# THE EFFECT OF DIVIDEND POLICY ON SHARE PRICES OF MULTINATIONAL AND LOCAL COMPANIES LISTED AT THE NAIROBI SECURITIES EXCHANGE

# $\mathbf{BY}$

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# **DECLARATION**

This research project is my original work and has not been	n presented for a degree in any
other university.	
Signed	Date
D61/62963/2011	
This project was submitted for examination with the	approval of my University
Supervisor.	
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# **DEDICATION**

This research project is dedicated to my husband Engineer Fredrick Otieno, my son Stanley Ng'wono and my daughter Shamilla Geno.

# **ABSTRACT**

This paper attempts to determine the effect of dividend policy on share prices of companies listed at the Nairobi Securities Exchange and whether this effect is dependent on whether a company is local or multinational. A sample of 38 listed companies from the Nairobi Securities Exchange was examined for a period of 10 years from 2003 to 2012. This study was limited to companies that were listed for the whole period and excludes those that were listed after the year 2003 or delisted before the year 2012. This study was facilitated by the use of secondary data extracted from annual reports of companies obtained from the Nairobi Securities Exchange. The empirical estimation was based on cross sectional regression analysis of the relationship between dividend policy and share prices for local and multinational companies after controlling for earnings per share, and net asset value per share. The independent variables were dividend payout ratio, earnings per share and net assets value per share. The study made use of dummy variables to represent the nature of the companies, i.e., whether they were local or multinational and established a positive relationship between share prices and dividend policy which was dependent on whether the company was a local or a multinational. From the results we conclude that dividend policy has a significant effect on the share price, however, the effect is not significant for local firms. Dividend payout is highly positively correlated to share prices for multinational firms; however this relationship is negative for local firms with a weak form of correlation.

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# LIST OF ABBREVIATIONS

CAPM - Capital Asset Pricing Model

DP - Dividend Policy

DPR - Dividend Payout Ratio

EPS - Earnings Per Share

IPO - Initial Public Offering

MM - Modigliani & Miller

MPS - Market Price per Share

NAVS - Net Assets Value per Share

NSE - Nairobi Securities Exchange

NYSE - New York Stock Exchange

REPS - Retained Earnings Per Share

US - United States

# CHAPTER ONE

# INTRODUCTION

# 1.1 Background

Many aspects of dividend policy including the linkage between dividend policy and stock prices remains a source of controversy despite years of empirical and theoretical research (Allen and Rachim, 1996). Research has steered development and documentation of many theories on the relevance and irrelevance of dividend policy and many authors continue to come up with different findings from their studies on the relevance of dividend policy and its effect on share prices (Murekefu and Ouma, 2012).

A number of empirical studies have indicated that, in corporate finance, one of the most essential decisions is related to the response to the question of whether a company's profits should be distributed to shareholders in the form of dividends or it must be reinvested in new investment opportunities, and if it ought to be distributed, what proportion of the profits should be distributed to shareholders and what proportion should be returned back to the business for further investments (Dawar, 2012; Kouki & Guizani, 2009). Scholars who have examined these questions through empirical studies suggest that managers must consider the type of dividend policy that will result in the maximisation of shareholders' wealth, and they should not only focus on the question of the amount of profits to be ploughed back into the business, but also consider the effect

of their final policy decisions on their company's stock prices (Dawar, 2012; Kouki & Guizani, 2009).

#### 1.1.1 Dividend Policy

According to Lease et al. (2000), the term dividend policy refers to the practice that management follows in making dividend payout decisions or, in other words, the size and pattern of cash distributions over time to shareholders. Bitok et al. (2010) observed that dividend policy is simply the determination of the proportion of profits paid out to shareholders- usually periodically. Dividend payout is the percentage of earnings a company pays in cash or otherwise to its shareholders (Van Horne, 2001).

There are four dividend policies in practice as outlined by Pandey (2010); residual dividend policy which dictates the payment of dividends in the absence of investment opportunities, constant amount per share, constant amount per share plus extra depending on profits and constant payout ratio.

Dividend policy is one of the most controversial subjects in finance. Finance scholars have engaged in extensive theorizing to explain why companies should pay or not pay dividends. Despite extensive debate and research, the actual motivation for paying dividends remains a puzzle (Baker and Powell, 1999).

#### 1.1.2 Share Prices

A share price is the price of a single share of a number of sellable stocks of a company, derivative or other financial asset. The share price of a firm is directly observable from the stock exchange which is part of the securities segment of the capital market (Seitz, 1990). The most common types of securities are stocks, bonds and options. Securities markets are the mechanisms that allow suppliers and demanders of funds to make transactions. They also allow transactions to be made quickly and at a fair price (Feldstein and Green, 1983).

# 1.1.3 Effect of Dividend Policy on Stock Prices

Some scholars have argued that dividends are relevant because they have informational value. Financial signaling theory implies that dividends may be used to convey information. Information, rather than dividends itself affects share prices (Brigham and Gapenski, 1994). Litzenberger and Ramaswamy (1979) employed a short term dividend yield definition and found that there is a positive relationship between dividend yield and stock returns. However, other schools of thought suggest that dividends are irrelevant and it doesn't matter what percentage of earnings is distributed to the shareholders. Black and Scholes (1974) in their study that employed long term dividend yield definition found no significant statistical relationship between a portfolio's monthly returns of a share and its dividend yield.

# 1.1.4 Multinational and Local Companies Listed at the NSE

A multinational corporation is a corporation that is registered in more than one country or that has operations in more than one country. It is a large corporation which produces and sells goods or services in various countries (Christos & Sugden, 2000). It can also be viewed as an enterprise operating from one county but managed from another (home) country. Using this gauge, there are 25 multinationals and 36 local companies listed at the NSE (Appendix 1).

#### 1.2 Research Problem

Despite numerous studies that have been done, the effect of dividend policy on share prices remain an unresolved issue in finance. Several theories that have been put forward have not had a universal proposition (DeAngelo, et. al, 2006). Modigliani and Miller (1961), one of the pioneers of dividend irrelevance theories stated that dividends are irrelevant in the valuation of a firm since investors can create "homemade" dividends by practicing arbitrage. Walter (1963) on the other hand disagreed with MM and had a view that dividend policy would only be irrelevant if the level of growth rate and weights employed in determining cost of capital are independent of dividend payout policy. Investors prefer lower pay-out companies in order to avoid current taxation since dividends are taxed at higher rates than capital gains (Litzenberger & Ramaswamy, 1979). The choice of dividend policy will always affect the value of an enterprise since markets are never perfect in the real word (Walter, 1963). The announcement of dividends convey certain information which is not available to the public thus there is a

positive relationship between asymmetry of information and dividend policy hence managers use dividends to convey useful information about a firm's future earnings to investors (Bhattacharya, 1979).

Recent studies suggest that dividend policy decisions carry concealed messages from management that may influence share prices (Zhou & Ruland, 2006). A number of studies have been done mostly in the developed word to establish the relationship between dividend policy and share prices especially in advanced markets. Azhagaiah & Priya (2008) established that higher dividends increased the market value of shares while lower dividends reduced the market value of shares since shareholders prefer dividends to future capital gains. In Kenya, few studies have analysed the relationship between dividend policy and share prices. Current dividend payments reduce investor uncertainty, causing investors to discount the firm's earnings at lower rates of return while dividend reduction increases uncertainty thereby raising the required rate of return (Waithaka et al., 2012). The announcement of dividends by a firm has short term effect on its share price Muriuki (2010) and the effect of dividend per share (DPS) on firm value is stronger than that of retained earnings per share (REPS) when DPS and REPS are the only two explanatory variables (Mohammed, 2010).

There is no known study done locally to establish the effect of dividend policy on share prices of local and multinational companies. Past studies have generalized their research to a given sample drawn from the stock exchanges without attempting to focus on the difference in nature of organizations. The reactions to dividend policy changes could be

dependent on the nature of a company hence such findings would not be generalized to the whole population. The study sought to establish the effect of dividend policy on share prices of local and multinational companies hence bridge the research gap. Does dividend policy have a significant effect on share prices? Secondly, does this effect depend on whether a company is a multinational or local company listed at the NSE?

#### 1.3 Research objective

The general objective of this study was to establish the effect of dividend policy on share prices of multinational and local companies listed at the NSE.

# 1.4 Hypothesis

**H**<sub>0</sub>: Dividend policy has no significant effect on share prices of multinational and local companies listed at the NSE

**H**<sub>1</sub>: Dividend policy has a significant effect on the share prices of multinational and local companies listed at the NSE

# 1.5 Importance of the study

Difficulties arise in trying to link dividend policy directly to share prices. The findings on the effect of dividend policy on share prices of multinational and local companies will be of great importance to the following stakeholders;

Senior managers and board of directors: Managers will be able to know the information content of dividend policy hence use dividends to convey important information to

shareholders. When managers know the relationship between dividend policy and share prices, then they will be able to satisfy shareholder expectations.

The Government of Kenya: The Government will find this research useful in the formulation of polices that would protect shareholders from exploitation by firm managers by knowing the information content of dividend policies and the importance of this information for local and multinational companies.

Investment analysts: They will be able to use the findings to offer value adding services to their clients thereby assisting them to maximize the share value of shares held. This would also increase their credibility in the face of their clients thereby increasing their clientele.

Scholars and Academicians: The study would be of great importance to scholars and academicians who may wish to use its findings as a basis of further research on the subject matter thereby adding to the existing body of knowledge in the area of the relationship between dividend policy and share prices. This research paper will give them additional information on the effect of dividend policy on share prices.

Investors and economists: This study will be of importance to investors who may need to know the effect of dividend policy on share prices of local and multinational companies order for them to make informed investment decisions thereby shun impulsive investments behavior witnessed during the previous Kenyan IPOs. The study will also help economists understand the functioning of the capital markets.

# **CHAPTER TWO**

### LITERATURE REVIEW

#### 2.1 Introduction

This study was aimed at establishing the effect of dividend policy on share prices of multinational and local companies listed at the NSE.

# 2.2 Dividend Policy Theories

There are a number of contradicting theories that have explained the relationship between dividend policies and share prices at the stock market. The theories present conflicting opinions as to the effect of dividend policy decisions on the value of a company's shares. In the opinion of one school of thought, dividends are significant to the valuation of a company, whilst other schools of thought contrarily posit that the value of a firm does not affect its share prices. All these schools of thoughts have been the subjects of further studies for a long time.

# 2.2.1 Dividend Irrelevance Proposition- Modigliani & Miller (1961)

Modigliani and Miller (1961) in their ground breaking paper about dividend policy, growth and valuation of shares forwarded a proposition that dividend policy chosen by a firm is irrelevant in as far as valuation of the firm is concerned in an ideal economy characterized by perfect capital markets, rational behaviour and perfect certainty. They

went further to state that firm value is rather determined by the quality of a firm's investment policy and the earning power of its assets.

From their proposition, shareholders would not pay a premium for any type of dividend policy because they can create home grown dividends by adjusting their portfolios based on their preferences. MM based their arguments on assumptions which if violated lead to the relevance of dividend policy not because dividends are preferred. However, it needs to be noted that these assumptions are untenable in the real world.

MM assumed that capital markets are perfect whereby no buyers or sellers of securities is large enough to have a significant influence on ruling share prices; that investors are rational meaning that they always prefer stocks of higher returns and they are risk averse; and that there is perfect certainty hence there is complete assurance on the part of the investors as to future investment programs and profits of every corporation.

#### 2.2.2 Bird in the Hand Theory- Lintner (1962) and Gordon (1963)

Lintner (1962) concluded that purely competitive markets, maximizing behaviour, absence of issue costs and taxes, and identical interest rates to personal and corporate debtors are not sufficient to make investors indifferent to substitutions between retained earnings and debt in financing fixed budgets. Investors will always have preference for dividends as a result of time value of money.

Gordon (1963) similarly presented an argument that a corporation's share price or its cost of capital is not independent of dividend policy. He went on to cross examine MM's

proposition and state its short comings. Gordon made two assumptions; that investors are risk averse and that uncertainty increases with increase of time into the future upon which dividends would be received. Consequently, the single discount rate an investor uses to value a share's dividend expectations is an increasing function of the rate of growth in the dividend hence dividend policy influences the value of a share. MM however criticized the bird in hand theory and called it a fallacy since most recipients of dividends would invest the funds in the same or different company.

# 2.2.3 Walter's Model- Walter (1963)

Walter (1963) in his seminal paper, Dividend policy: Its influence on share prices, use the analogy of dividend policy weighted differently from retained earnings to demonstrate the relevance of dividend policy. He approached the discussion from a net cash flows position and considered the effects of additions or subtractions from these flows. The market prices of stocks at any time is determined by two factors; the finite flow of dividends streams and terminal market values. He held the assumptions that investors are solely motivated by the monetary benefits only and that they do all the best they can but since they exist in a competitive environment, they are unable to stack results. Secondly, corporate management is keenly aware of the potential impact of its action upon stock prices but may however be confronted with mixed motivations like self-preservation and avoidance of anti-trust action.

He stated that investors reaction to dividend policy changes can nullify in whole or part of their price effect. Investment decisions are however linked with dividend policy hence dividend policy is relevant in this regard. Walter (1963) however did not totally disregard the irrelevance of dividends. He went ahead to state conditions under which dividends would be irrelevant; if the level of growth rate is independent of dividend pay-out policy and if the weights employed are independent of the dividend pay-out policy that is the weights are invariant with respect to changes in dividend policy.

He concluded that the choice of dividend policy will always affect the value of an enterprise as the general conditions for neutrality are not possible in the real world where markets are not perfect and recommended that growth firms should retain all earnings; normal firms should distribute all earnings while declining firms should be indifferent to dividend policy.

# 2.2.4 Tax Preference Theory- Litzenberger & Ramaswamy (1979)

Litzenberger & Ramaswamy (1979) put forward a theory which claims that investors prefer lower pay-out companies for avoidance of current taxation. Dividends are taxed at higher rates compared to capital gains hence the preference. Dividends are taxed in the year they are received while capital gains if any are taxed when stock is sold. Using the time value of money concept, dividends paid on present dividends has higher effective capital cost that capital gains taxed in future.

This theory reiterates that dividend policy is relevant and influences the value of shares since shareholder prefer earning retention of earnings to current dividends. This theory

attacks MM's assumption that taxes are irrelevant since taxes are unavoidable in real world.

# 2.2.5 Signalling Theory of Dividends

Miller and Rock (1985); Bhattachary (1979) in their model overlooked the standard finance model which assumes that in a perfect capital market, both outside investors and inside managers have access to the same information about the firm's current earnings and future opportunities. They replaced this assumption with the real world occurrence whereby managers know more about the firm's earnings and investment opportunities more than outside investors.

In that case, the announcement of dividends convey certain information which is not available to the public thus the model suggest a positive relationship between asymmetry of information and dividend policy. Managers use dividends to convey useful information about a firm's future earnings to investors (Bhattacharya, 1979)

# 2.3 Empirical Evidence

Jahnke (1975) in his study to establish what's behind stock prices done using S&P 425 industrial averages for 10 years from 1947 advanced that the determinants of stock prices aren't mysterious, stock prices reflect earning expectations and expected rates of returns. He observed that changes in stock prices and dividend income are the realized compensations for owning stocks and used the dividend discount model to demonstrate

the relationship between dividend policy and stock values. He concluded that dividend payout ratio is one of the single most determinants of stock prices.

Karanja (1987) studied dividend practices of publicly quoted companies in Kenya and established that one of the reasons why firms payout dividends is as a result of lack of investments opportunities which promise adequate returns or more returns than the shareholders would have otherwise received had they been paid dividends for them to make investments independently.

Huka (1998) in his study to establish the impact of dividend policy on shareholder's wealth for companies quoted at the NSE from 1997 to 2000 found out that shareholders preference for dividends varied from one company to the other. They also established that there is a negative relationship between dividend payment and share prices.

Baker & Powell (1999) surveyed 603 chief financial officers of U.S firms listed at the NYSE to establish how corporate managers view dividends. Based on 198 usable responses, the empirical results showed that most survey respondents believed that dividend policy affects firm value. Signaling effect had the highest level of agreements by respondents to explain dividend relevance.

Bitok (2004) in a study on the effect of dividend policy on the value of firms quoted at the NSE done for a six year period from 1998 to 2003 established that dividend policy is relevant. They observed that an optimal dividend policy exists. They however put a caveat that the relationship between dividend policy and values of quoted companies at

the NSE was weak implying that other factors other than dividend policy like investment and financing decisions affect the value of the firm. Dividend policy in this study was established to be negatively correlated with firm values in line with the tax differential theory advanced by Litzenberger and Ramaswamy in 1979.

Balke & Mohar (2006) sought to establish the drivers of stock prices by identifying the determinants of stock price movements. They argued that there is a fundamental problem in identifying the source of stock price movements because stock prices are very persistent but real dividend growth and excess returns are not. They presented that the decomposition of stock price movements is very sensitive to what assumptions are made about the presence of permanent changes in either real dividend growth or excess stock returns. When they allowed real dividend growth to have a permanent component but excess stock returns a temporary one, then real dividend growth was found to have a significant bearing on stock price movements than did excess returns. However this occurrence was reversed when excess returns were allowed to have a permanent component.

Azhagaiah & Priya (2008) in their empirical study on the impact of dividend policy on shareholders' wealth in Organic and Inorganic Chemical Companies in India for the period 1996 to 2006 established that there was a significant impact of dividend policy on shareholders' wealth for Organic Chemical Companies while shareholders' wealth was not determined by dividend policy in Inorganic Chemical Companies. They established that higher dividends increased the market value of shares while lower dividends reduced

the market value of shares since shareholders preferred current dividends to future income. Secondly, they also observed that since dividend has information content, its payment indicates that the company has a good earning capacity.

AL-Shubiri (2010) did an empirical study on the determinants of market stock price movements of Jordanian commercial banks based on a sample of 14 commercial banks listed at the Amman Stock Exchange for the period 2005-2008. He found out that there is a highly positive significant relationship between market price of stock and net asset value per share; stock dividend percentage; gross domestic product and a negative significant relationship on inflation and lending rates. However the relationship was not always significant on some years of Amman Stock Exchange.

Researchers have reported that, in the past, dividend policies have just been concerned with the selections between payments of earnings to a company's shareholders as cash dividends or retention of the profits in firms (Bank & Cheffins, 2010). This implies that, in such a scenario, a dividend policy only determined the issues of dividend payments and the amount to be paid to shareholders in the form of the dividends (Bank & Cheffins, 2010). In contrast, other empirical evidence shows that in the contemporary corporate finance, dividend policies deal with more salient issues, which entail how a company may attract more investors in different tax brackets and how companies may increase the market value of companies and share repurchase in place of cash dividends among others (Bank & Cheffins, 2010).

Mbaka (2010) did an empirical study on the applicability of dividend signaling theory at

the NSE between 2003 to 2007 and established that dividend announcements by companies cause some reaction in market prices and returns depending on the information contained in the announcement. Dividend announcements had positive effects for companies with increasing dividends while it had negative reactions for companies with decreasing dividends. Companies with no change in dividends were found to have mixed reactions towards dividend announcements.

Mohammed (2010) in her study titled the relationship between dividend per share and firm value between done between 2005 and 2009 found out that for firms quoted at the NSE, the effect of dividend per share (DPS) on firm value is strong than that of retained earnings per share (REPS) when DPS and REPS are the only two explanatory variables. She also concluded that the announcement of expected dividends don't play an important role in the determination of firm value in all industries.

More recently Limungi (2011) in his study on the ex-dividend day stock price behaviour in the Nairobi Securities Exchange covering stock prices of twenty companies which constituted the NSE share index as at September 2010 observed that the ex-dividend day behavior of stocks that traded at the NSE during the period under study indicated unique behaviors which needed to be studied further. However, generally most stocks prices on the ex-dividend date dropped.

Murekefu & Ouma (2012) in their study on the relationship between dividend payout and firm performance for firms listed at the NSE done for a nine year period from 2002 to 2010 established that there exists a strong relationship between dividend policy and firm

performance. They therefore concluded that dividend policy is relevance and therefore affects firm performance. They also found out that revenue and total assets are also among the factors that affect firm performance and that cash dividends was the most commonly used form of dividends among listed companies in Kenya.

Enhardt (2013) also conducted another study whose findings showed that there was correlation between dividend policies and share prices. During the study, it was realised that dividend policies of companies impacted the market value of shares even in the perfect capital market (Enhardt, 2013). The study also suggested that shareholders may prefer present dividend instead of future capital gains. This is because future business situations are uncertain even in perfect capital markets (Enhardt, 2013). In addition, the research indicated that there was a direct correlation between dividend policies and market values of shares even in situations where the internal rates of returns and the anticipated rate of returns were the same. The findings of the research study contradicted other previous studies.

Naveed (2013) conducted a survey on the views about the determinants of change in share prices in banking sector of Karachi Stock Exchange in which he sampled 15 banks covering the period 2008-2011. He found out from the study that the forces of demand and supply have a direct effect on share prices. However it is not only the forces of demand and supply that influence share prices, other firm, industry and country specific factors also influence share prices. He also established that the volume of stocks traded also had a significant effect on the prices.

#### 2.4 Conclusion

Black (1976) coined the term "the dividend puzzle" to illustrate the misunderstanding of dividend payment policy. Black (1976, p.5) illustrated the lack of consensus concerning the role of dividends by his statement "The harder we look at the dividend picture, the more it seems like a puzzle with pieces that just don't fit together". In all the foregoing studies, there can be identified research gaps. First, the studies failed to establish strongly whether or not there is a correlation between dividend policies and share prices. Other factors e.g. the forces of demand and supply were identified as having more significant effect on share prices other than dividend policy.

The studies have only added to the already existing confusion as to the nature of the relationship between dividend policies and share prices. Besides, the studies also failed to investigate the relationship between the two variables with specific reference to multinational and local listed companies since these operate in different macro and micro environments. Moreover, majority of the theories assumed that capital markets are perfect which rarely is the case. It can also be observed that most of the studies were done in the developed markets and more studies needed to have been done in the emerging markets. This research study sought to bridge these gaps.

# **CHAPTER THREE**

# RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter describes the methodology that was used in conducting the study successfully. Included in this chapter are the target population, research design, sampling design, data collection and analysis methods. It also describes how the data collected was analysed to determine the effect of dividend policy on share prices of local and multinational companies listed at the NSE.

# 3.2 Research Design

This study was a causal research design which is a design used to establish cause-and-effect relationship between variables. This type of design is used to measure what effect a specific change will have on existing norms and assumptions (Trochim and Donnelly, 2006). The study sought to establish the effect of dividend policy on share prices of multinational and local companies listed at the NSE.

# 3.3 Target Population

The population of interest in this study consisted of all the firms quoted at the Nairobi Securities Exchange (N.S.E) as at 30<sup>th</sup> June 2013 as shown in the Appendix 1 which indicates that there are 61 listed companies categorized in to two; multinational and local companies.

#### 3.4 Sample Design

There are 61 listed companies at the Nairobi Securities Exchange. The study used 38 companies only. Companies that were listed post 2003 were eliminated since their share prices could not be obtained.

#### 3.5 Data Collection Methods

This study was facilitated by use of secondary data which was be extracted from published reports of quoted companies which are publicly available from the companies' and NSE websites.

### 3.6 Data Analysis and Presentation

This study used multivariate regression and correlation analysis to determine the relationship between the dependent and independent variables the results of which were presented out in tables. Dividend Payout Ratio will was used as a proxy for dividend policy over the 10 year period from December 2003 to December 2012. Earnings per Share and Net Assets values per share (NAVS) were also obtained from the annual reports of respective companies. These were used as control variables. Share prices were obtained from the NSE over the same period. The significance of the relationship between dividends policy and share prices was tested at a confidence level of 95% using t-values.

Dividend Payout Ratio, Earnings per Share and Net Assets values per share were the independent variables while share price was the dependent variable. In order to examine the effect of dividend policy on share prices of local and multinational companies, dummy independent variables were used to formulate two equations as shown below. Local and multinational companies were represented by arbitrary values 1 and 0 respectively;

$$Y_i = A + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 N$$

Where  $Y_i$  is the year end Market Price per Share for the ith company in a sample of "n" companies from the NSE while A is an autonomous variable or constant.  $X_1$  represents DPOR,  $X_2$  EPS and  $X_3$  NAVS. N is a dummy variable which represents the nature of the company which can either be 1 for local or 0 for multinational.  $b_1$ ,  $b_2$ ,  $b_3$  and  $b_4$  are the coefficients of the independent variables. The selected was based on the Gordon model of common stock valuation where by earnings per share and dividend payout ratio are very significant in determining the value of a share.

Correlation analysis was used to describe the degree to which one variable is related to the other. In this study coefficient of correlation ( $\mathbf{r}$ ) and coefficient of determination ( $\mathbf{r}^2$ ) were estimated to determine the nature and magnitude of the relationship. Correlation coefficient was used to measure the degree or magnitude of relationship between dividend policy and share prices. The magnitude of the sample coefficient of correlation indicated a strong linear relationship.

# 4.0 DATA ANALYSIS AND FINDINGS

# **4.1 Statistical Description of Variables**

The statistical description of the variables which are used in this research is represented in Table 4.1. It indicates the range, the mean and standard deviation of variables used in this study.

**Table 4.1** 

Statistical description of variables	Mean	Standard Deviation	Range
Market price per share (MPS)	0.459195984	0.2389561912	1.1706431
Dividend Payout Ratio (DPR)	0.372579996	0.4981825112	3.9445300
Earnings Per Share (EPS)	0.042833146	0.0393390850	0.3142405
Net Asset Value per Share(NAVS)	0.038057935	0.0361883304	0.2528573

As Table 4.1 shows, market priced per share has the highest mean amongst variables with value of 0.459195984 and Net asset Value per share has the lowest mean amongst variables with value of 0.038067835. Dividend Payout Ratio has the highest standard deviation amongst variables with value of 0.4981825112 and Net Asset Value has the lowest standard deviation amongst variables. Moreover, DPR has the highest range amongst variable with value of 3.9445300 and NAVS has the lowest range amongst variable with value of 0.2528573.

# **4.2 Correlation Analysis amongst Variables**

**Table 4.2** 

	MPS	DPR	EPS	NAVS	MULTI	LOCAL
MPS	1	0.537			0.542	-0.127
DPR	0.382	1			0.222	-0.158
EPS	0.514	-0.180	1		0.129	-0.131
NAVS	-0.524	0.468	-0.278	1	0.260	-0.0986

MULTI	0.542	0.222	0.129	0.347	1	
LOCAL	-0.127	-0.158	-0.131	-0.0986		1

(Table 4.2, Pearson correlation between variables)

Table 4.2 represents the correlation amongst variables. It indicates that Market Price per share and Dividend Payout Ratio are positively correlated with value of 0.382 and it is significant at level of 5 %. The Market Price per Share and Net Asset Value per Share are negatively correlated with value of -0.524 and it is significant at level of 5 %.

The results presented in Table 4.2 show that Market Price per Share and Multinationals have significant positive association which is consistent with our expectation. This is because Multinational firms are usually more diversified compared to local firms. Larger firms are expected to be less risky and have high share price.

Market Price per Share and Multinationals are positively correlated with value of 0.542 and it is significant at level of 5It can also be seen from table that Multinationals and Dividend Payout Ratio has correlation of 0.222 which is significant at level of 5%. This positive correlation implies that larger size firms may have more dividend payout. Earnings per Share and Market Share Prices are positively correlated with value of 0.514 and it is significant at level of 5%. This significant positive relationship is also consistent with our expectation.

Based on table 4.2, Earnings per Share and Multinational are positively correlated with value of 0.292 and it is significant at level of 5% showing that larger firms may have high earnings.

From the table above (4.2) Net Asset Value per Share and dividend payout ratio are positively correlated with value of 0.468 and it is significant at level of 5 %. A multiple regression analysis was conducted in order to determine the effect of dividend policy on share prices. The variables as per STATA version 12.0 generated table 4.2.

The estimated model is as shown below;

$$Y_i = 0.973 + 0.042 X_1 + 2.241 X_2 + 0.052 X_3 + 1.770 N$$

Where  $Y_i$  is the year end Market Price per Share for the ith company in a sample of "n" companies from the NSE, A an autonomous variable or constant and E the error term.

 $X_1$  - represents DPR,

X<sub>2</sub> .EPS and

 $X_3$  NAVS.

N is a dummy variable which represents the nature of the company which can either be 1 for local or 0 for multinational.

# 4.3 Results of Multiple Regressions

Table 4.3 represents results of multiple regression analysis. In this stage, Market Price per share is regressed against earnings per share and dividend payout ratio. The results of the regression show that market price per share and earnings per share have significant positive relationship. The association between Market price per Share and dividend payout ratio is positive but it is not significant.

**Table 4.3** 

Model	Coefficients	Std. Error	t-stat	Sig.
(Constant)	0.797	0.033	24.333	0.000
Earnings per share	2.964	0.733	-4.043	0.000
Payout ratio	0.067	0.053	-1.266	0.209

Notes: Significance at level of 5 %;  $R^2 = 0.289$ ;  $Adj.R^2 = 0.272$ ; F-stat. = 16.467; F-prob. = 0.000.

In the next step, regression model was expanded by adding controls variables. The results are presented in Table 4.4. With addition of controls variables (Nature of company:

Multinational or local, Net Asset Value per Share) to the regression model, the significant negative association between Market Price per share and Earnings per Share still remains. In addition, the positive association between Market Price per share and dividend payout ratio remains but it is not significant. As Table 4.4 shows, there is also a significant positive association between Market price per share and multinational companies, however this association is negative for local firms. In line with our expectation, the significant positive association between market price per share and earnings per share is found, implying that companies which have higher earnings have higher share price.

**Table 4.4** 

Model	Coefficients	Std. Error	t-stat	Sig.
(Constant)	0.973	0.077	12.674	0.000
Earnings per share	2.241	0.643	-3.483	0.001
Payout Ratio	0.042	0.044	-0.975	0.333
Multi	0.052	0.013	-4.098	0.000
NAVS	1.770	0.520	3.403	0.001

*Notes: significance at level of 5%;*  $R^2$ =.554;  $Adj.R^2$ =.520; F-stat. =15.964; F-prob. =.000

From Table 4.4 our estimated model becomes;

$$Y_i = 0.973 + 0.042 \ X_1 + 2.241 \ X_2 + 0.052 \ X_3 + 1.770 \ N$$

In the following step, the dividend payout is dropped from regression equation in consideration of its strong correlation with Earnings per share. The result is presented in table 4.5

**Table 4.5** 

Model	Coefficients	Std. Error	t-stat	Sig.
(Constant)	0.973	0.077	12.684	0.000
Earnings per share	2.537	0.567	-4.477	0.000
Multi	0.053	0.013	-4.211	0.000
NAVS	1.784	0.520	3.432	0.001

Notes: Significance at level of 5 %;  $R^2 = .549$ ; Adj.  $R^2 = .520$ ; F-stat. = 18.979; F-prob. = .000

In the last stage, the earnings per share is excluded from the regression equation and regression is carried out. Table 4.6 represents the results of regression based on this analysis. A significant positive association between Market Price per Share and Dividend payout ratio is found out.

**Table 4.6** 

Model	Coefficients	Std. Error	t-stat	Sig.
(Constant)	0.911	0.080	11.412	0.000
Payout ratio	0.114	0.041	-2.782	0.007
Multi	0.059	0.013	-4.402	0.000
NAVS	2.115	0.546	3.875	0.000

Notes: Significance at level of 5 %; R<sup>2</sup> =0.484; Adj.R<sup>2</sup> =0.451; *F-stat.* =14.641; *F-prob.* =0.000

From the results of different stages of regression that have been conducted, Earnings per share and Multinationals have the most significant impact on Market price per share price with positive relationship. There a strong significant positive relationship between market price per share and Earnings per share.

## 5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Summary of the findings and conclusions

The objective of the study is to investigate the effect of dividend policy on share price with a focus on 61 firms listed in Nairobi Stock Exchange. For this purpose, a sample 38 multinationals and local companies was selected and the influence of earnings per share and dividend payout ratio on market price per share were examined by applying multiple regression for a period of ten years from 2003 to 2012. The regression model was expanded by adding control variables including nature of company (multinational or local), earning per share and net asset value per share.

The empirical results of this study showed significant positive relationship between Market price per share with two main measurements of dividend policy which are earnings per share and dividend payout ratio. From the results we conclude that dividend policy has a significant effect on the share price, however, the effect is not significant for local firms.

### 5.2 Limitations

This study mainly relied on secondary data obtained from the Nairobi Securities Exchange hence the research place reliability on the data available. However, secondary data is not always reliable and may be prone to errors or may be time barred.

Due to the limitations of data available, this study concentrated on firms listed at the NSE since information on such firms is readily available unlike unlisted companies. The study did not consider unlisted companies which could give further indication as to the relationship between the variables.

Initially the study had intended to use 61 companies listed at the NSE as at 30<sup>th</sup> June 2013. However, this proved impossible since some companies were listed after the year 2003 hence data was not available for some of the years from 2003 to 2012. The sample was therefore reduced to 38 companies listed at the NSE.

### **5.3 Recommendations**

The researchers recommend that the management of companies should clearly map out the dividend policies that they want their firms to follow. Dividend decisions should not be by the way decisions but should carefully be considered since dividends policy has an impact on firm value. Furthermore, these decisions should not be generalized since the effect of dividend policy on share prices vary depending on whether a firm is locally owned or a multinational.

### **5.4 Suggestions for further research**

Future researchers should consider doing a similar study on unlisted companies to establish whether the results still apply.

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# **APPENDICES**

# Appendix 1: Classification of Companies Listed at the NSE

Sources: http://www.nse.co.ke, 30<sup>th</sup> June 2013

	LISTED COMPANIES AT THE NSE	NATURE
1	Nation Media Group	Multinational
2	TPS Eastern Africa (Serena) Ltd	Multinational
3	Scangroup Ltd	Multinational
4	Uchumi Supermarket Ltd	Multinational
5	Sameer Africa Ltd	Multinational
6	Barclays Bank Ltd	Multinational
7	CFC Stanbic Holdings Ltd	Multinational
8	Kenya Commercial Bank Ltd	Multinational
9	Standard Chartered Bank Ltd	Multinational
10	Equity Bank Ltd	Multinational
11	Jubilee Holdings Ltd	Multinational
12	Kenya Re-Insurance Corporation Ltd	Multinational
13	British-American Investments Company (Kenya) Ltd	Multinational
14	Olympia Capital Holdings ltd	Multinational
15	Centum Investment Co Ltd	Multinational
16	Trans-Century Ltd	Multinational

17	British American Tobacco Kenya Ltd	Multinational
18	East African Breweries Ltd	Multinational
19	Bamburi Cement Ltd	Multinational
20	Crown Berger Ltd	Multinational
21	E.A.Cables Ltd	Multinational
22	E.A.Portland Cement Ltd	Multinational
23	KenolKobil Ltd	Multinational
24	Total Kenya Ltd	Multinational
25	Kakuzi	Multinational
26	Diamond Trust Bank Kenya Ltd	Local
27	Eaagads Ltd	Local
28	Kapchorua Tea Co. Ltd	Local
29	Limuru Tea Co. Ltd	Local
30	Rea Vipingo Plantations Ltd	Local
31	Sasini Ltd	Local
32	Williamson Tea Kenya Ltd	Local
33	Express Ltd	Local
34	Kenya Airways Ltd	Local
35	Standard Group Ltd	Local
36	Hutchings Biemer Ltd	Local
37	Longhorn Kenya Ltd	Local

38	AccessKenya Group Ltd	Local
39	Safaricom Ltd	Local
40	Car and General (K) Ltd	Local
41	CMC Holdings Ltd	Local
42	Marshalls (E.A.) Ltd	Local
43	Housing Finance Co Ltd	Local
44	National Bank of Kenya Ltd	Local
45	NIC Bank Ltd	Local
46	The Co-operative Bank of Kenya Ltd	Local
47	I & M Holdings	Local
48	Pan Africa Insurance Holdings Ltd	Local
49	CFC Insurance Holdings	Local
50	CIC Insurance Group Ltd	Local
51	City Trust Ltd	Local
52	B.O.C Kenya Ltd	Local
53	Carbacid Investments Ltd	Local
54	Mumias Sugar Co. Ltd	Local
55	Unga Group Ltd	Local
56	Eveready East Africa Ltd	Local
57	Kenya Orchards Ltd	Local
58	A.Baumann Co. Ltd	Local

59	Athi River Mining	Local
60	KenGen Ltd	Local
61	Kenya Power & Lighting Co Ltd	Local