

The Effects of Dividend Policy on Market Share Price of the Listed Companies at the Nairobi Securities Exchange (NSE) in Kenya

Azenga Valaria Vutale* Bo Chen

School of management, Hefei University of Technology, No.193 Tunxi Road, Hefei 230009, China

Abstract

Dividend policy despite been widely researched in different markets remains a mystery as to whether it's relevant or irrelevant to market share prices, this is due to different conclusions drawn from the studies. This made the study to explore the effects of dividend policy on market share price of the listed companies at Nairobi securities exchange (NSE) Kenya from the year 2011 to 2016. Secondary data obtained from the financial statements of the companies and the Nairobi security exchange website was used for the study. Purposive sampling design was used with a sample size of 33 companies selected from a population of 66 companies based on consistency in the listing of shares, consistency in payment of dividend for the six-year period, and data availability. The study employed multiple regression analysis. The market share price was used as dependent variable, dividend policy (measured by dividend payout ratio and dividend per share) as independent variable, while earnings per share, return on assets, financial leverage and growth as control variables. Data was analyzed at 5% level of significance. The results revealed that both dividend per share and dividend payout ratio have a significant effect on share price. Earnings per share and financial leverage have a significant effect on share price while return on assets and growth have an insignificant effect on the market share price of listed companies at the Nairobi Securities Exchange (NSE). The study in relation with the findings concludes that dividend policy has an effect on the market share price of listed companies at the Nairobi Securities Exchange(NSE), and is therefore not in support of the dividend irrelevance theory.

Keywords: Dividend policy, market share price, Nairobi securities exchange, ols regression.

1. Introduction

In modern economies, dividend policy is still an area of concern for both investors and shareholders of the firm. Therefore, management of any company aims at maximizing profits for the survival of their companies. A company with higher profits is a motivation to both investors and shareholders because it's an assurance that the going concern of that firm is positive and hence it attracts many investors for the reason that their return on investment is assured, on the contrary, a firm with poor management faces a risk of takeover and or even liquidation. Furthermore, Investors are serious risk evaders and the instability of their investments is a major concern to them in determining which decision to make regarding their investments upon studying the nature of the risk they might incur. They prefer to invest their money in stable companies rather than unstable ones, as it minimizes risk. Therefore, it could be presumed that consistency in dividend payment aids in raising the credit standing of a company and reduces interest rates payable. According to investors, the investment trends are anchored on market share prices where they monitor the rising and falling of share prices to determine its viability. Share prices are the most crucial part of any economy. Assessment of the economic condition of a country is measured through the performance of its stock market (Arslan & Zaman, 2014). Share price is the price of a single stock divide by a number of saleable stocks regarding the company as well as that of the financial asset (Huang, 2004). From the definition, we can deduce that it directly affects the rising and falling of stock value. An increase in share prices increases a firms value, and a decrease in share prices reduces a firms value (Purnamasari, Kurniawati, & Silvi, 2009). In this regard, investors found out that it's advisable for them to have sufficient knowledge about stock market prices in order for them to make optimal decisions.

The dividend policy of any firm is very crucial to investors as it contributes much to the return on their investments as it's used to gauge the company's investor's perspective. The type of policy a firm adopts will determine its future operations and survival. It's through dividend policy that we can know the productivity of the firm i.e. if it's economically viable or not. Many investors view dividends as a gauge of a company's performance calculated every financial year as it pays out its dividends (Chenchehene & Mensah, 2015). Dividend payout policy is an indicator of how a company is managed in the eyes of its shareholders and potential investors (Murekefu & Ouma, 2012). Dividend payout ratio is dependent on the company's dividend decision on which policy to adopt in deciphering the amount of cash that is given to shareholders (Adesina & Uwuijbe, 2017) For instance, if a lot of dividends are allocated to shareholders then it means that little will remain to invest in future projects and also payments to creditors who are also concerned about the return on investments. It's very risky therefore for the company to pay in excess of its equity for it will completely fail to meet its daily obligations and hence might face a risk of takeover among other financial risks. If it allocates low dividends it

means a lot is retained for investment in viable projects. Share prices directly affect the policy a company will choose. Increase in share prices is an indicator of the company's proper management and is therefore used to measure the company's strength. The rationale of dividend policy is anchored on two major aspects namely: That much cash that will be plowed back into the firm for the purposes of expansion and diversification and that much cash that will be given to shareholder as dividends. Dividend policy is the decision taken by the company on how dividends will be paid to shareholders.

There is a continuous study on dividend policy by many scholars that has led to the documentation of various schools of thought on the significance and insignificance of dividend policy (Thafani & Abdullah, 2014). Management decision on how much of its earnings should be distributed to the shareholders and how much should be retained for investment is through the use of dividend decisions (Ross, 1977). It has been evidenced that various scholars according to their empirical results, have opined managers regarding the type of dividend policy to adopt. According to those scholars, managers are required to consider a dividend policy that maximizes the company's share capital. Dividend policy mainly focuses on maximizing shareholders profits (Raju & Asaduzzaman, 2017). They are required to pay much attention to the company's stock prices as opposed to how much is re-invested as far as return on investments is concerned (Dawar, 2012). A number of theoretical arguments have emerged as authors try to shade more light on how dividends behave. Irrelevance theory by (Miller & Modigliani, 1961) postulates that rules relating to the bonuses emanating from the shareholder's contribution to the share capital don't impact on the firms share price as well as its capital. Some scholars came up with relevant theories to argue against Miller & Modigliani theory; they concluded that dividend payment was relevant. These theories include the bird in hand theory by (Gordon, 1963) & (Lintner, 1956) which indicates that investors give much preference to shareholders bonuses reason being that they are more secure as compared to the returns they get from the capital gains. Signaling theory by (Fama, 1969) assumes that companies use dividends to signal favorable information to stakeholders. A lot of research has been carried out regarding payout ratios in companies as being inversely proportional to the volatility of stock companies. For any firm to decide on which policy to adopt, it has to carry out proper market analysis followed by the employment of a good strategy in order for them to succeed. Thorough environmental scanning to determine both internal and external factors affecting share prices on stock markets as these factors are responsible for affecting dividend policy. Investment decisions are drawn basing on the sources of funds for financing those projects. This study aims at providing decisions to investors to formulate the best strategies to favor their investments while they avoid incurring losses. This paper, therefore, aims at determining the effects of dividend policy on market share prices of the listed companies at the Nairobi securities exchange (NSE) in Kenya and proposing some solutions to the subject matter.

1.1 Overview of Nairobi securities exchange

Nairobi securities exchange (NSE) was founded in 1954 as an alliance of stockbrokers to trade in shares and securities. The mandate of the Nairobi security exchange is regulated by the Capital Market Authority (CMA) under the societies act. It's also a member of Africa's stock association and uses two indices; NSE 20 share index which measures the performance of twenty blue chip companies and NASI (Nairobi all share index) which incorporate all saleable shares of a given day and thus its attention on the overall market utilization (NSE website, 2010). Its chief responsibility is to oversee the transfer of securities to all listed companies among other roles. Currently, it has 12 sectors with 66 listed firms (NSE website, 2016). NSE as a medium of funds transfer from surplus spending units to deficit units results in economic development in Kenya. Companies can also raise funds for expansion and development from NSE through initial public offers (IPOs). The market deals with a range of securities including ordinary shares, bond, stock (NSE website 2016). Despite its enormous contribution to economic development, the stock exchange platform has been faced with numerous challenges such as economic depression and political uncertainty. Pushed by the need for fostering sustainable financial growth through competent as well as secure economic systems during the 1980s, Kenyan government found out that it was a requirement to plan as well as implement the guiding principle reforms. The government sensitized the public on the function of private sector on the financial system, decrease demand of public sector on the exchequer, rationalize the activities of public sectors to make bigger the span of possession and reduce capital markets by establishing a regulatory organization "the capital markets authority" in 1989 whose aim was to establish an able environment favorable for expansion as well as enlargement of the nation's capital markets.

1.2.0 Literature review

This section summarizes literature; theories and empirical studies that have been done in connection with the relationship between dividend policy and share prices. It covers a review of theories guiding the study, determinants of share prices, and the relationship between dividend policy and share prices.

1.2.1 Theoretical review

Dividend irrelevance theory: According to (Miller & Modigliani, 1961), a company's value is not reliant on its

dividend policy but on its earnings ability which results from its investment decisions. This proposition was made under the assumptions of; a perfect capital market, no transaction costs, no taxes on dividends and capital gains, no issuance costs, no agency costs, fixed investment, and free accessibility to vital information by the stakeholders. If a company has plenty of viable projects but still chooses a high dividend payout, it can offset through the sale of new equity shares. This means current shareholders get a high dividend payout but a proportion of future dividend payment has to be given to new shareholders. If it chooses not to pay dividends and the shareholders need cash, they can generate homemade dividends by selling part of their shares to other investors. They established that the wealth of shareholders relies on the present as well as potential future income trends and that dividend plan has no impact on the firm's worth if that firm maximizes their value through investments. Scholars like (Black & Scholes, 1974) their studies comply with Miller & Modigliani dividend irrelevance theory.

Agency cost theory: This theory implies that a firm with a high dividend payout increases its value as the cost of monitoring managers is minimized. This normally occurs when managers act in favor of their own personal interest at the cost of the equity holder's interest such as undertaking unprofitable investments with excessive returns to them and, unnecessary high management compensation. According to (Jensen, 1986) it mainly originated from external debt and equity resulting from equity holders claiming high dividend payouts than bondholders who put reasonable obligation to enhance accessibility to debt. (DeAngelo, DeAngelo, & Stulz, 2006) proposed that one way of solving it is by increasing the dividend payout ratio which in turn will reduce cash available to managers and force them to minimize shareholder resources hence reduce embezzlement of the company's funds. If managers need more capital for investment, raising external debt subjects them to inspection by financial regulators acting as a way of keeping an eye on their performance. Shareholders can also exercise control over their investments by declining to purchase the company shares if they are suspicious of managerial behavior. (Kai, Shyuan, Yer, Yee, & Lly, 2014) are among scholars who argued about this theory in their study.

Tax preference theory: (Litzenberger & Ramaswamy, 1979) argued that investors prefer low payout companies to avoid paying immediate taxes. According to the tax preference theory, retained earnings increase the profit of the firm which is subjected to lower tax rates as compared to dividends. The lower the dividends, the higher the share value and vice versa. In Kenya, dividend attracts a withholding tax of 5% which is fixed and capital gains are exempted from tax.

Clientele effect theory: The theory was initiated by (Petit, 1977). It states that dividend preferences vary from one group of shareholders to another depending on their level of income from other sources. When a company selects a specific dividend policy it attracts a specific clientele, when it changes it then its clientele changes. Some stakeholders like retired people prefer stable and high income and will buy shares in those companies with high dividend payouts. While others who are wealthy with enough income for their consumption needs prefer to invest in companies with low dividend payouts.

Signaling effect theory: (Ross, 1977) disputed that dividends have informational value. Companies are mandated to pay dividends despite the prevailing market conditions in order to attract future prospects; this is because dividend acts as a device for conveying information about the company. This occurs because of information asymmetry where there is an information gap between the managers who have complete information about the company's prospects that is not disclosed to the outside investors. (Chaabouni, 2017) claimed dividends have a signaling effect as it makes the market aware of companies information through dividend payment. Similarly, (Olweny, 2012) empirical investigation concluded that dividend announcements have relevant information. A change in dividend payout sends a signal to potential investors about a company future financial performance. Therefore, increasing dividends portrays positive information to investors about its future financial condition attracting new shareholders and as a result, increase its share price. Decreasing dividends in the other hand portray negative information about its future financial performance.

Bird-in-hand theory: The theory was established by (Gordon, 1963) & (Litner, 1962). They confirmed that dividend theory is relevant to market share prices. Their argument was that investors are risk-averse and tend to give more preference to current dividends than capital gains when making decisions relating to stock investment. This is because dividend payments reduce the investor's uncertainty and in turn increase their stock value. Shareholders seem to care less about the future capital of the company because by increasing the company's payout ratio, retained earnings that the company re-invests reduces drastically. (Al-malkawi, Rafferty, & Pillai, 2007) affirms that in the current world where we have uncertainty and information asymmetry, dividend valuation is done differently from retained earnings.

1.2.2 Empirical studies

Dividend policy is considered by corporations as a vital financial policy which aids in achieving shareholder wealth maximization objective. A lot of research has been carried out on dividend policy by different financial scholars and practitioners who try to explain the causal relationship between dividend policy and share prices of firms. Despite the empirical research on related studies dividend policy still enjoys celebrated controversy especially in relation to market share price. (Litner, 1962) proposed the relevance of dividend policy in the

economy as it affects the share prices of companies. He paid much attention to dividend policy and designated the connection between bonus policy and prices per share. (Gordon, 1963) originated dividend relevance theory representing dividend policy in another approach in which he concluded that dividend policy affects the market value of a firm's stock. Among other scholars, (Chaabouni, 2017), (Masum & Abdullah, 2014), (Ozuomba, Anichebe, & Okoye, 2016), (Duke, D, S.E,2015) & (Babu, 2017) also established a significant association of dividend policy with stock prices.

Furthermore, according to the dividend relevance theory, the relationship between dividend policy and share prices has been reported by various studies. (Murekefu & Ouma, 2012) studied dividend policy and its effects on performance of companies quoted at Nairobi securities exchange (NSE) Kenya. They concluded that there is a strong correlation between dividend policy and firm performance. (Gunarathne, Priyadarshanie, & Samarakoon, 2015) also investigated how dividend policy affects share price volatility and the value of manufacturing listed firms in Sri-Lanka from the year 2006 -2014 and found out that dividend payout impacts stock price volatility positively while dividend yield negatively. (Sulaiman & Migiro, 2015) on their study of how dividend decisions made by quoted firms in Nigeria affects share price changes, concluded that dividend decisions and changes in stock price are correlated. Firm size was found to have a negative relationship with share price while earnings per share (EPS) and dividend per share (DPS) were found to have a strong relationship with share prices.

(Uwuijibe, Jafaru, & Ajayi, 2012) studied the association of dividend policy with the performance of quoted companies at Nigeria securities exchange. The outcome of the research showed that firm performance is positively associated with dividend payouts. (Al-shawawren, 2014) researched on the impact of dividend policy on stock price changes in Jordanian from the year 2001-2013 using a sample of 53 listed companies. Regression method was used to analyze the data and the findings indicated that both dividend payout and dividend yield which were used as measures of dividend policy have a positive influence on stock price changes. (Chen, Liu, & Huang, 2009) investigated cash dividends effects on stock prices and concluded that dividends, especially cash dividends, affect stock price positively in China. Additionally, (Jecheche, 2012) concluded from his research that dividend yield and dividend payout both which are proxies of dividend policy have a significant positive effect on share price volatility in Zimbabwe.

However, (Miller & Modigliani, 1961) in their dividend irrelevant policy, revealed that share prices are not affected by dividend policy but rather by their investment policy. (Black & Scholes, 1974), (Adefila, Oladipo, & Adoeti, 2000), (Denis & Osobov, 2008), (Chen et al., 2009) & (Das & Samantha, 2013) were both in support of dividend irrelevant theory. (Hashemijoo, Mahdavi Ardekani, & Younesi, 2012) on their study of the effects of dividend policy on share prices of companies listed at the Malaysian securities market from the year 2005-2010, concluded that dividend payout and dividend yield associate negatively with stock price volatility. (Khan, 2012) explained the impact of dividends on share valuation in Pakistan using two sectors as a sample size. Panel data methodology was used to describe the connection between the two after controlling earnings per share (EPS), return on equity (ROE) and retention ratio; they concluded that retention ratio and ROE influence share prices positively while EPS and dividends influence share prices negatively.

Factors affecting market share prices was instigated by (Collins, 1954) for the United State of America banks and recognized dividends, book value, and profitability as determinants of share prices. Since then, many attempts by different researchers to pinpoint out the factors that affect share prices in different markets emerged. (Ali & Jan, 2015) carried out a research on dividend policy and their findings deduced that it has impacts on the share prices of the firm with other factors also into play being profit after tax, return on equity and earnings per share. It was established that while dividend yield has got a negative significance of share prices, dividend payout ratio impacts positively the market share prices; earnings per share and profit after tax have significantly constructive effects on market value.

(Hussainey, Oscar Mgbame, & Chijoke - Mgbame, 2011) examined stock market of United Kingdom. Their major aim was to find out whether dividend policy and share price changes correlate. From their findings dividend policy is positively correlated to stock prices while dividend disbursement proportion has a negative correlation on market price per share. Apart from this, there are other determinants such as the firm's rate of expansion, credit level; size and income also influence stock prices. (Olowoniyi & Ojenike, 2012) examined the determinants of stock returns of listed firms in Nigeria. Panel data from 70 listed firms for the period 2000-2009 was used and the results proposed that expected growth and size positively influenced stock returns while tangibility affects negatively stock returns of listed firms. (Maldajian & El Khoury, 2014) examined factors affecting dividend policy of banks quoted in Beirut securities exchange. Empirical results showed that financial leverage, dividends, and size affects dividend policy positively while profitability and growth affect dividend policy negatively.

(Waworuntu & Claudy, 2016) studied the relationship between dividend policy and stock prices of company's listed in Indonesia from the year 2010 to 2014 found out that size and dividend payout have a significant relationship with stock prices while growth and dividend yield have an insignificant relationship with

stock prices. (Nirmala, Sanju, & Ramachandran, 2011) investigated three sectors in Indian economy from year 2000-2009 using panel data methodology and found out that key factors that affect share prices of sectors under consideration are financial leverage, dividends, and price per earnings ratio. Above results of empirical researches conducted in various stock markets seem not to follow a single pattern; some support the irrelevance of dividend policy while some support the relevance of dividend policy. This shows that more simultaneous research needs to be done in this area. Also, empirical studies on dividend policy and its relationship with share price and predictor variables are very few and inconclusive in Kenya. This study sought to bridge the gap by studying the effects of dividend policy on market share prices of the listed companies at Nairobi Securities Exchange (NSE) Kenya. Earnings per share, growth, return on assets and financial leverage will be used as control variables.

1.2.3 Research Objectives and Hypothesis

The general objective of the study was to examine the effects of dividend policy on the market share price of the listed companies at the Nairobi Securities Exchange (NSE) in Kenya. Specific objectives were:

- i. To examine the relationship between dividend policy and market share price of the listed companies at the Nairobi Securities Exchange.
- ii. To establish the relationship between selected control variables and market share price of the listed companies at the Nairobi Securities Exchange.

As per the above objectives, the study proposed the following hypotheses for testing:

H1: Dividend policy has a significant relationship with market share prices.

H2: Dividend policy has no significant relationship with market share prices.

1.3.0 Methodology of the study

1.3.1 Research design

The study adopted a descriptive research design as it aims to investigate in depth and describe features of the population under study.

1.3.2 Population

The population consists of the 66 companies quoted at the Nairobi Securities Exchange (NSE) for the six-year period under study ranging from the year 2011-2016. The researcher chose six years time period having an opinion that it will be adequate for establishing any relationship between variables.

1.3.3 Sample design and technique

A sample of 33 companies was selected from a target population of 66 companies based on those companies that were continuously listed during the period of study, their data available from Nairobi Securities Exchange website and also which were consistent in payment of dividends. This enabled the researcher to achieve study objectives. Table 1 below shows sample size used from different sectors of the Kenyan economy.

Table 1: Sample size

Sector	Population	Sample
Agricultural	6	3
Telecommunication and technology	1	1
Commercial and services	13	4
Construction and allied	5	4
Manufacturing and allied	8	5
Insurance companies	6	3
Energy and petroleum	7	4
Banking	11	8
Automobiles and accessories	1	1
Investment	6	0
Real estate investment trust	1	0
Exchange traded funds	1	0
Total	66	33

1.3.4 Data collection

The data used was secondary data. Data regarding market share prices was collected from Nairobi Securities Exchange website (www.nse.co.ke) while data regarding dividend, return on equity, and earnings per share, growth, and size were extracted from the financial statements of the quoted companies at Nairobi Securities Exchange website.

1.3.5 Data analysis

The study analyzed data collected by excel and Stata 12 statistical software. Regression method was used to establish the effects of dividend policy on the market share price of the listed companies at Nairobi securities exchange. Estimation is based on pooled Ordinary Least Square regression with robust standard errors to correct any heteroscedasticity. The significance of the relationship between dependent and explanatory variables was

tested at 5% level of significance and used to accept or reject the null hypothesis.

Empirical model

$$MPS = \alpha_0 + \alpha_1 DPS_{it} + \alpha_2 DPR_{it} + \alpha_3 EPS_{it} + \alpha_4 ROA_{it} + \alpha_5 FL_{it} + \alpha_6 GW_{it} + \epsilon_{it}$$

Where;

MPS=Market share price.

DPS=Dividend per share.

DPR=Dividend payout ratio.

EPS=Earnings per share.

ROA=Return on assets.

FL=Financial leverage.

GW=Growth.

Table 2: Measurement of variables

Variable	Formula	Symbol
Dividend Payout Ratio	$\frac{\text{dividend per share}}{\text{earnings per share}}$	DPR
Dividend per Share	$\frac{\text{dividends paid}}{\text{no. of shares}}$	DPS
Earnings Per Share	$\frac{\text{net income}}{\text{no. of shares outstanding}}$	EPS
Growth	$\frac{(\text{revenue of year } (t + 1) - \text{revenue of year } t)}{\text{revenue of year } t}$	GW
Market Share Price	Closing share price as at 31 st December for the years under study	MSP
Return On Assets	$\frac{\text{net income}}{\text{total assets}}$	ROA
Financial Leverage	$\frac{\text{total liabilities}}{\text{total assets}}$	FL

Table 3: Descriptive statistics results

Variable	Observations	Mean	Std.Dev.	Min	Max
MSP	198	109.228	173.311	3	1085
DPS	198	3.7299	7.03654	0.1	43
DPR	198	0.08793	3.51118	-48.576	2.2306
EPS	198	9.09278	12.4954	-5.84	82.71
ROA	198	0.08241	0.19006	-0.1923	2.483
FL	198	0.55954	0.25432	-0.4659	0.89241
GW	198	0.05056	2.44515	-31.346	10.4665

Tables 3 represents descriptive statistics of variables under study. Market share price (MSP) which is the dependent variable ranges from 3 to 1085 with a mean value of 109.2275 and standard deviation of 173.311. The first independent variable in the study is dividend per share (DPS) with a mean value of 3.7298 and standard deviation of 7.0365 and ranges from .1 to 43. The second independent variable is the dividend payout ratio (DPR) with a mean value of .0824 and standard deviation of 3.5111 ranges from -48.5755 to 2.2306. The mean value of earnings per share (EPS) is 9.0928 with a range of -5.84 to 82.71 and standard deviation of 12.4954. The highest

standard deviation of EPS shows that it's more volatile during the period under study. The mean value of return on assets (ROA) is .0824 with a range of -.1923 to 2.483 and standard deviation of .1901. It's lowest standard deviation suggests that it causes the minimum variation in MSP of companies listed in Nairobi securities exchange. The average value of financial leverage (FL) is .5595 with arrange of -.4659 to.8924 and standard deviation of .2543. The mean value of growth (GW) is .0506 and the standard deviation is 2.4451 with a range of -31.3456 to 10.4665.

Table 4: Correlation matrix for the dependent and explanatory variables.

	MSP	DPS	DPR	EPS	ROA	FL	GW
MSP	1						
DPS	0.6801*	1					
	0.0000						
DPR	-0.2264*	0.0775	1				
	0.0013	0.2779					
EPS	0.5923*	0.6165*	0.0679	1			
	0.0000	0.0000	0.3416				
ROA	0.1412*	0.1917*	0.0427	0.1369	1		
	0.0472	0.0068	0.5503	0.0545			
FL	-0.1850*	-0.1461*	0.0649	0.0398	-0.1295	1	
	0.0091	0.04	0.3638	0.5773	0.069		
GW	0.0091	-0.0008	-0.0063	0.0234	0.0448	-0.042	1
	0.8987	0.9906	0.9298	0.7432	0.5304	0.5567	

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4 shows the outcome of the correlation matrix. The results show that market share price has a positive significant correlation with dividend per share (.6801), earnings per share (.5923), return on assets (.1412) and growth (.0091). Dividend payout ratio (-.2264) and financial leverage (-.1850) have a negative significant correlation with market share price. Market share price relationship with all the variables under study is significant at the 5% level of significance. Dividend per share has a significant positive relationship with earnings per share (.6165) and return on assets (.1917) and a negative significant relationship with financial leverage (-.1416). The above results show that all the correlations coefficients among the explanatory variables are less than .84 indicating less evidence of multicollinearity. To check for multicollinearity in the regression analysis, VIF test was ran to confirm if multicollinearity really exists as it can make coefficient estimates unstable and difficult to estimate. Table 5 below shows the results of vif among the explanatory variables. A mean vif of 1.26 implies explanatory variables are not strongly correlated with each other and since the mean value of vif is less than the upper limit of 10, the chosen variables are suitable for regression models.

Table 5: Multicollinearity test result

Variables	VIF	1/VIF
DPS	1.72	0.580859
EPS	1.66	0.600673
FL	1.07	0.932496
ROA	1.05	0.948198
DPR	1.01	0.986569
GW	1	0.995108
mean vif	1.26	

Table 6: Regression analysis

Variables	Coefficient	Std.error	t-statistic	Prob
Constant	66.5116	20.8704	3.19	0.002
DPS	12.1707	1.4729	8.26	0.000
DPR	-13.7692	2.265	-6.08	0.000
EPS	4.3081	0.8157	5.28	0.000
ROA	2.0246	42.682	0.05	0.962
FL	-72.906	32.1637	-2.27	0.025
GW	-0.291	3.2384	-0.09	0.928
F statistic =48.40	prob >F = 0.0000			
R-squared = 0.6032	Adjusted R-squared =0.5908			

$$MPS=66.5116+12.1707DPS-13.7692DPR+4.3081EPS+ 2.0246ROA-72.906FL-0.291GW$$

Table 6 shows the regression analysis results. Prob > F =.0000 shows the overall model is fit for analysis R² of .6032 shows that the six explanatory variables account for 60% change in the market share prices of the

listed companies at the Nairobi securities between the year 2011- 2016, while the remaining 40% is explained by variables outside the model. Adjusted R-squared of 59% accounts for the significance level of the variables under study. From the analysis of the effects of dividend policy on market share prices of the listed companies at Nairobi securities exchange, it was found out that four explanatory variables out of six have a significant effect on market share prices while two have an insignificant impact on market share price. Dividend per share which is the first proxy of dividend policy has a p-value of .000 and coefficient of 12.1707 which shows that it has a significant positive relation with market share price. The second proxy of dividend policy, Dividend payout ratio with a coefficient of -13.7692 and a p-value of .000 shows a negative significant relationship with market share price. The result is consistent with (Joshi, 2012), (Ahmed & Jaraid, 2009), (Oliver, Loretta, & Grace, 2013) who also found a significant relation between dividend payout ratio, dividend per share and stock prices implying that each time a company issues shares and pay out dividends, it increases its value in the market and in turn gaining trust from the investors and as a result its debt capacity will increase. It contradicts (Okafor, Mgbame, 2011) who found a negative insignificant relationship between dividend payout ratio and share price. Earning per share with a p-value of .000 and coefficient of 4.3081 has a significant positive relation with market share price. The result is consistent with (Masum & Abdullah, 2014) & (Chen et al., 2009). This indicates shareholders rated high those companies with high earnings per share since they have high share price. Growth with a coefficient of -.2910 shows if it increases by one unit market share price will decrease by -.2910, the outcome shows that it has a negative insignificant relation with market share price and cannot significantly predict share prices of the listed companies. A one unit increase in financial leverage leads to a -72.9060 decrease in market share price. (Pani, 2008) also found a negative relationship between financial leverage and market share price. This shows that financial leverage negatively influences share price, and when the debt of a firm increases its share price decreases. A one unit increase in return on assets market share price is expected to increase by 2.0246 holding all other variables constant.

1.5 Conclusion and Recommendations

The study investigated the effects of dividend policy on market share price of the listed companies at the Nairobi Securities Exchange (NSE) Kenya from the year 2011 to 2016. A sample size of 33 companies was selected from nine sectors of the Kenyan economy. Secondary data used was collected from the Nairobi Securities Exchange (NSE) website to obtain panel data of the 33 companies resulting in 198 observations. The market share price (MSP) was the regressand, dividend payout ratio (DPR) and dividend per share (DPS) independent variables while earnings per share (EPS), return on assets (ROA), financial leverage (FL), and growth (GW) control variables. The results from the regression model showed dividend per share (DPS) has a positive significant relationship with market share price suggesting share price is affected positively by a higher dividend per share. DPS also provides the highest and most significant explanations on the firm's market share price. Dividend payout ratio (DPR) has a negative significant relationship with market share price. DPS and DPR (dividend policy proxies) are both significant which indicates that dividend policy has a significant effect on market share prices of the listed companies at the Nairobi security exchange (NSE). Earnings per share (EPS) with a positive significant relationship with market share price indicate that those companies with high earnings per share have a high market share price since investors have a preference for their stocks. A significant negative association of financial leverage with market share price shows that investors are not attracted to heavily indebted companies as it can result to future insolvency but at the same time they do consider it one of the factors that affect market share price due to its inclusion in the capital structure of firms. Both return on asset and growth have an insignificant relationship with market share price. The overall model is significant; these results are reliable and applicable in developing markets like Kenya. The research was inspired by the controversy that exists between dividend policy and share prices in different markets and it expects to add to the body of literature in corporate dividend policy in Kenya. Due to limitations on the availability of data, the study focused only on listed companies in Nairobi securities exchange (NSE), however in future other sectors and companies not listed could be included in the sample size which could give a further indication as to the relationship between variables. Managers of the listed firms should consider determinants of dividend policy so as to have an optimal dividend policy that impacts investors and in turn investment decisions of the country. The study recommends management of the quoted companies to pay dividends regularly so as to maintain and attract prospective investors, and also due to its significant effects use it as a policy for increasing its stock prices. Results from the study can be used as a tool of knowledge to both academicians and practitioners for future research. The study recommends further research to consider macro-factors that affect dividend policy and also theories of share prices. The time period and also the number of independent variables can be increased so as to obtain more valid and reliable results.

1.6 Acknowledgement

The author would like to acknowledge the research assistance of Ibrahim Ahmed and Gideon Wabwile.

References

- Adefila, J. J., Oladipo, J. A., & Adoeti, J. O. (2000). The Effect of Dividend Policy on the Market Price of Shares in Nigeria: Case Study of Fifteen Quoted Companies. *Journal of Accounting and Finance*, (1961), 1–10.
- Adesina, & Uwuigbe. (2017). Dividend Policy and Share Price Valuation in Nigerian Banks. *EuroEconomica*, 1(36), 185–195.
- Ali, A., & Jan, F. A. (2015). Effect of dividend policy on stock prices, (1), 56–87.
- Arslan, & Zaman. (2014). Impact of Dividend Yield and Price-Earnings Ratio on Stock Returns: A Study Non-Financial listed Firms of Pakistan. *Research Journal of Finance and Accounting*, 5(19), 2222–2847.
- Babu, S. &. (2017). Stock Price Reaction to Dividend Announcements. *Asian Journal of Research in Social Sciences and Humanities*, 7(1), 23–32.
- Black, F., & Scholes, M. (1974). The effects of dividend yield and dividend policy on common stock prices and returns. *Journal of Financial Economics*, 1(1), 1–22.
- Chaabouni. (2017). Impact of dividend announcement on stock return: A study of listed companies in Saudi Arabia financial markets. *International Journal of Information, Business, and Management.*, 9(4), 1–13.
- Chen, Liu, & Huang. (2009). The Announcement Effect of Cash Dividend Changes on Share Prices: An Empirical Analysis of China. *Chinese Economy*, 42(1), 62–85. <https://doi.org/10.2753/CES1097-1475420103>.
- Chenchehene, J., & Mensah, K. (2015). Dividend policy and its effects on shareholders wealth : Evidence from the UK retail industry. *International Journal of Liberal Arts and Social Science*1, 3(2), 52–64.
- Dawar, V. (2012). Role of Fundamental Variables in Explaining Stock Prices. *Journal of Arts, Science & Commerce.*, 4(4), 56–62.
- DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: a test of the life-cycle theory. *Journal of Financial Economics*, 81(2), 227–254. <https://doi.org/10.1016/j.jfineco.2005.07.005>
- Denis, D. J., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial Economics*, 89(1), 62–82. <https://doi.org/10.1016/j.jfineco.2007.06.006>
- Gordon, M. J. (1963). Optimal Investment and Financing Policy. *Journal of Finance*, 18, 264–272. <https://doi.org/10.2307/2977907>
- Gunarathne, Priyadarshanie, & Samarakoon. (2015). Impact of Dividend Policy on Stock Price Volatility : Evidence from Sri Lanka ” Impact of Dividend Policy on Stock Price Volatility : 13(January), 219–225.
- Hashemijoo, M., Mahdavi Ardekani, A., & Younesi, N. (2012). The Impact of Dividend Policy on Share Price Volatility in the Malaysian Stock Market. *Journal of Business Studies Quarterly*, 4(1), 111–129. <https://doi.org/ISSN: 2152 - 1034>
- Hussainey, K., Oscar Mgbame, C., & Chijoke - Mgbame, A. M. (2011). Dividend policy and share price volatility: UK evidence. *The Journal of Risk Finance*, 12(1), 57–68. <https://doi.org/10.1108/15265941111100076>
- Jecheche, P. (2012). Dividend policy and stock price volatility: A case of the Zimbabwe stock exchange. *Journal of Comprehensive Research - Accounting & Finance*, 10, 1–13.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review Papers and Proceedings* 323-9, 11–16.
- Joshi. (2012). Effect of Dividends On Stock Prices. *Management*, 2(5), 141–148. <https://doi.org/10.5923/j.mm.20120205.02>
- Kai, A. O. S., Shyuan, L. A., Yer, L. M., Yee, O. Y. P., & Lly, T. L. (2014). the Impact of Dividend Policy on Shareholders' Wealth: Evidence on Malaysia'S Listed Food Producer Sector, (August), 1–146.
- Lintner, J. (1956). Distribution of Incomes of Corporations Among Dividends, Retained Earnings, and Taxes John Lintner The American Economic Review, Vol. 46, No . 2, Papers and Proceedings of the Sixty-eighth Annual Meeting of the American Economic Association. (May, *Taxes*, 46(2), 97–113.
- Litner. (1962). Dividends, Earnings, and Stock Prices, 41(2), 99–105.
- Litzenberger, R. H., & Ramaswamy, K. (1979). The effect of personal taxes and dividends on capital asset prices. Theory and empirical evidence. *Journal of Financial Economics*, 7(2), 163–195. [https://doi.org/10.1016/0304-405X\(79\)90012-6](https://doi.org/10.1016/0304-405X(79)90012-6)
- Maldajian, C., & El Khoury, R. (2014). Determinants of the Dividend Policy: An Empirical Study on the Lebanese Listed Banks. *International Journal of Economics and Finance*, 6(4), 240–256. <https://doi.org/10.5539/ijef.v6n4p240>
- Masum, A., & Abdullah. (2014). Dividend Policy and Its Impact on Stock Price – A Study on Commercial Banks Listed in Dhaka Stock Exchange. *Global Disclosure of Economics and Business*, 3(1), 9–20.

- Miller, & Modigliani. (1961). Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business*, 34(4), 411–433.
- Murekefu, T. M., & Ouma, O. P. (2012). The relationship between dividend payout and firm performance : a study of listed companies in Kenya. *European Scientific Journal*, 8(9), 199–215. <https://doi.org/10.19044/esj.2016.v12n4p469>
- Nirmala, Sanju, & Ramachandran. (2011). Determinants of Share Prices in India, 2(2), 124–130.
- Oliver, Loretta, & Grace. (2013). Dividend Policy and Share Price Volatility. *Journal of Asian Development*, 2(2), 109–112.
- Olowoniyi, A. O., & Ojenike, J. O. (2012). Determinants of Stock Return of Nigerian-Listed Firms. *Journal of Emerging Trends in Economics and Management Sciences*, 3(4), 389–392.
- Ozuomba, Anichebe, & Okoye. (2016). The effect of dividend policies on wealth maximization—a study of some selected plcs. *Cogent Business and Management*, 3(1), 1–15. <https://doi.org/10.1080/23311975.2016.1226457>
- Purnamasari, Kurniawati, & Silvi. (2009). Interdependensi Antara Keputusan Investasi, Keputusan Pendanaan dan Keputusan Dividen. *Jurnal Keuangan Dan Perbankan*, 13(1), 106–119.
- Raju, M. B. H., & Asaduzzaman, A. H. M. (2017). The Impact of Dividend Policy on Stock Price: A Study of Fuel, Power and Cement Industry in Bangladesh. *IOSR Journal of Economics and Finance*, 08(03), 84–91. <https://doi.org/10.9790/5933-0803048491>
- Ross, S. A. (1977). The Determination of Financial Structure: The Incentive-Signalling Approach. *The Bell Journal of Economics*, 8(1), 23. <https://doi.org/10.2307/3003485>
- Sulaiman, L. a, & Migiro, S. O. (2015). Effect of dividend decision on stock price changes: further Nigerian evidence. *Investment Management and Financial Innovations*, 12(1), 330–337.
- Uwuigbe, U., Jafaru, J., & Ajayi, A. (2012). Dividend Policy and Firm Performance: A Study of Listed Firms in Nigeria. *Accounting and Management Information Systems*, 11(3), 442–454.
- Waworuntu, S. R., & Claudy, N. (2016). The study of the company's dividend policy and share price in indonesia., 96(12), 5793–5801.