released its half-year results on August 30, 2008, its share price fell from Ksh. 38 to ksh.8. The price rose again and settled at around ksh.26 after about 45 days. Likewise, Eveready East Africa announced its half-year results on May 20, 2008 and its price fell from ksh.7.60 to ksh.4.85. After thirty days, its price settled around ksh.5.50.

According to Osei (2002), developed markets are highly regulated, uses sophisticated technology and have sound financial management systems contrary to emerging markets characterized with low liquidity levels, poorly informed investors, weak legal, regulatory and

institutional framework, low levels of technology and unreliable accounting standards. Afego (2011) and Osei (2002) concluded that both Nigeria and Ghana's stock markets are not efficient in relation to adjusting to new information on earnings announcements. According to Stieglitz (1981) capital markets in developing countries are characterized with low volumes of transactions. He argued that the reaction of stock prices to the release of new information may not be immediate and thus prices may not fully reflect all available information. Koech (2013) argued that, Kenyan stock market as part of developing markets is faced with problems attributed to the emerging markets. Therefore it is expected to show a mixed behavior as far as market efficiency is concerned as was evident from the above literature.

In Kenya, Governments have often tried to regulate capital markets in order to make them more efficient and to protect investors. In Kenya, the Capital Markets Authority (CMA) undertakes that role (CMA, 2009). The principal objective of the authority is to create, maintain and regulate a capital market in which securities can be issued and traded in an orderly, fair and efficient manner. The capital market is an important arm of the general financial market that provides investment opportunities, allocates savings to real investment, distributes financial resources of long term nature, offers investment advice to investors, mobilizes capital and hence help achieve real economic output, and also helps in pricing of securities.

1.1.1 An overview of the Nairobi Securities Exchange (NSE)

The Nairobi Securities Exchange is the only stock exchange operating in Kenya. It was established in the 1920's by the British as an informal market for dealing in shares and stocks, with no rules and regulations to oversee stock broking activities. At that time it was a sideline business conducted by few professionals like accountants, auctioneers, estate agents and lawyers who meet informally and exchange price. Francis Drummond established the first professional stock broking firm in 1951. He impressed upon Sir Ernest Vasey, the finance minister of Kenya at that time, the need to set up a stock exchange in East Africa. In July 1953, Sir Ernest Vasey and Francis Drummond made the proposal to the London Stock Exchange officials who accepted and recognize the establishment of Nairobi Stock Exchange (NSE) as an overseas stock exchange.

Muragu (1990) has indicated that the Kenyan stock market, then named the Nairobi Stock Exchange, was founded in 1954 as a voluntary association of brokers registered under the Societies Act. It was through the NSE that saw the first ever privatization in the country of a

20% government stake in the Kenya Commercial Bank (KCB). Since 1994, there have been significant changes to the NSE in terms of structure, trading premises and its operations.

1.2 Statement of the Problem

The stock market reaction to information disclosure has been tested in many occasions in developed markets such as the USA and UK. The evidence reported in these studies is largely consistent with the information content hypothesis and efficient market hypothesis (EMH), which is that earnings announcements contained value-relevant information and that stock markets react quickly and efficiently to this information. Capital markets play an important role in facilitating economic development by allocating resources within the economy.

In Kenya, available evidence documents a few of related studies. These include. Rono (2013) examined stock market reaction to annual earnings announcements using the data from the Nairobi Securities Exchange (Kenya) and JSE Securities exchange (South Africa). The results showed positive and significant returns on the announcement month for JSE, whereas the returns for NSE were negative and significant on the second month after announcement. Koech (2010) studied the effects of stock splits announcements on stock prices of publicly quoted firms in Kenya. It was concluded that these events (stock splits announcements) cause a general increase in stock prices.

Kipronoh (2013) studied stock price response to earnings announcements at the NSE. This study examined the stock market response to earnings information releases using daily price data from the Nairobi Securities exchange for a two year period (2012 to 2013). There was evidence of significant abnormal price reaction around the earnings announcement periods suggesting that earnings announcements do contain relevant information. Ngure (2012) studied the effect of interim financial statement announcement on stock return and volume of share traded of listed commercial banks in Kenya. The study concluded that security prices react to interim financial statement announcement and thus the study supported the semi-strong form efficient market hypothesis since stock prices adjust to public information. Investors find themselves in a state of dilemma on whether to base their investment decisions on interim or annual reports .Therefore, there is need to conduct an empirical study to fill the void in the knowledge gap by providing information to both investors and managers on the information content of interim and annual earnings announcement that will enable them make informed investment decisions.

1.3 The main objectives of the Study

The main objective of this study was to determine the relationship between earnings announcements and stock prices at the Nairobi Security Exchange

1.4 Specific Objectives of the Study

- i) To determine the effect of interim earnings announcements on stock prices at the NSE
- ii) To determine the effect of annual earnings announcements on stock prices at the NSE.
- iii) To determine the relationship between interim and annual earnings announcements at the NSE

1.5 Hypothesis of the Study

H₀₁. Interim earnings announcements have no effect on stock prices at the NSE.

H₀₂. Annual earnings announcements have no effect on stock prices at the NSE.

H₀₃. There is no relationship between interim returns and annual returns for stocks at the NSE.

1.6 Significance of the Study

The findings of this research are important to investors, portfolio managers, decision makers and other stock market players who use earnings announcements to measure their trading expectations. Particularly, it is vital to note that investor expectations of company earnings are reflected in stock prices. Also, evidence from analyzing stock price reaction to earnings announcements in a developing and emerging market respectively casts more light on whether the theory of efficient markets is supported, or contradicted by the various empirical findings. The study would contribute to existing knowledge by providing evidence regarding the price effect of the information contained in interim and annual earnings announcements around the day of release. Finally, the results of the study would provide feedback to the Capital Markets Authority (CMA) as a regulator of the capital market in Kenya. In acting as a watchdog for the entire capital market system, the CMA may utilize such findings in guarding against manipulation of share prices and insider trading.

1.7 Scope of the Study

The study was only limited to firms that were listed at the NSE and which were continuously listed throughout the study period from 2012 to 2016. Listed firms were preferred because they

are required by the Capital markets Authority (CMA) to publish their annual and interim financial statements and thus this information was available at the NSE.

1.8 Limitation and Delimitation of the Study

This study was confined to the use of secondary data which raises reliability issues of the data used. The data relied upon was obtained from Nairobi Securities Exchange and the Capital Markets Authority databases. Relying on the secondary data means that any error in the source was reflected in the research, that is, errors and assumptions not disclosed in the source documents would reoccur in the research. The research was also conducted over a short period of time. The study was limited to firms that were listed at the NSE and which were continuously listed throughout the study period from 2012 to 2016. The study sampled only those firms whose earnings were disclosed consistently and whose information was published by NSE. The non-listed companies were left out due to the difficulty in obtaining the information even though they play a major role in determining the price adjustments. Furthermore only earnings announcements were considered in making conclusions though other factors like; weekend effects, January effect may have an effect on stock prices.

1.9 Operational Definition of Terms

Annual report : Is the major instrument whereby organizations provide information to those who are interested in their financial affairs. This reporting is given once per fiscal year.

Earnings : Earnings are defined as the net benefits derived from a firm's operations over a specified period of time usually reported quarterly, semi-annually or annually in the financial statements.

Earnings Announcement: Is a public statement of a company's profitability for a specific time period. It can be quarterly, annually or even monthly.

Event : An event is a piece of unexpected news conveyed to the Nairobi Securities Exchange that assumedly may affect the stock price.

Efficiency : The ability of the Nairobi Securities Exchange to price stocks and shares fairly and quickly.

Event window : The time period during which earnings announcement become available to the market.

Information : Information is knowledge gained about some situation for, which we had no prior knowledge.

Interim report : Defined as a financial report containing either a complete set of financial statements or a set of condensed financial statements for an interim period. Interim report could be issued quarterly, half yearly or for any other period depending on the regulations of the country concerned

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides an overview of the stock markets and how it began, Developed and emerging stock markets, Review of Theories, Empirical studies on developed and emerging stock markets, Research gap and Conceptual Framework.

2.2 Stock Market

Klingebiel (2000) defined Stock Market as a market where the trading of company stock, both listed securities and unlisted takes place. It is different from stock exchange because it includes all the national stock exchanges of the country. Lesger (2011) has indicated that stock market is an institution enabling people who want to buy shares of stock to buy them from others who want to sell shares of stock. This market matches buyers and sellers and provides a means for reaching mutual agreement on price. That is, the price of a share of stock is set at the moment when a buyer and seller agree to make a trade, and not before. The stock market is more than a physical location (and need not be a physical location at all); it is a set of arrangements, advertisements, online transactions, computer listings and personal relationships that make it possible for stocks to be traded. Although often referred to as if it were a single entity, “the stock market” is actually a number of different markets. The three largest stock markets in the world are the New York Stock Exchange (NYSE), National Association of Securities Dealers automated quotations [NASDAQ] Stock Market, and the Tokyo Stock Exchange in Japan.

Bramble (1989) has indicated that stock markets started when countries in the New World began trading with each other. While many pioneer merchants wanted to start huge businesses, this required substantial amounts of capital that no single merchant could raise alone. As a result, groups of investors pooled their savings and became business partners and co-owners with individual shares in their businesses to form joint-stock companies. Originated by the Dutch, joint-stock companies became a viable business model for many struggling businesses. In 1602, the Dutch East India Co. issued the first paper shares. This exchangeable medium allowed shareholders to conveniently buy, sell and trade their stock with other shareholders. The idea was so successful that the selling of shares spread to other maritime powers such as Portugal, Spain and France. Eventually, the practice found its way to England. Trade with the

New World was big businesses so trading ventures were initiated. Other industries during the Industrial Revolution began using the idea as a way to generate startup capital. This influx of capital allowed for the discovery and development of the New World and for the growth of modern industrialized manufacturing.

As the volume of shares increased, the need for an organized marketplace to exchange these shares became necessary. As a result, stock traders decided to meet at a London coffeehouse, which they used as a marketplace. Eventually, they took over the coffeehouse and, in 1773, changed its name to the "stock exchange." Thus, the first exchange, the London Stock Exchange, was founded. The idea made its way to the American colonies with an exchange started in Philadelphia in 1790. Today, there are many stock exchanges worldwide, each supplying the capital necessary to support industry growth. Without these vital funds, many revolutionary ideas would never become a reality, nor would fundamental improvements be made to existing products. In addition, the stock market creates personal wealth and financial stability through private investment, allowing individuals to fund their retirement and or other ventures.

2.3 Characteristic of Developed Stock Markets

Osei (2002) said that developed stock markets are highly regulated, uses sophisticated technology and have sound financial management systems. Earlier studies mostly probed into the behavior of developed financial markets, mostly of European and US financial markets. Traditionally markets of developed economies are more efficient as compared to emergent markets. The validity of the efficient markets hypothesis (EMH) has been questioned as several recent studies have reported evidence that significant abnormal returns can be generated by trading on the basis of public information. Some have found evidence of slow post announcement stock price adjustment to earnings disclosures. Smith (1992) indicated that a well-developed stock market should theoretically increase saving (by enhancing the set of financial instruments available to savers to diversify their portfolios) and efficiently allocate capital to productive investments; which eventually leads to an increase in the rate of economic growth. In doing so, it provides an important source of investment capital at relatively low costs and a more developed equity market also provides liquidity that lowers the cost of foreign capital that is essential for development. As such the presence of stock markets would mitigate the principal agent problem and reduce asymmetry information, thus promoting efficient resource allocation and growth.

2.4 Characteristics of Emerging Stock Markets

An emerging economy is a transitional phase between a developed and developing economy. Muragu (1990) described emerging stock markets as small in size, resulting in them being "thin" with an inadequate number of traders to ensure competition and insufficient securities to enable them to hold diversified portfolios of their choosing, Inadequate market regulation and standards of disclosure by companies, poor communications so that some investors have an advantage over others. Significant costs of obtaining investment information, a lack of competent analysts and professional advisers, resulting in differing expectations about the performance of securities, Significant transactions costs which may deter small investors, thereby limiting the number of market participants and restricting the market to infrequent large bargains.

Most of the investors are also said to take the view that the market is inefficient and therefore an unreliable price setter, Compared to developed markets, emerging markets are relatively isolated from capital markets of other countries and have relatively low correlation with developed markets. In the emerging markets speculations are common; large investors can easily speculate the market. As a less organized market without market makers and timely available information, there is always remain a possibility to make profit by large investors and insiders. The ability to predict stock price changes based on a given set of information lies behind the notion of stock market efficiency.

Wai and Patrick (1973) conducted studies on the test of efficient market hypothesis (EMH) in emerging markets compared to the volume of studies published on the developed market. It is generally assume that the emerging markets are less efficient than the developed market. The definition of emerging market highlighted on the growth potentiality as well as rapid growth of size of the market. However, it is not unlikely that the market participants are not well informed and behaving irrationally compares to well organize markets. The causes of lack of financial development especially in capital markets are due to certain market imperfection such as transaction costs, lack of timely information, cost of acquiring new information, and possibly greater uncertainty about the future. The empirical studies on emerging African markets demonstrated conflicting results for efficiency. Small sized markets with low integration showed evidence against weak-form efficiency and random walk. Studies noticed presence of random walk and weak-form efficiency in markets where improvements in trading systems, liberalization, market integration and better governance is experienced with the passage of

time. Trezevant (2005) has indicated that less developed capital markets may have characteristics, such as weak communication infrastructure or poor trading environment, which reduces the market's reaction to earnings announcements. However, less development capital markets may also have characteristics, such as fewer alternative information sources that increase the market's reaction to earnings announcements.

2.5 Review of Theories

The aim of this section is to review theoretical expositions on the responses of stock prices to earnings announcements. The main theoretical perspectives that have affected the development of stock price responses to earnings announcement are; the random walk theory and efficient market hypothesis.

2.5.1. Random Walk Theory

Random walk is a stock market theory stating that the past movements or direction of the price of a stock or overall market cannot be used to predict its future movement. Maurice (1953), a British statistician presented a controversial paper on the behavior of stock commodity prices. Maurice had expected to find regular price cycles but to his surprise they did not seem to exist. Each series appeared to be a „wandering one „, almost as if once a week the demon of chance drew a random number and added it to the current price to determine the next week's price. In other words the stock and commodity prices seemed to follow a random walk. Thus when he made a suggestion that the stock prices follow a random walk, he implied that the price changes are independent of one another just as gains and losses experienced in tossing a coin.

The theory gained popularity in the year 1973 when Barton Malkiel published a book *A Random Walk down Wall Street*. He constantly stated that long terms buy and hold strategy is the best and that individuals should not attempt to time markets. He concluded that any attempts based on technical, fundamental or any other analysis are futile. His evidence showed that most mutual funds fail to beat benchmark averages like the S&P 500. A follower of random walk believes it is impossible to outperform the market without assuming additional risk. In his book Malkiel argued that both technical analysis and fundamental analysis are largely a waste of time and are still unproven to outperform the market.

2.5.2 The Efficient Markets Hypothesis

The efficient market hypothesis was developed by Eugene Fama in the early 1970s. It states that a market is efficient if security prices immediately and fully adjust to reflect all available information. Efficiency here means informational efficiency not operational efficiency. This implies that if the market fully reflects information, the knowledge of that information would not allow anyone to profit from it because security prices already incorporates the information. Basu (1977) argued that in an efficient capital market, security prices fully reflect all available information in a rapid and unbiased fashion and thus providing unbiased estimates of the underlying values. Supporters of this model believe it is pointless to search for undervalued stocks or try to predict trends in the market through technical analysis or fundamental analysis.

The efficient market hypothesis asserts that for a market to be efficient, prices must at all times fully reflect all available relevant information. Dixon and Holmes (1996) explain that a response to new information in terms of a price adjustment must be both almost instantaneous and of a direction and size which fully reflects the significance of the information.

Fama (1970) has indicated that most early work related to efficient capital markets were based on the random walk hypothesis which contended that changes in stock prices occurred randomly. This early work contained extensive empirical analysis without much theory behind it. Fama attempted to formalize the theory and organize the growing empirical evidence. He presented the efficient market theory in terms of a fair game model, contending that investors can be confident that a current market price fully reflects all available information about a security and the expected return based upon this price is consistent with its risk. In his original article he divided the overall EMH and the empirical tests into three sub-hypotheses depending on the information set involved: the weak form EMH, Semi-strong form EMH and the Strong form EMH.

Fama argued that, Market efficiency evolved from the notion of perfect competition, but since conditions for a perfect market do not exist in a real capital market, security prices may not fully reflect all relevant information. Fama, therefore, pointed out the need to define 'fully reflect information' in the EMH in terms of the expected return from holding a security. He also pointed to the need to define 'relevant information' in the EMH, and in defining it; he divided the market into three levels: the weak form, the semi strong form and the strong form. Each deals with a different level of cumulative information.

Pike and Neale (2003) argued that weak form EMH asserts that the current stock prices fully reflect all security information including , historical price sequences, rates of returns, trading volume data and any other market-generated information such as block trades and transactions by exchange specialists. From its assumption that current prices already reflects all past returns and any other security market information, it implies that past rates of returns and other historical market data should have no relationship with future stock prices. This contends that one should gain little or no value from using any trading rule that decides whether to buy or sell a security based on past rates of returns or any other past market data. The randomness of stock price adjustments thus seems to be supported by this form of market efficiency.

Dolvin (2012) examined the semi-strong form EMH and found out that security prices adjust rapidly to the release of all public information and thus current security prices fully reflect all public information. This hypothesis encompasses the weak form EMH since all market information considered by the weak form is public. Public information also includes; dividends and earnings announcements, price earnings P/E ratios, stock splits, dividend yield D/P ratios, macro-economic news and political views. This theory therefore, implies that no group of investors should derive above average risk adjusted profits from their transactions because new public information is already reflected in security prices. Most empirical evidences are in support of this theory. He noted that in a semi-strong form efficient market the share price reflects all publicly information.

Mabhumu (2004) did a study on the strong form EMH and contends that stock prices fully reflect all public and private information. This implies that no group of investors has monopolistic access to information relevant to the discovery of stock prices. Thus no one should be able to consistently derive above average risk-adjusted rates of returns. The strong form EMH extends the assumption of efficient markets in which prices adjusts rapidly to the release of new public information to assume a perfect market in which all information is cost free and available to everyone at the same time. The theory seems to be satisfactory in theoretical sense however; it has a lot of shortcomings in its practicability due to existence of insider trading.

2.6 Interim Earnings Announcements

Mathuva (2012) indicated that interim reports become an important source of information's that provide users with timely information to make decisions, in 1998. The International

Accounting Standards Committee (IASC) issued the International Accounting Standard 34 (IAS 34) “Interim Financial Reporting” which defined interim financial report as a financial report containing either a complete set of financial statements or a set of condensed financial statements for an interim period. Interim report could be issued quarterly, half yearly or for any other period depending on the regulations of the country concerned. The main objective of IAS 34 is to prescribe the minimum content of an interim financial report and to prescribe the principles for recognition and measurement in financial statements presented for an interim period, and to encourage publicly-traded entities to provide interim financial reports that conform to the recognition, measurement, and disclosure principles

Krishnan and Zhang (2004) argued that reporting on interim financial statements originated in the US, where public accounting firms required an interim review engagement as a condition for undertaking the year-end audit. Subsequently, the US stock exchanges mandated the engagement. Walker (1973) pointed out that Interim statements provide a theoretically efficient channel for the enhancement of the information flow to parties interested in the results of a firm’s operations. A trade-off exists, however, between the benefits and the costs of such reporting. Continuous reporting would provide the market with the greatest amount of information.

There would be few surprises, because all market participants would be informed of events and transactions as they occur. With perfect visibility, the accounting system would be a continuous and error-free source of complete and perfect information to its users. Continuous reporting does not exist in practice. Among other things, continuous reporting would require the rapid reporting of decisions made at all levels of an organization, even before the financial impact of such decisions is felt. An additional cost would be that associated with the loss of secrecy to third parties which is inherent in detailed disclosure. Because timely financial information is more useful in making investment decisions (FASB, 1980), we expect investors to demand more frequent financial reporting. Further, since managers in countries with strong investor protection institutions have greater incentives to meet investor demand for disclosures that are “useful” in valuing securities. Hung (2000) asserted that frequent interim financial reporting is likely to be a structural factor associated with the financial reporting environments of strong investor protection countries.

2.7 Annual Earnings Announcements

Opong (1988) argued that the annual financial report is the major instrument whereby organizations provide information to those who are interested in their financial affairs. This reporting is given once per fiscal year. Such a system would have the merit of preserving organizational secrecy for as long as reasonably possible, in addition to the relatively low cost of producing just one report per period. The price to be paid would be increased information asymmetry in the market place vis-à-vis the firm's management. If events and transactions are reported only once per year, much of the report will be a surprise to the user. It is to be expected that market participants seek to balance the benefit-cost relationship associated with report frequency.

Firms that report too often would be penalized for the high cost of providing the information. Firms that report too infrequently would be penalized for the unnecessary information asymmetry that their failure to report would generate. There would be rewards, however, for those firms that optimize reporting frequency. Of course, firms cannot always decide the frequency of their reporting, due to the existence of regulatory requirements. It can be said that interim reports reduce the uncertainty related to a firm's operations observed and monitored by outside interest groups. Firstly, as with annual earnings numbers, aggregate interim earnings seem to contain useful information for the market around the time of the announcement. Secondly, separate interim income statement components contain incremental information.

The usefulness of interim reports is also supported by the fact that some firms voluntarily publish interim reports. Thirdly, quarterly earnings time-series have both an adjacent quarter-to-quarter component and a seasonal component. Fourth, interim earnings are useful in annual earnings predictions. Fifthly, some anomalous price behavior is reported. The market seems not to use all the information that reported earnings actually contain. The above findings are mainly based on studies conducted with readily available databases such as Compustat and CRSP (Center for Research in Security Prices). Quarterly reporting helps users to have a longer-term focus, quarterly reporting provides for an orderly dissemination of reliable information, and quarterly reporting reduces problems associated with insider trading.

2.8 Relationship between Earnings Announcement and Stock Price

Rono (2013) defined Earnings as the amount of profit that a company generates during a given period of time usually quarterly or annually as reported in its financial statements. Earnings are

important because they provide an indication of a company's potential growth, stock price appreciation and future dividend payments. Beaver (1968) asserted that a firm's communication to outside interest groups, especially to the capital markets, represents an essential part of financial accounting. Earnings announcements provide market participants with one public information source by which to evaluate performance of a firm. The response of actors in the marketplace to interim and annual accounting earnings announcements has interested both practitioners and academics for decades. The major issue has been the information value of these disclosures. Announcements are said to contain information if they alter investors' beliefs about the value of an asset.

The possibility that an announcement may be of differing usefulness to various groups was recognized long ago. For example, Hakansson (1977) demonstrated that when investor groups differ in their information acquisition abilities and/or resources, distinct patterns of information acquisition emerge. Investors with low information acquisition skills or resources (small investors) rely on public information, whereas investors with high information acquisition skills or resources (large investors) rely on pre-disclosure information in making their investment choices. Literally this means that the information content of announcements differs between investors. In addition, the assumption that investors are differently informed before an anticipated announcement and therefore respond differently to the announcement has been made frequently in theoretical studies.

Beaver (1968) provides empirical evidence on the information content of annual earnings announcements and suggests that investors may postpone their purchases and sales of securities until earnings reports are released. Delays in releasing annual reports are likely to increase the level of uncertainty associated with decisions that require the information contained in the annual reports. Strong market reaction towards earnings announcements are indicated by high cumulative abnormal returns around the announcement date, indicating high information content in the earnings announcements. Timely financial reporting is suggested to be more useful in users' decision-making than is late financial reporting. The usefulness of annual reports is indicated by the degree of information contained and determined by the degree of market reaction. Hence, annual reports released earlier by their firms have higher information content than those released later.

Ball and Brown (1968) provided evidence indicating that much accounting information is reflected in security prices prior to the release of an earnings report. Other sources of

information allow the market to anticipate the earnings report, so that the variability of returns (amount of information) associated with it may be related to reporting time lag. More specifically, a longer reporting time lag allows for more information in the report to be supplied by other sources, through investor search activity, other firms' voluntary disclosures, or the predictions of the earnings report supplied by the earnings releases of earlier-reporting firms. This suggests that later reports are associated with less price variability than earlier reports.

Zeghal (1984) found out that accounting reports with shorter delays have higher information content than those with longer delays. At the time of release to the capital market, the effect of delays on information content seems to be more significant for interim reports than for annual reports. This may be explained by the major characteristics that differentiate the information contained in interim reports from that contained in annual reports and the differences in their role in investors' decision processes. While interim reports contain abstract, unaudited information that mainly helps investors update their expectations of a firm's annual earnings, annual reports contain much more extensive and audited information that mainly plays a confirmatory role in investors' predictions. It is because of these two different roles of accounting information, anticipatory and confirmatory, that delays in the release of accounting reports and consequently substitute information can affect the information content of these reports. In fact, it seems easier to substitute information in interim reports for anticipatory decisions than to substitute audited information in annual reports for confirmation decisions.

Earnings studies in France by Gajewski and Quéré (2001) found out that there is a significant market reaction to both half-year and annual earnings announcements. The authors also conclude that the reaction to annual earnings is stronger than the reaction observed for half-year earnings; however, they argue that the richer information content of annual earnings is not the sole factor explaining the difference, and they allude to the possibility of earnings management. This is in line with the arguments advanced by Putman, Griffin and Kilgore (2008), and Chai and Tung (2002). Gajewski and Quéré (2001) who concluded that in France, greater attention and sensitivity are based on annual earnings, and that this disparity is therefore a strong incentive for management to announce bad news strategically in half-year earnings rather than in annual earnings.

Shores (1990) and McNichols and Manegold (1983) informed the importance of interim announcement as one of the main sources to obtain information for users, and they argued that interim reporting has become another important instrument that allows listed companies to

communicate with its shareholders. Because stock prices impound annual earnings information at an earlier point in time when interim reporting is more frequent, annual earnings announcements are likely to be less informative in countries with more frequent interim financial reporting (Butler, Kraft and Weiss, 2003). For example, McNichols and Manegold (1983) document that the information content of annual earnings announcements decreases after firms listed on the American Stock Exchange switch from annual to quarterly financial reporting. Thus, we expect frequent interim financial reporting to be a structural factor in countries' financial reporting environments that is associated with decreased annual earnings announcement informativeness.

2.9 Empirical Studies

This section looks at the developed and emerging stock markets.

2.9.1 Empirical Studies on Developed Stock Market

Firth (1976) did a study on the effect of earnings announcements on the share prices of similar type firms. It was the first study made on the effects of company earnings announcements on share prices in the D. K. Firths sample consisted of 87 firms classified into four groups namely breweries, retailers, shipping and banks. The impacts of earnings announcement of each firm on the share prices of the other members of the group were examined. Firth found out that on the day of the announcement of positive results, firms in the industry as a whole made abnormal gains of 2.1%, i.e. average price of securities of similar type firms rose by 2.1%. Similarly where the results announced were less than predicted by the market, the industry as a whole experienced abnormal loss of 3.7%-a poor reception by the market. Firth concludes therefore that financial reports have information content and this information is used by the market in evaluating the firm making this particular announcement as well as similar type firms. He concludes also from the study that the market reaction to the announcements of earnings is fairly rapid and lasts about two days but no profitable mechanical trading strategy can be evolved from the announcement of earnings.

Kiger (1972) examined the markets volume and price reaction to the announcement of quarterly earnings- His sample consisted of firms listed on the NYSE who met the criteria that there were no price or volume sensitive information about any firm in the sample around the time of the study- Such market sensitive information includes dividends announcements, secondary distribution or dividends announcements. Kiger used as a control in the study a five

day period during which no information about the shares in the study was released to the market- The time period of interest in the study was the five days around the time of the announcement of quarterly earnings in the Wall Street Journal Kiger's reported results indicate that the market reacts to quarterly earnings.

May (1971), using Beaver's methodology examined the price reaction of quarterly earnings of firms listed on the American Stock Exchange- The sample included 105 firms and covered the period June 1966 to April 1968. May's reported results indicate that weekly price changes at the time of the release of quarterly earnings reports are higher than the average weekly price changes for other times of the year- The reported results indicate also that the price reaction to the announcement of earnings was swift. Price change accompanies announcement of earnings but this settles quickly leaving no room for post announcement abnormal returns.

Spangler (1973) studied the effects of the announcement of dividend increases or decreases on share prices. His sample was made up of 4117 dividend announcements representing 1150 companies over the period July 1962 to June 1972. Analysis of the 21 trading -day period around and including the day of the announcement showed that the stock market reaction was most marked on the day subsequent to and the day of the dividend announcement- The sign and size of dividends change was also positively associated with the sign and size of security return. This indicates that the market is able to impound information about dividends into prices swiftly and in an unbiased manner.

DeFond et al (2005) Investigated investor Protection and the Information Content of Annual Earnings Announcements They examined the information content of more than 50,000 annual earnings announcements in 26 countries, where information content is measured as the abnormal stock return variance around an annual earnings announcement. They found out that earnings announcements are *more* informative in countries with higher quality earnings or better enforced insider trading laws; and that annual earnings' announcements are *less* informative in countries with more frequent interim financial reporting. They did also find evidence that earnings announcements are more informative in countries with strong investor protection institutions, and that our structural factors are the *channels* through which investor protection influences the information content of earnings.

Qabajeh (2012) studied the effect of interim financial reports announcement on stock returns during (five trading days before and five trading days after) the announcement date, and the

statistical relationship between trading volume, earnings and stock returns for a sample of (20) industrial public companies listed in Amman Security Exchange during the two years of 2010 and 2011. Data was gathered from 80 interim reports issued in the second and third quarter of the years 2010 and 2011. A multiple regression models were developed for the analysis. The results confirmed the following: First, there was a positive relationship between, interim financial reports announcement and stock returns during the announcement date. Second, there existed a positive relationship between stock returns and trading volume. Third, there was insignificant relationship between earnings and trading volume.

Beaver (1968) examined the relationship between interim and annual earnings announcements and stock market behavior. He argued that interim and annual reports do contain valuable information. The research sampled 143 companies and observed the information content of quarterly earnings announcement for the period 1961 – 1965. He used trading volume activity (TVA) and market model to test the information content of interim and annual reports, the test revealed a drastic increase in trading volume and a high variability in stock return in 17 weeks surrounding the announcement date. His conclusion was that the earning reports have information content which could affect the stock prices.

Balachandran (2001) examined the Price reaction to U.K dividend reductions, Initial interim and final dividend per share for the non-financial companies. The data collected for the reporting periods ending between January 1986 and December 1993 from the Micro view Plus Database. This study employs the market model (MM) to examine the daily abnormal returns around announcement dates.⁵ Model parameters were estimated using 100 observations, commencing 120 days prior to the event. The market proxy used was the FTA All Share Index. The daily returns were measured in logarithmic form. The abnormal returns for announcement periods were generated for different events windows: - day -1 to day 1 (the day before to the day after the announcement), day -1 to day 0, day 0 to day 1, day 0, day -12 to day 0, day - 1 to day 3, day -1 to day 5, day 2 to day 20, day -12 to day 20 and day -20 to day 20. These event windows were used to control for leakages and for "after hours" announcements (which are particularly likely for announcements of bad news). The magnitude of the dividend reduction does not differ (statistically significantly) between interim and final dividend reductions. Average dividend reductions for interim and final dividends are 63.7% and 63.9%, respectively.

The t-value for the difference between average dividend reductions is -0.08 (see Table 1). It does not reject the null hypothesis that the average dividend reduction is the same for both groups. However, the price reaction is stronger for the interim dividend reductions than final dividend reductions at the 2% level for all the event windows, except for the event window from day 2 to day 20. Effectively, then, interim dividend reductions provide strong signals to the market.

Higgs and Worthington (2004) examined 20 European markets, 16 of which are regarded as developed while the rest as emerging, with daily data between (1988 -2003). They used a wide range of tests belonging in three different procedures, in order to avoid the case that some spurious outcome to influence the results. According to their conclusions, among the developed markets only Germany, Ireland, Portugal, Sweden and the United Kingdom satisfied the most stringent random walk criteria, with France, Finland, the Netherlands, Norway and Spain meeting at least some of the conditions, while the rest namely Austria, Belgium, Denmark, Greece, Italy and Switzerland did not meet any of the requirements. Among the emerging markets, only Hungary satisfied the above criteria.

Abdel-khalik and Espejo (1978) examined whether or not the announcement of interim earnings has any influence on the accuracy of annual earnings forecasts made by analysts. The study includes 100 firms in the Value Line Investment Survey for 1976. Their results show that use of the data reported in each of the first three quarters increases the accuracy of annual earnings forecasts. Because the accuracy of annual earnings forecasts is highly correlated with the announcement of interim earnings, they conclude that analysts use interim reports in their forecasting work.

Gupta (2006) did a study on, Impact of earnings Announcements on stock prices, research on the stock market reaction in relation to earning announcements in the Indian market, and to test whether these prices posses any information content. He found out that the Average Abnormal Return (AAR) for good announcement is greater than zero on the announcement day and is less than zero for bad news. It was evident that the price reaction in the case of bad news is larger than in the case of good news. This study concluded that earning announcements contain important information which causes stock prices to adjust rapidly in the market. Higher than expected earnings announcement leads to a rise in the conditional mean of stock returns on days before news announcements and fall after news are announced

2.9.2 Empirical Studies on Emerging Stock Markets

A study by Rono (2013) examined stock market reaction to annual earnings announcements using the data from the Nairobi Securities Exchange (Kenya) and JSE Securities exchange (South Africa). The period of study was 2005 to 2011. There were a total of 456 stocks. To be included in the analysis, each stock must have its monthly share price information available, market capitalization and earnings together with announcement dates. After carefully screening the data, 177 stocks for the JSE and 18 stocks for the NSE respectively were eliminated due to lack of sufficient data points. The final sample consists of 261; 221 stocks for the JSE and 40 stocks for NSE for the analysis. Using the event study methodology, the magnitude of market reaction to the earnings announcements for a sample of 261 listed firms on NSE and JSE was tested. Abnormal returns (ARs) were computed for each firm and tested how announcements impact a firms' share price. The results showed positive and significant returns on the announcement month for JSE, whereas the returns for NSE were negative and significant on the second month after announcement.

Koech (2010) studied the effects of stock splits announcements on stock prices of publicly quoted firms in Kenya. Objectives were achieved by studying a sample of 5 firms out of the 13 firms that have undergone stock splits during the period 2004 to 2012. The study analyzed price changes to determine whether stock splits announcements elicit any reaction in the Kenyan market. The daily adjusted prices for sample stocks were recorded during the event window of 61 days, consisting of 30 days before and 30 days after the stock split. All the event day's stock prices data were captured. The study adopted a descriptive research design. Here, an attempt was made to explain the relationship between stock splits announcements and stock price changes. The event study methodology was employed in the determination of the effects of the split announcement. Stock splits announcements are informational events that cause increases in stock prices. It was concluded that these events (stock splits announcements) cause a general increase in stock prices. Given roughly a 60-day period, the effect of stock splits announcements on stock prices persists for an average period of one month. Finally, stock split announcements are reflected in stock prices in almost immediately. On average, it takes 1 day for prices to react to stock splits.

Kipronoh (2013) studied stock price response to earnings announcements at the NSE. This study examined the stock market response earnings information releases using daily price data

from the Nairobi Securities exchange for a two year period (2012 to 2013). The study used a sample of 5 companies from listed companies at the NSE. A simple random sampling technique was used to pick the sample from companies in the NSE 20-share index. The sample selection was based primarily on the criteria that only firms continuously listed and with the required financial and market information during the period 2012 to 2013 were included in the study. Thus stocks with insufficient data points, either as a result of non-trading or lack of financial and market information were excluded from the sample.

The companies were to have daily stock prices throughout the entire study period and had to announce earnings at least once a year. The sample period was considered sufficient for any annual earnings announcement effects to be detected and analyzed. The event window was set to be 90 days; 45 days before and 45 days after the event date and the event date represented by 0. The researcher used event study methodology to test the responsiveness of prices to earnings information releases for a sample of five companies in the 20-share index. There was evidence of significant abnormal price reaction around the earnings announcement periods suggesting that earnings announcements do contain relevant information. It was found that abnormal returns seems to dominate 25 days before the date of earnings release suggesting that there is no general reactions witnessed in the market.

The changes evident only are attributed to a few individuals who might be having private and insider information. There is however a drift in the cumulative abnormal returns, 25 days after the announcement, which contradicts the efficient markets hypothesis suggesting that Nairobi securities market, does not efficiently adjust prices to earnings information based on the sampled firms within the two year period of study.

Oyuga (2013) studied the effect of the earnings announcement on the share price for the firms listed at the NSE. These objectives were achieved by studying a sample of 19 firms listed at the NSE having made earnings announcement in the period of the study. The population considered is all listed at the NSE at 1 January 2010 to 31st December 2013. This being the most recent annual financial period and would be a more reflective of the current development in the stock market. A purposeful and judgmental sampling method was employed for the study. In order to include the target sample, the extracted sample of the earnings announcements has to meet the following the daily adjusted prices for the sample stocks were recorded during the event window of 17 days, 8 days before and after the announcements. The

study adopted a descriptive research design. The event study methodology was employed to determine the effects of the earnings announcement.

The sample population posted both negative and positive abnormal returns around the earnings announcement dates which show how the stock prices have reacted to the earnings announcement event. The sample population posted both negative and positive abnormal returns around the earnings announcement dates which show how the stock prices have reacted to the earnings announcement event. The above findings show that statistically negative abnormal returns were observed in the post and pre earnings announcements of firms listed at the Nairobi Stock Exchange. Given that a number of issues to be deliberated at earnings announcements are public information prior to earnings announcements and one would not expect revision in share prices that result into abnormal gains or losses. In which case abnormal gains or losses is only realizable if good or bad news emerges from the earnings announcements.

Kangai (2013) examined the effect of annual earnings announcement on the share price and trading volume of 5 listed companies at the NSE for the period from 2006 to 2010. The earnings announcement dates and major events were identified by carefully studying the NSE hand book, the NSE daily trading information and the companies' newsletters. Since most companies announce their earnings and dividends during the same period, only companies with positive correlation between dividend announcement and earnings announcement were selected. This assisted in neutralizing the effects of dividend announcements. This criterion gave a sample of 5 companies for the five years translating to 25 annual earnings announcements. They used the event study methodology to get the abnormal return for an event window of 91 days. Further, the volume reactions were examined using the trading activity ratio. The results showed that abnormal returns and trading activity were not significant. They concluded that NSE is of semi-strong efficiency, thus not possible to earn abnormal returns in the NSE using the publicly available information.

Kakiya et al (2013) examined the effect of earnings announcement on the level of efficiency of the NSE. The study used the closing share prices and traded volumes for 15 days before and after earnings announcement for year 2007. A cross-sectional research design was adopted because it examines the stock return behavior for a sample of firms experiencing a common type of event, that is earnings announcement, at time $t=0$ being the date of announcement,

despite the event taking place at different points in the calendar time. The event-study was used to examine the effect of post earnings announcement on stock returns. The results indicated that earnings announcement had a significant effect on stock return and thus it was concluded that the NSE is not semi-strong form efficient.

Olouch (2002) looked at the timing effect of earnings announcement on stock returns of companies listed at the NSE. The study examined whether there is any systematic relationship between the timing of earnings announcement in respect to the kind of earnings news, whether it is good or bad for the period, for the period between 1999 and 2001. Moving average model was used to estimate earnings and announcement dates for each year and a market model was used. Cumulative residual returns of late reporting and early reporting firms were compared using F-test and Man Whitney U- test. The study found that there was no systematic relationship between reporting time and earnings news and that delay in reporting does not have any significant effect on stock return of companies listed at NSE.

Atiti (2002) did a study to determine the presence of momentum at NSE and the possibility of generating abnormal profits based on this anomaly. The author examined whether momentum strategy employed on zero cost portfolios for 3, 6, 9 and 12 months with a holding period for 6 years, generates abnormal return, that is, from December 1997 to December 2003. t- Test was done to test the hypothesis. Results showed that NSE experiences price continuation. Stocks experiencing a decline in price continue to depreciate in price for a period not more than 12 months and vice versa. The study showed that holding stock for 6, 9, and 12 months indicate that momentum profits are present at NSE. However, returns on portfolios held for 3 months had insignificant results. Thus, it is not possible to beat the NSE market by investing in stocks whose price have shown an appreciation in short term and divesting from stocks whose price depreciate in short term.

Njau (2011) examined the impact of profit warning announcements on share prices at the NSE. He examined share returns following unexpected corporate announcements that are described as profit warnings. He tested whether there are abnormal returns on share prices after the announcement of profit warnings. This research used the eleven day event window where five days are prior and five days are after the profit warning announcement. The result of this research indicates that profit warning has impact on the stock return in the NSE and the impact is negative and significant for the period of pre-warning and post-warning and on the day of

actual announcement. There are also indications of information leakages where there were abnormal returns a day before the profit warning announcements.

Rioba (2003) examined the predictability of ordinary stock return for selected securities listed on NSE using recursive least square regression for the period between January 1995 and December 2002. The study was based on a sample of 10 companies identified using stratified sampling and monthly closing prices for the selected securities were used to obtain dividend yield and earning price ratio, which were exogenous variable in the model. Other independent variables in the model were monthly treasury bonds, monthly inflation rate, monthly percentage change in broad money supply and monthly percentage change in export earnings from coffee and tea. The study indicated that there was no significant difference between actual and forecast values generated by the regression model. It was concluded that the predictability evidence of ordinary shares in NSE is weak and not conclusive. The study also examined the macroeconomic variables that influence stock returns as compared to this study, which is considering microeconomic variables that influence changes in share prices of firms.

Ngure (2012) conducted a research on effect of interim financial statement announcement on stock return and volume of share traded of listed commercial banks in Kenya. The study was carried out through event study methodology focusing on three listed commercial banks. Secondary data obtained from Nairobi Stock Exchange was used to analyze changes in share price and traded volume from 2009 to 2013. Data from a sample of three banks namely; Equity bank, Barclays bank and standard Chartered was used to make conclusions of the whole population. Abnormal returns during an event window of 15 days were determined using a market model and trading activity ratio was calculated. According to this research interim financial announcement were informational events that caused increase in stock return and thus the information made by the companies was useful in valuing securities. Further research findings showed that abnormal returns and cumulative abnormal return around the announcement of interim financial statement were positive. The study concluded that security prices react to interim financial statement announcement and thus the study supported the semi-strong form efficient market hypothesis since stock prices adjust to public information.

Mohamed (2006) conducted a study on the effect of the earnings announcements on the stock prices of companies listed at the Nairobi stock exchange. The population of interest is all companies quoted in the Nairobi Stock Exchange that had been listed in the NSE as at

1st January 2004 till 31st December 2008. This being the most recent period, it is believed that the result based on the period would be reflective of the current development in the stock market. Secondary data is used in the research which was obtained from Nairobi Stock Exchange database. Forms are designed to collect the data for the period of interest. Statistical Package for Social Science (SPSS) was used as an aid in the analysis. The researcher prefers SPSS because of its ability to cover a wide range of the most common statistical and graphical data analysis and is very systematic. The study finds that investors do not benefit from earnings announcement. Over the period starting from 30 days prior to earnings announcement to 30 days after the announcement of earnings payment, investors incurred losses up to 52.14 percent of stock value on average.

Nyamosi (2015) conducted a research on a review of pricing efficiency after earnings announcements at NSE. The study targeted all 56 public listed companies whose stocks are traded at the NSE. A sample of 20 listed companies was selected from the population. The NSE has categorized listed companies into five sectors: the agricultural, commercial and services, finance and investment, industrial and allied, and the alternative investment sectors. The NSE 20-Share Index companies represent the five categories of listed firms. Only actively traded stocks are usually selected into the index. For each firm in the sample, the researchers identified and recorded as t_0 the day on which the earnings report was approved by the board of directors. We also recorded the percentage change in after-tax profit. This was easily obtained from annual financial reports available at the CMA library. The stocks' closing prices on the day of announcement and on the 1st, 3rd, 7th, 14th, 21st, and 28th day before and after announcement were recorded. The corresponding NSE 20-Share share index was also recorded. The percentage change in earnings from the previous year was also recorded. Of the 20 firms that were sampled, 11 reported increased earnings while nine reported decreased earnings, relative to previous earnings. While an increase is expected to lead to positive excess returns, a decrease is likely to result in negative excess returns. For each set of firms, the average excess returns for the periods before and after announcements were calculated. The study found that excess returns were realized whenever the firms announced their earnings. Excess returns were realized for each return window from $t-28$ to $t28$. The excess returns were analyzed during the pre-announcement and the post-announcement period. The pre-announcement period covered the period from $t-28$ to $t-1$. There were excess returns realized in the pre-announcement period. Of the 11 firms with increased earnings, six had negative mean excess returns in the pre-announcement period, ranging from -0.7% to -7.9%. The remaining five had positive mean

excess returns in the range of 1.32% to 16.2%. The average pre-announcement excess return is positive at 0.35%, but the average is negative after announcement, that is -0.58%.

Kaniel (2007) studied the behavior of individual and institutional investors around earnings announcement on NYSE stocks between January 2000 and December 2003. They obtained their daily abnormal net individual trading series by computing an imbalance measure: subtracting the value of shares by individuals from the value of shares bought and dividing by the average daily dollar volume from CRSP in the calendar year. It was realized that individual buying or selling prior to announcement is associated with significant positive or negative abnormal returns in three months following the event, with most abnormal returns generated by stocks that experience extreme earning surprise. The authors maintained that naïve investors would trade in the opposite direction and therefore slowing down adjustment of prices to the information. The study did not observe the strategies of specific individuals and institutions and hence unable to definitively answer the question whether trading by individuals after the event is naïve or rather it is part of profit taking strategy.

Wang (2013) Studied stock market reactions to the release of annual financial statements, a case of banking industry in Sri Lanka. By employing five year data using event study methodology, the study investigates stock market reaction to the release of annual financial statements of banks registered in the Colombo Stock Exchange (CSE). The sample of the study consists with the banks registered in the Colombo Stock Exchange. Respondent companies were eligible for the study when the following selection criteria are satisfied. The company should have been listed in Colombo Stock Exchange throughout the study period The Company's shares were actively traded in the stock market; daily and monthly share prices available and published by the sources, Annual financial statement should be published in the website of stock exchange and public newspapers at the end of each financial year of the study. The study results show that abnormal return and cumulative abnormal return around the release of annual financial statements are positive but insignificant at 5% level. Further, the share price behavior on the announcement of annual reports was different from that outside the test period. The positive reactions of investors could be attributed to the favorable information in annual financial reports. Therefore this response has the potential of generating abnormal returns based on publicly available information in the market.

Borjesson (2007) did a study to investigate the post earnings announcement effect on Swedish stocks, to establish whether the EMH holds in the short term (60 days) after earnings announcement. The study covers the period between 1997 and 2007. Investigations were done on the changes in trading volume in relation to earnings announcement effect. The metrics used were initial abnormal return (IAR) and initial abnormal trading volume (IAV) to observe the earnings announcement effect rather than the commonly used earnings related metric of SUE. Two different models were used to estimate abnormal returns, both a Fama- French 3-factor model and an extended trend connecting 4-factor model adding another to account for long term trends. Post-earnings announcement effect (Momentum) was found for abnormal volume metric, which suggests that the market is not efficient. Nevertheless, a long position in the highest quintile of IAV combined with a short position in the lowest quintile earned a significant abnormal return of ranging from 4.72% to 8.16% per year depending on the normal return model used and holding period. When the sample was restricted to large cap stocks, the strategy was less profitable but still earned abnormal returns of 3.55% for a 60-day holding period. This led to a conclusion that transaction costs should not be preventing investors from exploiting this anomaly.

Akbar and Baig (2010) studied the reactions of stock prices to dividend announcements and market efficiency in Pakistan. It analyzes cash, stock, and simultaneous cash and stock dividend announcements of 79 companies listed on the Karachi Stock Exchange from July 2004 to June 2007. Abnormal returns from the market model are evaluated for statistical significance using the t-test and Wilcoxon Signed Rank Test. The findings suggest negligible abnormal returns for cash dividend announcements. However, the average abnormal and cumulative average abnormal returns for stock and simultaneous cash and stock dividend announcements are mostly positive and statistically significant.

Liyambula (2014) studied the reaction of the stock prices to dividend announcements and market efficiency in Namibia. The reaction of stock prices to dividend announcements and market efficiency in the Namibian Stock Market has been analyzed in this study. Furthermore, the behavior of stock prices from 2008 - 2011, using a sample of 12 out of 33 companies listed on the Namibian Stock Exchange was explored. The study used a sample of 12 companies from 33 listed companies. The companies that were included in the sample were those that would have had to have daily stock prices throughout the entire study period and would have had to announce cash dividends at least once a year. The event study methodology (as implemented

by Ball and Brown, 1968), was adopted in this study, which explores the reaction of stock prices before, during and after the event date -where the event date was defined to be the last day of trading. The results from the analysis have shown that stock prices react positively to the announcements of dividend information, especially a few days before the last day of trading. This was attributed to the fact that most investors normally try to dispose of the nonperforming shares and acquire those shares that show more promise to pay dividends at a later stage. Furthermore, only those investors who are in possession of dividend promising shares before the last day of trading will benefit from the dividend. The results of the analysis also show that stock prices tend to start rising beyond the event date. The rise is, however, a unique finding of the study, which was found to be contrary to what has been recorded in literature.

Uwuigbe et al (2012) examined the determinants of share prices in the Nigerian stock exchange market. Using the judgmental sampling technique, a total of 30 companies were selected and data (2006 to 2010) collected from the stock exchange and annual reports of the firms. The paper modeled 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 (proxies by debt-equity ratio) had significant negative influence on the market value of share prices in Nigeria.

Mecagni and Sourial (1999) used the dividend expectation model and the market model to determine the effect of dividend announcements on stock price on securities listed on the Egyptian stock market. To empirically examine the adjustment of common stock prices to quarterly dividend announcements, a measure of unexpected change in dividends was first derived. Justification for the naïve expectation model was derived from the reluctance change dividend assertion, which states that managers do not change dividends payments unless they have reasons to expect a significant change in the future prospects of the firm. In order to isolate possible dividends effects from those of earnings, the study examined only those quarterly dividend and earnings announcements conveyed to the public on different dates within any quarter. The measurement of the abnormal performance was done by use of the market model. This study attempted to resolve the empirical issue as to whether or not, quarterly dividend announcements convey useful information beyond that provided by quarterly earnings numbers. Cumulative abnormal returns were found to be significant and the CAR was found

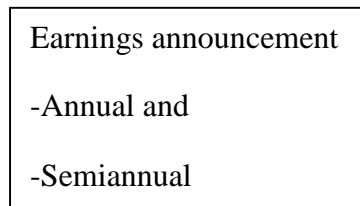
to be spike shaped meaning that CARs rose sharply and then fell sharply in the event period. This implies non-persistence of CAR.

2.10 Research Gap

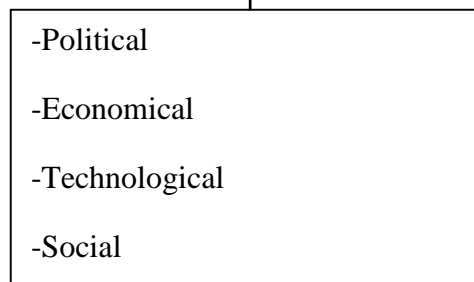
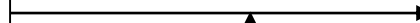
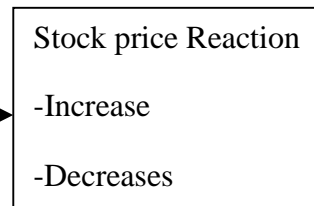
Many studies undertaken in the relationship between earnings announcements and stock prices were done in developed markets. Studies done by Butler, Kraft and Weisis (2003) found out that annual earnings announcements were less informative than interim reports in countries with more frequent interim reporting. These were because stock prices impound annual earnings information at an earlier point in time when interim reporting is more frequent. McNicholas and Manegold (1983) documented that information of annual earnings announcements decrease after firms listed at on the American stock exchange switch from annual to quarterly financial reporting, thus, they concluded that interim reporting was more informative than annual financial reporting. Beaver (1968) conducted a study on the relationship between interim and annual earnings announcements and stock market behavior in the U.S. He found a drastic increase in trading volume and a high variability in stock return in 17 weeks surrounding the announcement date. His conclusion was that the earning reports have information content which could affect the stock prices. On the other hand Cornell and Landsman (1989) found evidence that annual earnings announcements have greater stock price impacts with comparison to interim quarter's earnings announcements. This position might be supported by the fact that annual earnings are usually audited and are more reliable. They also conclude that the fourth quarter announcements are more informative for the analysts and investors than their interim quarter announcements. The problem is that there has never been a research done in Kenya to establish the relationship between interim and annual earnings announcements and stock prices and this research will help to fill in the gap.

2.11 Conceptual Framework

Independent variable



Dependent variable



Intervening variables

Figure 2.1: Conceptual Framework

Source: Reviewed Literature

Interim and annual earnings announcements constitute an informational event. When a listed company announces its interim and annual earnings, investors use this information to make their buy and sell decisions. According to the semi strong-form EMH, security prices adjust rapidly to the release of all public information. Therefore depending on the economic significance of that information, price will rise or fall to a new level. The movement in share prices is brought about by either normal market reaction or abnormal market reaction that further leads to increased returns, above the expected market return. Keen investors are able to outdo the market from the abnormal returns observed proving inefficiencies in the market. The stock prices will be influenced by social and political factors, firm specific factors, economic factors and regulations of the Nairobi Stock Exchange players including listing requirement

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter presents the research design, target population, sample size, data collection and data analysis and presentation.

3.2 Research Design

This study adopted a descriptive design. According to Mugenda (2009), descriptive design explains the relationship between two or more variables. Thus the research design establishes whether there is a relationship existing between stock prices and earnings announcements. This study used event study as used by Beaver (1968). In an event study, one infers whether an event, such as an earnings announcement, conveys new information to market participants as reflected in changes in the level or variability of security prices or trading volume over a short time period around the event. Rono (2010) used wide event window of (-10 to +10). This study adopted a window of (-10 to +10) in order to come up with normal market returns and to capture possible pre-event reaction. This was due to the abnormal nature of the information environment in developing stock markets, where there is a possibility for the markets to start reacting long before the actual announcements. As in Ball and Kothari (1991), the short-term period uses daily data where the event window is -10 days before and +10 days after the announcement date and day 0 is the event date. The 10 days before the announcement date helps to determine if the news leaked into the market before the announcement date.

3.3 Target Population

The target population for this study was all the companies listed at the Nairobi Securities exchange from the year 2012 to 2016 study period. Listed firms were preferred because they are required by the Capital markets Authority (CMA) to publish their interim and yearly financial statements and thus this information was available at the NSE.

3.4 Sample Design

The sample consists of 7 companies that continuously announced interim and annual earnings during the study period that was from 2012 to 2016. A purposeful sampling method was employed for the study. The companies were to have daily stock prices throughout the entire study period and had to announce both interim and annual earnings announcements during the

study period. The sample selection was based primarily on the criteria that only firms continuously announced interim and annual earnings were considered during the period 2012 to 2016 were included in the study. Thus companies with insufficient data points, either as a result of non-trading or lack of earnings announcements were excluded from the sample.

3.5 Data Collection

This study used secondary data from the Nairobi Securities Exchange database. The stock prices and earnings were obtained from the NSE five year. The data was found from published annual and interim reports of the NSE that provide listed company's financial performance information for a period of five years. This method of data collection was chosen because stock prices of listed companies were readily available at the NSE library. Confounding events such as bonus issues, stock splits, rights issues, management changes (hiring or dismissal of key management staff), restructuring (either operational or financial), mergers and acquisitions were excluded from the study. Only firms that had both interim and annual earnings announcement during the study period were considered. This was to ensure that the price movement was solely due to the earnings announcements (Mlonzi et al., 2011).

3.6 Data Analysis and Presentation

The market model was used to calculate the daily abnormal returns. The study considered an event window of 21 days focusing on 10 days before the event ($t = -10$) and 10 days after the event date ($t = 10$) with the event day represent by $t = 0$. The 21 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 event was the earnings announcement while the event date was the date of announcement and the event window included the event date. The period around the event date was used to aggregate abnormal returns on the individual stock. The abnormal return data was analyzed by Statistical Package for Social Sciences (SPSS) version 17.0. Data was analyzed by descriptive and inferential statistics and significance tested by T-test. The level of significance was set at 5%.

The return of securities at day t was computed by using the following formula;

$$R_{it} = \frac{(P_{it} - P_{it-1})}{P_{it-1}} \dots\dots\dots \text{Equation 1}$$

where;

R_{it} = daily return for security i on trading day t

P_{it} = closing price of share i on trading day t

P_{it-1} = closing price of share on trading day t-1

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

$$AAR_t = \sum \frac{AR_{jt}}{N} \dots\dots\dots \text{Equation 2}$$

where:

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

AR_{jt} = abnormal return security j at day t.

The actual abnormal returns were aggregated to draw an overall conclusion on the earnings announcement. To accommodate a multiple period event window, the study made use of the cumulative average abnormal return {CAARt}. The cumulative average abnormal returns {CAARt} for all the firms for 21 days were then cumulative as the sum of the abnormal returns.

$$CAAR_t = \sum_{t=-10,+10} AAR_t \dots\dots\dots \text{Equation 3}$$

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This section deals with the presentation, discussion and analysis obtained from the research. It presents the descriptive analysis of the study as well as the statistical analysis undertaken to test the research hypothesis. The general objective of the study was to investigate the effect of the earnings announcement on the share prices at Nairobi Securities Exchange (NSE), of which some listed companies were used for the analysis. The data used in this analysis was obtained from the Nairobi Securities Exchange (NSE). The effect of earnings announcements on stock prices were checked by calculating Abnormal Returns (AR), Average Abnormal Returns (AAR) and Cumulative Average Abnormal Returns (CAAR) using the market model. T-statistic at 5% level of significance was used to test the significance of AAR and CAAR.

4.2. Descriptive Statistics

The descriptive statistics for each of the sampled stocks returns in the study were presented. This analysis was based on the secondary data which spans from January 2012 to December 2016. The mean, minimum, maximum, standard deviation, and skewness were calculated using SPSS package for each of the 7 stocks over the five-year period and are reported in table 4.1 below.

4.2.1 Interim Returns

Descriptive statistics for interim returns were calculated and the findings presented in the table below;

Table 4.1: Descriptive Statistics following Interim prices Announcement

Stock	N	Min	Max	Mean	Std. Deviation	Skewness
KPLC	21	17.2500	18.1000	17.599405	.2685457	.534
Sasini	21	13.40	14.18	13.7667	.30031	.165
Barclays	21	25.42	26.58	25.8976	.36757	.445
Nation	21	216.00	224.80	220.1619	2.23304	.333
Bamburi	21	183.20	190.80	188.2667	1.71736	-1.279
BAT	21	430.00	464.20	447.1238	10.86158	.336
EABL	21	201.80	219.00	213.0286	5.50247	-.936

The summary of the descriptive statistics for all the sampled stock returns over the five year period of study shows both positive and negative skewness. The returns for two stocks; Bamburi and EABL showed negative skewness of -1.279, and -0.936 respectively. This indicates that there was a high probability that distributions of returns of these stocks were negative. However, the returns for five stocks; KPLC, Sasini, Barclays, Nation, and BAT showed positive skewness of 0.534, 0.165, 0.445, 0.333, and 0.336, respectively thus indicating that their returns distributions have a high probability of being positive.

4.2.2 Annual Returns Descriptive Statistics

Table 4.2: Descriptive statistics following annual prices announcements

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
						Statistic	Std. Error
KPLC	21	57.88	63.23	60.9865	1.11434	-.623	.501
Bamburi	21	172.20	190.00	179.561	5.72071	.170	.501
BAT	21	355.80	381.80	370.038	9.98331	-.140	.501
Barclays	21	31.06	33.37	32.1914	.92223	-.049	.501
Sasini	21	12.69	13.17	12.9238	.15118	.036	.501
EABL	21	228.60	243.20	237.419	4.85506	-.243	.501
Nation	21	208.60	237.00	221.561	9.49623	.211	.501

The summary of the descriptive statistics for all the sampled stock returns over the five year period of study shows both positive and negative skewness. The returns for Bamburi, Sasini, and Nation showed positive skewness of 0.170, 0.036, and 0.211 respectively. This indicates that there is a high probability that distributions of annual returns of these stocks were positive. However, the returns for four stocks; KPLC, BAT, Barclays, and EABL showed negative skewness of -0.623, -0.140, 0.049, and -0.243, respectively thus indicating that their returns distributions have a high probability of being negative.

4.3 Calculation of Abnormal Returns ARs and CARs

By theory, stock markets should be efficient in terms of information and thus, existing no relationship between earnings announcements and stock returns. Inefficient market exists if individual or companies are to trade and make excess returns basing on new information such as earnings announcements. In efficient market, information leads to quick adjustment of and thus no excess returns expected especially around earnings announcements dates.

The impact of an event such earnings announcement is measured by use of abnormal returns at the moment the information is introduced into the market. The abnormal returns for each firm are calculated during the event window and statistical significance is used to determine the impact of the newly released information (Bodie et al, 2008). The market model was used to calculate the AAR and CAAR during the event window. The markets AAR and CAAR were

obtained by calculating the daily average AAR and CAAR for the 21 observations. To test for significance, the t-statistic for the AAR and CAAR were obtained and compared to the t-table values at 5% level of significance.

4.4 Stock Prices Reaction to Interim Earnings Announcement

The market model was used to calculate the AAR and CAAR during the event window. The markets AAR and CAAR, was obtained by calculating the daily average AAR and CAAR for the 7 observations. To test for significance, the t-statistic for the AAR and CAAR were obtained and compared to the t-table values at 5% level of significance. The calculated AAR was fitted in a time plot to establish the trends. The AAR and CAAR were calculated for the entire study period. The findings are presented in the table 4.3;

Table 4.3: Abnormal and cumulative abnormal returns following Interim Returns Announcement

DAY	AARs	CAARs
-10	-0.02178	-0.02178
-9	-0.01971	-0.04148
-8	-0.02552	-0.067
-7	-0.02283	-0.08983
-6	-0.02269	-0.11252
-5	-0.02183	-0.13435
-4	-0.02266	-0.15701
-3	-0.02451	-0.18152
-2	-0.02154	-0.20306
-1	-0.02207	-0.22512
0	-0.02771	-0.25283
1	-0.02598	-0.27881
2	-0.02012	-0.29893
3	-0.02952	-0.32845
4	-0.01962	-0.34807
5	-0.0239	-0.37197
6	-0.02852	-0.40048
7	-0.02318	-0.42367
8	-0.02848	-0.45215
9	-0.02812	-0.48027
10	-0.02713	-0.5074

The calculated AAR and CAAR were fitted in a time plot to establish the trends. The graphs are as follows;

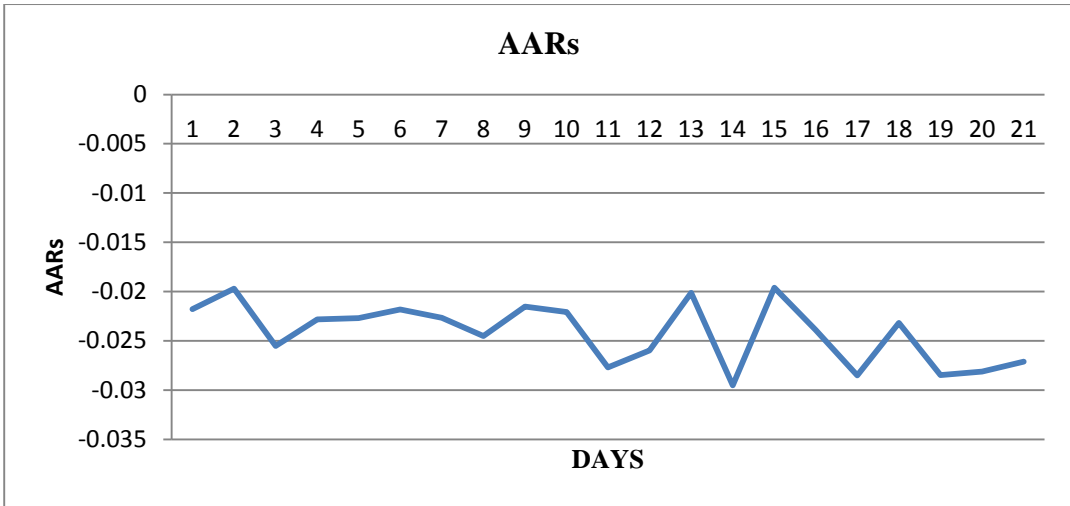


Figure 4.1: Trend of average abnormal returns

The impact of an event is measured by use of abnormal returns at the moment the information is introduced into the market. The abnormal returns for each firm are calculated during the event window and statistical significance is used to determine the impact of the newly released information (Bodie *et al*, 2008).

A careful observation of the results presented in table 4.3 and in the figure 4.1 above reveals that the AARs tend to stay significantly negative 10 days before and after the announcement date. The AARs tend to become more negative towards the announcement date reaching -0.02771 on the announcement date. After the announcement date, the AARs rose to -0.02012 on day +2 followed by a sharp decline on day +3 which is significantly negative at -0.02952. On the fourth day after announcement, the AARs increased significantly to -0.01962. After day +4, the AARs started drifting and becoming more negative.

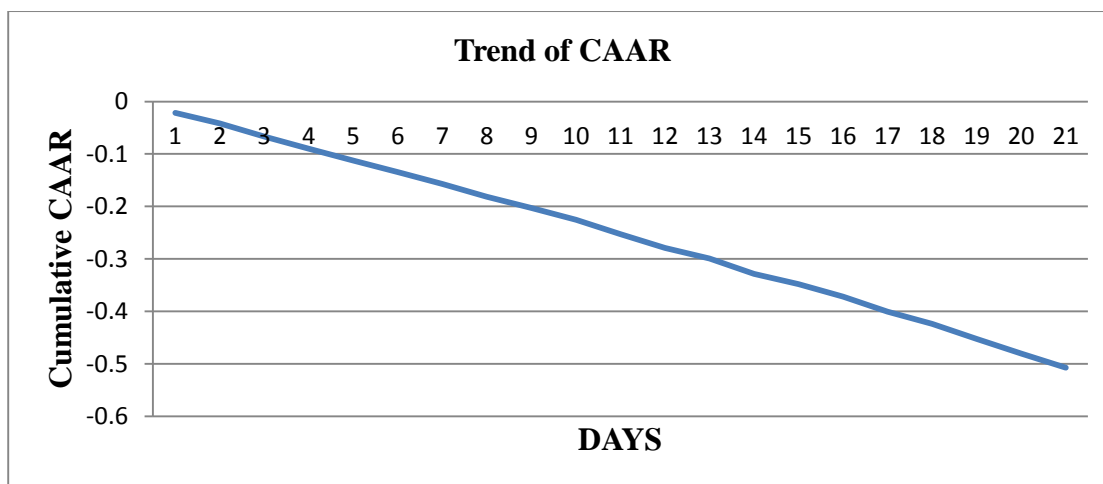


Figure 4.2: Trend of cumulative average abnormal returns

We summed the calculated AAR for all the firms during the 21 days event window so as to obtain the CAAR. Leakage of information complicates the event studies (Bodie *et al*, 2008). He further clarifies that this happens especially when information concerning a relevant event is released to a small group of investors before official public announcement which causes the stock prices to change prior to the announcement causing any abnormal returns on the event date to be a poor indicator of the total impact of the event. When this happens, cumulative abnormal returns are a better indicator of the impact (Bodie *et al*, 2008).

The CAAR remained significantly negative during the entire study period. The significant and negative ARs and CAARs in the period surrounding interim announcement suggests that earnings announcement do convey information which the market uses in revising share prices. The persistent drift of the mean CAR, 10 days after the announcement day, indicates that the market failed to adjust instantaneously and unbiased to earnings disclosures, further suggesting that significant negative AARs could be earned by trading on the information contained in the interim earnings information disclosure for the sample firms in our study. This phenomenon of low AAR on and surrounding the announcement day may be that, investors were uncertain or anticipated low earnings hence their confidence in the stock faded around the announcement days which caused the fall in the abnormal returns. This shows some level of inefficiency where the market takes a considerable amount of time to adjust to the effects of interim earnings announcements. On the whole, the results are inconsistent with the efficient markets hypothesis (EMH) which states that the price reaction to new information must be instantaneous and unbiased. However, the findings support the information content hypothesis that earnings information disclosures do contain relevant information which drives stock prices.

4.4.1 Test for statistical significance

The average abnormal returns for individual companies were tested for statistical significance using the t test. The findings are shown in table 4.4.

Table 4.4: T-test for average abnormal returns for each stock for all individual firms

	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
KPLC	3.375	18	.003	.3300000	.1245475	.5354525
Sasini	-15.744	18	.000	-.57800	-.65513	-.50087
Barclays	4.162	18	.001	.51200	.25355	.77045
Nation	-2.083	18	.05	-1.78000	-3.57503	.01503
Bamburi	1.134	18	.02	.88000	-.75038	2.51038
BAT	-5.898	18	.000	-17.58000	-23.84231	-11.31769
EABL	3.351	18	.004	6.54000	2.44022	10.63978

The t values for all the companies are significant since the Sig. (2-tailed) values were less than the p-values. This implies that at these companies, interim earnings announcements carries relevant information that influences stock prices. The earnings for the seven companies were averaged and then tested for significance using t test. The findings were presented in the table below

Table 4.5: T test statistics for the averaged AARs at 5% significance level

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	8.844	.008	2.37	18	.029	.0029430	.0012407

The hypothesis which stated that interim earnings announcements have no effect on stock prices at the NSE was rejected. From the t statistics table, it can be observed that the Sig. (2-tailed=0.029) is less than 0.05. This implies that ARs are statistically significantly different. A

conclusion can therefore be drawn that interim earnings announcements have an effect on stock prices. This agrees to Mathuva (2012) who indicated that interim reports are an important source of information that provides users with timely information to make decisions. The findings further agree to Shores (1990) and McNichols and Manegold (1983) who informed the importance of interim announcement as one of the main sources to obtain information for users, and they argued that interim reporting has become another important instrument that allows listed companies to communicate with its shareholders.

4.5 Stock Prices Reaction to Annual Earnings Announcement

The market model was used to calculate the AAR and CAAR during the event window. The markets AAR and CAAR, was obtained by calculating the daily average AAR and CAAR for the 7 observations. To test for significance, the t-statistic for the AAR and CAAR were obtained and compared to the t-table values at 5% level of significance. The calculated AAR was fitted in a time plot to establish the trends.

The AARs and CAARs were calculated for the entire study period. They were then plotted to obtain their trends over the study window. The findings are presented in the below

Table 4.6: Average Abnormal Returns following Annual Earnings Announcement

DAY	AARs	CAARs
-10	0.185797	0.186143
-9	0.360984	0.547127
-8	-0.20198	0.345142
-7	0.312185	0.657327
-6	0.149464	0.806792
-5	0.001826	0.808618
-4	0.362942	1.17156
-3	0.085368	1.256928
-2	0.240304	1.497232
-1	-0.18118	1.316049
0	2.09162	3.40767
1	-0.25955	3.148121
2	0.275553	3.423674
3	0.626649	4.050323
4	-0.01416	4.036166
5	0.146061	4.182228
6	-0.62152	3.56071
7	0.332176	3.892886
8	0.243542	4.136428
9	0.28652	4.422949
10	-0.01055	4.412401

From the table, it can be observed that the AARs remained positive for most of the days prior to the annual announcement day. The AARs were only negative only on day -8 and day -1. On the announcement day, there was a sharp increase in the AARs. This was followed by a sharp decline the day after the announcements were made. The AARs remained positive for most of the days after the annual announcements were made. The only days that had negative AARs after the announcement were day +1, day +4, day +6, and day +10. The CAARs remained positive over the entire study window and showed an increasing trend.

The trends in the AARs and CAARs over time are shown the graph below;

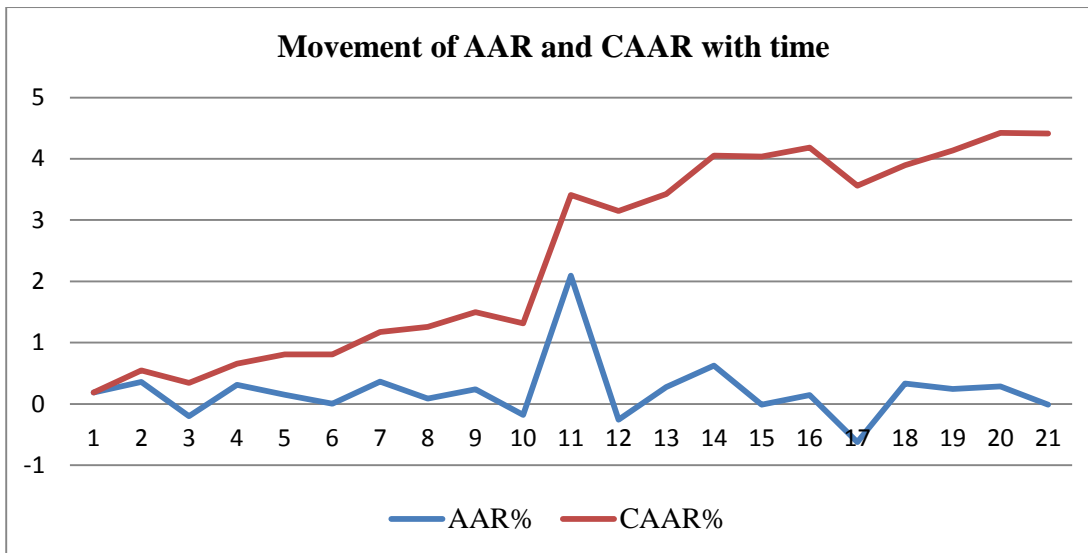


Figure 4.3: The trends in the AARs and CAARs over time

From the graph, it can be observed that the AAR had a sharp increase on the announcement day reaching 2.09162. This was followed by a sharp decline to -0.25955 a day after the announce day. The AARs generally showed a declining trend after annual earnings announcements with the minimum returns occurring on the 6th day after announcement recording a value of -0.62152. The decline observed prior to the announcement date shows adjustment of stock prices to informational expectations especially when close to the earnings announcement date.

The CAAR showed an increasing trend up to one day prior to earnings announcement where a drop was observed. On the annual returns announcement date, the CAAR increased sharply to 2.09162. This was followed by a slight decline the day after announcement. The CAAR then generally showed an increasing trend reaching 4.182228 on the last day of the study window. The findings are in line with Firth (1976) who did a study on the effect of annual earnings announcements on the share prices of 87 firms drawn from breweries, retailers, shipping and banks sectors. Firth found out that on the day of the announcement, positive results abnormal gains were recorded.

The positive trend observed in the CAAR prior to annual announcement day could be interpreted to indicate that on the days before the announcement date, the public anticipated that the announcement will contain some positive information. This is indicated by increasing

CAAR on the days before the announcement was made. On the day before the announcement day, the CAAR drops. This decline likely resulted from information leakage. Leakage of information complicates the event studies (Bodie et al, 2008). This happens especially when information concerning a relevant event is released to a small group of investors before official public announcement which causes the stock prices to change prior to the announcement causing any abnormal returns on the event date to be a poor indicator of the total impact of the event. After the annual announcements were made, the CAAR increased and continued increasing up to the last day of study period. This implies that upon announcement, the suspicions brought about by information leakage were eliminated leading to an increase in share prices

4.5.1 Test for statistical significance for individual firms

The average abnormal returns for individual companies were tested for statistical significance using t test. The findings are shown in table 4.7 below;

Table 4.7: T-test for Equality of Means

	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
KPLC	.158	18	.047	.08240	-1.01661	1.18141
Bamburi	-9.210	18	.000	-9.44000	-11.59349	-7.28651
BAT	-15.48	18	.000	-19.16000	-21.75987	-16.56013
Barclays	-27.48	18	.000	-1.79600	-1.93329	-1.65871
Sasini	.252	18	.004	.01700	-.12498	.15898
EABL	9.135	18	.000	8.80000	6.77603	10.82397
Nation	-8.947	18	.000	-17.16000	-21.18968	-13.13032

The t values for all the companies are significant since the Sig. (2-tailed) values are less than the 0.05. This implies that at these companies, annual earnings announcements carry relevant information that influences stock prices. The earnings for the seven companies were averaged and then tested for significance using t test. The findings are presented in the table below

Table 4.8: Independent Samples Test

	Levene's Test for		t-test for Equality of Means			
	Equality of		T	Df	Sig.	Mean
	Variances					
	F	Sig.			(2-tailed)	Difference
Equal variances						
assumed	1.848	.191	.207	18	.039	.0424857

The hypothesis which stated that annual earnings announcements have no effect on stock prices at NSE was rejected. From the t-statistics table, it can be observed that the abnormal are not statistically significantly different because the Sig. (2-tailed=0.039) is less than 0.05. This shows that annual earnings announcement have significant effect on the stock prices.

These findings are in line with the findings of a study conducted in France by Gajewski and Quéré (2001) who found out that there is a significant stock price reaction to both half-year and annual earnings announcements. The findings also agree to Gupta (2006) who did a study on, Impact of earnings announcements on stock prices in the Indian market. The findings concluded that earning announcements contain important information which causes stock prices to adjust rapidly in the market. The findings further agree to Kipronoh (2013) who studied stock price response to earnings announcements at the NSE. This study examined the stock market response earnings information releases using daily price data from the Nairobi Securities exchange for a two year period (2012 to 2013). The findings indicated occurrence of significant abnormal price reaction around the earnings announcement periods suggesting that earnings announcements do contain relevant information.

These results are consistent with those of Das *et al*, (2008) who studied the effect of quarterly earnings announcements on the stock price movement of the firms constituting the BSE-Sensex and found the abnormal returns around the event date to be not significant irrespective of the quality of announcement. Thus the results of this study indicate that investors at the NSE cannot earn abnormal returns around the annual earnings announcement date. This is because the information is already contained in the share prices giving no undue advantage to any investor, indicating that the market is semi-strong efficient in relation to annual earnings announcement.

4.6 Relationship between interim stock returns and annual stock returns following earnings announcements.

Correlation analysis was conducted to test the relationship between interim stocks returns and annual stock returns following announcement. This was achieved using correlation analysis .The following hypotheses were tested at 95% confidence level.

HO: There was no statistically significant relationship between interim stock returns and annual stock returns.

HA: There was statistically significant relationship between interim stock returns and annual stock returns. Reject the null hypothesis if p- value<0.05. The correlation analysis findings are presented in the table 4.9 below.

Table 4.9: Correlations

		Annual	Interim
Annual	Pearson Correlation	1	.425
	Sig. (2-tailed)		.049
	N	21	21
Interim	Pearson Correlation	.425	1
	Sig. (2-tailed)	.049	
	N	21	21

The hypothesis which stated that there was no relationship between interim and annual earnings announcements was rejected. The Pearson correlation coefficient obtained was 0.425. This implies that there was moderate positive relationship between interim stocks returns and annual stock returns following announcement.

The Sig. (2-tailed) obtained was 0.49. It was less than 0.05 implying that the association between interim stocks returns and annual stock returns following announcement was not statistically significant. These results are consistent with those of Gajewski and Quéré (2001) who found out that there is a significant market reaction to both half-year and annual earnings announcements. The authors also conclude that the reaction to annual earnings is stronger than the reaction observed for half-year earnings. Beaver (1968) conducted a study on the relationship between interim and annual earnings announcements and stock market behavior

in the U.S. He found a drastic increase in trading volume and a high variability in stock return in 17 weeks surrounding the announcement date. His conclusion was that the earning reports have information content which could affect the stock prices.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This study was done to investigate the effect of earnings announcements on share prices. Share price data from the Nairobi Securities Exchange was used in the investigation. The scope of observation was 10 days prior to the announcement date and 10 days after the announcement date for each company considered. Day 0 was set to represent the date when the earnings announcement was made.

5.2 Summary of the Findings

5.2.1 Impact of interim earnings announcements on stock prices at the NSE.

The first objective was to determine the effect of interim earnings announcements on stock prices at the NSE. The study established that interim announcements had significant effect on stock prices in all the companies studied. The t values obtained for all the companies were significant since the p values (0.000, 0.310, 0.206, 0.000, 0.017, 0.484, and 0.219) were all less than the 0.05. This implies that at these companies, interim earnings announcements carry relevant information that influences stock prices. The market model was used to calculate the average abnormal returns (AAR) and cumulative average abnormal returns (CAAR) during the event window. Statistical significance was used to determine the effect of the newly released information. The t-test gave a t statistic of -35.456 and a p value of 0.0001 which is less than 0.05. This implies that in general, interim returns announcements have significant effect on the stock prices and therefore contain key information that investors use to make investment decisions. Thus hypothesis HO_1 which predicted that interim earnings announcements have no effect on stock prices was rejected.

5.2.2 Impact of annual earnings announcements on stock prices at the NSE

The second objective was to determine the annual earnings announcements on stock prices at NSE. The study also established that annual earnings announcements influence and had significant effect on stock prices at the NSE. Thus the hypothesis HO_2 which predicted that annual earnings announcements have no effect on stock prices was rejected.

5.2.3 The impact of the relationship between interim and annual earnings announcements on stock prices at the NSE.

The study further determined the relationship between interim announcements and annual announcements. The Pearson correlation coefficient obtained was 0.425. This implies that there was moderate positive relationship between interim stocks returns and annual stock returns following announcement.

The p-value obtained was 0.49 less than 0.05 implying that the association between interim stocks returns and annual stock returns following announcement was statistically significant. The critical t-statistics for interim earnings was 0.029 and annual earnings were 0.039. This showed interim earnings announcement carried critical information then annual earnings announcement. It could be because stock prices impound annual earnings information at an earlier point in time when interim reporting is more frequent, annual earnings announcements are likely to be less informative in countries with more frequent interim financial reporting. Thus the hypothesis H₀₃ which predicted that there was no relationship between interim returns and annual returns for stocks at the NSE was rejected.

5.3 Conclusion

The results from this study showed that both interim and annual returns announcements had statistically significant effect on stock prices of the companies studied. This suggests that both interim and annual earnings announcement provide valuable information which the market uses to adjust share prices.

The critical t-statistics for interim earnings was 0.029 and annual earnings were 0.039. This showed interim earnings announcement carried critical information then annual earnings announcement. It could be because stock prices impound annual earnings information at an earlier point in time when interim reporting is more frequent, annual earnings announcements are likely to be less informative in countries with more frequent interim financial reporting.

According to the semi-strong form of EMH, stock prices reflect all publicly available information and trading on the basis of this information should not be profitable (Afego, 2011). This means that trading on information that is already publicly available should not result in significant abnormal gains or losses. From the results of the study it was observed that the calculated AAR and CAAR during the event window were not significant. This implies that

investors at the NSE cannot trade with the publicly available information around interim and annual earnings date to earn significant abnormal returns. Thus the NSE is semi strong efficient in relation to interim and annual earnings announcement.

It was observed that the companies recorded negative returns prior the announcements. A conclusion can thus be drawn that there was random nature of price adjustments where there was a negative market reaction before announcement. This portrays the level of literacy in the markets which are characteristics of developing countries Kenya not an exception. The investors are poorly informed and with the low technological advancements in the sector they are likely be biased in analyzing information. They tend to take time in responding to new information and do so at a future date. The study also found out that the stock market showed some level of inefficiency where it took long to adjust to the impacts brought about by interim and earning returns announcements. This inefficiency is common in the African markets due to the various institutional, infrastructural and regulatory weaknesses, including poor corporate governance practices which hinder access to information. In addition this can occur due to widespread corruption which may permit private acquisition of information.

5.4 Recommendation from the Study

The study found inefficiency in the stock market. It was imperative to note that efficiency in the stock markets has enormous benefits cutting across all sectors of the economy. This study therefore made various recommendations

5.4.1 Recommendation for Management Policy and Practice

The study recommends the government to strive towards attaining sustainable levels of market efficiency. Policy makers are recommended to act as a key to determining a clear policy framework for the Kenyan stock market. The government through its regulatory bodies; Capital Market Authority and Nairobi Securities Exchange should ensure that laws governing insider trading are adhered to by all participants in the stocks market. There is therefore need to efficiently monitor and control the stock market in order to improve efficiency. The ease and equality of access to information will boost the investor confidence and encourage healthy completion which improves information efficiency in the stock markets.

Due the low levels of technology and poor institutional frameworks amongst developing countries where Kenya is among them, the government should design training programs to

create more awareness in stock markets activities. This involves designing curriculums in tertiary colleges and universities on stock markets performance. The government should also increase the independence of regulatory institutions to be able to discharge their mandates without political interference. To improve on the overall liquidity large institutional and foreign investors should be attracted and encouraged to participate at the Nairobi securities exchange which has a small number of listed companies. This will encourage international investors to invest at the NSE and more so bring their expertise in the stock markets operations.

5.4.2 Companies

The companies have the sole responsibility of preparing and releasing the financial reports. They should therefore be compelled to release timely and accurate information to enable investors to make accurate decisions. Regulators and policy makers therefore have to impose stringent penalties on those companies that do not release their statements on time to deter others from following suit. Delayed disclosure sends negative signals to the market and therefore leading to investors making biased decisions. Timely disclosure will reduce unnecessary speculations. Accuracy in information releases enables the investors to make decisions based on real figures that are not manipulated to suit management needs and thus boosting their liquidity and confidence in the stock markets.

5.5 Recommendation for Further Study

Based on the findings of this study, a number of recommendations for further research are done;

Due to various technological and institutional changes, the extensive studies on the efficiency of Nairobi Securities Exchange have never been conclusive. This study therefore recommends more research to be done to provide more information to investors, traders, scholars and the general public. This study only focused on 7 companies from different sectors. This limited the scope of the study and therefore future research should be carried out to cover a larger sample that would enable wider generalizations to be made. To improve on this study, a similar study could be carried out to cover a longer period of time so as to obtain more reliable findings. The event window of 21 days can be increased further to be able to capture the quarterly earnings announcements that are also determining factors. This would help to give a better reflection of the dynamism in the stock markets. This study was limited to a single market among the wider developing markets in African continent. To obtain comprehensive evidence that in making generalizations about all the developing countries, future studies are required to be carried out for other emerging markets in Africa to ascertain the extent to which these findings can be relied

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APPENDICES

Appendix 1: List of Firms Listed in NSE

Agricultural Sector

1. Eaagads Limited
2. Kakuzi Limited
3. Kapchorua Tea Company Limited
4. Limuru Tea Company Limited
5. Rea Vipingo Plantations Limited
6. Sasini Tea and Coffee Limited
7. Williamson Tea Kenya Limited

Automobiles and Accessories

8. Car and General (Kenya) Limited
9. CMC Holdings Limited
10. Marshalls (EA) Limited
12. Sameer Africa Limited

Banking

13. Barclays Bank of Kenya Limited
14. CFC Stanbic Bank
15. Co-operative Bank of Kenya
16. Diamond Trust Bank (Kenya) Limited
17. Equity Bank Limited
18. Housing Finance Company Limited
19. Kenya Commercial Bank Limited
20. National Bank of Kenya Limited
21. NIC Bank Limited
22. Standard Chartered Bank Kenya Limited

Commercial and Services

23. Express Kenya Limited
24. Kenya Airways Limited
25. Longhorn Kenya Limited
26. Nation Media Group Limited
27. Scangroup Limited
28. Standard Group Limited
29. TPS Eastern Africa Limited (Serena Hotels)

31. Uchumi Supermarket Limited

Construction and Allied Sector

32. ARM Cement Limited

33. Bamburi Cement Company Limited

34. Crown Paints Kenya Limited

35. East African Cables Limited

36. East African Portland Cement Company

Energy and Petroleum

37. KenolKobil Limited

38. Kenya Electricity Generating Company (Kengen)

39. The Kenya Power & Lighting Co. Limited

40. Total Kenya Limited

41. Umeme Limited

Insurance

42. Britam Limited

43. CIC Insurance Limited

44. Jubilee Holdings Limited

45. Kenya Reinsurance Corporation Limited

46. Liberty Kenya Holdings Limited

47. Pan Africa Insurance Company Limited

Investment

48. Centum Investment Company (ICDCI) Limited

49. Olympia Capital Holdings Limited

50. Trans century Limited

Manufacturing and Allied

- 51. Boc Kenya Limited
- 52. British American Tobacco Kenya Limited
- 53. Carbacid Investments Limited
- 54. East African Breweries Limited
- 55. Eveready East Africa Limited
- 56. Mumias Sugar Company Limited
- 57. Unga Group Limited

Telecommunication and Technology

- 58. Access Kenya Group
- 59. Safaricom

Appendix 2: Data collection sheet

Day	Closing price						
	KPLC	Sasini	BBK	Nation	Bamburi	BAT	EABL
-10	18.1	13.48	25.53	218.8	188.4	430	215.2
-9	18.075	13.4	25.62	219.2	189.4	431.2	216.6
-8	18.05	13.54	26.11	219	187.2	437	218.2
-7	17.8625	13.52	26.1	218.2	188.4	437.4	218.4
-6	17.625	13.42	26.58	219	187.8	440.6	217
-5	17.5	13.45	26.49	218.8	189.2	439	217.8
-4	17.3875	13.43	26.18	219.6	189	441.8	219
-3	17.55	13.54	26.41	220.6	188	441.2	217.2
-2	17.5625	13.52	26.36	220.6	189	444	214.8
-1	17.8375	13.53	26.24	221	190.2	443	212.2
0	17.7875	13.66	25.73	216	189.2	443.4	206.2
+1	17.65	13.85	25.42	216.8	189.2	444	204.4
+2	17.2625	14	25.43	218.2	190.8	444.8	202.6
+3	17.3875	14.07	25.73	220.2	188.8	445.2	201.8
+4	17.2875	14.06	25.76	220	190.2	463	207.6
+5	17.25	14.18	25.76	221	189.2	464.2	208.8
+6	17.275	14.16	25.83	221.6	187	459.8	212.8
+7	17.3875	14.17	25.89	223.6	187	462.4	214.4
+8	17.5	14	25.68	223.4	183.2	460	217
+9	17.6375	14.12	25.55	224.8	186	456.8	216.4
+10	17.6125	14	25.45	223	186.4	460.8	215.2

Appendix 3: Financial Budget

ITEM	AMOUNT
TRANSPORT	5,000
STATIONARY	4,000
MEALS AND REFRESHMENTS	3,000
PRINTING AND BINDING	7,000
DATA COLLECTION COST	30,000
MISCELLANEOUS 10%	4900
TOTAL	53,900

Appendix 4: Work Plan

Task/Duration	July 2015	Aug 2015	Aug 2015	Sept 2015	May 2016	June 2017	October/Dec 2018
Study and development of literature review							
Proposal writing and consultation with supervisor							
Proposal Defence							
Corrections from defence and consultation with supervisor							
Data collection							
Data analysis							
Report writing and presentation							