THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND VALUE OF NONFINANCIAL FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

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Abstract

Purpose: This   paper investigates the relationship between capital structure and worth of nonfinancial businesses registered at the Nairobi Securities Exchange, in Kenya.

Methodology: The study uses an unbalanced secondary panel data consisting of 36 nonfinancial firms listed at the Nairobi Securities Exchange (NSE) for the period 2015 to 2019 as at December 31st 2019. The sample selection was showed by data availability. The sectors excluded consisted of firms in banking, insurance, equity investment and real estate, including investment trusts. These exclusions were motivated by regulatory differences and for the ease of comparability of findingss.

Findings: The connection amid capital structure and business worth was found to be positive. This means that capital is a determinant of firms value which supports the notion of trade-off theory and Pecking order theory as they advocate that firms should used debt to finance their operations.

Implications: The results of this study have two major policy implications. First, nonfinancial firms in Kenya could significantly improve their performance if there is established utilisation of debt. Second, whilst policies aimed at popularising external finance to firms could have significant positive impacts on their performance, the benefits of such policies would be much better realised if harmonised with efficient capital market for firms to raise debt capital with favourable interest.

Key Words: Capital Structure, Firm value, Tobin Q

1.1 Introduction

This study examined the association between capital structure and the value of nonfinancial companies registered at the NSE, Kenya. There has been a debate about the relevancy of capital structure to the value of the firm for over a decade among academics and practitioners (Kibet,

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2013). In the existing empirical literature, there is evidence that firm value and capital structure has a relationship (Draniceau, 2013). Capital structure refers to the mechanism which companies used to finances their investment projects through the combination of debt, equity and retained earnings (Ogbulu & Emeni 2012; Linh, 2014).

When company maintain appropriate capital, it is possible for value maximization as well as that of shareholders wealth and efficient in maintaining competitive over their rivals (Linh, 2014). The existing debate about the appropriate optimal structre of financing instruments obtained when have a balanced between tax-shield advantage gain from the used of external funding and cost of financial distress. This balanced in the capital structure will enable the firm to benefits from debt financing than only depending on equity. The eventual influence of appropriate proportion of capital structure would be reasonable (lower) average cost of finance in relations with high expected returns to the owners of the firm in term of their share price (Leary & Roberts, 2010).

According to the study conducted by Cheng and Tzeng (2010) reveal that firm leverage has positive impact on the value of the firm when quality of funding is well design. The value of a firm is refers to the summation of all its financing sources, which includes debt and equity financing (Pandey, 2004). This study contributes to the existing literature by examing the influences of capital structure on the firm value through review of related empirical literature capital structure decisions. There are numerous papers that have attempted to closed the gaps on the issue of capital structure decision in difference economies but some of them have examined the determinants of firm performance. The next section will review theoretical and empirical reaearch on the connection concerning capital structure and the value of a company.

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2.1 Theoretical Literature Review

The connection between capital structure and the value of the business can be well illustrated by the examination of differences among theories of capital structure. This is based on the seminal paper of Modigiliani and Miller (1958). They believe that firm value does not depends on its capital structure. They also put forward some assumptions of perfect capital market. The Modigliani and Miller (1958) assumptions were adeveloped on unrealities market situations, which offer the room for advancement for existing theories of capital structure.

Furthermore, the MM theorem is the way of redefining how firms finance their investment operations, which rquires high intellectual level of analytical tools and discipline among managers. In the study conducted by Prenaj and Ahmeti, (2015), identified capital structure as the mechanism of financing firm with pursuation that it is irrelevant but possible to identify other factors that re relevant in the real world of business, that is imperfect capital markets. The current study is based on the inspirational research of Modigliani and Miller (1958). The theory of capital structure is one of the anchoring theory that explained the association amid capital structure and the business worth.

The pecking order theory of capital structure by Myers and Majluf (1984) explained that company arranged its bases of financing for business by using internal resources, debt, equity and the last resort is perfrence share. The business only utilised the equity issuance, if the level of debt does does not increase significantly improved the business performance. The major concept of Pecking Order Theory include is the function of asymmetry information and costs of truncation in advancing market results. The cost of asymmetric information comes when a company does not take consideration of external financing and did not take up positive NPV as the best aternal investment project. The low interest of using equity is couple with the overstatement of equity by investors as alternative capital. As stated by the Myers and Majluf (1984), the mispricing of equity financing comes with deviation in the case of information possessed among differences players in the market from difference companies than the true state of affairs. For the company to mitigate this situation, the firm with growth rospective will

work hard to minimised any shortage of reserve to avoid short term borrowing to finance their investment.

The Trade off Theory by Kraus and and Litzenberger (1973) stated tht the used of debt finacing by companies has a tax shield advantage over the use of internal financing only, but the present of costs of bankruptcy encourage firms not used debt alone without equity financing. The company obtain the optimal mix of equity and debt that comes with marginal cost bankruptcy is lower than the benefit that results from the tax saving in relations with the utilisation of debt financing by firms. The management of the firm should ensure that capital structure must be well formulated in order to ensure the company has an optimal capital structure to avoid any deviation from optimal evel obtained. Hence there must be a level of dependence on debt-servcing ability to maintain adequate protection on company returns against tax to result into higher profit and firm value.

Agency theory pioneered by Jensen and Meckling (1976), which stated there is a conflict of interest between managers sharesholders. In this case, monitoring could be difficult to implement and costs related with the practice that is non-trivial in nature. In the company, the shareholders, debtholders and management are distinctive parties in the agreement of the firm operation. The agency costs is an important aspect determinants of the firm value as on how the corporate capital structure has been constituted by management. The study by Fama and Miller (1972) support the current study motivation of additional value created by used of debt financing in the capital structure, through the role of investing free cash flow in the profitable project that improved the share price of the company.

After years of intense scrutiny, capital structure effects on firm value continues to be a prevalent exploration in finance and accounting literature. The optimal capital structure, pecking order, agency theory and signaling theories have all contributed very useful but sometimes mixed guidance to academics and practitioners seeking to understand what managements financing decisions do to the value of a firm (Ruan et al. 2011).

Leary and Roberts (2010) states that capital structure and firm value is essential to corporate finance. Therefore, firms take different strategies to adjust capital structure to get a better firm value. However still the studies mostly conducted in one country setting or neglect the angle from registed companies across countries. The study encompassed two advanced economies and a developing country (China) to test the impact of capital structure on firm value for the period 2003-2012 with more than 1200 listed companies in Germany and Sweden and more than 1000 listed companies in China. The result showed that capital structure has a significant negative effect to firm performance in China, whereas, significant positive effect in the two European countries before financial crisis happened in 2008. The study thus concludes that there is a strong and positive connection between capital structure and firm value for companies listed at the Nairobi Securities Exchange.

Ogbulu and Emeni (2012) examined the influence of capital structure on the value of the company based on a sample of hundred and twenty four firms registered at the Nigerian Stock market as of 31st December 2007. The study used ordinary least Squared method of regression to conduct the analytical procedure. The findings of the study indicated that long term debt financing was an important aspect of firm value determiants. As revealed by the current findings of the study, capital structure decisions makers should consider the use of long term financing for their investment project as it has a positive correlation with the firm value.

Maina and Kondongo (2013) analysis the impact of capital structure on the performance in theconext of Kenya using nonfinancial firms registered at the NSE between 2002 to 201. This current research arrived to a negative connection between capital structure and performance. These outcomes support the irrelevance theory of capital structure in the determinance of performance, which mean that the firms quoted at the NSE used short-term debt than long term debt.

The study of Gichangi (2014) investigatyes the connection amid capital structure and profitability in the context of Kenya using 40 nonfinancial companies quoted at the NSE from 2008 to 2012. The study used descriptive research designs of analyse data obtained from annual

financial report unsing regression techniques. The results of the study indicated that long-term debt is negatively and significantly correlated to profitability, while short term debt is positively and statistically significant to the profitability measured by returns equity. The overall conclusion mean that capital structure is negatively related to the firm profitability.

Howue et. Al., (2014) investigates the connection and effects of capital structure policy on the worth of the businesses registered at the Dhaka Stock Exchange for the period from 2008-2012. The study used both primary and secondary data from nonfinancial firms, which was analyse using regression techniques. The outcomes of the analysis indicated that capital structure decisions have positive impact on the firm worth. This support the notion of both pecking order theory, tradeoff theory and agency cost theory. Implying that companies should utlises debt financing sources for them to improve the value the firms.

Andersson and Minnema (2018) examined the correlation between leverage and corporate profitability services companies in Sweden and the findings of the analaysis indicated that leverage has negative correlation with profitability. This support the notion of Pecking order theory of capital structure. Theory explained that companies should finance their investment first with internal generated funds before external debt funding to obtain substantial profitiability by companies under study.

3.1   Methodology

In this study paper, we extracted secondary data from financial statements of 36 nonfinancial companies quoted at the Nairobi Securities Exchange between 2015 and 2019. The variables employed were adopted from the past empirical studies. We utilized the Ordinary Least Squares (OLS) technique to analyze the connection amid capital structure and company worth. The OLS technique was utilized since it was the more appropriate technique as our aims was to analyse the relationship between capital structure and firms' value.

3.2 Model Specification

The model to be regressed in this study is presented in a relational form as follows:

FV = {Capital Structure}

FV = {Debt, Equity, Retained Earnings)

With the linear expression of the model being:

$$Y = \alpha + \beta_1 STD + \beta_2 LTDEBT + \beta_3 RE + \beta_4 D\_E\ Ratio + \varepsilon_I \text{----------------------------------(i)}$$

Where β_1- β_4 are coefficients of determination for the study variables, α constant and ε_I is the error term that explain the percentage not captured by the model.

STD is short term debt, LTD is long term debt, RE is the retained earnings and EQ is the equity capital. FV is the firm value measured by Tobin Q.

4. Analysis of Date and outcomes

4.1 Descriptive Statistics

The Table 4.1 below comprises the descriptive statistics of the study prarameters. The study used 36 nonfinancial firms listed at the NSE , Kneya.

Table 4.1: Descriptive Statistics

	Observations	Mean	Std. Dev	Min	Max
Short term debt	180	0.0214	0.0148	-0.078	0.0768
Long term debt	180	0.2143	0.3484	0	2.136
D-E ratio	180	0.0432	0.0673	0	0.568
RE	180	0.1397	0.0815	0.0246	0.342

The outcomes in Table 4.1 above reveal that mean value of short term debt for 180 observation was 0.0214 and standard deviation was 0.0148 respectively while min and max are -0.078 and 0.786 as shown on the table mentioned above. This positive mean shows that on average companies are performing well during the period of the study, although some of the nonfinancial firms operated at a loss as indicated the negative minimum value of 0.078 and

maximum value of 0.0768. The standard deviation of the study variable (Short term debt) revealed that short term debt have small variability among the nonfinancial firms under study and it is less volatile.

The long term debt mena value of the study indicated that 0.2143 on average were less geared meaning that nonfinancial firms where funding their investment project through internal earnings, which support the pecking oder theory of capital structure. This theory advocate that fims should utilised their internal resources while debt and equity will be used   as a last resort. The standard deviation of the study indicated that 0.3484 has a minimal variations in capital structre sine the minimum obtained from long term debt was 0.000 and maximum of 2.1360.

The findings of the D E ratio in the Table 1 basically has a mena value of 0.0432 with standard deviation of 0.0673. This is an indication of lower variability in debt equity ratio as a measure of capital structure. This is shown by the minimum of 0.000 with maximum as 0.5680, meaning that nonfinancial companies maintained a stable level of debt equity ratio in capital structure for the period of the study. The retained earnings as an internal generated fund has a mean value of 0.1397 and std dev of 0.0815 as well as min and max of 0.0246 and 0.3420 as stated in the table 4.1.

4.2 Correlation Matrix Ananlysis

The study intended to analyse the relationship between capital structure and value of nonfinancial firms listed at the Nairobi Securities Exchange using specifics variables measures.

Table 4.2: Correlation Matrix

	TQ	STD	LTD	DER	RE
Tobin Q	1.000				
Short term debt	-0.1032	1.000			
Long term debt	-0.345	0.3278	1.000		
D-E ratio	0.2146	-0.0175	-0.0324	1.000	
RE	0.2456	0.0854	0.0793	0.2731	1.000

The outcomes bestowed in Table 2 above indicated that short, long term debt have negative correltation coefficient, while Debt Equity ratio and RE (Retained earnings) have impact on the firm value. This implied that existance of weak negative effect of the independent on dependent variables of the study.

The purpose of this study was to examine the connection between capital structure and value of nonfinancial business registered at the NSE in Kenya. The regression outcomes found from the ordinary least square is bestowed below:

The amied of the paper is to explore influence of capital structure on value of nonfinancial business registered at the NSE, Kenya. Capital structure was measured by STD, LTD, DER, and retained earnings, while TQ is the indicator of relative worth of the company.   Accordingly, company value is regressed on stort term debt, long term debt, retained earnings and DER. The outcomes are presented in Table 4.1 below followed by a discussion of the outcomes.

Table 4.3: Connection amid the value of companies and capital structure

Variable	Coefficient	Standard Error	Z	P>|z|
Short term debt	0.0735	0.0109	0.850	0.3970
Long term Debt	0.0173*	0.0165	0.790	0.0000
DER	0.0682*	0.0660	9.280	0.0000
Retained Earnings	-0.0158*	0.0063	2.370	0.4180
Constant	1.1927*	0.1925	6.00	0.0000

Wald Chi-Sq (4) =147.16   Prob > chi2 =0.0000

(*) denote 5% level of significance

The outcomes of the regression presented in Table 4.1 reveal that STD, LTD, D-E ratio has positive relationships with Firm Value but only LTD and D-E ratio have statistical levels of

significance on TQ of non-financial entitie registered at the NSE (P=0.0000>0.05), while retained earnings have inverse effect on corporations' wealth but not a statistically significant effect. The results of the Wald Chi square is statistically significant, suggesting that capital structure determines company worth (PV 0.0000 <0.05).

5. Conclusions

The study analyze influences of capital structure on the value of companies utilising secondary data extracted from the financial statements of 36 nonfinancial companies quoted at the Nairobi Stock Market, Kenya, for the period 2015 to 2019. All other theories, except the M-M theory (1958), have endevaoured to resolve the capital structure puzzle articulated by M-M (1958) propositions. Each of this theory relaxes assumptions under which the M-M (1958) theorem was derived.

The results of the research imply that capital structure have different implications which influence the value of a firm. The adopts Ordinary Least Square (OLS) to process the secondary data extracted from annual financial statements for the period 2015 to 2019. In this case, capital structure (long-term debt), played a greatest role in the value of the firm, while cost of capital have a minimum contribution towards magnifying the value of nonfinancial companies. Therefore, the study recommends that corporate management as well as the regulatory institutions should adopt policies that tend towards the use of debt instruments so as to maximize the value of the firm, which will in turn maximize the shareholders wealth.

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