## THE EFFECT OF DEBT FINANCING ON DIVIDEND POLICY OF FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE

 $\mathbf{BY}$ 

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

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#### **DECLARATION**

I, the undersigned, declare that the	nis 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 s	submitted for examination with my approval as the
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#### **DEDICATION**

This project is dedicated to my family. Special gratitude goes to my ever loving parents Mr. Joseph M. Libondo and Mrs. Mary Akubala who have remained a source of inspiration for everything I set out to achieve and also for your financial support and prayers.

I also dedicate this project and express my gratitude to my husband Aggrey and my loving three month old son Jennings. You have been an interminable source of joy and deep inspiration to me. To my brothers Edgar, Jackson and Braizzon. To my sisters Winny, Doreen, Linda and Ivy. To my loving nephew Sammy, Remmy, Darren and to my adorable niece Velicia. Thank you all for your moral support.

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#### LIST OF ABBREVIATIONS

**CEO** Chief Executive Officer

**CMA** Capital Market Authority

**NSE** Nairobi Securities Exchange

SPSS Statistical Package for Social Sciences

UK United Kingdom

US United States

#### **ABSTRACT**

A firm's value is affected by the debt and dividend policy; the two decisions can either be attributed to the mode of security, how it is distributed, or how the ownership cuts across. Therefore a firms' financing decisions is affected by the mix between equity and debt, the relative number of debt and debt holders and how proceeds arising from investments like interests, dividends and capital gains are distributed. However, the method used to finance the investments should not affect the investment decision and neither should it affect the firm value. This study sought to determine to debt financing effect on dividend payout ratio of listed companies on the NSE. The population for the study was all the 64 companies listed at 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. Statistical package for social sciences version 21 was used for data analysis purposes. The results of the study produced R-square value of 0.068 which means that about 6.8 percent of the variation in dividend payout ratio of listed companies in Kenya can be explained by the four selected independent variables while 93.2 percent in the variation of dividend payout ratio was associated with other factors not covered in this research. The study also found that the independent variables had a weak correlation with financial performance (R=0.262). ANOVA results show that the F statistic was significant at 5% level with a p=0.000. Therefore the model was fit to explain the selected variables relationship. The results further revealed that debt financing produced negative and statistically significant values for this study while firm size produced positive but statistically significant values. Liquidity and profitability were found to be insignificant determiners of dividend payout ratio. The study recommends that when firms are setting their capital structure they should strike a balance between the tax savings benefit of debt and bankruptcy costs associated with borrowing. High levels of debt has been found to reduce dividend payout of listed firms from the findings of this study and so firm managers should maintain debt in levels that do not impact negatively on dividend payout of listed firms to ensure the goal of maximizing shareholders' wealth is attained.

#### **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. Categorically, the internal sources are the retained earnings and depreciation whereas the external sources mean the use of debt or equity. 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.

The debate as to whether dividend policy matters has become a major issue of interest in the financial literature for a period spanning more than half a century. The works of Miller and Modigliani (1958, 1961) showed that under restrictive conditions such as a constant policy of investments, the dividend policy of a firm does not have an effect on shareholder wealth since more dividends means lesser capital gains and retained earnings leaving the shareholders' wealth unchanged. Motivated by Linter's (1956) finding that firm follows well stipulated payout strategies. The financial theory further offers a variety of explanations concerning debt financing. The theories surrounding debt financing are: Pecking Order Theory, Trade-off Theory, and Agency Theory.

Dividend policy remains elusive and interesting since it affects growth, financing decisions and how it is distributed (when and how much). When dividend is declared and paid, there is reduction in cash flow in terms of internally generated profits / funds thus it forces a firm to source for external financing which is debt. Dividend policy affects various stakeholders. For managers, if a firm distributes dividends, then this means that they will be left with fewer funds for investment and growth. For lenders, fewer funds will be left to be claimed in case of bankruptcy and for shareholders, they will gain in terms of capital gain and increase in share prices (Servaes&Tufano, 2006).

#### 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.

The decision regarding the choice of debt, equity or a mix of the two stems from several factors such as the level of business risk, taxation regulation, economic conditions, the capital cost and the growth rate of the organization (Huang & Song, 2006). According to Gordon and Linter (1962), use of debt has a benefit of tax saving that accrued to firms in form of tax -deductible interest while equity does not attract any tax benefit. Debt is likely to produce efficiency in firms by forcing management to optimize efficiency in conducting its operations (Jensen, 1984). Close supervision by lenders funds that are loanable to firms is another benefit of debt (Jensen&Meckling, 1976).

Debt prevents the management from unwanted behavior through imprudent investments through discouraging excess investments (Servaes&Tufano, 2006). Firms with debt may not be allowed to make good investments generate more benefits as a result of the debt overcrowding argument by Myers (1984). Agency conflicts between managers and investors or among different group of investors are caused by debt (Binsbergen et al., 2007).

Debt ratios may be measured from financial statements to determine the proportion of debt in total financing. Brealey and Myers (2001), presents three ratios namely; debt - equity ratio which measures the level to which the assets of a firm are financed by debts and owners' equity, debt against total assets ratio that measures the portion of assets financed through debt, and capital employed to net worth ratio that measures the amount funds contributed by lenders and owners for each shilling of owners contribution. Bierman (1999) adds other debt ratios that include capitalization ratio which measures the debt component of a firm's capital structure and interest cover ratio which gives the ability of a firm to meet cost of debt when they fall due.

#### 1.1.2 Dividend Policy

Pandey (2010) argued that dividend policy can be defined as the norm followed by management in making distribution decisions out of a firms earnings by determining the amounts of dividends to be paid to the shareholders and how much to reinvest. He argued that a perfect dividend policy balances current dividends and future growth. Ross (1995) on the other hand defined dividend payment as the distribution of company profits to shareholders. Baskin (1989) measured dividend policy of a firm by considering to measures of dividend yield and dividend payout. Brealey et al., (2013) in his definition noted the earnings payable proportion in form of dividends to

shareholders is payout ratio while dividend is the stock's return on investments with lack of capital gain.

According to Al-Makawi (2007) dividend decisions are important, because they show signals of how sustainable a company's dividend is and also its ability to grow. Dividend decisions refer to the proportion of the earnings attributable to a company that are distributed as dividends. The ratio is sometimes calculated based on the cash flows which are exclusive of items which are not related to cash items such as depreciation. Young and high growth companies retain profits as much as possible because of the desire to reinvest the profits back to the business. Cyclical companies that experience volatility in their earnings are also not able to pay dividends frequently because they are unable to sustain high dividends in harsh economic conditions. Mature companies on the other hand who exhibit predictability in their earnings devote a higher proportion of their earnings to paying dividends. Investors also are attracted to firms with a stable target payout ratio which is a sign of financial discipline. A company with a dividend reinvestment plan can distribute more than its earnings since most investors prefer to take their dividends inform of shares rather than cash (Al-Makawi, 2007).

Simple rules of thumb do not exist with regards to payout ratios but strong companies growing revenues and earnings tend to reward shareholders with dividend increases. Dividend pay-out among many financial managers is a debatable issue. Firms do not have restrictions on how much dividends to pay ordinary shares holders, despite the fact that other factors such as legal restrictions, availability of ready cash resources and debt covenants may limit this decision. Dividend policies are very different across the globe in a way that goes to show that payment of dividends is as a result of effective pressure by a few shareholders with an aim of limiting agency behavior (Pandey, 2010).

#### 1.1.3 The Relationship between Debt Financing and Dividend Policy

Bhaduris (2002) noted that dividends show that the firm is in good financial health and such a firm has enough information when penetrating into the equity market. Payment of dividends increases the need for external financing while decreasing internal financing. A dividend policy serves to release resources in scenarios where the projects of the firm are not profitable conveys information about what the firm expects in future in relation to capital markets. A positive association exists between payout ratio and debt (Goyal& Frank, 2004). Studies carried out by various scholars suggest that a notable association is existent between dividend payout policy and capital structure. However, there is a conflict as to whether there is a direct or indirect relationship. Sierpinska (1999) suggests that dividend payout policy is directly connected to capital structure. This view is supported by Atipo (2013) who in his study concluded that firms with high gearing ratio pay low amounts of dividend. Bittok (2004) pointed out that the value of the firm is influenced considerably by dividend payout ratio and the value of the firm because the stock's value is dependent on the dividends.

On the other hand, Dabrowska (2007) presented a different view by suggesting that decision to pay dividend do not have an express direct relationship with capital structure, but have a profound influence on the value of equity capital. Rozeff (1982) in his study found that higher leveraged firms pay fewer dividends as a move to avoid costs associated with external financing. Collins, Saxena and Wesley (1996) suggested that a negative association exists between the leverage and dividend payout ratios.

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 Companies Listed at the Nairobi Securities Exchange

NSE opened its doors in 1954, it was formed by the Government as part of its agenda in bringing economic reforms aimed at development of both capital and financial markets so as to support and enhance the initiatives of the private sector. The NSE is operating one joint market for both debt and equity financing. It has made it possible for investors to acquire long-term capital thus boosting the activities of the financial sector and offer short term capital as well.

Security exchange market is organized to aid in the buying and selling of corporate and other securities. Such trading takes place within well-defined rules and regulations. Security markets promote high accounting standards transparency in the management of business and resource management. This is possible since the market separates owners of capital together with managers of capital. It also promotes accessibility to finance by various users by providing the flexibility for customization. The market gives investors a mechanism that is efficient if they wish to sell off their investments inform of securities. Because of the certainty that investors have of the likelihood to sell of securities as often as they want drives investments and this is a guarantee of the mobility of capital in purchasing assets (NSE, 2017).

#### 1.2 Research Problem

The firm's value is affected by the debt and dividend policy; the two decisions can either be attributed to the mode of security, how it is distributed, or how the ownership

cuts across (As if, 2011). Therefore a firms' financing decisions is affected by the mix between equity and debt, the relative number of debt and debt holders and how proceeds arising from investments like interests, dividends and capital gains are distributed. However, the method used to finance the investments should not affect the investment decision and neither should it affect the firm value. In summary, decisions on financing and investments are not related and firm value is hence determined by investment decisions. Since a financing decision does not affect value, they should be considered irrelevant and be given lesser priority in investment decisions. In practice, however, firms commit much resources and time, managers and investors in the analysis of financing decisions related to capital structure and dividends.

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. 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.

Past empirical studies show that the dividend policy behavior by firms operating in emerging markets is significantly different from the generally acceptable policies found in the more developed markets (Armadeep, 2013). Additionally, the dividend policy

adopted by those firms in developed markets exhibits stability as opposed to those of emerging markets which exhibits instability. Contrary to findings of Armadeep (2013), Aivazian (2012) asserted that firms found in the US market exhibit dividend payout policy similar to those in new markets. However, firms found in emerging markets have sensitivity to certain variables that show larger financial constraints under which they operate. Furthermore, it is noted that firms in emerging markets are influenced by asset mix due to their excess reliance on debts from banks under bank-dominated environments.

Minimal research work has been undertaken in locally on the relationships between debt financing and dividend policy. 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. The lack of consensus among the various scholars on how debt financing affects dividend policy is reason enough to conduct further examination of the area of study. Despite the fact that capital structure determines if dividends are paid or not, the study of the relationship has not been extensive in Kenya. This forms the foundation for this research. This paper will seek to identify how financing of debts affects dividend policy of companies listed at NSE. It will attempt to give an explanation to the research question, what is the effect of debt financing on dividend policy of firms listed NSE?

#### 1.3. Objective of the Study

To find out the effect of debt financing on dividend payout policy of firms listed at the Nairobi Securities Exchange.

#### 1.4 Value of the Study

This study is utmost important to researchers and scholars with interest in capital structure and dividend policy in that it seeks to enrich the area of study while at the same time recommend on where to conduct more studies. The study will also help both researchers and scholars in identifying research gap in this field which will prompt and guide them in executing further studies.

The outcome of this study will also aid the various regulatory agencies when developing legislation and regulatory framework around companies' capital structure. The regulators will thus consider this study as they formulate policies that will create a favorable environment for investors.

Value of this study is to the various managers who are tasked with the management of firms listed on the NSE; this study provides useful information and recommendations to assist them in making more informed management decisions leading to shareholders' wealth maximization.

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

#### 2.1 Introduction

The chapter presents the study theoretical framework applied inland reviews previous studies done on debt financing and dividend policy. It contains the dividend theories, determinants of dividend policy, empirical review, conceptual framework and summary of literature review.

#### 2.2Theoretical Framework

In corporate finance, financing theories defines the mix and extent to which debt and equity is used. There are three financing theories namely: Trade-off theory, pecking order theory and agency cost theory.

#### 2.2.1 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 benefits and costs balancing of each source. Debt capital results to benefits such as tax shied 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 debt benefit (the debt advantage in relation of tax) against expenses of excessive debt (financial distress) and the resultant equity agency expenses against debt agency costs. The theory further assert that, as firm increases debt in their capital structure, the marginal cost associated with

debt increases while the marginal benefits associated with debt decreases until an optimal point is reached. Beyond that point, the marginal costs of debt exceed the marginal benefits resulting to 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 lose 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.

#### 2.2.2 Pecking Order Theory

According to Myers and Majluf (1984) who developed this theory, 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 places 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 the 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).

#### 2.2.3 Agency Theory

This theory of agency exists when the principle delegates the authority to an agent to manage his business on his/her behalf (Jensen &Meckling, 1976). When the requirements and the objectives of principle and the agent conflict immediately the issue of agency arises. This is very tough and difficult or rather costly for a principal monitoring the work of his/her agent always in ensuring that the agent is working and is making some decisions based on the principle best interest. Thus, the theory of agency is helping the principle and the agent in unraveling disputes aiming by ensuring a healthier relationship between them (Itiri, 2014). This concept is established on the notion that the shareholders' interests and the executives are not perfectly affiliated in a way enabling them work for a goal that is collective which is achieving the set goals and objectives of organization. This theory has a crucial role in funding decisions

because of the debt holders and the shareholders problems which may arise between them (Aliu, 2010).

The Agency theory suggests that agents have a high level of cash flow who in this case are the managers regardless of the subsists or no profitable opportunity for investment so that the resources can be used for personal managers welfares other than for improving or growing the firms value (Calabrese, 2011). The Jensen and Meckling (1976) agency theory explains that decisions on capital structure need to purpose in decreasing the agency related cost by reducing capital equity structure. This is done be increasing the financing through using debt hence leading to the market value of the firm incensement as well as reducing the conflicts that may exist between shareholders and firm managers

Theory of Agency suggests that debt is used as a tool to control the manager since with debt financing; managers will be forced to focus on using the free cash flows to service the debt other than trying to invest the funds in some unprofitable projects (Calabrese, 2011). The theory is founded on the notion that manager's behavior can be controlled by debt financing since the managers will prefer using the free cash flow to interest payment of the debt obtain to finance the firm's investment projects. Thus, the theory of agency supports the use of debt to improve the firm's financial performance (Mwangi, Muturi&Ngumi, 2016).

#### 2.3 Determinants of Dividend Policy

Dividend policy research studies findings are inconsistent on ideal optimal dividend level. Black and Scholes (1974) established that dividend policy is a puzzle and various factors affect dividend policy but none can be explained as conclusive. To establish divided policy, the following factors are considered:

#### 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 and Jayaraman, 1994; Crutchley and Hansen, 1989; Faccio et al., 2001; Gugler and Yurtoglu, 2003; Al Malkawi, 2005). Their studies concluded that greatly levered firms decides 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 Legal Constraints and Contractual Obligations

Contractual provisions prohibit firms from paying dividend in order to protect debenture holders. Debenture holders incur monitoring and agency costs in order to minimize chances of moral hazards and agency conflict. Maher and Anderson (1999) noted that corporate governance not only affects micro-economic efficiency of the firm but also aid in facilitating the development and functioning of the capital markets in resources allocation.

#### 2.3.3 Liquidity Position of a Firm

Liquidity level determines the firm capability in meeting its contractual requirements as they fall due. High solvency level allows firms to honor dividend payment when declared thus direct association between liquidity level and dividend payout of a firm. Excessive cash outflow causes the firm management and shareholders conflict of interest resulting from underinvestment and consumption of perks by managers.

#### 2.3.4 Profitability of a Firm

The higher the profitability level, the more the firm's ability to pay dividend thus direct relation between the two. As per signaling theory, firms pay dividend to convey about its outstanding current and future performance. Wang', Gao and Guo (2002) showed that UK listed firms paid higher dividend than Chinese listed firms. UK listed firms had a clear dividend framework and firms increased their payment level annually while Chinese listed firms did not have clear framework and they relied on current earnings to settle dividend payment.

#### 2.3.5 Size of the Firm

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.

#### 2.3.6 Growth of the Firm

Chang and Rhee (2003) showed that firms that face growth prospects have a tendency of retaining their earnings to funding growth and expansion thus lower dividend payout. From their study, they revealed that firms pay lower dividend and divert retained earnings to growth opportunities and reduces reliance on external financing which is expensive. Moreover, firms with fewer growth opportunities pay high dividend to cub the problem of overinvesting of funds by managers in unprofitable projects. From this perspective, dividend is used to divert cash from the firm and reduce agency cost.

#### 2.4 Empirical Review

There are numerous empirical studies both locally and internationally to support the relationship between debt financing and dividend policy, but these studies have produced mixed results.

#### 2.4.1 Global Studies

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 to 2012 using descriptive statistics and multiple regression analysis. This context of this research is different from the current study.

Emamalizadeh, Ahmadi and Pouyamanesh (2012) explored the association between dividend policy and financial leverage of the listed33 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.

Asif (2011) conducted a research to study the influence of financial leverages on dividends policy for 403 firms listed on the Karachi stock exchange between the period 2002 and 2003. Correlation and regression analysis was utilized to examine the data. The results showed that dividend policy is negatively affected by financial leverage. It also concluded that debt ratios and dividend yield are highly significant determinants of dividend policy. Research done by El Essa et al., (2012) on dividends strategy of 25 industrialized firms quoted on the Amman Stock Exchange established that debt ratio was the only factor that had a negative effect on dividend policy. This study was conducted in developed countries and therefore cannot be generalized in the Kenyan stock market.

Ahmed (2009) studied the components of Pakistan's dividend policy. On this study, 320–non financial firms listed on KSE were selected from 2001 - 2006. Data was collected from the KSE and panel regression performed on the data analysis. The study findings show that leverage and sales expansion did not contribute towards the determination of dividends payout. This study focused on non-financial firms while the current study will consider both the financial and non-financial firms listed at the NSE.

The link concerning dividends policy and capital structure was also studied by Eriotis and Vasiliou (2003). The investigation was performed using corporate dividend per share with the earning per share and debt ratio. The regression results returned a positive association between debt ratios and dividend policy for most listed firms in the Athens

stock exchange between the periods 1996 - 2001. The context of this study cannot be generalized in the Kenyan scenario and therefore the need to conduct the current study. Jensen, Zorn and Solberg (1992) did a study on the interdependence between the three determinants of policy choices, leverage and dividend levels, level of inside ownership, through application of 3SLS. A cross-sectional data of the firm was analyzed in two stages, 565 -firms in 1982 and 632 -firms in 1987. The results showed insider ownership as a major determinant of the debt and dividend of the firm. Growth and investment were negatively associated to dividend, while profitability and dividend had a positive association. This study findings cannot be universal in the local context as it was

#### 2.4.2 Local Studies

conducted in a developed country.

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 all the listed firms 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 manufacturing firms only while the current study will focus on all the listed firms from different segments.

Njuguna (2006) reported that firms consider four variables in determining dividend policy which include cash flow, profitability level, investment and financing opportunities available to sustain its operations. The relationship between firm size, nature of industry, the years that the firm has been running and dividend payout is insignificant. This study did not address the consequence of debt financing on dividend policy of firms.

Karanja (1987) did a study on dividend practices companies that are publicly quoted in Kenya and found out that there are many reasons for payment of dividends by firms among them being lack of investment opportunities which are likely to accrue sufficient returns. The cash position of a firm was the most vital consideration of timing dividends. This study did not address the expected relationship between debt financing and dividend payout ratio and therefore the need to carry out the current study.

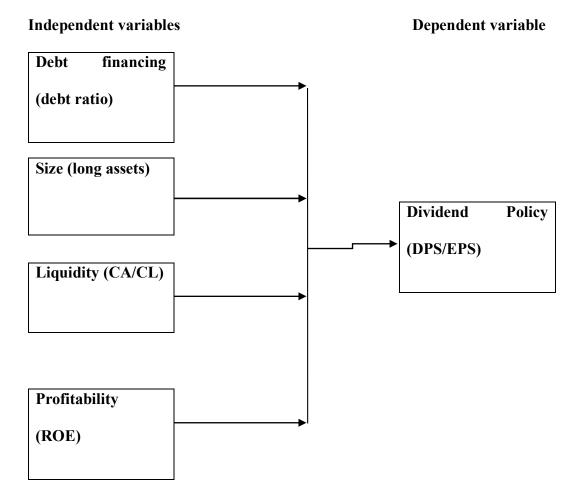
#### 2.5 Conceptual Framework

Bhaduris (2002) noted that dividends show that the firm is in good financial health and such a firm has enough information when penetrating into the equity market. Payment

of dividends increases the need for external financing while decreasing internal financing. A dividend policy serves to release resources in scenarios where the projects of the firm are not profitable conveys information about what the firm expects in future in relation to capital markets. A positive association exists between payout ratio and debt (Goyal& Frank, 2004). Studies carried out by various scholars suggest that a notable association is existent between dividend payout policy and capital structure. However, there is a conflict as to whether there is a direct or indirect relationship. Sierpinska (1999) suggests that dividend payout policy is directly connected to capital structure. This view is supported by Atipo (2013) who in his study concluded that firms with high gearing ratio pay low amounts of dividend. Bittok (2004) pointed out that the value of the firm is affected significantly by dividend payout ratio and the value of the firm because the stock's value is dependent on the dividends. This study seeks to determine this relationship between the variables.

Debt financing will be the independent variable and it will be measured by the debt ratio given as long term debt/ (shareholders equity + long -term debt), Liquidity given as current assets/ current liabilities, size of firm given by natural logarithm of total-assets and profitability given by ROE. Dividend policy will be the dependent variable that the study will seek to explain and it will be measured by dividend payout ratio given by dividend per share over earnings per share.

Figure 2.1: The Conceptual Model



#### 2.6 Summary of the Literature Review

Several theoretical frameworks have tried to explain the concept of debt financing. Three theories on debt financing have been discussed in this theoretical review. The theories are namely: Trade-off theory, pecking order theory and agency cost theory. Some of the key dividend policy determinants have also been deliberated in this section. Several empirical studies have been conducted both internationally and locally on debt financing and dividend policy. The findings of these studies have also been discussed in this chapter.

Most of the studies undertaken on the relationships between debt financing and dividend policy covered international markets with very few carried out locally. Moreover, findings from the studies reveal contradictions and inconsistency depending on the markets and analytical model adopted. Local studies done are not conclusive in their findings and it is this study that this present research anticipates to fill.

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

#### 3.1 Introduction

This chapter describes methods of study applied to objectively establish the effect of debt financing on dividend policy. It also shows the population of study, research design, a test of reliability and validity, data collection and analysis criteria.

#### 3.2 Research Design

Research design is defined as a blue print procedures assumed by a researcher for testing the dependent variables and independent variables relationship (Khan, 2008). Descriptive cross sectional design was adopted for the study. A descriptive study involves a description of all the elements of the population. It allows estimates of a part of a population that has these attributes. Identifying relationships among various variables is possible, to establish whether the variables are independent or dependent. Cross-sectional study methods are done once and they represent summary at a given timeframe (Cooper & Schindler, 2008).

#### 3.3 Population and Sampling

Population refers interest of observations in an entire collection like people or events as described by a researcher (Burns& Burns, 2008). The population of the study comprised of the 64 firms listed at NSE as at 31/12/2016. Since the population is small, a census of the 64 firms was undertaken for the study.

#### 3.4 Data Collection

Secondary data was solely extracted from the Annual financial reports of the listed firms that have been published for the period contained in year 2012 to year 2016 and captured in a data collection sheet. The reports were obtained from the Nairobi Securities Exchange, firm's publications and websites. The end result was information

detailing debt financing and dividend policy. The specific data collected was firms' revenue, net income, current liabilities, long term liabilities, current assets, equity, share prices and dividends distributed.

#### 3.5 Diagnostic Tests

Linearity show that two variables X and Y are related by a mathematical equation Y=bX where b is a constant number. The linearity test was obtained through the scatter plot testing or F-statistic in ANOVA. Normality is a test for the assumption that the residual of the response variable are normally distributed around the mean. This was determined by Shapiro-walk 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 (Cooper & Schindler, 2008).

Multicollinearity is said to occur when there is a nearly exact or exact linear relation 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 if there is a complete linear dependence between them it is zero and as it nears to zero then the Multicollinearity becomes further powerful (Burns & Burns, 2008).

#### 3.6 Data Analysis

The SPSS software version 21 was used in analysis of data. Quantitatively, the researcher presented the information using line graphs and tables. Various financial ratios were used in data analysis since financial ratios used to summarize large quantities of data and can be used in comparison of performance over time. The regression model below was used:

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

Where: Y = Dividend policy as measured by dividend payout ratio

 $\alpha$  =y intercept of the regression equation.

 $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ , =are the slope of the regression

 $X_1$  =Debt ratio given as total debt / (shareholders equity + total debt)

X<sub>2</sub> =Liquidity, as given by Current Assets divided by Current Liabilities

 $X_3$  =Size, as given by; Natural logarithm of total assets

 $X_4$  = Profitability, as given by, return on equity, ROE

 $\varepsilon$  =error term

#### 3.6.1 Tests of Significance

To test the statistical significance the F- test and the t – test were used at 95% confidence level. The F statistic was utilized to establish a statistical significance of regression equation while the t statistic was used to test statistical significance of study coefficients.

### CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATION

#### 4.1 Introduction

The chapter engrossed on the collected data analysis from the CMA to find out the debt financing effect on dividend payout ratio of firms listed at the Nairobi Securities Exchange. Using descriptive statistics, correlation analysis and regression analysis, the study outcomes were given out in table forms as shown in the following sections.

#### **4.2 Response Rate**

This study targeted all the 64 companies listed in Kenya as at 31<sup>st</sup> December 2016. Data was obtained from all 64 companies representing a response rate of 100%. From the respondents, the researcher was able to obtain secondary data on dividend payout, debt financing, firm size, liquidity and profitability.

#### 4.3 Diagnostic Tests

The study looked for data that would be able to meet the objectives of the study. The data collected from CMA was cross checked for errors to test the validity of the data sources. The research assumed a 95 percent confidence interval or 5 percent significance level (both leading to identical conclusions) for the data used. These values helped to verify the truth or the falsity of the data. Thus, the closer to 100 percent the confidence interval (and thus, the closer to 0 percent the significance level), the higher the accuracy of the data used and analyzed is assumed to be.

The researcher carried out diagnostic tests on the collected data. 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 results are as shown in Table

4.1.

**Table 4.1: Normality Test** 

Dividend Payout	Kolmogorov-Smirnov <sup>a</sup>		Shapiro-Wilk			
Ratio	Statistic	Df	Sig.	Statistic	Df	Sig.
Debt financing	.149	320	.300	.857	320	.853
Liquidity	.156	320	.300	.906	320	.822
Firm Size	.172	320	.300	.869	320	.723
Profitability	.165	320	.300	.880	320	.784
a. Lilliefors Significance Correction						

**Source: Research Findings (2017)** 

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

## **4.4 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 4.2 below shows the descriptive statistics for the study applied variables. An analysis of all the variables was acquired using SPSS software for the period of five years (2012 to 2016). Dividend payout ratio which was the dependent variable in this study had a mean of .3016667and a standard deviation of .59245300. Debt financing had a mean of .61with a standard deviation of .489. Size resulted to a mean of 6.94with a standard

deviation of .883. Liquidity recorded a mean of 1.81with a standard deviation of 1.812. Profitability had a mean of .07and standard deviation of .431.

**Table 4.2: Descriptive Statistics** 

	N	Minimum	Maximum	Mean	Std.
					Deviation
Dividend Payout	300	.00000	4.00000	.3016667	.59245300
Ratio	300	.00000	4.00000	.3010007	.39243300
Debt Financing	300	0	1	.61	.489
Liquidity	300	0	10	1.81	1.812
Size	300	5	9	6.94	.883
Profitability	300	0	4	.07	.431
Valid N (listwise)	300				

**Source: Research Findings (2017)** 

## 4.5 Correlation Analysis

Correlation analysis is key in establishing if there is a relationship between two variables which lies between (-) strong negative correlation and (+) perfect positive correlation. Pearson correlation was used in analyzing the association level between dividend payout ratio of listed companies in Kenya and the independent variables for this study (debt financing, liquidity, size and profitability).

The study found out that there was a small negative statistically significant correlation (r = -.181, p = .002) between debt financing and dividend payout ratio. The research also found out a weak positive and significant correlation between size of firm and dividend payout ratio of listed companies as evidenced by (r = .172, p = .003). The

other two independent variables (liquidity and profitability were found to have insignificant association with dividend payout ratio of listed firms at the NSE. Although the independent variables had an association to each other, the association was not strong to cause Multicollinearity as all the r values were less than 0.70. This implies that there was no Multicollinearity among the independent variables and therefore they can be used as determinants of financial performance of listed companies in regression analysis.

**Table 4.3: Correlation Analysis** 

		Correlation	15			
		Dividend	Debt	Liquidity	Size	Profitability
		Payout Ratio	Financing			
	Pearson	1	181**	.005	.172**	083
Dividend Payout Ratio	Correlation					
	Sig. (2-tailed)		.002	.927	.003	.152
	N	300	300	9	300	300
5.4.5	Pearson Correlation	181**	1	549**	031	.130*
Debt Financing	Sig. (2-tailed)	.002		.000	.591	.024
	N	300	300	300	300	300
	Pearson Correlation	.005	549**	1	139 <sup>*</sup>	060
Liquidity	Sig. (2-tailed)	.927	.000		.016	.300
	N	300	300	300	.005 .172** .927 .003 300 300549**031 .000 .591 300 300 1139*	300
Ci-o	Pearson Correlation	.172**	031	139 <sup>*</sup>	1	200**
Size	Sig. (2-tailed)	.003	.591	.016		.000
	N	300	300	300	300	300
Profitability	Pearson Correlation	083	.130*	060	200**	1
	Sig. (2-tailed)	.152	.024	.300	.000	
	N	300	300	300	300	300
** Correlation is s	ignificant at the 0.01	level (2-tailed)				

Source: Research Findings (2017).

## 4.6 Regression Analysis

Dividend payout ratio of listed companies in Kenya was regressed against four predictor variables; debt financing, liquidity, firm size and profitability. The regression analysis was embarked on at 5% significance level. The study obtained the model summary statistics as shown in table 4.4 below.

**Table 4.4: Model Summary** 

Model	R	R Square	Adjusted R	Std. Error of	Durbin-
			Square	the Estimate	Watson
1	.262ª	.068	.056	.57567115	1.552

a. Predictors: (Constant), Profitability, Liquidity, Size, Debt Financing

b. Dependent Variable: Dividend Payout Ratio

# Source: Research Findings (2017).

R squared, being the coefficient of determination indicates the deviations in the variable that is responsive as a result of changes in the predictor variables. From the outcome in table 4.4 above, the value of R square was 0.068, a discovery that 6.8 percent deviations in dividend payout ratio of registered companies is caused by changes in debt financing, liquidity, firm size and profitability of the firms. Other variables not included in the model justify for 93.2 percent of the variations in dividend payout of listed companies. Also, the outcomes shown that there was a weak relationship existing among the selected independent variables and the dividend payout as shown by the correlation coefficient (R) equal to 0.262. A durbin-watson statistic of 1.552 indicated that the variable residuals were not serially correlated since the value was more than 1.5.

**Table 4.5: Analysis of Variance** 

Mo	del	Sum of	df	Mean	F	Sig.
		Squares		Square		
	Regression	7.187	4	1.797	5.422	.000 <sup>b</sup>
1	Residual	97.762	295	.331		
	Total	104.949	299			

a. Dependent Variable: Dividend Payout Ratio

b. Predictors: (Constant), Profitability, Liquidity, Size, Debt Financing

# **Source: Research findings (2017)**

The significance value is 0.000 which is less than p=0.05. This implies that the model was significant statistically in foreseeing how debt financing, liquidity, firm size and profitability affects dividend payout ratio of listed companies in Kenya.

The researcher used t-test to determine the significance of each individual variable used in this study as a predictor of dividend pay-out ratio of listed companies. The p-value under sig. column was used as an indicator of the relationship significance between the variables that are dependent and the variables which are independent. At 95% confidence level, a p-value of less than 0.05 was interpreted as a statistical significance measure. As such, a p-value above 0.05 indicates relationship between the dependent and the independent variables is statistically insignificant. The results are as shown in table 4.6

**Table 4.6: Model Coefficients** 

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		В	Std. Error	Beta		
	(Constant)	141	.299		471	.638
1	Debt	278	.083	229	-3.364	.001
	Financing	.270	.003	.22)	3.301	.001
1	Liquidity	033	.022	102	-1.491	.137
	Size	.097	.039	.145	2.481	.014
	Profitability	042	.080	030	525	.600

a. Dependent Variable: Dividend Payout Ratio

## **Source: Research Findings (2017)**

From the above results, it is evident that debt financing and firm size produced statistically significant values for this study (high t-values (-3.364 and 2.481), p < 0.05). Liquidity and profitability were found to be insignificant determiners of dividend payout ratio as evidenced by low t-values and p-values higher than 0.05.

The following regression equation was estimated:

$$Y = -0.141 - 0.278X_1 - 0.033X_2 + 0.097X_3 - 0.042X_4$$

Where,

Y = Dividend payout ratio

 $X_1$ = Debt financing

 $X_2 = Liquidity$ 

 $X_3 = Firm size$ 

 $X_4 = Profitability$ 

On the estimated regression model above, the constant = -0.141 shows that if selected dependent variables (debt financing, liquidity, firm size and profitability) were rated zero, dividend payout ratio of listed companies would be -0.141. An increase in debt financing by one unit would cause a decline in dividend payout ratio of listed companies by -0.278 while an increase in firm size by a unit would results to arise in dividend payout ratio of listed companies by 0.097.

## 4.7 Discussion of Research Findings

The research pursued in finding out the effect of debt financing on dividend payout ratio of listed companies in Kenya. Debt financing as measured by debt ratio, liquidity as measured by current ratio, size of firm as measured by natural logarithm of total assets, and profitability as measured by dividend payout ratio were the independent variables while dividend payout ratio as measured by dividend per share over earnings per share was the dependent variable. The effect of each of the independent variable on the dependent variable was analyzed in terms of strength and direction.

The Pearson correlation coefficients between the variables revealed that a weak negative and statistically significant correlation exists between debt financing and dividend payout ratio of listed companies in Kenya. The association between liquidity and dividend payout ratio was found to be weak, insignificant and negative. The study also showed existence of a weak statistically significant positive relationship between size of firm and dividend payout ratio whereas profitability was established to have a weak negative relationship with dividend payout ratio that is insignificant.

The model summary revealed that the independent variables: debt financing, liquidity, firm size and profitability explains 6.8% of changes in the dependent variable as

indicated by the value of R<sup>2</sup> which implies that the are other factors not included in this model that account for 93.2% of changes in dividend payout ratio of listed companies. The model is fit at 95% level of confidence since the p-value is less than 0.05. This endorses that the multiple regression model overall is significant statistically, in that it is appropriate forecast model for enlightening how the independent variables selected impact dividend payout ratio of listed companies in Kenya.

The findings of this research are in resemblance with a study done by Atipo (2013) who studied the association between financial leverage and dividend policy of 57 firms registered 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.

# CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter summarizes findings of the previous chapter, conclusion, limitations encountered during the research. This chapter also elucidates the policy recommendations that policy makers can implement to achieve the expected dividend payout ratio of listed firms in Kenya. 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 companies listed in Kenya. The independent variables for the study were debt financing, liquidity, firm size and profitability. The study adopted a descriptive cross-sectional research design. Secondary data was obtained from the CMA and was analyzed using SPSS software version 21. The study used annual data for 60 listed companies in Kenya covering a five years period from January 2012 to December 2016.

From the results of correlation analysis, a weak negative and statistically substantial correlation exists between debt financing and dividend payout ratio of listed companies in Kenya. The link between liquidity and dividend payout ratio was found to be weak, insignificant and negative. The study also showed existence of a weak positive and statistically significant relationship between size of firm and dividend payout ratio while profitability was found to have a weak and insignificant negative correlation with dividend payout ratio.

The co-efficient of determination R-square value was 0.068 implying that the predictor variables selected for this study explains 6.8% of changes in the dependent variable. This means that there are other factors not included in this model that account for 93.2%

of changes in dividend payout ratio of listed companies. The model is fit at 95% level of confidence since the p-value of 0.000 is less than 0.05. This affirms that the multiple regression model overall is significant statistically, in that it is a proper forecast model for clarifying how the independent variables selected impacts dividend payout ratio of listed companies in Kenya..

The regression results show that when all the independent variables selected for the study have zero value, dividend payout ratio of listed companies would be -0.141. A unit rise in debt financing would lead to a decline in dividend payout ratio of listed companies by -0.278 while a unit growth in firm size would lead to a rise in dividend payout ratio of listed companies by 0.097.

#### 5.3 Conclusion

Through the study findings, the research concludes that dividend payout ratio of listed companies in Kenya is significantly affected by debt financing and size of the companies. The study found that debt financing had a negative and significant effect on dividend payout ratio of listed companies. The research therefore concludes that debt financing by listed firms leads to a decrease in dividend payout ratio. The study found that size of firm had a positively significant effect on dividend payout ratio and therefore it is concluded that higher levels of firm assets leads to an increase in dividend payout ratio. Liquidity and profitability were observed having a negatively statistically insignificant effect on dividend payout ratio of listed companies in Kenya and therefore this study concludes that liquidity and profitability do not significantly influence dividend payout ratio of companies listed in Kenya.

The study concludes that independent variables selected for this study debt financing, liquidity, firm size and profitability influence to a large extent dividend payout ratio of

listed companies in Kenya. It is therefore sufficient to conclude that these variables significantly influence dividend payout ratio as shown by the p value in ANOVA summary. The fact that the four independent variables explain 6.8% of changes in dividend payout ratio imply that the variables not included in the model explain 93.2% of changes in dividend payout ratio.

This finding concurs with Atipo (2013) who studied the association in dividend policy and financial leverage of 57listedfirms 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.

#### **5.4 Recommendations**

The study established that there was a negative influence of debt financing on dividend payout ratio of firms listed in Kenya. The study recommends that when firms are setting their capital structure they should strike a balance between the tax savings benefit of debt and bankruptcy costs associated with borrowing. High levels of debt has been found to reduce dividend payout of listed firms from the findings of this study and so firm managers should maintain debt in levels that do not impact negatively on dividend payout of listed firms to ensure the goal of maximizing shareholders' wealth is attained.

The study found out that a relationship that is positive exists between dividend payout ratio of listed companies and firm size. This study recommends that listed firms' management and directors should aim at increasing their asset base by coming up with

measures and policies aimed at enlarging the firms' assets as this will eventually have an impact that is direct on dividend payout ratio of listed companies. From findings of this study, big firms in terms of asset base are expected to perform better than small firms and therefore firms should strive to grow their asset base.

Listed companies should develop dividend policies to guide them in establishing and guiding them in surplus distributions. This will guide them on when to pay dividends, how to pay dividends and when to retain surpluses. It is also recommended that an investment policy should be developed and implemented. This will ensure that the management is not left to decide on how to use the little surplus left but would rather be guided by the investment policy.

#### 5.5 Limitations of the Study

The research scope was for five years 2012-2016. 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 2016. A longer study period is more reliable as it will take into account major happenings not accounted for in this study.

One of this study limitations is the quality of the data. It is difficult to conclude from this research whether the findings present the true facts about the situation. The data that has been used is only assumed to be accurate. The measures used may keep on varying from one year to another subject to prevailing condition. The research used secondary data, which was in the public domain had already been obtained, unlike the first-hand information associated with primary data. The study also considered selected determinants and not all the factors affecting dividend payout ratio of listed firms 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 concentrated on debt financing and dividend payout ratio of companies listed in Kenya and relied on secondary data. A research study where collection of data depends on primary data i.e. questionnaires that are in depth and interviews covering all the 64 listed companies in Kenya is recommended so as to compliment this research.

The study was not exhaustive of the independent variables affecting dividend payout ratio of companies listed in Kenya and it recommends that further studies be conducted to incorporate other variables like management efficiency, growth opportunities, corporate governance, industry practices, age of the firm, political stability and other macro-economic variables. Establishing the effect of each variable on dividend payout ratio of listed companies 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 firms in Kenya. The recommendations of this study are that further studies be conducted on other non-listed 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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