

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

**BY**

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## **DECLARATION**

**This research project is my original work and has not been presented to any other institution for examination.**

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

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To all may the Almighty God bless you in abundance.

## **DEDICATION**

I dedicate this Project to my lovely wife Shirley, my children David and Daniel and niece Kimberly for their encouragement, support and patience during the entire period it took to pursue my studies and complete this project.

Also I dedicate the project to my departed parents for their strict upbringing and great sacrifice made to educate me and open many opportunities, without whom I would not have made it in life. My relatives and friends for guidance and contribution in many ways to the end of the project.

## **ABSTRACT**

Firms engage in three critical decisions namely, financing, investment and dividend. Financing decisions entails how firms source for funds through debt and equity financing while investment decisions entail how the sourced funds are invested into profitable projects for expansions and growth. Dividend decisions entail how generated profits are distributed among the shareholders. The objective of the study was to establish the effect of debt financing on dividend policy of firms listed at the Nairobi Securities Exchange between 2009 to 2013. The study employed longitudinal research design that used secondary quantitative data from financial statements of sampled firms listed at the NSE. The study considered a population of sixty three quoted firms at the NSE as at 31<sup>st</sup> December 2013. Purposive sampling design was used to select the sample size of non financial forty one firms listed at the NSE from 2009 to 2013. Analyzed data was presented in form of pie charts, graphs and tables. Descriptive and inferential statistics was applied to assess the relationship between dividend policy and debt financing of firms listed at the NSE. The study sought to find out whether there exists a relationship between debt financing and dividend policy for firms listed at the NSE between 2009 to 2013. The study findings concludes that a negative relationship does exist. The study supports previous research done by Brealey and Myers (2000) and Asif, et al. (2011) who concluded that there exists a negative association between financial leverage and dividend policies employed by firms. The study had the limitations of use of secondary data with high likelihood of impairment, time constraints and using few samples from selected listed firms. The study recommends further research on other factors that affect dividend policy of firms, non listed firms that are the majority and sector specific segments among others.

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## **LIST OF ABBREVIATIONS**

AIM	Alternative Investment Market Segment
CDS	Central Depository System
CMA	Capital Market Authorities
CO	Company
EPS	Earnings Per Share
FIM	Fixed Income Investment Segment
GEM	Growth Enterprise Market Segment
LTD	Limited
MIM	Main Investment Market Segment
MM	Modigliani and Miller
NSE	Nairobi Securities Exchange
SPSS	Statistical Package for Social Sciences

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Optimal capital structure is a critical decision for any organization since it affects decisions on maximization of shareholders' wealth and organization's ability to operate in competitive environment. Firms continue to face interesting challenges that arises from dynamic changes in business environment and the dilemma in establishing optimal capital structure that assist to estimate the profitability of the company by employing the best strategy to enhance firm growth using different forms of finances.

Capital structure therefore comprises the proposition of debt - equity mix of the firms. According to pecking order theory, firms prefer retained earnings to debt to external equity since debt increases liquidation risk of a firm and equity lead to dilution of shareholding. The use of debt in capital structure increases firm's value and obligation unlike equity which is cheap thus used to finance projects. MM (1958) commended that by introducing corporate taxes, a levered firm commands a higher value as compared to similar unlevered firms due to the interest on debt as tax is deductible expense while dividends are not.

Investors acquire shareholding in firms due to trust and they have faith that the company's financial statements have been prepared using high quality accounting standards designed to accurately reflect the company's financial condition. Moreover, relevant socio - political and economic fundamentals prevailing in the country also affect their shareholding decision. Besides, investors need assurance that effective corporate governance structures are in place to sustain superior performance and wealth creation in line with owners' preferences.

Ali and Chowdhury (2010) noted that firm's main objectives are to maximize the value of the firm and wealth of its stakeholders. Also, Uddin and Chowdhury (2005) documented that firms are faced with three critical decisions that include investment, financing and dividend for its success and gain competitive advantage in the market. Investment decisions determine the future gain and potential dividend while dividend policy determines the equity capital proportion within which the capital structure is established and the associated cost of capital. Fong et al. (2007) published that after establishing the optimal capital structure, firms decide on optimal capital mix to enhance distribution of dividend to shareholders, retention amount for investment, expansion and growth which eventually have an overall impact on firm's liquidity conditions, future investment, stability of profits and stockholders expectations hence influence dividend policy of the firm.

Dividend is used as a signal to reflect firm's prospects and firms are always indifferent on amount to pay for dividend and the amount to be retained for investments to create wealth for institutional investors. Shareholders incur monitoring and agency costs with an aim to monitor the management's activities and to ensure that agents operate rationally in the interest of firms' stakeholders. Dividend policy is one of the most debated issues in developed economies and emerging markets and to date there is no universal position on optimal dividend policy adopted by firms. To a great extent, this has been compromised by varying country different tax regimes, market regulations and prevailing economic markets conditions.

Linter (1956) commented that dividend payment depends on the firm's current earnings and past periods. The findings indicated that changes in earnings are the most determinant of

firm's dividend policy and firms tend to make partial or periodical adjustments towards target payout ratios rather than drastic changes in dividend payout.

This study is to identify the effects of debt financing on dividend policy for firms listed at the Nairobi Securities Exchange (NSE). The NSE presently has 63 listed firms in 4 segments and 11 sectors. It is a buyers market which presents both foreign and local investors with bargain opportunities and an ideal frontier market. Listed firms use the exchange for debt financing using a number of debt instruments such as bonds, commercial paper and issuance of equities either through private placement or right issues. Members of the NSE are by law required to have a dividend policy and publish its financial statements (NSE Handbook, 2012).

### **1.1.1 Debt Financing**

Debt financing is the optimal level of external borrowing by a firm to finance its short and long term financial deficit. Majority of Business firms borrow at some point to buy assets, undertake major projects that are capital intensive for expansion through research and development (Kurt, 2013).

The relative proportions of debt, equity and other securities that a firm has constitute its capital structure (Berk and DeMarzo, 2007). A firm can finance its investments by debt, equity or a combination of both. The use of debt along with equity in the capital structure is described as financial leverage or gearing (Dare and Sola, 2010).

According to Kraus and Litzenberger (1973), use of debt has a benefit of tax saving that accrue to firms in form of interest which is tax deductible while equity does not attract any tax benefit. Debt is likely to produce efficiency in firms by forcing management to run

operations optimally (Jensen, 1984). Monitoring by lenders of loanable funds to firms is another benefit of debt (Jensen and Meckling, 1976). Debt prevents management from self serving behavior through imprudent investments by bonding them not to over invest (Servaes and Tufano, 2006). Firms with debt may be prevented from making good investments that add value due to the debt overcrowding argument by Myers (1997). Agency conflicts between managers and investors or among different group of investors are caused by debt (Binsbergen et al., 2007). Cost of debts cause financial distress and debt overhang to firms (Myers, 1977).

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 degree to which assets of the firms are financed by debts and owners equity, Debt to 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 schilling 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 measures the ability of a firm to meet cost of debt when they fall due.

Firms use debt because it offers them potential to increase the financial resources available to a firm for growth and expansion. It assumes that management can earn more on borrowed funds than it pays in interest expense and fees on these funds (Watkins, 2002).

### **1.1.2 Dividend Policy**

Dividend policy is the regulations and guidelines that a firm uses to decide dividends payments to shareholders and firms distribute earnings for investment purposes while the remainder paid out as dividends depending on the policies in place (Nissim and Ziv, 2002).

Firms design dividend policies that enable them achieve their diverse goals. The main policies include residual, stable, constant payout and low regular plus extra. Residual policy is one which the dividend payment is set equal to the actual earnings available less the amount of retained earnings held. Constant payout is a policy of payment of a certain constant percentage of earnings to the shareholders in each dividend period. Stable or predictable policy involves payment of a specific dividend amount per share increasing the dividends at a constant rate. Low regular plus extra is a policy which involves payment of low regular dividends plus end year extras in periods when earnings are higher (Pandey, 2005). Zero dividends are another policy where firms decide not to pay dividends, especially for newly formed firms that require capital to execute their projects.

Ross et al. (2002) noted that dividend policy provide information to stakeholders on performance of the firm and is therefore considered to be among the major decisions encountered by managers of firms. Omran and Pointon (2004) showed that dividend policy has implications on share prices and return to shareholders and investors. It affects financing of firm's growth through retention and gearing levels. A firms dividend policy can reduce agency problems between managers and shareholders where managers use excess cashflows to pursue selfish interests (Dhanani, 2005).Dividends further force firms to source for external funds for new investments which in turn increases the level of external monitoring

(Jiraporn et al., 2011). A firm's dividend policy can influence its capital structure or investment decisions and in turn enhance the firm's value to shareholders (Baker et al., 2001).

Dividends come in different forms, the common being cash dividend which refers to cash paid out of earnings. Cash dividends may be regular, extras, special and liquidating dividends. Stock dividends are another type of dividends paid out in shares of stock instead of cash increasing the shares owned by each shareholder. Cash dividends are expressed in terms of dividends per share, which are the total earnings declared for distribution over the number of shares outstanding. It is also expressed as a percentage of the market price or dividend yield or a percentage of earnings per share called dividend payout. Stock dividends on the other hand are expressed as a percentage. For example a 20% stock dividend implies that a shareholder receives one new share for every five held (Ross et al., 2011). A study of listed companies in Kenya revealed that cash dividends were the most commonly used form of dividend. Majority of listed firms did not employ other forms of dividend payout but prefer not to pay or lower dividends when there was no cash (Murekefu and Ouma, 2012).

A firm's dividend policy can take into account different circumstances and interests of its shareholders which in turn enhances the firm's value to its shareholders. Dividends policy can be viewed as a result of the investment and financing decisions since the firm needs to decide how to distribute wealth generated from these strategies (Dhanani, 2005).

### **1.1.3 Effect of Debt Financing on Dividend Policy**

The capital structure of a firm is the specific mix of debt and equity the firm uses to finance its operations (Abor, 2005). A firm can issue a large amount of debt or equity, hence it is important for a firm to have an appropriate mix of debt and equity that maximizes its market

value. Improvement of financial performance is achieved through utilization of different levels of debt and equity mix by firms (Gleason et al., 2000).

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.

Firms employ different dividend policies for different capital structure through efficient resource mobilization to boost productivity and performance. Harford et al. (2008) noted that during economic boom firms' record high liquidity and increase in cash reserves thus managers make economic decisions that rationally reflect strategic objectives of the firm and investment level. Amidu and Abor (2006) findings revealed that dividend policy affects firms' performance and profitability based on return on investment. The findings indicated that there exists direct association between return on investments, sales mix, growth in revenue, return on equity and dividend payout policy.

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 financial leverage as among factors that affect dividend policy of listed companies in Kenya.

Dividend policy and debt financing decisions work in the same direction and cannot be separated from one another. Shareholders require return on their investment for the risks faced thus dividend is relevant. On the other hand, capital structure is critical towards achievement of maximization of shareholders wealth thus firms establish optimal mix between equity and debt. Dividend is used as a signal to portray prospect of future performance and to control the action of investment by managers. From this standpoint, the research sort to an answer the research question, does a relationship between debt financing and dividend policy exists and to what extent? The research proposal will find out the effect of debt financing on dividend policy of firms listed at the Nairobi Securities Exchange between 2009 to 2013.

#### **1.1.4 Nairobi Securities Exchange**

According to the Nairobi Securities Exchange (NSE) website (2013), NSE was established in 1954 as a voluntary association of stock brokers and registered under the Society's Act with an aim to regulate the informal dealings in shares and stock which were being practiced during the colonial period. The arrangement confined to the European settler community continued until attainment of independence in 1963. The NSE was later incorporated under the Company's Act in 1991 as a company limited by guarantee without share capital. In July 2011, the Nairobi Stock Exchange changed its name to Nairobi Securities Exchange, to reflect its strategic plan of evolving into a full service securities exchange.

The NSE has undergone tremendous revolution from establishment period to date to reflect changes in the market. Some of the changes include enactment of NSE trading and settlement rules, foreign investor regulations, the central depository system (CDS), market automation, dematerialization of listed securities and demutualization from a mutual company to a company limited by shares. The exchange is in the process of self listing by offering a portion of its shares to the public. It is currently owned by 22 market participants made up of Stock brokers and Investment Banks.

The Exchange provides a platform for trading in equities and debt securities and is currently made up of 63 listed firms as at 31<sup>st</sup> December 2013. The firms are grouped in eleven sectors comprising of agriculture, banking, insurance, investment, commercial and services, construction and allied, manufacturing and allied, telecommunication and technology, energy and petroleum, automobile and accessories and lastly growth enterprise market. According to CMA (2013), the sectors are categorized into four market segments namely the Main Investment Market Segment (MIMS), Alternative Investment Market Segment (AIMS), Fixed Income Investment Segment (FIMS) and Growth Enterprise Market Segment (GEMS) which was launched in 2013 (CMA, 2013).

Trading at the NSE is done through an electronic trading system(ETS) complemented by a wide area network(WAN) platform that allows trading to be conducted from Brokers offices. Trading is still carried out on the exchange floor from 9.30 am to 3.00 pm on week days. Performance of trading is mainly measured by two indices, the NSE 20 share index and NSE all share index.

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 percentum of the company's net worth, a gearing ratio of 4:1 (NSE manual, 2013). The 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. The NSE works in close cooperation with the regional stock exchanges which has led to cross listing of equities across the exchanges (NSE, 2013).

## **1.2 Research Problem**

Dividend policies have been researched widely with no universally accepted explanation for firms dividend behavior observed. Black (1976) described dividend policy as a puzzle, with pieces that don't fit. Dividend policy has been described by Brealey and Myers (2005) as one of the top ten most difficult unsolved problems. Dividend payment patterns by firms are influenced differently by economic conditions, culture, beliefs, perception, regulation and other factors as advanced by Al-Malkawi (2007) and attempts to explain why no uniform dividend policy applies to firms.

Jensen (1986) advanced the agency theory which states that dividend payments reduce the amount of funds available which reduces monitoring costs for the shareholders. For prudent investment projects to be undertaken, firms are forced to source externally for funds increasing financing and debt levels. It therefore follows from the theory that dividend policy and debt financing are intertwined and justify further research to establish relationships and optimal levels. This will minimize financial distress on one hand and agitation by shareholders for dividend payments on the other.

A firm's financial investment and payment of dividends are key management decisions which must be performed accurately and planned as they influence stock value directly (Asif, 2011). Financial leverage influences the policy of distributing dividends because they are effective in changing firms' dividends especially with regard to lenders' debt covenants and stock markets' debt level regulations.

A study by Al-Shubri (2011) on firms listed in the Amman stock exchange concluded that the likelihood of paying dividends increases as debt ratio among other factors reduces. Allam and Hossain (2012) established that dividend rate is positively influenced by leverage on sampled firms listed at the London stock exchange. A research done on components of dividend policy by Ahmed and Javid (2009) on non-financial firms listed on the Karachi Stock exchange established that leverage did not contribute to determination of dividends payout. Amarjit et al., (2010) examined the determinants of dividend payout ratios of American service and manufacturing firms and found no significant relationship between the debt ratio and standard dividend payouts.

Past studies relating to debt financing and dividend policy have arrived at contradicting and inconsistent results. Theoretical and empirical studies have generated diverse outcomes on the relationship between dividend payout policy and debt financing. Further, the studies concentrated mostly on international markets with different regulations and business climate.

Minimal research work has been undertaken 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 level and type of mixed results on the link between debt financing and dividend policy in addition to few studies undertaken locally provides a compelling case for this current study. The study seeks to fill the void by answering the research question, does a relationship exists between debt financing and dividend policy by firms listed at the Nairobi Securities Exchange?

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

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

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

Management; the study will aid them in adoption of relevant dividend policies and optimal capital structures with an aim to maximize shareholders wealth, increase firm value and reduce bankruptcy level of a firm. Firms will adopt policies that maximize returns out of their investment.

Academicians; the study will create a base for further research. Dividend policy and debt financing is elusive thus the study will create an avenue for further study. They will be concerned to know the dividend policy pattern adopted by different firms in different industries.

Shareholders; the study will help them to identify inherent details and gain knowledge of securities and investments that will generate higher returns thus strike a balance among their portfolio investment in different firms.

Regulators and Government; the study will enable the regulatory institutions to review and transform the regulatory instruments that will ensure firms comply with laws and engage in business best practices regarding operations, settlement of obligations, tax, financial policies and dividend policies.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

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

#### **2.2 Dividend Theories**

Dividend decisions are complex and challenging since it is affected by investment and financing decisions adopted by firms and has an effect on share prices and wealth maximization level of shareholders. Despite intensive studies done, there is no agreed optimal dividend policy that can be universally accepted as ideal and no clear basis can be reliably be used in determining the dividend distribution to shareholders. Theories on dividend policies include:

##### **2.2.1 Dividend Irrelevance Theory**

MM (1961) showed that under perfect market situation, dividend policy of a firm is irrelevant as it does not affect the value of the firm. They documented that the value of the firm depends on the firm's earnings thus dividend is of no significance in determining the value of the firm. When a firm pays dividend, shareholders get it inform of thus the firm's assets reduces leading to transfer of wealth from shareholders one pocket to another.

In perfect competitive markets, investors behave rationally as information is freely shared, there is no transaction and floatation costs, no tax differences to capital gains and dividend

and no risk of uncertainty as investors are able to forecast future prices and dividend with certainty. From this theory, firms choose to capitalize dividend through bonus shares and rights issue leading to change of perception of future prospects of the firm. In practice, the theory doesn't exist.

### **2.2.2 The Signaling Theory**

Dividend payment is used as a yardstick to portray future prospects of a firm thus managers release information to help investors to make sound investment decisions. According to Brealey and Myers (2000) theory, managers hold more information than investors, investors are many and diverse in nature and do not have time to run the business as they lack the technical know how to manage business. Due to this, they appoint agents with fiduciary duties to oversee stockholders' interest. Moreover, Ross (1995) studied the relationship between change in dividend policies and different reaction of group of investors and concluded that firms that pay higher dividends have positive share prices while firms that pay low stock payout have significant decline in share prices. Through dividend payments, the financial leverage level of firms increase as they seek debt from the market to spur growth and investment in viable projects.

### **2.2.3 The Bird in the Hand Theory**

Gordon and Linter (1962) concluded that a bird in hand is worth two in the bush and thus shareholders receiving cash dividend today is better off than future anticipated capital gain that is uncertain. Investors value current dividend more than future capital gains and dividend payment increases market value of the firm thus attracts investors. Typical investors would most certainly prefer to have dividend paid today and not tomorrow.



Uncertainty increases with futurity and investors prefer to avoid uncertainty thus are willing to pay higher prices for shares that pay greater current dividend. The bird in the hands theory is relevant to the study given that in practice, investors expect return on investments at minimal risk and invest in securities that promise to pay dividend in current period as compared to future capital gains. The demand for current dividend increases the firm's financial leverage.

#### **2.2.4 Clientele Effect of Dividend Theory**

Institutional investors' perceptions with regard to investment opportunities in firm securities vary relatively with change in dividend policy and firms use dividend to retain and attract prospective investors. Pettit (1977) established that in a market, investors react differently based on desire for dividend payment. Some investors especially the old generation have preference for cash dividend as a substitute to settle living expenses while the other young generation prefers to invest in investment opportunities to enhance growth of wealth and greater capital gain in future.

The relevance of the theory is based on the fact that firms pay low dividend level depending on preference of investors in order to sustain growth momentum and optimal leverage level. According to Richardson (1977), various stakeholders in the firm have varied perception for dividend. The retired people and low income earners have high preference for liquid cash dividend to meet living expenses whereas high end wealthy persons prefer to capitalize cash dividend because of tax benefit incentives. Given the shifting position of investors' perception, firms settle at optimal levels that accommodate both investors' position which the firm considers consistent and agreement with the clientele base.

## **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 dividend policy, the following factors are considered:

### **2.3.1 Leverage and Debt Covenants**

Debt covenants restrict firms from paying dividend since it allows a firm to retain sufficient funds for payment of debt obligations as they fall due. High leverage level leads to low dividend payout thus inverse association between debt financing and dividend payout. Brealey (1984) established that debt ratio is inversely related to the cost of financial distress which includes bankruptcy and agency costs of debt. High leverage level increases the liquidation risk and reduces the profitability level of a firm. This encourages firms to default thus debt providers sign debt covenants with the firm to protect their interest.

### **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 Profitability**

High profitability level enables firms to pay dividend with ease thus direct relationship between profitability and dividend payout levels. Dividend is paid out of profits recorded by

a firm thus the higher the profitability, the higher the dividend payout level. As per signaling theory, dividend payment is used as a signal to portray firm's current and future prospect. Sharma and Singh (2006) studied the stock prices of firms listed in India Stock Exchange and found out that revenue and value per share are affected by dividend payout level. Financial health of a firm increases the dividend ratio thus increase in market value per share and revenue level.

#### **2.3.4 Inherent Business and Financial Risk**

The presence of high business risk and inherent contingent liability of potential financial distress affects operations of a firm as occasioned by risk in portfolio investments. Chang and Rhee (2003) proved that investors are pessimistic about the future business environment because of uncertainty and constraint in future cash flows. Due to this, investors prefer current dividend as oppose to future capital gains.

#### **2.3.5 Liquidity Position of a Firm**

Liquidity level determines the ability of a firm to meet its contractual obligations 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 conflict of interest between the management of a firm and shareholders resulting from underinvestment and consumption of perks by managers.

#### **2.3.6 Size of the Firm**

Beabczuk (2004) concluded that large and more profitable firms with good investments opportunities pay more dividends. Large firms have high leverage level and have ability to pay dividend as opposed to growing firms. Further, firms with better credit rating have access

to external finances from the financial market. Also, Sawicki (2005) found out that performance of large corporations is mainly monitored through dividend payout.

## **2.4 Empirical Review**

The link between dividends policy and capital structure was 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 dividend policy and debt ratios for majority of firms listed on the Athens stock exchange between the periods 1996 to 2001.

Harford et al. (2008) argued that during economic boom, firms record high liquidity levels thus increase in cash reserves. Managers make economic decisions that rationally reflect strategic objectives of the firm and company investment. They further established that industry segment in which the firm operates affect performance, growth opportunities and leverage position of firms.

Ahmed and Javid (2009) analyzed the components of dividend policy in Pakistan. On this study, 320 non financial firms listed on the Karachi Stock exchange(KSE) were selected from the period 2001 to 2006. Data was collected from the KSE and panel regression performed on the analysis of data. The results of the research show that leverage and sales expansion don't contribute towards the determination of dividends payout.

Asif, et al. (2011) conducted a research to examine the effects of financial leverage on dividends policy for 403 companies registered on the Karachi stock exchange between the period 2002 and 2003. Regression and correlation analysis was used 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 dividends policy.

Emamalizadeh, et al. (2012) examined the relationship between dividend policy and financial leverage of 33 food companies listed at the Tehran Stock exchange during the period 2003 to 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 meaningful relationship on dividend per share and has only a positive relationship if the debt ratio is less than the dividend yield.

A Study by Ajanthan (2013) on Corporate governance of listed Hotels and Restaurants in Srilanka established that leverage measured by debt equity ratio have no significant effects on the dividends payouts of the firms. The study examined a sample of 17 companies listed on the Colombo Stock Exchange during the period 2008 to 2012 using descriptive statistics and multiple regression analysis.

In the Kenyan context, Njuguna (2006) argued that there are several issues that are considered when determining dividend policy and these include but not limited to leverage, profitability, risk, cash flow, investment opportunities, size of the firm and market growth prospects in the market. There is no close relationship between size of the firm, nature of industry, number of years that the firm has been in operations and dividend payout.

Murekefu and Ouma (2012) research revealed that dividend payout affects firm's performance and significant positive association exist between dividend policy and firms' performance thus dividend is relevant and affect share prices. They revealed that factors that affect dividend policy of a firm include profitability, pattern of past dividend, legal rules, financial leverage, investments opportunities, growth stage, size of the firms size and capital structure.

A study done by Atipo (2013) examined the relationship between dividend policy and financial leverage of 57 companies listed on the NSE during the period 2008 to 2012. Regression analysis and random model was adopted for the research design. The results of the study revealed that leverage had a significant negative impact on dividend payout, indicating less dividends for high debt firms. The study found that debt ratio and dividend yield to be the most influential variables affecting dividend payout policy.

Kivale (2013) analyzed the effects of financial leverage and revenue growth on dividend policy of firms listed at the NSE from 2008 to 2012. The study sampled 40 firms from a population of 60 and adopted multivariable regression analysis model. The findings of the study concluded that there exists a negative association between financial leverage, revenue growth and dividend payouts.

Waswa (2013) investigated factors that influence dividend 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 results showed a negative relationship between

dividend payout and leverage. The impact of the leverage is however not significant on the dividends payout.

## **2.6 Summary of Literature Review**

One of the challenging and complex issues in corporate finance is identifying the determinants of dividend policy. Black and Scholes (1974) and Allen and Michael (1995) described factors that determine dividend policy as a puzzle and argued that more research is required before conclusions are made on determinants of corporate dividend policy. Likewise, Brealey and Myers (2005) described dividend policy as one of the top ten difficult unsolved problems in financial economics.

The inconclusive debate on dividend policy remains a puzzle in corporate finance. Some scholars argue that dividend payment increase value of the firm while other criticises dividend payment as irrelevant in perfect market. Dividend and financing decisions affect leverage position and growth of a firm. Dividend payout is used as a sign to portray future prospect of a firm, increase the value of a firm and to monitor action of managers.

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 gap that the current study intends to fill.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

The chapter involves dimensions of the research, techniques, methods and tools to utilize in order to achieve the objective of the research. It explains the research design, target population of the study, sample design, data collection and analysis to be used in the study. The model used aims at achieving the research objectives and framework upon which data will be collected and analyzed. The study targets to establish the effect of debt financing on dividend policy of firms listed at the NSE.

#### **3.2 Research Design**

Orodho (2003) define a research design as the scheme, outline or plan that is used to generate answers to a research problem. Descriptive and inferential statistics was applied since it aimed to establish the relationship that exists between debt financing and dividend policy of the listed firms at the NSE.

The study was carried out using longitudinal research design employing secondary quantitative data from financial statements of sampled firms listed at NSE. The methodology involved pooling of observations on a cross section of units over a five year time period from 2009 to 2013. Dividends policy was measured by the dividend payout ratio and debt financing by the debt financing level. Correlation was used since it allows for different variables to be analysed hence determining the impacts of debt on dividend payouts. This increased the reliability and validity of the study findings and conclusions. The research design was therefore suitable for conducting the study.



### **3.3 Population of the Study**

Burns and Grove (2003) describe a population as all the elements that meet the criteria for inclusion in the study. The sampling frame for this study was all sixty three quoted firms at the NSE as at 31<sup>st</sup> December 2013 (Appendix I). A sampling frame is a list of population from which a sample was be drawn. It's a published list for identifying a population (Borg and Gall, 2007).

### **3.4 Sample Size**

Kombo and Tromp (2009) describe a sample as a collection of units chosen from the universe to represent it. A sample is a subset of population (Hyndman, 2009). Purposive sampling design was used to select the sample size of forty one firms that have continuously declared dividend and listed at the NSE from 2009 to 2013. Home Afrika Ltd and Umeme Ltd were quoted at the NSE in 2013, Longhorn Ltd in 2012 and Hutchings Biemer Ltd was suspended during the period of the study thus were not considered.

Further, all firms that operate under banking and insurance industries were not considered since their financial statements don't have standardized classification of assets and liabilities as compared to other firms in other industries.

### **3.5 Data Collection**

Secondary data was collected from annual reports and financial statements of sampled companies at the NSE. Secondary data are easy to use, reliable and descriptive in nature. Audited annual financial statements were obtained from NSE and individual companies. Group annual financial statements include statement of financial position, comprehensive

income and cashflow and consolidated financial statements were considered since they show global performance of companies.

To establish the relationship between debt financing and dividend policy of firms listed at the NSE, the study covered a period of five years ranging from 2009 to 2013 since Rafique (2012) established that a business cycle is between five to six years.

### **3.6 Data Analysis**

Data analysis is the process of bringing order, structure and meaning of the mass of data collected (Mugenda and Mugenda, 2003). The coded and cleaned data was applied to SPSS Version 17.0 to obtain coefficients of constants. SPSS Version 17.0 was used due to its ability and strength of wide scope of graphical and statistical data analysis. Strength of the model was tested using F – test, Durbin Watson statistics, R squared and adjusted R<sup>2</sup>.

R squared was used to explain the level of variance in dependent variable that is caused by independent variables while Durbin Watson statistics was used to test for auto correlation among the independent variables. Multiple regression analysis was used to assess the relationship between debt financing and dividend policy of firms and various independent variables that affect it.

Analyzed data was presented in form of pie charts, graphs and tables. Pie charts were used to display distribution proportion of derived variables. Tables were used to display and present obtained data from annual financial statement. As per the research questions, data was cleaned and analyzed. From the cleaned data, descriptive statistics was used in terms of

median, mean, mode, maximum and minimum. The variables specifications are included in table 3.1 below.

### 3.6.1 Test of Significance

Analysis of variance (ANOVA) was used to test and estimate the hypotheses about the population, variances and means. It involved use of P and F values to explain the random variables. To test the strength and robustness of the model, F test was used and t test to investigate existence of any relationship.

### 3.6.2 Model Specification

From the literature review done earlier, the results showed that there is a relationship between debt financing and dividend policy of firms. To establish the kind and strength of the relationship, multi – variable regression model was applied on data collected to derive conclusion about the relationship.

The association between debt financing and dividend policy of firms defined after the notations below. Multi regression model between debt financing and dividend policy of firms: Alam and Hossain (2012) model

$$DPR = \beta_0 + \beta_1 DFL + \beta_2 L + \beta_3 CFO + \beta_4 G + \beta_5 ROI + \beta_6 S + \varepsilon_t \dots \dots \dots (3.1)$$

Let:-

DPR = Dividend Payout Ratio

DFL =Debt Financing Level

L = Liquidity

CFO = Cash flow from Operations

G = Growth Level

ROI = Profitability

S = Size Level

$\beta_i$  = Regression Coefficient for Independent Variables

$\epsilon_t$  = Error Term

$\beta_0$  = Regression equation intercept

**Table 3.1 Specification of Variables**

<b>Criterion / Dependent Variable</b>	<b>Abbreviation</b>	<b>Equation</b>
Dividend Payout Ratio	DPR	$\frac{\text{Dividend}}{\text{Net Income after Tax} + \text{Depreciation}} \dots(3.2)$
<b>Predictor /Independent Variable</b>		<b>Equation</b>
Debt Financing Level	DFL	$\frac{\text{Total Debt}}{\text{Total Equity}} \dots\dots\dots(3.3)$
Liquidity	L	$\frac{\text{Current Assets}}{\text{Current Liabilities}} \dots\dots\dots(3.4)$
Cash flow from Operations	CFO	Log of Cash flow from Operating Activities.....(3.5)
Growth Level	G	$\frac{\text{Current Revenue} - \text{Previous Revenue}}{\text{Previous Revenue}} \dots\dots\dots(3.6)$
Profitability	ROI	$\frac{\text{Net Profit After Tax}}{\text{Total Assets}} \dots\dots\dots(3.7)$
Size	S	Log of Total Assets.....(3.8)
Earnings Per Share	EPS	$\frac{\text{Net Income After Tax}}{\text{Number of Shares Held}} \dots\dots\dots(3.9)$

## **CHAPTER FOUR**

### **DATA ANALYSIS, FINDINGS AND DISCUSSION**

#### **4.1 Introduction**

The Chapter covers detailed data analysis, findings and discussion to draw conclusions on the research. The objective of the study was to establish the effect of debt financing on dividend policy of firms listed at the NSE between 2009 to 2013. Data of interest was collected, cleaned and regressed using SPSS Version 17.0. Analyzed data was presented in the form of tables. The discussions in this chapter include general findings on determinants of dividend payout, the effect of debt financing on dividend policy of firms listed at the NSE and summary of the findings.

#### **4.2 General Findings**

This Section covers identified variables to get the feel of secondary data that determine dividend payouts of firms. Variables of interest were analyzed using descriptive statistics that included the mean, median, maximum, minimum and standard deviation with results shown in table 4.1

##### **4.2.1 Debt Financing Level**

The variable measures the extent to which firms finance operations through debt and is given by the ratios of debt to equity. The results give a mean level of 1.82, maximum of 3, minimum of -119 and high standard deviation of.....indicating wide dispersions in debt financing among the listed firms. It also reveals that most of the listed firms operations are largely financed through debt and not equity.

**Table 4.1: Descriptive statistics**

	Debt financing level(DFL)	liquidity (L)	Size(S)	Cash Flow from Operations (CFO)	Growth Level (G)	Profitability (ROI)	Earnings Per Share (EPS)
Mean	0.464	2.328	6.749	8.398	0.136	0.114	7.961
Median	0.498	1.527	6.773	8.548	0.120	0.090	2.419
Std. Deviation	1.005	2.427	0.767	1.568	0.153	0.106	15.676
Minimum	0.018	0.40	4.861	1.363	-0.202	-0.151	-7.417
Maximum	1.005	10.626	8.185	10.469	0.827	0.466	81.789

Source: Research findings (2009-2013).

#### 4.2.2 Liquidity

Liquidity measures the ability of firms to meet short term debt obligations when they fall due and is computed by the ratios of current assets over current liabilities. The mean result of 2.32 with a moderate standard deviation of 2.42 is an indicator of prudence in liquidity management by maintain current assets above current assets. Listed firms at the NSE observe the rule of thumb in terms of liquidity index of 2.00.

#### 4.2.3 Size

It is a measure of the total assets held by firms and taken as the natural logarithm of total assets . The maximum levels is 8.18, minimum of 4.86 and a low standard deviation of 0.76.This implies that sizes of listed firms do not vary significantly across and within the market segments

#### **4.2.4 Cash flows from Operations**

This variable measures the net cash receipts generated by normal firm operations and taken as the natural logarithm of cashflows from operations. The maximum is 10.46, minimum of 1.36 with a mean 8.39. This results is a strong indicator of positive cashflows sustained from day to day operations of the listed firms and confirms the strong liquidity position observed earlier.

#### **4.2.5 Growth Level**

Firms growth levels is measured by the changes in sales turnover. The results of this measure gives a mean of 0.13, with a maximum of 0.82 and low standard deviation of 0.153. This implies that firms at the NSE have on average experienced low growth levels during the period of study.

#### **4.2.6 Profitability**

This variable measures the firms profitability by the return on investments. The measure of performance gives a mean of 0.11 with standard deviation of 0.10. The results indicate that on average firms profitability was moderate at 11%. It also suggests that majority of the listed firms are profitable.. This is given more credence with maximum of 0.46 and minimum of -0.15.

#### **4.2.7 Earnings per Share**

This variable measures the earning strength per ordinary share held. The maximum of 81.78, minimum of -7.41, and a high standard deviation of 15.67 implies that majority of firms at the NSE do make profits but with wide disparities in shareholding structure affecting earnings return per share.

### 4.3 The Effect of Debt Financing on Dividend Policy

Inferential statistics was used to measure the strength and relationship of the variables and testing the hypothesis. This was performed using multivariate regression analysis and testing the variables for correlation by Multi-collinearity and Durbin Watson tests.

#### 4.3.1 Regression Analysis

Multiple regression analysis was performed with Dividend payout ratio (DPR) as the dependable variable while Debt financing level(DFL), Liquidity(L), Size(S), Growth level(GL), Profitability(P) and Earnings per share(EPS) were the predictor variables.

**Table 4.2: Model Summary**

R	R <sup>2</sup>	Adjust R <sup>2</sup>	Std. Error	Change Statistics					Durbin Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
.842 <sup>a</sup>	.743	.656	3.346	.743	9.961	7	28	.021	0.218
a. Predictors: (Constant), Earnings Per Share(EPS), Cash Flow From Operations(CFO), Growth Level (G), Debt financing level(DFL), liquidity(L), Profitability(ROI), Size (S)									
b. Dependent Variable: DPR									

Source: Research findings (2009-2013).

The table 4.2 of the Model summary provides R, R<sup>2</sup>, adjusted R<sup>2</sup>, and the standard error of the estimate which can be used to determine how well a regression model fits the data summary.

The results of the regression analysis showed that up to 65.60% of the observed variability of dividend payout ratio was affected by the Debt financing level, Liquidity, Size, Growth



level, Profitability and Earnings per share. An adjusted  $R^2$  of 65.60% from the model showed that the independent variables were strong predictors of the dependable variable. The remaining 34.50% are not explained, because the remaining part of the variance in the dividend payout ratio is related to other variables not depicted in the model. Multiple R at 0.842 indicates a strong and positive correlation of the model variables.

The analysis indicates that the independent variables are significant in determining dividend payouts of firms listed on the NSE. The F value is significant at 5 % level ( $F= 0.021$ ,  $p < 0.021$ ) showing the applicability of the overall model.

**Table 4.3: ANOVA<sup>a</sup>**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	780.604	7	111.515	9.961	.056 <sup>b</sup>
	Residual	313.455	28	11.195		
	Total	1094.059	35			
a. Dependent Variable: DPR						
b. Predictors: (Constant), Earnings Per Share, Cash Flow From Operations(CFO), Growth Level (G), Debt financing level(DFL), liquidity(L), Profitability(ROI), Market capitalization(S)						

Source: Research findings (2009-2013).

In the Anova table 4.4 above, the  $F$ -ratio tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly

predict the dividend payout ratio,  $F(7, 28) = 780.6, p > .05$  implying the regression model is a good fit of the data.

**Table 4.4: Regression Results**

Coefficients <sup>a</sup>												
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error				Beta	Lower Bound	Upper Bound	Zero-order	Partial	Partial	Tolerance
(Constant)	.211	1.761		.120	.905	-3.397	3.819					
Debt financing level(DFL)	-.294	.871	.042	.337	.738	-1.490	2.077	-.173	.064	.034	.647	1.546
liquidity(L)	.032	.321	-.415	-2.901	.007	-1.590	-.274	.165	-.481	-.293	.499	2.005
Market capitalization(S)	-.018	.027	.115	.649	.522	-.038	.073	-.095	.122	.066	.324	3.089
Cash Flow From Operations(CFO)	.173	.180	-.173	-.961	.345	-.541	.195	.009	-.179	-.097	.315	3.176
Growth Level (G)	-.339	4.081	-.266	-2.288	.030	-17.698	-.979	.041	-.397	-.231	.758	1.320
Profitability(ROI)	.651	11.986	.629	4.152	.000	25.213	74.318	.585	.617	.420	.446	2.244
Earnings Per Share	.228	.042	.626	5.408	.000	.142	.315	.710	.715	.547	.764	1.309

a. Dependent Variable: DPR

Source: Research findings (2009-2013).

From table 4.4 on the regression results using unstandardized coefficients, the regression equation was obtained as below:

$$\text{DPR} = 0.211 - 0.294(\text{DFL}) + 0.032(\text{L}) - 0.018(\text{S}) + 0.0173(\text{CFO}) - 0.339(\text{G}) + 0.651(\text{ROI}) + 0.228(\text{EPS}) + E$$

The regression equation and results obtained indicates a negative relationship between debt, financing level, and size and growth level variables while a positive relationship existed between liquidity, cash flows and earnings per share. The t statistic measured the effect of percentage change on independent variable and its overall impact on the dividend payout. At 5 % confidence, 1 % change in debt financing level would translate to a 0.337 change in dividend payout level in the opposite direction.

Hypothesis: Debt financing has significant effects on dividend policy.

Debt financing is represented by debt financing level while dividend payout ratio is the proxy for dividend policy. Pearson correlation was used to examine relationship between debt financing level and dividend payouts while regression test was used to examine the effect of debt financing level on dividend payout.

Hypothesis  $H_0$  and  $H_A$  are defined as follows:

$H_0$ : There is no significant effect of debt financing on dividend policy

$H_A$ : There is a significant effect on debt financing on dividend policy

From the Anova table 4.3, the F value is not significant at the 0.056 level. This implies that the hypothesis is not substantiated. That there is no significant difference between debt financing and dividend policy. The Null hypothesis is upheld.

#### **4.3.2 Correlations Tests**

Multi-collinearity tests among the independent variables are as indicated by the collinearity statistics at table 4.50 above. Collinearity is likely to exist when there is a correlation coefficient ( $r$ ) above 0.8 between the independent variables (Fox, 1991). The coefficients of the variables in the table are all below this mark. Collinearity can also exist if the VIF value of a variable is above 5. From the table 4.50 all the VIF values are below this number. The independent variables as observed from the table were not affected by Multi-collinearity problems, indicating positive association with the dependable variable.

Durbin Watson is a test statistic used to detect presence of autocorrelation. It tests if the residuals in regression are independent. There are no autocorrelation problems for Durbin Watson factors between 1 to 3. From table 4.30 of the model summary, the Durbin Watson factor is 0.218 indicating a positive presence of auto correlation on the regression model.

#### **4.3 Summary of the Findings**

From the estimated model, there exists negative association between dividend payout level and debt financing of firms listed at the NSE between 2009 to 2013 which is not significant. Dividend is the return that shareholders are entitled from their investment in the firm and thus it attract shareholders towards a firm. Firms institute various dividend policies that determine the level of dividends due to shareholders. From the study, dividend is relevant and there exist negative relationship with debt financing, size and growth levels while direct positive

association exists between dividend payout and cash flows from operations level, liquidity and profitability. Firms pay dividend as a signal of future prospects and to monitor managers' actions. On debt financing, firms quoted at the NSE institute the pecking order theory which entails utilization of retained earnings, external debt and lastly equity. Utilization of debt comes with interest cost thus reduction of profitability level of a firm which eventually leads to reduction in dividend pay out level.

On the other hand, there exists positive relationship between dividend pay out, cash flow from operations, liquidity level and profitability of firms. On cash flows from operations, firms invest in projects that generate positive net present values that tend to maximize shareholders' wealth thus positive relationship between dividend pay out and cash flow from operations. On liquidity, a firm is able to settle its short term obligations as they fall due thus firms with strong liquidity are declare dividend to its shareholders within the shortest time. Profitability indicates the rate of return from investment and dividend is declared out of profits recorded thus direct association between the two.

Negative association exists between size, growth and dividend payout level. As a firm expands, it faces liquidity problems since cash is diverted to profitable projects. Growth comes with associated costs thus reduction in profitability level at initial stages before stabilization of revenue of a firm and this growth must be financed through external sources. From the study, it is clear that firms utilize external debt as a source of financing and to boost growth. Firms institute proper credit policy and working capital management thus trade – off between liquidity and profitability.

Majority of firms listed at the NSE did not exhibit any stable and predictable dividend policy.

This is observed from the haphazard dividends decisions made during the five year period under study. Some firm's notably Centum investments made huge profits throughout the period but failed to declare dividends to its shareholders. Other firms like Total Kenya and Olympia Capital made losses for two consecutive years but still declared dividends.

All the listed firms financed their operations through debt in varying levels and majority declared dividends but in an unpredictable manner. Dividend decisions still remain a puzzle with pieces that do not fit together, Black (2009).

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The Chapter focuses on key findings of the study as discussed in Chapter Four. It is a recap of previous studies done, conclusion of the findings and recommendation for further research. Moreover, it details recommendations and limitation of the study.

#### **5.2 Summary**

The main objective of the study was to establish the effect of debt financing on dividend policy of firms listed at the Nairobi Securities Exchange between 2009 to 2013. Data of interest was collected from annual financial statements obtained from NSE and CMA. The study revealed that there is negative significant association between dividend pay out and debt financing level. As the level of dividend pay out increases, the level of debt financing declines. Listed firms declare dividend as a sign of future prospects and to attract shareholders. Firms institute proper dividend policy that guides them in declaration of dividend. On financing, firms institute pecking order theory which entails utilization of retained earnings, debt and lastly external equity.

Other variables considered were cash flow from operations, liquidity, profitability, and size and growth levels. It was established that there exists inverse relationship between dividend policy, growth and size implying that firms aim at expansion at a cost which eventually reduces profitability and dividend pay out levels. Positive association exists between cash flow from operations, liquidity, profitability and dividend policy. Liquidity level is critical for success of a firm. Firms are able to settle short term obligations including dividend, as they fall due thus direct association between dividend policy and liquidity.

### **5.3 Conclusions**

Finance managers are mandated to make three critical decisions namely: financing, investment and dividend decisions. Financing decisions deal with how the firm source for cheaper funds thus importance of debt financing, while investment decisions entail how the sourced funds can be put into profitable projects. Lastly, on dividend decisions, it entails how generated profits are distributed to shareholders.

Findings from the study show that there exists inverse but insignificant between dividend policy and debt financing. As the level of dividend payout increases, the debt financing level reduces. This implies that high level of dividend payout leads to higher return to shareholders. Dividend is used as a sign of future prospects about the firm. It is among the most critical decisions thus firms institute proper dividend policies. Quoted firms at the NSE in general do not maintain stable dividend policies contrary to expectations. Very few firms namely Limuru tea company limited, to a certain extent Kengen Ltd and Crown paints maintain stable and predictable dividend payouts.

Increase in the level of debt financing increases the chances of bankruptcy to a firm since debt comes with interest cost. Quoted firms in Kenya constantly engage in product diversification thus increase in growth level. During growth stages, quoted firms face liquidity problems since cash generated is diverted into profitable projects. Through this, profitability level of a firm increases which eventually lead to increase in dividend payout levels.

The study established that there exists positive relationship between cash flow from operations level, liquidity level, and profitability level and dividend policy. Firms invest in



profitable projects that have positive net present value leading to maximization of shareholders' wealth thus positive relationship between dividend policy and cash flows from operations. Liquidity management is critical for success of a firm since it reduces the liquidity and bankruptcy risks. As the level of liquidity increases, dividend pay out also improves in the same direction. Through engagement in various economic activities, they are able to improve their profitability levels. Negative relationship exists between market capitalization, growth level and dividend policy. As firms grow, they face liquidity problems thus inability to pay dividend.

In conclusion, there exists negative and insignificant relationship between dividend policy and debt financing of quoted firms at the Nairobi Securities Exchange between 2009 to 2013. The study support previous study done by Brealey and Myers (2000) on signaling theory, Jensen (1984) who concluded that dividend is used to monitor the actions of managers. The study however disapproves previous one done by Asif, et, al. (2011) and Atipo (2013) who concluded that there exists significant negative relationship between financial leverage and dividend policies employed by firms. It upholds international findings by Emamalizadeh, et al. (2012) and locally by Waswa (2013) that there is no significant relationship between debt financing and dividend policies.

#### **5.4 Limitations of the Study**

Throughout the research work, there were challenges encountered. The study considered annual audited financial statements which are prepared on historical basis and on general accepted accounting principles. Due to this, the financial statements are not adjusted to reflect the current or future performance which directly affects the selected variables. Material misstatements occurred on some of the accounts requiring adjustment for errors. This

imperfections lead to inaccuracies which may have affected the study findings.

It is also clear that there are qualitative factors that affect dividend policy of a firm which were not considered limiting the scope of the study. This includes macroeconomic factors like interest and inflation rates, shareholding structure of the firms also affect dividends as well as Government policies, regulations, competitive climate and political environment.

The study focused only on listed firms at the NSE and therefore, the results are indicative and not conclusive. There are many unlisted companies in the country which contribute significantly to the Gross domestic product in terms of dividend payouts. It would be relevant to study how these variables relate to such firms which are not listed. Inclusion of these firms which will expand the sample frame is likely to draw more conclusive outcomes.

Constraints of time in undertaking the study meant that a limited five year period was adopted. The sample horizon for the study is short to arrive at comprehensive outcomes. Adequate time would have allowed for a much longer study period and collection of both primary and secondary data spanning over ten years. A much longer period may have obtained more accurate and enhanced findings.

The study considered descriptive statistics to sampled firms. Adoption of averages or mean values in the sample statistic considered very high and low values recorded during the five year period under review. Conclusions arrived at were based on average measures and not yearly measures which has the effect of distorting actual outcomes.

## **5.5 Recommendations for Further Research**

From the findings and limitations, it is evident that the relationship between dividend policy and debt financing is exclusive. The study considered only listed sampled firms of the NSE between 2009 to 2013 due to time constraints. Further research is recommended for non listed firms which are the majority in Kenya to establish if the same relationship holds. Further, the same study should be repeated over a longer period of time as compared to only five years used in this study.

The study established that other variables like inflation, interest rate, share holding structure, competition, government policy, regulatory frameworks and political environment were not considered and whose interplay has a bearing on dividend payouts. These variables constitute risk exposures and further research is recommended to test and analyze these factors which significantly affect the relationship between debt and dividend policy of firms.

Firms reaction to debt and dividends payouts may be industry or market segment specific. Further research is advocated based on industry to industry analysis. The research should investigate if such relationship holds among firms in the different industries.

The findings were based on longitudinal studies over a five year period. Average measures were adopted as a result with possible contamination brought about by high and low figures observed over the period. A cross sectional study is recommended to establish if the same association is replicated over a much shorter time period.

Findings from the study reveal that very few firms at the NSE have stable dividend policies contrary to expectations. Some listed firms have posted impressive profits but failed to

declare any dividends yet others make losses but still proceeded to declare dividends. There is need for further research to unearth other fundamentals affecting dividend payouts that are at variance with business logic and shareholders expectations.

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## APPENDICES

### Appendix I: Companies Quoted at the NSE According to Industries as at 31<sup>st</sup> December 2013

Industry	Companies Quoted	
<b>Agricultural</b>	1. Eaagads Ltd 2. Kakuzi Company Ltd 3. Kapchorua Tea Company Ltd 4. Limuru Tea Company Ltd	5. Rea Vipingo Plantations Ltd 6. Sasini Ltd 7. Williamson Tea Kenya Ltd
<b>Insurance</b>	8. British American Investments Co. Ltd 9. CFC Insurance Group 10. Liberty Kenya Holdings Ltd	11. Jubilee Holdings Ltd 12. Kenya Re-Insurance Corporation Ltd 13. Pan Africa Insurance Holdings Ltd
<b>Commercial And Services</b>	14. Express Kenya Ltd 15. Hutchings Biemer Ltd 16. Kenya Airways Ltd 17. Longhorn Kenya Ltd 18. Nation Media Group Ltd	19. Scangroup Ltd 20. Standard Group Ltd 21. TPS Eastern Africa (Serena) Ltd 22. Uchumi Supermarket Ltd - Relisted (2011)
<b>Investment</b>	23. Centum Investment Ltd 24. City Trust Ltd	25. Olympia Capital Holdings Ltd 26. Trans – Century Ltd
<b>Manufacturing And Allied</b>	27. Baumann Company Ltd 28. B.O.C Kenya Ltd 29. British American Tobacco Kenya Ltd 30. Carbacid Investments Ltd	31. East African Breweries Ltd 32. Eveready East Africa Ltd 33. Kenya Orchards Ltd 34. Mumias Sugar Company Ltd 35. Unga Group Ltd
<b>Telecommunication And Technology</b>	36. Access Kenya Group Ltd 37. Safaricom Ltd	
<b>Automobiles And Accessories</b>	38. Car and General (K) Ltd 39. CMC Holdings Ltd	40. Marshalls (E.A.) Ltd 41. Sameer Africa Ltd
<b>Banking</b>	42. Barclays Bank Ltd 43. CFC Stanbic Holdings Ltd 44. Diamond Trust Bank Kenya 45. I & M Holdings Ltd 46. Equity Bank Ltd	47. Housing Finance Company Ltd 48. Kenya Commercial Bank Ltd 49. National Bank of Kenya Ltd 50. NIC Bank Ltd 51. Standard Chartered Bank Ltd 52. The Co-operative Bank of Kenya Ltd
<b>Construction And Allied</b>	53. Athi River Mining Ltd 54. Bamburi Cement Ltd	55. Crown Paints Ltd 56. E.A. Cables Ltd 57. E.A. Portland Cement Ltd
<b>Energy And Petroleum</b>	58. KenGen Ltd 59. KenolKobil Ltd 60. Umeme Ltd	61. Kenya Power & Lighting Company Ltd 62. Total Kenya Ltd
<b>Growth Enterprise Market</b>	63. Home Afrika Ltd	

Source: NSE & CMA (2013)

## **Appendix II: Sample to be used**

1. Access Kenya Group Ltd
  2. Athi River Mining Ltd
  3. B.O.C Kenya Ltd
  4. Bamburi Cement Ltd
  5. British American Tobacco Kenya Ltd
  6. Car and General (K) Ltd
  7. Carbacid Investments Ltd
  8. CMC Holdings Ltd
  9. Crown Paints Ltd
  10. Eaagads Ltd
  11. East African Breweries Ltd
  12. East African Cables Ltd
  13. East African Portland Cement Ltd
  14. Eveready East Africa Ltd
  15. Express Kenya Ltd
  16. Kakuzi Company Ltd
  17. Kapchorua Tea Company Ltd
  18. KenGen Ltd
  19. KenolKobil Ltd
  20. Kenya Airways Ltd
  21. Kenya Orchards Ltd
  22. Kenya Power & Lighting Company Ltd
  23. Limuru Tea Company Ltd
  24. Marshalls (E.A.) Ltd
  25. Mumias Sugar Company Ltd
  26. Nation Media Group Ltd
  27. Olympia Capital Holdings Ltd
  28. Rea Vipingo Plantations Ltd
  29. Safaricom Ltd
  30. Sameer Africa Ltd
  31. Sasini Ltd
  32. Scangroup Ltd
  33. Standard Group Ltd
  34. Total Kenya Ltd
  35. TPS Eastern Africa (Serena) Ltd
  36. Trans – Century Ltd
  37. Uchumi Supermarket Ltd - Relisted (2011)
  38. Unga Group Ltd
  39. Williamson Tea Kenya Ltd
  40. City Trust Ltd
  41. Centum Investment Ltd
- Source: NSE & CMA (2013)

**Appendix III: Statistical Means of Various Variables from 2009 to 2013**

Name of Firms	Dividend Payout	Debt Financing	Cashflow	Liquidity	Profitability	Size	Growth	E.P.S
Sasini Ltd	0.843	0.287	8.529	2.144	0.074	6.949	0.157	1.705
B.A.T Kenya Ltd	0.764	0.543	9.453	1.165	0.298	7.124	0.270	26.677
City Trust Ltd	0.602	0.018	7.614	7.543	0.134	5.493	0.230	6.819
K.P.L.C Ltd	0.548	0.635	10.175	0.988	0.057	8.047	0.076	9.884
Eaagads Ltd	0.532	0.204	6.854	10.300	0.062	5.636	0.091	1.083
E. A. Cables Ltd	0.506	0.532	8.638	1.190	0.110	6.706	0.058	1.413
Bamburi Cement Ltd	0.489	0.441	9.848	2.391	0.219	7.564	0.051	14.410
Nation Media Ltd	0.462	0.300	9.334	2.241	0.283	6.950	0.103	11.264
E. A. Breweries Ltd	0.397	0.581	9.945	1.178	0.292	7.663	0.129	11.278
Uchumi Supermarket	0.365	0.591	8.527	0.769	0.122	6.587	0.166	2.180
Carbacid Invest. Ltd	0.315	0.152	8.584	7.920	0.229	6.241	0.222	10.187
B.O.C Kenya Ltd	0.313	0.248	8.363	2.208	0.090	6.312	(0.005)	8.029
Safaricom Ltd	0.270	0.407	10.469	0.609	0.188	8.046	0.152	0.345
TPS (Serena) Ltd	0.228	0.378	8.817	1.303	0.073	7.076	0.167	3.648
Scangroup Ltd	0.221	0.443	8.611	1.625	0.103	6.892	0.236	2.419
Sameer Africa Ltd	0.214	0.281	8.349	3.073	0.087	6.512	0.060	0.648
Limuru Tea Co. Ltd	0.190	0.262	6.919	10.626	0.466	5.229	0.206	50.860
Rea Vipingo Ltd	0.188	0.323	8.336	2.762	0.204	6.313	0.149	5.021
Kapchorua Tea Ltd	0.184	0.409	8.032	1.838	0.105	6.210	0.202	33.428
Kakuzi Company Ltd	0.181	0.274	8.696	4.669	0.137	6.534	0.003	16.528
CMC Holdings Ltd	0.179	0.592	9.004	1.470	0.058	7.131	0.014	0.140
Access Kenya Ltd	0.173	0.530	8.598	0.768	0.094	6.385	0.064	0.469
KenolKobil Ltd	0.164	0.722	9.401	1.161	0.039	7.515	0.079	0.103
KenGen Ltd	0.162	0.537	9.698	2.310	0.037	8.185	0.100	1.411
Total Kenya Ltd	0.162	0.665	9.519	1.198	0.053	7.530	0.345	1.242
Crown Paints Ltd	0.150	0.527	8.292	1.462	0.111	6.346	0.168	5.514
Athi River Mining Ltd	0.138	0.705	8.972	1.067	0.084	7.304	0.256	4.987
Standard Group Ltd	0.120	0.526	8.582	1.411	0.313	6.541	0.120	2.987
Olympia C. Holdings	0.114	0.388	4.932	1.827	0.040	6.093	(0.019)	0.597
Unga Group Ltd	0.112	0.390	8.533	2.220	0.080	6.787	0.113	2.634
Williamson Tea Kenya	0.095	0.311	8.531	2.580	0.118	6.773	0.284	81.789
Kenya Orchards Ltd	0.081	1.005	5.455	1.527	0.011	4.861	0.237	0.016
Trans – Century Ltd	0.065	0.498	9.008	1.516	0.081	7.209	0.161	1.608
Car and General K Ltd	0.063	0.622	8.072	1.202	0.113	6.687	0.199	8.416
E. A. Portland Cement	0.039	0.550	8.871	1.561	0.033	7.115	0.079	2.745
Express Kenya Ltd	0.000	0.676	7.809	0.400	0.017	5.901	(0.041)	(1.347)
Marshalls (E.A.) Ltd	0.000	0.587	1.363	0.531	(0.151)	5.941	(0.202)	(7.417)
Eveready E. A. Ltd	0.000	0.614	8.042	1.652	0.060	6.005	(0.040)	0.002
Centum Invest. Ltd	0.000	0.144	8.533	0.585	0.105	7.033	0.827	2.312
Mumias Sugar Co. Ltd	(0.109)	0.428	9.266	1.529	0.055	7.348	0.015	0.714
Kenya Airways Ltd	(0.515)	0.713	9.748	0.947	0.005	7.923	0.112	(0.357)

Source: Research Findings (2009 – 2013)



**Appendix IV: Descriptive Statistics of Firms Quoted at the NSE from 2009 to 2013**

Various Variables	Observations	Mean Level	Median Level	Maximum Level	Minimum Level	Standard Deviation Level
Dividend Pay Out Level	41	0.220	0.179	0.843	(0.515)	0.242
Debt Financing Level	41	0.464	0.498	1.005	0.018	0.193
Liquidity	41	2.328	1.527	10.626	0.400	2.427
Cashflow from Operations Level	41	8.398	8.5484	10.469	1.363	1.568
Growth Level	41	0.136	0.120	0.827	(0.202)	0.153
Profitability Level	41	0.114	0.090	0.466	(0.151)	0.106
Market Capitalization Level	41	6.749	6.773	8.185	4.861	0.767
Earnings Per Share	41	7.961	2.419	81.789	(7.417)	15.676

Source: Research Findings (2009 – 2013)

**Appendix V: Summary of Quoted Firms' Liquidity, Net Working Capital, Percentage of Current Assets to Total Assets and Percentage of Total Liabilities to Total Assets Level (2009-2013)**

Name of Firms	Current Assets	Current Liabilities	Net Working Capital	% of Current Assets to Total Assets	% of Total Liabilities to Total Assets
Sasini Ltd	1,183,363	565,344	618,019	13%	29%
B.A.T Kenya Ltd	6,335,265	5,382,815	952,450	47%	54%
City Trust Ltd	43,709	5,712	37,996	14%	2%
K.P.L.C Ltd	28,162,665	28,717,346	(554,681)	24%	63%
Eaagads Ltd	69,182	13,078	56,104	15%	19%
E. A. Cables Ltd	2,363,030	1,999,818	363,212	45%	53%
Bamburi Cement Ltd	14,298,200	6,099,400	8,198,800	39%	44%
Nation Media Ltd	5,960,000	2,637,300	3,322,700	66%	30%
E. A. Breweries Ltd	17,361,226	17,143,300	217,926	37%	62%
Uchumi Supermarket	1,400,058	1,867,514	(467,456)	35%	54%
Carbacid Invest. Ltd	605,557	83,478	522,079	34%	15%
B.O.C Kenya Ltd	1,004,942	459,113	454,830	49%	25%
Safaricom Ltd	21,664,937	35,581,058	(13,916,121)	19%	41%
TPS (Serena) Ltd	2,143,658	1,710,590	433,068	17%	37%
Scangroup Ltd	5,093,446	3,420,114	1,673,332	61%	44%
Sameer Africa Ltd	2,400,057	786,686	1,613,371	74%	28%
Limuru Tea Co. Ltd	96,520	11,089	85,431	51%	25%
Rea Vipingo Ltd	780,721	313,029	467,692	37%	31%
Kapchorua Tea Ltd	635,574	348,041	287,533	38%	41%
Kakuzi Company Ltd	999,356	288,239	711,117	29%	27%
CMC Holdings Ltd	10,973,647	7,540,750	3,432,897	81%	60%
Access Kenya Ltd	541,953	717,263	(175,310)	22%	53%
KenolKobil Ltd	27,041,092	23,409,268	3,631,823	81%	73%
KenGen Ltd	22,534,801	11,353,547	11,181,254	15%	55%
Total Kenya Ltd	23,984,058	20,016,582	3,967,477	71%	66%
Crown Paints Ltd	1,626,429	1,118,187	508,242	72%	53%
Athi River Mining Ltd	5,222,200	4,945,940	276,260	25%	71%
Standard Group Ltd	1,575,106	1,124,302	450,804	45%	52%
Olympia C. Holdings	493,854	270,037	223,817	37%	40%
Unga Group Ltd	4,359,311	2,036,597	2,322,714	70%	40%
Williamson Tea Kenya	2,001,637	776,363	1,225,274	33%	31%
Kenya Orchards Ltd	23,599	16,233	7,366	32%	101%
Trans – Century Ltd	6,693,652	4,605,705	2,087,947	38%	48%
Car and General K Ltd	3,190,320	2,705,913	484,407	63%	63%
E. A. Portland Cement	2,991,458	1,964,964	1,026,493	23%	55%
Express Kenya Ltd	127,543	358,769	(231,227)	15%	69%
Marshalls (E.A.) Ltd	173,377	453,120	(279,743)	18%	64%
Eveready E. A. Ltd	767,099	534,949	232,150	76%	62%
Centum Invest. Ltd	296,261	620,733	(324,472)	3%	18%
Mumias Sugar Co. Ltd	6,465,411	4,820,296	1,645,115	28%	43%
Kenya Airways Ltd	22,116,800	26,300,800	(4,184,000)	26%	72%

Source: NSE & CMA (2009-2013)