

**THE IMPACT OF DIVIDEND INITIATION ON STOCK RETURNS OF COMPANIES  
LISTED AT THE NAIROBI SECURITIES EXCHANGE**

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## DECLARATION

This research project is my original work and has not been presented for a degree or any other examination to any other university.

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## **DEDICATION**

I dedicate this project to my family especially Pastor, Jack Ogeda who encouraged me through completion. To my children Jack, John and Racheal may this study be a source of inspiration and guidance in your future endeavors.

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## **LIST OF ABBREVIATIONS**

|               |                                                                 |
|---------------|-----------------------------------------------------------------|
| <b>AMEX</b>   | American Stock Exchange                                         |
| <b>AR</b>     | Abnormal Returns                                                |
| <b>AAR</b>    | Average Abnormal Returns                                        |
| <b>CAPM</b>   | Capital Assets Pricing Model                                    |
| <b>CAR</b>    | Cumulative Abnormal Returns                                     |
| <b>CMA</b>    | Capital Markets Authority                                       |
| <b>MM</b>     | Modigliani and Miller                                           |
| <b>NASDAQ</b> | National Association of Securities Dealers Automated Quotations |
| <b>NSE</b>    | Nairobi Securities Exchange                                     |
| <b>NYSE</b>   | New York Stock Exchange                                         |

## **ABSTRACT**

Dividends are the distribution of past or present earnings in real assets among the shareholders of a firm in proportion to their ownership. This study investigates the impact of dividends on stock returns of companies that either pay the first dividend in their corporate history or initiate dividends after a 3-year hiatus, listed at the Nairobi Securities Exchange. The study period (2009 to 2014) sampling criteria results to 8 firms for the study sample and uses an estimation window of 140 days and 15-day event window period. The analysis particularly, considers the magnitude of abnormal returns during the days that surround announcements of dividend initiation. This study expects to reveal whether dividend initiation is important to investors at the Nairobi Securities Exchange. It also expects to reveal whether the type of firm's industry or sector has influence on the investors' reaction to dividend initiation announcement. This is accomplished by measuring the abnormal returns before, during and after dividend initiation announcements. Using an event study approach, the evidence shows that dividend initiation announcements are greeted positively by investors. Sectorial analysis is made to ascertain if firms in different industries according to the sample react differently to dividend initiation announcement. The sectors included: commercial and services, banking, energy, insurance and telecommunication and technology. The results suggest that all sectors experienced significant effect of dividend initiation announcement. The firms in the telecommunication and technology sector experienced stronger investors' reaction than firms in the other sectors. The results of this study show that dividend initiation does matter, in a way that is consistent with the signaling hypothesis which states that investors can infer information about a firm's future earnings through the signal coming from dividend announcements, both in terms of the stability and changes in dividends. Therefore, conveying to the market information about the future prospects of the firm. Policy makers of listed firms should watch carefully and consider dividend initiation as an option to signal to the market about their future performance because investors on the securities exchange attach dividend initiation with value increasing effect on their shares/stocks. There is need for the companies' management to ensure availability of information to the shareholders. Provision of vital information regarding operations of the firm to the stakeholders will affect positively the performance of the firm as the shareholders will tend to invest along the trends of the business.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

The emergence of dividend policy as important to investors was, to some extent, driven by the evolving state of financial markets. Investing in shares was initially as analogous to bonds, so regularity of payments was important. It was also seen that in the absence of regular and accurate corporate reporting, dividends were often preferred to reinvested earnings, and often even regarded as a better indication of corporate performance than published earnings accounts. However, as financial markets developed and became more efficient, it was thought by some that dividend policy would become increasingly irrelevant to investors. Why dividend policy should remain evidently important has been theoretically controversial (Rafferty, Pillai and Al-Malkawi, 2010).

Dividend policy has been an issue of interest in financial literature since Joint Stock Companies came into existence (Bhattacharyya, 2007). According to Pandey (2011), dividend policy involves the balancing of the shareholders' desire for current dividends and the firm's needs for funds for growth. Dividends are commonly defined as the distribution of earnings (past or present) in real assets among the shareholders of the firm in proportion to their ownership. Managements' primary goal is shareholders' wealth maximization, which translates into maximizing the value of the company as measured by the price of the company's common stock. This goal can be achieved by giving the shareholders a fair payment on their investments. However, the impact of firm's dividend payment on shareholders wealth is still unresolved.

In recent past, a lot of literature has been developed seeking to explain the market reactions to dividend initiation announcements. The phrase, "dividend puzzle" by Black (1976) has been used by many researchers in an attempt to explain the myth behind dividend behavior. Modigliani and Miller (1961) argued with the notion of a perfect capital market without information asymmetry, no taxes and transaction costs should, in no way affect the firm's value or the share price of a company. They intimated that the value of the firm's shares is the present value of the stream of future cash flows from current assets and future growth opportunities. This assumption is true if only the issue of securities to raise funds is fairly priced. These

arguments fairly suggest that receiving cash dividend from dividend payment is merely exchanging future earning with today's cash of the same market value. This logic led to the conclusion that dividend policy is irrelevant. Even with the intensive argument put up by M & M in finance literature about dividend irrelevance, it only assumes that it operates in a perfect world. However, they did not hesitate to concede that dividend payment could be important if firms used it to convey information not otherwise known to the market.

Brealey (1994) stated that dividend payment has implication for investors, managers and lenders and other stakeholders (more specifically the claimholders). For investors, dividends – whether declared today or accumulated and provided at a later date are not only a means of regular income, but also an important input in valuation of a firm. Similarly, managers' flexibility to invest in projects is also depended on the amount of dividend that they can offer to shareholders as more dividends may mean fewer funds available for investment. Lenders may also have interest in the amount of dividend a firm declares, as more the dividend paid less would be the amount available for servicing and redemption of their claims (Lintner, 1956).

### **1.1.1 Dividend Initiation**

Alangar and Bathala (1999), defines dividend initiation as dividend payment by a firm for the first time in its entire corporate history or after a hiatus of more than three years. Dividends are corporate earnings that companies pass on to their shareholders. There are a number of reasons why a corporation might choose to pass some of its earnings on as dividends. There are also a number of reasons why it might prefer to reinvest all of its earnings back into the company.

A company that is still growing rapidly usually won't pay dividends, because it wants to invest as much as possible into further growth. Even a mature firm that believes it will do a better job of increasing its value (and therefore a better job of increasing its share price) by reinvesting its earnings will choose not to pay dividends. Companies that don't pay dividends might use the money to start a new project, acquire new assets, repurchase some of their shares or even buy out another company (Pandey, 2011).

However, for a mature company that doesn't need to reinvest as much in itself, and has stable earnings, there are several reasons why issuing dividends can be a good idea. Many investors like the steady income associated with dividends, so they will be more likely to buy that company's shares. Investors also see a dividend payment as a sign of a company's strength and a sign that management has positive expectations for future earnings, which again makes the shares more attractive. A greater demand for a firm's shares will increase its price (Brigham and Houston, 2004).

Various dividend theories have been put across which view dividend as either irrelevant or relevant to financial decision making of a company. Gordon (1959) view on dividend policy was developed from his valuation of stock price which asserted that the price of a share is the same as the discounted value of its expected payments of dividends in the future. He concluded that a firm is more valuable with the more cash dividends it pays. Walter (1956) tried to depict the relationship between stock prices and dividend policies. His main focus was on common stock prices of large public firms. He concluded that stock prices reflected the present value of the expected dividend over longer periods and so the value of the firm is affected by dividend.

Dividend policy is no longer thought to be irrelevant. Asquith and Mullins (1983) show that the average firm that initiates dividend payments experiences a statistically significant positive abnormal return. Miller and Rock (1985) offer an explanation for this, saying that companies can signal positive information by initiating dividends. Signaling hypothesis states that dividend initiation conveys to the market information about the future prospects of the firm.

### **1.1.2 Stock Return**

According to Pandey (2011), stock return is the present value of the expected future returns to the owners (shareholders) of the firm. These returns can take the form of periodic dividend payments and/or proceeds from the sale of the stock. Deschow (2000) states that it is value delivered to shareholders because of management's ability to grow earnings, dividends and share price. In other words, shareholder value is the sum of all strategic decisions that affect the firm's ability to efficiently increase the amount of free cash flow over time.

Stock return is measured by the market value of the firm's common stock. Pandey (2011), states that the market value of the shareholders' equity is directly observable from the capital markets. In theory, the market value should be equal the warranted economic value of the firm. The true economic value of a firm or business or division or project or any strategy depends on the cash flows and the appropriate discount rate (commensurate with the risk of cash flows).

The shareholder value approach is based on the assumption that a principal-agent relationship exists between the shareholders and the management. As the shareholders' agent the management is charged with the responsibility of creating wealth for shareholders. Therefore, all management actions and strategies should be guided by shareholder wealth maximization. This approach helps to strengthen the competitive position of the firm by focusing on wealth creation (Pandey, 2011).

The interest in shareholders' value is gaining momentum as a result of several recent developments; the threat of corporate takeovers by those seeking undervalued, under managed assets, impressive endorsements by corporate leaders who have adopted the approach, the growing recognition that traditional accounting measures such as EPS and ROI are not reliably linked to the value of the company's shares, reporting of returns to shareholders along with other measures of performance in business press, a growing recognition that executives' long-term compensation needs to be more closely tied to returns to shareholders.

### **1.1.3 Effect of Dividend Initiation on Stock Return**

One interpretation of proper financial management is that agents (directors) are oriented toward the benefit of the principals (shareholders), and in increasing their wealth by paying dividends and/or causing the stock price or market value to increase. A dividend is allocated as a fixed amount per share, with shareholders receiving a dividend in proportion to their shareholding (Brealey, 1994). For the joint stock company, paying dividends is not an expense; rather, it is the division of after tax profits among shareholders. Public companies usually pay dividends on a fixed schedule (semiannually or annually), but may declare a dividend at any time, sometimes called a special dividend.

Several studies in developed markets such as Europe and America have been undertaken to study the impact of dividend initiation on stock returns. Most prominent and popular studies in the area are Asquith and Mullins (1983), Schultz (2004), Healy and Palepu (1988) and Jin (2000). While firms that initiate dividends experience a positive abnormal return on average, there is a wide dispersion of returns associated with the event.

According to Asquith and Mullins (1983), a positive wealth impact may also result from a dividend policy that communicates valuable information to investors. Dividends may provide a vehicle for communicating management's superior information concerning their interpretation of the firm's recent performance and their assessment of future performance. This view is consistent with the results of empirical studies examining firms' dividend policies (Lintner, 1956). Bhattacharya (1979, 1980) presents asymmetric information models in which dividends serve as signals of the firm's current performance and future prospects.

Jin (2000) analyses data sets of dividend initiating firms that experience a positive abnormal return and those with negative abnormal returns separately. He compared eight characteristics of the firms, and found that the characteristics of firms where the market reacts negatively to dividend announcements differ significantly from the characteristics of firms favored by the market.

In the Pakistan market, evaluation of whether dividend announcement had an impact on prices of shares for firms that announced dividend and other rival firms in the industry was conducted by Aamir and Ali-Shar (2011). They found that on the day dividend was announced and a few days after, there was positive impact on share prices. They concluded that for the rival firms, the findings previously seen also existed. They stated that the results confirmed that for future price determination, dividend distribution was relevant.

In the Kenyan market at the Nairobi Securities Exchange, Olweny (2012) sought to determine the extent to which there was information content in dividend announcements, the effect dividend announcements had on the firm value and its implications on the semi strong efficiency of the securities market (NSE). He concluded that there was information content in dividend

announcements which affected the value of the firm. This conclusion arose from the fact that he found out that there was a significant relationship between abnormal stock returns and unexpected dividend announcements.

#### **1.1.4 Nairobi Securities Exchange**

During the British colony rule, dealing in shares commenced in 1920s with trading taking place on a gentleman's agreement with no physical trading floor. London Stock Exchange (LSE) officials accepted to recognize the setting up of the Nairobi Stock Exchange as an overseas stock exchange in 1953. In 1954, the Nairobi Securities Exchange was registered under the Societies Act as a voluntary association of stockbrokers and charged with the responsibility of developing the securities market and regulating trading activities. By 1968, the number of listed public sector securities was 66 during which the NSE operated as a regional market in East Africa where a number of the listed shares and public sector securities included issues by the East African Community. The Capital Markets Authority which regulates the activities of capital market in Kenya was constituted in January 1990 through the Capital Markets Authority Act and inaugurated in March 1990.

The Nairobi Stock Exchange Limited changed its name to the Nairobi Securities Exchange Limited on July 6, 2011 which was a reflection of its evolution into a full service securities exchange. Later in 2014, the NSE received formal approval from the CMA to offer its shares to the public through an Initial Public Offer and subsequently self-list its shares on the Main Investment Market Segment of NSE. Following its self-listing the Exchange became the second African Exchange after the Johannesburg Stock Exchange to be listed. Currently the NSE has 64 listed firms divided into the following sectors: Investment, Investment Services, Manufacturing & Allied, Telecommunication & Technology, Agricultural, Banking, Automobiles & Accessories, Commercial & Services, Construction & Allied, Energy & Petroleum, and Insurance.

In May 2013, internet service provider AccessKenya for the first time in three years paid a dividend of sh.0.30 per ordinary share for the year ended December 31, 2012 after announcing a 38.8 per cent increase in net profit. This was a boon to the company investors who saw shares

gain 55% to sh7.05 per share but the stock remained below its June 2007 IPO price of sh10 per share. The firm paid a dividend of sh0.30 in 2009 and sh0.50 in 2008 attributing the rebound to market share growth (Okuttah, 2013). In June 2013, AccessKenya Group received a take-over bid from Dimension Data Holding for 100% of the stock that lead to the delisting of the stock from NSE. Nairobi Securities Exchange announced its initial dividend of sh0.38 per share on March 27, 2015 to be paid September 24, 2015.

## **1.2 Research Problem**

Signaling hypothesis states that investors can infer information about a firm's future earnings through the signal coming from dividend announcements, both in terms of the stability of, and changes in, dividends. Therefore, dividend initiation conveys to the market information about the future prospects of the firm. Easterbrook (1984) alluded that the argument surrounding dividend payment of companies are most of the time to convey a message to the shareholders that they expect favorable future prospects of the firm. According to him, it is just an effort to align shareholders' mind to believe that management will not mismanage any available cash in unprofitable projects to reduce agency conflict.

There is no research that has been carried out to determine the impact of dividend initiation on stock returns of companies listed at the NSE. This study therefore sought to establish whether dividend initiation is important and relevant to investors of companies listed at the Nairobi Securities Exchange. It was carried out to determine whether there is information content in the initial dividend announcement event affecting investor behavior. It also expected to reveal whether the type of firm's industrial sector has influence on the investors' investment decision. The question being answered here is whether an investor can expect a repeat of similar market behavior around a dividend initiation period.

Previous researchers in this area suggest that dividend announcement conveys information on future prospects of the company and the investors assess share price of the firm using dividend announcements information. Asquith and Mullins (1983) analyzed 168 firms that initiated dividend payments to establish the effect on shareholders wealth. They found that excess returns over the 2-day announcement period were both large and significant. This implied that any

negative wealth effect that is generated through changes in tax-induced clienteles is more than offset by the value that investors place on dividend payments and on the establishment of signaling mechanism.

Healy and Palepu (1988) examined whether changes in dividend policy conveyed information about future earnings of firms. They observed the impact of dividend initiation on shareholder value and also on earnings per share five years before and after dividend initiation announcements. They concluded firms initiating dividends have significant increases in their earnings for at least one year before, the year of and the year following dividend initiation. Venkatesh (1989) conducted a similar analysis for dividend initiating firms. His principal hypothesis was that information content of quarterly earnings announcements decreases after introduction of cash dividends by a firm. He concluded that the average price reaction to earnings announcements is smaller in the post dividend-initiation period, regardless of whether earnings precede or follow dividend announcements.

Bunyasi (2007) sought to establish the effect of dividend policy on the market value of shares of public companies quoted at the Nairobi Securities Exchange. She concluded that dividend payment information often leaks out to the market a few days before the announcement date. This leads to investors reaping high returns on their investments after the announcements are made. Ngunjiri (2010) studies relationship between payment policies and stock price volatility and indicated that payment policies had a great impact on the stock price volatility.

Studies on dividend initiation have not been given attention in Kenya over the years despite its importance in understanding share price behavior. This has led to deficient literature in understanding share market reaction to dividend initiation in Kenya. Though it has been widely studied in the developed markets (Europe and America) the same cannot be said of Kenya. In addition to that, the data set used in the developed markets for the study of this topic cannot be used in explaining the investor behavior of the securities market in Kenya. This is because the variables used in those studies could have been influenced by factors unique to their environment.

Hence a unique study focusing on Nairobi Securities Exchange is warranted. This study will establish the Kenyan perspective on share price behavior towards dividend initiations of various companies allied to various sectors listed at the Nairobi Securities Exchange. This study therefore seeks to establish the following research question; what is the effect of dividend initiation announcement on stock returns?

### **1.3 Research Objectives**

The main objective of the study was to establish the impact of dividend initiation on stock returns of companies listed at the Nairobi Securities Exchange. The specific objectives were as follows:

- i. To examine share price changes following dividend initiation announcement.
- ii. To investigate the effect of industry classification on impact of dividend initiation on stock returns.

### **1.4 Value of the study**

The advancement of literature has led to the emergence of a new area that sought to explain the main causes of the market reaction to such unique events. Because of this effort, a great deal of work has been done in the area of market reaction to dividend initiation announcement together with the information content of dividend hypothesis. This study is expected to contribute to the understanding of the abnormal returns that will result due to the shock or surprise that the market will experience in receiving the news of dividend initiation announcement.

The study will also contribute to the financial knowledge of various parties and stakeholders in the financial sector. The findings will be of interest to the management of publicly listed companies who will be able to determine the effect of dividend initiation announcement on shareholders' value so that they can make prudent dividend decisions and have prior knowledge on what to expect before, during and after the event; the impact it has on the firm and shareholder value.

The government of Kenya would be enlightened in a bid to make policies relating to dividends and taxes. The knowledge of the effect of dividends on the shareholders' value will help in

ascertaining the appropriate amount or percentage of tax and their effects on the value of the firm. The study findings will be of importance to firms such as Capital Markets Authority and Nairobi Securities Exchange which may use it as a form of guidance in their policy formation concerning dividend and earnings announcements contributing to market efficiency.

The findings of the study would also enable financial consultants to offer proper services to their clients. This relates to optimal dividend policy where the firm value can be maximized. It is important for corporate manager to understand the informational impact of dividend and earnings announcements on the share prices. This will help them in making disclosure policies regarding any information that is released to the stock market. Lastly for investors' who are always interested on gains for their investments will have a clear indication on what to expect during corporate announcements that affect stock value and returns in general. The study findings will be of use to investors in identifying the best firm or industry for investment of their funds.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents literature in the field of dividend initiation announcement. The chapter first focused on three dividend theories followed by an explanation on factors that influence stock returns. Related studies on dividend initiation announcement were then reviewed at the end of the chapter.

#### **2.2 Theoretical Review**

Three main contradictory theories of dividends can be identified. Some argue that increasing dividend payments increases a firm's value. Another view claims that high dividend payouts have the opposite effect on a firm's value; that is, it reduces firm value. The third theoretical approach asserts that dividends should be irrelevant and all effort spent on the dividend decision is wasted. These views are embodied in three theories of dividend policy: high dividends increase share value theory (bird-in-the-hand argument), low dividends increase share value theory (tax-preference argument), and the dividend irrelevance hypothesis. Dividend debate is not limited to these three approaches. Several other theories of dividend policy have been presented, which further increases the complexity of the dividend puzzle. Some of the more popular arguments include the information content of dividends (signaling), the clientele effects, and the agency cost hypothesis. The three main contradictory theories are discussed below beginning with dividend irrelevance theory.

##### **2.2.1 Dividend Irrelevance Theory**

The principal proponents of this theory are Miller and Modigliani (1961). Pandey, (2011) states that, according to Miller and Modigliani, under a perfect market situation, the dividend policy of a firm is irrelevant, as it does not affect the value of the firm. They argued that the firm's value is determined only by its basic earning power and business risk. In other words, the value of the firm depends only on the income produced by its assets, not on how this income is split between dividends and retained earnings. In developing their dividend theory, MM made a number of assumptions as follows: *Perfect capital markets*: The firm operates in perfect capital markets where investors behave rationally, information is freely available to all and transactions and

flotation costs do not exist; *No taxes*: Taxes do not exist – there are no differences in the tax rates applicable to capital gains and dividends; *Investment policy*: The firm has a fixed investment policy; *No risk*: Investors are able to forecast future prices and dividends with certainty, and one discount rate is appropriate for all securities and all time periods.

The above discussion suggests that the firm's investment policy is the key determinant of its value and dividend policy is the residual. Operating cash flows depend on investments. In other words, the firm's investments in positive net present value (NPV) projects will increase the cash flows from operation, which is the only way to increase the value of the firm. In summary, given the assumptions of perfect capital markets, the firm's future cash flow from investment activities is the sole determinant of the value of the firm. The firm's payout policy must therefore be independent of its value (Bishop, Harvey, Robert and Garry, 2000).

To understand MM's argument that dividend policy is irrelevant, they recognize that any shareholder can in theory construct his or her own dividend policy. If a firm does not pay dividends, a shareholder who wants a 5 percent dividend can "create" it by selling 5 percent of his or her stock. Conversely, if a company pays a higher dividend than an investor desire, the investor can use the unwanted dividends to buy additional shares of the company's stock. If investors could buy and sell shares and thus create their own dividend policy without incurring costs, then the firm's dividend policy would truly be irrelevant. Note, though, that investors who want additional dividends must incur brokerage costs to sell shares, and investors who do not want dividends must first pay taxes on the unwanted dividends and then incur brokerage costs to purchase shares with the after-tax dividends. Since taxes and brokerage costs certainly exist, dividend policy may well be relevant (Brigham and Houston, 2004).

### **2.2.2 Bird-In-The-Hand Theory**

The principal conclusion of MM's dividend irrelevance theory is that dividend policy does not affect the required rate of return on equity. This conclusion has been hotly debated in academic circles. In particular, Gordon (1963) and Lintner (1962) argued that return on equity decreases as the dividend payout is increased because investors are less certain of receiving the capital

gains that are supposed to result from retaining earnings than they are of receiving dividend payments (Brigham and Houston, 2004).

According to Gordon (1963), uncertainty increases with futurity; that is, the further one looks into the future, the more uncertain dividends become. Investors prefer to avoid uncertainty and would be willing to pay higher price for the share that pays the greater current dividend, all other things held constant. Gordon's view states that the increase in earnings retention will result in a lower value of share. To emphasize, he reached his conclusion through two assumptions regarding investors' behavior; investors are risk averters and they consider distant dividends as less certain than near dividends. He concludes that the rate at which an investor discounts dividend stream increases with the futurity of the dividend stream. If investors discount distant dividend at a higher rate than near dividends, increasing the retention ratio has the effect of raising the average discount rate, or equivalently lowering share prices (Pandey, 2011).

However, all do not agree with this view. MM disagreed and instead argued that return on equity is independent of dividend policy, which implies that investors are indifferent between dividend yield and growth and hence, between dividends and capital gains. MM called Gordon-Lintner argument the bird-in-the-hand fallacy because, in their view, most investors plan to reinvest their dividends in the stock of the same or similar firms, and, in any event, the riskiness of the firm's cash flows to investors in the long run is determined by the riskiness of operating cash flows, not by dividend payout policy (Brigham and Houston, 2004).

Further, Bhattacharya (1979) suggested that the reasoning underlying the bird-in-the-hand theory is fallacious. Moreover, he suggested that the firm's risk affects the level of dividend not the other way round. That is, the riskiness of a firm's cash flow influences its dividend payments, but increases in dividends will not reduce the risk of the firm. The notion that firms facing greater uncertainty of future cash flow (risk) tend to adopt lower payout ratios seems to be theoretically plausible. Empirically, Rozeff (1982) found a negative relationship between dividends and firm risk. That is, as the risk of a firm's operation increases, the dividend payments decrease.

### **2.2.3 Tax-Effect Theory**

MM's assumption that taxes do not exist is far from reality. Therefore, Litzenberger and Ramaswamy (1979) argued that investors may prefer one dividend policy over another because of the tax effect on dividend receipts. Investors have to pay taxes on dividends and capital gains. But different tax rates are applicable to dividends and capital gains. Dividend income is generally treated as the ordinary income, while capital gains are specially treated for tax purposes.

The tax-effect theory suggests that low dividend payout ratios lower the cost of capital and increases the stock price. In other words low dividend payout ratios contribute to maximizing the firm's value. This argument is based on the assumption that dividends are taxed at higher rates than capital gains. In addition, dividends are taxed immediately, while taxes on capital gains are deferred until the stock is actually sold. These tax advantages of capital gains over dividends tend to predispose investors, who have favorable tax treatment on capital gains, to prefer companies that retain most of their earnings rather than pay them out as dividends, and are willing to pay a premium for low-payout companies. Therefore, a low dividend payout ratio will lower the cost of equity and increases the stock price. Note that, this prediction is almost the exact opposite of the Bird-in-the-hand theory, and of course challenges the strict form of the Dividend Irrelevance theory (Rafferty, Pillai and Al-Malkawi, 2010).

From the tax point of view, a shareholder in high tax bracket should prefer capital gains over current dividends for two reasons: the capital gains tax is less than the tax on dividends, and the capital gains tax is payable only when the shares are actually sold (Pandey, 2011). Due to time value effects, a dollar of taxes paid in the future has a lower effective cost than a dollar paid today (Brigham and Houston, 2004).

Pandey (2011), states that the effect of the favorable tax differential in case of capital gains will result in tax savings. As a consequence, the value of the share should be higher in the internal financing case than in the external financing one. Thus, the tax advantage of capital gains over dividends strongly favors a low-dividend payout policy. This implies that investors will pay more for low-dividend yield shares. Therefore, tax differential will attract tax clienteles.

Investors in high-tax brackets should own low-payout shares, and those in low-tax bracket should own high-payout shares. In reality, most investors may have marginal income tax rate higher than the capital gains tax rate. Thus, dividends, on an average, are considered bad since they will result in higher taxes and reduction in the wealth of shareholders. Tax differential generally favor low-payout clientele.

If a tax system favors capital gains to dividend income, there may still be several investors who are in lower tax brackets. These investors investing in shares will prefer dividend income rather than capital gains. Thus, there may exist high-payout clientele. In a tax system that treats dividends more favorably than capital gains, shareholders in high tax brackets will also prefer receiving dividends rather than capital gains. Under this tax system, dividends will be considered good and it will generally attract high-payout clientele. This situation prevails currently in India.

Brennan (1970) developed an after-tax version of the capital asset pricing model (CAPM) to test the relationship between tax risk-adjusted returns and dividend yield. Brennan's model maintains that a stock's pre-tax returns should be positively and linearly related to its dividend yield and to its systematic risk. Higher pre-tax risk adjusted returns are associated with higher dividend yield stocks to compensate investors for the tax disadvantages of these returns. This suggests that, all factors held constant, a stock with higher dividend yield will sell at lower prices because of the disadvantage of higher taxes associated with dividend income (Brigham and Houston, 2004).

## **2.3 Determinants of Stock Returns**

The following factors have an effect on stock returns which are realized in dividend and market price of a company's stock:

### **2.3.1 Profitability**

Accounting earnings are the major factor which can affect stock market price of the firm. Earnings of the firm convey information to the investors about the position, which will of course, effect investors' decision. If the earnings are higher than the expectations of the shareholders, then they will be more satisfied and it will have a positive effect on stock prices and vice versa.

The decision to pay dividends starts with profits. Therefore, it is logical to consider profitability as a threshold factor, and the level of profitability as one of the most important factors that may influence firms' dividend decisions. In his classic study, Lintner (1956) found that a firm's net earnings are the critical determinant of dividend changes. Furthermore, several studies have documented a positive relationship between profitability and dividend payouts (Fama and French, 2001)

### **2.3.2 Dividend payout**

Earnings distributed to shareholders are known as dividend. The main objective of the manager is to maximize the wealth of the shareholder and managers pursue this objective with investing and financing decisions. Managers have more information about the firm's current and future information than the outsiders and stakeholders. Share prices may not reflect the true position and managers then preferably can use dividends as a signal tool to share inside information (Miller and Rock, 1985). An increase in dividend payout is effective for a firm because it enhances the market price of the share and has great impact on shareholders' wealth (Asquith & Mullin, 1983). Higher dividend payout ratio creates positive reaction by increasing the market price of the share.

### **2.3.3 Leverage**

The degree of debt financing in the capital structure is called leverage. The degree of debt financing by the business has impact on the value of firm's assets. Managers may finance the fixed assets as well as a large portion of current assets through long term fund, this is said to be "conservative approach". The assets of the firms following this approach remain under-utilized and result in low profitability, which affects stock prices adversely. Black and Scholes (1973) discuss the impact of leverage on stock price behavior. They observed that the volatility of a stock's return should come entirely from the fluctuations in the total firm value. The firm's leverage will also cause stock volatility to vary systematically and asymmetrically with returns; when a negative stock return causes equity value to go down while debt is fixed, firm leverage is raised, which increases future equity volatility and vice versa.

### **2.3.4 Liquidity**

Dividend payments mean cash outflow. The cash position of a firm is an important consideration in paying dividends; the greater the cash position and overall liquidity of a company, the greater will be its ability to pay dividends. A mature company is generally liquid

and is able to pay large amount of dividends. It does not have much investment opportunities, much of its funds are not tied up in permanent working capital. On the other hand, growing firms face the problem of liquidity. Even though they make good profits, they continuously need funds for financing growing fixed assets and working capital therefore they may follow a conservative dividend policy (Pandey, 2011).

### **2.3.5 Growth**

Firm's growth is directly linked with the stock market prices and its dividend policy. Firm's sales, market-to-book ratio (MBR) and price-earnings ratio (PER) are different proxies used to determine the growth of the firm. Growth is also determined by some researchers in terms of the age/life cycle of the firm (Michaely, Grullon and Swaminathan, 2002). From a financial market perspective, firms' growth requirements are determined by the shareholders' long-term earnings growth expectations, which are inherent in the firm's current market value. Furthermore, according to the maturity hypothesis presented by Michaely et al. (2002), as firms become mature; their growth and investment opportunities shrink, resulting in a decline in their capital expenditures. Thus, more free cash flows are available to be paid as dividends.

## **2.4 Empirical Review**

The information content theory suggests that managers can communicate information to investors about their optimism of the firm's prospect in the future through dividend announcement (Asquith and Mullins, 1983; Healy and Palepu, 1988 and Norton, 2008). It is said that since managers spend most of their time in analyzing the firm's performance, they are by default having deeper understanding about the firm's investment opportunities, operations and limitations. That understanding may influence their decisions and actions that presuppose that any decision by managers to initiate dividend payment reflect their view that the firm's future earnings, cash flows and other opportunities will likely be favorable.

### **2.4.1 International Evidence**

Asquith and Mullins (1983) did a thorough work on dividend initiation announcements for a sample of 168 firms listed at the New York Stock Exchange which either initiated dividend for the first time in their corporate history or resumed paying dividends after at least a ten-year hiatus. The initial 10-year screen used was January 1954–December 1963. They tested the average

daily excess returns and cumulative excess returns for the 20-day period surrounding the initial dividend announcement. The results for the 2-day announcement period were both large and significant. The 2-day excess return was +3.7% and the associated t-statistic 6.59. They concluded that initiating dividends increases shareholders' wealth. Their results were consistent with the view that dividends convey unique, valuable information to investors as Lintner (1956) and others have documented.

Healy and Palepu (1988) carried an investigation on earnings information conveyed by dividend initiations and omissions. Their sample comprised of firms used by Asquith and Mullins (1983) in their study of the effect of initiating dividend announcements on shareholders' wealth. All the dividend policy changes examined occurred between 1969 and 1980. They estimated abnormal returns for initiation and omission for a period of 60 days before to 20 days after the announcement. From a sample of 131 initiations, they found a 3.9 percent increase and 9.5 percent decrease on a sample of 172 omissions. They concluded that their dividend initiation findings provided strong support for Lintner's (1956) description of managers' dividend decision-making process, and the dividend information hypothesis proposed by Modigliani and Miller (1961). Dividend initiation decisions are therefore interpreted by the market as managers' forecasts of future earnings increases.

Michael, Thaler and Womack (1995) investigated the immediate and long-term effects of dividend initiations and omissions announcements. They majored on companies that initiated dividends during 1964 to 1988, listed at the New York Stock Exchange or American Stock Exchange. The sample contained 561 cash dividend initiation events and 887 omission events. They used a buy-and-hold strategy to calculate the excess return from the time period before the event, and for the three-day window around the event. During the three-day event period, the initiation portfolios experienced a significant additional excess return of +3.4% ( $t = 11.08$ ) and omitting firms experienced a return of -7.0%. Michael et al also found significant long-run drifts in stock prices in response to dividend initiations and omissions. They reported +7.5% excess returns after one year of initiation announcements and +24.8% after three years. For dividend omissions they reported abnormal returns of -11.0% in the first year and -15.3% after

three years. Consistent with prior studies, they found that the short-run price impact of dividend omissions was negative and that of initiations was positive.

Using a sample of 200 German firms listed on Frankfurt Stock Exchange, Amihud and Murgia (1997) found support for the notion that dividend changes convey information about firms' values. They examined the stock price reaction to dividend announcements using 255 events of dividend increase and 51 events of dividend decrease for the period of 1988 to 1992, and compared the results with findings of studies based on US data. Their findings were inconsistent with tax-based signaling models because dividends in Germany are not tax-disadvantaged. Thus, according to these models, if dividends do not suffer from a tax penalty (as in the case Germany) share prices should not react to dividend changes.

Skinner and Soltes (2009) investigated whether the informativeness of payout policy with respect to earnings quality changes over the past 30 years. Their sample contained all firms listed on the NYSE, AMEX or NASDAQ between 1974 and 2005; incorporated in the United States.

Their findings indicated that the reported earnings of dividend-paying firms are more persistent than those of other firms and that this relation is remarkably stable over time. They also found that dividend payers are less likely to report losses and those losses that they do report tend to be transitory losses driven by special items. These results do not hold as strongly for stock repurchases, consistent with them representing less of a commitment than dividends. Therefore repurchases are unlikely to completely supplant dividends given the strength of the relation between earnings quality and dividends.

Raja and Tahir (2014) analyzed the impact of dividend policy on shareholder wealth of oil and gas exploration companies of Pakistan during the years from 1999 to 2006. They used convenience sampling technique and came up with 6 companies listed on Karachi Stock Exchange. They examined the relationship between dividend payout ratio, P/E ratio, BV/MV ratio and holding period yield within the industry and how these variable effects shareholders wealth. Their findings indicated based on historical data and statistical analysis that correlation between independent and depended variable is very low for all companies showing insignificant

relationship between them. They further indicated that there are many external factors influencing Karachi Stock Exchange and shareholders wealth is affected by these factors.

#### **2.4.2 Local Evidence**

Kiio (2006) carried out a study seeking to establish how fast the stock prices were changing after dividend announcements and found that indeed share prices are reactive to dividend announcements. On the contrary, Kihara (2011) concluded that there was no significant relationship between dividend announcements and abnormal returns after carrying out an investigation on the relationship between dividend announcements and return on investment for firms listed in the NSE.

Olweny (2012) sought to determine the extent to which there is information content in dividend announcements, dividend announcements effect on firm value and its implications on the semi strong efficiency of the Nairobi Securities Exchange. A sample to trading delays in each year for the period 1999 – 2003 was used and an event study methodology was used for analysis. He concluded that there was information content in dividend announcements which affected the value of the firm. This conclusion arose from the fact that he found out that there was a significant relationship between abnormal stock returns and unexpected dividend announcements. He further explained that some investors had unequal access to public information earning them abnormal returns thus the Nairobi Securities Exchange was not semi strong from efficiency.

A study investigating the signaling hypothesis by testing the displacement property of dividends was done by Waweru, Pokhariyal and Mwaura (2012). They used Ohlson model followed by Hand and Landsman approach to analyze data. The study population had 58 listed firms in the Nairobi Securities Exchange for the period beginning 1998 to 2010. They provided further empirical evidence that dividends are used as signal about future earnings prospects of the firm. This supports the view that firms only increase dividend if they are absolutely sure the future earnings prospects will allow them to maintain the higher payout.

Muigai (2012) sort to establish the effect of dividend declaration on share prices of commercial banks listed on the Nairobi Securities Exchange from 2007 to 2011. The study population comprised of 10 banks. Event study methodology covering a total of 91 days for each company's share trading with a 60-day estimation window was used. He established that the event of dividend declaration does affect the share prices but the effect is however not standard for all the banks that made the announcements.

Atieno (2013), analyzed stock price reaction of firms listed on the Nairobi Securities Exchange between the periods before, during and after the post-election violence in Kenya, covering a period between 2005 and 2012. She used event study to analyze price reactions to dividend change announcements. Results revealed that dividend announcement had significant effect on share price returns during the period. In addition, dividend decreases resulted to negative returns while dividend increases resulted to positive returns. She therefore concluded that dividend announcement had information content which had signaling effect on share prices.

## **2.5 Event Study Methodology**

Event study is a systematic examination of the average impact of a certain event on the price of a certain type of (corporate) asset. It provides an ideal tool for examining how asset prices react to announcements of economic events that include new information relevant for the value of the underlying assets. The first event study was conducted by Dolly (1933) where he studied the impact of stock splits on the stock prices. The theoretical framework behind the event study methodology is the theory of efficient capital markets proposed by Fama (1970) from the University of Chicago.

The underlying assumption of the event study methodology is that the capital market is semi-strong form efficient. This form of market efficiency assumes that asset prices comprise all publicly available information relevant for price formation. The following are steps followed in carrying out an event study:

*First step:* it is important to define as exactly as possible the corporate event being examined to make sure all identified events are comparable. In this case the event shall be dividend initiation.

*Second step:* sample period is then defined and the firms to be examined in the study. The time

frame over which the impact of the event would be observed is identified and it is also termed as an event window. *Third step:* the exact date on which the event of interest was announced is then identified. This is the first trading day on which the dividend initiation became public information. If the event was announced on a non-trading day, the next trading day is the correct event day to choose.

*Fourth step:* In order to calculate the abnormal returns, there is need to first estimate the expected return for the event date. The abnormal return is simply the realized return minus the expected return on the same day. Several methods exist to estimate the expected return. The market return model will be used to estimate the abnormal return where the market mean return will be used as the expected return for an asset. The study intends to use the NSE 20 share index as a proxy for market returns.

*Fifth step:* One needs to determine the estimation window and the event window. The estimation window is the period of trading days (before the event date) used to estimate the expected return for each asset and each event using the market model. The event window is the period of trading days over which one wants to calculate abnormal returns. For this study, the event window will be 15-day, t-7 days prior to and t+7 days after the event day; t-0 will be the event day itself.

*Finally,* the last step is to test whether the abnormal returns are significantly different from zero on a statistical basis. In order to test whether the abnormal return in the event window is statistically significant, the t-statistic will be calculated.

## **2.6 Summary of the Literature Review**

The literature review shows the existing theories on dividend policy and the empirical findings. From the theories of dividend policy reviewed, it can be concluded that dividend policy theories have contrasting relevance between management and the shareholders emanating from contrasting interests. Management is more focused on the objective growth of the organization while the shareholders are focused on the performance of the organization in terms of share price that determine their return on investment.

Empirical studies testing the relationship between dividend initiation and stock returns as measured by share price have been carried out mainly in the developed economies (Europe and America) unlike the emerging economies. Local studies that have attempted work on securities market in Kenya according to the review are such as; Kiio (2006), Olweny (2012), Muigai (2012) and Atieno (2013) which mainly researched on the effect of dividend announcements on share price. There is no study that has focused on market reaction to dividend initiation either in the long-run or short-run. Hence a unique study focusing on the Kenyan market is warranted. This study therefore comes in to fill the gap by establishing the effect of dividend initiation on shareholders returns for companies listed on NSE.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the procedure that was followed in conducting the study. Research design, the population, data collection procedure, data analysis and the analytical method were discussed in this section.

#### **3.2 Research Design**

This refers to the method used to carry out the research. This study used the event study methodology by Brown and Warner (1985). An event study methodology is an empirical study performed on a security that has experienced a significant catalyst occurrence, and has subsequently changed dramatically in value as a result of that catalyst. The event can have either a positive or negative effect on the value of the security. Event studies can reveal important information about how a security is likely to react to a given event, and can help predict how other securities are likely to react to the event (Brigham and Houston, 2004).

#### **3.3 Population**

There were 64 listed firms in the NSE which formed the population of the study. The firms were grouped into 12 sectors according to specific industry a firm is allied to (Appendix I). However, based on the need to provide adequate data, to be included in the study; the firms must have initiated dividend payment during the period 2009 to 2014. The sample number therefore consisted of 8 companies (Appendix II).

The following criteria was used to select the firms for the study: The firm must have initiated dividend payment; the firm must have dividend initiation declaration date and that date must be available for assessment; the company must have at least 150-day trading share prices before and at least 10-day trading share prices after the dividend initiation was announced.

#### **3.4 Data Selection**

The study used secondary data obtained from annual reports and financial statements of companies filed with the Capital Markets Authority. Share prices and NSE 20 share index data

was obtained from Nairobi Securities Exchange and this was used to calculate the abnormal returns.

The original data was in the form of closing price of shares and closing value of market index. The study used the NSE 20 share index as a proxy for market returns. 15-day returns were collected for each dividend initiation announcement to examine the impact 7-days return before and after the dividend initiations to capture the entire impact of the announcement. Day  $t = 0$  is the day the news of the dividend initiation is published at the Nairobi Securities Exchange.

### 3.5 Data Analysis

The market model was used to estimate the abnormal return. This model is based on the assumption of a constant and linear relation between individual asset returns and the return of a market index.

#### 3.5.1 Analytical Model

$$E(R_{it}) = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \dots \dots \dots \text{Eqn(1)}$$

$R_{it}$  = the expected rate of return on the share price of firm  $i$  on day  $t$ .

$R_{mt}$  = the rate of return on the market portfolio of stocks of (NSE) on day  $t$ .

$\alpha$  = the intercept term

$\beta$  = the systematic risk of stock  $i$ ,

$\varepsilon_{it}$  = the error term, with  $E(\varepsilon_{it}) = 0$

This means Alpha ( $\alpha$ ) shows how much on average the stock price changed when the market index is unchanged and Beta ( $\beta$ ) tells how much the stock price moved for each percentage (1%) change in the market index.

The study used 140 days observations before the event window to estimate the betas. From that estimation, the research then used estimates of daily abnormal returns (AR) for the  $i^{\text{th}}$  firm using the equation below:

$$AR_{it} = R_{it} - (\alpha_i + \beta_i R_{mt}) \dots \dots \dots \text{Eqn (2)}$$

$AR_{it}$  = abnormal return of firm  $i$  surrounding the announcement date

$R_{it}$  = actual return of firm i surrounding the announcement date

$\alpha$  = the intercept term

$\beta$  = the systematic risk of stock i

$R_{mt}$  = the rate of return on the market portfolio of stocks of (NSE) on day t.

The abnormal returns ( $AR_{it}$ ) represent the returns earned by the firm after subtracting the expected return from the actual return.

For each of the 15-days average return was calculated as follows: Eqn (3)

$$AAR = \frac{1}{N} \sum_{i=1}^N AR_i$$

AAR = average abnormal return

N = number of firms in the sample

i = 1 = the i<sup>th</sup> firm

The average abnormal returns were cumulated over the event window that gave the cumulative abnormal returns as shown below: Eqn (4)

$$CAR = \sum_{i=1}^n AAR$$

CAR = cumulative abnormal returns

n = the number of days in the event window

Regression analysis was also applied to test the relationship between independent variable and the dependent variable in the study. The following equation was applied for the regression analysis.

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where;

Y = stock return (share price)

$\beta_0$  = constant

$\beta_1$  = coefficient of dividend initiation announcement

$X_1$  = Dividend initiation announcement

$\varepsilon$  = standard error

### 3.5.2 Test of Significance

The t-statistic was computed for as  $= \text{AAR} / \delta / \sqrt{N}$ .....Eqn (5)

Where  $\delta$  = the standard deviation of the abnormal returns

AAR = average abnormal return

N = number of firms in the sample

The significance of the abnormal returns was tested at 95% level of confidence.

## **CHAPTER FOUR**

### **DATA ANALYSIS, RESULTS AND INTERPRETATION**

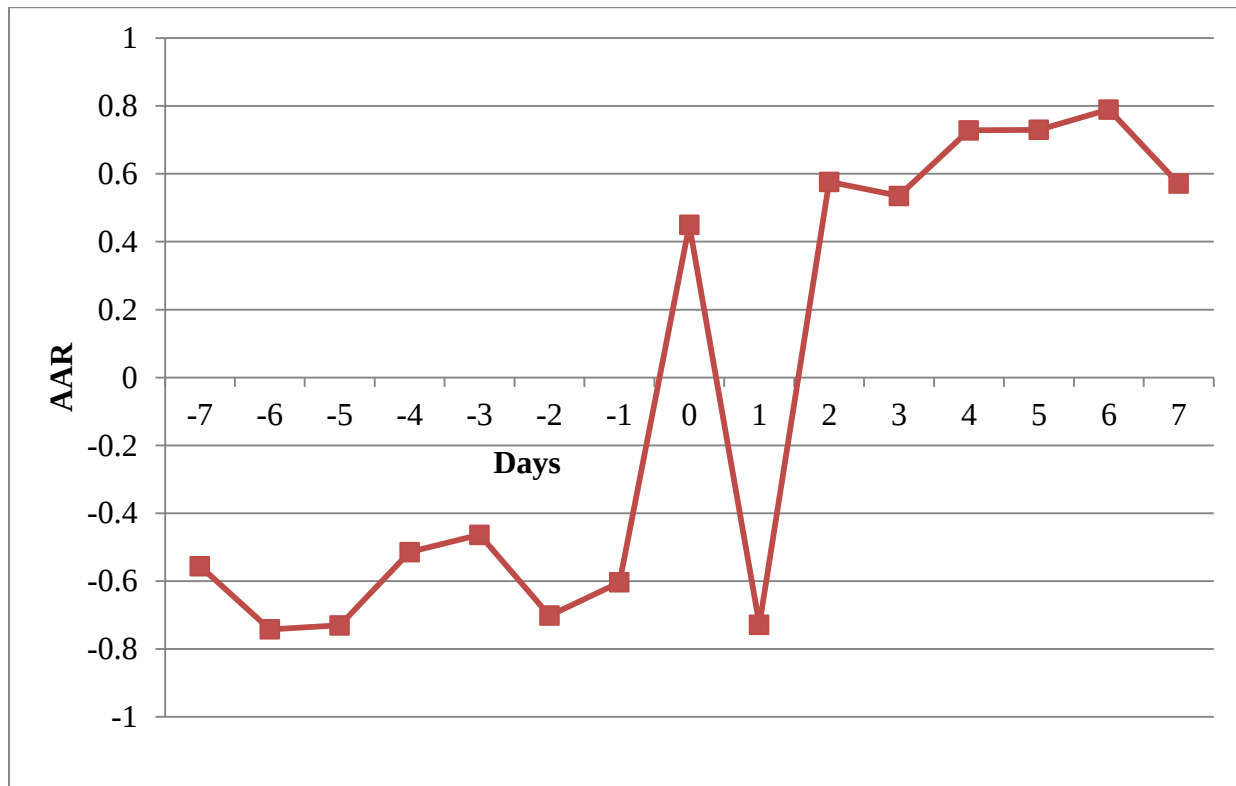
#### **4.1 Introduction**

This chapter presents an analysis of data that was collected, which is interpreted and finally discussion of the findings. The chapter is divided in to three sections; descriptive results based on the study variables' means and standard deviation, inferential statistics including correlation and regression results and interpretation of the findings as guided by the study objectives and the results.

#### **4.2 Descriptive Statistics**

The study made use of daily stock prices for eight companies in different sectors listed on the Nairobi Securities Exchange for the event window of 15 days consisting of 7 days before and 7 days after the initiation date. The analysis was done for the eight selected firms which are listed at the NSE. It used comparison period approach before and after the announcement. The abnormal returns were calculated by subtracting the expected returns from the daily returns and adding the dividend payment announced during the period for each of the days after announcement. To bring out the behavior, cumulative average returns were calculated by summing daily abnormal returns before and after the announcement.

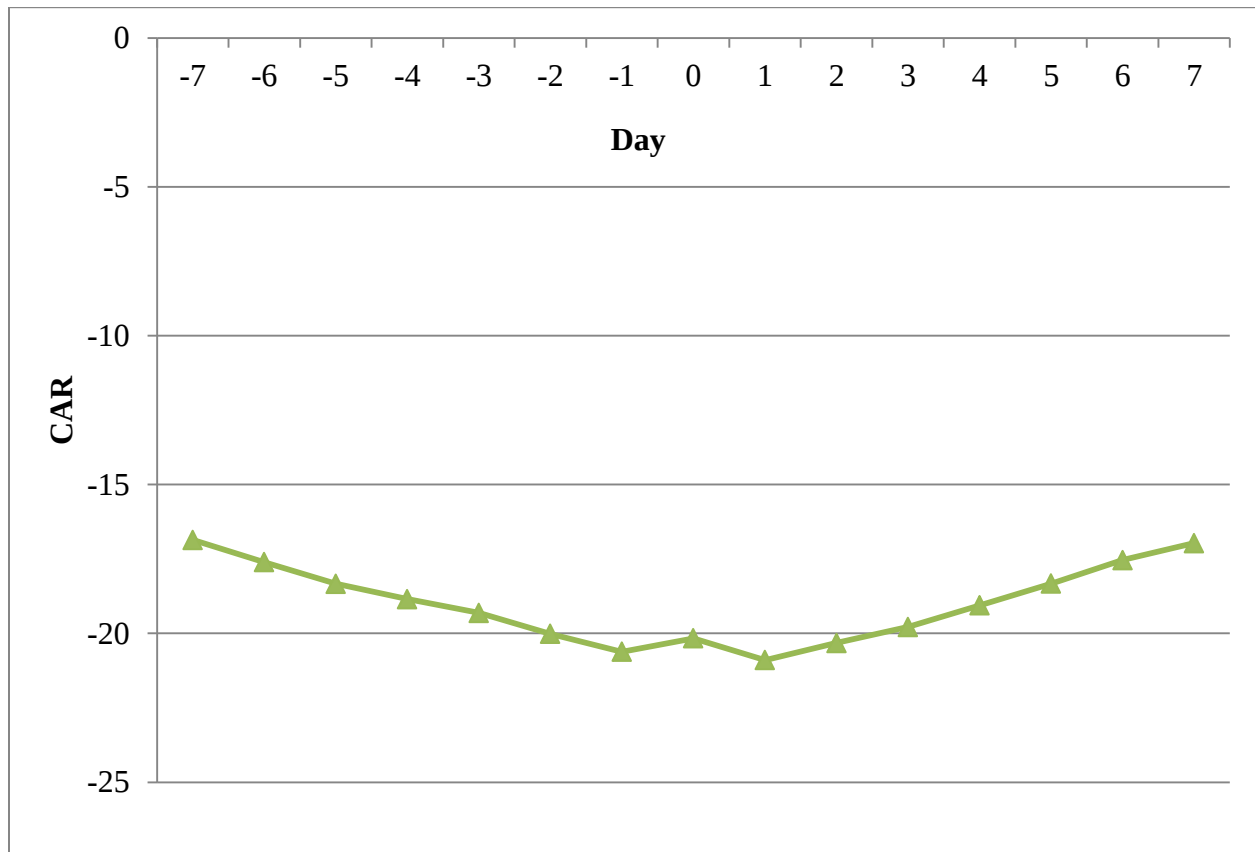
**Figure 4.1 AAR Trend over the Period**



**Source: Research Findings**

Figure 4.1 presents the trend of the slope of the average abnormal returns for the companies considered. The period is across the 15 days with 7 days prior and 7 days post the announcement day. From the figure, it is clear that the curve fluctuates both before the dividend announcement date and after. However, the curve slope is negative before the dividend announcement date and positive after the dividend announcement date. On the day of announcement the average abnormal returns shows a rapid increase as shown by the curve. Though a steep negative slope is present a day after announcement, this changes abruptly during the second day after announcement and keeps the trend with a small fluctuation. There is an upward kink on the average abnormal returns as evidenced by the curve.

**Figure 4.2 CAR Trend for the Period**



**Source: Research Findings**

The curve in the graph shows that the cumulative average abnormal returns slopes generally downwards for the 7 days before the dividend announcement date, and is generally upward sloping for the 7 days after the announcement. The findings therefore reveal that dividend announcement has a significant effect on stock returns. This is according to the fact that the cumulative abnormal returns curve slopes downwards before the announcement day indicating a decrease in the returns obtained by the respective firms. From the graph also, it is clear that after the announcement day the curve slopes upwards indicating a positive reaction (recovery) in the returns following the announcement by the firms.

### **4.3 Inferential Statistics**

Under this section, statistical analysis techniques showing relationship between the variables are conducted and presented. These include correlation analysis to test the association between the

variables, regression analysis to test the relationship between the study variables and the t-test to study the difference between abnormal returns for prior and post announcement period. The test of significance of the relationships is tested at 5% level of significance.

#### 4.3.1 Correlation Analysis

Correlation analysis was conducted to test the association between the study variables. This was conducted at the 5% level of significance setting the critical value at 0.025 with a 2-tailed test. The Pearson correlation scale was used to determine the strength of the association between the variables. The results for the test are as presented in table 4.1;

**Table 4.1 Correlation Results**

|             |                     | Dividend initiation announcement |
|-------------|---------------------|----------------------------------|
| Share price | Pearson Correlation | .647                             |
|             | Sig. (2-tailed)     | .000*                            |

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

#### Source: Research Findings

As shown in the table above, there is a positive association between dividend initiation announcement and share prices of the firms listed at the NSE. The correlation coefficient obtained is 0.647 with a significant value of 0.000 which is less than the critical value (0.025) at the 5% level using a 2-tailed test. Thus, based on these, there is a positive and significant correlation between dividend initiation announcement and the share prices of the firms studied.

#### 4.3.2 Regression Analysis

A multivariate regression model was used to establish the effects of dividends initiation on share prices of firms listed at the Nairobi Securities Exchange. This was done through the use Ordinary Least Squares (OLS) analysis giving out the model relating the variables. The resultant regression model was as follows;

In order to conduct a regression analysis using ordinary least squares, the researcher estimated the model in which all the variables under study were included. Table 4.2 presents the model summary.

**Table 4.2 Regression Model Summary**

| Model | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1     | .733a | 0.673    | 0.610             | 3.1528                     |

a Predictors: (Constant), Dividend initiation announcement

**Source: Research Findings**

Analysis in table 4.2 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R Square equals 0.673 that is, holding other variables constant, the predictor variable (dividend initiation announcement) explain 67.3% of the changes in the dividend share prices of firms listed at the Nairobi Securities Exchange leaving 32.7 percent of the changes unexplained. The 32.7% is the variation due to other factors affecting share prices of the listed firms.

#### **4.3.3 Analysis of Variance (ANOVA)**

**Table 4.3 Analysis of Variance (ANOVA)**

| Model | Sum of Squares |          | df | Mean Square | F     | Sig.  |
|-------|----------------|----------|----|-------------|-------|-------|
| 1     | Regression     | 672.133  | 1  | 672.133     | 5.617 | .011b |
|       | Residual       | 718.005  | 6  | 119.668     |       |       |
|       | Total          | 1390.138 | 7  |             |       |       |

a Dependent Variable: Share Price

b Predictors: (Constant), Dividend initiation announcement

**Source: Research Findings**

From the table above, the significance value is .011 which is less than 0.025 the critical value at the 5% level in a 2-tailed test. This therefore shows that the model is statistically significant in predicting the share prices of the listed firms with response to their dividend initiation announcement. The F critical at 5% level of significance is 3.23. From the table, the F value is 5.617 which is greater than the F critical. This shows that the overall model was significant in presenting the relationship between the variables.

**Table 4.4 Regression Coefficients**

| Model                            | Unstandardized |            | Standardized | t     | Sig.  | Std. Error |             |
|----------------------------------|----------------|------------|--------------|-------|-------|------------|-------------|
|                                  | Coefficients   |            | Coefficients |       |       |            | of Estimate |
|                                  | B              | Std. Error | Beta         |       |       |            |             |
| 1 (Constant)                     | 213.026        | 204.173    |              | 1.322 | 0.012 | 3.1528     |             |
| Dividend initiation announcement | 14.176         | 6.526      | 1.138        | 3.02  | 0.004 |            |             |

a Dependent Variable: Share Price

**Source: Research Findings**

The table presents the regression coefficients that answer the regression model relating the dependent and independent variables in the study. From the table, the relationship between share price and dividend initiation is statistically significant testing at the 5% level as indicated by the p-value of 0.012 and 0.004 which are less than 0.025 the critical value. From the table, it can also be seen that there is a positive relationship between dividend initiation announcement and share price for the listed firms as indicated by the beta coefficient which is a positive integer depicting a positive relationship between the variables. Based on the coefficients, the regression model therefore becomes;

$Y = 213.026 + 14.176 X + 3.1528$  also noted as;

Share price = 213.026 + 14.176 dividend initiation announcement + 3.1528

This shows that, without the influence of the dividend initiation announcement, share prices would be 213.026 whereas with a unit (1%) increase in the firms' efforts towards dividend initiation, the share prices would experience a positive change of 14.176 times.

#### 4.4 Industrial Analysis

To test whether a firms' specific industry could affect its shareholders' reaction to dividend initiation announcement, the study conducted a t-test for individual sectors with the studied firms. This shows the reaction of the stock returns following dividend announcement for firms in different sectors. The results are presented as shown in table 4.7 below;

**Table 4.5 Sectors Reaction to Dividend Initiation Announcement**

|                                | Paired Differences |                   |                       |                 |        | t     | df | Sig.<br>(2-tailed) |
|--------------------------------|--------------------|-------------------|-----------------------|-----------------|--------|-------|----|--------------------|
|                                | Mean               | Std.<br>Deviation | Std.<br>Error<br>Mean | 95% Confidence  |        |       |    |                    |
|                                |                    |                   |                       | Interval of the |        |       |    |                    |
|                                |                    |                   |                       | Lower           | Upper  |       |    |                    |
| Banking                        | -3.200             | .903              | .052                  | -3.303          | -3.097 | -1.36 | 1  | .000               |
| Commerce & Services            | -1.260             | .971              | .056                  | -1.370          | -1.150 | -1.48 | 1  | .001               |
| Energy                         | -.510              | 1.099             | .063                  | -.635           | -.385  | -1.04 | 1  | .011               |
| Insurance                      | -.223              | .713              | .041                  | .142            | -.304  | 0.43  | 2  | .004               |
| Telecommunication & technology | -3.247             | .857              | .049                  | -3.344          | -3.149 | -5.60 | 1  | .000               |

**Source: Research Findings**

Findings in table 4.5 show that all the sectors experienced significant effect of dividend initiation announcement as indicated by the p-values which are all less than 0.025 (critical value testing) at the 5% level. However, the extent of influence resulted to different magnitude of reaction as shown by the mean differences. The Telecommunication sector had the highest mean difference of 3.247 followed by the Banking sector with 3.2. Commerce and Services sector had a mean difference of 1.26 and the Energy sector had a mean difference of 0.51 whereas the Insurance sector experienced the least effect as the mean difference for this sector was 0.223.

Analysis was also done on dividend announcements per sector for the study sample and results were realized as shown on Appendix III. The table shows that the highest average dividend of

13.15 percent was paid in the commercial and services sector, followed by 12.20 percent in the insurance sector and 6.36 percent in the banking sector. Telecommunication and technology sector had an average dividend of 5.45 whereas the least was the energy sector with 3.61 percent.

The single highest dividend of 18 percent was announced in the commercial and services sector, while the lowest dividend of 2 percent in the banking sector. The average dividend was 8.15 percent with a standard deviation of 3.78 percent. As for the announcements of dividends, a total of 17 announcements were made by the two commercial and services companies followed by 14 announcements by the company in the energy sector. The three insurance companies made a total of 10 announcements, while the remaining sixteen announcements came from the banking and telecommunication and technology sectors with 8 announcements each.

#### 4.5 Test of Significance

The t-statistics for both the average abnormal returns and the cumulative average abnormal returns was calculated using the standard deviation of the average abnormal returns and the cumulative average abnormal returns respectively.

**Table 4.6 Test of Significance for Average Abnormal Returns**

| Test Value = 1.62459 |         |    |                 |                 |                                           |         |
|----------------------|---------|----|-----------------|-----------------|-------------------------------------------|---------|
|                      | t       | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |         |
|                      |         |    |                 |                 | Lower                                     | Upper   |
| AAR                  | -21.433 | 61 | .000            | -4.42205        | -4.8346                                   | -4.0095 |

#### Source: Research Findings

The t-test statistics was used to examine the significance of the difference between average abnormal returns using a 5% level of significance. The t-test is -21.433 which lies in the rejection area. Hence there is statistical evident that dividend initiation announcement has an effect on stock returns of firms listed at the Nairobi Securities Exchange. The p-value for AAR is zero which also leads us to the conclusion above since the value is less than 0.025 the critical value at the 5% level of significance.

#### **4.6 Interpretation of the Findings**

The objective of the analysis was to determine whether dividend announcement has an effect on stock returns of firms listed at the Nairobi Securities Exchange. The average abnormal returns were calculated by subtracting the expected returns from the daily returns and adding the dividend payment announced during the period for each of the days after announcement. The cumulative average returns were then calculated by summing up the average abnormal returns before and after the announcement.

The graphs for the AAR and the CAR were then plotted to bring out the trends over the window period of 15 days. To test the significance of the influence of the dividend initiation announcement on share prices, correlation analysis, regression analysis and t-test statistics were conducted. As observed from findings, the average abnormal returns for all the days (period) were negative before the announcement date and were positive after the announcement date. This trend reveals a positive impact of dividend initiation announcement on share prices of the firms listed at the NSE for the study period. This shows that stock returns of the firms listed react positively towards the dividend announcement.

In line with these findings, Aamir and Shah (2011) in their study concluded that there is a positive reaction on stock returns due to dividend announcement. Atieno (2013) also discovered that there is a positive reaction in stock price after a dividend increase announcement while dividend decrease resulted to negative returns.

Testing the significance of the relationship between dividend initiation announcement and share price changes, the study findings showed a positive association between initiation and share price. The study also indicated a positive and significant relationship between dividend initiation announcement and the changes in the share price of the listed companies. Thus, the findings reveals a significant impact of the initiation announcement on share prices of the firms listed showing that whenever a firm announces its dividend initiation, a positive change in its share price will be the result in turn.

From the test of significance, the findings revealed a significant difference between the share prices for the periods before the dividend initiation and that after the initiation announcement. This shows that dividend announcement is statistically significant and affects the stock returns positively.

The study findings further revealed that the Commercial and Services sector had the highest percentage of dividend paid followed by the Insurance sector, Banking sector and then Telecommunication and Technology sector whereas the least was the Energy sector. This indicated a significant difference in dividend payout in the period considered which resulted to the difference in the abnormal returns of the companies considered. A total of 17 announcements of dividends were made by the two commercial and services companies followed by 14 announcements by the company in the energy sector, 10 announcements by the three insurance companies and 8 announcements by the banking and telecommunication and technology sectors. Testing the difference in the mean differences for the reactions per sector, the study revealed a significant difference in the extent to which each sector reacted. Telecommunication sector had the highest mean difference followed by banking sector, commerce and services sector and the energy sector whereas insurance sector experienced the least extent.

These findings are in line with the findings of a study done by Gunasekarage & Power (2002) that illustrated that since not all investors may realize the positive and negative implications of dividend initiation, stock prices may not fully reflect long-term negative implications of dividend initiation for future profitability, as well as positive implications for future risk. This would suggest that over the long-term, stock prices of dividend initiating firms are negatively influenced as investors learn more about declining profitability and positively influenced as investors learn more about decline in risk.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

The purpose of this study was to determine the effect of dividend initiation on stock returns of firms listed on the Nairobi Securities Exchange. This chapter summarizes the findings and makes conclusion based on the objective of the study. From the data collected and analysis done the following findings, conclusion and recommendations were made based on the objective of the study.

#### **5.2 Summary**

In the study, the average abnormal returns were calculated by subtracting the expected returns from the daily returns and adding the dividend payment announced during the period for each of the days after announcement. To bring out the behavior, cumulative average returns were also calculated by summing daily abnormal returns before and after the announcement. A graph of the cumulative average abnormal returns for the period was then plotted to show the trend of abnormal returns over the event window.

The study results revealed that the average abnormal returns were generally negative before the announcement date which had a positive after the announcement date. Testing the significance of the changes, the study revealed a significant influence of dividend initiation announcement and the share prices of the firms. The mean difference also indicated a significant difference between the share prices for the two periods.

The study also revealed that there was a general decrease in the cumulative abnormal returns before the dividend announcement date leading to a downward sloping curve and a general increase after the dividend announcement date leading to an upward sloping curve. The test of significance also revealed that dividend announcement has significant effect on stock returns of firms listed at the Nairobi Securities Exchange.

The study findings further revealed that the shareholders and other stakeholders in different sectors react different towards dividend announcement initiation. This was found to bring difference in the effect of the initiation to the abnormal returns in the different sectors.

### **5.3 Conclusion**

The study therefore based on the findings and discussion of the results presented concludes that; dividend announcement has a positive effect on stock returns of firms listed at the Nairobi Securities Exchange. These results are consistent with the view that dividends convey unique, valuable information to investors as Lintner (1956), Asquith and Mullins (1983), Atieno (2013), and Pokhariyal et al (2012) have documented. There is a strong association between dividend initiation announcement and the share prices of the firms listed at the NSE.

It can therefore be concluded that the Nairobi Securities Exchange market reacts to new information such as dividend announcement leaving significant impact on the companies' operations and performance of their business. The industrial analysis results leads to the conclusion that all industrial sectors experience significant positive effect of dividend initiation announcement. However, the reaction magnitudes differ and this could be caused by various economic factors affecting firms in addition to firm profitability.

### **5.4 Recommendations for Policy**

This study recommends that the Capital Market Authority encourage firms to initiate dividends on the investments of the shareholders since stock returns react positively to dividend initiation. Policy makers of listed firms should watch carefully and consider dividend initiation as an option to signal to the market about their future performance because investors on the securities exchange attach dividend initiation with value increasing effect.

There is need for the companies' management to ensure availability of information to the shareholders. Provision of vital information regarding operations of the firms to the stakeholders will affect positively the performance of the firms as the shareholders will tend to invest along the trends of the business.

### **5.5 Limitations of the Study**

The study was limited due to the use of secondary data. This data is historical and due to the changing economic factors and trends, this may not be a good representation of what may happen in the future. The data which was collected for other purposes might have also been altered to suit the intended purpose and therefore using such a data might not have given a true feature of the situation.

The study employed the use of a sample, therefore limited to 8 firms listed at NSE that initiated dividend between the years 2009 to 2014. The sample used was relatively small considering Nairobi Securities Exchange consists of 64 companies of which more than 50% have initiated dividend payments. Therefore, the results may not give a general picture on how investors at the NSE respond to dividend initiations.

### **5.6 Suggestions for Further Studies**

Due to the above challenges limiting the study, the researcher recommends that further studies should be undertaken to investigating the effect of other corporate actions on stock returns such as mergers and acquisitions, stock split and bonus issues at the NSE. In addition to that, study on dividend policy and dividend structures can also be undertaken to investigate whether they have an effect on the value of the listed firms.

The present research focused exclusively on finding the impact of dividend initiation on stock returns of companies listed at the NSE for the period 2009 to 2014. An attempt can be made in future to study the impact of dividend initiation on stock returns for all listed firms that have initiated dividend payments.

The share price reaction to dividend initiation may also differ according to the information environment in which the firms operate. Therefore studies may be extended to study share price reaction to initial dividend announcements across different information environments and how the impact varies for a firm operating in low information environment to one operating in high information environment.

Lastly, further studies should also be undertaken in different sectors to examine whether dividend announcement reacts the same on the stock returns for the firms in the different sectors as classified by the NSE.

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## APPENDICES

### Appendix I: Companies Listed at Nairobi Securities Exchange as at June 2015

| <b>NAIROBI SECURITIES EXCHANGE LISTED COMPANIES</b> |                                    |
|-----------------------------------------------------|------------------------------------|
|                                                     | <b>AGRICULTURAL</b>                |
| 1                                                   | Eaagads Ltd                        |
| 2                                                   | Kapchorua Tea Co. Ltd              |
| 3                                                   | Kakuzi Ord                         |
| 4                                                   | Limuru Tea Co. Ltd                 |
| 5                                                   | Rea Vipingo Plantations Ltd        |
| 6                                                   | Sasini Ltd                         |
| 7                                                   | Williamson Tea Kenya Ltd           |
|                                                     | <b>AUTOMOBILES AND ACCESSORIES</b> |
| 8                                                   | Car and General (K) Ltd            |
| 9                                                   | Sameer Africa Ltd                  |
| 10                                                  | Marshalls (E.A.) Ltd               |
|                                                     | <b>BANKING</b>                     |
| 11                                                  | Barclays Bank Ltd                  |
| 12                                                  | CFC Stanbic Holdings Ltd           |
| 13                                                  | I & M Holdings Ltd                 |
| 14                                                  | Diamond Trust Bank Kenya Ltd       |
| 15                                                  | Housing Finance Co Ltd             |
| 16                                                  | Kenya Commercial Bank Ltd          |
| 17                                                  | National Bank of Kenya Ltd         |
| 18                                                  | NIC Bank Ltd                       |
| 19                                                  | Standard Chartered Bank Ltd        |
| 20                                                  | Equity Bank Ltd                    |
| 21                                                  | The Co-operative Bank of Kenya Ltd |
|                                                     | <b>COMMERCIAL AND SERVICES</b>     |
| 22                                                  | Express Ltd                        |
| 23                                                  | Kenya Airways Ltd                  |

|    |                                                  |
|----|--------------------------------------------------|
| 24 | Nation Media Group                               |
| 25 | Standard Group Ltd                               |
| 26 | TPS Eastern Africa (Serena) Ltd                  |
| 27 | Scangroup Ltd                                    |
| 28 | Uchumi Supermarket Ltd                           |
| 29 | Hutching Biemer Ltd                              |
| 30 | Longhorn Kenya Ltd                               |
| 31 | Atlas Development and Support Services           |
|    | <b>CONSTRUCTION AND ALLIED</b>                   |
| 32 | Athi River Mining                                |
| 33 | Bamburi Cement Ltd                               |
| 34 | Crown Berger Ltd                                 |
| 35 | E.A. Cables Ltd                                  |
| 36 | E.A. Portland Cement Ltd                         |
|    | <b>ENERGY AND PETROLEUM</b>                      |
| 37 | Kenol Kobil Ltd                                  |
| 38 | Total Kenya Ltd                                  |
| 39 | KenGen Ltd                                       |
| 40 | Kenya Power & Lighting Co Ltd                    |
| 41 | Umeme Ltd                                        |
|    | <b>INSURANCE</b>                                 |
| 42 | Jubilee Holdings Ltd                             |
| 43 | Pan Africa Insurance Holdings Ltd                |
| 44 | Kenya Re-Insurance Corporation Ltd               |
| 45 | Liberty Kenya Holdings Ltd                       |
| 46 | British-American Investments Company (Kenya) Ltd |
| 47 | CIC Insurance Group Ltd                          |
|    | <b>INVESTMENT</b>                                |
| 48 | Olympia Capital Holdings Ltd                     |
| 49 | Centum Investment Co Ltd                         |

|    |                                         |
|----|-----------------------------------------|
| 50 | Trans-Century Ltd                       |
| 51 | Home Afrika Ltd                         |
| 52 | Kurwitu Ventures                        |
|    | <b>INVESTMENT SERVICES</b>              |
| 53 | Nairobi Securities Exchange Ltd         |
|    | <b>MANUFACTURING AND ALLIED</b>         |
| 54 | B.O.C Kenya Ltd                         |
| 55 | British America Tobacco Kenya Ltd       |
| 56 | Carbacid Investments Ltd                |
| 57 | East Africa Breweries Ltd               |
| 58 | Mumias Sugar Co Ltd                     |
| 59 | Unga Group Ltd                          |
| 60 | Eveready East Africa Ltd                |
| 61 | Kenya Orchards Ltd                      |
| 62 | A. Bauman Co Ltd                        |
| 63 | Flame Tree Group Holdings Ltd           |
|    | <b>TELECOMMUNICATION AND TECHNOLOGY</b> |
| 64 | Safaricom Ltd                           |

**Source: Nairobi Securities Exchange 2015**

## Appendix II: List of Sampled Companies

|    | COMPANY                             | DIVIDEND RATE<br>(Ksh) | ANNOUNCEMENT DATE  |
|----|-------------------------------------|------------------------|--------------------|
| 1. | The Co-operative Bank of Kenya Ltd  | 1.00                   | March 5, 2009      |
| 2. | TPS Eastern Africa (Serena) Ltd     | 1.25                   | March 24, 2011     |
| 3. | Longhorn Kenya Ltd                  | 0.80                   | September 20, 2013 |
| 4. | Kenol Kobil Ltd                     | 3.50                   | April 3, 2009      |
| 5. | Liberty Kenya Holdings Ltd          | 0.40                   | March 15, 2013     |
| 6. | British-America Investments Co. Ltd | 0.15                   | March 22, 2012     |
| 7. | CIC Insurance Group Ltd             | 0.10                   | March 27, 2013     |
| 8. | Safaricom Ltd                       | 0.10                   | May 21, 2009       |

**Source: Nairobi Securities Exchange 2015**

## Appendix III: Sectorial Analysis of the Announcement Effect

| Sector                              | Number of<br>Companies | Number of<br>Announcements | Average<br>Dividend (%) | Maximum<br>Dividend<br>(%) | Minimum<br>Dividend<br>(%) |
|-------------------------------------|------------------------|----------------------------|-------------------------|----------------------------|----------------------------|
| Banking                             | 1                      | 8                          | 6.36                    | 8                          | 2                          |
| Commercial &<br>Services            | 2                      | 17                         | 13.15                   | 18.00                      | 3.00                       |
| Energy                              | 1                      | 14                         | 3.61                    | 4.00                       | 3.50                       |
| Insurance                           | 3                      | 10                         | 12.20                   | 14.13                      | 7.00                       |
| Telecommunication<br>and Technology | 1                      | 8                          | 5.45                    | 7.2                        | 3.00                       |
| <b>Total</b>                        | <b>8</b>               | <b>57</b>                  | <b>8.15(SD=3.78)</b>    |                            |                            |

**Source: Research Findings**

#### Appendix IV: Event Window Share Prices of Sampled Companies

|                                      | COMPANY | Liberty Kenya Holdings Ltd | British-America Investments Ltd | CIC Insurance Group Ltd | TPS Eastern Africa (Serena) | Longhorn Kenya Ltd | The Co-operative Bank Kenya Ltd | Kenol Kobil Ltd | Safaricom Ltd |
|--------------------------------------|---------|----------------------------|---------------------------------|-------------------------|-----------------------------|--------------------|---------------------------------|-----------------|---------------|
| Event Window Days Share Prices (Ksh) | -7      | 7.50                       | 4.15                            | 5.25                    | 67.00                       | 14.50              | 7.50                            | 45.00           | 2.80          |
|                                      | -6      | 7.75                       | 4.35                            | 5.60                    | 67.00                       | 14.00              | 7.15                            | 45.00           | 2.80          |
|                                      | -5      | 8.30                       | 4.35                            | 5.35                    | 67.50                       | 14.00              | 7.20                            | 45.00           | 2.85          |
|                                      | -4      | 9.05                       | 4.35                            | 5.35                    | 67.50                       | 14.00              | 7.40                            | 45.00           | 2.95          |
|                                      | -3      | 9.95                       | 4.35                            | 5.50                    | 67.00                       | 14.00              | 7.15                            | 45.00           | 3.00          |
|                                      | -2      | 9.60                       | 4.30                            | 5.45                    | 67.00                       | 14.00              | 7.05                            | 45.00           | 2.95          |
|                                      | -1      | 9.05                       | 4.30                            | 5.45                    | 67.00                       | 14.00              | 7.05                            | 45.00           | 2.95          |
|                                      | 0*      | 8.55                       | 4.20                            | 5.55                    | 67.00                       | 12.20              | 7.15                            | 45.00           | 2.85          |
|                                      | 1       | 8.65                       | 4.05                            | 5.45                    | 67.50                       | 12.20              | 7.30                            | 30.00           | 2.85          |
|                                      | 2       | 9.15                       | 4.05                            | 5.70                    | 67.00                       | 12.45              | 7.10                            | 30.00           | 2.80          |
|                                      | 3       | 9.60                       | 4.05                            | 5.85                    | 67.00                       | 13.00              | 7.00                            | 30.00           | 2.80          |
|                                      | 4       | 9.75                       | 4.15                            | 5.75                    | 67.00                       | 14.00              | 6.90                            | 30.00           | 2.80          |
|                                      | 5       | 9.80                       | 4.25                            | 5.70                    | 67.00                       | 14.20              | 6.70                            | 36.00           | 2.80          |
|                                      | 6       | 9.90                       | 4.20                            | 5.70                    | 66.50                       | 14.80              | 6.85                            | 36.00           | 2.75          |
|                                      | 7       | 9.50                       | 4.15                            | 5.75                    | 63.50                       | 15.00              | 6.60                            | 36.00           | 2.75          |

\* Dividend announcement date as shown on Appendix II

Source: Nairobi Securities Exchange 2015