

**EFFECT OF DIVIDEND PAYOUT RATIO ON THE SHARE PRICES  
OF THE COMPANIES LISTED ON THE NAIROBI SECURITIES  
EXCHANGE**

**ZHANG HAIFENG**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF  
THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION,  
SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

**2018**

## DECLARATION

I declare that this research project is my own work and it has not been submitted for any degree or examination in any other university.

Signature: ..... Date:.....

**Zhang Haifeng**

**D61/77366/2015**

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

Signature: ..... Date:.....

**Dr. Winnie Nyamute**

**Senior Lecturer, Department of Finance and Accounting,**

**School of Business, University of Nairobi.**

## **DEDICATION**

This research project is dedicated to my wife and two most lovely children.

## **ACKNOWLEDGEMENT**

I wish to acknowledge almighty God for the gift of life and chance to come this far. I also wish to express my appreciation to my supervisor Dr. Winnie Nyamute for her guidance throughout the whole research writing process, also the contribution and encouragements made by my family members especially for their caring support and all those who made this research project a success. I also extend my gratitude to the lecturers who taught me in the MBA program, therefore enriching my research with knowledge, especially Dr. Abdullatif Essajee, who taught me Financial Accounting and aroused my interest in corporate finance. My appreciation finally goes to my classmates for their encouragements throughout the research process.

## TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>ii</b>
<b>DEDICATION.....</b>	<b>iii</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>iv</b>
<b>LIST OF TABLES .....</b>	<b>vii</b>
<b>LIST OF FIGURES .....</b>	<b>viii</b>
<b>ABSTRACT.....</b>	<b>viii</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>x</b>
<b>CHAPTER ONE: INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the Study .....	1
1.1.1 Dividend Payout Ratio .....	2
1.1.2 Share Prices .....	3
1.1.3 Dividend Payout Ratio and Share Prices.....	4
1.1.4 Nairobi Securities Exchange .....	5
1.2 Research Problem .....	5
1.3 Research Objective .....	8
1.4 Value of the Study .....	8
<b>CHAPTER TWO: LITERATURE REVIEW.....</b>	<b>9</b>
2.1 Introduction.....	9
2.2 Theoretical Review .....	9
2.2.1 Dividend Irrelevance Theory.....	9
2.2.2 Tax Differential Theory.....	10
2.2.3 Bird in the Hand Theory.....	11
2.3 Determinants of Share Prices.....	12
2.3.1 Dividend Payout Ratio.....	12
2.3.2 Capital Structure .....	13
2.3.3 Company Size .....	13
2.3.4 Corporate Governance .....	14
2.4 Empirical Review.....	15
2.5 Conceptual Framework.....	19
2.6 Summary of Literature Review.....	19

<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>20</b>
3.1 Introduction.....	20
3.2 Research Design.....	20
3.3 Population .....	20
3.4 Data Collection .....	20
3.5 Diagnostic Tests.....	<b>21</b>
3.6 Data Analysis .....	21
3.7 Test of significance.....	22
<b>CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATION ...</b>	<b>23</b>
4.1 Introduction.....	<b>23</b>
4.2 Descriptive Statistics.....	<b>23</b>
4.3 Correlation Analysis .....	25
4.4 Regression Analysis.....	26
4.5 Interpretation and Discussion of Results .....	28
<b>CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS</b>	<b>30</b>
5.1 Introduction.....	30
5.2 Summary of the Findings.....	30
5.3 Conclusions.....	31
5.4 Recommendations.....	32
5.5 Limitations of the Study.....	33
5.6 Suggestions for Further Research .....	34
<b>REFERENCES.....</b>	<b>36</b>
Appendix 1: List of Companies Listed on the NSE.....	39
Appendix 2: Data .....	42

## LIST OF TABLES

<b>Table 4.1:</b> Descriptive Statistics Analysis.....	24
<b>Table 4.2:</b> Correlation Matrix.....	25
<b>Table 4.3:</b> Model Summary.....	26
<b>Table 4.4:</b> Summary of One Way ANOVA .....	26
<b>Table 4.5:</b> Regression Coefficients .....	27

## LIST OF FIGURES

Figure 2.1: Conceptual Framework .....	19
--	----



## **ABSTRACT**

As a company earns profits, it can pay it back to investors as dividends or it can retain it within the business for reinvesting. Dividend payout is dependent on lots of factors such as type of industry, trends of profits, taxation policy and liquidity. The main objective of this study was the effect of dividend payout ratio on the share prices of the companies listed on the Nairobi Securities Exchange. The study period was a five-year period from 2013 to 2017. The study involved the use of a descriptive research design using a sample of 60 companies listed on the NSE. Secondary data from the audited financial statements of the listed companies and the NSE's reports on share prices were used. The data collected was systematically organized in a manner that facilitated analysis using the Statistical Package for Social Sciences (SPSS). Data was analyzed on the basis of the mean and the F test statistic was computed at 5% significance by regression analysis. To test the strength of the model and the effect of dividend payout ratio on the share prices of the companies listed on the Nairobi Securities Exchange, the study conducted an Analysis of Variance (ANOVA). From the findings, the F statistic was 3.579 and was found to be significant, dividend policy had a t-value of 3.142 which was significant, capital structure had a t-value of 0.117 which was insignificant, firm size had a t-value of 0.615 which was insignificant and inflation rate had a t-value of -0.662 which was significant. The study concluded that dividend payout ratio affects the share prices of the companies listed on the Nairobi Securities Exchange. The study recommends that companies should pay dividends since they are relevant and they affect the share prices. In addition, dividends are a signal to investors and the market of how the firm is performing. Finally the study recommends the inclusion of the qualitative aspects that are likely to affect the share prices to be included in the model of analysis. This will ensure both the qualitative and quantitative factors are considered in the analysis to ensure the results are more conclusive.

## **LIST OF ABBREVIATIONS**

<b>CMA</b>	Capital Markets Authority
<b>GDP</b>	Gross Domestic Product
<b>MM</b>	Modigliani and Miller
<b>NSE</b>	Nairobi Securities Exchange

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

The payment of dividends in the corporate world is very critical. This is based on the fact that they constitute a major cash outlay for most of the business entities and this is one of the ways the investors get a return from the companies they have invested in (Kim, 2013). Most companies do not pay out all of the firm's cash flows as dividends in the real world. The monies are retained as capital gains and in the process, this will act as a source of internal financing which is less expensive (Ross, 1995).

This study was anchored on the bird in the hand theory (Gordon, 1962). The theory argues that investors would rather have the cash dividend put as the bird in hand rather than future capital gains. Some theorists have argued that when the dividend payout ratio is increased, the value of the shares also increase. Other theorists have argued that the dividend payout ratio has no significant effect on the share prices of the business entities. Therefore it is the responsibility of the finance managers to gauge based on these conflicting theories how the dividend payouts will affect the share prices.

The performance of the companies as reflected in the share prices has been the basis of the declaration and payment of the dividends globally with better performing companies paying higher dividends compared to poor performing companies not paying dividends at all. Nevertheless, the determination of the ideal dividend payments is a very important issue in corporate finance world (Pandey, 2011).

### **1.1.1 Dividend Payout Ratio**

Dividend payout ratio is the proportion of net income business entities pay their shareholders in dividends. It is calculated as total dividend for the period divided by the net income available to common stakeholders. That proportion of net income that is not paid to the shareholders is normally for reinvestment which will ensure the earnings grow in the future. The term dividend implies the cash which is paid to the shareholder of a business entity out of the earnings within a certain period of time. The form of dividend payment varies across the companies. It is normally paid in form of buyback of shares, bonus shares and cash dividends (Thakor, 2010).

The common form of dividend payment among the companies is cash dividend and this requires a business entity to have enough cash to pay the dividends when they have been declared. In case the company has insufficient funds, it is allowed to borrow the funds so that it is able to pay the dividends declared. The ultimate effect after the payment of dividends is the reduction in the reserve and cash accounts of the firm and in the long run, the total assets and the net worth of a business entity reduce after the declaration and payment of dividends. In the practice the price of the shares in the market tends to drop by the amount of cash that has been distributed as dividends (Kling, 2006).

Dividends can also be paid in the form of issue of bonus shares and in this scenario, shares are distributed free of charge to the existing shareholders and this is commonly practiced when business entities are faced with financial challenges. By the issue of shares in this arrangement, the number of the outstanding shares of the company

increases. This will ensure there is no dilution in ownership of the company. In the buyback arrangement, the company repurchases its own shares. In this arrangement, the bought-up shares will be extinguished and will not be re-issued in the process, the equity capital amount will reduce as well as the number of outstanding shares (Kling, 2006).

### **1.1.2 Share Prices**

A share price is the highest amount an individual is willing to pay for the stock or the lowest amount it can be bought for (Hicks, 2001). The ownership in the company is achieved when shareholders purchase the shares of that company and they qualify to be the shareholders. Shareholders always enjoy certain rights and privileges in those companies they have bought shares in. After investing their money in various companies, they expect a return and that return can be in the form of dividends or capital gains. The value of asset prices is based on random walk analysis, which means that at any point in time, the value of an asset can be estimated based on the future expectations since the investors act rationally without any bias (Malik, 2013).

The price is affected by all the information existing in the market and the entrance of a new information will randomly affect the prices of the shares. According to Fama and French (2003), seasonal and temporal patterns cause some deviations of the shares from the random walk theory. For example, the January effect which proves that in January, the returns are higher than the rest of the months and the price of the shares on Mondays are low than any other days of the week. However, it is evident that the price of the shares is influenced by the earnings and the dividends of that company.

### **1.1.3 Dividend Payout Ratio and Share Prices**

The effect of dividend payout ratio on share prices has been widely researched with different findings. Some theorists strongly believe that the payment of dividends increases the values of the firms involved while some others believe that increased dividend payout has no significant effect on the value of shares of the business entities. According to Gordon and Lintner (1963), the payment of high dividends will reduce risks and this has a direct effect on the share prices. Litzenberger (1980) on the other hand argued that low dividend payouts attract reduced taxes, which influences share prices. According to Miller and Modigliani (1961), the dividend payout ratio does not have any impact on the share price of firms because the value of a firm depends only on its basic earning power and its business risk.

Dividend irrelevancy theory forms the basis for formulation of additional theories that attempt to explain different imperfections in the real world. Bhattacharya (2014) hypothesized that changes in dividend payout are clear signals concerning the present and future cash-flows, sent out consciously by management to shareholders. Rozeff (2012) also suggested that firms declare dividends to deprive managers of the unsupervised access to internal financing that can lead to decisions that are detrimental to shareholders value. He found out that companies whose owners were separated from managers and dispersed had the least abilities to closely monitor managers and therefore were able to pay high dividends. Dividend payout ratio has a direct influence on the value of the shares of the companies, consistent trend in the dividend payout ratio improves the share prices as it is an indication of good performance.

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

Nairobi Securities Exchange was constituted in 1954 when Kenya was a British colony and it comprises 64 listed companies with a daily trading volume of approximately USD 10 million and a total market capitalization of KES 2,556.74 billion (as of 5 July 2018), accounting to approximately 39.53 % of its Nominal GDP. NSE plays a big role in the Kenyan economic development by encouraging firms to save thus helping them reallocate funds from dormant accounts to active agents and make long term investment liquid via for example transferring of securities.

Most companies quoted on the NSE usually pay dividends in the form of cash dividend and bonus shares. Companies also execute share splits although share splits are not dividends. Buy back of shares as a form of dividend is rare in Kenya. Cash dividend are usually paid twice in any given financial year as interim and final dividends are paid after the end of the financial year. In some years when there is unexpected income, firms pay a one-off extra dividend which is not repeated in the subsequent years. However, there are some listed firms which have not paid dividends for many years because of financial difficulties. The capital markets authority regulates the NSE. In the recent past, many listed companies have not paid dividends on regular basis due to inconsistency of the good performance of the shares as a result of unfavorable economic conditions.

#### **1.2 Research Problem**

Due to the Information Value of the dividends, dividends are considered to be significant in the firms. According to Jean (1965), in an uncertain world, the payment of dividends is

a good signal that the company is profitable, and the company is financially strong in the market. Any change in dividend policy implies that it is a result of the profitability of the company which is expected to last for long in the future. When a company increases its payout ratio, it is a good signal of the company's expected increase in the earnings and this leads to higher demand for the company's shares and hence increases its share price. On the other hand, a decline in dividend payout signals to the shareholders that the company is underperforming, and that the management do not believe the current dividend policy can be sustained by the company.

Firms quoted on the NSE have been declaring dividends and this has been done by those firms which have recorded profits and as a result the share prices of those firms have always reported an upward trend. The upward trend is a signal of improved share performance. After the declaration of the dividends, shareholders on the firm's share register as at a given cut-off date become eligible to receive a dividend once it is paid out. Once a dividend is declared, the share prices commence trading cum-dividend until the dividend payment is made to shareholders. Shares trading cum dividend tend to sell at higher prices as they are expected to factor in the proposed dividend component. The shares start trading as ex-dividend immediately the dividend is paid and the share prices tend to come down on the NSE.

Several studies have been done on the effect of dividend payout ratio on share prices. Jamal (2014) investigated the effect of dividend payout ratio on the share prices of commercial banks in Indonesia between 2012 and 2013. From his findings, the dividend



payout ratio positively affected the future earnings of the commercial banks. The study however used a shorter period of study. Mohamed (2015) found out that the dividend payout ratio had no significant effect on the share prices of the listed companies on the Karachi stock exchange. Malik (2013) did a study on how dividend policy affected the share prices in Indian firms. The study revealed that there was a positive relationship between dividend policy and wealth creation for shareholders of chemical firms in India. The results of the study show that in the long run the shareholders wealth increased for those shareholders who invested in firms that paid constant dividend in comparison to those who did not pay dividends constantly.

Locally, Kimani (2015) concluded that share prices react negatively upon the dividend payment as dividends are assumed to reduce the shareholder's equity. This was after he surveyed the behavior of the share prices of investment firms quoted on NSE when subjected to dividend payouts. A study by Omondi (2016) concluded that dividend payout ratio affects the share prices. Kiprono (2016) confirmed that share prices react negatively after the payment of the dividends. An important aspect of this study is that its sample will be representative of the entire population, whilst the studies by Jamal (2014), Mohamed (2015), Malik (2013), Kimani (2015), Omondi (2016) and Kiprono (2016) their sample focused on some segments of the Nairobi Security Exchange. Findings of many studies have confirmed mixed results of the effect of dividend payout ratio on share prices. Therefore, the current study sought to answer this research question: What is the effect of dividend payout ratio on share prices of the companies listed on the Nairobi Securities Exchange?

### **1.3 Research Objective**

To determine the effect of dividend payout ratio on the share prices of companies listed on the Nairobi Securities Exchange.

### **1.4 Value of the Study**

Stock broker managers and other investment consultants would find the effect of dividend payout ratio on share prices useful when advising their clients on investment decisions. This will ensure the correct investment decisions are made by the investors. Investors are interested in return on their investment. This study would provide information on how dividend payouts affect value of their investment with a view to make better investment choices that maximizes value on quoted companies.

Kenya government would make informed decisions as pertaining fiscal and monetary policies as they impact payment of dividends by companies for example, the study would provide more information on the implication of taxes on dividends payouts and capital gaining.

To the scholars, it will be of great use to conduct academic research. It will act as a source of empirical literature and will act as a ground in conducting further studies in dividend payout ratio.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter covers the theoretical review, the determinants of share prices, empirical literature, conceptual framework and ends with the summary of the literature review.

### **2.2 Theoretical Review**

The following theories are related to dividend payout ratio and share prices and they include, Dividend Irrelevance Theory (Modigliani & Miller, 1961), Tax Differential Theory (Litzenberger & Ramaswamy, 1979) and Bird in Hand Theory (Gordon, 1962).

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

This theory originated from Modigliani and Miller (1961). According to this theory, the share price is not affected by the payout ratio but rather depends on the company's investment policy. It puts forward the argument that a company's policy on dividend does not bother investors because they can dispose a percentage of their equity holding in the portfolio in case cash was needed essentially indicating that issuing out of dividends would have little or no effect on the price of stock and consequently returns. This theory suggests that use of a dividend payout ratio by a firm is of no significance as such a policy has got no consequence on the organization's cost of capital or the company's share price. The following assumptions forms the basis of the MM argument: corporate or personal income taxes do not exist; stock transaction and flotation costs are not in existence and there is no existing effect of dividend policy.

On the basis of the above assumptions in case a firm gives a higher dividend, the firm must also sell more shares to new investors of the firm. The ratio of the value of the firm assumed up by new investors is equal to the dividends paid out and hence it does not change the firm's value. It can therefore be concluded that firm's value is based on its investment policy rather than its dividend payout ratio. The theory was instrumental in this study since it points out that the performance of the shares is not dependent on the dividend payout ratio.

### **2.2.2 Tax Differential Theory**

This theory was proposed by Litzenger and Ramaswamy in 1979. It argues that if the dividend payout ratios were low, it would lead to an increased stock price and a lower cost of capital. This means that a dividend payout ratio that is low maximizes the firm's values. This argument follows an assumption that taxes for dividends are much higher compared to the taxes from capital gains. Furthermore the taxes on dividends are immediate while stock taxes are only incurred after the sale of the stock.

This theory argues further that dividends are unattractive compared to capital gains due to the tax advantage associated with capital gains and therefore you find investors tend to prefer firms who choose to not pay out their earnings as dividends but rather retain them and they are ready to pay companies that have a lower dividend payout ratio a premium (Bhandari, 1988). This theory shows the significance and impact dividend payout ratio has on the share value and consequent returns to the shareholders since they prefer capital gains to current dividends.

### **2.2.3 Bird in Hand Theory**

According to this theory, the payment of the dividends is relevant to the value of any firm (Gordon, 1962). Investors are indifferent and the share price is affected as a result of dividends or capital gains. The fundamental assumption of this argument is based on the fact that equity holders are risk averse and favor dividend paid in the current period. Where there is information asymmetry, dividend values are different compared to retained capital gains or earnings. Investors would rather have the cash dividend put as the bird in hand rather than future capital gains. He further argued that investors favored current dividends compared to anticipated capital gains due to their uncertainty resulting from information asymmetry. The Gordon model further purports that dividend yield is significant in measuring what is expected from the equity than its cost and that in determining the value of an organization, dividends are most appropriate.

The growth of any firm's earnings is not guaranteed and as such capital gains in the future cannot be estimated accurately. Business entities that don't pay dividends are perceived by the investors as non-performing and their future value in the market cannot be estimated and therefore it is uncertain whether investors can get the value on their investment. This is based on some assumptions for example the inaccessibility of external funding which implies that the firm will rely on internal sources for financing. A certain dividend is better compared to what firms promise as future dividend or in some instances, capital gains, hence, dividend payout ratio is relevant (Gordon, 1962). This theory was key in this study because it points out the need to pay dividends which have direct effect on the share prices of companies.

## **2.3 Determinants of Share Prices**

A number of causes have been identified as determinants of share prices in various experiential researches conducted by different scholars in different markets. Dividend payout ratio has been found to have an effect on the share prices. Different scholars have performed numerous empirical reviews on dividend payout ratio overtime. The determinants of share prices include: dividend payout ratio, corporate governance, capital structure and company size.

### **2.3.1 Dividend Payout Ratio**

Dividend payout ratio is the proportion of net income business entities pay their shareholders as dividends. Dividend payout is a signal that the company is worth to invest in hence able to attract more investment funds hence the rise in the share price. It is calculated as total dividend for the period divided by the net income available to common stakeholders. That proportion of net income that is not paid to the shareholders is normally for reinvestment which will ensure the earnings grow in future dates. The term dividend implies the cash which is paid to the shareholder of a business entity out of the earnings within a certain period of time. The form of dividend payment varies across the companies. It is normally paid in the form of buyback of shares, bonus shares and cash dividends. According to Thakor (2010), dividend payout increases the price of the shares.

### **2.3.2 Capital Structure**

Capital structure denotes the distribution of funds employed in a company by type. An optimal capital structure increases the share prices since it minimizes the overall WACC. There are two forms of capital: debt and equity. Debt capital refers to the long term borrowed monies for use in the business which could be in the form of long-term loans or debentures while equity capital refers to the retained earnings, share capital that is paid up, share premium, and reserves. The traditional theory on capital structure emboldens the use of debt by companies in its efforts to reduce WACC (Modigliani & Miller 1956)

The Modigliani and Miller (1956) theory developed without taxes showed the irrelevance of capital structure arguing that it had no influence on an organization's share return because a firm's value is computed based on organizational earning capacity and on risks involving assets. The pecking order theory by Myer (1984) starts with asymmetric information as managers have more information than outsiders, it goes on to say based on this asymmetry, managers favor debt to equity when they are confident that an investment is profitable.

### **2.3.3 Company Size**

The size of the company influences the share prices, the larger the firm the better the share price since larger firms have a better chance to access finances. Mathur and Kenyon(1997) in their studies concluded that big firms have a better chance to access finances compared to the smaller firms meaning when the organization is large it generates more revenue hence being in a better and stable financial position because of its

size and they are also able to diversify their assumed risks effectively and respond faster to any changes in the operating environment and market while on the contrary smaller firms generate less revenue hence making the firm's financial position not to be stable and hence unable to access the financial resources and lower cost hence lower prices of the shares.

#### **2.3.4 Corporate Governance**

Sound corporate governance practices are associated with increased share prices since they ensure legitimate corporations are governed with integrity and transparency. It involves the interrelationship of the various participants in improving the corporation performance and the manner it moves forward towards the achievement of objectives. It deals with determination of implementing corporate decisions aimed at improving the general welfare of the stakeholders. Some prior findings by (Batra, 1999; Lumpkin & Dess, 1999) indicated that good corporate governance increases the share prices. It offers the final authority and complete mandatory to all stakeholders. It ensures the interest of all the shareholders both the minority and the majority are safeguarded. It aims at promoting the efficiency, effectiveness and sustainable corporation that can contribute to the affairs of the society through wealth creation. Responsible corporations will ensure profits are maximized for the shareholders by recognizing and protecting the rights of stakeholders.



## **2.4 Empirical Review**

Kimani (2016) conducted a study on the effect of dividend announcements on quoted companies' share prices on the NSE. The study used the event study methodology. Data was collected from the NSE listing services. Abnormal returns were first determined by using the market model whereby daily stock returns was regressed with the corresponding market return on the estimation period then deducting expected returns from the daily returns. The study however used a shorter period of study in the analysis. The empirical results showed varied results with the overall results suggesting that indeed an effect was evident on the share prices on the announcement of the dividends.

Omondi (2014) examined the effect dividend announcements had on Kenyan securities exchange listed firms' share prices. The study looked at the existing relationship between dividend and price changes seeking to establish if share prices were a reflection of dividend announcement effect on stocks that were traded on the Nairobi Securities Exchange. The event study analysis was performed by the use of CAR, the study used secondary data in the analysis. Analysis of the study's data was done using correlation and t-statistic. The study was conclusive since it is supported by a strong preliminary data. According to the outcomes of the study, there was a negative relationship between the announcement of the dividend and the share price.

Koros (2015) conducted a study on the effect of policy on dividend on stock prices for organizations on the NSE. In her research, descriptive research design was used in the study of the sample of the 20 listed firms on the NSE in the five years between 2010 and

2014. The study used secondary data available for all firms on the NSE. The regression model used in the study had the share price as a function of dividends, profitability and leverage. The study found a positive relationship between dividend per share and the share prices and that share prices were affected by the dividends per share paid out. Subsequently it concluded that there's a positive correlation between stock prices and dividends for firms listed on the NSE.

Momanyi (2016) analyzed how dividend policy affected share prices basing the study on firms listed on the NSE. According to the study results, investors favored stocks that had higher dividend payouts. This study clearly demonstrated the understanding of the content of the study. Further according to the study, increased trading volume of a company's stock affected the share price and investors who were in need of present investment income hold shares in firms with high dividend payouts. Further, the free cash flow led to a conflict between shareholders and the management which led to an effect on the price of shares.

Muriuki (2017) study was on how dividend policies affect share prices for companies listed on the NSE. He employed a causal research design in the study. According to the findings of the study, the payment of constant dividend amounts for every share was the most suitable policy for the four firms under study. The methodology applied in the study was appropriate. The study recommended that the Kenyan government should formulate policies that shield shareholders from the exploitation done by the management of firms. The use of a constant dividend payout ratio could result in uncertainty especially to

ordinary shareholders who depend on the income from dividend and they might demand a minimum required rate of return that is higher. The recommendation of the study to the investor is that investors are better off investing in firms who pay constant dividend amount per share together with an extra amount that is based on the firm's profitability.

Malik (2013) did a study on how dividend policy affected the share prices in Indian firms. The study revealed that there was a positive relationship between dividend policy and wealth creation for shareholders of chemical firms in India. The methodology of the study was not clearly spelt out. According to the results of the study in the long run the shareholders wealth increased for those shareholders who invested in firms that paid constant dividend in comparison to shareholders who had invested in chemical companies that do not pay dividends. This shows how the share price is affected by dividend policy.

Desai (2010) did a study to assess the effect of dividend payout on the share prices of the manufacturing companies in Pakistan. He used a sample size of 30 companies from a population of 70 manufacturing companies between 2005 to 2009. The survey utilized secondary data from the websites of the companies. The study also employed the linear regression model in the analysis. The study was well structured from the beginning to the end. From the analysis, he concluded that the payment of the dividends acted as a good signal for the improved share prices of the companies.

Thakor (2010) studied the effect of dividend payout ratio on the share prices of the pharmaceutical companies in Nigeria from 2005 to 2008. The study used secondary data to compute the price earnings ratio and daily share prices were collected over a period of 60 days. The study was supported by strong data. He concluded that the price of the shares declined as a result of the payment of the dividends for the period under study.

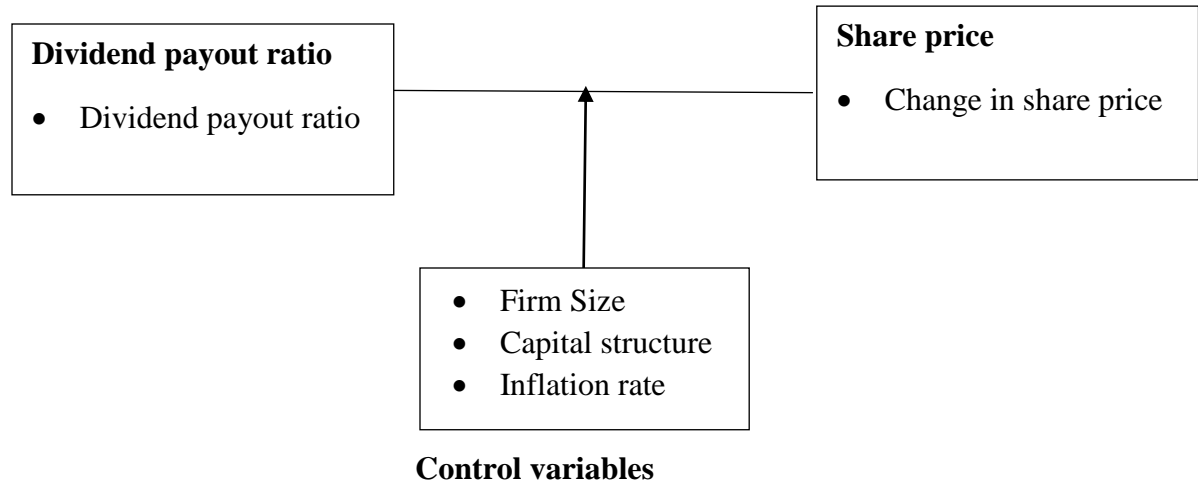
Jamal (2013) did a survey on the effect of dividend policy on the stock returns of Non-listed commercial Banks in Indonesia between 2002 to 2012. The study used a sample of 30 out of 92 non-listed commercial banks in Indonesia. The study used secondary data in the analysis in determining cumulative abnormal returns from the day of the dividend announcement. The criteria for firm selection was not elaborate in this study. He concluded that the dividend policy was insignificant on the stock returns of commercial banks in Indonesia.

Acharya et al. (2013) investigated the effect of dividend announcement on the share prices of selected companies listed on the India securities market from 2009 to 2012. A sample of 8 selected companies was chosen for the study. The study relied on secondary data which was readily available. The study also used the multiple regression models in the analysis. The study used a limited sample size which cannot be representative. The study concluded that, on average, the share prices showed an upward trend after the dividend announcement in the selected listed companies in Indian securities market.

## 2.5 Conceptual Framework

### Independent variable

### Dependent Variable



**Figure 2.1: Conceptual Framework**

## 2.6 Summary of Literature Review

The literature review entails the theories that were discussed which are: Dividend Irrelevance Theory (Modigliani and Miller, 1961), Tax Differential Theory (Litzenberger & Ramaswamy, 1979) and Bird in Hand Theory (Gordon, 1962). The determinants of share prices were also highlighted which include: corporate governance, company size, external factors and capital structure and the empirical review including Kimani (2016), Omondi (2014), Koros (2015), Momanyi (2016), Muriuki (2017), Malik (2013), Desai (2010), Thakor (2010), Acharya et al. (2013) and with the conceptual framework. From the literature reviewed, the period of study was short in most of the studies and the sample size was small in some studies. Therefore, this research sought to address the above research gaps in conducting this study on the effect of dividend payout ratio on the share prices of companies listed on the NSE.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter clearly states the methods that were used during the study to realize its set goals. It covers research design, a description of the population, sample design, data collection and analytics.

### **3.2 Research Design**

Research design entails the methods used to conduct the research. This study used the descriptive research design since it helped in the description of the phenomena under study. This type of design is applicable in obtaining information about the current status of the phenomenon with respect to variables or conditions in a situation. It also involves the correlation study to investigate the relationship between variables. This research design summarizes the various variables under the study.

### **3.3 Population**

The population of interest in this study comprised all the 60 companies listed on the Nairobi Securities Exchange between the years 2013 and 2017. A census survey was undertaken.

### **3.4 Data Collection**

This research relied on secondary data from the published financial statements and changes in the share prices which were obtained from the Nairobi Securities Exchange and the respective companies from their financial statements in the websites because

secondary data was readily available. Data that was collected included the share prices, total assets, inflation rates, total debt, equity, and total dividends paid all on annual basis.

### **3.5 Diagnostic Tests**

The diagnostic tests that were carried out on the data to ensure it suits the basic assumptions of classical linear regression model include: Kurtosis and Skewness of the distribution of data which tested for normality, multicollinearity was tested by variance inflation factor and correlation coefficient, heteroscedasticity was measured by the weighted generalized least square to establish the relationship.

### **3.6 Data Analysis**

This research employed descriptive and inferential statistics to analyze the data collected. Mugenda and Mugenda (2003) argued that, descriptive statistics enables the researcher to get the meaningful description of scores and measurements for the study through the use of new indices or statistics. This study used SPSS to analyze the independent and dependent variables. The relationship between dividend payout ratio and share price of firms listed on the NSE was tested by the following regression model:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where

$Y$  = Share price as measured by annual change in the share prices

$X_1$  = Dividend payout ratio as measured by dividend paid divided by net income available to common share holders

$X_2$  = Capital structure as measured by debt to equity ratio

$X_3$  = Size of the firm as measured by natural logarithm of total assets

$X_4$  = Annual inflation rate

$\alpha$  = constant term of the model

$\beta$  = Coefficients of the model

$e$  = the error term

### **3.7 Test of significance**

An F-test at 5% significance level was conducted to determine the strength of the model, and the effect of dividend payout ratio on the share price of the companies listed on the Nairobi Securities Exchange.



## **CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATION**

### **4.1 Introduction**

This section presents the analysis of the data obtained. In section 4.2 data was analyzed in terms of descriptive statistics and in section 4.3 and section 4.4, data was analyzed in terms of inferential statistics which included correlation analysis, regression analysis and the analysis of the variance and section 4.5 presents interpretation and discussions of results.

### **4.2 Descriptive Statistics**

The independent variables analyzed here included dividend payout ratio, capital structure, firm size and interest rates while the dependent variable was the change in share price. The means, standard deviations, the minimum values, the maximum values of the variables under study were tabulated as shown below.

**Table 4.1: Descriptive Statistics Analysis**

<b>Variable</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard deviation</b>
Share price	300	0.00	14.85	4.13	3.02
Dividend payout ratio	300	-2.50	1.82	0.25	0.37
Capital structure	300	0.01	0.94	0.49	0.25
Firm size	300	6.36	20.07	9.20	1.50
Inflation rate	300	4.50	6.88	5.68	0.96

From the findings, the minimum change in share price was 0.00, the maximum value was 14.85, the mean change in share price was 4.31 and the standard deviation was 3.02 which indicated a small variation in the change in the share price. The minimum number of dividend payout ratio was -2.50, the maximum number was 1.82, the mean value was 0.25 and the standard deviation was 0.37 which shows the small variations in dividends payments variations. The minimum number of the firm size was 6.36 the maximum number was 20.07, the mean firm size was 9.20 and the standard deviation was 1.50 which shows a small variation. The minimum number of capital structure was 0.01, the maximum number was 0.94, the mean was 0.49 and the standard deviation was 0.25 which shows a small variation in the size of the firms. The minimum value of inflation was 4.5, the maximum number was 6.88, the mean value was 5.68 and the standard deviation was 0.96 which shows a small variation.

### 4.3 Correlation Analysis

**Table 4.2: Correlation Matrix**

		Share rice	Dividend policy	Capital structure	Firm size	Inflation rate
Share price	Pearson correlation Sig. (2-tailed) N.	1 300				
Dividend Payout ratio	Pearson correlation Sig. (2-tailed) N.	0.188 0.001 300	1 300			
Capital structure	Pearson Correlation Sig. (2-tailed) N.	-0.092 0.111 300	0.001 0.992 300	1 300		
Firm size	Pearson correlation Sig. (2 –tailed) N.	0.074 0.204 300	0.169 0.003 300	-0.09 0.121 300	1 300	
Inflation rate	Pearson Correlation Sig. (2-tailed) N.	-0.037 0.524 300	-0.008 0.890 300	-0.014 0.804 300	0.024 0.677 300	1 300

The results of the correlation analysis above show that a negative relationship exists between inflation rate and the change in the share price. When inflation rate increases, the share price decreases. However, relationship is not significant. The correlation coefficient -0.037 and the p-value of 0.524 is greater than 0.05. The findings showed further that the size of the firm is positively related to share price and the relationship was not significant since the p-value of 0.074 is greater than 0.05. Capital structure is negatively related with the share price since it had a negative correlation coefficient and the relationship was not significant since its p-value of 0.111 was greater than 0.05. The findings showed further that dividend payout ratio was positively related to share price and the relationship was significant since the p-value of 0.001 is less than 0.05.

#### 4.4 Regression Analysis

**Table 4.3: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.215	0.046	0.033	2.968

The value of the correlation coefficient from the table above is 0.215 which implies that a positive relationship exists between the study variables. The adjusted R square was 0.033 which implies that 3.3% of the influence of the capital structure, firm size, dividend policy and inflation rate is explained by the model.

**Table 4.4: Summary of One Way ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	126.15	4	31.537	3.579	0.007
	Residual	2599.256	295	8.811		
	Total	2725.405	299			

The results in the table above shows the value of F statistic was 3.579 at 5% level of significance and the statistic was significant since the P-value was 0.007 which is less than 0.05 implying that the overall model was significant.

**Table 4.5: Regression Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	4.309	1.525		2.825	0.005
	Dividend policy	1.491	0.475	0.181	3.142	0.002
	Capital structure	-1.077	0.686	-0.09	-1.570	0.117
	Firm size	0.072	0.116	0.036	0.615	0.539
	Inflation rate	-0.119	0.180	-0.038	-0.662	0.508

The findings of the regression analysis show that dividend policy is directly related to share price. Capital structure is inversely related to share price. This implies that an increase in the capital structure will lead to decrease in the share price. Firm size is directly related to the share price, the rate of inflation is inversely related to share price which implies that a unit increase in the rate of inflation will reduce the share prices by 0.119

The standardized beta coefficient of dividend policy was 0.181 which means that dividend policy has a moderate effect on the share price. The standardized beta coefficient of capital structure was -0.09 which implies that capital structure has a strong effect on the share price, the standardized beta coefficient of firm size was 0.036 meaning a moderate effect of firm size on the share price and the standardized beta coefficient of inflation was -0.038 which implies a strong effect of inflation rate on the share price.

#### **4.5 Interpretation and Discussion of the Results**

The results of the descriptive statistics show that on average, the share prices of the listed companies on the Nairobi Securities Exchange posted mixed signals for the period under study. Some companies continued to post a high change in the share prices while others posted insignificant change in the share prices after the payout. Increase in the share price is a signal of good company prospects, on the other hand insignificant increase in the share prices is a sign of slow growth of the companies. On average, the companies have increased their sizes in terms of the assets base which is a sign of company's strength. In terms of the declaration and the payment of the dividends, a great disparity was evident with some companies not paying dividends at all due to poor returns. However, for the profitable firms, they consistently paid dividends.

From the regression analysis results the research established the four independent variables which were analyzed which included dividend policy, capital structure, firm size and inflation rates were able to explain their effect on the change in the share price up to 3.3% as shown by adjusted R square. This implies that the four independent variables inputs 3.3% on the share price and the remaining 96.7% is contributed by the factors not studied.

This research found that the coefficient of dividend policy was 1.491 meaning that dividend payout ratio positively influences the share price. Capital structure was found to be negatively related to share price which means that as the capital structure increases, the share price decreases. Firm size was found to be positively related with the share

price and the effect was not significant because the p value was 0.539 which is greater than 0.05. Finally, inflation rate was found to be negatively related to the share price since the coefficient of inflation was -0.119 and this effect was insignificant because the p value of 0.508 is greater than 0.05. In general, dividend payout ratio affects the share price. This study concurs with the study by Desai (2015) who confirmed that the dividend payout ratio affected the share prices of the manufacturing companies in Pakistan.

## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter provides a summary, conclusion, recommendations, limitations of the study and recommended areas for further research.

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

The objective of this study was to establish the effect of dividend payout ratio on share prices of the companies listed on the Nairobi Securities Exchange. Inflation rates were found to be negatively related with the share prices and the relationship insignificant. It implies that as the rate of inflation increases, the share prices are likely to drop. The size of the firm was found to be positively related with the share price from the study. However, the companies reported mixed results on the share price. On average, the relationship was not significant. Capital structure was found to have a negative relationship with the share price and the relationship was not significant. This implies that as the ratio of debt to equity increases, the share prices of the companies are likely to decrease which is a signal of slowed performance. Decrease in the ratio of debt to equity was found to increase the value of the shares which is due to the reduced costs of debt financing by the companies.

The study established that a positive relationship exists between dividend payout ratio and the share price of the listed companies on the NSE. This is based on the fact that the guidelines the companies set in the determination of how much of its earnings will be



paid as the dividends will ultimately affect the share prices of the companies. Payment of the dividends acts as a good signal of the performance of the companies and the results are reflected in the share prices. On the other hand, the non-declaration and the non-payment of dividend signifies poor performance of the companies as reflected in the poor performance of the shares and is supported by the signaling hypothesis.

The ANOVA was employed to determine how strong the model was in the analysis. Based on the analysis of the regression statistics, the research concluded that the four factors which include the inflation rate, dividend payout ratio, capital structure and firm size affected the share price of the companies listed on the Nairobi Securities Exchange. The four independent variables were able to explain their influence on the share price up to 3.3% and the rest is contributed by other factors not considered in this study meaning the model was significant.

### **5.3 Conclusions**

From the study, a negative relationship was found to exist between inflation rates and share prices, the correlation coefficient was found to be -0.037 which was not significant because the P value of 0.54 was found to be statistically insignificant ( $P > 0.05$ ). A negative relationship exists between capital structure and the share price, the correlation coefficient was -0.092 and again the relationship was not significant. The P-value was 0.111 which is greater than 0.05. A positive relationship exists between firm size and share price, because the correlation coefficient was 0.074 although the relationship was not significant ( $p > 0.05$ ). Dividend payout ratio was found to be positively related with

the share price, the relationship was significant. Based on the outcome of this research, it concludes that dividend payout ratio affects the share price. This is based on the fact that a number of variables studied proved the existence of the relationship between dividend payout ratio and the share price and they included the firm size, dividend policy, capital structure and inflation rates.

In general, the companies which regularly declared and paid the dividends, their share prices were expected to show an upward trend, however a small fraction of the companies also recorded a downward trend which was an indication of poor performance after the declaration and the payment of the dividends. This study confirmed the changes in the share prices upon the payout. This is in agreement with the studies by Kimani (2016) and Malik (2013) who both concluded that dividend payout ratio affects the share prices of the companies.

#### **5.4 Recommendations**

From the outcome of this research, the study recommends the setting aside of more finances which will facilitate the collection and analysis of data. This will ensure the financial challenges in research are dealt with. This will also guarantee the completion of the research in time.

The study recommends the allocation of enough time for the entire research exercise. Sufficient time will ensure step by step research operations and process without

interruption. In so doing, the research will be conclusive and objective unlike when working under pressure to meet the deadlines.

This study recommends the inclusion of the qualitative aspects that are likely to affect the share prices to be included in the model of analysis. This will ensure both the qualitative and quantitative factors are considered in the analysis to ensure the results are more conclusive.

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

Time constraint, considering that this study relied on data from the multiple sources including the Central Bank of Kenya, Capital Markets Authority, the individual companies and the Nairobi Securities Exchange, more time was needed for the entire exercise of data collection and analysis. But despite the limited time available, it was well utilized to achieve the intended objective of the study.

The entire exercise needed more financing which ranged from the data collection, data analysis, writing materials and printing of the research work which called for total sacrifice to achieve the objectives. Despite the limited financial resources, the entire research process was successful.

Aspects which are qualitative in nature were not captured by the secondary data which are also able to affect the share prices of the companies. Such qualitative aspects include good corporate governance practices and good customer relations.

This study was conducted over a five-year period due to the limited time that was available. Sufficient time could have enabled the conduction of this study for a longer period of time for example ten years.

The choice of the control variables was limited in this study. Only the firm size, capital structure and inflation rates were employed as the control variable. Control variables plays a critical role of ensuring the other variables being tested are better understood since they remain unchanged in the analysis.

### **5.6 Suggestions for Further Research**

This study recommends that a similar study be conducted but in the Eastern Africa region which involves the incorporation of the companies listed on the Nairobi Securities Exchange, Rwanda Stock Exchange, Uganda Securities Exchange and Dar es salaam Stock Exchange.

A study should be conducted to assess the effect of dividend payout ratio on the financial performance, it will be interesting to see whether a relationship exists between dividend payout ratio and financial performance.

This study examined the effect of dividend payout ratio on the share prices of the companies listed on the Nairobi Securities Exchange. From the study findings, the study recommends that in the near future, a research to be conducted which should incorporate

both primary data and secondary data. Primary data will help in capturing information not captured by the secondary data.

This study recommends that a study be done but now focusing on the non-listed firms to establish how the share prices will behave under the influence of the payout ratio. This will help in the comparison of the share prices of the listed and non-listed companies.

This study recommends that a study be done but now focusing on a particular segment of the seven segments at Nairobi Securities Exchange. For example a study can be done on the investment segment or agriculture segment.

## REFERENCES

- Acharya, D., Cheung, Y. W., & Lilian, K. N. (2013). The effect of dividend announcement on the share prices of selected companies listed on the India securities market. An Empirical Investigation, *Journal of Finance*, 5, 200-272.
- Batra, G. (1999). *Job Reallocation on the Export Market and Firm Performance*.
- Bhandari, G. W. (1988). *Corporate Finance: Principles and Practice*, Addison Wesley Longman, First Edition.
- Bhattacharya, S. (2014). Imperfect Information, Dividend Policy, and the 'Bird in the Hand' Fallacy, *Bell Journal of Economics*, 10, 259-270.
- Desai, C. (2010). The effect of dividend payout on the share prices of the manufacturing companies in Pakistan. An Empirical Analysis, *Journal of the Pakistan Statistical Association*, 1132-1161.
- Fama, E., & French, K. (2003). The capital asset pricing model: Theory and evidence, *Journal of Economic Perspectives*, 18, 25-46.
- Gordon, M. and Lintner, J. (1963). Dividends, earnings and stock prices, *Review of Economics and Statistics*, 99-105.
- Jamal, P. (2013). The effect of dividend policy on the stock returns of Non-listed commercial Banks in Indonesia. An Empirical Investigation, *Journal of Finance*, 2, 128-287.
- Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers, *The American Economic Review*, 76, 323-329.
- Jensen, M.C. and Meckling, W.H. (1976). Theory of the firm: managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Kimani, C. (2016). The effect of dividend announcements on quoted companies' share prices at the NSE. *Unpublished MBA Thesis of the University of Nairobi*.
- Kling, A. (2006). Firm Performance and Board Committee Structure, *The Journal of Law and Economics* 48, 233-289.
- Koros, W. (2015). The effect of policy on dividend on stock prices for organizations at the NSE. *Unpublished MBA Thesis of the University of Nairobi*.
- Litzenberger, R. H. & Ramaswamy, K. (1980). The influence of personal taxes and dividends on capital asset prices: Theory and empirical evidence. *Journal of Financial Economics*, 8(3), 145-174.

- Gordon, M.J. (1962), Dividend, Earnings and Stock Prices, *Review of Economics and Statistics*, pp 78-101.
- Malik, B. (2013). The effect of dividend policy on the share prices in Indian firms. An Empirical Analysis, *Journal of the Finance*, 132-161.
- Lumpkin, G. and Dess, G. (1999). Linking to Dimensions of Entrepreneurial orientation of firm performance. The moderating role of environment, firm age and industry life cycle; *Journal of Business Venturing*; Forthcoming.
- Mathur, S. and Kenyon A. (1997). *Creating Value; Sharing Tomorrow's Business*.
- Litzenberger, R. H., & Ramaswamy, K. (1979). The Effects of Personal Taxes and Dividends on Capital Asset Prices: Theory and Empirical Evidence, *Journal of Financial Economics*, 163 – 195.
- Modigliani, F., & Miller, M. H. (1956). The Cost of Capital, Corporation Finance and the Theory of Investment, *American Economic Review*, 48(3), 261-297-Retrieved from <http://www.his.se/PageFiles/17648/Modiglianiandmiller1958.pdf>
- Modigliani, F., & Miller, M. H. (1961). Dividend Policy, Growth, and the Valuation of Shares, *Journal of Business*, 411-433.
- Mohamed (2015). The effect of dividend payout ratio on the share prices of the listed companies at Karachi stock exchange. Empirical Evidence, *Journal of Financial Economics*, 174 – 223.
- Momanyi, K. (2016). The effect of dividend policy on share prices on firms listed at the NSE. *Unpublished MBA Thesis of the University of Nairobi*.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: quantitative and qualitative approaches*. Nairobi. Acts Press.
- Muriuki (2017). The influence of dividend policies affect share prices for companies listed at the NSE. *Unpublished MBA Thesis of the University of Nairobi*.
- Mohamed, J. (2015). The effect of payment payout ratio on share prices. *Unpublished MBA Thesis of the University of Nairobi*.
- Omondi (2016). The effect of dividend payout ratio on the share prices of commercial banks in Kenya. *Unpublished MBA Thesis of the University of Nairobi*.
- Pandey, I.M. (2011). *Financial Management*, Vikas Publishing House PVT Ltd, Tenth Edition.
- Ross, S. A, Westerfield R. W., & Jordan B. D. (1995). *Fundamentals of corporate finance*, Tata McGraw Hill, Eighth Edition.

Rozeff, M. (2012). Growth, Beta and Agency Costs as Determinants of Dividend Payout Ratios, *Journal of Financial Research*, 249-259.

Sorensen, A., Mukaila, A. and Stuart, T. (1999): "Corporate Governance Mechanisms and Firm Financial Performance in Nigeria", *AERC Research Paper*, No. 149.

Thakor, Z. (2010). The effect of dividend payout ratio on the share prices of the pharmaceutical companies in Nigeria. *Journal of Financial Research*, 265-299.



## **APPENDIX 1: LIST OF COMPANIES LISTED ON NSE**

1. Eaagads Ltd
2. Kapchorua Tea Co. Ltd
3. Kakuzi
4. Limuru Tea Co. Ltd
5. Rea Vipingo Plantations Ltd
6. Sasini Ltd
7. Williamson Tea Kenya Ltd
8. Car and General (K) Ltd
9. Barclays Bank Ltd
10. Stanbic Holdings Plc.
11. I&M Holdings Ltd
12. Diamond Trust Bank Kenya Ltd
13. HF Group Ltd
14. Uchumi Supermarket Ltd
15. Bamburi Cement Ltd
16. E.A.Cables Ltd
17. KenolKobil Ltd
18. KenGen Ltd
19. Umeme Ltd
20. Sanlam Kenya PLC
21. Liberty Kenya Holdings Ltd
22. CIC Insurance Group Ltd
23. KCB Group Ltd
24. National Bank of Kenya Ltd

25. NIC Group PLC
26. Standard Chartered Bank Ltd
27. Equity Group Holdings
28. The Co-operative Bank of Kenya Ltd
29. Express Ltd
30. Sameer Africa PLC
31. Kenya Airways Ltd
32. Nation Media Group
33. Standard Group Ltd
34. TPS Eastern Africa (Serena) Ltd
35. Scangroup Ltd
36. Longhorn Publishers Ltd
37. Deacons (East Africa) Plc
38. Athi River Mining
39. Crown Paints Kenya PLC
40. E.A.Portland Cement Ltd
41. Total Kenya Ltd
42. Kenya Power & Lighting Co Ltd
43. Jubilee Holdings Ltd
44. Kenya Re-Insurance Corporation Ltd
45. Britam Holdings Ltd
46. Olympia Capital Holdings ltd
47. Centum Investment Co Ltd
48. Trans-Century Ltd
49. Home Afrika Ltd
50. Kurwitu Ventures

51. B.O.C Kenya Ltd

52. British American Tobacco Kenya Ltd

53. Carbacid Investments Ltd

54. East African Breweries Ltd

55. Mumias Sugar Co. Ltd

56. Unga Group Ltd

57. Eveready East Africa Ltd

58. Kenya Orchards Ltd

59. Flame Tree Group Holdings Ltd

60. Safaricom PLC

## APPENDIX 2: DATA

IRM	YEAR	INFLATION RATE	PAYOUT RATIO	CHANGE IN SHARE PRICE	CAPITAL STRUCTURE	FIRM SIZE
Eaagads	2013	5.72	0.71	2.40	0.56	8.23
Eaagads	2014	6.88	0.00	0.00	0.60	8.96
Eaagads	2015	6.58	0.02	3.70	0.77	8.13
Eaagads	2016	4.50	0.00	0.00	0.21	8.86
Eaagads	2017	4.73	0.91	8.50	0.13	7.92
Kapchorua	2013	5.72	0.11	4.50	0.79	8.23
Kapchorua	2014	6.88	0.00	0.00	0.81	8.4
Kapchorua	2015	6.58	-2.50	4.23	0.72	8.15
Kapchorua	2016	4.50	0.46	5.00	0.48	7.05
Kapchorua	2017	4.73	-0.21	6.20	0.69	7.58
Kakuzi	2013	5.72	0.00	0.00	0.88	7.26
Kakuzi	2014	6.88	0.45	3.60	0.01	7.52
Kakuzi	2015	6.58	0.98	1.40	0.29	8.18
Kakuzi	2016	4.50	0.00	0.00	0.94	7.93
Kakuzi	2017	4.73	0.00	0.00	0.61	7.93
Limuru	2013	5.72	0.23	7.00	0.73	8.02
Limuru	2014	6.88	0.00	0.00	0.64	8.16
Limuru	2015	6.58	0.23	5.20	0.12	8.19
Limuru	2016	4.50	0.00	0.00	0.67	7.48
Limuru	2017	4.73	0.09	11.80	0.69	7.22
Rea Vipingo	2013	5.72	0.02	9.00	0.70	6.36
Rea Vipingo	2014	6.88	0.00	0.00	0.49	6.98
Rea Vipingo	2015	6.58	0.54	2.50	0.12	6.88
Rea Vipingo	2016	4.50	0.03	1.70	0.75	7.9
Rea Vipingo	2017	4.73	0.00	0.00	0.72	6.95
Sasini	2013	5.72	0.13	2.25	0.18	8.22
Sasini	2014	6.88	0.10	6.00	0.91	8.52
Sasini	2015	6.58	0.00	0.00	0.08	8.21
Sasini	2016	4.50	0.54	2.10	0.68	7.14
Sasini	2017	4.73	0.01	2.95	0.32	7.69
Williamson	2013	5.72	0.00	0.00	0.58	7.36
Williamson	2014	6.88	0.01	5.67	0.56	7.53
Williamson	2015	6.58	0.00	0.00	0.54	8.21
Williamson	2016	4.50	0.01	5.40	0.36	8.08

Williamson	2017	4.73	0.02	4.00	0.51	7.54
Car and General	2013	5.72	0.50	7.50	0.53	9.89
Car and General	2014	6.88	0.03	8.10	0.24	9.45
Car and General	2015	6.58	0.19	3.46	0.58	9.23
Car and General	2016	4.50	0.33	3.10	0.60	9.56
Car and General	2017	4.73	0.08	6.00	0.54	9.82
Barclays	2013	5.72	0.04	3.70	0.55	7.44
Barclays	2014	6.88	0.04	10.00	0.17	7.63
Barclays	2015	6.58	0.04	7.50	0.58	8.21
Barclays	2016	4.50	0.08	6.75	0.47	8.13
Barclays	2017	4.73	0.08	3.00	0.76	6.69
Stanbic	2013	5.72	0.25	5.25	0.58	8.09
Stanbic	2014	6.88	0.20	12.00	0.09	8.39
Stanbic	2015	6.58	0.48	5.20	0.62	8.3
Stanbic	2016	4.50	0.91	3.50	0.83	7.51
Stanbic	2017	4.73	0.01	7.65	0.72	7.43
I&M	2013	5.72	0.18	2.75	0.06	6.45
I&M	2014	6.88	0.43	6.23	0.88	6.96
I&M	2015	6.58	0.13	4.50	0.01	6.68
I&M	2016	4.50	0.87	4.00	0.59	8.09
I&M	2017	4.73	0.10	3.35	0.54	7.06
DTB	2013	5.72	0.69	5.00	0.16	8.32
DTB	2014	6.88	0.01	2.50	0.36	8.59
DTB	2015	6.58	0.20	4.00	0.06	8.34
DTB	2016	4.50	0.02	8.00	0.39	7.23
DTB	2017	4.73	1.39	3.20	0.67	7.77
HF	2013	5.72	0.34	5.90	0.45	7.43
HF	2014	6.88	0.02	5.05	0.71	7.63
HF	2015	6.58	0.47	6.60	0.12	8.28
HF	2016	4.50	0.00	0.00	0.39	8.25
HF	2017	4.73	0.28	6.00	0.90	6.75
UCHUMI	2013	5.72	0.00	0.00	0.87	8.11
UCHUMI	2014	6.88	0.00	0.00	0.75	8.44
UCHUMI	2015	6.58	0.00	0.00	0.33	8.36
UCHUMI	2016	4.50	0.00	0.00	0.80	7.45
UCHUMI	2017	4.73	0.00	0.00	0.11	7.47

BAMBURI	2013	5.72	0.43	2.12	0.54	8.32
BAMBURI	2014	6.88	0.00	0.00	0.52	8.95
BAMBURI	2015	6.58	0.01	3.45	0.51	7.76
BAMBURI	2016	4.50	0.32	9.85	0.49	8.1
BAMBURI	2017	4.73	0.20	5.00	0.51	7.11
Kenolkobil	2013	5.72	0.27	7.55	0.45	8.33
Kenolkobil	2014	6.88	0.02	5.00	0.56	8.65
Kenolkobil	2015	6.58	0.00	0.00	0.63	8.39
Kenolkobil	2016	4.50	0.32	11.80	0.23	7.28
Kenolkobil	2017	4.73	0.40	9.00	0.53	7.82
KenGen	2013	5.72	0.03	6.50	0.35	7.5
KenGen	2014	6.88	0.18	5.00	0.02	7.68
KenGen	2015	6.58	0.20	1.70	0.11	8.29
KenGen	2016	4.50	0.50	7.35	0.32	8.3
KenGen	2017	4.73	0.08	2.25	0.21	9.81
UMEME	2013	5.72	0.42	6.00	0.76	8.14
UMEME	2014	6.88	0.30	2.26	0.47	8.52
UMEME	2015	6.58	0.00	0.00	0.79	8.41
UMEME	2016	4.50	0.23	12.95	0.44	7.47
UMEME	2017	4.73	0.05	3.13	0.83	7.54
SANLAM	2013	5.72	0.06	14.85	0.71	10.32
SANLAM	2014	6.88	0.00	0.00	0.87	9.87
SANLAM	2015	6.58	0.00	0.00	0.06	10.56
SANLAM	2016	4.50	0.16	2.50	0.58	9.22
SANLAM	2017	4.73	0.07	6.80	0.19	9.82
LIBERTY	2013	5.72	0.04	3.50	0.61	9.87
LIBERTY	2014	6.88	0.16	3.45	0.02	10.71
LIBERTY	2015	6.58	0.00	0.00	0.77	9.01
LIBERTY	2016	4.50	0.00	0.00	0.48	9.58
LIBERTY	2017	4.73	0.31	7.00	0.66	9.61
CIC	2013	5.72	0.00	0.00	0.47	8.39
CIC	2014	6.88	1.40	7.54	0.69	10.22
CIC	2015	6.58	0.72	11.10	0.20	10.06
CIC	2016	4.50	0.00	0.00	0.17	9.42
CIC	2017	4.73	0.43	3.95	0.84	10.91
KCB	2013	5.72	0.15	7.00	0.52	9.45
KCB	2014	6.88	0.96	7.72	0.79	8.71
KCB	2015	6.58	0.02	3.00	0.08	9.25
KCB	2016	4.50	0.82	5.00	0.54	9.53
KCB	2017	4.73	0.57	7.75	0.38	11.01

NBK	2013	5.72	0.28	6.00	0.50	10.70
NBK	2014	6.88	0.00	0.00	0.27	11.80
NBK	2015	6.58	0.00	0.00	0.47	10.20
NBK	2016	4.50	0.36	3.50	0.49	9.15
NBK	2017	4.73	0.00	0.00	0.51	9.75
NIC	2013	5.72	0.23	5.00	0.73	9.70
NIC	2014	6.88	0.31	4.00	0.55	8.88
NIC	2015	6.58	0.12	6.00	0.83	10.43
NIC	2016	4.50	0.00	0.00	0.50	9.67
NIC	2017	4.73	0.02	5.90	0.65	9.54
STANCHART	2013	5.72	0.92	5.05	0.53	11.58
STANCHART	2014	6.88	1.20	6.00	0.68	9.36
STANCHART	2015	6.58	0.40	8.10	0.43	8.74
STANCHART	2016	4.50	0.50	2.35	0.61	9.34
STANCHART	2017	4.73	0.23	3.00	0.20	11.06
EQUITY	2013	5.72	0.45	4.00	0.16	10.11
EQUITY	2014	6.88	0.00	0.00	0.73	9.40
EQUITY	2015	6.58	0.52	7.30	0.08	11.43
EQUITY	2016	4.50	0.07	6.90	0.80	9.80
EQUITY	2017	4.73	0.60	4.60	0.27	9.58
CO-OP	2013	5.72	0.81	6.35	0.83	9.75
CO-OP	2014	6.88	0.97	3.45	0.54	9.80
CO-OP	2015	6.58	0.46	9.85	0.60	8.53
CO-OP	2016	4.50	0.00	0.00	0.17	10.57
CO-OP	2017	4.73	0.42	7.55	0.58	9.63
EXPRESS	2013	5.72	0.37	5.00	0.59	9.51
EXPRESS	2014	6.88	0.03	4.10	0.61	11.13
EXPRESS	2015	6.58	0.00	0.00	0.62	9.49
EXPRESS	2016	4.50	0.00	0.00	0.38	9.45
EXPRESS	2017	4.73	0.12	6.50	0.05	9.56
SAMEER	2013	5.72	0.01	5.00	0.66	11.08
SAMEER	2014	6.88	0.03	1.70	0.02	9.72
SAMEER	2015	6.58	0.27	7.35	0.83	9.61
SAMEER	2016	4.50	0.84	2.25	0.81	11.60
SAMEER	2017	4.73	0.01	6.00	0.78	9.84
KEN AIRWAYS	2013	5.72	0.00	0.00	0.61	9.42
KEN AIRWAYS	2014	6.88	0.00	0.00	0.73	9.84
KEN AIRWAYS	2015	6.58	0.04	2.29	0.51	9.83
KEN	2016	4.50	0.00	0.00	0.72	9.84

AIRWAYS						
KEN AIRWAYS	2017	4.73	0.00	0.00	0.14	8.76
NATION MEDIA	2013	5.72	0.45	2.60	0.47	10.26
NATION MEDIA	2014	6.88	0.12	5.00	0.23	9.74
NATION MEDIA	2015	6.58	0.02	7.00	0.47	9.58
NATION MEDIA	2016	4.50	0.09	4.67	0.19	11.25
NATION MEDIA	2017	4.73	0.01	4.00	0.51	9.55
STANDARD G	2013	5.72	0.61	7.80	0.53	9.45
STANDARD G	2014	6.88	0.01	2.00	0.74	10.00
STANDARD G	2015	6.58	0.03	9.00	0.48	9.32
STANDARD G	2016	4.50	0.10	2.77	0.50	9.72
STANDARD G	2017	4.73	1.82	8.00	0.16	20.07
TPS	2013	5.72	0.07	7.50	0.28	9.40
TPS	2014	6.88	0.10	11.10	0.56	9.72
TPS	2015	6.58	0.14	2.00	0.17	10.08
TPS	2016	4.50	0.07	3.98	0.70	10.13
TPS	2017	4.73	0.06	7.20	0.21	9.70
SCANGROUP	2013	5.72	0.23	2.00	0.05	10.73
SCANGROUP	2014	6.88	0.76	3.60	0.49	11.19
SCANGROUP	2015	6.58	0.06	0.00	0.76	9.57
SCANGROUP	2016	4.50	0.26	0.00	0.78	11.34
SCANGROUP	2017	4.73	0.18	6.00	0.03	9.49
DEACONS	2013	5.72	0.00	0.00	0.52	9.42
DEACONS	2014	6.88	0.00	0.00	0.23	9.93
DEACONS	2015	6.58	0.07	3.50	0.54	9.51
DEACONS	2016	4.50	0.14	5.00	0.56	11.13
DEACONS	2017	4.73	0.07	2.50	0.57	10.08
LONGHORN	2013	5.72	0.01	5.00	0.19	11.21
LONGHORN	2014	6.88	0.70	6.00	0.05	10.05
LONGHORN	2015	6.58	0.08	4.68	0.61	9.37
LONGHORN	2016	4.50	0.19	5.90	0.29	9.95
LONGHORN	2017	4.73	0.10	8.00	0.64	9.87
ARM	2013	5.72	0.00	0.00	0.82	10.47
ARM	2014	6.88	0.02	8.10	0.80	10.56
ARM	2015	6.58	0.45	2.35	0.77	10.72
ARM	2016	4.50	0.02	13.00	0.05	10.71



ARM	2017	4.73	0.00	0.00	0.43	11.44
CROWN	2013	5.72	0.00	0.00	0.71	9.45
CROWN	2014	6.88	0.80	6.60	0.49	9.34
CROWN	2015	6.58	0.01	7.40	0.63	9.58
CROWN	2016	4.50	0.45	4.60	0.16	9.44
CROWN	2017	4.73	0.06	6.35	0.02	11.20
EA PORTLAND	2013	5.72	0.09	3.45	0.80	10.13
EA PORTLAND	2014	6.88	0.11	9.85	0.45	11.19
EA PORTLAND	2015	6.58	0.00	0.00	0.71	9.98
EA PORTLAND	2016	4.50	0.64	7.55	0.49	9.36
EA PORTLAND	2017	4.73	0.38	5.80	0.61	9.98
TOTAL	2013	5.72	0.25	4.10	0.59	9.91
TOTAL	2014	6.88	0.34	1.80	0.68	8.58
TOTAL	2015	6.58	0.22	9.00	0.34	10.86
TOTAL	2016	4.50	0.07	6.50	0.36	9.54
TOTAL	2017	4.73	0.34	5.00	0.78	9.71
KPL	2013	5.72	0.76	4.00	0.81	11.47
KPL	2014	6.88	0.14	7.40	0.47	8.77
KPL	2015	6.58	0.20	2.25	0.88	9.25
KPL	2016	4.50	0.67	5.00	0.12	9.49
KPL	2017	4.73	0.93	4.00	0.07	9.51
JUBILEE	2013	5.72	0.01	2.00	0.30	11.20
JUBILEE	2014	6.88	0.00	0.00	0.66	9.70
JUBILEE	2015	6.58	0.01	3.50	0.32	9.38
JUBILEE	2016	4.50	0.04	4.85	0.11	9.87
JUBILEE	2017	4.73	0.01	2.00	0.07	10.03
KENYA RE	2013	5.72	0.08	5.00	0.09	11.27
KENYA RE	2014	6.88	0.01	2.00	0.71	11.57
KENYA RE	2015	6.58	0.00	0.00	0.69	11.29
KENYA RE	2016	4.50	0.45	7.89	0.12	10.18
KENYA RE	2017	4.73	0.00	0.00	0.35	9.74
BRITAM	2013	5.72	0.01	2.00	0.63	10.44
BRITAM	2014	6.88	0.02	9.00	0.59	10.63
BRITAM	2015	6.58	0.16	6.00	0.16	11.17
BRITAM	2016	4.50	0.03	3.70	0.65	9.02
BRITAM	2017	4.73	0.02	7.50	0.08	10.14
OLYMPIA	2013	5.72	0.13	1.10	0.17	9.23

OLYMPIA	2014	6.88	0.93	2.00	0.05	9.37
OLYMPIA	2015	6.58	0.00	0.00	0.78	8.93
OLYMPIA	2016	4.50	0.01	2.00	0.81	9.60
OLYMPIA	2017	4.73	0.86	3.00	0.45	9.72
CENTUM	2013	5.72	0.50	5.70	0.18	11.68
CENTUM	2014	6.88	0.01	5.00	0.92	11.79
CENTUM	2015	6.58	0.80	1.75	0.61	11.90
CENTUM	2016	4.50	0.40	6.00	0.03	12.00
CENTUM	2017	4.73	0.00	0.00	0.78	9.45
TRANS-CENTUR	2013	5.72	0.01	4.00	0.75	9.96
TRANS-CENTUR	2014	6.88	0.00	0.00	0.24	8.68
TRANS-CENTUR	2015	6.58	0.01	5.00	0.70	9.32
TRANS-CENTUR	2016	4.50	0.00	0.00	0.23	8.59
TRANS-CENTUR	2017	4.73	0.01	4.78	0.66	8.34
HOME AFRICA	2013	5.72	0.03	8.00	0.28	10.23
HOME AFRICA	2014	6.88	0.04	4.35	0.62	8.77
HOME AFRICA	2015	6.58	0.34	5.90	0.61	10.43
HOME AFRICA	2016	4.50	0.83	6.00	0.56	10.63
HOME AFRICA	2017	4.73	0.42	6.60	0.54	11.18
KURWITU	2013	5.72	0.02	8.10	0.63	11.30
KURWITU	2014	6.88	0.98	2.35	0.07	11.41
KURWITU	2015	6.58	0.91	3.00	0.68	12.74
KURWITU	2016	4.50	0.03	4.00	0.72	12.85
KURWITU	2017	4.73	0.19	6.00	0.15	12.96
BOC	2013	5.72	0.96	2.00	0.77	9.42
BOC	2014	6.88	0.00	0.00	0.81	9.32
BOC	2015	6.58	0.01	4.60	0.49	9.37
BOC	2016	4.50	0.24	6.35	0.89	9.36
BOC	2017	4.73	0.02	3.45	0.58	9.52
BAT	2013	5.72	0.60	9.85	0.61	10.88
BAT	2014	6.88	0.39	5.00	0.16	11.64
BAT	2015	6.58	0.00	0.00	0.72	11.75
BAT	2016	4.50	0.00	0.00	0.32	8.90

BAT	2017	4.73	0.00	0.00	0.58	8.23
CARBACID	2013	5.72	0.01	4.80	0.65	8.40
CARBACID	2014	6.88	0.00	0.00	0.23	8.15
CARBACID	2015	6.58	0.02	6.45	0.62	7.05
CARBACID	2016	4.50	0.10	5.00	0.27	7.58
CARBACID	2017	4.73	0.33	6.80	0.03	7.26
EABL	2013	5.72	0.25	7.35	0.54	7.52
EABL	2014	6.88	0.85	2.25	0.52	8.18
EABL	2015	6.58	1.26	6.00	0.60	7.93
EABL	2016	4.50	0.88	4.56	0.45	6.50
EABL	2017	4.73	1.09	2.00	0.79	8.02
MUMIAS	2013	5.72	0.00	0.00	0.43	8.16
MUMIAS	2014	6.88	0.00	0.00	0.02	8.19
MUMIAS	2015	6.58	0.00	0.00	0.16	7.48
MUMIAS	2016	4.50	0.00	0.00	0.78	7.22
MUMIAS	2017	4.73	0.00	0.00	0.81	6.36
UNGA	2013	5.72	0.13	2.00	0.58	6.98
UNGA	2014	6.88	0.00	0.00	0.56	7.81
UNGA	2015	6.58	0.14	7.00	0.18	7.90
UNGA	2016	4.50	0.00	0.00	0.72	6.50
UNGA	2017	4.73	0.52	6.00	0.69	6.95
EVERADY	2013	5.72	0.00	0.00	0.67	8.76
EVERADY	2014	6.88	0.00	0.00	0.13	8.10
EVERADY	2015	6.58	0.01	1.20	0.63	7.11
EVERADY	2016	4.50	0.00	0.00	0.61	8.33
EVERADY	2017	4.73	0.00	0.00	0.59	8.65
KENYA ORCHAD	2013	5.72	1.34	2.30	0.58	8.39
KENYA ORCHAD	2014	6.88	0.01	4.00	0.56	7.28
KENYA ORCHAD	2015	6.58	0.40	2.00	0.45	7.82
KENYA ORCHAD	2016	4.50	0.01	3.20	0.02	7.50
KENYA ORCHAD	2017	4.73	0.71	4.20	0.50	7.68
FRAME TREE	2013	5.72	0.01	6.00	0.15	8.29
FRAME TREE	2014	6.88	0.34	1.75	0.08	8.30
FRAME TREE	2015	6.58	0.01	5.00	0.63	8.14
FRAME TREE	2016	4.50	0.80	4.50	0.87	8.52
FRAME TREE	2017	4.73	0.12	4.00	0.69	8.41
SAFARICOM	2013	5.72	0.73	3.50	0.71	11.04

SAFARICOM	2014	6.88	0.40	4.25	0.15	10.12
SAFARICOM	2015	6.58	0.76	2.50	0.78	9.72
SAFARICOM	2016	4.50	0.30	5.00	0.82	11.11
SAFARICOM	2017	4.73	0.26	7.20	0.54	11.34
EA cables	2013	5.72	0.03	5.00	0.16	11.20
EA cables	2014	6.88	0.45	4.85	0.69	9.89
EA cables	2015	6.58	0.00	0.00	0.73	9.92
EA cables	2016	4.50	0.63	5.00	0.65	9.67
EA cables	2017	4.73	0.52	4.33	0.53	9.91