# EFFECT OF DIVIDEND PAYOUT RATIO ON THE SHARE PRICE OF MANUFACTURING AND ALLIED COMPANIES LISTED AT NAIROBI SECURITIES EXCHANGE

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# A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

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### DECLARATION

This research paper is my work and it has not been submitted for any degree or examination in any other university.

Signature: Date:

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This research paper has been submitted for academic purpose with my approval as the University Supervisor.

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## **DEDICATION**

I dedicate this research paper to my lovely family together with the very friends who greatly invested their support throughout the study.

### ACKNOWLEDGEMENT

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## LIST OF ABBREVIATIONS

Capital Markets Authority
Gross Domestic Product
Nairobi Securities Exchange
Statistical Package for Social Science

#### ABSTRACT

Dividends are regarded as a critical success factor for many business entities since they are able to signal the projected performance. The declaration and the payment of the dividends by the business entities is enough proof the business entities are worthy to invest in since it is a sign of good performance by the companies. Therefore, this study attempts to determine the effects of dividend payout ratio on share prices for the manufacturing and allied firms enlisted in the NSE of Kenya. This study employed secondary data obtained from the NSE. Particularly, collected data included annual change in share prices, total assets, current assets, current liabilities, total debt and dividend. A census study was adopted and all 8 companies were analyzed for a period of 5 years from 2013 to 2017. The independent variables analyzed here included working capital, payout ratio, leverage and firm size while the dependent variable was share price. Descriptive statistics, correlation analysis, regression analysis and Analysis of variance (ANOVA) were carried out to determine the strength of the model and effect of dividend payout ratio on the share prices. F- test at 5% significance level was employed to assess the significance of the regression whilst the coefficient of determination, within and between  $\mathbb{R}^2$ , were employed to establish the variation in dependent factor as explained by independent factors. The p-value from analysis was 0.015. The study established that a strong relationship exist amongst dividend payout ratio with price of share for the manufacturing and allied firms enlisted at the NSE of Kenya. This study recommends the adoption of appropriate dividend policy since it directly affects the share prices. It is believed that dividend payout ratio determines the survival and the profitably of the companies since it positively or negatively affect the share prices.

#### **CHAPTER ONE: INTRODUCTION**

#### 1.1 Background of the Study

Dividend decisions form a very critical component for the firms as they are a representative of the cash flows in the firms, also it is act a source of information to gauge the performance of the various firms in corporate arena. If a company pays out its earnings, then the business will meet its requirement and expansion. Dividend payout thus affects both long-term financing and shareholders of the firms (Laer, 2014). Different options are available pertaining to dividends, they can be distributed or money is retained so that by the end of the day shareholders can enjoy capital gains.

Bird in the Hand Theory by Gordon and Lither (1963) argued that investors of the firm would prefer to be paid the dividends today than in the future because the dividends paid today are more certain than what they are likely to get in the future in form of capital returns and in the process the cost of equity of the firms reduces as the payout ratio increases. On the other hand, the signal effect by Ross (1979) argued that any change on the dividend payout ratio is a reflection of the management's perception concerning the earnings of the firm in the future. Higher payout ratio implies that the management of the firm focused on good future earnings and this will affect the share prices.

It's worth noting that companies enlisted at the Nairobi Securities Exchange have been declaring and paying dividends. However, the decision on dividends is critical since it relates to determining whether they should distribute their earnings or retain them as another strategy for re-investment purposes. It forms one of the core integral part of the financing decisions of the firms because the payout ratio will eventually determine the

required amount which can be retained by the firms to act as a source of internal equity financing. Dividends can be paid in different forms for example the cash dividend whereby the company issues cheques to the shareholders of the company, there is also stock dividend which is the issuance by a company of its common stock which is the shares to its shareholders without any consideration (NSE, 2017).

#### **1.1.1 Dividend payout ratio**

Dividend payout ratio is that part of the incomes of firms normally given out to the shareholders in dividends (Allen, 2015). It is the proportion of the income earned which is given out to shareholders as dividend (Mathur, 1997). According to Petit (1977), dividend payout ratio implies that proportion of income paid to shareholders in dividends. The optimal law relating to dividends is the one that is able to strike a balance on what the firm is able to pay at the current period and future growth of an entity which improves the price of the firms.

Cash dividends is the preferred form of dividend payment by the many companies and this calls for sufficient cash to meet this obligation by the firms. A company can have a high payout or a low payout. Low liquidity provides a low payout since the firm lack enough funds to pay dividends, the instability of the underlying earnings implies that the company is not profitable and is unable to pay the dividends in the future and the high growth potential of a firm forces the firm to retain the earnings for investment purposes due to its high growth prospects. On the other hand uncertainty promotes a high payout in the sense that investors prefer to receive the dividends today and not the capital gains because the future is uncertain (Ross, 1980).

#### 1.1.2 Share prices

According to (Allen, 2015), a share price of a firm is the minimum amount it can be bought in the market. Petit (1977) defined a share price as that amount of one share of a figure of a profitable shares of a company. Investors qualify to be the shareholders of the business entities or the firms when they purchase the shares of the firm they are interested in and in the process they achieve a stake in the company. Being a shareholder, a number of rights and privileges is normally enjoyed. Shareholders normally get the return on their investment in form of dividends or capital gains. High dividends imply low capital gains and low dividends means high capital gains. According to the clientele effect on the dividends Petit (1977) different classes of shareholders prefer different payout policies.

The information entering and exiting the market has a significant part in determining the prices of the stocks. Any information entering the market will affect the prices of the stock in a random manner. Seasonal patterns normally affect the prices of the shares of the firm, according to the Random Walk theory, Fama (2012) presented a conflicting opinion on the performance of the shares of the firms.

The theory has proven that the performance of the shares varies across the various days of the week which is commonly known as the day of the week influence. As such, the performance of the stock on Mondays are low and high on Fridays. Dividend payout ratio and the earning power of firms influence the share prices of the firms. Share prices normally signals the performance of the firms. High share prices implies that the firms have performed better, on the other hand, low share prices is an indication of a low performance of the business entities (Fama, 2012).

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

The correlation between dividend payout ratio with share price of firms has been the subject of discussion by various scholars in the finance field. While others are of an opinion that dividends payout ratio affects the prices of the firms, other researchers are of a different opinion. According to Modigliani and Miller (1962) argument, the dividend policy is irrelevant. Modigliani and Miller were able to demonstrate that based on some assumptions, if companies pay high dividends, they can be forced to dispose the shares of the firm to incoming investors and the worth of the firm given up to incoming investors will be equal to the amount of dividends paid hence no resultant effect on the share prices.

Allen (2015) hypothesized that when business entities change the dividend payout, it is a clear indication and signal of the cashflow of the firm which management should be concerned about. The ideal of the declaration of the dividends is meant to limit the access of the monies in the firms which are not supervised. He pointed out that the firms whose stakeholders were totally separated from the management, were not in a position to monitor the managers of their firms and this meant that the managers were likely to pay high dividends. It is theoretically proven that dividend payout ratio has a direct effects on the price of the stocks of the firms (Ross, 1979).

#### 1.1.4 Manufacturing and Allied Companies Listed at Nairobi Securities Exchange

NSE existed since 1952 and was tasked with ensuring the growth of financial markets in Kenya. That core mandate is normally done by ensuring proper mechanisms are put in place to allow the trading of securities by which promotes economic growth. It also tasked with the responsibility of facilitating the listing of the companies seeking to be listed, it was founded under the companies Act. CMA oversees the operations of the NSE activities (NSE, 2017).

The performance of the Manufacturing and Allied companies was exacerbated by widespread drought experienced last year 2017 and it affected adversely the production of goods and this effect affected the performance of the companies by the reduction in the earnings thus reduction in the dividends payments. It was also affected by the political scene following the 2017 election saga. However, the companies are slowly improving as the result of the favorable economic conditions and some companies have declared the dividends recently which is a sign of recovery. Increased payout ratio has been as a result of improved share prices of the firms which have been profitable. On the other hand, the firms which have been underperforming as reflected in the low share prices, have maintained a low dividend payout ratio (NSE, 2017).

#### **1.2 Statement of the Problem**

Dividends are regarded as a critical success factor for many business entities since they are able to signal the projected performance. The declaration and the payment of the dividends by the business entities is enough proof the business entities are worthy to invest in since it is a sign of good performance by the companies (Lukas, 2009). When the dividend payout is changed it means that the business entities are either profitable or non-profitable. Increase in the payout ratio implies that the firm's earnings have increased which is a sign of good growth prospects. On the other hand, a decline in the dividend payout means that the performance of the firm has slowed down.

There has been the declaration and the payment of the dividends by manufacturing and Allied firms quoted under the NSE of Kenya. Particularly, it's not all the companies have declared and paid the dividends because of the macroeconomic environment which has caused the variations in the earnings of different business entities. Some of these factors include poor climatic conditions to support the production of goods and services, political instability and inflation rates which have been very high. On the other hand, the companies which have paid dividends regularly has been attributed to the improved performance from the increased earnings and this is reflected in the share prices which have recorded upward trends (NSE, 2017).

Several research has been undertaken on the dividend payout ratio and its final effect on the prices of the shares of various companies. Sohail (2015) concluded that the dividend payout ratio significantly affects the share value of the companies. This was after a study of the manufacturing industry firms in china. Firms which had a higher payout ratio, their share prices reported upward trends, which was a sign of increased share prices. A study by Mas (2016) to establish how dividend payout ratio relate with share price performance in Washington confirmed that higher payout ratios was as a result of the improved share prices of the companies. Kentur (2016) confirmed that the payout ratio of the dividends has no significant effect on the share prices but the share prices are dependent on the macroeconomic environment.

The dividend payout ratio significantly affects the price of the share of the firms (Simiyu, 2016). His argument was based on the fact that if the companies declare and pay the dividends, it is a good signal of improved earnings. Omondi (2015) confirmed that

dividend payout ratio significantly affected price of shares for the manufacturing sector in Kenya. A study by Kimani (2014) however concluded that payments of the dividends has no significant consequence on the share prices of the commercial banks in Kenya. Based on a couple of studies on the dividend payout ratio on the share prices, little research has been done on manufacturing and allied firms quoted under the NSE extensively. Considering the critical role these sectors play in the economy a more extensive research need to be done. This study sought to address the limitations of the previous studies for example the shorter period of study and non-representative of the sample for the study in answering this study question; what is the effect of the dividend payout ratio on prices of shares for the manufacturing and allied firms quoted under the Nairobi Securities Exchange?

#### **1.3 Objective of the Study**

The objective of this paper was to determine the impact of dividend payout ratio on the share prices of manufacturing and Allied companies quoted under the Nairobi Securities Exchange.

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

This study acts as a foundation for empirical literature. Scholars and academicians conducting research on dividend payout ratio and the share prices will find this study very resourceful since it acts as a point of reference.

To the policy makers for example, the government, Nairobi securities exchange and capital markets authority. This study helps them during the policy formulations which directly affects the dividend payouts and the share prices. The management of the firms finds the results of this study beneficial. They are able to determine the appropriate dividends to declare and pay also the timing of the dividends which is key to the profitability and future prospects of the firms.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### **2.1 Introduction**

This part discusses the various literatures on the dividend payout ratio, the theories on dividend payout ratio, various determinants of the share prices, the conceptual framework and summary of the literature review.

#### 2.2 Theoretical review

The theories on dividend payout ratio include; Bird in-hand theory (Gordon & Lintner, 1963), Tax differential theory (Litzenberger & Ramaswamu, 1980), signal effect theory (Ross, 1980) and dividend irrelevancy theory (Modigliani & Miller, 1962).

#### **2.2.1 Signal Effect theory**

This theory was put forth by Stephen Ross in 1980. The genesis of this theory was as a result of the dividend changes in the companies. Stephen Ross hypothesized that the management's view on the future prospects of the firm and their earning power is reflected in the changes in the dividend payout ratio. Ross confirmed from various studies that those firms that regularly and significantly declared and paid the dividends the share prices of the companies sharply declined.

According to Ross, capital gains are preferred to dividends by the investors of the firms. The increase in the dividend payment is a good signal that the management has projected the good times ahead which will show an increase in the earnings in the future. The increase in the dividend payout by the firms is an indication of higher future earnings to cater for the dividend payout increase (Ross, 1980).

#### 2.2.2 Bird in Hand theory

According to Gordon and Linter (1963), the payment of the dividends is relevant to the value of any firm. They based their argument on the fact that investors are risk averse and prefer new dividends to future dividends since future dividends involve uncertainties. Modigliani and Miller referred to the Gordon and Linter argument as the bird in hand theory because in their view, most of the investors would re-invest their dividends in the same or similar companies if they have no need for current investment income. In any case, investors are concerned about the total cash flow to the firm not to themselves.

According to Gordon and Linter (1963), investors are risk averse and indifferent and will prefer cash dividend rather than future capital gains. Share price will be affected by either the capital gains or cash dividends in the long run which implies that what the investors regard as a certain dividend is much better as opposed to the promised dividend gain inform of capital gains hence the dividend payout is relevant.

#### **2.3.3 Dividend irrelevancy theory**

The theory was put forth by Modigliani and Miller (1961). MM supposed that dividend payout ratio don't affect the price of the stocks. MM proved that under certain assumptions that for example if a firm offers high dividends, it may be forced to sell more shares to incoming shareholders and the value of the firm given up to new shareholders is equivalent to dividend paid. MM further advanced their understanding that shareholders are able to replicate any dividend pattern of the firm, they can buy or sell some of their shares to obtain their desired cash distribution. According to this theory, the share price is not affected by the payout ratio. In each financial year, a company must make a decision either to preserve its earnings or pay portion or all of them to shareholders. Quite simply, if the firm is faced with projects that have higher returns than the cost of equity, the firm will use the retained earnings to finance the projects. If there are earnings left over then the earnings can be distributed to the shareholders as dividends (Lumpkin, 199). This theory is pertinent in this study since it confirms that companies need not to pay the dividends in order to improve their share prices.

#### **2.3 Determinants of share prices**

The performance of the share prices of any business entity is influenced by the following factors; macroeconomic factors, firm size, dividend payout ratio and management efficiency.

#### 2.3.1 Macroeconomic factors

Most of the share returns are influenced by market expectations in the short run, many researches have been undertaken to determine the effects of macroeconomic factors on share price of companies, these factors are, the rate of interest, GDP growth and inflation, for example GDP will lead to positive change in the shares price ,while high inflation will erode the purchasing power therefore limiting the investors from buying shares while those with share may sell them and use them on cash expenditure, therefore this may lead to low demand of shares hence making the share price to fall (Allen, 2015).

#### 2.3.2 Firm size

The size of the company influences the share prices. Mathur and Kenyon(1997) in their studies they 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 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 generates smaller revenue hence making the firm's financial position not to be stable and hence unable to access the financial resources and lower cost hence low prices of their shares (Mathur& Kenyon, 1997).

Sorensen and Stuart (1999) on their findings concluded that firms that are old tend to be slow and they have old technology and not flexible making them difficult to adapt the market and new market and competition from new firms. on the other hand new firms that are small take away the market share because they are aware what is happening to the market and what is exactly needed hence making them easily adjustable despite of the challenges as limited access to finances and their unpopular brand, old firms tend to relax because they think they have won the market hence losing the market since their services and goods are old.

#### 2.3.3 Dividend Payout Ratio

This is that part of the incomes of firms that is normally given out to the shareholders in dividends (Allen, 2015). It is the proportion of the income earned which is given out to shareholders as dividend (Mathur, 1997). According to Petit (1977), dividend payout ratio implies that proportion of income paid to shareholders in dividends. The optimal dividend law is able to maintain a balance on what the firm is able to pay at the current period and future growth of an entity.

#### **2.3.4 Management efficiency**

According to Johnson (2005), management efficiency signifies a situation where by the resources are prudently applied to maximize the output levels. Management efficiency aims at the reduction of the use of available resources by maximizing the returns for example stock waste to improve efficiency and sharing of duties for example chief executive officer can equally act as the managing director. Operational efficiency deals with the management of the operating expenses. The management should ensure resources are deployed efficiently, operating costs are minimized and profit is maximized (Johnson, 2005).

#### **2.4 Empirical Review**

Various studies have analyzed the influence of dividend payout ratio on the prices of shares for the companies in different settings in the world. Laer (2014) investigated the link connecting dividend payout ratio and the share returns of the companies quoted on the Athens Stock Exchange in Greece. From the analysis, a negative connection among dividend payout ratio and the stock returns was confirmed. Sample of the study was limited.

Sohail (2013) analyzed the dividend payout ratio of companies in China. A sample of 93 companies during the study period 2005 to 2012 were selected for the study. The survey aimed at establishing the association linking dividend payout ratio with return of shares for the manufacturing firms by the use of ratio analysis and t-test statistics. He arrived at conclusion that the dividend payout ratio has a positive significant influnce on share return of the manufacturing firms. The study was well structured.

Mas (2016) carried a research to assess the association connecting dividend payout ratio with a price of share in the New York stock exchange in America in 2010. The share prices of 200 companies was under observation but they used a sample of 102 companies. Secondary data was used in this study. They concluded from their observation that dividend payout significantly affected the share prices of the companies. Methodology was appropriate.

Sevvam, et al., (2011) carried a research on the impact of dividend payout ratio on the progress of selected corporate entities in India from 2005 to 2010. A total of 76 corporate firms were chosen as the population of the study. A sample of 15 corporate firms was selected from 2007 to 2010. The study utilized secondary data to capture the share prices and dividend payout ratio over the period. They made conclusions that dividend payout ratio has a noteworthy impact on the share prices the corporate firms in India. Sample of the study was limited.

Kentur (2016) used a sample of 60 commercial banks form the population of 137 commercial banks in Pakistan to look at the effect of dividend payout ratio on the financial performance of commercial banks from 2002 to 2006. The study also utilized a regression model to establish the link connecting payout ratio with fiscal performance (measured in share return). He concluded that dividend payout ratio significantly affected the share returns of the commercial banks. Methodology was ok.

Omondi (2015) studied effects of dividend payout ratio on the price of selected firms quoted under the NSE between 2010 and 2014. A sample of 14 selected companies was chosen for the study out of the 53 listed companies. The study relied on the secondary

data which was readily available. The study also used the multiple regression model in the analysis. The study concluded that dividend payout ratio significantly has effects on the value of the quoted companies at the NSE. Study was well structured.

Kimani (2017) conducted a paper to assess the effect of dividend payout ratio on the share value of insurance companies in Kenya between 2010 and 2016. A sample of 8 insurance companies was selected from the population of 63 insurance companies. Secondary data were collected from the available audited financial accounts of the companies for investigation. The study concluded that dividend payout ratio had insignificant influence on the firms' share price. Choice of the variables was okay.

Soita (2012) did a study to examine whether the dividend payout ratio of companies listed in NSE affected their share price return. The analysis of share return involved the determination of the return on investment. The study covered a five year period from 2008 to 2011. The linear regression model used in the analysis confirmed the positive link connecting dividend payout ratio with share return. Period of the study was short.

Mwaniki (2011) analyzed the dividend payout ratio of non-listed commercial banks and their effect on the share returns in Kenya. He examined the existing link between dividend payout ratio and the share returns using the regression analysis and ANOVA analysis. He used a sample of 17 non-listed commercial banks and analyzed their share return reactions in the 30 day period. He concluded that dividend payout ratio greatly improved the share returns of the non-listed commercial banks in Kenya. Study was well structured.

#### **2.5 Conceptual Framework**

In attempts to establish the connection linking the independent variable and dependent variable, the conceptual framework was used to establish the interrelationships between the independent variable and represented by dividend payout ratio and the dependent variable by share prices.



#### **Figure 2.1: Conceptual Framework**

#### 2.6 Summary of literature Review

The following theories were reviewed in this study. Signal effect theory (Ross, 1980), Bird in-hand theory (Gordon & Lintner, 1963) and dividend irrelevancy theory, Modigilani and Miller (1961). The factors which influence the share prices were also discussed and they include; macroeconomic factors, firm size, management efficiency and dividend payout ratio.

Empirical literature reviewed include the following, Laer (2014), Sohail (2015), Sevvam, et al., (2011), Falope (2010) Omondi(2015),Kimani (2017), Soita(2012) and Mwaniki(2011) and conceptual framework. From the literature reviewed, it was evident that little studies have been extensively done on manufacturing and allied companies, some studies also focused on big firms. Therefore, this research sought to address the above research gaps in conducting this study.

#### **CHAPTER THREE: RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The section covers the methodology that was employed during this research. It includes the study design, population of the study, and method collecting data along with the data analysis.

#### **3.2 Research Design**

Study design involves the methods used to do the research. This paper employed descriptive research design. This type of design is ideal in the collection of the information about the current status of the phenomenon. It employs correlation and regression analysis in studying the relationships between the variables. This research design summarizes the various variables under the study (Mugenda, 2005).

#### **3.3 Population**

Population is items of similar traits (Mugenda, 2005). 8 manufacturing and allied firms quoted under the NSE of Kenya formed the population of this paper. This study was done over a five year period from 2013 to 2017. A census survey was undertaken.

#### 3.4 Data Collection

This paper utilized secondary data obtained from the published financial statements together with daily share prices which was obtained from the capital markets authority and also the websites of Manufacturing and Allied companies. Secondary data was the right choice due to its availability. Data that was collected include; current liabilities, annual share prices changes, current assets, total assets, total liabilities and dividends paid.

#### **3.5 Diagnostic Tests**

The diagnostic tests which were completed on the data to guarantee it suits the fundamental assumptions of classical linear model included; autocorrelation, Kurtosis and Skewness of the dispersion of data.

#### **3.6 Data Analysis**

The paper employed descriptive and inferential statistics. SPSS was used in the analysis between dependent and independent factors. A regression model below was used:

 $Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + e$ 

Where;

Y = Share price = Annul price changes

 $x_1$  = Payout ratio = dividends/net income

 $x_2$  = Leverage = debt to equity ratio

 $x_3$  = Firm size = Natural logarithm of total assets

 $x_4$  = working capital =current assets to current liabilities ratio

 $\beta_0 = \text{constant term of the model}$ 

e = the error term

#### **3.7** Test of significance

An F-test and T- test at 5% significance level was carried to determine the strength of the model.

# CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1 Introduction

The section covers data analysis findings. In section 4.2 data was analyzed in terms of descriptive statistics which is a summary of data and in section 4.3, and section 4.4 data was analyzed in terms of inferential statistics and section 4.5 presents discussions of the findings.

#### **4.2 Descriptive Statistics**

The independent variables analyzed here included the working capital, payout ratio, leverage and firm size while the dependent variable was share price. The minimum values, means, maximum values and the standard deviations of the factors under study were tabulated as shown below.

Ν	Minimum	Maximum	Mean	Std. Deviation
40	0.18	10.09	1.9112	1.99909
40	0.00	1.58	0.4390	0.40217
40	0.35	0.69	0.5328	0.09050
40	18.77	26.99	22.6310	2.12853
40	-115.00	302.00	21.7475	65.70482
	N 40 40 40 40 40	N         Minimum           40         0.18           40         0.00           40         0.35           40         18.77           40         -115.00	NMinimumMaximum400.1810.09400.001.58400.350.694018.7726.9940-115.00302.00	N         Minimum         Maximum         Mean           40         0.18         10.09         1.9112           40         0.00         1.58         0.4390           40         0.35         0.69         0.5328           40         18.77         26.99         22.6310           40         -115.00         302.00         21.7475

From the findings, the minimum number of working capital was 0.18, the maximum value was 10.09, the mean was 1.9112 and the standard deviation was 1.99909 which

indicated a large variation in the working capital. The minimum number of payout ratio was 0.00, the maximum number was 1.58, the mean was 0.4390 and the standard deviation was 0.40217. The minimum value of leverage was 0.35 the maximum number was 0.69, the mean was 0.5328 and the standard deviation was 0.09050. The minimum value of firm size was 18.77, the maximum number 26.99 the mean was 22.6310 and the standard deviation was 2.1285 which shows very large variations. The minimum value of share price was -115.00, the maximum number was 302.00. The mean was 21.7475 and the standard deviation was 65.70482 which shows a large variation.

#### **4.3 Diagnostic tests**

Initial data assessment to find out if it has a normal distribution was done. There was no departure from an assumption of normality that was extreme a s indicated by the measures as shown in table 4.2. Therefore this confirmed the data was suitable for analysis by the use of parametric tests. Autocorrelation was tested by Durbin watson and the value was 1.87 which confirmed no autocorrelation.

Scale	Ν	Skewness		Kurtosis	
		statistic	Std. Error	statistic	Std. Error
Working capital	40	2.566	0.374	7.434	0.733
Payout ratio	40	1.306	0.374	1.826	0.733
Firm size	40	0.116	0.374	-0.746	0.733
Share price	40	2.319	0.374	8.319	0.733
Leverage	40	-0.110	0.374	-0.659	0.733

#### **4.4 Correlation Analysis**

#### **Table 4.3: Correlation Matrix**

		Working	Payout		Firm	Share
		Capital	Ratio	Leverage	Size	Price
Working Capital	Pearson Correlation	1				
	Sig. (2-tailed)					
	Ν	40				
Payout Ratio	Pearson Correlation	0.078	1			
	Sig. (2-tailed)	0.631				
	Ν	40	40			
leverage	Pearson Correlation	-0.305	-0.114	1		
	Sig. (2-tailed)	0.056	0.482			
	Ν	40	40	40		
Firm Size	Pearson Correlation	-0.218	0.275	-0.423	1	
	Sig. (2-tailed)	0.176	0.086	0.007		
	Ν	40	40	40	40	
Share Price	Pearson Correlation	0.073	0.538	-0.084	0.149	1
	Sig. (2-tailed)	0.654	0.000	0.607	0.359	
	Ν	40	40	40	40	40

The outcomes of correlation analysis confirmed a positive association exists between working capital and share price however the relationship was not significant. The correlation coefficient was 0.073. The findings showed further that payout ratio is positively related to share price. The relation is important since the p-value is 0.000 which is less than 0.05. Leverage is negatively related to share price. The correlation coefficient was -0.084 and the p-value was 0.607 which is greater than 0.05 implying the connection is not important. Firm size is negatively linked with share price and insignificant since the p-value is 0.359 which is bigger than 0.05.

#### **4.3 Regression Analysis**

#### Table 4.4: Model Summary

			Adjusted R	Std. Error of	Durbin
Model	R	<b>R</b> Square	Square	the Estimate	Watson
1	0.539	0.291	0.210	0.40540	1.87

R-Square is the commonly employed statistic to calculate model fit. R-square is 1 minus the ratio of residual variability. The adjusted  $R^2$  (square), also known as the coefficient of multiple determinations, is the percent of the variance in the dependent detailed uniquely or jointly by the independent factors. 21.0 % effect of the dividend payout ratio on share prices of manufacturing and allied firms quoted under the Nairobi securities exchange could be attributed to the joint impact of the predictor factors.

**Table 4.5: Summary of One-Way ANOVA** 

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48976.129	4	12244.032	3.589	0.015
	Residual	119391.681	35	3411.191		
	Total	168367.810	39			

The paper employed One-way ANOVA to assess the significance of the regression model. The value of significance was 0.015 which is below 5% level of significance thus indicating the impact of dividend payout ratio on the share prices of manufacturing and allied firms quoted under the Nairobi securities exchange was statistically significant.

The F calculated at 5% significance level was 3.589 since F is greater than the F critical this shows that the overall model was significant.

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	-15.831	166.799		-0.095	0.925
	Working Capital	0.914	5.442	0.028	0.168	0.868
	Payout Ratio	87.218	24.528	0.534	3.556	0.001
	leverage	-6.573	88.042	-0.013	-0.075	0.941
	Firm Size	0.083	5.545	0.003	0.015	0.988

**Table 4.6: Regression Coefficients** 

Regression analysis above established that holding all other factors constant the share prices of manufacturing and allied firms quoted under the Nairobi securities exchange would be at -15.831. An increase of a unit in working capital would lead to a raised change in share price by 0.914. An increase of a unit in payout ratio would lead to share price raise by 87.218. An increase of a unit in leverage would lead to a share price decrease by 6.573. Finally, An increase of a unit in firm size would lead to the share price raised by 0.083. The standardized beta coefficient of working capital was 0.028 which means that working capital has a small impact on the share price. The standardized beta coefficient of leverage was -0.013 meaning a strong effect of leverage on the share price. The standardized beta coefficient of firm size was 0.003which implies a weak effect of firm size on the share price.

#### **4.4 Interpretation of the Findings**

The descriptive statistics outcomes confirmed on average that the payout ratio reported a steady increasing trend over the study period. The payout ratio confirmed the lowest and highest values of 0.00 and 1.58 respectively. Working capital, leverage, firm size and share price posted mixed results. It implies that there was no a definite link between the number of years and working capital, leverage, firm size and share price implying the time factor was significant.

From the regression analysis results the research established a number of dividend payout variables that affect share price and they included working capital, payout ratio, leverage, and firm size, and the intercept for all these factors was found to be -15.831 for the years analyzed. The four independent variables which were analyzed were able to explain their effect on the share price up to 21% as shown by adjusted R square. This implies that the fourindependent variables inputs 21% on the share price and the remaining 79% is contributed by the factors not studied.

This research found out that the coefficient of working capital was 0.914 meaning that working capital positively influences share price. This means that, holding all other factors constant, as the working capital increases, share price also increases. Leverage impacts negatively on the share price since its coefficient was -6.573. Firm size showed a positive influence on share price since the coefficient was 0.083. In general, dividend payout ratio affects the share price of the firms. This study concurs with the study by Aokpar (2016) who concluded that dividend payout ratio affects the share price of the agricultural and investment firms in Malawi.

# CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### **5.1 Introduction**

The section covers a summary of the research findings, conclusions, recommendations, study limitations along with suggestions for further studies.

#### 5.2 Summary of the Findings

This paper aimed at assessing the effect of dividend payout ratio on the share prices of manufacturing and allied companies quoted under the NSE of Kenya. This paper established that there is strong connection linking dividend payout with the share price of the manufacturing and allied firms quoted under the NSE of Kenya. This is based on this fact; the ability of a firm to pay dividends, timing of the payouts and form of dividend payments are sufficient indicators for a firm's share return.

Working capital was found to positive effect on share price. Working capital is a major indicator of the internal strength of the firm which will enable them to withstand any losses in cases of the occurrence of a crisis. The fundamental aim in the management of any working capital is to ensure prudent sound strategies of current assets and current liabilities in a firm, this will in turn improve the shareholder's wealth. To achieve working capital objectives, business entities can adopt aggressive, moderate and conservative management policies. Under the aggressive policy, business entities employs more of short-term funds .This approach will bring about an increase in liquidity risk and cash flow challenges but there is the likelihood of share price increase since short term finances are cheaper. According to the results, leverage also affected share price negatively. Leverage is concerned with debt financing by the business firms. Leverage has been confirmed to be the major factor which determines the survival of the entities. Debt has an undesirable impact on share price of firms depending on how the firms utilize it. This implies that firms which displayed decrease in share price had not adopted optimal debt financing.

The study also established that a positive connection links the firm's size with the share price. The firm's size hence has a direct connection with the share price, the size of the company can influence the share price of the company negatively or positively. Large business entities can access most services at reduced costs due to their purchasing power for example finance, production and distribution compared to smaller companies who cannot afford the bulkiness of services.

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 working capital, payout ratio, leverage and firm size affected the share price of manufacturing and allied firms quoted with the NSE of Kenya. The four independent variables were able to explain their influence up to 21.0% and the rest is contributed by other factors not considered in this study meaning the model was significant.

#### **5.3 Conclusions**

From the study, it was confirmed that a weak positive relationship was found to exist between working capital and the share price, the correlation coefficient was found to be 0.073 which was also insignificant because the P value of 0.654 was greater than 0.05. A desirable relationship exists between payout ratio and share price, the correlation coefficient was 0.00 and the relationship was significant since the p-value was less than 0.05. A negative relationship exist between leverage and share price, because the correlation coefficient was -0.084. The relationship was weak and insignificant since P value was 0.607 which is greater than 0.05. A positive connection links the size of firm with share price, because the correlation coefficient was 0.359, indicating the relationship was insignificant.

Based on the data from the findings, on average it was confirmed that the payment of the dividends was common among manufacturing and allied companies listed at Nairobi Securities Exchange. However, the dividend payment of manufacturing and allied firms quoted under the Nairobi Securities Exchange over years that were studied varied greatly with some companies not paying the dividends during the financial year. Leverage of manufacturing and allied firms quoted under the NSE that were analyzed confirmed variations in leverage this was attributed to different financing capabilities of the firms. It confirmed that the amount of own fund that was available in supporting the companies' business was changing over time. The ability of manufacturing and Allied firms quoted under the NSE of Kenya to meet its obligations posted mixed results from the findings of the study. There was no common trend for the share price.

The study concluded that dividend payout ratio affects the share price of manufacturing and allied firms quoted at the Nairobi Securities Exchange. This is formed on the detail that a various of variables studied proved the existence of positive association linking dividend payout ratio with share price. This implied that the higher the dividend payout ratio, the higher the share price. This is in agreement with Mukumu (2015) who argued that increase individend payout ratio led to increase in share price of companies listed at NSE in Kenya.

#### **5.4 Recommendations**

Founded on the research outcomes, this study recommends the adoption of optimal dividend payout ratio by the policy makers. This is due to the fact that the study findings concurred with the bird in hand theory by Gordon (1963) confirmed the association linking the company's mode of dividend payouts and its market value. The results showed a direct connection linking a company's dividend policy with its market value.

This study recommends the adoption of dividend payment since this new strategy increases the share price. It is believed that dividend payout ratio determines the survival and the profitably of the companies since it identifies the optimal values of payout ratio, working capital, and leverage which are likely to positively or negatively affect the share price.

Founded on the research outcomes, the study further suggests for more funds allocation to cater for data collection and analysis so that deal with the financial constraints. This will also help in carrying out research work smoothly.

Further, the study recommends for adequate time allocation during the research exercise. Adequate time allows for utilization of all systematic steps of research leading to a comprehensive report as opposed to working under pressure due to tight timelines. This study also recommends for consideration of qualitative data which can be captured through questionnaires. Qualitative aspects are crucial in determining the changes in share prices and hence ought to be included in the analysis model. Factoring in both qualitative and quantitative data guarantees more reliable results.

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

This paper had several limitations which included the difficulty in gaining access to the required data as they are considered confidential and not open to public consumption. The time within which the study was conducted was not sufficient to obtain necessary permit to collect data from a big number of agricultural and investment firms quoted under the NSE of Kenya. The sample for this paper was very small. This means that the results of this study may not conclusively prove the impact of dividend payout ratio on the share price of agricultural and investment firms quoted with the NSE of Kenya.

Since the study depended on several sources of the secondary data such as Central bank of Kenya, Capital Markets Authority, individual companies and NSE, the data collection exercise needed a longer time. However, the researcher innovatively utilized the available time and managed to obtain all the required information for the accomplishment of the research objectives.

Movements during data collection also needed more funds. Other costs which the researcher had not perceived included costs for writing materials, printing and photocopying. The researcher had to optimally manage the available funds so as to cater for all related costs to ensure the research process was successful.

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Since the time allocated was short, the research focused on five year period. Therefore, a longer period of approximately ten years would give a better trend of the variables considered in the study leading to better results.

The control variables considered in the study which included firm size, capital structure, and inflation rates were very few. Since the control variables remain unchanged, they play a vital role in ensuring the impact of independent factors on the dependent factors is well elaborated.

#### **5.6 Suggestions for Further Studies**

The paper recommends that there exist an importance to be done on all agricultural and investment firms quoted at the NSE of Kenya on their views regarding the effect of dividend payout ratio on the share price.

A similar study focusing on Eastern Africa region by incorporating the Rwand Stock exchange, Uganda Securities exchange, Nairobi Securities exchange and Dar es salaam Stock exchange should be conducted.

Another research focused on investigating the effect of dividend payout ratio on the firm value should be done to reveal the link connecting dividend payout ratio with company value.

This study utilized only secondary data in investigating the impact of dividend payout ratio on the share prices for the quoted companies under at the NSE of Kenya. It therefore recommends on another study which will aim to determine the effect of dividend payout ratio with incorporation of both primary and secondary data. Another study on impact of dividend payout ratio on the share prices of non-listed companies in Kenya should be conducted so as to compare the results with the impact of dividend payout ratio on share prices for the quoted firms with the NSE.

NSE consists of companies of different segments. This study looked at the companies across all the seven categories. Therefore, it recommends for a study focusing on one of the seven segments for instance the investment category.

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### APPENDIX I: LIST OF MANUFACTURING AND ALLIED COMPANIES LISTED AT NAIROBI SECURITIES EXCHANGE

- 1. B.O.C Kenya Limited
- 2. British American Tobacco Kenya limited
- 3. Carbacid Investments limited
- 4. East African Breweries limited
- 5. Mumias Sugar Company Limited
- 6. Unga Group limited
- 7. Kenya Orchards limited
- 8. Flame Tree Group Holdings limited

## **APPENDIX II: RESEARCH DATA**

Company	year	working capital	payout	size	change in share price	leverage
BOC	2013	2.08	0.49	19.62	15.00	0.64
	2014	2.23	0.50	21.68	34.00	0.59
	2015	2.14	0.31	20.56	36.00	0.43
-	2016	2.06	0.34	21.79	4.00	0.38
	2017	2.28	0.39	21.88	13.00	0.58
BAT	2013	1.18	0.99	23.43	103.00	0.63
	2014	1.26	1.58	23.68	302.00	0.56
-	2015	1.25	0.99	25.76	-115.00	0.58
-	2016	1.45	1.01	25.06	124.00	0.59
-	2017	1.41	0.56	25.88	152.00	0.61
EABL	2013	0.80	0.64	24.78	97.00	0.62
-	2014	0.70	0.67	24.86	-31.00	0.64
-	2015	0.72	0.64	25.77	15.00	0.65
-	2016	0.62	0.62	26.31	-26.00	0.66
	2017	0.54	0.62	26.99	20.00	0.68
FLAME	2013	1.21	0.07	19.99	2.00	0.69
-	2014	1.53	0.40	18.77	1.70	0.56
	2015	1.64	0.00	19.09	3.00	0.48
	2016	1.53	0.00	19.46	7.00	0.37
	2017	2.08	0.65	19.95	-2.00	0.35
ORCHADS	2013	1.77	0.43	20.08	0.25	0.46
-	2014	2.08	0.21	20.89	4.25	0.43
	2015	2.20	0.19	21.78	6.00	0.54
	2016	1.60	1.47	20.68	2.70	0.52
	2017	2.10	0.26	21.56	1.50	0.50
CARBACID	2013	4.26	0.42	21.77	15.00	0.49
	2014	10.09	0.49	22.88	9.00	0.47
	2015	6.30	0.00	22.84	131.50	0.49
	2016	4.51	0.00	21.87	-3.00	0.51
	2017	7.09	0.10	22.04	9.00	0.54
MUMIAS	2013	1.25	0.38	24.08	1.90	0.55
	2014	0.84	0.00	24.24	-1.35	0.50
	2015	0.41	0.00	21.73	-2.40	0.50
	2016	0.19	0.00	24.66	-1.30	0.52

	2017	0.18	0.00	23.76	-1.10	0.53
UNGA	2013	1.25	0.16	22.55	-29.75	0.68
	2014	0.84	0.21	22.65	7.00	0.43
	2015	0.41	0.21	23.05	6.00	0.51
	2016	0.19	0.20	23.77	-4.00	0.38
	2017	0.18	0.13	23.05	-15.00	0.47