



EFFECT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE OF LISTED COMMERCIAL BANKS IN KENYA. A CASE STUDY OF KENYA COMMERCIAL BANK LIMITED.

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ABSTRACT

The study examined the effects of Capital structure on financial performance of listed commercial Banks in Kenya, a case study of Kenya Commercial Bank Limited. Most studies on capital structure were conducted in European countries, Middle-east and in the United States and found inconsistencies on the effects of capital structure on the financial performance of the firms. In Kenya studies done on capital structure and financial performance concentrated on the effect of capital structure on microfinance institutions, industrial firms and allied sectors. It is important to distinguish the banking sector from the general financial sectors and other sectors. Banks in general, operate under a totally unique and rigorous set of regulations which only apply to that sector making it impossible to explain the relationship of both the banking market and the rest of the market. The banking sector is fundamentally different from any other sector of the market in terms of high leverage and regulation, therefore the results obtained from Research using data across other sectors in the market need not to be carried over to the banking sector. Further, Research on the effect of capital structure and Kenyan Financial sector performance were very scarce. The banking industry being a key pillar in the financial industry and economy as a whole needed to be studied in this context. The inadequate studies and inconsistencies of effects of capital structure created a knowledge gap which motivated this study. The findings of this research study will help the Management of Kenyan Commercial Banks, investors, shareholders, scholars, Government of Kenya, Nairobi Stock Exchange and Capital Market Authority by providing insight on effect of capital structure on financial performance of listed commercial banks in Kenya. Capital structure theories; (irrelevance theory of capital structure, the Trade-off theory, the pecking order theory and the agency cost theory have been explored) and predict that leverage level influences a listed commercial banks' financial performance. This study has considered returns on assets and return on equity ratios as essential financial performance indicators. The effects of capital structure variables; deposits, debts, retained earnings and equity on financial performance of listed commercial banks in Kenya were therefore measured using these indicators. This study adopted descriptive research design. The study is a case study of Kenya commercial bank limited. Therefore the overall annual financial reports of 230 branches of Kenya Commercial Bank limited formed the target population. The main source of data for the study was Secondary data. The financial and income statements panel data covering five-year period from 2009 to 2013 was summarized and ratios calculated and analyzed using SPSS version 21 to produce inferential statistics using multiple regression analysis so as to determine the relationships between dependent and independent variables. The multiple regression models used considered performance as the dependent variable and was measured in terms of ROA and ROE. The results from the regression analysis indicated that Deposits, debt and equity was negative and significantly related to financial performance of listed commercial banks in Kenya as measured by return on assets. The regression analysis results indicated that the relationship between Retained Earnings ratio was positive although insignificantly related to financial performance as measured by return on assets. It was therefore concluded that capital structure of listed commercial banks in Kenya is significant and affects financial performance of commercial banks negatively. Therefore various stakeholders in this industry should strive to carry out researches in other areas in order to be able to identify which are the major factors that affect the performance of their industry.

Key Words: *Capita Structure, Financial Performance, Commercial Banks*

INTRODUCTION

This chapter gives a brief background of the effects of capital structure on listed commercial banks with regard to Global, Regional and Kenya's perspectives. It also captured the statement of the problem, general and specific objectives, research questions, justification of the study, scope of the study, and the limitations of the study.

Background

Capital Structure in finance means the way a firm finances his assets across the blend of debt, equity or hybrid securities (Saad, 2010). The concept is generally described as the combination of debt and equity that make the total capital of firms. The proportion of debt to equity is a strategic choice of corporate managers (Saad, 2010). Capital structure decision is the vital one since the financial performance of an enterprise is directly affected by such decision (Saad, 2010). Hence, proper care and attention need to be given while determining capital structure decision (Saad, 2010). In the statement of affairs of a firm, the overall position of the enterprise regarding all kinds of assets, liabilities are shown (Saad, 2010). Capital is a vital part of that statement. The term capital structure of a firm is actually a combination of equity shares, preference shares and long term debts (Pandey, 2009). A cautious attention has to be paid as far as the effect capital structure is concerned with unplanned capital structure, companies may fail to economize the use of their funds. Consequently, it is being increasingly realized that a company should plan its capital structure to maximize the use of funds and to be able to adapt more easily to the changing conditions, (Pandey, 2009).

The role of commercial banks in an economy cannot be ignored (Scott and Timothy, 2006). Commercial banks play an important role in facilitating economic growth, (Scott and Timothy, 2006). Banks deposits

represent the liquid form of money, on a micro economic level, commercial banks represent the primary source of credit to most small businesses and many individuals (Scott and Timothy, 2006). Scott and Timothy (2006) asserts that, a sound financial system will contain, predominantly, banks with adequate capital to withstand the most probable adverse shocks, and will have staff skilled in assessing conditions and coming up with solutions to manage liquidity, credit, market and other risks.

The similarities between the banks and non-financial firms' capital structure may be greater than previously thought, as noted by (Gropp and Heider, 2009). They observed that most determinants of capital structure in other firms also apply to banks with exception of those banks which are close to minimum capital requirements. They also observed that banks finance their statement of financial position growth entirely with non-deposit liabilities meaning composition of banks total liabilities has shifted away from deposits. It is therefore difficult to state the optimal capital structure of a bank since they appear to have stable capital structures at levels that are specific to each individual bank (Gropp and Heider, 2009). Therefore in a dynamic framework, banks' target leverage is time invariant and Bank specific (Gropp & Heider, 2009).

Capital structure of any institution should therefore be well managed to ensure that the firm remains in operation and it's able to finance its projects. Therefore, the way a bank combines its debt and equity, will define its performance as noted by (Ross et al., 2009). According to CBK prudential guidelines (2013), Commercial banks operations in Kenya are controlled by CBK which defines the environment in which these banks should operate. It also sets the various capital requirements that any commercial bank should operate by setting up minimum capital requirements. CBK Prudential Guidelines (2013) part 3 states that Capital requirements for a specific

institution may increase or decrease depending upon its risk profile. CBK Prudential Guidelines (2013) note that capital requirement by the CBK is associated to risk of the bank. The section goes further and sets a formula for determining minimum capital requirement (MCR) which will be calculated by dividing its Core and Total Capital by the sum of the value of its Risk-Weighted Assets for Credit Risk, Market Risk and Operational Risk, to arrive at the minimum Tier One and Regulatory capital adequacy ratios respectively (CBK Prudential Guidelines, 2013).

Global Perspective

In 2008, the global banks industry had a total value of assets of \$ 90,880.4 billion which was a compound annual growth rate of 16.4% for a period of five years from 2004 to 2008, (Banks Industry Profile report, 2009). This forecast is expected to reduce with a compound annual growth rate of 9.7% for the five year period from 2008 to 2013 and it's expected to drive banking industry total asset value to \$ 144, 153.40 billion by the end of 2013 (Banks Industry Profile report, 2009). The report further shows that Europe dominates the market with 54.1% share, followed by Asia Pacific with 19.5%, America with 18.6% and the rest of the world, where Africa falls is 7.8%. Therefore, bank industry cannot be ignored in any economy because of its significant role (Banks Industry Profile report, 2009).

Flannery and Rangan (2008) document that in the 1990s, large banks in the United States increased their capital well above the regulatory minimum. It is widely assumed in the banking literature that equity is a costly form of finance for banks and other financial institutions (Flannery and Rangan, 2008). This suggests that banks should minimize the amount of capital they use, and if there is a regulatory minimum, this should be binding. In practice, this is not the case (Flannery and Rangan, 2008).

Berger and Bonaccorsi (2006), using data on commercial banks in the USA found that higher leverage or lower equity capital ratio is related to higher financial performance. At some point where bankruptcy and distress become more likely, the agency costs of outside debt overwhelm the agency cost of outside equity, and therefore further increases in leverage lead to higher total agency cost of outside debt from risk shifting or reduced effort to control risk that result in higher expected costs of financial distress, bankruptcy, or liquidation (Berger and Bonaccorsi, 2006). Such agency costs leads to higher interest expenses from firms to be able to compensate debt holders for their expected losses (Berger and Bonaccorsi, 2006). Thus, capital structure which is defined as total debt to total assets at book value, impacts on both the profitability and friskiness of a firm (Berger and Bonaccorsi, 2006). One important conclusion that has emerged here is the fact that the structure of a firm's capital has implications for its operations and effects on its financial performance (Berger and Bonaccorsi, 2006).

The importance of financing decisions cannot be over emphasized since many of the factors that contribute to business failure can be addressed using strategies and financial decisions that drive growth and the achievement of organizational objectives (Salazar et al, 2012). The finance factor is the main cause of financial distress (Salazar et al, 2012). Financing decisions result in a given capital structure and suboptimal financing decisions can lead to corporate failure. A great dilemma for management and investors alike is whether there exists an optimal capital structure. The objective of all financing decisions is wealth maximization and the immediate way of measuring the quality of any financing decision is to examine the effect of such a decision on the firm's performance (Salazar et al, 2012).

Taani (2013) in his study found Total debt to be significant in determining net profit and return on capital employed in the banking industry of Jordan. The mean values of debt/equity ratio and debt to total funds were 8250.15% and 88.66% respectively. The mean value of debt/equity ratio suggests that debt is 8.25 times higher than equity capital (Taani, 2013). The debt/equity ratio is normally safe up to 2 this shows the fact that banks in Jordan depends more on debt (long-term loans) rather than equity capital (Taani, 2013). The mean value of debt to total funds ratio indicates 89% of the total capital of listed banks in Jordan is made up of debt (Taani, 2013). This has re-emphasized the fact that banks are highly levered institutions. Long-term debt and total debt were found to be insignificant in determining return on equity in the banking industry of Jordan (Taani, 2013). This means that deposits do not necessarily transit into enhancing return on equity in the banking industry of Jordan (Taani, 2013).

Regional Perspective

South Africa has one of the most advanced financial systems in the world, which compares favorably to the financial systems of more developed economies (Skerritt, 2009). The South African banking sector, for example, though oligopolistic in nature (because it is dominated by the big four banks: ABSA, First Rand, Nedbank and Standard), ranks among the world's top ten (Skerritt, 2009). The regulatory framework, the depth of financial infrastructure and markets and the vitality of the banking system serve as proof of the advanced nature of the South African financial sector (Skerritt, 2009). Since 1996, BCPS has consistently exceeded the country's GDP, which shows the importance of the banking sector to the private sector in South Africa (Skerritt, 2009). Despite this amount of BCPS, there seems to be heavy dependence on trade credit by big companies in South Africa. According to (Skerritt, 2009), period

2001 to 2010 sample firms' short-term debt and trade credit to current liabilities were 19% and 70%, respectively. In addition, while trade credit financed half of the current assets held by these firms, short-term debt financed less than a fifth.

PWC (2013) stated that deposits due to customers remain the most important source of bank funding in South Africa. Total deposits for the major banks grew 6.5% in the year to December 2012, somewhat below the 11.8% growth recorded in the previous year (PWC, 2013). Interestingly, this growth arose mainly in the second half of the year (PWC, 2013). It is also pleasing that growth in the major banks' corporate deposit books largely comprising notice deposits and cash-managed accounts continued steadily in 2012 (PWC, 2013). This was in spite of the subdued interest rate environment and relatively stable money market rates. In addition, the 1.2% decline in the combined loans-to-deposit ratio (which provides a useful measure in tracking the rebalancing of the South African banking system) underlines the relative funding contribution of the banks' deposits and the competitive environment to source deposit funding (PWC, 2013).

Awunyo-Vitor and Badu (2012) made an observation that the average capital structure of the listed Banks on the Ghana Stock exchange was 87% from 2000 to 2010 implying the banks listed on the Exchange are highly geared. The high level of gearing observed amount the banks can be attributed to their over dependency on short term debt as a result relatively high Bank of Ghana Lending rate and low level of bond market activities (Awunyo-Vitor and Baaadu, 2012). The gearing of these banks was as results of their over dependency on short term debt. Of the 87%, average gearing, Short-term liability constitute 86.61% of the total this (75% of total capital) whilst the remaining 23.39% being long Term Debt (Awunyo-Vitor and

Baaadu, 2012). One of the reasons for the bank dependency on short term loan was the relatively high Bank of Ghana lending rate which makes the banks rely on short-term loan debts (mostly customer's deposits). In addition the bond market in Ghana is not properly developed to attract the banks to opt for long- term debt (Awunyo-Vitor and Baaadu, 2012). The Study also revealed that capital Structure is inversely related to performance as revealed by the regression results of return on Equity and Tobin's q. It is important that listed Banks intensify their efforts to rely on internally generated funds to finance their operational activities (Awunyo-Vitor and Baaadu, 2012). Even where external debt would be used, the banks should search for low interest-bearing loans so that the tax shield benefit of the loan will exceed the financial distress associated with it (Awunyo-Vitor and Baaadu, 2012). In future, the Government of Ghana should liaise with the stakeholders in the financial sector in order to develop bond market to enable the banks to raise long-term debt so as to avoid overreliance of short-term debt which is associated with high cost (Awunyo-Vitor and Baaadu, 2012). In addition, increase in tax relief is likely to enable the banks to have enough profit after tax that would increase retained earnings to improve internal investment.

Kenyan perspective

According to Kenya Commercial Bank (2013) credit rating report, Kenya Commercial Bank, group is predominantly funded through customer deposits, shareholders equity and to a lesser extent borrowings. Being a listed entity, the group can raise additional capital through the equity market.

Ondiek (2010) revealed that capital structure of listed companies in Kenya is influenced by tangibility of assets, by size and by profitability. The results suggest that capital structure of listed companies

can be explained by trade of and pecking order theories.

Makau (2006) showed that there existed a regression equation that was relating the firms leverage to its own growth, profitability, liquidity, size and non-debt ratio tax shields in Nairobi stock exchange, the study also concludes that there was a general increase in leverages from year 2003 to 2007 (Makau, 2006). The researcher also concluded that in order for firm to increase its leverage it should increase its factors that leads to increase in its size and growth. The study further concludes that the firm own capital structure affects its value. The study further concludes that profitability of the company affects leverage of the company (Makau, 2006).

Oria (2009) studied the relationship between capital structure and financial performance of microfinance institutions in Kenya for a period five years from 2004 to 2008; she studied 36 institutions which had been trading for a period of six years. The study concluded that such relationship could not be clearly observed and they were inferred from capital structures of MFIs which were perceived to be performing well (Oria, 2009). She also concluded that capital structure influences the performance of corporate entities. Highly leveraged MFIs performed better by reaching out more clients.

Kamau (2009) found out that Kenyan firms listed in NSE are largely dependent on short term debts to finance their operations due to difficulties in accessing long term credit. He advocated for further study to be carried out in this area.

Kibet (2009) found that the capital structure decision is crucial for any business organization in Kenya. The decision is important because of the need to maximize returns to various organizational constituencies, and also because of the impact such a decision has on an organization's ability to deal

with its competitive environment (Kibet, 2009). From the findings the study found that that most of MFIs in Kenya were using equity and or donations as their main source finances in Kenya which accounted for by 72.42% and 27.58% in form of debt. The study further found that there exist a positive relationship between capital structure and profitability of MFIs in Kenya (Kibet, 2009).

In this research Kenya Commercial Bank have been chosen over other listed Banks in Kenya because in 2007 key changes in KCB capital structure in share splits in ratio of 10 to 1, owed to the significance rise of share price making it inaccessible to many Kenyans (KCB sustainability report, 2007). The study was also interested in the way the Government of Kenya has been reducing its shareholding position of the company, from 26.2% in 2008 to 23.1% and latest being that of 2010 where they reduced from 23.1% to 17.74% in a rights issue (Kenya Commercial Bank report, 2013). Total funding (excluding equity) grew by 8.6% to KShs306bn as at FYE12, compared to growth of 36% in the previous period. The funding mix remained largely unchanged, with customer deposits making up a slightly higher 94% of the overall total in FYE12 (Kenya Commercial Bank report, 2013). According to global rating report (2013), net profit after tax from 2008 to 2012 was 4191, 4084, 7178, 10980, 12203 million shillings respectively.

Statement of the Problem

A study by Chisti et al (2013) states that decision making has emerged as one of the toughest tasks as it decides the fate of every firm. They believe that the aspect of capital structure decision is vital, since the financial Performance of an enterprise is directly affected by such decision. Hence, proper care and attention need to be given while making the capital structure decision (Chisti et al, 2013).

Most studies on capital structure, (Lislevan 2012; Ibrahim 2009; Velnampy and Niresh 2012; Gleason 2000) were conducted in European countries, Middle-east and in the United States and according to Chisti et al (2013) inconsistency on the effects of capital structure exist. This is evidenced by the empirical studies (Lislevan 2012; Ibrahim 2009; Velnampy and Niresh 2012; Gleason 2000), which supports negative effect of Total debt on the financial performance of the firms using ROA as their measurement tool. Maina and Kondongo (2013) also found a negative relationship between financial leverage and ROE Consistent with Jermias (2008). However the above studies are inconsistent with (Silva by(2008) and Velnampy and Niresh (2012), who found that there is a positive relationship between Total debt and ROE. Gul et al (2011) results showed that deposits, had positive correlation with ROA. Deposits however, had negative relationship with ROCE. Similarly total deposits to total assets had negative correlation with ROCE, which shows that banks that rely on deposits for their funding are less profitable. Dietrich and Wanzeried (2009) results showed that the yearly growth in deposits did not affect financial performance significantly. While Khan and Zulfiqar (2012) established a weak positive relationship between a firm's retained earnings and stock performance. Shubita and Alsawalhah (2012) suggests that firms with high profits depend heavily on equity as their main financing option.

In Kenya studies done on capital structure and financial performance, (Orua 2009; Makau 2006; Kamau 2009; Kibet 2009; Kaumbuthu 2011and Ondiek 2010) concentrated on the effect of capital structure on microfinance institutions, industrial firms and allied sectors. Orua (2009) in her study of the relationship between capital structure and financial performance of micro finance in Kenya restricted her study on micro finance institutions. Kamau (2009) also carried out a research on effects

of change in capital structure on performance of companies quoted in Nairobi Stock Exchange. It is important to distinguish the banking sector from the general financial sectors and other sectors. Banks in general, operate under a totally unique and rigorous set of regulations which only apply to that sector making it impossible to explain the relationship of both the banking market and the rest of the market. The banking sector is fundamentally different from any other sector of the market in terms of high leverage and regulation, therefore the results obtained from Research using data across other sectors in the market should not be carried over to the banking sector. Further, Research on the effect of capital structure and Kenyan Financial sector performance were very scarce. The banking industry being a key pillar in the financial industry and economy as a whole need to be studied in this context.

The reduction in KCB's government shareholding position of company, growth of total funding in FYE12 by 8.6% to KShs306bn as at FYE12, compared to growth of 36% in the previous period coupled with unchanged funding mix and a reduction of net profit after tax in the year 2009 to 4084 million shillings from 4191 million shillings in the year 2008 then followed by constant increase in net profit after tax in the succeeding years bore the research study to bridge the gap in Kenya of effects of capital structure in the financial performance of listed commercial banks and give Kenya's reflection of inconsistencies as was given by (Lislevan 2012; Ibrahim 2009; Velnampy and Niresh 2012) in foreign countries. It is that gap which motivated this research on the effect of capital structure on financial performance of listed commercial banks in Kenya, a case study of Kenya Commercial Bank limited.

General Objective

The General objective of the study was to examine the effects of Capital structure on financial

performance of listed commercial Banks in Kenya, a Case study of Kenya Commercial Bank Limited.

Specific Objectives

- i. To assess the effect of Deposits on financial performance of listed Commercial Banks in Kenya.
- ii. To examine the effect of Debts on financial performance of listed Commercial Banks in Kenya.
- iii. To determine whether retained earnings affects financial performance of listed Commercial Banks in Kenya.
- iv. To examine the effect of Equity on financial performance of listed Commercial Banks in Kenya.

Justification of the Study

The findings of this study will help the Management of Kenya's listed Commercial Banks to make good decisions on capital structure as their effects on financial performance may bring devastating results; high increase in capital structure decreases financial performance. It also helps the management maximize the use of funds and to be able to adapt more easily to the changing conditions. Hence these research findings will be benefited from to provide and add new knowledge to corporate managers in making their own decision on selecting the capital structure to achieve the optimum level of listed commercial bank's financial performance as well as research other areas that are significant and positively affects performance.

The findings of this study will fulfill the demands of the investors and shareholders. Investors need to know the relationship between capital structure policy and performance of the banks for them to make a choice which bank to invest their funds.

It adds knowledge to Scholars since findings of the study portrays the effects of capital structure on

financial performance of listed commercial banks in Kenya. In addition, it will help Scholars to relate the results of these study to those done by other scholars to check if the findings are consistent or not. They will then deduce the potential problems in financial performance which might be associated with wrongful decisions on capital structure. A copy of this paper will be made available to the University to serve as Empirical evidence in future studies.

The Government of Kenya will find this study to be of great interest in formulating policies that steer towards the capital structure that optimizes performance.

Nairobi Stock Exchange and Capital Market Authority will use the findings of this study to determine the effect of capital structure on the banks listed at their market. As regulators, this study will provide the necessary information for regulatory purpose for which they will be able to gauge Bank's performance based on capital structure of Kenya commercial bank limited.

Scope of the Study

The study will access overall financial performance of Kenya commercial bank limited. Kenya Commercial bank limited serves as the holding company of the Group's subsidiaries and associates, having established a presence in five East African countries. The study will examine annual financial reports covering period of five years from 2009 to 2013.

Limitations of the Study

Due to time constraint this study narrowed down to four capital structure variables. There are other capital structure variables that affects financial performance of listed commercial banks in Kenya, examples are liquidity and effectiveness which have been left out to be examined by other scholars.

LITERATURE REVIEW

Introduction

This chapter examined the literature on Capital structure and financial performance of listed commercial Banks in Kenya. The first part examined various capital structure theories which are relevant to this study. The theories explored include; Modigliani-Miller Theorem, Trade off Theory, Pecking Order theory, and Agency Cost Theory, which represented theoretical review of the study. A Conceptual framework that has been operationalized is also captured in this part. The second part is the review of various empirical studies in reference to deposits, debt, Retained earnings and equity. Then in context of this study a summary of literature review is given, also critiques and the gaps of findings regarding the past studies.

Theoretical review

The following theories are relevant in capital structure and financial performance and are therefore discussed. Modigliani and Miller (1958) irrelevance theory of capital structure, the Trade-off theory which assumes that firms trade off the benefits and costs of debt and equity financing and find an optimal capital structure after accounting for market imperfections such as taxes, bankruptcy costs and agency costs. The pecking order theory (Myers 1984, Myers and Majluf, 1984) that argues that firms follow a financing hierarchy to minimize the problem of information asymmetry between the firm's managers-insiders and the outsiders-shareholders and the agency cost theory premised on the idea that agency costs of equity in corporate finance arise from the separation of ownership and control of firms whereby managers tend to maximize their own utility rather than the value of the firm. Agency costs can also arise from conflicts between debt and equity investors (Jensen and Meckling 1976).

Modigliani-Miller Theorem

Modigliani and Miller (1958) seminal paper showed conditions under which capital structure is irrelevant. The following assumptions were made in this paper: A world without taxes, no bankruptcy costs, no transaction costs, no growth, all earnings were paid out as dividends and all individuals in the market were homogeneous. This paper formed a basis for examining real world reasons why capital structure is relevant. The other reasons include: bankruptcy costs, taxes, and information asymmetry. By relaxing the assumptions made in Modigliani and Miller (1958) paper, several theories came up attempting to address the imperfections. They include: Trade-off theory, Pecking order theory, Agency costs theory etc.

This theory has been reviewed so as to anchor the dependent variable of financial performance. The theory explains that under classical random walk, and in an efficient market, financial performance of the firm is unaffected by how that firm is financed. Instead, it only changes the allocation of cash flows between debt and equity, without changing the total cash flows of the firm (Berk & DeMarzo, 2007).

Trade-off Theory

Second proposition by Modigliani and Miller (1963) introduced the trade off theory. Trade off theory allowed bankruptcy costs to exist and stated that there was an advantage to financing with debt (namely the tax benefit of debts) and that there was a cost of financing with debt (the bankruptcy cost of debt). The theorists further argued that marginal benefit of further increases in debt declined as debt increased while the marginal cost increased so that a firm that was optimizing its overall value would focus on this trade-off when choosing how much debt and equity to use for financing. This theory

explained debt to equity ratios between industries but did not explain differences within the industry.

According to Myres (2001), the tradeoff theory says that the firm will borrow up to the point where the marginal value of tax shields on additional debt is just offset by the increase in the present value of possible cost of financial distress. The value of the firm will decrease because of financial distress (Myers, 2001).

This theory has been reviewed so as to anchor the independent variable of debt and Deposits. The trade-off theory suggests that managers simply prefer debt (Myers, 2001). They balance the costs and benefits of debt to reach an optimal leverage level, the interest expense on the debt is tax deductible (thereby reducing the firm's tax liability), thereby reducing the effective price of using debt relative to equity (Myers, 2001). An additional benefit of debt is that an organization's free cash flow is reduced (Myers, 2001). Deposit finance has also played a role in the theory of bank funding it is usually simply treated as another form of debt (Calabrese, 2011). Therefore Deposits is also tied to Trade-off theory in the study.

Pecking -Order Theory

The pecking-order theory argues that, because of information asymmetry, firms choose to use their retained earnings first to finance their investments (Myers and Majluf, 1984). When internal financing does not suffice, firms issue debt first and equity last. The pecking order theory suggests that firms have a particular preference order for capital used to finance their businesses (Myers and Majluf, 1984). The order of preferences reflects the relative costs of the various financing options (Abor, 2005; Berk and DeMarzo, 2007). Owing to the presence of information asymmetries between the firm and potential financiers, the relative costs of finance

vary between the financing choices (Berk and DeMarzo, 2007). Where the funds provider is the firm's retained earnings, meaning more information than new equity holders, the new equity holders will expect a higher rate of return on capital invested resulting in the new equity finance being more costly to the firm than using existing internal funds (Myers and Majluf, 1984). A similar argument can be provided between the retained earnings and new debt-holders. In addition, the greater the exposure to the risk associated with the information asymmetries for the various financing choices besides retained earnings, the higher the return of capital demanded by each source (Berk and DeMarzo, 2007). Thus, the firm will prefer retained earnings financing to debt, short-term debt over long-term debt and debt over equity.

Having enough slack would allow firms to minimize the costs of information asymmetry associated with external financing. Studies show that majority of Chief Finance Officers appreciate financial flexibility, more so when the proportion of managerial ownership is higher (Graham and Harvey, 2001). According to Graham and Harvey (2001) most managers confirm that debts are issued when their internal funds are insufficient to fund their activities. Sometimes a firm's inability to obtain funds using debt affects their decisions to issue common stock (Graham and Harvey, 2001). There is weak support for either the trade-off or the information asymmetry-based pecking-order theory of capital structure, (Graham and Harvey, 2001).

This theory has been reviewed so as to anchor the independent variable of Retained earnings. It explains why managers simply prefer internal funds to external borrowing (Calabrese, 2011). The pecking order theory is an alternative explanation to predict organizational leverage (Calabrese, 2011). Unlike the trade-off theory, increased profitability is expected to result in a decline in leverage, because

a more profitable firm is better able to finance capital needs with internal financial resources (such as retained earnings), (Calabrese, 2011). At the core of the pecking order theory is the notion that leverage decisions are driven by information asymmetry between management and investors: because investors will view equity (stock) issuances negatively, firms will prefer to finance capital from retained earnings, then debt, and, only having exhausted these options, new equity (Calabrese, 2011).

Agency Cost Theory

The agency cost theory is premised on the idea that the interests of the firm's managers and its shareholders are not perfectly aligned (Jensen and Meckling, 1976). In their seminal paper, Jensen and Meckling (1976) emphasized the importance of the agency costs of equity. They argue that agency costs of equity in corporate finance arise from the separation of ownership and control of firms whereby managers tend to maximize their own utility rather than the value of the firm.

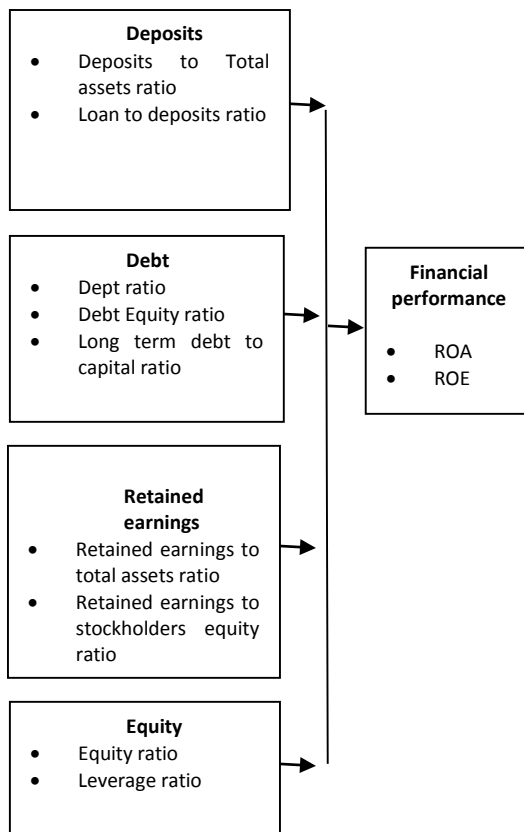
According to Jensen and Meckling (1976), there existed three types of agency costs that explained the relevance of capital structure. Firstly, asset substitution effect which emphasized that as debt /equity ratio increased, management developed an increased incentive to undertake risky (even negative NPV) projects because if the project was successful, shareholders got all the upside, whereas if it was unsuccessful, debt holders get all the downside. If the projects were undertaken therefore, there was a chance of a firm's value decreasing and a wealth being transferred from debt holders to share holders (Jensen and Meckling, 1976). Secondly, there were underinvestment problems where if debt was risky (e.g. in a growth company) the gain from the project would accrue to debt holders rather than the shareholders hence management had an incentive to reject positive NPV projects even though they had the potential to

increase the firm's value (Jensen and Meckling, 1976). Finally, the agency costs arising from the free cash flows which argued that unless free cash flow was given back to investors, management had an incentive to destroy firm value through empire building and perks etc., with cash that should have been paid back to shareholders (Jensen and Meckling, 1976). He further concluded that increasing leverage would impose financial discipline on management in such circumstances.

This theory has been reviewed so as to anchor the independent variable of Equity. According to this theory conflict of interest exert pressure on managers (agents) to seek Equity even when profitable growth opportunities do not exist, so that such cash flow can be used for perquisites (fringe benefits enjoyed in some kind of employment) rather than for enhancing firm value (i.e., at the expense of the owners, the principles). Managers want free cash to invest in unprofitable projects that generate cash so that salaries or perquisites may be enhanced rather than service debt (Calabrese, 2011). This theory however give solution by concluding that increasing leverage would impose financial discipline on management in such circumstances.

Conceptual framework

According to Miles & Huberman (1994) Conceptual framework is a diagrammatic explanation of relationship between independent variable and dependent variable. A written or visual presentation that explains either graphically, or in narrative form, the main things to be studied, the key factors, concepts or variables and the presumed relationship among them (Miles and Huberman, 1994). The interconnection of these blocks completes the framework for certain expected outcomes.



Independent variables **Dependent variable**

Figure 2.1: Conceptual Framework

Empirical data

Deposits

Gul et al (2011) showed that deposits, among other had positive correlation with ROA. Deposits however, had negative relationship with ROCE. Similarly total deposits to total assets had negative correlation with ROCE, which shows that banks that rely on deposits for their funding are less profitable.

Dietrich and Wanzeried (2009) showed that the yearly growth in deposits did not affect financial performance significantly. They found no empirical evidence that commercial banks in Switzerland were able to convert at an increasing amount of deposit liabilities into significantly higher income earning assets.

Ratnovski and Huang (2009) found out that Canadian banks were resilient during the 2008 economic turmoil since they relied more on depository funding as compared to the other banks that relied more on wholesale funding.

Debt

Abor (2007) found that there is a positive relationship between short-term debt and ROA in South Africa. Mesquita and Lara (2003) also found similar results in their study on Brazilian companies. Therefore, this study hypothesizes that there is a positive relationship between short-term debt and ROA and ROE. However the above studies are inconsistent with (Silva (2008), Ebaid (2009), and Shahjahanpour et al (2010) who found that there is a negative relationship between short-term debt and ROA.

A study by Abor (2005), found out that Short term debt and Total debt has significantly positive relationship with ROE while Long term debt has significantly negative relationship with ROE. Thus, it implies that an increase in the long term debt is associated with decrease in financial performance due to being more expensive. Ibrahim (2009) revealed that capital structure choice is a decision in general, has weak to no impact on firm's performance.

Lislevan (2012) carried out a study to determine the effect of capital structure on microfinance institutions performance. The regression results where return on assets was used as a measure of performance only total debt to assets and long term debt to assets have a significant and negatively impact on return on assets. These results are consistent with the previous studies.

Taani (2013) found Long-term debt and total debt to be insignificant in determining return on equity in the banking industry of Jordan. This means that deposits do not necessarily transit into enhancing return on equity in the banking industry of Jordan (Taani, 2013). The R² values were found to be significant for the impact of debt to total funds on net profit, debt to equity on net interest margin, and debt to total funds on net interest margin. But, no significant impact was found on the remaining dependent variables (Taani, 2013).

Gleason et al (2000) result indicates that total debt has a significant, negative influence on performance. Thus, two implications can be drawn from the result. First, even in the presence of control variables, capital structure has a significant influence on Performance (Gleason et al, 2000). Second, the negative coefficient indicates that retailers, in general, use more debt in their capital structure than would be appropriate. Thus, this overleveraging negatively affects firm performance (Gleason et al, 2000).

Ondiek (2010) revealed in the study that capital structure of listed companies is influenced by tangibility of assets, by size and by profitability. The results suggest that capital structure of listed companies can be explained by trade of and pecking order theories.

Retained Earnings

Keister (2004) found out that retained earnings increased the likelihood of borrowing from all sources in the first decade of reforms. This finding is consistent with arguments that earnings signaled financial wellbeing to potential creditors and increased firm's ability to attract external funds.

A study by Kanwal (2012) found that Retention Ratio and Return on Equity has significant positive relation with financial performance and significantly explains

the variations in the stock prices of chemical and pharmaceutical sector of Pakistan. According to Kanwal (2012), the prime idea behind earnings retention is that the more the company retains the faster it has chances for growth. Retained earnings are usually recorded under shareholders' equity on the balance sheet (Kanwal, 2014).

Khan and Zulfiqar (2012) studied the effect of retained earnings on future profitability and stock returns and established a weak positive relationship between a firm's retained earnings and stock performance in Pakistan.

Equity

Shubita and Alsawalhah (2012) suggests that firms with high profits depend heavily on equity as their main financing option. They also suggested that debt to equity has a positive relationship to financial performance.

Velnampy and Niresh (2012) find that there is a negative relationship between capital structure and banks' financial performance however establish a positive relationship between ROE and debt to equity. This finding suggests that the sampled banks are highly geared. The positive relationship was also revealed in the study of Abor (2005) between financial performance and total debt.

Wilson et al (2012) find that private equity backed companies perform more strongly (higher return on assets, higher interest cover, higher gross margin) than a matched sample of private and listed companies both before and during the recent recession. They also find that bought-out companies have a higher failure rate than other companies, but this does not apply for deals completed after 2003

Berger and Bonaccorsi di Patti (2006) argued that firm performance and capital structure could be closely correlated. They used data on commercial

banks in the US and their results are consistent with the agency theory, under which high leverage reduces the agency costs of outside equity and increases firm value by constraining or encouraging managers to act more in the interests of shareholders (Berger and Bonaccorsi-diPatti, 2006).

Chiang Yat Hung et al. (2002), concluded that while high gearing is positively related to asset, it is negatively related to profit margins. He further noted that the separation of ownership and management of any corporate entity leading usually to divergent objectives, raises questions on how much debt and equity should be employed.

Financial Performance

Silva (2008) found that total debt and short term debt ratio impacts positively and significantly on ROE while negatively and significantly on ROA. Long term debt ratio had a positively and significantly impact ROE but not significantly impact on ROA of MFIs. This shows that if MFIs use long term debt to finance their operations, there may not be a pressure on management of MFI (Silva, 2008). This further suggests that profitable MFIs depend more on long term debt financing. The study uses a data set which consists of 290 MFIs from 61 countries (Silva, 2008). This indicated that ROA and ROE was used as performance indicators, while debt to equity, long term debt to equity, short term debt to equity, debt to assets, long term debt to assets and short term debt to assets ratios are used as indicators of capital structure of MFIs. The study shows how capital structure affects commercial banks' performance.

Kyereboah-Coleman (2007) argues that capital structure of a firm is basically a mix of debt and equity which a firm deems as appropriate to enhance its operations. Therefore capital structure is deemed to have an effect on a firm performance

against the position held by Modigliani and Miller in their seminal work of 1958 (Kyereboah-Coleman, 2007).

Critique

The inconsistencies in theories of capital structure on effect of capital structure ratios, and interpretation therefore led to the question as to how the capital structure affect listed commercial banks performance in Kenya. Ibrahim (2009) result revealed that capital structure choice is a decision in general, has weak to no impact on firm's performance. Munene, (2006) studied the impact of profitability on capital structure on companies listed at the NSE. He established that profitability on its own does not exclusively account for variability in capital structure. The study revealed that there were more variables that could be in play to determine a firm's capital structure.

Research Gaps

Studies undertaken by (Gleason 2000; Gul et al (2011); Velnampy and Nireesh 2012 and Dietrich and Wanzeried (2009); Mesquita and Lara 2003; Taani 2013; Awunyo-Vitor and Badu 2012, Abor 2005 and Silva 2008), found conflicting results on effect of capital structure of firms. In the review of Empirical literature, few local studies have been conducted in Kenya such as; (Orua 2009, Kamau 2009, Kibet 2009, Ondiek 2010) and concentrated on the effect of capital structure on microfinance institutions, industrial firms and allied sectors in Kenya.

The lack of a consensus on effect of capital structure in the Banking sector coupled with insufficient studies created a knowledge gap. This study was therefore motivated by the need to close this gap in knowledge by studying the effect of capital structure on financial performance of listed commercial banks in Kenya differentiating, Deposits, Debt, Retained earnings, and Equity as

independent variables and Return On Equity and Return On Assets as dependent variables. These variables have different effects since they have different risk and return profiles.

RESEARCH METHODOLOGY

Introduction

This section summarizes the methodology adopted by the study; it consists of Research Design, Target Population, Data Collection, Data Collection Procedure and Data Analysis Procedures. It is aimed in assisting the researcher to establish answers to research questions.

Research design

Sekaran and Bougie (2010) defines research design as a systematic arrangement of the measures, factors and the tools applied in the collection and analysis of data in order to achieve the objectives of a study in the most efficient and effective way. This study adopted descriptive research design. A descriptive study design can be used to find out the present state of affairs (Saunders et al, 2009), in relation to the effect of capital structure on financial performance of listed commercial banks. The major emphasis of a descriptive study was to determine frequency of occurrence or the extent to which variables are related.

The design was suitable because the study required an accurate examination of the effects of capital structure and financial performance of commercial banks. Moreover, it is dependable, valid and generalized in this research for the purpose of data collection and analysis, because it is appropriate regardless of whether the data is qualitative or quantitative (Sekaran and Bougie, 2010).

Population

The study examined the effect of capital structure on financial performance of listed commercial banks in Kenya. The study included results from all Kenya commercial bank limited. Kenya Commercial bank limited serves as the holding company of the Group's subsidiaries and associates, having established a presence in five East African countries (Kenya Commercial Bank report, 2013). As at financial year 2012, the Group had a total of 230 branches across its regional footprint as shown; Kenya 173, Uganda 14, Tanzania 11, Rwanda 11, South Sudan 20, and Burundi 1 (Kenya Commercial Bank report, 2013). The Overall annual reports of the 230 branches therefore forms the target population.

Data Collection

The study relied on of Secondary sources to collect the required data. This will allow the researcher to economize on resources, provide more efficient management of the time needed to collect the information as well as obtain a greater number of observations from the Bank's annual report especially the statement of financial position and the statement of comprehensive income. The secondary data for the period 2009 to 2013 was sourced from Kenya Commercial Bank limited website and the Central Bank manuals .

Data Analysis

Secondary data that was collected from Kenya Commercial Bank limited, Central Bank manuals and the annual reports of NSE and was used during analysis. Mostly data collected was quantitative in nature and therefore both descriptive and inferential statistics was used to analyze the data. Descriptive statistics such as mean, standard deviation, frequency distribution and percentages was used to analyze the data. Tables presentations as appropriate was used to present the data collected for ease of understanding and analysis.

This generated quantitative reports through tabulation and measures of central tendencies. Data collected was entered into the SPSS version 21 to produce inferential statistics using multiple regression analysis so as to determine the relationships between dependent and independent variables.

$$Y_1 = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \varepsilon$$

Where:

Y1= Return on Assets / Return on equity,

X1= Deposits

X2 = Debt

X3 = Retained earnings

X4 = Equity

β_0 = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$ =Regression Coefficients

ε = Error term

DATA ANALYSIS AND DISCUSSION

Introduction

This chapter deals with the analysis of data, where they are presented in harmony with the specific objectives of the study. In particular the chapter presents the descriptive statistics, correlation analysis as well as the regression analysis.

Descriptive Statistics

The Table 4.1 below shows the descriptive statistics. The results indicate that the deposits to total assets had a minimum value of 0.752 and a maximum of 0.855, it had a standard deviation of 0.040 and a mean value of 0.787. Loan to deposits had a mean of 0.779 with a minimum and maximum value of 0.669 and 0.817 respectively and had a standard deviation of 0.062. Debt ratio's minimum and maximum values was 0.809 and 0.870 respectively, its mean value was 0.832 and a standard deviation of 0.024. Debt to Equity ratio on the other hand had a minimum and maximum value of 4.225 and 6.696

respectively with a mean of 5.076 which was associated with a standard deviation of 0.984. Long term debt to capital had a minimum value of 0.000 while its maximum value was 0.030, its mean was 0.016 and had a standard deviation of 0.015. The results further indicated that the retained earnings to total assets had a minimum value of 0.060 and a maximum of 0.108, it had a standard deviation of 0.019 and a mean value of 0.075. Retained earnings to stockholders equity had a mean of 7.069 with a minimum and maximum value of 4.635 and 11.704 respectively and had a standard deviation of 2.828. Equity ratio on the other hand had a minimum and maximum value of 0.130 and 0.191 respectively with a mean of 0.168 which was associated with a standard deviation of 0.024. Leverage had a minimum value of 5.225 while its maximum value was 7.696, its mean was 6.076 and had a standard deviation of 0.984. Last the measures of financial performance return on assets, had a minimum and maximum value of 0.026 and 0.040 respectively with a mean of 0.035 which was associated with a standard deviation of 0.005 while return on equity had a minimum and maximum value of 0.201 and 0.218 respectively with a mean of 0.210 and a standard deviation of 0.007

Retained earnings to stockholders equity	4.635	11.704	7.069	2.828
Equity ratio	0.130	0.191	0.168	0.024
Leverage	5.225	7.696	6.076	0.984
Return on Assets	0.026	0.040	0.035	0.005
Return on Equity	0.201	0.218	0.210	0.007

Relationship between Dependent and the Independent Variables

Relationship between Deposits and Financial Performance

The Figure 4.1 below indicates the movement overtime in the ratio of total assets ratio and the loan to deposits ratio for the period 2009 to 2013. The trend analysis indicated that loan to deposits ratio was on an increase from 2009 to 2010 and thereafter the loans to deposit ratio seemed to flat though evidence by a continuous increase. On the other hand deposits to total assets ratio was on a decline from 2009 onwards.

Table 4.1: Descriptive Statistics

Variable	Minimum	Maximum	Mean	Std. Dev
Deposits to Total assets	0.752	0.855	0.787	0.040
Loan to deposits	0.669	0.817	0.779	0.062
Debt ratio	0.809	0.870	0.832	0.024
Debt to Equity ratio	4.225	6.696	5.076	0.984
Long term debt to capital	0.000	0.030	0.016	0.015
Retained earnings to total assets	0.060	0.108	0.075	0.019

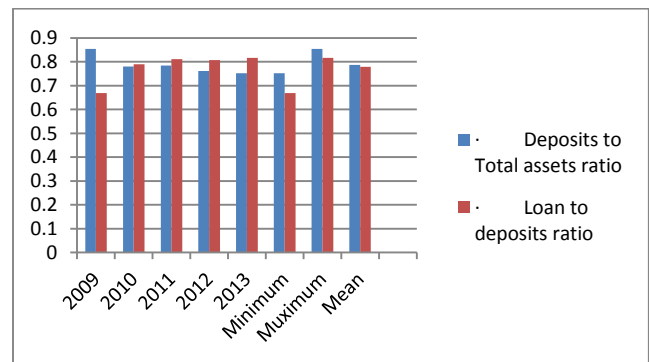


Figure 4.1: Trends of Deposits to Total Assets and Loan to Deposit Ratio

The Table 4.2 below presents the relationship between deposits to total assets, loan to deposits and return on assets as well as the return on equity. The results indicates a negative (-0.919) and significant relationship between Deposits to total assets and return on assets. The results further shows that Loan to deposits and return on assets are a positive (0.895) and significantly related. The results also indicate that there is a negative (-0.165) and insignificant relationship between Deposits to total assets and return on equity. The results further shows that Loan to deposits and return on equity are a positive (0.384) and insignificantly related. It was therefore concluded that the relationship between the deposits to total assets and return on assets as well as return on equity was strong while that of loan to deposits to the measures of financial performance was low as indicated by low correlation coefficients.

Table 4.2: Correlation Matrix for Deposits and Financial Performance

Variable	Statistics	ROA	ROE	Deposits to Total assets	Loan to deposits
ROA	Correlation	1.00			
	Coefficient				
ROE	Correlation		1.00		
	Coefficient				
Deposits to total assets	Correlation	-0.919*	-0.165	1.00	
	Coefficient				
	Sig. (2-tailed)	0.028	0.791		
Loan to deposits	Correlation	0.895*	0.384	-0.961**	1.00
	Coefficient				
	Sig. (2-tailed)	0.04	0.523	0.009	

The results from the correlation analysis was further reinforced by regression analysis results. The results

of regression analysis are thus presented in the next section below where the model summary results, analysis of variance and finally the regression estimates are presented. The Table 4.3 presents the model summary results for the regression model where the R squared of the model is established to be 0.844 implying that 84.4% of the variances in the financial performance of companies listed at the securities exchange is explained by the variations in levels of their deposits.

Table 4.3: Model Summary for Effect of Deposits on Financial Performance

R	R Square	Adjusted R Square	Std. Error of the Estimate
.919	0.844	0.792	0.00238

The results in Table 4.4 shows that the estimated model was also found to be significant since the reported F statistic of 16.21119 was found to be significant as this was supported by a probability value of 0.028 which is less than the conventional threshold probability of $p \leq 0.05$.

Table 4.4: Effect of Deposits on Financial Performance ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression				16.2111	.028
Residual	0.000092	1	0.000092	9	8
Total	0.000109	4			

Given that the estimated model was found to be significant a regression model was estimated and the results are presented in the next section below. The results in Table 4.5 below indicated that deposits to total assets is negatively ($\beta = -0.119$) and significantly ($p\text{-value} = 0.028$) related to financial performance as measured by return on assets.

These results are inconsistent with the findings of Gul et al (2011) who showed that deposits had positive relationship with return on assets. They are further in disagreement with the findings of Dietrich and Wanzeried (2009) who established that deposits did not affect financial performance significantly.

Table 4.5: Regression Model on Effect of Deposits on Financial Performance

Variable	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	0.129	0.023	5.527	0.012
Deposits to Total assets	-0.119	0.03	-4.026	0.028

4.3.2 Relationship between Debt and Financial Performance

The Figure 4.2 below also shows the trend analysis of debt-to-equity ratio and leverage ratio over a span of 5 years (2009 to 2013). The figure indicates that the two metrics followed the same trend over time. Both were on a decline from 2009 to 2010 and further they both were on the rise thereafter however at a much less extent. It can thus be asserted that the amount of variations over time in debt-to-equity ratio was relatively low as indicated by a more or less flat slope in the trend of both the metrics as captured in the Figure 4.2

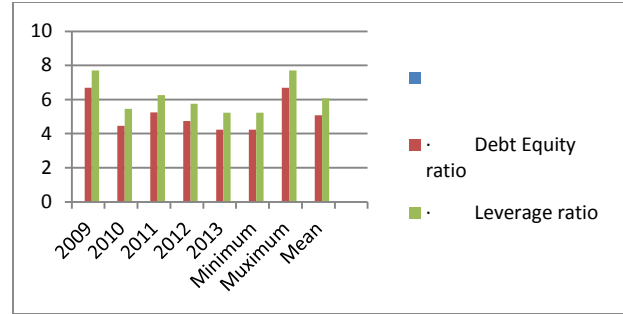


Figure 4.2: Trend Analysis of Debt-to-Equity and Leverage Ratio

The Table 4.6 below presents the relationship between debt, long term debt to capital and return on assets as well as the return on equity. The results indicates a negative ($r = -.971$) and significant ($p\text{-value} = 0.006$) relationship between debt and return on assets. The results further shows that long term debt to capital and return on assets are a positive ($r = 0.323$) and insignificantly related ($p\text{-value} = 0.596$). The results further shows that debt and return on equity are a negatively ($r = -0.10$) and insignificantly ($p\text{-value} = 0.873$) related. Finally, the results shows that Long term debt to capital and return on equity were positively ($r = 0.157$) and insignificantly ($p\text{-value} = 0.801$) related. It was therefore concluded that the relationship between the debt and return on assets as well as return on equity was strong while that of Long term debt to capital to the measures of financial performance was low as indicated by low correlation coefficients.

Table 4.6: Correlation Matrix for Debt and Financial Performance

Variable	Statistics	ROA	ROE	Debt	Debt to Equity	Long term debt to capital
ROA	Pearson Correlation	1.00				
ROE	Pearson Correlation		1.00			
Debt	Pearson Correlation	-	-0.10	1.00		
	Sig. (2-tailed)	0.006	0.873			
Long term debt to capital	Pearson Correlation	0.323	0.157	-	-	1.00
	Sig. (2-tailed)	0.596	0.801	0.601	0.525	

** Correlation is significant at the 0.01 level (2-tailed).

The Table 4.7 presents the model summary results for the regression model where the R squared of the model is established to be 0.942 implying that 94.2% of the variances in the financial performance is explained by the variations in levels of debts.

Table 4.7: Model Summary for Effect of Debt on Financial Performance

R	R Square	Adjusted R Square	Std. Error of the Estimate
.97	0.942	0.923	0.001445
1			

The results in Table 4.8 shows that the estimated model was also found to be significant since the reported F statistic of 49.077 was found to be significant as this was supported by a probability value of 0.006 which is less than the conventional threshold probability of $p \leq 0.05$.

Table 4.8: Effect of Debt on Financial Performance ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.000103	1	0.000103	49.07	.00
Residual	0.000006	3	0.000002		
Total	0.000109	4			

Given that the estimated model was found to be significant a regression model was estimated and the results are presented in the section below. The results in Table 4.9 below indicated that Debt is negatively ($\beta = -0.21$) and significantly (p -value = 0.006) related to financial performance as measured by return on assets. The results are consistent with those of Gleason et al (2000) whose results also indicated that debt has a significant, negative influence on performance. However, they contradict the findings of Abor (2007) and Mesquita and Lara (2003) who found that there is a positive relationship between debt and Return on assets, but consistent with Lislevan 2012 on ROA.

Table 4.9: Regression Model on Effect of Debt on Financial Performance

	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	0.21	0.025	8.414	0.004
Debt	-0.21	0.03	-7.005	0.006

Relationship between Retained Earnings and Financial Performance

The Figure 4.3 below indicates the trend analysis of retained earnings to stockholders equity ratio and the retained earnings to total assets ratio. The Figure shows that both metrics; retained earnings to stockholders equity ratio and the retained earnings

to total assets ratio were on a continuous rise from 2009 to 2010 as indicate by an upward trend in both metrics. This increase in retained assets positively but insignificantly affected the financial performance of listed commercial banks in Kenya.

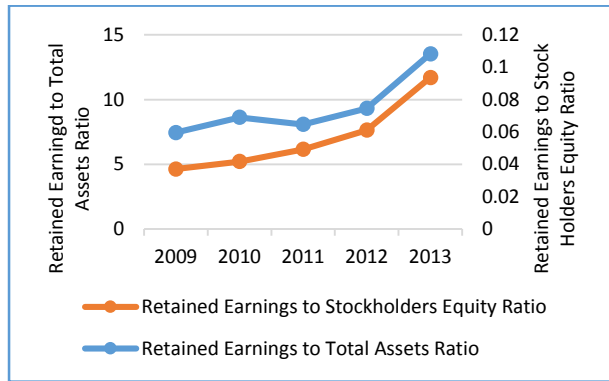


Figure 4.3: Trend Analysis of Retained Earnings to Stockholders Equity and To Total Assets Ratio

The Table 4.10 below presents the relationship between retained earnings to total assets, retained earnings to stockholders equity and return on assets as well as the return on equity. The results indicates positive and insignificant relationships between retained earnings to total assets, retained earnings to stockholders equity and return on assets as well as the return on equity. This is evidenced by positive correlation coefficients for the variables and further critical values in excess of the threshold 0.05 and it was thus concluded that the relationship between the retained earnings to total assets, retained earnings to stockholders equity and return on assets as well as the return on equity is positive and insignificant.

Table 4.10: Retained Earnings and Financial Performance Correlation

Variable	Statistics	ROA	ROE	Retained earnings to total	Retained earnings to equity
ROA	Correlation	1.00			
ROE	Correlation		1.00		
	Sig. (2-tailed)	0.582			
Retained earnings to total assets	Correlation	0.554		1.00	
	Sig. (2-tailed)	0.333	0.352		
Retained earnings to stockholders equity	Correlation	0.504	-0.51	.972**	1.00
	Sig. (2-tailed)	0.386	0.38	0.006	

** Correlation is significant at the 0.01 level (2-tailed).

The Table 4.11 presents the model summary results for the regression model where the R squared of the model is established to be 0.306 implying that 30.6% of the variances in the financial performance is explained by the variations in levels of retained earnings.

Table 4.11: Model Summary for Effect of Retained Earnings

R	R Square	Adjusted R Square	Std. Error of the Estimate
.554	0.306	0.075	0.005016

The results in Table 4.12 shows that the estimated model was also found to be insignificant since the reported F statistic of 1.325 was found to be insignificant as this was supported by a probability

value of .333 which is excess of the conventional threshold probability of $p \leq 0.05$.

Table 4.12: Effect of Retained Earnings on Financial Performance ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression				1.32	.33
n	0.000033	1	0.000033	5	3
Residual	0.000075	3	0.000025		
Total	0.000109	4			

The regression model estimated Table 4.13 below indicated that Retained Earnings is positively ($\beta = 0.15$) and insignificantly ($p\text{-value} = 0.333$) related to financial performance as measured by return on assets. The results are thus consistent with those of Kanwal (2012) who also found that retention ratio has significant positive relation with financial performance. It is also consistent with those of Khan and Zulfiqar (2012) who studied the effect of retained earnings on future profitability and stock returns and established a weak positive relationship between a firm's retained earnings and stock performance in Pakistan.

Table 4.13: Effect of Retained Earnings on Financial Performance

	Unstandardized Coefficients	Std. Error	t	Sig.
(Constant)	0.024	0.01	2.375	0.098
Retained earnings to total assets	0.15	0.13	1.151	0.333

Relationship between Equity and Financial Performance

The Figure 4.4 below indicates the trend analysis of equity ratio. The Figure shows that metric of equity ratio was rose from 2009 to 2010 as indicate by an upward trend in equity ratio metric. then declined in year 2011 before increasing in subsequent years to 2013. This increase in Equity ratio negatively and significantly affects the financial performance of listed commercial banks in Kenya.

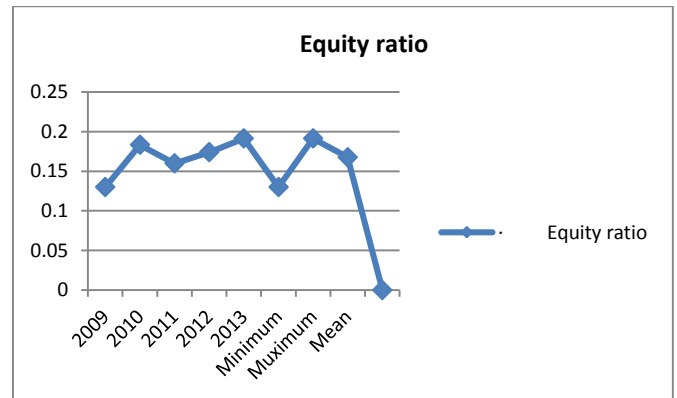


Figure 4.4: Trend Analysis of Equity ratio

The Table 4.14 below presents the relationship between equity and return on assets as well as the return on equity. The results indicates a positive ($r = .971$) and significant ($p\text{-value} = 0.006$) relationship between equity and return on assets. The results further shows that equity and return on equity are a positive ($r = 0.100$) and insignificantly related ($p\text{-value} = 0.873$). It was therefore concluded that the relationship between the equity and return on assets as well as return on equity was strong and significant while that of equity and return on equity was weak and insignificant as indicated by low correlation coefficients.

Table 4.14: Correlation Matrix for Equity and Financial Performance

Variable	Statistics	ROA	ROE	Equity	Leverage
ROA	Pearson Correlation	1.00			
ROE	Pearson Correlation		1.00		
Equity	Pearson Correlation	.971**	0.100	1.00	
	Sig. (2-tailed)	0.006	0.873		

** Correlation is significant at the 0.01 level (2-tailed).

The Table 4.15 presents the model summary results for the regression model where the R squared of the model is established to be 0.971 implying that 97.1% of the variances in the financial performance is explained by the variations in levels of equity.

Table 4.15: Model Summary for Effect of Equity on Financial Performance

R	R Square	Adjusted R Square	Std. Error of the Estimate
.986	0.971	0.962	0.001021

The results in Table 4.16 shows that the estimated model was also found to be significant since the reported F statistic of 101.284 was found to be significant as this was supported by a probability value of .002 which is less than the conventional threshold probability of $p \leq 0.05$.

Table 4.16: Effect of Equity on Financial Performance ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression				101.28	.00
n	0.000106	1	0.000106	4	2
Residual	0.000003	3	0.000001		
Total	0.000109	4			

Given that the estimated model was found to be significant a regression model was estimated and the results are presented in the next section below. The results in Table 4.17 below indicated that equity is negatively ($\beta = -0.005$) and significantly ($p\text{-value} = 0.002$) related to financial performance as measured by return on assets. The results seems inconsistent with that of Shubita and Alsawalhah (2012) who suggested found out that equity has a positive relationship to financial performance. However, the results are in tandem with those of Velnampy and Niresh (2012) who found that there is a negative relationship between capital structure and banks' financial performance.

Table 4.17: Regression Model on Effect of Equity on Financial Performance

	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	0.067	0.003	20.996	0
Equity	-0.005	0.001	-10.064	0.002

4.4 Trend Analysis of Financial Performance

The Figure 4.4 below indicates the trend analysis of financial performance metrics over the 5 year period (2009 to 2013). The metrics shows the trajectory of return on assets as well as the return on equity and it can be established from the figure that the two metrics of financial performance was on a steady rise in 2009 to 2010 however for 2010 to 2011 there was a decline in return on assets while the return on assets was on a increase however the rate of increase was slightly lower than the previous period, however there was a sharp decline in return on equity for the period 2011 to 2013. On the other hand return on assets increased though slightly for the period 2011 to 2013.

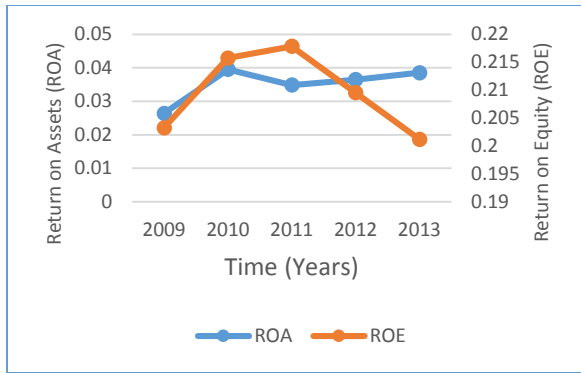


Figure 4.5: Trend Analysis of Financial Performance Metrics

Multivariate Regression Analysis

The Table 4.18 presents the model summary results for the regression model where the R squared of the model is established to be 0.855 implying that 85.5% of the variances in the financial performance is explained by the variations in levels of independent variables and the remaining 14.5% is explained by other factors.

Table 4.18: Model Summary for Effect of Independent Variables on the Dependent Variables

Statistics	Value
R	0.925
R Square	0.855
Adjusted R Square	0.421
Std. Error of the Estimate	0.005597

The regression results indicated in Table 4.20 below indicates that Debt to equity ratio is negatively ($\beta = -0.005$) and significantly ($p\text{-value} = 0.012$) related to financial performance as measured by return on assets. The results are consistent with those of Gleason et al (2000) whose results also indicated that debt has a significant, negative influence on performance. Further the results indicated that Retained earnings to total assets ratio is positively ($\beta = 0.476$) and significantly ($p\text{-value} = 0.05$) related to financial performance as measured by return on assets. The results are thus consistent with those of

Kanwal (2012) who also found that retention ratio has significant positive relation with financial performance. The results also indicated that deposits to total assets ratio is positively ($\beta = 0.07605$) and significantly ($p\text{-value} = 0.034$) related to financial performance.

Table 4.19: Multivariate Regression Analysis Results

	Unstandardized Coefficients		t	Sig.
	β	Std. Error		
Constant	0.329	0.151	2.175	0.034
Deposits to Total assets ratio	0.076	0.242	0.313	0.041
Retained earnings to total assets ratio	0.476	0.2	2.377	0.05
Debt to Equity Ratio	-0.005	0.01	-0.486	0.012

Significance levels of variables

The Figure 4.5 below indicates the significance of variables over the 5 year period (2009 to 2013). Equity is the most significant variable at 48%, followed by Debt at 40%, Deposits at 9% and Finally Retained earnings at 3% which falls below the conventional threshold probability of $p \leq 0.05$ therefore insignificant.

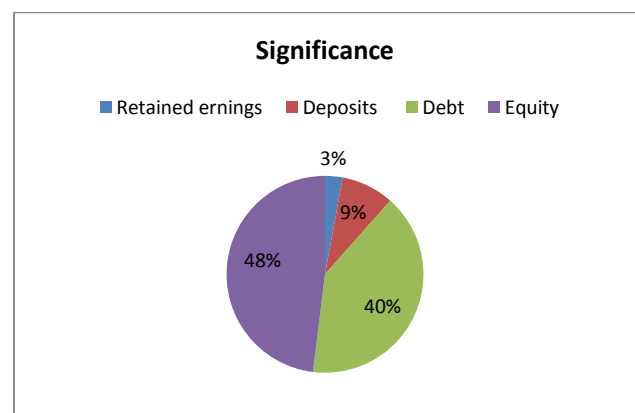


Figure 4.6: Levels of significance of variables

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents the summary of key findings of the study, relevant discussions, conclusions and the necessary recommendations. The summary is done in line with the objectives of the study based on the output of the descriptive and inferential statistical analyses adopted in the study.

Summary of the Findings

Deposits and Financial Performance

The results indicated that a negative and significant relationship existed between deposits to total assets and return on assets, while the relationship between Loan to deposits and return on assets was positive and significant. The results also showed that there existed a negative and significant relationship between Deposits to total assets and return on equity. It was also found that Loan to deposits and return on equity were positively and significantly related. The regression results from the model estimated indicated that deposits to total assets was negatively and significantly related to financial performance as measured by return on assets.

Debts and Financial Performance

From the analysis conducted it was established that there existed a negative and significant relationship between debt and return on assets. It was also established that long term debt to capital and return on assets were positively but insignificantly related. The results also indicated that there existed a negative and significant relationship between Deposits to total assets and return on equity. Further, the results showed that debt and return on equity were negatively but insignificantly related. The results from correlation analysis also showed that Long term debt to capital and return on equity were positively but insignificantly related. The regression analysis conducted indicated that debt

was negatively and significantly related to financial performance as measured by return on assets.

Retained Earnings and Financial Performance

The correlation analysis results indicated that there existed an insignificant positive relationship between retained earnings to total assets, retained earnings to stockholders equity and return on assets as well as the return on equity. The regression analysis results indicated that the relationship between Retained Earnings ratio was positive although insignificantly related to financial performance as measured by return on assets.

Equity and Financial Performance

Lastly, the correlation analysis results also indicated that there existed a positive and significant relationship between equity and return on assets. It was also established that equity and return on equity were positively though insignificantly related. The results from the regression analysis indicated that equity was negative and significantly related to financial performance as measured by return on assets.

Conclusion

From the findings of the study the following conclusions were arrived at.

Deposits

It was concluded that deposits to total assets negatively affects the financial performance of a company. As a result an increase in the deposits to total assets ratio of companies would result in a reduction in the financial performance as indicated by the return on assets and return on equity ratios.

Debt

It was concluded that debt affects the company's financial performance negatively and thus an increase in the debt ratio of the company would result in a reduced financial performance whereas a

reduction in the debt levels of the company would lead to an increased financial performance of the company.

Retained earnings

It was also established that retained earnings ratio positive although insignificantly related to financial performance and thus it was concluded that the return on earnings does not have a significant effect on the financial performance of the company.

Equity

It was also concluded that equity negatively affects the financial performance of the company and thus beyond the optimal equity levels the financial performance of the firm would experience a reduction in its performance.

Recommendations

Equity, debt and deposits Variables

In this study, it can be observed that capital structure of listed commercial banks in Kenya is significant and affects its financial performance negatively as in the case of deposits, debt and equity on return on assets.

Therefore Capital structure of listed commercial banks in Kenya should not be raised beyond the optimal levels or managers to ensure that they only maintain the statutory required capital by the regulator. This is because, if they increase the capital ratios, this might have some negative effects on the performance of the institution. Therefore, the managers of commercial banks should ensure that they meet the required capital regulations but if possible, to maintain at the very required level.

According to the Banking Act (2008), every institution is expected to maintain:-

a) A minimum core capital of at least KES 1 billion (USD 12 million) by 2012

b) A core capital of not less than 8% of total risk adjusted assets plus risk adjusted off balance sheet items;

c) A core capital of not less than 8% of its total deposit liabilities;

d) A total capital of not less than 12% of its total risk adjusted assets plus risk adjusted off balance sheet items;

In addition to the above minimum capital adequacy ratios of 8% and 12%, commercial banks were required to hold a capital conservation buffer of 2.5% over and above these minimum ratios to enable the institutions withstand future periods of stress (CBK, 2013)³. This brings the minimum core capital to risk weighted assets and total capital to risk weighted assets requirements to 10.5% and 14.5%, respectively

Retained earnings

In this study, it can be observed that Retained earnings of listed commercial banks in Kenya is positive and insignificant and has no effect on return on assets. The study therefore recommend limiting the use of retained earnings since its positive and insignificant. Similarly, various stakeholders in this industry should strive to carry out researches in other areas in order to be able to identify which are the major factors that affect the performance of their industry. These areas may include the development of new products or increased marketing and they should not concentrate much on the capital structure.

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