# THE EFFECT OF DIVIDEND ANNOUNCEMENTS ON STOCK RETURNS OF COMPANIES LISTED AT THE NAIROBI SECURITIES EXCHANGE

BY

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RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF BUSINESS ADMINISTRATION DEGREE AT THE SCHOOL BUSINESS, UNIVERSITY OF NAIROBI.

# **DECLARATION**

I, the undersigned declare that this research project proposal is my original work and has not
been presented in any other University.
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To my great family and friends whose inspirations made mountains possible to climb, may God richly bless you all and receive my great honour.

# **DEDICATION**

I dedicate this project to my mom Alice Akomo. To my siblings Violet, Emily and Mercy, Kennedy, George and to my family and friends. God richly bless you all.

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# LIST OF ABBREVIATIONS

AAR- Average Abnormal Returns

AIM - Alternative Investment Markets

CAR- Cumulative Average Abnormal Returns

CBN- Central Bank of Nigeria

CERs- Cumulative excess returns

CMA- Capital Market Authority

DSE- Dhaka Stock Exchange

**EMH-Efficient Market Hypothesis** 

MIM- Main Investment Markets

NASI- NSE All Share Index

NASDAQ

NPV-Net Present Value

NSE -Nairobi Securities Exchange

NYSE-New York Securities Exchange

S & P 500 –Standard and Poor Index

SEC- Securities and Exchange Commission

WAN-Wide Area Network

#### **ABSTRUCT**

Dividends has been time and again used to make earnings distributions to shareholders in addition to capital gains that is realized when investors decides to sell off their stock holdings. Dividends declared therefore has information that portray the firm as either being liquid or not in the current market in light of distribution of earnings and the future potentiality of the company to excel. Dividends announcement fulfils the commitment by management to offer better returns for the investors given the prevailing economic situations by taking on projects with positive Net Present Values. Expectation plays a major role in two ways, that if the announced dividend is up to the shareholders expectation, share prices in the market will respond positively and equally true is that if the announced dividends fall short of expectations market price will negatively respond. The study had an objective to determine the effect of the announcement of dividends and the implications for returns on stock for listed firms at the NSE.The study employed an event study methodology where the effect of dividends announcement on stock returns was determined by putting to investigation all companies at the NSE which had dividends announcement from 2009 to 2013 through an event window of 21 days. The study collected secondary data from the NSE, consisting of stock prices for 10 days before and after dividend announcement day.NSE-20 share price index was used for 30 pre and post event day. Abnormal returns were computed over the event window and a graph of cumulative abnormal return was drawn to highlight the trend. Stock returns were observed to portray more positive trend immediately after the announcement of dividends, while before the announcement the trend was varied with two out of five periods considered giving a climb and the rest dived to the event day. The test of significance rejected the null hypothesis that the announcements of dividends has no effect over returns of stocks for firms listed at the NSE. This study established that dividends announcement have significant influence on stock returns at the NSE trading. We therefore recommend that dividend information be made more transparent to avoid earnings management and insider trading ,this in addition to accurate reporting of financial statements, which can be made possible through the action of CMA,NSE trading rules and the accounting fraternity reporting standards. Investing public too need to be educated on other dynamics of stock returns such as the general economic situations which informs trading of stocks and the part that is played by events such as dividends announcement. More companies too need to consider dividend declaration as it positively influence liquidity at the NSE and consequently provide positive returns.

#### **CHAPTER ONE**

# INTRODUCTION

# 1.1 Background of the Study

In Corporate world, managers do make important decisions about investments and financing (Baker and Powell, 2005). When managers make such decisions, they have to consider the cost and returns that is acceptable and sustainable within their contractual engagement with their employer. Investments will need cash outlay to be realized, when managers choose projects with positive Net Present values (Bashir et al 2013). Investors come in to finance these projects and they do so through markets. Managers would therefore, in making investment decisions will include in their decision set, first the internal sources of cash availability and secondly if the internal source is not adequate, they will consider external source, through a financing media. Dividends announcement and payment policy comes in the picture to play an important role and affect both investment and financing decision's options available to the company. (Baker, 2009).

Dividends announcements portray the firm as either being liquid or not in the current market conditions. Expectation plays a major role, in that if the announcement of dividend amount fulfils the need and to the expectation of stockholders; positive response will be registered in the market stock prices and consequently impact on stock return. Dividend increments signify good news to investors that the management has high optimism that cash flows in the nearby future would be generated by investment decision to be undertaken, and that firm's value will increase through continuous rise in stock price (Manzoor, 2015). On a short time scale, Fracassi (2008) noted that stock price reacted negatively to a dividend increase announcement. For the last four centuries income distribution through dividend payments have been noted across firms all over the world (Baskin, 1988), yet the key motivation behind this policy as practiced by corporation is still a major subject of debate in the academic community.

Miller and Modigliani (1961) in a study noted the fact that the valuation of a firm can be done independently away from dividend it pays and is equivalent as that of a firm that does not pay dividends with underlying assumptions. Consequently shareholders wealth remains unaffected. Black (1976, p. 5) narrated how puzzling the dividends concept is and what it brings to mind. This was to illustrate how unwittingly misplaced people judge the underlying different corporate dividend payment policies. This explains the fact that time and again the same picture of dividend is viewed differently as if it comes with hard and puzzling gaps that needs to be filled.

It is also true that the same has attracted appreciably many theories that have put forward explanations about the phenomenon of dividend with an equally little or no consensus reached. Out of these theories, a larger number view agents as rational when it comes to maximizing investor's wealth by investing optimally per rules like fisherian criterion and dividends are either used efficiently to mitigate on the agency problems or as a means by which the problems of information asymmetry can be resolved(Itzhak ,2010). This study seeks to test and determine the sensitivity of market returns for stocks of listed firms at the NSE during the period of dividend announcements.

#### 1.1.1 Dividends Announcements

Dividend announcement is an important event and is used by managers to convey their inner feelings in regards to future outlook of a company when markets are not perfect—when markets are not perfect, (Nur-Adina et al 2002). When markets are not efficient informationally, managers have much better information than investors with respect to firm's future prospects, including investment opportunities, related returns and general business and economic situations. In that scenario, dividend announcements may be used to communicate the information about the level of confidence management has and accordingly reduce gaps in the level of information. This is often referred to as dividend signaling hypothesis as stated by Bhattacharya (1979), Miller and Rock (1985) and John and Williams (1985).

Ghada, (2015) observed a situation that the stock prices do not adjust rapidly to the new dividend

information. During such dividend announcement and time lag to incorporate dividend information to stock prices, investor can take advantage of the inefficiency to earn returns that are above the market normal return, which may persist until such a time that the market realize otherwise. This happens as Investors are always keen to increase their investments holdings by earning good returns and therefore on the constant look out for optimal investments opportunities. This they can realize by making use of analyst technical information and other information from signaling devices. High dividends payout depicts how profitable the company is and its good investments decisions that the management make. Dividend announcements provide information on distribution of earnings of the company in the current period, and equally project better performance in the future. Considering an assumptions of an inefficient market, information content of dividend is conjectured as having the ability that can fill the gaps and sends signal to the investors.

In the finance literature, many have laid formidable proofs that prices for stocks change after the firm announces their dividends (Bhattacharya, 1979, 1980; Miller & Rock, 1985; John & William, 1985). How Managers with or without intentions may send a message to investors that has the impact of projecting the future earnings of a firm and value by announcing cash dividends (Miller & Modigliani, 1961). Quite a number of researchers have concentrated on earnings information and their influence on prices of stock and have made use of the event study to pin point the underlying impact. Jin (2000) made suggestion to the fact that there could be other factors that are unique to the firm that may provide explanation of what influence prices of stock to change apart from announcement of dividends.

# 1.1.2 Stock Returns

Stock returns measures the spread in price between a period when an investor buys and sells an investment vehicle, which for our purpose is stock or shares. In Finance discussions little is borrowed from economics but inferences are drawn from its tenets that in efficient markets prices are freely determined by market forces in manner that abnormal price and by extension returns are not sustainable in the long run. Ochuodho (2013) and Mohamed (2010) suggested

that for investors to excel in obtaining favorable stock returns then they have to select a well-diversified portfolio.

Davis et el (2012) in a study stated that in U.S. stocks when viewed over long time period has a poor outlook in relation to factors such as growth of the economy, profitable margins, rising indebtedness of government, and lower rates of interest. They found that many commonly cited signals had no unique pattern with subsequent actual returns, even at longer horizons of investment. The commonly used predictions involve having a trail of values for yields in dividends and growth in economy, the spread between the yields in earnings from stock market and Treasury bond (commonly referred to as Fed Model), margins in profit, and past returns in stock. They confirmed that metrics of valuation including price/earnings ratios, or P/Es, had been noted to move in opposite direction to that of future returns of stock in the market ,when longer horizons are taken into account and, even then, returns that are inflation deductible ,only about 40 % are "explained" by P/Es ratio. Prices are therefore the value that one party losses and another party equally gain, or as is commonly referred to as a sacrifice one makes to gain something that is of value to another party. Ben-David,Glushkov, and Moussawi (2010) documented how hedge fund managers will be more comfortable to make a move on non dividend payers firms when they exhibit stronger signals of mispricing.

Itzhak (2010) stated that Stock prices have been used time and again as a valuation yardstick by investors in making buy or sale decisions for stock. Analyst and brokers alike make use of stock prices in time-series and cross-sectional analyses to predict future prices and performances of corporations issuing the stocks across stock and securities exchanges around the world.

# 1.1.3 Dividends Announcements Effects on Returns of Stock

Stock prices are value dependent and are sensitive to any factor in the market that brings favourable or otherwise outcome to it like an early return or residual return. Dividends paid on stock represent that early return to stock and is mostly associated with positive returns, over and above capital gains that accrue in form of price appreciation. Dividends announcement therefore represent that outcome that is anticipated by investors and corporations pay dividends to meet

that expectations, (Itzhak 2010). Stock returns were noted to respond positively to dividends announcement as recorded by Mukora (2014), Laabs and Bacon (2013) and Odhiambo (2013). Kihara (2011), noted an insignificant changes in stock returns in the event window at the NSE. Stock returns therefore are expected to respond at least favourably to dividends announcement over the event window that in our case will be 21 days, that is pre 10 days and 10 post days of the announcement. Rubinstein (1976) concluded that the content of information in dividends is non partisan and cannot be said to be responsible for the increase or decrease in returns for stock. Miller and Modigliani (1961) too concluded that prices of stock remain indifferent to the announcement of dividends. They claimed the dividends irrelevance. An opposing side was provided by Gordon and Shapiro (1956) when they concluded that dividend announcement produces insignificantly lesser effects on prices of stock and value of the firm. Deangelo and Deangelo (2006), in their study posited that the content of information in dividends is held highly and investors attach much relevance to it when making buy or hold decisions.

# 1.1.4 Nairobi Securities Exchange

In Kenya, trading in stocks can be traced way back to the early 1920's and borrowed heavily from British system, as the protectorate was mainly patronized by the whites. It operated as an informal market, with no formally enforceable rules. In 1953 Nairobi Stock Exchange (NSE) was set up as an overseas stock exchange. In 2011, the bourse witnessed name change to Nairobi Securities Exchange. The NSE has witnessed a history of rapid development from within and outside mandate, majorly as a licensee under the Capital Markets Authority (CMA) Act. These include providing form of trading floor or otherwise automated trading of securities in Kenya. NSE has a membership slot in African Securities Exchanges Association and is ranked number four in Africa by trading volumes, behind Lagos, Johannesburg, and Cairo Securities Exchanges.

Two indices are used, namely the NSE 20-Share Index (since 1964) and NSE All Share Index (NASI-2008) .NSE 20-Share index captures the performance in the market that constitute 20 blue-chip companies that are strong in fundamentals and have produced returns that are

consistent and are in tandem with positive financial results. NASI on the other hand is an indicator of market overall performance and for the day incorporates all shares traded (NSE, 2014).NSE is categorized into different market segments mainly the Main Investment Markets (MIM), or the Alternative Investment Markets (AIM). The number of companies currently listed in NSE is 64.In 2007 NSE implemented Wide Area Network (WAN) platform making it easier for brokers to conduct business away from trading floors. In 2011, it commenced the Broker Back Office operation as a system mandated to offer superior capability in internet trading connectivity thereby improved the integrity of the trading systems in the Exchange. This deepened access to the securities market. As per the NSE listing manual approved by the Capital Markets Authority, for dividends announcement to be in order, a notice through an announcement over press need to undertaken within twenty four hours of the resolution by the Board in case of an interim dividend or recommendation in case of final dividend. The beneficiary to the notice will include the securities exchange, the Authority and the holders of the relevant security.

Companies in Kenya by practice pay interim dividends after six months and a final one after twelve months when the financial year ends (Mukora 2014). Ochuodho (2013) noted that market valuation for shares in the agricultural companies listed at the NSE absorbed information hence the NSE was efficient. Kihara (2010) and Kioo (2006) differed and noted that NSE was in efficient. Other announcements that impact on the trading activities at the NSE include earnings, financing arrangements and board/key management changes, mergers and acquisitions are among the events that NSE must be notified within reasonable time limits set. Performance of company's stock is therefore influenced by these events in varying degrees.

NSE performance has therefore been positively affected by events including dividends announcements.NSE rules on trading practices prohibits insider information trading, implying that stock prices/ returns is highly expected to be market determined.However,investors have been noted to outperform the market, weeks before the announcements of dividends by earning above the market risk adjusted returns, signifying information leaks to sections within the trading

community (Mohammed 2015). As an emerging market in East Africa region, NSE has been frequented and dominated by foreign investors which have accounted for high robust activities especially during the announcement of earnings and interim dividends. NSE has therefore been noted to provide facilities which make investment a worthwhile activity for investors to engage in by allowing free access to information, thereby reinforcing and enabling an important ingredient of efficient market operation.

# 1.2 Research Problem

Stock returns signify the wealth created by investing in stocks of companies and are affected by different events in the market and within the corporations issuing the stocks. Andres et al. (2009) showed that stock market returns were affected by unexpected dividend changes. Ochuodho (2013) and Mohamed (2010) suggested that for investors to excel in obtaining favorable stock returns then they have to select a well-diversified portfolio .Dividends announcements have been discussed in research papers and numerous academic exposures as having explanatory power for movement in stock prices, thereby affecting stock returns. Dividends have been observed to have that capacity to meet the temporary goal of the investors at least until they decide to dispose off their investment and realize a permanent return through capital gain or loss. Consequently dividends announcements are highly studied as they are meaningful events for investors and managers to research on (Laabs and Bacon 2013).

Despite numerous work using different techniques and academic exposures around the information content of dividends and the consequent stock returns expected, there is little rapport on the direction that the two should take in relation to each other and whether there is unique pattern in both developed and emerging markets. Results are as variedly conflicting as the methods and techniques and data employed. Ochuodho (2013) in a study to determine how announcement of dividends impact on the market valuation for shares in the agricultural sector observed that share prices absorbed information hence the NSE was efficient. Odhiambo (2013) studied dividends and earnings announcement and how it influences shareholders' value for firms listed at the NSE and observed that there was no significant effect of the announcements on prices for stocks.

The concept that underpins how stock returns and dividend announcement are related have been invariably supported by the theory of dividends signaling fronted by Miller and Rock (1985), Agency Cost theory as hypothesized in Easterbrook (1984) study ,free cash flow hypothesis proposed by Bhattacharya(1979, 1980), Miller & Rock (1985), John & William(1985), and Jensen (1986) hypothesis of free cash flow hypothesis . The tone in these theories mainly resonate that change in firm's dividend policy announcements are significant and affect the stock returns in the respective firms. Such dividend announcement informs and, acts as a vehicle that signals to the investors the levels of earnings the firm expect to attain in future. Dividend figures that rises is a symbol of strength of the company production function in light of being capable of attaining earnings that are sustainable in the coming periods. It has been noted that, higher dividend amounts announced by firms made the prices of stock to reciprocate upwards. This same rapport has been echoed and substantiated by the mixed empirical results of Jin (2000), Mitra & Owers (1995) and Healy & Palepu (1988). Cooper et al. (2001), found various explanation of the means by which information is conveyed to investors and noted them as announcement of earnings and dividends by firms.

In Kenya several event studies have been carried out on factors that affect stock returns, dividends announcements being one among the many factors. The results of these studies have not yielded a clear consensus on whether the explanatory power is significantly different from what other studies in other markets, especially in developed markets, have found out about dividend changes and implications on stock prices. Muigai (2012) observed no pattern during the event window while studying declaration of dividend and the effect on prices of stocks for listed commercial banks at the NSE .At the NSE stock splits sent a signal to the market according to Nkonge (2010) findings. The market interpreted a stock split as good information as returns were observed to increase significantly around the time of stock split announcement. Information at the NSE listed firms made security prices to adjust and investors could use this to benefit from it according to Odumbe (2010). Njuru (2007) observed returns that were positive that persisted over days after stock dividend announcement and concluded that there is an under reaction of stock dividend announcement at NSE.In the study on rights issues at NSE, Cheruiyot (2006),

observed information content. Mulwa (2006) determined that there exist relationships in the year when payment of dividend is made. Bitok (2004) positively concluded that dividend policy is significantly related to the firm's value and in addition that dividend payout ratio and the value of the firm were birds of the same feather. Different results that have been produced both internationally and locally, therefore fuels for more work using more current data and better techniques that are carefully employed. This implies that more or further work is required in order to shed more light, in an attempt to reach a more plausible consensus. This shows that there exists a research gap. The research sought to answer the following question; does dividend announcement have an effect on the stock returns of firms listed at the Nairobi Securities Exchange?

# 1.3 Research Objective

The objective of the study was to investigate the effect of dividend announcements on stock returns for firms listed at the NSE.

# 1.4 Value of the Study

The study is expected to score highly in managerial ability to understand the influence that a positive dividend announcement will have on the firm value. That is to say, the management can project good news to investors by announcing high dividends. Higher dividends will be interpreted to mean that the company is making use of the best managerial skills to invest in optimal and positive NPV projects that would yields high returns, and that investors would equally perceive that the firm is committed and is favourably following the agenda to maximize their wealth and create value.

The study will make valuable contributions to ideas and knowledge that has the capacity to enlighten and enable the academicians and scholars to further their studies in the area of policy advisory and teachings on dividend announcements and their effect on stock returns. It will also provide a useful back up on future researches on variables that will be need fully required to explain stock returns. Investors too are going to benefit from this research by refining their

thoughts on how to make use of or not of dividend information to optimize their investments holdings in company stocks and other securities like options whose values are stock linked. This would in turn increase their investment appetite, an important ingredient of heightened investor activities.

Government, market regulators and policy makers are going to be enlightened and enabled by the findings and recommendations that this research will produce. Government as the watchdog and promoter of good investment climate is responsible for general public education in regards to vehicles of investments that promotes its programs of revenue making. Market regulators are enforcers of good trading rules either as self or forced regulations that markets are so much in need in order to be an intermediary for units that either have deficits or surplus funds.

#### CHAPTER TWO

# LITERATURE REVIEW

#### 2.1 Introduction

In the chapter will be summaries of the Theories that have been put forward in finance and academia and that have proposed models around decisions on dividends policies practices in corporate world. These theories are based on different market background majorly in developed markets, with varied emphasize premised on and including dividends information content, efficient market hypothesis and firm as an agent of shareholders. These have equally generated many proponents and opponents.

It also include empirical tests that have been carried out in similar studies, with a view in mind to delve further into the discussions that would attempt to bring a consensus or shed more light into the topic of the effect of dividends announcements on stock returns at the local burse. These has also produced numerous explanations that tries to offer accurate explanation on the effect of dividends announcements on the performance of the market, that is at least consistent with other studies in the emerging markets.

#### 2.2 Theoretical Review

The announcement of dividends and the related perceptiveness it brings in the minds of investors are often debated in the literature of corporate finance and academia. In the debate, it is noted that there exist a spectrum of standpoints that is variously supportive, collaborative and opposing views that dividends has information content. Fama (1970) came up with the concept he hypothesized as an efficient market system and analyzed the stock market in terms of how efficient market process information and three categories of market were identified namely markets that have forms of efficiency that are either weak, semi-strong ,or strong with implications how information is absorbed in prices of stocks. Similar concept was noted in the studies of Keith Cuthbertson (2005), Reilly (2006). Lintner (1956) in a pioneering article, made investigation on dividends policy and noted that firms practiced dividend smoothing in order to meet

investors' preference for stable dividends with sustained growth. That Management will shy away from dividend reduction in order not send negative signal to investor in one hand and on the other hand will avoid increasing payout for the fear that such practice may be non sustainable in the nearby future.

Theories have been propounded to offer explanations as the binding factors that firms consider in making dividends decisions and related investor sentiments in receiving the dividends visa a vie expected future prospect in the company. These theories have different approaches and propose different models in the spirit of providing better explanation of events surrounding dividends policy decisions of companies.

# 2.2.1 Dividend Signaling Theories

Dividends signaling models as fronted by Bhattacharya (1979), John and Williams (1985), and Miller and Rock (1985) noted that managers are privy to more information than the investors in terms of the true worth of a firm and will announce dividends that will carry that information to the market. However managers will do so at a cost, implying that the models were supportive of a relationship that is positive for information asymmetry and dividend policy statements.

A contrary view, Miller and Modigliani (1961), carried out an investigation and made a conclusion that announcement of dividends have little impact on returns a firm will achieve and called irrelevant the hypothesis of information content of dividends. They furthered the argument that prices of stock will absorb little impact under the dividends phenomenon when considered in light of the concept of perfect markets assumptions and firms investments are subjected to schedules that are fixed. Rubinstein (1976) while testing in the same context drew conclusions that the information content in dividends was neutral and was not responsible for the upward or downward changes in returns of stocks. Kamstra (2000) found support for Miller and Modigliani (1961) and concluded that the announcement of dividends carry with it no impact that may cause significant changes in the stock prices. Contrary view was provided by Gordon and Shapiro (1956) who concluded that the announcement of dividends carried significant effects on prices of stock and return of the firm.

Handjinicolaou and Kalay (1984) in their study over the dividend phenomenon drew conclusions by stating how current dividends will have an effect in future about the changes in dividend and prices of stock. Deangelo and Deangelo (2006) noted how dividend information content is held in high esteem by the investors. Many researchers (Fargher & Weigand, 2009; Koch & Sun, 2004; Grullon et al. 2002; Healy and Palepu, 1988; Michaely et al., 1997; Dyl & Weigand, 1998; Nissim & Ziv, 2001;) agreed that the content of information in dividends produces impact which is positive and significant to prices of stock. Using CAR in their analysis, they found a relationship that is positive and significant to firms' profitability and the prices of stock. Notable is that they failed to reject that CAR and risk have a negative relationship. In their study Frankfurter and Wood (2002) noted that at the dates of announcement the firm generates a positive and significant CAR. They observed that managers who had a stake through ownership in a firm and dividend information content were related in a positive and significant manner.

Other studies (How, Ngo & Verhoeven, 2011; Brav etal, 2005; Boehem & Sorescu, 2002) conducted a test on how investors reacted as a result of dividends announcements in the market and noted that the prices of stock increased and thereby validating the signaling theory. Fama (1969) put to a study the phenomenon and drew a conclusion that the information content in dividend is significant. That investors in the market are signaled by dividends and will use that information to project future trends in the prices of stock. In the study data that consisted of positive and negative abnormal returns were analyzed using an event study methodology. CAR was positive and significant confirming that market response was positive to the announcement of dividends. The results was in support of hypothesis under laying dividend information content and had implication for the investors in the market whereby they can attain positive or negative signal consequent on the announcement of dividends.

In a similar work, Pettit (1972) utilized information that was quarterly and suggested that dividends may convey sufficient signal to investors in the market. The question that is pertinent is whether there is time lag between the market response to the signal thereby reflecting the

true efficiency. That is to say that the sent signal to the market in the form of dividend will be efficiently and slowly adjusted in the true stock's value. He suggested that the conveyed signal in the dividends will be over and above what will be perceived by the market. In a study, Bhattacharya (1979) claimed that investors under perfect information efficiency may gain access to the innermost firms' news by a combination of tools to gauge the profitability of the firm, its riskiness and how much the business is really worth. On the other hand dividends are used by management as a tool of signaling to convey signals concerning the firm's real worth to the market.

John and Williams (1985), Miller and Rock (1985), in their work incorporated the concept of cash flow, thereby making a slight modification in the versions of the information content of dividend hypothesis. They noted that dividend announcement had an effect on the near future and present cash flow and such action was premeditated in nature. Management action was however noted not to be free and in an instance where signals to market investors and shareholders were practiced, some cost were unavoidable. The work by Jensen (1986) suggested that free cash was a major driver that caused increase and decrease in the prices of stock reinforcing that dividend had information content. That dividend would be paid as a residual of excess cash after considering that the investment projects needs have been met. The prices of stock will exhibit abnormal returns response only by a surprise and an unmatched dividend announcement.

# 2.2.2 Agency Cost Theory

Easterbrook (1984) and Jensen (1986) studies as early researches explained dividend payment policy practices in light of agency problems by making an argument that having the shareholder separated from the management made for fertile ground and sometimes encouraged management to misuse funds. In line with the hypothesis of agency cost theory, there would be a negative reaction in the prices of stock when announcement of dividends is made. The study somewhat yielded result that was interesting in light of dividend initiation and dividend omission consideration. Agency problems emerged as the manager had incentives that were quite different apart from simply maximizing shareholder value. Dividends pulls out from the firm free cash

flow leaving the manager with costly options to carry out wrong investment (Jensen, 1986).

Chetty and Saez (2007) and Gordon and Dietz (2006) built models that considered incentives for executives and were for more support for agency models in comparison to other models of dividend due to its power of predictions that fitted better the empirical data. That agency models could predict better changes in tax behavior, expound better the different payout policies practices across firms, and explain how payout policy will be influenced when we have majority of owners also being in the board directors. Shareholders interest are said to be harmonized when they gave incentives to managers in form of management compensation which is tied to returns achieved by the firm in value terms. The manager being the insider more that the shareholders will have more information thereby making for grounds for the manager to present a different picture of increased firm's value. Earnings management presents cost that is real, as funds will be reduced by any further manipulation. Sooner profits will start to drop as a result in the future by a proportion of marginal product of capital. Such practices are put in check by Dividends as they become far expensive, inducing reporting to be more exact.

In a study by Mitra and Owners (1995), made an argument that announcement of increased dividend made a positive impact on returns for stock. Eades and Kim (1985) in a study suggested that stock returns will be receiving a negative impact in the event that decreased dividends announcement is made. In the emerging markets like Malaysia similar reaction was noted by Hess and Kim (1985) who drew the conclusion that positive prices of stock were observable when increased dividend was announced and conversely true for decreased dividend announcements. Kao (1994) in a study of unexpected announcements of dividend and dividends information content concluded that dividend has information that is capable of sending good news to the investors and market. Additionally, he suggested that information is made available by the management confirming that they have good expectations about the future and the present decision they are undertaking.

Reviews by Allen and Michaely (2003), Frankfurter and Wood (2006), and DeAngelo, DeAngelo, and Skinner (2009) better related empirical facts to the theories. Allen and Michaely (2003) and Frankfurter and Wood (2006) drew conclusions that did not support either agency theories or signaling theories as they did not fit with the empirical evidence and questioned the rationale behind firms distribution of earning through dividends terming it a puzzle. DeAngelo et al., on a different conclusion noted that dividend phenomenon could better be explained by asymmetric information.

# 2.2.3 The Efficient Market Hypothesis

Fama (1970) explained the term market efficiency in terms of the level of stock market response in the event that information is publicly announced. Three levels of market efficiency were proposed to signify the speed with which market absorbs such news and the possible returns attainable by investors who trade legally. These were referred differently as either Weak-form efficient market, semi-strong form efficient market, or strong-form efficient market.

The weak form of efficiency involve making use of historical information such as past prices and past data(accounting) to make sell or buy decision by investors. It states that investors using historical information cannot make better or excess returns, meaning that they cannot predict a pattern in prices by using fundamental or technical analysis of past information. Semi strong form efficiency explains the fact that prices react to all publicly available information and basing decision on that information an investor will not achieve a return which is abnormal. Investors will not make more returns than the market .Such information include annual financial reports of commercial units, dividends announcements, stock splits, and stock repurchase and earnings announcements, (Fama, Fisher, Jensen, & Roll, 1969).In the Strong form efficiency of market, market price of shares reflects all public and private information and no investor would constantly obtain excess return or outperform market for much longer lest the market become inefficient. Insider information trading is prohibited in the market settings.

#### 2.3 Determinants of Stock Returns

# 2.3.1 Size of the Firm

Viswanath et al. (2002) defined size of the firm as taking market capitalization and obtaining the natural logarithm. The traded volume transaction as a factor of stock prices can play a major role in activation of sustained stock returns. Bigger and more mature firms have been known to pay more dividends, thereby making price of their stock to have a momentum in terms of stock returns. Empirical work of Mougoue and Rao (2003) observed a relationship that is converse between size of the firm and payout ratio, implying that bigger firms pay less than average dividends paid by smaller firms. Smaller firms with little analyst coverage have been observed to follow a pattern of increased price movements thereby offering better returns than the bigger firms. This has been variously considered to be a market anomaly.

# 2.3.2 Leverage Ratio

A firm leverage ratio is determined percentagewise as total liabilities over shareholders equity. Expectation under the agency theory and signaling theory explains the ratio to be positive. In Study by Borokhovich (2005) suggested that the higher the ratio the more the financial liability that consequently reduces distributable funds. Similarly Ross (1977) observed that higher debt ratio affect positively the value of the firm. However too much debts will cause the cost of distress to set in and counter balance the benefits achieved, thereby negatively impact on stock returns.

# 2.3.3 Firms Liquidity

A firm Liquidity is determined as cash and cash equivalent divided by total assets. The higher the ratio for a firm the more the dividends it is expected to pay as positively hypothesized. Positive and significant relationship was noted between expected stock returns and illiquidity measures including the bidding-asking spread, traded volume, or impact of price on trading. Amihud and Mendelson (1989, 1986), noted that when bidding-asking spread is controlled for the effect of size becomes irrelevant and disappears. Brennan, Chordia and Subrahmanyam

(1998, 2005) and Chordia, Subrahmanyam, and Anshuman (2001) found that when traded volume is controlled for the relationship between the size and return turns either to be insignificant or positive, suggestion that the effect of size could simply be the impact of liquidity.

# 2.3.4 Volatility of Stock Returns

Rubin and Smith(2009) measured volatility as the standard deviation of stock returns, where firms tends to pay more dividends when their net income is more volatile in order to signal good news to the outside investors, thereby producing a positive relationship. They observed that firms that had less volatile scenario of cash flow stream that is steady paid dividends consistently in comparison to ones which had high volatility. Firm's whose business are affected by seasons and cycles like Agricultural entities have their stock prices impacted negatively during such intervening periods. The consequence is that stock prices will exhibit little movement, thereby producing little return until the onset of good news when activities are activated by the approaching favorable season or cycle.

#### 2.3.5 Interest Rate

Stock returns react to interest rates when a company borrows and service its debts at higher interest rates. Profits are affected and consequently the dividends it pays shareholders. At times when interest rates are on the increase, investments that pay interest tend to out compete those that pay dividends as stock. Al-Qenae, Li & Wearing (2002) in a study on the impact of earning inflation and interest rate and implications for prices of stock at the Kuwait Stock Exchange, documented that changes or swings in the macro-economic factors such as interest rates adversely impact stock prices. Interest rate changes represent cost that must be incurred in order to borrow or lend by the business or investors in order to maintain and execute planned operational and financial goals. This would in turn affect demand and supply of stocks and achievable returns on stock.

#### 2.3.6 Inflation Rate

Fama and Schwert (1977) in a study to determine how inflation impact on stock returns at the New York Stock Exchange asserted that stock returns are adversely wiped by both expected and unexpected inflation. Similar observations were made by Al-Qenae, Li & Wearing (2002) while

studying the Kuwait Stock Exchange that stock returns are negatively affected by inflation. Udegbunam and Eriki (2001) while studying the capital market in Nigeria also showed that inflation has an inverse correlation to the behavior of stock market prices. High inflation erodes the purchasing power and the resultant high prices of stocks make returns to be more negative than positive.

#### 2.3.7 Dividends Announcements

Muriuki (2010) study revealed that announcement of a dividend by a firm had a short term influence on share prices. When market efficiency are described as semi strong form, stock prices will reflect high percentage of publicly available information (Fama, 1976). As a result an adjustment in stock prices will be noted when dividend announcements are made. Vazakidis and Athianos (2010) observed a positive market reaction in pre period of dividend announcements, and negative abnormal returns were observed in the first days of post announcement period. Mukora (2014) documented that dividend announcement affected positively stock returns for companies listed at the Nairobi Securities Exchange. Andres et al. (2009) showed that stock market returns were affected by unexpected dividend changes. According to Gurgul and Majdosz (2005), dividend announcements do affect stock returns in the Polish stock market. Mohammed (2015) observed a weak form in the NSE when he documented mixed results on announcement of dividends.

# 2.4 Empirical Review

In Finance, many empirical researches are centered on the identification of what relation exists between economic events and stock returns. Meaningfully interpreted these 'event studies' presupposes that stock market is efficient. Bashir (2013), in the study of stock price reactions in emerging market, obtained data from files that analyzed Balance Sheet from the State Bank of Pakistan (SBP) Statistics and DWH department that included variable that are specific to the firm, the data of stock prices was obtain from 73 firms' business records basing it on the final dividend announcement dates in the year FY011. Observation made was that the market reaction was one-sided with many companies reporting CAR that was positive within the given period. The factors that were specific to the firms too had an impact over the dividends. Ghada

(2015), on a study of the effects of dividends on Damascus Stock Exchange (DSE) documented how average abnormal returns tended to be statistically insignificant in one hand, and cumulative average abnormal returns tended to be statistically significant on the other hand. Equally observed was a downward drift of the cumulative average abnormal returns six days after the announcement implying a slow adjustment in prices immediately after dividend information.

In Finance cycles, the efficient market hypothesis has dominated, however increasingly number of researchers have documented instances that market inefficiencies exist among them are Charest (1978), Copeland and Mayers (1982), and Rendleman, Jones and Latane (1982)]. David(2010), in a review on dividend policy decisions concluded that broad consensus exist among researchers centered around the life-cycle theory and these studies have documented facts that explains high likelihood of mature firms paying dividends. Laabs and Bacon (2013) in a study randomly selected 15 cases that announced dividend increase for 44 months ended July 2012 for firms listed at either the NYSE or NASDAQ with an objective of testing the hypothesis of efficient market in semi strong form and put to an analysis the effects of announcing increased dividends on stock price. The study used the event study methodology after adjusting for risk and performed a regression analysis of each firms actual daily return (dependent variable) over the matching S&P 500 daily return (independent variable). A pre-event 30 days period and post event period of 30 days was used extending pre event to 180 days to estimate the standardized coefficient beta and the intercept alpha. The analysis produce impact that was significantly positive to share prices for the firm's twelve days before and ten days after the announcement day 0 when dividend increase was announced. The conclusions confirmed the theory of EMH.

Mollah (2001), in a similar study in the Dhaka Stock Exchange(DSE), collected market data from 1988 to1991 consisting of price quotations, published and non published records and from computer database of the Exchange. The sample constituted 380 announcements of cash dividend announcements, with further sub samples of 213 increased announcements of dividends, 84 decreased announcements of dividends, and 83 maintaining dividends announcements. His objective

was to investigate how prices for stocks react to the three scenarios of maintaining, increasing or decreasing dividends practice. The study employed event study methodology and made use of T-test approach and compared abnormal returns within the study of event periods ( $\pm$  60 days,  $\pm$  30days,  $\pm$  20 days,  $\pm$  10 days). From the result of T-test mean abnormal returns for the period of observation and period comparison was not significant and different from zero, i.e., no abnormal returns for the securities were noted during the period of the announcement of dividends. Consequently the announcement of dividends carried no better and new information to the market. Hence the results did not support the signaling theory of dividend.

Olatundun (2009) used modified model to investigate whether the stock market in Nigeria efficiently react to announced dividends observed in price adjustments. Data was collected for all firms in all sectors that paid same or either increased or decreased dividends as listed at Lagos Branch of the Nigerian Stock Exchange. The study also covered dividends initiation, omission and stock dividends between 1991 and 1999. The event time period was in three parts, a 3, 9, 21 and 60 day event window. The study results confirmed a positive and significant effect on cumulative excess returns (CERs) for firms that paid dividends 30 days post the announcement, and for firms that omitted dividend CERs in the same period was significantly negative. Subsamples showed statistically significant CERs around the event window. Conclusion reached was that stock market in Nigeria was not efficiently semi–strong and that share prices did react to dividend announcements.

Uddin & Chaudhary (2003) in a study investigated dividend announcements and its impact on the prices of stock at the Dhaka market and noted that dividends announcement lacked any significant information for Dhakan market prices of stock and returns. The empirical study used a sample of 137 firms that announced and paid dividend for the year ended September 2002. Announcement of dividends did not produce abnormal returns that were significant in the stock market. Vojtech (2013) conducted a study in USA on the relationship between information asymmetry and Dividend Policy and posited that dividends have the capacity that is able to limit management discretion, leading to greater disclosure of earnings reports. That the dividend

commitment can be attained with a board that is perfectly aligned to shareholders wish.

Kiio (2006) studied firms quoted at the NSE with an objective of evaluating the impact of announced cash dividend on stock returns and to uncover the speed with which stock prices incorporate information from dividends. The sample consisted of companies making up the 20 NSE share index. The event period covered January 2000 to December 2004. Data was collected from NSE 20 database. The event window was 21 days which included the date of announcement and pre 10 days and post 10 days of the cash dividend announcement. The adjusted market buy and hold returns for the samples for the twenty one day event period revealed cumulative market adjusted returns to be significant for 10 days before and 10 days after the announcement for firms that were paying dividends. This indicated that share prices were responsive to cash dividends. She found out that the reaction at Nairobi Stock Exchange was inefficient in relation to cash dividend announcements. Hence the NSE was not of the semi strong form.

Kihara (2011) studied companies quoted on the NSE that announced dividends from the years of 2006 to 2010 with an objective of establishing a relationship between stock returns and dividend announcements. It sought to find out whether there was any element of abnormal returns after a dividend announcement. The observation window was 15 days before the announcement, and 15 days after dividend announcement. Data was analyzed through a regression analysis. Statistical analysis was carried out using SPSS, Excel and Access. He found no significant evidence that confirm stock price reacts similarly to the announcement of dividends and implied that stock returns at the NSE did not absorb information making the NSE an inefficient market.

Mukora (2014) selected 5 companies from the banking sector as at 31st December 2013 out of a population of 61 companies in 11 sectors to find the effects on stock returns of dividend announcements in the NSE. She used the event study methodology with a 61 day event window, where –

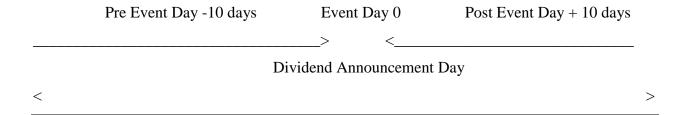
30 days to +30 days was used as prior and post periods respectively. Day 0 was the dividend announcement date. The analysis was conducted for a period for five years. The daily normal stock returns were calculated and from it the abnormal returns were determined. Then the cumulative average abnormal returns were calculated. Trend analysis was conducted to determine whether there was a change before or after the dividend announcement. The test of significance was conducted for both the AAR and the CAR. The null hypothesis that announced dividend event has non effect on stock returns for firms listed at the NSE were rejected. Njuru (2007) studied firms listed at the Nairobi Stock Exchange with the objective of examining the behavior of stock prices following stock dividend announcements if they showed evidence of "under reaction" anomaly.

Odhiambo (2013) looked at firms quoted at the Nairobi Securities Exchange with the objective to determine the effects of dividend and earnings announcement on shareholders' value on selected companies quoted in the NSE. The study was limited to companies that announce their dividends constantly within the period and used the NSE 20 market index. He used the event study methodology and used two measures of daily CAR and market adjusted abnormal return MAAR. These were calculated over the study period of -15 to +15 days. The study used the NSE all share price index as a proxy for average market price. Finally the study used the parametric tests to determine MAAR and CAR statistical significance. Based on the 10 NSE listed firms declaring dividends during 2008- 2012, it was noted that investors derive no benefit as a result of dividend announcement. He found that there was no significant contribution by dividend announcements to the values of the shares in the market. The changes in the share values were erratic after the announcement of the dividend and there were no consistent abnormal returns. Hence implying that the NSE was inefficient. This led to a conclusion that dividend announcement positively affect stock returns for listed firms at the NSE.

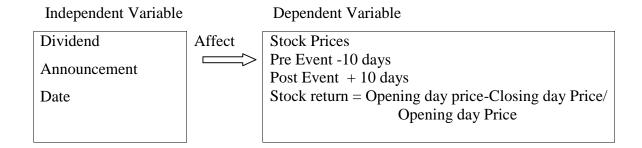
# 2.5 Conceptual Framework

A conceptual framework outlines core areas to put under the study in regards to the key factors, constructs or variables and the relatedness presumed among them, (Miles and Huberman, 1994).

Dividends announcements make public the distribution of either cash or stock dividends to Shareholder paid out of earnings of a company after a trading year end. Vazakidis and Athianos (2010) observed a positive market reaction in the periods before the dividend announcements, while negative abnormal returns were observed in the first days of post announcement period, implying that investors sentiments change when new information arrive in the market. Dividends increment announcement positively affected the stock returns according to Laabs (2013) in the NYSE reinforcing the quest to study the NSE and determine how the Stock prices and returns are responsive to factors such as earnings announcements, board changes, and dividends announcements, among the significant events in company calendar. Holding other factors constant Dividends announcement effects on stock returns during the event window period at the NSE as an emerging in East Africa is put to a study as depicted below:



# **Event Window Period**



Stock returns are not expected to be significantly affected by the dividends announcement during the event period at the NSE (Mukora 2014). Odhiambo, (2013) observed non-significant

contribution made by dividend announcements to the values of the shares in the market. The changes in the share values were erratic after the announcement of the dividend and there were no consistent abnormal returns. Stock returns will be determined and compared over the event window period to reach a conclusion whether there is a relationship between the announcement dates and stock returns at the NSE.

## 2.6 Summary of Literature Review

In summary, many researches on the effect of dividend announcement on stock returns have produced mixed results. Dividends convey information about earning in the future and market participant are enabled by the information to predict future earnings more accurately (Watts, 1973). Therefore a dividend announcement would have an effect on stock returns. Kalay (1980) supported this theory. Furthermore a fall in dividend payments would lead to stock price deduction (Jensen, 1986). Fama (1970) discerned that in a semi-strong form market efficiency it was expected that prices adjusted whenever there was a public announcement such as a dividend or earnings announcement. This was supported by the random walk theory that stock prices tended to be random. Gordon (1959) noted the greater influence dividends had on stock value as compared to retained earnings. According to Modigliani and Miller (1961) dividends had no explanatory effect when it comes to firms valuation hence a corresponding dividend announcement would have no effect on stock returns. Mulwa (2006) established some relationship in the year payment of dividend occurs. Njuru (2007) observed that positive returns followed in the days when stock dividend announcement were made and noted under reaction in the event period of announcement of stock dividend at NSE. Muigai (2012) examined dividend declaration and the effect it has on Prices for stock within the listed commercial banks at the NSE and observed no pattern within the event window.

The divergent views by different researchers create a knowledge gap in providing explanation as to the exact nature of this important corporate practice of dividend policy actions and the effects the dividend announcements might rally on the stock returns and more so within the Kenyan market. Dividend announcements have been noted as an important factor in rallying for the stock returns in both developed world and emerging markets. As a result, this study sought to fill the gaps that exist in research by determining the effect of dividend announcements on stock returns of firms listed on the NSE.

#### **CHAPTER THREE**

## RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter describes the methodology that was adopted in order to arrive at the research findings. It presents the study design and methodology.

## 3.2 Research Design

The study used a descriptive study, employing an event study methodology to carry out an analysis of the effects of dividend announcements on stock returns of companies listed at the NSE. Sitthipongpanich (2011) described an event study methodology as an empirical analysis that can be well applied in measuring the effect of an event such as dividends announcement on stock prices (returns). This method is most appropriate as it will give accurate results with minimum errors as the market reaction to the event will be measured by stock returns over the study time period.

Past prices for stocks of the sampled companies, and NSE 20 index, were obtained .An event study duration for -60 days to +20 days (with day -10 to day +10 defined as the event prior and post periods respectively and day 0 the date that dividend announcement occurred) was defined. The companies holding period returns ( $\mathbf{R}$ ) and the corresponding NSE 20 index ( $\mathbf{Rm}$ ) for each day in the study period was obtained by the formula as follows:

Current Daily Return = (Current Day Close Price – Previous Day Close Price) /
Previous day close price

A regression analysis was run between the actual daily return of each company (dependent variable) and the corresponding NSE 20 daily return (independent variable) over the pre-event period (day -60 to -21 or period prior to the event period of day -10 to day +10) to estimate the intercept alpha and the standardized coefficient beta.

## 3.3 Population and Sample

The study will use a population that will consider all 64 companies that are listed at the NSE which had dividends announcements in the period selected. Listed firms were preferred because of the availability of the information at the NSE. A period of study of five years was selected and considered sufficient to establish a relationship between dividend announcements and stock returns at the NSE.

## 3.4 Data Collection

Secondary data was used in the research and was be obtained from Nairobi Securities Exchange information services. The data comprised of stock prices of all companies between 2009 and 2013, the NSE all share index, dividend announcements dates, during the event period of day – 10 to day +10.

## 3.5 Data Analysis

Sitthipongpanich (2011) stated that an event study is commonly developed to attempt to measure whether an unanticipated event could have an effect on stock prices and the direction and magnitude any perceived effects might have on those stock prices. The study was based on the assumption that under the market efficiency hypothesis, the impact of an event would be instantly reflected in stock prices. Therefore, the market reaction to the event can be measured by stock returns over the study time period. That the event will be unforeseen. Abnormal (excess) stock returns indicated the market reaction to the unanticipated event. That during the event window, there was no confounding effects, meaning that the effect of other events was isolated. In this study the first step was to identify the event of interest and to specify the event date. This date was known as the announcement date of the event or 'day 0'. Using the defined date, sample firms (stocks) was selected and classified according to their event date. Secondly, was to identify the event period of the time study. In the event period, the test period (event window) and the estimation period was identified.

## 3.5.1 Analytical Model

The first operation was to calculate the normal or the expected returns for each stock. The daily normal stock returns were determined as follows;

$$Rit = = (Pit - Pit-1 + Dit) / Pit-1$$

Where: **Rit** is the actual rate of return on stock (i) at day (t), **Pit** and **Pit-1** denote the closing stock prices at days t and t-1 respectively. **Dit** is the paid dividend at time t.

$$E(Rit) = \epsilon i + \beta i Rmt + \epsilon it$$

Where Rit and Rmt were the period-t returns on security i and the market portfolio, respectively, and it shock term. The parameters and was estimated using the ordinary least square regression over an estimation period. This model relates the return of any given security to the return of the market and assumes joint normality of asset returns (MacKinlay, 1997)

The second operation was to determine abnormal return, **ARit** 

$$ARit = Rit - E(Rit)$$

When the average abnormal return or the cumulative abnormal rate of return was significantly different from zero, then the announcement provided abnormal return. On the other hand when the average abnormal return was significant before the announcement date, this meant that the information was leaked before the announcement date, when the average abnormal return was significant after the event, this meant investors could earn an abnormal return after the information release.

Thirdly we calculated the cumulative abnormal return (CAR) for all stock by aggregating the

abnormal return of each stock over the event window, (Brown, 1985).

$$CAR (T1,T2) = ARit$$

$$T1$$

The average abnormal return for all sample stocks on time (t) will be calculated as follows

$$\underline{\phantom{A}} T2$$

$$ARit = 1/ \mathbf{N} ARit$$

$$T=1$$

The cumulative average abnormal return for all sample stocks on time (t) was calculated as follows.

$$CAR (T1,T2) = ARit$$

$$T=1$$

Pictorial representation for CAR was made to deduce the observations made with respect to returns visa vie the event window.

## 3.5.2 Test of Significance

The final process made use of t- statistic to confirm whether the average abnormal return for stocks that paid dividends was statistically significant over the window period (-10 day to +10 day with respect the announcement of dividends). The t-statistics was calculated using the standard deviation of abnormal returns. The modified t-test by Brown and Warner (1980) was also applied to test the statistical significance of the cumulative abnormal returns. The level of significance used was 5%. The null hypothesis in this study was; Dividend announcement does not have an effect on stock returns of firms listed at the Nairobi securities Exchange.

Graphs of the average abnormal return and cumulative average abnormal return was plotted to give out the relationship between the two variables.

### **CHAPTER FOUR**

# DATA ANALYSIS, RESULT AND DISCUSSIONS

#### 4.1 Introduction

This chapter presents the information obtained from processing the data on the study, the effect of dividends announcement on stock returns for the firms listed at the Nairobi Securities Exchange. An event methodology was employed by subjecting to analysis the stock returns and the performance of stock market in the pre and post days of the announcement of cash dividends. Event study methodology was appropriate in determining whether there arise positive or negative abnormal returns around the dividend declaration event by defining an event window covering a period of days before and after the actual event date. Data were collected from the NSE offices and analyzed using Excel Spreadsheet and SPSS. By evaluating abnormal returns the analysis proceed to establish if any, the relationship between dividends announcement and stock returns.

# 4.2 Findings

The study evaluated daily stock returns for all companies listed on the NSE who announced cash dividends for the event window of 21 days comprising 10 days before and 10 days after the event date. The analysis was done for five years; from 2009 to 2013. The study used the comparison approach for pre and post days of the announcement. The abnormal returns were calculated by subtracting the expected return from the daily returns and adding the dividend payment announced during the period for each of the days after the announcement. Inorder to isolate the pattern, cumulative average returns were calculated by summing the daily abnormal returns in the pre and post announcement periods. A graph depicting the cumulative average abnormal returns for the period was then plotted for each of the years to depict the trend of the abnormal returns over the event window. The daily abnormal returns, average abnormal returns and the cumulative average abnormal returns for all companies that had cash dividends announcement at the NSE as were studied are represented in the diagrams below for the 21 day event window.

# **4.2.1** Analysis for 2009

As depicted in figure 4.1 below, stock returns exhibited slight changes in the pre announcement period, more so within -5 days the trend was downward sloping for Cumulative abnormal returns and achieved the lowest curve on the dividend announcement day. After the dividend announcement day the curve steeply arose within + 3 days, before staggering up and down after +5 days. This clearly shows that dividend announcement has a significant effect of stock returns as depicted by figure 4.1



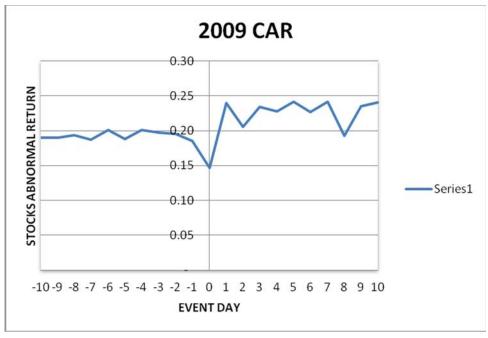


Table 4.1: Test of Significance for 2009

## **One- Sample Test**

	Test V	Test Value= 0							
	t	d.f	Sig(2-tailed)	Mean	95% Confidence				
				Difference	Interval of the dif	ference			
					Lower	Upper			
Pre- announcement Period	-5.94	9	0.0002	-5.5	-70.3	92.6			
Post- announcement Period	5.54	9	0.0004	5.5	-21.1	43.03			

Table 4.1 shows that the effect of dividend announcement before the event period is not statistically significant (t = -5.94, p=0.0002,p>0.05) on share return. However, share return significantly reacts to post dividend announcement (t=5.54, p=0.0004, p<0.05).

# **4.2.2** Analysis for **2010**

The curve for cumulative average abnormal returns fluctuates both before the dividend announcement date and after, but is more of a downside before the dividend announcement date and comparatively positive after the dividend announcement date. It was noted that the curve have a sharp kink on the day of dividends announcement. This clearly shows that dividend announcement has a significant effect on stock returns as depicted by figure 4.2.

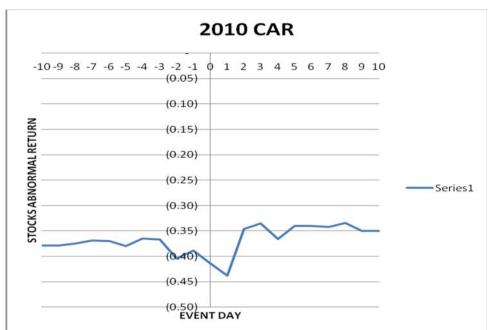


Figure 4.2: Trend for CAR for the year 2010

Table 4.2: Test of Significance for 2010

	Test Val	Test Value= 0						
	t	t d.f Sig(2- Mean 95% Confidence						
			tailed	Difference	Interval of the d	ifference		
					Lower	Upper		
Pre- announcement Period	-5.34	9	0.0005	-5.5	-111.9	34.77		
Post- announcement Period	6.29	9	0.0001	5.5	4.00	10.00		

Table 4.2 clearly indicate and reinforce the fact that the effect of dividend announcement before the event period is not statistically significant (t = -5.34, p=0.0005,p>0.05) on share return. However, share return significantly reacts to post dividend announcement (t=6.29, p=0.0001, p<0.05).

## **4.2.3** Analysis for 2011

In the pre dividend announcement period stocks cumulative average abnormal return assume less curvy demeanor, sloping upwards and downward between -9 and -3 days before touching down

on the announcement date. After the dividends announcement the curve rises in steps until day + 4 when zero return is noticed touching lows on day +5 and instantaneously peak steeply upwards before falling steeply in + 10 day.

Figure 4.3: Trend for CAR for the year 2011

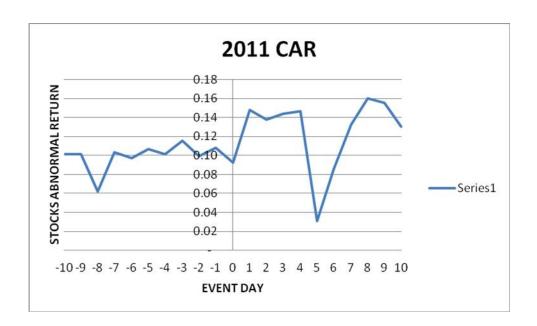


Table 4.3: Test of Significance for 2011

	Test V	Test Value= 0						
	t	d.f	Sig(2-	Mean	95% Confidence			
			tailed	Difference	Interval of the diffe	erence		
					Lower	Upper		
Pre- announcement Period	-5.86	9	0.0002	-5.5	-30.2	1.88		
Post- announcement Period	5.65	9	0.0003	5.5	-0.6	12.5		

Table 4.3 shows that the effect of dividend announcement before the event period is not statistically significant (t = -5.86, p=0.0002,p>0.05) on share return. However, share return significantly reacts to post dividend announcement (t=5.65, p=0.0003, p<0.05).

# **4.2.4** Analysis for 2012

In 2012 stocks cumulative average abnormal return was determined and graph plotted as in figure 4.4 below. It was noted that the returns assumed moments of rising and falling patterns in the pre event period, touching high on - 2 day and low on -7 day before steeply falling on the announcement day. On the announcement day 0 it return lowest return before immediately rising till + 3 day and thereafter decreases to a more flat pattern before finishing on high and low pattern.

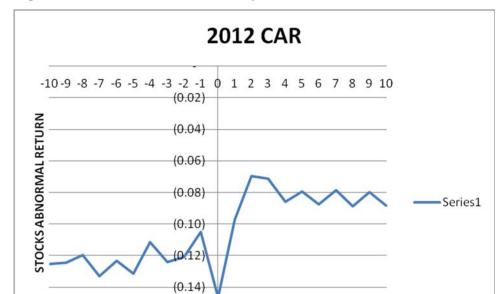


Figure 4.4: Trend for CAR for the year

Table 4.4: Test of Significance for 2012

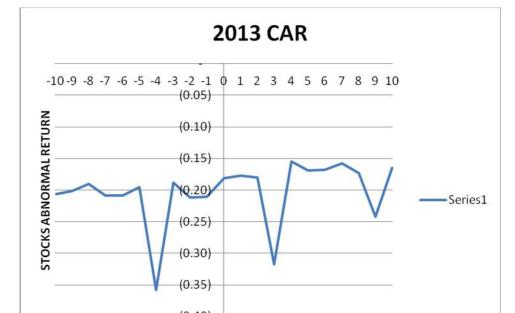
(0.16) EVENT DAY

	Test V	Test Value= 0						
	t							
			tailed	Difference	Interval of the diffe	erence		
					Lower	Upper		
Pre- announcement Period	-5.63	9	0.0003	-5.5	-13.0	47.9		
Post- announcement Period	5.87	9	0.0002	5.5	-29.6	45.0		

Table 4.4 shows that the effect of dividend announcement before the event period is not statistically significant (t = -5.63, p=0.0003,p>0.05) on share return. However, share return significantly reacts to post dividend announcement (t=5.87, p=0.0002, p<0.05).

# **4.2.5** Analysis for 2013

Figure 4.5 below present the share reaction to dividend announcement conducted in 2013. It was observed that between -10 and -5 days there was a less flat fluctuation in abnormal return which suddenly deepen after -5 day touching lowest on – 4 day before steeply rising on -3 day. On day -2 it slowed down before assuming a rising momentum till the announcement day when it dived downward on +3 day and immediately climbed steeply and thereafter flattened before diving downward and finally assumed a steady recovery after +10 day. The finding indicates that pre and post event period of dividend announcement affects share returns of companies listed at NSE.



**EVENT DAY** 

Figure 4.5: Trend for CAR for the year 2013

Table 4.5 : Test of Significance for 2013

	Test Val	Test Value= 0						
	t	d.f Sig(2- Mean 95%						
			tailed	Difference	Interval	of the		
					difference	e		
					Lower	Upper		
Pre- announcement Period	-5.50	9	0.0004	-5.5	-18.8	2.7		
Post- announcement Period	6.00	9	0.0002	5.5	-3.2	18.4		

Table 4.5 shows that the effect of dividend announcement before the event period is not statistically significant (t = -5.50, p=0.0004,p>0.05) on share return. However, share return significantly reacts to post dividend announcement (t=6.00, p=0.0002, p<0.05).

# 4.2.6 Analysis for 5 years 2009-2013

The general outlook for 5 years as shown in figure 4.6 confirm that stock abnormal returns before dividends announcements are less pronounced than after the announcement of dividends. It shows that in the pre event period, stock performance curve is more or less flatter between day 10 up to day 6, followed by steep fall and steep rise interchangeably. Lowest return is noted on day 4 and highest return is on day 3.

On the event day stock fell and started scaling up and down, assuming an upward pattern generally. The single most steep rise was noted on day 1, illustrating the significant effect of dividends announcement on stock returns. Returns were noted to fall and made recovery after one to two days thereafter.

Figure 4.6: Trend for CAR for the 5 year 2009-2013

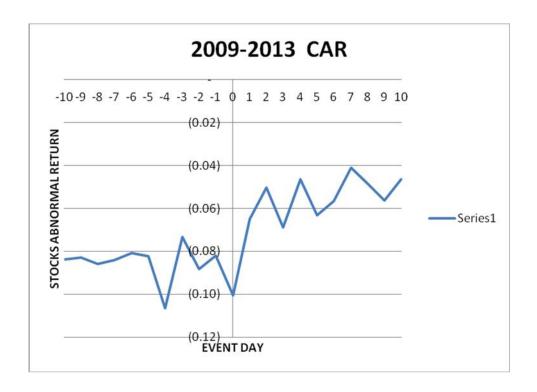


Table 4.6 Test of Significance for cumulative average abnormal returns for years 2009-2013

	Test	Test Value= 0							
	t	d.f	Sig(2-	Mean	95% Confidence				
			tailed	Difference	Interval of the difference				
					Lower	Upper			
Pre- announcement Period	-5.60	9	0.0003	-5.5	-18.8	2.7			
Post- announcement Period		9	0.0003	5.5	-3.2	18.4			
	5.80								

T test was conducted on the data for 5 years at 5 % significant level significance with a t statistic of -5.6 and 5.8 respectively for pre and post announcement period. The result of t statistic revealed statistically a strong rejection of our null hypothesis both for pre and post event period

that dividend announcement do not have an effect on stock returns at the NSE. This led us to conclude that indeed dividends announcement do have a significant effect on stock returns at the NSE for the 5 years under the study, 2009 to 2013.

## **4.3** Test of Significance

T test was conducted on the data for 5 years at 5 % significant level significance with a t statistic of -5.6 and 5.8 respectively for pre and post announcement period for p< 0.05 .Both lie in the rejection area respectively, hence we make conclusive gesture that dividend announcement do have an effect on stock returns for firms listed at the NSE for the period 2009-2013.

## 4.4 Interpretation of the Findings and Discussion

The objective of the study was to determine precisely whether dividends announcement has an effect on stock returns for firms listed at the NSE. An event study methodology was carried out by pegging returns before and after the dividends announcement date which was the event day. Abnormal returns was obtained by subtracting expected returns from actual returns within the event period for all the companies which had announced the dividend. Cumulative abnormal return was determined from average returns for all companies compared day wise. This was important objectively to isolate the behaviour of stock returns in and around the dividends announcement date. The cumulative abnormal returns were plotted against event days in order to highlight the trend of the returns before and after the event day. Test of significance was conducted before and after the event day in order to show the significance of the observed pattern of the returns.

In 2009 assumed a more or less flatter curve before the dividend announcement date. On day -4 it picked a falling pattern touching low on the announcement day and there after started a journey of climbing with lows and highs but on an upward trend. This illustrated the fact that stock performed much better after the announcement of dividends that more or less met the expectations of the shareholders and the market. The moment was captured when on the eve of the announcement day stocks return dived and instantaneously started momentous climbing. The

same pattern was observed in 2010 and 2011.

In 2012 stock returns touched lowest and rose steeply just before the day of the announcement, implying information leak. Immediately after the announcement on day 2 it assumed climbing momentum by interchangeably scaling down and up, peaking on day 7 before leveling off. In 2013, stock returns witnessed a cycle of deep dive and steep climb before (day 5 and 3) and after (day 2 and 4) dividends announcement. The overall 5 years outlook from 2009 to 2013 painted a clearer picture where stock returns performed better after the dividends announcement, as compared to the pre event period.

The test of significance at 95% level of confidence revealed a strong rejection of our null hypothesis both in the pre and post event period, registering a t value of -5.6 and 5.8 respectively, and a p value of 0 where P < 0.05. This made for a robust conclusion that dividend announcement do have a testable positive and significant impact on stock returns at the NSE. For the period 2009 to 2013.

Vazakidis and Athianos (2010) in their study concluded that market reaction is positive during the period before the dividend announcements, while negative abnormal returns were observed in the first days of post announcement period, implying that investors sentiments change when new information arrive in the market. Kiio (2006) observed that there is positive effect of dividend announcement on stock returns as share prices were responsive to cash dividends. From the research findings, it can be proven that dividends announcement do have a testable positive impact on stock returns for firms listed at the NSE.

#### CHAPTER FIVE

# SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Introduction

This chapter put to discussion the summary of the findings as laid down in chapter four, the conclusions and recommendations drawn from the findings are put to discussion in relation to the objectives of the study which was to establish the effect of dividends announcement on stock returns for companies listed at the NSE for the period from 2009 to 2013.

## 5.2 Summary of Findings

The abnormal returns were computed from all companies which had dividends announcement, by subtracting actual average returns from expected market return which was risk adjusted. Cumulative abnormal stock returns was graphed against the event days in order to produce an observable pattern before, during and after the event day, the dividend announcement day.

It was observed that stock returns were far better in the post period analysis compared to pre period analysis, as both side of the periods witnessed fluctuating patterns in stock returns, with some taking one to two days to recover. It was observed that in 2 cases out of five (2012 and 2013) stock returns modestly rose 3 to four days before dividend declaration, implying information leak. In all cases stock prices dived on the material day and instantaneously assumed a steep rise in stock returns in day 1 onwards. The 5 year outlook painted a better picture that abnormal returns were sensitive to pre and post event days with post days carrying more positive Trends than the pre event days.

The test of significance revealed that in overall, both pre and post event days were connected positively with stock returns for years 2009 to 2013. This was in tandem with the objective of the study that sought to determine whether dividend announcements have an effect on the stock returns for firms listed at the NSE. From research findings, this has been proven, that indeed stock returns do respond at least favourably to dividend announcement event.

#### **5.3 Conclusion**

The conclusion reached is that indeed stock prices do respond to and align itself to dividend announcement date event, as proven from the cumulative abnormal returns graphed against the event days. Based on findings in chapter four, the pattern produced is that of more positive returns in the post announcement days than in the pre announcement days, leading to the conclusion that dividend announcement do have an effect on stock returns for firms listed at the NSE from 2009 to 2013. This is consistent with information content of dividends as stated in dividend signaling theory, which states that dividends carry information about the firms future earnings prospect and is highly used by shareholders, market and management to express expectation about the potentiality of the production function employed by firm to maximize firms shareholders wealth. This finding is consistent with Wasike (2015) who established that dividend announcement event made share return to generally increase. Those investors prefer dividend to capital returns and accordingly positively react to new information such as dividends announcement.

# **5.4 Limitations of the Study**

The study used data for all companies that announced dividends making for huge data to be analyzed, this made time and cost to be of essence and made a major constrain in considering many periods and event days for analysis.

Model used may have not produce correct result as we had no control of errors inherent considering that different companies had different announcements days and had to use different beta and alpha in computing expected returns.

The study used historical date to analyses the data, a fact that may not fit to the changing environment at the NSE, including technology, economic, social and demography of investors. On the other hand current data may not produce better result and are also suffering from the same bias as time is not stationery; therefore it may still be inappropriate for future predictions.

Data availability was a major constrain as there were long days of missing data for some

companies with respect to share prices a fact that we did not confirm whether or not it was an oversight on the provided information. This made computation of returns not complete and may have an effect on the accuracy of the result.

Other factors might had an impact in explaining stock returns for firms listed at the NSE more better or in combination with dividends announcement event. In our study we assumed that other factors were held constant.

#### 5.5 Recommendations

## 5.5.1 Policy Recommendations

From the research findings, Dividends announcement have a major influence on stock returns, therefore we recommend that more firms at the NSE to make dividend announcement as it will carry positive result for shareholders, market and investor generally. More so to be more open with dividend policy changes that are made more informative as opposed to being used for window dressing.

CMA should enforce intact laws relating to publication of information on dividends announcements, insider trading, and general trading rules to contain unwarranted noise trading and other erratic movement in stock prices and therefore returns. This will in turn boost investor confidence at the NSE.

Public education is crucial to investing public in order to forestall eminent reliance on dividend as a major valuation tool in trading of stocks as other events or factors like micro and macro economic factors like election results, interest rates, forex rate among others, needs to be incorporated in the analysis in order to come up with a more robust portfolio of investments choices.

# 5.6 Suggestions for Further Research

Research need be done on specific sectors for the effect of dividends on stock returns for at least 2 sectors and comparison made in order to understand the dynamics behind returns achieved. This will inform the would be investors how they need to react to events like dividends announcements in sectors they are interested in or whether they ought to be indifferent.

Do research on more periods to provide a better understanding on the effect of dividends announcement on stock returns for firms listed at the NSE. In regression analysis terms this ought to be 30 years.

Investigate other factors that affect stock returns and note their explanatory power, alongside dividend announcement event. This is likely to provide more insight into main determinant of stock returns at the NSE.Research on whether dividend policy structure such bonus issue, right issues, share splits and share repurchase have effect on stock returns for firms listed at the NSE.Isolation of critical factors will lead to better and all inclusive analysis of the behavior of stock returns at the local bourse.

Exploration of other methods of capturing the effect of dividends announcements on stock returns and more so to quantify the relationship, if any.

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# APPENDIX

# CUMULATIVE ABNORMAL RETURNS

	PERIOD					2000
EVENT DAYS	2009	2010	2011	2012	2013	2009- 2013
-10	0.190	(0.379)	0.101	(0.125)	(0.207)	(0.084)
-9	0.190	(0.379)	0.101	(0.125)	(0.201)	(0.083)
-8	0.194	(0.375)	0.062	(0.120)	(0.191)	(0.086)
-7	0.187	(0.369)	0.103	(0.133)	(0.209)	(0.084)
-6	0.201	(0.370)	0.097	(0.123)	(0.208)	(0.081)
-5	0.188	(0.380)	0.106	(0.131)	(0.195)	(0.082)
-4	0.201	(0.364)	0.101	(0.111)	(0.358)	(0.106)
-3	0.198	(0.366)	0.115	(0.124)	(0.189)	(0.073)
-2	0.196	(0.404)	0.099	(0.121)	(0.211)	(0.088)
-1	0.186	(0.389)	0.108	(0.105)	(0.210)	(0.082)
0	0.147	(0.415)	0.092	(0.147)	(0.181)	(0.101)
1	0.240	(0.438)	0.148	(0.097)	(0.177)	(0.065)
2	0.206	(0.346)	0.138	(0.070)	(0.180)	(0.050)
3	0.234	(0.335)	0.144	(0.071)	(0.317)	(0.069)
4	0.227	(0.366)	0.147	(0.086)	(0.155)	(0.046)
5	0.242	(0.340)	0.031	(0.079)	(0.169)	(0.063)
6	0.227	(0.340)	0.086	(0.088)	(0.168)	(0.057)
7	0.242	(0.343)	0.132 52	(0.079)	(0.158)	(0.041)

8	0.193	(0.334)		(0.089)	(0.173)	(0.049)
9	0.235	(0.350)	0.155	(0.080)	(0.242)	(0.056)
10	0.241	(0.350)	0.130	(0.088)	(0.165)	(0.046)