THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND CORPORATE TAXES FOR COMPANIES LISTED IN THE NAIROBI SECURITIES EXCHANGE

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Abstract

Purpose: The purpose of this study was to analyze the relationship between capital structure and corporate taxes for companies listed in the Nairobi securities exchange

Methodology: The study used descriptive survey research design. This study used Secondary data sourced from annual audited financial statement of the firms listed on Nairobi Securities Exchange. The population of the study consisted of companies listed on the NSE. Purposive sampling was used to select respondents from the sampling frame. A sample size of 46 listed companies for the year 2001 to 2011 were selected through random sampling. Data was analyzed using Statistical Packages for Social Sciences (SPSS) to derive descriptive results.

Results: Finding indicated that the relationship between debt equity ratio and taxes profit ratio was negative and significant and that debtequityratio has a significant effect on taxesprofitratio.

The findings pointed out that the existence of tax shield in a perfect capital market conditions cannot be reached, in an imperfect financial market, the capital structure changes will affect the company's value. The findings also pointed that firm which follows the trade-off theory sets a target debt to value ratio and then gradually moves towards the target. Accordingly, the findings agreed pointed that the value of the firm will increase or the cost of capital will decrease with the use of debt due to tax deductibility of interest charges. Findings also pointed that a firm facing a low enough tax rates would also use equity, because investors pay more taxes on debt interest than on equity income. In conclusion, the findings pointed that the more profitable the firm the lower is the debt ratio.

Unique contribution to theory, practice and policy: The study is recommended for commercial banks to issue corporate bonds as this would form a cheap source of finance and also the use of corporate bonds entails the enjoyment of the interest tax shield and consequently improving the shareholder's wealth. The study also recommended that commercial banks should engage strategic investors. Further to that, the study recommended that the equity share holder should be substituted for debt shareholding in future, this is because an increase in debt shareholding arising out of

substitution would be beneficial to the commercial bank because it will result into interest tax saving.

Keywords: *capital structure, corporate taxes, listed companies. Securities Exchange,*

1.1 INTRODUCTION

Capital structure refers to the combination of debt and equity capital that a firm uses to finance its long-term operations. The value of a firm depends upon its expected earnings stream and the rate used to discount this stream. The rate used to discount earnings stream is the firms required rate of return or the cost of capital. Capital structure decision can thus affect the value of the firm either by changing the expected earnings or the cost of capital or both. An optimal capital structure would be obtained at the combination of debt and equity that maximizes the total value of the firm (Value of share plus value of debt) or minimizes the weighted cost of capital (Pandey, 2002).

1.2 Statement of the Problem

In recent years a number of theories have been proposed to explain the effect of corporate taxes on the firm's capital structures. Theories suggest that firms select capital structures depending on attributes that determine various costs and benefits associated with debt and equity financing. Debt maybe better than equity in some cases while worse in others. The difficulty of the task lies in the fact that shareholders expect management to issue a financing combination that attempts to maximize a firms overall market value. Corporate tax rate affects the capital structure of firms because firms weigh the marginal tax benefits induced by the deductibility of interest payments on debt against the marginal financial costs of debt when determining their 'target' leverage ratio.

The tax-induced benefits of debt are increasing with the statutory corporate tax rate. The costs of debt are typically assumed to increase with the debt level but are independent of other firm characteristics. Despite strong theoretical reasons why taxes should matter (e.g., Modigliani and Miller, 1963, Miller, 1977, and DeAngelo and Masulis, 1980), discouraging results in earlier empirical studies lead Myers (1984) to state in his well-known *Presidential Address* to the American Finance Association that "[w]e don't know" how "firms choose their capital structures" as there is "no study clearly demonstrating that a firm's tax status has predictable, material effects on its debt policy" Other studies however establish a more solid *statistical* connection between taxes and capital structure choices. These studies include Graham (1996a, 1996b, 1999) and MacKie-Mason (1990), who carefully measure corporate marginal tax rates, and Desai, Foley and Hines (2004) who exploits the rich cross-sectional variation in corporate tax rates across countries. However not all firms take the benefit of tax because young firms might result to debt due to lack of capital while firms that have been in existence may tend to use the retained earnings. Studies in Kenya have focused on capital structure decisions for example, determinants of capital structure in tea sector kago (2012), priority structure of debt muriuki(2003))relationship between ownership structure and the value of firms (Onyango 2004). Studies that been carried out on tax and capital structure has come up with different result, Nyang'oro (2001) found out that tax rate is significant in determining the leverage of firms but shows unexpected (negative) sign. While Mutsotso (2003) shows there is a positive relationship between the corporate tax rate and the capital structure of quoted companies.The main purpose of this research proposal is to find out the relationship

between capital structure and corporate taxes in companies listed in Nairobi Securities Exchange. This study will focus fully on the corporate taxes and its relationship on capital structure of listed companies.

Since the landmark seminal paper by Modigliani and Miller (1958), the issue of capital structure has continued to generate great interests in finance literature. Copeland and Weston (1993) define capital structure as the permanent financing represented by long-term debt, preferred stock, and shareholder equity. Academic researchers and practitioners have come to recognize capital structure decision as a significant managerial decision since it influences the shareholder return and risk (Pandey, 2002). The study of capital structure mainly attempts to explain the mix of securities and financing sources used by corporations to finance real investment (Myers, 2001). In more general terms a firm can choose among many alternative capital structures to have varied mix of debt and equity.

The various capital structure theories address the theoretical relationship that exists between the value of the firm and the capital structure. The traditional view which refers to finance theorists before 1958 (Kamere 1987), argue that the values of a firm can be maximized by minimizing the cost of capital through the careful use of debt. The basis of this argument is that at low levels of debt, increased leverage does not increase the cost of debt hence an incentive to borrow exists.

This is the case until a certain level when the cost of debt begins to rise. Under these circumstances, the weighted average cost of capital curve is expected to decline to a minimal and then start rising implying that an optimal capital structure exists and it is at this point that the value of the firm is maximized (Omondi 1996).

There are various attributes that different theories of capital structure suggest may affect the firms" capital structure decision. These attributes according to Titman and Wessels (1988) are denoted as profitability, non-debt tax shields, asset structure, growth, business risk, size and earnings volatility. Regarding the cost of equity, traditional theorists argue that borrowing at first increases the expected return on equity at a slow rate which then shoots up with excessive borrowing (Omondi 1996). The traditional theory has been complemented with encouraging more analysis in the contemporary ways of looking at capital structure for example signaling theory (Ross 1977) and the Agency theory (Jensen 1976).1.1.2 Corporate Taxes

Modigliani and Miller (1958) show that in their seminal work that the capital structure is Irrelevant to the value of the firm in a perfect, frictionless world without taxes. In the real economy the interest deductibility of debt at the corporate level encourages firms to use debt financing. On the other hand, personal income taxation provides a tax advantage of equity at the investor level because equity income (dividends and capital gains) is taxed at a lower rate than interest income. Thus, the overall effect remains unclear and depends on the country specific tax policies. Miller (1977) states that, at the margin, the tax disadvantage of debt at the investor level completely offsets the tax advantage at the corporate level; thus there is no tax advantage of debt at all.

Since then numerous empirical studies have explored the impact of taxation on corporate financing decisions in the major industrial countries. Some are concerned directly with tax policy, for example: MacKie-Mason (1990), Shum (1996) and Graham (1999). MacKie-Mason (1990)

studied the tax effect on corporate financing decisions and provided evidence of substantial tax effect on the choice between debt and equity. He concluded that changes in the marginal tax rate for any firm should affect financing decisions. When already exhausted (with loss carry forwards) or with a high probability of facing a zero tax rate, a firm with high tax shield is less likely to finance with debt. The reason is that tax shields lower the effective marginal tax rate on interest deduction. Graham (1999) concluded that in general, taxes do affect corporate financial decisions, but the magnitude of the effect is mostly "not large".

On the other hand, DeAngelo and Masulis (1980) show that there are other alternative tax shields such as depreciation, research and development expenses, investment deductions, etc., that could substitute the fiscal role of debt. Empirically, this substitution effect is difficult to measure, a finding an accurate proxy for tax reduction that excludes the effect of economic depreciation and expenses is tedious (Titman and Wessels, 1998).Dammon and Senbet (1988) argue that there is also an income effect when investment decisions are made simultaneously with financing decisions. They suggest that increases in allowable investment-related tax shields due to changes in the corporate tax code are not necessarily associated with reduction in leverage at the individual firm level when investment is allowed to adjust optimally. They explain that the effect of such an increase depends critically on the trade-off between the "substitution effect" advanced by DE Angelo and Masulis (1980) and the "income effect" associated with an increase in optimal investment.

1.3 Objective of the Study

The objective of this study is to ascertain the relationship between capital structure and corporate taxes in listed companies in the Nairobi Securities Exchange.

2.0 LITERATURE REVIEW

2.1 Theoretical Literature Review

2.1.1 Modigliani and Miller (1958) without Corporate Taxes

The Modigliani-Miller without Corporate Taxes also known as Proposition I Theory (MM I) states that under a certain market price process, in the absence of taxes, no transaction costs, no asymmetric information and in an perfect market, the cost of capital and the value of the firm are not affected by the changed in capital structure. The firm's value is determined by its real assets, not by the securities it issues. In other words, capital structure decisions are irrelevant as long as the firm's investment decisions are taken as given. The Modigliani and Miller (1958) explained the theorem was originally proven under the assumption of no taxes. It is made up of two propositions that is the overall cost of capital and the value of the firm are independent of the capital structure. The total market value of the firm is given by capitalizing the expected net operating income by the rate appropriate for that risk class, and that the financial risk increase with more debt content in the capital structure. As a result, cost of equity increases in a manner to offset exactly the low cost advantage of debt. Hence, overall cost of capital remains the same.

2.2.2 Modigliani-Miller with Corporate Taxes (1963)

The Modigliani-Miller with corporate taxes which is also referred to proposition II Theory (MM II) defines cost of equity is a linear function of the firm's debt/equity-ratio. According to them, for any firm in a given risk class, the cost of equity is equal to the constant average cost of capital plus a premium for the financial risk, which is equal to debt/equity ratio times the spread between average cost and cost of debt. Also Modigliani and Miller (1963) recognized the importance of the existence of corporate taxes. Accordingly, they agreed that the value of the firm will increase or the cost of capital will decrease with the use of debt due to tax deductibility of interest charges. Thus, the value of corporation can be achieved by maximizing debt component in the capital structure. This theory of capital structure for the study provided an important and analytical framework. According to this approach, value of a firm is VL = VU = EBIT (1-T) / equity + TD where TD is tax savings. Modigliani-Miller Proposition II is assuming that the tax shield effect of each is the same, and continued in sight. Leverage firms are increased in interest expense due to reduced tax liability, has also increased the allocation to the shareholders and creditors of the cash flow. The above formula can be deduced from the company debt the more the greater the tax saving benefits, the greater the value of the company.

The revised capital structure of the Modigliani-Miller Proposition II, pointed out that the existence of tax shield in a perfect capital market conditions cannot be reached, in an imperfect financial market, the capital structure changes will affect the company's value. Therefore, the value and cost of capital of corporation with the capital structure changes in different leverage, the value of the levered firm will exceed the value of the unlevered firm.MM Proposition theory suggests that the higher the debt ratio is more favorable to corporate, but though borrowing adds an interest tax shield it may lead to costs of financial distress. Financial distress occurs when promises to creditors are broken or honored with difficulty. Financial distress may lead to bankruptcy. The trade-off theory of capital structure theory in MM based on the added risk of bankruptcy and further improves the capital structure theory, to make it more practical significance.

2.2.3 Trade-off Theory of Capital Structure

According to Myers (1984), a firm that follows the trade-off theory sets a target debt to value ratio and then gradually moves towards the target. The target is determined by balancing the tax benefits of using debt against costs of financial distress that rise at an increasing rate with the use of leverage. It so predicts moderate amount of debt as optimal. But there is evidence that the most profitable firm in an industry tend to borrow the least, while their probability of entering in financial distress seems to be very low. This fact contradicts the theory because if the distress risk is low, an increase of debt has a favorable tax effect. Under the trade-off theory, high profits should mean more debt-servicing capacity and more taxable income to shield and therefore should result in a higher debt ratio.

2.2.4 Pecking Order Theory

In their pioneering work, Myers and Majluf (1984) showed that, if investors are less wellinformed than current firm insiders about the value of the firm's assets, then equity may be mispriced by the market. If firms are required to finance new projects by issuing equity, underpricing may be so severe that new investors capture more than the NPV of the new project, resulting in a net loss to existing shareholders. In this case the project will be rejected even if its NPV is positive. This underinvestment can be avoided if the firm can finance the new project using a security that is not so severely undervalued by the market. For example, internal funds and/or riskless debt involve no undervaluation, and, therefore, will be preferred to equity by firms in this situation. Even (not too) risky debt will be preferred to equity. Myers (1984) refers to this as a pecking order theory of financing, i.e., that capital structure will be driven by firms' desire to finance new investments, first internally, then with low-risk debt, and finally with equity only as a last resort. Myers' (1984) study and find that debt is preferable even though it is risky.

2.2.5 Signalling Theory and Capital structure

Ross (1978) introduced signalling theory to finance in which he suggested that managers can use capital structure as well as dividends to give some signals about the firm's future prospects.

More specifically, outsiders may interpret increasing the amount of debt in the firm's capital structure as a sign of confidence in a firm's future. Kamere (1987) notes that signalling is closely related to agency problem in that the use of a firm's capital structure to convey information to the market about a firms profitability is made possible by failure on the part of principals to control actions of management fully. Harris and Raviv (1990) contend that in general, managers do not always behave in the best interest of investors. Debt according to them serves this purpose by offering creditors the option to force the firm into liquidation and it also generates information about these aspects.

2.3 Review of Empirical Studies

The term capital structure refers to the percentage of capital (money) at work in a business by type. It is a mix of a company's long-term debt, specific short-term debt, common equity and   equity and it simply describes how a firm finances its overall operations and growth by using different sources of funds. Broadly speaking, there are two forms of capital: equity capital and debt capital. Each has its own benefits and drawbacks and a substantial part of wise corporate management is attempting to find the optimal capital structure in terms of risk/reward payoff for shareholders. There are several strands of literature that are relevant to the proposed research.

Booth et al. (2001) covering many countries also provide evidence consistent with the pecking order hypothesis. They find that the more profitable the firm the lower is the debt ratio. This finding contradicts optimal theory in that why these firms do not move their leverage to the industry average. Is it that high profitable firms engage in non-optimal behaviour? Additionally, an examination of Hungarian firms by Colombo (2001) provides further support for the pecking order hypothesis. Colombo (2001) reports that there is evidence of the existence of the pecking order in firms' financing choices suggesting the Presence of forms of financial market imperfections that constrain them in the achievement of their optimal capital structure.

Although the pecking order theory has been widely accepted, Ryen, Vasconcellos and Kish (1997) argue that it is inconsistent with many empirical observations. Frank and Goyal (2003) using U.S. data report that debt financing does not dominate equity financing in magnitude. In fact, equity financing is closely related to financing deficit while debt financing is not. Myers and Majluf (1984) argue that a drop in share price should be greatest for an equity issue, less for convertible debt, and the least for straight debt. However, there are several findings that contradict this view; for example, Mikkelson and Partch (1986), Noe (1988) and Constantinides and Grundy (1989).

However, transparency also affects the firm's relationships with its competitors and other noninvestor stakeholders (e.g., employees, suppliers, and customers) and transparency can have a negative effect reducing firm value (Leuz and Verrecchia, 2000). High levels of transparency may make it easier for these non-financial stakeholders to press for and increase their claims on the firm's assets and earnings. High levels of transparency also may discourage managers from seeking outside financing and, thus, use non-optimal and more conservative capital structures and forego investments in some positive NPV projects requiring outside financing (Almazan et al., 2003). Thus, not all transparency is value enhancing and the optimal level and type of transparency may depend both on firm characteristics and on the regulatory and transparency regime in place. Further, while increased transparency has been shown to reduce the overall cost of capital for firm, different types of transparency may have differential impact on debt versus equity. This resulting impact of transparency on capital structure has not been explored adequately in the literature.

Mateus and Balla, (2002) did a study to analyse capital structure choices of firms in Hungary and Portugal. They chose three debt ratio as dependent and six independent variables and could see that debt ratios seem to be directed in the same way by the same type of variables that are significant. The dependent debt ratios were ratio, long term book-debt ratio and long term market debt ratio. The independent variables were average tax rate, asset tangibility business risk, size,return on assets and market-to book ratio. Using a cross sectional regression analysis they concluded that the relevant variables explaining capital structure in developed countries are also relevant in developing countries: despite the difference in their institutional structure. However, they also revealed that these ratios are affected by macros factors, such as inflation rate and GDP growth rate but their impact is low. These findings were consistent with a similar study done by Booth et,al (2001). The main goal in this study is to examine the financial structure of firms in a sample of developing countries using a new-level database. Using the cross –sectional regression he came up with a similar conclusion.

3.0 RESEARCH METHODOLOGY

The study used descriptive survey research design. This study used Secondary data sourced from annual audited financial statement of the firms listed on Nairobi Securities Exchange. The population of the study consisted of companies listed on the NSE. Purposive sampling was used to select respondents from the sampling frame. A sample size of 46 listed companies for the year 2001 to 2011 were selected through random sampling. Data was analyzed using Statistical Packages for Social Sciences (SPSS) to derive descriptive results.

4.0   Analysis

4.1 Descriptive Results

This section presents the descriptive results of the overall descriptive statistics that is presented in table 1. It also indicated that the mean debt was 3413507.83, the mean equity was 7311447.04, the mean corporate taxes was 524764.61, mean profit before taxes was 1919339.48, the mean debt equity ratio was 0.5725 and mean Taxes profit ratio was 0.2083.

Table 1: Descriptive statistics for Returns and years

	N	Mean	Std. Deviation
Debt	405	3413507.83	9431130.740
Equity	413	7311447.04	1.377E7
corporate taxes	420	524764.61	1285864.081
profit before taxes	413	1919339.48	4357743.344
Debtequityratio	410	.5725	1.83580
Taxesprofitratio	412	.2083	.39277
Valid N (listwise)	397		

Table 2 indicates that the average debt per company for the year 2001 was kshs 1,665,331.38.the average debt per company for the year 2002 was kshs 1,905,801.34.the average debt for the year 2003 was 2,143,641.34.for the year 2004 its average debt was kshs 2,877,389.52.the average debt for the year 2005 was kshs 3,363,145.65.for the year 2006 the average debt was kshs 3,648,909.84.for the year 2007 the average debt was 5,586,638.77.the average debt for the year 2008 was kshs 6,533,668.29.for the year2009 the average debt was kshs 3,839,699.16.the average debt per company for the year 2010 was3,929,997.02 and finally for the year 2011 the average debt per company was 2,471,529.23

Table 2: average debt per year

Years	Mean	N	Std. Deviation
2001	1665331.38	37	3909109.313
2002	1905801.34	37	4301303.397
2003	2143641.34	37	4861352.249
2004	2877389.52	37	7687591.964
2005	3363145.65	37	8571166.725
2006	3648909.84	38	8953147.563
2007	5586638.77	36	1.439E7
2008	6533668.29	34	1.639E7
2009	3839699.16	35	8968462.727

2010   3929997.02 37 1.240E7
2011   2471529.23 36 4969227.474
Total 3424047.74 401 9469169.887

Figure1 presents the graphical relationship between years and the mean return of debt. The figure indicates that there is a positive relationship between years and the mean return. Year 2008 has the highest return (6,533,668.29) while year 2001 has the lowest returns (1,665,331.38).

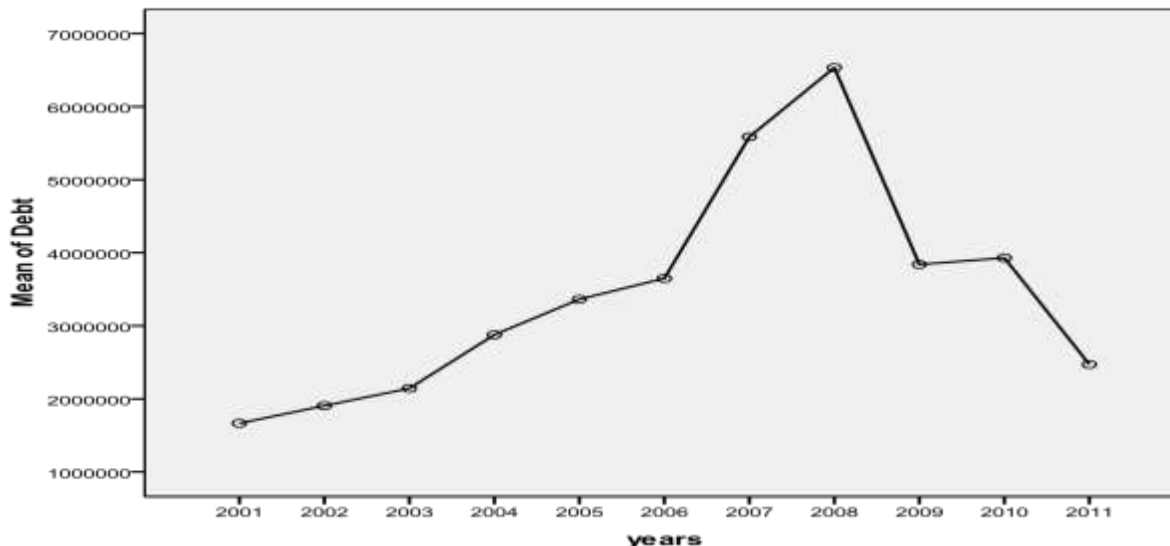**Figure 1: Graphical relationship between years and the mean return of debt**

Table 3 indicates that the average taxes profit ratio per company for the year 2001 was 0.2399.the average taxes profit ratio per company for the year 2002 was 0.2782the average taxes profit ratio for the year 2003 was 0.2893.for the year 2004 its average taxes profit ratio was 0.2696.the average taxes profit ratio for the year 2005 was0.2320.for the year 2006 the average taxes profit ratio was 0.2690.for the year 2007 the average taxes profit ratio was 0.1848.the average taxes profit ratio for the year 2008 was 0.1235.for the year2009 the average taxes profit ratio was 0.1024.the average taxes profit ratio per company for the year 2010 was0.1377 and finally for the year 2011 the average taxes profit ratio per company was 0.1492.

Table4. 3: average taxes profit ratio per year

	N	Mean	Std. Deviation	Std. Error

2001	37	.2399	.20479	.03367
2002	37	.2782	.19275	.03169
2003	37	.2893	.15175	.02495
2004	37	.2696	.28011	.04605
2005	38	.2320	.21940	.03559
2006	38	.2690	.12302	.01996
2007	38	.1848	.23616	.03831
2008	37	.1235	1.05549	.17352
2009	36	.1024	.30851	.05142
2010	37	.1377	.30683	.05044
2011	36	.1492	.32832	.05472
Total	408	.2074	.39426	.01952

Figure 2 presents the graphical relationship between years and the mean return of taxes profit ratio. The figure indicates that there is a negative relationship between years and the mean return. Year 2003 has the highest return (0.2893) while year 2009 has the lowest returns (0.1024).
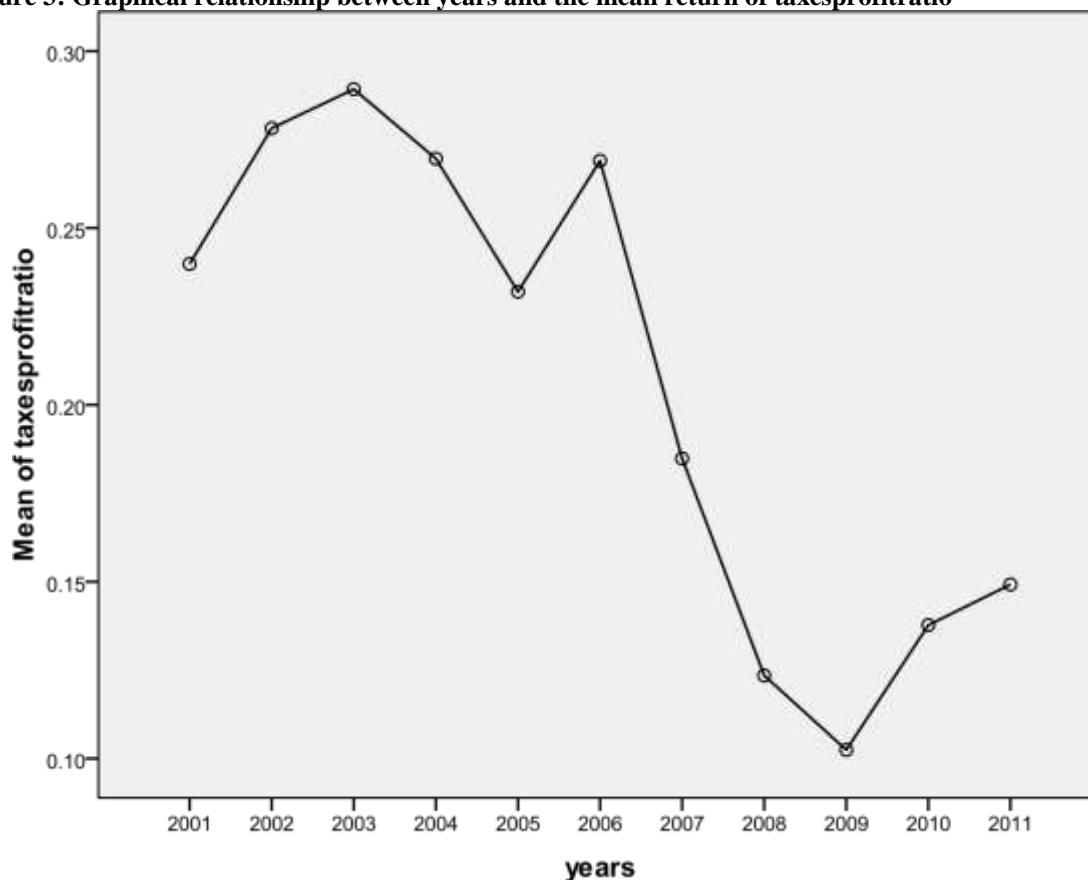
Figure 3: Graphical relationship between years and the mean return of taxesprofitratio

Table.4 indicates that the average Equity for the year 2001 was kshs 4,748,472.60.the average Equity per company for the year 2002 was kshs 5,167,873.48 the average Equity for the year 2003 was kshs 5,764,855.31.for the year 2004 its average Equity was kshs 6,886,984.91.the average Equity for the year 2005 was kshs 7,651,224.03.for the year 2006 the average Equity was kshs 8,393,211.26.for the year 2007 the average Equity was kshs 9,507,708.53.the average Equity for the year 2008 was kshs 9,450,934.40.for the year2009 the average Equity was kshs 8,798,038.83.the average Equity per company for the year 2010 was kshs 8,824,935.84and finally for the year 2011 the average Equity per company was kshs 6098617.45.the total average Equity for year 2001 to 2011 was kshs 7,356,026.17.

Table 4: average Equity per year

	N	Mean	Std. Deviation	Std. Error
2001	38	4748472.60	8854910.717	1436456.201

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2002	38	5167873.48	9351836.989	1517068.287	2003 38 5764855.31 9942633.679 1612908.165
2004	38	6886984.91	1.314E7	2131808.817	
2005	38	7651224.03	1.407E7	2281775.221	
2006	38	8393211.26	1.448E7	2348599.010	
2007	36	9507708.53	1.650E7	2749665.122	
2008	34	9450934.40	1.504E7	2578576.447	
2009	36	8798038.83	1.654E7	2756948.033	
2010	38	8824935.84	1.849E7	2999786.444	
2011	37	6098617.45	1.334E7	2193400.209	
Total	409	7356026.17	1.383E7	683704.226	

Figure 3 presents the graphical relationship between years and the mean return of Equity. The figure indicates that there is a positive relationship between years and the mean return. Year 2007 has the highest return (9507708.53) while year 2001 has the lowest returns (4748472.60).

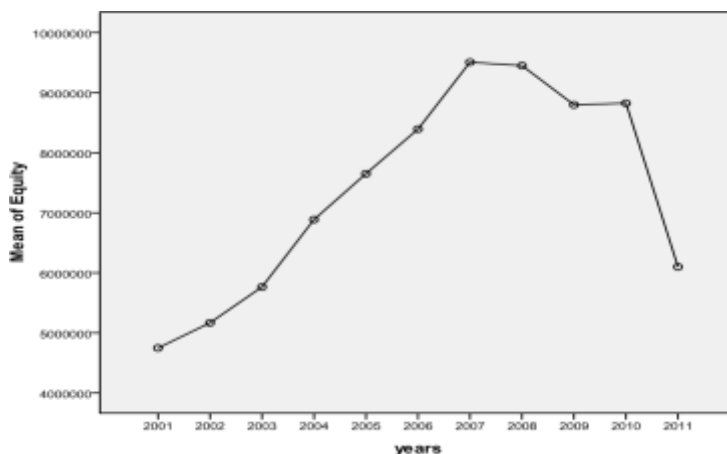**Figure 4. 4: Graphical relationship between years and the mean return of Equity**

Table5 indicates that the average corporate taxes for the year 2001 was kshs 374,960.49.the average corporate taxes per company for the year 2002 was kshs 443,691.40 the average corporate taxes for the year 2003 was kshs 500,766.85.for the year 2004 its average corporate taxes was kshs 609,906.34.the average corporate taxes for the year 2005 was kshs 672,878.29 .for the year 2006 the average corporate taxes was kshs 626,437.07 .for the year 2007 the average corporate taxes was kshs 688,874.39.the average corporate taxes for the year 2008 was kshs 597,889.53.for the year2009 the average corporate taxes was kshs 386,990.28.the average corporate taxes per company for the year 2010 was kshs 369,796.37and finally for the year 2011 the average corporate taxes per company was kshs536,278.12.the total average corporate taxes for year 2001 to 2011 was kshs 528,361.92.

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Table 5: average corporate taxes per year

	N	Mean	Std. Deviation	Std. Error
2001	38	374960.49	1034687.684	167848.506
2002	38	443691.40	1092629.253	177247.870
2003	38	500766.85	1173080.251	190298.745
2004	38	609906.34	1291784.272	209555.080
2005	38	672878.29	1378546.552	223629.781
2006	38	626437.07	1238919.110	200979.219
2007	38	688874.39	1387068.810	225012.274
2008	38	597889.53	1151360.532	186775.342
2009	37	386990.28	1488352.330	244683.616
2010	38	369796.37	1676378.532	271944.508
2011	37	536278.12	1282324.045	210812.774
Total	416	528361.92	1291467.318	63319.395

Figure 4 presents the graphical relationship between years and the mean return of corporate taxes. The figure indicates that there is a positive relationship between years and the mean return. Year 2007 has the highest return (688874.39) while year 2010 has the lowest returns (369796.37).

Figure.5: Graphical relationship betwee
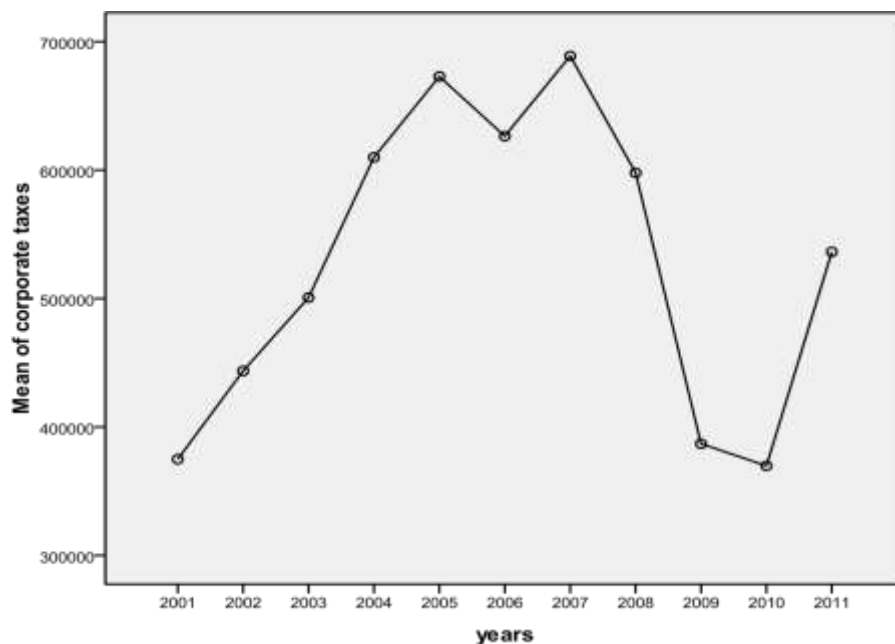
**n years and the mean return of corporate taxes**

Table 4.6 indicates that the average of debt equity ratio for the year 2001 was 0 .3109.the average of debt equity ratio per company for the year 2002 was 0.3669 the average of debt equity ratio for the year 2003 was 0.3530.for the year 2004 its average of debt equity ratio was 0.3415.the average of debt equity ratio for the year 2005 was 0.3547 .for the year 2006 the average of debt equity ratio was 0.3319 .for the year 2007 the average of debt equity ratio was 0.4771.the average of debt equity ratio for the year 2008 was 0.4870.for the year2009 the average corporate taxes was 1.1540.the average of debt equity ratio per company for the year 2010 was 1.0504and finally for the year 2011 the average of debt equity ratio per company was 1.1143.the total average of debt equity ratio for year 2001 to 2011 was 0.5745.

Table 6: average debt equity ratio per year

	N	Mean	Std. Deviation	Std. Error
2001	37	.3109	.45823	.07533
2002	37	.3669	.44990	.07396
2003	37	.3530	.38098	.06263
2004	37	.3415	.39042	.06419
2005	37	.3547	.36733	.06039
2006	38	.3319	.31532	.05115
2007	38	.4771	.51331	.08327
2008	35	.4870	.58917	.09959
2009	36	1.1540	3.48069	.58011
2010	38	1.0504	3.40042	.55162
2011	36	1.1143	3.48735	.58123
Total	406	.5745	1.84390	.09151

Figure 5 presents the graphical relationship between years and the mean return of debt equity ratio. The figure indicates that there is a negative relationship between years and the mean return. Year 2009 has the highest return (1.1540) while year 2001 has the lowest returns (0.3109).

Graphical relationship between years and the mean return of debtequityratio
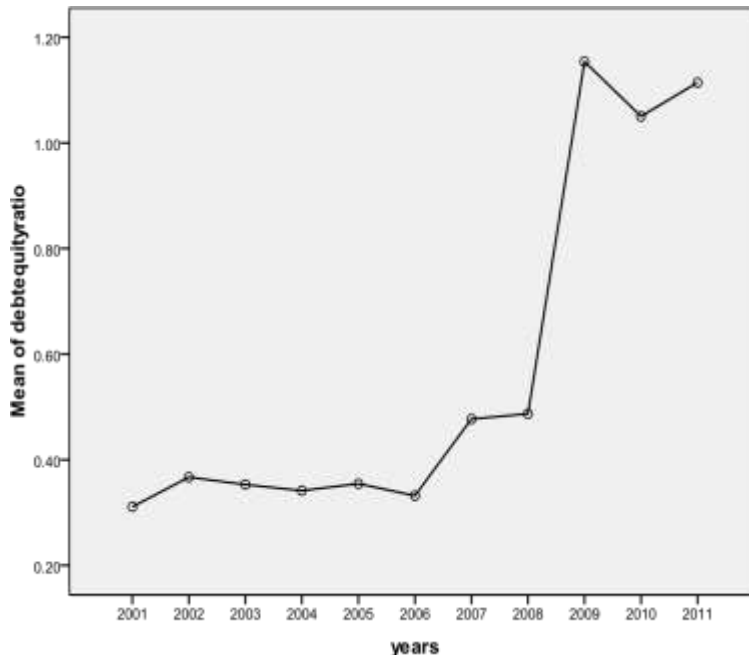
5.0 Findings, Discussion and Summary

An Analysis of Variance (ANOVA) results indicated that the overall model was significant. This was supported by an f statistic of 8.821 (p value = 0.000).

Regression results indicated that the relationship between debt equity ratio and taxes profit ratio is negative and significant (b1=-.032, p value 0.000). The findings imply that debtequityratio has a significant effect on taxesprofitratio.

Regression analysis was conducted to determining the relationship between the debt equity ratio and taxes profit ratio. The findings indicated that the r squared was 0.022.this imply that the overall goodness of fit was poor. An r squared of 0.022 implied that 2.2% of the variation in corporate taxes is explained by the capital structure.

5.2 Conclusions

It was concluded that the trend in total average debt for the year 2001 to 2011 was positive Year 2008 has the highest return while year 2001 has the lowest returns. The trend in average debt rose from the year 2001 to the year 2008, the trend reversed and there was a decline in average debt from the year 2009 to the year 2011.

The trend in equity for the commercial banks was positive. Equity rose from the year 2001 to 2008 but declined hence forth to the year 2011.The trend in corporate taxes rose from 2001 to 2005 but turn down in the year 2006.corporate taxes rose again in the year 2007 but declined again until year 2010 and rose in the year 2011.There was a constant trend of debt equity ratio from the year 2001 to 2006.finally the average debt equity ratio rose from the year 2007 to 2008.The trend in taxesprofitratio rose from the year 2001 to 2003 but declined from year 2004 to the year 2005

where it went up again in the year 2006 and started declining again from the year 2007 to 2009.the trend rose again in the year 2010 and 2011.

It was concluded that the relationship between debt equity ratio and taxes profit ratio was negative and significant (b1=-.032, p value 0.000). The findings imply that debtequityratio has a significant effect on taxesprofitratio.

5.3 Policy Recommendations

It was recommended that commercial banks should issue corporate bonds as this would form a cheap source of finance. In addition the use of corporate bonds entails the enjoyment of the interest tax shield. In other words, the use of debt improves the shareholder's wealth.

It is also recommended that commercial banks should engage strategic investors. Such investors should provide loans to the commercial banks for example such strategic investor can advance long term loans to the banks.

It is also recommended that the equity share holder should be substituted for debt shareholding in future. This is because an increase in debt shareholding arising out of substitution would be beneficial to the commercial bank because it will result into interest tax saving.

5.4 Limitations of the study

One of the limitations of the study was that data was unavailable in some instances. For instance, data for the years before a commercial bank was listed was hard to collect and could only be collected from online sources and IPO prospectors

The study did not consider the role of corporate governance and other internal factors and how they affected the return of debt equity ratio Perhaps, governance, cash flows, competition, operating efficiency could have influenced the returns of the debt equity ratio.

This study did not cover non listed banks. Therefore this study is limited to only companies listed in the Nairobi Securities Exchange.

5.5 Suggestions for Further Research

It is suggested that a comparative study of listed bank in East Africa Community (EAC) should be done. This will help to identify the relationship between capital structure and corporate taxes for companies listed in East Africa countries securities.

It is also suggested that other factors should be considered when conducting a study on companies listed in the Nairobi Securities Exchange. This includes governance, cash flows, competition, operating efficiency and how they could have influenced the returns of debt equity ratio. Furthermore, further studies should be on the no listed banks. This would make it possible to compare whether listing status moderates the relationship between capital structure and taxes.

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