THE EFFECT OF DIVIDEND DECLARATION ON SHARE PRICES OF COMMERCIAL BANKS LISTED ON THE NAIROBI SECURITIES EXCHANGE

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## DECLARATION

## STUDENTS

I, the undersigned, declare that this project is my original work and that it has not been submitted in any other university or institution for academic credit.

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## DEDICATION

This work is dedicated first to my late parents Erastus Muigai and Ruth Njeri who in deep poverty spared nothing in ensuring that I am educated. "For I testify that they gave as much as they were able, and even beyond their ability". 2 Cor. 8:3

I also dedicate this work to my two beloved sons James Muigai and Dan Mbuthia to be a source of inspiration and encouragement in their endeavors in life.

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#### Abstract

The effect of dividend declaration on share prices of the listed companies is a matter of great importance to the investors, the companies making the declaration and the market in general. Dividend declaration is an event that takes place in the day a company holds its AGM. It is an event that the shareholders look forward to since it gives them a chance to reap a return from their investment in the form of dividends. The act of declaring dividend in itself is seen to contain a communication from the management about the companies past performance and the anticipated future performance. These expectations are expressed in the behavior of the investors which in turn influence the share prices of the firm.

This study aimed at establishing the effect of dividend declaration on the share prices of the banks listed on the NSE from 2007 to 2011. In 2007 and 2008, the study considered 9 banks since the Co-operative Bank of Kenya was listed on the NSE in December 2008. From 2009 to 2011 the study considered 10 banks comprising all the banks listed on the NSE to date.

The study was achieved through the event study methodology covering a total of 91 days for each company's share trading. 60 days were used as the estimation window from which the regression analysis was performed to obtain parameters for the Market model used to determine the expected returns over the event window period of 31 days and the abnormal returns which were obtained by subtracting the expected returns from the actual returns for the same period. Cumulative Abnormal Returns were obtained by adding the abnormal returns for the 31 days event window period. Cumulative Average Abnormal Returns were arrived at by dividing the CAR by the 31 days of the event window.


The findings of this study do not indicate any conclusive pattern of the effect of dividend declaration on the share prices of the banks listed on the NSE. It has been observed that it is not in all cases where the dividend increases have resulted in increase in share prices and not in all cases where dividend decreases have resulted in decrease in share prices. It is the therefore the researcher's recommendation that further research is carried out to establish the other factors that influence the share prices of the banks listed on the NSE other than or alongside dividend declaration events.

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## ABBREVIATIONS

| AGM | Annual General Meeting |
| :--- | :--- |
| BIHH | Bird-in-Hand Hypothesis |
| CAAR | Cumulative Average Abnormal Returns |
| CAR | Cumulative Abnormal Returns |
| CBK | Central Bank of Kenya |
| CMA | Capital Markets Authority |
| DPS | Diamond Trust Bank |
| DTB | Kenya Commercial Bank |
| KCB | Menya Shilling |
| KSh | National Bank of Kenya |
| M\&M | Net Present value |
| NBK | Nairobi Securities Exchange |
| NPV | United States of America |
| NSE | US |

## CHAPTER ONE

## INTRODUCTION

### 1.1.Background of the Study

Dividend payout announcement is one of the most important corporate announcements. The announcement does not only entail cash flow from company to share holders but also send signals regarding the company's present and future plans and performance. For shareholders who invest for long term dividend earning purposes, dividend payment announcement is always a welcome event and it serves to boost the confidence of the investors in their investment in the company. Depending on the information the investors perceive as conveyed by the management through the announcement, their behavioral response impact on the share prices of the firm in the stock market.

According to Miller and Modigliani's (1961), the effect of a firm's dividend policy on the current price of its shares is a matter of considerable importance, not only to the corporate officials who must set the policy, but to investors planning portfolios and to economists seeking to understand and appraise the functioning of the capital markets.

This study was an assessment of the effect of dividend declaration on share prices of commercial banks listed on the Nairobi Securities Exchange. The study therefore focused on the ten (10) commercial banks listed on the Nairobi Securities Exchange. The banking sector has the highest number of firms among the sectors of the economy represented in the stock market. The established effect on share prices of dividend declaration is therefore expected to reflect largely
the general pattern that may be observed for the market. The firms studied represent $17.2 \%$ of all the listed companies.

The Nairobi Securities Exchange is the market for securities in Kenya where shares of the listed companies are traded. Government bonds and other debt instruments are also traded in the NSE. The listed companies are categorized according to the sectors of the economy that they serve. The categorization has created ten (10) sectors into which the listed companies are put, which are Agricultural, Automobiles \& Accessories, Banking, Commercial \& Services, Construction \& Allied, Energy \& Petroleum, Insurance, Investment, Manufacturing \& Allied and Telecommunication \& Technology.

A study of the effect of dividend declaration on the share prices of all the companies from the banking sector listed in the NSE had not been done. This study therefore was to establish the effect of the dividend declaration on the share prices of these companies. The effect would be determined by testing for abnormal returns around the dividend declaration event for the ten companies for a period of five years from 2007 to 2011 . This covered about fifty events for all the companies over the study period.

### 1.1.1. Dividend Declaration

In calling for an annual general meeting (AGM) of a company the directors of the company make a proposal for dividend payment which may be ratified by the shareholders of the company during the AGM. Dividend declaration is the resolution taken during the AGM by the shareholders of the company to pay the proposed dividends. The shareholders have a right to accept or reject the payment of the proposed dividends. However, the normal practice has been
simply to ratify the proposed dividends even when they may be dissatisfied with the rate or amount of dividend per share.

Dividends are payments made by a corporation to its shareholder members in proportion to their shareholding in the company. It is the portion of corporate profits paid out to stockholders. When a corporation earns a profit or surplus, that money can be put to two uses: it can either be reinvested in the business (called retained earnings), or it can be distributed to shareholders as cash dividends. There are two ways to distribute cash to shareholders: share repurchases or dividends payment. Many corporations retain a portion of their earnings and pay the remainder as a dividend. The word "dividend" comes from the Latin word "dividendum" meaning "thing to be divided". Dividend payment is therefore not an expense to the firm but the sharing or distribution of profits to the firm's shareholders each according to the ratio of their shareholding in the firm. The term 'dividend policy' refers to "the practice that management follows in making dividend payout decisions or, in other words, the size and pattern of cash distributions over time to shareholders" (Lease et al., 2000). Dividend Policy refers to the explicit or implicit decision of the Board of Directors regarding the amount of residual earnings that should be distributed to the shareholders of the corporation. This decision is considered a financing decision because the profits of the corporation are an important source of financing available to the firm.

Dividends are a permanent distribution of residual earnings of the corporation to its owners. In the absence of dividends, corporate earnings accrue to the benefit of shareholders as retained earnings and are automatically reinvested in the firm. When a cash dividend is declared, those funds leave the firm permanently and irreversibly. Distribution of earnings as cash dividends
may starve the company of funds required for growth and expansion, and this may cause the firm to seek additional external capital.

There are a variety of reasons why firms pay dividends to shareholders. Karanja (1987) in his study on dividend practices by firms listed in the NSE found out that one of the reasons why firms pay dividends is lack of viable investment opportunities. Karanja (1987) further found that a firm's cash position is the most important determinant of dividend payout. Firms also pay dividends to provide certainty about a company's well-being and to attract investors looking for secure current income. Moreover, dividend payment may be geared to avoiding the negative impact on share prices that may be brought about by lowering or omitting dividend distributions.

This study concentrated on cash dividends only. A cash dividend is a dividend paid in cash. To be able to pay cash dividends, companies need to have not only sufficient earnings but also sufficient cash. Even if a company shows a large amount of retained earnings on its balance sheet, it may not be enough to ensure cash dividends. The amount of cash that a company has is independent of retained earnings. Cash-poor companies still can be profitable. Kimathi (2008) in his study on dividend payout decisions by firms listed in the NSE in the 2002-2006 shows that cash dividends are the most preferred mode of dividend payments with all the firms covered in his study having paid cash dividends over the entire period of the study.

### 1.1.2. Share Prices

The share price is the market value of the share on the day it sells. The prices fluctuate from day to day where the magnitude of such fluctuations depends on the economic factors affecting the company. These factors may be either internal to the company or from the general macroeconomic environment like levels of inflation, monetary policies and social-political
factors among others. These factors do influence forces of demand and supply. Other factors that influence share prices are industry and company specific. Industry specific factors are those that may cause instability in an industry. For instance the financial market being affected by high inflation conditions that lead to high interest rates precipitating a credit crunch. This may cause apprehension in the market that would reflect in the drop in share prices. Company specific factors that have an influence on the share prices of a company may include earnings per share, dividends per share, reported results whether positive or negative, investment and financing decisions of the firm and profit and dividend payment announcements, among others.

Dividend declaration was the focus of this study. The assumption made in the study is that the only factor at play that may be affecting the share prices at the time of the announcement is the dividend declaration, taken as an event taking place at a given date. Unless there is another publicly known occurrence affecting the company at the same time, any changes in the share prices were taken to be the reaction of the market to the dividend declaration event for that particular company.

### 1.1.3. Effect of Dividend Declaration on Share Prices

Dividend payment has an impact on the share prices of the shares for which the dividend is paid. The impact largely depends on the information contained in the dividend declaration made by the management of a company. Following the declaration the forces of supply and demand take over either triggering a desire in the shareholders to dispose their share or a demand for more shares from both the current and potential investors in the company. These reactions influence the price movement for the shares either pushing the price upwards if the demand is greater than the supply or downwards if the supply surpasses the demand.

The announcement may be to retain the dividend payment at the same rate as previously paid, increase or decrease the payment. Each of these affects the price either positively or negatively. Grullon, Michaely, and Swaminathan (2002) show a 3-day cumulative abnormal return of 1.34\% for dividend increases and of $-3.71 \%$ for dividend decreases. In his classic study on dividend policy, Lintner (1956) interviewed a sample of corporate managers. He found that managers demonstrate a "reluctance (common to all companies) to reduce regular rates once established and a consequent conservatism in raising regular rates". The magnitude of the effect on share prices by dividend payment declaration is dependent on the expectations of the shareholders and potential investors in terms of returns. Docking and Koch (2005) discovers that there is a direct relationship between dividend announcement and equity price behavior.

### 1.1.4. Mechanics of Cash Dividend Payments

Declaration Date is the date on which the Board of Directors meets and declares the dividend. In their resolution the Board sets the date of record, the date of payment and the amount of the dividend for each share class. When carried, this resolution makes the dividend a current liability for the firm. For purposes of this study, the declaration date was taken to be the dividend payment announcement date.

Date of Record is the date on which the shareholders' register is closed after the trading day and all those who are listed would receive the declared dividend.

Ex-dividend Date is the date that the value of the firm's common shares would reflect the dividend payment (i.e. fall in value). 'Ex' means without. At the start of trading on the exdividend date, the share price would normally open for trading at the previous day's close, less
the value of the dividend per share. This reflects the fact that purchasers of the stock on the exdividend date and beyond would not receive the declared dividend.

Date of Payment is the date the cheques for the dividend are mailed out to the shareholders.

### 1.1.5. Commercial Banks Listed in the NSE

The Banking industry in Kenya is governed by the Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya (CBK). The banking sector was liberalized in 1995 when the exchange controls were lifted. The CBK, which falls under the Minister for Finance docket, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. Currently there are 43 licensed commercial banks 30 of which are locally owned and 13 foreign owned. There are ten (10) commercial banks listed on the NSE.

The commercial banks in the country play a major role in the development of the country by making available funds for development to the business community. Their intermediation function entails taking deposits from those with funds in excess of their current needs and advancing the same to those in need of finance for economic development. The banking institutions therefore are an important factor to the financial stability of the economy. They are an important determinant of the credit rating of a country depending on how well they are managed.

The ten (10) commercial banks listed on the NSE are the major players in the banking sector. The assets of Kenya Commercial Bank were valued at KSh. 282.5 billion, those of Barclays Bank Ltd at KSh. 167 billion and those of Co-operative Bank of Kenya at KSh. 168.3 billion as
at $31^{\text {st }}$ December 2011 just to look at few of the financial institution for an indication of their financial strength. On dividend payments, there appears to be a consistent year to year declaration and payment of dividends at least over the period of the study for three firms cited above. Kenya Commercial Bank paid KSh. 0.70, KSh. 1, KSh. 1, KSh. 1.25 and KSh. 1.85 dividend per share in 2007, 2008, 2009, 2010 and 2011 respectively. Barclays Bank Ltd. paid KSh. 1.65, KSh. 2.00, KSh. 2.50, KSh. 1.36 and KSh. 1.50 dividend per share in 2007, 2008, 2009, 2010 and 2011 respectively while Co-operative Bank of Kenya paid KSh. 0.54, KSh. 0.80, KSh. 0.85, KSh. 1.31 and KSh. 1.53 dividend per share in 2007, 2008, 2009, 2010 and 2011 respectively. This shows a growing dividend per share over the period of study for two firms and fluctuations for one firm. This may indicated the trend in the sector, which became clear in the course of the study.

### 1.2. Research Problem

Pettit (1972) observed that dividend announcements do communicate valuable information, and showed that the market reacts positively to the announcement of dividend increases (significant increase in stock prices), and negatively to the announcement of dividend decreases (significant drop in stock prices). Investors in the securities exchange seek returns on their investments either through dividends paid by the firms on whose shares they have invested or through capital gains upon sale of their shares in the secondary market. The share prices movements are therefore an area of interest for the investors and research has shown that dividend declaration and does affect share prices for the firms making the declaration albeit differently from market to market and from firm to firm depending on the information contained in the declaration.

There are firms in the NSE whose share prices have remained stagnant for a long time like Unga Limited with the price remaining at around KSh. 11per share for many years. This is not the case with other very active shares in the securities exchange like Equity Bank share prices which have had to undergo splits to make them affordable in the NSE after rising within a short period to over KSh. 250. It is apparent that the prices of the shares of companies with high dividend payout tend to increase over time while for those that have low dividend payment over time tend to decline. This therefore shows that there exists a relationship between dividend policies adopted by companies and their share prices in the market. This is in spite of the dividend irrelevance theory of Miller and Modigliani (1961) who argued that dividend policy of a firm is irrelevant to either the price of a firm's stock or its cost of capital.

The subject of the effect of dividend declaration on share prices for the companies listed in the NSE has not been fully explained. This study therefore sought to establish whether the dividend declarations do affect the share prices for shares of the company making the announcement. This is a test of whether there is information content or a signaling effect in the dividend announcement event affecting the behavior of the investors. The study also sought to establish whether there is a consistent pattern of prices behavior over the years covered and across the companies under study and therefore predictability of such behavior. The question being answered here is whether an investor can expect a repeat of similar market behavior year after year around the dividend announcement period.

Looking at the firms in the banking sector that are listed on the NSE it is noted that for a good number of them there has been increase in dividend payment rates from one year to the next. Some have displayed remarkable growth in the dividend rate per share over the five year period focused by this study while others have grown at a significantly low pace. The dividend per
share paid by KCB has grown from KSh. 0.70 to KSh. 1.85 per share, a $164.3 \%$ growth while that of Barclays bank has been fluctuating between KSh. 1.50 per share paid in 2011 and KSh. 2.50 paid in 2009. This clearly demonstrates share price volatility in the market and this begs the question of what happens when the dividend is declared on the price of the shares of the company. The rate of increase in DPS for firms in the banking sector has been very different from firm to firm. Some firms like the Diamond Trust Bank appear to have been very cautious in the change in DPS. Their rate remained the same for the year 2007 and 2008 at KSh. 1.40 per share. It rose to KSh. 1.55, KSh. 1.60 and KSh. 1.70 per share in 2009, 2010 and 2011 respectively giving a total increase of only $21.4 \%$ over the period under consideration.

There was no known study done on the effect of dividend declaration on the share prices of all the commercial banks listed on the NSE. Having seen the volatility of dividend payments by the firms, this study sought to establish the effect of the dividend declaration on the prices of the shares of these firms for a period of five year from 2007 to 2011 . The study would contribute to literature on the subject of the relationship between dividend declaration and share prices. The research question in this case was "Do dividend declarations have an effect on the share prices of the commercial banks listed on the NSE?"

### 1.3.Objective of the Study

To determine the effect of dividend declaration on the share prices of commercial banks listed in the Nairobi Securities Exchange.

### 1.4.Value of the Study

Boards of Directors: The study would benefit the boards of directors of the companies listed in the NSE by providing information about the implication of dividend declaration on the share
prices. The share prices are affected by the behavior of shareholders in light of the information contained in the dividend declaration. When the announcement is a decrease in dividend the market may react differently from if the announcement was for an increase in dividend payout. A different effect would be anticipated for an announcement that either omits dividend payout or retains the payout at the previous level. The study would add value to the boards of directors' decisions on dividend policy to adopt.

Stockbrokers: Stockbrokers would benefit from the information obtained from the study for their advice to the investors. Trading in the NSE is accomplished through the registered stockbrokers. The stockbrokers are therefore directly involved in the behavior of investors as they react to the event of dividend declaration from a company. The results of the study would therefore equip them with information that they may use in advising their clients on what stocks to invest in at any given time according to their understanding of the trends in the stock market.

Investors: Both existing and potential investor would benefit from the study from the information provided for investment decisions. Investors would also know how the market behaves following any dividend declaration. The announcement of dividend payment would inform their decisions on when to buy or sell their stocks held by the date of announcement.

Scholars and Academicians: scholars and academicians may use the findings of and information gathered through this study for further research in the area of the study.

## CHAPTER TWO

## LITERATURE REVIEW

### 2.1. Introduction

This chapter presents the theoretical review by focusing on five dividend theories followed by an explanation of the factors that influence dividend payments and factors influencing share prices. This is followed by an explanation of the event study methodology after which is the empirical review and the conclusion on the findings from the theoretical and empirical literature review.

### 2.2.Theoretical Review

The theoretical literature review focused on five dividend theories which include the dividend irrelevance theory, bird in hand dividend theory, clientele effect of dividend theory, the information content of dividends (signaling) theory and the agency costs and free cash flow hypothesis of dividend policy. Throughout this paper, share price shall be used as proxy for the value of the firm and vice versa. The theories are discussed in turn here below.

### 2.2.1. Dividend Irrelevance Hypothesis

The propagators of this school of thought were France Modigliani and Merton Miller (1961), hereafter M\&M. They stated that the dividend policy employed by a firm does not affect the value of the firm. They argued that the value of the firm is dependent on the firm's earnings which result from its investment policy, such that when the investment policy is given the dividend policy is of no consequence. Miller and Modigliani's (1961), posit that in a perfect world the value of a firm is unaffected by the distribution of dividends and is determined solely
by the earning power and risks of its assets. They stated that "given a firm's investment policy, the dividend payout policy it chooses to follow will affect neither the current price of its shares nor the total returns to shareholders". In other words, investors calculate the value of companies based on the capitalized value of their future earnings, and this is not affected by whether firms pay dividends or not and how firms set their dividend policies. They further suggested that, to an investor, all dividend policies are effectively the same since investors can create "homemade" dividends by adjusting their portfolios in a way that matches their preferences. In this argument M\&M suggested that the prices of shares are not affected by the dividend policy of the firm.

Prior to the publication of Miller and Modigliani's (1961) seminal paper on dividend policy, a common belief was that higher dividends increase a firm's value. This belief was mainly based on the so-called "bird-in-the-hand" argument, discussed in more detail later.

Graham and Dodd (1934), for instance, argued that "the sole purpose for the existence of the corporation is to pay dividends", and firms that pay higher dividends must sell their shares at higher prices (cited in Frankfurter et al., 2002). However, as part of a new wave of finance in the 1960's, M\&M demonstrated that under certain assumptions about perfect capital markets, dividend policy would be irrelevant.

M\&M based their argument upon idealistic assumptions of a perfect capital market and rational investors. The assumptions of a perfect capital market necessary for the dividend irrelevancy hypothesis can be summarized as follows: (1) no differences between taxes on dividends and capital gains; (2) no transaction and flotation costs incurred when securities are traded; (3) all market participants have free and equal access to the same information (symmetrical and costless
information); (4) no conflicts of interests between managers and security holders (i.e no agency problem); and (5) all participants in the market are price takers.

As stated by Ball et al. (1979), empirical tests of M\&M’s "dividend irrelevance theorem have proven difficult to design and to conduct". Recall that M\&M built their conclusions on a certain set of assumptions of perfect capital markets. Relaxing one or more of these assumptions has formed the basis for most of theoretical and empirical studies.

### 2.2.2. Bird-In-The-Hand Hypothesis (High Dividends Increase Stock Value)

This theory was developed by Myron Gordon (1963) as a response to Modigliani and Miller's dividend irrelevance theory. The theory suggests that investors are generally risk averse and attach more risk to promised future dividends and capital gains than to current dividends. Thus currents dividends (Bird in the Hand) reduce investor uncertainty and results in higher value in the firm's stock. Investors therefore prefer the "bird in the hand" of cash dividends rather than the "two in the bush" of future capital gains. Increasing dividend payments, ceteris paribus, may then be associated with increases in firm value. As a higher current dividend reduces uncertainty about future cash flows, a high payout ratio would reduce the cost of capital, and hence increase share value. Studies that provide support for the BIHH include Lintner (1962) and Walter (1963).

M\&M (1961) criticized the BIHH and argued that the firm's risk is determined by the riskiness of its operating cash flows, not by the way it distributes its earnings. Consequently, M\&M called this argument the bird-in-the-hand fallacy. Empirically, Rozeff (1982) found a negative relationship between dividends and firm risk. That is, as the risk of a firm's operations increases, the dividend payments decrease.

The BIHH suggests that dividend announcement would lead to a definite reaction by the investors that would lead to variation in stock prices either way.

### 2.2.3. Clientele Effects of Dividends Hypothesis

A firm attracts shareholders whose preferences with respect to stability of dividends correspond to the pattern maintained by the firm itself. Some shareholders prefer stable dividends as a source of income while others may prefer to earn capital gains. A firm that has established a certain dividend policy should not change it arbitrarily because it may adversely affect its preferred dividend clientele.

Pettit (1977) provided empirical evidence for the existence of a clientele effect by examining the portfolio positions of 914 individual investors. He found a significant positive relationship between investors' ages and their portfolios' dividend yield, and a negative relationship between investors' incomes and dividend yield. Pettit suggested that elderly low-income investors tend to rely more on their portfolios to finance their current consumption, and avoid the transaction costs associated with selling stocks. Consequently, they have more of a tendency to invest in highdividend stocks. Pettit also showed that investors whose portfolios have low systematic risk prefer high-payout stocks, and he found evidence for tax-induced clientele effect. However, using a sample constructed from the same database used in Pettit's (1977) study, Lewellen et al. (1978) found only very weak supportive evidence of the clientele effect hypothesis. In a later study, Scholz (1992) developed an empirical model to test the Dividend Clientele Hypothesis directly by examining individual investor portfolio data. He found that differential tax treatment
of dividends and capital gains influences investors' decisions in choosing between higher-or-lower-dividend yield portfolios, consistent with dividend-/tax-clientele hypothesis.

In their seminal paper $\mathrm{M} \& \mathrm{M}$ (1961) noted that the pre-existing dividend clientele effect hypothesis might play a role in dividend policy under certain conditions. They pointed out that the portfolio choices of individual investors might be influenced by certain market imperfections such as transaction costs and differential tax rates to prefer different mixes of capital gains and dividends. M\&M argued that these imperfections might cause investors to choose securities that reduce these costs. M\&M termed the tendency of investors to be attracted to a certain type of dividend-paying stocks a "dividend clientele effect". Nonetheless, M\&M maintained that even though the clientele effect might change a firm's dividend policy to attract certain clienteles, in a perfect market each clientele is "as good as another"; hence the firm valuation is not affected; that is, dividend policy remains irrelevant.

### 2.2.4. The Information Content of Dividends (Signalling) Hypothesis

The hypothesis was developed by Modigliani and Miller (1958). They postulated that under the assumptions of perfect capital markets, rational behavior and zero taxes, the value of the firm does not depend on the firm's announcement of a dividend. M\&M (1961) assumed that managers and outside investors have free, equal and instantaneous access to the same information regarding a firm's prospects and performance. But managers who look after the firm usually possess information about its current and future prospects that is not available to outsiders. This informational gap between insiders and outsiders may cause the true intrinsic value of the firm to be unavailable to the market.

According to the signaling hypothesis, 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. However, for this hypothesis to hold, managers should firstly possess private information about a firm's prospects, and have incentives to convey this information to the market. Secondly, a signal should be true; that is, a firm with poor future prospects should not be able to mimic and send false signals to the market by increasing dividend payments. Thus the market must be able to rely on the signal to differentiate among firms. If these conditions are fulfilled, the market should react favorably to the announcements of dividend increase and unfavorably otherwise (Ang, 1987, and Koch and Shenoy, 1999).

An increase in dividend payout may be interpreted as the firm having good future profitability (good news), and therefore its share price would react positively. Similarly, dividend cuts may be considered as a signal that the firm has poor future prospects (bad news), and the share price may then react unfavorably. Accordingly, it would not be surprising to find that managers are reluctant to announce a reduction in dividends. Lintner (1956) argued that firms tend to increase dividends when managers believe that earnings have permanently increased. This suggests that dividend increases imply long-run sustainable earnings. This prediction is also consistent with what is known as the "dividend-smoothing hypothesis". That is, managers endeavor to smooth dividends over time and not make substantial increases in dividends unless they can maintain the increased dividends in the foreseeable future.

Lipson, Maquieira and Megginson (1998) observed that, "managers do not initiate dividends until they believe those dividends can be sustained by future earnings".

### 2.2.5. Agency Costs and Free Cash Flow Hypothesis of Dividend Policy

The theory suggests that payment of dividends reduces free cash flows available for management to engage in perquisite consumptions, entrenchment and over investment. The free cash flow hypothesis of Easterbrook (1984) and Jensen (1986) states that companies with substantial free cash flow always tend to face conflicts of interest between stockholders and managers. Managers, once they have satisfied all the obligations contracted by the company with funds generated by operations, can use the remaining flows from the treasury for their own benefit instead of the interest of shareholders (Jensen, 1986). A higher relative dividend payout or a higher effective dividend yield is expected to minimize agency costs, as dividends lower the level of available liquidity which increases the potential default risk of firms. Hence, the higher the dividends are relative to earnings, the stronger is the focus likely to be on future earnings performance as a means of maintaining the current dividend payout level.

Easterbrook (1984) argued that dividends could be used to reduce the free cash flow in the hands of managers. In addition, Easterbrook hypothesized that dividend payments will oblige managers to approach the capital market to raise funds. In this case investment professionals such as bankers and financial analysts would also be able to monitor managers' behavior. Therefore, shareholders are able to monitor managers at lower cost. This suggests that dividend payments increase management scrutiny by outsiders and reduce the chances for managers to act in their own self-interest. However, Easterbrook suggested that increasing dividend payments might force managers to take undesirable actions like increasing firm leverage, which may sometimes increase the riskiness of the firm.

Along the lines of Easterbrook's argument, Jensen (1986) provided another explanation for paying dividends based on the agency costs hypothesis. Jensen contended that firms with excess (free) cash flow give managers more flexibility for using the funds in a way that benefit themselves but not shareholders' best interests. He argued that managers have incentives to enlarge the size of their firms beyond the optimal size to amplify the resources under their control and moreover to increase their compensation, which is often related to firm size. Thus, if a firm has a substantial surplus of cash the overinvestment problem will be more pronounced, and managers may undertake negative NPV projects. Extracting the excess funds of free cash flow that management controls can reduce this overinvestment problem. Increasing dividend payouts may help to mitigate the free cash flow under managers' control, thereby preventing them from investing in negative NPV or poor projects. As a result, paying more dividends will reduce the agency costs between managers and shareholders. Moreover, Jensen has pointed out that debt might play a similar role to dividends in reducing the agency costs of free cash flow by reducing the funds under management control.

M\&M suggested that a firm's dividend policy is independent of its investment policy. By contrast, the free cash flow hypothesis implies that dividend policy and the investment decision are interrelated. It is argued that an increase in dividend payments reduces the "overinvestment" problem, which would have a positive impact on the market value of the firm, ceteris paribus (Lang and Litzenberger, 1989).

One of the assumptions of M\&M's perfect capital market is that there are no conflicts of interests between managers and shareholders. In practice, however, this assumption is questionable where
the owners of the firm are distinct from its management. In these cases managers are always imperfect agents of shareholders (principals). This is because the interests of managers are not necessarily the same as the interests of the shareholders, and they might conduct actions that are costly to shareholders, such as consuming excessive perquisites or over-investing in managerially rewarding but unprofitable activities. Shareholders therefore incur (agency) costs associated with monitoring the behavior of managers, and these agency costs are an implicit cost resulting from the potential conflict of interest among shareholders and corporate managers. The payment of dividends might serve to align the interests and mitigate the agency problems between managers and shareholders, by reducing the discretionary funds available to managers.

Another source of the agency costs problem that may be influenced by dividend policy is the potential conflict between shareholders and bondholders. Shareholders are considered as the agents of bondholders' funds. In this case, excess dividend payments to shareholders may be taken as shareholders expropriating wealth from bondholders (Jensen and Meckling, 1976). Shareholders have limited liability and they can access the company's cash flow before bondholders; consequently, bondholders prefer to put constraints on dividend payments to secure their claims. Conversely, for the same reasons, shareholders prefer to have large dividend payments (Ang, 1987).

### 2.3. Factors Influencing Dividend Payment

Research has established several factors that influence dividend payments by firms. The following are four of the most common factors:

### 2.3.1. Amount of Earnings.

For the company to be able to pay dividends there must be sufficient earnings after tax available for distribution to the shareholders. Companies are largely required to pay dividends out of the profits made in a particular year and not from retained earnings. Lintner (1956) in his classical study found that a firm's net earnings are the critical determinant of dividend change.

### 2.3.2. Cash Flows

In deciding on dividend payment the company has to consider its cash flow situation. This is to ensure it is liquid enough to cover the cash outflow in dividend payment and its operations thereafter. Alli et al. (1993) argues that dividend payments depend more on cash flows, which reflect the company's ability to pay dividends.

### 2.3.3. Previous dividend

The manager of firms are keen not to reduce the previous level of dividend payment because of the signal such action would convey to the investors in line with the dividend signaling hypothesis. In his classic study on dividend policy, Lintner (1956) interviewed a sample of corporate managers. He found that managers demonstrate a "reluctance (common to all companies) to reduce regular rates once established and a consequent conservatism in raising regular rates"

### 2.3.4. Leverage

Firms that finance their activities mostly with debt put pressure on their liquidity. Debt principal and interest payments reduce the ability of firms to have residual income to guarantee dividend payment. Consequently, it is expected that debt would impact negatively on the amount of dividend paid for a period. Kowaleski et al (2007) argue that
more indebted firms prefer to pay lower dividends. Also, Al-Kuwari (2009) confirms that dividend policy is negatively related to leverage ratio.

### 2.4. Factors influencing Share Prices

The factors influencing share prices may be categorized as either micro or macro environment factors

### 2.4.1. Micro-economic environment factors

These are factors that are within the firm and the industry in which it operates. They may include the firm's dividend policy, performance in terms of profitability, management quality and earnings ratios among others. Low dividend policy may attract low priced stocks while high dividend policy may attract highly priced stocks. A firm making high profits is able to pay higher dividends and therefore the investors would rate its stocks highly and vice versa. The banking sector in Kenya was affected by poor performance in the 1980s and 1990s to the extent that for some of the banks dividend payment was not possible for a long time.

### 2.4.2. Macro-economic environment factors

These are factors affecting the whole economy within which the firm operates. These factors include interest rates, inflation rate, fiscal measures taken by the government in managing the economy and foreign exchange rates among others. Other factors that may also influence share prices are the political stability of the country anticipated economic growth.

### 2.5. Event Study Methodology

Even study method was introduced by Dolly (1933) and is used to frame the estimation and investigation window for research. An event study attempts to measure the valuation effects of a corporate event, such as a merger or earnings announcement, by examining the response of the stock price around the announcement of the event. One underlying assumption is that the market processes information about the event in an efficient and unbiased manner. Thus, it should be possible to see the effect of the event on prices. The first paper that applied event-studies, as we know them today was: Fama, Fisher, Jensen, and Roll (1969) for stock splits. Today, thousands of papers have been done using event-study methods.

Event study normally begins with establishing the event of interest, which is considered to be the source of abnormal returns. Dividend announcement is benchmarked as event of interest and the date of dividend announcement is the event date.

The following are the seven steps for carrying out an event study:

1. Event Definition: In this case the event shall be the dividend declaration which is achieved through a resolution in the AGM of the company in question.
2. Selection Criteria: This entails the criteria used to select the firms to be covered in the study. In the case of the study at hand, the firms are selected as a category from the sectors represented in the NSE with the highest number of firms. The banking sector has 10 firms listed in the NSE representing $17.24 \%$ of all the listed firms.
3. Normal and Abnormal Return Measurement: The normal and abnormal returns are necessary in determining the effect of the dividend declaration on the share prices of the
commercial bank. Market model is going to be used to determine the normal returns using OLS from a regression of daily security returns on daily NSE 20 share index for the estimation window. Abnormal returns were determined as a difference between actual returns and expected normal returns over the event window. Cumulative Abnormal Returns (CAR) was obtained by aggregating all the abnormal returns.
4. Estimation Procedure: This entails determination of the Estimation window, the event window and the post event window. For this study the estimation procedure was as follows:

- The estimation window was 60 days prior to the event window.
- The event window was 31 days, $t-15$ days prior to and $\mathrm{t}+15$ days after the event day $(\mathrm{t}-0$ ) and the event day $\mathrm{t}-0$ itself.
- Event period which is $\mathrm{t}-1$ to $+\mathrm{t}+1$

5. Testing Procedure: Parameter tests, which rely on the assumption that individual firm's abnormal returns are normally distributed, were used. The t-statistic using standardized abnormal returns were calculated and compared to the critical t -value from the tables at $\mathrm{N}-1$ degrees of freedom to make statistical inferences. This involved calculation of the abnormal returns and testing the same for significance through $t$-statistic
6. Empirical Results: This involves presentation of the results of the study. This was accomplished through tables with descriptive statistics.
7. Interpretation: This involves explanation of the results of the study leading to the conclusion of the study

### 2.6. Empirical Review

The empirical work on dividend signaling has examined two main issues. Firstly, whether share prices move in the same direction with dividend change announcements. Secondly, whether dividend changes enable the market to predict future earnings.

Finance scholars have addressed these issues extensively, but the results have been mixed and inconclusive. The first question has received much attention in the literature, because if the announcement of dividend changes does not have the predicted impact on share prices this would cast doubt on the validity of the information content of dividend hypothesis. Pettit (1972) observed that dividend announcements do communicate valuable information, and showed that the market reacts positively to the announcement of dividend increases (significant increase in stock prices), and negatively to the announcement of dividend decreases (significant drop in stock prices). Pettit also added, "...dividend announcement, when forthcoming, may convey significantly more information than the information implicit in an earnings announcement". Aharony and Swary (1980) suggest that dividend and earning announcements are not perfect substitutes and a proper test for the signaling hypothesis needs to take into account the effect of earnings announcements. Aharony and Swary found support for the results obtained by Pettit even after controlling for contemporaneous earnings announcements. Woolridge (1983) also found a significant increase (decrease) in common stock return following the unexpected dividend increase (decrease) announcements.

Asquith and Mullins (1983) examined the market's reaction to dividend announcements for a sample of 168 firms that initiated dividends either for the first time in their corporate history or resumed paying dividends after at least a ten-year hiatus. Asquith and Mullins tested the average
daily excess stock returns ten days before and ten days after the announcement of dividend initiation. For the two-day announcement period their result shows that there is an excess return of about +3.7 percent. Moreover, using cross-sectional regression Asquith and Mullins found a positive and significant relationship between the magnitude of initial dividends and the abnormal returns on the announcement day. This suggests that the size of dividend changes may also matter. In another empirical study, Asquith and Mullins (1986) reinforce their earlier findings and offer more support to the information content of dividend hypothesis.

Michaely, Thaler and Womack (1995) have gone further by examining the impact of both initiations and omissions of cash dividends on share prices reaction. They observed 561 dividend initiation events and 887 dividend omission events over the period of 1964 to 1988. Michaely et al. documented that, during three days surrounding the announcements, the average excess return was about -7.0 percent for omissions and +3.4 percent for dividend initiations. Note that the market reactions to dividend omissions are greater than for dividend initiations. This implies that the market reacts optimistically toward dividend initiations (or increases); however, the market is more pessimistic in response to the announcements of dividend omissions (or decreases). Michaely et al. also found significant long-run drifts in stock prices in response to dividend initiations and omissions. They reported +7.5 percent excess returns after one year of initiation announcements and +24.8 percent after three years. For dividend omissions they reported abnormal returns of -11.0 percent in the first year and -15.3 percent after three years.

More recently, Bali (2003) presented evidence consistent with the preceding results. He reported an average 1.17 percent abnormal return for dividend increases and -5.87 percent for decreases.

In addition, Bali examined the long run drifts of stock prices reaction to dividend increases and decreases and reinforced Michaely et al.'s (1995) findings.

From the local studies, Tobias Olweny (2012), in his research found a significant relationship between unexpected dividend announcements and abnormal stock returns on shares of companies listed in the NSE. 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) carried out a study on the relationship between dividend announcement and return on investment for firms listed in the NSE and concluded that there was no significant relationship between dividend announcements and abnormal returns.

In line with the dividend irrelevance hypothesis, Black and Scholes (1974) examined the relationship between dividend yield and stock returns in order to identify the effect of dividend policy on stock prices. Black and Scholes concluded that, "we are unable to show that differences in yield lead to differences in stock prices". Their conclusion lent important empirical support to M\&M's dividend irrelevance argument. Other studies by leading financial economic researchers such as Miller and Scholes (1978, 1982), Hess (1981) Miller (1986), and Bernstein (1996) provided evidence in support of the dividend irrelevance hypothesis.

While some empirical research supported the dividend irrelevance hypothesis, other research was not so supportive or provided evidence directly challenging the irrelevance hypothesis. On his part, Bitok (2004) in his study on the effect of dividend policy on the value of the firm quoted in the NSE over the period 1998 to 2004 found that there is a weak relationship between the
dividend payout ratio and the value of the firm. Despite all the empirical work testing the dividend irrelevance hypothesis, the impact of dividend policy on the value of a firm remains unresolved.

### 2.7. Conclusion

The literature on dividend policy has produced a large body of theoretical and empirical research, especially following the publication of the dividend irrelevance hypothesis of M\&M (1961). No general consensus has yet emerged after several decades of investigation. In perfect capital markets, $M \& M$ asserted that the value of a firm is independent of its dividend policy. However, various market imperfections exist (taxes, transaction costs, information asymmetry, agency problems, etc) and these market imperfections have provided the basis for the development of various theories of dividend policy including tax-preference, clientele effects, signaling, and agency costs theories.

It is evident from the above literature review that there is no conclusive position arrived at from the many studies done on the subject of the relationship between dividend payment announcement and share prices or the return on investments. This study therefore seeks to find the effect of dividend announcement on the share prices of a specific sector of the firms quoted in the NSE, the banking sector. It is probable that if the study is carried out on a sector to sector basis a pattern is likely to be established that may resolve the mystery of the effect of cash dividend announcement on the share prices, and therefore returns for the firms listed in the stock exchange.

From the empirical findings of studies on the subject of effect of dividend declaration on share prices, there seems to be general agreement that share prices follow the same direction as the dividend change announcements. Dividend increases and dividend initiations (decreases and omissions) are associated with subsequent significant increases (decreases) in share prices. Moreover, the reaction of share prices in the event of dividend decreases and dividend omissions is found to be more severe.

It is an observed fact that studies carried out in different environments have resulted in varying results or conclusions. This therefore authenticates the study carried out in the Kenyan setting to establish the relationship between shares prices and dividend declarations for firms in the banking sector listed on the NSE.

## CHAPTER THREE

## RESEARCH METHODOLOGY

### 3.1. Introduction

This chapter presents the research design, the population, data collection procedure, data analysis and the analytical model used in the research.

### 3.2. Research Design

Research design refers to the way the study is designed, that is, the method used to carry out a research Mugenda, (2003). This study used event study methodology which has been used in most instances to test the effect of dividend announcement. An event study attempts to measure the valuation effects of a corporate event, such as a merger or earnings announcement, by examining the response of the stock price around the announcement of the event. One underlying assumption is that the market processes information about the event in an efficient and unbiased manner. Thus, it should be possible to see the effect of the event on prices. The first paper that applied event-studies, as we know them today was: Fama, Fisher, Jensen, and Roll (1969) for stock splits. The first step in the event study is to find daily return of the share and market index. The original data was in the form of closing price of shares and closing value of market index. The study intends to use the NSE 20 Share Index as a proxy for market returns.

The event study methodology helped in testing whether there were abnormal returns that resulted from the dividend announcement events. The event window was 31 days, $\mathrm{t}-15$ days prior to and $t+15$ days after the event day ( $\mathrm{t}-0$ ) and the event day $\mathrm{t}-0$ itself.

### 3.3. Population

The target population for the study was all commercial banks listed on the NSE over the period of the study (Appendix I). The study was therefore a census study covering all the banks listed on the NSE during the five years of the study period from year 2007 to 2011.

### 3.4. Data Collection Procedures and Instruments

The study primarily used secondary data. Secondary data refers to the information obtained from news articles, books, newspapers, internet and magazines. For purposes of this study, the secondary data was obtained from the annual reports and financial statements of the companies filed with the Capital Markets Authority and the companies' websites. Share prices and the NSE 20 Share Index data was obtained from the NSE.

### 3.5. Data Analysis

For data collected to make sense, it needs to be analyzed in a way that it is easy to be understood by the common man. The research mainly used quantitative data comprising of daily share prices of the banks listed on the NSE and the daily NSE 20 Share Index for the same period. The researcher used event study methodology to test the effect of dividend declaration on the share prices.

### 3.5.1. Analytical Model.

Event study method was used to analyze the data. This was accomplished by use of Excel software. Normal or expected returns were determined by use of the market model based on the ordinary least squares regression as follows:
$\mathrm{E}\left(\mathrm{R}_{\mathrm{i}}\right)=\alpha_{\mathrm{i}}+\beta_{\mathrm{i}} \mathrm{R}_{m t}$

Where:
$\mathrm{E}\left(\mathrm{R}_{\mathrm{i}}\right)=$ Normal Return for security $i$
$\mathrm{R}_{m t}=$ the return of market on day $t$ calculated from the NSE 20 Share Index
$\alpha_{\mathrm{i}}, \beta_{\mathrm{i}}=$ Estimation parameters based on the estimation window and calculated through regression analysis

The abnormal returns were derived as follows:

$$
\mathrm{AR}_{i t}=\mathrm{R}_{i t}-\mathrm{E}\left(\mathrm{R}_{\mathrm{i}}\right)
$$

Where:
$\mathrm{AR}_{i t}=\mathrm{Abnormal}$ returns of stock $i$ at day $t$.
$\mathrm{R}_{i t}=$ the actual return of stock $i$, at day $t$.
$i=$ stock under observation
$t=$ the event day
Cumulative abnormal returns (CAR) were determined as follows:
$\mathrm{CAR}={ }^{\sum} \mathrm{AR}_{i t}$ for all the companies under study
Cumulative Average Abnormal Returns (CAAR) was calculated as CAR divided by the number of companies involved.

The study used t-statistic to test for significance of the resulting abnormal returns.

## CHAPTER FOUR

## DATA ANALYSIS, RESULTS AND DISCUSSION

### 4.1. Introduction

This chapter presents the data analysis based on the daily share prices of the banks listed on the NSE, the NSE 20 share Index and the dividends per share declared by the banks over the period of the study. The analysis uses the event study methodology, regression analysis and descriptive statistics to test the effect of the dividend declaration on the share prices of the banks. Event study methodology determines whether there arises positive or negative abnormal returns around the dividend declaration event by defining an event window covering a period of days before and after the actual event date.

Regression analysis was used to determine the expected returns. The independent variable was the market return regressed against the actual returns. In the event methodology, the estimation window used was 60 days before the event window. The regression parameters were determined using MS Excel.

### 4.2. Data Analysis and Discussion

The study carried out was to establish the effect of dividend declaration on the share prices of the banks listed on the Nairobi Securities Exchange. The data corrected to facilitate the study was the daily share prices of the banks for the period of five years from 2007 to 2011 and the NSE 20 share index for the same period.

The study was based on the event study methodology where the event of interest was the declaration of dividend. The event date was the day when the bank held its AGM since it is
during the AGM that the shareholders are advised on the proposed dividend if any for their approval for payment.

The firms to be included in the study were selected because they represent a sector with the highest presence in the NSE. There are ten (10) banks listed on the NSE out of a total of 58 companies listed on the exchange.

### 4.2.1 Dividend Payment

Dividend declaration was a key focus of this study since the study sought to establish the effect of dividend declaration on the share prices of the banks listed on the Nairobi Securities Exchange. All the banks declared a dividend at least once during the five years covered by the study. Cooperative Bank of Kenya was included in the study in 2009. The dividends declared were generally increasing from the previous year's rate or remaining at the same level. However there were incidences of some banks declaring decreased dividend during the study period.

The table below shows the dividends declared by the banks over the period of the study and the rate of change from one year to the next:

Table 4.1: Dividend Declared 2007-2011

| Bank | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Barclays Bank | 2.10 | 1.65 | 1.65 | 2.00 | 2.50 | 1.36 |
| \%age Change |  | $-21.43 \%$ | $0.00 \%$ | $21.21 \%$ | $25.00 \%$ | $-45.60 \%$ |
| CFC-Stanbic Holdings | 1.75 | 1.75 | 1.90 | 0.50 | 0.00 | 0.00 |
| \%age Change |  | $0.00 \%$ | $8.57 \%$ | $-73.68 \%$ | $-100.00 \%$ | $0.00 \%$ |
| Diamond Trust | 0.70 | 1.00 | 1.40 | 1.40 | 1.55 | 1.60 |
| \%age Change |  | $42.86 \%$ | $40.00 \%$ | $0.00 \%$ | $10.71 \%$ | $3.23 \%$ |
| Equity Bank | 2.00 | 2.00 | 2.00 | 3.00 | 0.40 | 0.80 |
| \%age Change |  | $0.00 \%$ | $0.00 \%$ | $50.00 \%$ | $33 \%$ | $100.00 \%$ |
| Housing Finance | - | 0.00 | 0.25 | 0.30 | 0.50 | 0.35 |
| \%age Change | $0.00 \%$ | $100.00 \%$ | $20.00 \%$ | $66.67 \%$ | $-30.00 \%$ |  |
| KCB |  | $50.00 \%$ | $16.67 \%$ | $42.86 \%$ | $0.00 \%$ | $25.00 \%$ |
| \%age Change | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.60 |
| National Bank |  | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $100.00 \%$ |
| \%age Change | 2.50 | 2.70 | 0.80 | 0.50 | 0.50 | 0.50 |
| NIC Bank |  | $8.00 \%$ | $-70.37 \%$ | $-37.50 \%$ | $0.00 \%$ | $0.00 \%$ |
| \%age Change | 7.50 | 8.50 | 10.00 | 10.00 | 12.00 | 13.50 |
| Standard Chartered Bank |  | $13.33 \%$ | $17.65 \%$ | $0.00 \%$ | $20.00 \%$ | $12.50 \%$ |
| \%age Change | 0.08 | 0.08 | 0.10 | 0.20 | 0.40 |  |
| The Co-operative Bank of Kenya | - | $100.00 \%$ | $0.00 \%$ | $25.00 \%$ | $100.00 \%$ | $100.00 \%$ |
| \%age Change |  |  |  |  |  |  |

Source: Research Findings

### 4.2.2 Normal and Abnormal Returns

Market model has been used to determine the Normal and Abnormal Returns for each of the shares. The parameters were calculated using regression analysis with the help of Microsoft Excel. Regression analysis was applied over an Estimation window of 60 days prior to the beginning of the event window which covered a period of 15 days before and after the Event

Day, the AGM day. The event window was therefore a period of 31 days over which the normal and abnormal returns are calculated. The normal returns are the expected returns computed through the Market Model, $\mathrm{E}\left(\mathrm{R}_{\mathrm{i}}\right)=\alpha_{\mathrm{i}}+\beta_{\mathrm{i}} \mathrm{R}_{m t}$

The following section discusses the resulting normal and abnormal returns per the year covered by the study, 2007 to 2011. The figures in the following tables have been calculated by subtracting the expected returns in each event time from the actual returns. The event period is depicted as $t-1$ to $t+1$, a period of three days while the event window is a period of 31 days represented as $t-15$ to $t+15$ including $t-0$, the event day. The tables show CAR with respect to the event period, i.e. CAR for the Pre-Event period, CAR for the Event period and CAR for the Postevent period. The total CAR and CAAR for each firm is also given in the last two rows respectively.

## Year 2007

Table 4.2: Abnormal Returns for Year 2007

| Event <br> Time | Barclays | CFC <br> Bank | DTB | Equity <br> Bank | HFCK | KCB | NBK | NIC | Stan. <br> Chart |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| t-15 | -2.14\% | 3.12\% | 2.25\% | -0.29\% | 4.78\% | -1.54\% | 10.70\% | 1.36\% | 1.03\% |
| t-14 | 1.48\% | 3.35\% | -2.14\% | -0.28\% | 8.89\% | -2.28\% | 7.24\% | -1.40\% | 0.59\% |
| t-13 | -4.14\% | 0.03\% | -1.91\% | -0.28\% | 7.93\% | -1.03\% | 7.27\% | -1.20\% | -1.69\% |
| t-12 | -0.26\% | 1.83\% | 2.85\% | -1.97\% | 8.70\% | -1.38\% | -2.97\% | 1.38\% | 0.31\% |
| t-11 | 4.07\% | -3.23\% | 0.43\% | -0.49\% | 4.76\% | 0.85\% | -4.16\% | -0.40\% | 0.31\% |
| t-10 | -0.69\% | 3.69\% | 0.27\% | -1.96\% | 3.61\% | -0.60\% | -4.48\% | 4.34\% | -0.44\% |
| t-9 | 1.56\% | -0.39\% | -0.63\% | -1.62\% | 3.48\% | 0.32\% | -2.12\% | -6.05\% | -0.36\% |
| t-8 | 0.06\% | -0.35\% | 1.32\% | -0.48\% | -1.40\% | 1.67\% | -0.91\% | 3.43\% | -0.60\% |
| t-7 | -1.26\% | 0.88\% | 0.69\% | 1.99\% | 2.84\% | -9.69\% | -0.24\% | 0.62\% | 0.92\% |
| t-6 | 0.16\% | 1.18\% | -1.32\% | -3.20\% | -6.59\% | 8.10\% | -2.60\% | 1.54\% | 1.14\% |
| t-5 | 0.54\% | 0.39\% | 2.60\% | 5.04\% | 6.79\% | -0.39\% | -3.03\% | -1.89\% | -0.05\% |
| t-4 | 2.15\% | -0.32\% | -1.13\% | -0.53\% | -2.57\% | 0.94\% | -3.37\% | 2.79\% | -0.59\% |
| t-3 | 0.40\% | 3.67\% | 0.95\% | 2.01\% | 1.36\% | 1.80\% | -2.45\% | 6.21\% | -1.80\% |
| t-2 | 1.26\% | 2.09\% | 0.52\% | 3.49\% | -2.98\% | -0.40\% | -4.58\% | -3.79\% | 2.31\% |
| S-Total | 3.19\% | 15.94\% | 4.75\% | 1.43\% | 39.60\% | -3.63\% | -5.70\% | 6.94\% | 1.08\% |
| t-1 | -0.04\% | 0.56\% | 0.65\% | -3.21\% | -5.49\% | -0.30\% | -0.41\% | 0.88\% | -0.08\% |
| t-0 | -2.29\% | 1.06\% | -5.24\% | 1.05\% | -2.07\% | -0.75\% | -2.70\% | -1.12\% | -0.43\% |
| t+1 | -2.62\% | 1.44\% | 5.35\% | -3.57\% | 6.60\% | 2.58\% | 0.75\% | -1.36\% | -0.49\% |
| S-Total | -4.95\% | 3.06\% | 0.76\% | -5.73\% | -0.96\% | 1.53\% | -2.36\% | -1.60\% | -1.00\% |
| t+2 | 3.08\% | 1.76\% | -0.70\% | -5.59\% | 9.45\% | -0.91\% | -5.28\% | 3.42\% | -1.09\% |
| t+3 | 1.90\% | 1.02\% | 1.65\% | 2.18\% | 3.22\% | 0.74\% | -3.74\% | -1.41\% | -1.18\% |
| t+4 | -1.37\% | 2.19\% | 5.73\% | -70.34\% | 2.18\% | -3.18\% | 1.68\% | 0.87\% | 4.30\% |
| t+5 | 0.48\% | 0.16\% | -0.14\% | 4.93\% | 3.54\% | -9.30\% | -0.40\% | 3.10\% | -0.36\% |
| t+6 | -1.95\% | 0.63\% | -1.91\% | -3.35\% | 1.92\% | 4.23\% | 1.16\% | -0.90\% | 0.65\% |
| t+7 | 0.98\% | -0.69\% | 0.70\% | -3.80\% | -7.52\% | -0.58\% | 0.51\% | -1.44\% | 0.31\% |
| t+8 | 2.25\% | 3.13\% | -0.10\% | -5.10\% | -0.21\% | -0.38\% | -1.45\% | 0.43\% | -0.94\% |
| t+9 | -0.56\% | 0.78\% | 0.01\% | -8.26\% | 0.98\% | 3.29\% | 1.12\% | -0.51\% | 0.36\% |
| t+10 | -0.54\% | 0.30\% | 1.84\% | -3.67\% | 3.82\% | 1.09\% | 0.14\% | 0.04\% | -1.58\% |
| t+11 | 0.65\% | 0.00\% | 8.65\% | 6.79\% | 5.41\% | 0.89\% | -0.10\% | 1.67\% | -0.10\% |
| t+12 | 0.45\% | 0.76\% | 2.81\% | 1.08\% | 2.01\% | 0.84\% | -0.42\% | 4.99\% | 0.55\% |
| t+13 | 0.52\% | 0.92\% | 1.97\% | -0.85\% | -4.02\% | 0.34\% | -1.76\% | -1.32\% | -0.71\% |
| t+14 | -2.28\% | 1.98\% | 0.92\% | 7.13\% | 0.16\% | -3.04\% | -0.39\% | 0.08\% | -0.47\% |
| t+15 | 0.86\% | 0.52\% | -0.42\% | 5.06\% | 0.69\% | -2.25\% | -1.91\% | -1.66\% | -2.25\% |
| S-Total | 4.47\% | 13.46\% | 21.01\% | -73.79\% | 21.63\% | -8.22\% | -10.84\% | 7.36\% | -2.51\% |
| CAR | 2.71\% | 32.46\% | 26.52\% | -78.09\% | 60.27\% | -10.32\% | -18.90\% | 12.70\% | -2.43\% |
| CAAR | 0.09\% | 1.05\% | 0.86\% | -2.52\% | 1.94\% | -0.33\% | -0.61\% | 0.41\% | -0.08\% |

Source: Research Findings

In 2007 only nine banks were listed on the NSE. Cooperative Bank of Kenya Ltd was listed on the $22^{\text {nd }}$ December 2008. In an efficient market, the market is expected to react positively to the increase in the dividend payment and negatively to announcements of reduced dividends on the date of the declaration. The assumption is that the information contained in the dividend declaration has signaling effect that the increase or decrease suggests a communication to the shareholders that the firm is expected to perform better or worse in the future respectively. This being the case it would be expected that the prices of the DTB, KCB, NIC and Standard Chartered Bank would have gone up resulting in abnormal returns to the investors. However, within the event period, $t-1$ to $t+1$, it is noted that there is no significant abnormal returns recorded for any bank. The highest cumulative abnormal return realized by the CFC Stanbic Bank at $3.06 \%$ yet the bank had retained the its DPS at the previous rate while the lowest abnormal return is realized by Equity Bank Ltd at $-5.73 \%$ which also retained the DPS at the previous rate.

The banks that had increased their DPS were DTB, KCB NIC and Standard Chartered Bank at $42.86 \%, 50 \%, 8 \%$ and $13.3 \%$ respectively. Over the event window these banks realized cumulative abnormal returns of $26.52 \%,-10.32 \%, 12.7 \%$ and $-2.43 \%$ respectively in 2007. The observation here is that there is no common pattern in the way the investors reacted to dividend declaration across the banks. This is confirmed by the fact that the highest realized abnormal returns over the event window was for HFCK which had not declared any dividend that year. The reason for the high abnormal return was that the expected return over the period was generally negative for the bank while the actual was generally positive as the share prices was recovering from a downward trend experienced in the early part of the year

The lowest realized abnormal returns over both the event window and the event period were realized by the Equity Bank Limited at $-78.09 \%$ and $-5.73 \%$ respectively. The apparent poor performance was mainly influenced by a sharp drop in the share price on $5^{\text {th }}$ April 2007 to KSh. 84.50 from KSh. 273 per share the previous day, i.e. $69.05 \%$ drop. The fall in price could not be fully explained since the bank had declared a dividend of KSh. 2 per share and a bonus of 2 shares for each share held. The date when the share prices dropped was the day the share started trading ex-bonus and ex-dividend but the drop was not expected to be so much.

## Year 2008

Table 4.3: Abnormal Returns for Year 2008

| Event Time | Barclays | CFC <br> Bank | DTB | Equity Bank | HFCK | KCB | NBK | NIC | Stan. Chart. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| t-15 | -0.18\% | -1.35\% | 0.28\% | -2.01\% | 0.36\% | 0.55\% | -2.01\% | 1.17\% | 2.13\% |
| t-14 | 2.22\% | 1.05\% | -0.57\% | 1.52\% | -0.13\% | 0.85\% | -2.08\% | -1.36\% | -1.55\% |
| t-13 | -1.87\% | -0.62\% | 0.58\% | 0.44\% | -2.20\% | 1.85\% | -5.24\% | -0.65\% | 0.55\% |
| t-12 | 0.09\% | 1.14\% | -0.43\% | -0.43\% | 10.29\% | 1.68\% | 1.85\% | -0.93\% | 0.50\% |
| t-11 | 0.56\% | 1.13\% | -0.95\% | -1.67\% | 8.11\% | 1.38\% | 5.90\% | -0.83\% | 0.87\% |
| t-10 | 1.29\% | 0.06\% | -0.24\% | -0.85\% | 1.56\% | 2.21\% | 1.33\% | 0.01\% | 0.76\% |
| t-9 | -0.78\% | 0.18\% | -1.08\% | 0.44\% | -7.35\% | 7.03\% | -2.77\% | 0.86\% | -0.24\% |
| t-8 | 1.23\% | -3.44\% | -1.39\% | 0.73\% | -3.45\% | -0.32\% | -0.11\% | -0.25\% | 0.09\% |
| t-7 | -0.03\% | 5.63\% | -1.50\% | -1.21\% | -4.75\% | 0.59\% | -2.88\% | 1.58\% | -0.34\% |
| t-6 | 0.16\% | -1.78\% | 3.28\% | -3.25\% | -19.52\% | -1.48\% | 0.99\% | 0.49\% | -0.33\% |
| t-5 | -0.81\% | 1.85\% | -0.13\% | -1.03\% | -9.05\% | -1.02\% | -0.96\% | 0.83\% | 1.12\% |
| t-4 | 0.86\% | -3.12\% | -0.94\% | -1.70\% | -5.17\% | -2.21\% | 1.65\% | -0.47\% | 0.49\% |
| t-3 | 0.76\% | 1.98\% | 0.57\% | -1.18\% | 2.58\% | -0.03\% | -0.35\% | 0.65\% | 0.10\% |
| t-2 | -0.80\% | -1.69\% | -0.29\% | -1.34\% | 1.15\% | 0.51\% | -2.16\% | 0.02\% | -0.03\% |
| S-Total | 2.70\% | 1.02\% | -2.81\% | -11.54\% | -27.57\% | 11.59\% | -6.84\% | 1.12\% | 4.12\% |
| t-1 | 1.23\% | -4.25\% | -1.16\% | -1.65\% | 0.66\% | -1.82\% | 0.05\% | 0.78\% | 0.16\% |
| t-0 | -0.20\% | 5.04\% | -1.12\% | 1.74\% | 0.53\% | -3.53\% | -1.89\% | -0.30\% | 0.38\% |
| t+1 | 0.22\% | 0.47\% | -1.03\% | -6.58\% | -2.08\% | -0.70\% | 1.38\% | -0.15\% | 0.06\% |
| S-Total | 1.25\% | 1.26\% | -3.31\% | -6.49\% | -0.89\% | -6.05\% | -0.46\% | 0.33\% | 0.60\% |
| t+2 | 0.31\% | 1.26\% | -1.12\% | 1.03\% | 0.17\% | 0.22\% | 1.13\% | -0.98\% | 0.63\% |
| t+3 | -0.35\% | -0.29\% | -0.30\% | -4.15\% | -1.99\% | -0.59\% | -0.75\% | -0.11\% | 0.13\% |
| t+4 | 0.33\% | -1.23\% | -0.98\% | -5.72\% | 1.30\% | 0.24\% | -0.18\% | -0.98\% | 0.46\% |
| t+5 | 0.77\% | 2.82\% | 0.08\% | 1.59\% | -0.95\% | -0.04\% | -0.41\% | -0.74\% | 0.54\% |
| t+6 | -0.45\% | -0.11\% | 0.87\% | 3.87\% | 1.06\% | 0.96\% | -0.20\% | -1.65\% | 0.10\% |
| t+7 | 0.70\% | 0.23\% | 0.56\% | 0.22\% | 1.12\% | -0.12\% | 0.08\% | 0.81\% | 0.14\% |
| t+8 | -0.34\% | -0.04\% | -0.42\% | -1.79\% | 5.39\% | 0.25\% | 0.35\% | -0.13\% | -0.83\% |
| t+9 | -0.12\% | -0.72\% | -0.15\% | 0.53\% | 5.60\% | 0.57\% | 0.41\% | -0.82\% | 1.16\% |
| t+10 | -0.52\% | 0.06\% | -0.24\% | 0.10\% | 2.69\% | 1.70\% | -0.15\% | -1.20\% | 0.15\% |
| t+11 | -0.35\% | -0.69\% | 0.96\% | -0.84\% | -6.13\% | -0.56\% | 1.40\% | -0.17\% | 1.06\% |
| t+12 | -1.81\% | 0.05\% | -0.27\% | -1.09\% | 0.52\% | 1.01\% | 0.93\% | -0.25\% | -0.87\% |
| t+13 | 1.47\% | 0.24\% | 0.05\% | -3.03\% | 1.78\% | 1.52\% | -1.41\% | -0.13\% | 0.59\% |
| t+14 | 0.88\% | -0.70\% | -1.14\% | -4.14\% | 2.65\% | 0.86\% | 3.54\% | -1.89\% | 0.40\% |
| t+15 | -1.29\% | 0.20\% | -0.02\% | -0.87\% | -2.47\% | 0.77\% | -0.43\% | -0.01\% | 0.05\% |
| S-Total | -0.77\% | 1.08\% | -2.12\% | -14.29\% | 10.74\% | 6.79\% | 4.31\% | -8.25\% | 3.71\% |
| CAR | 3.18\% | 3.36\% | -8.24\% | -32.32\% | -17.72\% | 12.33\% | -2.99\% | -6.80\% | 8.43\% |
| CAAR | 0.10\% | 0.11\% | -0.27\% | -1.04\% | -0.57\% | 0.40\% | -0.10\% | -0.22\% | 0.27\% |

Source: Research Findings

Five banks out of the nine being analyzed above declared increased dividends in 2008 from the rate paid the previous year; two banks retained their dividend rates at the rate of the previous year and one did not declare a dividend in 2008. This would under efficient market situation result in abnormal returns that would be reflected in the event period. The table above and the graph below reflect the abnormal returns that resulted from the actual activities over the 31 days period around the dividend declaration day, $\mathrm{t}-\mathrm{0}$.

During the 3 days event period, the highest abnormal return is realized by CFC Stanbic Bank at $1.26 \%$ whose dividend increased by $8.57 \%$ while the lowest abnormal return is observed in Equity Bank Limited at $-6.49 \%$ whose dividend was retained at the rate of the previous year. On the other hand, the highest CAR over the 31 days event window is achieved by KCB at $12.33 \%$ whose dividend increased by $16.67 \%$ while the lowest CAR was achieved by Equity Bank Limited at $-32.32 \%$. The highest dividend increase was by the HFCK which came from a period of none payment to pay 25 cts per share but the CAR for the bank over the Event Period was $0.89 \%$ and over the event window period was $-17.72 \%$

Year 2009
Table 4.4: Abnormal Returns for Year 2009

| Event Time | Barclays | CFC Bank | DBT | Equity <br> Bank | HFCK | КСВ | NBK | NIC | Stan. Chart. | Co-op Bank |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| t-15 | -1.18\% | 0.26\% | 1.68\% | -1.05\% | -2.25\% | 1.21\% | 2.07\% | 1.10\% | 1.56\% | 0.63\% |
| t-14 | 1.24\% | -4.12\% | -1.09\% | -1.89\% | -0.09\% | -1.22\% | -1.25\% | 0.67\% | 0.56\% | 0.37\% |
| t-13 | -0.74\% | -0.32\% | 0.42\% | 2.28\% | -1.94\% | -0.41\% | 0.80\% | 0.52\% | -0.14\% | 0.57\% |
| t-12 | 1.23\% | 0.14\% | 3.53\% | 3.69\% | 1.22\% | 0.25\% | 0.24\% | 1.57\% | 0.39\% | 0.37\% |
| t-11 | 0.66\% | 1.34\% | 0.10\% | 2.68\% | 1.14\% | -0.61\% | -2.29\% | 1.50\% | -0.14\% | 0.53\% |
| t-10 | 0.39\% | 4.04\% | -2.95\% | 4.22\% | 1.43\% | -0.80\% | -1.56\% | 0.48\% | -1.94\% | 0.41\% |
| t-9 | 0.01\% | 0.76\% | -1.16\% | 0.16\% | -0.58\% | 0.06\% | -3.22\% | 3.08\% | -0.02\% | -0.27\% |
| t-8 | 0.05\% | -0.37\% | 0.70\% | -2.01\% | 1.03\% | 0.50\% | -6.13\% | 0.56\% | 1.12\% | 1.23\% |
| t-7 | -1.63\% | 2.30\% | 0.79\% | -1.17\% | 0.21\% | 4.78\% | -0.70\% | 0.77\% | 1.46\% | 0.42\% |
| t-6 | 0.97\% | 0.18\% | 0.22\% | 2.40\% | -0.70\% | -1.45\% | -0.27\% | -0.69\% | -0.01\% | 0.44\% |
| t-5 | 1.14\% | 2.27\% | -1.09\% | -0.78\% | -1.65\% | -2.20\% | 1.11\% | -0.16\% | 0.06\% | 1.30\% |
| t-4 | -0.50\% | 2.24\% | 1.31\% | -0.46\% | -1.01\% | -0.61\% | 0.76\% | 0.26\% | 0.12\% | 0.49\% |
| t-3 | 1.45\% | 0.24\% | 1.29\% | -3.69\% | -0.95\% | -0.96\% | 1.82\% | 1.87\% | -0.56\% | 0.59\% |
| t-2 | 0.06\% | 2.24\% | 1.27\% | 1.28\% | -1.56\% | -0.25\% | 0.45\% | -0.71\% | 1.93\% | 6.32\% |
| Sub-Total | 3.15\% | 11.20\% | 5.02\% | 5.66\% | -5.70\% | -1.71\% | -8.17\% | 10.82\% | 4.39\% | 13.40\% |
| t-1 | -0.98\% | 0.23\% | -1.81\% | 0.99\% | -0.48\% | -0.68\% | -1.09\% | 0.30\% | 1.17\% | 9.09\% |
| t-0 | -0.31\% | 8.04\% | -0.24\% | -3.00\% | 0.23\% | 0.28\% | 1.56\% | -1.94\% | 0.36\% | 1.91\% |
| t+1 | 0.27\% | 0.18\% | -1.20\% | 3.23\% | 0.30\% | -1.17\% | -0.56\% | -3.16\% | 0.16\% | 0.45\% |
| Sub-Total | -1.02\% | 8.45\% | -3.25\% | 1.22\% | 0.05\% | -1.57\% | -0.09\% | -4.80\% | 1.69\% | 11.45\% |
| t+2 | -0.35\% | 7.50\% | -0.44\% | 6.30\% | -0.54\% | -5.90\% | 0.70\% | 5.08\% | -1.38\% | 2.66\% |
| t+3 | 1.98\% | -0.67\% | -2.70\% | 5.72\% | 0.12\% | -0.90\% | 3.75\% | -0.42\% | 1.09\% | 0.45\% |
| t+4 | -0.75\% | 0.97\% | 2.25\% | 1.19\% | 1.94\% | 0.65\% | -3.65\% | 0.33\% | -0.66\% | 1.69\% |
| t+5 | 0.46\% | 2.65\% | -1.74\% | 0.58\% | 1.20\% | 0.19\% | 0.08\% | 1.53\% | -0.30\% | -1.08\% |
| t+6 | 0.00\% | 2.72\% | 0.52\% | 0.88\% | 3.83\% | 0.05\% | -0.39\% | 0.18\% | -0.36\% | 0.58\% |
| t+7 | 0.39\% | 0.09\% | -2.06\% | -1.25\% | 0.39\% | -0.16\% | 0.30\% | -1.16\% | 0.42\% | 0.24\% |
| t+8 | 0.38\% | -1.38\% | 0.28\% | 2.06\% | 3.66\% | -1.37\% | 1.18\% | 2.16\% | 0.27\% | 0.55\% |
| t+9 | 0.28\% | 1.82\% | -0.45\% | -2.57\% | -0.27\% | -0.16\% | -2.34\% | -0.40\% | -0.40\% | 1.14\% |
| t+10 | 0.52\% | 0.04\% | 0.15\% | -7.73\% | 0.57\% | -0.02\% | 5.35\% | 1.17\% | 0.83\% | 4.93\% |
| t+11 | 0.39\% | 0.09\% | -2.79\% | -7.99\% | -1.23\% | -0.64\% | -4.84\% | 2.85\% | -1.47\% | 2.85\% |
| t+12 | 0.25\% | 1.72\% | -0.96\% | -9.86\% | -2.28\% | -0.02\% | -0.99\% | 2.03\% | -0.48\% | 4.75\% |
| t+13 | 0.94\% | 2.27\% | -3.86\% | -8.04\% | -3.17\% | 0.23\% | 0.62\% | -0.94\% | 0.40\% | 7.74\% |
| t+14 | -0.21\% | 3.10\% | -3.48\% | 0.92\% | -3.15\% | 0.06\% | 0.82\% | 1.31\% | -0.13\% | 9.09\% |
| t+15 | -1.38\% | -0.71\% | -1.50\% | 5.80\% | 1.81\% | -1.22\% | -1.21\% | 0.70\% | 0.48\% | 9.46\% |
| Sub-Total | 2.90\% | 20.21\% | -16.78\% | -13.99\% | 2.88\% | -9.21\% | -0.62\% | 14.42\% | -1.69\% | 45.05\% |
| CAR | 5.03\% | 39.86\% | -15.01\% | -7.11\% | -2.77\% | -12.49\% | -8.88\% | 20.44\% | 4.39\% | 69.90\% |
| CAAR | 0.16\% | 1.29\% | -0.48\% | -0.23\% | -0.09\% | -0.40\% | -0.29\% | 0.66\% | 0.14\% | 2.25\% |

Source: Research Findings

In 2009, nine banks declared dividend and one did not declare a dividend. Of the nine banks five declared a higher dividend, two a lower dividend and two retained the same dividend as the previous year's. The increase ranged from $20 \%$ to $50 \%$ while the decrease was by $-73.68 \%$ and $37.5 \%$. From the above table of abnormal returns for the banks, it is observed that the bank with the highest abnormal return is Cooperative Bank of Kenya at $69.9 \%$ while that with the least is DTB at $-15.01 \%$. Cooperative Bank's dividend increased by $25 \%$. Of the $69.9 \%, 45.05 \%$ was realized after the event period, $11.45 \%$ during the event period and $13.4 \%$ prior to the event period. This means that the dividend increase was received well by the investors. A contradictory scenario is observed with the banks that declared reduced dividends where CFC Stanbic realized CAR of $39.86 \%$ with a $73.68 \%$ reduction in dividends and NIC Bank realized $20.44 \%$ with a $37.5 \%$ reduction in dividends.

Three banks of the five that had positive dividend declaration also reported negative CAR. The distribution of the CAR between the period prior and after the event window, and during the event period is not consistent with some of the banks realizing more of one than the either regardless of the form of dividend declaration attending to each. This means there is no conclusive evidence that dividend declaration indeed resulted in abnormal returns.

Year 2010
Table 4. 5: Abnormal Returns for Year 2010

| Event <br> Time | Barclays | CFC | DTB | Equity Bank | HFCK | KCB | NBK | NIC | Stan. Chart. | Co-op <br> Bank |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| t-15 | 0.63\% | -1.94\% | -0.74\% | -1.27\% | -0.12\% | -2.22\% | -0.08\% | 0.40\% | 0.33\% | 0.53\% |
| t-14 | -0.01\% | -0.59\% | 0.39\% | -2.12\% | -1.65\% | -1.76\% | 1.14\% | 0.43\% | 0.86\% | 0.07\% |
| t-13 | 0.70\% | -0.61\% | 2.21\% | -2.83\% | 2.28\% | -0.09\% | 2.02\% | 3.11\% | 1.38\% | -0.59\% |
| t-12 | -0.28\% | 0.14\% | 0.26\% | -3.06\% | 1.63\% | 2.88\% | -1.87\% | 2.94\% | -0.23\% | -0.80\% |
| t-11 | 2.30\% | -1.33\% | -2.74\% | -2.58\% | 0.52\% | 1.77\% | -0.81\% | 3.77\% | 1.29\% | 1.35\% |
| t-10 | 0.43\% | -0.72\% | 0.32\% | -2.59\% | 0.11\% | -1.71\% | -2.60\% | -1.82\% | -0.25\% | -0.57\% |
| t-9 | 0.64\% | 1.56\% | -0.44\% | -1.74\% | 0.34\% | -0.76\% | -0.03\% | -1.85\% | 0.22\% | -0.23\% |
| t-8 | -1.92\% | 7.42\% | -2.27\% | -1.30\% | 1.29\% | -1.12\% | -0.02\% | 0.24\% | -1.77\% | -0.37\% |
| t-7 | -0.24\% | 8.16\% | 0.22\% | 2.59\% | -0.05\% | 0.33\% | 0.60\% | -1.85\% | 0.25\% | -0.31\% |
| t-6 | -0.21\% | 1.50\% | -0.19\% | 3.06\% | 0.68\% | 1.44\% | 1.45\% | 0.72\% | 0.82\% | -0.26\% |
| t-5 | -1.08\% | 0.48\% | 0.57\% | 1.97\% | 3.17\% | 0.83\% | -0.42\% | 1.02\% | 0.29\% | 2.15\% |
| t-4 | -0.23\% | -2.68\% | -2.03\% | -1.05\% | 0.58\% | -0.64\% | -2.59\% | -1.50\% | 1.76\% | -1.91\% |
| t-3 | -0.21\% | 3.20\% | 0.46\% | -1.03\% | 1.91\% | -0.72\% | -1.07\% | 1.89\% | -2.25\% | -0.26\% |
| t-2 | -1.61\% | -1.88\% | 3.56\% | -0.50\% | 5.39\% | -0.50\% | 3.89\% | -0.38\% | 0.24\% | 1.85\% |
| S-Total | -1.09\% | $\mathbf{1 2 . 7 1 \%}$ | -0.42\% | -12.45\% | 16.08\% | -2.27\% | -0.39\% | 7.12\% | 2.94\% | 0.65\% |
| t-1 | 0.08\% | -0.18\% | -4.28\% | -0.58\% | 6.06\% | -0.31\% | 1.41\% | 0.06\% | 1.26\% | 0.63\% |
| t-0 | 0.55\% | 0.63\% | 1.54\% | -1.64\% | 2.65\% | -1.06\% | 1.61\% | -1.42\% | -0.23\% | 0.00\% |
| t+1 | -0.31\% | 5.68\% | 8.09\% | 1.13\% | 6.16\% | -5.87\% | -1.52\% | -0.08\% | -0.20\% | 0.77\% |
| S-Total | 0.32\% | 6.13\% | 5.35\% | -1.09\% | 14.87\% | -7.24\% | 1.50\% | -1.44\% | 0.83\% | 1.40\% |
| t+2 | -0.06\% | 6.96\% | -5.09\% | -0.37\% | 5.95\% | -5.66\% | -1.71\% | 0.37\% | 1.22\% | 0.39\% |
| t+3 | -0.32\% | 9.01\% | 4.32\% | -0.19\% | -2.95\% | -1.13\% | -0.55\% | 0.01\% | 1.22\% | 0.35\% |
| t+4 | -0.25\% | -5.31\% | -1.18\% | 1.58\% | -1.98\% | 2.07\% | 0.83\% | -0.11\% | 1.66\% | -0.71\% |
| t+5 | -0.24\% | -3.15\% | -2.52\% | -0.28\% | 0.00\% | 2.29\% | 1.55\% | -0.71\% | 2.10\% | -0.71\% |
| t+6 | -0.25\% | 0.46\% | 1.55\% | 0.22\% | 1.17\% | 2.70\% | 1.23\% | -0.67\% | 0.23\% | 0.07\% |
| t+7 | -0.16\% | -0.76\% | -2.54\% | 0.27\% | 0.14\% | 3.54\% | -1.25\% | -2.05\% | -0.69\% | -0.17\% |
| t+8 | 0.56\% | -0.29\% | 1.44\% | 0.24\% | 0.34\% | 0.06\% | 2.86\% | -1.39\% | 1.59\% | 0.39\% |
| t+9 | -0.38\% | 0.53\% | 1.89\% | -0.15\% | 0.21\% | -4.49\% | -0.97\% | 2.70\% | 0.14\% | 0.23\% |
| t+10 | 0.55\% | 2.00\% | -1.54\% | 1.60\% | -5.46\% | -1.20\% | -0.21\% | -2.27\% | -0.31\% | 0.00\% |
| t+11 | 0.51\% | 0.50\% | -2.75\% | 0.80\% | 0.13\% | 1.32\% | 0.35\% | -0.29\% | 0.23\% | 1.48\% |
| t+12 | -0.99\% | -1.55\% | -0.61\% | 2.76\% | -1.17\% | 0.16\% | 0.32\% | -0.14\% | -4.22\% | 0.96\% |
| t+13 | -0.97\% | 2.64\% | 2.01\% | 0.82\% | 0.18\% | 2.39\% | 2.46\% | 0.52\% | -2.59\% | 5.47\% |
| t+14 | 0.77\% | 0.34\% | -0.20\% | 0.16\% | 4.87\% | 1.20\% | -2.96\% | 0.87\% | 1.20\% | 3.86\% |
| t+15 | -0.15\% | -0.96\% | 1.88\% | 1.59\% | 1.28\% | -0.15\% | 2.82\% | -0.17\% | 0.24\% | 1.54\% |
| S-Total | -1.38\% | 10.42\% | -3.34\% | 9.05\% | $\mathbf{2 . 7 1 \%}$ | 3.10\% | 4.77\% | -3.33\% | 2.02\% | 13.15\% |
| CAR | -2.15\% | 29.26\% | 1.59\% | -4.49\% | 33.66\% | -6.41\% | 5.88\% | 2.35\% | 5.79\% | 15.20\% |
| CAAR | -0.07\% | 0.94\% | 0.05\% | -0.14\% | 1.09\% | -0.21\% | 0.19\% | 0.08\% | 0.19\% | 0.49\% |

Source: Research Findings

In 2010 only two banks did not declare a dividend out of ten while two retained their dividends at the previous year's rate. Six banks declared higher dividends than the previous year's dividends with the increments ranging from $10.71 \%$ to $100 \%$. In the same period Equity Bank split its shares at 10 for 1 held and declared a dividend of 40 cts per share of the split shares. This effectively was a $33 \%$ increase in dividend payout rate from the previous year's dividend of KSh. 3 per share. The effect of this on the returns was a 9.05\% CAR after the event period as compared to a negative CAR of $12.45 \%$ prior to the event period.

Of the banks with increased dividends, only two had higher CAR arising after the event period than prior to the event period while four had higher CAR arising prior to the event period than after the event period. It is also observed that only one of these banks had a negative CAR during the event period with the rest recording positive CAR during the event period. It is also observed that of the six banks with increased dividend payout, four have realized positive CAR and two negative CAR over the entire event window period of 31 days.

An interesting observation is made on the NIC Bank which did not change the dividend rate but retained the rate of the previous year for the current period. In the period prior to the event period the bank realized CAR of $7.12 \%$; in the event period the CAR was $-1.44 \%$ and the CAR for the period after the event period was $-3.33 \%$. This may suggest the shareholders were positive that the bank was going to pay a higher dividend than it did resulting in some negative reaction as depicted in the negative CAR.

## Year 2011

Table 4.6: Abnormal Returns for Year 2011

| Event Time | Barclays | CFC | DTB | Equity Bank | HFCK | KCB | NBK | NIC | Stan. Chart. | Co-op Bank |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| t-15 | -0.36\% | 0.40\% | -0.42\% | -2.38\% | -0.19\% | 0.94\% | 2.18\% | -0.06\% | -0.02\% | 1.09\% |
| t-14 | -0.24\% | 0.41\% | -0.34\% | -1.08\% | -0.84\% | 1.35\% | -1.75\% | 0.52\% | -0.15\% | -1.59\% |
| t-13 | 0.29\% | -0.48\% | -0.10\% | 2.59\% | -1.12\% | -0.90\% | 2.58\% | -0.17\% | 0.46\% | 0.43\% |
| t-12 | -1.14\% | 0.42\% | 0.60\% | -1.80\% | -1.22\% | -2.04\% | -0.46\% | 0.00\% | -0.31\% | -0.36\% |
| t-11 | 0.92\% | -3.61\% | -0.76\% | -2.28\% | 1.06\% | -0.66\% | 0.29\% | 0.79\% | -0.01\% | 0.56\% |
| t-10 | -0.16\% | 1.24\% | -0.13\% | 1.09\% | 1.19\% | -1.88\% | 0.16\% | -0.21\% | 0.81\% | 1.05\% |
| t-9 | -0.03\% | 0.60\% | 2.02\% | 4.53\% | -1.21\% | -2.06\% | -1.72\% | 0.59\% | -0.38\% | -0.23\% |
| t-8 | -0.63\% | 2.22\% | 0.22\% | -1.84\% | -0.31\% | 0.15\% | -1.99\% | -0.42\% | -0.44\% | -0.36\% |
| t-7 | -0.16\% | 0.51\% | -0.14\% | -1.46\% | 0.82\% | -0.47\% | -1.70\% | 0.31\% | 0.03\% | -0.38\% |
| t-6 | -0.24\% | -0.63\% | 0.83\% | 0.45\% | 1.06\% | -0.73\% | -3.14\% | -0.02\% | 0.00\% | 0.38\% |
| t-5 | -0.57\% | -1.30\% | 0.66\% | 2.37\% | 1.00\% | 2.53\% | 1.61\% | 0.66\% | -0.06\% | 0.28\% |
| t-4 | 0.47\% | 6.67\% | 0.05\% | 0.07\% | -1.17\% | -1.08\% | 0.92\% | -0.54\% | -0.09\% | -0.25\% |
| t-3 | 0.98\% | -5.61\% | 0.40\% | -0.44\% | -0.09\% | 1.50\% | -0.93\% | 0.05\% | 0.49\% | 0.34\% |
| t-2 | 1.54\% | -0.49\% | 1.98\% | -1.42\% | 1.74\% | 0.54\% | 1.56\% | -0.07\% | 0.18\% | -0.13\% |
| S-Total | 0.67\% | 0.35\% | 4.87\% | -1.60\% | 0.72\% | -2.81\% | -2.39\% | 1.43\% | 0.51\% | 0.83\% |
| t-1 | -0.24\% | 0.29\% | 3.21\% | 0.42\% | 0.27\% | -1.31\% | -1.72\% | -0.95\% | 0.17\% | 0.09\% |
| t-0 | -1.38\% | -0.11\% | -2.14\% | 0.67\% | 0.63\% | 1.39\% | -3.31\% | -3.90\% | 0.09\% | -0.11\% |
| t+1 | -1.49\% | -1.38\% | -12.35\% | -0.44\% | -1.95\% | -1.28\% | 0.79\% | 0.00\% | 0.03\% | -1.63\% |
| S-Total | -3.11\% | -1.20\% | -11.28\% | 0.65\% | -1.05\% | -1.20\% | -4.24\% | -4.85\% | 0.29\% | -1.65\% |
| t+2 | 0.05\% | 1.15\% | -6.83\% | -0.22\% | -1.02\% | -4.30\% | -1.37\% | -1.18\% | -0.19\% | -0.50\% |
| t+3 | -1.10\% | -1.31\% | -1.48\% | -1.35\% | 0.91\% | -0.55\% | 0.58\% | -1.38\% | -0.40\% | 0.04\% |
| t+4 | -0.74\% | -0.52\% | -0.06\% | -1.03\% | 0.84\% | 0.23\% | 2.72\% | -0.03\% | -0.96\% | 0.74\% |
| t+5 | -0.88\% | -0.65\% | 0.50\% | -1.49\% | -0.05\% | -1.22\% | 7.99\% | -0.44\% | -1.17\% | -1.41\% |
| t+6 | -1.13\% | 1.39\% | -2.31\% | -0.70\% | 0.23\% | -1.04\% | -4.16\% | 1.24\% | -1.18\% | -0.24\% |
| t+7 | -1.89\% | 0.39\% | -0.07\% | 1.62\% | -1.06\% | -0.90\% | 0.12\% | -4.59\% | 0.57\% | -0.44\% |
| t+8 | -1.49\% | 0.40\% | -3.45\% | 0.34\% | -2.70\% | 0.78\% | 0.30\% | 1.13\% | -0.23\% | -1.69\% |
| t+9 | 0.13\% | 0.32\% | 2.47\% | 1.14\% | 1.96\% | -0.35\% | 1.22\% | 4.35\% | 0.43\% | -0.96\% |
| t+10 | -2.80\% | -0.42\% | -1.73\% | 2.48\% | -0.90\% | 1.18\% | 1.80\% | 1.98\% | -0.98\% | 1.79\% |
| t+11 | 0.18\% | 1.52\% | 1.57\% | 2.21\% | -0.24\% | -0.42\% | 0.78\% | -0.55\% | 0.08\% | 0.88\% |
| t+12 | 0.61\% | -0.20\% | -0.17\% | 1.03\% | 0.97\% | 0.23\% | -1.59\% | -1.74\% | 0.40\% | 0.42\% |
| t+13 | 2.25\% | 0.61\% | -0.76\% | 0.49\% | -0.05\% | -2.04\% | -0.27\% | 2.33\% | -0.40\% | -0.49\% |
| t+14 | 0.19\% | -0.28\% | -0.69\% | -2.48\% | -0.21\% | -1.32\% | -2.25\% | -1.99\% | -1.34\% | 0.24\% |
| t+15 | 1.78\% | 5.07\% | 1.13\% | 0.09\% | 1.85\% | -0.95\% | 0.17\% | -1.52\% | 0.18\% | -0.57\% |
| S-Total | -4.84\% | 7.47\% | -11.88\% | 2.13\% | 0.53\% | -10.67\% | 6.04\% | -2.39\% | -5.19\% | -2.19\% |
| CAR | -7.28\% | 6.62\% | -18.29\% | 1.18\% | 0.20\% | -14.68\% | -0.59\% | -5.81\% | -4.39\% | -3.01\% |
| CAAR | -0.23\% | 0.21\% | -0.59\% | 0.04\% | 0.01\% | -0.47\% | -0.02\% | -0.19\% | -0.14\% | -0.10\% |

Source: Research Findings

In 2011 only one bank did not declare a dividend. Two banks declared a reduced dividend, one retained the payout of the previous year and six declared higher dividends than the payout of the previous year. Barclays Bank reduced its dividend by $45.6 \%$ while HFCK reduced its dividend by $30 \%$. The increment of those that declared higher dividends ranged from $3.23 \%$ to $100 \%$.

It is observed that nearly all the banks with increased dividends are ending up with negative CAR and CAAR. DTB realized $4.87 \%$ abnormal return in the period before the event period within the event window but $-11.28 \%$ during the event period and $-11.88 \%$ after the event period within the event window. This led to the ultimate negative $18.29 \%$ CAR and negative $0.59 \%$ CAAR. This may suggest that investors reacted negatively to the slight increase in dividends (3.23\%) after the declaration day. A similar pattern of behavior is observed with KCB, Standard Chartered Bank and Cooperative Bank of Kenya. What is interesting is the fact that for Cooperative Bank the increment in dividend payment was by $100 \%$ while KCB's was by $25 \%$ but they ended with $-3.01 \%$ CAR ( $-0.10 \%$ CAAR) and $-14.68 \%$ CAR ( $-0.47 \%$ CAAR) respectively.

Barclays Bank and HFCK had reduced their dividend per share by $45.6 \%$ and $30 \%$ respectively. This would be expected to result in negative abnormal returns. This was the case for the event period where Barclays Bank realized $-3.11 \%$ CAR while HFCK realized $-1.05 \%$. The negative effect continued for Barclays Bank after the event period where further -4.84\% CAR was realized within the event window leading to the ultimate $-7.28 \%$ CAR and -0.23 CAAR. The case for HFCK was however different since for the period following the event period it realized $0.53 \%$ CAR, very close to the $0.72 \%$ CAR it realized in the period prior to the event period.

NIC Bank is the only bank that maintained its dividend per share at the previous year's rate. The resulting effect was $-5.81 \%$ CAR or $-0.19 \%$ CAAR. It is observed that in the period prior to the event period within the event window the bank had realized $1.43 \%$ CAR but during the event period the bank realized $-4.85 \%$ CAR and $-2.39 \%$ CAR in the period after the event period within the event window.

CFC Stanbic Bank did not declare a dividend in 2011. It is however observed that the only period when a negative CAR was realized was the event period at $-1.2 \%$. The period prior to the event period realized $0.35 \%$ CAR while the period after the event period within the event window realized $7.47 \%$ CAR. This means in 2011 the bank that realized the highest CAR was CFC Stanbic with $6.62 \%$ CAR and $0.21 \%$ CAAR even though it did not declare any dividend.

The above discussion suggests that there is no common behavior among the shareholders of the different banks in response to the dividend declaration events. It is not possible to generalize and conclude that the share prices will respond in either way following a given dividend declaration information.

### 4.2.3 Descriptive Statistics

This section brings out the descriptive statistics to elaborate on the analysis done above on the event study results. The critical t-statistic at $95 \%$ level of significance at 30 (31-1) degrees of freedom is $\pm 2.042$ that would compare with the $t$-stat shown in the tables. The following are descriptive statistics tables for each of the five years covered in the study:

Table 4.7: Descriptive Statistic 2007

| Bank | Mean - <br> CAAR | Std. <br> Error | Median | Std. <br> Dev. | Range | Min. | Max. | CAR | t-stat. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Barclays | $0.09 \%$ | $0.32 \%$ | $0.40 \%$ | $1.79 \%$ | $8.21 \%$ | $-4.14 \%$ | $4.07 \%$ | $2.71 \%$ | 0.272 |
| $\boldsymbol{C F C}$ Bank | $1.05 \%$ | $0.26 \%$ | $0.88 \%$ | $1.46 \%$ | $6.92 \%$ | $-3.23 \%$ | $3.69 \%$ | $32.46 \%$ | 3.981 |
| DTB | $0.86 \%$ | $0.46 \%$ | $0.65 \%$ | $2.58 \%$ | $13.89 \%$ | $-5.24 \%$ | $8.65 \%$ | $26.52 \%$ | 1.843 |
| Equity Bank | $-2.52 \%$ | $2.36 \%$ | $-0.49 \%$ | $13.12 \%$ | $77.47 \%$ | $-70.34 \%$ | $7.13 \%$ | $-78.09 \%$ | -1.069 |
| HFCK | $1.94 \%$ | $0.81 \%$ | $2.18 \%$ | $4.50 \%$ | $16.97 \%$ | $-7.52 \%$ | $9.45 \%$ | $60.27 \%$ | 2.403 |
| KCB | $-0.33 \%$ | $0.59 \%$ | $-0.38 \%$ | $3.30 \%$ | $17.79 \%$ | $-9.69 \%$ | $8.10 \%$ | $-10.32 \%$ | -0.562 |
| NBK | $-0.61 \%$ | $0.64 \%$ | $-0.91 \%$ | $3.55 \%$ | $15.98 \%$ | $-5.28 \%$ | $10.70 \%$ | $-18.90 \%$ | -0.955 |
| NIC | $0.41 \%$ | $0.46 \%$ | $0.08 \%$ | $2.58 \%$ | $12.26 \%$ | $-6.05 \%$ | $6.21 \%$ | $12.70 \%$ | 0.884 |
| Stan. $\boldsymbol{C h a r t}$. | $-0.08 \%$ | $0.23 \%$ | $-0.36 \%$ | $1.26 \%$ | $6.55 \%$ | $-2.25 \%$ | $4.30 \%$ | $-2.43 \%$ | -0.346 |

Source: Research Findings
The t-statistic for CFC Stanbic and HFCK in the above table shows significantly high CAAR.
CFC Stanbic had maintained a constant dividend from the previous year but HFCK had not declared any dividend in the AGM. The rest were within the expected range of the critical $t$ value of -2.042 to 2.042 .

Table 4.8: Descriptive Statistic 2008

| Bank | Mean - <br> CAAR | Std. <br> Error | Median | Std. <br> Dev. | Range | Min. | Max. | CAR | t-Stat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Barclays | $0.10 \%$ | $0.17 \%$ | $0.09 \%$ | $0.94 \%$ | $4.09 \%$ | $-1.87 \%$ | $2.22 \%$ | $3.18 \%$ | 0.608 |
| CFC Bank | $0.11 \%$ | $0.37 \%$ | $0.06 \%$ | $2.07 \%$ | $9.88 \%$ | $-4.25 \%$ | $5.63 \%$ | $3.36 \%$ | 0.291 |
| DTB | $-0.27 \%$ | $0.17 \%$ | $-0.29 \%$ | $0.94 \%$ | $4.78 \%$ | $-1.50 \%$ | $3.28 \%$ | $-8.24 \%$ | -1.569 |
| Equity Bank | $-1.04 \%$ | $0.40 \%$ | $-1.03 \%$ | $2.21 \%$ | $10.45 \%$ | $-6.58 \%$ | $3.87 \%$ | $-32.32 \%$ | -2.627 |
| HFCK | $-0.57 \%$ | $0.98 \%$ | $0.52 \%$ | $5.45 \%$ | $29.81 \%$ | $-19.52 \%$ | $10.29 \%$ | $-17.72 \%$ | -0.584 |
| KCB | $0.40 \%$ | $0.32 \%$ | $0.51 \%$ | $1.76 \%$ | $10.56 \%$ | $-3.53 \%$ | $7.03 \%$ | $12.33 \%$ | 1.256 |
| NBK | $-0.10 \%$ | $0.37 \%$ | $-0.15 \%$ | $2.05 \%$ | $11.14 \%$ | $-5.24 \%$ | $5.90 \%$ | $-2.99 \%$ | -0.262 |
| NIC | $-0.22 \%$ | $0.15 \%$ | $-0.17 \%$ | $0.84 \%$ | $3.47 \%$ | $-1.89 \%$ | $1.58 \%$ | $-6.80 \%$ | -1.461 |
| Stan. Chart. | $0.27 \%$ | $0.12 \%$ | $0.16 \%$ | $0.68 \%$ | $3.68 \%$ | $-1.55 \%$ | $2.13 \%$ | $8.43 \%$ | 2.225 |

Source: Research Findings
The t-statistic of 2.225 in the above table for Standard Chartered Bank, which had declared a $17.65 \%$ increase in dividends, shows that dividend declaration had a significant influence on the share prices of the bank resulting in high CAAR of $0.27 \%$. Equity bank had a significant
negative result with a $t$-value of -2.627 . The rest were within the expected range of the critical $t$ value of -2.042 to 2.042 .

Table 4.9: Descriptive Statistic 2009

| Bank | Mean CAAR | Std <br> Error | Median | Std. <br> Dev | Range | Min. | Max. | CAR | t-Stat |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Barclays | 0.16\% | 0.15\% | 0.27\% | 0.85\% | 3.61\% | -1.63\% | 1.98\% | 5.03\% | 1.063 |
| CFC Bank | 1.29\% | 0.42\% | 0.76\% | 2.35\% | 12.16\% | -4.12\% | 8.04\% | 39.86\% | 3.047 |
| DTB | -0.48\% | 0.31\% | -0.44\% | 1.73\% | 7.39\% | -3.86\% | 3.53\% | -15.01\% | -1.557 |
| Equity Bank | -0.23\% | 0.73\% | 0.58\% | 4.09\% | 16.16\% | -9.86\% | 6.30\% | -7.11\% | -0.312 |
| HFCK | -0.09\% | 0.31\% | -0.09\% | 1.70\% | 7.00\% | -3.17\% | 3.83\% | -2.77\% | -0.292 |
| KCB | -0.40\% | 0.28\% | -0.25\% | 1.55\% | 10.68\% | -5.90\% | 4.78\% | -12.49\% | -1.444 |
| NBK | -0.29\% | 0.41\% | 0.08\% | 2.31\% | 11.48\% | -6.13\% | 5.35\% | -8.88\% | -0.691 |
| NIC | 0.66\% | 0.28\% | 0.56\% | 1.57\% | 8.24\% | -3.16\% | 5.08\% | 20.44\% | 2.345 |
| Stan. Chart. | 0.14\% | 0.16\% | 0.12\% | 0.87\% | 3.87\% | -1.94\% | 1.93\% | 4.39\% | 0.907 |
| Co-op Bank | 2.25\% | 0.54\% | 0.59\% | 3.03\% | 10.54\% | -1.08\% | 9.46\% | 69.90\% | 4.148 |

Source: Research Findings

In 2009 t-statistics for CFC Stanbic Bank, NIC Bank and Co-operative Bank indicate a significantly high CAAR ranging from $0.66 \%$ to $2.25 \%$. CFC Stanbic and NIC Bank had declared reduced dividends by $73.68 \%$ and $37.5 \%$ respectively and therefore a contradictory outcome. Cooperative banks outcome may relate to the increase in the declared dividend by $25 \%$. The rest of the banks were within the expected range of the critical $t$ value.

Table 4.10: Descriptive Statistic 2010

|  | Mean - <br> CAAR | Std. <br> Error | Median | Std. Dev. | Range | Min. | Max. | CAR | t-Stat |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Barclays | $-0.07 \%$ | $0.14 \%$ | $-0.21 \%$ | $0.79 \%$ | $4.22 \%$ | $-1.92 \%$ | $2.30 \%$ | $-2.15 \%$ | -0.490 |
| CFC Bank | $0.94 \%$ | $0.61 \%$ | $0.34 \%$ | $3.38 \%$ | $14.32 \%$ | $-5.31 \%$ | $9.01 \%$ | $29.26 \%$ | 1.554 |
| DTB | $0.05 \%$ | $0.47 \%$ | $0.22 \%$ | $2.63 \%$ | $13.18 \%$ | $-5.09 \%$ | $8.09 \%$ | $1.59 \%$ | 0.109 |
| Equity Bank | $-0.14 \%$ | $0.30 \%$ | $-0.19 \%$ | $1.68 \%$ | $6.12 \%$ | $-3.06 \%$ | $3.06 \%$ | $-4.49 \%$ | -0.480 |
| HFCK | $1.09 \%$ | $0.47 \%$ | $0.52 \%$ | $2.63 \%$ | $11.62 \%$ | $-5.46 \%$ | $6.16 \%$ | $33.66 \%$ | 2.299 |
| KCB | $-0.21 \%$ | $0.41 \%$ | $-0.15 \%$ | $2.28 \%$ | $9.41 \%$ | $-5.87 \%$ | $3.54 \%$ | $-6.41 \%$ | -0.505 |
| NBK | $0.19 \%$ | $0.31 \%$ | $-0.02 \%$ | $1.72 \%$ | $6.85 \%$ | $-2.96 \%$ | $3.89 \%$ | $5.88 \%$ | 0.612 |
| NIC | $0.08 \%$ | $0.28 \%$ | $-0.08 \%$ | $1.56 \%$ | $6.04 \%$ | $-2.27 \%$ | $3.77 \%$ | $2.35 \%$ | 0.270 |
| Stan. Chart. | $0.19 \%$ | $0.25 \%$ | $0.24 \%$ | $1.38 \%$ | $6.32 \%$ | $-4.22 \%$ | $2.10 \%$ | $5.79 \%$ | 0.756 |
| Co-op Bank | $0.49 \%$ | $0.26 \%$ | $0.07 \%$ | $1.42 \%$ | $7.38 \%$ | $-1.91 \%$ | $5.47 \%$ | $15.20 \%$ | 1.916 |

Source: Research Findings

The t-statistic for HFCK in the above table, 2.299, shows that dividend declaration had a significant influence on the share prices of the bank resulting in high CAAR of $1.09 \%$. The rest were within the expected range of the critical $t$ value of -2.042 to 2.042

Table 4.11: Descriptive Statistic 2011

| Bank | Mean - <br> CAAR | Std. <br> Error | Median | Std. <br> Dev. | Range | Min. | Max. | CAR | t-Stat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Barclays | $-0.23 \%$ | $0.20 \%$ | $-0.24 \%$ | $1.09 \%$ | $5.05 \%$ | $-2.80 \%$ | $2.25 \%$ | $-7.28 \%$ | -1.204 |
| CFC Bank | $0.21 \%$ | $0.38 \%$ | $0.32 \%$ | $2.12 \%$ | $12.28 \%$ | $-5.61 \%$ | $6.67 \%$ | $6.62 \%$ | 0.562 |
| DTB | $-0.59 \%$ | $0.52 \%$ | $-0.10 \%$ | $2.87 \%$ | $15.56 \%$ | $-12.35 \%$ | $3.21 \%$ | $-18.29 \%$ | -1.144 |
| Equity Bank | $0.04 \%$ | $0.30 \%$ | $0.07 \%$ | $1.69 \%$ | $7.01 \%$ | $-2.48 \%$ | $4.53 \%$ | $1.18 \%$ | 0.125 |
| HFCK | $0.01 \%$ | $0.21 \%$ | $-0.05 \%$ | $1.14 \%$ | $4.66 \%$ | $-2.70 \%$ | $1.96 \%$ | $0.20 \%$ | 0.031 |
| KCB | $-0.47 \%$ | $0.25 \%$ | $-0.66 \%$ | $1.37 \%$ | $6.83 \%$ | $-4.30 \%$ | $2.53 \%$ | $-14.68 \%$ | -1.921 |
| NBK | $-0.02 \%$ | $0.41 \%$ | $0.16 \%$ | $2.31 \%$ | $12.15 \%$ | $-4.16 \%$ | $7.99 \%$ | $-0.59 \%$ | -0.046 |
| NIC | $-0.19 \%$ | $0.30 \%$ | $-0.06 \%$ | $1.66 \%$ | $8.94 \%$ | $-4.59 \%$ | $4.35 \%$ | $-5.81 \%$ | -0.629 |
| Stan. Chart. | $-0.14 \%$ | $0.10 \%$ | $-0.02 \%$ | $0.53 \%$ | $2.15 \%$ | $-1.34 \%$ | $0.81 \%$ | $-4.39 \%$ | -1.474 |
| Co-op Bank | $-0.10 \%$ | $0.15 \%$ | $-0.13 \%$ | $0.82 \%$ | $3.48 \%$ | $-1.69 \%$ | $1.79 \%$ | $-3.01 \%$ | -0.659 |

Source: Research Findings

In 2011, though most of the banks declared an increased dividend none reported a significant
CAAR as observed from the t-statistic in the above table.

### 4.3. Interpretation of the findings

The findings of this study do not indicate any conclusive pattern of the effect of dividend declaration on the share prices of the banks listed on the NSE. It has been observed that it is not in all cases where the dividend increases have resulted in increase in share prices and not in all cases where dividend decreases have resulted in decrease in share prices. The study has shown that out of the observed 26 incidences of dividend increases over the five years covered by the research only twelve (12) incidences resulted in positive CAAR over the entire event window. This means fourteen (14) out of twenty (26) incidences of dividend increase declarations did not result in increase in prices and therefore CAAR.

Over the research period there were a total of six (6) incidences of decreased dividend declarations. The reported CAAR in four (4) of these incidences was positive and only in two (2) incidences was the CAAR negative and not significantly according to the $t$-test of significance. This is confounding considering that decreased dividend declaration would be expected to lead to reduced prices and therefore negative CAAR or abnormal losses.

There were nine (9) incidences over the research period when the dividend declared was the same as the previous year's dividend. It would be expected that the prices may not be affected negatively by these events since there is a dividend declared though maintained. It is however observed that in five (5) of these incidences the reported CAAR over the event window is negative and only four (4) are positive. Neither the negative nor the positive Car is significant except for the case of Equity Bank in 2007 which reported CAAR of $-2.52 \%$, a phenomenon that analysts could not explain since the bank had declared a dividend and a bonus issue at the same time.

There were seven (7) incidences where a bank did not declare a dividend over the five years of the research. The research shows that in four (4) of these incidences was positive CAAR and in three (3) incidences negative CAAR. Again this appears to contradict expectations of market actors who would predict more negative reaction than positive.

The interpretation of these findings is that NSE is not an efficient market and that there is no consistent behavior of the shareholders that can be attributed to any form of dividend declaration. Whether the declaration is for a dividend increase or decrease or maintaining the previous dividend the behavior in the market is of a random nature and therefore may not confirm the Information Content of Dividends (Signaling) Hypothesis of Modigliani and Miller (1958).

## CHAPTER FIVE

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1. Introduction

This chapter presents the summary of the research findings, the conclusion drawn from the finding, recommendations, limitations of the study and suggestions for further research.

### 5.2. Summary

This section provides the summary of the findings f the study project and the researcher's conclusion derived from the findings. The study covered a period of five years from 2007 to 2011 and considered a total of 10 banks listed on the NSE. In the first two years the banks covered by the study were nine since the Cooperative Bank was not listed until December 2008. The study sought to determine the effect of dividend declaration on the share prices of the banks listed on the Nairobi Securities exchange using the vent study methodology. To depict the findings of the study, the outcomes have been related to nature of dividend declaration. This means banks that declared increased dividend from the previous year's, those that declared a constant dividend, those that declared a reduced and those that did not declare a dividend in any year of the study.

In 2007 there were four banks that declared an increased dividend from the previous year's dividend. They were DTB, KCB, NIC and Standard Chartered Bank. Two of them show a higher CAR in the post-vent period than the pre-event period which indicates a positive effect of the dividend declaration event. The other two give a contrary outcome. However, on the overall the four banks cumulatively had CAR of $17.64 \%$ in the post-event period compared to $9.14 \%$ in the
pre-event period and a total over the event window period of $26.47 \%$ or $6.62 \%$ CAAR for the four banks. In summary each bank on average had $0.21 \%$ CAAR for the event window.

In 2008 five banks declared an increased dividend. They were CFC Bank, DTB, HFCK, KCB and Standard Chartered Bank. The effect of the dividend declaration is demonstrated by the CAR that resulted in the post-event period where except for DTB all the other banks posted positive CAR ranging from $1.08 \%$ to $10.74 \%$. The Cumulative CAR for all the banks in the post-event window was $20.20 \%$ or CAAR of 4.04 for all the banks. In the pre-event period, however HFCK posted $-27.57 \%$ CAR thus distorting the overall picture portrayed by the post event period CAR. It is not clear what may have been the reason for this kind of performance except that the investor had not been paid a dividend in the preceding two year and therefore were probably apprehensive. The effect of the dividend declared was immediate and the bank posted $10.74 \%$ CAR in the post-event period. The only bank that reported negative CAR in the entire event window was DTB. The overall CAAR for each bank in this year over the entire event window period was $-0.01 \%$

In 2009 five banks declared increased dividends and they include Barclays Bank, Equity Bank, HFCK, KCB and Cooperative Bank of Kenya. Cooperative Bank reported the highest CAR during the pos-event period, $45.05 \%$ compared to $13.4 \%$ in the pre-event period and 11.45 in the event period. KCB and Equity Bank reported decreased negative CAR in the post event period compared to the Car in the pre-event period. This is not expected to be the case after declaration of higher dividends by $42.86 \%$ and $50 \%$ respectively. The overall CAAR for each bank in this year over the entire event window period was $0.34 \%$.

In 2010 six banks declared higher dividends than the previous year and they were Barclays Bank, DTB, Equity Bank, HFCK, Standard Chartered Bank and Cooperative Bank of Kenya. Four report positive CAAR of between $0.05 \%$ and $1.09 \%$ while two reported negative CAAR of 0.14 \% and $0.07 \%$. The resulting overall CAAR for each bank in this year over the event window period was $0.27 \%$.

In 2011 six banks declared higher dividends than the previous year which included DTB, Equity Bank, KCB, NBK, Standard Chartered Bank and Cooperative Bank of Kenya. It is observed that contrary to the previous years all the banks except Equity Bank reported negative CAR and CAAR over the event window period ranging from $-0.59 \%$ to $18.29 \%$ and $-0.02 \%$ to $-0.59 \%$. The resulting overall CAAR for each bank in this year over the event window period was $0.21 \%$.

Throughout the period of the study the banks that declared constant dividend put together resulted in overall negative CAR and CAAR in each of the year of study which were CAR $1.47 \%$ CAAR $-0.74 \%$ in 2007 ; CAR $-0.94 \%$ and $-0.47 \%$ in 2008 ; CAR $-0.34 \%$ and CAAR -0.17 in 2009; CAR $-0.13 \%$ and CAAR $-0.07 \%$ in 2010. Each year from 2007 to 2010 there were two banks declaring the same dividend as in the previous year. In 2011 only NIC Bank declared the same dividend as for 2010. It also resulted with negative CAAR of -0.19\% and CAR of -5.81\%

In 2007 only Barclays Bank declared a reduced dividend by $21.43 \%$ to KSh. 1.65 per share from KSh 2.10 of the previous year. The effect is only seen during the event period when the three days had CAR of $-4.95 \%$ compared to $3.19 \%$ Car of the pre-event period and $4.47 \%$ of the postevent period. The overall CAR over the event window period was $2.71 \%$ and $0.09 \%$ CAAR.

In 2008, only NIC Bank declared a dividend reduced by $70.37 \%$ to 0.80 cts from KSh. 2.70 per share of the previous year. The effect of the reduction is seen in the negative CAR resulting in the post-event period of $-8.25 \%$ compared to $1.12 \%$ in the pre-event period and $0.33 \%$ in the event period. The overall Car over the event window period was $-6.80 \%$ and $-0.22 \%$ CAAR.

In 2009 two banks, CFC Stanbic Bank and NIC Bank declared dividend reduced by $73.68 \%$ and $37.5 \%$ respectively. The amazing results are the positive CAR realized by both banks over the event window period with CFC Stanbic Bank having $20.21 \%$ and NIC bank $14.42 \%$ respectively during the post-event period. The overall net effect was $0.97 \%$ CAAR for the banks. This is a phenomenon that may not be explained by this study. No bank declared a reduced dividend in 2010.

In 2011Barclays Bank and HFCK declared a dividend reduced by $45.6 \%$ and $30 \%$ respectively. The effect of this is seen in the reducing or negative CAR from the vent period to the pos-event period. On the overall the resultant CAR was $-0.11 \%$ for the two banks.

The analysis of these banks reveals a mixture of reactions with some banks realizing as high CAR as $60.27 \%$ over the event window period while other realize as low CAR as $18.9 \%$ over the same period. This does not reflect a consistent behavior of the shareholders following failure by the management to declare a dividend.

### 5.3. Conclusion

In conclusion from the above summarized observations the study has established that indeed the event of dividend declaration does affect the share prices of the banks listed on the NSE. The effect is however not standard for any kind of announcement made. Appendices II to V show the movements in each category of announcements and they reveal mixed behavior. No consistent
pattern of behavior has been established by the study for a particular kind of information contained in the dividend declaration of the banks listed on the Nairobi Securities Exchange.

### 5.4. Recommendations for Policy

The study recommend that the banks listed in the NSE should consider factors that influence share prices in the market other the information content in the dividend declaration for firm value maximization. This is because the study could not conclude that there is a positive relationship between dividend declaration and share prices.

The study recommend caution as a matter of policy for the brokers in dealing with investors who peg their investments on short term capital gains since it is not clear which way the prices of shares may go following dividend announcements.

The study recommends that NSE adopts policies that would enhance market efficiency for predictability of the market behavior by market players and for enhanced investor confidence in the operations of the market.

### 5.5. Limitations of the Study

The main limitation of the study is that it covered only one segment of the firms listed on the NSE and considered only the event of dividend declaration whereas other factors may have been stronger in affecting the share prices.

The other limitation may have been the methodology used for the study in that the determination of the lengths of the pre-event and post-event periods may not be optimal. Differing lengths may produce different results from those obtained by this particular study.

The other limitation was in reliance on the supply of data from bank personnel in cases where the data could not be obtained from the banks' websites and the Capital Markets Authority. This is because of the reliance placed on the goodwill of the personnel involved and this may cause delay in getting all the required information in good time.

### 5.6. Suggestions for further study

Further research can be carried on all other segments represented in the NSE to establish whether shareholders in the other segments have a different way of reacting to the event of dividend declaration and thus the effect on the share prices of the respective firms. This will establish whether there exists a difference between investors in the different sectors represented in the NSE.

It is suggested that a research be carried out to determine the factors that influence share prices of the banks listed in the NSE. This may explain why the share prices were behaving in mixed and unpredictable manner following the dividend declarations by the banks.

The researcher further recommends a study to establish the kind of investors who have invested in the shares of the banks listed on the NSE and proportions of their investments in any bank. There are local individual, foreign individual, corporate local or corporate foreign investors and their behavior could vary. This may help in understanding the responses of the investors to the event of dividend declaration by the banks

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## APPENDICES

## Appendix I: listed companies at NSE

## AGRICULTURAL

1. Eaagads Ltd
2. Kapchorua Tea Co. Ltd
3. Kakuzi
4. Williamson Tea Kenya Ltd
5. Rea Vipingo Plantations Ltd
6. Sasini Ltd
7. Limuru Tea Co. Ltd

## COMMERCIAL AND SERVICES

8. Express Ltd
9. Kenya Airways Ltd
10. Nation Media Group
11. Standard Group Ltd
12. TPS Eastern Africa (Serena) Ltd
13. Scangroup Ltd
14. Hutchings Biemer Ltd
15. Uchumi Supermarket Ltd

TELECOMMUNICATION AND
TECHNOLOGY
16. AccessKenya Group Ltd
17. Safaricom Ltd

## AUTOMOBILES AND ACCESSORIES

18. Car and General (K) Ltd
19. CMC Holdings Ltd
20. Sameer Africa Ltd
21. Marshalls (E.A.) Ltd

## BANKING

22. Barclays Bank Ltd
23. CFC Stanbic Holdings Ltd
24. Diamond Trust Bank Kenya Ltd
25. Housing Finance Co Ltd
26. Kenya Commercial Bank Ltd
27. National Bank of Kenya Ltd
28. NIC Bank Ltd
29. Standard Chartered Bank Ltd
30. Equity Bank Ltd
31. The Co-operative Bank of Kenya Ltd

## INSURANCE

32. Jubilee Holdings Ltd
33. Pan Africa Insurance Holdings Ltd
34. Kenya Re-Insurance Corporation Ltd
35. CFC Insurance Holdings
36. British-American Investments Company (Kenya) Ltd.

## INVESTMENT

37. City Trust Ltd
38. Olympia Capital Holdings ltd
39. Centum Investment Co Ltd
40. Trans-Century Ltd

## MANUFACTURING AND ALLIED

41. B.O.C Kenya Ltd
42. British American Tobacco Kenya Ltd
43. Carbacid Investments Ltd
44. East African Breweries Ltd
45. Mumias Sugar Co. Ltd
46. Unga Group Ltd
47. Eveready East Africa Ltd
48. Kenya Orchards Ltd
49. Athi River Mining

## CONSTRUCTION AND ALLIED

50. A.Baumann Co Ltd
51. Bamburi Cement Ltd
52. Crown Berger Ltd
53. E.A.Cables Ltd
54. E.A.Portland Cement Ltd

## ENERGY AND PETROLEUM

55. KenolKobil Ltd
56. Total Kenya Ltd
57. KenGen Ltd
58. Kenya Power \& Lighting Co Ltd

## Appendix II: List of Banks Paying Increased Dividends

Year 2007

| Event Time | DTB | KCB | NIC | Stan. Chart | CAR | CAAR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Div \% Change | 42.86\% | 50.00\% | 8.00\% | 13.33\% |  |  |
| CAR Pre EP | 4.75\% | -3.63\% | 6.94\% | 1.08\% | 9.14\% | 2.29\% |
| CAR in EP | 0.76\% | 1.53\% | -1.60\% | -1.00\% | -0.31\% | -0.08\% |
| $\begin{aligned} & \text { CAR post } \\ & \text { EP } \end{aligned}$ | 21.01\% | -8.22\% | 7.36\% | -2.51\% | 17.64\% | 4.41\% |
| Total CAR | 26.52\% | -10.32\% | 12.70\% | -2.43\% | 26.47\% | 6.62\% |
| CAAR | 0.86\% | -0.33\% | 0.41\% | -0.08\% | 0.85\% | 0.21\% |

Year 2008

| Event Time | CFC <br> Bank | DTB | HFCK | KCB | Stan. <br> Chart | CAR | CAAR |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Div \% <br> Change | $\mathbf{8 . 5 7 \%}$ | $\mathbf{4 0 . 0 0 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{1 6 . 6 7 \%}$ | $\mathbf{1 7 . 6 5 \%}$ |  |  |
| Pre-EPCAR | $\mathbf{1 . 0 2 \%}$ | $\mathbf{- 2 . 8 1 \%}$ | $\mathbf{- 2 7 . 5 7 \%}$ | $\mathbf{1 1 . 5 9 \%}$ | $\mathbf{4 . 1 2 \%}$ | $-13.65 \%$ | $-2.73 \%$ |
| EP CAR | $\mathbf{1 . 2 6 \%}$ | $\mathbf{- 3 . 3 1 \%}$ | $\mathbf{- 0 . 8 9 \%}$ | $\mathbf{- 6 . 0 5 \%}$ | $\mathbf{0 . 6 0 \%}$ | $-8.39 \%$ | $-1.68 \%$ |
| Post-EP | $\mathbf{1 . 0 8 \%}$ | $\mathbf{- 2 . 1 2 \%}$ | $\mathbf{1 0 . 7 4 \%}$ | $\mathbf{6 . 7 9 \%}$ | $\mathbf{3 . 7 1 \%}$ | $20.20 \%$ | $4.04 \%$ |
| CAR | $\mathbf{3 . 3 6 \%}$ | $\mathbf{- 8 . 2 4 \%}$ | $\mathbf{- 1 7 . 7 2 \%}$ | $\mathbf{1 2 . 3 3 \%}$ | $\mathbf{8 . 4 3 \%}$ | $-1.84 \%$ | $-0.37 \%$ |
| Total CAR | $\mathbf{0 . 1 1 \%}$ | $\mathbf{- 0 . 2 7 \%}$ | $\mathbf{- 0 . 5 7 \%}$ | $\mathbf{0 . 4 0 \%}$ | $\mathbf{0 . 2 7 \%}$ | $-0.06 \%$ | $-0.01 \%$ |
| CAAR |  |  |  |  |  |  |  |

Year 2009

|  |  |  |  |  | Co-op <br> Bank <br> of <br> Event Time | Barclays | Equity <br> Bank |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| HFCK | KCB | CAR | CAAR |  |  |  |  |
| Div \% <br> Change | $\mathbf{2 1 . 2 1 \%}$ | $\mathbf{5 0 . 0 0 \%}$ | $\mathbf{2 0 . 0 0 \%}$ | $\mathbf{4 2 . 8 6 \%}$ | $\mathbf{2 5 . 0 0 \%}$ |  |  |
| Pre-EPCAR | $\mathbf{3 . 1 5 \%}$ | $\mathbf{5 . 6 6 \%}$ | $\mathbf{- 5 . 7 0 \%}$ | $\mathbf{- 1 . 7 1 \%}$ | $\mathbf{1 3 . 4 0 \%}$ | $14.80 \%$ | $2.96 \%$ |
| EP CAR | $\mathbf{- 1 . 0 2 \%}$ | $\mathbf{1 . 2 2 \%}$ | $\mathbf{0 . 0 5 \%}$ | $\mathbf{- 1 . 5 7 \%}$ | $\mathbf{1 1 . 4 5 \%}$ | $10.13 \%$ | $2.03 \%$ |
| Post-EP | $\mathbf{2 . 9 0 \%}$ | $\mathbf{- 1 3 . 9 9 \%}$ | $\mathbf{2 . 8 8 \%}$ | $\mathbf{- 9 . 2 1 \%}$ | $\mathbf{4 5 . 0 5 \%}$ | $27.63 \%$ | $5.53 \%$ |
| CAR | $\mathbf{5 . 0 3 \%}$ | $\mathbf{- 7 . 1 1 \%}$ | $\mathbf{- 2 . 7 7 \%}$ | $\mathbf{- 1 2 . 4 9 \%}$ | $\mathbf{6 9 . 9 0 \%}$ | $52.56 \%$ | $10.51 \%$ |
| Total CAR | $\mathbf{0 . 1 6 \%}$ | $\mathbf{- 0 . 2 3 \%}$ | $\mathbf{- 0 . 0 9 \%}$ | $\mathbf{- 0 . 4 0 \%}$ | $\mathbf{2 . 2 5 \%}$ | $1.70 \%$ | $0.34 \%$ |
| CAAR |  |  |  |  |  |  |  |

Year 2010

| Event Time | Barclays | DTB | Equity <br> Bank | HFCK | Stan. <br> Chart | Co-op <br> Bank of <br> Kenya | CAR | CAAR |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Div \% <br> Change | $\mathbf{2 5 . 0 0 \%}$ | $\mathbf{1 0 . 7 1 \%}$ | $\mathbf{3 3 . 0 0 \%}$ | $\mathbf{6 6 . 6 7 \%}$ | $\mathbf{2 0 . 0 0 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |  |  |
| Pre-EPCAR | $\mathbf{- 1 . 0 9 \%}$ | $\mathbf{- 0 . 4 2 \%}$ | $\mathbf{- 1 2 . 4 5 \%}$ | $\mathbf{1 6 . 0 8 \%}$ | $\mathbf{2 . 9 4 \%}$ | $\mathbf{0 . 6 5 \%}$ | $5.71 \%$ | $0.95 \%$ |
| EP CAR | $\mathbf{0 . 3 2 \%}$ | $\mathbf{5 . 3 5 \%}$ | $\mathbf{- 1 . 0 9 \%}$ | $\mathbf{1 4 . 8 7 \%}$ | $\mathbf{0 . 8 3 \%}$ | $\mathbf{1 . 4 0 \%}$ | $21.68 \%$ | $3.61 \%$ |
| Post-EP | $\mathbf{- 1 . 3 8 \%}$ | $\mathbf{- 3 . 3 4 \%}$ | $\mathbf{9 . 0 5 \%}$ | $\mathbf{2 . 7 1 \%}$ | $\mathbf{2 . 0 2 \%}$ | $\mathbf{1 3 . 1 5 \%}$ | $22.21 \%$ | $3.70 \%$ |
| CAR | $\mathbf{- 2 . 1 5 \%}$ | $\mathbf{1 . 5 9 \%}$ | $\mathbf{- 4 . 4 9 \%}$ | $\mathbf{3 3 . 6 6 \%}$ | $\mathbf{5 . 7 9 \%}$ | $\mathbf{1 5 . 2 0 \%}$ | $49.60 \%$ | $8.27 \%$ |
| Total CAR | $\mathbf{- 0 . 0 7 \%}$ | $\mathbf{0 . 0 5 \%}$ | $\mathbf{- 0 . 1 4 \%}$ | $\mathbf{1 . 0 9 \%}$ | $\mathbf{0 . 1 9 \%}$ | $\mathbf{0 . 4 9 \%}$ | $1.60 \%$ | $0.27 \%$ |
| CAAR | $\mathbf{- 0 . 1 4 \%}$ |  |  |  |  |  |  |  |

Year 2011

| Event Time | DTB | Equity <br> Bank | KCB | NBK | Stan. Chart | Co-op <br> Bank of <br> Kenya | CAR | CAAR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Div \% <br> Change | 3.23\% | 100.00\% | 25.00\% | 100.00\% | 12.50\% | 100.00\% |  |  |
| Pre-EPCAR | 4.87\% | -1.60\% | -2.81\% | -2.39\% | 0.51\% | 0.83\% | -0.59\% | $0.10 \%$ |
| EP CAR | -11.28\% | 0.65\% | -1.20\% | -4.24\% | 0.29\% | -1.65\% | 17.43\% | 2.91\% |
| $\begin{aligned} & \text { Post-EP } \\ & \text { CAR } \end{aligned}$ | -11.88\% | 2.13\% | -10.67\% | 6.04\% | -5.19\% | -2.19\% | - | $3.63 \%$ |
| Total CAR | -18.29\% | 1.18\% | -14.68\% | -0.59\% | -4.39\% | -3.01\% | 39.78\% | 6.63\% |
| CAAR | -0.59\% | 0.04\% | -0.47\% | -0.02\% | -0.14\% | -0.10\% | -1.28\% | 0.21\% |

Source: Research Findings

## Appendix III: List of Banks Paying Constant Dividends

Year 2007

| Event Time | Barclays | CAR | CAAR |
| :---: | ---: | ---: | ---: |
| Div \% Change | $\mathbf{- 2 1 . 4 3 \%}$ |  |  |
| CAR Pre EP | $\mathbf{3 . 1 9 \%}$ | $3.19 \%$ | $3.19 \%$ |
| CAR in EP | $\mathbf{- 4 . 9 5 \%}$ | $-4.95 \%$ | $-4.95 \%$ |
| CAR post EP | $\mathbf{4 . 4 7 \%}$ | $4.47 \%$ | $4.47 \%$ |
| Total CAR | $\mathbf{2 . 7 1} \%$ | $2.71 \%$ | $2.71 \%$ |
| CAAR | $\mathbf{0 . 0 9} \%$ | $0.09 \%$ | $0.09 \%$ |

Year 2008

| Event Time | NIC | CAR | CAAR |
| :--- | ---: | ---: | ---: |
| Div \% Change | $\mathbf{- 7 0 . 3 7 \%}$ |  |  |
| Pre-EPCAR | $\mathbf{1 . 1 2 \%}$ | $1.12 \%$ | $1.12 \%$ |
| EP CAR | $\mathbf{0 . 3 3 \%}$ | $0.33 \%$ | $0.33 \%$ |
| Post-EP CAR | $\mathbf{- 8 . 2 5 \%}$ | $-8.25 \%$ | $-8.25 \%$ |
| Total CAR | $\mathbf{- 6 . 8 0 \%}$ | $-6.80 \%$ | $-6.80 \%$ |
| CAAR | $\mathbf{- 0 . 2 2 \%}$ | $-0.22 \%$ | $-0.22 \%$ |

Year 2009

| Event Time | CFC <br> Bank | NIC | CAR | CAAR |
| :--- | ---: | ---: | ---: | ---: |
| Div \% Change | $\mathbf{- 7 3 . 6 8 \%}$ | $\mathbf{- 3 7 . 5 0 \%}$ |  |  |
| Pre-EPCAR | $\mathbf{1 1 . 2 0 \%}$ | $\mathbf{1 0 . 8 2} \%$ | $22.02 \%$ | $11.01 \%$ |
| EP CAR | $\mathbf{8 . 4 5} \%$ | $\mathbf{- 4 . 8 0} \%$ | $3.65 \%$ | $1.83 \%$ |
| Post-EP CAR | $\mathbf{2 0 . 2 1 \%}$ | $\mathbf{1 4 . 4 2 \%}$ | $34.63 \%$ | $17.32 \%$ |
| Total CAR | $\mathbf{3 9 . 8 6 \%}$ | $\mathbf{2 0 . 4 4 \%}$ | $60.30 \%$ | $30.15 \%$ |
| CAAR | $\mathbf{1 . 2 9} \%$ | $\mathbf{0 . 6 6 \%}$ | $1.95 \%$ | $0.97 \%$ |

Year 2011

| Event Time | Barclays | HFCK | CAR | CAAR |
| :--- | ---: | ---: | ---: | ---: |
| Div \% Change | $\mathbf{- 4 5 . 6 0} \%$ | $\mathbf{- 3 0 . 0 0} \%$ |  |  |
| Pre-EPCAR | $\mathbf{0 . 6 7 \%}$ | $\mathbf{0 . 7 2 \%}$ | $1.39 \%$ | $0.70 \%$ |
| EP CAR | $\mathbf{- 3 . 1 1 \%}$ | $\mathbf{- 1 . 0 5 \%}$ | $-4.16 \%$ | $-2.08 \%$ |
| Post-EP CAR | $\mathbf{- 4 . 8 4 \%}$ | $\mathbf{0 . 5 3} \%$ | $-4.31 \%$ | $-2.16 \%$ |
| Total CAR | $\mathbf{- 7 . 2 8} \%$ | $\mathbf{0 . 2 0 \%}$ | $-7.08 \%$ | $-3.54 \%$ |
| CAAR | $\mathbf{- 0 . 2 3} \%$ | $\mathbf{0 . 0 1 \%}$ | $-0.23 \%$ | $-0.11 \%$ |

## Appendix IV: List of Banks Paying Reduced Dividends

Year 2007

| Event Time | CFC <br> Bank | Equity <br> Bank | CAR | CAAR |
| :---: | ---: | ---: | ---: | ---: |
| Div \% Change | $\mathbf{0 . 0 0 \%}$ | $\mathbf{0 . 0 0 \%}$ |  |  |
| CAR Pre EP | $\mathbf{1 5 . 9 4 \%}$ | $\mathbf{1 . 4 3 \%}$ | $17.37 \%$ | $8.69 \%$ |
| CAR in EP | $\mathbf{3 . 0 6 \%}$ | $\mathbf{- 5 . 7 3} \%$ | $-2.67 \%$ | $-1.34 \%$ |
| CAR post EP | $\mathbf{1 3 . 4 6 \%}$ | $\mathbf{- 7 3 . 7 9 \%}$ | $-60.33 \%$ | $-30.17 \%$ |
| Total CAR | $\mathbf{3 2 . 4 6 \%}$ | $\mathbf{- 7 8 . 0 9 \%}$ | $-45.63 \%$ | $-22.82 \%$ |
| CAAR | $\mathbf{1 . 0 5 \%}$ | $\mathbf{- 2 . 5 2 \%}$ | $-1.47 \%$ | $-0.74 \%$ |

Year 2008

| Event Time | Barclays | Equity <br> Bank | CAR | CAAR |
| :--- | ---: | ---: | ---: | ---: |
| Div\% Change | $\mathbf{0 . 0 0 \%}$ | $\mathbf{0 . 0 0 \%}$ |  |  |
| Pre-EPCAR | $\mathbf{2 . 7 0 \%}$ | $\mathbf{- 1 1 . 5 4 \%}$ | $-8.84 \%$ | $-4.42 \%$ |
| EP CAR | $\mathbf{1 . 2 5 \%}$ | $\mathbf{- 6 . 4 9 \%}$ | $-5.24 \%$ | $-2.62 \%$ |
| Post-EP | $\mathbf{- 0 . 7 7 \%}$ | $\mathbf{- 1 4 . 2 9 \%}$ | $-15.06 \%$ | $-7.53 \%$ |
| CAR | $\mathbf{3 . 1 8 \%}$ | $\mathbf{- 3 2 . 3 2 \%}$ | $-29.14 \%$ | $-14.57 \%$ |
| Total CAR | $\mathbf{0 . 1 0 \%}$ | $\mathbf{- 1 . 0 4 \%}$ | $-0.94 \%$ | $-0.47 \%$ |
| CAAR |  |  |  |  |

Year 2009

| Event Time | DTB | Stan. <br> Chart | CAR | CAAR |
| :--- | ---: | ---: | ---: | ---: |
| Div \% Change | $\mathbf{0 . 0 0 \%}$ | $\mathbf{0 . 0 0 \%}$ |  |  |
| Pre-EPCAR | $\mathbf{5 . 0 2 \%}$ | $\mathbf{4 . 3 9 \%}$ | $9.41 \%$ | $4.71 \%$ |
| EP CAR | $\mathbf{- 3 . 2 5 \%}$ | $\mathbf{1 . 6 9 \%}$ | $-1.56 \%$ | $-0.78 \%$ |
| Post-EP <br> CAR | $\mathbf{- 1 6 . 7 8 \%}$ | $\mathbf{- 1 . 6 9 \%}$ | $-18.47 \%$ | $-9.24 \%$ |
| Total CAR | $\mathbf{- 1 5 . 0 1 \%}$ | $\mathbf{4 . 3 9 \%}$ | $-10.62 \%$ | $-5.31 \%$ |
| CAAR | $\mathbf{- 0 . 4 8 \%}$ | $\mathbf{0 . 1 4 \%}$ | $-0.34 \%$ | $-0.17 \%$ |

Year 2010

| Event Time | KCB | NIC | CAR | CAAR |
| :--- | ---: | ---: | ---: | ---: |
| Div $\%$ Change | $\mathbf{0 . 0 0} \%$ | $\mathbf{0 . 0 0} \%$ |  |  |
| Pre-EPCAR | $\mathbf{- 2 . 2 7} \%$ | $\mathbf{7 . 1 2} \%$ | $4.85 \%$ | $2.43 \%$ |
| EP CAR | $\mathbf{- 7 . 2 4} \%$ | $\mathbf{- 1 . 4 4 \%}$ | $-8.68 \%$ | $-4.34 \%$ |
| Post-EP |  |  |  |  |
| CAR | $\mathbf{3 . 1 0} \%$ | $\mathbf{- 3 . 3 3} \%$ | $-0.23 \%$ | $-0.12 \%$ |
| Total CAR | $\mathbf{- 6 . 4 1 \%}$ | $\mathbf{2 . 3 5} \%$ | $-4.06 \%$ | $-2.03 \%$ |
| CAAR | $\mathbf{- 0 . 2 1} \%$ | $\mathbf{0 . 0 8 \%}$ | $-0.13 \%$ | $-0.07 \%$ |

Year 2011

| Event Time | NIC | CAR | CAAR |
| :--- | ---: | ---: | ---: |
| Div \% Change | $\mathbf{0 . 0 0} \%$ |  |  |
| Pre-EPCAR | $\mathbf{1 . 4 3 \%}$ | $1.43 \%$ | $1.43 \%$ |
| EP CAR | $\mathbf{- 4 . 8 5 \%}$ | $-4.85 \%$ | $-4.85 \%$ |
| Post-EP |  |  |  |
| CAR | $\mathbf{- 2 . 3 9} \%$ | $-2.39 \%$ | $-2.39 \%$ |
| Total CAR | $\mathbf{- 5 . 8 1 \%}$ | $-5.81 \%$ | $-5.81 \%$ |
| CAAR | $\mathbf{- 0 . 1 9} \%$ | $-0.19 \%$ | $-0.19 \%$ |

Source: Research Findings

## Appendix V: List of Banks not Declaring Dividends

Year 2007

| Event Time | HFCK | NBK | CAR | CAAR |
| :--- | :--- | :--- | :--- | ---: |
| Div \% <br> Change | nil | nil |  |  |
| Direction |  |  |  |  |
| CAR Pre <br> EP | $\mathbf{3 9 . 6 0 \%}$ | $\mathbf{- 5 . 7 0 \%}$ | $33.90 \%$ | $16.95 \%$ |
| CAR in EP | $\mathbf{- 0 . 9 6 \%}$ | $\mathbf{- 2 . 3 6 \%}$ | $-3.32 \%$ | $-1.66 \%$ |
| CAR post <br> EP | $\mathbf{2 1 . 6 3 \%}$ | $\mathbf{- 1 0 . 8 4 \%}$ | $10.79 \%$ | $5.40 \%$ |
| Total CAR | $\mathbf{6 0 . 2 7 \%}$ | $\mathbf{- 1 8 . 9 0 \%}$ | $41.37 \%$ | $20.69 \%$ |
| CAAR | $\mathbf{1 . 9 4 \%}$ | $\mathbf{- 0 . 6 1 \%}$ | $1.33 \%$ | $0.67 \%$ |

Year 2008

| Event Time | NBK | CAR | CAAR |
| :--- | :--- | :--- | :--- |
| Div \% <br> Change | nil |  |  |
| CAR Pre <br> EP | $\mathbf{- 6 . 8 4 \%}$ | $-6.84 \%$ | $-6.84 \%$ |
| CAR in EP | $\mathbf{- 0 . 4 6 \%}$ | $-0.46 \%$ | $-0.46 \%$ |
| CAR post <br> EP | $\mathbf{4 . 3 1 \%}$ | $4.31 \%$ | $4.31 \%$ |
| Total CAR | $\mathbf{- 2 . 9 9 \%}$ | $-2.99 \%$ | $-2.99 \%$ |
| CAAR | $\mathbf{- 0 . 1 0 \%}$ | $-0.10 \%$ | $-0.10 \%$ |

Year 2009

| Event Time | NBK | CAR | CAAR |
| :--- | :--- | :--- | :--- |
| Div \% <br> Change | nil |  |  |
| CAR Pre <br> EP | $\mathbf{- 8 . 1 7 \%}$ | $-8.17 \%$ | $-8.17 \%$ |
| CAR in EP | $\mathbf{- 0 . 0 9 \%}$ | $-0.09 \%$ | $-0.09 \%$ |
| CAR post <br> EP | $\mathbf{- 0 . 6 2 \%}$ | $-0.62 \%$ | $-0.62 \%$ |
| Total CAR | $\mathbf{- 8 . 8 8 \%}$ | $-8.88 \%$ | $-8.88 \%$ |
| CAAR | $\mathbf{- 0 . 2 9 \%}$ | $-0.29 \%$ | $-0.29 \%$ |

Year 2010

| Event Time | CFC <br> Bank | NBK | CAR | CAAR |
| :--- | :--- | :--- | ---: | ---: |
| Div \% <br> Change | NIL | NIL |  |  |
| CAR Pre <br> EP | $\mathbf{1 2 . 7 1 \%}$ | $\mathbf{- 0 . 3 9 \%}$ | $12.32 \%$ | $6.16 \%$ |
| CAR in EP | $\mathbf{6 . 1 3 \%}$ | $\mathbf{1 . 5 0 \%}$ | $7.63 \%$ | $3.82 \%$ |
| CAR post <br> EP | $\mathbf{1 0 . 4 2 \%}$ | $\mathbf{4 . 7 7 \%}$ | $15.19 \%$ | $7.60 \%$ |
| Total CAR | $\mathbf{2 9 . 2 6 \%}$ | $\mathbf{5 . 8 8 \%}$ | $35.14 \%$ | $17.57 \%$ |
| CAAR | $\mathbf{0 . 9 4 \%}$ | $\mathbf{0 . 1 9 \%}$ | $1.13 \%$ | $0.57 \%$ |

Year 2011

| Event Time | CFC <br> Bank | CAR | CAAR |
| :--- | ---: | ---: | ---: |
| Div \% <br> Change | NIL |  |  |
| CAR Pre <br> EP | $\mathbf{0 . 3 5 \%}$ | $0.35 \%$ | $0.35 \%$ |
| CAR in EP | $\mathbf{- 1 . 2 0 \%}$ | $-1.20 \%$ | $-1.20 \%$ |
| CAR post <br> EP | $\mathbf{7 . 4 7 \%}$ | $7.47 \%$ | $7.47 \%$ |
| Total CAR | $\mathbf{6 . 6 2 \%}$ | $6.62 \%$ | $6.62 \%$ |
| CAAR | $\mathbf{0 . 2 1 \%}$ | $0.21 \%$ | $0.21 \%$ |

Source: Research Findings

