THE RELATIONSHIP BETWEEN DIVIDEND PAYOUT RATIO AND CAPITAL STRUCTURE OF COMPANIES LISTED AT THE NAIROBI SECURITIES EXCHANGE

BY:

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DECLARATION

This is to declare that this research project is my original work that has not been presented to any other University or Institution of Higher Learning for examination.

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DECLARATION BY SUPERVISOR

This is to declare that this project has been submitted for examination with my approval as the university supervisor.

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DEDICATION

I wish to wholly dedicate this project first and foremost to almighty God whose grace, providence and endless care, I cherish.

I also dedicate this project to my family for spiritual, psychological and other forms of support accorded to me that largely contributed to the successful conduct of this study to completion. I am particularly grateful to my wife Millicent, for the moral support that saw me through the challenges encountered while undertaking my MBA degree course especially in the research process.

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ABSTRACT

The existing literature on optimal dividend policy and capital structure is voluminous and has continuously evolved over the last five decades. Theories on the two widely researched topics have been treated differently, even though there is reason to believe that there are common factors affecting both hence leaving us with many unanswered questions. The theories of capital structure and dividend policy are jointly determined as part of a variety of control allocations between managers and investors, and hence cross-sectional variations in both are driven by the same underlying factors.

The objective of this study was to establish the relationship between the dividend payout ratio and capital structure of companies listed at the NSE. This study relied on secondary data. The study sampled 29 companies listed at the NSE and the listed firms within financial and other regulated sectors were excluded in coming up with the sample size. Regression analysis was used to analyze the data and find out whether there exists a relationship between dividend payout ratio and capital structure.

The study found out that there is a significant relationship between dividend payout ratio and capital structure. The findings revealed that there is an inverse relationship between leverage and dividend payout ratio. The study concludes that leverage negatively affects dividend payout ratio.

Based on these results, the study recommends company's management education, as they need to understand the factors that lead to increase or decrease in the company's dividend payout ratio. In order for a company to increase its dividend payout ratio, it should decrease factors that lead to increase in its leverage since there is an inverse relationship between these parameters.

ABBREVIATIONS

ASEA - African Stock Exchanges Association.

EAT - Earnings After Tax.

EPS - Earning Per Share.

DPS - Dividend Per Share.

GDP - Gross Domestic Product.

MM - Modigliani and Miller.

NPV - Net Present Value.

NSE - Nairobi Securities Exchange.

US - United States.

WACC - Weighted Average Cost of Capital.

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CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Decisions regarding the most optimal choice of financing sources and dividend policy are some of the most difficult financial decisions. Firms have a choice between internal or external sources to finance their investments. Internal sources include retained earnings and depreciation, while external sources basically refer to use of debt or equity. Thus the financing decision involves the appraisal of two choices. The first is the dividend choice; the fraction of retained earnings to be ploughed back and the fraction to be paid out as dividends. The second is the capital structure choice; the fraction of external finance to be borrowed and the fraction to be raised in the form of new equity.

According to Weston & Brigham (1981), dividend policy determines the extent of internal financing by a firm. The finance manager decides whether to release corporate earnings from the control of the enterprise. Because dividend policy may affect such areas as the financial structure, the flow of liquid funds, corporate liquidity, stock prices and investor satisfaction, it is clearly an important aspect of financial management. Franklin & Roni (1995) suggest that the reason why dividend policy questions are interesting is that, deciding on the amounts of dividends to be paid out of earnings is a major decision that firm's managers' face. In addition, proper understanding of dividend policy is crucial for other areas of corporate finance such as; capital structure, theories of asset pricing, mergers and acquisition and capital budgeting since they rely on how and why dividends are paid.

Dividends are commonly defined as the distribution of earnings (past or present) in real assets among the shareholders of the firm in proportion to their ownership. Dividend policy connotes to the payout policy, which managers pursue in deciding the size and pattern of cash distribution to shareholders over time. Firms are at discretion to select the level of dividend they wish to pay to holders of ordinary shares, although factors such as legal requirements, debt covenants and the availability of cash resources impose some limitations on this decision. Variations amongst firms are noted (Fama and French, 2001). They bring evidence to show that US dividend paying firms

tend to be large and profitable, while non-payers are typically small, less profitable but with high investment opportunities. Variations across countries include an empirical study by La Porta, Lopez-de-Silanes, Shleifer and Vishny (2000) who studied the dividend policies of over 4000 firms from 33 countries around the world. They found that dividend policies vary across legal regimes as firms in countries with good legal protection of investors tend to have higher payout ratios compared with firms in countries with weaker legal protection.

Dividend policy decisions are influenced by a number of factors that have been identified in previous empirical studies. Profits have long been regarded as the primary indicator of the firm's capacity to pay dividends. Lintner (1956) conducted a study on how U.S. managers make dividend decisions and concluded that the current year earnings and previous year dividends influence the dividend payment pattern of firm decisions. Alli et.al (1993) reveal that dividend payments depend more on cash flows, which reflect the company's ability to pay dividends, than on current earnings, which are less heavily influenced by accounting practices. Green et.al. (1993) questioned the irrelevance argument and investigated the relationship between the dividends and investment and financing decisions. Their study shows that dividend decision is taken along with investment and financing decisions. The results however do not support the views of MM (1961). Mohammed Amidu and Joshua Abor (2006) examined the factors affecting dividend payout ratios of listed companies in Ghana. The results of their study show that payout ratio are positively related to profitability, cash flow and tax but are negatively related risk and growth.

1.1.1 Dividend Payment/Payout Ratio

The question of how dividend policy is determined has been the subject of many studies (dividend puzzle). The debate is generally believed to have been initiated by MM (1961) irrelevancy theory. Their study showed that in a perfect capital market with rational behaviour and perfect certainty and with investment and borrowing decisions given, dividend policy has no effect on the value of the firm. The implication of relaxing MM (1961) irrelevancy theory assumption led to introduction of market imperfections. Dividend policy under market imperfections may be categorized under two schools of thoughts; for and against. On the 'against' school of thought are theories including the transaction cost theory of dividend and the

tax hypothesis that suggest that dividend payments reduce shareholder wealth. On the 'for' school of thought are theories that suggest that dividend payments increase shareholder wealth, including the bird in the hand argument, the signalling theory and the agency theory of dividend. All these theories have been extensively discussed and tested but to date there is no consensus on how firms determine their dividend policies.

Financial signaling theory implies that dividends may be used to convey information. Information, rather than dividends itself, affects share prices (Brigham and Gapenski, 1998). The payment of dividends conveys information to shareholders that the company is profitable and financially strong. This in turn causes an upsurge in demand for the firm's shares causing a rise in their market prices. When a firm changes its dividends policy, investors assume that it is in response to an expected change in the firm's profitability which will last long (Pandey, 2004). An increase in payout ratio signals to shareholders a permanent or long term increase in firm's expected earnings. Lintner (1956) in his seminal work on dividend payout practices suggested that managers believe that stockholders prefer stable dividends and that the market puts a premium on such stability. He hypothesizes that differences among firms in target payout ratios reflect judgments based on factors such as prospects for growth of the industry and the individual firm, cyclical movements of investment opportunities, and earnings prospects for the firm.

Myers' (1984) description of managers' pecking order preferences for internal financing includes a link between dividend payout and factors such as investment opportunities and fluctuations in firm's profitability. Marsh and Merton (1987) in their study found that firms observe industry practices in the selection of their target payout ratios. Pettit (1972) documented that announcements of dividend increases are followed by significant price increases and that announcements of dividend decreases are followed by significant price drops. Several studies of large changes in dividend policy have been carried out by; Asquith and Mullins (1983) (dividend initiations), Healy and Palepu (1988), and Michaely, Thaler, and Womack (1995) (dividend omissions)—showed that the market reacts dramatically to such announcements.

1.1.2 Capital structure

A firm's capital structure refers to the relationship between debt and equity finance in its long term funding arrangement. Brealey and Myers (2005) defined capital structure as comprising of debt, equity or hybrid securities issued by the firm. Benito & Young (2001) describe that higher leverage is closely associated with dividend reduction and omission. When financial leverage increases, it may bring better returns to some existing shareholders but its risk also increases as it causes financial distress and agency costs (Jensen and Meckling, 1976). Over the past several decades, theories on a firm's capital structure choice have evolved along many directions. The traditional capital structure theory was based on the idea of WACC principle, which states that companies issue debt in order to reduce their WACC as debt is considered less costly than equity (Prace, 2004).

Modern capital structure theories were later developed since the publication of capital structure irrelevancy framework by MM (1958). MM concluded that in a world without taxes, the value of the firm and also its overall costs of capital is independent of its choice of capital structure. A later study in 1963 by MM concluded that by incorporating corporate tax, the market value of a firm is increased and the overall cost of capital is reduced to the point of interest being tax deductible. The trade-off theory explains the relevance of debt with the existence of taxes and bankruptcy costs (De Angelo and Masulis, 1980). The general result from this theory is that the combination of leverage costs and tax advantages of debt produces an optimal capital structure below 100% debt financing, as the tax advantage of debt is traded against the likelihood of incurring bankruptcy costs. Pecking order model is another important **t**heory in the study of corporate capital structure that explains the relevance of the debt and optimum capital structure. This theory was developed by Steward Myers in 1984 in his paper, "Capital Structure Puzzle". Myers (1984) presented two sides of the capital structure issue, which are called static trade-off theory and pecking order hypothesis.

The static trade-off theory holds that the capital structure choices may be explained by the trade-off between benefits and costs of debt versus equity. The pecking order hypothesis contends, on the other hand, that there is no well defined target debt ratio, and firm have an ordered preference for financing. According to Myers, firms prefer retained earnings as their main source of funds

for investment followed by debt. The last resort sought by a firm would be external equity financing. Agency theory was developed by Jensen and Meckling in their 1976 publications. This theory considered debt to be a necessary factor in creating the conflict between equity holders and the managers. They recommended that, due to increasing agency costs with both the equity holders and debt-holders, there would be an optimum combination of outside debt and equity to reduce total agency costs. Ross (1978) popularized the signaling theory of capital structure that states the managers of the firm posses inside information and they only reveal it by the method of financing. The managers will issue more debt if the future prospect is positive as they are willing to incur higher risk of bankruptcy and other relevant costs of higher debt.

1.1.3 Relationship between Dividend Payout Ratio and Capital Structure

Bhaduris (2002) suggested that dividends are the signal of finance health to outsiders. A firm with a constant stream of dividends will face less asymmetric information when entering the equity market. Dividend payments decrease the amount of internal funds and increase the need for external financing. Dividend policy allows for releasing of resources when a firm has no profitable projects and conveys information about a firm's future expectations to capital markets. There is a positive relationship between payout ratio and debt (Frank and Goyal, 2004). Studies carried out by various scholars suggest that there is a notable relationship 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 Wandeto (2005) who in his study concluded that firms with high gearing ratio pay low amounts of dividend. Bittok (2004) pointed out that there is a significant relationship between dividend payout ratio and the value of the firm in that dividends are relevant to the value of the common stock.

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, although they do exert a strong influence on the value of equity capital. Roseff (1982) in his study found that firms with higher leverage pay low dividends in order to evade the cost of raising external capital of the firms. Collins, Saxena and Wesley (1996) suggested that there is statistically negative relationship between leverage and dividend payout ratio.

In practice, however, firms, managers, and investors, devote much time and resources to making and analyzing financing decisions about dividends and capital structure. Moreover, when market imperfections such as taxation, transaction costs, asymmetric information and agency conflicts, are introduced, devoting time and resources to financing decisions no longer appears a futile pursuit. Subsequently, much theoretical and empirical research has aspired to clarify how the two principle financing decisions, the dividend and capital structure choices, impact on the value of firms that operate in imperfect markets. To date no consensus has been reached.

1.1.4 Brief Overview of Nairobi Securities Exchange

As a capital market institution, the stock exchange plays an important role in the process of economic development. It helps mobilize domestic savings thereby bringing about the reallocation of financial resources from dormant to active agents. Long-term investments are made liquid, as the transfer of securities between shareholders is facilitated. The exchange has also enabled companies to engage local participation in their equity, thereby giving Kenyans a chance to own shares (NSE, 2007).

The NSE began in the early 1920s while Kenya was considered a colony under British control. It was an informal marketplace for local stocks and shares. By 1954, a true stock exchange was created when the NSE was officially recognized by the London Stock Exchange as an overseas stock exchange. After Kenyan independence from Britain, the stock exchange continued to grow and become a major financial institution. The facilities have modernized since the original "handshake over coffee" method of trading. The NSE has recently adopted an automated trading system, to keep pace with other major world stock exchanges (NSE, 2011).

The NSE is part of the African Stock Exchanges Association. The ASEA was founded in the early 1990s to create a way for all the stock exchanges in Africa to communicate and stay organized. There are about 20 exchanges in the ASEA. NSE is Africa's fourth largest stock exchange in terms of trading volumes, and fifth in terms of market capitalization as a percentage of GDP.

1.2 Research Problem

Despite extensive research, the dividend payout policy still remains a controversial topic in modern corporate finance subject. Black (1976) in his study on dividend wrote, "The harder we look at the dividend picture the more it seems like a puzzle, with pieces that just don't fit together". Why shareholders like dividends and why they reward managers who pay regular increasing dividends is still unanswered. Dividend payout policy has been kept as the top ten puzzles in finance (Brealey and Myers 2005). The behaviour of dividend policy is the most debatable issue in the corporate finance literature and still keeps its prominent place both in developed and emerging markets. Many researchers try to uncover the issue regarding the dividend behaviour or dynamics and determinants of dividend payout policy but we still don't have an acceptable explanation for the observed dividend behaviour of firms (Black, 1976; Allen and Michaely, 2003 and Brealey and Myers 2005).

The reason why dividend policy should remain so evidently important has been theoretically controversial. Three main contradictory theories of dividends can be identified. Some argue that increasing dividend payments increases a firm's value. Another view claims that high dividend payouts have the opposite effect on a firm's value; that is, it reduces firm value. The third theoretical approach asserts that dividends should be irrelevant and all effort spent on the dividend decision is wasted. These views are embodied in three theories of dividend policy: high dividends increase share value theory (or the 'bird-in-the- hand' argument), low dividends increase share value theory (the tax-preference argument), and the dividend irrelevance hypothesis. Dividend debate is not limited to these three approaches. Several other theories of dividend payout policy have been presented, which further increases the complexity of the dividend puzzle. Some of the more popular of these arguments include the information content of dividends (signalling), the clientele effects, and the agency cost hypotheses.

MM (1961) demonstrated that under certain assumptions about perfect capital markets, dividend policy would be irrelevant as dividend policy has no effect on either the price of a firm's stock or its cost of capital, shareholders wealth is not affected by the dividend decision and therefore they would be indifferent between dividends and capital gains. MM (1961) argued that regardless of how the firm distributes its income, its value is determined by its basic earning power and its

investment decisions. They stated that given a firm's investment policy, the dividend payout policy it chooses to follow will affect neither the current price of its shares nor the total returns to shareholders. In other words, investors calculate the value of companies based on the capitalized value of their future earnings, and this is not affected by whether firms pay dividends or not and how firms set their dividend policies.

According to the bird in the hand theory associated with Gordon & Litner (1963), dividends are valued differently to retained earnings (or capital gains). Investors prefer the "bird in the hand" of cash dividends rather than the "two in the bush" of future capital gains. Increasing dividend payments, ceteris paribus, may then be associated with increases in firm value. As a higher current dividend reduces uncertainty about future cash flows, a high payout ratio will reduce the cost of capital, and hence increase the share value. The tax differential theory advanced by Litzenberger & Ramaswamy (1979) suggests that low dividend payout ratios lower the cost of capital and increase the stock price. In other words low dividend payout ratios contribute to maximizing the firm's value. This argument is based on the assumption that dividends are taxed at higher rates than capital gains.

Wandeto (2005) carried out an empirical investigation of the relationship between dividend changes, earnings, cashflows & capital structure for firms listed at the NSE. He concluded that dividend change is the most sensitive, then cash flows and finally debt in that order. Those firms with high gearing ratio pay low amounts of dividends with an exception of 5% which pay high amount. This study is different from Wandeto's (2005) in that, this study seeks to utilize the current data available at the NSE. Since the year 2005, various macroeconomic factors have changed for instance; high interest rates, fluctuating exchange rate, high inflation rate, depreciating shilling and changing Gross Domestic Product. In addition, various mergers and acquisitions have witnessed at NSE since 2005. The use of most recent data as well as a larger sample size will result into more accurate and conclusive findings.

Locally, other researchers have reviewed various aspects of dividend payout policy and capital structure in the Kenyan context. e.g. Obonyo (1989) carried out an investigation into an existence and characteristics of dividend yield clientele phenomenon among the equity stock

investors in Kenya; Huka (2000) studied the impact of dividend payment on shareholders wealth, the case of quoted companies at NSE; Kiogora (2000) reviewed an empirical study testing for variations in the capital structure at the NSE; Bittok (2004) researched on the effect of dividend policy on the value of firms quoted at the NSE; Gachoki Munyui (2005) reviewed the capital structure choice in an empirical testing of the pecking order theory among firms quoted at the NSE; while Kipsitet (2006) researched on dividend policy and ownership structure of firms quoted at the NSE. To the best of the researcher's knowledge, there exists no literature on the relationship between dividend payout ratio and capital structure in the Kenyan context. This is the gap the study seeks to address by attempting to answer the following research question: what is the relationship between dividend payout ratio and capital structure of companies listed at NSE?

1.3 Research Objective

To establish the relationship between the dividend payout ratio and capital structure of companies listed at the NSE.

1.4 Value of the Study

Management: The study will enable the management to understand the impact of group affiliation on dividend and capital structure decisions respectively.

Investors: Investors may need to know the effect of the chosen capital structure will have on the amount of dividend to be paid out of their investments.

Financial consultants/Analysts: The findings of this study will enable them to provide better services to the clients in form of better advice. This is in regard to the return on their investments in form of dividends as a result of a chosen capital structure.

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Scholars: This study will help those intending to use the findings of this study as a basis for further research on this subject. They may wish to contribute to corporate finance literature, by looking at both the dividend and capital structure choices.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter discusses various contradictory theories of dividend, capital structure theories, the relationship between dividend and capital structure and lastly chapter conclusion.

2.2 Theoretical and Conceptual Framework

2.3 Dividend Theories

In the literature of dividend policy, there is a wide range of theories that have been developed by various scholars. These theories include; dividend irrelevance theory, information signalling theory, bird in the hand theory, clientele effect theory, agency cost and free cash flow theories and transaction cost theory. These conflicting theories are explained below;

2.3.1 Dividend Irrelevance Theory

According to MM (1961), under certain simplifying assumptions, a firms' dividend policy does not affect its value. The basic premise of their argument is that firm value is determined by choosing optimal investments. The net payout is the difference between earnings and investments, and simply a residual. Because the net payout comprises dividends and share repurchases, a firm can adjust its dividends to any level with an offsetting change in share outstanding. From the perspective of investors, dividends policy is irrelevant, because any desired stream of payments can be replicated by appropriate purchases and sales of equity. Thus, investors will not pay a premium for any particular dividend policy.

MM concluded that given firms optimal investment policy, the firm's choice of dividend policy has no impact on shareholders wealth. In other words, all dividend policies are equivalent. The most important insight of MM analysis is that it identifies the situations in which dividend policy can affect the firm value. It could matter, not because dividends are "safer" than capital gains, as was traditionally argued, but because one of the assumptions underlying the result is violated. The propositions rest on the following four assumptions;

1. Information is costless and available to everyone equally.

2. No distorting taxes exist.

3. Flotation costs are non- existent.

4. Non-contracting or agency cost exists.

2.3.2 Information Content/Signaling Effect Theory

This theory was advanced by Stephen Ross in 1979. He observed from empirical studies that dividend increase is generally accompanied with an increase in share price and vice versa. According to Ross (1979), investors generally prefer dividends to capital gains. A model constructed by Merton & Rock (1985) suggests that dividend announcements convey information to investors regarding the company's future prospects. Many earlier studies had shown that stock prices tend to increase when an increase in dividends is announced and tend to decrease when a decrease or omission is announced. Signaling theory states that changes in dividend policy convey information about changes in future cash flows (Bhattacharya 1979, Miller and Rock, 1985). Dividend signaling theory suggests a positive relation between information asymmetry and dividend policy. The higher the asymmetric information level, the higher the sensitivity of the dividend to future prospects of the firm. Several empirical studies attempt to test the informational content of dividend changes, yet they disagree about the sign and the significance of the effect of information asymmetry on dividend policy (Allen and Michaely, 2002).

The signalling hypothesis can explain the preference for dividends over stock repurchases in spite of the tax advantage of the latter. Particularly, as suggested in Jagannathan, Stephens and Weisbach (2000), Guay and Harford (2000) and De Angelo, De Angelo and Skinner (2000) among others, the regular dividend signal is an ongoing commitment to pay out cash. This signal is consistent with Lintner (1956) observation that managers are typically reluctant to decrease dividend levels. However, unlike regular dividends, repurchases and special dividends can be used to signal prospects without long-term commitment to higher payouts. Mbugua (2003) carried out a research on information content on dividend payment on stock prices by quoted companies. She found out that dividend has a significant impact on share prices and the impact is much greater when there is reduction paid than increase.

2.3.3 Bird in the Hand Theory

The bird-in-the-hand theory of dividend policy is associated with John Litner (1962), and Myron Gordon (1963). They argued that shareholders are risk-averse and prefer to receive dividend payments rather than future capital gains. Shareholders consider dividend payments to be more certain than future capital gains – thus a "bird in the hand is worth more than two in the bush". Gordon contended that the payment of current dividends resolves investor uncertainty. Investors have a preference for a certain level of income now rather than the prospect of a higher, but less certain, income at some time in the future. The key implication, as argued by Litner and Gordon, is that because of the less risky nature of dividends, shareholders and investors will discount the firm's dividend stream at a lower rate of return thus increasing the value of the firm's shares.

In response to Litner and Gordon, MM (1961) criticized this theory and argued that the firm's risk is determined by the riskiness of its operating cash flows, not by the way it distributes its earnings. Consequently, MM called this argument the bird-in-the-hand fallacy. Further, Bhattacharya (1979) suggested that the reasoning underlying this theory is fallacious. Moreover, he suggested that the firm's risk affects the level of dividend not the other way around. That is, the riskiness of a firm's cash flow influences its dividend payments, but increases in dividends will not reduce the risk of the firm. The notion that firms facing greater uncertainty of future cash flow (risk) tend to adopt lower payout ratios seems to be theoretically plausible (Puckett, 1964). Empirically, Rozeff (1982) found a negative relationship between dividends and firm risk. That is, as the risk of a firm's operations increases, the dividend payments decrease (Jensen, Solberg, and Zorn, 1992).

2.3.4 Clientele Effect Theory

According to the dividend clientele hypothesis (MM 1961)), firms attract investor clienteles based on their dividend payout policy. Different groups, or clienteles, of stockholders prefer different dividend payout policies. For instance, the poor, retirees, the old among others generally prefer cash income, so they may want the firm to pay out a high percentage of its earnings. Such investors are in low or even zero brackets, so taxes are of concern to them. On the other hand, investors in their peak earning years might prefer re-investment, because they have less need for current income and would simply reinvest dividends received after paying income

taxes on these dividends. Investors with preference to current investment income should own shares in high dividend payout firms, while those with no need for current investment income should own shares in low dividend payout firms.

In practice, investors often face different tax treatments for dividend income and capital gains, and incur costs when they trade securities in the form of transaction costs and inconvenience (changing portfolios). For these reasons and based on different investors' situations, taxes and transaction costs may create investor clienteles, such as tax minimization induced clientele and transaction cost minimization induced clientele respectively. These clienteles will be attracted to firms that follow dividend policies that best suit their particular situations. Similarly, firms may tend to attract different clienteles by their dividend policies. For example, firms operating in high growth industries that usually pay low (or no) dividends attract a clientele that prefers price appreciation (in the form of capital gains) to dividends. On the other hand, firms that pay a large amount of their earnings as dividends attract a clientele that prefers high dividends. Allen, Bernardo and Welch (2000) suggest that clienteles such as institutional investors tend to be attracted to invest in dividend-paying stocks because they have relative tax advantages over individual investors. Obonyo (1989) carried out an investigation into an existence and characteristics of dividend yield clientele phenomenon among the equity stock investors and concluded that there is an indication of non tax determined clientele in Kenya.

2.3.5 Tax Differential Theory

This theory was popularized by Litzenberger & Ramaswamy (1979). They disagreed with MM (1958) assumption that taxes do not exist. Their argument is that investors have to pay taxes both corporate and personal level. The capital gain tax is lower than the dividend tax rate. In addition, as opposed to tax on dividends, an investor may postone the effect of taxation by simply delaying realizing the gain. The effect of taxation especially for wealthy investors is to prefer capital gains to dividends. In Kenya, dividends attract withholding tax of 5%, which is final, and capital gains are tax exempt.

Miller and Scholes (1982) challenged Litzenberger and Ramaswamy's conclusion, and criticized their short-term (monthly) definition of dividend yield. They suggested that tests employing a

short-term dividend yield definition are inappropriate for detecting the impact of differential tax treatment of dividends and capital gains on stock returns. Furthermore, Miller and Scholes argued that the positive yield-return relation was caused by information bias. The reason for this argument is that Litzenberger and Ramaswamy ignored the information effect of dividend omissions. An announcement of dividend omissions (perceived as bad news) may result in an upward bias in the dividend yield.

2.3.6 The Agency Cost and Free Cash Flow Theories

One of the assumptions of MM's perfect capital market is that there are no conflicts of interests between managers and shareholders. In practice, however, this assumption is questionable where the owners of the firm are distinct from its management. Shareholders therefore incur (agency) costs associated with monitoring managers' behaviour. The payment of dividends might serve to align the interests and mitigate the agency problems between managers and shareholders, by reducing the discretionary funds available to managers (Rozeff, 1982, Easterbrook, 1984, and Jensen, 1986).

Another source of the agency costs problem that may be influenced by dividend policy is the potential conflict between shareholders and bondholders. Shareholders are considered as the agents of bondholders' funds. In this case, excess dividend payments to shareholders may be taken as shareholders expropriating wealth from bondholders (Jensen and Meckling, 1976). Shareholders have limited liability and they can access the company's cash flow before bondholders; consequently, bondholders prefer to put constraints on dividend payments to secure their claims. Conversely, for the same reasons, shareholders prefer to have large dividend payments (Ang, 1987).

A major explanation why firms pay dividends is the free cash flow hypothesis (Jensen, 1986), which explains dividends as a means to mitigate agency cost of free cash flows. The free cash flow hypothesis is primarily based on the argument that there is a conflict of interest between managers and shareholders. That is, rather than act in shareholders' best interests; managers could allocate the firm's resources to benefit themselves (Jensen and Meckling, 1976). Managers' selfish behaviors can include lavish spending on luxurious office and unjustifiable

mergers and acquisitions. Hence, excess cash can create overinvestment problem because they may be used to fund negative NPV projects. To mitigate the overinvestment problem, (Easterbrook 1984) and (Jensen 1986) suggest that firms return excess cash to shareholders by paying dividends or repurchasing shares.

The implication of the free cash flow hypothesis is that cash-rich firms that are mature with scarce investment opportunities tend to have overinvestment problem. Thus, a dividend increase announcement by these firms should be accompanied with a positive stock market reaction since it is a signal to shareholders that management will not wastefully use corporate cash flows. Lang & Litzenberger (1989) tested free cash flow hypothesis empirically using Tobin's Q ratio to determine the group of overinvesting firms. Their conclusion is consistent with the free cash flow hypothesis in that dividend increases by overinvesting firms signal management's intention to mitigate overinvestment problem, thereby causing larger stock market reaction. Farida (1993) studied the parameters that are important in determination of dividend by publicly quoted companies in Kenya. She empirically explained that liquidity is the most important in determining dividends. Other factors are working capital, cashflows, profitability and investment.

2.3.7 The Transaction Cost Theory

Firms may incur costs in distributing dividends while investors may incur costs in collecting and reinvesting these payments. Moreover, both firms and investors may incur costs when, due to paying dividends, the firm has to raise external finance in order to meet investment needs. Indeed, the transaction costs incurred in having to resort to external financing is the cost of dividend in Bhattacharya's (1979) model. In contrast, however, it may be argued that dividend are beneficial as they save the transaction costs associated with selling stocks for consumption purposes. Alternatively dividends may influence value if dividend policy has an impact on management's investment decisions. For example, managers may decide to forgo positive NPV investments because dividend payments exhausted internal finance and raising external funds involves transaction or other costs. Indeed in Miller and Rock's (1985) model the cost of dividends arise from cutting or distorting the investment decision.

Transaction costs include flotation costs to the firm of raising additional external finance such as underwriter fees, administration costs, management time, and legal expenses. Further, when the firm pays dividend and then has to raise additional external finance, existing shareholders suffer dilution of control. Due to the costs associated with raising external finance, the transaction cost theory of dividend suggests that firms should utilize retained earnings to the extent possible. Dividend should only be paid when this does not result in shortage of internal funds that are required for investment. Thus Rozeff (1982) suggests that firms that have greater dependency on external finance would maximize shareholder wealth by adopting lower payout policies.

2.4 Theories of Capital Structure

In the literature of capital structure, three main important but conflicting theories have been developed, which includes the trade-off theory, pecking order theory and agency costs theory. These theories are explained below;

2.4.1 Trade-Off Theory

The trade-off theory model was popularized by MM (1963). When corporate tax was added to the original irrelevance proposition of MM, a benefit for debt is observed that serves to shield earnings from taxes. According to the static trade-off hypothesis, a firm's performance affects its target debt ratio, which in turn is reflected in the firm's choice of securities issued and its observed debt ratios (Hovakimian et al., 2004). This theory also states that optimal capital structure is obtained by balancing the tax advantage of debt financing and leverage related costs such as financial distress and bankruptcy, holding firm's assets and investment constant (Bradley et al., 1984).

According to Myers (1984), firms adopting this theory could be regarded as setting the target debt ratio and gradually moving towards achieving it. The static trade-off theory also suggests that higher profitable firms have higher target debt ratio. The dynamic trade-off theory which was popularized by Fischer et al. (1989) stated the negative relation of profitability with leverage. The argument is firms passively accumulate earnings and losses letting their debt ratios deviate from the target as long as the costs of adjusting the debt ratio exceed the costs of having a sub-optimal capital structure. Therefore, firms that were highly profitable in the past are likely

to be have lesser gearing (Hovakimian et al., 2004). According to this theory, firms issues, sells and repurchase debt or equity to maintain its debt / equity ratio.

2.4.2 Pecking Order Theory

Pecking order theory also referred to as information asymmetry theory was proposed by Myers (1984) and suggests that firms prefer to finance new investments, first internally with retained earnings, then with debt, and finally with the issue of new equity. According to Frank and Goyal (2004), the pecking-order theory is among the most influential theories of corporate finance and it derives its influence from the view that it fits naturally with certain facts about how firms obtain and use external financing. The pecking-order theory presents the strongest challenge to the trade-off theory because it offers some explanation for the alternative financing patterns found among firms and which the trade-off theory has failed to explain (Vidal & Ugendo, 2005). The pecking order habits are as follows;

1. Firms prefer internal financing (retained earnings) to external financing and that information asymmetries are assumed relevant for external financing.
2. Firms maintain dividend payments and they neither increase nor decrease them in response to temporary fluctuations in profits.
3. If external finance is required, firms issue the safest security first, that is, debt before equity. If the internally generated cash flows exceed capital investment opportunities, the excess will be used to pay down debt rather than retire equity.
4. When the internally generated cash flows are exhausted, firms will work down the pecking order, from safe to riskier debt.
5. The firm's debt ratio reflects its cumulative requirement for external financing.

The pecking-order theory is based on two assumptions: firstly, according to informational asymmetry, managers are better informed about their own firm's prospects than are outside investors. So, when they decide to issue new equity to finance new projects it is almost invariably taken by outside investors as a signal that the firm's prospects, as seen by management, are not good and that the said issue is therefore overvalued and therefore causes the firm's share price to fall (Suresh & Jam, 1998). Secondly, the pecking-order assumes that

managers act in the best interests of their existing shareholders, maximizing the value of existing shares, so that, they will even forego positive NPV projects if accepting them forces the firm to issue undervalued equity at higher issuing costs to new investors which would, in part, disadvantage their existing shareholders (Vidal & Ugendo, 2005).

Kamere (1987) found that long term debt and the value of total assets are positively correlated. This suggests that the use of debt financing may be higher among large firms than small ones. This is inconsistent with pecking order theory prediction. On contrary, Omondi (1996) found that Kenyan firms tend to borrow more when profits are high. He gives an explanation that high profits serve as an incentive to the firm to invest more thus warranting borrowing for expansion of business activities. Karanja (1987) found out that the level of dividends vary directly with the level of earnings i.e. most companies follow stable dividend payout ratio and therefore must retain enough funds to finance its expansion program. Gachoki (2005) concluded that firms do not follow pecking order theory of capital structure in their financing choices in Kenya.

2.4.3 Agency Cost Theory

This theory was developed by Jensen and Meckling (1976) and states that optimal capital structure will be determined by minimizing the costs arising from conflicts between the parties involved as agency costs play an important role in financing decisions due to the conflict that may exist between shareholders and debt holders. Jensen and Meckling recommended that, given increasing agency costs with both the equity-holders and debt-holders, there would be an optimum combination of outside debt and equity to reduce total agency costs. Grossman and Hart (1982) argued that debt can reduce agency costs by increasing the possibility of bankruptcy and providing a managerial discipline. Bradley et al. (1984) found that volatility in earnings will increase bankruptcy costs and this in turn will increase the agency costs, therefore, companies tend to use less debt.

Mehran (1992) found that adding compensation in incentive plan, giving some equity to managers, having investment bankers in the board and having equity owned by large individual investors will make managers willing to take leverage in their firms. In addition to that, taking more debt makes the firms have a lesser cash flow for the manager's 'perks' payout. This will

make managers to work harder to service the interest level, hence, the debt behave as a disciplinary forces. The conflict of shareholders and bondholders is another area of agency cost problem, whereby shareholders have better incentives to maximize their wealth at the expense of the bondholders by the increases in dividend rate, claim dilution, asset substitution and underinvestment. The only way bondholder can limit the action to benefit shareholders is to draft a bond covenants, an agreement to limit the firm on investment, financing, production and dividend payout.

Locally, Kamere (1987) noted that agency problem may bring about an optimal ratio of debt and equity financing when agency costs related to debt and equity financing are considered. In addition, Kamere (1987) points out that signalling theory is closely related to agency problem in the use of firm's capital structure to convey information to the market about how firm's profitability is made possible by failure on the part of principals to control actions of management fully.

2.5 Empirical Review

The existing literature on optimal dividend policy and capital structure is voluminous and can be traced back to seminal paper of MM (1958). Theories of dividend policy differ from theories of capital structure, since, the literature has treated dividend policy and capital structure as two distinct choices, even though there is reason to believe that there are common factors affecting both hence leaving us with many unanswered questions (Faulkender et al., 2006). According to Faulkender et al (2006), the theories of capital structure and dividend policy are jointly determined as part of a continuum of control allocations between managers and investors, and hence cross-sectional variations in both are driven by the same underlying factors. The endogenously determined allocation of control between the manager and investors is crucial not because of agency or private information problems but because of potentially divergent beliefs that can lead to disagreement about the value of the project available to the company.

The past performance is a critical factor. Better past performance reduces disagreement and thus affects the costs and benefits of different control allocations. Capital structure and dividend policy thus constitute an implicit governance mechanism that determines how much control over

the company's investment decisions is exercised by the manager in relation to the shareholders, and the company's past performance impinges on this governance mechanism, (Faulkender et al 2006).

According to several authors, there are two dominant dividend policy theories. These theories are signaling supported by Bhattacharya (1979), Miller & Rock (1985), and Ofer & Thakor (1987). Then there is the free cash flow highlighted by Easterbrook (1984), Jensen (1986), and Lang & Litzenberger (1989). Faulkender (2006) suggests that if dividends signal management's proprietary information to shareholders, then an abnormal increase in stock price must accompany an unexpected dividend increase. If dividends diminish free-cash-flow inefficiencies, then an increase in dividends will increase company value by reducing excess cash. Thus, both theories predict that unexpected increases in dividends should generate positive price reactions.

However, when it comes to being able to choose which of these theories best fits the data, the picture is not so clear. The evidence that supports signaling is that stock price changes following dividend change announcements have the same signs as the dividend changes, and the magnitude of the price reaction is proportional to the magnitude of the dividend change. This contention is supported by Nissam & Ziv (2001), and Allen & Michaely (2002). Bernheim & Wantz (1995) find that the signaling impact of dividends is positively related to dividend tax rates, consistent with a key implication of dividend signaling models that the signaling value of dividends should change with changes in dividend taxation. However, Benartzi et al (1997) present conflicting evidence. They found that the dividends are related more strongly to past earnings than future earnings.

Others researchers, Fama & French (2001) have found that there is a significant price drift in the years following the dividends, and it is the large and profitable companies, with less informational asymmetries, that pay most of the dividends, which is consistent with the free-cash-flow hypothesis. Support for the free-cash-flow hypothesis is not absolute, either. Supporting evidence is provided by Grullon et al (2002), who find that companies anticipating declining investment opportunities are likely to increase dividends, and Lie (2000) who finds that companies with cash in excess of that held by industry peers tend to increase their dividends.

More troubling is the fact that existing theories also do not explain why some companies never pay dividends whereas others consistently do, why the payment of dividends seems dependent on the company's stock price, and why there seem to be correlations between companies' capital structure and dividend policy choices.

Further, Baker & Wurgler (2004) found that managers pay dividends when investors place a premium on dividend-paying stocks and don't pay dividends when investors prefer non-dividend paying stocks. This suggests that managers are conditioning dividend decisions on their companies' stock prices. And, according to Graham& Harvey (2001) it is well documented fact that companies consider their stock price to be an important determinant of whether to issue debt or equity, which suggests that capital structure and dividend policy choices may be correlated through dependence on common factors.

Fauklender (2006) thus present that we are left without a theory of dividends that squares well with these stylized facts. The evidence on capital structure is even more troubling, according to him. The two dominant capital structure theories are the (static) tradeoff theory and the pecking order theory. The tradeoff theory states that a company's capital structure balances the costs and benefits of debt financing, where the costs include bankruptcy and agency costs, and the benefits include the debt tax shield and reduction of free-cash-flow problems. He is supported in his argument by Jensen (1986) & Jensen & Meckling (1976).

A prediction of the theory is that an increase in the stock price, because it lowers the company's leverage ratio, should lead to a debt issuance by the company to bring its capital structure back to its optimum. The pecking order theory, according to Myers & Majluf (1984) assumes that managers have private information that investors don't have, and goes on to show that companies will finance new investments first from retained earnings, then from riskless debt, then from risky debt, and finally, only in extreme circumstances like financial distress, from equity. This implies that equity issues should be quite rare, particularly when the company is doing well and its stock price is high.

Fauklender (2006) points out that empirical evidence is, however, perplexing in light of these theories. According to Graham & Harvey's (2001) survey evidence, companies issue equity rather than debt when their stock prices are high. This contention is corroborated by Asquith & Mullins (1986). It would appear that existing theories are under threat, for example Baker & Wurgler (2002) found out that the level of a company's stock price is a major determinant of which security to issue. In addition, Welch (2004) finds that companies let their capital structures change with their stock prices rather than issuing securities to counter the mechanical effect of stock returns on capital structure. On the contrary, Baker and Wurgler (2002) ascribe their finding to managers attempting to time the market. In a report by Dittmar & Thakor (2005) they show theoretically and empirically that companies may issue equity when their stock prices are high even when managers are not attempting to exploit market mispricing.

Recently, Fama and French (2004) have provided direct evidence against the pecking order hypothesis and concluded that this hypothesis cannot explain capital structure choices. They find that equity issues are not as infrequent as the pecking order hypothesis predicts, and that between 1973 and 2002 the annual equity decisions of more than half the companies in their sample violated the pecking order. These empirical studies on dividend policy and capital structure have questioned why companies work with lower leverage and dividend payout ratios when their stock prices are high.

2.6 Conclusion

There is an emerging consensus that there is no single explanation of dividend decision making (Abrutyn and Turner, 1990, Lease et al, 2000). Many researchers have engaged in extensive research to explain why companies should pay or not pay dividend and developed and empirically tested various models to explain dividend behavior. There are many reasons explaining, why dividend policy is so interesting. One reason is that the dividend policy of the firm affects capital structure. Consider the case, where the dividend payment is increased, then less fund is available internally for financing investments and consequently additional equity capital is needed. Thus the company has to issue new common stock. Dabrowska (2007) in his study concluded that recognition of relationships between the theories of capital structure and

dividend payout may support financial decision processes and allow for choosing such decisions that will influence the financial situation of the enterprise in the most beneficial manner.

In an attempt to establish the relationship between dividend and capital structure, various scholars have put forward conflicting views as to whether there is a direct or indirect relationship. Dabrowska (2007) points out that decision to pay dividends do not have a direct relation to the capital structure, although they do exert a strong influence on the value of equity capital. It seems therefore that there is no express relationship between the capital structure and the dividend policy.

Other scholars are of the view that dividend payout policy is directly connected with the capital structure. If an enterprise pays dividends, it decreases the degree of financing of equity capital from internal sources, and as a consequence may require external financing sources. According to the pro-dividend school, investors prefer to receive income from capital invested in shares in the form of a dividend. In their opinion, dividends are a more certain source of income than capital profits from the sale of securities (Sierpinska 1999). The anti-dividend school on the other hand assumes that paying dividends causes a drop in the price of stock. The payment of dividends is connected with the necessity of spending cash, which periodically leads to its shortage in companies following a dividend payments policy (Litzenberger and Ramaswamy 1979). Moreover it has been found that increasing the share of dividends in the net profit exerts a negative influence on the price of stock (Poterba and Summers 1984). In this situation, companies should limit dividend payments and allocate achieved profit to equity capital.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter is a description of the methodology used in the study to find answers to the research question. In this chapter, the research methodology is presented in the following order, research design, target population, sampling procedure, data collection methods, instruments of data collection and finally the data analysis. The following sections provide a detailed description of the methodology utilized in the study.

3.2 Research Design

This study adopted a descriptive design that aims at exploring the relationship between dividend payout ratio and capital structure of companies listed at NSE. This is because the study seeks to establish a relationship between two variables. A descriptive survey was undertaken. Descriptive designs result in a description of the data, either in words, pictures, charts, or tables, and indicate whether the data analysis shows statistical relationships or is merely descriptive. Sample survey based on the firms listed at the NSE was used to produce results that are broad, credible and conclusive. Survey is preferred as a result of financial constraints and surveys focus on data rather than theory. The research is quantitative in nature and relies on secondary data obtained from NSE and firms' financial reports.

3.3 Population

Target population can be defined as a complete set of individuals, cases/objects with some common observable characteristics of a particular nature distinct from other population. According to Mugenda and Mugenda (1999), a population is a well defined as a set of people, services, elements and events, group of things or households that are being investigated. The population consisted of 58 companies listed at the NSE from 2007 to 2011 as indicated in appendix II. This period was considered long enough to provide sufficient variables to assist in determining a trend on the relationship between dividend payout ratio and capital structure. This period was chosen in order to capture the most recent data and to give results that reflect the

current trend. This is consistent with other related studies in Kenyan context e.g. Wandeto (2005).

3.4 Sample Design

The sample was made up of 29 companies listed at NSE. Random sampling technique was used in this study. In coming up with the sample size, companies in financial sector were excluded since they utilize different mechanism in financing their operations, financial firms are also subject to strict regulations and finally their accounting mechanisms are different from that of other sectors. Yearly data for the period 2007 to 2011 was used. The study was limited to the quoted companies due to lack of readily available data among the private companies.

3.5 Data Collection

The study sourced data from secondary sources. The data was obtained from annual financial statements of all the listed companies and other resourceful information available at the NSE secretariat for 5 years from 2007 to 2011. The data extracted include; DPS, EPS and debt to equity ratio from published reports of listed companies.

3.6 Data Analysis

The collected data from the secondary sources was systematically organized in a manner to facilitate analysis. Data analysis involved preparation of the collected data, coding, editing and cleaning of data so as to facilitate processing using SPSS package. The coded data was keyed into the SPSS program where it was developed into a database and subsequently analyzed. SPSS is preferred because it is systematic and covers a wide range of the most common statistical and graphical data analysis. Regression model was used to establish the relationship between the variables. Correlation analysis was used to explain variation between the variables.

3.6.1 Analytical Model

Regression analysis is a statistical technique that can be used to develop a mathematical equation showing how variables are related. In regression terminology, the variable that is predicted is called dependent variable while the variable used to predict the value of dependent variable is called independent variable. Data collected was analyzed using simple regression and correlation

analysis. The significance of each independent variable was tested at a confidence level of 95%. In this study, dependent variable was dividend payout ratio and independent variable was leverage. The variables involved were calculated as follows;

Dividend payout ratio = DPS ÷ EPS.
Leverage was measured by Debt to Equity ratio = Total debt ÷ Shareholders Equity.

In order to examine the relationship between dividend payout ratio and capital structure, the regression equation of the form given below was applied;

$$\mathbf{Y = \alpha_0 + \alpha_i X_i + \varepsilon}$$

Where **Y**= Dividend Payout Ratio (dependent variable).
$\boldsymbol{\alpha_0}$= Constant (Defines value of dividend payout ratio without inclusion of predictor variable)
$\mathbf{X_i}$ = Leverage
$\boldsymbol{\varepsilon}$ = Error Term
$\boldsymbol{\alpha_i}$ - Regression coefficient- define the amount by which Y is changed for every unit change in predictor variable.

3.6.2 Coefficient of Determination ($\mathbf{R^2}$)

Coefficient of determination is the ratio of the explained variation to the total variation and is used to measure the strength of linear relationship. The stronger the relationship, the closer the ratio will be to one. This study used Coefficient of determination ($\mathbf{R^2}$) as a measure of the degree of linear association between predictor variables and the responsive variable.

Coefficient of Determination ($\mathbf{R^2}$) = $\frac{\text{Explained Variation}}{\text{Total Variation}}$

CHAPTER FOUR
DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter gives the results of the analysis where the researcher used secondary data to get the results of the study. The results are then presented inform of charts and tables where quantitative data was analyzed through computer excel while qualitative data was analyzed through coding.

4.2 Relationship between dividend payout ratio and capital structure

4.2.1 Relationship between dividend payout ratio and capital structure in 2007

This result in table 4.2 gives the relationship between dividend pay-out ratio and capital structure (leverage) where it indicates the extent to which capital structure component under study affects dividend pay-out ratio thus giving a predictive equation.

Table 4.1: Model summary for year 2007

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.190[a]	.036	.000	45.313699

a Predictors: (Constant), Leverage

Source: Research Findings

The independent variable that was studied, explain only 3.6% of the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE in the year 2007 as represented by the R^2. This therefore means that other factors not studied in this research contribute 96.4% of the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE. Therefore, further research should be conducted to investigate the other factors (96.4%) that affect the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE.

Table 4.2 Regression of leverage with dividend pay-out ratio as the dependent variable in 2007

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	54.411	15.804		3.443	.052
	Leverage	-12.655	12.605	-.190	-1.004	.324

a. Dependent Variable: Dividend Pay Out Ratio
Source: Research Findings

The results in table 4.2 answer the equation $\mathbf{Y = \alpha_0 + \alpha_i X_i + \varepsilon}$ where:

Y= Dividend Payout Ratio (dependent variable).

$\boldsymbol{\alpha_0}$= Constant (Defines value of dividend payout ratio without inclusion of predictor variable)

$\mathbf{X_i}$ = Leverage

$\boldsymbol{\varepsilon}$ = Error Term

The given equation is answered by the values Unstandardized Coefficients (B) where all of them are significant since their p values (Sig.>0.05) is greater than 0.05 testing at 95% confidence level. The results indicate that leverage has an inverse relationship with the dividend pay-out ratio since it gives a negative response.

Equation $\mathbf{Y = \alpha_0 + \alpha_i X_i}$

Dividend Payout Ratio = 54.411 (Constant) + -12.655Leverage

The results indicate that leverage affects dividend pay-out ratio negatively by 12.655 given a constant of 54.411.

4.2.2 Relationship between dividend payout ratio and capital structure in 2008

This result in table 4.4 gives the relationship between dividend pay-out ratio and capital structure (leverage) where it indicates the extent to which capital structure component under study affects dividend pay-out ratio thus giving a predictive equation.

Table 4.3: Model summary for year 2008

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.092[a]	.008	-.028	30.071907

a. Predictors: (Constant), Leverage

Source: Research Findings

The independent variable that was studied, explain only 0.8% of the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE in the year 2008 as represented by the R^2. This therefore means that other factors not studied in this research contribute 99.2% of the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE. Therefore, further research should be conducted to investigate the other factors (99.2%) that affect the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE.

Table 4.4 Regression of leverage with dividend pay-out ratio as the dependent variable in 2008

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	38.276	11.858		3.228	.063
	Leverage	-4.684	9.794	-.092	-.478	.636

a. Dependent Variable: Dividend Pay Out Ratio

Source: Research Findings

The results in table 4.4 answer the equation $\mathbf{Y = \alpha_0 + \alpha_i X_i + \varepsilon}$ where:

Y= Dividend Payout Ratio (dependent variable).

$\boldsymbol{\alpha_0}$= Constant (Defines value of dividend payout ratio without inclusion of predictor variable)

$\mathbf{X_i}$ = Leverage

$\boldsymbol{\varepsilon}$ = Error Term

The given equation is answered by the values Unstandardized Coefficients (B) where all of them are significant since their p values (Sig.>0.05) is greater than 0.05 testing at 95% confidence level. The results indicate that leverage has an inverse relationship with the dividend pay-out ratio since it gives a negative response.

Equation $\mathbf{Y = \alpha_0 + \alpha_i X_i}$

Dividend Payout Ratio = 38.276 (Constant) + -4.684 Leverage

The results indicate that leverage affects dividend pay-out ratio negatively by 4.684 given a constant of 38.276.

4.2.3 Relationship between dividend payout ratio and capital structure in 2009

This result in table 4.6 gives the relationship between dividend pay-out ratio and capital structure (leverage) where it indicates the extent to which capital structure component under study affects dividend pay-out ratio thus giving a predictive equation.

Table 4.5: Model summary for year 2009

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.473[a]	.224	.195	26.922850

a. Predictors: (Constant), Leverage

Source: Research Findings

The independent variable that was studied, explain only 22.4% of the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE in the year 2009 as represented by the R^2. This therefore means that other factors not studied in this research contribute 77.6% of the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE. Therefore, further research should be conducted to investigate the other factors (77.6%) that affect the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE.

Table 4.6 Regression of leverage with dividend pay-out ratio as the dependent variable in 2009

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	55.029	8.800		6.253	.061
	Leverage	-17.193	6.166	-.473	-2.788	.074

a. Dependent Variable: Dividend Pay Out Ratio
Source: Research Findings

The results in table 4.6 answer the equation $\mathbf{Y = \alpha_0 + \alpha_i X_i + \varepsilon}$ where:

Y= Dividend Payout Ratio (dependent variable).

$\boldsymbol{\alpha_0}$= Constant (Defines value of dividend payout ratio without inclusion of predictor variable)

$\mathbf{X_i}$ = Leverage

$\boldsymbol{\varepsilon}$ = Error Term

The given equation is answered by the values Unstandardized Coefficients (B) where all of them are significant since their p values (Sig.>0.05) is greater than 0.05 testing at 95% confidence level. The results indicate that leverage has an inverse relationship with the dividend pay-out ratio since it gives a negative response.

Equation $\mathbf{Y = \alpha_0 + \alpha_i X_i}$

Dividend Payout Ratio = 55.029 (Constant) + -17.193 Leverage

The results indicate that leverage affects dividend pay-out ratio negatively by 17.193 given a constant of 55.029.

4.2.4 Relationship between dividend payout ratio and capital structure in 2010

This result in table 4.8 gives the relationship between dividend pay-out ratio and capital structure (leverage) where it indicates the extent to which capital structure component under study affects dividend pay-out ratio thus giving a predictive equation.

Table 4.7: Model summary for year 2010

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.124[a]	.015	-.021	158.098763

a. Predictors: (Constant), Leverage

Source: Research Findings

The independent variable that was studied, explain only 1.5% of the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE in the year 2010 as represented by the R^2. This therefore means that other factors not studied in this research contribute 98.5% of the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE. Therefore, further research should be conducted to investigate the other factors (98.5%) that affect the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE.

Table 4.8 Regression of leverage with dividend pay-out ratio as the dependent variable in 2010

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	38.128	54.878		.695	.493
	Leverage	-24.135	37.191	-.124	-.649	.522

a. Dependent Variable: Dividend Pay Out Ratio
Source: Research Findings

The results in table 4.8 answer the equation $\mathbf{Y = \alpha_0 + \alpha_i X_i + \varepsilon}$ where:

Y= Dividend Payout Ratio (dependent variable).

$\boldsymbol{\alpha_0}$= Constant (Defines value of dividend payout ratio without inclusion of predictor variable)

$\mathbf{X_i}$ = Leverage

$\boldsymbol{\varepsilon}$ = Error Term

The given equation is answered by the values Unstandardized Coefficients (B) where all of them are significant since their p values (Sig.>0.05) is greater than 0.05 testing at 95% confidence level. The results indicate that leverage has an inverse relationship with the dividend pay-out ratio since it gives a negative response.

Equation $\mathbf{Y = \alpha_0 + \alpha_i X_i}$

Dividend Payout Ratio = 38.128 (Constant) + -24.135 Leverage

The results indicate that leverage affects dividend pay-out ratio negatively by 24.135 given a constant of 38.128.

4.2.5 Relationship between dividend payout ratio and capital structure in 2011

This result in table 4.10 gives the relationship between dividend pay-out ratio and capital structure (leverage) where it indicates the extent to which capital structure component under study affects dividend pay-out ratio thus giving a predictive equation.

Table 4.9: Model summary for year 2011

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.299[a]	.089	.055	58.813248

a. Predictors: (Constant), Leverage

Source: Research Findings

The independent variable that was studied, explain only 8.9% of the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE in the year 2011 as represented by the R^2. This therefore means that other factors not studied in this research contribute 91.1% of the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE. Therefore, further research should be conducted to investigate the other factors (91.1%) that affect the effectiveness of the relationship between dividend payout ratio and capital structure of companies listed at NSE.

Table 4.10 Regression of leverage with dividend pay-out ratio as the dependent variable in 2011

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.261	15.744		2.049	.051
	Leverage	-14.899	9.168	-.299	-1.625	.116

a. Dependent Variable: Dividend Pay Out Ratio

Source: Research Findings

The results in table 4.10 answer the equation $\mathbf{Y = \alpha_0 + \alpha_i X_i + \varepsilon}$ where:

Y= Dividend Payout Ratio (dependent variable).

$\boldsymbol{\alpha_0}$= Constant (Defines value of dividend payout ratio without inclusion of predictor variable)

$\mathbf{X_i}$ = Leverage

$\boldsymbol{\varepsilon}$ = Error Term

The given equation is answered by the values Unstandardized Coefficients (B) where all of them are significant since their p values (Sig.>0.05) is greater than 0.05 testing at 95% confidence level. The results indicate that leverage has an inverse relationship with the dividend pay-out ratio since it gives a negative response.

Equation $\mathbf{Y = \alpha_0 + \alpha_i X_i}$

Dividend Payout Ratio = 32.261 (Constant) + -14.899 Leverage

The results indicate that leverage affects dividend pay-out ratio negatively by 14.899 given a constant of 32.261.

4.3 Graphical relationship between dividend payout ratio and debt to equity ratio

Kakuzi Ltd

Figure 4.1 indicate the pay-out ratio in percentages and debt to equity ratio of Kakuzi Ltd for the period of 2007 to 2011. The line graph indicates the movement according to years.

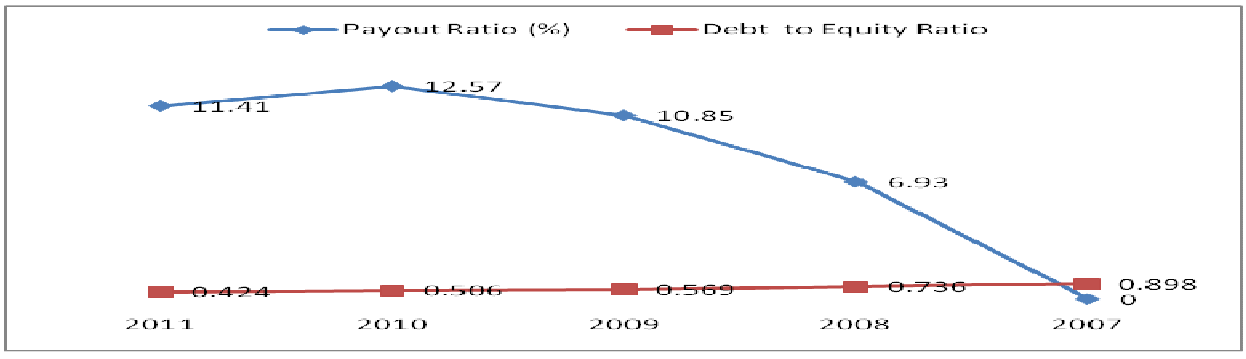

Figure 4.1 Kakuzi Ltd

Source: Research Findings

The results in figure 4.1 indicate that Kakuzi Ltd has had a steady performance on debt to equity ratio as indicated by a range of 0.424 to 0.898. Dividend payout ratio increased from 2007 to 2010, before showing a slight decline in 2011.

Rea Vipingo Ltd

The results in figure 4.2 indicate the performance of Rea Vipingo Ltd in payout ratio in percentage form and debt to equity ratio.

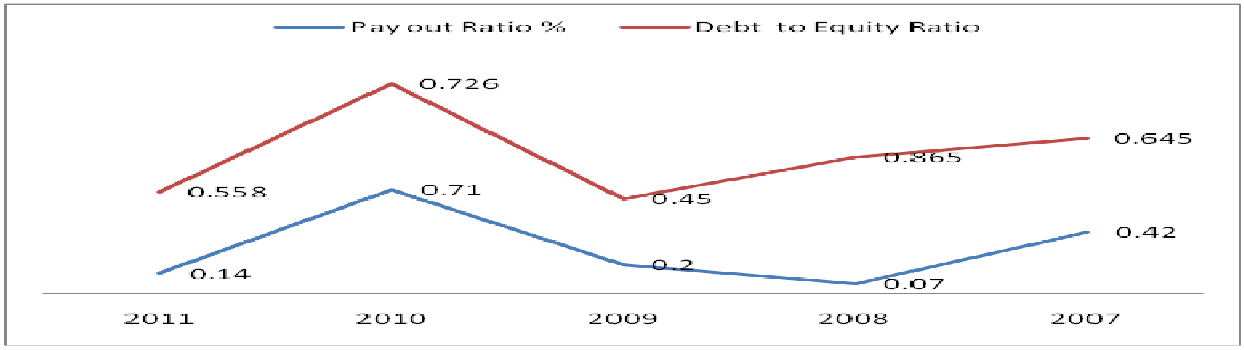

Figure 4.2 Rea Vipingo Ltd

Source: Research Findings

The results in figure 4.2 indicate that as debt to equity ratio declined from 2007 to 2009, before increasing sharply in the year 2011. A sharp decrease was witnessed in the year 2011. Payout ratio decreased from 2007 to 2008 then increased to 2010 then decreased to 2011.

Sasini Ltd

The results in figure 4.3 indicate the performance of Sasini Ltd in payout ratio in percentage form and debt to equity ratio.

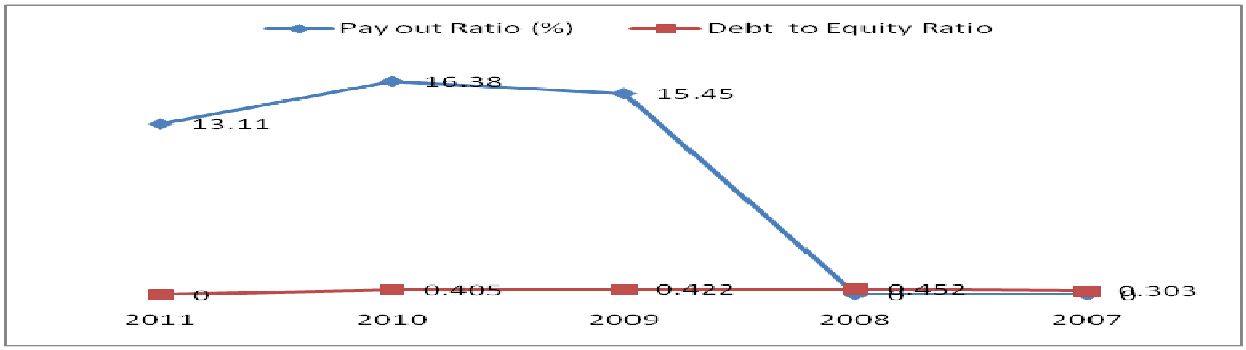

Figure 4.3 Sasini Ltd

Source: Research Findings

The results in figure 4.3 indicate that the performance of debt to equity ratio remained constant across the years. The performance of pay-out ratio was steady from 2007 to 2008, then increased from 2008 to 2009 after which there was a slight increment to 2010 then decreased to 2011.

Access Kenya Ltd

The results in figure 4.4 indicate the performance of Access Kenya Ltd in payout ratio in percentage form and debt to equity ratio.

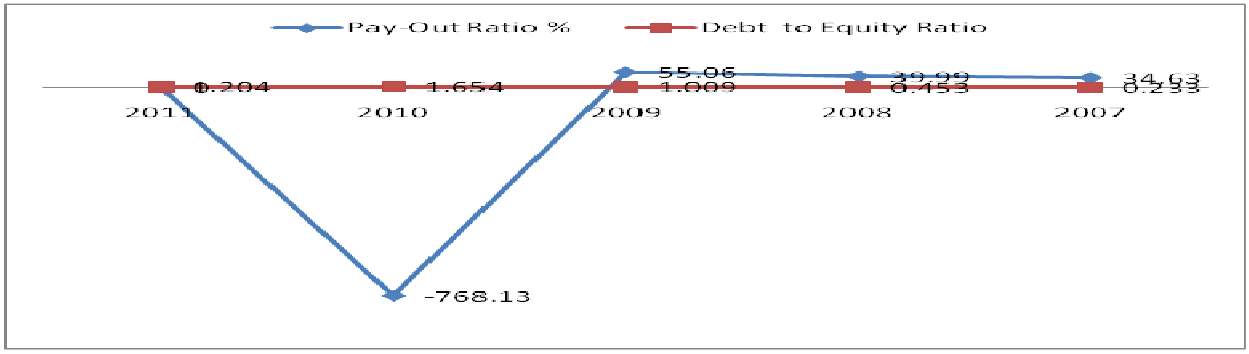

Figure 4.4 Access Kenya Ltd

Source: Research Findings

The results in figure 4.4 indicate that the performance in debt to equity were steady while the performance of payout ratio was steady from 2007 to 2009 then it decreased till 2010 before increasing in the year 2011.

Cars & General ltd

The results in figure 4.5 indicate the performance of Cars & General ltd in payout ratio in percentage form and debt to equity ratio.

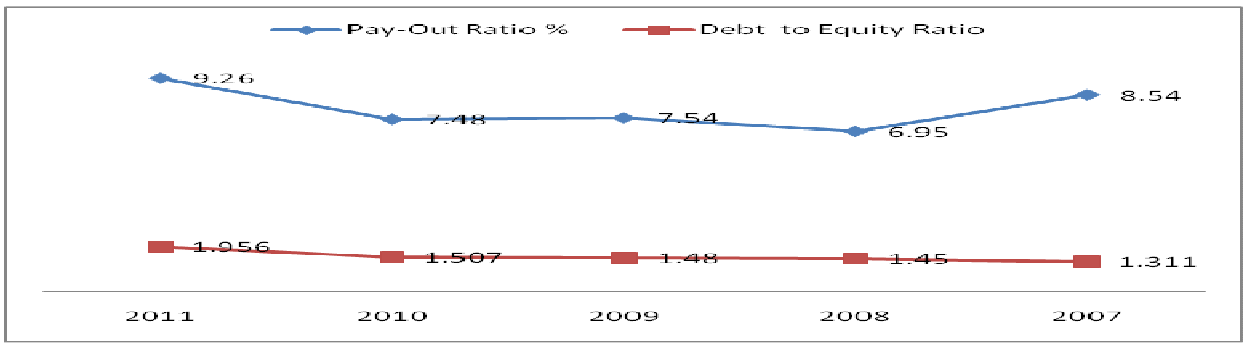

Figure 4.5 Cars & General ltd

Source: Research Findings

The results in figure 4.5 indicate that debt to equity ratio had a steady performance from 2007 to 2011. The performance in pay-out ratio decreased from 2007 to 2008 then there was a slight increase to 2009 to 2011.

Kenya Airways Ltd

The results in figure 4.6 indicate the performance of Kenya Airways Ltd in payout ratio in percentage form and debt to equity ratio.

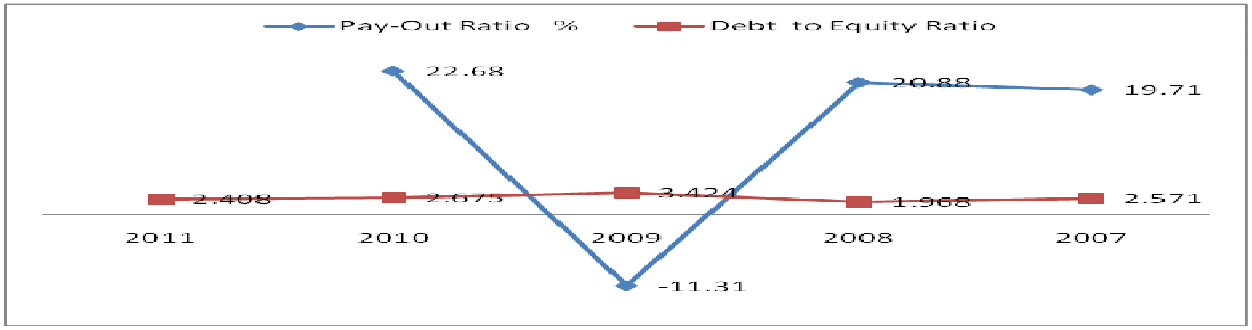

Figure 4.6 Kenya Airways Ltd

Source: Research Findings

The results indicate that there was a steady performance in debt to equity ratio. The performance in payout ratio was steady from 2007 to 2008 after which it also decreased to 2009 then increased to 2010.

Scan Group Ltd

The results in figure 4.7 indicate the performance of Scan Group Ltd in payout ratio in percentage form and debt to equity ratio.

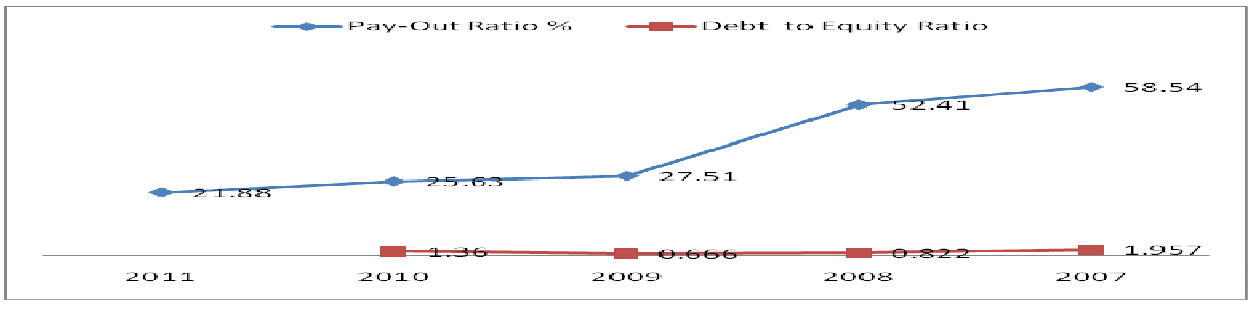

Figure 4.7 Scan Group Ltd

Source: Research Findings

The results in figure 4.7 indicate that the performance in earning per share and debt to equity ratio was steady while the performance in payout ratio decreased from 2007 at a high rate to 2009 then it decreased at a slow rate till 2011.

Nation Media Group Ltd

The results in figure 4.8 indicate the performance of Nation Media Group Ltd in payout ratio in percentage form and debt to equity ratio.

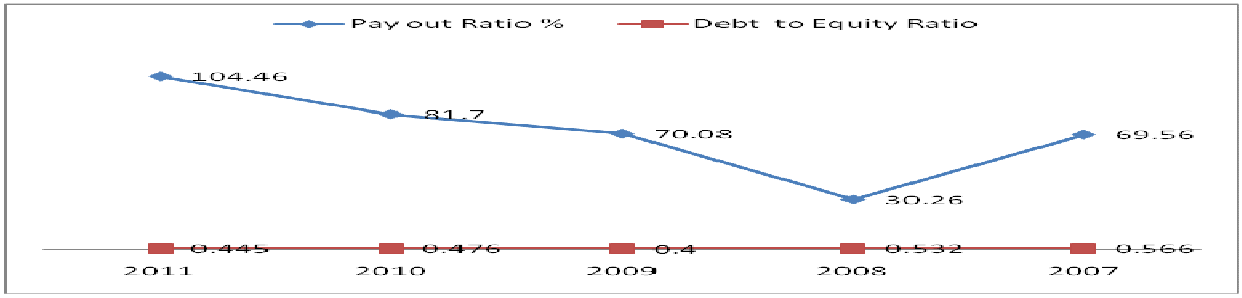

Figure 4.8 Nation Media Group Ltd

Source: Research Findings

The results in figure 4.8 indicate that the performance in debt to equity ratio was steady. The results however indicate that pay-out ratio declined from 2007 to 2008 then it increased steadily till 2011.

Standard Group Ltd

The results in figure 4.9 indicate the performance of Standard Group Ltd in payout ratio in percentage form and debt to equity ratio.

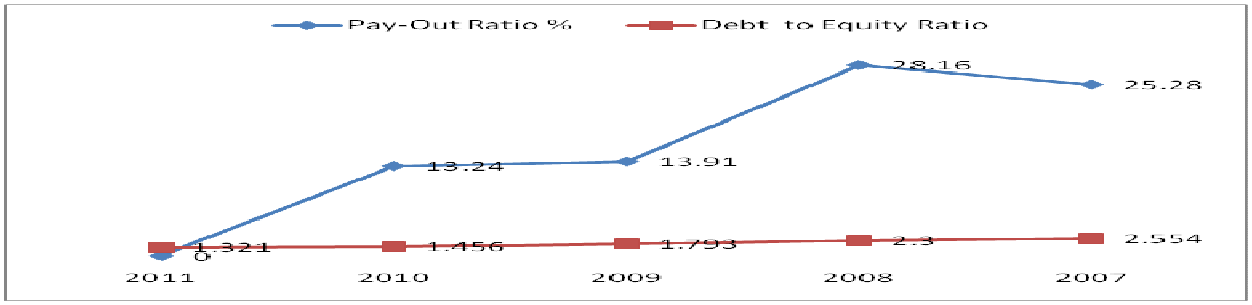

Figure 4.9 Standard Group Ltd

Source: Research Findings

The results in figure 4.9 indicate that the performance in debt to equity ratio was steady while the performance of payout ratio increased from 2007 to 2008 after which it decreased to 2011.

TPS Serena Ltd

The results in figure 4.10 indicate the performance of TPS Serena Ltd in payout ratio in percentage form and debt to equity ratio.

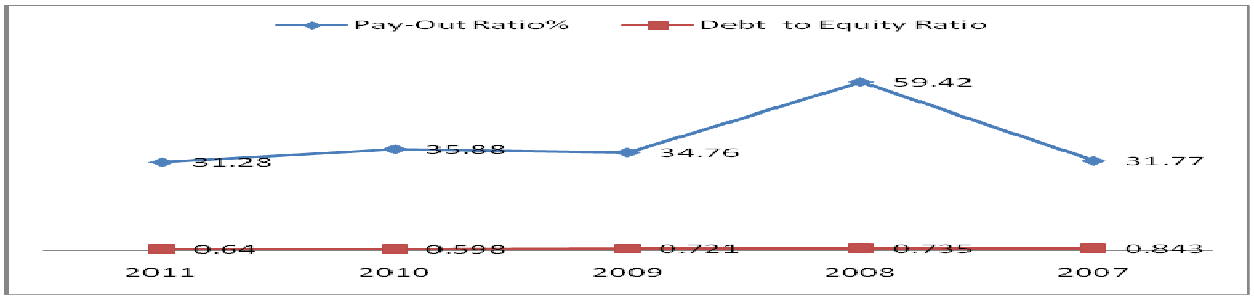

Figure 4.10 TPS Serena Ltd

Source: Research Findings

The results in figure 4.10 indicate that the performance in debt to equity ratio was steady while the performance of payout ratio increased from 2007 to 2008 after which it decreased sharply to 2009 then there was a slight decrease to year 2011.

Athi River Mining Ltd

The results in figure 4.11 indicate the performance of Athi River Ltd in payout ratio in percentage form and debt to equity ratio.

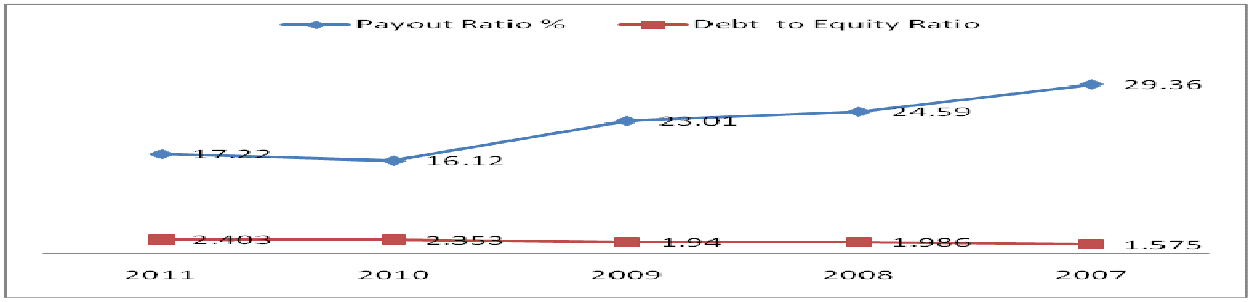

Figure 4.11 Athi River Mining Ltd

Source: Research Findings

The results in figure 4.11 indicate that the performance in debt equity ratio was steady while the performance in pay-out ratio declined from 2007 to 2010 after which it had a slight increment from 2010 to 2011.

Bamburi Cement Ltd

The results in figure 4.12 indicate the performance of Bamburi Cement Ltd in payout ratio in percentage form and debt to equity ratio.

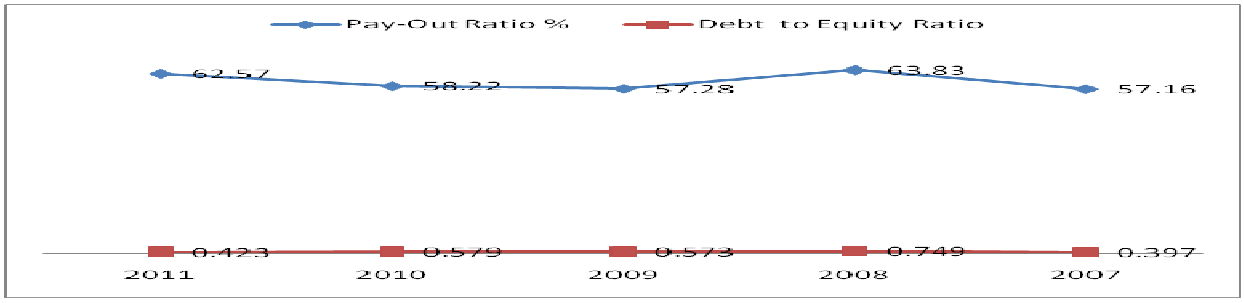

Figure 4.12 Bamburi Cement Ltd

Source: Research Findings

The results in figure 4.12 indicate that pay-out ratio rose in 2007 to 2008 followed by a decline in 2009 then a slight increment till 2011. The performance of debt to equity ratio was steady over years.

British American Tobacco Ltd

The results in figure 4.13 indicate the performance of British American Tobacco Ltd in payout ratio in percentage form and debt to equity ratio.

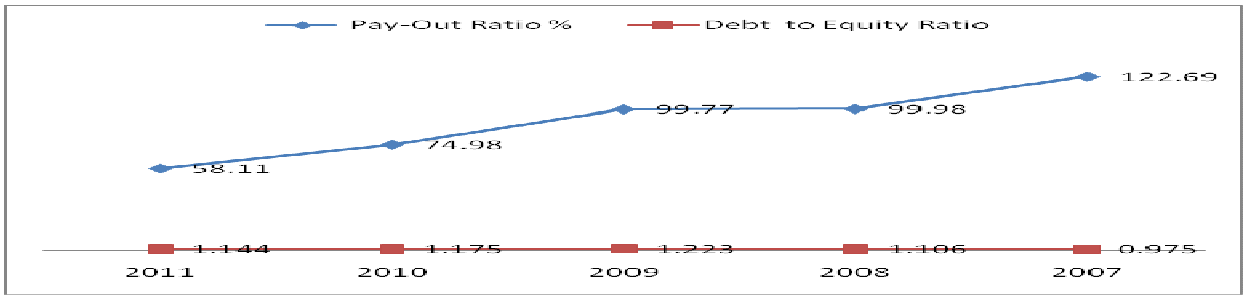

Figure 4.13 British American Tobacco Ltd

Source: Research Findings

The results in figure 4.13 indicate that the performance in debt to equity ratio is steady while the performance in pay-out ratio decreases slightly from 2007 to 2011.

Crown Barger Kenya Ltd

The results in figure 4.14 indicate the performance of Crown Barger Kenya Ltd in payout ratio in percentage form and debt to equity ratio.

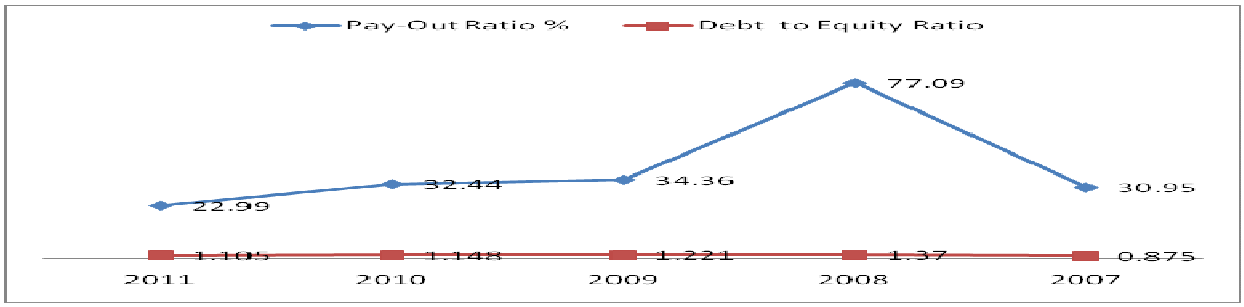

Figure 4.14 Crown Barger Kenya Ltd

Source: Research Findings

The results in figure 4.14 indicate that there was a steady performance in debt to equity ratio while the performance in payout ratio increased from 2007 to 2008 after which it decreased till 2011.

East Africa Cables Ltd

The results in figure 4.15 indicate the performance of East Africa Cables Ltd in payout ratio in percentage form and debt to equity ratio.

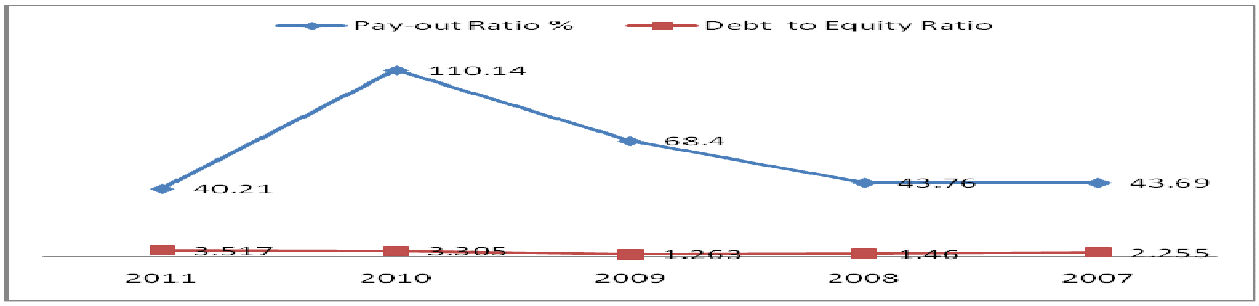

Figure 4.15 East Africa Cables Ltd

Source: Research Findings

The study results in figure 4.15 indicate that the performance of debt equity ratio was steady while there was increment of payout ratio from 2007 till 2010 where there was a decline.

East Africa Portland Cement Ltd

The results in figure 4.16 indicate the performance of East Africa Portland Cement Ltd in payout ratio in percentage form and debt to equity ratio.

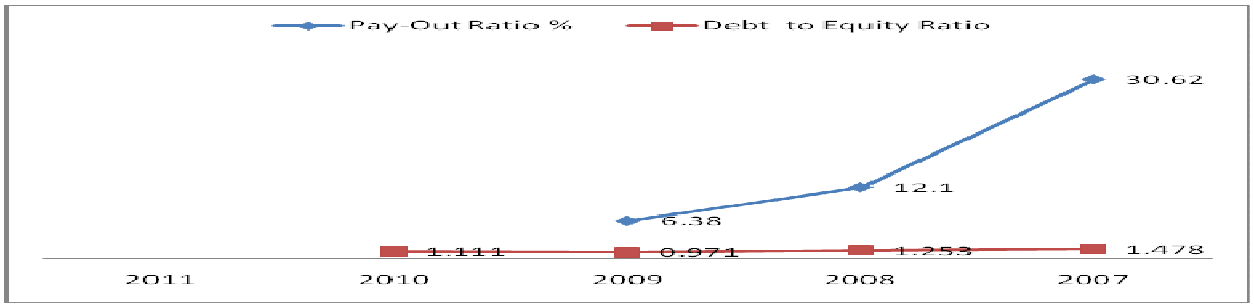

Figure 4.16 East Africa Portland Cement Ltd

Source: Research Findings

The results in figure 4.16 indicate that the performance of debt equity ratio was steady. Payout ratio declined sharply from 2007 to 2009.

East Africa Breweries Ltd

The results in figure 4.17 indicate the performance of East Africa Breweries Ltd in payout ratio in percentage form, debt to equity ratio and earnings per share.

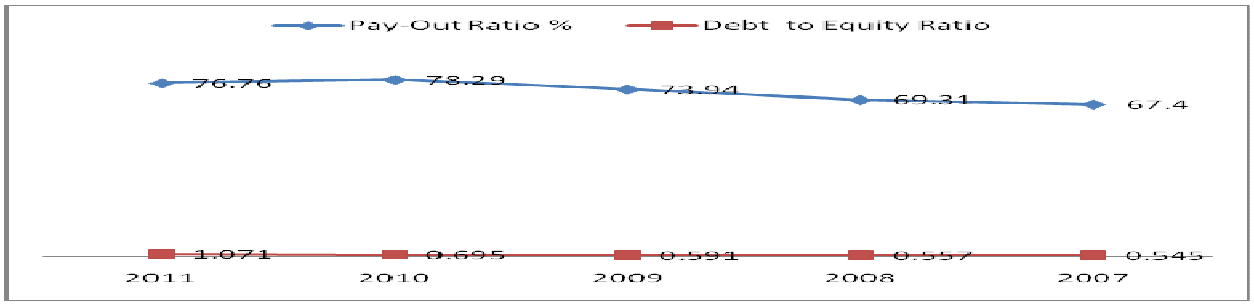

Figure 4.17 East Africa Breweries Ltd

Source: Research Findings

The result in figure 4.17 indicate that the performance of debt equity ratio was steady while the performance of pay-out ratio had a slight increment from 2007 till 2010 after which there was a slight decline till 2011.

Eveready East Africa Ltd

The results in figure 4.18 indicate the performance of Eveready East Africa Ltd in payout ratio in percentage form and debt to equity ratio.

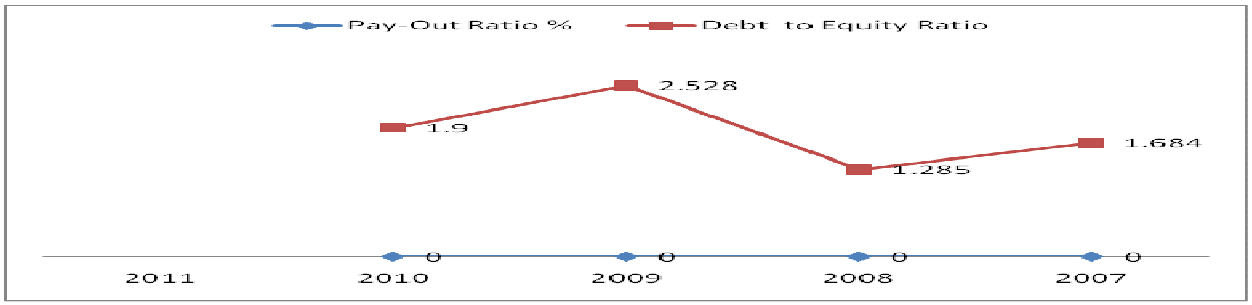

Figure 4.18 Eveready East Africa Ltd

Source: Research Findings

The results in figure 4.18 indicate that there was no payout ratio since 2007 to 2011 while debt to equity ratio decreased from 2007 to 2008 after which it increased from 2008 to 2009 then there was a decline from 2009 to 2010.

Kenya Oil Company Ltd

The results in figure 4.19 indicate the performance of Kenya Oil Company Ltd in payout ratio in percentage form and debt to equity ratio.

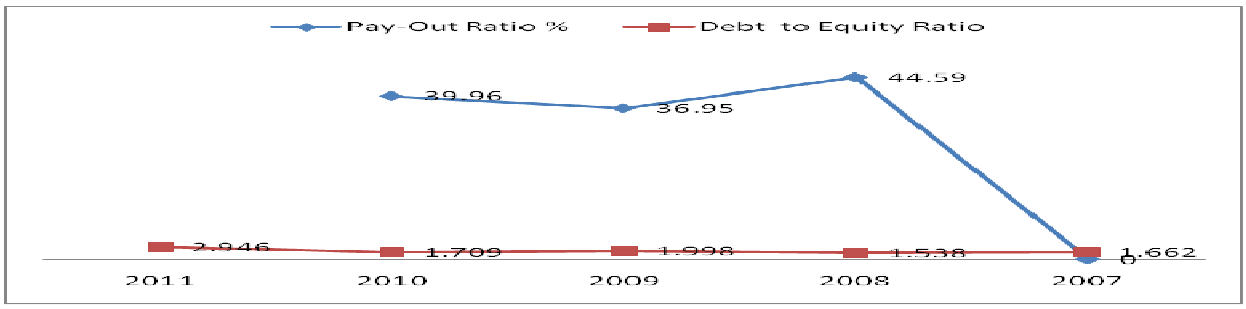

Figure 4.19 Kenya Oil Company Ltd

Source: Research Findings

The results in figure 4.19 indicate that the performance of debt to equity ratio was steady while that of pay-out ratio increased to 2008 then decreased till 2009 after which it had a slight increment to 2010.

BOC Kenya Ltd

The results in figure 4.20 indicate the performance of Kenya Oil Company Ltd in payout ratio in percentage form and debt to equity ratio.

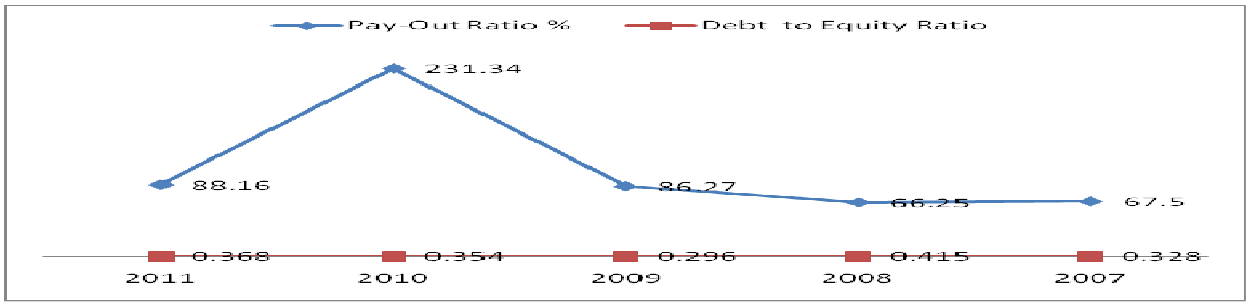

Figure 4.20 BOC Kenya Ltd

Source: Research Findings

The results in figure 4.20 indicate that the performance of debt to equity ratio is steady while the performance of payout ratio had a slight increment from 2007 to 2009 after which there was a sharp increment till 2010 then followed by a decrease in performance till 2011.

KPLC Ltd

The results in figure 4.21 indicate the performance of Kenya Oil Company Ltd in payout ratio in percentage form and debt to equity ratio.

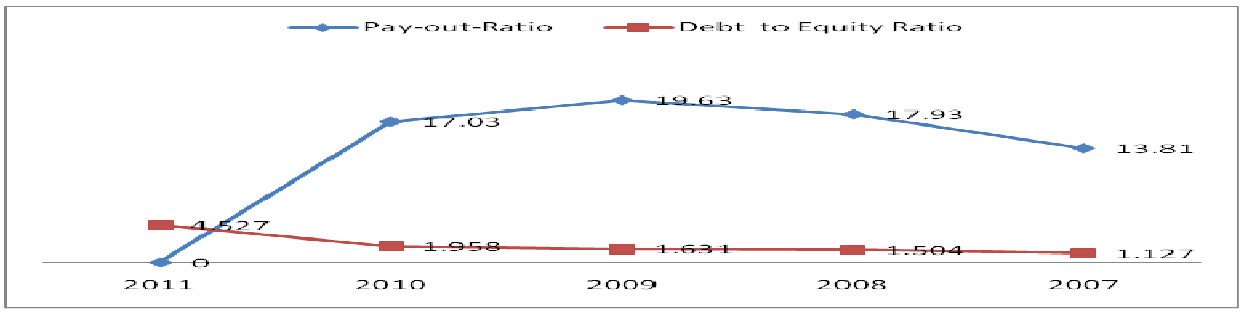

Figure 4.21 KPLC Ltd

Source: Research Findings

The results in figure 4.21 indicate that the performance of debt to equity ratio was constant while that of payout ratio had a slight increment from 2007 to 2008 after which there was a sharp increment till 2009 then followed by a sharp decrease till 2011.

Total Kenya Ltd

The results in figure 4.22 indicate the performance of Total Kenya Ltd in payout ratio in percentage form and debt to equity ratio.

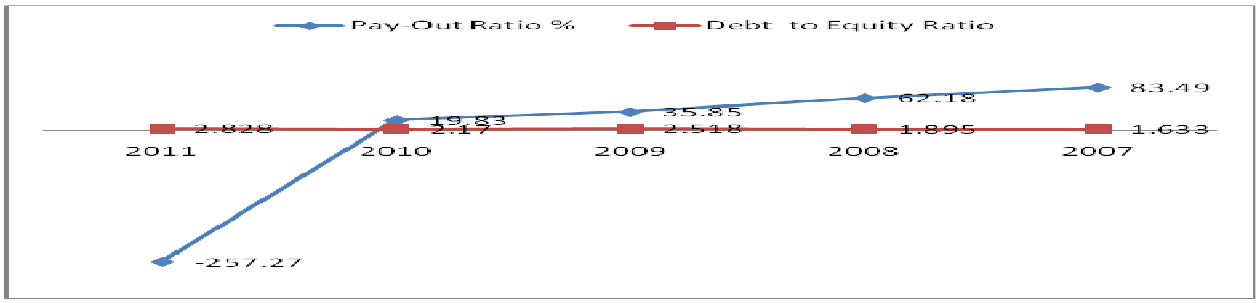

Figure 4.22 Total Kenya Ltd

Source: Research Findings

The results in figure 4.22 indicate that the performance of debt to equity ratio was steady while that of pay-out ratio declined from 2007 to 2010 after which it recorded a negative performance from 2010 to 2011.

Mumias Sugar Ltd

The results in figure 4.23 indicate the performance of Mumias Sugar Ltd in payout ratio in percentage form and debt equity to ratio.

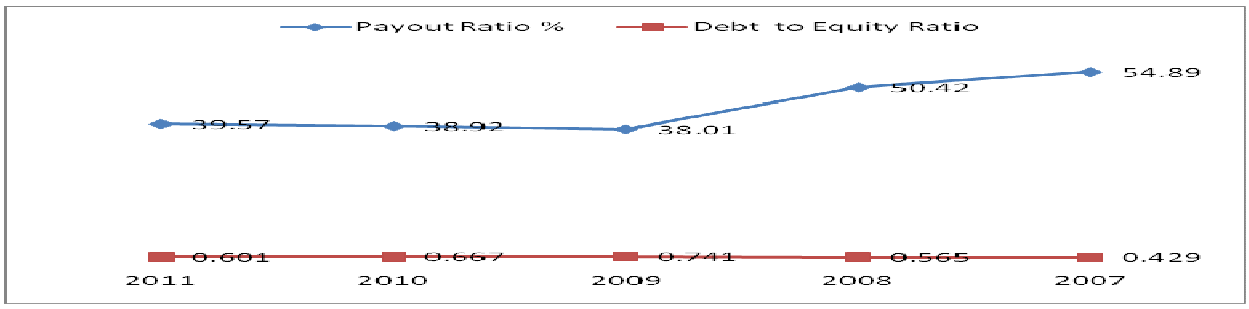

Figure 4.23 Mumias Sugar Ltd

Source: Research Findings

The results in figure 4.23 indicate that the performance of debt to equity ratio was steady while that of payout ratio had a slight decline from 2007 till 2009 after which there was a slight increment till 2011.

Sameer Africa Ltd

The results in figure 4.24 indicate the performance of Sameer Africa Ltd in payout ratio in percentage form and debt to equity ratio.

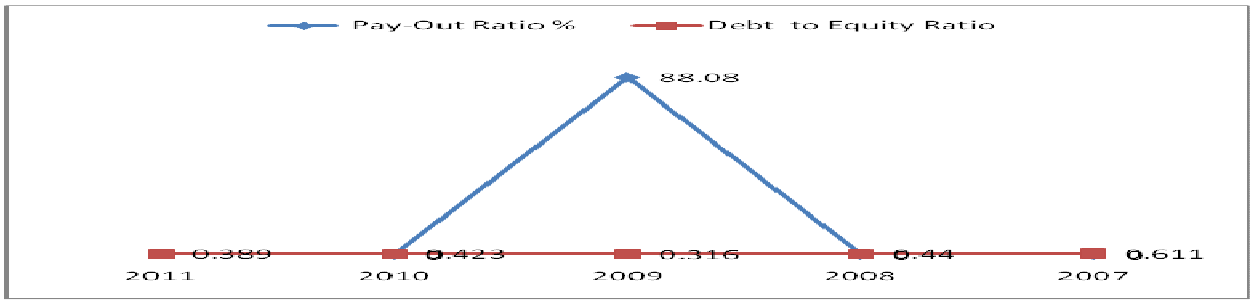

Figure 2.24 Sameer Africa Ltd

Source: Research Findings

The results in figure 2.24 indicate that the performance in payout ratio and debt to equity ratio was similar in all the years except from 2008 to 2010 where pay-out ratio had a sharp increment till 2009 then a sharp decrease till 2010.

Unga Group Ltd

The results in figure 4.25 indicate the performance of Unga Group Ltd in payout ratio in percentage form and debt to equity ratio.

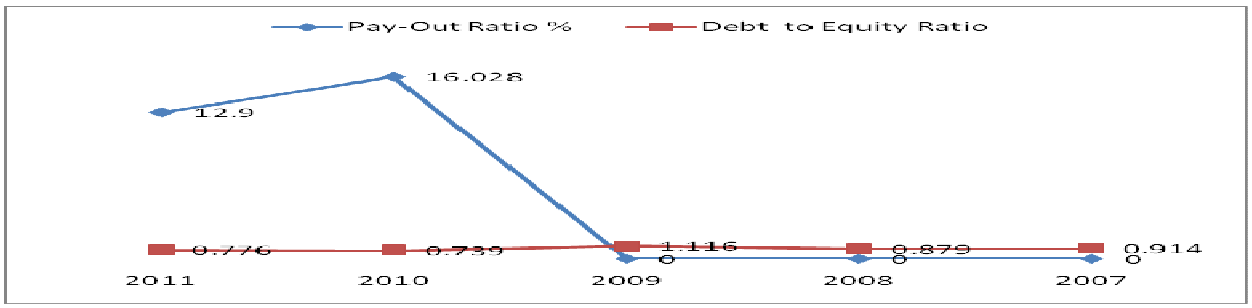

Figure 4.25 Unga Group Ltd

Source: Research Findings

The results in figure 4.25 indicate that the performance of debt to equity ratio was steady while that of payout ratio was steady from 2007 to 2009 after which there was a sharp increment to 2010 then followed by a decrease of 2011.

Express Kenya Ltd

The results in figure 4.26 indicate the performance of Express Kenya Ltd in payout ratio in percentage form and debt to equity ratio.

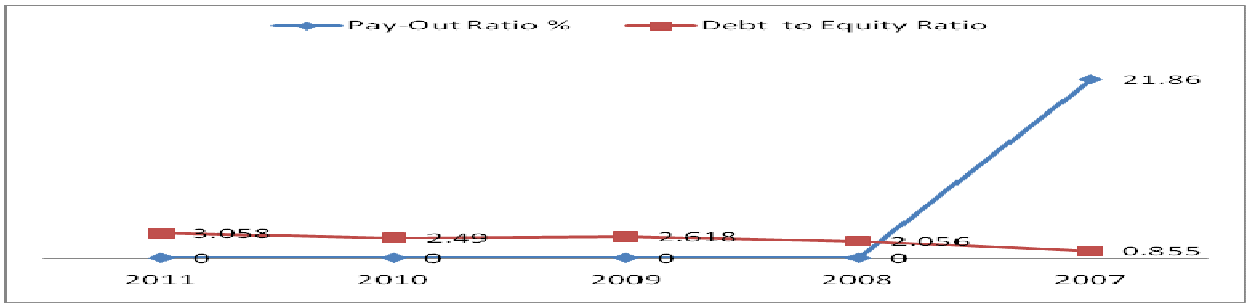

Figure 4.26 Express Kenya Ltd

Source: Research Findings

The results in figure 4.26 indicate that the performance of debt to equity ratio was steady through the whole study period while that of payout ratio made a sharp decrease from 2007 to 2008 after which it remained steady.

Williamson Tea Kenya Ltd

The results in figure 4.27 indicate the performance of Williamson Tea Kenya Ltd in payout ratio in percentage form and debt to equity ratio.

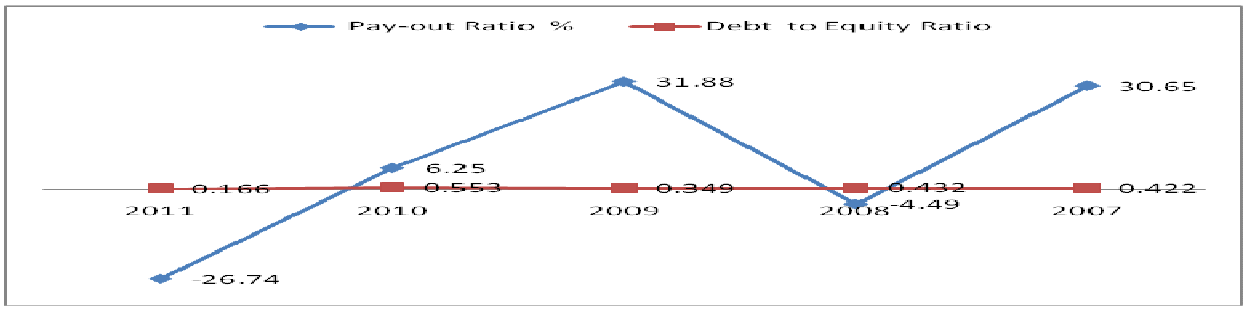

Figure 4.27 Williamson Tea Kenya Ltd

Source: Research Findings

The results in figure 4.27 indicate that the performance of debt to equity ratio was steady. Payout ratio decreased from 2007 to 2008, increased in 2009 and then decreased to 2011.

Limuru Tea Ltd

The results in figure 4.28 indicate the performance of Limuru Tea Ltd in payout ratio in percentage form and debt to equity ratio.

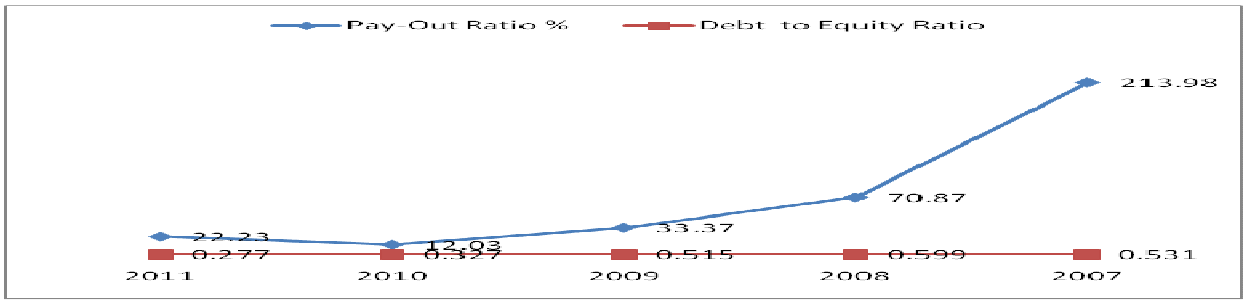

Figure 4.28 Limuru Tea Ltd

Source: Research Findings

The results in figure 4.28 indicate that the performance of debt to equity ratio was steady while that of payout ratio decreased from 2007 to 2010 after which it made a slight increment to 2011.

Kengen Ltd

The results in figure 4.29 indicate the performance of Kengen Ltd in payout ratio in percentage form and debt to equity ratio.

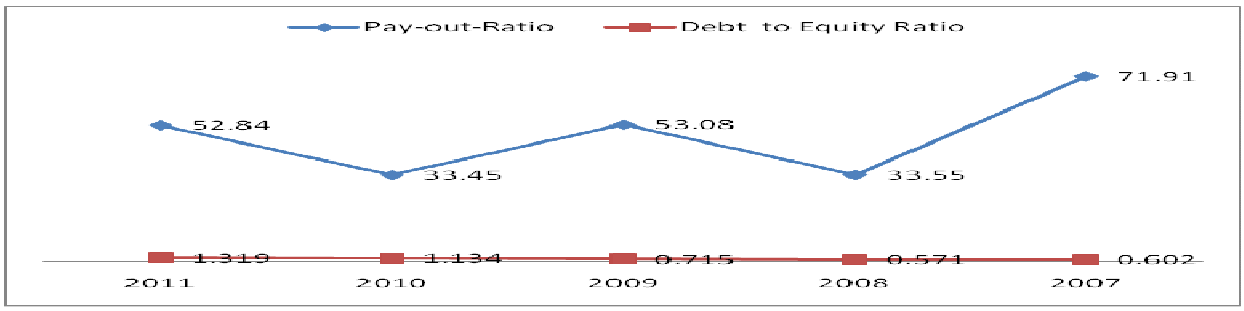

Figure 4.29 Kengen Ltd

Source: Research Findings

The results in figure 4.29 indicate that the performance of debt to equity ratio was steady while that of payout ratio decreased from 2007 to 2008; it then increased till 2009 after which it decreased in 2010 followed by an increase till 2011.

4.4 Interpretation of the Findings

The study found out that there is a significant relationship between dividend payout ratio and capital structure. The findings of the study showed that there is an inverse relationship between leverage and dividend payout ratio.

The regression of leverage (capital structure) with dividend payout ratio being dependent variable in 2007 indicates the extent to which capital structure component under study affects dividend payout ratio. The study found that there is an inverse relationship between dividend payout ratio and leverage. This is supported by the regression results which indicate that holding leverage constant, dividend payout ratio will be 54.411 and a unit increase in leverage will lead to a unit decrease in dividend payout ratio by -12.655. The independent variable (leverage) that was studied explain only 3.6 % of the effectiveness of the relationship between dividend payout ratio and capital structure in 2007 as represented by R^2 meaning that other factors not studied contribute to 96.4%.

The regression of leverage (capital structure) with dividend payout ratio being dependent variable in 2008 indicates the extent to which capital structure component under study affects dividend payout ratio. The study found that there is an inverse relationship between dividend payout ratio and leverage. This is supported by the regression results which indicate that holding leverage constant, dividend payout ratio will be 38.276 and a unit increase in leverage will lead to a unit decrease in dividend payout ratio by -4.684. The independent variable (leverage) that was studied explain only 0.8 % of the effectiveness of the relationship between dividend payout ratio and capital structure in 2008 as represented by R^2 meaning that other factors not studied contribute to 99.2%.

The regression of leverage (capital structure) with dividend payout ratio being dependent variable in 2009 indicates the extent to which capital structure component under study affects dividend payout ratio. The study found that there is an inverse relationship between dividend payout ratio and leverage. This is supported by the regression results which indicate that holding leverage constant, dividend payout ratio will be 55.029 and a unit increase in leverage will lead to a unit decrease in dividend payout ratio by -17.193. The independent variable (leverage) that was studied explain only 22.4 % of the effectiveness of the relationship between dividend payout ratio and capital structure in 2009 as represented by R^2 meaning that other factors not studied contribute to 77.6%.

The regression of leverage (capital structure) with dividend payout ratio being dependent variable in 2010 indicates the extent to which capital structure component under study affects dividend payout ratio. The study found that there is an inverse relationship between dividend payout ratio and leverage. This is supported by the regression results which indicate that holding leverage constant, dividend payout ratio will be 38.128 and a unit increase in leverage will lead to a unit decrease in dividend payout ratio by -24.135. The independent variable (leverage) that was studied explain only 1.5 % of the effectiveness of the relationship between dividend payout ratio and capital structure in 2010 as represented by R^2 meaning that other factors not studied contribute to 98.5%.

The regression of leverage (capital structure) with dividend payout ratio being dependent variable in 2011 indicates the extent to which capital structure component under study affects dividend payout ratio. The study found that there is an inverse relationship between dividend payout ratio and leverage. This is supported by the regression results which indicate that holding leverage constant, dividend payout ratio will be 32.261 and a unit increase in leverage will lead to a unit decrease in dividend payout ratio by -14.899. The independent variable (leverage) that was studied explain only 8.9 % of the effectiveness of the relationship between dividend payout ratio and capital structure in 2011 as represented by R^2 meaning that other factors not studied contribute to 91.1%.

CHAPTER FIVE
5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

From the analysis and data collected, the following discussions, conclusions and policy recommendations were made. The responses were based on the objectives of the study.

5.2 Summary

The objective of this study was to establish the relationship between dividend payout ratio and capital structure of companies listed at the NSE using time series data covering the period 2007 to 2010. It aimed at finding the nature of relationship between dividend payout ratio and capital structure (leverage).

The study found out that there is an inverse relationship between leverage and dividend payout ratio. Studies carried out by various scholars pointed out that there is a notable relationship between dividend payout policy and capital structure. However, there is a controversy as to whether there is a direct or indirect relationship. The findings of this study are supported by Sierpinska (1999) who found out that dividend policy is directly connected to capital structure. He further suggested that if an enterprise pays dividends, it decreases the degree of financing of equity capital from internal sources, and as a consequence may require external financing.

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, although they do exert a strong influence on the value of equity capital. Similar view is supported by Wandeto (2005) who in his study concluded that firms with high gearing ratio/leverage pay low amounts of dividend, and this supports the findings of this study since the study shows that there is an inverse relationship between dividend payout ratio and leverage. However, Frank and Goyal (2004) presents a different view by suggesting that there is a positive relationship between payout ratio and debt.

The results of this study is further supported by the findings of Higgins and Roseff (1982) who found out that firms with higher leverage pay low dividends in order to evade the cost of raising external capital of the firms. Results similar to the findings of this study were also found by Collins, Saxena and Wesley (1996) who suggested that there is statistically negative relationship between leverage and dividend payout ratio.

From the regression equations used in the study, it was found that there was an increase in the intercept from 2007 to 2009 before a slight decline in 2010.A sharp increase was witnessed in 2011. The factor of leverage showed a considerable decline from 2002 to 2008 before steadily increasing till 2010; a slight decrease was noted in 2011.

The study further found out that the parameter that led to decrease in dividend payout ratio was leverage since there is an inverse relationship between dividend payout ratio and leverage. Graphical results from individual firm's analysis showed that on average, leverage was steady and dividend payout ratio recorded varied results depending on the individual company.

5.3 Conclusions

The study concludes by stating that there is an inverse relationship between dividend payout ratio and leverage. From the study, the researcher concluded that there existed a regression equation that was relating the companies listed at NSE dividend payout ratio to its own leverage. The study also concludes that there was variation in leverage over five years with the highest value noted in 2008.

The researcher also concluded that in order for a company to increase its dividend payout ratio, it should decrease factors that lead to increase in its leverage. The study further concludes that leverage of the company negatively affects dividend payout ratio of the company. In addition, the study concludes that the factors that contribute to decrease in leverage should be increased in order to increase the dividend payout ratio since there is an inverse relationship between dividend payout ratio and leverage.

5.4 Recommendations for Policy

From the findings and conclusions, the study recommends that in order for a company to increase its dividend payout ratio, it must decrease its leverage since it affects dividend payout ratio negatively.

5.5 Limitation of the Study

In a typical research, the study will always face some limitations. The study mainly relied on secondary data obtained from Nairobi Securities Exchange, which means the researcher placed high reliability on this data.

The researcher used a sample of 29 companies listed at NSE, which is small to make generalizations across industries. Though useful, the sample may not be used to make generalizations about other companies not listed at NSE; thus the variables identified are tentative suggestions of the variables that determine the relationship between dividend payout ratio and capital structure across Kenya.

In this study, firms in financial sector were excluded in coming up with the sample size. The reason for not including the financial firms is that; first, financial firms utilize different mechanism to finance their operations compared to other sectors. Secondly, financial firms are more subject to regulations and finally financial firms use different accounting mechanisms. As a result, the sample may not be used to make generalization across the sectors.

5.6 Areas for Further Research

The variables identified in the study can be tested on companies not quoted at the NSE. The additional information obtained thereof including the results of this study can be used to draw generalization for the firms in Kenya.

Further research using other models for example simultaneous equation should be carried out to explain various relationships between dividend payout ratio and capital structure. Dividend payout ratio and leverage for other years or longer period of the study can also be used to validate results of this study.

Other research studies should be done to determine whether other variables of capital structure other than leverage affect firms' dividend payout ratio.

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APPENDICES

APPENDIX I: DATA USED IN THE STUDY

AGRICULTURAL SECTOR	2011	2010	2009	2008	2007
Kakuzi Ltd					
Payout Ratio (%)	11.41	12.57	10.85	6.93	0
Debt to Equity Ratio	0.424	0.506	0.569	0.736	0.898
Earnings Per Share (Kshs)	32.88	19.88	23.04	14.43	9.78

Rea Vipingo Ltd					
Payout Ratio %	0.14	0.71	0.2	0.07	0.42
Debt to Equity Ratio	0.558	0.726	0.45	0.865	0.645
Earnings Per Share (Kshs)	7.79	1.12	2.48	2.8	1.92

Sasini Ltd					
Payout Ratio (%)	13.11	16.38	15.45	0	0
Debt to Equity Ratio	0	0.405	0.422	0.452	0.303
Earnings Per Share (Kshs)	1.97	4.36	2.34	3.88	-0.21

COMMERCIAL AND SERVICES SECTOR

Access Kenya Ltd					
Pay-Out Ratio %	0	-768	55.06	39.99	34.63
Debt to Equity Ratio	1.204	1.654	1.009	0.453	0.233
Earnings Per Share(Kshs)	0.52	-0.04	0.73	1	0.87

Cars & General td					
Pay-Out Ratio %	9.26	7.48	7.54	6.95	8.54
Debt to Equity Ratio	1.956	1.507	1.48	1.45	1.311
Earnings/(Loss) Per Share (Kshs)	8.64	10.69	8.89	9.64	7.85

Kenya Airways Ltd					
Pay-Out Ratio %		22.68	-11.3	20.88	19.71
Debt to Equity Ratio	2.408	2.675	3.424	1.968	2.571
Earnings Per Share (Kshs)		4.41	-8.85	8.38	8.88

Scan Group Ltd					
Pay-Out Ratio %	21.88	25.63	27.51	52.41	58.54
Debt to Equity Ratio		1.36	0.666	0.822	1.957
Earnings Per Share(Kshs)	3.2	2.73	1.82	1.43	1.54

Nation Media Group Ltd					
Pay out Ratio %	104.5	81.7	70.08	30.26	69.56
Debt to Equity Ratio	0.445	0.476	0.4	0.532	0.566
Earnings Per Share (Kshs)	7.66	9.79	7.85	18.17	15.1

Standard Group Ltd					
Pay-Out Ratio %	0	13.24	13.91	28.16	25.28
Debt to Equity Ratio	1.321	1.456	1.793	2.3	2.554
Earnings/(Loss) Per Share (Kshs)	1.99	3.78	3.59	3.91	3.96

TPS Serena Ltd					
Pay-Out Ratio%	31.28	35.88	34.76	59.42	31.77
Debt to Equity Ratio	0.64	0.598	0.721	0.735	0.843
Earnings/(Loss) Per Share (Kshs)	4.16	3.48	3.6	2.1	3.93

INDUSTRIAL AND ALLIED SECTOR

Athi River Ltd					
Payout Ratio %	17.22	16.12	23.01	24.59	29.36
Debt to Equity Ratio	2.403	2.353	1.94	1.986	1.575

Earnings Per Share (Kshs)	11.61	10.86	6.52	5.08	4.26

Bamburi Cement Ltd					
Pay-Out Ratio %	62.57	58.22	57.28	63.83	57.16
Debt to Equity Ratio	0.423	0.579	0.573	0.749	0.397
Earnings per Share (Kshs.)	15.98	14.6	19.2	9.4	10.5

British American Tobacco Ltd					
Pay-Out Ratio %	58.11	74.98	99.77	99.98	122.69
Debt to Equity Ratio	1.144	1.175	1.223	1.106	0.975
Earnings Per Share (Kshs.)	30.98	17.67	14.78	17	13.86

Crown Barger Kenya Ltd					
Pay-Out Ratio %	22.99	32.44	34.36	77.09	30.95
Debt to Equity Ratio	1.105	1.148	1.221	1.37	0.875
Earnings Per Share (Kshs.)	5.44	3.85	3.64	1.3	3.23

East africa Cables Ltd					
Pay-out Ratio %	40.21	110.1	68.4	43.76	43.69
Debt to Equity Ratio	3.517	3.305	1.263	1.46	2.255
Earnings Per Share (Kshs)	1.24	0.91	1.46	2.29	2.06

East africa Portland Cement Ltd					
Pay-Out Ratio %			6.38		30.62
Debt to Equity Ratio		1.111	0.971	1.253	1.478
Earnings Per Share (Kshs.)		-3.25	20.38	5.96	8.49

East Africa Breweries Ltd					
Pay-Out Ratio %	76.76	78.29	73.94	69.31	67.4
Debt to Equity Ratio	1.071	0.695	0.591	0.557	0.545

Earnings Per Share (Kshs.)	11.4	11.18	10.89	11.61	11.43

Eveready East Africa Ltd					
Pay-Out Ratio %		0	0	0	0
Debt to Equity Ratio		1.9	2.528	1.285	1.684
Earnings Per Share (Kshs.)		0.04	0.13	0.08	0.6

Kenya Oil Company Ltd					
Pay-Out Ratio %		39.96	36.95	44.59	-
Debt to Equity Ratio	2.946	1.709	1.998	1.538	1.662
Earnings Per Share (Kshs.)		1.3	8.8	7.85	5.84

BOC Kenya Ltd					
Pay-Out Ratio %	88.16	231.3	86.27	66.25	67.5
Debt to Equity Ratio	0.368	0.354	0.296	0.415	0.328
Earnings Per Share (Kshs)	7.71	4.06	7.88	10.26	13.7

KPLC Ltd					
Pay-out-Ratio	0	17.03	19.63	17.93	13.81
Debt to Equity Ratio	4.527	1.958	1.631	1.504	1.127
Earnings/(Loss)/Share (Kshs)	-	46.97	40.76	22.3	21.72

Kengen Ltd					
Pay-out-Ratio	52.84	33.45	53.08	33.55	71.91
Debt to Equity Ratio	1.319	1.134	0.571	0.602	
Earnings/(Loss)/Share (Kshs)	0.95	1.49	0.94	2.68	1.11

Total Kenya Ltd					
Pay-Out Ratio %	-257	19.83	35.85	62.18	83.49
Debt to Equity Ratio	2.828	2.17	2.518	1.895	1.633
Earnings Per Share (Kshs.)	-0.41	5.3	2.79	4.02	2.99

Mumias Sugar Ltd					
Payout Ratio %	39.57	38.92	38.01	50.42	54.89
Debt to Equity Ratio	0.601	0.667	0.741	0.565	0.429
Earnings per Share-Kshs	1.26	1.03	1.05	0.79	2.73

Sameer Africa Ltd					
Pay-Out Ratio %		0	88.08	0	0
Debt to Equity Ratio	0.389	0.423	0.316	0.44	0.611
Earnings Per Share (Kshs)	0.35	0.21	0.57	0.54	0.43

Unga Group Ltd					
Pay-Out Ratio %	12.9	16.03	0	0	0
Debt to Equity Ratio	0.776	0.739	1.116	0.879	0.914
Earnings/(Loss) Per Share (Kshs)	5.83	3.12	2.45	5.92	2.12

ALTERNATIVE INVESTMENT SEGMENT

Express Kenya Ltd					
Pay-Out Ratio %	-	-	-	-	21.86
Debt to Equity Ratio	3.058	2.49	2.618	2.056	0.855
Earnings/Loss Per Share (Kshs)	-6.47	-0.79	0.43	-1.22	2.29

Williamson Tea Kenya Ltd					
Pay-out Ratio %	-26.7	6.25	31.88	-4.49	30.65
Debt to Equity Ratio	0.166	0.553	0.349	0.432	0.422
Earnings (Loss) Per Share (Kshs)	-46.7	100.1	12.55	-11.1	16.31

Limuru Tea Ltd					
Pay-Out Ratio %	22.23	12.03	33.37	70.87	213.98

Debt to Equity Ratio	0.277	0.327	0.515	0.599	0.531
Earnings per share	33.74	62.37	22.47	14.11	2.34

APPENDIX II: LIST OF COMPANIES LISTED AT NAIROBI SECURITIES EXCHANGE

AGRICULTURAL

Eaagads Ltd

Kapchorua Tea Co. Ltd

Kakuzi Ltd

Limuru Tea Co. Ltd

Rea Vipingo Plantations Ltd

Sasini Ltd

Williamson Tea Kenya Ltd

COMMERCIAL AND SERVICES

Express Ltd

Kenya Airways Ltd

Nation Media Group Ltd

Standard Group Ltd

TPS Eastern Africa (Serena) Ltd

Scangroup Ltd

Uchumi Supermarket Ltd

Hutchings Biemer Ltd

TELECOMMUNICATION AND TECHNOLOGY

Access Kenya Group Ltd

Safaricom Ltd

AUTOMOBILES AND ACCESSORIES

Car and General (K) Ltd

CMC Holdings Ltd

Sameer Africa Ltd

Marshalls (E.A.) Ltd

BANKING

Barclays Bank Ltd

CFC Stanbic Holdings Ltd

Diamond Trust Bank Kenya Ltd

Housing Finance Co Ltd

Kenya Commercial Bank Ltd

National Bank of Kenya Ltd

NIC Bank Ltd

Standard Chartered Bank Ltd

Equity Bank Ltd

The Co-operative Bank of Kenya Ltd

INSURANCE

Jubilee Holdings Ltd

Pan Africa Insurance Holdings Ltd

Kenya Re-Insurance Corporation Ltd

CFC Insurance Holdings

British-American Investments Company (Kenya) Ltd

INVESTMENT

City Trust Ltd

Olympia Capital Holdings Ltd

Centum Investment Co Ltd

Trans-Century Ltd

MANUFACTURING AND ALLIED

B.O.C Kenya Ltd

British American Tobacco Kenya Ltd

Carbacid Investments Ltd

East African Breweries Ltd

Mumias Sugar Co. Ltd

Unga Group Ltd

Eveready East Africa Ltd

Kenya Orchards Ltd

A.Baumann CO Ltd

CONSTRUCTION AND ALLIED

Athi River Mining Ltd

Bamburi Cement Ltd

Crown Berger Ltd

E.A.Cables Ltd

E.A.Portland Cement Ltd

ENERGY AND PETROLEUM

KenolKobil Ltd

Total Kenya Ltd

KenGen Ltd

Kenya Power & Lighting Co Ltd