

**“DO DIVIDENDS PROVIDE INFORMATION ABOUT FUTURE  
EARNINGS OF LISTED COMPANIES AT THE NAIROBI STOCK  
EXCHANGE?”**

BY


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Requirements for the Degree of Master of Business Administration in the  
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## DECLARATION

I declare that this is my original work and all the sources used in conducting the study have been acknowledged in all cases. I further declare that all the work covered in this research has never been submitted anywhere for a degree or qualification of the same in any other university or institute of higher learning.

Signed.....

Date.....21/11/2009.....

This research paper has been submitted for examination with my approval as the University Supervisor

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## DEDICATION

The current research study is dedicated to my mum Jerusa, dad Andrew and my fiancé David for their continued support, encouragement, motivation and understanding throughout the period of my studies.

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# TABLE OF CONTENTS

- Declaration.....ii
- Dedication.....iii
- Acknowledgement.....iv
- Abbreviations.....vii
- Abstract.....viii
- CHAPTER ONE: INTRODUCTION.....1
  - 1.1 Back ground.....1
  - 1.2 Statement of Problem.....4
  - 1.3 Objective of the Study.....5
  - 1.4 Significance of the Study.....5
- CHAPTER TWO: LITRATURE REVIEW.....7
  - 2.1 Introduction.....7
  - 2.2 Theoretical framewok.....7
  - 2.3 Empirical Literature.....13
  - 2.4 Conclusion.....16
- CHAPTER THREE: RESEARCH METHODOLOGY.....17
  - 3.1 Introduction.....17
  - 3.2 Research Design.....17
  - 3.3 Population of the Study.....17
  - 3.4 Data Collection.....17
- CHAPTER FOUR: DATA ANALYSIS & FINDING ENTERPRETATION... ..19
  - 4.1 Introduction.....19
  - 4.2 Descriptive Statistics.....19
  - 4.3 Regression Analysis.....20
- CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION & RECOMMENDATION
  - 5.1 Introduction.....27
  - 5.2 Conclusion.....27
  - 5.3 Limitation.....29
  - 5.4 Recommendation & Suggestion.....29
- APPENDIX.....30

|                         |    |
|-------------------------|----|
| List of Companies ..... | 30 |
| Raw Data.....           | 32 |
| REFERENCES.....         | 33 |

## ABBREVIATIONS AND ACCRONNYMS

|      |   |
|------|---|
| CFOs | Chief Financial Officers                    |
| GDP  | Gross Domestic Product                      |
| IFRS | International Financial Reporting Standards |
| Jr.  | Junior                                      |
| NPV  | Net Present Value                           |
| NSE  | Nairobi Stock Exchange                      |
| NYSE | New York Stock Exchange                     |
| SEC  | Securities and Exchange Commission          |
| SSPS | Statistical Package for Social Sciences     |
| US   | United States                               |
| EPS  | Earnings per Share                          |
| AR   | Autoregressive                              |

## ABSTRACT

This paper investigated whether dividends are informative about a firm's future earnings per share. The study reports the results of a ten-year (1998 to 2008) empirical analysis of the relationship between dividend changes and future earnings per share using regression analysis on firms listed at the Nairobi Stock Exchange. The data reveal a weak relationship between the dividend changes and future earnings per share lagged by one year. Overall the result found is that dividend changes provide around only 0.3 percent information about the level and changes in future earnings per share and leaves the 99.7 percent unexplained. This is an indication that there are other critical variables that determine the changes in the firms earning per share.



# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

The three most important corporate decisions that a firm has to take are the investment decision, financing decisions and the dividend payout decisions. These are the three basic components that a finance manager has to synthesize in such a way to produce profit and expand the shareholders' wealth. The company's dividend decision has a direct impact on its financial mix. Additionally, the volume of the distributed dividend can affect the market value of the firm and future expected earnings. There are three basic views regarding the dividend payment's effect on the firm. The first view implies that an increase in dividend payout has a positive impact on the value of the firm (Gordon 1963); the second suggests that there exists a negative effect on the value of the company (Lintzenberger and Ramaswamy, 1979), and the third that dividend policy has no influence on the total price of the firm (Miller and Modigliani, 1961).

The current study has investigated whether dividend payment provide information about future EPS of firm using publicly listed companies at the NSE. The study seeked to shed light into the relationship between dividend payments and future earnings per share thus provide new evidence on the information content hypothesis.

### 1.1.1 Payment of dividends

The goal of corporate entities is to maximize the wealth of its shareholders' investment in the firm. Managers pursue this goal through their investment and financing decisions. Investment decisions involve selection of positive net present value projects while financing decisions involve selection of a capital structure that would minimize the cost of capital of firm. Apart from the investment and financing decisions, managers need to decide on regular basis whether to payout the earning to shareholders (Jensen and Meckling, 1976). However, the question remains whether paying out dividend would essentially create value for the firm or payment provides cash flow to shareholders but reduces firm's recourse for investment. A great deal of

theoretical and empirical research on dividend effects has been done over the last several decades. Theoretically, dividend means giving reward to the shareholders of something they already own in the company; hence this will be offset by the decline in stock value (Porterfield, 1959 and 1965). In an ideal world (without tax and any restrictions) dividend payments would have no impact on the shareholders' wealth (Miller and Modigliani, 1961)<sup>1</sup>. In the real world, however a change in the dividend policy is often followed by change in the market value of stocks. The economic argument for investor' preference to dividend income was offered by Graham-Dodd (1951). Subsequently, Walter (1956) forwarded the dividend relevancy idea, which has been formalized into a theory, postulating that current stock price would reflect the present value of all expected dividend payments in the future.

### 1.1.2 Dividend policy and future earnings per share

Despite their view of dividend irrelevance, Modigliani and miller (1958 ) indicate that dividends may convey information not otherwise known to the market. This argument "the information content of dividends", is explained by a number of studies like (Lintner, 1956; Miller and Modigliani, 1961; Mancinelli and Ozkan, 2006 ; Amidu and Abor, 2006; Zhou and Ruland, 2006). Since dividends have an effect on stock prices and company's future growth, corporate governance should have a suitable dividend strategy. Dividend policy is directly related with the price of the share. This fact affects not only investors but managers as well. On one hand, Lintner (1956) finds that managers consider dividend payments as a necessary tool to maintain or change share price and to attract investors.

According to Frankfurter and Lane (1992) managers know that investors' desire dividend and managers use dividend in order to mollify the investors. On the other hand, investors prefer to receive a mix of current income (mainly as dividend payments) and capital gain. The amount of money that they are willing to receive today depends on their current ,future needs and their investment objectives, thus we have a category of investors who prefer to collect a small (big) dividend today and big

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<sup>1</sup> It was further shown that the irrelevancy of dividend policy holds even after dropping the assumption of ideal economy.

(small) future capital gains and vice versa. Additionally, Thaler and Shefrin (1981) denote that dividends and capital gains are not perfect substitutes; dividend payments are appreciated more than capital gains (Thaler, 1980) and that risky alternatives such as costs and payoffs are evaluated separately (Frankfurter and Wood, 2002).

Miller and Modigliani (1961) used a logical analysis to explain firms' dividend policy. They asserted that in a perfect market, the value of a firm would be independent of its dividend policy and that a change in dividend policy would indicate a change in the management's view of future earnings per share. Benartzi *et al* (1997) found limited support for the view that dividend changes have information content about future EPS of a firm. Using a linear regression model and data for 1025 firms, they found no evidence that dividends contain information about changes in earnings. They stated that "while there is a strong past and concurrent link between earnings and dividend changes, the predictive value of changes in dividends seems minimal." They concluded that if there was any information content at all, it was that dividends paid out were adjusted to reflect earnings increases in the previous years.

Mozes and Rapaccioli (1998) in their study utilized data for 681 firms during the time period 1980-1990 and examined the relationship between dividends and corporate earnings. Regressing earnings on lagged dividends, they provided evidence that large dividend increases lead to a decline in future earnings and small dividend increases lead to an increase in future earnings. They further argued that if a firm reported a loss, a decrease in dividends would have to reach a certain amount before it provided enough information that the firm would continue to report a loss. Mozes and Rapaccioli suggested that the relationship between the dividend decrease and future earnings would not be positive and linear. Kao and Wu (1994) used a time series regression analysis of 454 firms over the 1965-1986 periods and showed that there was a positive relationship between unexpected dividends and earnings. They further concluded that the effectiveness of dividend signaling depends upon firm specific characteristics. Carroll (1995) used quarterly data of 854 firms over the 1975-1984 periods and examined whether quarterly dividend changes predicted future earnings. He found a significant positive relationship between earnings forecast revisions and dividend changes.

## 1.2 Statement of the Problem

The relationship between dividends and earnings has long been a controversy to analysts and investors. Some studies on this subject provide evidence in support of a positive and significant causal relation from dividends to earnings. These studies support the view that higher dividend payouts signal an increase in future earnings Mozes and Rapaccioli (1998). While information asymmetry hypothesis argues that firms have private information about future prospects of firm earnings and choose dividends to signal that private information, the signal is credible if only other firms with inferior future prospects cannot mimic the dividend announcements and policies of firms with strong prospects. These theories imply that dividend payment is economically logical, and generate hypotheses about the announcement effects of dividends that have been observed empirically. These arguments, call for economic justification of dividend – as a signalling mechanism – are convincing, but empirical evidence in their support is not conclusive as there are both positive and negative support for the dividend signalling capability. This paper investigated the empirical significance of dividend payment in forecasting of firm future earnings per share for 45 Kenyan firms that pay dividends for a ten year period. As dividend remains one of the greatest enigmas of modern finance. In fact, Black (1976) wrote that there was no convincing explanation for public corporations paying cash dividends to their shareholders. He referred to the interest in dividends by shareholders and the practice of dividend payments as the “dividend puzzle.” The inability of theoretical and empirical studies to resolve this intriguing puzzle stems from several possible sources.

Dividend signaling theories propose that dividend increases convey news to capital markets about higher future profitability (Bhattacharya, 1979; Miller and Rock, 1985; and John and Williams, 1985). For example, John and Williams (1985) assume that outside investors have imperfect information about firm’s profitability and that cash dividends are taxed at a higher rate than capital gains. Under these conditions they show that dividends function as a costly signal of expected future cash flows. Early empirical studies have failed to support the signaling theory (Watts, 1973; DeAngelo, DeAngelo, and Skinner, 1996; and Benartzi *et al.*, 1997). They find little or no evidence that dividends predict abnormal increases in earnings. However, Nissim and Ziv (2001) use a different model of earnings expectations and show that current

dividend changes are positively related to future earnings per share changes. They point out that the models of earnings expectations in prior studies were incorrectly specified. Prior studies assume that earnings follow a random walk with drift. They also incorrectly deflate the dependent variable and future earnings per share with past stock price. On introducing mean reversion in the earnings expectation model and using a more appropriate deflator, they were able to show that dividend increases and unexpected future earnings per share changes are positively correlated. However, in a follow-up study, Grullon *et al.* (2005) question this finding on the ground that the linear specification of earnings expectation model used by Nissim and Ziv (2001) is not correct.

### 1.3 Objective of the Study

The study investigated whether there exist a relationship between change in dividends and future earnings per share of firms listed at the Nairobi Stock Exchange.

### 1.4 Significance of the Study

Specifically, this study will benefit the following:-

**Financial managers and investors:** - The study make managerial contributions for players in the financial services sector, in that it provides a basis for the decision makers of the various institutions to better understand the relationship between information content of dividends and future earnings per share of firms and use the information to make informed investment decision.

**The Regulatory Bodies and the Government:** - The research findings shall aid in the improvement of the already formulated policies of full disclosure and enforcement of the same in order to facilitate full implementation and in conformity with the International Financial Reporting Standards (IFRS) that the country is in the process of adopting.

**Academic Researchers** – The study makes a significant contribution to the growing body of research on the information content of dividends payouts. The findings will also be used as a source of reference for other researchers. In addition, other academic

researchers may need the study findings to undertake further research in this area of dividend payments and as such form a basis of good background for further researches.

# CHAPTER TWO: LITERATURE REVIEW

## 2.1 Introduction

This chapter presents a review of the literature related to the purpose of the study. The chapter is organized according to the specific objectives in order to ensure relevance to the research problem. The review is undertaken in order to eliminate duplication of what has been done and provide a bridge and clear understanding of existing knowledge base in the problem area. The literature review is based on authoritative, recent, and original sources such as journals, books, thesis and dissertations.

## 2.2 Theoretical Framework: The signaling theory and catering theory of dividends

Much prior literature has investigated what, if any, information is contained in dividend payment. However, to date, little consensus has emerged. For example, theoretical models by Bhattacharya (1979) and Miller and Rock (1985) predict that changes in dividend policy convey news about future cash flows (i.e. dividend increases (decreases) signal future increases (decreases) in future cash flows) (the dividend signalling hypothesis). The models then predict a positive (negative) price reaction around the announcement date of a dividend initiation or increase (omission or decrease) because of the conveyed information about future cash flows. Empirical evidence strongly supports the price reaction prediction and has been used to justify the theory about dividend changes signaling future cash flow changes.

### 2.2.1 Signaling theory

Information content of dividend changes has long been a topic of interest to researchers. The signaling theory of dividends posits that firms convey their optimism for the future by initiating dividend payments. The basis of this theory derives from a study by Lintner (1956), in which managers from 28 companies were interviewed to determine which factors were most instrumental in firms' payout policies. Lintner found that not only were dividends dependent upon the amount of cash needed to finance projects in the short-term, but that they also represented management's belief

in the sustainability of company earnings over the long-term. Thus, managers tended to increase or initiate payouts only when they believed that subsequent earnings would be high.

Subsequently, Miller and Modigliani (1961) suggest that dividends can convey information about future cash flows when markets are incomplete. Several papers build on the idea of asymmetric information (Bhattacharya, 1979; Miller and Rock, 1985; and John and Williams, 1985). In their models, dividend increases are not actions that just happen to have information content, but are explicit signals about future earnings per share, sent intentionally and at some cost by management of the firm. Bhattacharya (1979) proposes that the cost of issuing new shares is the signaling cost. Miller and Rock (1985) assume that forgone investment is the cost of the signal, and John and Williams (1985) propose higher taxes on dividends relative to capital gains as the signaling cost.

To date, the empirical evidence on the signaling role of dividends is inconclusive. Watts (1973) was among the first to examine whether the knowledge of current and past dividends enables a better prediction of future earnings per share than is possible with current and past earnings alone. Using 310 firms during the period 1946 to 1967, Watts regresses the next year's earnings on this year's dividends. He does not find a significant and positive relationship between future earnings per share and current year's and past year's dividends. Penman (1983) finds that after controlling for management's future earnings per share forecasts, there is not much information conveyed by the dividend changes themselves. DeAngelo, DeAngelo, and Skinner (1996) examine dividend policy of 145 New York Stock Exchange (NYSE) firms which experience annual earnings decline after nine or more consecutive years of growth. They find that for these firms with unexpected decline in earnings, dividend changes contain virtually no information about future changes in earnings. Benartzi, Michaely, and Thaler (1997) use a matched sample approach in which dividend changing firms are matched to non-dividend changing firms based on such attributes as market capitalization, industry, and past earnings performance. They find no evidence of positive abnormal earnings changes after dividend increases.



However, some studies have provided results that seem to be consistent with the signaling theory of dividends. Healy and Palepu (1988) show that for their sample of 131 firms that initiate dividend payments, earnings increased for the following two years. Brickley (1983) shows that for a sample of 35 firms with greater than 20% dividend increase, there was a significant increase in earnings in the subsequent year. Nissim and Ziv (2001) point out that models of earnings expectations in most of the prior studies were incorrectly specified. Prior studies use a random walk with drift model. They also incorrectly deflate the dependent variable, future earnings per share, with past stock price. On using a model of earnings expectation that allows for linear mean reversion and an appropriate deflator, book value, for the dependent variable, Nissim and Ziv (2001) document a positive association between current dividend increases and future earnings per share changes. However, their conclusion is refuted by Grullon, Michaely, Benartzi, and Thaler (2005). They use the earnings expectation model proposed by Fama and French (2000). This model allows for mean reversion and auto-correlation in earnings to be non-linear. Grullon *et al.* (2005) do not find a significant relation between dividend increases and unexpected future earnings per share changes. Thus, the validity of the dividend signal theory remains in question.

Empirical evidence also indicates that investors respond favorably to dividend increases and initiations; the stock prices of firms that initiate dividends tend to increase around the time of the initiation announcement (see Asquith and Mullins (1983) or Healy and Palepu (1988)). Likewise, the signaling theory implies that any subsequent decrease or elimination of dividends will be viewed with extreme disfavor by the financial markets (Benartzi, Michaely and Thaler (1997), Healy and Palepu (1988), Michaely, Thaler and Womack (1995)). The perception that the market punishes dividend omitting firms more than it rewards dividend initiating firms is, according to Brav, Graham, Harvey and Michaely (2005), the primary cause of dividend "conservatism" – the reluctance of management to increase payments if it feels there is a chance that long-run earnings will not be able to sustain those payments.

Empirical tests of theories concerning the information content of dividends can be traced at least as far back as Watts (1973). Watts studied the impact of dividends on both stock prices and future earnings per share to see whether dividends contained

any information for investors. Watts found that after conditioning on current and past earnings, dividends could not be used by investors to reliably predict future earnings per share, and thus concluded: "...in general, the information content of dividends can only be trivial." More recently, Benartzi, Michaely and Thaler (1997) reported that while changes in dividend policy were generally unrelated to changes in future earnings per share, there was some evidence to suggest that firms that increased dividends were relatively unlikely to experience subsequent earnings *decreases*. They interpret their results to be consistent with the signaling hypothesis; if managers initiate dividends only when they believe that such dividends are sustainable, and then we expect that these initiations will rarely be followed by significant earnings decreases. They need not, however, be followed by large increases in profitability.

Bhattacharya (1979) argues that because a company's future cash position is determined by the quality of the projects in which it invests today, the only way that it will commit to a high level of dividends is if those projects are of high quality. Therefore, managers can signal their optimism regarding project quality to investors by declaring a sustainable and preferably high level of dividends. Miller and Rock (1985) follow Bhattacharya's line of reasoning by focusing on the credibility of the signal. The authors argue that almost any firm, regardless of whether its prospects are good, can pay a relatively small dividend to its shareholders. Thus, in order for a dividend to be considered a credible signal of good news, it must be large enough so that only firms that have good prospects can afford to pay it.

### 2.2.2 Catering Theory of Dividends

Baker and Wurgler (2004) argue for a view of dividend policy that relaxes the market efficiency assumption. Their theory has three main elements. First, for either psychological or institutional reasons, some investors have an uninformed and time-varying demand for dividend paying stocks. Second, arbitrage fails to prevent this demand from driving apart the prices of payers and non-payers. Third, managers cater to investor demand by paying dividends when investors put higher prices on payers, and not paying dividends when investors prefer non-payers. Their theory predicts that

the propensity to pay dividends depends on the difference in prices of dividend paying stocks relative to non-dividend paying stocks, referred to as a dividend premium (or dividend discount).

For the empirical analysis, Baker and Wurgler (2004) construct different proxies for dividend premium. These proxies conceptually measure the difference between market prices of firms that have the same investment policy but different dividend policies. Their main proxy called "the" dividend premium is the log of the difference between the average market to book ratios of dividend payers and non-payers. Their second proxy is the price difference in cash dividend and stock dividend share classes of Citizen Utilities. This company had two classes of shares, which did not differ in the payouts but differed in the form. Their third proxy is the average 3-day announcement period returns of recent dividend initiations. The return measure captures the level of demand for dividend paying stocks. Their final proxy is the difference between future returns of payers and non-payers. If managers initiate dividends to exploit market mispricing, then the dividend initiation rate and the difference in future returns between payers and non-payers should be negatively related. As expected, they find that the first three proxies are positively related with each other and these three proxies are negatively related to the fourth proxy.

Baker and Wurgler (2004) document a significant relation between the above proxies and dividend initiations, with the strongest relation being with the first proxy, the dividend premium. This result is consistent with their prediction that the propensity to pay dividends is related to investors' demand for dividend paying stocks reflected in the difference in prices of dividend paying stocks relative to non-dividend paying stocks. Moreover, these results hold after controlling for other firm characteristics, including investment opportunities, profits, and firm size, which have been shown to explain dividend payment decisions (Fama and French, 2001).

Baker and Wurgler (2004) investigate the source of time-varying demand for dividends. They argue that when investors seek firms that exhibit safety, they find dividend paying stocks attractive and the dividend premium is high. On the other hand, when investors are attracted to firms with capital appreciation potential, which means no dividends, then the dividend premium is low. Baker and Wurgler (2004)

also document a positive correlation between the dividend premium and the closed-end fund discount (Lee, Shleifer, and Thaler, 1991), which suggests that the dividend premium is driven by investor sentiment. Baker and Wurgler (2004) conclude that when sentiment for extreme-growth stocks is high, investors are not attracted to dividend payers and the dividend premium is negative.

On the other hand, when sentiment for extreme-growth stocks is low, usually after a crash, investors are attracted to dividend paying stocks which seem safe to them, thus the dividend premium is high. Li and Lie (2006) extend Baker and Wurgler (2004) model of dividend initiations and omissions to include increases and decreases in existing dividends. They find that both the probability of dividend increases and decreases and the magnitude of the dividend changes are related to the dividend premium as predicted by the model. In particular, the probability that a firm increases its dividend is positively related to the dividend premium and the probability that a firm decreases its dividend is negatively related to the dividend premium. Moreover, the magnitude of dividend increases is positively related to the dividend premium and the magnitude of dividend decreases is negatively related to the dividend premium. They also find that the announcement returns for dividend increases are positively related to the dividend premium and that the announcement returns for dividends decreases are negatively related to the dividend premium. These results are consistent with the dividend catering theory. When the dividend premium is high, investors find dividends attractive and hence the stock price reaction is highly positive to dividend increases, and highly negative to dividend decreases. This investor behavior motivates managers to increase dividends when the dividend premium is high and decrease dividends when the dividend premium is low.

### **2.2.3 The Free Cash Flow Hypothesis**

An alternative view of the relationship between dividends and project quality is implicit in the free cash flow argument detailed by Jensen (1986) among others. The free cash flow argument states that after a firm has invested in all of its positive NPV projects, it should pay out its remaining cash in the form of dividends. By this logic, firms that have few positive NPV projects in which to invest should pay a higher proportion of their current earnings in dividends. DeAngelo, DeAngelo and Stulz (2004) state similarly that managers who do not have good investment opportunities

and do not pay dividends quickly create a situation where they very little debt and enormous cash balances. These managers can then easily use their high cash balances to benefit themselves at the expense of the stockholders.

It is important to examine the aforementioned theories of signaling in light of the empirical evidence. A number of studies have documented the market's reaction to changes in dividend policy as positive and statistically significant. Asquith and Mullins (1983) found that companies that initiate dividend payments enjoy abnormal stock returns of 5.1% for the 21-day period surrounding the announcement. Furthermore, Healy and Palepu (1988) found that abnormal stock returns around dividend initiations and omissions are correlated with earnings changes in the year of and year after the dividend announcements. Grullon, Michaely and Swaminathan (2005) found that increases in dividends tend to reflect decreases in the systematic risk of the paying firms. They argued that the concomitant positive stock returns were the market's reward for this reduction in risk. Brickley (1983) examined the market's reaction to what he termed "special dividends," or dividends with unusual codes. This reaction, although favorable, was not as strong as the reaction to regular dividends, which were more likely to be sustained over a long period of time. Li and Lie (2006) finds that announcement-period returns are directly related to the amount of cash in the firm, particularly for firms with low Q ratios. This result supports the excess funds hypothesis and suggests that investors are well aware of the potential of firms with little growth and much cash to invest in negative NPV projects. Therefore, the payment of dividends may constitute a signal of management's fiscal discipline.

### **2.3 Empirical literature**

Much prior literature has investigated what, if any, information is contained in dividends. However, to date, little consensus has emerged. For example, theoretical models by Bhattacharya (1979) and Miller and Rock (1985) predict that changes in dividend policy convey news about future cash flows (dividend increases (decreases) signal future increases (decreases) in future cash flows) (the dividend signaling hypothesis). The models then predict a positive (negative) price reaction around the announcement date of a dividend initiation or increase (omission or decrease) because

of the conveyed information about future cash flows. Empirical evidence strongly supports the price reaction prediction and has been used to justify the theory about dividend changes signaling future cash flow changes (Asquith and Mullins, 1983; Healy and Palepu, 1988; among others).

However, the premise of the models is that dividend changes should be followed by changes in profitability in the same direction, which is presumably what the market is reacting to. Benartzi, Michaely, and Thaler (1997) test this premise and find that earnings growth rates of firms that increase dividends do not subsequently increase. Firms that decrease dividends, however, experience significant increases in growth rates in the two years following the dividend decrease. This evidence contradicts the central theory of the dividend signaling hypothesis (Grullon *et al.*, 2005). In addition, a recent survey paper, Brav *et al.* (2005) report that they find little evidence to support the traditional signaling hypothesis.

Grullon *et al.* (2005) question why the price reaction is consistent with the theory but the future earnings per share do not materialize in the predicted manner. They relate dividend changes to a firm's life cycle and hypothesize that the dividend change announcement period stock returns are in response to changes in firms' systematic risk. Grullon *et al.* (2005) examine whether dividend changes signal changes in systematic risk by testing for shifts in the weights on the three factors in the Fama and French (1993) model around the dividend change announcement month. They find results consistent with their theory – firms that increase dividends experience a significant decline in their systematic risk while firms that decrease dividends experience a significant increase in systematic risk.

Nissim (2004) argues, however, that the risk (the weights on the three factors in the Fama-French model) changes before the dividend announcement so changes in risk cannot explain the dividend announcement effect. That is, dividend changes cannot be signaling the change in risk –they are only *associated with* changes in risk. While the above papers examine the traditional dividend-signaling hypothesis by investigating the market reaction to announcement of dividend changes, and future changes in earnings, other papers have started to investigate the information content hypothesis in a different manner. For example, Skinner (2004) investigates the information

content of dividends by examining the persistence (sustainability) of earnings. He motivates his hypothesis by the earnings "persistence parameter" from Miller and Rock (1985). Skinner reports evidence consistent with reported current earnings of dividend paying firms being more persistent in future periods and that this is more pronounced for firms with larger dividend payouts, for large firms, and for large firms with larger payouts.

Another recent paper is Caskey and Hanlon (2005) that investigated whether dividends provide information about earnings quality by examining the dividend payout policies of firms accused by the Securities and Exchange Commission (SEC) of committing financial accounting fraud. They report evidence consistent with the alleged fraud firms paying out dividends less often and of a lower amount than a matched sample of firms not accused of financial accounting fraud. However, Caskey and Hanlon (2005) report that the alleged fraud firms did pay Chen *et al.* (2006) extend Grullon *et al.* (2005) by adding an information risk factor (based on a measure of accruals quality) to the Fama-French three factor model used in Grullon *et al.* (2005). Chen *et al.* (2006) hypothesize and report results showing a decrease (increase) in the weight on the information risk factor returns in the months surrounding firms' announcement of dividend initiations and increases (dividend omissions and decreases). These results are consistent with dividend changes signaling changes in firms' information risk.

However, the pricing of the change in information risk in Chen *et al.* (2006) occurs prior to the dividend announcement leading the authors to conclude that the two are merely associated rather than dividends signaling this change in risk to the market. This line of thinking is also consistent with other research. For example, Lintner (1956) provides evidence consistent with managers being reluctant to increase dividends unless they believe that dividends can be sustained at the new level. Indeed, Brav *et al.* (2005) report that more than two-thirds of the financial executives they survey state that the stability of future earnings per share is an important factor affecting dividend decisions. In addition, two-thirds of the chief financial officers (CFOs) say that a sustainable change in earnings is important or very important for dividends. In addition, Koch and Sun (2004) provide evidence consistent with

investors revising their expectations about the persistence of past earnings changes upon a change in dividends.

## 2.4 Conclusion

In academic literature, it was suggested that dividend payments have no impact on the shareholders' value (Miller and Modigliani, 1961) in the absence of taxes and other market imperfections. A dividend payment provides cash flow to the shareholders but it reduces firm's resources for investment. Hence, firms should not pay dividend if they have any positive net present value project in hand. However, Walter (1956) showed that valuation of stock depends on the expected future dividends. If company pays out all the earnings to shareholders, funds for future investment will decrease and dividend may not increase in the future. Theoretical literature suggested that dividends payout should not be desirable provided that companies can better invest their funds. Moreover, cash dividend is not desirable if investors need to pay taxes on their dividend income. Given the valid reasons for not paying dividends, an announcement of dividend payments may carry some information for the market and stock prices may be adjusted accordingly.

The contribution of this study is that it provides financial managers and investors with evidence that it would be a mistake to base investment decisions on inferences about dividend/earnings relationships that rely on some certain short-term periods that return positive relationship between changes in dividends and future earnings per share.



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter aims at defining the research design and methodology used in the study. It contains a description of the study design, target population, sample design and size, data collection instruments and procedure.

### **3.2 Research design**

A descriptive design was used to identify the relationship between changes in dividend and future earnings per share of companies listed on the Nairobi Stock Exchange. The method was preferred as it permitted gathering of data from the NSE handbook as well as companies annual financial reports. In this case, it was possible for collection of data for the ten year span of the study.

### **3.3 Population of the study**

The sample of the firms for study was drawn from whole population of the companies listed on the Nairobi Stock Exchange (NSE) main market segment out of the 47 firms as at 31<sup>st</sup> December, 2008 and only 45 listed companies that had data available on the NSE handbook for the ten year period of the study (1998-2008) was sampled.

### **3.4 Data collection**

The study used secondary data that was obtained from Nairobi Stock Exchange database that has company's financial data available in their handbook. The data included the actual dividend paid out by each of the listed firms and their earnings per share for the last ten between years 1998-2008.

### 3.5 Data analysis and presentation

Statistical Package for Social Sciences (SPSS) was used as an aid in the analysis. The researcher preferred SPSS because of its ability to cover a wide range of the most common statistical and graphical data analysis and is very systematic. In determining the relationship between dividends and future earnings per share, regression analysis was used to regress changes in dividend lagged by one year to estimate future EPS. A typical simple regression model in following form was used:

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

Where

- Y - Dependent variable- Future EPS
- $X_1$  - Independent variable- Dividend pay out
- $\beta_0$  - The intercept
- $\beta_1$  - The slope coefficient
- $\epsilon$  - The error

Regression analysis was preferred as it enabled the research to analyze the relationship in consideration and a regression model employing one independent variable was used. The model is set up because the study hypothesises that there is a linear relationship between the dependent variable-EPS and the independent variable-changes in dividend. The analytical results was presented by regression output tables, the ANOVA tables and interpretation and conclusion drawn from the outcome.

# CHAPTER FOUR: DATA ANALYSIS AND FINDINGS INTERPRETATION

## 4.1 Introduction

According to the signaling theory, dividends should reflect the manager's superior inside information about a firm's future earnings conditions. One key hypothesis of these signaling models is that dividend changes should be followed by changes in future earnings in the same direction. Higher dividend is to signal better future earnings performance. There have been considerable empirical results establishing a positive as well negative or weak relationship between changes in dividends and future earnings per share. This section examines the connection between dividend changes and changes in firm's future earnings.

The EPS estimation is done through the four major segments of the main market namely: Agriculture, Commercial and Allied, Finance and Investment and the Industrial and Allied. Finally a cross sectional estimation of the entire main market was done. The study used t-statistic to test whether the level of agreement/disagreement attached to the analysis is significantly different from zero given the confidence level of 95 percent.

## 4.2 Descriptive Statistic

This section covers the analysis of the data, discussions and interpretation. The first step in analyzing the data was through descriptive measures this was done using SPSS. The study used final dividend for the corresponding year as the variable of interest. The results were as shown in Tables 4.1 and all the raw data for analysis were in Kenya Shillings.

**Table 4.1: Descriptive Statistics-**

|                                 |           | Mean               | Std. Deviation      |
|---------------------------------|-----------|--------------------|---------------------|
| <b>Agricultural Sector</b>      | EPS       | 2.162              | 5.22565             |
|                                 | Dividends | 23,554,046.7141    | 27,481,958.55472    |
| <b>Commercial &amp; Allied</b>  | EPS       | 3.1914             | 5.46702             |
|                                 | Dividends | 132,800,059.2471   | 212,202.882.06677   |
| <b>Finance &amp; Investment</b> | EPS       | 3.9345             | 6.14658             |
|                                 | Dividends | 1,026,376,295.9818 | 6,286,295,350.55022 |

|                                |           |                  |                     |
|--------------------------------|-----------|------------------|---------------------|
| <b>Industrial &amp; Allied</b> | EPS       | 5.0942           | 10.83912            |
|                                | Dividends | 360,198,516.5936 | 835,449,616.50031   |
| <b>All Sectors</b>             | EPS       | 4.0951           | 8.25501             |
|                                | Dividends | 472,934,975.6591 | 3,421,280,838.13594 |

The evidence about the relationship between dividend changes and subsequent future earnings was mixed as Industrial and allied sector had the highest EPS mean of 5.0942 with a standard deviation of 10.83912 while agricultural sector had the least EPS mean of 2.162 with a standard deviation 5.22565. The entire main market had an EPS mean of 4.0951 with standard deviation 8.25501. It shows that agricultural sector, commercial and allied sector and finance and investment sector performed below the industry level. Finance and investment sector recorded the highest average value of dividend during the period of the study 1998-2008. This is supported by the fact that most of firms in the other market segments are non-dividend payers while the Financial and investment almost all pay dividends annually. DeAngelo, DeAngelo and Skinner (1996) show dividend increases are not informative signals about future earnings. They found evidence that some firms' favorable dividend actions are likely managerial mistakes. Benartzi, Michaely, and Thaler (1997) find a very strong lagged and contemporaneous correlation between dividend changes and earnings. But in the two years following dividend increase, they find that earnings changes are essentially unrelated to the sign and magnitude of the dividend change.

### 4.3 Regression Analysis

In this section we examined the relationship between dividend changes and future EPS. Regression analysis was used to find the relationship between future EPS and dividends changes, the correlation between EPS and dividends and whether dividend is linearly related to EPS and dividends. Here the regression analysis of raw earnings changes on dividend changes is presented. The results were as shown below.

#### 4.3.1: Agricultural sector

Table 4.2: Model Summary

| R | R Square | Adjusted R | Std. Error of the | Change Statistics |
|---|----------|------------|-------------------|-------------------|
|---|----------|------------|-------------------|-------------------|

|         |      | Square | Estimate |                 |          |     |      |             |   |
|---------|------|--------|----------|-----------------|----------|-----|------|-------------|---|
|         |      |        |          | R Square Change | F Change | df1 | df 2 | Sig. Change | F |
| .359(a) | .129 | .100   | 4.95811  | .129            | 4.436    | 1   | 30   | .044        |   |

Predictors: (Constant), Dividends

The coefficient of determination ( $R^2$ ) equals 0.129. This shows that dividends explain only 12.9 percent of the EPS, leaving 87.1 percent unexplained. The P- value of 0.044 (ANOVA table) implies that the model of EPS is significant at the 5 percent significance

Table 4.3: ANOVA

| Model |            | Sum of Squares | df | Mean Square | F     | Sig.    |
|-------|------------|----------------|----|-------------|-------|---------|
| 1     | Regression | 109.044        | 1  | 109.044     | 4.436 | .044(a) |
|       | Residual   | 737.487        | 30 | 24.583      |       |         |
|       | Total      | 846.531        | 31 |             |       |         |

Predictors: (Constant), Dividends  
Dependent Variable: EPS

Table 4.4: Coefficients

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|
|       |            | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant) | .569                        | 1.162      |                           | 489   | .628 |
|       | Dividends  | 6.825E-08                   | .000       | .359                      | 2.106 | .044 |

Dependent Variable: EPS

The trend line simple regression model using the regression coefficient gives the equation

$$EPS = 0.569 + 6.825E-08 \text{ Dividend pay out}$$

Where 0.569 is a constant- meaning that at least EPS takes the value 0.569 when there is no dividend. Using t statistics, ( $t = 2.106$ ) indicates that dividend is linearly related with EPS hence a significant determinant.

### 4.3.2: Commercial & Allied

**Table 4.6: Model Summary**

| R       | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               |
|---------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
|         |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |
| .476(a) | .227     | .217              | 4.83644                    | .227              | 24.332   | 1   | 83  | .000          |

Predictors: (Constant), Dividends

The coefficient of determination ( $R^2$ ) equals 0.227. This shows that dividends explain only 22.7 percent of the EPS, leaving 77.3 percent unexplained. The P- value of 0.000 (ANOVA table) implies that the model of EPS is significant at the 5 percent significance

**Table 4.7: ANOVA**

| Model |            | Sum of Squares | df | Mean Square | F      | Sig.    |
|-------|------------|----------------|----|-------------|--------|---------|
| 1     | Regression | 569.150        | 1  | 569.150     | 24.332 | .000(a) |
|       | Residual   | 1941.469       | 83 | 23.391      |        |         |
|       | Total      | 2510.619       | 84 |             |        |         |

Predictors: (Constant), Dividends

Dependent Variable: EPS

**Table 4.8: Coefficients**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |       | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|
|       |            | B                           | Std. Error | Beta                      | t     |      |
| 1     | (Constant) | 1.562                       | .620       |                           | 2.521 | .014 |
|       | Dividends  | 1.227E-08                   | .000       | .476                      | 4.933 | .000 |

Dependent Variable: EPS

The trend line simple regression model using the regression coefficient gives the equation

$$EPS = 1.562 + 1.227E-08 \text{ Dividend pay out}$$

Where 1.562 is a constant- meaning that at least EPS takes the value 1.562 when there is no dividend. Using t statistics, ( $t = 4.933$ ) indicates that dividend is linearly related with EPS hence a significant determinant.

### 4.3.3: Finance & Investment

**Table 4.10: Model Summary**

| R      | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               |
|--------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
|        |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. Change F |
| 066(a) | 004      | -005              | 6 16162                    | 004               | 469      | 1   | 108 | 495           |

Predictors: (Constant), Dividends

The coefficient of determination ( $R^2$ ) equals 0.004. This shows that dividends explain only 0.4 percent of the EPS, leaving 99.6 percent unexplained. The P-value of 0.495 (ANOVA table) implies that the model of EPS is not significant at the 5 percent significance.

**Table 4.11: ANOVA**

| Model |            | Sum Squares | df  | Mean Square | F   | Sig.   |
|-------|------------|-------------|-----|-------------|-----|--------|
| 1     | Regression | 17.790      | 1   | 17.790      | 469 | 495(a) |
|       | Residual   | 4100.277    | 108 | 37.966      |     |        |
|       | Total      | 4118.068    | 109 |             |     |        |

Predictors: (Constant), Dividends

Dependent Variable: EPS

**Table 4.12: Coefficients**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |       | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|
|       |            | B                           | Std. Error | Beta                      | t     |      |
| 1     | (Constant) | 3.869                       | .595       |                           | 6.498 | .000 |
|       | Dividends  | 6.427E-11                   | .000       | .066                      | .685  | .495 |

Dependent Variable: EPS

The trend line simple regression model using the regression coefficient gives the equation

$$EPS = 3.869 + 6.427E-11 \text{ Dividend pay out}$$

Where 3.869 is a constant- meaning that at least EPS takes the value 3.869 when there is no dividend. Using t statistics, ( $t = 0.685$ ) indicates that dividend is not linearly related with EPS hence dividend is not a major predictor of EPS in the financial and investment sector.

### 4.3.4: Industrial & Allied Sector

**Table 4.14: Model Summary**

| R      | R Square | Adjusted R Square | Std Error of the Estimate | Change Statistics |          |     |     |              |
|--------|----------|-------------------|---------------------------|-------------------|----------|-----|-----|--------------|
|        |          |                   |                           | R Square Change   | F Change | df1 | df2 | Sig Change F |
| 172(a) | .030     | .023              | 10.71167                  | .030              | 4.711    | 1   | 154 | .032         |

Predictors: (Constant), Dividends

The coefficient of determination ( $R^2$ ) equals 0.030. This shows that dividends explain only 3 percent of the EPS, leaving 97 percent unexplained. The P- value of 0.032 (ANOVA table) implies that the model of EPS is significant at the 5 percent significance

**Table 4.15: ANOVA**

| Model |            | Sum Squares | df  | Mean Square | F     | Sig     |
|-------|------------|-------------|-----|-------------|-------|---------|
| 1     | Regression | 540.482     | 1   | 540.482     | 4.711 | .032(a) |
|       | Residual   | 17669.930   | 154 | 114.740     |       |         |
|       | Total      | 18210.412   | 155 |             |       |         |

Predictors: (Constant), Dividends

Dependent Variable: EPS

**Table 4.16: Coefficients**

| Model |            | Unstandardized Coefficients |           | Standardized Coefficients | t     | Sig  |
|-------|------------|-----------------------------|-----------|---------------------------|-------|------|
|       |            | B                           | Std Error | Beta                      |       |      |
| 1     | (Constant) | 4.289                       | .934      |                           | 4.590 | .000 |
|       | Dividends  | 2.235E-09                   | .000      | .172                      | 2.170 | .032 |

Dependent Variable: EPS

The trend learner simple regression model using the regression coefficient gives the equation

$$EPS = 4.289 + 2.235E-09 \text{Dividend pay out}$$

Where 4.289 is a constant- meaning that at least EPS takes the value 4.289 when there is no dividend. Using t statistics, (t= 2.170) indicates that dividend is linearly related with EPS



### 4.3.5: All the sectors

**Table 4.18: Model Summary**

| R      | R Square | Adjusted R Square | Std Error of the Estimate | Change Statistics |          |     |     |              |
|--------|----------|-------------------|---------------------------|-------------------|----------|-----|-----|--------------|
|        |          |                   |                           | R Square Change   | F Change | df1 | df2 | Sig Change F |
| 055(a) | 003      | 000               | 8 25334                   | .003              | 1.155    | 1   | 381 | 283          |

Predictors (Constant), Dividends

The coefficient of determination ( $R^2$ ) equals 0.003. This shows that dividends explain only 0.3 percent of the EPS, leaving 99.7 percent unexplained. The P- value of 0.283 (ANOVA table) implies that the model of EPS is not significant at the 5 percent significance

**Table 4.19: ANOVA**

| Model |            | Sum Squares | df  | Mean Square | F     | Sig    |
|-------|------------|-------------|-----|-------------|-------|--------|
| 1     | Regression | 78 646      | 1   | 78 646      | 1 155 | 283(a) |
|       | Residual   | 25952.786   | 381 | 68 118      |       |        |
|       | Total      | 26031 432   | 382 |             |       |        |

Predictors (Constant), Dividends

Dependent Variable: EPS

**Table 4.20: Coefficients**

| Model |            | Unstandardized Coefficients |           | Standardized Coefficients | t     | Sig. |
|-------|------------|-----------------------------|-----------|---------------------------|-------|------|
|       |            | B                           | Std Error | Beta                      |       |      |
| 1     | (Constant) | 4 032                       | 426       |                           | 9.471 | .000 |
|       | Dividends  | 1 326E-10                   | .000      | .055                      | 1.075 | 283  |

Dependent Variable: EPS

The trend line simple regression model using the regression coefficient gives the equation

$$EPS = 4.032 + 1.326E-10 \text{Dividend pay out}$$

Where 4.032 is a constant- meaning that at least EPS takes the value 4.032 when there is no dividend payout. Using t-statistics, ( $t = 1.075$ ) indicates that dividend is not linearly related with EPS a cross the industry. The behavior of earnings measures is much more drastic and noticeable future earnings are not showing much relationship to the dividend changes. But, Nissim and Ziv (2001) argued that the insignificant

relations in future EPS regressed on changes in dividends may be due to the incorrect specification of the model and due to the measurement error in the independent variable.

# CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION & RECOMENDATION

## 5.1 INTRODUCTION

The present study has attempted to provide additional empirical evidence needed to determine whether changes in dividend provide useful information about a firm's future earnings per share. Such evidence is important in establishing the validity of the "informational content of dividends" hypothesis. Some studies that have been reviewed in this paper suggest that dividends can predict future earnings while some of these studies return a negative verdict of no-predictability of future earnings. The objective of this paper was to present logical and empirical evidence if dividend has explanatory power to predict future earnings of the companies listed at the NSE. The returned verdict of the entire market is that the future earnings is only predicted by the changes in dividend by only 0.3 percent and the rest of 99.7 percent is explained by other factors. Nissim and Ziv (2001) argued that an analysis of the relationship between dividend changes and future level of earnings is desirable from the perspective of information content of dividend hypothesis.

## 5.2 CONCLUSION

To this end, the study has examined the relationship between changes in dividend and future expected earnings per share using. The study focused on ten-year periods because of interest in the impact of real growth on "fair valuation." Transient short-term peak and trough earnings should have little impact as only long-term earnings prospects should really matter. In the study the arbitrary choice of ten-year span is to balance two conflicting goals: a span long enough to be of economic significance but short enough span to have a reasonable number of independent periods and to have some relevance to an investor's career horizon and to avoid the possibility of sampling from two or more different periods. The naïve functional form of simple linear regression model that was used in the study to measure changes in future EPS may have lead to serious measurement error and affect the study result. So a more refined model as Autoregressive (AR) may provide better result consistent with the

signaling hypothesis. As AR will use past EPS as part of the independent variable and may be able to provide more insight to the best predictor of future EPS.

To test whether dividend changes convey incremental information about future earnings, the study used regression analysis to establish the relationship between EPS and dividend pay outs. EPS models were developed for each sector and the overall industry and were tested for accuracy using correlations. One major finding of the study is that there is a weak relationship between EPS and dividend pay outs in all the sectors individually as well as the entire industry. This is demonstrated in the part of the analysis where the proportion of  $R^2$  is low. The usage of the model developed to forecast EPS is therefore not recommended as one might get predictions that are inaccurate as such the objective of the study is not fully achieved.

The individual significant of the predictor variable in predicting EPS shows that there exist a linear relationship between dividends pay out and EPS in Agricultural sector, Commercial & Allied sector and industrial and allied sector. The model for the overall industry was not significant as indicated by the values of  $R^2$  and t-statistics. Whereas, there is a linear relationship between the EPS and dividends pay outs for most sectors (t-statistics), the relationship may not be one of cause and effect. The other factor is that there could be random fluctuation in the variables. Whenever the random fluctuation occurs, then the value of the test statistic will increase this will lead to significant difference between the estimate and actual. There could also be an error term that was not captured by the established model. The model does not take into account things like the changing economic environment and the possibility of sampling from different periods. The state of the technology is changing and economic conditions are also changing and the models may fail to forecast accurately because of change in the business environment during the test period as the NSE has been changing and new technologies being introduced and this might have led to sampling of two different periods.

### **5.3 LIMITATION OF THE STUDY**

As with any research, this study had a range of challenges, one the data used was secondary data availed by the NSE handbook for 2009 and 2002 five year running. In the capturing of the data the NSE dependent on the company's annual financials and did manual capture thereof, the accuracy may not be guaranteed as different firms use different reporting standard as the market has not yet adopted the uniform reporting standard (The IFRS). Apart from the accuracy the study suffered from selection bias where some companies were excluded from the study due to data in availability as some firms were newly listed and their data before listing has not been covered by the NSE handbook as well as survivorship bias on the companies that are not active due to suspension or out of business. Other factors such as company management style and peoples perceptions could have boosted the values of dividends pay outs; economic factors such as inflation would affect the purchasing power of the consumers and hence affect the performance across the sectors. There is therefore room for isolating all these factors in order to generate better predictive model.

### **5.4 RECOMENDATION & SUGGESTION**

In this study only one predictor variable (dividend payouts) was singled out and used, it is recommended that a number of the independent variables be included and a multiple linear regression model be used as with the single independent variable only 0.3 percent changes of the EPS is explained by the changes in dividend leaving a massive 99.7 percent unexplained.

## APPENDIX

The following is the list of companies use in coming up with the results.

### AGRICULTURAL

1. KAKUZI
2. REA VIPINGO
3. SASINI LTD

### COMMERCIAL & ALLIED

4. CAR & GENERAL
5. CMC
6. KENYA AIRWAYS LTD
7. MARSHALLS
8. NATION MEDIA GRP
9. STANDARD GRP LTD
10. TPS EASTERN AFRICA (SERENA LTD)

### FINANCE & INVESTMENT

11. PAN AFRICA INSURANCE HOLDINGS
12. SCB
13. BARCLAYS BANK OF KENYA LTD
14. HOUSING FINANCE COMPANY OF KENYA LTD
15. JUBILEE INSURANCE CO. LTD
16. NIC BANK LTD.
17. NATIONAL BANK OF KENYA LTD
18. KENYA COMMERCIAL BANK LTD
19. DIAMOND TRUST BANK OF KENYA
20. CFCSTANBIC HOLDINGS LTD

### INDUSTRIAL & ALLIED

21. ATHI RIVER MINING
22. BOC (K)
23. BAMBURI
24. BRITISH AMERICAN TOBACCO
25. CROWN BERGER
26. E.A CABLES
27. E.A PORTLAND
28. E.A BREWERIES
29. KENYA OIL
30. K. POW. & L.
31. MUMIAS
32. SAMEER AFRICA LTD
33. TOTAL.

34. UNGA

35. CENTUM INVESTMENT LTD

| THE FIRMS TRADING ON THE NSE |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
|------------------------------|--------------------------------------|------------------|-------|------------------|-------|------------------|-------|------------------|---------------|------------------|-------|------------------|--------|------------------|--------|---|------------------|--------------|------------------|---------------|------------------|---------------|-------------------|------|--|
| FIRM NAME                    |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| AGRICULTURAL                 |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 2008                         |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 2007                         |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 2006                         |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 2005                         |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 2004                         |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 2003                         |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 2002                         |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 2001                         |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 2000                         |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 1999                         |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 1998                         |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| DIVIDENDS                    |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| EPS                          |                                      |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 1                            | KAKI ZI                              | 19,600,000.00    | 13.12 |                  | 9.88  | 6.78             |       | -3.76            | 18,800,000.00 | 4.27             | 0     | -0.60            | 0      | 0.39             |        | 0 | 2.3              | 7,839,999.60 | 1.44             | 39,199,998.00 | 1.67             | 53,899,997.25 | 5.11              |      |  |
| 2                            | REA YIPINGO                          | 12,000,000.00    | 2.80  | 48,000,000.00    | 1.82  | 48,000,000.00    | 1.88  | 48,000,000.00    | 2.14          | 24,000,000.00    | 0.05  | 16,000,000.00    | 0.61   | 0                | 0.07   |   |                  |              |                  |               |                  |               |                   |      |  |
| 3                            | NASINI LTD                           | 38,009,000.00    | 3.90  | 38,009,250.00    | 0.18  | 38,009,000.00    | 8.23  |                  | -10.17        | 57,014,000.00    | 20.29 |                  | 1.77   | 19,964,828.00    | -2.18  |   | 9,502,000.00     | 0.4          | 76,018,500.00    | 2.91          | 19,004,625.00    | 0.32          | 114,027,750.00    | 3.2  |  |
| 4                            | COMMERCIAL & ALLIED                  |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 5                            | CAR & GENERAL                        | 15,000,000.00    | 9.50  | 15,000,000.00    | 7.85  | 15,000,000.00    | 6.08  | 15,000,000.00    | 8.71          | 15,000,000.00    | 1.84  | 15,000,000.00    | 2.72   | 0                | 0.33   |   |                  |              |                  |               |                  |               |                   |      |  |
| 6                            | CNC                                  | 165,454,000.00   | 1.59  | 189,958,920.00   | 1.27  | 111,685,976.00   | 8.94  | 72,840,000.00    | 7.00          | 48,580,000.00    | 5.42  | 24,280,000.00    | 7.29   | 24,280,000.00    | 6.29   |   | 18,216,000.00    | 3.58         | 18,210,000.00    | 8.05          | 18,210,000.00    | 6.61          | 12,139,780.00     | 8.38 |  |
| 7                            | KENYA AIRWAYS LTD                    | 808,000,000.00   | 12.00 | 808,000,000.00   | 8.88  | 808,000,000.00   | 10.48 | 577,000,000.00   | 6.54          | 346,000,000.00   | 2.82  | 231,000,000.00   | 0.87   | 277,000,000.00   | 1.88   |   | 346,000,000.00   | 2.94         | 346,000,000.00   | 8.03          | 461,615,184.00   | 2.61          | 461,615,184.00    | 2.88 |  |
| 8                            | MARSHALLS                            | 14393000         | 8.16  | 14,393,000.00    | 2.94  | 14,393,000.00    | 3.11  |                  | 2.95          | 0                | 1.55  | 0                | 1.53   | 0                | 2.03   |   |                  |              |                  |               |                  |               |                   |      |  |
| 9                            | NATION MEDIA GRP                     | 748,700,000.00   | 8.00  | 534,800,000.00   | 15.10 | 713,000,000.00   | 10.98 | 356,500,000.00   | 10.04         | 267,500,000.00   | 11.99 | 491,500,000.00   | 11.27  | 93,600,000.00    | 7.66   |   | 57,000,000.00    | 7.2          | 42,800,000.00    | 5.7           | 62,392,102.50    | 7.01          | 58,826,839.50     | 9.16 |  |
| 10                           | STANDARD GRP LTD                     | 80,603,000.00    | 3.57  | 65,133,359.00    | 3.96  |                  | 3.15  |                  | 1.12          | 0                | 1.42  | 0                | 0.73   | 0                | -0.18  |   |                  |              |                  |               |                  |               |                   |      |  |
| 11                           | TPS EASTERN AFRICA (SERV)            | 132,331,000.00   | 2.10  | 132,330,928.00   | 3.93  | 110,276,000.00   | 3.70  | 31,020,000.00    | 0.30          | 42,547,000.00    | 3.37  | 42,547,000.00    | 0.65   | 43,847,000.00    | 2.74   |   | 42,547,000.00    | 2.5          | 42,547,000.00    | 2.15          | 38,679,000.00    | 2.05          | 38,679,000.00     | 1.48 |  |
| 12                           | FINANCE & INVESTMENT                 |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 13                           | PAN AFRICA INSURANCE HOLDINGS        | 69,120,000.00    | 1.99  | 76,800,000.00    | 4.19  | 69,120,000.00    | 1.96  | 57,600,000.00    | 3.68          | 48,000,000.00    | 1.95  | 2,101,569,444.00 | -0.49  | 0                | 0.33   |   |                  |              |                  |               |                  |               |                   |      |  |
| 14                           | SCB                                  | 2,888,138,000.00 | 11.34 | 1,444,529,000.00 | 12.76 | 1,199,758,000.00 | 9.69  | 904,339,000.00   | 9.02          | 571,132,000.00   | 6.74  | 1,013,697,000.00 | 11.28  | 981,887,000.00   | 8.92   |   | 1,050,785,000.00 | 9.07         | 1,631,807,000.00 | 8.8           | 1,219,734,800.00 | 10.3          | 824,144,888.00    | 8.67 |  |
| 15                           | Barclays Bank of Kenya Ltd           | 3,824,000,000.00 | 4.10  | 1,561,567,000.00 | 3.62  | 1,630,000.00     | 3.31  | 2,241,000,000.00 | 0.41          | 2,241,000,000.00 | 18.13 | 1,830,000,000.00 | 16.53  | 1,112,000,000.00 | 9.60   |   | 2,084,000,000.00 | 16           | 1,389,000,000.00 | 11.2          | 1,850,000,000.00 | 14.6          | 1,697,355,000.00  | 19.4 |  |
| 16                           | Housing Finance Company of Kenya Ltd | 28,750,000.00    | 0.79  | 28,750,908.00    | 0.64  |                  | 0.88  |                  | 2.51          | 0                | 0.52  | 0                | 0.45   | 0                | 0.48   |   |                  |              |                  |               |                  |               |                   |      |  |
| 17                           | Jubilee Insurance Co Ltd             | 191,250,000.00   | 14.74 | 146,250,000.00   | 14.73 | 117,000,000.00   | 18.54 | 117,000,000.00   | 18.18         | 83,000,000.00    | 7.88  | 83,000,000.00    | 5.81   | 48,800,000.00    | 4.67   |   | 45,000,000.00    | 3.37         | 45,000,000.00    | 2.17          | 36,000,000.00    | 3.82          | 45,000,000.00     | 4    |  |
| 18                           | NH Bank Ltd                          | 305,111,000.00   | 3.49  | 79,117,970.00    | 7.54  | 222,518,288.00   | 8.56  | 208,036,378.00   | 3.34          | 140,105,000.00   | 3.17  | 135,984,000.00   | 2.94   | 118,380,000.00   | 2.78   |   | 82,414,000.00    | 3.12         | 86,538,000.00    | 3.79          | 86,538,000.00    | 3.85          | 85,931,641,000.00 | 4.71 |  |
| 19                           | National Bank of Kenya Ltd           | 74,000.00        | 4.50  |                  | 5.80  |                  | 3.12  |                  | 2.99          | 0                | 1.91  | 0                | 2.02   | 0                | 0.98   |   |                  |              |                  |               |                  |               |                   |      |  |
| 20                           | Kenya Commercial Bank Ltd            | 1,397,200,000.00 | 1.97  | 1,397,200,000.00 | 1.49  | 1,197,600,000.00 | 12.18 | 788,400,000.00   | 8.64          | 399,200,000.00   | 3.94  | 149,600,000.00   | 3.25   | 0                | 20.96  |   |                  |              |                  |               |                  |               |                   |      |  |
| 21                           | Diamond Trust Bank of Kenya          | 241,235,000.00   | 6.28  | 228,252,000.00   | 4.54  | 139,746,000.00   | 3.48  | 86,853,000.00    | 1.65          | 89,563,000.00    | 1.65  | 89,563,000.00    | 1.40   | 47,700,000.00    | 0.96   |   | 31,800,000.00    | 0.51         | 47,700,000.00    | 2.06          | 83,888,000.00    | 1.31          | 83,888,000.00     | 2.8  |  |
| 22                           | CPCST ANBIC HOLDINGS LTD             | 78,000,000.00    | 3.35  | 296,400,000.00   | 4.94  | 273,000,000.00   | 6.03  | 131,040,000.00   | 3.54          | 120,800,000.00   | 4.82  | 100,800,000.00   | 3.46   | 80,400,000.00    | 1.45   |   | 80,400,000.00    | 1.18         | 80,400,000.00    | 1.61          | 87,000,000.00    | 1.58          | 87,000,000.00     | 2.38 |  |
| 23                           | INDUSTRIAL & ALLIED                  |                  |       |                  |       |                  |       |                  |               |                  |       |                  |        |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 24                           | ATHI RIVER MINING                    | 123,616,000.00   | 5.08  | 123,818,750.00   | 4.26  | 93,000,000.00    | 2.84  | 69,750,000.00    | 2.15          | 0                | 1.26  | 9,300,000.00     | 1.04   | 9,300,000.00     | 0.62   |   |                  |              |                  |               |                  |               |                   |      |  |
| 25                           | BOC (K)                              |                  |       | 122,033,000.00   | 13.70 | 82,982,000.00    | 11.57 | 82,982,000.00    | 10.62         | 68,340,000.00    | 8.20  | 65,411,000.00    | 7.82   | 68,411,000.00    | 5.42   |   | 49,790,000.00    | 3.84         | 49,790,000.00    | 3.83          | 49,790,000.00    | 5.75          | 49,790,000.00     | 7.81 |  |
| 26                           | BAMBURI                              | 1,343,000,000.00 | 8.78  | 2,177,755,650.00 | 9.91  | 1,998,276,013.00 | 7.20  | 1,923,684,156.00 | 5.94          | 2,221,310,763.00 | 4.73  | 653,000,000.00   | 2.94   | 181,000,000.00   | 3.38   |   | 272,000,000.00   | 2.01         | 181,000,000.00   | 0.8           | 382,840,725.00   | 1.74          | 181,000,000.00    | 1.57 |  |
| 27                           | BRITISH AMERICAN TOBACCO (K) LTD     | 1,500,000,000.00 | 17.00 | 1,050,000,000.00 | 13.86 | 750,000,000.00   | 12.01 | 450,000,000.00   | 13.82         | 450,000,000.00   | 12.10 | 450,000,000.00   | 11.40  | 260,000,000.00   | 8.23   |   | 210,000,000.00   | 6.04         | 165,000,000.00   | 5.83          | 600,000,000.00   | 18.8          | 562,500,000.00    | 15   |  |
| 28                           | CROWN BERGER                         | 23,727,000.00    | 1.20  | 23,727,000.00    | 3.23  | 35,561,000.00    | 2.69  | 23,727,000.00    | 1.45          | 0                | 2.15  | 32,355,000.00    | 2.74   | 32,356,000.00    | 2.67   |   | 10,785,000.00    | 1.08         | 10,785,000.00    | 0.9           | 21,970,000.00    | 2.13          | 21,970,000.00     | 0.65 |  |
| 29                           | E CABLES                             | 208,051,000.00   | 1.94  | 182,250,000.00   | 2.06  | 101,250,000.00   | 1.41  | 70,875,000.00    | 10.52         | 35,438,000.00    | 6.11  | 20,250,000.00    | 0.46   | 16,125,000.00    | 2.29   |   | 22,275,000.00    | 0.79         | 22,275,000.00    | 1.5           | 81,125,000.00    | 1.08          | 40,500,000.00     | 3.14 |  |
| 30                           | E A PORTLAND                         | 117,000,000.00   | 5.96  | 234,000,000.00   | 8.49  | 234,000,000.00   | 4.58  | 235,000,000.00   | 6.75          | 157,500,000.00   | 2.88  | 157,500,000.00   | 2.51   | 48,000,000.00    | 1.33   |   | 90,000,000.00    | 1.08         | 90,000,000.00    | 0.8           | 90,000,000.00    | 1.08          | 90,000,000.00     | 4.17 |  |
| 31                           | E A BREWERIES                        | 7,722,561,000.00 | 9.55  | 4,388,788,000.00 | 9.31  | 2,734,762,000.00 | 8.18  | 1,978,937,000.00 | 7.24          | 1,878,088,000.00 | 35.05 | 1,308,366,000.00 | 13.76  | 881,218,000.00   | 21.27  |   | 735,958,000.00   | 14.9         | 535,712,000.00   | 12.91         | 855,215,784.00   | 11.5          | 491,411,826.00    | 3.27 |  |
| 32                           | KENYA OIL                            | 748,318,000.00   | 2.19  |                  | 5.84  | 228,319,000.00   | 8.29  | 226,781,000.00   | 0.95          | 201,592,000.00   | 8.32  | 55,438,000.00    | 46.50  | 95,758,000.00    | 43.80  |   | 75,597,000.00    | 37.2         | 43,199,000.00    | 15.15         | 63,998,500.00    | 29.3          | 43,198,800.00     | 23.7 |  |
| 33                           | K POW & L                            | 537,330,000.00   | 2.30  | 189,807,000.00   | 21.72 | 118,692,000.00   | 20.78 | 118,692,000.00   | 18.05         | 0                | 5.79  | 0                | -38.56 | 0                | -23.76 |   |                  |              |                  |               | 1,930,000.00     | -40.3         | 1,930,000.00      | 27.8 |  |
| 34                           | MUMIAN                               | 492,447,000.00   | 0.79  | 765,000,000.00   | 2.73  | 892,500,000.00   | 2.99  | 459,000,000.00   | 2.53          | 306,000,000.00   | 1.55  | 0                | -0.42  | 81,008,000.00    | 0.13   |   | 362,100,000.00   | 0.95         |                  |               |                  |               |                   |      |  |
| 35                           | SAMER AFRICA LTD                     | 0                | 0.42  | 437,661,785.00   | 0.43  | 432,532,500.00   | 2.81  | 432,532,500.00   | 0.74          | 139,171,000.00   | 0.99  | 69,588,000.00    | 0.56   |                  |        |   |                  |              |                  |               |                  |               |                   |      |  |
| 36                           | TOTAL                                | 434,433,000.00   | 4.02  | 437,661,785.00   | 2.99  | 432,532,500.00   | 2.81  | 432,532,500.00   | 3.07          | 437,663,000.00   | 3.34  | 437,663,000.00   | 3.10   | 287,610,000.00   | 2.41   |   |                  |              |                  |               |                  |               |                   |      |  |
| 37                           | UNGA                                 | 13,355,000.00    | 3.67  |                  | 1.31  |                  | 0.58  |                  | 1.15          | 0                | 1.62  | 0                | -0.43  | 0                | -1.07  |   |                  |              |                  |               |                  |               |                   |      |  |
| 38                           | Centum Investment Ltd                | 250,543,000.00   | 1.58  | 247,478,348.00   | 2.03  | 219,880,732.00   | 11.03 | 164,986,000.00   | 5.37          | 164,986,000.00   | 4.39  | 120,989,000.00   | 2.89   | 109,860,000.00   | 4.48   |   | 92,063,000.00    | 3.35         | 76,728,000.00    | 8.92          | 56,517,000.00    | 7.17          | 84,775,287.00     | 5.3  |  |

Source: NSE Handbook 2002 and 2009



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