

**EFFECT OF DEBT FINANCING ON DIVIDEND PAYOUT RATIO
IN MANUFACTURING FIRMS LISTED AT THE NAIROBI
SECURITIES EXCHANGE**

BY

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DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

I dedicate this work to my beloved wife Racheal and my beautiful daughter Raina for appreciation of sacrifices they have made to me throughout my project period.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
ATS	Automated Trading System
CMA	Capital Markets Authority
DPS	Dividend Per Share
EABL	East African Breweries Ltd
EPS	Earnings Per Share
NSE	Nairobi Securities Exchange
SACCO	Savings and Credit Cooperative Societies
VIF	Variance Inflation Factors

ABSTRACT

Dividend payment is a contentious issue in finance. Dividend payment is such an important issue in every organization that management has to take it into consideration in order to satisfy their shareholders. Various theories have come up trying to identify the determinants of dividend payout, more so the influence of debt financing on dividend payout ratio. Notwithstanding the numerous theories and models developed to clarify the relationship between these two variables, the relationship remains a puzzle. The aim of this study was to determine the effect of debt financing on dividend payout ratio of manufacturing and allied firms quoted at the NSE. The population for the study was all the 9 manufacturing and allied companies quoted at the NSE. The independent variables for the study were debt financing as measured by debt ratio, firm size as measured by natural logarithm of total assets, profitability as measured by return on equity and liquidity as measured by current ratio while dividend payout ratio of manufacturing and allied companies listed at the NSE as measured by the ratio of dividend per share to earnings per share on an annual basis was the dependent variable. Secondary data was collected over a five 5 year time frame (January 2013 to December 2017) annually. The descriptive cross-sectional research design was employed for the study and the relationship between variables established using multiple linear regression analysis. Data analysis was undertaken using the SPSS software. The results of the study produced R-square value of 0.235 which means that about 23.5 percent of the variation in dividend payout ratio of manufacturing and allied firms quoted at the NSE can be explained by the four selected independent variables while 76.5 percent in the variation of dividend payout ratio of manufacturing and allied firms listed at the NSE was associated with other factors not covered in this research. The study also found that the independent variables had a weak correlation with dividend payout ratio of manufacturing and allied firms listed at the NSE ($R=0.485$). ANOVA results show that the F statistic was significant at 5% level with a $p=0.027$. Therefore the model was fit to explain the association between the selected variables. The findings also showed that profitability produced positive and statistically significant values for this study. Debt financing produced negative but statistically insignificant values while liquidity and firm size were also found to be a statistically insignificant determinants of dividend payout ratio among manufacturing and allied firms' quoted at the NSE. This study recommends adequate measures should be put in place by managers of these firms to improve and grow their dividend payout ratio by increasing their profitability.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Decisions that revolve around finding the most favorable choice of sources of finance coupled together with dividend policy decisions are some of the toughest financial decisions. Firms have a choice between financing investments either from internal or external sources. Consequently, financing decision revolves around the dividend choice; the proportion of the earnings that will be re-invested back and that which would be paid out as dividends and the capital structure choice; the proportion of funds that would be borrowed externally from issuance of new equity (Servaes & Tufano, 2006). According to Weston and Brigham (1981), the degree of internal financing required by a firm is determined by the dividend policy of the same firm. Because of its influence on the structure of finance of a firm, the flow of liquid funds, corporate liquidity, stock prices and investor satisfaction, a policy on dividends is an important part of financial management.

Debt financing theories try to explain whether combination of debt and equity matters, and if it does, what might be the optimal capital structure. These theories include; the theory of Modigliani and Miller (1958) which proposed that the cost of obtaining capital is not linked to the type of funds that a company uses and there isn't any existence of an optimal capital structure, hence the capital structure of a firm is not relevant or has no influence on the value of a firm. The trade-off theory suggests that for a firm achieves an optimal capital structure, there must be a tradeoff between benefits-costs of borrowing and equity financing (Jensen & Meckling, 1967). According to the pecking order theory, there exists an information asymmetry problem between the agents of a firm who are managers and shareholders who are the

owners, in order to reduce this problem firm will prefer to use funds generated internally as compared to external funds (Myers & Majluf, 1984).

The issuance of debt finance through the capital market in Kenya is becoming more and more common. Manufacturing and allied companies listed at the NSE are accumulating massive debts in their capital structure as a way of raising fresh finance to funds operations and execute development projects through capital market (Anyanzwa, 2015). For instance, regional beer maker East African Breweries Ltd (EABL) have established the foundation for debt financing by borrowing millions of dollars from the debt market. Several firms use debt to leverage on their capital in order to enhance profit levels. However, the dividend payout ratios of the manufacturing firms listed at the NSE varies from one firm to the other and therefore the current study seeks to investigate whether it is influenced by the level of debt financing in a firm.

1.1.1 Debt Financing

Debt financing is the level of external borrowing by a firm to finance its short and long term financial deficit (Bierman, 1999). Majority of business firms borrow at some point to buy assets, undertake major projects that are capital intensive for expansion through research and development (Kumar, 2014). A firms' capital structure is determined by the relative contributions of both equity and debt finance together with any other securities (Grossman & Hart, 1982). The investment of a firm can be financed through debt, equity or a combination of both.

Debt finance has both the advantages and disadvantages in the growth of companies and expansion of the economy. Debt finance results to benefits such as tax shield and the diminution of free cash flow problems by enhancing managerial behavior while

the expenses of debt financing include agency expenses and bankruptcy cost which results from the conflicts between shareholders and debt holders (Fama & French, 2002). Managers therefore, should try to balance these costs and benefits of debt when making debt capital decisions in order to improve performance (Kraus & Litzenberger, 1973).

Capital structure is measured using debt ratios. The debt ratios make comparison of the total debt with the total assets owned by the company. A low ratio indicates that a company depends less on debt while a high percentage indicates that a firm rely more on debt finance. Another measure of capital structure is the ratio of debt to aggregate capital. Nevertheless, the widely preferred method of measuring capital structure as used by various researchers to compute capital structure in studies using capital structure to predict different variables is the proportion of debt to equity (Abhor, 2005).

1.1.2 Dividend Payout Ratio

Dividend payout ratio is the percentage of profits paid to shareholders in form of dividends. It is the ratio of annual dividend per share to profits per share of the firm (Brockington, 2013). The returns of the shareholder is made of two components which are capital or dividend gain. Both of these factors are influenced by the dividend payout ratio. A higher share price is brought about by a low payout policy since it accelerates earnings growth rate. Less retained earnings and more dividend payouts are brought about by a high payout policy, this reduces the market price per share and thus leading to slower growth. Firms basically adopt dividend policies based on their business life cycle stage. According to Kapoor (2009) firms with higher

growth for instance have fewer projects and large cash flows which enable them to pay their earnings in dividends.

Ross, Westerfield and Jaffe (2002) assert that dividend decisions are vital since they describe the type of funds that go to investors and those that the firm retains for the investment purposes. They give stakeholders essential information regarding the company's performance. Foong, Zakaria and Tan (2007) argue that a firm's investment determines future potential dividends as well as earnings of a firm and affect the cost of capital of firms. Dividend policy of a firm is among the most vital concepts in finance from the perspective of the employees, consumers, regulatory bodies and the government. It can be viewed as a policy that acts as a pivot which is relied on by other financial policies (Sujata, 2009).

The dividend policy guides the finance manager in deciding on how much shareholders will be paid in the form of dividends for their share capital holding in the firm. The main types of dividend policies include; Constant payout ratio under which a firm agrees upon a constant percentage of the profits as dividends. It maintains this amount regardless of whether the firm makes more profits or not. Residual dividend policy payout; where a firm issue out dividends from the amount that remains after all investments have been undertaken. If all profits are used for investment then no dividends are paid out during that period. Stable dividend policy; where a constant amount of money is to be distributed to every shareholder in the firm. Occasionally firms use the stable plus extra policy where a constant amount of money is maintained as dividend to be issued to every shareholding but an extra amount can be paid when the firm makes huge profits in a particular trading period (Pandey, 2010).

1.1.3 Debt Financing and Dividend Payout Ratio

A firm's leverage plays a role in explaining its dividend policy. Firms with less debt and more tangible assets have greater financial slack and more able to pay and maintain dividends (Aivazian, et al.,2003).Firms with high leverage ratios are not in a strong position to declare higher dividends due to debt financing. This outcome is supported by the Agency theory of dividend policy. A highly levered firm is expected to return more to strengthen its equity base. Highly levered firms have more debt and interest obligations to meet thus have high probability of paying low dividends according to Jensen (1996), low payouts is due to monitoring by debt holders who reduce management capability of paying dividends.

Firm's capital structure is influenced by dividend policy adopted. Aivazian et al. (2003) confirmed that corporate investments are relatively affected by firm's liquidity and financial constraints adversely affect shareholders wealth maximization as underinvestment decisions generate weak income cash flows that are not sufficient to reward dividend. Findings of a study by Murekefu and Ouma (2012) established that debt financing as among factors that affect dividend policy of listed companies in Kenya.

Dividend policy exhibits a direct connection to the capital structure theories thus an enterprise that commits resources to paying dividends lowers the extent of financing of equity capital from internal sources and as a result, the need to finance from external sources arises from dividends through the capital invested in shares. Paying dividends increases cash spending and periodically this will lead to cash shortages in those companies which have a policy for distribution of dividends (Litzenberger &

Ramaswamy, 1979). Moreover, an increase in the share of dividends in net profits has an indirect effect on the prices of stock (Poterba & Summers, 1984).

1.1.4 Manufacturing Firms listed at the Nairobi Securities Exchange

NSE was constituted as a voluntary brokers' association in 1954, it is registered under the Societies Act. It was not until 1988 that NSE was privatised. In 2006, the NSE implemented Automated Trading System (ATS) to enable live trading on the basis of first come first served. This system was also linked to the Central Depository System (CDS) and the Central Bank of Kenya to facilitate trading in Government bonds. Since then, it has undergone various changes and innovations, including the abolishment of the aggregate foreign ownership cap of the NSE listed companies in 2015. The Capital Markets Authority (CMA) is the state regulatory body mandated with licensing and regulating the Nairobi Securities Exchange. Public listings and offers of securities issued and traded at the NSE are also approved by the CMA (NSE, 2017). There are presently 9 manufacturing companies registered at the NSE.

It is common with companies in the manufacturing and allied sector to have a more frequent and higher need of raising capital than those in the service sector like professional services. A more common method of raising finance in this sector is through debt or equity which is dominant in their capital structure. Manufacturing firms have a more frequent and higher need of raising capital, this has seen the overall credit to the sector increasing from KSh 237,422 million in 2015 to KSh 290,069 million in 2016 (Economic Survey, 2017). To increase their profitability, manufacturing firms should efficiently manage their capital structure components in order to minimize costs and maximize profits in their operations.

The listing requirements for firms at the NSE provide for among others, adoption of a stable dividend policy and total indebtedness not exceeding four hundred per centum of the net company worth, a gearing ratio of 4:1 (NSE manual, 2013). Listing requirements at the exchange are reinforced by Gazettement of legal notice no. 60 (2002) which provides that firms wishing to be listed must have a clear future dividend policy. It is common with companies in some sectors such as manufacturing to have a more frequent and higher need of raising capital than those in the service sector like professional services. A more common method of raising finance in these sectors is through debt or equity which is dominant in their capital structure.

1.2 Research Problem

Dividend payment is a contentious issue in finance. Brealey and Myers (2005) noted that despite the decades long of research on dividend payout, there is no globally accepted explanation of firm's dividend behavior. Munyua (2014) posited that dividend payment is such an important issue in every organization that management has to take it into consideration in order to satisfy their shareholders. Various theories have come up trying to identify the determinants of dividend payout, more so the influence of debt financing on dividend payout ratio. Notwithstanding the numerous theories and models developed to clarify the relationship between these two variables, the relationship remains a puzzle (Brigham & Ehrhardt, 2011).

The manufacturing sector needs a keen attention in order to make meaningful contribution to Kenya's economy. According to the 2016-2017 budget, Kenya has set out to enhance the economic growth by double digits by the year 2030 and this is through prioritizing key industries in the manufacturing sector as the vehicles to deliver these goals (Wakiaga, 2016). Manufacturing firms have a more frequent and

higher need of raising capital, this is due to the fact that the overall credit to the manufacturing sector increased from KSh 237,422 million in 2015 to KSh 290,069 million in 2016 (Economic Survey, 2017). Due to capital, intensive nature of this sector, they are required to determine their optimal capital mix in order to realize gains from their investments. To meet their dividend policy objectives, firms should efficiently manage their capital structure components in order to minimize costs and maximize profits in their operations.

Several studies have been conducted on the effect of debt financing on dividend payment ratio of firms but these studies have yielded mixed results. The studies by Gupta and Banga (2010) exploring the corporate dividend policy determinants in India found that leverage was of no consequence on the dividend rate. Holder, Langrehr and Hexter (2012) examined how dividend policy is influenced by debt financing of Pakistani listed companies. It was concluded from the study that a link exists between the two variables but co-efficient indicates a weak link. Perretti, Allen and Shelton (2013) examined the determinants of dividend policy for American depository receipts. They concluded that capital structure is among the main dividend payment determinants where a rise in debt financing leads to a decline in dividend payout ratio.

Locally, there are only few studies that have attempted to establish the link between the study variables. Atipo (2013) is one such attempt whose findings from a study of firms listed at NSE established a negative association between leverage and dividend. A study by Kivale (2013) on a sample of firms at the NSE arrived at similar conclusions. Mudeizi (2017) focused on the effect of debt financing on dividend policy of firms listed at the NSE and found a negative but significant effect of debt

financing on dividend payout ratio of firms. Although the studies conducted before in Kenya have studied the effect of debt financing on dividend payout, none has focused on manufacturing firms listed at the NSE and this is the gap the current study leveraged on. The current study intended to fill this research gap by answering the research question; what is the effect of debt financing on dividend payout ratio of manufacturing firms listed at the Nairobi Securities Exchange?

1.3 Objective of the Study

This study's objective is to determine the effect of debt financing on dividend payout ratio of manufacturing firms listed at the Nairobi Securities Exchange.

1.4 Value of the Study

Findings from this study will become a point of reference for scholars, researchers as well as students who will want to carry out studies on a closely related or the same area in the future. Researchers and scholars also may use this study to identify further areas of study as well as related areas through identifying topics which require further research and through identification of gaps in the study from the review of existing empirical literature.

The study will help the management of manufacturing firms listed at NSE and other manufacturing firms in general as they might adopt the study recommendation to formulate policies on dividend payout as well as dividend decisions. This study will also give added knowledge on if debt financing is relevant in determining dividend policies or not.

This study will also be of importance to the policy makers such as Kenya Association of Manufacturers in understanding the best ways to enhance the dividend payout of firms through debt financing. This will guide the government on matters pertaining

regulation on dividend payments and other policies aimed at improving firm performance. Other policy makers such as the CMA and NSE use the study findings to develop capital structures and dividend policies that are effective.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter reviews theories that form the foundation of this study. In addition, previous empirical studies that have been carried before on this research topic and related areas are also discussed. The other sections of this chapter include determinants of dividend payout, conceptual framework showing the relationship between study variables and a literature review summary.

2.2 Theoretical Framework

This presents review of the relevant theories that explains debt financing in firms. The theoretical reviews covered are; Modigliani and Miller model, Pecking Order theory and the Trade-off theory.

2.2.1 Modigliani and Miller Model

Modigliani and Miller (1958) contended that the capital structure of a company is immaterial to the company's worth, supposing faultless markets and zero business deal charges. Modigliani and Miller (1963) presented the influence of business revenue levies on the capital structure of a company and established that companies will upsurge their use of debt to exploit the duty deductibility of interest. Though, greater debt funding upsurses the likelihood of insolvency. Market symmetry must be real in which the value of using debt- financing equals increased peril of insolvency owing to the great leverage of companies. This was supported by Staking and Babbel (1995) who argued that they concurred with the hypothesis made by Modigliani and Miller.

Modigliani and Miller (1963) revised their previous opinion through integrating duty welfares as causes of the capital structure of companies. Important feature of tax policy is that interest is a tax- deductible outlay. Company which remits duties obtains partly counterweighing interest duty- shield in the form of smaller levies remitted. Consequently, as Modigliani and Miller (1963) propose, companies ought to expenditure equally considerable debt capital as possible acceptable to exploit their worth. Alongside with company tax policy, scholars were also concerned in investigating the situation of individual duties levied on persons. This theory is relevant to the current study as it discusses the relevance of debt financing in a firm. This study will investigate whether debt financing is relevant in determining dividend payout ratio.

2.2.2 Pecking Order Theory

According to this theory, developed by Myers and Majluf (1984), there is no predefined optimal capital structure but instead asserts that, firms displays different preference for utilizing internal funds or retained earnings over external capital. It is the one of the most significant theories of company leverage and goes against the firm's idea of having distinctive combination of equity and debt finance, which minimizes the corporation costs of funds. It suggests that the firm should follow a well-specified order of priority with respect to financing sources to minimize its information asymmetry costs, first choosing retained earnings, then debt and finally raising equity as a last option. It advocates for retained earnings to be used first in funding long-term projects and when they are exhausted or not available, then debt is issued; and when it is insufficient or not available, equity is issued (Myers, 1984).

The explanation of the pecking order stems from the existence of the information asymmetry where managers are assumed to know more about their company risk, prospects and project value than external investors including capital markets. According to Myers and Majluf (1984), investors place low value on the company stock because of the inability of managers to convey information on the company prospects including the new investment opportunities identified. This in return makes managers who are believed to be at the core of company information to finance their project using readily available retained earnings. If the retained earnings are insufficient, managers will choose debt capital in preference to issuing equity shares since they are undervalued in the capital markets. The asymmetric information effect therefore favors use of debt over equity and shows management confidence that the newly identified investment opportunity is profitable and the current share price is underpriced (Myers & Majluf, 1984). This theory is relevant to the current study as it gives factors considered by firms before opting for debt financing and in essence the level of debt financing in a firm.

2.2.3 Trade-Off Theory

This theory was proposed by Myers (1984). The theory holds that, there exists an optimal capital structure for every firm, which can be determined by balancing the costs and benefits of equity. As a result, a firm decides on how much debt capital and how much equity capital to include in their capital structure by balancing on the costs and benefits of each source. Debt capital results to benefits such as tax shield though high debt levels in the capital structure can result to bankruptcy and agency expenses. Agency expenses results from divergence of interest among the different firm stakeholders and because information asymmetry (Jensen & Meckling, 1976).

Thus, including cost of agency into the trade-off theory signifies that a corporation ascertains its optimal financial structure by balancing the benefit of debt (the tax advantage of debt) against expenses of excessive debt (financial distress) and the resultant equity agency expenses against debt agency costs. The theory further asserts that, as a firm increases debt in their capital structure, the marginal cost associated with debt increases while the marginal benefits associated with debt decrease until an optimal point is reached. Beyond that point, the marginal costs of debt exceed the marginal benefits resulting in reduced firm value. In this regard, the firm should set an optimal financial structure in order to enhance its stock returns (Jensen & Meckling, 1976).

According to Myers (1984), firms with more tangible assets should have high debt ratios while firms with more intangible assets should depend more on equity capital because they are subject to loss of value in case of liquidation. Under this theory, firms should evaluate the various costs and benefits of each debt level and determine an optimal debt structure that balances the incremental costs and incremental benefits (debt tax shields against costs of bankruptcy). This further explains why firms are partly financed by equity and also partly financed by debt in their capital structure. This theory is relevant to the current study as it explains the factors that are considered by a firm before deciding on the level of debt financing. The debt financing is in return expected to influence some variables such as dividend payout ratio and the current study will investigate this relationship.

2.3 Determinants of Dividend Payout Ratio

There are a number of determinants of dividend payout by companies. These factors usually cut across almost all the sectors in the economy. They include debt financing,

profitability, company's liquidity position, growth prospects, firm size, ownership structure, legal restrictions and macro-economic variables.

2.3.1 Debt Financing

A rising study number have found that dividend policy is negatively affected by the financial leverage level (Jensen et al., 1992; Agrawal & Jayaraman, 1994; Crutchley & Hansen, 1989; Faccio et al., 2001; Gugler & Yurtoglu, 2003; Al Malkawi, 2005). Their studies concluded that greatly levered firms decide upholding their cash flow internal to accomplish responsibilities, rather than allotting cash accessible to shareholders and safeguard their creditors.

Nevertheless, Mollah et al., (2001) observed a market evolving and found a relationship that is direct between financial leverage and debt burden level that rises transaction costs. Thus, firms with high leveraging ratios are associated of having transaction costs that are high, and are in a position that is weak to manage higher dividends pay in avoiding the external financing cost. To evaluate the debt level in which it can have impact on dividend payouts, this research used the financial leverage ratio, or ratio of liabilities (total short term and long term debt) to total shareholders' equity. Al Kuwari (2009) also established a negative relationship that is significantly between the two. The used proxy is Debt to Equity ratio for financial leverage.

2.3.2 Profitability

Profitability of a firm is perceived as a key firm's indicator of the capacity to pay dividends. According to Lintner (1956) the firm's pattern of paying dividends is determined by the earnings of that particular year and the dividends of the previous

years. Baker and Powell (2000) noted that dividend payments are determined by the expected level of future earnings.

Gitman and Pruitt (1991) stated that the profits of the current and previous years greatly determine the ability of a company to pay dividends. In their New York review of firms listed in exchange, Baker and Powell (2000) noted that industry definite and projected future earnings level is the major dividend determinant. This finding was in line with that of Lintner, which argues that organizations with cyclical earnings that are more smooth more whereas those with less cyclical earnings smooth more (Abala, 2013). This implies that cyclical earnings have a big impact on dividend decisions.

2.3.3 Liquidity

Dividend payments are regarded as cash outflow by the firm. Although a company could have enough earnings to declare dividends, the cash available at a particular instance may not be adequate to pay dividends. The firm's cash position is therefore a critical factor to consider while making dividend payments; the ability of the firm to pay dividends increases with the firms' overall liquidity and cash position (Pandey, 2010).

Well established companies generally have higher liquidity which makes their dividends payment capability is higher. Such a company has little investments opportunity since most of its funds are not held in the working capital thus its cash position is secure. On the other hand, growing firms face the problem of liquidity. The management has to consider the effect of paying out dividends on its liquidity position. If it impacts negatively on the liquidity position, the management may opt to

retain earnings rather than issue out dividends by following a conservative dividend policy (Pandey, 2010).

2.3.4 Firm Size

A study by Eriotis (2005) noted that Greek firms annually distribute dividends based on each firm's target payout ratio, this is done based on the size of these firms and the amount of earnings distributed. The size of the firm plays a critical role in explaining the firm's dividend payout ratio (Lloyd, Jahera &Page, 1985). In this study, it was noted that larger firms are endorsed with a high financial maturity which gives them a higher access to funds in the capital markets. This reduces their reliance on the internally generated funds and increases the ratio of dividend payouts. A positive association can therefore be said to exist between firm size and dividend payout ratios.

Firms which are large are mature and able to pay dividend compared to small firms since they have easier access to financial market. Sawicki (2005) established that performance in large firms can be monitored through dividend payment. Information asymmetry in large firms is high due to dispersion of ownership thus increase in shareholders inability to monitor managers' activities. Dividend payment cubs this problem since higher dividend payout triggers for debt financing which eventually leads to monitoring due to existence of trade payables and debenture holders.

2.3.5 Macro-economic Factors

A number of studies have been undertaken to determine the effect of macroeconomic factors on dividend policy of companies. The factors include but not limited to monetary aggregates, rate of interest, investment level in the economy, consumer price index, producer price index, GDP growth, inflation, financial depth and the

degree of market efficiency. Kwon and Song (2011) stated that it may be possible that investors are more averse to large cash outflows during a period of crisis. Flannery and Protopapadakis (2002) pointed out that inflation and money supply are well documented as the two macro-economic factors that have a significant effect on dividend policy.

2.4 Empirical Review

Several empirical studies are available both locally and internationally on dividend payout ratio but most of these studies have either focused on financial performance or stock returns leaving a gap on the effect of debt financing on dividend payout.

2.4.1 Global Studies

The study by Gupta and Banda (2010) explored the corporate dividend policy determinants through reexamination of which influence a firm's dividend decision through use of a two-step multivariate procedure. The companies used as the samples for this study were drawn from the broad based Bombay Stock Exchange 500 index in a span of seven years from 2001-2007. The data was first subjected to factor analysis to draw vital insights from the various variables after which the factors were further subjected to multiple regression. The factor analysis results identified Profitability, Leverage, Growth and ownership structure and liquidity as the main corporate dividend policy' determinants.

Abu (2012) did a research based on the evidence from Bangladesh to explore the determinants of dividend payout policy. The six independent variables used for this study were: sales, earnings per share, net income, liquidity, retained earnings and price earnings ratio. With the use of operating least squares, the results identified EPS to be negatively significant for dividend payout policy; net income positively

influence dividend payout; revenue (sales) have no impact on the dividend payout; liquidity significantly influences dividend payout and price earnings ratio do not have an impact on dividend payout policy. The results concluded that commercial banks' dividend payout in Bangladesh is dependent on net income as opposed to other variables used in the analysis.

Holder, Langrehr and Hexter (2012) did a study on the Pakistan listed companies to examine how dividend policy is influenced by debt financing. Data was then extracted from Karachi stock exchange from 2005 to 2009. For data analysis, the descriptive, regression and modified cross sectional analysis methods were utilized. This study adopted five variables the first being the dividend payout which acted as variable that is dependent whereas the other four used as the earnings management' independent variables were; debt financing, discretionary accrual, return on equity and the firm size which was in this case the control variable. It was noted that associations exist between both variables though the coefficient indicates a weak correlation implying no association.

Emamalizadeh, Ahmadi and Pouyamanesh (2012) explored the association between dividend policy and financial leverage of the listed 33 food-companies at the Tehran Stock exchange between 2003 and 2010. Correlation matrix and Regression analysis was used on panel data with the extended linter model adopted as the analytical model. The finding revealed that debt ratio has no significant association on the dividend per share and merely exhibit a positive correlation if the dividend yield is more than the debt ratio. This study was conducted in a developed country and thus its findings may not be replicated in the local scenario.

A study by Ajanthan (2013) on Corporate governance of listed Hotels and Restaurants in Srilanka established that leverage measured by debt equity ratio do not influence significantly dividends payouts of the firms. The research sampled 17 companies listed in the Colombo Stock Exchange between 2008 and 2012 using descriptive statistics and multiple regression analysis. This context of this research is different from the current study

2.4.2 Local Studies

Mbuki (2010) studied factors that determine dividend payout ratio among Savings and Credit Cooperative Societies (SACCO) in Kenya. The data was collected in September 2010. Out of 5,000 registered SACCO's in Kenya, a sample of 25 SACCO's was selected. The results were analyzed using regression method. The study established that SACCO's profitability, growth opportunity, cash flow and size variables positively influenced dividend payout ratio, while risk variable negatively influenced dividend payout ratio.

A study done by Atipo (2013) studied the association between financial leverage and dividend policy of 57 firms listed on the NSE between 2008 and 2012. Regression analysis and random model was adopted for the research design. The study's results showed that leverage had significant negative influence on dividend payout which indicated little dividends for firms with large debts. The study found the dividend yield and debt ratio as the most influential variables influencing dividend payout policies. This study adopted a random model as the research design while the current study will employ a descriptive cross-sectional design.

Kivale (2013) analyzed the effects of revenue growth and financial leverage on firms' dividend policy listed at the NSE from 2008 -2012. A sample of 40 firms was chosen

from a total of 60 firms and adopted multivariable regression analysis model. The study's findings concluded a negative association exists between financial leverage, dividend payouts and revenue growth. This study sampled firms listed at the NSE while the current study intends to study the manufacturing firms listed at the NSE.

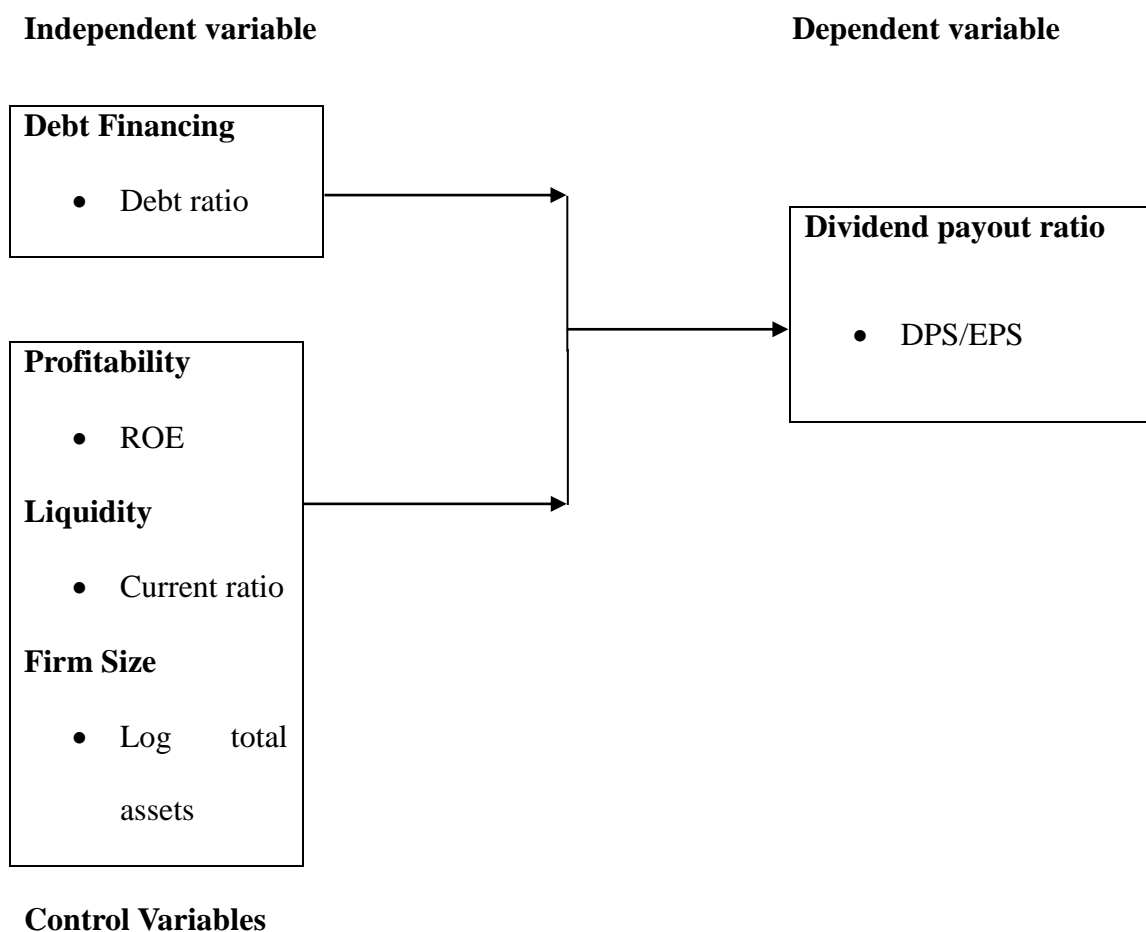
Waswa (2013) investigated factors influencing policy payout decisions of Agriculture firms listed on the NSE. The study focused on 7 companies in the Agricultural segment and covered a period from 2005 to 2010. Quantitative multiple regression analysis was adopted in the research design whose outcomes exhibited an association that is negative between leverage and dividend payout. The impact of the leverage is however not significant on the dividends payout. This study focused on listed agricultural firms only while the current study will focus on manufacturing firms listed at the NSE.

Mudezi (2017) sought to determine how debt financing affect dividend payout ratio of listed companies on the NSE. The independent variables for the study were debt financing as measured by debt ratio, liquidity as measured by current ratio, firm size as measured by natural logarithm of total assets and profitability as measured by return on equity. Dividend payout ratio was the dependent variable and was measured by dividend per share divided by earnings per share. Secondary data was collected for a period of 5 years (January 2012 to December 2016) on an annual basis. The study employed a descriptive cross-sectional research design and a multiple linear regression model was used to analyze the relationship between the variables. The results revealed that debt financing produced negative and statistically significant values for this study.

2.5 Conceptual Framework

The conceptual framework is a diagrammatic representation of the relationship between the factors identified. The elements given consideration here are debt financing and dividend payout ratio. The dividend payout ratio as measured by dividend per share divided by earnings per share is the dependent variable. Debt financing as measured by debt ratio is the independent variable. The control variables are profitability as measured by return on equity, firm size as measured by natural logarithm of total assets and liquidity as measured by the current ratio.

Figure 2.1: The Conceptual Model



Source: Researcher (2018)

2.6 Summary of the Literature Review

A number of theoretical frameworks have explained the theoretically expected association between debt financing and dividend payout ratio. Theories covered in this review are; Modigliani and Miller model, pecking order theory and the trade-off theory. Some of the primary influencers of dividend payout ratio have also been explored in the chapter. A number of local and international empirical studies have been carried out on dividend payout ratio and debt financing. Findings from these studies have been explored in the chapter. Although the studies conducted before in Kenya have studied the effect of debt financing and dividend payout of firms, none has focused on listed manufacturing firms. The current study intends to fill this research gap by providing an answer to the research question; what is the effect of debt financing on dividend payout ratio of manufacturing companies listed at the NSE?

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

In order to determine the effect of debt financing on dividend payout ratio of manufacturing companies listed at the Nairobi Securities Exchange, a research methodology is necessary to outline how the research was carried out. This chapter has four sections namely; research design, data collection, diagnostic tests and data analysis.

3.2 Research Design

A descriptive cross-sectional research design was employed in the current study to investigate the association between debt financing and dividend payout ratio of manufacturing companies in the Nairobi Securities Exchange listing. Descriptive design was utilized as the researcher is interested in finding out the state of affairs as they exist (Khan, 2008). This research design was appropriate for the study as the researcher is familiar with the phenomenon under investigation but want to know more regarding the nature of relationship between the variables of the study. In addition, a descriptive research aims at providing a valid and accurate representation of the study variables and this helps in responding to the research question (Cooper & Schindler, 2008).

3.3 Population

According to Burns and Burns (2008), population refers to the characters of interest upon which the study seeks to draw deductions. The study's population consisted of all the 9 manufacturing firms listed at the NSE as at 31st December 2017 (Appendix D).

3.4 Data Collection

Data was exclusively collected from a secondary source. It is always a regulatory requirement for firms listed at the NSE to report their values annually to the Capital Markets Authority. Secondary data was obtained solely from the published annual financial reports of the listed manufacturing companies in the period contained from January 2013 to December 2017 on an annual basis and was captured in a data collection sheet. The end result was information detailing dividend payout ratio and debt financing. The specific data collected was firms' EPS, DPS, sales revenue, net income, equity, total expenses, current liabilities, long term liabilities and current assets.

3.5 Data Analysis

The data collected from the different sources was organized in a manner that can help address the research objective. Statistical Package for Social Sciences version 22 was utilized for data analysis purposes. Both descriptive and inferential statistics were carried out. In descriptive statistics, the minimum, maximum, mean, standard deviation, skewness and kurtosis were computed for each variable. In inferential statistics, both regression and correlation analysis was carried out. Correlation analysis involved determining the extent of relationship between the study variables while regression analysis involved establishing the cause and effect between the dependent variable (dividend payout ratio) and independent variables: debt financing, profitability, firm size and liquidity.

3.5.1 Diagnostic Tests

Linearity uses the mathematical equation $Y = C + bX$ where c is a constant to show the association between variable X and Y . The linearity test was obtained through the

scatterplot testing or F-statistic in ANOVA. Stationarity test is a process where the statistical properties such as mean, autocorrelation and variance structure do not change with time. Stationarity was obtained from the run sequence plot. Normality is a test for the assumption that the residual of the response variable are normally distributed around the mean. This will be determined by Shapiro-wilk test or Kolmogorov-Smirnov test. Autocorrelation is the measurement of the similarity between a certain time series and a lagged value of the same time series over successive time intervals. It was tested using Durbin-Watson statistic (Khan, 2008).

Multicollinearity is said to occur when there is a nearly exact or exact linear correlation among two or more of the independent variables. This was tested by the determinant of the correlation matrices, which varies from zero to one. Orthogonal independent variable is an indication that the determinant is one while it is zero if there is absolute linear dependence between them and as it approaches to zero then the multicollinearity becomes more intense. Variance Inflation Factors (VIF) and tolerance levels were also carried out to show the degree of multicollinearity (Burns & Burns, 2008).

3.5.2 Analytical Model

Using the collected data, the researcher conducted a regression analysis to determine the extent of the association between debt financing and dividend payout ratio. The study applied the following regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon.$$

Where: Y = Dividend payout ratio as measured by the ratio of dividend per share to earnings per share

β_0 =y intercept of the regression equation.

β_1 to β_4 ,=are the slope of the regression

X_1 = Debt financing given as the ratio of long term debt divided by long term debt and shareholders' equity

X_2 = Profitability as measured by return on equity (that is net income divided by shareholder's equity)

X_3 = Firm size as given by natural logarithm of total assets

X_4 = Liquidity as given by current assets divided by current liabilities

ε =error term

3.5.3 Tests of Significance

The researcher carried out parametric tests to establish the statistical significance of both the overall model and individual parameters. The F-test was employed to establish the significance of the overall model and it was obtained from Analysis of Variance (ANOVA) while a t-test was employed to establish statistical significance of individual variables.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

This section represents study's findings established on the objectives of research. This chapter focused on collected data analysis from CMA to determine the effect of debt financing on dividend payout ratio of manufacturing companies quoted at the NSE. Using descriptive statistics, correlation analysis and regression analysis, the results of the study were presented in form of tables for easy interpretation.

4.2 Diagnostic Tests

The researcher carried out diagnostic tests on the collected data. A test of multicollinearity was undertaken. Tolerance of the variable and the VIF value were used where values more than 0.2 for Tolerance and values less than 10 for VIF means that there is no multicollinearity. For multiple regressions to be applicable there should not be strong relationship among variables. From the findings, the all the variables had a tolerance values >0.2 and VIF values <10 as shown in table 4.1 indicating that no multicollinearity exists among the independent variables.

Table 4.1: Multicollinearity Test for Tolerance and VIF

Variable	Collinearity Statistics	
	Tolerance	VIF
Debt Financing	0.380	1.367
Firm Liquidity	0.706	1.417
Firm Size	0.503	1.99
Profitability	0.683	1.403

Source: Research Findings (2018)

Shapiro-wilk test and Kolmogorov-Smirnov test was used in normality test. The null hypothesis for the test was that the secondary data was not normal. If the p-value recorded was more than 0.05, the researcher would reject it. The test findings are as illustrated in table 4.2.

Table 4.2: Normality Test

Dividend Payout	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Debt Financing	.156	40	.300	.906	40	.822
Firm Liquidity	.172	40	.300	.869	40	.723
Firm Size	.165	40	.300	.880	40	.784
Profitability	.168	40	.300	.862	40	.716
a. Lilliefors Significance Correction						

Source: Research Findings (2018)

Both Kolmogorov-Smirnova and Shapiro-Wilk tests recorded p-values greater than 0.05 implying that the data used in research was distributed normally and therefore the null hypothesis was rejected. This data was therefore appropriate for use to conduct parametric tests such as Pearson's correlation, regression analysis and analysis of variance.

Autocorrelation tests were executed so as to check for correlation of error terms across time periods. Autocorrelation was tested using the Durbin Watson test.

Durbin-watson statistic of 1.610 indicated that the variable residuals were not serially correlated since the value was within the acceptable range of between 1.5 and 2.5.

Table 4.3: Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.485 ^a	.235	.159	.465501	1.610

a. Predictors: (Constant), Company liquidity, Profitability, Firm size,

Debt financing

b. Dependent Variable: Dividend payout ratio

Source: Research Findings (2018)

4.3 Descriptive Analysis

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations in this study. Table 4.4 below shows the descriptive statistics for the variables applied for the research. An analysis of all the variables was obtained using SPSS software for the period of five years (2013 to 2017) on an annual basis. Dividend payout ratio had 0.5282 as mean with a 0.5076 standard deviation. Firm size resulted in a mean of 16.2358 and a 1.4232 standard deviation. Debt financing had a mean of 0.4798 and a standard deviation of 0.2326 while profitability and liquidity recorded 0.0791 and 1.9942 mean with a 0.1409 and 2.0233 standard deviation respectively.

Table 4.4: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Dividend payout ratio	45	.000	2.570	.52822	.507553
Debt financing	45	.120	.970	.47978	.232648
Profitability	45	-.280	.390	.07911	.140871
Firm size	45	13.560	18.020	16.23578	1.423297
Company liquidity	45	.110	10.090	1.99422	2.023251
Valid N (listwise)	45				

Source: Research Findings (2018)

4.4 Correlation Analysis

Correlation analysis are used to test whether a relationship exists between two variables and often range between (-) strong negative correlation and (+) perfect positive correlation. The study employed the Pearson correlation to analyze the level of correlation between the dividend payout ratio of manufacturing firms quoted at the NSE and the independent variables for this study (debt financing, company size, liquidity and profitability).

The study found out that there was a positive and statistically significant correlation ($r = 0.415$, $p = 0.005$) between profitability and dividend payout ratio. The study further established that a negative but insignificant correlation exists between debt financing and dividend payout ratio of quoted manufacturing firms as evidenced by ($r = -0.227$, $p = 0.134$). Firm size was found to have a weak positive and insignificant association with dividend payout ratio as evidenced by ($r = 0.97$, $p = .526$). Liquidity was also found to have a positive but insignificant correlation with dividend payout ratio as shown by p value that was more than the significance level of 0.05.

Table 4.5: Correlation Analysis

		Dividend payout ratio	Debt financin g	Profita bility	Firm size	Company liquidity
Dividend payout ratio	Pearson Correlation	1	-.227	.415**	.097	.117
	Sig. (2-tailed)		.134	.005	.526	.445
	N	45	45	45	45	45
Debt financing	Pearson Correlation	-.227	1	-.305*	.495*	-.616**
	Sig. (2-tailed)	.134		.042	.001	.000
	N	45	45	45	45	45
Profitability	Pearson Correlation	.415**	-.305*	1	-.066	.334*
	Sig. (2-tailed)	.005	.042		.665	.025
	N	45	45	45	45	45
Firm size	Pearson Correlation	.097	.495**	-.066	1	-.435**
	Sig. (2-tailed)	.526	.001	.665		.003
	N	45	45	45	45	45
Company liquidity	Pearson Correlation	.117	-.616**	.334*	.435*	1
	Sig. (2-tailed)	.445	.000	.025	.003	
	N	45	45	45	45	45

** . Correlation is significant at the 0.01 level (2-tailed).

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

Source: Research Findings (2018)

4.6 Regression Analysis

Dividend payout ratio of manufacturing firms listed at the NSE was regressed against four predictor variables; debt financing, company size, liquidity and profitability. The regression analysis was executed at 5% significance level. The study obtained the model summary statistics as illustrated in table 4.6 below.

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.485 ^a	.235	.159	.465501	1.610

a. Predictors: (Constant), Company liquidity, Profitability, Firm size,

Debt financing

b. Dependent Variable: Dividend payout ratio

Source: Research Findings (2018)

R squared is the coefficient of determination and depicts the variations in the response variable that is brought about by the changes in the predictor variables. From the outcome in table 4.6 above, the value of R square was 0.235, a discovery that 23.5 percent of the deviations in dividend payout ratio of manufacturing firms quoted at the NSE are caused by changes in debt financing, company size, liquidity and profitability. Other variables not included in the model justify for 76.5 percent of the variations in dividend payout ratio of manufacturing firms quoted at the NSE. In addition, the results revealed that there exists a weak relationship among the selected independent variables and the dividend payout ratio of manufacturing companies listed at the NSE as shown by the correlation coefficient (R) equal to 0.485.

Table 4.7: Analysis of Variance

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	2.667	4	.667	3.077	.027 ^b
Residual	8.668	40	.217		
Total	11.335	44			

a. Dependent Variable: Dividend payout ratio

b. Predictors: (Constant), Company liquidity, Profitability, Firm size, Debt financing

Source: Research findings (2018)

The significance value is 0.027 which is less than $p=0.05$. This implies that the model was statistically significant in predicting how debt financing, company size, liquidity and profitability affects dividend payout ratio of manufacturing companies listed at the NSE.

The researcher used t-test to determine the significance of each individual variable used in this study as a predictor of dividend payout ratio of manufacturing firms listed at the NSE. The p-value under sig. column was used as an indicator of the significance of the association between the dependent and the independent variables. At 95% level of confidence, a p-value of less than 0.05 was interpreted as a statistical significance measure. As such, a p-value above 0.05 shows that a statistically insignificant association between the dependent and the independent variables. The findings are as indicated in table 4.8.

Table 4.8: Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.435	.930		-.468	.643
Debt financing	-.710	.456	-.325	-1.558	.127
Profitability	1.367	.536	.380	2.553	.015
Firm size	.078	.058	.219	1.354	.183
Company liquidity	-.037	.051	-.148	-.725	.472

a. Dependent Variable: Dividend payout ratio

Source: Research Findings (2018)

From the above results, it is evident that profitability produced positive and statistically significant values for this study (high t-value (2.553), $p < 0.05$). Debt financing produced negative but statistically insignificant values for this study as shown by p values that is more than 5%. Liquidity and firm size produced positive but insignificant values for this study as shown by high p values.

The following regression equation was estimated:

$$Y = -0.435 + 1.367X_1$$

Where,

Y = Dividend payout ratio

X1= Profitability

On the estimated regression model above, the constant = -0.435 shows that if selected dependent variables (debt financing, company size, liquidity and profitability) were rated zero, dividend payout ratio of manufacturing firms' listed at the NSE would decrease by 0.435. A unit increase in profitability would result to an increase in dividend payout ratio of manufacturing companies listed at the NSE by 1.367 while the rest of the variables were found not to have an insignificant effect on dividend payout ratio of manufacturing firms listed at the NSE.

4.7 Discussion of Research Findings

The research purposed to explore the effect of debt financing on dividend payout ratio of manufacturing firms quoted at the NSE. Debt financing as measured by debt ratio, profitability as measured by return on equity, firm size as measured by natural logarithm of total assets and liquidity as measured by current ratio were the independent variables while dividend payout ratio of manufacturing companies listed at the NSE as measured by the ratio of dividend per share to earnings per share on an annual basis was the dependent variable.

The Pearson correlation coefficients between the variables revealed that a strong positive correlation exists between profitability and dividend payout ratio of manufacturing firms quoted at the NSE. The association between liquidity and dividend payout ratio of manufacturing firms quoted at the NSE was found to be weak, positive and insignificant. The study also showed that there exist a weak positive association between firm size and dividend payout ratio of manufacturing firms quoted at the NSE while debt financing was found to have a weak and insignificant negative relationship with dividend payout ratio of manufacturing companies listed at the NSE.

The model summary revealed that the independent variables: debt financing, company size, liquidity and profitability explain 23.5% of variation in the dependent variable as depicted by an R^2 value implying that other factors were not included in the model that account for 76.5 of changes in dividend payout ratio of manufacturing companies listed at the NSE. The model is fit at 95% confidence level as the F-value was 3.077. Therefore, the overall multiple regression model is statistically significant and suitable in predicting how the independent variables selected affects dividend payout ratio of manufacturing and allied firms quoted at the NSE.

The findings of this study are in line with Waswa (2013) who investigated factors influencing policy payout decisions of Agriculture firms listed on the NSE. The study focused on 7 companies in the Agricultural segment and covered a period from 2005 to 2010. Quantitative multiple regression analysis was adopted in the research design whose outcomes exhibited an association that is negative between leverage and dividend payout. The impact of the leverage is however not significant on the dividends payout.

This study is also in agreement with Kivale (2013) who analyzed the effects of revenue growth and financial leverage on firms' dividend policy listed at the NSE from 2008 -2012. A sample of 40 firms was chosen from a total of 60 firms and adopted multivariable regression analysis model. The study's findings concluded a negative association exists between financial leverage, dividend payouts and revenue growth.

This study differs with Mudeizi (2017) who sought to determine how debt financing affect dividend payout ratio of listed companies on the NSE. The independent variables for the study were debt financing as measured by debt ratio, liquidity as measured by current ratio, firm size as measured by natural logarithm of total assets and profitability as measured by return on equity. Dividend payout ratio was the dependent variable and was measured by dividend per share divided by earnings per share. Secondary data was collected for a period of 5 years (January 2012 to December 2016) on an annual basis. The study employed a descriptive cross-sectional research design and a multiple linear regression model was used to analyze the relationship between the variables. The results revealed that debt financing produced negative and statistically significant values for this study.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section summarizes the previous chapter's findings, conclusion and study limitations. The section also elucidates the policy recommendations that policy makers can implement to achieve the expected dividend payout ratio of manufacturing companies listed at the NSE. Lastly the chapter presents suggestions for further research which can be useful by future researchers.

5.2 Summary of Findings

The study sought to investigate the effect of debt financing on dividend payout ratio of manufacturing companies listed at the NSE. The independent variables for the study were debt financing, company size, liquidity and profitability. The study adopted a descriptive cross-sectional research design. The companies' annual reports were used to retrieve secondary data which were analyzed using SPSS software version 21. The study used annual data for the 9 manufacturing firms listed at the NSE covering a five year time frame as from January 2013 to December 2017.

From the results of correlation analysis, a strong positive correlation exists between profitability and dividend payout ratio of manufacturing firms quoted at the NSE. The association between liquidity and dividend payout ratio of manufacturing firms quoted at the NSE was found to be weak, positive and insignificant. The study also showed that there exist a weak positive and insignificant association between firm size and dividend payout ratio of manufacturing firms quoted at the NSE while debt financing was found to have a weak and insignificant negative relationship with dividend payout ratio of manufacturing companies listed at the NSE.

The co-efficient of determination R-square value was 0.235 implying that the predictor variables selected for this study explains 23.5% of changes in the dependent variable. This means that there are other factors not included in this model that account for 76.5% of changes in dividend payout ratio of manufacturing companies quoted at the NSE. The model is fit at 95% confidence level and F-value of 3.077. Therefore, the overall multiple regression model was statistically significant and thus suitable in explaining how the dividend payout ratio of the manufacturing companies quoted at the NSE is affected by the selected independent variables.

The regression results show that when all the independent variables selected for the study have zero value, dividend payout ratio of manufacturing firms' listed at the NSE would decrease by 0.435. A unit increase in profitability would result to an increase in dividend payout ratio of manufacturing companies listed at the NSE by 1.367 while the rest of the variables were found not to have an insignificant effect on dividend payout ratio of manufacturing firms listed at the NSE.

5.3 Conclusion

From the findings of the study, it can be concluded from the study that dividend payout ratio of manufacturing companies listed at the NSE is significantly affected by debt financing, company size, liquidity and profitability. Debt financing was noted to have a negative but statistically insignificant association with dividend payout ratio of manufacturing companies listed at the NSE and this means an increase in debt financing leads to a decrease in dividend payout ratio though not to a significant extent. The study found that profitability had a positive and significant impact on manufacturing firms' dividend payout ratio quoted at the NSE.

The study therefore concludes that profitability leads to an increase in dividend payout ratio of manufacturing companies listed at the NSE and to a significant extent.

The study established that firm size had a positive but insignificant impact on dividend payout ratio of manufacturing companies quoted at the NSE and therefore it is concluded that higher levels of firm size leads to an increase in dividend payout ratio though not to a significant extent. Liquidity was found to be statistically insignificant determinant of dividend payout ratio of manufacturing companies quoted at the NSE and therefore this study concludes that liquidity has a positive but insignificant influence dividend payout ratio of manufacturing companies quoted at the NSE.

This study concludes that independent variables chosen for this study; debt financing, company size, liquidity and profitability affect to a large extent dividend payout ratio of manufacturing firms quoted at the NSE. It could be therefore concluded that these variables significantly affect dividend payout ratio as depicted by the p value of ANOVA summary. Since the four independent variables explain 23.5% of changes in dividend payout ratio of manufacturing companies listed at the NSE imply that the variables not included in the model explain 76.5% of changes in dividend payout ratio.

This finding concurs with Waswa (2013) who investigated factors influencing policy payout decisions of Agriculture firms listed on the NSE. The study focused on 7 companies in the Agricultural segment and covered a period from 2005 to 2010. Quantitative multiple regression analysis was adopted in the research design whose outcomes exhibited an association that is negative between leverage and dividend payout. The impact of the leverage is however not significant on the dividends payout.

5.4 Recommendations

Debt financing was found to have an insignificant negative impact on dividend payout ratio of manufacturing companies quoted at the NSE. This may imply that even when debt financing of manufacturing firms are increasing, the dividend payout ratio may be declining. This study recommends that managers of manufacturing firms should maintain debt at sustainable levels that will not significantly influence the returns that shareholders receive at the end of a given period.

The study found out that a positive relationship exists between dividend payout ratio and profitability. This study recommends that a comprehensive assessment of listed manufacturing firm's profitability should be undertaken to ensure the company is operating at sufficient levels of profitability that will lead to improved dividend payout ratio of firms. This is because a firm's profitability have been found to be a significant determiner of dividend payout ratio of firms.

The study established that there was a positive influence of firm size on dividend payout ratio of manufacturing firms quoted at the NSE though not significant. This study recommends adequate measures should be put in place by managers of these firms to improve and grow their dividend payout ratio by increasing their company sizes. Listed manufacturing firms and all firms in general should work on increasing their assets that will lead to an increase in dividend payout ratio because this translates to improved shareholder wealth which is the main goal of a firm.

5.5 Limitations of the Study

The scope of this study was for five years 2013-2017. It has not been determined if the results would hold for a longer study period.

Furthermore, it is uncertain whether similar findings would result beyond 2017. A longer study period is more reliable as it will take into account major happenings not accounted for in this study.

One of the study's limitations was the quality of the data. It is illusion to derive conclusions from the study since the legitimacy of the situation cannot be ascertained. The data that has been used is only assumed to be accurate. The measures used may keep on deviating from one year to another subject to prevailing condition. Secondary data that had already been retrieved was utilized for the study, unlike the primary data which is first-hand information. The study also considered selected determinants and not all the factors affecting dividend payout ratio of manufacturing companies quoted at the NSE mainly due to limitation of data availability.

For data analysis purposes, the researcher applied a multiple linear regression model. Due to the shortcomings involved when using regression models such as erroneous and misleading results when the variable values change, the researcher cannot be able to generalize the findings with certainty. If more and more data is added to the functional regression model, the hypothesized relationship between two or more variables may not hold.

5.6 Suggestions for Further Research

This study focused on free cash flows and dividend payout ratio of manufacturing firms quoted at the NSE and relied on secondary data. A research study where data collection relies on primary data i.e. in depth questionnaires and interviews covering all the 9 manufacturing firms listed at the NSE is recommended so as to compliment this research.

The study was not exhaustive of the independent variables affecting dividend payout ratio of manufacturing firms quoted at the NSE and this study recommends that further studies be conducted to incorporate other variables like management efficiency, growth opportunities, industry practices, age of the firm, political stability and other macro-economic variables. Establishing the impact of each variable on dividend payout ratio of manufacturing companies quoted at the NSE will enable policy makers know what tool to use when maximizing shareholder's wealth.

The study concentrated on the last five years since it was the most recent data available. Future studies may use a range of many years e.g. from 2000 to date and this can be helpful to confirm or disapprove the findings of this study. The study limited itself by focusing on listed manufacturing firms at the NSE. The recommendations of this study are that further studies be conducted on other non-listed manufacturing firms operating in Kenya. Finally, due to the shortcomings of regression models, other models such as the Vector Error Correction Model (VECM) can be used to explain the various relationships between the variables.

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APPENDICES

Appendix 1: Listed of Manufacturing and Allied Firms at NSE

1. B.O.C Kenya Ltd
2. British American Tobacco Kenya Ltd
3. Carbacid Investments Ltd
4. East African Breweries Ltd
5. Eveready East Africa Ltd
6. Flame Tree Group Holdings Ltd
7. Kenya Orchards Ltd
8. Mumias Sugar Co. Ltd
9. Unga Group Ltd