DIVIDEND PAYOUT AND FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE.

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A Research Project Submitted to the department of Economic Theory in the School of Economics in Partial Fulfillment of the Requirements for the award Degree of Master of Economics (Policy and Management) of Kenyatta University.

DECLARATION

This is to certify that this research project is my original work and has not been presented for award in any other university or institution of higher learning. Information from other sources has been duly acknowledged.

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This research project has been submitted for examination with my approval as the university Lecturer.

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OPERATIONAL DEFINITION OF TERMS

Dividend policy	This is considered as a set of guidelines a company adopts in making decisions in regard to dividend payout, how much to pay and when to pay.
Dividend Payout Ratio	The percentage of earnings paid to shareholders in dividends. It is a ratio of dividend paid over total earnings.
Earnings per Share	This is a profit of the company allocated to every share held by the shareholder- these shares are the common stocks.
Return on Assets	This is the return earned by all the capital employed.

ABSTRACT

To determine the correct mix of dividend and retained earnings and how it affects profitability has been a subject in Literature of financial management. This research came in to contribute to the on-going debate by examining the relationship between dividend pay-out and financial performance of manufacturing firms listed in the Nairobi Securities Exchange. The key motivation was to establish if the findings of this study are consistent with prior empirical studies as found in both Signaling and Bird -in-hand hypotheses of dividend policy theory. The target population was the listed manufacturing firms in Kenya as at December 2015. All the ten listed firms at the period were used in the study. The study used secondary data. Annual financial reports for the period 2002-2015 were utilized as the main source of data collection for the 10 firms. Ordinary Least Squares (OLS) was used to estimate the coefficients of explanatory and control variables. Return on Assets (ROA) serves as the dependent variable, profitability, while Dividend Pay-out ratio proxy for dividend policy was the explanatory variable. Control variables include firm size and leverage. The use of descriptive statistics showed that dividend payout ratio -measured as Dividend per Share/ Earnings per Share, had an average of 37.21% and a median of 33.88%. Correlational coefficient findings results imply that the independent variables that is; dividend payout, Firm Size, and Leverage, and the dependent variable -Return on Assets, all had a positive relationship. From the results, there is a clear positive and significant relationship between return on assets and dividend payout. The significance and the positive coefficient of the variable dividend payout indicate that when a listed firm has a policy to pay dividend it influences its level of future financial performance as measured by ROA. The study recommends that policies and laws governing dividend payment should be reinforced and enforced to ensure more frequent payment by firms in order to increase their market values through share price increases.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Profit making and enhancing shareholders wealth is one of a firm's major objective and this is mainly realized through improvement in profit margin, growth in sales, through capital investment decisions and decisions in capital structure. A Firm's performance can be said to be how well it enhances its shareholders' wealth and the ability of a firm to generate earnings from the capital invested by shareholders. It be measured by the earnings generated by the company in terms of profitability. In a firm, the ability to make profit is known as profitability. Profit is defined as the income left after a firm has deducted all its operating costs and expenses related to earning profit. The return of every unit of asset employed is seen through Return on Assets.

Many literature reviews on profitability and how it relates to dividend policies have been developed making dividends an important aspect to shareholders and potential investors in showing the earnings that a company is generating. The dividend payout of a firm is not only the source of cash flow to the shareholders but it also offers information relating to firm's current and future performance. A number of studies have arisen suggesting the design of a firm's dividend payout is to reveal the earnings prospects to investors Miller and Rock (1985) Miller and Rock (1985).

Dividend payout, how funds flow in a firm, prices of its stocks, liquidity and the morale of stockholders are among the various aspects that affect the financial structure of a firm. Shareholders in a firm have different preferences where some prefer receiving the maximum

current earnings on their investment while the other segment is where they prefer reinvestment of earnings so that the company's capital will increase. If a company pays out earning as dividend, then it reduces its ability to reinvest and expand unless it borrows funds and in this case it diminishes its long-term prospects (Van Horne, 2002). Companies will in most cases reinvest their earnings more when there are chances for profitable expansion. This means that, during periods when earnings are high, reinvestment takes a greater share than dividends.

1.1.2 Dividend Payout Policies

Dividend payout among listed firms is guided by dividend policy which is the decision making strategy aiding in deciding the amount of dividends and the timing of the payments. It is said to be an important financial decision that corporate managers encounter (Baker & Powell, 1999). A study conducted by Zhou and Roland (2005) in 2005 revealed that high dividend payout firms tend to send a message of higher future profitability but relatively low past earnings growth.

When making a decision as to which dividend policy to use, a firm may adopt either of four main dividend policies explained below which are based on various factors that frame a dividend policy of a firm; How available are investment opportunities, predicted earnings changes, tax regimes, flexibility of a firm's financial status, restrictions from a legal perspective and floatation costs are among the factors that affect a company's dividend policy.

One of the various dividend policies used is the Stable Dividend Policy; in this case a firm aims at having a balanced dividend payout every year. The payout of dividend rarely does it change even at the times when earnings are volatile every year. The provisional level of the dividend

payout is determined by assessing a forecasted long term earnings of the company. Using this avenue, growth rate of a company's dividend is aligned with the growth rate of its long-run. Stable dividend policy is guided by a series of possibilities: Dividends may rise even in periods when earnings of the company decline of Dividends may not increase at the same higher rate of earnings in the booming years.

Arising from above mentioned, the stable dividend policy may eventually move towards a target payout ratio. Targeted payout is the measure of the size of a company's earnings that should be paid out as dividends. One such kind of model on the line of gradual adjustment is the target payout ratio adjustment model. Using this model, if the earnings of the company are expected to rise and the current dividend payout ratio is below the target dividend payout ratio, the investor can calculate the estimated future dividends as follows: Estimated Dividend = (Previous Dividend) + [(Expected Increase in EPS) * (Target Payout Ratio) * (Adjustment Factor).

The second dividend policy is the Constant dividend policy where a specific percentage of the company's earning is paid out as dividends every year. Dividends are affected by the short term volatility of earnings and in this case the amount of dividends varies directly with the company's earnings. However, this policy is not used very frequently in companies.

Thirdly, there is the Residual Dividend Policy where the company pays the dividends from the funds left after the finances for the capital expenditures of the current period are deducted from the internally generated funds of the company. In this policy the company's management uses funds to fund capital expenditure with available earnings before paying dividends to its shareholders. The residual dividend policy holds that dividends paid by firms are residual, after the firm has retained cash for all available and desirable positive NPV projects. Investors who

subscribe to this theory therefore do not care whether firms pay dividends or not, what they are concerned with is the prospect of higher future cash flows which might lead to capital appreciation of their stocks and higher dividends payouts.

The final dividend policy is the No dividend Policy: here the company may use this type of dividend policy in the event it wants to reinvest all its earnings or due to other the working capital requirement.

A study conducted by Miller and Modigliani theory (1961) concluded that if there were no imperfections in the capital markets including taxes, transaction costs and other associated costs, then the dividend policy of a company is irrelevant for the market value of its shares. It therefore implies that financial managers cannot alter the value of their firms by changing their dividend policy.

Pecking order theory as studied by Myers and Maljluf (1985) and Fama (19746 found that firms should consider financing investments using retained earnings as opposed to using debt or externally acquired equity. Therefore, there exist competition between dividends and investment for internally generated funds; this is as stated by (Alli & Khan, 1993). If a firm adopts a model where it has a higher income retention ratio it therefore implies a lower dividend payment ratio and dividend payout. Asset expansion by firms has a potential to influence dividend payments, therefore an inverse relationship between dividend payments and new investments is expected (Partington, 1989).

Dividend payout in the world differ in the modes of payment where these include cash dividends and consist of various segments of dividends which are either regular, cash special and

liquidating dividends (Ross, Westerfield, & Jordan, 2010). Regular cash dividends are defined as those dividends that are paid to shareholders in the regular course of business mostly every third of the year. Non recurring distribution of company assets mainly in the form cash is referred to as Extra cash dividend. A special dividend is viewed as a one-time payout and it won't be repeated. Liquidating dividend is where a firm distributes a onetime dividend in the event it's being liquidated. Many firms appear to pay out cash to investors because the opportunities to steal or fail to invest it are in part limited by law, and because a small section of the shareholders have enough power to extract it (La Porta, et al., 2001). Firms may experience lower future earnings if they pay high dividends without considering investment needs. Again an increase in dividends in a quarter may be the result of the management's policy to keep investors satisfied and prevent them from selling the stock at times when future earnings are expected to decline or current losses are expected to continue or on the same note the managers want to attract more investment by making investors buy the stock. This is a case of rising dividends followed by declining earnings. On the other hand, an increase in dividends may be the result of good performance in previous periods which may continue into the future this supports the view of a positive causal relationship between current dividends and future earnings (Farsio et al., 2004).

A firm's financial performance could be argued it's a subjective matter of accountability of an entity for the results of its policies. A number of measures have been used in the past to measure performance such as profit after tax, financial ratios, return on assets (ROA), return on equity (ROE), return on investment (ROI), earnings per share (EPS) and any market value ratio that is generally accepted.

Profitability of a firm can be measured through; a) Net profit Margin which is a ratio of net profit and total revenue b) Gross profit margin which is a ratio of gross profit and total sales revenue c) Comparative Expenses analysis which is a technique used to analyze financial statements data to bring out comparative and significance of the financial information. d) Profitability by segment which is segmenting the firm and determining which segment generates the highest profit.

Profit after tax has emerged as one of the main and widely used measures of firm's performance where the profit level is a key determinant of value, but the changes in value of stock market returns is driven by changes in profitability. When profitability improves more than the expectation of the investors then stocks outperform the market. Even a company that is under performing can see its stock grow rapidly if it reduces its losses by more than investors had expected of forecasted.

Return on Assets is a measure that captures the percentage of profitability arising from all resources employed; it's also the ability of a firm's to generate income by utilizing company assets at their disposal driven by the management and it also acts as an indicator of the efficiency of the management of a company in generating net income from all the resources of the firm. A higher return on assets is an indication that the company is more efficient in using its resources. It's mainly used as a general index of profitability where the higher the value, the more the firm is profitable.

Return on Equity is a measure of the rate of return on the investor's equity employed in the firm and it indicates the rate of return that the firm has earned on the capital provided by shareholders after accounting for payments to all other capital suppliers (Brown & Reilly, 2010). A high ratio of Return on Equity mainly reflects the firm's acceptance of strong investment opportunities and efficient management of expenses. It's an important ratio to shareholders as it offers a number of

benefits to the investors who want insights about the company. It's important to consider Equity return in relation to ROA to determine if the firm is making a profitable return on their debt.)

1.1.3 Effect of Dividend Payout on Financial Performance

Determination of the proportion of a firm's total distributable earnings that is payable to shareholders is done through dividend payout (Adesola & Okwong, 2009). Shareholders value Dividends as well as potential investors who use this this as a way of showing the earnings that a company is generating. A Healthy dividend payment overtime shows that companies are generating real earnings and is a strong indication of a long term trend (Barron, 2002).

Over the years, there has been an emergence different school of thought in explaining the importance of dividend payout on future financial performance of firms. Miller and Modigliani (1960) which was a study on dividend payout in firms, explains that high dividends increases firm value since there exists natural shareholder for dividend paying stocks and hence many investors invest in stocks to maintain a steady source of cash. One school of thought argues that, if it is cheaper paying dividends in comparison to letting the investors earn benefit in terms of cash by selling shares, then the natural clientele would be willing to pay a premium for the stock and this therefore means that the firm value goes high.

On the other hand, there exist a narrative that low dividends will increase value of a firm mainly because dividend income is often taxed, which is severely ignored by the study by Modigliani and Miller. This is also explained by the argument that paying out large dividends crowds out a firm's pool of funds to reinvest for growth. Firms could convert dividends into capital gains by slightly adjusting or changing their dividend payment policies and additionally,

in the instance where shareholders part with more taxes on dividends than on capital gains, the taxpaying investors should welcome such a move. The resultant scenario is where the value of the firm will increase, since total cash flow retained by the firm and/or held by shareholders will be higher than if dividends are paid. This means that if capital gains attract less taxes than dividend income, companies should therefore pay the lowest dividend possible. Notably on the same note, dividend payments, whether they are cash or stock, impact retained earnings negatively by the total amount of the dividend which means that a company may have to borrow externally when investing. If we incorporate the cost of borrowed funds, this will further shrink the financial performance of the firm as it has to pay interest.

1.1.4 Nairobi Securities Exchange.

The Nairobi Securities Exchange (NSE) was established to the 1920's where trading of stocks begun on the platform of gentleman's agreement. It was registered in the late 1950's under the Societies' act as a free will association of stock brokerage. Restructuring took place in the year 2001 and this led to establishment of three main market segments namely; the Main Investments Market Segment (MIMS), the Alternative Investment Markets Segment (AIMS) and the Fixed Income Securities Market Segment (FISMS).

By December 2015 NSE had sixty one listed companies. Listed companies in NSE are classified into ten sectors; Telecommunication and Technology, Automobiles and Accessories, Agricultural, Commercial and Services, Insurance, Investment, Manufacturing and Allied, Banking, Construction and Allied and Energy and Petroleum.

NSE has various requirements that must be fulfilled by a company that intends to be listed which is that they should have a clear future dividend policy as stipulated by the Kenya Gazette Legal Notice No 60 of May, 2002. This Legal notice makes dividend policy worthy of serious management consideration by the management of all firms. The NSE provides an avenue where members of public could participate in buying and selling of bond, sharess and other stocks/securities either from the primary market through an IPO or from the secondary market. In return the owners of the shares get a dividend based on the dividend policy of the particular company. Investors can also benefit from capital gains if they decide to sell their shares to a third party.

1.1.5 Average Performance of Manufacturing Firms Listed on NSE

Below figure shows the average performance of manufacturing firms listed firms in Kenya NSE. The performance was a measure of Return on Asset (ROA) defined as Net profit after tax/ Average Total assets)

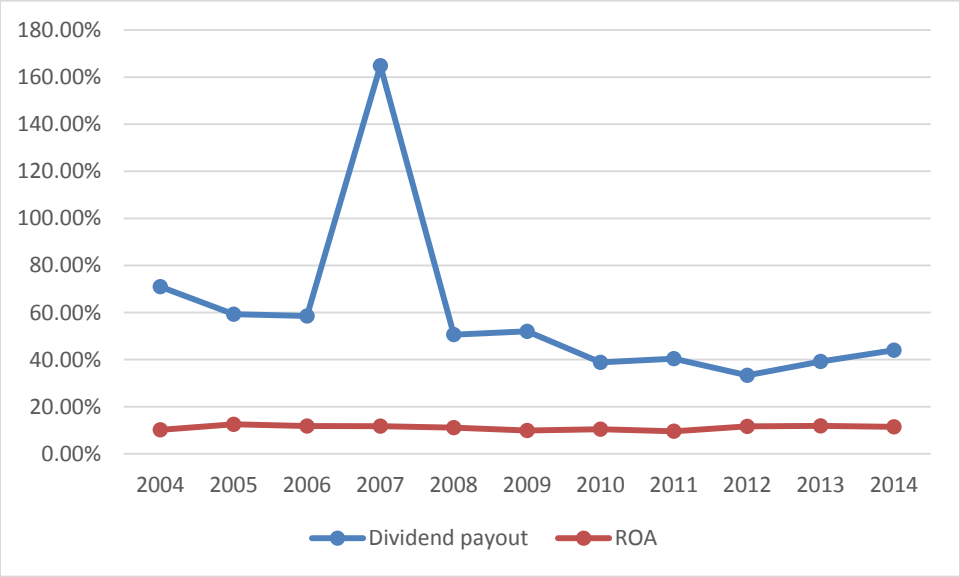


Fig 1.1 Performance of Manufacturing Firms shown by ROA.

According to the Signaling Theory of Dividends, a rise in dividend payout ratio in one period result to a future rise in Financial Performance attributed to increased investor confidence leading to more investments as well as increased firm value. A firm's value increases is attributed to a rise in prices of its shares.

From Fig1.1, changes in dividend payout are not consistent with the changes in both ROA and Earnings per share. An upward movement in Dividend payout does not guarantee a subsequent similar movement in ROA.

1.2 Statement of the Problem

Various Financial scholars have engaged in modeling and examining corporate dividend policy for a long time. In a study by Black (1976) revealed that, It seems like a puzzle, with pieces that look hard to fit together whenever we look closely at the dividend policies.

Many researches have been developed and different views about whether the long term price of shares and performance of manufacturing firms positively or negatively are affected by earnings distribution and retention. Dhanani (2005) who used a survey approach to capture managerial views and attitudes of corporate managers regarding distribution and retention of earnings, came to a conclusion that dividend policy serves to enhance corporation's market value.

In the year 2004, a study by Farsio et al., (2004) noted that empirical studies concluded a cause and effect relationship exists between earnings and dividends based on short periods of time and

were therefore seen to mislead potential investors. They found that, distributed earnings did not have explanatory power to predict future earnings. On the contrary opinion, high retained cash flows may have low persistence if they are derived by opportunistic earnings management-accounts receivables securities, transfers in and out of trading securities, delay of payments to suppliers. In 2006 a study by Richard (2006) points out those high retained cash flows may also have a negative impact on future profitability since they could be associated with future overinvestment.

Aivasian et al., (2008) carried out a study in 2008 and argue that in the emerging markets, firms are highly sensitive to some determinants of dividends policy since they have high financial constraints and hence that are suggested by research in the developed countries. Consequently, it is critical to find out the effect of distribution of earnings on future performance of firms in developing countries such as Kenya.

As it was observed from Figure above in 1.16, changes in dividend payout were not consistent with the changes in both ROA and Earnings per share year on year. The expectation as per Signaling theory would be that, a rise in dividend payout would lead to a rise in ROA in the subsequent year(s). However in this case an upward movement in Dividend payout does not guarantee a subsequent similar movement in ROA.

Therefore this study came in to find out the effect of dividend payout on the future financial performance among manufacturing firms listed in Nairobi Securities Exchange.

1.3 Research Questions

The research was guided by the following research questions;

1. What is the effect of dividend payout on return on assets among listed companies in Kenya?

2. What is the effect of dividend payout on earnings per share among listed companies in Kenya?

1.4 Research Objectives

The principal focus of the study was to empirically find out the effect of a firm's dividend payout on its performance.

1. To examine the effect of dividend payout on return on assets among listed companies in Kenya.

2. To determine the effect of dividend payout on earning per share among listed companies in Kenya.

1.5 Significance of the study

Corporate managers especially of listed companies can use the findings of this study to make decisions about how to pay, when to pay dividends, how much dividends to pay and who to pay those dividends. This is important to them since it forms an integral part of corporate finance and will also affect firm value.

This study is critical to investors as they will it to help them interpret announcements of dividend payment and changes thereto. It would thus enable them make more informed decisions on investments they will make or their performance. It will help them to determine worthy investments through the firm's value determined by the dividend policy.

As part of the ongoing debate on the relationship between dividend payout and firm financial performance, this study came in handy to give more information.

The study goes a long way in explaining to the Academicians as to the importance of dividend policy since it forms a basis of other theories of finance such as asset pricing, capital structure and capital budgeting. It therefore introduces a deeper understanding of corporate dividend policy and hence help academicians develop more advanced financial models. Academicians will also find the findings of this research useful in forming a basis for further research or extending their studies.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter focuses on previous studies done by various authors in relation to dividend policy and firm performance.

2.1 Theoretical literature

2.1.1 Agency Theory

This theory explains the relationship between principals and agents in a business. It addresses problems arising because of the differences between the goals of the two. An agency in simple terms is the relations between two parties where one is an agent and the other being the principal. According to this theory, dividend policy is determined by agency costs which are internal costs that arise or are paid to agents on acting on behalf of the principal. Managers may not always adopt a dividend policy that maximizes value for shareholders but would choose a dividend policy that maximizes their own private benefits. By making dividend payout 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. In the process of attracting new financing, firms subject to the monitoring and disciplining of these markets.

2.1.2 Signaling Theory

This theory derives its propositions from the game theory where managers with good investment potential are more likely to signal. Due to the amount of skeptics about this theory, regular tests have been conducted and studies have confirmed that signaling does occur. The theory proposes that dividend policy can be used as a means to communicate information to investors about a

firm’s future performance. When a firm pays out cash dividends, this sends valuable information, which shareholders do not have, about management's assessment of a firm's future profitability thus reducing information irregularity. Firms paying out the highest dividends should continue being profitable into the future. Investors may therefore hold this information with a bid to assess a firm’s share price. The intuition underlying this argument is based on the information irregularity between managers and outside investors, where managers have private information about the current and future fortunes of the firm that is not available to outsiders.

The theory argues that a company announcements of an increase in dividend payouts act as an indicator of the firm possessing strong future prospects.

2.1.3 Bird in Hand Theory

This theory was developed by Myron Gordon and Linter John as a counter to the Modigliani and Miller Theory. The theory states that investors are indifferent as to whether their returns from holding stocks arise from dividends or capital gains. In this theory a relationship exists between firm value and dividend payout. According to this theory dividends are less risky than capital gains since they are more certain. Investors would therefore prefer dividends to capital gains. Because dividends are supposedly less risky than capital gains, firms should set a high dividend payout ratio and offer a high dividend yield to maximize stock price. The importance of the bird-in-the-hand theory of dividend policy is that outside shareholders prefer a higher dividend policy. Investors think dividends are less risky than potential future capital gains, hence they like dividends. If so, investors would value high payout firms more highly.

2.1.4 Dividend Irrelevance Theory

MM's dividend-irrelevance theory says that investors are not really concerned about a company's dividend policy since they can sell part of their portfolio of their equities if they want cash. If they don't want cash, they can use dividends to buy stock. It also states that issuance of dividends has little or no impact on the stock price. This theory is based on unrealistic assumptions (no taxes or brokerage costs), hence may not be true. Implication of the Dividend Irrelevance Theory is that, if dividends are in fact, irrelevant, firms are spending a great deal of time pondering an issue about which of their stockholders is indifferent. A number of strong implications emerge from this proposition. Among them, the value of equity in a firm should not change as its dividend policy changes. This does not imply that the price per share will be unaffected, however, since larger dividends should result in lower stock prices and more shares outstanding. In addition, in the long term, there should be no correlation between dividend policy and stock returns.

2.2 Empirical Literature

Studies in the past literature have shown that the patterns of corporate dividend payout policies vary tremendously between developed and transition equity markets.

A firm's dividend payout policy basically indicates the stability of the firm's future cash performance. Reviewing deeply previously studies carried out on dividend policy show further that the main factors that influence a firm's dividend decisions include cash flow considerations, investment returns, past dividend practices, inflation, interest, after tax earnings, liquidity, future earnings, legal requirements and the future growth projection.

A study carried by Khan and Ramirez, (1993) explained that the relationship between expected price to asset ratio, dividend per share, ration of dividend payout. The study included samples of non-financial firms in the period 1997 -2006. It revealed that the variations in price-to-asset ratios, systematic and unsystematic risks are not due to dividends per share. The relationships between expected price-to-asset ratio and dividend payout ratios are purely nonlinear. Expected dividend payout ratios can be used efficiently for signaling purposes as well as a proxy for measuring the agency problem.

Asness and Arnett (2003) pointed the existence of a positive association between dividend payout and growth in future earnings is that managers are reluctant to cut dividends. Firms registering high dividend payout ratio indicates management's confidence in the stability and growth of future earnings and a low dividend payout ratio suggests that management is not confident of the stability of earnings or sustainability of earnings growth.

Anijesushola and Jimoh (2012) investigated the link between the financial performance and dividend payout among listed firms' in Nigeria. The elements used were size of firms, ownership structure and the dividend payouts. The period 2004-2009 was utilized as the main sources of data collection for the fifty selected firms. The study found out that there is a significant positive interrelationship between the dividend payout and the performances of firms of the sampled firms in Nigeria. The study exhibited that ownership structure and firm's size has a significant impact of the dividend payout of firms too. Those dividends in Poland have less of a signaling role than in the developed capital markets.

Luc Renneboog and Marc Goergen, (2004) pointed that Dividend policy and other corporate governance functions are interrelated. To begin with, the common knowledge stating that in Germany and other parts of Europe dividends are lower than UK or US, is not necessarily

supported as on a published profits basis; the exact opposite is true. Secondly to note is that dividends in the UK and US are relatively smooth as they show traits of small changes however frequent, whereas dividends in Germany show less frequent, but larger changes. The third item is that the link between corporate control and dividend payouts. Fourth, evidence existence of a loss is an additional determinant of dividend changes. Finally, results have important implications for the current debate on the best corporate governance system.

In another study by Ivan and Oleksandr (2007) exploring the determinants of the dividend policy in Poland testing whether corporate governance practices determine the dividend policy in the non-financial companies listed on Warsaw Stock Exchange. The findings are based on the period 1999-2004 of banks in Ghana. Panel data was constructed from the financial statements of 16 commercial banks in Ghana for a period of 5 years, from 1999-2003. These financial statements were obtained from the Banking Supervision department of Bank of Ghana. STATA was used for the data analysis. Indicate that banks pay dividend increase their performance.

In a study that examines whether dividend policy influences firm performance in the Ghana Stock Exchange, Amidu (2007) found that dividend policy affects firm performance especially the profitability measured by the return on assets. The results showed a positive and significant relationship between return on assets, return on equity, growth in sales and dividend policy. This showed that when a firm has a policy to pay dividends, its profitability is influenced. The results also showed a statistically significant relationship between profitability and dividend payout ratio.

2.3 Literature Overview

From the literature reviewed, it is evident that there exist contrasting views between different authors as to whether pay dividends or retain profits and re-invest. Signaling theory argue that there exist a positive interdependence between dividend payout and growth in future earnings is that managers are reluctant to cut dividends in that Cash dividend announcements convey valuable information, which shareholders do not have, about management's assessment of a firm's future profitability thus reducing information irregularity. Investors may therefore use this information in assessing a firm's share price. On the other hand while Agency theory argues that making dividend payouts which reduces the free cash flows available for reinvestment.

It is therefore critical to undertake this study in order to establish the policy adopted by the various manufacturing firms and how lead to financial performance of the firms.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives an outline of the research methodology to be used in achieving the objectives of this study. The chapter presents the research design, Theoretical Framework, Model Specification, target population, data assembling procedures, and data examination.

3.2 Research Design

This research design was panel where the emphasis here was on studying a phenomenon for a period of time in order to unravel the link between variables (i.e., Dividend Payout and Firm Performance).

Panel data was employed. This is the case because data was collected from different companies for a period of 13 years.

3.3 Theoretical Framework

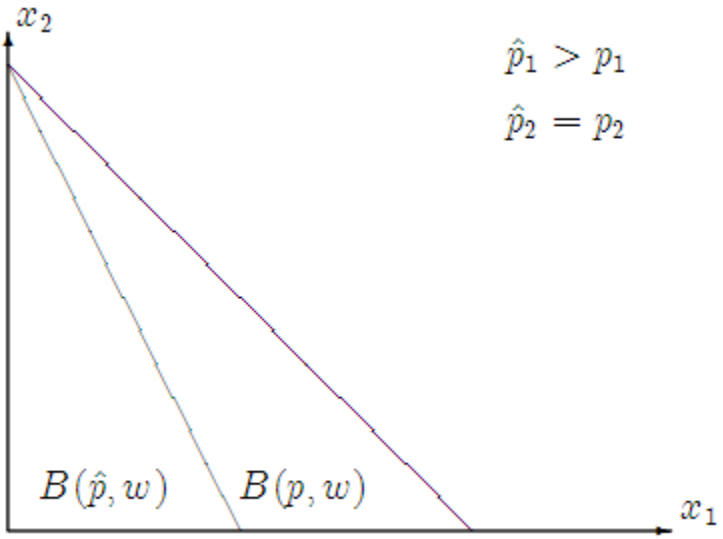
To understand why investors will want to invest in dividend paying firms, we will review consumer utility maximization based on the theory of investment. Here the consumer plays a policy making function to decide how much of each of the many various goods and services to consume so as to ensure the highest possible total utility level subject to his/her available income and the prices of the bundle of goods and services. The decision at hand here is selecting a specific choice that is a measure by a utility function U, It is a mathematical representation of the decision maker's system of preferences such that: $U(x) > U(y)$, where choice x is preferred over choice y or $U(x) = U(y)$, In this case choice x and y are different but both choices are equally

preferred. The basic assumption is that the consumer is rational and will select a bundle that maximizes utility subject to prices.

Owing to the fact that we have one good, which are the shares of the firm that maximizes the consumer's utility, the maximization will be given as below:

Max U(x) such that px < m,

The idea is that the consumer will choose a vector of goods x = (x1... xn) to maximize her/his utility subject to a budget constraint that says she cannot spend more than her total wealth.



$$\max_{x_1, x_2} u(x_1, x_2)$$

$$\text{subj. to} \quad p_1 x_1 + p_2 x_2 = m$$

$$x_1 \geq 0$$

$$x_2 \geq 0$$

We will use chain rule to find the differential of the utility function with respect to the choice variable x_1.
Here we get:

$$\frac{\partial u\left(x_1^*, \frac{m-p_1x_1^*}{p_2}\right)}{\partial x_1} + \frac{\partial u\left(x_1^*, \frac{m-p_1x_1^*}{p_2}\right)}{\partial x_2}\left(-\frac{p_1}{p_2}\right) = 0$$

After satisfying the budget constraint with equality, we can now substitute back

$$\frac{\frac{\partial u\left(x_1^*, x_2^*\right)}{\partial x_1}}{\frac{\partial u\left(x_1^*, x_2^*\right)}{\partial x_2}} = \frac{p_1}{p_2}.$$

In examining whether dividend policy influences firm's performance, we will review Signaling theory of dividends and it states that when dividend policy changes it sends information about variations in future cash flows (Bhatacharya, Miller and Rock, 1986). Dividend signaling point of a positive relationship between information asymmetry and dividend policy. In other words, the higher the differentiated information availability, the higher will be the sensitivity of the dividends to future prospects of the firm.

Signaling model of dividends argues that dividend generation is through an undeviating process. The procedure is such that, present period's dividend is a function of the previous period's dividend payout and present earnings. This means that the dividend technique is defined by equation (a) below.

$$D_t = a_1 + a_2 Y_t + a_3 D_{t-1} + e_t \quad \text{..... (i)}$$

Here D_t is the dividend paid as announced, Y_t is the announced earning, e_t is the firm's determined error term. The expected value of the error term is zero i.e. $E_{t-1}(e_t) = 0$ .The equation has coefficients, a_1, a_2 and a_3 which are the policy of dividends indicators used by the firm. The magnitude of these links is subject to substantial managerial assessment and determination.

Equation (ii) below describes the earnings generating procedure as a basic function of lagged earnings and dividends.

Equation (ii) is where we have et being the shock to earnings at $time = t$, and $E_{t-1}(\varepsilon_t) = 0$, . The coefficients$b_1$, b_2 and b_3 , and are the parameters for the firm's earnings procedure or technique employed.

$$Y_t = b_1 + b_2 Y_{t-1} + b_3 D_{t-1} + \varepsilon_t \quad \text{..... (ii)}$$

There is a lot of compromise which the equation provides for the earnings process. For a case where we take coefficients b1 and b3 set to zero and b2 is set to one, we will have a random walk model for earnings where this model has a substantial support from empirical studies making it more desirable to use it in further empirical studies. It has been widely used in research papers that study earnings announcement effects.

3.4 Model Specification

A construction of the model based on the theoretical framework was raised as below. Control variables were included in the study since they affect the performance of the firm and are not captured by the dividend payout.

$$Y_{it} = \alpha + \beta_1 X_{i1}(_{1t\text{-}1)} + \beta_2 X_{i2\,(t\text{-}1)} + \beta_3 X_{i3\,(t\text{-}1)} + \varepsilon \quad \text{.....(iii)}$$

Where;

Y_t = ROA current year

$X_{1(t-1)}$ = Dividend Payout ratio

$X_{2(t-1)}$ = Firm's Size

$X_{3(t-1)}$ = Leverage

α = the constant term

i = this is the cross-sectional dimension indicator.

β_i = coefficient used to measure the reaction of the dependent variable to unit change in the independent variables.

ε = is the error term to capture unexplained variations in the model and which is assumed to be normally distributed with mean zero and constant variance.

Definition and Measurement of Variables

ROA- Returns on Assets per annum. It's a measure of the profitability of a company's profitability.

$$= \frac{Total\ Net\ income}{Total\ Assets}$$

Dividend Payout Ratio per annum – is the percentage of earnings paid to shareholders in dividends. It is measured as below:

$$= \frac{Annual\ Dividend\ per\ share}{Earnings\ per\ share}$$

Firm Size – This is the total worth of a firm- This was measured as a log of total assets.

Leverage – This is the ratio of a company's debt to its total capital. This is measured as below:

Total debt / Total Capital Employed.

3.5 Data errors diagnostics and Solutions

Despite Panel data being best suited for this study, it led to few problems which included:

Auto-correlation; this is due to omitted variable bias- This was solved through use of lagged depended variable or through increased observations.

The other problem was heteroscedasticity which is a situation where the errors do not have the same variance. This was solved through correcting of the standard errors.

3.6 Target Population

The population for this study included all the manufacturing firms listed on the Nairobi Stock Exchange. The number of listed manufacturing firms in the NSE by the end of 2015 was ten. The research studied all the ten firms.

3.6 Data Collection

The study employed secondary data which was obtained from the firm's annual reports most of which was publicly available. The annual reports were easily obtained from the respective company's website as well as from the Capital Market Authority. This was for a fifteen year period, which is, from the year 2002 to 2015. This dataset allowed for the study of the relationships between dividends and different factors of firm performance such as return on assets and equity, and changes in earnings. Data collection took three weeks.

3.7 Data Analysis

Dividend payout ratio was used as a measure of Dividend payout. The company's financial performance was analyzed by the net profit after tax which indicates profitability. In the event we had subsequent rise in profitability in the following year after dividend payout, then it was an indication that the dividend policy used by the firms leads to a better financial performance and the contrary was true. Similarly, a rise in the earnings per share in the subsequent year following dividend payout or profits retaining then this was an indication that either is the best policy to be used by firms. Regression analysis was used to determine the effect of dividend payout and firms' financial performance.

Dividend payout was the independent variable which is given by the dividend per share divided by the earnings per share. The trend of dividend payout was also obtained from the financial statements to establish the dividend payout used by firms and the pattern. The results of the study were presented in tabular form. Panel data was used since data from the same firms was observed over time.

CHAPTER FOUR

RESULTS ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents the results and findings which have been laid down in tabular summary format. This is based on the research objectives .Regression analysis was used to analyze the data to answer the research objective and to establish the strength of the relationship between variables.

4.2 Results

Control variables were used in the regression analysis conducted. Test of significance was carried out for all variables studied using t-test at 95% confidence level.

From the observations;

A p-value greater than 0.05 is said to have a significant relationship with the depended variable and otherwise the relationship is considered insignificant.

The measure of degree of variability of the dependent variable due to a change in the independent variable is done using the adjusted R-Squared.

Table 1: Regression model Results

Variable	Coefficient	Std.error	t-statistic	P-values
Constant	0.093977	0.058221	1.798443	0.0943
Dividend Payout	0.465239	0.074195	5.841775	0.0000
Firm Size	4.89126	4.79815	2.301732	0.0001
Leverage	0.007999	0.038758	-0.678883	0.5796
R-Squared	0.879794		Mean Dependent var.	0.384826
Adjusted R-Squared	0.641514		S.D Dependent var.	0.421128
S.E of Regression	0.314478		Sum squared resid.	7.314823
Probability(F-Statistic)	0.0000		F-Statistic	8.954332

Durbin-Watson Stat	1.983739			

Source: Research findings

Table1 above presents the regression results showing the interdependence between the dependent and independent variables from the conducted regression analysis.

The results gave an adjusted R-squared of 0.641514indicating that 64.15% of the variations in dependent variable i.e. (ROA) can be explained by the changes in the independent variables.

There was absence of auto-correlation as the results gave a Durbin-Watson statistic of 1.983739 since the value is close to 2. The results revealed that Dividend Payout and Firm Size are statistically significant since the observed T-Values are positive and more than 2 that is 5.84177 and 2.301732 respectively, this was confirmed through use of T-ratio to test for their statistical significance. Leverage was not statistically significant as its t-value was -0.678883.

From the results a positive and significant link between ROA and Dividend payout is observed. The significance and the positive coefficient of the regressor, dividend payout indicates that when a firm pays dividend it positively influences its level of future financial performance.

The established linear regression equation becomes;

$$Y = 0.09397 + 0.46539X1 + 4.89126X2 + 0.007999X3 + 0.0388$$

If Dividend payout, firm Size and Leverage are all zero, the financial performance of listed manufacturing firms in the Nairobi Securities Exchange would be 0.093977. as seen from the constant 0.093977.

Dividend Payout was a significant factor that affected manufacturing firm's financial performance as indicated by the regression equation as can be seen from the regression model

obtained. The P- value for dividend paid was 0% implying that it was highly significant. This means if the dividend payout increased by 1 unit, then the performance (ROA) will increase by 0.465239 units in the following period.

P value of 0% indicates that Firm size was a significant factor that affected manufacturing firm's financial performance which shows that if the firm size increased by 1 unit, then the financial performance of these firms would increase by 4.896 Finally, Leverage was found to be an insignificant factor that affected manufacturing firm's future financial performance as indicated by a p-value of 0.58%. The coefficient obtained from regression analysis was 0.008 indicating that if leverage increased by 1 unit, the performance would increase by 0.008 units.

Results in Table 1 also shows how manufacturing firm's profitability is affected by some of other firm level characteristics. The study selected dividend payout, firm size and leverage. The results show that the coefficient of firm size and leverage are statistically significant for the panel data estimates.

The positive relationship between firm size and return on assets implies that an increase in firm size will lead to an increase in the financial performance of the manufacturing firms. The same case applies to both dividend payout, if dividend payout increases, it communicates the financial health of the manufacturing firm which attracts more investor confidence and therefore more investments and this in turn will yield increased future financial performance.

4.3: Correlation Analysis

Correlation analysis was employed in this study to determine the strength of the relationship between variables. This relationship is shown below

Table 2: Correlation coefficients

Correlations	ROA	Payout	Firm Size	Leverage
ROA	1.000**			
Payout	.753**	1.000**		
Firm Size	.776**	.363**	1.000**	
Leverage	.695**	.639**	.267**	1.000**

Source: Research Findings

** Significance at p < 0.001 level (2 tailed) * Significant at p< 0.05 level (2 tailed)

From the correlation analysis, Dividend Payout was positively correlated with Return on Assets as shown by 0.753 which is an implication that an upward change in dividend payout contributes to a rise in the Return on Assets. Leverage and Dividend Payout had a positive correlation as shown with 0.639. This was also the case for ROA and firm size as shown by 0.776. The findings also indicate positive correlation between leverage and firm size with a value of 0.267 implying that the independent variables (Div payout, Firm Size, and Leverage) and the dependant variable (Return on Assets) all had a positive relationship.

4.4 Analysis of Variance

ANOVA which is a statistical method used to analyze and test the differences between and among group means was used in the study. ANOVA provides a statistical test of whether or not

the means of several groups are equal, and therefore generalizes the t-test to more than two groups (Mugenda, 2003).

Table 3: ANOVA Resuls

Model	R	R^2	Adjusted R^2	St Error
1	0.635[a]	0.879794	0.641514	0.0388

Source: Research Findings

Significance level: $p < 0.001$;

Overall model: $F = 8.95433$; $p < 0.001$; $R^2 = 0.87974$; Adjusted $R^2 = 0.64154$

From tables 3 above determination coefficient, R^2(the variation (measured in percentage) in the dependent variable being explained by the changes in the independent variables), equals 0.642 that is, Dividend Payout, Firm Size and Leverage leaving only 35.8 percent to unexplained variables not covered by the model. That is the three independent variables account for 64.2% (R Square, 0.64151) of the variations in the dependent variable, ROA.

The main reason of conducting ANONA was to determine whether the model works and its findings in the table above show that there is correlation between the independent variables (Div Payout, Firm Size and Leverage) and dependent variable (ROA). An F value of 8.954332 at significance level of 0.001 calculated represents the variation between the various groups, divided by the variance within the respective groups. High F ratio signifies that there is more

variability between the groups (caused by the explanatory variables) than there is within each group, referred to as the disturbance term.

4.5 Interpretation of the findings

The key objective of this study was to establish the link between dividend payout and the financial performance of firms listed at the NSE. Descriptive statistics showed that dividend payout ratio (which indicates the payout) had a mean of 37.21% which shows that on the average, firms pay about 37% of their profits as dividends with the 63% of the earnings are retained for future growth and re-investment purposes of the firm. Firm's size, determined as the natural logarithm of total assets had a mean of 15.8567 and a median of 12.4566. Leverage, measured by total debt divided by total capital had a mean of 0.6229 and median of 0.5443 meaning that on average 62.29% of firms studied financed their operations with debt and remaining 37.71% with equity.

Regression analysis with a Constant of 0.093977 shows that if Dividend Payout, Firm Size and Leverage were all rated zero, the performance of the firms listed in the NSE would be 0.093977. Dividend Payout, X_1 = 0.465239, shows that one unit change in dividend payout results in 0.465239 units increase in the performance of firms listed in NSE. Firm's size, X_2= 4.89126, shows that one unit change in firm Size results in 4.89126 units increase in the performance of firms listed in the NSE. Leverage, X_3= 0.007999, shows that one unit change in firm leverage results in 0.007999 units increase in the performance of firms listed in the NSE.

Correlation coefficient findings imply that the independent variables (Div payout, Firm Size, and Leverage) and the dependant variable (Return on Assets) all had a positive relationship.

Coefficient of determination results show that the three independent variables, dividend policy, firm size and leverage account for 64.2% (RSquare, 0.641514) of the variations in the dependent variable, ROA.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter a presentation of summary of findings of the data analysis in chapter four and interpretations of the data analysis, conclusion and recommendations based on the findings has been laid out.

5.2 Summary

The study aimed at examining in order to find out the impact of dividend policy on the future financial performance of manufacturing firms listed in Nairobi Securities Exchange. Data used to realize the study objectives of the study was obtained from the firm's websites in the period 2002- 2015 financial results of the 10 manufacturing companies quoted on the Nairobi Securities Exchange. Extraction of the variables was done and were computed to enable adequate variable analysis to be carried out. From the result of the analysis, it was discovered that the dividend payout of the listed companies had a significant positive relationship with the firm's financial performance measured by ROA.

A positive and significant association between return on assets and dividend payout was evident from the results which was an indication that when a listed manufacturing firm has a policy to pay out dividend it positively influences its growth of future financial performance as measured by Return on Assets. This is in line with the information contained in the dividend or signaling theory by John and William (1985) and Miller and Rock (1985). There is consistency with

empirical evidence as contained in (Gordon, 1961, 1962; Ross, et al 2002; Easterbrook, 1984) that dividend policy affects the price of its shares. In order to assess whether if a firm's policy was to pay dividend and eventually paid dividends affected its return on assets dividend payout was used. The results indicate a statistically significant and positive relationship between financial performance and dividend payout. The positive coefficient could mean that if a firm retains dividend it increases its retained earnings which affects a firm's internally generated financing.

5.3 Conclusion

The findings of the study revealed a significant positive relationship between dividend payout of the manufacturing firms listed in the Nairobi Securities Exchange and future financial performance. The results displayed a positive and significant association between the dependent variable, financial performance (ROA) and the independent variables (dividend payout, Leverage and Firm Size). This shows that a manufacturing listed firm's dividend policy influence their levels of financial performance.

It can also be concluded that larger manufacturing companies tends to pay more dividend due to the fact that based on their size they have easier access to external financing and rely less on internal capital. Also firm size tends to have a significant positive impact on their dividend payout ratio.

Most manufacturing firms have an appetite of paying more dividends to reduce agency costs since they tend to face high agency costs as a result of managers and shareholders having different information about the future prospects of the company. High payments of dividend increases the need for external financing due to depressed retained earnings, which, in turn, leads to the increased monitoring of large firms by creditors and other key stakeholders.

Based on the findings of the study, it can therefore be concluded that dividend payout of manufacturing companies listed in the Nairobi Securities Exchange influences their future financial performance.

5.4 Recommendations for Policy

Manufacturing companies listed in the Nairobi Securities Exchange should ensure that they have a good and robust dividend policy in place that can enhance their level of profitability and also attract investments.

The study recommends that listed manufacturing firms should develop policies and laws governing dividend payment and should be strengthened and enforced to ensure a more frequent dividend payment in order to increase their market values through share price increases. Since profitability drives dividend and dividends influence the share prices of the listed manufacturing firms, managers may use dividend payments to convey information on the competitiveness of their firms. The Government should monitor firms closely to declare their proper profits which form the bases of their tax obligation to the state so as to prevent them from channeling the greater proportion into higher dividend payments to shareholders as a way of tax evasion for fiscal purposes.

Managers can exploit other forms of dividends payout other than cash dividends such as bonus issue and stock splits. This will enable shareholders to at least receive another form of dividend when there are no cash flows to pay as cash dividends. Profitability, pattern of past dividends, financial leverage, investment opportunities, legal rules, growth stage and capital structure should be considered by manager when making decisions on dividend payment if they are to achieve an optimal dividend policy.

Policies should be formulated by the Capital Markets Authority to help manage unclaimed dividends and also ensure that situations that give rise to such cases are minimized. The directors of the listed manufacturing companies should therefore be made to operate much updated records of shareholders including their next-of-kin to avoid a deliberate diversion or undue retention of unclaimed dividends.

More stringent conditions should be established by the Capital Markets Authority (CMA) to make it mandatory for directors of the listed manufacturing firms to invest only in profitable ventures, report the utilization of retention earnings through notes to the accounts. This guarantees future financial performance of the manufacturing firms.

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APPENDIX: LIST OF MANUFACTURING COMPANIES LISTED IN THE NAIROBI SECURITIES EXCHANGE

MANUFACTURING AND ALLIED

1. B.O.C Kenya Limited

2. British American Tobacco Kenya Limited

3. Carbacid Investments Limited

4. East African Breweries Limited

5. Mumias Sugar Co. Limited

6. Unga Group Limited

7. Eveready East Africa Limited

8. Kenya Orchards Limited

9. A.Baumann CO Limited

10. Flame Tree Group Limited

(Nairobi Securities Exchange, 2015)