

**SIGNALING EFFECT OF DIVIDEND PAYMENT ON THE EARNINGS OF THE  
FIRM: EVIDENCE FROM THE NAIROBI STOCK EXCHANGE**

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**A management research project submitted in partial fulfillment of the requirements  
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## DECLARATION

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

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

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## **DEDICATION**

To my loving parents, for their immense love, understanding and confidence.

## **ABSTRACT**

Signaling theory of dividend stipulates that payment of dividend conveys information to the market with respect to expected future earnings of the company. The theory has attracted research in various dimensions owing to the puzzling nature of the dividend payment and its resultant predictability of the earnings of a firm. However, various scholars have found varied impression created by the payment or non payment of dividend resulting into varied empirical findings on the signaling effect of dividend payment on future earnings of which the study sought to establish.

The study was an event study conducted on the companies listed at the NSE that had traded consistent for 10 year period; 2000 to 2009, which were 39 in number. The data was collected on from NSE database on companies' annual reports on earnings and dividend payout ratios. The study used both parametric tests such as t and f-tests to establish the relationship between dividend payment and the future earnings of companies listed at the NSE. The study also used simple linear regression analysis to measure the relationship between earnings and one year lag of dividend payout ratio. The study concludes that dividend payout ratios positively correlate with future earnings of companies though the relationship is low. The study suggest that further earnings be conducted on the appropriation of earnings and the future earnings of companies so as to bring out clearly what role dividend play in signaling future earnings.

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## ABBREVIATIONS

CMA	-	Capital Market Authority
CRSA	-	Centre for Research in Security Analysis
KBS	-	Kenya Bureau of Statistics
NSE	-	Nairobi Stock Exchange
NYSE	-	New York Stock Exchange
STDEV	-	Standard Deviation

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Dividend signaling is one of the most interesting theories that have attracted research in various dimensions, this is due to the puzzling nature of the dividend payment and its resultant predictability of the earnings of a firm. It is due to this nature that various scholars found varied impression created by the payment or non payment of dividend. Brealeys and Myers (2002) list dividends as one of the ten important unresolved problems in finance reinforcing the conclusion that much more empirical and theoretical research on the subject of dividend is required before a conclusion is reached.

This theory is also called information signaling theory of dividend. The theory stipulates that payment of dividend conveys information to the market with respect to expected future earnings of the company. Managers use dividend policy to send signals about the firm's future earnings (Bhattacharya, 1979; Miller and Rock, 1985;). This theory is based on the assumption that information is not equally available to all parties at the same time, and that information asymmetry is the rule. Michael (1973) conducted research in this area and his work culminated with the signaling theory, which he stated that the markets will be more efficient if sellers provided more information to the buyers. The importance of this theory in the financial markets is that for instance a firm which increased its dividends is conveying a message to the public that its earning prospects are promising.

Maquieira and Megginson (1994) found that earnings do not surge after newly public firms begin paying dividends. Additionally, Bernartzi, Michaely, and Thaler (1997) too

argue that earnings do not systematically grow following dividend increases. They however found that dividend changes are related to contemporaneous and lagged earnings changes. Clearly, there is no compelling evidence that corporate dividend decisions are made to signal future profitability

DeAngelo, DeAngelo, and Skinner (1996) found that dividend changes lag earnings changes in a sample of 145 firms that suffer decreased earnings after ten straight years of rising earnings. In only two cases do firms cut dividends prior to the earnings drop, and in less than one-third of their sample is the prior dividend increase smaller than the dividend increase the previous year. DeAngelo, DeAngelo, and Skinner conclude that managers do not signal their negative information with dividends and argue that over optimism by managers and the small cash obligations associated with increasing dividends reduce the reliability of dividends as a signaling mechanism. Again, these results seriously challenge dividend-signaling models.

Signaling theory is based on the premise that the management of a company knows more about the future earnings prospects of a company than do the stockholders. According to the theory if a company declares dividends more than that anticipated by the market, this will be interpreted that the future financial prospects of the company will be good. Conversely, if a company cuts its dividends the markets take this as a signal that the management expects poor earnings and does not believe that the current earnings will be maintained. The market price of a firm will drop when dividend falls because investors will sell their stocks in anticipation of difficult times for the firm.

Benartzi, Michaely, and Thaler (1997) extensive study between 4,996 and 7,186 firm years. They find that dividends are related to past, but not future, earnings. Furthermore, they find no relation between future earnings and the size of dividend increases in prior years, although they do find some evidence that dividend increases signal that recent earnings jumps are permanent.

If a firm's manager believes in signaling theory he would be wary of the signal their dividend signal may send to the investors. Even If the firm has some interesting investment opportunities that could be financed with retained earnings, management would seek alternative financing to avoid cutting dividends that may send an unfavorable signal to the market.

Information asymmetries can result in very low valuations or a sub-optimum investment policy. Signaling theory thus further states that corporate financial decisions are signals sent by the company's managers to investors in order to shake up these asymmetries. These signals are the cornerstone of financial communications policy.

The theory is also advanced by Ross (1977). He argued that in an inefficient market management can use divided policy to signal important information into the market which is only known to them. If the management pays high dividends it signals high expected profits in future to maintain the high dividend level. This would increase the share value price/vice versa.

Miller and Modigliani (1961) also argued that change in share price following the change in dividend amount is due to information content of dividend policy, rather than dividend policy itself. Therefore dividends are irrelevant if information can be given to

the market and all the players. Dividend decisions are relevant in an inefficient market and the higher the dividends the value of the firm.

The theory is based on the following four assumptions; the sending of signal by management should be cost effective, the signal should be correlated to observable events (common trend in the market), no company can imitate their competitors in sending the signal and the managers can only send true signals even if they are bad signals. Sending untrue signals is financially disastrous to survival of the firm.

Another proposition is that of Lintner (1956) on dividend theory in which his model became a prototype model on the dividend asymmetric information. Lintner's theory suggests that dividend payment is relevant to earnings performance of firms. He stipulated that firms will increase dividend payment when managers are confident over the firms' future performance but they will be reluctant to decrease dividend payments unless they have much and enough information of a seemingly permanent decline in the firms' performance. Lintner's model further suggested that firms cannot disguise the signal by increasing the payout when they do not have a true increasing position on the firms' performance.

Another theory which supports the signaling theory is that of Miller and Rock (1985). In this model, dividend payment acts indirectly as a signal of future profitability of the firm. It states that higher dividends are associated with higher current earnings. In their model, the information asymmetry pertains to current earnings and the level of investment. The payment of dividends signals information about current income through the sources. They proposed that, earnings are assumed to be correlated through time and once current

earnings are revealed, future earnings can be inferred by the investors. Hence investors are able to predict the future profitability of the firm through inference from the current earnings and the subsequent dividend payments.

Firms with higher earnings pay higher dividend to set itself in a position high enough to separate itself from the rest of the firms with relatively lower earnings. Lintner also proposed that dividend payment under asymmetric information is higher as compared to that under efficient market. Hence this means that firms with higher level of asymmetric information will signal higher earnings through the payment of high dividends, implying the higher the level of asymmetric information the higher the dividend payout.

## **1.2 Statement of the Problem**

With Benartzi et al (1997) in his study stated that changes in dividend policy are generally unrelated to changes in future earnings but with suggestion that firms that increased dividends are unlikely to report decrease in earnings. This may not be in line with the dividend signaling hypothesis as it does not hold true for the firms with decreased dividend. What would be the effect of dividend cut on the future profitability of the firm?

Lintner (1956) argues that firms will increase dividend payment when managers are confident over the firms' future performance but they will be reluctant to decrease dividend payments unless they have much and enough information of a seemingly permanent decline in the firms' performance. Will the firm increase or decrease dividend and would the subsequent earnings increase or decrease?

Ofer and Siegel (1987) discovered that analysts revise their earnings forecasts following dividend changes while scholars such as Lang and Litzenberger (1989) argue that there is no significant effect. Consistent with dividend signaling, Healy and Palepu (1988), among others, proved that firms' earnings tend to increase (decrease) after dividends are initiated (omitted).

Mulwa (2006) in his analysis of the relationship between dividend changes and future profitability of companies established that at least in the year of dividend change a relationship existed. However, in the first and second year after the dividend, he observed an insignificant relationship. What type of relationship occurred in the even of dividend increase or decrease?

Watts (1973) joined the fray with the strong findings that dividends contain no information for the investors to use. This is rather a strong argument against the opinions of Ross (1977), Lintner (1956), Miller and Rock (1985) who support the information content of dividend.

Frankfurter and Wood (2002) states in their work on dividend policy, theory and empirical test that corporate dividend policy has captured the interest of economist of the century and over the last decades has been the subject of intensive theoretical modeling and empirical examinations. He further notes a number of conflicting theoretical models all lacking strong empirical support defining current attempt to explain corporate dividend behavior.

Bhattacharya (2007), in his review on the dividend policy found that the famous dividend puzzle is still unresolved. Empirical evidence is equivocal and the search for new

explanation for dividend continues. Brealeys and Myers (2002) list dividends as one of the ten important unresolved problems in finance reinforcing the conclusion that much more empirical and theoretical research on the subject of dividend is required before a conclusion is reached. Lintner (1956) surveyed corporate managers to understand how they arrived at the dividend policy. He found that an existing dividend rate forms a benchmark for management. He argues that company's management usually displays a strong reluctance to reduce dividend. Lintner says that managers usually have reasonably definite target payout ratios and over the years, dividends are increased slowly at a particular speed of adjustment so that actual payout ratio moves closer to the target payout ratio.

A number of conflicting theoretical models define current attempts to explain corporate dividend behavior. Initial forays into theorizing corporate dividend policy are divided as to their prediction of the dividend payment's effect on share price, Frankfurter and Wood (2006). Over the last century, three schools of thought have emerged. One faction sees dividends as attractive and as a positive influence on stock price.

### **1.2 Objective of the Study**

The study sought to establish the signaling effect of dividend payment on the earnings of the firms quoted at the Nairobi Stock Exchange (NSE).

### **1.3 Importance of the Study**

The findings of this study is of interest to the following:-



### **The management**

The management of publicly quoted companies are able to determine the effect of dividends on the earnings of the firm so that they can make appropriate dividend decisions.

### **The Government**

The Government of Kenya is in a position to make clear policies relating to dividend and taxes. Thorough knowledge of the effects of dividends on the earnings of the firm can assist in ascertaining the appropriate amount of tax to pay for dividends paid out and the effect on the firm's earnings.

### **The Investor**

Investors need to know the relationship between dividend payment and the earnings of the firm in order to make informed decisions regarding their investment in which firm.

### **The Financial Consultants**

The findings of this study can enable financial consultants to offer proper services to their clients. This relates to optimal dividend policy where the earnings of their firms can be maximized.

### **The Scholars and Academicians**

Scholars and academicians can use the findings of this study as a basis of further research on this subject.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Theoretical Studies**

This chapter presents literatures, theories and empirical studies that have been done on the signaling effect of dividends on future earnings.

#### **2.2 Miller and Rock Model (1985)**

Miller and Rock (1985) developed a model in which higher dividends are associated with higher current earnings. In their model, the information asymmetry pertains to current earnings and the level of investment. In the model, earnings are assumed to be correlated through time and once current earnings are revealed, future earnings can be inferred by the investors. Therefore, dividends indirectly serve as a signal of future earnings of the firm.

In equilibrium, a firm with higher current earnings pays a level of dividends that is high enough to separate itself from a firm with lower current earnings. In the model, the cost of signaling is underinvestment relative to the full information case. In addition, the dividend payout under asymmetric information is higher relative to that under full information.

The above arguments imply that, other things equal, a firm with a higher level of asymmetric information will have to pay a higher level of dividends to signal the same level of earnings as a firm with a lower level of asymmetric information. Therefore, other things equal, the signaling argument predicts that the higher the level of asymmetric information, the higher the dividends. Note that the pecking order theory and the

signaling theory provide opposite predictions regarding the effect of the level of asymmetric information on dividend policy and thus provide a basis to distinguish between them.

### **2.3 Lintner Theory (1956)**

Lintner proposed another approach of dividend theory which his model becomes a prototype model on the dividend asymmetric information. Lintner (1956) model suggests that dividend payment is relevant to earnings performance of firms. From Lintner (1956), firms will increase dividend payment when managers are confident over the firms' future performance but they will be reluctant to decrease dividend payments unless they have much and enough information of a seemingly permanent decline in the firms' performance. Lintner's model further suggested that firms cannot disguise the signal by increasing the payout when they do not have a true increasing position on the firms' performance.

### **2.4 Empirical Studies**

#### **Do Changes in Dividends Signal the Future or the Past?**

Benartzi, et al (1997) in a study to establish whether changes in dividend signal the future or the past. The population consisted of all the companies that traded on the NYSE or on the American stock exchange for at least 2 years during the period 1979 – 1991. With a sample of 7186 firms. Using regression analysis, they observed that firms that increase dividend in year 0 have experienced significant earnings increases in years – 1 and 0, but show no subsequent unexpected earnings growth. Also, the size of the dividend increase does not predict future earnings. Firms that cut dividend in year 0 have experienced a

reduction in earnings in year 0 and in year -1, but these firms go on to show significant increases in earnings in year 1.

However, consistent with Lintner's (1956) model on dividend policy, firms that increase dividends are less likely than non changing firms experience a drop in future earnings. Therefore in spite of lack of future earnings growth, firms that increase dividends have significant (though modest) positive excess returns for the following three years.

They reported that while changes in dividend policy were generally unrelated to changes in future earnings, 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.

### **Testing Dividend Signaling Models**

The objective was to distinguish the hypothesis that dividends are used as a signaling device from the hypothesis that dividends contain information. Bernhardt et al (2005). The study was between 1962 and 1996. The sample size was all the firms that were listed on the NYSE (New York Stock Exchange) that make regular quarterly cash dividends and have a complete set of price, distribution and return information at the declaration date of each dividend. Data was obtained from the CRSA (Center for Research in Security Analysis). They used non parametric tests. Their findings indicate that the information content in dividend is not positively related to the marginal cost of dividends

in the manner implied by the dividends signaling theory. The excess return as predicted by signaling models is more strongly related to the tax regime. This empirical evidence does not support the signaling theory.

### **An Investigation of Earnings Anomaly Following Dividend Cuts and Omissions**

Iqbal et al (1992) study was to examine the reliability of the signaling content of a dividend cut in light of the fact that firms often reduce dividend payments as part of a cost-reduction program.

They empirically examine unanticipated earnings changes following dividend cuts and omissions for firms that implement one or more operational measures and firms that do not take any measure. They took the perspective that when a firm reduces dividends and concurrently undertakes other value-enhancing measures, it is less likely sending a signal that poor earnings will follow. In this case, the dividend cuts can be viewed as ways to conserve cash and improve earnings. On the other hand, firms that reduce dividend payments but do not implement the cost-reducing measures are the ones likely to experience a drop in future earnings consistent with the signaling theory.

The empirical evidence indicated that groups of firms, those implementing operational actions and those not implementing any actions, experience a significant drop in earnings one year prior to and in the year of the dividend cut. Earnings tend to increase substantially within one year after the dividend cut, however, for firms who undertook operational actions. The non action firms, on the other hand, do not experience any earnings change. These findings provide a plausible answer to why prior studies observe an increase in future earnings after a dividend reduction.

Deducing the findings of no earnings change for the non action firms as being consistent with Lintner's (1956) argument that a dividend decrease signifies a permanent drop in earnings.

Only a small group of the non action firms in our study experience an earnings decline after dividends are reduced, consistent with the signaling theory. Firms in this group have strong earnings performance in the year of the dividend cut. This evidence, based on a small sample, suggests that the firm reduces dividends to signal poor earnings only when it is profitable and only when it does not take any steps to correct the upcoming earnings decline.

### **Do Dividends Signal Earnings? The Case of Omitted Dividends**

In a study carried out by Rajiv and Arnold (1994) investigating the effects of dividend omission on stock return volatility and the effect of dividend omission on security-analyst forecast of earnings. They considered firms that omitted dividends from 1962-1987 by examining the distribution of records in the CRSA. The results yielded a significant 5% return.

Thus in conclusion, they found evidence to support the hypothesis that the payment of dividends provides information that helps analyst and investors value the firm. The evidence was also consistent with the information transmission and that dividend omission increases the dispersion of analyst forecast of earnings.

### **Watts (1973) Information Content of Dividends Paper.**

Watts (1973) as early as 1973 undertook studies to investigate theories concerning the information content of dividends. Watts studied the effect of dividends on both stock prices and future earnings to establish whether dividend contained any information for the investors. He sampled 310 firms in the COMPUSTAT and CRSA covering a period of 23 years. He computed the unexpected variations in dividend using error term for each firm under study. Under the period of study he also computed for abnormal security returns by applying the familiar market model.

Watts found that after conditioning on current and past earnings, dividends could not be used by investors to reliably predict future earnings, and thus concluded: "...in general, the information content of dividends can only be trivial."

Mulwa (2006), An Analysis of the Relationship between Dividend Changes and Future Profitability of Companies Quoted at the NSE. Mulwa (2006) examined whether the signaling efficiency of dividend changes on the future profitability of quoted companies at the NSE. The population consisted of the 48 companies listed at the NSE and covered a period of 5 years (1998 - 2002). Secondary data obtained from NSE, Stockbrokers, KBS & CMA was used.

Comparison of actual dividend changes in relation to the earnings of the firm and also regression analysis was employed. From the comparison, it was established that at least in the year of dividend payment a relationship exists. However, for the first and second year after, though a relationship existed, it was very insignificant.

## **Information Content on Dividend Announcements by Companies Quoted at NSE**

Kiptoo (2006) in a study to investigate the information content of dividends announced by the firms quoted at the NSE, with a population of all the firms listed at the exchange market and chose a sample of 13 firms which met the criteria of the researcher, using regression analysis concluded that cash dividend payment do affect the share prices and earnings in the firms quoted at the NSE.

### **2.5 Conclusion**

Since the theory bases its ground on the front of inefficiency of the market and asymmetry of information. Some of the international studies and empirical evidences also contradict the information signaling hypothesis. The consistency of information signal of dividend is still unresolved more so when dividends are reduced. Benartzi et al. (1997) detected an increase in subsequent earnings after dividend cut which is not in line with the contention that a dividend omission indicates less-than-anticipated earnings in the future.

Watts (1973) also linked no relationship between dividend changes and subsequent earnings. Benartzi et al (1997) observed that earnings improvement within one year after dividend cut. Similarly Mulwa (2006) too observed considerable changes in earnings in the year of dividend announcement and slight increase in earnings after year one and two after dividend increment. The studies in the local industry have been carried out long ago to necessitate a renewed examination in the evasive theory of signaling. The reliability of the dividend signal measured by consequent earnings performance is still an unresolved issue, especially when dividends are reduced. These two factors builds ground for more



research to be carried out to establish the dependability of dividend signaling hypothesis and issues affecting it other than the information asymmetry.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research methodology employed in this study. It includes the research design, population and sampling criteria, data collection and data analysis tools.

#### **3.2 Research Design**

An event study research design was used in the study. This is the most appropriate since there were sufficient secondary data available in the market for analysis to establish the facts. The research depended on secondary data from companies' published financial statements.

#### **3.3 Population**

This research was based on all the 48 companies listed at the NSE, (as provide in appendix 1).

#### **3.4 Sampling**

The sample of this research consisted of all the companies listed consistently at the NSE for the past 10 years in order to deduce a meaningful relationship, that is, 2000 to 2009. The required firms had to have been listed consistently for the past 10 years and must have had steady earnings. These companies were 39 in numbers (Appendix I)

### **3.5 Data Collection**

The research was based on the data collected from the NSE. The data was primarily of secondary nature as it is obtained from companies' published financial reports at the NSE library. The data collected were dividends paid, dividend payout ratio and the earnings by the companies as stated in their financial reports for the past five years from 2005 to 2009.

### **3.6 Data Analysis**

With the collection of the required data, statistical techniques were applied to derive a relationship from the data for the period under study. The analysis started with the determination of various measures of central tendency such the mean, mode and median. Standard deviation was also computed to determine the measure of dispersion.

The research also used multiple regression technique and correlation which helped in establishing whether a relationship exists or not. Parametric tests i.e. f and t-test were used to measure statistical significance in the difference of mean ratios. The research applied the Allen, Bernardo, and Welch Model (2000) to investigate the market reaction to dividend announcements and the relation between dividend changes and contemporaneous and future earnings. The regression model used by the study was:

$$E_t = \beta_0 + \beta_1 \text{DPR}_{(t-1)} + \varepsilon$$

Whereby  $E_t$  is the annual earnings in year  $t$  while  $\text{DPR}_{(t-1)}$  is the one-year lag for dividend payout ratio.  $\beta_0$  is the regression intercept,  $\beta_1$  is the regression coefficient and  $\varepsilon$  is the error term of the model.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSIONS

#### 4.1 Introduction

This chapter presents the information processed from the data found by the study on determinants of dividend policy from the companies listed at the Nairobi Stock Exchange. The data was collected on 39 companies that had traded for the period ranging from 2000 to 2009.

The study used both descriptive statistics on the annual earnings and regression analysis with also included the f and t-test. These tests were aimed at showing the significance of the regression model and the coefficients so obtained by comparing the means of the independent and dependent variables. The study also conducted a regression analysis of the annual earnings before taxation and one year backwards lag of annual earnings.

#### 4.2 Descriptive Statistics

Table 4.1: Earnings before Tax in Thousands

Year	Mean	Standard Deviation	Minimum	Maximum	Median	First Quartile	Third Quartile
2009	1,687,996	3,182,294	-5,664,000	12,316,332	558,890	217,765	1,905,770
2008	1,669,697	2,408,701	-169,688	10,635,773	715,889	214,945	1,838,188
2007	1,522,827	2,338,074	-86,666	10,635,771	620,640	161,593	1,477,260
2006	1,288,926	2,038,279	-14,865	8,577,049	498,605	141,832	1,188,537
2005	1,063,944	1,798,430	-524,894	8,599,051	295,920	120,961	1,052,340
2004	838,492	1,471,966	-391,594	7,041,897	240,235	89,432	913,169
2003	485,245	1,356,818	-4,112,193	4,790,000	202,948	11,263	579,810
2002	291,024	1,255,472	-4,178,557	3,400,411	112,799	2,941	365,183
2001	335,777	1,218,215	-4,105,915	4,235,000	118,175	-668	383,620
2000	188,815	1,172,671	-4,157,793	3,147,004	110,159	-41,849	327,633

Table 4.1 presents the descriptive statistics of the annual 10 year earnings presented in appendix III. The data shows an annual increase in the means of earning from Ksh188,815,000 in 2000 to Ksh1,687,996,000 in 2009. The variability of the earnings from one company to the other also increased in tandem from Ksh1,172,671,000 in 2000 to Ksh3,182,294,000 in 2009. This indicates that while some companies performed better with time, other companies had poor performance in the same period. This is also supported by the minimum and maximum values of the earnings which shows that while 2009 had the best performance with the best company having an earnings of Ksh12,316,332,000 the poorest performance was found in the same year at a loss of Ksh5,664,000,000.

The median (second quartile) values shows that at least half of the companies sampled made profits for the 10 year period while the first quartile values shows that, apart from 2000 and 2001, at least 75% of the companies made profits.

**Table 4.2: Dividend Payout Ratios (DPR)**

<b>Year</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Median</b>	<b>First Quartile</b>	<b>Third Quartile</b>
<b>2009</b>	32.0	29.4	0	99.77	31.88	4.42	55.02
<b>2008</b>	29.4	29.6	0	99.98	24.59	0	51.75
<b>2007</b>	35.4	41.1	0	213.98	28.84	8.25	44.66
<b>2006</b>	47.6	42.2	0	198.01	35.71	17.4	73.02
<b>2005</b>	47.7	96.1	0	581.55	32.62	0.2	61.19
<b>2004</b>	37.8	40.5	0	136.34	32.6	0	56.09
<b>2003</b>	45.3	51.0	0	216.23	38.07	0	75.69
<b>2002</b>	39.8	45.8	0	170.28	18.79	0	71.61
<b>2001</b>	45.5	77.2	0	424.46	16.19	0	59.58
<b>2000</b>	30.4	41.6	0	135.57	1.875	0	56.38
<b>1999</b>	43.3	70.6	0	417.07	35.91	0	63.01

Table 4.2 displays the descriptive statistics of the dividend payout ratios computed as the ratio of the dividend paid per share and the earnings obtained per share (Appendix II). The table shows that, unlike earnings, there were no patterns in the means of the annual DPR with the highest value of the mean of the DPR being 47.7 in 2005. The table also shows that in the 10 year period, there were companies that had zero payout ratios although, in the least, half of the companies had positive payout ratios. The table also shows that apart from the 2000 to 2004 year period and 2008, at least  $\frac{3}{4}$  of the companies had positive payout ratios.

### **4.3 Regression Models**

The study used simple regression analysis to present the signaling effect of dividend payment on earnings by establishing relationship between earnings before tax and one year lags of the profits. The regression model was of the form:

$$E_t = \beta_0 + \beta_1 \text{DPR}_{(t-1)} + \varepsilon$$

Whereby  $E_t$  is the annual earnings in year  $t$  while  $\text{DPR}_{(t-1)}$  is the dividend payout ratios.  $\beta_0$  is the regression intercept,  $\beta_1$  is the regression coefficient while is the multiplier effect of today's dividend payout ratio on future earnings and  $\varepsilon$  is the error term of the model or the ANOVA significance interval value which should be ( $p \leq 0.05$ ).

## Year 2000 Statistics

**Table 4.3: Analysis of Variance - 2000**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	293,203,661,457.672	1	293,203,661,457.672	0.209	0.650
<b>Residual</b>	51,962,771,578,366.7	37	1,404,399,231,847.75		
<b>Total</b>	52,255,975,239,824.4	38			

Table 4.3 above presents the analysis of variance (ANOVA) statistics from the comparison of the difference of means between earnings (2000) and one year lagged (1999) dividend payout ratios. This was meant to test the proposition that there is no difference in means of earnings and their previous 1 year lagged dividend payout ratio. The study established that there were differences in means of earnings and their previous 1 year lagged dividend payout ratio given a f-significance value of 0.650 which also points at the fact that the regression model was insignificant. This points at the model has an error probability of 65%.

**Table 4.4: Regression Coefficient -2000**

	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
(Constant)	135,825.227	222,395.248		0.611	0.545
Dividend Payout Ratio	1,255.031	2,746.723	0.075	0.457	0.650

Table 4.4 presents the findings of the regression analysis between earnings and one-year lagged dividend payout ratio of the firms listed at the NSE. From the findings the following regression model could be arrived at:

$$E_t = 135,825.227 + 1,255.031DPR_{t-1}$$

This means that when a company's DPR is zero, company would still earn Ksh135,825,227 in the next financial year while a unit increase in DPR would lead to 1,255.031 increase in earnings. However, the t-significance value of 0.650 shows that this estimate is wrong as it has a probability of being 65% wrong in its prediction.

### Year 2001 Statistics

**Table 4.5: ANOVA - 2001**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	11,347,580,806,537	1	11,347,580,806,537	9.321	0.004
<b>Residual</b>	45,046,193,219,815.9	37	1,217,464,681,616.65		
<b>Total</b>	56,393,774,026,353.0	38			

Table 4.5 above presents the analysis of variance in the 2001 model in which earnings of the same period was compared with 2000 DPR declared by the companies listed at the NSE. From the f-significance value of 0.004, it can be concluded that there was a relationship between earnings and its one-year lagged DPR; no differences in means.

**Table 4.6: Regression Coefficients – 2001**

	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
<b>(Constant)</b>	-54,851.394	218,147.382		-0.251	0.803
<b>Dividend Payout Ratio</b>	13,201.492	4,324.138	0.449	3.053	0.004



Table 4.6 illustrates the findings of the regression 2001 model from which the regression model below is developed:

$$E_t = -54,851.394 + 13,201.492DPR_{t-1}$$

It can thus be deduced that lack of dividends payment (DPR =0) in a financial year would predict a loss of Ksh54,851,394 in the next financial year while a unit increase in DPR leads to a 13,201.492 increase in the future earnings. However, the t-significance value for the intercept yield insignificant outcome at 0.803

### Year 2002 Statistics

**Table 4.7: ANOVA – 2002**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	1,423,584,726,739.3	1	1,423,584,726,739.300	0.901	0.349
<b>Residual</b>	58,472,418,591,553.1	37	1,580,335,637,609.540		
<b>Total</b>	59,896,003,318,292.4	38			

ANOVA table presented above shows that the regression model that relates 2003 earnings with 2002 dividend payout ratio would be insignificant; f-significance at 0.349 (p>0.05).

**Table 4.8: Regression Coefficient – 2002**

	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
<b>(Constant)</b>	178,818.361	233,447.632		0.766	0.449
<b>Dividend Payout Ratio</b>	2,530.951	2,666.655	0.154	0.949	0.349

The regression results presented in table 4.8 depicts that lack of dividend payment would signal to a Ksh178,818,361 payment while a unit increase in dividend paid in relation to retention of earnings would lead to a 2,530.951 increase in earnings. However, this is insignificant at  $p = 0.349$ .

$$E_t = 178,818.361 + 2,530.951DPR_{t-1}$$

### Year 2003 Statistics

**Table 4.9: ANOVA - 2003**

	Sum of Squares	df	Mean Square	F	Sig.
<b>Regression</b>	6,816,927,315,389.09	1	6,816,927,315,389.09	3.995	0.05
<b>Residual</b>	63,139,327,912,334.4	37	1,706,468,321,954.98		
<b>Total</b>	69,956,255,227,723.4	38			

Table 4.9 is on the results of analysis of variance between the means of earnings and that of dividend payout ratio. The study established an f-significance value of 0.05 which points at the models significance which also validates the results of the regression model in table 4.10.

**Table 4.10: Regression Analysis – 2003**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
<b>(Constant)</b>	124,555.064	276,265.296		0.451	0.655
<b>Dividend Payout Ratio</b>	9,285.077	4,645.584	0.312	1.999	0.05

Regression coefficients in table 4.10 would lead to the following regression analysis which shows that:

$$E_t = 124,555.064 + 9,285.077DPR_{t-1}$$

The findings thus shows that lack of dividend payments would signal future earnings of Ksh124,555,064 while a unit increase in company's preference for dividends payment to retention of earnings would signal an increase of 9,285.077 in future earnings at 0.05 significance level.

### Year 2004 Statistics

**Table 4.11: ANOVA – 2004**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	8,392,022,823,382.44	1	8,392,022,823,382.440	4.199	0.048
<b>Residual</b>	73,941,946,781,728.4	37	1,998,430,994,100.770		
<b>Total</b>	82,333,969,605,110.80	38			

Table 4.11 on ANOVA depicts an association between dividend payment and future earnings given the f-significance value of 0.048 ( $p < 0.05$ ). This also shows that the regression analysis was significant.

**Table 4.12: Regression Analysis - 2004**

	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
<b>(Constant)</b>	420,212.023	304,803.907		1.379	0.176
<b>Dividend Payout Ratio</b>	9,218.423	4,498.502	0.319	2.049	0.048

From table 4.12, the following regression model was established:

$$E_t = 420,212.023 + 9,218.423DPR_{t-1}$$

The regression coefficients depicts that lack of dividend payments would signal a future earnings of Ksh420,212,023 while a unit increase in DPR would lead to a 9,218.423 increase in the next years earnings.

### Year 2005 Statistics

**Table 4.13: ANOVA - 2005**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	10,588,892,676,201.2	1	10,588,892,676,201.20	3.488	0.070
Residual	112,316,439,594,752	37	3,035,579,448,506.81		
Total	122,905,332,270,953	38			

The ANOVA statistics above shows that 2005 earnings and 2004 DPRs can relate at 90% confidence level. Indicating that earnings and DPR can only relate at 0.07 confidence interval.

**Table 4.14: Regression Analysis – 2005**

	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
<b>(Constant)</b>	572,120.12	383,639.982		1.491	0.144
<b>Dividend Payout Ratio</b>	13,034.74	6,979.074	0.294	1.868	0.070

From table 4.14, the following regression model can be established:

$$E_t = 572,120.12 + 13,034.74DPR_{t-1}$$

The regression model shows that when the DPR is zero, the future earnings would be Ksh572,120,120 while a unit increase in DPR would lead to a 13,034.74 increase in earnings in the next financial year.

### Year 2006 Statistics

**Table 4.15: ANOVA - 2006**

	Sum of Squares	df	Mean Square	F	Sig.
<b>Regression</b>	36,007,569,627,694.9	1	36,007,569,627,694.900	10.932	0.002
<b>Residual</b>	121,866,529,434,439	37	3,293,689,984,714.570		
<b>Total</b>	157,874,099,062,134	38			

The ANOVA statistics above shows that 2006 earnings and 2005 DPRs can relate at 99% confidence level. Indicating that the regression model is significant at 0.002 confidence interval.

**Table 4.16: Regression Coefficient - 2006**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
<b>(Constant)</b>	805,883.45	325,264.189		2.478	0.018
<b>Dividend Payout Ratio</b>	10,123.086	3,061.663	0.478	3.306	0.002

From table 4.16, the following regression model can be established:

$$E_t = 805,883.45 + 10,123.086DPR_{t-1}$$

The regression model shows that when the DPR is zero, the future earnings would be Ksh805,883,450 while a unit increase in DPR would lead to a 10,123.086 increase in earnings in the next financial year. Table 4.16 also indicates that both the regression intercept and coefficient were significant at 0.018 and 0.002 respectively.

### Year 2007 Statistics

**Table 4.17: ANOVA – 2007**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	1,872,723,383,556.620	1	1,872,723,383,556.620	0.331	0.569
<b>Residual</b>	203,819,010,611,317.000	36	5,661,639,183,647.700		
<b>Total</b>	205,691,733,994,874.000	37			

The ANOVA statistics above shows that 2007 earnings and 2006 DPRs have no relationship given an mf-significance of 0.569.

**Table 4.18: Regression Coefficient – 2007**

	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
<b>(Constant)</b>	1,306,285.284	586,064.775		2.229	0.032
<b>Dividend Payout Ratio</b>	5,330.770	9,268.815	0.095	0.575	0.569

From table 4.14, the following regression model can be established:

$$E_t = 1,306,285.284 + 5,330.770DPR_{t-1}$$

The regression model shows that when the DPR is zero, the future earnings would be Ksh1,306,285,284 while a unit increase in DPR would lead to a 5,330.770 increase in earnings in the next financial year. However only the regression intercept was significant at 0.032.

### Year 2008 Statistics

**Table 4.19: ANOVA – 2008**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	11,575,087,003,367.600	1	11,575,087,003,367.6	2.050	0.161
<b>Residual</b>	208,894,854,986,069.000	37	5,645,806,891,515.37		
<b>Total</b>	220,469,941,989,436.000	38			

ANOVA table presented above shows that the regression model that relates 2008 earnings with 2007 dividend payout ratio would be insignificant; f-significance at 0.161 ( $p > 0.05$ ).

**Table 4.20: Regression Coefficient – 2008**

	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
<b>(Constant)</b>	1,193,576.091	505,305.720		2.362	0.024
<b>Dividend Payout Ratio</b>	13,436.110	9,383.706	0.229	1.432	0.161

The regression results presented in table 4.20 depicts that lack of dividend payment would signal to a Ksh1,193,576,091 payment while a unit increase in dividend paid in

relation to retention of earnings would lead to a 13,436.110 increase in earnings. However, this is insignificant at  $p = 0.161$ . However, the regression intercept was significant at  $p = 0.024$ .

### Year 2009 Statistics

**Table 4.21: ANOVA – 2009**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	65,831,412,202,103.50	1	65,831,412,202,103.50	7.485	.010
<b>Residual</b>	316,640,756,458,393.00	36	8,795,576,568,288.70		
<b>Total</b>	382,472,168,660,497.00	37			

Table 4.21 is on the results of analysis of variance between the means of earnings and that of dividend payout ratio. The study established an f-significance value of 0.010 which points at the models significance which also validates the results of the regression model in table 4.22.

**Table 4.22: Regression Coefficient – 2009**

	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
<b>(Constant)</b>	367720.280	691830.388		.532	.598
<b>DPR 2008</b>	45100.196	16485.192	.415	2.736	.010

Regression coefficients in table 4.22 would lead to the following regression analysis which shows that:



$$E_t = 367720.280 + 45100.196DPR_{t-1}$$

The findings thus shows that lack of dividend payments would signal future earnings of Ksh367,720,280 while a unit increase in company's preference for dividends payment to retention of earnings would signal an increase of 45100.196 in future earnings at 0.01 significance level.

#### 4.4 Model Fitness - Correlation and Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
2000	0.075	0.006	-0.021	1,185,074	1.891
2001	0.449	0.201	0.180	1,103,388	2.230
2002	0.154	0.024	-0.003	1,257,114	2.226
2003	0.312	0.097	0.073	1,306,319	2.215
2004	0.319	0.102	0.078	1,413,659	2.553
2005	0.294	0.086	0.061	1,742,291	2.328
2006	0.478	0.228	0.207	1,814,853	2.421
2007	0.095	0.009	-0.018	2,379,420	2.031
2008	0.229	0.053	0.027	2,376,091	2.107
2009	0.415	0.172	0.149	2,965,734	2.132

a. Predictors: (Constant), 1 Year Lagged Dividend Payout Ratio

b. Dependent Variable: Earnings before Taxation

The study also performed correlation test the relationship between dividend payments and future earnings of firma listed at the NSE. The correlation coefficients had positive values depicting positive relationship between dividend payments and future earnings. However, the correlation values ranged from the highest value of 0.478 to a minimal value of 0.075 depicting that though positive, the association between the two was weak given a coefficient of determination values ranging from 0.006 to 0.228. The Durbin Watson test results revolved around a value of 2.0 signifying lack of autocorrelation of regression model residuals.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the discussions drawn from the data findings analyzed and presented in the previous chapter. The chapter is structured into summary of findings, conclusions, recommendations and areas for further research.

#### **5.2 Summary of Findings**

The study's findings shows that although the annual earnings of the firms listed at the NSE has been on the increase from Ksh188,815,000 in 2000 to Ksh1,687,996,000 in 2009, dividend payment have not followed a particular pattern with the highest average value of DPR being 47.7 and the minimal value being 30.4. However, across the period, there were companies that did not issue dividend while other companies like Barclays Bank of Kenya issued highest dividends per earnings at a rate of 581.55. It also follows that from 1999 to 2004 at least quarter of the companies studied did not issue dividends while on average the companies within the third fourth quartile had DPR of more than 44.66%.

The study also established that six out of the ten regressions done on annual basis to relate earnings with one year lagged dividend paid had significant results. These are presented below:

2001: $E_t = -54,851.394 + 13,201.492DPR_{t-1}$	$p = 0.004$
2003: $E_t = 124,555.064 + 9,285.077DPR_{t-1}$	$p = 0.050$
2004: $E_t = 420,212.023 + 9,218.423DPR_{t-1}$	$p = 0.048$
2005: $E_t = 572,120.12 + 13,034.74DPR_{t-1}$	$p = 0.070$
2006: $E_t = 805,883.45 + 10,123.086DPR_{t-1}$	$p = 0.002$
2009: $E_t = 367720.280 + 45100.196DPR_{t-1}$	$p = 0.010$

The study found that the cross-sectional regression analysis of earnings and one-lagged dividend payout ratio produced significant results in 2001, 2006 and 2009 at 99% confidence level 2003 and 2004 at 95% confidence level and in 2005 at 90% confidence level. The regression for year 2006 had the highest significance as the t-significances for both the intercept and regression co-efficient were significant at  $p = 0.018$  and  $p = 0.002$  respectively. The same year also had the highest correlation coefficient of 0.478 and R-squared value of 0.228. Nonetheless, all these results illustrated that dividend payment had positive signaling effect on the future earnings of companies listed at the NSE. However, the correlation coefficients indicated that this relationship was not strong.

### 5.3 Conclusions

From the foregoing discussion it can be concluded that dividend payout ratio is positively related with future earnings although the association is low. **This is more so, seen for, while** the average earnings per company increased on an annual basis, the dividend payout ratio did not follow the same pattern. Correlation tests indicated a moderate association at 0.478 of which dividend payout ratio accounts for 22.8% of the changes in earnings. This study concurs with Mulwa's (2006) findings that dividend changes and future profitability of companies are correlated at least in the year of dividend change.

#### **5.4 Recommendations**

Given that dividend had a relationship with earnings though the relationship was weak, the study recommends that shareholders should not overlook changes in dividend payout ratio as it might signal higher or lower future earnings. Since payout ratios across the market did not take an upward trend unlike earnings, therefore, dividend payment do not necessarily indicate higher future earnings. Hence, the study also recommends that shareholders should understand when a company has unfavorable dividend policy (dividend payout ratio) due to either bad profits or investment in growth opportunity since the same not unequivocally indicate a dip in future earnings.

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

Companies earnings do not necessarily use their earnings for dividends and some might use the same to invest in short-term or long-term business ventures which positively correlates earnings hence lack of earnings do not necessarily indicate a decline in future performance. However, the study did not measure these intervening variables hence the findings might have been affected by the same.

#### **5.6 Areas for Further Research**

The study suggests that future studies be undertaken on the effects appropriation of earnings of companies listed at the NSE on the future earnings. This would objectively bring out what signals the future earnings of companies.

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## APPENDICES

### Appendix I: Listed Companies Listed at Nairobi Stock Exchange

<b>Main Investment Market Segment (MIMS)</b>	Standard Chartered Bank Ltd.
	NIC Bank Ltd.
<b>Agriculture Sector</b>	<b>Industrial and Allied Sector</b>
Rea Vipingo Ltd.	Athi River Mining Ltd.
Sasini Tea & Coffee Ltd.	BOC Kenya Ltd.
Kakuzi Ltd.	British American Tobacco Kenya Ltd.
<b>Commercial and Services Sector</b>	E.A. Cables Ltd.
Marshalls E.A. Ltd.	E.A. Breweries Ltd.
Car & General Ltd.	Sameer Africa Ltd.
Kenya Airways Ltd.	Kenya Oil Ltd.
CMC Holdings Ltd.	Unga Group Ltd.
Nation Media Group Ltd.	Bamburi Cement Ltd.
TPS (Serena) Ltd.	Crown Berger (K) Ltd.
<b>Financials and Investments Sector</b>	E.A Portland Cement Co. Ltd.
Standard Group Ltd.	Kenya Power & Lighting Co. Ltd.
Barclays Bank of Kenya Ltd.	Total Kenya Ltd.
CFC Stanbic Bank Ltd.	<b>Alternative Investment Market Segment (AIMS)</b>
Housing Finance Ltd.	Eaagads Ltd
Centum Investment Ltd.	Express Ltd
Kenya Commercial Bank Ltd.	Williamson Tea Kenya
National Bank of Kenya Ltd.	Kapchorua Tea Co. Ltd
Pan Africa Insurance Holdings Co. Ltd	Limuru Tea
Diamond Trust Bank of Kenya Ltd.	
Jubilee Insurance Co. Ltd	



## Appendix II: Dividend Payout Ratio

<b>Agriculture</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>	<b>1999</b>
Rea Vipingo Ltd.	0.2	0	0	0	0	0.37	7	1	0	0	0
Sasini Tea & Coffee Ltd.	15	0	0	16	0	12	0	1	1	2	0.5
Kakuzi Ltd.	10.85	7	0	0	0	23	0	0	0	-28	106.8
Marshalls E.A. Ltd.	0	0	34	32	0	0	0	0	0	0	0
Car & General Ltd.	8	7	9	11	8	41	24.6	0	0	0	0
Kenya Airways Ltd.	-11	21	20	17	19	27	58	32	43	21	0
CMC Holdings Ltd.	38	28	27	26	21	18	14	16	21	15	11.35
Nation Media Group Ltd.	70	30	70	109	60	50	44	3	2	2	1.75
TPS (Serena) Ltd.	35	59	32	34	135	33	170	40	44	51	48.75
Standard Group Ltd.	14	28	25	0	0	0	0	0	0	0	0
Barclays Bank of Kenya Ltd.	56	49	46	50	582	77	85	93	88	89	68.46
CFC Stanbic Bank Ltd.	-	16	32	29	24	18	24	46	57	42	42.47
Housing Finance Ltd.	49	51	0		0	0	0	0	0	1	0.81
Centum Investment Ltd.	0	29	22	36	56	68	76				
Kenya Commercial Bank Ltd.	54.31	53	47	49	60	51	31	0	0	0	0
National Bank of Kenya Ltd.	0	0	0	0	0	0	0	0	0	0	0
Pan Africa Insurance Co. Ltd	59	-	38	73	33	51.17	0	0	0	0	2.78
Diamond Trust Bank of Kenya	19	20	31	29	30	42	50	63	78	29	61.02
Jubilee Insurance Co. Ltd	22	27	29	27	26	33	38	38	52	81	66.82
Standard Chartered Bank Ltd.	69	84	78	88	83	96	75	92	91	125	70.22
NIC Bank Ltd.	15	14	11	49	75	76	76	72	51	47	49.27
Athi River Mining Ltd.	23	25	29	35	35	0	48	65	51	0	0
BOC Kenya Ltd.	86	66	68	98	52	55	56	81	92	93	61.79
British American Tobacco Ltd.	100	100	123	100	90	136	110	109	131	136	63.64
E.A. Cables Ltd.	68	44	44	50	48	57	216	170	140	73	417.07
E.A. Breweries Ltd.	74	69	83	72	62	51	109	54	60	58	60.91
Sameer Africa Ltd.	88	0	0	0	68	101	89	120	83	95	71.32
Kenya Oil Ltd.	37	45	-	27	25	24	23	22	20	40	25.58
Unga Group Ltd.	0	0	0	0	0	0	0	0	0	0	0
Bamburi Cement Ltd.	57	64	61	76	89	129	95	0	0	0	57.47
Crown Berger (K) Ltd.	34	77	31	56	69	0	55				
E.A Portland Cement Co. Ltd.	1	0	31	57	37	-59	70	110	12	0	0
Kenya Power & Lighting Co.	20	18	14	7	9	0	0	0	0	-5	48.43
Total Kenya Ltd.	36	62	83	89	81	75	81	71	0	0	34.53
Eaagads Ltd	0	0	0	198	0	0	0	104	424	0	109.69
Express Ltd	0	0	22	19	0	0	0	0	0	0	0

Williamson Tea Kenya	32	-4	8	50	41	51	-16	13	32	28	37.29
Kapchorua Tea Co. Ltd	36	-14	20	75	37.96	42	-14	12	156	66	63.42
Limuru Tea	33	71	214	124	-95	93	75	87	0	93	64.51

**Source: NSE (2004, 2008 and 2010)**

### Appendix III: Earnings in Thousands

<b>Agriculture</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>
Rea Vipingo Ltd.	214066	227,219	167,785	157,358	185,139	177941	10,859	47,108	8,955	-46,292
Sasini Tea & Coffee Ltd.	759,722	1,266,406	-70,723	349,493	-524,894	1,104,137	-93,828	-68,415	36,436	161594
Kakuzi Ltd.	558890	390,189	270,330	189,752	-112,082	92,996	-19,670	8,471	-95,934	-85,766
Marshalls E.A. Ltd.	-117,479	-169,688	42,321	53,485	61,850	22,256	22,045	1,799	-356,066	-104,028
Car & General Ltd.	279,390	321,565	257,446	176,815	283,010	44,006	61487	20,074	-11,069	10,005
Kenya Airways Ltd.	-5,664,000	5,513,000	5,975,000	6,960,000	4,652,000	2,075,000	756,000	1,059,000	2,044,000	2,853,000
CMC Holdings Ltd.	807,283	1,328,849	879,236	559,036	461,680	381,875	276,281	241,150	139,806	183,904
Nation Media Group Ltd.	1,617,400	1,910,300	1,601,600	1,150,800	1,018,400	894,700	872,600	635,200	390,200	296,100
TPS (Serena) Ltd.	520,002	330,014	617,380	498,605	140,300	197,540	42,968	168,987	138,699	117,113
Standard Group Ltd.	376,493	428,774	413,120	304,507	118,051	121,908	75,173	14,550	21,393	-126,226
Barclays Bank of Kenya Ltd.	9,002,000	8,016,000	7,078,800	6,475,000	5,427,000	5,391,000	4,790,000	2,550,000	4,235,000	3,035,000
CFC Stanbic Bank Ltd.	709,301	1,322,356	1,352,919	1,366,912	865,879	880,896	529,966	323,093	260,467	360,622
Housing Finance Ltd.	351,118	202,670	113,397	141,236	90,488	87,856	98,011	95,318	-255,765	78,618
Centum Investment Ltd.	475,653	985,280	1,185,778	696,489	373,999	348,451	202,948	306,611	227,160	321,767
Kenya Commercial Bank	6300361	6,012,862	4,225,982	3,166,753	1,947,608	1,073,467	750,151	-4,178,557	182,958	-765,631
National Bank of Kenya	2,159,441	1,796,565	1,610,084	934,177	859,161	743,478	491,902	390,142	-322,580	-1,619,719
Pan Africa Insurance Co.	173,647	-16,369	203608	94,266	175,345	91007	-68,776	-6,452	158,103	-54,661
Diamond Trust Bank Ltd.	1,929,862	1,604,296	1,055,270	705,954	426,614	240,235	204,106	112,799	51,407	200,346
Jubilee Insurance Co. Ltd	1,115,776	900,692	809,566	664,687	470,726	358,882	305,664	213,413	169,791	117,281
Standard Chartered Bank	6,728,447	4,719,814	4,910,188	3,810,427	3,512,681	2,690,985	4,009,954	3,212,008	3,231,694	3,147,004
NIC Bank Ltd.	1,526,793	1,484,174	1,049,907	677,072	403,010	372,556	359,301	340,224	377,040	451,165
Athi River Mining Ltd.	948,714	705,450	620,640	387,868	295,920	172,368	131,197	82,136	51,027	45,601
BOC Kenya Ltd.	231,682	295,179	399,769	333,705	291,257	220,980	210,720	154,990	118,175	110,159
British American Tobacco	2,108,964	2,416,913	2,049,596	1,746,526	2,008,971	1,750,602	1,677,595	1,310,423	851,343	682,970
E.A. Cables Ltd.	526,444	669,927	597,486	422,812	294,035	178,815	14,022	-4,954	24,112	46,698
E.A. Breweries Ltd.	12,316,332	10,635,773	10,635,771	8,577,049	8,599,051	7,041,897	3,640,784	3,400,411	2,499,117	1,798,105

Sameer Africa Ltd.	221,464	165,522	166,520	-14,865	294,253	400,473	255,709	310,834	448,879	396,412
Kenya Oil Ltd.	1,933,456	1,879,811	876,390	1,226,274	1,373,761	1,200,537	629,653	679,174	595,097	250,991
Unga Group Ltd.	260,439	564,016	156,665	142,427	155,017	-95,505	-16,448	-135,858	-292,157	-778,312
Bamburi Cement Ltd.	9,596,000	4,889,000	5,443,000	3,838,000	3,147,000	2,786,000	1,742,000	2,083,000	1,340,000	487,000
Crown berger (K) Ltd.	139,818	77,781	140,293	80,350	69,726	73,639	95,750	93,412	58,514	40,663
E.A Portland Cement Co.	1,881,678	715,889	1,112,625	924,364	1,086,280	-391,594	382,164	212,934	974,384	-538,860
Kenya Power & Lighting	4,782,433	2,738,309	2,648,691	2,497,983	1,979,276	873,684	-4,112,193	-2,849,116	-4,105,915	-4,157,793
Total Kenya Ltd.	733,699	1,031,368	781,935	677,194	798,190	931,638	756,645	604,776	-318,899	333,498
Eaagads Ltd	16,830	42,960	-2,892	9,107	12,868	-2,760	-6,572	6,391	2,656	3,115
Express Ltd	25,916	-52,864	112,380	102,508	76,580	10,237	-108,827	-32,908	-5,969	-37,405
Williamson Tea Kenya	145,341	-143,984	-86,666	139,754	123,870	94,884	-38,425	-38,300	215,539	112,461
Kapchorua Tea Co. Ltd	99,735	-103,081	-13,372	37,277	56,292	50,226	-18,043	-18,019	11,710	20,283
Limuru Tea	38,731	15,234	2,445	6,955	-4,490	13,898	11,666	4,082	-3,991	16,998

**Source: NSE (2004, 2008 and 2010)**

## **Appendix IV: Introductory Letter**

**The CEO,**

**Nairobi Stock Exchange,**

Dear Sir,

### **REF: REQUEST TO CARRY OUT RESEARCH ON NSE MARKET EFFICIENCY**

I am a student at the University of Nairobi, Faculty of Commerce pursuing a Master's degree in Business Administration. As a requirement in fulfilment of this degree a I need to carry out a research on "*Signalling Effect Of Dividend Payment On The Earnings Of The Firm*".

I have chosen NSE since I can obtain information on the financial performance being that listed companies are required to file annual financial reports with you. My desire is to obtain the annual dividend payout ratios and earnings before taxation of firms listed consistently from 1999 to 2009.

Any assistance accorded to me in my noble cause and information given shall be treated as confidential and will be used purely for the purpose of this research and a final copy o the document shall be availed to you upon request. Your cooperation will be highly appreciated and thank you in anticipation.

Yours faithfully,

Mohamed Ali Abdi.      D61/71653/2008