THE RELATIONSHIP BETWEEN FINANCIAL INNOVATION AND CAPITAL STRUCTURE OF COMPANIES LISTED IN THE NAIROBI SECURITIES EXCHANGE

BY

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DECLARATION

This research project is my original work and has not been submitted to the university or any other institution of learning for examination or otherwise.

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This research project is submitted to the University with my approval as the University supervisor.

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DEDICATION

I dedicate this Research project to my beloved nieces and nephew for their love and determination. May God bless them to live to attain the highest academic achievements.

In treasured memory of my dear mum, the late Fridah Wambui Mwai.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ABBREVIATIONS

CBK	-	Central Bank of Kenya
DIST	-	The Department of Industry Science and Tourism
FISD	-	Financial Information Services Division
ICS	-	Investment Climate Survey
ICT	-	Information Communications Technology
KBS	-	Kenya Bureau of Statistics
KIPI	-	Kenya Industrial Property Institute
MBA	-	Master of Business Administration
NSE	-	Nairobi Securities Exchange
OECD	-	Organization for Economic Co-operation and Development
PAT	-	Profit after Tax
R & D	-	Research and Development
SIIA	-	Software and Information Industry Association
UON	-	University Of Nairobi
UNU	-	United Nations University
WAN	-	Wide Area Network

ABSTRACT

This study was carried out to investigate the relationship between Financial Innovation and Capital structure of the firms the Nairobi Securities Exchange**.** Though capital structures as well as financial innovation are widely studied, few studies have been done trying to capital structure and innovation which is very important in the current world. The study focused was on 44 firms listed in the NSE that were trading over the study period. The data used in this study was secondary data. The secondary data was collected from the companies audited financial statements, the central bureau of statistics as well as from Kenya Industrial Property Institute. The data collected was run through various models so as to clearly bring out the effects of financial innovation on Capital structure. The results obtained from the models were presented in tables, bar graphs and line graphs. The study period was year 2008 to 2012. Multiple Linear regression analysis model was used to analyze the data using SPSS program. The literature review identified what other researchers have done in the area of financial innovations and financial performance of intermediaries. The study was conceptualized to determine the relationship between the dependent and independent variables and the influence of the intervening variables on the relationship between the dependent and the independent variables**.** To measure the dependent variable, capital structure, leverage was used where the book value of debt was divided by the total book value of (debt + Equity). For independent variable, financial innovation, the number of registered Trademarks was used as the measure of financial innovation. Other determinants of capital structure were also tested as independent variables. These were profitability as given by return on Assets and Assets Tangibility as explained in the Research Methodology**.** The study concludes that there is a strong and significant relationship between capital structure and the independent variables in this study which include Assets Tangibility, Firms Profitability, Number of Registered Trademarks and that innovation has a great impact on the capital structure. In addition, the study concludes that capital structure has been on a downward trend over the period of the study.

CHAPTER ONE

INTRODUCTION

1.1Background of the Study

This study focused in determining the relationship between financial innovation and capital structure of Companies listed in the Nairobi Securities Exchange. Firms needed capital in order to run their respective businesses, do necessary investments and eventually, grow larger. For firms to grow or to remain competitive in the industry, they needed to be creative and innovative. These actions and decisions are combined with high costs where both internal and external financing might be appropriate. Capital structure has been the subject of considerable debate, both theoretically and in empirical research. Throughout the literature, debate has centered on whether there is an optimal capital structure for an individual firm or whether the proportion of debt usage is irrelevant to the individual firm's value (Baxter, 1967).

As we considered firm's innovative activities, we also needed to think of the sources of finances for such firms. According to the Modigliani-Miller theorem (1958), in an efficient market with perfect information and no transaction costs, firms chose optimal levels of investments to maximize their returns, which did not depend on how the firms were financed. At the margin, firms faced the same cost of capital for all types of investment. However, in reality, this theorem is often violated because of a variety of financial market distortions.

Recent studies have provided evidence of an impact of financial constraints on fixed investment, Bond and Meghir (1994) and Love (2003). In an 'imperfect' world dominated by asymmetric information, bankruptcy risks and agency conflicts, external financing may be highly costly; thus, a firm's investment behavior might be constrained in terms of the availability and cost of finance. This study sort to establish whether there existed any relationship between a firm's innovative activities and its sources of finances looking at the firms listed in the NSE.

1.1.1 Capital Structure

The capital structure is the mix of debt and equity maintained by a company. Brealey and Myers (1991) defined capital structure as comprising of debt, equity or hybrid securities issued by the firm. Weston & Copeland (1986) defines capital structure as the permanent financing of the firm and represented by long-term debt, from securities and common equity. It is a firm's mix of debt and equity financing. Bos and Fetherston (1993) pointed out that capital structure, being total debt to total asset at book value, influences both profitability and riskiness of the firm.

There were various factors determined by the capital structure theories that affected the choices of a firm's financial leverage. According to Harris and Raviv (1991), the debt ratio increases with fixed assets, non-debt tax shield, growth opportunities and firm size and decreases with volatility and profitability. While Titman and Wessels (1988) confirm that asset structure, non-debt tax shields, growth, uniqueness, industry classification, size, earnings volatility, and profitability are some of the factors that may affect leverage according to different theories of capital structure.

1.1.2 Financial Innovation

The operation of a financial system involved real resource costs, such as labor, materials and capital employed by financial intermediaries (e.g., banks, insurance companies, etc.) and by financial facilitators (e.g., stock brokers, market makers, financial advisors, etc.). Further, since multiple time periods were an inherent characteristic of finance, there were also uncertainties about future states of the world that generate risks. For risk-averse individuals, these risks represent costs. The possibility of new financial products/services/instruments that would better satisfy financial system participants' demands is always present. Viewed in this context, a financial innovation represented something new that reduced costs, reduced risks, or provided an improved product/service/instrument that better satisfied participants' demands. (Frame and White, 2004)

Financial innovation referred to development of new products, formation of new institutions, embracing new technology and other aspects that portray newness in the financial markets. Innovation was defined as the application of new ideas to the products, processes or any other aspect of a firm's activities (OECD, 1997). Technology included tools, equipments and processes used in transforming inputs into outputs.

Schumpeter (1997) defined 5 types of innovation**;** introduction of new products or a qualitative change in an existing product, process innovations new to an industry, the opening of a new market, development of new sources of supply for raw materials or

other inputs and changes in industrial organization. Porter (1985) argued that firms created competitive advantage by conceiving new ways to deliver superior value to the customers. Innovation was a key source of competitive advantage and occurred at any stage of the value chain, however literature and research in this regard was biased towards technological innovation.

1.1.3 Relationship between Capital Structure and Financial Innovation

Financing of innovative activities was very important for the innovative ideas to become realities. One could not think of innovation without thinking of how to finance the investment. Innovations in the early phases of introduction of new technologies were subject to a high degree of risk and failure as they were often characterized by substantial experimentation taking place, no clear convergence on a particular design, and perception as being disruptive and competence destroying in established industries (Abernathy and Utterback, 1978). Even incremental innovations required significant levels of new investment in capital, internal capabilities, relationships with external suppliers and information sources, new marketing and sales approaches, and other types of investment. The payback for these investments took a length of time to be realized (Hanel and St-Pierre 2002).

According to Aghion, Bond, Klemm, and Marinescu (2004), theories of capital structure tended not to focus directly on technological characteristics, but suggest reasons why more innovative firms favored particular sources of finance. Much of the empirical work on the relationship between firms financing and innovation assumed the common wisdom that the direction of causality went from finance to innovation. However, there was room

to believe that the opposite might have been at work, given that when innovative projects were able to open up opportunities, there was a demand for specific financial instruments, thus affecting a firm's capital structure.

The 'pecking order' model proposed by Myers(1984) and Myers and Majluf (1984) suggested a positive relationship between financial innovation and capital structure. The 'pecking order' theory of capital structure suggested that more innovative firms were likely to be more reliant on external sources of funds, but were likely to favor debt over new equity among external sources, to avoid these relatively high dilution costs. More specifically, there was a hierarchy of financing sources available. Firms' preferred option for financing new investments was internal resources, provided that an adequate flow of retained earnings was available. When the amount of internally-generated funds was not sufficient and external resources were required, firms preferred debt financing, which was less costly; equity was only used as the last option.

Tufano (1989) observed that financial innovation had implications on financial markets. This included: reduction in the cost of financial intermediation, widened the choice of financial instruments in which to invest and which to issue. It also lowered the cost of inconveniences in some cases. His arguments supported that there was a positive relationship between financial innovation and capital structure. It was also possible that the type of financing could also influence firms' innovative activities. For instance, a firm that had debt in its capital structure had restrictive covenants restricting the way the management of a firm utilized the funds and the investment opportunities to take up or

not to. A firm's financial innovation activities in terms of product, process and institutional innovation might have as well influenced the type of financing the firm sort.

1.1.4 Firms listed at Nairobi Securities Exchange

The NSE which changed its name from Nairobi Stock Exchange in July 2011 is a company limited by shares and is the principal security exchange in Kenya. In Kenya, dealing in shares and stocks started in the 1920's when the country was still a British colony. In 1954 the Nairobi Stock Exchange was then constituted as a voluntary association of stockbrokers registered under the Societies Act when the London officials accepted to recognize the setting up of the Nairobi Stock Exchange as an overseas stock exchange. The exchange works incorporation with the Uganda Securities exchange and the Dares salaam stock exchange including the cross listing of various equities. It is a member of the Financial Information Services Division (FISD) of the Software and Information Industry Association (SIIA).

The NSE's offices and trading floor are located in the Nation Centre along Kimathi Street in Nairobi Kenya. The trading is done through the electronic trading systems commissioned in 2006 A wide Area Network platform was implemented in 2007 which eradicated the need for brokers to send their staff to the trading floor to conduct business. The trading is mainly conducted from the Brokers offices through the WAN. The Capital Markets Authority grants approval for listing for all public offers and listing of securities on any securities exchange in Kenya. Between the year 2008 and 2012 there were 62 listed companies that were trading in the NSE. The focus of this study however on the 44 companies that were trading over the study period.

Firms listed at the NSE have undertaken a number of financial innovations on an individual scale and in collaboration with other firms. Innovation in financial products in Kenya grew rapidly over the period between 2006 and 2009. For instance, the adoption of ATM and debit cards doubled over the period. However, these products have been overshadowed by phenomenal growth in the adoption of Mobile money products such as M-pesa. Most of financial innovations have been undertaken by firms in the telecommunication and technology segment. In this segment, mobile money services, most notably M-pesa, drives the market because they are trusted, convenient, simple and available. Mobile money systems today represent the largest economic payment medium in East Africa (Weil, Mbiti and Mwega, 2012).

1.2 Research Problem

Increasing global competition in recent decades requires companies around the globe to continuously innovate in order to improve its competitiveness. Naturally, the new investment opportunity will demand financing first from internal resources. When the amount of internally-generated funds is not sufficient, then external resources will be sought to finance the venture. The effect of initial capital structure on subsequent innovation performance is a crucial question in understanding the relationship between financing and innovation. In large firms, lower leverage allows large firms to focus on innovation strategy by providing financial slack (O'Brien, 2003). In large publicly traded firms arms length financing in the form of equity and public debt facilitates innovation whereas bank debt can impede risk, but potentially high payoff, novel innovation, as measured in patent production and quality (Atanassov et al., 2007).

A substantial stream of empirical works has specifically investigated the role of firm- and industry specific characteristics in determining a firm's leverage (Titman and Wessel, 1988), whereas there is relatively little empirical evidence on the role of a firm's innovative behavior. These models predict that leverage decreases with profitability (Hovakimian et al., 2001; Aghion et al., 2004; Heyman et al., 2008; Magri, 2009) and, also, with alternative measures of internal resources (Colombo and Grilli, 2006). Conversely, the effect of innovation remains ambiguous. Some empirical studies suggest that leverage is negatively related to R&D efforts (Aghion et al.; Hovakimian et al., 2001); however, other investigations support the view of credit rationing as seeming to affect more the small innovative firms compared to larger enterprises within the manufacturing sector (Ughetto, 2008; Magri, 2009; Colombo and Grilli, 2006). There is still lack of evidences based on other measures than R&D expenditures, in order to fully capture the effects of a firm's financial innovation.

Despite extensive research, the theory of capital structure remains one of the most controversial issues in modern corporate finance subject Myer's (1984) and the question of how firms choose their capital structures still remains unanswered. Therefore, there is a strong need to conduct empirical studies on these issues in order to get some further evidence on the capital structure theory. Jensen and Meckling (1976) acknowledged the potential for the investment and financing decisions to interact hence the challenge for researchers to explore how competitive strategy like innovation influence capital structure.

To date, especially in Kenya, there is less concrete empirical evidence to answer questions like, what is the capital structure adopted by innovative companies in Kenya? This study will try to establish whether a firm's innovative activities do influence its capital structure.

1.3 Research Objective

To establish the relationship between financial innovation and capital structure of Companies listed in the Nairobi Securities Exchange.

1.4 Value of the Study

The study is intended to help the management of firms to understand the implication of using debt or Equity in its financing strategy and the benefits derived there from. The study will also help the management to understand whether the firm's competitive advantage as a result of financial innovation influence on its financing decision. The study is also intended to help current and potential investors to understand the implication of a firm's capital structure where they want to invest. Whether their funds are more at risk or not and when to demand for more compensation on their investments. It is intended to help the investors to make a decision whether to hold their investment in companies. The information gathered in this study can be used by other scholars to further or broaden studies in

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covers relevant studies relating to capital structure and its determinants as well as innovation in firms. It will also provide a framework for establishing the importance of the study as well as bench mark for comparing the result with other findings. It gives an overview of the literature showing the research gap to be filled.

2.2 Theoretical Review

This section of the paper reviews the reasons that the impact of financial considerations on the investment decision may vary with the type of investment and with the source of funds in more detail. Countless studies investigated into the explanations of firms' capital structure choice, both theoretical studies and empirical ones. There still remains no clear answer to Myers (1984) question "How do firms choose their capital structure?" Different theories answer this question from different point of view. For instance, traditional trade-off theory postulates the existing of an optimal capital structure, which indicates the optimal choice of capital structure by firms is a balance of corporate tax shield against the bankruptcy cost and agency cost. However pecking order theory throws doubt on the existence of target capital structure, suggesting that firms use debt only when the internal financing is not available. This study seeks to establish whether the firms financing decisions on the proportion of debt and equity in its capital structure affects the innovative activities of the firm.

2.2.1 Modigliani and Miller Propositions

The capital structure is the mix of debt and equity maintained by a company. The determination of the capital structure has been one of the most controversial topics in finance since Modigliani and Miller (1958) introduced their capital structure irrelevance theory. In brief, the MM stated that the value of the company is independent from its corporate financing decisions under certain conditions (no taxes, no transaction costs, no bankruptcy costs, perfect contracting assumptions, an efficient and a perfect market assumption).

To address some of the imperfections of the irrelevance theory, Modigliani and Miller (1963) relaxed the assumptions related to taxes and showed that their model is no more effective since debt interest payments are deductible from taxes (tax- shield) and lead to a rise of in the value of the company. However increasing debt results in an increased probability of bankruptcy. Hence, the optimal capital structure represents a level of leverage that balances the bankruptcy costs and the benefits of the debt finance. The next step of the capital structure theory was the introduction of the personal taxes. In fact, Miller (1977) argued that the personal taxes reduced but does not eliminate the benefits of debt financing and the leverage gains may not be as great as previously.

2.2.2 Trade-Off Theory of Capital Structure

According to Jensen and Meckling (1976), 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 .The cost of financial distress can be both direct and

indirect. The bankruptcy cost is an example of direct financial distress cost while extraordinary administrative costs, loss of trade credit, loss of sales and key personnel are examples of indirect financial distress costs.

According to Ross, Westernfield and Jordan (1998), a firm with greater risk of experiencing financial distress will borrow less than firms with lower risk of distress. The tax benefit-bankruptcy cost trade-off models predict that firms seek to maintain an optimal capital structure by balancing the benefits and the costs of debt (DeAngelo and Masulis, 1980). The benefits include the tax shield whereas the costs include expected financial distress costs. This theory predicts that firms maintain an optimum capital structure where the marginal benefit of debt equals the marginal cost. The implication of the trade-off model is that firms have target leverage and they adjust their leverage toward the target over time.

2.2.3 The Pecking Order Theory

Pecking order model is another important theory in the study of corporate capital structure that explains the relevance of the debt and optimum capital structure. 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. A firm is regarded as setting a target debt level and gradually moving towards it. 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 (1984), 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. The reason for this ranking was that internal funds were regarded as 'cheap' and not subject to any outside interference. External debt was ranked next as it was cheaper and has fewer restrictions compared to issuing equity. The issuance of external equity is seen as the most expensive and dangerous as it can lead to potential loss of control of the enterprise by the original owner and manager; hence, it was ranked the last. The pecking order theory is able to explain why firms tend to depend on internal sources of funds and prefer debt to equity if external financing is required.

2.2.4 The Agency Cost Theory

Jensen and Meckling (1976) were the pioneers in introducing the agency theory and in relaxing the assumption of no conflict of interest between the managers (agent) and the shareholders (principal). In particular, the managers do not always act in the interest of the shareholders and consequently the goal is not always to maximize the value of the company. This conflict of interest will create agency cost that may be reduced by a choice of a capital structure.

More particularly, a higher leverage reduces the agency costs of outside equity and increases the firm value by constraining the managers to act more in the interests of the shareholders. Jensen et al, (1976) 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. The optimal capital structure can be determined by trading off the agency costs of debt against the benefits of debt.

2.2.5 Signaling Theory of Capital Structure

Ross (1977) 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. According to Ross (1977), managers, have full information about their firm and with rewards depending on the current value and future returns of the firm, have the motivation to credibly signal this information to outside investors. Managers know the true distribution of firm returns while investors do not.

Ross (1977) argued that managers benefit if the company's securities are more highly valued by the market but are penalized if the firm goes bankrupt. Under such circumstances, the level of debt the company managers choose serves as a signal about the quality of the company, a signal sent from the managers as possessors of private insider information towards outside investors. Since lower quality firms have higher marginal expected bankruptcy costs for any debt level, managers of low quality firms do not imitate higher quality firms by issuing more debt. Therefore, higher leverage is a "good signal" in this model.

Ross (1977) predicts that debt ratios will rise only for the most valuable firms. This theory states that managers can mitigate information asymmetry by signaling their firms' value through increased leverage. As managers commit more of a firm's profits to paying dividends, they signal the strength of their firms' cash flows. Cash-flow strength will make a firm more attractive to lenders, likely increasing leverage. Ross (1977) argues that only the most valuable firms will take on debt because of the need to allocate a portion of a firm's future cash flows to repay the debt. 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.

2.3 Other Determinants of Capital Structure

Titman and Wessles (1988), among many other authors have conducted empirical tests on capital structure determinants in the United States. An early piece of cross country study was conducted by Toy, et al. (1974) to investigate the determinants of capital structure in manufacturing sectors of France, Japan, the Netherlands, Norway, and the United States. Rajan and Zingales (1995) investigate the determinants of capital structure of G7 countries after some detailed accounting adjustments. The basis approach that has been taken in empirical work is trying to identify certain proxies for the unobservable theoretical attributes. As Titman and Wessels (1988) have explained, this approach certainly has its limitations. First of all, there may be some attributes which cannot be well represented by available proxies, or there may be several proxies that can be used for certain attributes. Secondly, the attributes themselves can be related as well, so the proxies chosen may actually measure the effects of several different attributes. Thirdly, measurement errors in the proxy variables may be correlated with measurement errors in the dependent variables thus creates spurious correlations.

This study intends to further investigate the relevance of different capital structure theories for capital structure choice in the firms listed in the NSE. It focuses on the following attributes: asset tangibility, growth, size, earning volatility, profitability and market to book ratio.

2.3.1 Asset Tangibility

In an uncertain world, with asymmetric information, the asset structure of a firm has a direct impact on its capital structure since firms tangible assets are the most widely accepted sources for bank borrowing and raising secured debt. If banks have imperfect information regarding the behavior of the firm, firms with little tangible assets find it difficult to raise funds via debt financing. This suggests that a positive relationship between asset tangibility and leverage implies the existence of imperfect information, and hence indirectly confirms the relevance of models based on asymmetric information for explaining capital structure choice of the firms listed in the NSE. On the other hand, the absence of a relationship between tangible assets and leverage seems to suggest that information problems do not play an important role. Hence, the sign of the coefficient with respect to asset tangibility provides information on the importance of theories based on asymmetric information.

2.3.2 Growth

Different theories give different predictions on how a firm's growth is related to its leverage. The agency theory predicts a negative relationship between growth and leverage. Myers' (1977) underinvestment problem suggests a negative relationship between growth and long-term debt. The argument is that a firm's growth opportunities are intangible assets instead of tangible assets; the liquidity effect of high leverage may reduce a firm's ability to finance its future growth. So he suggests that managers at firms with valuable growth opportunities should choose low leverage.

However, according to Lang, Ofek and Stulz (1996), leverage is negatively related to growth only for firms with low Tobin's ratio, i.e. for firms whose growth opportunities are not recognized by the capital market. But the negative relationship between leverage

and growth does not hold for firms or industries with high Tobin's ratio. We use percentage change of sales year over year as the proxy for growth (GROWTH). Even though the signs of the coefficient with respect to growth remain positive, they are not significant.

2.3.3 Size

A firm's size is considered positively related to leverage. The most important argument is that informational asymmetries are less severe for larger firms than for smaller firms. If the public is more aware of what is going on at larger firms, the firm will find it easier to raise debt. Further, larger firms can diversify their investment projects on a broader basis and limit their risk to cyclical fluctuation in one particular line of production. Thus the financial distress risk can be considered lower for larger firms. We use the logarithm of sales as the proxy for size (SIZE) and interpret a positive sign as evidence for the relevance of capital market imperfections and hence the importance of models based on asymmetric information for firms listed in the NSE capital structure choice.

2.3.4 Earning Volatility

Apart from some inherent cyclicality or seasonality related to certain lines of businesses, financial markets usually regard a firm's volatile earnings as the results of poor management therefore discounting such firm's stock price and demanding an extra premium should such firm seek debt financing. Generally speaking, these firms will face additional difficulties in external financing. According to this line of argument, earning volatility should be negatively related to leverage. However, the agency theory suggests a positive relationship between earning volatility and leverage. The reason is that the underinvestment problem decreases when the volatility of firm's returns increases (Cools,

1993). We use the absolute value of the first difference of percentage change of operating income as the proxy for earning volatility (EVOL). The results are mixed.

2.3.5 Profitability

Many authors have different views on the relationship between leverage and profitability. The pecking order theory strongly suggests a negative relationship between leverage and profitability. If a firm has more retained earnings, it will be in a better position to finance its future projects by retained earnings, instead of external debt financing. However, in Ross's (1977) and Leland and Pyle's (1977) approaches, the choice of the firm's capital structure signals to outside investors the information of insiders, in which case investors take larger debt levels as a signal of good performance of the firm and management's confidence. If their argument is true, one would expect that firm value (or profitability) and debt level are positively related. We use the ratio of operating income to total asset as the proxy for profitability (PROF). Our result strongly confirms the "pecking order" hypothesis.

2.4 Empirical Studies

Recent empirical work has extended the range of strategies linked to leverage and implicated a strategy of innovativeness as a determinant of leverage. Tufano (1989) did a research on financial Innovation and first movers' advantage in the US. The objective of the study was to determine whether financial products innovators enjoy first movers' advantage. The data was collected from 1,944 publicly traded securities where he specifically used a sample of 58 financial innovations introduced between 1974 and 1986. The innovations were in mortgage-backed securities, asset-backed securities, non-

equity-linked debt, equity-linked debt, preferred stock, and equities. The study was to test whether investments banks that create new securities benefit by charging higher prices (underwriting charges) than imitators or by capturing large quantities. Tufano concluded that investment banks that created new financial products did not charge higher prices in the period before imitative products appear and in the long run charges lower than rivals. However, these innovators did underwrite more public offerings that they innovated than did the imitating rivals. Overall, Tufano's results were not consistent with the monopoly pricing of new securities issued by innovators, but rather with the presence of cost advantage that allow these institutions to capture market shares.

Jordan, Lowe, and Taylor (1998) investigated the relationship between capital structure and strategy using a variant of Porter's (1980) generic strategy typology in the UK. Jordan, Lowe and Taylor (1998), they looked at size, growth, profitability, asset structure and other financial variables as determinants of capital structure, considered the impact of variables related to corporate strategy. Their results strongly supported the propositions that: both financial and strategic factors are necessary to explain corporate debt levels; industry effects are not important in explaining the capital structure of small firms; Assets Tangibility (asset structure) is negatively related to debt; cash flow is negatively related to debt; innovation strategy is negatively related to debt; SMEs that pursue innovation strategies have lower debt levels than firms that pursue other competitive strategies; and the capital structure of SMEs is consistent with a pecking order approach to capital structure.

Their results with regard to the relationship between capital structure and turnover (size) and sales growth were also supported but less conclusively. Their results strongly rejected the propositions that: profitability is negatively related to debt; the effective tax rate is positively related to debt; and risk is negatively associated with debt. They concluded, with respect to strategy variables, that, whilst the literature provides some weak link between the two, they had been unable to show this in the context of small firms. They concluded that a strategy based on innovation was associated with the lowest level of debt, while firms pursuing a cost-leadership strategy had the highest levels of debt.

Similarly, Vincente-Lorente (2001) found that R and D investments that are characterized by a high degree of specificity or opaqueness are associated with lower leverage. The negative relationship between R and D spending and leverage was not surprising, since Long and Malitz (1985) had previously argued that investments in R and D create intangible assets that will likely suffer from market failure (i.e., they cannot be efficiently traded on the open market) and hence they cannot serve as effective collateral and support a high level of debt.

The interesting finding to emerge from the Vincente-Lorente (2001) study was that some R and D investments are less specific than others, and thus more capable of supporting debt. The linkage between R and D intensity and leverage raises an interesting, yet apparently unexplored, question. If R and D is negatively related to leverage simply because those investments create intangible assets that are incapable of supporting much debt, then why does R and D intensity remain a significant predictor of leverage even

after the firm's tangible assets ratio has been controlled for (e.g., Hovakimian, Opler, and Titman, 2000)

Mantel (2000) and Mantel and McHugh (2001) both used a consumer survey of 1,300 people to study usage of electronic bill payment and debit cards. The studies were focused on the characteristics of customers for and users of financial innovations. In Mantel (2000) study, the usage of electronic bill payment services is found to be positively related to age, income, and gender (female). Mantel and McHugh (2001) study also found a positive relationship between the characteristics of the users of financial innovation and financial innovation as they concluded that debit card usage is related to age, income, and market size (population)

Lerner (2002) documented financial patenting activity in the late twentieth century using the US patent classification scheme. He identified 455 financial Trademarks awarded from January 1971 to the end of February 2000 as his population. His study primary focus was on the environmental conditions that encourage financial innovation. He notes that although the level of patenting activity has been modest, it increased markedly after a 1998 judicial decision (the State Street Bank case) that allowed for business method Trademarks. Lerner also studies the patenting activity of investment banks and finds that it was positively related to the size of the investment banks and to the extent of their indirect academic ties. He also finds, however, that the direct involvement of academic institutions or of academics themselves in financial patenting was not related to finance-related research productivity of the institutions or the individuals.

Lerner (2003) carried out a study on origins of financial innovation. The paper examined which institutions were the key financial innovations between 1990 and 2002, using Wall Street Journal articles as an indicator. The conclusion of his study was that smaller firms account for a disproportionate share of the innovations. Less profitable firms innovate more, though in the years subsequent to the introduction of the innovation, the profitability of the innovators increases significantly. Finally, those firms with stronger academic ties innovate more. While the determinants of patenting are similar, academic ties are far less important, consistent with evidence about the problematic patent review process.

Goedhuys (2007) carried out a research using the World Bank's Investment Climate Survey (ICS) data collected in Brazil in 2003.The objective of his study was to establish the impact of innovation activities on productivity and firm growth. The ICS the data collection was part of a larger and ongoing program coordinated by the World Bank that implements Investment Climate Surveys in many countries using a harmonised master questionnaire. The objective of the ICS is to obtain firm level data that allow analysing the conditions for investment and enterprise growth in the country. As such, the many aspects of the business environment that influence the investment decisions and performance of the firms were tackled, in a number of sub-questionnaires.

A set of questions was asked on the history of the firm, the background of the entrepreneur and manager, the acquisition and status of equipment and technology, the firm's human resource management, innovation activities, and institutional constraints to growth and investment. Survey data were collected through intensive interviews with

owners and managers of firms. The target population was 1642 manufacturing firms which represented a stratified random sample, stratified on the basis of size, sector and location. Due to missing values for some of the key variables, the number of firms used in the analysis reduced to 1352, distributed over the different size classes and sectors.

Goedhuys (2007) argues that the proportion of firms that is undertaking innovation activities is strongly and positively related to firm size, measured in terms of employment. This is true for the *change* variables and as a result also the knowledge *stock* variables show to be size related. Strong sector differences are also observed, with generally more innovation activities in the sectors of machinery, electronic products and auto-parts and less in the more traditional sectors. The sector of chemical products invests most heavily in human capital, with the highest incidence in training and the highest levels of education of management and work force. This sector also has by far the highest Assets Tangibility, which may explain the accordingly high human capital development efforts.

Mwangi (2007) carried out a study on factors influencing financial innovation of companies listed in the NSE. The objective of the study was to explain the macro – environmental and micro- environmental factors affecting innovation in Kenya's securities market. The findings concluded that Kenyan laws protecting investors was the major factor influencing financial innovation. Mwangi also observed that the absence of automated trading systems as a technological factor was found to influence financial innovation regularly. He also argued that global competition and integration had an influence on financial institutions influencing financial innovation the most.

Karanja (2011) did research on the relationship between financial innovation and growth of insurance companies in Kenya. The objective of the study was to evaluate the relationship financial innovation and growth of insurance companies in Kenya. The study used a descriptive survey design. The study was carried out in Nairobi and the target population was all the 44 licensed insurance companies as at the end of December 2009. Data was collected from the senior managers in marketing, underwriting, ICT and finance. A semi- structured questionnaire was used for the study. Data was analyzed using descriptive statistics and regression analysis. Karanja (2011) argued that insurance companies in Kenya review their products as and when need arise and most products could be tailor made or new.

The approach taken by insurance companies seem to be reactive than proactive as they respond to customer demands and market environment. Growth was found to be positively related to new products to a small extent. There is need for a proactive approach in innovation of new products and repackaging of old ones to enhance growth. He also argued that operating systems have no relationship with premium growth . It could help in customer satisfaction, internal efficiency but it is not a predictor of premium growth. Innovation therefore could be gauged by the kind of an operating system an insurance company has but the number of new products and banc assurance. He also concluded that the growth of insurance company cannot be enhanced by promoting partnership or affiliation with other financial institutions like banks and micro finance institutions.

Gitakwa (2011) carried out a study a study in Kenya. The objective of the study was to establish the relationship between financial innovation and profitability in commercial banks in Kenya. The target population was the 44 registered commercial Banks in Kenya as recorded by the central bank of Kenya. The study was conducted using questionnaires and secondary data from commercial Banks Websites, publications and the CBK. He looked at external and internal environment influencing profitability. Under the external environment he evaluated the financial regulation systems, macro environment and the conditions of the market competition as possible factors that could influence profitability. For internal environment he looked at operating systems, ownership structure, Human resource as well as enterprise culture. From his study, he concluded that bank's profitability is affected by both external and internal environment hence a positive relationship between financial innovation and profitability.

2.5 Summary of Literature Review

Tufano (1989) concluded that the presence of cost advantage that allow these institutions to capture market shares. Lerner (2002) study on the patenting activity of investment banks found that it was positively related to the size of the investment banks and to the extent of their indirect academic ties. Vincente-Lorente (2001) concluded that there is negative relationship between R and D spending and leverage. Goedhuys (2007) argues that the proportion of firms that is undertaking innovation activities is strongly and positively related to firm size, measured in terms of employment.

Mwangi (2007) argued that technological factor, global competition and integration had an influence on financial institutions influencing financial innovation. Karanja (2011)

concluded that growth was found to be positively related to new products to a small extent. There is need for a proactive approach in innovation of new products and repackaging of old ones to enhance growth. He also argued that operating systems have no relationship with premium growth. Gitakwa (2011) concluded that bank's profitability is affected by both external and internal environment hence a positive relationship between financial innovation and profitability.

Though capital structures as well as financial innovation are widely studied, few studies have been done trying to capital structure and innovation which is very important in the current world. From the studies on financial innovation, there is none giving a conclusive relationship between financial innovation and capital structure. This study seeks to fill the gap of knowledge by establishing whether the innovative activities influence firms' capital structure in Kenya, studying the firms listed in the NSE.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes how the research study will be carried out. It outlines the general methodology to be used in the study. It will also serve as the operational plan of the study. It specifies the research design, the target population, sampling design, data collection procedures and instruments used data analysis procedure and data presentation techniques.

3.2 Research Design

This study will be conducted through the use of a descriptive design. Descriptive research portrays an accurate profile of persons, events, or situations (Kothari, 2000). Therefore, the descriptive survey will be deemed the best strategy to fulfil the objectives of this study. Quantitative research include designs, techniques and measures that do produce discrete numerical data, and some designs used could include, experimental designs, causal-comparative and correlational research (Mugenda and Mugenda , 2003).

3.3 Target Population

Mugenda and Mugenda (2003) define population as the entire group of individuals, event or objects having a common observable characteristic. It is the aggregate of all that conforms to a given specification. According to Ngechu (2004), target population in statistics is the specific population from which information is desired. Mugenda and

Mugenda (2003) says that, if the target population is less than 100 units, then a census should be carried out. If the target population is greater than 100 units, the sample size of at least 15% of the population is considered representative. For the purpose of this study, the target population will be all 44 listed companies listed in the Nairobi Securities Exchange that were trading over the study period.

3.4 Data Collection

Secondary data collection method will be used in this study. The secondary data will be collected from the companies audited financial statements, the central bureau of statistics, KIPI website, the NSE as well as any other site that could provide the needed information. Data will be collected for the period between year 2008 and 2012 for comparative purposes.

3.5 Data Analysis

Quantitative Data will be analyzed using Statistical Package for Social Sciences (SPSS Version 19.0) program .The data collected will be run through various models so as to clearly bring out the impact of innovation on the capital structure. The results obtained from the models will presented in tables and graphs to aid in the analysis and ease with which the inferential statistics will be drawn. Multivariate regression model below will be used in determining the relationship with a test of 0.5 level of significance. A number of variables will be tested to determine whether they influence firms' capital structure as explained below.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

β_0 = Constant Term; β_1, β_2 and β_3 = Beta coefficients; ε = Error term.

Where:

Y = Capital Structure –This is the dependent variable

Y= The firm's Leverage = $\frac{\text{the book value of debt}}{\text{The total book value of (debt + Equity)}}$

X1= Financial innovation - This is the key independent variable of the firm. For the purpose of this study, financial innovation will be measured by the number of registered trademarks. A firm with a higher number of Trademarks is more innovative than one with none or less.

X2= Profitability- This will be firm's accounting profitability as measured by return on assets Return on Assets = $\frac{\text{Net income (PAT)}}{\text{The book value of assets}}$

Ultimately, the key output measure of innovative activity is the success of the firm. Firm success can be proxied by profits, Assets tangibility, revenue growth, share performance, market capitalization or productivity among many indicators. A company with a competitive advantage due to its innovative activities is likely to enjoy higher profits that the rest in the same industry.

X3= Asset Tangibility – For the purpose of this study, this is the value of total assets in a firm excluding intangible assets.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents analysis and findings and discussion of the study as set out in the research objective and research methodology. The study aimed at establishing the impact of innovation on the capital structure. The data was gathered exclusively from the secondary source which included the records at the central bureau of statistics, KIPI website, the NSE as well as any other site that could provide the needed information.

4.2 Descriptive Statistics

Table 4.2. 1 : Descriptive statistics

	N	Minimum	Maximum	Median	Mean	Std. Deviation
Y= Leverage	5	27.62	30.81	29.215	29.17	1.39
X1= No of registered trade mark	5	36	118	77	68.6	30.615
X=2- Profitability	5	2.794	3.83	3.312	3.258	0.462
X=3- Assets Tangibility	5	8.50E+08	3.70E+09	2.28E+09	1.80E+09	1.09E+09
Valid N(list wise)	5					

The study established that for the five years, Leverage had a mean score of 29.17 and a standard deviation of 1.39, number of registered trade mark had a mean score of 68.6 and a standard deviation of 30.615, profitability had a mean score of 3.258 and a standard deviation of 0.462 .A reasonable level of consistency was observed between the mean and standard deviation for all variables.

4.2.1 Capital Structure

The study sought to establish the trend in the variation of Capital structure over the study period which was obtained by the ratio of the book value of debt to the total book value of (Debt +Equity). The findings were as shown in the Figure 4.1 below and appendix IV.

Figure 4.2 1 : Capital Structure

Table 4.2.2 : Capital Structure

Year	Leverage=D/(D+E)
2008	27.62
2009	30.81
2010	29.86
2011	29.77
2012	27.81

Data Source: NSE 2012

As at the year 2008, the capital expenditure was 0.207. This increased to 0.242 in the year 2009 before a decrease was posted in 2010 whereby the capital structure declined to a all time low of low of 0.196. Over the following year an upward trend was realized whereby in the year 2011 capital structure 0.276 which further increased to 0.424 in 2012.

4.2.2 Firms Profitability

The study sought to find out the movement in the firms accounting profitability over the study period. The firm's accounting profitability was measured by return on assets which was the expressed as the ratio between Net income (PAT) and the book value of assets. The findings were presented in the figure 4.2 and appendix V.

Figure 4.2 2 : Firms Profitability

Table 4.2. 3 : Profitability

Year	Profitability
2008	2.794
2009	2.995
2010	2.998
2011	3.830
2012	3.675

Data Source: NSE 2012

From the findings, the firms profitability as at 2008 were -205229 wich was a loss. This however increased to 249,671 in 2009 then 262,740 in 2010 and further to 534300 in 2011. As at the end of the study period, the overall profitability of the firms had increased

to a all time high of 655101. Overall, the study findings established that the firms' profitability, measured by the Return on assets, had been increasing continuously over the study period.

4.2.3 Number of Registered Trademarks

The study sought to establish the trend in the number of registered per year over the study period. Figure 4.3 and Appendix VI presents the data findings.

Figure 4.2 3 : Number of Registered Trademarks

Table 4.2. 4 : Number of Registered Trademarks

Year	Number of Registered Trademarks
2008	118
2009	69
2010	67
2011	36
2012	53

Data Source: KIPI 2012

From the data findings on the trading companies, as at the incepting year 2008, the numbers of register Trademarks were 118. The number of the registered Trademarks has

been declining over the years to 69, 67then 36 with an increase to 53 in 2012. The overall number of registered Trademarks had been reducing over the study period as found out by this study.

4.2.4 Assets Tangibility

The study sought to establish the trend in the firms accounting profitability over the study period. Assets Tangibility was given by the ratio of the total assets to Total Turnover. The findings were presented in the figure 4.4 and appendix VII.

Figure 4.2 4 : Assets Tangibility

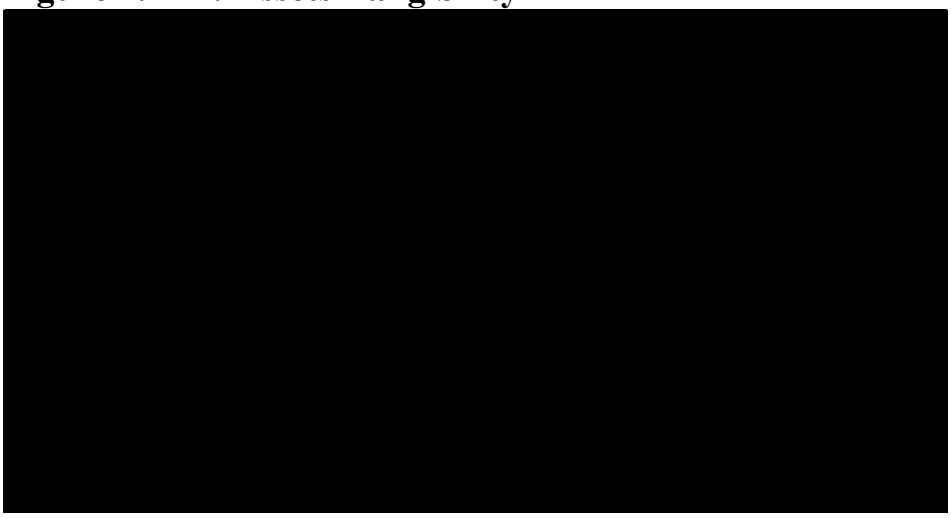

Table 4.2. 5 : Assets Tangibility

Year	Total Tangible Assets
2008	854,837,952
2009	1,253,358,887
2010	1,400,887,475
2011	1,720,338,652
2012	3,650,025,074

Data Source: NSE 2012

At the inception year 2008, the total assets tangibility was 854,837,952 which increased gradually to 1,253,358,887 in 2009 then to 1,400,887,475 in 2010. In the year 2011, the

total assets tangibility had increased to 1,720,338,652 after which it posted the total assets tangibility 3,650,025,074 in the year 2012. From the findings, the total assets tangibility of the firms had been on the increase over the study period and that the total assets tangibility was high across the firms.

4.3 Regression Analysis and Hypotheses testing

The study conducted a multiple regression analysis inorder to establih the relationship between capital structure and the idependent variables. The findings were as shown in the table 4.1 below:

Table 4.3. 6 : Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.968[a]	.937	.748	.0700683

a. Predictors: (Constant), Assets Tangibility, Number of Registered Trademarks, Firms Profitability

R^2 which is the coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable that is explained by the independent variables. The independent variables that were studied, explained 93.7% of the capital structure as represented by the adjusted R^2. This therefore means that other factors not studied in this research contribute 6.3% of the capital structure. The study conducted an Analysis of Variance in order to test the significance of the model. The findings were as shown below:

Table 4.3. 7 : ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.287	3	2.429	4.947	.0316[b]
	Residual	.491	1	.491		
	Total	7.778	4			

a. Dependent Variable: Capital Structure

b. Predictors: (Constant), Assets Tangibility, Number of Registered Trademarks, Firms Profitability

The significance value is 0.0316 which is less that 0.05 thus the model is statistically significance in predicting the relationship between Assets Tangibility, Firms Profitability and Number of Registered Trademarks on Capital Structure.

Table 4.3. 8 : Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	45.331	6.355		7.133	.089
	X1-Firms Profitability	-.072	.022	-1.583	-3.347	.0185
	X2- Number of Registered Trademark	-3.081	1.679	-1.020	-1.835	.0318
	X3- Assets Tangibility	-6.594	.000	-.517	-1.458	.0383

a. Dependent Variable: Capital Structure

The table above presents the regression analysis result for the relationship between the dependent variable (Capital Structure) and the independent variables as per the SPSS generated table above, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon_i$) becomes:

$$Y = 45.331 - 0.072X_1 - 3.081X_2 - 6.594X_3$$

From the equation obtained, holding other factors constant, the Capital Structure would be 45.331. A unit change in the number of registered trademarks holding other factors constant will change Capital Structure by -0.072. A unit change in the profitability holding other factors constant will change Capital Structure by -3.081while a unit change in Assets Tangibility holding other factors constant will change Capital Structure by -6.594. Assets Tangibility had the highest influence on capital structure followed by Firms profitability and finally by the numbers of Registered Trademarks.

Firms Profitability and Assets Tangibility were significant in the model as their corresponding probability values were 0.0318 and 0.0383 respectively which were less than α=0.05. Number of Registered Trademarks the least significant in the model as the corresponding probability value was 0. 0185 which was also less than α=0.05.

4.4 Discussion of Research Findings

From the study findings table 4.2.1 on capital structure indicates that the leverage had an increase on year 2009 then began a downward trend for the rest of the years. Firm's profitability as measured by profit after tax was on an upward trend up to year 2011. For year 2012, the profitability of many firms declined. This could be attributed to the anticipated general elections in the nation in the following year. The number of registered trademarks had been on a downward trend for year 2008 to 2011 with a slight improvement in year 2012. The assets tangibility of firms as measured by firms' total assets less the intangible assets had been on an upward trend.

From the results of this study as given by the coefficients summary table 4.3.3,a unit change in the number of registered trademarks holding other factors constant will change Capital Structure by -0.072. This means that they have negative relationship. An increase in one leads to a decline in the other by 7.2%. A unit change in the profitability holding other factors constant will change Capital Structure by -3.081. This also indicate a negative relationship between the two variables with a change of 308% in capital structure with a one unit change in registered trademarks. It was also noted that a unit change in assets tangibility holding other factors constant will change Capital Structure by -6.594. This also indicates a negative relationship between the two variables. Assets Tangibility had the highest influence on capital structure followed by Firms profitability and finally by the numbers of Registered Trademarks.

Using the significance levels as obtained in table 4.3.3, Number of Registered Trademarks gave a level of 0.0318 which was less than the permitted level of α=0.05. Assets Tangibility was a very significant variable in the model giving a probability value of 0.0383 which was also slightly less than α=0.05. Firms' profitability had the least significant in the model as the corresponding probability value was 0. 0185 which was also less than α=0.05.

From the study findings the Assets Tangibility, Firms Profitability and Number of Registered Trademarks had an influence on the capital structure of the firms. This was reflected by the R^2 which is the coefficient of determination explained the extent to which changes in the capital infrastructure was explained by the change in the independent variables. The three independent variables that were studied, explained 93.7% of the

capital structure. The results from the analysis of variance table indicated that the model was significant in determining the relationship.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter is organized into five parts; the summary of findings, conclusions of the study, recommendations for policy and practice and suggestions for further research.

5.2 Summary of Findings

This study sought to investigate the relationship between capital structure and the predictor variable which included Assets Tangibility, Firms Profitability and Number of Registered Trademarks. This study adopted a descriptive research design due to the researches designs ability to portray an accurate profile of persons, events, or situations. The population of this study all the listed companies in the Nairobi Securities. Since not all the listed companies were trading over the study period, the study focused on only 44 listed companies listed in the Nairobi Securities Exchange that were trading over the period.

The study used secondary data which was collected from the central bureau of statistics, KIPI website, the NSE as well as any other site that could provide the needed information. The study period was from 2008 to 2012. Data was analyzed using SPSS and presented by use of figures and graphs. The results obtained from the models will presented in tables and graphs to aid in the analysis and ease with which the inferential statistics will be drawn.

Firms Profitability and Assets Tangibility were significant in the model as their corresponding probability values were 0.0318 and 0.0383 respectively which were less than α=0.05. Number of Registered Trademarks the least significant in the model as the corresponding probability value was 0. 0185 which was also less than α=0.05.

This study conducted a multiple regression analysis whereby the dependent variable was the capital structure. The independent variables that were studied, explained 93.7% of the capital structure as represented by the adjusted R^2. This therefore means that other factors not studied in this research contribute 6.3% of the capital structure. The study established that the relationship was very strong and that Assets Tangibility had the highest influence on capital structure followed by Number of Registered Trademarks then Firms Profitability and finally Assets tangibility. The study further revealed that capital structure, firms' profitability and the Assets Tangibility were on increase over the study period while the number of registered Trademarks was declining.

5.3 Conclusion

From the study results, it is evident that financial innovation do influence the capital structure of firms. The other factors studied were also found to influence the capital structure. From the data obtained, this study concludes that there is a strong and significant relationship between capital structure and the independent variables in this study which include Assets Tangibility, Firms Profitability and the number of Registered Trademarks. According to the study Assets tangibility followed by innovation as measured by number of Registered Trademarks have a great impact on

the capital structure. In addition, the study concludes that capital structure has been on increase over the period of the study.

The study concludes that Assets Tangibility; Number of Registered Trademarks and Firms Profitability have an indirect relationship with capital structure. Further, the study concludes that Assets Tangibility has the highest influence on capital structure followed by Number of Registered Trademarks then Firms Profitability and finally Firms Profitability.

The study also concludes that the ratio of the book value of debt to the total book value of (Debt+Equity) has been increasing and hence capital structure. The study further concludes that firm's profitability which was measures by Net income (PAT) per the book value of assets on increase an indication that income in firms after taxation was increasing continuously over the period of study. In addition the study concludes that the Assets Tangibility were on increase over the study period. Given that Assets Tangibility was measured by total assets per Total Turnover, the study concludes that total assets in firms were increasing hence leading to the increased ratio. The study finally concludes that the number of registered Trademarks was declining.

5.4 Recommendations

The study finding established that capital structure, Number of Registered Trademarks, Firm profitability, and Assets Tangibility were low in the year 2008. This could be as a result of the postelection violence. This study therefore recommends that policymakers

should come up with policies that govern elections, ensuring free and fairness in the election process and discouraging against any form of violence.

The study established that the number of registered Trademarks had been declining over the study period. This study therefore recommends the policy makers to come up with policies which will enable the reversal of the trend.

The study findings established that the Number of Registered Trademarks and the assets tangibility were inversely related to the capital structure. This implies that an increase in Number of Registered Trademarks density resulted to a decrease in the capital structure of the firms. This study therefore recommends that policies should be enacted to ensure that assets tangibility are kept low.

5.5 Limitations of the Study

The researcher encountered quite a number of challenges related to the research and most particularly during the process of data collection. Due to inadequate resources, the researcher conducted this research under constraints of finances. In addition Nairobi Securities Exchange analysts had to be pushed to assist with data. This was done through many calls to remind them. Others wanted to be paid in order to give data. Other thought that the information they were requested to volunteer was confidential.

One of the measures of inputs into the innovation process for this study could have been R and D expenditure and personnel involved in R and D. There are serious problems with all this measures. One problem with R and D expenditure and employment data is that

they are subject to errors and biases caused by financial reporting and accounting practices. The data to measure R and D was not available and this important variable was not used in this study. Hence this had been a limitation in this study.

Time limit was a major constrain in this study. The scope of this research was for the less than ten years ending and including the year 2012. It is not known whether the results would hold if a longer period would have been researched upon. Further it is not possible to tell whether the same findings will hold for the period after 2012. An extension of the study period would probably give different results from this study.

Since this study used secondary data which was collected for other purposes, the quality of the data may be a weakness of this study. It is not possible to tell from this research whether the results are simply due to the nature and quality of data used or whether it is the true picture of the situation. Actually the use of the data from the various sources is based on the assumption that the data are accurately captured. The study would also give different results under different political or economic influences. These have not been considered in this study. The actual impact of political instabilities in the country on the various variables under study may not be clearly reflected in the study hence a limitation in the study.

5.6 Suggestions for Further Research

The results of this study are not conclusive, therefore what the researcher of this study has achieved can only be considered to be little hence requiring further research work. The four independent variables that were studied, explained 81.6% of the capital structure

as represented by the adjusted R^2. This therefore means that other factors not studied in this research contribute 18.4% of the capital structure. The study therefore recommends that other factors influencing the capital structure of the firms be studied. The researcher offer the following recommendations for further study which should act as a direction to future researchers in order to discover more facts concerning this area of study and shed more light.

This study focused on the empirical historical data only that was collected from secondary data like the financial statements of the firms. It has been proved by other studies that capital structure is also affected by non-empirical factors. There is need to complement the findings of this research by incorporating other non-factors that affect capital structure. A part from financial innovation and the other few determinants of capital structure studied, other factors should be considered as well.

A study should be undertaken to establish the impact of political instability and global economic the capital structure of the firms. Effect of the political instability and global economic instability on financial innovation could also be studied. The study also recommends that a study be done on the impact of existing policies on the capital structures as well as the independent variables of this study.

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APPENDIX I

LISTED COMPANIES IN THE NSE

AGRICULTURAL

1 Eaagads Ltd Ord 1.25
2 Kapchorua Tea Co. Ltd Ord Ord 5.00
3 Kakuzi Ord.5.00
4 Limuru Tea Co. Ltd Ord 20.00
5 Rea Vipingo Plantations Ltd Ord 5.00
6 Sasini Ltd Ord 1.00
7 Williamson Tea Kenya Ltd Ord 5.00

COMMERCIAL AND SERVICES

8 Express Ltd Ord 5.00
9 Kenya Airways Ltd Ord 5.00
10 Nation Media Group Ord. 2.50
11 Standard Group Ltd Ord 5.00
12 TPS Eastern Africa (Serena) Ltd Ord 1.00
13 Scangroup Ltd Ord 1.00
14 Uchumi Supermarket Ltd Ord 5.00
15 Hutchings Biemer Ltd Ord 5.00
16 Longhorn Kenya Ltd

TELECOMMUNICATION AND TECHNOLOGY

17 AccessKenya Group Ltd Ord. 1.00
18 Safaricom Ltd Ord 0.05

AUTOMOBILES AND ACCESSORIES

19 Car and General (K) Ltd Ord 5.00
20 CMC Holdings Ltd Ord 0.50
21 Sameer Africa Ltd Ord 5.00
22 Marshalls (E.A.) Ltd Ord 5.00

BANKING

23 Barclays Bank Ltd Ord 0.50
24 CFC Stanbic Holdings Ltd ord.5.00
25 I&M Holdings Ltd Ord 1.00
26 Diamond Trust Bank Kenya Ltd Ord 4.00
27 Housing Finance Co Ltd Ord 5.00
28 Kenya Commercial Bank Ltd Ord 1.00
29 National Bank of Kenya Ltd Ord 5.00
30 NIC Bank Ltd 0rd 5.00
31 Standard Chartered Bank Ltd Ord 5.00
32 Equity Bank Ltd Ord 0.50
33 The Co-operative Bank of Kenya Ltd Ord 1.00

INSURANCE

34 Jubilee Holdings Ltd Ord 5.00
35 Pan Africa Insurance Holdings Ltd 0rd 5.00
36 Kenya Re-Insurance Corporation Ltd Ord 2.50
37 Liberty Kenya Holdings Ltd
38 British-American Investments Company (Kenya) Ltd Ord 0.10
39 CIC Insurance Group Ltd Ord 1.00

INVESTMENT

40 Olympia Capital Holdings ltd Ord 5.00
41 Centum Investment Co Ltd Ord 0.50
42 Trans-Century Ltd

MANUFACTURING AND ALLIED

43 B.O.C Kenya Ltd Ord 5.00
44 British American Tobacco Kenya Ltd Ord 10.00
45 Carbacid Investments Ltd Ord 5.00
46 East African Breweries Ltd Ord 2.00
47 Mumias Sugar Co. Ltd Ord 2.00
48 Unga Group Ltd Ord 5.00
49 Eveready East Africa Ltd Ord.1.00
50 Kenya Orchards Ltd Ord 5.00

MANUFACTURING AND ALLIED

51 A.Baumann CO Ltd Ord 5.00

CONSTRUCTION AND ALLIED

52 Athi River Mining Ord 5.00
53 Bamburi Cement Ltd Ord 5.00
54 Crown Berger Ltd 0rd 5.00
55 E.A.Cables Ltd Ord 0.50
56 E.A.Portland Cement Ltd Ord 5.00

ENERGY AND PETROLEUM

57 KenolKobil Ltd Ord 0.05
58 Total Kenya Ltd Ord 5.00
59 KenGen Ltd Ord. 2.50
60 Kenya Power & Lighting Co Ltd
61 Umeme Ltd Ord 0.50

GROWTH ENTERPRISE MARKET SEGMENT

62 Home Afrika Ltd Ord 1.00

APPENDIX II

SAMPLED COMPANIES IN THE NSE

AGRICULTURAL

1 Eaagads Ltd Ord 1.25
2 Kapchorua Tea Co. Ltd Ord Ord 5.00
3 Kakuzi Ord.5.00
4 Limuru Tea Co. Ltd Ord 20.00
5 Rea Vipingo Plantations Ltd Ord 5.00
6 Sasini Ltd Ord 1.00
7 Williamson Tea Kenya Ltd Ord 5.00

COMMERCIAL AND SERVICES

8 Express Ltd Ord 5.00
9 Kenya Airways Ltd Ord 5.00
10 Nation Media Group Ord. 2.50
11 Standard Group Ltd Ord 5.00
12 TPS Eastern Africa (Serena) Ltd Ord 1.00
13 Scangroup Ltd Ord 1.00
14 Uchumi Supermarket Ltd Ord 5.00
15 Longhorn Kenya Ltd

TELECOMMUNICATION AND TECHNOLOGY

16 AccessKenya Group Ltd Ord. 1.00
17 Safaricom Ltd Ord 0.05

AUTOMOBILES AND ACCESSORIES

18 Car and General (K) Ltd Ord 5.00
19 CMC Holdings Ltd Ord 0.50
20 Sameer Africa Ltd Ord 5.00
21 Marshalls (E.A.) Ltd Ord 5.00

BANKING

22 Diamond Trust Bank Kenya Ltd Ord 4.00
23 Housing Finance Co Ltd Ord 5.00
24 Kenya Commercial Bank Ltd Ord 1.00
25 NIC Bank Ltd 0rd 5.00
26 Standard Chartered Bank Ltd Ord 5.00
27 The Co-operative Bank of Kenya Ltd Ord 1.00

INVESTMENT

28 Trans-Century Ltd

MANUFACTURING AND ALLIED

29 B.O.C Kenya Ltd Ord 5.00
30 British American Tobacco Kenya Ltd Ord 10.00
31 Carbacid Investments Ltd Ord 5.00
32 East African Breweries Ltd Ord 2.00
33 Mumias Sugar Co. Ltd Ord 2.00
34 Unga Group Ltd Ord 5.00
35 Eveready East Africa Ltd Ord.1.00

CONSTRUCTION AND ALLIED

36 Athi River Mining Ord 5.00
37 Bamburi Cement Ltd Ord 5.00
38 Crown Berger Ltd 0rd 5.00
39 E.A.Cables Ltd Ord 0.50
40 E.A.Portland Cement Ltd Ord 5.00

ENERGY AND PETROLEUM

41 KenolKobil Ltd Ord 0.05
42 Total Kenya Ltd Ord 5.00
43 KenGen Ltd Ord. 2.50
44 Kenya Power & Lighting Co Ltd

APPENDIX III
DATA SUMMARY

		2008				2009				2010				2011				2012			
		Y	X1	X2	X3	Y	X1	X2	X3	Y	X1	X2	X3	Y	X1	X2	X3	Y	X1	X2	X3
	AGRICULTURAL																				
1	Eaagads Ltd Ord 1.25	0.8	(0.0)	0.0	4.3	0.9	0.1	0.0	3.9	0.7	0.0	0.0	2.2	0.8	0.2	0.0	1.9	0.8	0.0	0.0	3.7
2	Kapchorua Tea Co. Ltd Ord Ord 5.00	0.9	(0.1)	0.0	0.5	0.9	0.1	0.0	1.6	0.9	0.1	0.0	1.3	0.9	0.1	0.0	1.3	1.0	0.0	0.0	1.4
3	Kakuzi Ord.5.00	0.9	0.1	0.0	1.8	0.9	0.1	0.0	1.4	0.9	0.1	1.0	1.5	0.9	0.2	0.0	1.6	0.9	0.1	0.0	1.7
4	Limuru Tea Co. Ltd Ord 20.00	0.5	0.1	0.0	0.8	0.5	0.3	0.0	0.9	0.5	0.5	0.0	1.3	0.6	0.2	0.0	1.9	0.7	0.3	0.0	2.8
5	Rea Vipingo Plantations Ltd Ord 5.00	0.4	0.1	0.0	0.8	0.4	0.1	0.0	1.0	0.5	0.0	0.0	1.2	0.6	0.2	0.0	1.1	0.6	0.2	0.0	0.9
6	Sasini Ltd Ord 1.00	0.9	0.1	0.0	4.7	0.9	0.1	1.0	3.7	0.9	0.1	0.0	3.9	0.9	0.0	0.0	3.5	0.9	(0.0)	0.0	3.2
7	Williamson Tea Kenya Ltd Ord 5.00	0.9	(0.0)	0.0	3.3	0.9	0.1	0.0	1.4	1.0	0.2	0.0	2.0	1.0	(0.1)	0.0	1.8	1.0	0.1	0.0	2.0
	COMMERCIAL AND SERVICES																				
8	Express Ltd Ord 5.00	0.7	(0.0)	0.0	1.6	0.7	0.0	0.0	1.5	0.7	(0.0)	0.0	1.6	0.5	(0.3)	0.0	1.7	0.4	0.0	0.0	2.2
9	Kenya Airways Ltd Ord 5.00	0.0	0.1	1.0	1.3	0.9	(0.1)	0.0	1.1	0.9	0.0	0.0	1.0	0.9	0.0	1.0	0.9	0.9	0.0	5.0	0.7
10	Nation Media Group Ord. 2.50	0.3	0.2	12.0	0.8	0.2	0.5	9.0	0.3	0.0	0.2	7.0	0.8	0.3	0.1	1.0	0.8	0.3	0.2	4.0	0.9
11	Standard Group Ltd Ord 5.00	0.7	0.1	14.0	1.0	0.7	0.1	9.0	1.1	0.7	0.1	6.0	1.1	0.6	0.0	8.0	1.1	0.6	0.1	2.0	1.0
12	TPS Eastern Africa (Serena) Ltd Ord 1.00	0.9	0.3	0.0	2.0	0.9	0.1	0.0	1.7	0.9	0.0	0.0	2.7	1.0	0.0	0.0	2.4	1.0	0.0	0.0	2.5
13	Scangroup Ltd Ord 1.00	0.0	0.1	9.0	0.7	0.1	0.1	0.0	0.7	0.4	0.1	1.0	3.4	0.5	0.1	0.0	2.4	0.6	0.1	0.0	2.0
14	Uchumi Supermarket Ltd Ord 5.00	0.0	0.0	0.0	0.0	0.5	0.2	0.0	0.3	0.3	0.3	0.0	0.3	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.4
15	Longhorn Kenya Ltd	0.0	0.2	0.0	0.6	0.0	0.0	0.0	0.7	0.3	0.0	0.0	1.0	0.1	0.2	0.0	0.6	0.0	(0.0)	0.0	0.9
	TELECOMMUNICATION AND TECHNOLOGY																				
16	AccessKenya Group Ltd Ord. 1.00	0.1	0.1	0.0	1.0	0.7	0.1	0.0	1.1	0.7	(0.0)	0.0	1.6	0.8	0.0	0.0	1.4	0.7	0.1	0.0	1.2
17	Safaricom Ltd Ord 0.05	0.8	0.2	31.0	1.2	0.7	0.1	14.0	1.3	0.8	0.1	19.0	1.2	0.4	0.1	2.0	1.2	0.9	0.1	13.0	1.1
	AUTOMOBILES AND																				

	ACCESSORIES																				
18	Car and General (K) Ltd Ord 5.00	0.7	0.1	0.0	0.9	0.7	0.1	0.0	0.7	0.7	0.1	0.0	0.8	0.8	0.0	0.0	0.9	0.9	0.0	0.0	1.0
19	CMC Holdings Ltd Ord 0.50	0.5	0.1	0.0	1.0	0.5	0.2	0.0	0.2	0.6	0.0	0.0	1.2	0.6	0.0	0.0	1.2	0.7	0.0	0.0	1.1
20	Sameer Africa Ltd Ord 5.00	0.1	0.0	1.0	1.0	0.1	0.1	0.0	0.9	0.1	0.0	0.0	0.9	0.1	0.0	0.0	0.9	0.0	0.1	0.0	0.6
21	Marshalls (E.A.) Ltd Ord 5.00	0.9	(0.1)	0.0	1.4	0.8	(0.1)	0.0	2.4	0.9	(0.3)	0.0	1.9	0.0	0.2	0.0	4.1	0.0	(0.3)	0.0	2.4
	BANKING																				
22	Diamond Trust Bank Kenya Ltd Ord 4.00	1.0	0.0	0.0	15.3	1.0	0.0	0.0	13.2	1.0	0.0	0.0	10.8	1.0	0.0	0.0	11.3	1.0	0.0	0.0	11.0
23	Housing Finance Co Ltd Ord 5.00	0.9	0.0	0.0	10.8	0.9	0.0	2.0	10.1	1.0	0.0	2.0	11.8	1.0	0.0	0.0	9.2	1.0	0.0	1.0	8.1
24	Kenya Commercial Bank Ltd Ord 1.00	0.9	0.2	0.0	1.0	0.9	0.0	3.0	8.6	0.8	0.0	4.0	8.6	0.9	0.0	9.0	8.9	0.9	0.0	7.0	8.3
25	NIC Bank Ltd 0rd 5.00	0.9	0.0	5.0	13.5	0.9	0.0	0.0	12.4	0.9	0.0	0.0	11.3	0.9	0.0	0.0	12.0	0.9	0.0	0.0	13.0
26	Standard Chartered Bank Ltd Ord 5.00	1.0	0.0	0.0	9.8	1.0	0.0	4.0	10.1	1.0	0.0	0.0	10.3	1.0	0.0	0.0	10.3	1.0	0.0	0.0	94.5
27	The Co-operative Bank of Kenya Ltd Ord 1.00	1.0	0.0	1.0	8.7	1.0	0.0	1.0	9.4	1.0	0.0	4.0	9.8	1.0	0.0	2.0	9.2	1.0	0.0	0.0	8.4
	INVESTMENT																				
28	Trans-Century Ltd	0.5	0.1	0.0	1.3	0.5	0.0	1.0	1.6	0.4	0.0	0.0	1.7	0.5	0.0	0.0	2.1	0.5	0.0	0.0	0.2
	MANUFACTURING AND ALLIED																				
29	B.O.C Kenya Ltd Ord 5.00	0.9	0.1	0.0	1.6	0.5	0.1	0.0	1.5	0.5	0.0	0.0	1.6	0.2	0.1	0.0	1.5	0.1	0.1	0.0	1.5
30	British American Tobacco Kenya Ltd Ord 10.00	0.5	0.2	19.0	0.6	0.6	0.1	5.0	0.6	0.7	0.2	3.0	0.8	0.7	0.2	2.0	0.7	0.7	0.2	7.0	0.8
31	Carbacid Investments Ltd Ord 5.00	0.7	0.1	0.0	3.1	0.7	0.2	0.0	2.5	0.5	0.2	0.0	2.4	0.6	0.2	0.0	3.0	0.6	0.2	0.0	2.2
32	East African Breweries Ltd Ord 2.00	0.6	0.3	8.0	1.0	0.9	0.2	11.0	1.0	0.6	0.2	9.0	1.0	0.8	0.2	8.0	1.1	1.0	0.5	9.0	0.4
33	Mumias Sugar Co. Ltd Ord 2.00	0.4	0.1	0.0	1.2	0.5	0.1	0.0	1.5	0.6	0.1	0.0	1.2	0.7	0.1	3.0	1.5	0.7	0.1	2.0	1.8
34	Unga Group Ltd Ord 5.00	0.5	0.1	0.0	0.7	0.5	0.0	0.0	0.5	0.5	0.0	0.0	0.4	0.5	0.1	0.0	0.4	0.1	0.1	0.0	0.4
35	Eveready East Africa Ltd Ord.1.00	0.3	0.0	0.0	0.5	0.7	0.0	3.0	0.6	0.4	0.0	0.0	0.7	0.3	(0.1)	0.0	0.7	0.3	0.1	0.0	0.8

	CONSTRUCTION AND ALLIED																			
36	Athi River Mining Ord 5.00	0.8	0.1	0.0	1.4	0.9	0.1	0.0	2.4	0.9	0.1	7.0	2.8	1.0	0.1	0.0	2.5	1.0	0.0	3.0	2.4
37	Bamburi Cement Ltd Ord 5.00	0.8	0.2	14.0	1.0	0.8	0.2	1.0	1.1	0.0	0.0	1.0	0.0	0.7	0.1	0.0	0.9	0.1	0.1	0.0	1.1
38	Crown Berger Ltd 0rd 5.00	0.9	0.0	0.0	0.8	0.9	0.0	0.0	0.7	0.9	0.0	0.0	0.6	0.9	0.1	0.0	1.6	0.3	0.1	0.0	0.5
39	E.A.Cables Ltd Ord 0.50	0.8	0.2	0.0	0.8	0.9	0.1	0.0	1.3	0.9	0.0	0.0	1.3	0.8	0.1	0.0	1.0	0.9	0.1	0.0	1.5
40	E.A.Portland Cement Ltd Ord 5.00	0.9	0.1	0.0	1.3	0.9	0.2	0.0	1.5	0.9	(0.0)	0.0	1.3	0.9	0.0	0.0	1.3	0.6	(0.1)	0.0	1.6
	ENERGY AND PETROLEUM																			
41	KenolKobil Ltd Ord 0.05	0.9	0.0	0.0	0.2	0.8	0.0	0.0	1.2	0.8	0.1	1.0	0.3	1.0	0.1	0.0	2.0	0.9	(0.2)	0.0	0.2
42	Total Kenya Ltd Ord 5.00	0.0	0.0	1.0	0.3	0.5	0.0	1.0	0.8	0.4	0.0	0.0	0.4	0.4	(0.0)	0.0	0.3	0.1	(0.0)	0.0	0.3
43	KenGen Ltd Ord. 2.50	0.8	0.1	0.0	9.3	0.9	0.0	0.0	8.6	0.9	0.0	0.0	13.7	0.9	0.0	0.0	11.2	0.9	0.0	0.0	10.2
44	Kenya Power & Lighting Co Ltd	0.9	0.0	2.0	2.5	0.9	0.0	4.0	1.1	1.0	0.0	2.0	1.2	0.9	0.0	0.0	1.6	0.7	0.1	0.0	1.4
44	TOTALS	27.6	3.7	118.0	117.1	30.8	3.8	69.0	120.0	29.9	3.0	67.0	126.8	29.8	3.0	36.0	127.3	27.8	2.8	53.0	204.2

APPENDIX IV
Y= Capital Structure= Leverage= Debt/ (Debt+Equity)

		2012			2011			2010			2009			2008		
		Debt	Equity	L	Debt	Equity	L	Debt	Equity	L	Debt	Equity	L	Debt	Equity	L
	AGRICULTURAL															
1	Eaagads Ltd Ord 1.25	87,377	20098	0.81	74,073	20098	0.79	59,350	20098	0.75	58,511	10,049	0.85	44,280	10,049	0.82
2	Kapchorua Tea Co. Ltd Ord Ord 5.00	372,367	19560	0.95	319,713	19560	0.94	266582	19560	0.93	271966	19560	0.93	243165	19560	0.93
3	Kakuzi Ord.5.00	624,425	98,000	0.86	709,398	98,000	0.88	624,408	98,000	0.86	571,806	98,000	0.85	685,997	98,000	0.87
4	Limuru Tea Co. Ltd Ord 20.00	67253	24000	0.74	36045	24000	0.60	27782	24000	0.54	11693	12000	0.49	11399	12000	0.49
5	Rea Vipingo Plantations Ltd Ord 5.00	396489	300000	0.57	394644	300000	0.57	281068	300000	0.48	214222	300000	0.42	202358	300000	0.40
6	Sasini Ltd Ord 1.00	1910550	228055	0.89	2116420	228055	0.90	2051037	228055	0.90	1929050	228055	0.89	1717778	228055	0.88
7	Williamson Tea Kenya Ltd Ord 5.00	1280968	43782	0.97	1074119	43782	0.96	909731	43782	0.95	349183	43782	0.89	780201	43782	0.95
	COMMERCIAL AND SERVICES															
8	Express Ltd Ord 5.00	135831	177019	0.43	169456	177019	0.49	397396	177018	0.69	389913	177018	0.69	378979	177018	0.68
9	Kenya Airways Ltd Ord 5.00	30653000	2308000	0.93	33386000	2308000	0.94	32710000	2308000	0.93	37081000	2308000	0.94	36794	2308000	0.02
10	Nation Media Group Ord. 2.50	137200	392800	0.26	163000	392800	0.29	0	392800	-	89300	356500	0.20	131200	356500	0.27

11	Standard Group Ltd Ord 5.00	543943	408654	0.57	663672	371123	0.64	734550	370295	0.66	891572	366375	0.71	842960	366375	0.70
12	TPS Eastern Africa (Serena) Ltd Ord 1.00	3256705	148211	0.96	3469720	148211	0.96	2768787	148211	0.95	1643771	105865	0.94	1738714	105865	0.94
13	Scangroup Ltd Ord 1.00	358,058	284,789	0.56	337430	284789	0.54	191143	234570	0.45	11620	220690	0.05	4065	220690	0.02
14	Uchumi Supermarket Ltd Ord 5.00	80,309	1,327,133	0.06	183368	1327133	0.12	320140	900000	0.26	820089	900000	0.48	0	0	-
15	Longhorn Kenya Ltd	-	58,500	-	9600	58500	0.14	22920	58500	0.28		58500	-		58500	-
	TELECOMMUNICATION AND TECHNOLOGY															
16	AccessKenya Group Ltd Ord. 1.00	468,664	218,038	0.68	660967	207227	0.76	586808	207227	0.74	617171	207227	0.75	26039	203581	0.11
17	Safaricom Ltd Ord 0.05	12,202,079	2,000,000	0.86	1228294	2000000	0.38	8005762	2000000	0.80	4774580	2000000	0.70	6480000	2000000	0.76
	AUTOMOBILES AND ACCESSORIES															
18	Car and General (K) Ltd Ord 5.00	2,143,154	167,097	0.93	536670	167097	0.76	276041	111398	0.71	221552	111398	0.67	208038	111398	0.65
19	CMC Holdings Ltd Ord 0.50	679,590	291,355	0.70	431402	291355	0.60	424298	291355	0.59	338558	291355	0.54	240868	291355	0.45
20	Sameer Africa Ltd Ord 5.00	-	1,391,712	-	121145	1391712	0.08	122618	1391712	0.08	117044	1391712	0.08	128528	1391712	0.08
21	Marshalls (E.A.) Ltd Ord 5.00	500	71,966	0.01	0	71966	-	423163	71966	0.85	329984	71966	0.82	449880	71966	0.86
	BANKING															
22	Diamond Trust Bank Kenya Ltd Ord 4.00	116,834,491	880,400	0.99	94510999	782578	0.99	73340498	652148	0.99	58590882	652148	0.99	49125280	652148	0.99

23	Housing Finance Co Ltd Ord 5.00	35,819,333	1,153,000	0.97	27153552	1152125	0.96	25020989	1150000	0.96	14165983	1150000	0.92	10641952	1150000	0.90
24	Kenya Commercial Bank Ltd Ord 1.00	314,039,726	53,339,559	0.85	286351132	44365027	0.87	212226429	39129771	0.84	172207623	22570212	0.88	170124634	21086952	0.89
25	NIC Bank Ltd 0rd 5.00	92,866,971	15,481,622	0.86	68461052	10522953	0.87	50660693	8353229	0.86	40765987	6792254	0.86	37053369	5565750	0.87
26	Standard Chartered Bank Ltd Ord 5.00	164,599,942	1,825,798	0.99	143352168	1715386	0.99	122415127	1715386	0.99	109786817	1639839	0.99	87520764	1639839	0.98
27	The Co-operative Bank of Kenya Ltd Ord 1.00	171,221,000		1.00	147360000		1.00	134359000		1.00	95022000		1.00	70534000		1.00
	INVESTMENT															
28	Trans-Century Ltd	8,505,563	7,494,041	0.53	8065792	6632626	0.55	3371518	5293454	0.39	3168545	3517845	0.47	2811053	3090209	0.48
	MANUFACTURING AND ALLIED															
29	B.O.C Kenya Ltd Ord 5.00	11,501	97,627	0.11	29462	97627	0.23	96411	97627	0.50	87083	97627	0.47	603119	97627	0.86
30	British American Tobacco Kenya Ltd Ord 10.00	2,025,898	1,000,000	0.67	1997849	1000000	0.67	1900596	1000000	0.66	1248055	1000000	0.56	1013524	1000000	0.50
31	Carbacid Investments Ltd Ord 5.00	209,880	169,902	0.55	226922	169902	0.57	151851	169902	0.47	142237	56634	0.72	146750	56634	0.72
32	East African Breweries Ltd Ord 2.00	32,100,534	1,581,547	0.95	7314817	1581547	0.82	2783675	1581547	0.64	2746441	1585487	0.95	2269487	1581547	0.59
33	Mumias Sugar Co. Ltd Ord 2.00	5,955,772	3,060,000	0.66	5738818	3060000	0.65	4084089	3060000	0.57	3675907	3060000	0.55	1712983	3060000	0.36
34	Unga Group Ltd Ord 5.00	453,088	2,675,765	0.14	345150	378535	0.48	355354	378535	0.48	334142	378535	0.47	259438	315454	0.45
35	Eveready East Africa Ltd				79076	21000		12359	21000		46949	21000		86765	21000	

	Ord.1.00	105,476	210,000	0.33		0	0.27	2	0	0.37	6	0	0.69		0	0.29
	CONSTRUCTION AND ALLIED															
36	Athi River Mining Ord 5.00	13,329,740	495,275	0.96	9993361	495275	0.95	8431581	495275	0.94	4658399	495275	0.90	2382004	495275	0.83
37	Bamburi Cement Ltd Ord 5.00	5,166,000	30,861,000	0.14	4231000	1815000	0.70	0	0	-	6227000	1815000	0.77	6170000	1815000	0.77
38	Crown Berger Ltd 0rd 5.00	47,352	118,635	0.29	1143354	118635	0.91	980556	118635	0.89	934803	118635	0.89	917954	118635	0.89
39	E.A.Cables Ltd Ord 0.50	791,387	126,563	0.86	644888	126573	0.84	872774	101250	0.90	635519	101250	0.86	488078	101250	0.83
40	E.A.Portland Cement Ltd Ord 5.00	6976194	4,839,390	0.59	5168236	450000	0.92	4499714	450000	0.91	4426723	450000	0.91	3870221	450000	0.90
	ENERGY AND PETROLEUM															
41	KenolKobil Ltd Ord 0.05	897,625	73,588	0.92	1529666	73588	0.95	284298	73588	0.79	323738	73588	0.81	490983	73588	0.87
42	Total Kenya Ltd Ord 5.00	845,765	9,974,771	0.08	3020584	4774771	0.39	3704925	4774771	0.44	3978000	4774771	0.45	0	875324	-
43	KenGen Ltd Ord. 2.50	77,964,362	5,495,904	0.93	80318110	5495904	0.94	73066203	9495904	0.88	39422908	5495904	0.88	30943433	5495904	0.85
44	Kenya Power & Lighting Co Ltd	90,620,430	43,511,553	0.68	4976532 3	4336593	0.92	3743778 3	1582560	0.96	2046101 7	1582560	0.93	1741245 7	1582560	0.92
	TOTAL	1,196,786,492	194,444,709	27.81	992,886,447	99,285,072	29.77	811,371,240	89,280,129	29.861	634,211,890	65,468,676	30.811	510,929,491	58,888,102	27.617

APPENDIX V

X1= Profitability = ROA = PAT/ ASSETS

		2012			2011			2010			2009			2008		
		PAT	Assets	ROA	PAT	Assets	ROA	PAT	Assets	ROA	PAT	Assets	ROA	PAT	Assets	ROA
	AGRICULTURAL															
1	Eaagads Ltd Ord 1.25	21,805	573,356	0.04	71,784	354,922	0.20	11,838	260,061	0.05	29,686	276,789	0.11	(1,508)	217,333	(0.01)
2	Kapchorua Tea Co. Ltd Ord Ord 5.00	77,968	1,962,897	0.04	187,005	1,570,203	0.12	139,252	1,498,931	0.09	69,908	1,167,797	0.06	(69,778)	982,058	(0.07)
3	Kakuzi Ord.5.00	408,656	3,571,700	0.11	644,397	3,817,290	0.17	388,666	3,218,590	0.12	388,586	2,873,255	0.14	206,603	2,662,519	0.08
4	Limuru Tea Co. Ltd Ord 20.00	101,834	320,023	0.32	40,484	191,242	0.21	74,840	158,305	0.47	26,969	84,794	0.32	8,466	57,775	0.15
5	Rea Vipingo Plantations Ltd Ord 5.00	380,433	2,376,618	0.16	467,196	2,288,740	0.20	67,355	1,707,016	0.04	148,949	1,414,084	0.11	168,153	1,132,964	0.15
6	Sasini Ltd Ord 1.00	(124,113)	8,922,980	(0.01)	450,347	9,462,027	0.05	993,729	9,060,061	0.11	533,032	7,998,233	0.07	885,204	6,796,306	0.13
7	Williamson Tea Kenya Ltd Ord 5.00	854,740	7,243,227	0.12	(409,305)	6,032,743	(0.07)	876,055	5,328,706	0.16	109,870	2,043,160	0.05	(97,517)	3,630,966	(0.03)
	COMMERCIAL AND SERVICES															
8	Express Ltd Ord 5.00	13,028	503,609	0.03	(229,088)	769,296	(0.30)	(28,091)	1,341,699	(0.02)	15,070	1,304,116	0.01	(43,236)	1,320,624	(0.03)
9	Kenya Airways Ltd Ord 5.00	1,660,000	77,432,000	0.02	3,538,000	78,743,000	0.04	2,035,000	73,263,000	0.03	(4,083,000)	75,979,000	(0.05)	3,869,000	76,780,000	0.05
10	Nation Media Group Ord. 2.50	2,510,300	10,677,400	0.24	1,203,300	8,816,300	0.14	1,538,400	7,975,200	0.19	1,119,200	2,249,700	0.50	1,295,900	6,618,700	0.20
11	Standard Group Ltd Ord 5.00	183,307	3,501,548	0.05	147,345	3,512,257	0.04	279,784	3,306,000	0.08	263,384	3,003,966	0.09	286,192	2,686,213	0.11
12	TPS Eastern Africa (Serena) Ltd Ord 1.00	493,588	13,484,076	0.04	615,891	13,131,840	0.05	516,384	11,923,137	0.04	380,675	6,996,196	0.05	2,227,171	6,506,996	0.34
13	Scangroup Ltd Ord 1.00	752,009	8,646,961	0.09	911,116	8,489,938	0.11	640,585	8,009,431	0.08	401,148	3,933,148	0.10	315,789	3,773,957	0.08
14	Uchumi Supermarket Ltd Ord 5.00	273,977	4,941,888	0.06	390,425	4,004,720	0.10	865,099	3,153,511	0.27	420,630	2,488,648	0.17	-	-	-
15	Longhorn Kenya Ltd	(22,46	661,675	(0.03	127,74	709,65	0.1	21,621	523,00	0.0	20,146	431,35	0.0	77,956	418,49	0.1

		5)		)	6	3	8		0	4		7	5		6	9
	TELECOMMUNICATION AND TECHNOLOGY															
16	AccessKenya Group Ltd Ord. 1.00	151,377	2,265,714	0.07	109,084	2,415,111	0.05	(7,951)	2,728,978	(0.00)	147,909	2,318,717	0.06	203,656	1,502,525	0.14
17	Safaricom Ltd Ord 0.05	12,627,607	121,899,677	0.10	13,158,973	113,854,762	0.12	15,148,038	104,120,850	0.15	10,536,760	91,682,324	0.11	13,853,286	74,366,313	0.19
	AUTOMOBILES AND ACCESSORIES															
18	Car and General (K) Ltd Ord 5.00	266,556	5,705,400	0.05	238,234	5,562,239	0.04	288,706	3,871,293	0.07	197,984	3,210,498	0.06	214,840	2,750,520	0.08
19	CMC Holdings Ltd Ord 0.50	105,355	12,957,113	0.01	-	-	-	406,671	14,667,707	0.03	539,609	2,191,969	0.25	927,162	12,023,494	0.08
20	Sameer Africa Ltd Ord 5.00	189,755	2,326,723	0.08	96,948	3,125,040	0.03	57,396	3,086,993	0.02	158,005	3,005,374	0.05	150,848	3,076,148	0.05
21	Marshalls (E.A.) Ltd Ord 5.00	(165,527)	567,095	(0.29)	181,501	1,076,865	0.17	(344,722)	1,126,208	(0.31)	(117,479)	1,433,970	(0.08)	(169,837)	1,210,100	(0.14)
	BANKING															
22	Diamond Trust Bank Kenya Ltd Ord 4.00	4,067,978	135,461,412	0.03	2,996,726	107,759,818	0.03	2,482,170	83,600,177	0.03	1,354,435	66,679,080	0.02	1,126,465	56,145,697	0.02
23	Housing Finance Co Ltd Ord 5.00	743,334	40,956,577	0.02	622,278	31,870,916	0.02	379,531	29,278,396	0.01	234,176	18,239,359	0.01	136,427	14,294,368	0.01
24	Kenya Commercial Bank Ltd Ord 1.00	12,203,531	367,379,285	0.03	10,981,046	330,716,159	0.03	7,177,973	251,356,200	0.03	4,083,871	194,777,835	0.02	4,190,690	19,121,586	0.22
25	NIC Bank Ltd 0rd 5.00	3,036,794	108,348,593	0.03	2,707,137	78,984,005	0.03	1,863,918	59,013,922	0.03	1,085,718	47,558,241	0.02	1,037,681	42,619,119	0.02
26	Standard Chartered Bank Ltd Ord 5.00	8,069,533	1,953,522,756	0.00	5,836,821	164,046,624	0.04	5,376,191	142,746,249	0.04	4,732,754	123,778,972	0.04	3,250,813	99,019,571	0.03
27	The Co-operative Bank of Kenya Ltd Ord 1.00	7,724,000	200,588,000	0.04	5,366,000	168,312,000	0.03	4,580,000	154,339,000	0.03	2,968,000	110,678,000	0.03	2,374,000	83,486,000	0.03
	INVESTMENT															
28	Trans-Century Ltd	740,647	21,845,754	0.03	616,100	22,424,264	0.03	468,262	11,236,478	0.04	234,497	8,733,331	0.03	605,484	8,089,074	0.07
	MANUFACTURING AND ALLIED															
29	B.O.C Kenya Ltd Ord 5.00	197,374	1,989,541	0.10	150,604	1,816,803	0.08	79,337	1,904,995	0.04	153,907	1,988,401	0.08	200,409	2,057,227	0.10
30	British American	3,270,8	15,176,4	0.22	3,097,7	13,750,	0.2	1,767,2	11,121,	0.1	1,478,4	10,387,	0.1	1,700,3	10,307,	0.1

	Tobacco Kenya Ltd Ord 10.00	52	95		55	545	3	36	561	6	31	137	4	95	602	6
31	Carbacid Investments Ltd Ord 5.00	389,278	2,012,816	0.19	302,195	1,739,985	0.17	307,392	1,512,166	0.20	256,377	1,376,380	0.19	166,760	1,209,543	0.14
32	East African Breweries Ltd Ord 2.00	11,186,113	21,710,427	0.52	9,014,175	49,712,130	0.18	8,837,560	38,420,691	0.23	8,609,185	35,832,389	0.24	9,184,385	33,254,248	0.28
33	Mumias Sugar Co. Ltd Ord 2.00	2,012,679	27,400,113	0.07	1,933,225	23,176,516	0.08	1,572,383	18,334,110	0.09	1,609,972	17,475,715	0.09	1,213,837	14,152,576	0.09
34	Unga Group Ltd Ord 5.00	348,195	6,410,259	0.05	441,043	5,708,897	0.08	236,173	5,064,420	0.05	185,192	5,565,541	0.03	373,661	4,761,528	0.08
35	Eveready East Africa Ltd Ord.1.00	70,084	1,150,729	0.06	(123,994)	1,010,864	(0.12)	8,703	1,195,824	0.01	28,271	997,672	0.03	17,840	837,329	0.02
	CONSTRUCTION AND ALLIED															
36	Athi River Mining Ord 5.00	1,245,638	26,953,100	0.05	1,150,498	20,515,940	0.06	1,075,268	16,564,900	0.06	645,774	12,141,091	0.05	503,454	6,352,478	0.08
37	Bamburi Cement Ltd Ord 5.00	4,882,000	43,038,000	0.11	3,412,000	33,502,000	0.10	-	-	-	6,970,000	32,112,000	0.22	5,859,000	28,215,000	0.21
38	Crown Berger Ltd 0rd 5.00	133,543	2,258,263	0.06	129,002	2,215,352	0.06	91,417	1,972,337	0.05	86,308	1,858,452	0.05	30,777	1,948,281	0.02
39	E.A.Cables Ltd Ord 0.50	522,060	6,248,642	0.08	314,730	4,993,032	0.06	183,850	4,518,445	0.04	296,033	3,543,383	0.08	462,760	3,043,593	0.15
40	E.A.Portland Cement Ltd Ord 5.00	(821,486)	14,091,006	(0.06)	561,255	13,530,871	0.04	(292,402)	12,037,565	(0.02)	1,834,054	12,053,977	0.15	536,652	9,073,345	0.06
	ENERGY AND PETROLEUM															
41	KenolKobil Ltd Ord 0.05	(6,284,575)	32,684,166	(0.19)	3,273,831	45,974,304	0.07	1,915,045	30,372,909	0.06	1,294,505	120,714,336	0.01	1,155,319	27,708,592	0.04
42	Total Kenya Ltd Ord 5.00	(202,142)	32,980,604	(0.01)	(71,436)	35,198,166	(0.00)	916,205	30,375,677	0.03	482,585	31,528,196	0.02	703,894	14,526,784	0.05
43	KenGen Ltd Ord. 2.50	2,822,600	163,144,873	0.02	2,080,121	160,993,138	0.01	3,286,487	150,566,886	0.02	2,070,913	108,603,879	0.02	5,896,879	106,993,551	0.06
44	Kenya Power & Lighting Co Ltd	8,506,693	134,131,983	0.06	4,219,566	119,878,993	0.04	3,716,370	85,025,890	0.04	3,225,094	70,648,425	0.05	1,764,870	59,812,122	0.03
	TOTAL			2.794			2.995			2.998			3.8305			3.676

APPENDIX VI
X2= NUMBER OF REGISTERED TRADEMARKS

		2012	2011	2010	2009	2008
	AGRICULTURAL					
1	Eaagads Ltd Ord 1.25	0	0	0	0	0
2	Kapchorua Tea Co. Ltd Ord Ord 5.00	0	0	0	0	0
3	Kakuzi Ord.5.00	0	0	1	0	0
4	Limuru Tea Co. Ltd Ord 20.00	0	0	0	0	0
5	Rea Vipingo Plantations Ltd Ord 5.00	0	0	0	0	0
6	Sasini Ltd Ord 1.00	0	0	0	1	0
7	Williamson Tea Kenya Ltd Ord 5.00	0	0	0	0	0
	COMMERCIAL AND SERVICES					
8	Express Ltd Ord 5.00	0	0	0	0	0
9	Kenya Airways Ltd Ord 5.00	5	1	0	0	1
10	Nation Media Group Ord. 2.50	4	1	7	9	12
11	Standard Group Ltd Ord 5.00	2	8	6	9	14
12	TPS Eastern Africa (Serena) Ltd Ord 1.00	0	0	0	0	0
13	Scangroup Ltd Ord 1.00	0	0	1	0	9
14	Uchumi Supermarket Ltd Ord 5.00	0	0	0	0	0
15	Longhorn Kenya Ltd	0	0	0	0	0
	TELECOMMUNICATION AND TECHNOLOGY					
16	AccessKenya Group Ltd Ord. 1.00	0	0	0	0	0
17	Safaricom Ltd Ord 0.05	13	2	19	14	31
	AUTOMOBILES AND ACCESSORIES					
18	Car and General (K) Ltd Ord 5.00	0	0	0	0	0
19	CMC Holdings Ltd Ord 0.50	0	0	0	0	0
20	Sameer Africa Ltd Ord 5.00	0	0	0	0	1
21	Marshalls (E.A.) Ltd Ord 5.00	0	0	0	0	0

	BANKING					
22	Diamond Trust Bank Kenya Ltd Ord 4.00	0	0	0	0	0
23	Housing Finance Co Ltd Ord 5.00	1	0	2	2	0
24	Kenya Commercial Bank Ltd Ord 1.00	7	9	4	3	0
25	NIC Bank Ltd 0rd 5.00	0	0	0	0	5
26	Standard Chartered Bank Ltd Ord 5.00	0	0	0	4	0
27	The Co-operative Bank of Kenya Ltd Ord 1.00	0	2	4	1	1
	INVESTMENT					
28	Trans-Century Ltd	0	0	0	1	0
	MANUFACTURING AND ALLIED					
29	B.O.C Kenya Ltd Ord 5.00	0	0	0	0	0
30	British American Tobacco Kenya Ltd Ord 10.00	7	2	3	5	19
31	Carbacid Investments Ltd Ord 5.00	0	0	0	0	0
32	East African Breweries Ltd Ord 2.00	9	8	9	11	8
33	Mumias Sugar Co. Ltd Ord 2.00	2	3	0	0	0
34	Unga Group Ltd Ord 5.00	0	0	0	0	0
35	Eveready East Africa Ltd Ord.1.00	0	0	0	3	0
	CONSTRUCTION AND ALLIED					
36	Athi River Mining Ord 5.00	3	0	7	0	0
37	Bamburi Cement Ltd Ord 5.00	0	0	1	1	14
38	Crown Berger Ltd 0rd 5.00	0	0	0	0	0
39	E.A.Cables Ltd Ord 0.50	0	0	0	0	0
40	E.A.Portland Cement Ltd Ord 5.00	0	0	0	0	0
	ENERGY AND PETROLEUM					
41	KenolKobil Ltd Ord 0.05	0	0	1	0	0
42	Total Kenya Ltd Ord 5.00	0	0	0	1	1
43	KenGen Ltd Ord. 2.50	0	0	0	0	0
44	Kenya Power & Lighting Co Ltd	0	0	2	4	2
	TOTALS	**53**	**36**	**67**	**69**	**118**

APPENDIX VII
X3= Assets Tangibility = TOTAL TANGIBLE ASSETS

		2012	2011	2010	2009	2008
		Assets	Assets	Assets	Assets	Assets
	AGRICULTURAL					
1	Eaagads Ltd Ord 1.25	573,356	354,922	260,061	276,789	217,333
2	Kapchorua Tea Co. Ltd Ord Ord 5.00	1,962,897	1,570,203	1,498,931	1,167,797	276,789
3	Kakuzi Ord.5.00	3,571,700	3,817,320	3,218,590	2,873,255	2,662,519
4	Limuru Tea Co. Ltd Ord 20.00	320,023	191,242	158,305	84,794	57,775
5	Rea Vipingo Plantations Ltd Ord 5.00	2,376,618	2,288,740	1,707,016	1,414,084	1,132,964
6	Sasini Ltd Ord 1.00	8,922,980	9,462,027	9,060,061	7,998,233	6,796,306
7	Williamson Tea Kenya Ltd Ord 5.00	7,243,227	6,032,743	5,328,706	2,043,160	3,630,966
	COMMERCIAL AND SERVICES					
8	Express Ltd Ord 5.00	503,609	769,296	1,341,699	1,304,116	1,320,624
9	Kenya Airways Ltd Ord 5.00	77,432,000	78,743,000	73,263,000	75,979,000	76,780,000
10	Nation Media Group Ord. 2.50	10,677,400	8,816,300	7,975,200	2,249,700	6,618,700
11	Standard Group Ltd Ord 5.00	3,501,548	3,512,257	3,306,000	3,003,966	2,686,213
12	TPS Eastern Africa (Serena) Ltd Ord 1.00	13,484,076	13,131,840	11,923,137	6,996,196	6,506,996
13	Scangroup Ltd Ord 1.00	8,646,961	8,489,938	8,009,431	3,933,148	3,773,957
14	Uchumi Supermarket Ltd Ord 5.00	4,941,888	4,004,720	3,153,511	2,488,648	-
15	Longhorn Kenya Ltd	661,675	709,653	523,000	431,357	418,496

	TELECOMMUNICATION AND TECHNOLOGY					
16	AccessKenya Group Ltd Ord. 1.00	2,265,714	2,415,111	2,728,978	2,318,717	1,502,525
17	Safaricom Ltd Ord 0.05	121,899,677	113,854,762	104,120,850	91,682,324	74,366,313
	AUTOMOBILES AND ACCESSORIES					
18	Car and General (K) Ltd Ord 5.00	5,705,400	5,562,239	3,871,293	3,210,498	2,750,520
19	CMC Holdings Ltd Ord 0.50	12,957,113	14,579,112	14,667,707	2,191,969	12,023,494
20	Sameer Africa Ltd Ord 5.00	2,326,723	3,125,040	3,086,993	3,005,374	3,076,148
21	Marshalls (E.A.) Ltd Ord 5.00	567,095	1,076,865	1,126,208	1,433,970	1,210,100
	BANKING					
22	Diamond Trust Bank Kenya Ltd Ord 4.00	135,461,412	107,759,818	83,600,177	66,679,080	56,145,697
23	Housing Finance Co Ltd Ord 5.00	40,956,577	31,870,916	29,278,396	18,239,359	14,294,368
24	Kenya Commercial Bank Ltd Ord 1.00	367,379,285	330,716,159	251,356,200	194,777,835	19,121,586
25	NIC Bank Ltd 0rd 5.00	108,348,593	78,984,005	59,013,922	47,558,241	42,619,119
26	Standard Chartered Bank Ltd Ord 5.00	1,953,522,756	164,046,624	142,746,249	123,778,972	99,019,571
27	The Co-operative Bank of Kenya Ltd Ord 1.00	200,588,000	168,312,000	154,339,000	110,678,000	83,486,000
	INSURANCE					
	INVESTMENT					
28	Trans-Century Ltd	21,845,754	22,424,264	11,236,478	8,733,331	8,089,074
	MANUFACTURING AND ALLIED					
29	B.O.C Kenya Ltd Ord 5.00	1,989,541	1,816,803	1,904,995	1,988,401	2,057,227
30	British American Tobacco Kenya Ltd Ord 10.00	15,176,495	13,750,545	11,121,561	10,387,137	10,307,602
31	Carbacid Investments Ltd Ord 5.00	2,012,816	1,739,985	1,512,166	1,376,380	1,209,543

32	East African Breweries Ltd Ord 2.00	21,710,427	49,712,130	38,420,691	35,832,389	33,254,248
33	Mumias Sugar Co. Ltd Ord 2.00	27,400,113	23,176,516	18,334,110	17,475,715	14,152,576
34	Unga Group Ltd Ord 5.00	6,410,259	5,708,897	5,064,420	5,565,541	4,761,528
35	Eveready East Africa Ltd Ord.1.00	1,150,729	1,010,864	1,195,824	997,672	837,329
	MANUFACTURING AND ALLIED					
	CONSTRUCTION AND ALLIED					
36	Athi River Mining Ord 5.00	26,953,100	20,515,940	16,564,900	12,141,091	6,352,478
37	Bamburi Cement Ltd Ord 5.00	43,038,000	33,502,000	-	32,112,000	28,215,000
38	Crown Berger Ltd 0rd 5.00	2,258,263	2,215,352	1,972,337	1,858,452	1,948,281
39	E.A.Cables Ltd Ord 0.50	6,248,642	4,993,032	4,518,445	3,543,383	3,043,593
40	E.A.Portland Cement Ltd Ord 5.00	14,091,006	13,530,871	12,037,565	12,053,977	9,073,345
	ENERGY AND PETROLEUM					
41	KenolKobil Ltd Ord 0.05	32,684,166	45,974,304	30,372,909	120,714,336	27,708,592
42	Total Kenya Ltd Ord 5.00	32,980,604	35,198,166	30,375,677	31,528,196	14,526,784
43	KenGen Ltd Ord. 2.50	163,144,873	160,993,138	150,566,886	108,603,879	106,993,551
44	Kenya Power & Lighting Co Ltd	134,131,983	119,878,993	85,025,890	70,648,425	59,812,122
44	TOTAL	3,650,025,074	1,720,338,652	1,400,887,475	1,253,358,887	854,837,952