# THE EFFECT OF DIVIDEND POLICY ON FINANCIAL PERFORMANCE OF COMPANIES QUOTED AT THE NAIROBI SECURITIES EXCHANGE

# BY:

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**OCTOBER 2012** 

# **DECLARATION**

This is to declare that this research project is my original work that has not been presented to any

other University or Institution of Higher Learning for ex	xamination.
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# **DEDICATION**

I wish to dedicate this project to my lovely daughter Tahlia Chepchumba.

#### **ABSTRACT**

The topic of dividend policy has been the most controversial subject in modern finance to the extent of being referred to as a "puzzle" by some scholars. Several dividend theories have been advanced as to whether dividend payment is relevant or irrelevant. It is well documented by many financial researchers that dividend changes are positively associated with profitability of many firms. According to many scholars, dividend policy practices of many corporate bodies signal firm's performance even though there is no unanimity of theoretical and empirical researchers when it comes to the relationship between dividend policy and performance.

The objective of this study was to establish the effect of dividend policy on financial performance of companies quoted at Nairobi Securities Exchange. This study relied on secondary data. The study sampled 30 companies listed at the NSE. Regression analysis was used to analyze the data and find out the effect of dividend policy on financial performance.

The study found out that there is a significant positive relationship between dividend per share and returns on equity and dividend pay-out ratio also indicated a positive relationship with returns on equity on overall performance while the results on individual companies did not give the same response as some had inverse relationship depending on the industry under review. The study concludes by indicating that there is a significant relationship between dividend pay-out ratio and dividend per share with the returns on equity. The results of the study findings further indicate that the relationship is not only significant but also direct.

Based on these results, the study recommends that organizations should rather declare constant dividend paid to shareholders rather than giving a decrease on the paid dividends since this will negatively affect dividend pay-out rate for customers. Management of various companies should ensure that dividend per share declared is positive for the future earnings of their firms.

# **ABBREVIATIONS**

CAPM Capital Asset Pricing Model

DPS Dividend Per Share

DPR Dividend Payout Ratio

EPS Earnings Per Share

IPO Initial Public Offer

MM Modigliani & Miller

NASI Nairobi Stock All-Share Index

NPV Net Present Value

NSE Nairobi Securities Exchange

ROE Return on Equity

SPSS Statistical Package for Social Sciences

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#### **CHAPTER ONE**

#### INTRODUCTION

# 1.1 Background of the Study

Dividend policy is the regulations and guidelines that a company uses to decide to make dividend payments to its shareholders. Pandey (2001) defines dividend as that portion of a company's net earnings which the directors recommend to be distributed to shareholders in proportion to their share holdings in the company. When a company makes a profit, they must decide on what to do with those profits. They could continue to retain the profits within the company, or they could pay out the profits to the owners of the firm in the form of dividends. Once the company decides on whether to pay dividends, they may establish a dividend structure, which may in turn impact on investors and perceptions of the company in the financial markets which bring impact on the firm's value.

Dividend policy question has been a controversial issue since the introduction irrelevance of dividend policy theory by (MM) in the 1960's when they believed in the world of efficient market; dividend policy does not affect the shareholder's wealth. Basically, the principal hypotheses of dividend policy can be classified into signalling models, clientele effects, agency models, tax effects and free cash flow hypothesis (Frankfurter et al, 2004; Brav et al, 2005). There is an emerging consensus that there is no single explanation of dividend decision making (Abrutyn and Turner, 1990, Lease et al, 2000). Recent studies showed that the patterns of corporate dividend payout policies do not only differ across time periods (Pandey, 1995; Sarig, 2004) but also across countries (La Porta et al, 2000; Frankfurter, 2002) as well as between emerging and developed countries (Adaoglu, 2000; Aivazian and Booth, 2003).

An examination of corporate dividend policy practices in emerging countries is currently not well established in the literatures (Lease et al, 2000). Emerging markets differ from those in developed countries in terms of corporate governance (Mitton, 2004), taxation on dividends and capital gains (La Porta et al, 2000), and ownership structure (Lin, 2002). In addition, firms in emerging markets are subjected to more financial constraints than their counterparts in developed markets (Glen and Singh, 2004); they often have less information efficiency, more volatility, and are smaller market capitalization (Fuss, 2000; Bekaert and Harvey, 2003) which may have difference influence on their dividend policy. As an example, in Adaoglu

(2000) study, it showed that the emerging market firms followed unstable cash dividend policies and the main factor that determines the amount of cash dividends was the earnings of the corporation in that year. Aivazian and Booth (2003) also found out that companies in developing countries were shown to be less reluctant to change its dividends than their United States counterparts. These differences of the particular markets themselves raised the question about the extent to which the competing dividend policy theories could apply to such markets, in particular to Kenya.

Though a very important financial policy, the dividend policy remains one of the most puzzling issues in corporate finance (Baker, Powell, and Veit, 2002). According to Desai, Foley and Hines (2001) a major impediment to understanding corporate dividend policy is the availability of multiple plausible explanations for observed behaviour. Among the principal explanations stressed by modern theories include agency and other informational problems between owners and managers (Bebczuk, 2004). Thus, while the shareholders use dividends to wrest resources from the control of managers, corporate managers on the other hand use dividends to send credible profitability signals to the capital market.

According to Rigar and Mansouri (2003), the policy of dividends practiced by a corporation is a robust signal of a firm's performance, even though relationship between the two variables does not meet unanimity of theoretical and empirical research. Indeed, generous distribution of profits in favour of shareholders may be considered as a signal of treasury ease as it can be interpreted as revealing obstacles at the level of investment horizons. Similarly, maintaining profits to be reinvested is an action that is generally less appreciated by shareholders, and often badly interpreted by the market, especially in the case of listed companies, but this may also be considered as a signal of strong growth potentials.

Dividend payments reduce the free cash flows under the discretion of the corporate members (the controlling owners and top management) and this help alleviate expropriation of minority shareholders (Hwang, Park and Park, 2004). Hence the need to control corporate managers is often invoked to explain the existence of large and frequent dividend payments from corporations to common shareholders (Desai et al, 2001). On the other hand, information asymmetries between managers and shareholders necessitates that the former focus attention on the information content of dividends that are conveyed to the latter regarding future earnings or cash flows.

The theoretical principles underlying the dividend policy and its impact on firms can be described either in terms of dividend irrelevance or dividend relevance theory. Miller and Modigliani (1961) irrelevance theory forms the foundational bedrock of modern corporate finance theory. Miller and Modigliani argued that dividend policy is irrelevant for the cost of capital and the value of the firms in a world without taxes or transaction cost. Other scholars later came up with dividend relevance theories which include; the bird in the hand theory, clientele effect theory, tax differential theory, information content theory, agency theory among others which did not support MM's (1961) dividend irrelevance theory.

The expected relationship between dividend policy and financial performance is a positive relationship. It is well documented that dividend changes are positively associated with stock returns in the days surrounding the dividend change announcement (Asquith and Mullins (1983) and Petit (1972). According to "the information content of dividends hypothesis" MM (1961), dividend changes trigger stock returns because they convey new information about the firm's future profitability. However, recent studies have not supported this hypothesized relation between dividend changes and future earnings e.g. (DeAngelo, DeAngelo, and Skinner, 1996; Benartzi, Michaely, and Thaler, 1997). Nissim and Ziv (2001) examined the relation between dividend changes and alternative measures of future profitability, and provide strong evidence that dividend changes are positively related to future earnings changes, future earnings, and future abnormal earnings. In addition, dividend increases are associated with future profitability, whereas dividend decreases Mansouri (2003) suggested that dividend policy practices of many corporate bodies signal firm's performance even though there is no unanimity of theoretical and empirical researchers when it comes to the relationship between dividend policy and performance. Kioko (2006) concluded that there existed a positive relationship between dividend change and future profitability during the first year and an insignificant relationship thereafter. Kioko (2011) in his study pointed out that there exist a positive relationship between previous dividend payment and financial performance of a firm are not related to future profitability.

# 1.1.1 Brief Overview of Nairobi Securities Exchange

The NSE, which was formed in 1954 as a voluntary organization of brokers, is now one of the most active markets in Africa. The NSE has played a role in increasing investor confidence by modernizing its infrastructure. At the dawn of independence, stock market activity slumped due to uncertainty about the future of independence in Kenya. However, after three years of calm and economic growth, confidence in the market was rekindled and the exchange handled a number of highly over-subscribed public issues (Munga, 1974).

In 1980s the Kenyan government realized the need to design and implement policy reforms to foster sustainable economic development with an efficient and stable financial system. In particular, it set out to enhance the role of the private sector in the economy, reduce the demands of public enterprise on the exchequer, rationalize the operations of the public enterprise sector to broaden the base of ownership and enhance capital markets in the formation of a regulatory body "the capital markets authority" in 1989, to assist in the creation of an environment conclusive to the growth and development of the country's capital markets (Statistical Abstract, 1990).

The NSE is poised to play an increasing role in the Kenyan economy, especially in the privatization of state owned enterprises. In 2006 the NSE installed the automated trading system (ATS), which has resulted in high trading volumes with the daily market turnovers exceeding Ksh110 billion in some days. The implementation of the ATS provided for longer trading hours, increased trading efficiency and price discovery (Economic Survey, 2007)

The boom experienced at the NSE in the recent past has resulted to an increase in the volume traded, with the stock market registering increased activity especially with initial public offers. The rapid growth of the NSE has been subject to debate among scholars, Politicians and the general public. Statements have been reported in the media questioning the phenomenal growth of the NSE in the past three years and more specifically the appreciation of stock prices of quoted companies. The growth has been attributed to the high growth rate registered by the Kenyan economy in the last three years and the changing international perception of Kenya as a secure investment destination (Statistical Abstract, 2008).

In the beginning of the year, the NSE introduced the NSE All-share Index (NASI), which is complementary to NSE 20 share index in an effort to provide investors with a comprehensive measure of the performance of the stock market. The Nairobi Stock Exchange is one of the leading developing markets in the world and investing in stocks has been hyped so much that the mention of the IPO reflexively elicits a pat on the pocket. Starting with KenGen offer in May 2006, the NSE has seen tremendous growth in the number of retail investors. However,

the majority of investing public is still in the dark on the operations of the stock market. Many still do not bother to follow up on their investments, preferring to once in a while to keep the tab through media reports.

In a surprising turn that has left retail investors drooling, the last two months following the listing of Safaricom were depressing and have nudged more keen interest in shares in that investors are taking more focus in the market and its performance. The need to know how the shares are determined in the market has become a necessity for many. A number confessed that they least understand how the market prices are arrived upon, what takes them up or brings them down. Thus due to the robustness of the market and emerging interests on stock price determination, this study aims to establish the relationship between macroeconomic factors and stock prices.

#### 1.2 Research Problem

The topic of dividend policy has been the most controversial subject in modern finance to the extent of being referred to as a "puzzle" by some scholars (Black, 1976). Several dividend theories have been advanced as to whether dividend payment is relevant or irrelevant. MM (1961) pioneered dividend irrelevance theory by suggesting that dividend policy doesn't affect the value of the firm. Later, many other scholars came up with dividend theories that contradicted MM theory and concluded that dividend payment was relevant. These theories include; information content theory (Ross, 1979), bird in the hand theory (Lintner & Gordon, 1963), Clientele effect theory, and tax differential theory (Lintzberger & Ramaswamy, 1979).

Amongst many firms, there exists a continuous management dilemma regarding the company's earnings. Management is torn between paying large, small or zero percentage of their earnings as dividends to its shareholders or to retain them for future investments. This has been necessitated by the need of management to satisfy the various needs of shareholders. Preference for dividend varies amongst shareholders. For instance, shareholders who need money now for profitable investment opportunities would like to receive high dividends now. On the other hand, shareholders who would like to invest in the future will prefer dividends to be retained by the company and be reinvested

Firms are free to pay the level of dividend the wish to its shareholders although factors such as liquidity, debt covenants and legal requirements may impose some restriction. Since management are dealing with competing interests of various shareholders, the kind of dividend policy they adopt by them may have either positive or negative effects on the share prices of the company hence its overall performance. They are therefore unable to forecast with certainty to what extent the policy will affect their share prices of their firms. The questions therefore to be asked are: Should the firm pay out dividend to its shareholders, or should the firm take that money and invest it for its shareholders? If a firm decides to pays a dividend, of what percentage of its earnings? Given the above, will this affect the performance of the firm? Would the company lose some shareholders if they adopt a particular dividend policy? For these reasons, this study seek to examine the effect of dividend policy on the performance of companies quoted at the NSE.

In Kenya, many studies have been conducted on the topic of dividend policy. These include Farida (1993), Njorge (2001), Wairimu (2002) and Tiriongo (2004), among others and the majority of such studies have examined various aspects of dividend policy. Only a few studies, have reviewed the impact of dividend policy on the performance of various firms e.g. Kioko (2006) who analyzed the relationship between dividend changes and future profitability of companies quoted at the NSE, Kioko (2011) studied the relationship between prior dividends and financial performance of firms listed at NSE, Odhiambo (2011) examined whether divided provide information about future earnings of listed companies at the NSE and Malombe (2011) who reviewed the effect of dividend policy on profitability of Sacco's with Fosa's in Kenya. Unlike previous related studies, this study will use a longer period of study (10 years), and uses multiple regression model for data analysis in order to give more accurate and conclusive results which differ from spearman's Rank Correlation coefficient (SRC) and Pearson Product-Moment Correlation Coefficient (PPMC) model used by Kioko (2011), simple regression model used by both Odhiambo (2011) and Malombe (2011) and finally Kioko (2006) replicated Benartzi, Michaely and Thaler (1997) model in his study. A gap in literature has motivated this study as the study seeks to answer the research question, "what is the effect of dividend policy on financial performance of companies quoted at the NSE?"

# 1.3 Research Objective

To examine the effect of dividend policy on the financial performance of companies quoted at NSE.

# 1.4 Value of the Study

Management: The study will enable the management to understand the effect of change in dividend policy on the performance of the company. This will assist managers in making sound financial decisions that would positively impact on their performance.

Financial Analysts: The findings of this study will enable them to provide better services to the clients in form of sound financial advice. This is in regard to the return on their investments in form of dividends as a result of a particular dividend policy adopted by the firm.

Investors: Investors may need to know the effect of a particular dividend policy on the amount of dividend to be paid out of their investments and the subsequent effect on the overall performance of the firm. For scholars, this study will help those intending to use the findings of this study as a basis for further research on this subject.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviews various types of dividend theories, types of dividend policies, determinants of dividend policy, and empirical studies on the link between dividend policy and financial performance and lastly chapter summary.

#### 2.2 Theoretical Review

#### 2.3 Dividend theories

There are several dividend theories that have been put forward by different scholars, these are; dividend irrelevance preposition, tax differential theory, information content theory, agency theory, bird in the hand theory and lastly clientele effect theory.

# 2.3.1 Dividend Irrelevance Proposition

Modigliani and Miller (1958, 1961), hereafter referred to as MM, put forward the irrelevance theorems, more commonly known as the MM theorems and these form the foundation of modern corporate finance theory. The two main conclusions that are drawn from the MM theorems are that firm value is dependent on its current and future free cash flow. Secondly, the level of dividends (or dividend policy) does not affect firm value given that firms maximize their value through investment. The difference between equity issued and payouts of the firm is equal to its free cash flow. Hence, dividend policy is irrelevant when it comes to affecting firm value.

The studies carried out by Black and Scholes (1974) and Miller and Scholes (1982) are in line with the propositions of the MM theorem. Those opposing the propositions can be classified into two groups. For instance, one group would be those who argue that a high dividend payment increases share price which in turn increases firm value and therefore decreases the cost of equity (Graham and Dodd, 1962). The other group gave evidence that higher dividend payout lead to higher required rate of returns which adversely impacts on share price (Blume, 1980). In many cases, the MM theorems have been argued to be irrelevant mainly because of the assumptions based on a perfect world without taxes and no market imperfections. However, in the real world, these assumptions do not hold. For example, companies pay corporate taxes and there are many imperfections which provides arbitrage opportunities.

Various theories have been developed with the relaxation of MM assumptions. The theories had with main objective to explain why companies pay dividends. Black (1976) argued that there may be infinite reasons of paying dividends. According to this researcher, dividends may simply represent the return to the investor who faces a particular level of risk when investing in the company. Also, he mentioned that companies pay dividends as a means of rewarding existing shareholders but the main argument was that dividends were paid so that the company is seen as a worthwhile investment. In this case, investors will be willing to acquire the firm's shares even if they are sold at a higher or premium price.

# 2.3.2 Tax Differential Dividend Theory

Taxation is one the critical factors that affect firm value and future expected profits. For example, discounted expected after-tax cash flows can be used as a determinant for the market value of a firm. In this respect, differential tax treatment of capital gains relative to the dividends can influence the after-tax returns of investors and in turn affect the willingness of investors to receive dividends (demand for dividends). Economists have concluded that personal investment decisions and corporate dividend decisions are both affected or influenced by taxes. Brennan (1970) was the first researched who investigated the relationship between dividend yields and risk adjusted returns in the context of taxation. He proved that using the CAPM Model, the pre tax excess return on a security is positively and linearly related with the dividend returns and systematic risk of the security. In other words, the tax disadvantages of dividends faced by investors in general is compensated by higher pre-tax returns. These findings were further supported by Litzenberger and Ramaswamy (1979). However, the correlation of share returns and dividend yields is very complex and cannot be explained solely by tax effects (Blume, 1980). On the other hand, Blume (1980) also explained that dividend payouts have a positive impact on a company's future profits.

## 2.3.3 Information Content/ Signaling Dividend Theory

According to the information content of dividends or signaling theory, firms, despite the distortion of investment decisions to capital gains, may pay dividends to signal their future prospects. The intuition underlying this argument is based on the information asymmetry between managers (insiders) and outside investors, where managers have private information about the current and future fortunes of the firm that is not available to outsiders. Here, managers are thought to have the incentive to communicate this information to the market. Bhattacharya (1979) and Miller and Rock (1985) argued that information asymmetries

between firms and outside shareholders may induce a signaling role for dividends. They show that dividend payments communicate private information in a fully revealing manner. The most important element in their theory is that firms have to pay out funds regularly. An announcement of dividends increase is taken as good news and accordingly the share price reacts favourably, and vice-versa. Only good-quality firms can send signals to the market through dividends and poor quality firms cannot mimic these because of the dissipative signaling cost (for e.g. transaction cost of external financing, or tax penalty on dividends, distortion of investment decisions). Therefore, a similar reasoning applies to recurrent share buy-backs.

#### 2.3.4 The Agency Theory

Berle and Means (1932) initially developed the agency theory and they argued that there is an increase in the gap between ownership and control of large organizations arising from a decrease in equity ownership. This particular situation provides a platform for managers to pursue their own interest instead of maximizing returns to the shareholders. In theory, shareholders of a company are the only owners, and the duty of top management should be solely to ensure that shareholders interests' are met. In other words, the duty of top managers is to manage the company in such a way that returns to shareholders are maximized thereby increasing the profit figures and cash flows (Elliot, 2002).

However, Jensen and Meckling (2006) explained that managers do not always run the firm to maximize returns to the shareholders. Their agency theory was developed from this explanation and the principal-agent problem was taken into consideration as a key factor to determine the performance of the firm. Jensen and Meckling (2006,) states that "An agency relationship is a contract under which one or more persons (the principal[s]) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent". The problem is that the interest of managers and shareholders is not always the same and in this case, the manager who is responsible of running the firm tends to achieve his personal goals rather than maximizing returns to the shareholders i.e. if both parties to the relationship are utility maximizers, there is good reason to believe that the agent will not always act in the best interests of the principal. This means that managers will use the excess free cash flow available to fulfill his personal interests instead of increasing returns to the shareholders (Jensen and Ruback, 2003).

## 2.3.5 Bird-in-Hand Theory

The "Bird in Hand" theory of Gordon (1961, 1962) argues that outside shareholders prefer a high dividend policy. They prefer a dividend today to a highly uncertain capital gain from a questionable future investment. A number of studies demonstrate that this model fails if it is posited in a complete and perfect market with investors who behave according to notions of rational behavior (MM, 1961; Bhattacharya, 1979). Nonetheless, the original reasoning of Gordon (1961) is still frequently cited.

## **2.3.6** Clientele Effect Theory

The clientele effect is a theory which describes the intention of investors to invest in firms which suits their factor endowments; among the most common ones is their tax circumstance. It can be said that there is an inverse relationship between stock returns (dividends) and tax levels. For instance, an investor in a high tax bracket would prefer to invest in stock giving a low rate of return so as to pay less tax. On the other hand, an investor in a low tax bracket would definitely invest in stocks with higher returns as he currently does not have a large tax liability. Pettit (1977) showed that older investors (retired persons) were more likely to hold high dividend shares because they pay lower income tax. In this case we call it the tax clientele effect. Hence the clientele effect refers to firms making their dividend policy decision based the customers they would like to attach to themselves (Litzenberger and Ramasawmy, 1979).

# 2.4 Types Dividend Policies

Dividend policy refers to plan action adopted by the firm whenever dividend decision is to be made. The important aspect of dividend policy is to determine the amount of earnings to be distributed to the shareholders and the amount to be retained for re-investment. Dividend policy can provide information regarding the performance of the firm to the stockholders. There are four broad dividend policies in practice, these are;

The residual payment policy is whereby the dividends to be paid are set to equal the actual earnings in a given year less the amount of retained earnings required to finance the optimal capital budget. In effect, dividends are paid out as residuals, free of uncommitted cashflows. Since earnings and investments fluctuate, the residual policy implies that variations will be present in annual dividends. This may cause uncertainly to investors and hence increasing the

cost of capital. The only justification of this policy is that as long as the firm has investments that generate returns which are higher than the cost of equity therefore causing the value of the firm to rise.

The stable predictive dividend policy involves the payment of a specific amount of dividends per share and or periodically increasing the dividend at a constant rate. There are enough evidences to indicate that most firms and stockbrokers prefer reasonably stable dividend policies (Mayer et al, 1992). This stability is characterized by a rather strong reluctance to reduce the dividends from period to period. A decrease in dividend is not made until the management is convinced that the new low level of earnings is permanent, thus dividend changes lag behind changes in earnings. The advantage with this policy is that shareholders are assured of streams of earnings every time the company makes profits. The disadvantage of this policy is that it is not in sync with dividend signaling effect that is fluctuating, dividend would lead to a greater uncertainty. According to Lintner (1956), there is evidence that directors of firms are reluctant to change the dividends in response to temporary fluctuations in earnings from year to year. Dividends are therefore "sticky" in nature (Lintner 1956)

Constant payout ratio policy involves the payment of a constant percentage of earnings on dividends. Since earnings fluctuate, this policy implies that variation exist in the annual dividend per share. The advantage of this policy is that it simplifies the determination of periodic dividends. However, the limitation of the policy is that it will cause uncertainty and may consequently lead to fluctuation in the share prices. This policy is unpopular with certain group of shareholders consisting of widows, orphans, retirees and institutional investors (Mathur, 1979).

Low plus extra or bonus is a compromise policy that involves payment of regular dividend plus year end extras during good years. It gives a firm flexibility yet the investor can count on receiving at least minimal dividends. The extra dividend has some "information effect". Mathur (1979) suggests that firms often use this policy to inform shareholders of their commitment to paying regular dividends.

# 2.5 Determinants of Dividend Policy

In the literature of dividend payout policy, there is a wide range of factors that have been pointed out by many scholars as the determinants of dividend payout ratio. These factors are; cash flows, stability of earnings, investment opportunities, ownership concentration, financial leverage and firm size.

#### 2.5.1 Cash Flows

Residual dividend policy theory is an approach that suggests that a firm pay dividends if all the acceptable investment opportunities for those funds are currently unavailable (Lease et al, 2000). Therefore, it implies that firms with higher cash flow tend to have higher dividend payout. Zeng (2003), Deshmukh (2005), and Amidu & Abor (2006) study results showed that, firms with high cash flow have a higher probability to pay high dividend to their shareholders. However, Baker and Smith (2006) argued that most firms nowadays practice "modified" residual policy where the firms carefully manage their payout ratio and dividend stream after investment decisions are made. While the firms may consistently experience low free cash flows, the dividend policy is not necessarily a corporate goal.

# 2.5.2 Stability of Earning

A firm that has relatively stable earnings is often able to predict its future earnings. Therefore, the firms with stable earnings are more likely to pay out dividends than the firms with fluctuating earnings. In Brav et al (2005), one of the main factors determining dividend decision is stability of future earnings and a sustainable change in earnings. Aivazian and Booth (2003) and Amidu and Abor (2006) study results show that dividend payout has negative relationship with risk. Their study results also suggest that profitable firms with less variability in profit increase the ability of the firm to pay dividends. According to the study by Nissim and Ziv (2001), they argued that under the signaling theory, dividend changes are related to firm's future earnings changes not the past information leading to insignificant in relation.

## 2.5.3 Investment Opportunities

Both residual theory and agency cost theory have different explanation towards growth opportunities. Under residual theory, companies with high growth opportunities tend to pay lower dividends because they may use the available funds to finance the investments with

positive NPV. This implies that, given investment opportunities, a firm with higher cash flow or earnings tends to pay higher dividends (Deshmukh, 2005). Collins et al (1996), Gul (1999), and Amidu and Abor (2006) study results indicate that there is significant negative relationship between firm growth and dividend payout. Gul (1999) study findings also shows significant negative relationship between growth opportunities and dividend yields meaning that high growth firms have low dividend yields compared to low growth firms.

Under signalling perspective, high investment opportunities may be associated with high dividends as high quality firms basically may pay dividend to signal their quality to the market (Easterbrook, 1984). Meanwhile, under agency cost theory, high growth firms may pay dividends to restrict managerial discretion (Zeng, 2003). However, D'Souza and Saxena (1999) study results that in the context of international firms, it seems that dividend are paid irrespective of the firm's investment opportunities. They indicated that these findings support the MM (1961) argument that investment decisions are independent of dividend policy.

## 2.5.4 Ownership Concentration

Ownership concentration has mixed explanation. Under agency cost theory, insider ownership and institutional ownership are inversely related to agency costs as the shareholders can monitor the management more effectively (Alli et al, 1993). However, under tax-based theory, institutional ownership is positively related to dividend payout because of tax differential and clientele effect (Short et al, 2002) because institutions prefer dividends than capital gains.

#### 2.5.5 Financial Leverage

Zeng (2003) indicated that if financial leverage is used as one indicator of the future default and positively related to the cost of financial costs, paying dividends may increase the financial distress for a firm with a high leverage ratio. His study results show that leverage is inversely related to dividend payout. Fenn and Liang (2001) results study also indicate that firm financial leverage (debt to assets ratio) is inversely related to firm's payout ratio. Nash et al (2003) study also support the argument due to the inclusion of debt covenants to minimize dividend payments by the bondholders.

#### **2.5.6 Firm Size**

Collins et al (1996), Zeng (2003) and Deshmukh (2005) study findings also indicate that firm size has relationship with the dividend payout. Collins et al (1996) argued that larger firms have more generous payout resulting to a positive relationship with dividend payout. Lee (1997) study results show that large companies are indeed the ones that are more likely to pay dividends explaining the decision of whether to pay dividends or not. Zeng (2003) argued that if the firm size is positively related to diversification and decentralization, the larger the firm size, the less observable the actions of management and higher agency costs may be incurred. Therefore, paying high dividends may reduce the agency cost. Mitton (2004) and Deshmukh (2005) indicated that the firm size proxies symmetric information where the larger firms have less asymmetric information therefore pay higher dividends.

# 2.6 Empirical studies on the link between dividend policy and financial performance

There are many scholars who have tried to empirically document a relation between dividend changes and future firm performance, for instance Benartzi, Michaely and Thaler in their article "Do Changes in Dividends Signal the Future or the Past" (1997). In this article the authors utilize a large number of firms and events and they control for many factors that can create spurious relationship between dividends and subsequent earnings changes. Their results, both by utilizing categorical analyses and regression analyses, indicate a very strong correlation between dividend changes and both lagged and contemporaneous earnings. However, they are unable to find much evidence of a positive relationship between dividend changes and future earnings changes. Because of their findings the authors ask if dividend changes can be a signal of something else than the expected value of future earnings. One possibility is that dividend increases are a signal of a permanent shift in earnings (Linter 1956). They do indeed find some support for Lintner's view. Nevertheless, their results indicate that if firms are sending a signal, it is not a signal about future earnings growth and the market doesn't "get it". Why firms would burn money to send a signal that is not received is, indeed, a mystery (Benartzi et.al. 1997).

Unlike Benartzi et al. (1997) Nissim and Ziv (2001) present the "information content of dividend hypothesis", which states that dividend changes trigger stock returns because they convey new information about the firms' profitability. Doron Nissim and Amir Ziv (2001)

investigate this hypothesis and they find a positive relationship between dividend changes and future earnings changes, future earnings and future abnormal earnings. Further they find that dividend increases are positively related to earnings in each of the four subsequent years, but that a dividend decrease is not related to future earnings. As they explain in their paper, the lack of correlation between dividend decreases and future earnings does not necessarily imply that dividend decreases are not informative about future earnings. Actually, when current year earnings are omitted, the coefficient on dividend decreases becomes positive and significant. This, they claim, can be explained by accounting practices. Losses should be recognized in earnings when anticipated whereas profits should be recognized only when earned. As a result, current year earnings cannot contain the future implications of the good news that caused management to increase dividends. On the other hand, future implications of the bad news that triggered the dividend decrease should be reflected in current earnings.

In response to the article by Nissim and Ziv (2000) Gustavo Grullon, Roni Michaely, Shlomo Benartzi and Richard Thaler presented the article "Dividend Changes Do Not Signal Changes in Future Profitability" (2005), where the signalling hypothesis is rejected. In this paper the authors claim that Nissim and Ziv (2000) assumption of linear mean reversion in earnings is inappropriate. From econometrics it is known that assuming linearity when the true functional from is nonlinear has the same consequences as omitted variable bias. Hence the Nissim and Ziv results may be biased. The authors therefore employ a model that assumes that the rate of mean reversion and the coefficient of autocorrelation are highly nonlinear. With this approach the relation between dividend changes and future earnings disappears. Overall no evidence is found supporting the idea that dividend increases signal better prospects for future firm profitability. Further it is also shown that out of sample forecasts are generally better without using dividend changes as an independent variable. Given the evidence presented by various scholars, it is therefore sensible to conclude that changes in dividends are not useful in predicting future changes in earnings. However the authors do not rule out that dividend increases signal something, but that something is not an abnormal increase in future earnings or future profitability.

Locally, many researchers have reviewed various aspects of dividend policy. Karanja (1987) carried out research to identify dividend practices of publicly quoted companies. He found out that the level of dividends vary directly with earnings i.e. most companies follow stable dividend payout rate. Iminza (1997) carried out research on information content on dividend

payments on share prices by publicly quoted companies. Her findings showed that dividend had a significant impact on share prices and the impact was greater when there was reduction in dividend paid than increase.

Farida (1993) researched on determinants of dividend payment by publicly quoted companies in Kenya and concluded that liquidity is the most important factor in determining dividends amongst the firms. Njoroge (2001) studied the relationship between dividend policies and return on assets and return on equity of companies listed at the NSE and found out that there was a positive correlation between dividends paid and both return on equity and return on assets. Wairimu (2002) carried out an empirical study on the relationship between dividend and investment decisions of firms quoted at NSE. She concluded that in Kenya, dividend decisions are affected by investment decisions because the two decisions are competing for internal sources of funds given that the funds obtained by debt are very expensive and are not available to many companies.

Tiriongo (2004) conducted a study on dividend policy practices for the companies listed at NSE. He concluded that there was a positive relationship between dividend paid and factors such as financial performance of the firm and general economic performance. Muindi (2006) studied the relationship between EPS & DPS of companies listed at the NSE. He established that there was a positive relationship between EPS & DPS.

Kioko (2006) analyzed the relationship between dividend changes and future profitability of the companies quoted at the NSE and established that at least in the year of dividend change, there existed a positive relationship between the dividend change and future profitability. However, for the first and second after dividend change, an insignificant relationship was observed. Kioko (2011) studied the relationship between prior period dividends and financial performance of firms listed at NSE. He conclude that majority of the firms enjoy a better financial performance as indicated by EPS after issuing dividends. There exist a positive relationship between previous dividend payment and financial performance of a firm.

Odhiambo (2011) carried out a study titled, "Do divided provide information about future earnings of listed companies at the NSE?" and concluded that there is a significant relationship between dividend payout and future earnings. Malombe (2011) studied the effect of dividend policy on profitability of Sacco's with Fosa's in Kenya and found out that there is

a positive but insignificant relationship between dividend policy and profitability of Sacco's with Fosa's in Kenya.

# 2.7 Chapter Summary

The purpose of this literature review is to investigate the effect of dividend policy on the performance of companies listed at NSE. This study will generally highlight the various aspects of dividend policy and its resulting effect on the overall performance of the firm. The knowledge of this information shall be used in data collection so as to meet the objective of the study.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter presents the research methodology in the following order, research design, target population, sampling procedure, data collection methods, and a detailed explanation of the data analysis technique will be given in conclusion.

# 3.2 Research Design

This study used a descriptive design that seeks to examine the effect of dividend policy on the performance of companies listed at NSE. This is because the study aims at establishing the relationship between two variables. A descriptive survey was undertaken in this study. The research is quantitative in nature and relies on secondary data obtained from NSE and firms' financial reports.

# 3.3 Population

The population of this study consisted of 58 listed companies at the Nairobi Securities Exchange.

## 3.4 Sample Design

Random sampling technique was adopted in this study. A sample of 30 listed companies at NSE was used. Annual data for the period 2001 to 2011 will be used. The study was limited to the quoted companies due to lack of readily available data among the private companies.

# 3.5 Data Collection

This study was facilitated by the use of secondary data. DPR and DPS data was obtained from published reports of quoted companies at NSE library or companies secretariat.

## 3.6 Data Analysis

Data was organized, coded and analyzed using statistical package for social sciences (SPSS) and regression analysis was used since it is best suited for providing a means of establishing quantitative associations between variables. In this study, the dependent variable was

performance and independent variables were DPS and DPR. To test whether independent variables are capable of predicting the effect of dividend policy on performance, an average for each year was computed for a period of ten years. Bryman (1998) states that regression has become one of the most widely used techniques in the analysis such data. From the above the multiple regression models to be used is in the form below,

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$$

Where Y = Financial Performance (Measured by ROE) which is the dependent variable

 $\beta_1$ ,  $\beta_2$ , = Represent regression coefficients for DPS, and DPR respectively.

 $\beta_{0}$  Constant (Represents performance when independent variables are excluded).

 $X_1, X_{2,=}$  Observed values of independent variables, DPS and DPR respectively.

 $\mathbf{e} = \mathbf{Error}$  term.

#### **CHAPTER FOUR**

## DATA ANALYSIS, FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

This chapter gives the results of the analysis where the researcher used secondary data to get the results of the study. The results are then presented inform of charts and tables where quantitative was analyzed through computer excel while qualitative data was analyzed through coding.

# **4.2** Effect of Dividend Policy on Financial Performance of Companies Quoted at the Nairobi Securities Exchange

The researcher sought to determine the effect of dividend policy on financial performance of companies quoted at the Nairobi securities exchange where financial institutions were excluded from the study due to the difference in their capital structure as compared to other companies. The researcher used the following regression model:

$$\mathbf{Y} = \mathbf{\beta_0} + \mathbf{\beta_1} \mathbf{X_1} + \mathbf{\beta_2} \mathbf{X_2} + \mathbf{e}$$

Where Y = Financial Performance (Measured by ROE) which is the dependent variable

 $\beta_1$ ,  $\beta_2$ , = Represent regression coefficients for DPS, and DPR respectively.

 $\beta_0$  = Constant (Represents performance when independent variables are excluded).

 $X_1$ ,  $X_2$ , = Observed values of independent variables, dividend per share (DPS) and dividend pay-out ratio (DPR) respectively.

e = Error term

In order to establish the effect of dividend policy on the financial performance, the researcher obtained the values for ROE, DPS and DPR separately for each company under the category of agriculture, telecommunication, and manufacturing and its allied, manufacturing and processing, automobiles and commercial and services. After individual variable per company is obtained in every category, the researcher then determined their averages per category and the overall average after which regression for each category was determined and then for the overall.

# 4.2.1 Telecommunications and Technology Industry

The researcher sought to determine the relationship between dividend policy of telecommunication companies where the regression equation  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$  sought to determine the extent to which ROE is affected by dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$  where  $\beta_1$  and  $\beta_2$  are their coefficients respectively in telecommunication industry. The study results can be used to predict returns on equity among telecommunication firms in Kenya using dividend pay-out ratio and dividend per share.

Table 4.1 Coefficients<sup>a</sup> of Variables in Telecommunication and Technology Sector

	Unstandardized Coefficients		Standardized		
			Coefficients		
Model	В	Std. Error	Beta	T	Sig.
(Constant)	.234	.067		3.492	.073
Dividend Per	011	.145	023	077	.946
Share					
Dividend	126	.042	922	-3.036	.094
Pay-out Ratio					

a. Dependent Variable: Returns on Equity

Testing at 5% (0.05) significant level means that any p-value (Sig.) of the independent variable greater than 0.05 is significant. As given in table 4.1, the study results indicate that all the two variables in the study are significant given their p-values greater than 0.05. Using table results under Unstandardized Coefficients (B), the value of the constant and that of coefficients of the variables under review can be obtained. In the equation of:

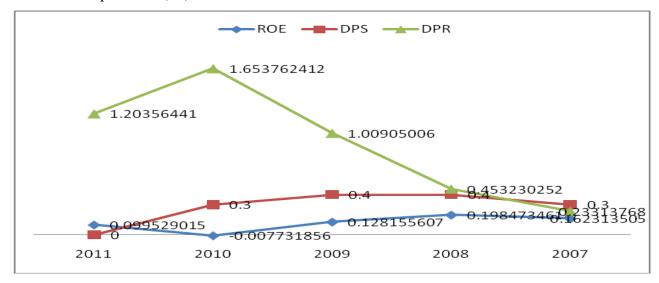
$$\mathbf{Y} = \mathbf{\beta_0} + \mathbf{\beta_1} \mathbf{X_1} + \mathbf{\beta_2} \mathbf{X_2} + \mathbf{e}$$

Y (Returns on Equity) = 0.234 + -.011 Dividend per Share + -.126 Dividend Pay-out Ratio + .067 (standard error of the constant)

Note: The negative values indicate inverse relationship between the dependent variable and the independent variable.

Figure 4.1 Variable Trends in Telecommunications and Technology Sector

The results in figure 4.1 give the trends of variables under review starting 2007 to 2011 as given. The study results give the trends of returns on equity (Y), dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$ .



The study results in figure 4.1 indicate that dividend pay-out ratio (DPR) had a sharp increment from 2007 till 2010 when it recorded a sharp decrease while dividend per share (DPS) and returns in equity of the telecommunication firms had same movement trend where they recorded gradual increase from 2007 to 2008 after which they decreased at a slow rate till 2011 for DPS while 2010 for ROE that later increased.

# **4.2.2 Agricultural Sector**

The researcher sought to determine the relationship between dividend policy of telecommunication companies where the regression equation  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$  sought to determine the extent to which ROE is affected by dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$  where  $\beta_1$  and  $\beta_2$  are their coefficients respectively in agricultural sector. The study results can be used to predict returns on equity among agricultural firms in Kenya using dividend pay-out ratio and dividend per share.

Table 4.2 Coefficients<sup>a</sup> of Variables in Agricultural Sector

	Unstandardized Coefficients		Standardized		
			Coefficients		
Model	В	Std. Error	Beta	T	Sig.
(Constant)	156	.297		525	.652
Dividend Per	.085	.056	1.230	1.514	.269
Share					
Dividend	.418	.441	.770	.948	.443
Pay-out Ratio					

a. Dependent Variable: Returns on Equity

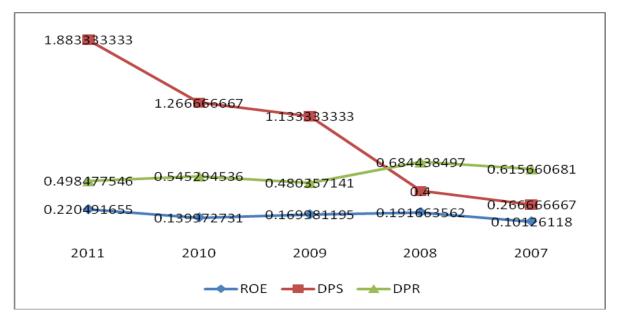
Testing at 5% (0.05) significant level means that any p-value (Sig.) of the independent variable greater than 0.05 is significant. As given in table 4.2, the study results indicate that all the two variables in the study are significant given their p-values greater than 0.05. Using table results under Unstandardized Coefficients (B), the value of the constant and that of coefficients of the variables under review can be obtained. In the equation of:

$$\mathbf{Y} = \mathbf{\beta_0} + \mathbf{\beta_1} \mathbf{X_1} + \mathbf{\beta_2} \mathbf{X_2} + \mathbf{e}$$

Y (Returns on Equity) = -.156 + .085 Dividend per Share + .418 Dividend Pay-out Ratio + .297 (standard error of the constant)

# Figure 4.2 Variable Trends in Agricultural Sector

The results in figure 4.2 give the trends of variables under review starting 2007 to 2011 as given. The study results give the trends of returns on equity (Y), dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$ .



The study results in figure 4.2 indicate that ROE registered a slow growth that was almost constant in the entire study period from 2007 to 2011 while DPS increased steadily from 2007 to 2011. The table also indicates that DPR decreased slowly from 2007 to 2011 as given in the study.

# **4.2.3 Service Industry Sector**

The researcher sought to determine the relationship between dividend policy of service companies where the regression equation  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$  sought to determine the extent to which ROE is affected by dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$  where  $\beta_1$  and  $\beta_2$  are their coefficients respectively in agricultural sector. The study results can be used to predict returns on equity among service firms in Kenya using dividend pay-out ratio and dividend per share.

Table 4.3 Coefficients<sup>a</sup> of Variables in Service Sector

	Unstandardized Coefficients		Standardized		
			Coefficients		
Model	В	Std. Error	Beta	Т	Sig.
(Constant)	.087	.056		1.559	.259
Dividend Per	.015	.012	.441	1.231	.344
Share					
Dividend	030	.019	569	-1.590	.253
Pay-out Ratio					

#### a. Dependent Variable: Returns on Equity

Testing at 5% (0.05) significant level means that any p-value (Sig.) of the independent variable greater than 0.05 is significant. As given in table 4.3, the study results indicate that all the two variables in the study are significant given their p-values greater than 0.05. Using table results under Unstandardized Coefficients (B), the value of the constant and that of coefficients of the variables under review can be obtained.

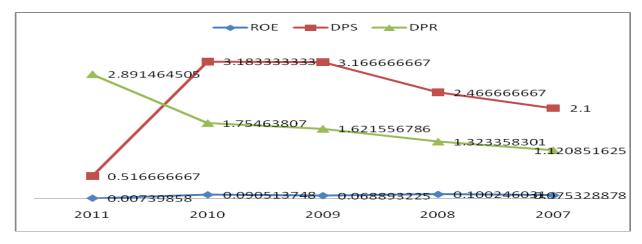
In the equation of:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$$

 $\mathbf{Y}$  (Returns on Equity) = .087 + .015 Dividend per Share + -.030 Dividend Pay-out Ratio + .056 (standard error of the constant)

#### Figure 4.3 Variable Trends in and Service Sector

The results in figure 4.3 give the trends of variables under review starting 2007 to 2011 as given. The study results give the trends of returns on equity (Y), dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$ .



The study results in figure 4.3 indicate that DPS increased from 2007 to 2009 after which it was almost constant till 2010 then fell sharply till 2011 in the service industry. The results also indicate that DPR rose from 2007 to 2011 without fall while ROE was low and almost constant in performance.

#### 4.2.4 Automobiles and Accessories Sector

The researcher sought to determine the relationship between dividend policy of manufacturing and service companies where the regression equation  $\mathbf{Y} = \boldsymbol{\beta}_0 + \boldsymbol{\beta}_1 \mathbf{X}_1 + \boldsymbol{\beta}_2 \mathbf{X}_2 + \mathbf{e}$  sought to determine the extent to which ROE is affected by dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$  where  $\boldsymbol{\beta}_1$  and  $\boldsymbol{\beta}_2$  are their coefficients respectively in agricultural sector. The study results can be used to predict returns on equity among manufacturing and service firms in Kenya using dividend pay-out ratio and dividend per share.

Table 4.4 Coefficients<sup>a</sup> of Variables in Automobiles and Accessories Sector

	Unstandardized Coefficients		Standardized		
			Coefficients		
Model	В	Std. Error	Beta	T	Sig.
(Constant)	.202	.098		2.062	.175
Dividend Per	072	.093	441	773	.520
Share					
Dividend	060	.096	355	623	.597
Pay-out Ratio					

a. Dependent Variable: Returns on Equity

Testing at 5% (0.05) significant level means that any p-value (Sig.) of the independent variable greater than 0.05 is significant. As given in table 4.4, the study results indicate that all the two variables in the study are significant given their p-values greater than 0.05. Using table results under Unstandardized Coefficients (B), the value of the constant and that of coefficients of the variables under review can be obtained.

In the equation of:

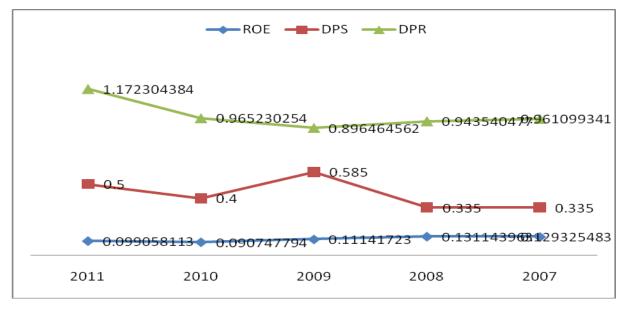
$$\mathbf{Y} = \mathbf{\beta_0} + \mathbf{\beta_1} \mathbf{X_1} + \mathbf{\beta_2} \mathbf{X_2} + \mathbf{e}$$

Y (Returns on Equity) = .202 + -.072 Dividend Per Share + -.060 Dividend Pay-out Ratio + .098 (standard error of the constant)

Note: Negative values indicate inverse relationship between the variables.

Figure 4.4 Variable Trends in Automobiles and Accessories Sector

The results in figure 4.4 give the trends of variables under review starting 2007 to 2011 as given. The study results give the trends of returns on equity (Y), dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$ .



The study results in figure 4.4 indicate that DPR increased at a slow rate from 2007 to 2011 while the performance of ROE was almost constant over the period and that of DPS was constant from 2007 to 2008 then increased to 2009 after which it decreased to 2010 then increased to 2011.

#### 4.2.5 Construction and Allied Sector

The researcher sought to determine the relationship between dividend policy of manufacturing and service companies where the regression equation  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$  sought to determine the extent to which ROE is affected by dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$  where  $\beta_1$  and  $\beta_2$  are their coefficients respectively in agricultural sector. The study results can be used to predict returns on equity among manufacturing and service firms in Kenya using dividend pay-out ratio and dividend per share.

Table 4.5 Coefficients<sup>a</sup> of Variables in Construction and Allied Sector

	Unstandardize	d Coefficients	Standardized		
			Coefficients		
Model	В	Std. Error	Beta	Т	Sig.
(Constant)	.234	.025		9.449	.011
Dividend Per	.015	.004	.845	3.767	.064
Share					
Dividend	.079	.021	857	-3.818	.062
Pay-out Ratio					

a. Dependent Variable: Returns on Equity

Testing at 5% (0.05) significant level means that any p-value (Sig.) of the independent variable greater than 0.05 is significant. As given in table 4.5, the study results indicate that all the two variables in the study are significant given their p-values greater than 0.05. Using table results under Unstandardized Coefficients (B), the value of the constant and that of coefficients of the variables under review can be obtained.

In the equation of:

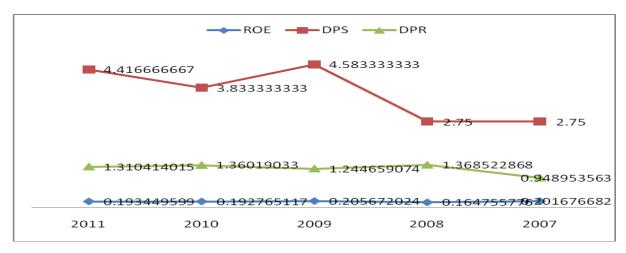
$$\mathbf{Y} = \mathbf{\beta_0} + \mathbf{\beta_1} \mathbf{X_1} + \mathbf{\beta_2} \mathbf{X_2} + \mathbf{e}$$

Y (Returns on Equity) = .234 + .015 Dividend Per Share + .079 Dividend Pay-out Ratio + .025 (standard error of the constant)

Note: Negative values indicate inverse relationship between the variables.

#### Figure 4.5 Variable Trends in Construction and Allied Sector

The results in figure 4.5 give the trends of variables under review starting 2007 to 2011 as given. The study results give the trends of returns on equity (Y), dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$ .



The study results in figure 4.5 indicate that ROE is almost constant across the years and DPR also recorded the same trend though with slight movement but DPS was constant from 2007 to 2008 then rose to 2009 after which it fell to 2010 then rose to 2011.

#### 4.2.6 Manufacturing and Allied Sector

The researcher sought to determine the relationship between dividend policy of manufacturing companies where the regression equation  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$  sought to determine the extent to which ROE is affected by dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$  where  $\beta_1$  and  $\beta_2$  are their coefficients respectively in manufacturing sector. The study results can be used to predict returns on equity among manufacturing firms in Kenya using dividend pay-out ratio and dividend per share.

Table 4.6 Coefficients<sup>a</sup> of Variables in Manufacturing and Allied Sector

	Unstandardize	d Coefficients	Standardized		
			Coefficients		
Model	В	Std. Error	Beta	T	Sig.
(Constant)	.259	.180		1.440	.287
Dividend Per	.010	.053	131	185	.871
Share					
Dividend	.005	.145	.026	.037	.974
Pay-out Ratio					

a. Dependent Variable: Returns on Equity

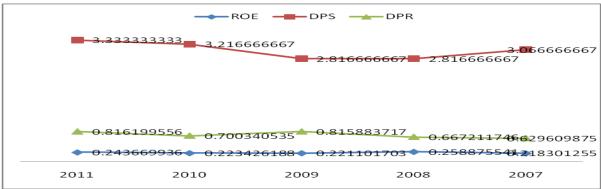
Testing at 5% (0.05) significant level means that any p-value (Sig.) of the independent variable greater than 0.05 is significant. As given in table 4.6, the study results indicate that all the two variables in the study are significant given their p-values greater than 0.05. Using table results under Unstandardized Coefficients (B), the value of the constant and that of coefficients of the variables under review can be obtained.

In the equation of:

$$\mathbf{Y} = \mathbf{\beta_0} + \mathbf{\beta_1} \mathbf{X_1} + \mathbf{\beta_2} \mathbf{X_2} + \mathbf{e}$$

Y (Returns on Equity) = .259 + .010 Dividend Per Share + .005 Dividend Pay-out Ratio + .180 (standard error of the constant)





The study result in figure 4.6 indicate that the performance of DPR and ROE was almost the same where all of them had slight up and down movements while that of DPS was much above all of them with a decreasing movement from the beginning and then later upward movement at the end of the study period.

#### 4.2.7 Commercial and Services Sector

The study results in table 4.7 gives the relationship between DPR, DPS and ROE where the extent of which both DPR and DPS affect ROE in commercial and service firms is established in the equation  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$ .

Table 4.7 Coefficients<sup>a</sup> of Variables in Commercial and Services Sector

	Unstandardized Coefficients		Standardized		
			Coefficients		
Model	В	Std. Error	Beta	Т	Sig.
(Constant)	.259	.180		1.440	.287
Dividend Per	.010	.053	131	185	.871
Share					
Dividend	.005	.145	.026	.037	.974
Pay-out Ratio					

a. Dependent Variable: Returns on Equity

Testing at 5% (0.05) significant level means that any p-value (Sig.) of the independent variable greater than 0.05 is significant. As given in table 4.7, the study results indicate that all the two variables in the study are significant given their p-values greater than 0.05. Using table results under Unstandardized Coefficients (B), the value of the constant and that of coefficients of the variables under review can be obtained.

In the equation of:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$$

 $\mathbf{Y}$  (Returns on Equity) = -.091 + .009 Dividend Per Share + .271 Dividend Pay-out Ratio + .079 (standard error of the constant)

Note: Negative values indicate inverse relationship between the variables.

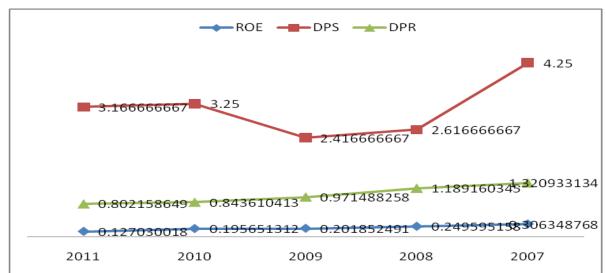


Figure 4.7 Variable Trends in Commercial and Services Sector

The study result in figure 4.7 indicates that the performance of DPR decreased at a slow rate while that of ROE was almost constant. The study results also indicate that the performance of DPS decreased at a slow rate to 2009 after which it increased to 2010 where it finally recorded a slight decrease.

#### 4.2.8 Overall Performances of all Sectors

The results in table 4.8 indicate the relationship between dividend policy in selected companies in all the sectors where the regression equation  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$  sought to determine the extent to which ROE is affected by dividend pay-out ratio  $(X_1)$  and dividend per share  $(X_2)$  where  $\beta_1$  and  $\beta_2$  are their coefficients respectively in manufacturing sector. The study results can be used to predict returns on equity in any listed company in Kenya a part from financial institutions that did not participate in the study using dividend pay-out ratio and dividend per share.

**Table 4.8 Overall Performances of all Sectors** 

	Unstandardize	d Coefficients	Standardized		
			Coefficients		
Model	В	Std. Error	Beta	Т	Sig.
(Constant)	.346	.048		7.279	.018
Dividend Per	.059	.026	597	-2.302	.148
Share					
Dividend	.069	.035	510	-1.968	.188
Pay-out Ratio					

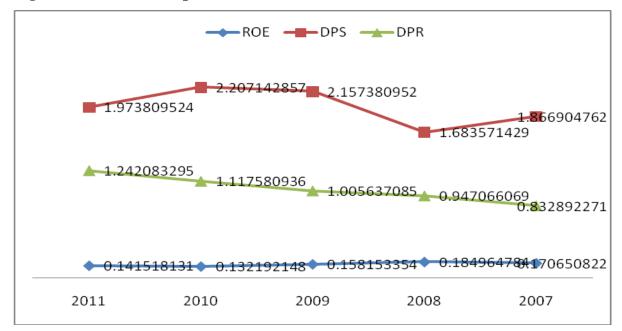
#### a. Dependent Variable: Returns on Equity

The study results indicate that the overall equation for predicting ROE for all the firms is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$$

Where Y (Returns on Equity) = .346 + .059 Dividend Per Share + .069 Dividend Pay-out Ratio + .048 (standard error of the constant) and the negative responses recorded in the study indicate negative relationship between the variables. The results further indicate that all the variables under study are significant given that their p-values (Sig.) is greater than 0.05.

Figure 4.8 Overall Graphical Performances of all Sectors



The study results in figure 4.8 indicate that in overall, the performance in all sectors apart from the financial sectors is that ROE is low and almost constant while DPS is high and has upwards and downwards movement. DPS moves down till 2008 after which it moves up till 2010 then finally move down till 2011. The performance of DPR is than of steady increment from 2007 till 2011.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter gives the summary, recommendations and conclusions that were captured by the researcher. The study further illustrates the recommendations that can be adopted by the relevant authority to control crime in the country.

#### **5.2 Summary**

The study found out that there is a direct relationship between dividend per share and returns on equity and dividend pay-out ratio also indicated a positive relationship with returns on equity on overall performance while the results on individual companies did not give the same response as some had inverse relationship depending on the industry under review. The general results of the study was supported by the study done by Tiriongo (2004) that was conducted on dividend policy practices for the companies listed at NSE where it concluded that there was a positive relationship between dividend paid and factors such as financial performance of the firm and general economic performance. The same findings was also supported by Wairimu (2002) carried out on the relationship between dividend and investment decisions of firms quoted at NSE. She concluded that in Kenya, dividend decisions are affected by investment decisions because the two decisions are competing for internal sources of funds given that the funds obtained by debt are very expensive and are not available to many companies the findings by most of the individual companies that gave a direct relationship between dividend paid and returns on equity of the firm under review.

Since majority of the sectors gave a positive response on the relationship between dividend pay-out ration and dividend per share with returns on equity, the study supported the findings by Odhiambo (2011) who carried out a study titled, "Do divided provide information about future earnings of listed companies at the NSE?" and concluded that there is a significant relationship between dividend payout and future earnings. Malombe (2011) also studied the effect of dividend policy on profitability of Sacco's with Fosa's in Kenya and found out that

there is a positive but insignificant relationship between dividend policy and profitability of Sacco's with Fosa's in Kenya.

#### **5.3 Conclusion**

In this study, the researcher utilized a large number of firms and events and they control for many factors that can create spurious relationship between dividends and subsequent earnings changes. The results, both by utilizing categorical analyses and regression analyses, indicate a very strong correlation between dividend changes and both lagged and contemporaneous earnings. However, the researcher was unable to find much evidence of a positive relationship between dividend changes and future earnings changes.

The study concludes by indicating that there is a significant relationship between dividend pay-out ration and dividend per share with the returns on equity. The results of the study findings further indicate that the relationship is not only significant but also direct. This indicate that a unit change in dividend per share is followed by a unit positive change in retained earnings and also that a unit change in pay-out ratio is also followed by a positive unit change in retained earnings though the value of the change is not uniform depending on the company in question and the change can also be positive depending on the company under review.

The study also found out that the performance of returns on equity is higher than the performance of all the other variables as given in the trends. The trends also illustrates that returns on equity recorded a constant performance while that of dividend pay-out ratio recorded a decreasing trend in some case increasing and constant trend while that of dividend per share showed more upwards and downwards trends in most cases.

#### 5.4 Recommendation

Based on the study findings, the study makes the following recommendations to the study:

#### **5.4.1 Policy Recommendations**

Companies should register good dividend pay-outs since this will directly have positive impact on retained earnings of the organizations. Organizations should rather declare constant dividend paid to shareholders rather than giving a decrease on the paid dividends since this

will negatively affect dividend pay-out rate for customers. Management of various companies should ensure that dividend per share declared is positive for the future earnings of their institutions.

#### **5.4.2 Recommendations for further studies**

The researcher then recommends further studies on other factors that affect retained earnings other than dividend pay-out ratio and dividend per share as given in the study. Since the study findings on each and every sector indicate that the absolute coefficients of the two independent variable is less than 50% when totaled in any regression equation given, there are other factors that are not under review but affect retained earnings either negative or positively and any interested scholar can go further and determine what are those variables and how do they affect the retained earnings whether positive or negative and by what magnitude.

The study recommends a further study that goes beyond five years since the researcher conducted a study over a period of five years. The results obtained from the study conducted over a longer period together with the findings of this study can be used to make generalization of the effects of dividend policy on financial performance.

Other models can be used to conduct similar study like simultaneous equation that would give a different dimension to the study topic of the effect of dividend policy on financial performance of companies quoted at Nairobi stock exchange.

Other similar studies can be done on the same topic touching on those companies that are not listed at the Nairobi stock exchange to ascertain whether the results would be similar to the study findings or different from the results.

Another similar study can be conducted that touches on both listed and non listed companies at the Nairobi stock exchange to ascertain if the results obtained from the study would be different from the ones in the study findings.

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# APPENDIX 1: LIST OF COMPANIES QUOTED AT NAIROBI SECURITIES EXCHANGE IN KENYA

<u>AGRICULTURAL</u>
Eaagads Ltd
Kapchorua Tea Co. Ltd
Kakuzi Ltd
Limuru Tea Co. Ltd
Rea Vipingo Plantations Ltd
Sasini Ltd
Williamson Tea Kenya Ltd
COMMERCIAL AND SERVICES
COMMERCIAL AND SERVICES  Express Ltd
Express Ltd
Express Ltd Kenya Airways Ltd
Express Ltd  Kenya Airways Ltd  Nation Media Group Ltd
Express Ltd  Kenya Airways Ltd  Nation Media Group Ltd  Standard Group Ltd
Express Ltd  Kenya Airways Ltd  Nation Media Group Ltd  Standard Group Ltd  TPS Eastern Africa (Serena) Ltd

# TELECOMMUNICATION AND TECHNOLOGY

Access Kenya Group Ltd

Safaricom Ltd

# **AUTOMOBILES AND ACCESSORIES**

Car and General (K) Ltd

CMC Holdings Ltd

Sameer Africa Ltd

Marshalls (E.A.) Ltd

### **BANKING**

Barclays Bank Ltd

CFC Stanbic Holdings Ltd

Diamond Trust Bank Kenya Ltd

Housing Finance Co Ltd

Kenya Commercial Bank Ltd

National Bank of Kenya Ltd

NIC Bank Ltd

Standard Chartered Bank Ltd

Equity Bank Ltd

The Co-operative Bank of Kenya Ltd

### **INSURANCE**

Jubilee Holdings Ltd

Pan Africa Insurance Holdings Ltd

Kenya Re-Insurance Corporation Ltd

**CFC Insurance Holdings** 

British-American Investments Company (Kenya) Ltd

## **INVESTMENT**

City Trust Ltd

Olympia Capital Holdings Ltd

Centum Investment Co Ltd

Trans-Century Ltd

# MANUFACTURING AND ALLIED

B.O.C Kenya Ltd

British American Tobacco Kenya Ltd

Carbacid Investments Ltd

East African Breweries Ltd

Mumias Sugar Co. Ltd

Unga Group Ltd

Eveready East Africa Ltd

Kenya Orchards Ltd

A.Baumann CO Ltd

### **CONSTRUCTION AND ALLIED**

Crown Berger Ltd
E.A.Cables Ltd
E.A.Portland Cement Ltd
ENERGY AND PETROLEUM
KenolKobil Ltd
Total Kenya Ltd
KenGen Ltd
Kenya Power & Lighting Co Ltd

# **APPENDIX 2: DATA USED**

# TELECOMMUNICATIONS AND TECHNOLOGY

Athi River Mining Ltd

Bamburi Cement Ltd

ROE	DPS	DPR
0.099529	0	1.20356441
-0.007732	0.3	1.653762412
0.1281556	0.4	1.00905006
0.1984735	0.4	0.453230252
0.1623135	0.3	0.23313768

COMMERCIAL AND SERVICES		
ROE	DPS	DPR
0.12703	3.166666667	0.802158649
0.1956513	3.25	0.843610413
0.2018525	2.416666667	0.971488258
0.2495952	2.616666667	1.189160345
0.3063488	4.25	1.320933134

CONSTRUCTION AND ALLIED		
ROE	DPS	DPR
0.1934496	4.416666667	1.310414015
0.1927651	3.833333333	1.36019033
0.205672	4.583333333	1.244659074
0.1647558	2.75	1.368522868
0.2016767	2.75	0.948953563

AUTOMOBILES AND ACCESSORIES		
ROE	DPS	DPR
0.0990581	0.5	1.172304384
0.0907478	0.4	0.965230254
0.1114172	0.585	0.896464562

0.131144	0.335	0.943540477
0.1293255	0.335	0.961099341

MANUFACTURING AND ALLIED		
ROE	DPS	DPR
0.2436699	3.33333333	0.816199556
0.2234262	3.216666667	0.700340535
0.2211017	2.816666667	0.815883717
0.2588755	2.816666667	0.667211746
0.2183013	3.066666667	0.629609875

MANUFACTURING	AND		
PROCESSING			
ROE		DPS	DPR
0.0073986		0.516666667	2.891464505
0.0905137		3.183333333	1.75463807
0.0688932		3.166666667	1.621556786
0.100246		2.466666667	1.323358301
0.0753289		2.1	1.120851625

AGRICULTURAL SECTOR		
ROE	DPS	DPR
0.2204917	1.883333333	0.498477546
0.1399727	1.266666667	0.545294536
0.1699812	1.133333333	0.480357141
0.1916636	0.4	0.684438497
0.1012612	0.266666667	0.615660681

OVERAL			
ROE	DPS	DPR	
0.1415181	1.973809524	1.242083295	
0.1321921	2.207142857	1.117580936	
0.1581534	2.157380952	1.005637085	
0.1849648	1.683571429	0.947066069	
0.1706508	1.866904762	0.832892271	