# RELATIONSHIP BETWEEN DIVIDEND POLICY AND FINANCIAL PERFORMANCE OF MANUFACTURING AND ALLIED FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE

George Murage Master of Business Administration, Jomo Kenyatta University of Agriculture and Technology, Kenya Dr. Florence Emba Lecturer, Jomo Kenyatta University of Agriculture and Technology, Kenya

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## ABSTRACT

The performance of many manufacturing firms have not been performing well as compared to other sectors. Manufacturing sector faces a numbers of challenges. These include; high cost of production affects both investment decisions and competitiveness of Kenyan products; illicit trade characterized by counterfeits, substandard, or un-taxed goods; high cost of living that drives up wage costs, reduces consumer effective demand and drives inflation; inadequate government support for local produce; weak linkages with local supplies; and inadequate or weak negotiation skills in regional trade agreements. Dividend policy is described as the regulations and guidelines that a company uses to decide to make dividend shareholders. payments to Financial performance as the measurement of the outcome of firm strategies, policies and operations in monetary terms. These results are reflected in the firm return on assets and return on investments. The study was guided by the following specific objectives; To find out the effect of dividend payout ratio, dividend stability, dividend vield and residual dividend policy on financial performance of manufacturing firms listed at NSE. Secondary data was collected from only the 9 manufacturing firm listed at NSE. Theories such as dividend irrelevance theory, signaling theory and agency costs theory were reviewed. The Financial Statement Approach (FSA) was used. This approach involves collecting secondary data from the financial statements and notes to financial statements (income statement and statement of financial position), annual

reports and disclosures provided by CBK, CMA as well as data from the NSE on manufacturing firms. The period 2014 to 2018 constitute the time with the latest data and therefore most relevant to the current analysis study. Descriptive including maximum, minimum, means and standard deviations were analyzed. Normality tests confirmed that data was normally distributed since the values for kurtosis and skewness were neither below -0.96 nor above +0.96. Multicollinearity test was further done by use of Variance Inflation Factor (VIF) and values were below 10 indicating existence of multicollinearity problem. Breusch- Pagan and Koenker values were 0.010 and 0.948 indicating homoscedasticity since the values were more than 0.05. The study showed rsquared value was 0.463, which indicate that nearly 46% of the total variations in the financial performance of manufacturing and allied firms listed at NSE. The R coefficient of the correlation that shows the relationship that exist among the research variables was 0.680 which implies a strong positive correlation exist among the study variables as captured by the study variables. The findings further indicated that the model had a F-tests of 0.861 which was statistically significant at 0.1% confidence level. The study concluded that there is weak positive and significant effect of Payout Dividend Ratio, Stability Dividend and residual dividend ratio on performance whereas Dividend yield had a weak negative and significant effect on performance of manufacturing firms listed at NSE. The study recommended that manufacturing firms managements should ensure that they come up with an optimal dividend policy

since the payment of dividend may affect their financial performance.

*Key Words: dividend policy, financial performance, manufacturing, allied firms, Nairobi Securities Exchange* 

## **INTRODUCTION**

Manufacturing sector consists of firms engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. Manufacturing firms are represented by Kenya Association of Manufacturers (KAM). KAM is Kenya's leading representative organization for an industry that unites industrialists, serves as a common voice for Kenya's manufacturing sector, and provides an essential link for cooperation, dialogue, and understanding with the Government. The manufacturing sector was identified as one of the six key sectors under the economic pillar as having the greatest potential in the realization of Kenya vision 2030 (Were, 2016). The vision for the manufacturing sector is the development of robust, diversified and competitive manufacturing processes. The overall goal for the sector is to increase its contribution to GDP by at least 10% per annum. The sector is also expected to raise market share in regional markets from 7% to 15% and attract at least ten large strategic investors in key agro-processing industries, targeting local and international markets.

Manufacturing industries play a critical role in economic growth and development. Manufacturing provides a significant source of demand for goods and services in other sectors of the economy, and these sales to other industries are not captured in measures of manufacturing sector GDP but are counted in the broader measure of its gross output. Based on the recent statistics, manufacturing contributes £ 6.7 trillion to the global economy (Badu, 2013). The manufacturing sector employed 12.4 million workers in 2015 or about 8.8 percent of total U.S. employment (Badu, 2013). Manufacturing industries generated \$2.1 trillion in GDP (12.5 percent of total U.S. gross domestic product) in 2013. In the United Kingdom, manufacturing makes up 10% of GVA and 45% of UK exports and directly employs 2.7 million people (Merozwa, 2015).

The manufacturing sector has a great potential for promoting economic growth and competitiveness in the country like Kenya. It is the third leading sectors contributing to GDP in Kenya. It contributed 11% of the GDP in 2016 (Kenya Association of Manufacturers, 2016). However, the sector has experienced the fluctuations over the years under different financial conditions. The Kenya Vision 2030 identifies the manufacturing sector as one of the key drivers in the economic pillar for realizing a sustained annual GDP growth of 10 percent geared to make Kenya a middle-income country by the year 2030. Despite the government efforts in improving divided policy conditions as well as market de-regulation, the performance of the manufacturing sector according to the Kenya Economic report 2013 regarding contribution to GDP has remained below the medium-term plan and Vision 2030 targets (Njoroge, 2015).

Financial performance is a subjective measure of the responsibility of a substance for the consequences of its approaches, operations, and exercises evaluated for a recognized period in

budgetary terms (Maaka, 2013). Financial performance is a measure of the outcomes of a firm's operations and policies in monetary terms. These outcomes are revealed in the firm's accounting profitability, return on investment (ROI), shareholders value and return on assets (ROA) (Kassim, 2011). Return on Assets measures how efficiently a firm utilizes the resources at its disposal to generate revenue. Profitability is a measure that indicates whether a firm is performing satisfactorily. Profitability is also used to determine a firm's performance relative to its competitors, identify whether a firm is a worthwhile investment opportunity and measure the performance of management (Sushma & Bhupesh, 2017). However, this study used the Net Profit Margin (NPM) which is not mostly used to find out whether in line with other ratios, namely:

#### **Return on Assets and Return on Equity**

The accounting based proxies used to measure financial performance are diverse and some of those measurements are; return on equity, earnings per share, return on assets and operating cash flows (Al-Malkawi, 2010). The shortcomings of using accounting based indicators is that it represents a short term financial performance implication to the management and also their values are determined from historical data and therefore they cannot be fully relied upon to make future firm decisions (Klapper & Love, 2002). Another limitation of using these proxies is that they are anchored on Accounting based professional rules, regulations and standards. However, operating cash flows being one of the Accounting based proxies, it is least adversely influenced by the accounting practices (Maaka, 2013). Current study used ROE and operating cash flows as accounting based approaches to measure financial performance of the firms under study. Return on equity is the profit after tax to total equity quotient (Al-Malkawi, 2010). Operating cash flows is expressed as the coefficient of the sum of profit after taxation and noncash items and total assets net of cash and cash equivalents (Kassim, 2011).

The market based indicators commonly used in measuring financial performance of a firm are wide-ranging. Some of those proxies are; Tobin's Q, market to book value, dividend yield and price earnings which are futuristic and long term in nature. These market-based proxies represent the expectations of the shareholders on the firm future performance (Carolyne, 2015). The current study used market to book value and price earnings to gauge financial performance. The market to book value is a coefficient representing the ratio of market to book value of common stock (Gitau & Gathigia, 2017). whereas, price earnings is a coefficient of market price of common stock and earnings per share of a firm (Bulla, 2018).

## **Dividend Policy**

Dividend policy is the blueprint used to define the portion of the dividends to be shared and or reinvested (Arnott, 2013). The extent of dividend paid out by an organization is primarily influenced by an organizations dividend policy, which are rules and procedures a business uses to select which proportion of its earnings it will give back to its stakeholders.

As viewed by Pandey (2012) dividend is part of the company's net earnings distributed to shareholders as return on their claim in the company usually based on recommendations by the board of directors. According to Gitau and Gathigia (2017) as well as Baker, Powell and Veit (2014) dividend is an appropriation of profits distributable to shareholders after making appropriate deduction of tax and fixed interest obligation related to debt capital. As emphasized by Kosikoh (2014) dividend disbursement is one of the key factors that establish that a company is practicing the required corporate governance. Dividend policy decisions have also been identified as one of the primary element of corporate finance policy (Uwuigbe *et al*, 2013). As explained by Kosikoh (2014) dividend policy refers to guideline, regulation and policies that a company make use of, in deciding how to embark on dividend payment.

Dividend payout has been described by Amidu (2017) as the ratio of total cash dividend distributable to common shareholders over the available net income for the shareholders whereas, the Dividend yield, can be described as profitability indicator shown as a cash dividend per share for common stocks divided by the per share market value. It can also be simply determined as dividend per share divided by the market value per share. There are four broad dividend policies in practice including residual payment policy, stable predictive dividend policy, Constant payout ratio policy, Low plus extra or bonus dividend policy (Emekekwue, 2018).

Murekefu and Ouma (2012) define the term dividend as payment by a company to its stockholders. Emekekwue (2018) further defines dividend as that section of a business's profit that is shared out to the investors as reward for investment. Dividend may therefore be viewed as the section of a firms' net income that the directors propose to distribute amongst investors in proportion to their shareholdings in the firm (Pandy, 2012).

Fumey and Doku (2013) outline that dividend payout relates to a proportion of total profit remitted to ordinary shareholders as dividends. Dividend payout ratio is considered vital in providing insight on a company's dividend policy to its stakeholders. Organizations may pay dividends to their stakeholders in various forms such as cash dividend, bonus shares and share repurchase however, the most common form of dividends issued by organizations to its stakeholders is cash dividend (Murekefu & Ouma, 2012).

## STATEMENT OF THE PROBLEM

The manufacturing industry accounted for 12% GDP in 2013/2014 (GOK, 2015). The manufacturing sector grew at 3.5% in 2015 and 3.2% in 2014, contributing 10.3% to gross domestic product (GDP) (KNBS, 2016). On average, however, manufacturing has been growing at a slower rate than the economy, which expanded by 5.6% in 2016. Further the growth reduced by 4.7% in 2017 and a slightly decrease by 4.2% in 2018. This implies that the share of manufacturing in GDP has been reducing over time as compared to the overall economy (Too & Simiyu, 2019). This is not the case with other sectors such as Agricultural, Telecommunication, Forestry and Fishing, Transport and construction industries. Could the declining in financial

performance be attributed to dividend policies employed by these firms? Financial performance of manufacturing sector Kenya is particularly low, compared to regional and global productivity levels. Since 2015 some manufacturing firms closed their business due to poor performance while others have been forced to relocate their manufacturing plants to other countries. Some companies have also scaled down their manufacturing capacity. Consequently, negatively affecting the financial performance of manufacturing sector at large (Gitau & Gathiaga, 2017). This challenges when monitored closely create major problems in the Kenyan manufacturing industry, hence the need for the current study. In Kenya, a study carried out by Odawo (2015) revealed that dividend policy of firms listed at the Nairobi securities exchange depend on the firm liquidity, debt equity ratio, profitability and firm size. Bulla (2018) sought to investigate the causes of variations in dividend policy of public firms listed at the Nairobi securities exchange. Despite providing varied results on correlation linking dividend policies to profitability, the context of most studies in Kenya covers all the listed firms. The findings on all firms listed at NSE cannot be generalized to the listed manufacturing firms since the various segments adopt different payout policies. The study therefore established to fill the research gap by conducting a study and answering the question: what is the relationship between divided policy and financial performance of manufacturing and allied firms listed at NSE.

## **GENERAL OBJECTIVE**

The main objective of the study was to establish the relationship between divided policy and financial performance of manufacturing and allied firms listed at NSE, Kenya.

## **SPECIFIC OBJECTIVES**

- 1. To find out the effect of dividend payout ratio on financial performance of manufacturing and allied firms listed at NSE.
- 2. To establish the effect of dividend stability on financial performance of manufacturing and allied firms listed at NSE.
- 3. To determine the effect of dividend yield on financial performance of manufacturing and allied firms listed at NSE
- 4. To assess how residual dividend policy affects financial performance of manufacturing and allied firms listed at NSE.

#### **RESEARCH HYPOTHESIS**

- **H0**<sub>1</sub>: Dividend payout ratio has no significant effect on financial performance of manufacturing and allied firms listed at NSE.
- **H0<sub>2</sub>:** Dividend stability has no significant effect on financial performance of manufacturing and allied firms listed at NSE.
- H03: Dividend yield has no significant effect on financial performance of manufacturing and

allied firms listed at NSE.

**H0**<sub>4</sub>: Residual Dividend policy has no significant effect on financial performance of manufacturing and allied firms listed at NSE.

## THEORETICAL FRAMEWORK

#### **Dividend Irrelevance Theory**

The dividend irrelevance theory was proposed by Miller and Modigliani in 1961. Bhattacharyya (2018) points out that their model is a one-period model under certainty in that given a firm's investment program, the dividend policy of the firm is irrelevant to the firm value, since a higher dividend would necessitate more sale of stock to raise finances for the investment program. The crucial assumption here is that the future market value will remain unaffected by current dividends.

According to Al-Malkawi, Rafferty and Pillai (2010) Miller and Modigliani argued that it does not matter how a firm distributes its income since it has no effect on the value of the firm rather the value of the firm is greatly influenced by its basic earning power and its investment decisions. They stated that a firm's investment policy and the dividend payout policy chosen will not affect the current price of its shares and the total returns to its shareholders. This is to mean that whether a firm pays dividends or not, and also how it sets the dividend policy the value of a firm is based on the capitalized value of their future earnings and not by any of those. In addition, Miller and Modigliani pointed out that, all dividend policies are in essence the same since investors can have their own dividends by having a diversification in their portfolios in a way that matches their preferences (Al-Malkawi, Rafferty & Pillai, 2010).

Al-Malkawi, Rafferty and Pillai (2010) in their review of dividend policy theories go even further to proof that the dividend irrelevance theory put forward by Miller and Modigliani (1961) to be true by them asserting that their discussion suggests that the firm'sinvestment policy is the key determinant of its value and dividend policy is the residual. Since the operating cash flows are dependent on firms" investments, positive net present value (NPV) projects will lead to increases in the operating cash flows and thus lead to increase in the value of the firm. In summary, even considering the assumptions above, a firm'sfuture cash flow from investment activities has the greatest impact on the value of the firm.

Black and Scholes (1974) used the dividend yield given by previous year"s dividends divided by the year-end share price. Their results showed that the dividend yield coefficient was not significantly different from zero for the period under study (1936- 1966) or for any shorter sub periods in between. They thus concluded that there is no difference in the expected return for high or low yield stocks. Black and Scholes (1974) also concluded that differences in yield do not automatically lead to having any differences in stock prices, meaning that neither high-yield nor low-yield payout policy of firms have an influence on stock prices.

## **Dividend Signaling Theory**

Dividend signaling theory is based on the asymmetric information where managers have better access, than outsiders, to inside information about the company (Bhattacharya, 1979; Miller and Rock, 1985). They may signal such information with the shareholders and potential investors through their dividend policy in order to reduce asymmetries. Managers may use changes in dividend policy to communicate information to the market about the future prospect of the firm. Constant or increase in dividends pay-out signals positive messages about the future prospects of the company. This would result in an increase in share price. Whereas, not paying or decrease in dividends pay-out might be received negatively by shareholders and potential investors and this would result in a decline in share price.

According to Bhattacharya (1979), variations in dividend policy communicate information about variations in future cash flows. The signaling theory majorly relies on the supposition that information asymmetry exists, meaning that the management of an organization may have more information about the financial state of an organization than external investors and therefore dividend payout may be utilized by management to deliver certain information on an organization's performance. For example, an increases in a company''s dividend payout may be an indicator of positive forthcoming growth of the firm's shares, while a decline in dividend payouts indicates a negative future performance by the company. Stephen Ross (1977) outlines that in an inefficient market, management can make use of dividend policy to communicate to the market. Therefore dividend is relevant and consequently variations in dividend payout ratio will affect the share price of a firm (Fama, Fisher, Jensen and Roll, 1969).

## **Agency Cost Theory**

The agency cost theory suggests that, dividend policy is determined by agency costs arising from the divergence of ownership and control. Managers may not always adopt a dividend policy that is value-maximizing for shareholders but would choose a dividend policy that maximizes their own private benefits. Making dividend pay-outs which reduces the free cash flows available to the managers would thus ensure that managers maximize shareholders "wealth rather than using the funds for their private benefits (DeAngelo, H., & DeAngelo, L., 2006). In the process of attracting new equity, firms subject themselves to the monitoring and disciplining of these markets.

Agency theory states that managers of firms are likely to engage in Non-Value Maximizing (NVM) behaviour. Jensen and Meckling (1976) theorized that the value of the firm would be decreased by the agency costs incurred due to NVM managers. However, if a manager,,s personal wealth were linked to the price of the firm,,s common equity, these agency costs could be reduced. Thus, managerial ownership of equity (insider holdings) could serve as an agency-cost reducing mechanism, increasing the value of the firm.

## **Residual Theory of Dividend Policy**

The essence of the residual theory of dividend policy is that the firm will only pay dividends from residual earnings, that is, from earnings left over after all suitable (positive NPV) investment opportunities have been financed. Retained earnings are the most important source for financing for most companies (Baker et al 2012). A residual approach to the dividend policy, as the first claim on retained earnings will be the financing of the investment projects. With the residual dividend policy, the primary focus of the firm's management is indeed on investment, not dividends. Dividend policy becomes irrelevant, it is treated as a passive rather than an active, decision variables.

According to Baker et al (2012), the view of management in this case is that the value of firm and the wealth of its shareholders will be maximized by investing the earnings in the appropriate investment projects, rather than paying them out as dividends to shareholders. Thus managers will actively seek out, and invest the firm'searnings in, all acceptable (in terms of risk and return) investment projects, which are expected to increase the value of the firm. Dividends will only be paid when retained earnings exceed the funds required to finance the suitable investment projects. Conversely when the total investment funds required exceed retained earnings, no dividend will be paid.

#### **EMPIRICAL REVIEW**

## **Dividend Payout Ratio**

Ritha and Koestiyanto (2013) conducted a study to look at the factors that affect the dividend payout ratio in the companies listed on the Stock Exchange during the period 2007 to 2009. The results showed leverage has a positive and significant effects on the dividend payout ratio, which indicates that the total debt greater provides the benefits of increased income for shareholders. Profitability was found to be negative and significant effect on the payment of dividends. The company's growth rate showed negative and significant effect on the payment of dividends. These results indicate that large companies with a high growth rate is not maximized in providing dividend income for shareholders, it possible the funds available more widely to use to increase the total assets for the benefit for the company's operations.

Amidu and Abor (2017) conducted a study to examine the determinants of the dividend payout ratio in the company which is listed on the Ghana Stock Exchange during the period 2008 to 2013 with panel data regression. The results showed positive and significant effect on the profitability of the dividend payout ratio. Because the higher of the ability of a company to process its assets into profits, the company tends to announce the payment of a higher dividend. Badu (2013) examines the determinants of dividend payout policy of listed financial institutions in Ghana. Panel data covering 2005-2009 from the selected companies were used for the study. Using fixed and random effects to estimate the coefficient of the explanatory variables, the

results show statistically significant and positive relationship between age and liquidity but saw statistical insignificant relationship between profitability, collateral and dividend payment. Osegbue, Ifurueze and Ifurueze (2014) analyze the relationship between dividend payout and corporate performance of Nigerian listed banks for the period 1990 -2010. Results indicate that there is no significant relationship between dividend payout of the banks and all the explanatory variables (free cash flow, current profitability, financial leverage, business risk and tax paid used in the study.

Odesa and Ekezie (2015) investigate the determinants of dividend payout of selected quoted companies in Nigeria using cross sectional data of 131 companies and employing multiple and linear regression techniques. The results reveal that investment opportunity is negatively related to dividend payout while debt, profitability, shareholding structure and last dividend paid have a positive and significant relationship with dividend payout ratio dividend stability. According to Lintner (2011) Stability of dividend refers to payment of dividend regularly and shareholders generally, prefer payment of such regular dividends. Some companies follow a policy of constant dividend per share while others follow a policy of constant payout ratio and while there are some other who follow a policy of constant low dividend per share plus an extra dividend in years of high profits. A policy of constant dividend per share is most suitable to concerns whose earnings are expected to remain stable over a number of years or those who have built up sufficient reserves to pay dividends in years of low profits. The policy of constant payout ratio i.e. paying a fixed percentage of net earnings every year may be supported by firm because it is related to firms ability to pay dividends. The policy of constant low dividend per share plus some extra dividend in years of high profits is suitable to firms having fluctuating earnings from year to year.

Lintner (2011) observes that most managers are unwilling to reduce the dividend payment because they feel that if they were to do so, they would hurt their companies" stock prices. Managers believe that investors are willing to pay more or dividend stability. Therefore, managers are keen to meet investors" expectations. The stability of the dividend policy provides assurance to the investors on the performance of a particular firm; hence, the investors are willing to pay a premium or dividend stability and his would boost the stock price. Apart from that, Lintner (2011) also discovers that managers tend to be very conservative when it comes to revising the dividend policy. In other words, managers would change the dividend policy when they are able to sustain the dividend change that is being made.

## **Dividend Yield**

Luvembe, Mungai and Mungami (2014) established that there was significant relation between dividend yield and price volatility where earnings, firm's size, debt level, growth level and dividend payout significantly impacted on stock returns and dividend yields. The findings seem to agree with Gordons concept of dividend relevance theory that dividend policy has significant

positive effect on stock prices as according to him, firms that pay larger amount of dividends to their shareholders, faces less risk in terms of stock price volatility.

Baskin (2010) and Allen (2013) looked at the effect of dividend yield and investment on financial leverage and the effects of dividend yield and financial leverage on rate of investment growth in the United States of America and Australia respectively. Both studies found a positive relationship between financial leverage and investment in United States and Australia respectively. The study further showed investment impacting positively on financial leverage but financial leverage not impacting significantly on investment. The study therefore concluded that there exists no clear-cut relationship between financial leverage and dividend payout ratio as well as corporate investment. He pointed out that the nature of their relationship depended on how firms respond to their earnings shortage.

#### **Residual Dividend Policy**

The adoption of a residual dividend policy does not necessarily mean that cash dividends are not distributed (Baker and Smith, 2016). Therefore, the management of a company always sets a target for the dividends ratio, based on the provision that any shortage in Funds is covered by external financing. This article examines whether Bangladeshi. Companies followed a residual dividend policy during the period 2001 to 2011 following the methodology discussed in Baker and Smith (2016) and by calculating the Standardized Free Cash Flow (SFCF) as per the definition prescribed by Lehn and Poulsen (2011).

The residual dividends cannot be isolated from transaction cost theory and pecking order hypothesis. Firms pay dividends as a residual after satisfying all investment needs that are paid out of the internally generated funds, debt then new equity issues. Therefore, transaction cost theory predicts that larger more profitable firms are more capable of paying high amount of earnings as dividends, since they can raise external capital at lower transaction costs (Crutchley and Hansen, 2012). Rozeff (2013) argues that the optimal dividend policy is the one that minimizes the sum of both agency costs and transaction costs. In this instance, fast growing firms can reduce their need for external capital by reducing their dividend payout ratios.

## **RESEARCH METHODOLOGY**

#### **Research Design**

The study used descriptive research design. Muthuva (2016) suggested that descriptive research design enables the researcher to obtain information about the status of the phenomena and it explains its association with the variables in the study. Descriptive research design is suitable because it provides the basis of collecting data on the relationship between divided policy and financial performance of manufacturing and allied firms listed at NSE. Descriptive research design has been used before in other studies like Okoth (2014) used descriptive research design

to determine the effect of interest rate and inflation on growth of collective investment schemes in Kenya. In view of the above definitions, descriptions and strengths, descriptive research design was therefore the most appropriate design for this study.

## **Target Population**

Population refers to the entire group of people, events or things of interest that the researcher wished to investigate (Sekaran, 2008). A study population is defined by Cooper and Schindler (2006) as the entire collection of events, cases or units about which the researcher wishes to draw conclusions. The main objective was to investigate the relationship between dividend policy and financial performance of manufacturing and allied firms listed at NSE, Kenya. The population comprised of the entire data of manufacturing firms listed at NSE from 2014-2018. Kosikoh (2014) argued that a period of five years can help in the computation of various ratios of both the independent and dependent variables for five years for better analysis. Therefore, no selection procedures which was followed since all the 9 manufacturing and allied firms listed at the NSE were incorporated in the sample (Appendix I). It is thus a census study.

#### **Data Collection**

Secondary data was used in this study. Secondary data is defined by Kothari (2004) as the data which have already been collected and analyzed by someone else. It may either be published or unpublished data. Yin (2003) also defines secondary data as data obtained from literature sources or data collected by other people for some other purposes. The data was readily available in financial statement, firm's annual reports, notes and disclosures of NSE handbook, CBK and CMA website, journals, relevant internet and library materials. This is because of reliability of the data as financial statement are audited and published. Data collected was based on key variables which were; dividend payout ratio, Stability dividend, dividend yield and Residual Dividend policy on financial performance of manufacturing and allied firms listed at NSE. The data collected was recorded in the data collection sheet for the various variables useful for the study. The data collection sheet is in appendix II. Specifically, Total assets, Sales revenue, Net incomes, Annual dividend paid, EPS, Constant dividend per share, Low constant per share of manufacturing and Allied firms listed at NSE was obtained through the data collection sheet.

## **Data Analysis and Presentation**

Griffin (2010) argues that data analysis is the application of reasoning to understand the data that was gathered with the aim of determining consistent patterns and summarizing the relevant details revealed through data entry, data sorting, data coding, data cleaning data processing and interpretation of the results. The secondary data collected was analyzed by use of the following methods; Descriptive statistics involves description of data using statistics such as means and standard deviations. Statistical Package for Social Sciences (SPSS) version 25.0 was used for the

data analysis. The study tested for normality and autocorrelation. Normality is important in knowing the shape of the distribution and helps to predict dependent variables scores. The research was controlled by autocorrelation as provided by (Levine, 2008). This approach required the computation of the Durbin Watson Statistic (D) which measures the correlation between each residual and residual for the time period immediately preceding the one of interest. When the successive residuals positively auto Correlate, the value of D approaches 0. If the residuals were not auto correlated, the value of D was close to 2. If there was a negative auto correlation, D was greater than 2 and could approach its maximum value of 4. For each of the tests to be performed, the study therefore carried out a test for auto correlation, and the value of D interpreted according to these criteria to determine whether autocorrelation could be invalidating the results (Levine, 2008). Multiple regression model was applied to establish the relationship between dividend policy and financial performance of manufacturing and allied firms listed at NSE, Kenya. Regression is concerned with describing and evaluating the relationship between a given variable and one or more other variables. More specifically, regression is an attempt to explain movements in a Variable by reference to movements in one or more other variables. Ambrosius (2007) further concluded that a multiple linear regression model is an extension of the simple regression model for data with multiple predictor variables and one outcome. The regression model below was used in determining the relationship

 $Y = {}^{a}it + {}^{p}1^{x}1it + {}^{p}2^{x}2it + P3^{x}3it + P4^{x}4it + {}^{\pounds}$ 

Where: Y = Financial performance P0 = the constant e = error term; Pi: coefficient of the independent variable *i* which measures the responsiveness of *Y* to changes in *i.;* X1-Dividend payout ratio X2-Dividend stability X3-Dividend yield; X4-Residual dividend policy

## **RESEARCH RESULTS**

## **Dividend Payout Ratio**

From the analyzed results, indeed there is existence of a positive relationship between dividend payout ratio and financial performance of manufacturing and allied firms listed at NSE. High payout ratios signify high performance of a firm hence encouraging the investors in investing more assets due to the increased returns. This can also be interpreted as the firm having a big market share in the industry. Many firms adopt optimal dividend policy which is aimed at increasing reputation hence firm value. Dividend payout ratio had a positive effect on financial performance of manufacturing and allied firms listed at NSE with a coefficient of 0.276 which implied that a unit change in the dividend payout ratio resulted into a 0.276 change in the financial performance of manufacturing and allied firms listed at NSE

## **Dividend Stability**

The study results revealed that dividend stability had a positive effect on financial performance of manufacturing and allied firms listed at NSE with a coefficient of 0.110 which implied that a unit change in the dividend stability resulted into a 0.110 change in the financial performance of manufacturing and allied firms listed at NSE.

## **Dividend Yield**

The results of the study revealed that dividend yield had a negative effect on financial performance of manufacturing and allied firms listed at NSE with a coefficient of -0.245; implied that one unit change in the dividend yield will result into a -0.245 change in the financial performance of manufacturing and allied firms listed at NSE.

## **Residual Dividend Policy**

The study established that residual dividend policy had a positive effect on financial performance of manufacturing and allied firms listed at NSE with a coefficient of 0.787; implied that one unit change in residual dividend policy will result into a 0.787 change in the financial performance of manufacturing and allied firms listed at NSE.

## **INFERENTIAL STATISTICS**

The regression analysis among dependent and the independent was carried out. The coefficient of determination was denoted by the adjusted r-squared which provides explanations to the total variations in the dependent variables due to the changes in the value of the dependent variables. The results indicated that the r-squared value was 0.463, which indicate that nearly 46% of the total variations in the financial performance of manufacturing and allied firms listed at NSE can be attributed to the changes in the value of the independent variables (Dividend Payout Ratio, Stability Dividend Ratio, Dividend Yield and Residual Dividend) captured by the study model and at confidence level of 95%. The R coefficient of the correlation that shows the relationship that exist among the research variables was 0.680 which implies a strong positive correlation exist among the study variables as captured by the study variables.

Analysis of Variance (ANOVA) is a parametric statistical technique used to compare datasets. The research study determined that all the variables were significant at their significance level which was lower than 0.05. Normally, F-test is used to test whether the regression model fits well. The predictor variables were regressed against the financial performance of firms listed at NSE and the findings indicate that the research model had an f-tests of 0.861, which was statistically significant at 0.1% confidence level. On the other, the P-value is 0.01 which is less than 0.05 indicating that the model was good for the study. This finding shows that the study model is significant and can be applied for the purposes of making predictions at 5% level of

significance. Regression coefficients shows the statistical significant test of the predictor variables in the study model. It shows the estimation of the independent variables, standard error and the t-ratios. It was used for case of multiple regression. From the findings, the multiple regression model was summarized as:

$$NPM = 200.145 + 0.276X_1 + 0.110X_2 - 0.245X_3 + 0.787X_4$$

The regression model was written as: financial performance = 200.145 + 0.276 dividend Payout ratio + 0.110 dividend stability - 0.245 dividend yield + 0.787 residual dividend policy. The Beta Coefficients in the regression show that most of the tested variables (Dividend Payout Ratio, Dividend Stability Ratio, and Residual Dividend Policy) had positive relationship with financial performance of manufacturing firms listed at NSE except the dividend yield which had a negative relationship with the dividend payout ratio. The findings show that all the variables tested were statistically significant with p- values less than  $0.05.X_1 = 0.276$  which implied that a unit change in the dividend payout ratio resulted into a 0.276 change in the financial performance of manufacturing firms listed at NSE. This implies that there is a positive significant influence of dividend payout ratio on financial performance.  $X_2 = 0.110$ ; this implied that one unit change in the dividend stability will result into a 0.110 change in the financial performance of manufacturing and allied firms in NSE.  $X_3 = -0.245$ ; implied that one unit change in the dividend yield will result into a -0.245 change in the financial performance of manufacturing and allied firms in NSE.  $X_4 = 0.787$ ; implied that one unit change in residual dividend policy will result into a 0.787 change in the financial performance of manufacturing and allied firms in NSE.

This is in line with the study of Amindu and Abor who found a positive coefficient of 0.098 on the effect of dividend payout ratio on performance of companies listed at Ghana Stock Exchange. They argued that an increase in dividend payout ratio increases financial performance. He further states that investors prefer stable and predictable dividends payment because of the bird-in hand theory. This is the reason behind a positive stability and residual dividend policy. Also, Brealy, Myers and Marcus (2017), in an investigation of the impact of profit approach on future budgetary execution of firms recorded at the Nairobi Securities Exchange presumed that the positive relationship between current profit payout and future income development depends on the free income hypothesis. Bulla (2018) opined that the measure of a firm assumes a vital part in deciding the sort of relationship the firm appreciates inside and outside its working surroundings. The bigger a firm is, the more prominent the impact it has on its partners. Once more, the developing impacts of aggregates and multinational companies in today's worldwide economy are characteristic of what part measure plays inside the professional workforce. There is a negative correlation between dividend yield and performance of manufacturing and allied firms listed at NSE. This is because stock dividends do not lead to actual increase in the value of investors at the time of issuance. They therefore affect stock prices and thus an effect on cash dividends (Odawo, 2015).

## CONCLUSION

The findings of the research established that manufacturing and allied firms listed at NSE was directly and significantly influenced by the firms" dividend payout ratio. Based on this finding the study concludes that dividend payout significantly affects the financial performance manufacturing firms listed at NSE. The findings also revealed that manufacturing firm's financial performance was positively and significantly influenced by the dividend stability. As per this finding, the study concludes that a firm's dividend stability significantly affects the performance of manufacturing firms listed at NSE. The findings of the study revealed that residual dividend policy had a positive but insignificant relationship with financial performance of the manufacturing firms. Based on this finding the study concludes that the residual dividend policy affects the performance of manufacturing firms in financial terms. In addition, the study revealed that dividend yield had negative but insignificant relation on the financial performance of manufacturing firms. As per this observation, the study concludes that dividend yield do not affect the performance of manufacturing firms in financial terms.

## RECOMMENDATIONS

First, the study recommends that the manufacturing firms managements should ensure that they come up with an optimal dividend policy since the payment of dividend may affect their financial performance. The research also recommends that the management of manufacturing firms listed at NSE should not worry about the method of dividend payment since the mode does not affect the firm's financial performance.

Second, the results of study showed that dividend stability decisions are made with some level of consideration for stability or smoothing. It was evident that investors are willing to pay a premium for stocks paying dividends. Therefore, manufacturing managers may need to consider establishing a more steady or consistent dividends path especially for high growth manufacturing firms/sectors to signal the market and to mitigate information asymmetry problems. There should be less smoothing in manufacturing sectors experiencing less growth opportunities to control agency costs. This will most likely improve value by reducing volatility of stock price in the market. On the basis of risk which is a significant predictor of payout, more dividend stability should be seen in high risk industries like manufacturing to mitigate agency costs due to diminished investment opportunities and information asymmetry between investors and managers.

Third, the selected manufacturing firms listed at NSE should maintain a stable dividend policy it must consider its debt: equity ratio as earnings are paid out as dividends and the company undertakes more investment it will have to seek debt financing. Secondly it must have sufficient liquidity to continue paying its obligations unless it pays dividends through non-cash forms such as scrip dividends. Manufacturing firms listed at NSE that seek to maintain a stable dividend policy have to take into consideration their profitability since dividends can only be paid out of

the company is making profits further it must take into account its growth level. High growth requires high capital investment which can be funded by earnings thus affecting the dividend policy. Manufacturing and allied firms are profitable, and should make higher earnings that can maintain a stable dividend policy unlike smaller firms with uncertain lower earnings thus making a stable dividend policy difficult to implement.

Fourth, the study recommends that the dividend yield should also be considered to be instrumental in improving financial performance of manufacturing listed at NSE: The final recommendation is to understand the role that dividends yield play as a percentage of total returns. The idea that investors underestimate the impact of dividends yield on total returns is one that has been proposed in this study.

#### REFERENCES

- Allen D. E. (2013). The Pecking Order Hypothesis: Australian Evidence. Applied Financial Economics, Vol.3, pp. 101-122.
- Ambrosius, W. (2007). Topics in Biostatistics. (J. M. Wlker, Ed.). Totowa, New Jersey: Humana Press.
- Amidu, M. (2017). How does dividend policy affect performance of the firm on Ghana stock Exchange? Investment Management and Financial Innovations, 4(2), 104 - 112.
- Amidu, Mohammed dan Joshua Abor. (2016). Determinants of Dividend Payout Ratios in Ghana. *Journal of Risk Finance*, 7(2): 136-145. An MBA project submitted to the University of Nairobi.
- Ap Gwilym, O., Morgan, G. & Thomas, S. (2014) Dividend stability, dividend yield and stock returns: UK evidence. *Journal of Business Finance and Accounting*, 27(3-4), 261281.
- Arnott, R., Asness, C. (2013). Surprise! Higher dividends-higher earnings growth.
- Badu, E. A (2013). Determinants of dividend payout policy of listed financial institutions in Ghana. *Research Journal of Finance and Accounting*, 4(7), 184-190.
- Baker Kent. H, G. P. (2014). How Corporate Managers View Dividend Policy. *Quarterly* Journal of Business and Economics.
- Baker, H.K (2014). In search of a residual dividend policy. Review of Financial Economics, 15(1), 118.
- Baker, H.K., &Smith, D.M. (2016). In search of a residual dividend policy. Review of Financial Economics, 15(1), 1-18.
- Baker, K. & Gandhi, D.(2017), The Perception of Dividends by Canadian Managers: New.
- Baskin, J. (2010): An Empirical Investigation of the Pecking Order Hypothesis. Financial Management, Vol. 18, pp. 26-35.
- Bazavov, A., Ding, H. T., Hegde, P., Kaczmarek, O., Karsch, F., Laermann, E., ... & Sandmeyer, H. (2017). Skewness and kurtosis of net baryon-number distributions at small values of the baryon chemical potential. *Physical Review D*, *96*(7), 074510.
- Bhattacharya, S. (2019). Imperfect Information, Dividend Policy and the "Bird-in-Hand" fallacy. The Bell Journal of Economics, 10, pp. 259-270.
- Black, F. and Scholes, M. (1974) The Effects of Dividend Policy on Common Stock Prices and Returns. *Journal of Financial Economics*, 2, 1-22.

- Brealey R. A., Myers S.C. & Allen. F. (2015). Principles of corporate finance. (10<sup>th</sup> ed.) London: McGraw-Hill.
- Brigham, E. F. and J. Houston (2014) Fundamentals of Financial Management. Australia: Thompson South-Western.
- Bulla, D. M. (2018). An empirical analysis of selected factors affecting dividend policy of listed firms at the Nairobi securities exchange. African Journal of Accounting, Economics, Finance and Banking Research, 9(9), 14-23.
- Carolyne, S.M. (2015). The Effect of Dividend Policy on the Financial Performance of Firms Listed at the Nairobi Securities Exchange (Unpublished MBA Research Project, University of Nairobi, Kenya.
- Cheung, W. M., Chung, R., & Fung, S. (2015). The Effects of Stock Liquidity on Firm Value and Corporate Governance: Endogeneity and the REIT Experiment. *Journal of Corporate Finance*, 35, 211-231.
- Cohen, R.D. (2012). The Relationship between the Equity Risk Premium, Duration and Dividend Yield Wilmott Magazine, pp 84-97.
- Crabtree, A. D., & DeBusk, G. K. (2018). The effects of adopting the balanced scorecard Crutchley, C.E., &Hansen, R. (2012). A test of agency theory of managerial ownership, corporate leverage and corporate dividends. Financial Management, 18(4), 36-46. DeAngelo,
- H., DeAngelo, L. and Stulz, R. (2016). Dividend Policy and the earned/contributed capital mix: a test of the life-cycle theory. *Journal of Financial Economics*, 81, 227254.
- Dogan, M. & Topal, Y. (2014). The influence of dividend payments on company performance: *The* Case of Istanbul Stock Exchange (BIST). European Journal of Business and Management, 3(6), 189197.
- Emekekwue, P. (2018). Corporate Financial Management (6th ed). Kinshasa, African Bureau of Educational Sciences, 393-413.
- Fama, E., Fisher L., Jensen M. and R. Roll, (1969). The adjustment of stock prices to new.
- Fenn, G.W. & Liang, N. (2001). Corporate Payout Policy and Managerial Stock Incentives. *Financial Analysts Journal, Vol. 59 No.1, pp.70-87.*
- Fumey, A. & Doku, D. (2013). Dividend Payout Ratio in Ghana: Does the Pecking Order Theory Hold Good? Journal of Emerging Issues in Economics, Finance and Banking. Volume, 2(5), 99-133.
- Gitau, R., & Gathigia, J. (2017). The Moderating Effect of Firm Size on the Relationship Between Capital Structure and Financial Distress of Non-Financial Companies Listed in Kenya. Journal of Finance and Accounting<sup>A</sup> (4): 151-158.
- Hashim, Z., Shahid, R., Sajid, I. & Umair, A. (2013). Determinants of dividend policy: A case of banking sector in Pakistan, Middle East. *Journal of Scientific Research*, 18(3), 410-
- Horne Van, (2011) Fundamentals of Financial Management 11th Edition. Information International Economic Review, 10, 1-21.
- Jensen, M.C. and Meckling, W.H. (1976). Theory of Dividend Policy in Jordan: An Application of the firm: Managerial behavior, agency costs and Tobit Model. *Journal of Economic & Administrative ownership structure 30*, (4).
- Kajola, S. O., Adewumi, A. A., & Oworu, O. O. (2015). Dividend pay-out policy and firm financial performance: Evidence from Nigerian listed non-financial firms.

*International Journal of Economics, Commerce and Management,* 3(4), 1-12 KAM (2015). Kenya association of manufacturers: Retrieved from KAM.

- Kassim, H. (2011). The relationship between working capital management and financial performance of supermarkets in Nairobi County. MBA Research project, University of Nairobi.
- Kosikoh, J. C. (2014). Determinants of Financial Distress in Insurance Companies in Kenya. Jomo Kenyatta University of Agriculture and Technology.
- Kothari, C. (2004). Research Methodology, Methods and Techniques, New Delhi: International P Limited.
- Lehn, K. and A. Poulsen, (2011) Free Cash Flow and Stockholder Gains in Going Private Transactions, *Journal of Finance, July 2011, pp. 771-787.*
- Lintner, J, (2011). Distribution of Incomes of Corporations among Dividends, Retained Earnings and Taxes. American Economic Review, 46(2), pp. 97-113.
- Maaka, Z. A. (2013). The relationship between liquidity risk and financial performance of commercial banks in Kenya. Unpublished MBA Research Project. (MBA dissertation, University of Nairobi).
- Maladjian, C. & El Khoury, R. (2014). Determinants of the dividend policy: An empirical study on the Lebanese listed banks. *International Journal of Economics & Finance*, 4(6), 240252.
- Malik, M. &Maqsood, M. (2015). Impact of Changes in Dividend Policy on Firm'sValue: A Case Study of Cement Sector of Pakistan. *Journal of Basic Sciences and Applied Research*, 1(4), 41-52.
- Mathuva, D. (2012). Capital adequacy ratio, cost income ratio performance *The International Journal of Applied Economics and Finance*, *3*(2), *35-47*.
- Mauti, M. (2012).E-procurement adoption among large scale manufacturers in Nairobi.
- Merozwa, G. (2015). Liquidity and Bank Performance. International Journal of Economics and Business Research, 14(3):453-462.
- Mugenda, O. M. & Mugenda, A. G. (2013). Research Methods: Quantitative and
- 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.
- Nash, R, J. M. Netter, & A. B. Poulson, (2003). Determinants of Contractual Relations between Shareholders and Bondholders: Investment Opportunities and Restrictive Covenants. *Journal of Corporate Finance*, 9, 201-232.
- Ndirangu, J. (2013). Effects of Working Capital Management on Profitability of Manufacturing Firms in Kenya. *Journal of Chemical Information and Modeling*, 53(9), 1689-1699.
- Nissim, D., & Ziv, A. (2011). Dividend changes and future profitability. Journal of Finance, 56(6), 2111-2133.
- Njoroge, I. (2015). Effect of liquidity on the financial performance of construction and allied and companies listed at the NSE. Unpublished MBA project, University of Nairobi.
- Odawo, C. (2015). Determinants of dividend payout policy in public ltd banks in Kenya: A case study of CFC Stanbic bank. *Strategic Journal of Business & Change Management*, 2(2), 16-28.

- Odesa, J.O. & Ekezie, A. (2015). Determinants of Dividend Policy in Quoted Companies in Nigeria. Communication Panorama -African and Global Perspectives 1(1), Sept -Oct.
- Okibo, B.W. & Chateya, A, G. (2013). An Investigation into Effects of Dividend Policy on Financial Growth of Advertising Firms in Kenya. *International Journal of Management and Business Research*, 3(3), 199-214.
- Okoth, A. K. (2014). The Effect of Interest Rate and Inflation on Growth of Collective Investment Schemes in Kenya. Master's Thesis. School of Business, KCA University on shareholder returns. Advances in Accounting, 24(1), 8-15.
- Oppong, F. K. (2015). Dividend Policy and Firms" Performance: A Case of Listed Banks in Ghana. Unpublished Project. Kwame Nkrumah University of Science and Technology.
- Osegbue, I.F., Ifurueze, M. & Ifurueze, P.(2014). An analysis of the relationship between dividend payment and corporate performance of Nigerian banks. *Global Business and Economic Research Journal*, 3(2), 75-95.
- Pandey, I.M. (2012). Financial Management. New Delhi, India: Vikas Publishing House.
- Partington, G. H., (2013) Dividend Policy and Its Relationship To Investment and Financing Policies: Empirical Evidence, *Journal of Business Finance & Accounting*, 12(4), pp. 531-542.
- Preinreich, Gabriel A. D. (2012). Stock Yields, Stock Dividends and Inflation.
- Priya, K., & Nimalathasan, B. (2013). Dividend policy ratios and firm performance: a case study of Selected Hotels & Restaurants in Sri Lanka. *Global Journal of Commerce and Management Perspectives*,2(6), 16-22 Qualitative Approaches, Acts Press, Nairobi Kenya
- Rehman, M. U., & Hussain, A. (2013). Impact of Dividend Policy on Performance of Firms Having Stocks Listed in an Emerging Stock Market. Asian Journal of Empirical Research, 3(1), 20-29.
- Ritha, Henny dan Eko Koestiyanto. (2013). Faktor-Faktor yang Mempengaruhi Dividend Payout Ratio. *E-JournalManajemen dan Bisnis*, 1(1): 1-15.
- Ross, A. S., Wester field, R.W., & Jaffe, J. (2012) Corporate Finance. Boston: Irwin McGraw-Hil.
- Rozeff, M. (2013). Growth beta and agency costs as determinants of dividend payout ratios. Journal of Financial Research, 5(3), 249-259.
- Rwoti, J. (2015). Procurement performance measurement systems: A survey of large manufacturing companies in Nairobi. Thesis submitted to the University Of Nairobi.
- Sinha A, et al. (2015) A reduced VWA domain-containing proteasomal ubiquitin receptor of
- Giardia lamblia localizes to the flagellar pore regions in microtubule- dependent manner. *Parasit Vectors* 8:120.
- Stephen A. Ross, Randolph W. Wester field and Bradford D. Jordan (2006), Fundamentals of corporate finance. 9<sup>th</sup> edition McGraw-Hill higher education.
- Sushma, V. & Bhupesh, S. (2017). Effect of Working Capital Management Policies on Corporate Performance. Global Business Review, 8-26.
- Too, I. C., & Simiyu, E. (2019). firm's characteristics and financial performance of general insurance firms in Kenya. *International Journal of Business Management and Finance*, 2(1).

- Troughton, G. H. (2012). Corporate finance: A Practical Approach. Wiley. University of Nairobi, Kenya.
- Uwuigbe, U., Jafaru, J & Ajayi, A (2013), Dividend policy and firm'sperformance: A Study of listed firms in Nigeria, Accounting and Management Information Systems, 11(3), 442-454.
- Were, A. (2016). Manufacturing in Kenya: Features, challenges and opportunities.
- Yegon, C., Cheruiyot, J., & Sang, J. (2014). Effects of dividend policy on firm's financial performance: econometric analysis of listed manufacturing firms in Kenya. *Research Journal of Finance and Accounting*, 5(12), 136-144.
- Zeng, T., (2013). What determines dividend policy? A comprehensive test. *Journal of* Accounting Review 7:4, 273-289.