

**EFFECTS OF CHANGE IN CAPITAL STRUCTURE ON PERFORMANCE OF
COMPANIES QUOTED IN NAIROBI STOCK EXCHANGE**

PRESENTED BY:

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
AWARD OF MASTER OF BUSINESS ADMINISTRATION (MBA) DEGREE,
SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

OCTOBER 2009

DECLARATION

STUDENT'S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university for the award of any degree or academic credit.

Sign: 


Date: 20/11/2009

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SUPERVISOR'S DECLARATION

This project has been submitted for examination with my approval as university supervisor

Sign: 

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DEDICATION

I dedicate this paper to my wife Catherine and our son Samuel. I also dedicate it to my late father for helping me understand the value of hard work and my mother for believing in my capabilities

ACKNOWLEDGEMENT

I wish to thank my wife for her love, guidance, patience, understanding and support without her support; residential consultations and encouragements this work would not have been accomplished.

I salute our son Samuel for being my source of inspiration.

Am grateful to my parents for laying the foundation of my academic pursuit through their guidance, wise council and material support

My brothers and Sisters for their unequal support and encouragements

My sincere gratitude to my supervisor, Moses Anyangu for his tireless and dedicated guidance to the completion of this paper.

I thanks the almighty God for I know it is only by his Grace that I have come this far.

His Name be praised and glorified forever.

ABSTRACT

Restrictions on the capital structure of a public company may harm the company's performance by preventing owners from choosing the best capital structure. Many theoretical and empirical analyses have also dealt with change in capital structure and its effect on firm performances. Capital structure change has always been one of the main topics among the studies of many scholars. Its importance derives from the fact that capital structure is tightly related to the ability of firms to fulfil the needs of various stakeholders. The last century has witnessed a continuous developing of new theories on the issue of change of capital structure and its effect on performance. The objective of the study was to address the effect of change in capital structure on performance in companies listed in Nairobi Stock Exchange.

This was a descriptive study that utilized a descriptive survey approach on the 45 companies that had traded at NSE consistently from 2003 to 2007. The use of secondary data sources used in the study was obtained from published reports of quoted companies. Both quantitative analysis and inferential analysis was used as data analysis technique whereby the OLS regression model was used.

The study findings showed that there was significantly positive relationship between SDA and profitability since short-term debt tends to be less expensive and increasing it with a relatively low interest rate will lead to an increase in profit levels and hence performance. The study further concluded that profitability increases with the control variables, that is, size and sales growth. The study recommended that owing to the less cost incurred in obtaining short term loans than long term ones, companies should go for short term loans.

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LIST OF ABBREVIATIONS

BR Book Ratio

MB Market Book ratio

MM Modigliani Miller

NSE Nairobi Stock Exchange

ROE return on equity ratio

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The capital structure of a firm is basically a mix of debt and equity which a firm deems as appropriate to enhance its operations in the midst of several constraints it poses. Berger and Bonaccorsi di Patti (2006) have noted that high leverage or low equity/assets ratio reduces agency cost of outside equity and thus increases firm value by compelling managers to act more in the interest of shareholders. Important theories have been advanced to explain capital structure decisions. The trade-off theories of corporate financing are built around the concept of target capital structure that balances various costs and benefits of debt and equity (Modigliani and Miller, 1963; Hovakimian et al., 2004). But, Harkbarth et al. (2006) postulate that, if one determines optimal leverage by balancing the tax benefit of debt and bankruptcy costs, then both the benefits and costs should depend on macroeconomic conditions. The expected benefit of debt (tax benefit to be derived as a result of debt utilization and mitigation of agency conflicts between managers and shareholders) depends on whether there is an economic expansion or recession since this has cash flow implications.

Further, expected costs of debt (bankruptcy costs and agency conflicts between bondholders and shareholders) depend on probability of default and loss given default both of which should depend on the current state of the economy (Harkbarth et al, 2006). An economic intuition indicates that, economy's business cycle phase should be an important determinant of capital structure decisions. Studies conducted by Fanelli and Keifman (2002) and Bebczuk (2000) have indicated that credit markets are markedly segmented in Argentina and that the volatility of the environment and external shocks affects firms capital structure decisions

It could also be argued that if a firm's cash flow and value is sensitive to exchange rate fluctuations, then the firm may have to issue some of its debt in foreign currencies and also ascertain in which currency its cash flow will be denominated. Still at the

macroeconomic level, Fanelli et al. (2002) noted that, there is a trade-off between the benefits of matching the duration of the two sides of the balance sheet and the increased currency risk taken because of higher mismatching in the currency denomination of assets and liabilities.

Empirical results indicate that the major trends in stock-bond correlation are determined primarily by uncertainty of expected inflation. Korajczyk and Levy (2000) found that a firm's choice of security issuance is dependent on macroeconomic conditions and firm-specific variables. They postulate that firms tend to time the issuance of securities to periods of favorable macroeconomic conditions. Antoniou et al. (2002) find that the capital structure choice of a firm is not only affected by its own specific characteristics, but also by its surrounding environment such as general health of the economy, the existence of a stock market as well as the size of banking sector. Choe et al. (1993) argue that adverse selection costs vary counter-cyclically to explain the general increases in equity issues during expansion.

Drobetz et al (2007) noted when ascertaining the impact of macroeconomic factors on the speed of adjustment towards target leverage that firms adjust faster in favorable macroeconomic conditions than under unfavourable conditions. This implies that when interest rates are low and the risk of disruptions in the global financial systems are negligible; firms' speed of adjustment towards target leverage is faster. Banjeree et al (2004) have also argued that economy-wide factors should impact the speed of capital structure adjustment (Löff, 2004).

Harkbarth et al.(2006) document that macroeconomic conditions determine both the pace and the size of capital. Therefore, the timing of capital structure target should not only consider firm level characteristics, but due consideration should also be given to the state of the economy. Henderson et al. (2006) document that for debt issues a negative relationship between the level of interest rates and the quantity of long- and short-term debt issued (Graham and Harvey, 2001). In all of this, the direction of impact of macroeconomic factors on capital structure decisions of firms is not clear.

1.1.1 The Stock Market

The Nairobi Stock Exchange which was formed in 1954 as a voluntary organization of stock brokers is now one of the most active capital markets in Africa. The administration of the Nairobi Stock Exchange Limited is located on the 1st Floor, Nation Centre, Kimathi Street, Nairobi. 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).

A stock market is a place where securities are traded. These securities are issued by listed companies and by the government, with the aim of raising funds for different purposes such as to fund expansion for the former, and development and finance budget deficits for the latter. Common securities traded on a stock exchange include company shares, corporate bonds, and government debt in the form of treasury bonds. (The NSE Hand book 2004 -2005). Companies can also raise extra finance essential for expansion and development. To raise funds, a new issuer publishes a prospectus which gives all pertinent particulars about the operations and future prospects and states the price of the issue. A stock market also enhances the inflow of international capital. They can also be useful tools for privatization programmes.

The Nairobi Stock Exchange is at present made up of nineteen stock broking firms. They include: Drummond Investment Bank Limited, Dyer & Blair Investment Bank Ltd., Ngenye Kariuki & Co. Ltd, Suntra Investment Bank Ltd, Reliable Securities Ltd., CFC Financial Services – Stock broking Division, Bob Mathews Stockbrokers Ltd., Afrika Investment Bank Limited, Crossfield Securities Limited, Sterling Investment Bank Limited, ApexAfrica Investment Bank Ltd., Faida Investment Bank Limited, NIC Capital Securities Ltd., Standard Investment Bank Ltd., Kestrel Capital (EA) Limited, Discount Securities Ltd., African Alliance Kenya Securities, Renaissance Capital

(Kenya) Limited and Genghis Capital limited. All of them are based in Nairobi (NSE, 2007).

These members of the Nairobi Stock Exchange transact business mainly on the within Nairobi stock market, with a limited proportion of business conducted in foreign securities through overseas agents. The stockbrokers act as financial advisers to their clients and carry out their orders. The Nairobi Stock Exchange deals in both variable income securities and fixed income securities. Variable income securities are the ordinary shares, which have no fixed rate of dividend payable, as the dividend is dependent upon both the profitability of the company and what the board of directors decides. The fixed income securities include Treasury and Corporate Bonds, preference shares, debenture stocks - these have a fixed rate of interest/dividend, which is not dependent on profitability (NSE, 2007).

Listing is the process of taking a privately owned organization and transforming it, into a publicly owned entity whose securities (equity or debt) can be traded on a securities exchange. As of December 2004, 52 companies and 67 government bonds were listed on the NSE. 48 companies have floated over 5.1 billion shares valued at over Kshs 300 billion. The remaining 4 companies have listed bonds worth Kshs 8.7 billion. (The NSE Hand book 2004 -2005). The stock market consists of both the primary and secondary markets. In the primary or new issue market, shares of stock are first brought to the market and sold to investors. In the secondary market, existing shares are traded among investors. (Ross, Wasterfield and Jordan, 2000)

1.2 Statement of the Problem

Restrictions on the capital structure of a public company may harm the company's performance by preventing owners from choosing the best capital structure. Many theoretical and empirical analyses have also dealt with change in capital structure and its effect on firm performances. Capital structure change has always been one of the main topics among the studies of many scholars. Its importance derives from the fact that capital structure is tightly related to the ability of firms to fulfill the needs of various

stakeholders. The last century has witnessed a continuous developing of new theories on the issue of change of capital structure and its effect on performance. These include (Modigliani and Miller (1988), whose model argued on the irrelevance of the change in capital structure in determining firms' future performance. However, many authors have successively proved that a relationship between change in capital structure and firm performance actually exists (e.g., Lubatkin and Chatterjee, 1994).

More recent literature, however, tends to be less interested on how the capital structure determines firm's value per se, and more on how changes in the capital structure of a company affects its profitability (Hitt, Hoskisson, and Harrison, 1991), and thus its overall performance (Jensen, 1986). The pecking order theory of Myers (1984), Myers and Majluf (1984), and Shyam-Sunder and Myers (1999) suggests that firms prefer to finance investments first from retained earnings, second from debt, and third from equity. According to this theory, more profitable firms result from change in capital structure which directly enhances their performance. Change capital structure and other governance instruments have not been considered important in determining firm performance (Heinrich, 2000, Bhagat and Jefferis, 2002). Controversial evidence on the relation between change in capital structure and performance (Harris and Raviv, 1991 relation A) and the ambiguous results that have emerged regarding the existence of a relation of necessity to take the specific structure of capital structure into consideration (Heinrich, 2000, Mahrt-Smith, 2005).

Locally, many researchers have reviewed various aspects of capital structure in the Kenyan context. E.g. Omondi (1995) did a study of capital structure in Kenya; Kiogora (2000) carried out an empirical study testing for variations in the capital structure at the NSE; Lutomia (2002) studied the relationship between the firm's capital structure and the systematic risk of common stocks in an empirical study of CQS quoted on the NSE; Gachoki Munyui (2005) reviewed the capital structure choice in an empirical testing of the pecking order theory among firms quoted on the NSE; Patrick Wandeto (2005) carried out an empirical investigation of the relationship between dividend changes & earnings, cashflows & capital structure for firms listed in the NSE while Nyaboga Esther

(2008) researched on the relationship between capital structure and agency cost. To the best of the researcher knowledge, there exists no literature on the effects of change in capital structure on firm's performance in the Kenyan context. This is the gap the study sought to address by investigating the effect of change in capital structure on performance in companies listed in Nairobi Stock Exchange.

1.3 Objective of the Study

The main objective of this study was to determine the effects of change in capital structure on firm performance of companies quoted in Nairobi Stock Exchanges.

1.4 Significance of the study

Difficulties arise in trying to establish the effect of change in capital structure and its impacts on performance of the firm. Its output is significant to the management of quoted companies who will be able to determine the effect of capital structures on the share value of their firms so that they can make prudent decisions regarding capital policies.

The study enlightens the government of Kenya in a bid to make policies relating to capital structure. Through knowledge of the effect of capital structure on the performance of the firms will assist in ascertaining the appropriate amount of tax to pay for dividends paid out and their effects on performance of the firm. Investors who may need to know the relationship between capital structure policy and performance of the firm for them to choose which firm to invest their funds in and as a result shun impetuous investment decisions. The study will be of help to Scholars and academicians who may wish to use its findings as a basis for further research on this subject.

CHAPTER TWO

LITERATURE REVIEW

2.1 Concept of Capital Structure

Researches in Business Economics, and in particular, in Business economics and Finance have always analyzed the processes of economic value creation as their main field of studies. Starting from the provocative work of Modigliani and Miller (1958), capital structure became one of the main elements that following studies have shown as being essential in determining value. Half a century of research on capital structure attempted to verify the presence of an optimal capital structure that could amplify the company's ability to create value. Important, and still in vogue, is the debate between the two main theoretical perspectives, the trade-off approach, that balance the advantages and disadvantages of debt, and the pecking order approach (Myers, 1984, Myers and Majluf, 1984), that makes it evident the active and intentional role of management in how the firm's financial resources are decided on follows an order of preference (self-generated resources, debt and new equity).

The controversy that has emerged in trying to verify the validity of these theories (Harris and Raviv, 1991) has stimulated an attempt to find solutions that can “strengthen” theoretical hypotheses and improve econometric models, also because of the difficulties found when trying to apply the theories to reality.

2.2 Theories on Capital Structure

The theoretical principles underlying the capital structure, financing and lending choices of firms can be described either in terms of a static trade-off choice or pecking order framework. The static trade-off choice encompasses several aspects, including the exposure of the firm to bankruptcy and agency cost against tax benefits associated with debt use. Bankruptcy cost is a cost directly incurred when the perceived probability that the firm will default on financing is greater than zero. One of the bankruptcy costs is liquidation costs, which represents the loss of value as a result of liquidating the net

assets of the firm. This liquidation cost reduces the proceeds to the lender, should the firm default on finance payments and become insolvent. Given the reduced proceeds, financiers will adjust their cost of finance to firms in order to incorporate this potential loss of value. Firms will, therefore, incur higher finance costs due to the potential liquidation costs (Cassar and Holmes, 2003).

Another cost that is associated with the bankruptcy cost is distress cost. This is the cost a firm incurs if non-lending stakeholders believe that the firm will discontinue. If a business is perceived to be close to bankruptcy, customers may be less willing to buy goods and services due to the risk of a firm not being able to meet its warranty obligations. In addition, employees might be less inclined to work for the business and suppliers less likely to extend trade credit. These stakeholders' behaviour effectively reduces the value of the firm. Therefore, firms which have high distress cost would have incentives to decrease debt financing so as to lower these costs. Given these bankruptcy costs, the operating risk of the firm would also influence the capital structure choice of the firm because firms which have higher operating risk would be exposed to higher bankruptcy costs, making cost of debt financing greater for higher risk firms. Research has found that high growth firms often display similar financial and operating profiles (Hutchinson and Mengersen, 1989).

Debt financing may also lead to agency costs. Agency costs are the costs that arise as a result of a principal-stakeholder relationship, such as the relationship between equity-holders or managers of the firm and debt holders. Myers and Majluf (1984) showed that, given the incentive for the firm to benefit equity-holders at the expense of debt holders, debt-holders need to restrict and monitor the firm's behaviour. These contracting behaviours increase the cost of capital offered to the firm. Thus, firms with relatively higher agency costs due to the inherent conflict between the firm and the debt-holders should have lower levels of outside debt financing and leverage.

Firms also consider within the static trade-off framework, the tax benefits associated with the use of debt. This benefit is created as the interest payments associated with debt are tax deductible while payments associated with equity such as dividends are appropriated

from profit. This tax effect encourages the use of debt by firms as more debt increases the after-tax proceeds to the owner. The theory among other things predicts a positive relationship between tax and leverage.

The pecking order theory suggests that firms have a particular preference order for capital used to finance their businesses (Myers, 1984). Owing to the presence of information asymmetries between the firm and potential financiers, the relative costs of finance vary between the financing choices. Where the funds provider is the firm's retained earnings, meaning more information than new equity holders, the new equity holders will expect a higher rate of return on capital invested resulting in the new equity finance being more costly to the firm than using existing internal funds. A similar argument can be provided between the retained earning and new debt-holders. In addition, the greater the exposure to the risk associated with the information asymmetries for the various financing choices besides retained earnings, the higher the return of capital demanded by each source. Thus, the firm will prefer retained earnings financing to debt, short-term debt over long-term debt and debt over equity.

2.3 Firm Level Characteristics

Theoretical constructs of any empirical research are proxied indirectly through the use of firm characteristics. Thus, the hypotheses and results are interpreted on the basis that several theoretical effects are represented by each variable. The firm variables discussed are profitability, growth, tax, asset structure, risk and size.

2.3.1 Profitability

Corporate performance has been identified as a potential determinant of capital structure. The tax trade-off models show that profitable firms will employ more debt since they are more likely to have a high tax burden and low bankruptcy risk (Ooi, 1999). However, Myers (1984) prescribes a negative relationship between debt and profitability on the basis that successful companies do not need to depend so much on external funding. They, instead, rely on their internal reserves accumulated from past profits. Titman and

Wessels (1988) and Barton et al. (1989), agree that firms with high profit rates, all things being equal, would maintain relatively lower debt ratio since they are able to generate such funds from internal sources. Empirical evidence from previous studies (Chittenden et al., 1996; Coleman and Cole, 1999; Al-Sakran, 2001) appears to be consistent with the pecking order theory. Most studies found a negative relationship between profitability and debt financing.

2.3.2 Growth

Applying pecking order arguments, growing firms place a greater demand on their internally generated funds. Consequentially, firms with high growth will tend to look to external funds to finance the growth. Firms would; therefore, look to short-term, less secured debt then to longer-term more secured debt for their financing needs. Myers (1977) confirms this and concludes that firms with a higher proportion of their market value accounted for by growth opportunity will have debt capacity. Auerbach (1985) also argues that leverage is inversely related to growth rate because the tax deductibility of interest payments is less valuable to fast growing firms since they usually have non-debt tax shields. Michaelas et al. (1999) found future growth positively related to leverage and long-term debt, while Chittenden et al. (1996) and Jordan et al. (1998) found mixed evidence.

2.3.3 Impact of Capital Structure on Taxation

Different authors on capital structure have given different interpretations of the impact of taxation on corporate financing decisions in the major industrial countries. Some are concerned directly with tax policy. For instance Auerbach (1985), MacKie-Mason (1990), etc. studied the tax impact on corporate financing decisions. The studies provided evidence of substantial tax effect on the choice between debt and equity. They concluded that changes in the marginal tax rate for any firm should affect financing decisions. A firm with a high tax shield is less likely to finance with debt.

The reason is that tax shields lower the effective marginal tax rate on interest deduction.

Graham (1996) on his part concluded that, in general, taxes do affect corporate financial decisions, but the extent of the effect is mostly not significant. Ashton (1991) confirms that any tax advantage to debt is likely to be small and thus have a weak relationship between debt usage and tax burden of firms. De Angelo and Masulis (1980) on the other hand, show that depreciation, research and development expenses, investment deductions, etc. could be substitutes for the fiscal role of debt. Titman and Wessels (1988) provided that, empirically, the substitution effect has been difficult to measure as finding an accurate proxy for tax reduction that excludes the effect of economic depreciation and expenses is tedious

2.3.4 Assets Assessment

Asset structure is an important determinant of the capital structure of a new firm. The extent to which the firm's assets are tangible and generic would result in the firm having a greater liquidation value (Harris and Raviv, 1991; Titman and Wessels, 1988). Studies have also revealed that leverage is positively associated with the firm's assets. This is consistent with Myers (1977) argument that tangible assets, such as fixed assets, can support a higher debt level as compared to intangible assets, such as growth opportunities. Assets can be redeployed at close to their intrinsic values because they are less specific (Williamson, 1988; Harris, 1994). Thus, assets can be used to pledge as collateral to reduce the potential agency cost associated with debt usage (Smith and Warner, 1979; Stulz and Johnson, 1985). Feri and Jones (1979), Marsh (1982), Long and Matlitz (1985) and Allen (1995) provide empirical evidence of a positive relationship between debt and fixed assets. The empirical evidence suggests a positive relation consistent with the theoretical arguments between asset structure and leverage for large firms (Van der Wijst and Thurik, 1993; Chittenden et al., 1996; Michaelas et al., 1999).

2.3.5 Risk

Given agency and bankruptcy costs, there are incentives for the firm not to utilise the tax benefit of debt within the static framework model. As a firm is exposed to such costs, the greater its incentive to reduce its level of debt within its capital structure. One firm

variable which impacts upon this exposure is firm operating risk, in that the more volatile a firm's earnings streams, the greater the chance of the firm defaulting and being exposed to such costs. Firms with relatively higher operating risk will have incentives to have lower leverage than more stable earnings firms. Empirical evidence suggests that there is a negative relationship between risk and leverage of small firms (Ooi, 1999; Titman and Wessels, 1988).

2.3.6 Size

Size plays an important role in determining the capital structure of a firm. Researchers have taken the view that large firms are less susceptible to bankruptcy because they tend to be more diversified than smaller companies (Hall 1995). Following the trade-off models of capital structure, large firms should accordingly employ more debt than smaller firms. According to Berryman (1982), lending to small businesses is riskier because of the strong negative correlation between the firm size and the probability of insolvency. Hall (1995) added that, this could partly be due to the limited portfolio management skills and partly due to the attitude of lenders. Marsh (1982) and Titman and Wessels (1988) report a contrary negative relationship between debt ratios and firm size. Marsh (1982) argues that small companies, due to their limited access to equity capital market tend to rely heavily on loans for their funding requirements. Titman and Wessels (1988) further posit that small firms rely less on equity issue because they face a higher per unit issue cost. The relationship between firm size and debt ratio is, therefore, a matter for empirical investigation.

2.4 The Determinants of Capital Structure and Ownership Structure

2.4.1 Dividends

Bhaduri (2002) suggests that if a firm can credibly signal its quality to outsiders, it can avoid an information premium and so may gain access to external sources of funds, mainly the equity market. John and Williams (1985) and Miller and Rock (1985) argue that a firms with a reputation for paying a constant stream of dividends face less asymmetric information when entering the equity market. Thus, if dividend payments

represent a signal of sound financial health and hence of higher debt-issuing capacity, one would expect a positive relationship between dividend payments and leverage.

In addition, firms with a reputation for paying a stream of dividends will be monitored by the capital market (Short et al., 2002). Institutional ownership may act as alternative monitoring device, and so this will reduce the need for capital markets as external monitoring system (Zeckhauser and Pound, 1990). Thus, according to agency theory, there is a positive relationship between dividend payments and institutional ownership (Jensen, 1986; Zeckhauser and Pound, 1990; Short et al., 2002). However, the existence of institutional ownership mitigates the need for dividends to signal good performance (Short et al., 2002). Therefore, signaling theory suggests a trade-off between dividends and institutional ownership, i.e. a negative relationship. This study uses the dividend payout ratio (DPO) to analyze the dividend policy effect on the firm's capital structure and ownership structure.

2.4.2 Profitability

According to the pecking order theory in the presence of asymmetric information, a firm would prefer internal finance over other sources of funds, but would issue debt if internal finance was exhausted. The least attractive alternative for the firm would be to issue new equity. Profitable firms are likely to have more retained earnings. Thus, a negative relationship is expected between leverage and past profitability (Donaldson, 1961; Myers, 1984; Myers and Majluf, 1984).

It is expected that institutional investors will prefer to invest in profitable firms. This is because the more profitable the firm is, the lower the likelihood of default and of having to face financial difficulties and bankruptcy. Therefore, a positive relationship is expected between profitability and institutional ownership. However, Tong and Ning (2004) find that there is limited evidence that institutional investors prefer to invest in a profitable firms. They find that profitability (measured as the return on equity) is negatively related to average shares held by institutional investors. The return on equity is used as an index

for firm profitability in this study (return on equity ratio (ROE)).

2.4.3 Business risk

BR is considered to be one of the key factors that can affect the capital structure of the firm. Bhaduri (2002) states that: Since debt involves a commitment of periodic payment, highly leveraged firms are prone to financial distress costs. Therefore, firms with volatile incomes are likely to be less leveraged (Bhaduri, 2002, p. 202).

Thus, according to the bankruptcy theory, there is a negative relationship between BR and capital structure. Institutional investors tend to invest in firms with low BRs because firms with high volatility in their returns are likely to have a high probability to default and to become bankrupt. Therefore, a negative relationship is expected between firm's BR and the firm's institutional ownership. The current study uses the standard deviation of return on assets as an indicator for firms BR.

2.4.4 Asset structure

According to the agency cost theory, the shareholders of a leveraged firm have an incentive to invest sub-optimally (Titman and Wessels, 1988). However, the more tangible the firm's assets are, the more such assets can be used as collateral. Collateralized assets can restrict such opportunistic behaviour. Therefore, a positive relationship between tangible assets and debt is expected (Bhaduri, 2002; Huang and Song, 2006; Jensen and Meckling, 1976; Rajan and Zingales, 1995; Titman and Wessels, 1988).

In addition, agency theory suggests that the optimal capital and ownership structures may be used to minimize agency costs (Jensen and Meckling, 1976; Jensen, 1986). Thus, a negative relationship between asset tangibility and ownership structure is expected. This is because tangible assets can act as collateral for higher levels of debt. Therefore, institutional investors prefer to invest in firms with low tangible assets. The current study uses the fixed assets to total assets ratio as indicator of firm's tangibility (TANG).

2.4.5 Liquidity and capital Structure

Liquidity ratios have both a positive and a negative effect on the capital structure decision, and so the net effect is unknown. First, firms with high liquidity ratios may have relatively higher debt ratios due to their greater ability to meet short-term obligations. This argument suggests a positive relationship between a firm's liquidity and its debt ratio. Alternatively, firms with more liquid assets may use such assets as sources of finance to fund future investment opportunities. Thus, a firm's liquidity position would have a negative impact on its leverage ratio. A further argument for a negative relationship is provided by Myers and Rajan (1998) who argue that when agency costs of liquidity are high, outside creditors limit the amount of debt financing available to the company. Thus, a negative relationship between debt and liquidity would be expected.

Similarly, the effect of asset liquidity is an ambiguous signal to institutional investors. A high liquidity ratio may be considered to be a negative signal because it indicates that the firm faces problems regarding opportunities for its long-term investment decisions. Hence a high liquidity ratio may be considered to be a negative signal for institutional investors. However, a high liquidity ratio may be considered to be a positive signal from the firm, because it indicates that the firm can easily pay its obligations and hence faces lower risk of default. Thus, high liquidity would be a positive signal for institutional investors. Whatever, in order to measure the effect of liquidity, the study uses the ratio of current assets to current liabilities as a proxy for the liquidity of the firm's assets (LIQ).

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2.4.6 Growth

Agency problems are likely to be more severe for growing firms, because they are more flexible in their choice of future investments. Thus, the expected growth rate should be negatively related to long-term leverage.

Moreover, firms with high-growth opportunities provide a positive signal about the firm's future performance. Hence institutional investors prefer to invest in high-growth firms rather than lower ones. In addition, Hovakimian et al. (2004) suggest that high-growth

firms may bring more capital gains to institutional investors than lower growth ones. This is because institutional investors, as taxpayers, would prefer to invest in capital-gain stocks to delay tax payments and to avoid double taxation. Thus, a firm's growth opportunities are considered to be a positive signal for institutional investors. The study uses market-to-book ratio (MB) as an indicator of the growth opportunities of a firm.

2.4.7 Size of the Firm

There is considerable evidence that the size of a firm plays an important role in the capital structure decision. Large firms tend to be more diversified and less prone to bankruptcy. Therefore, a positive relationship is expected between a firm's size and its leverage (Titman and Wessels, 1988; Bhaduri, 2002). Institutional investors prefer to invest in large firms in the belief that they have a low risk of bankruptcy. This is because large firms have the required resources and ability to minimize the risk of their stock investment. Therefore they are less subject to financial distress and bankruptcy risk (O'Brien and Bhushan, 1990; Tong and Ning, 2004). The natural logarithm of total assets is used as a proxy for firm size .

2.5 Capital structure and performance

The separation of ownership and control in a professionally managed firm may result in managers exerting insufficient work effort, indulging in perquisites, choosing inputs or outputs that suit their own preferences, or otherwise failing to maximize firm value. In effect, the agency costs of outside ownership equal the lost value from professional managers maximizing their own utility, rather than the value of the firm. Theory suggests that the choice of capital structure may help mitigate these agency costs.

Under the agency costs hypothesis, high leverage or a low equity/asset ratio reduces the agency costs of outside equity and increases firm value by constraining or encouraging managers to act more in the interests of shareholders.

Since the seminal paper by Jensen and Meckling (1976), a vast literature on such agency-theoretic explanations of capital structure has developed (see Harris and Raviv

1991 and Myers 2001 for reviews). Greater financial leverage may affect managers and reduce agency costs through the threat of liquidation, which causes personal losses to managers of salaries, reputation, perquisites, etc. (e.g., Grossman and Hart 1982, Williams 1987), and through pressure to generate cash flow to pay interest expenses (e.g., Jensen 1986). Higher leverage can mitigate conflicts between shareholders and managers concerning the choice of investment (Myers 1977), the amount of risk to undertake (e.g., Jensen and Meckling 1976, Williams 1987), the conditions under which the firm is liquidated (e.g., Harris and Raviv 1990), and dividend policy (Stulz 1990).

A testable prediction of this class of models is that increasing the leverage ratio should result in lower agency costs of outside equity and improved firm performance, all else held equal. However, when leverage becomes relatively high, further increases generate significant agency costs of outside debt – including higher expected costs of bankruptcy or financial distress – arising from conflicts between bondholders and shareholders. Because it is difficult to distinguish empirically between the two sources of agency costs, we follow the literature and allow the relationship between total agency costs and leverage to be non-monotonic. Despite the importance of this theory, there is at best mixed empirical evidence in the extant literature (see Harris and Raviv 1991, Titman 2000, and Myers 2001 for reviews).

2.5.1 Tests of the agency costs hypothesis

Typically regress measures of firm performance on the equity capital ratio or other indicator of leverage plus some control variables. At least three problems appear in the prior studies that we address in our application. In the case of the industry studied here, there are also regulatory costs associated with very high leverage. First, the measures of performance are usually ratios fashioned from financial statements or stock market prices, such as industry-adjusted operating margins or stock market returns.

These measures do not net out the effects of differences in exogenous market factors that affect firm value, but are beyond management's control and therefore cannot reflect agency costs. Thus, the tests may be confounded by factors that are unrelated to agency costs. As well, these studies generally do not set a separate benchmark for each firm performance that would be realized if agency costs were minimized. We address the measurement problem by using profit efficiency as our indicator of performance performance. The link between productive efficiency and agency costs was first suggested by Stigler (1976), and profit efficiency represents a refinement of the efficiency concept developed since that time.

2.5.2 Profit Efficiency

Evaluates how close firm *a* is to earning the profit that a best-practice firm would earn facing the same exogenous conditions. This has the benefit of controlling for factors outside the control of management that are not part of agency costs. In contrast, comparisons of standard financial ratios, stock market returns, and similar measures typically do not control for these exogenous factors. Even when the measures used in the literature are industry adjusted, they may not account for important differences across firms within an industry – such as local market conditions – as we are able to do with profit efficiency. In addition, the performance of a best-practice firm under the same exogenous conditions is a reasonable benchmark for how the firm would be expected to perform if agency costs were minimized. Second performance, the prior research generally does not take into account the possibility of reverse causation from performance to capital structure.

If firm performance affects the choice of capital structure, then failure to take this reverse causality into account may result in simultaneous-equations bias. That is, regressions of firm performance on a measure of leverage may confound the effects of capital structure on performance with the effects of performance on capital structure. We address this problem by allowing for reverse causality from performance to capital structure We

discuss below two hypotheses for why firm performance may affect the choice of capital structure, the

2.5.3 Efficiency-Risk Hypothesis and The Franchise-Value Hypothesis

By construct a two-equation structural model and estimate it using two-stage least squares (2SLS). An equation specifying profit efficiency as a function of the Stigler's argument was part of a broader exchange over whether productive efficiency (or X-efficiency) primarily reflects difficulties in reconciling the preferences of multiple optimizing agents – what is today called agency costs – versus “true” inefficiency, or failure to optimize (e.g., Stigler 1976, Leibenstein 1978). firm s equity capital ratio and other variables is used to test the agency costs hypothesis, and an equation specifying the equity capital ratio as a function of the firm's profit efficiency and other variables is used to test the net effects of the efficiency-risk and franchise-value hypotheses. Both equations are econometrically identified through exclusion restrictions that are consistent with the theories.

Third, some, but not all of the prior studies did not take ownership structure into account. Under virtually any theory of agency costs, ownership structure is important, since it is the separation of ownership and control that creates agency costs .Greater insider shares may reduce agency costs, although the effect may be reversed at very high levels of insider holdings (e.g., Morck, Shleifer, and Vishny 1988). As well, outside block ownership or institutional holdings tend to mitigate agency costs by creating a relatively efficient monitor of the managers

Exclusion of the ownership variables may bias the test results because the ownership variables may be correlated with the dependent variable in the agency cost equation performance and with the key exogenous variable (leverage) through the reverse causality hypotheses noted above. To address this third problem, we include ownership structure variables in the agency cost equation explaining profit efficiency. We include

insider ownership, outside block holdings, and institutional holdings.

Our application to data from the firm industry is advantageous because of the abundance of quality data available on firms in this industry. In particular, we have detailed financial data for a large number of firms producing comparable products with similar technologies, and information on market prices and other exogenous conditions in the local markets in which they operate. In addition, some studies in this literature find evidence of the link between the efficiency of firms and variables that are recognized to affect agency costs, including leverage and ownership structure (Berger and Udell 1997 for a review). Although banking is a regulated industry, banks are subject to the same type of agency costs and other influences on behavior as other industries. The banks in the sample are subject to essentially equal regulatory constraints, and we focus on differences across banks, not between banks and other firms. Most banks are well above the regulatory capital minimums, and our results are based primarily on differences at the margin, rather than the effects of regulation.

Our test of the agency costs hypothesis using data from one industry may be built upon to test a number of corporate finance hypotheses using information on virtually any industry.

2.6 Measures of performance, Reverse Causality, and the Use of Ownership Structure

2.6.1. Measures of the firm performance

The literature employs a number of different measures of firm performance to test agency cost Hypotheses. These measures include 1) financial ratios from balance sheet and income statements (e.g., Demsetz and Lehn 1985), Its argued that profit efficiency that frontier efficiency computed using a profit function – is a more appropriate measure to test agency cost theory because it controls for the effects of local market prices and other exogenous factors and because it provides a reasonable benchmark for each individual firm's performance if agency costs were minimized. Profit efficiency is superior to cost efficiency for evaluating the performance of managers, since it accounts for how well

managers raise revenues as well as control costs and is closer to the concept of value maximization. Although maximizing accounting profits and maximizing shareholder value are not identical, it seems reasonable to assume that shareholder losses from agency costs are close to proportional to

Other studies of agency problems use different methodologies. For example, one study of agency costs estimates the effect of debt on input misallocation using elasticities derived from a cost function. Some studies of expense preference behavior use input demand functions (e.g., Hannan and Mavinga 1980, Mester 1989). Frontier efficiency is sometimes called X-efficiency or managerial efficiency. The only study that uses profit efficiency in a similar context is DeYoung, Spong, and Sullivan (2001), who analyze the effect of managerial ownership on the performance of a sample of small, closely held banks. However, they test only the effects of managerial ownership and do not include capital structure or test the agency costs hypothesis. The losses of accounting profits that are measured by profit efficiency. We measure profit efficiency in two different ways, standard profit efficiency and alternative profit efficiency. The standard profit function takes variable output prices as given and allows output quantities to vary, so that it accounts for revenues that can be earned by varying outputs as well as inputs: .

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This was a descriptive study that utilized a descriptive survey approach. A descriptive survey is a process of collecting data from the members of a population in order to determine the current status of the subject under study with respect to one or more variables. The major emphasis of a descriptive study is to determine the frequency of occurrence or the extent to which variables are related. This design was found suitable because the study required an accurate examination of the effects of capital structure on firm performance.

3.2 Sampling Technique

For studies which main objective is the generalizability of findings to the whole population, simple random sampling offers the best sampling design (Sekaran, 2000). The sample was drawn from the companies that had traded consistently from 2003 to 2007. By 2003, 45 companies had been listed at the NSE, however Uchumi was put under statutory management and A. Baumann & Company Limited that was suspended for sometime; the two could not trade for sometime and were excluded leaving a sample of 43 companies listed at NSE that had been in operation from the year 2003 to 2007

3.3 Data Collection Methods

This study was facilitated by the use of secondary data. Dividend data was extracted from published reports of quoted companies. This information was obtained at the N.S.E library and from the company libraries. Data on the market share prices will be obtained from the share prices as reported by N.S.E from a period of five years (2003 to 2007) due to financial and time constraint and since recent data are cumbersome to get.

3.4 Data Analysis Technique and Model Specification

Being that the study is descriptive in nature, both quantitative analysis and inferential analysis will be used as data analysis technique. The data collected was run through

various models so as to clearly bring out the effects of change in capital structure on firm's performance. The results obtained from the models were presented in tables to aid in the analysis and ease with which the inferential statistics was drawn. The under-mentioned models were used:

3.4.1 Model Specification

Variables used for the analysis include profitability and leverage ratios. Performance was operationalized using a commonly used accounting-based measure; profitability measured as the ratio of earnings before interest and taxes (EBIT) to equity. The leverage ratios used include:

- i. short-term debt to the total capital;
- ii. long-term debt to total capital; and
- iii. total debt to total capital.

Firm size and sales growth are also included as control variables.

The panel character of the data allowed for the use of panel data methodology. Panel data involved pooling of observations on a cross-section of units over several time periods and provided results that were simply not detectable in pure cross-sections or pure time-series studies. A general model for panel data that allowed the study to estimate panel data with great flexibility and formulate the differences in the behavior of the cross-section elements was adopted. The relationship between debt and profitability/performance was thus estimated in the following regression models:

$$ROE_{it} = \alpha_0 + \alpha_1 SDA_{it} + \alpha_2 SZE_{it} + \alpha_3 SG_{it} + e_{it}$$

$$ROE_{it} = \alpha_0 + \alpha_1 LDA_{it} + \alpha_2 SZE_{it} + \alpha_3 SG_{it} + e_{it}$$

$$ROE_{it} = \alpha_0 + \alpha_1 DA_{it} + \alpha_2 SZE_{it} + \alpha_3 SG_{it} + e_{it}$$

where:

ROE_{it} is EBIT divided by equity for firm i in time t ;

SDA_{it} is short-term debt divided by the total capital for firm i in time t ;

LDA_{it} is long-term debt divided by the total capital for firm i in time t ;

DA_{it} is total debt divided by the total capital for firm i in time t ;

$SIZE_{it}$ is the log of sales for firm i in time t ;

SG_{it} is sales growth for firm i in time t ; and

e_{it} is the error term

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter presents the data findings and analysis procedure and presentation of the output from analysis. Out of the 43 companies sampled for the study, complete set of data could only be found on 38 companies and were the only companies used in this study.

4.2 Return on Equities over the Years as a Measure of Performance

Agricultural sector	2007	2006	2005	2004	2003	Mean	STDEV
Brooke Bond	-0.03537	0.018436	0.02567	0.130581	0.019847	0.031833	0.136681
Kakuzi	0.139076	0.111375	-0.07728	0.052435	-0.01172	0.042776	0.196917
Rea Vipingo	0.193036	0.191724	0.230783	0.22872	0.016512	0.172155	0.387595
Sasini	-0.01984	0.098876	-0.16341	0.290752	-0.03453	0.034369	0.348455
Eaagads	-0.01395	0.040787	0.070368	-0.01484	-0.04519	0.007436	0.094956
Limuru Tea	0.047085	0.124292	-0.08564	0.223301	0.193123	0.100432	0.319489
Commercial & Service Sector							
CMC Holdings	0.203605	0.141465	0.135589	0.119947	0.10313	0.140747	0.291659
Standard News	0.275096	0.410479	0.26295	0.288304	0.270081	0.301382	0.61526
Marshals	0.064597	0.112395	0.132236	0.098856	0.108661	0.103349	0.212581
Kenya Airways	0.095259	0.130154	0.150892	0.094576	0.04412	0.103	0.221506
NMG	0.40008	0.298475	0.311647	0.312025	0.313501	0.327146	0.659465
TPS Serena	0.113217	0.090961	0.03272	0.139098	0.0309	0.081379	0.189323
Express Kenya	0.197883	0.200467	0.259867	0.046935	-0.78116	-0.0152	0.871243
Finance and Investment							

Barclays	0.403037	0.435675	0.411854	0.432144	0.434585	0.423459	0.847449
NIC Bank	0.221605	0.222997	0.148066	0.140908	0.139465	0.174608	0.359969
StanChart Bank	0.449815	0.376158	0.366315	0.443823	0.622576	0.451737	0.926568
K.C.B	0.320037	0.272519	0.193177	0.12511	0.133625	0.208894	0.45153
H.F.C.K.	0.078406	0.102884	0.071154	0.078448	0.092468	0.084672	0.171262
CFC Bank	0.077029	0.091974	0.065711	0.070613	0.048083	0.070682	0.144958
Diamond Trust	0.208881	0.246141	0.258204	0.16717	0.151279	0.206335	0.423253
Jubilee	0.209582	0.183805	0.179077	0.153396	0.055037	0.156179	0.334581
Pan African ins	0.141573	0.07102	0.188272	0.113881	-0.11379	0.08019	0.282879
I.C.D.C	0.142036	0.111669	0.095059	0.113983	0.073546	0.107258	0.220402
N.B.K	0.327805	0.288632	0.266543	0.283251	0.228357	0.278918	0.562488

Industrial & Allied

E.A Cables	0.336751	0.371435	0.464013	0.529581	0.051583	0.350673	0.791719
Unga	0.066116	0.062312	0.06988	-0.0447	-0.00709	0.029303	0.119695
Total Kenya	0.164563	0.145163	0.172894	0.205989	0.183545	0.174431	0.351766
Crown Berger	0.153067	0.090542	0.097029	0.110615	0.146654	0.119582	0.245938
B.A.T	0.357981	0.352446	0.441095	0.400732	0.348981	0.380247	0.764669
E.A.B.L.	0.464396	0.418571	0.459943	0.417554	0.262822	0.404657	0.825889
Bamburi	0.311082	0.239053	0.232921	0.217097	0.125387	0.225108	0.469414
Firestone	0.078775	-0.00724	0.13532	0.18838	0.126366	0.10432	0.25523
Kenya Oil	0.157377	0.241751	0.320436	0.32608	0.239127	0.256954	0.53233
Athi River -Min	0.180506	0.122254	0.108866	0.12569	0.102995	0.128062	0.263413
B.O.C.	0.273316	0.248841	0.219959	0.18423	0.1874	0.222719	0.452159
Mumias Sugar	0.185364	0.225039	0.233668	0.155469	-0.03663	0.152582	0.376609

Kenya Power	0.08986	0.093895	0.078375	0.036785	-0.21278	0.017227	0.263373
E.A Portland	0.148284	0.120765	0.159204	-0.06126	0.058526	0.085103	0.248705

Table 1: Return on Equities over the Years as a Measure of Performance

Table 1 above illustrates the movement in value of ROE over the duration of the study. The table shows that Standard Chartered Bank had the best ROE over the years with a mean of 0.4514 followed by Barclays Bank of Kenya which had a mean of 0.4237 then East Africa Breweries Limited at 0.4046 while Express Kenya Ltd had a ROE of -0.0152 and Eaagads Ltd had a ROE of 0.007436. This shows that Standard Chartered Bank, Barclays Bank of Kenya and East Africa Breweries Limited in that order while Express Kenya Ltd and Eaagads Ltd performed the worst. In the same period market capitalization for standard chartered bank had increased from Ksh47, 223,501,624 in 2003 to Ksh 56,025,368,860 in 2007 while Barclay Bank's commendable performance was spurred bold investments over the period with the market capitalization increasing from Ksh57,040,648,000 in 2003 to Ksh107,272,836,000 in 2007.

4.3 Summary of the Descriptive Statistics of the Dependent and Independent Variables

	Mean	STDEV	Minimum	Maximum
ROE	0.1664	0.4008	0.0965	0.1896
SDA	0.4876	0.2296	0.0934	1.1018
LDA	0.0985	0.1803	0	0.7665
DA	0.5861	0.2032	0.2054	1.1018
SIZE	18.2124	1.6495	14.1875	22.0995
SG	0.3288	0.3457	20.75	1.3597

Table 2: Summary of the Descriptive Statistics of Dependent and Independent Variables

Table 2 provides a summary of the descriptive statistics of the dependent and independent variables for the sample of listed companies. The table shows the average indicators of variables computed from the financial statements. The return rate measured by Return on Equity (ROE) reveals an average of 16.64% with highest being 18.96% in 2007 and the lowest being 9.65% in 2003. This picture suggests a good and steadily growing performance during the period under study. The ROE measures the contribution of net income per a shilling invested by the firms' stockholders; a measure of the efficiency of the owners' invested capital. The study further tested for the variable SDA which measures the ratio of short-term debt to total capital and found its mean score to be 0.4876. This indicates that averagely, 48.7% of total capital hence assets are ,represented by short-term debts. This means that Kenyan firms largely depend on short-term debt for financing their operations due to the difficulty in accessing long-term credit from financial institutions. The ratio of total long-term debt to total assets (LDA) also stands at a mean score of 0.0985 while the minimum LDA was 0 and the maximum value settled at 0.7665. This shows that on average 9.85% of the companies assets are covered by long-terms debts attesting to the fact that the capital structures of listed companies have low proportion of long term liability/debts. On the variable on total debt to total capital ratio (DA) as an indicators of companies' performance, the study found out that it had a mean of 0.5861. This indicates that on average, about 58% of total assets are financed by debt capital. The above position reveals that the companies are financially leveraged with a large percentage of total debt being short-term that is a large percentage of the capital companies liability consist of short term debts.

Regression analysis used by this to investigate the relationship between capital structure and profitability measured by ROE.

$$Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \dots + \alpha_n X_n + e_{it}$$

The ordinary least squares (OLS) regression results are presented in Table 3. The results from the regression models presented in chapter three; 1, 2 and 3, denote that the independent variables explain the debt ratio determinations of the firms at 68.3, 39.7, and

86.4 percent, respectively.

4.4 Profitability (EBIT/Equity) Ordinary Least Squares

Variable	1	2	3
SIZE	0.0038	0.05	0.0411
SG	0.1314	0.1316	0.1413
SDA	0.8025		
LDA		-0.3722	
DA			-0.7609
R	0.6825	0.3968	0.8639
SE	0.4365	0.4961	0.4735
Prob. (F)	0	0	0

Table 3: Profitability (EBIT/Equity) Ordinary Least Squares

The result obtained from the first regression equation (1) shows a significantly positive relationship between SDA and profitability which suggests that short-term debt tends to be less expensive and increasing it with a relatively low interest rate will lead to an increase in profit levels and hence performance. The results further indicate that profitability increases with the control variables, that is, size and sales growth. The second regression equation (2) shows a significantly negative association between LDA and profitability which implies that an increase in the long-term debt position is associated with a decrease in profitability. This is explained by the fact that long-term debts are relatively more expensive and therefore, the companies' management fear that employing high proportions of them could lead to low profitability.

The results from the third regression equation (3) indicate a significantly positive association between DA and profitability. The significantly positive regression coefficient for total debt implies that an increase in the debt position is associated with an increase in profitability: thus, the higher the debt, the higher the profitability. Again, this

suggests that profitable firms depend more on debt as their main financing option. The results also show positive relationships between the control variables, firm size and sale growth, and profitability.

CHAPTER FIVE: DISCUSSIONS, CORRECTION AND RECOMMENDATION

5.1 Introduction

This chapter presents the discussions on the data findings, conclusions and recommendation. The chapter is outlined into discussions, conclusions, recommendation and areas for further studies.

5.2 Discussions

On the movement in the value of ROE over the duration of the study, the findings shows that Standard Chartered Bank had the best ROE over the years with a mean of 0.4514 followed by Barclays Bank of Kenya which had a mean of 0.4237 then East Africa Breweries Limited at 0.4046 while Express Kenya Ltd had a ROE of -0.0152 and Eaagads Ltd had a ROE of 0.007436. This can be explained by market capitalization, for example, Standard Chartered Bank had increased its market capitalization from Ksh47,223,501,624 in 2003 to Ksh 56,025,368,860 in 2007 while Barclay Bank's commendable performance was spurred bold investments over the period with the market capitalization increasing from Ksh57, 040,648,000 in 2003 to Ksh107,272,836,000 in 2007.

The study found out that return rate measured by Return on Equity (ROE) averages 16.64% with highest value being 18.96% in 2007 and the lowest being 9.65% in 2003. This suggests a good and steadily growing performance during the period under study. The study found that SDA which measures the ratio of short-term debt to total capital had a mean score of 0.4876 which indicates that averagely, 48.7% of total capital hence assets are represented by short-term debts. This means that Kenyan firms are largely dependent on short-term debt for financing their operations due to the difficulty in accessing long-term credit from financial institutions. The ratio of total long-term debt to total assets (LDA) also stands at a mean score of 0.0985 while the minimum LDA was 0 and the maximum value settled at 0.7665. This shows that on average 9.85% of the companies

5.5 Areas for Further Research

The study recommends that further research should be on capital structure, industry pricing, and firm performance since a capital structure is influenced by the industry valuation and so is performance.

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APPENDICES

Appendix I: Listed Companies

Agricultural Sector

1. Brooke Bond
2. Kakuzi
3. Rea Vipingo
4. Sasini
5. G. Williamson
6. Kapchorrua Tea
7. Eaagads
8. Limuru Tea

Commercial and Service Sector

1. Uchumi (excluded from the sample)
2. CMC Holdings
3. Standard News
4. A.Baumann (suspended)
5. Marshals
6. Kenya Airways
7. NMG
8. IPS Serena
9. Express Kenya

Finance and Investment Sector

1. Barclays

2. NIC Bank
3. Stan Chart Bank
4. K.C.B
5. H.F.C.K.
6. CFC Bank
7. Diamond Trust
8. Jubilee
9. Pan African ins
10. I.C.D.C
11. N.B.K
12. City Trust

Industrial & Allied Sector

1. E.A Cables
2. Unga
3. Total Kenya
4. Crown Berger
5. B.A.T
6. E.A.B.L.
7. Bamburi
8. Firestone
9. Kenya Oil
10. Athi River -Min
11. B.O.C.
12. Dunlop
13. Kenya Power

14. E.A Portland

15. K. Orchards

16. Carbacid