

## **SHORT TERM DEBT AND EQUITY OF LISTED OIL AND GAS FIRMS IN NIGERIA**

**Dr Kaine Awuli Horsfall**

**Department Of Accountancy, Faculty of Business Studies**  
**Ignatius Ajuru University of Education, Port Harcourt, Rivers State, Nigeria**

### **ABSTRACT**

*The study unveiled some salient relationship between debt structure and equity of listed oil and gas firms in Nigeria for the period 2008-2107. The aim of this study is to empirically ascertain the effect of debt structure on profitability of listed oil and gas firms in Nigeria. The study has contributed to the empirical body of literature on debt structure and financial performance of listed oil and gas firms in Nigeria. It aids to understanding the relationship between institutional factor on Nigerian firms debt structure and the proportionate effect on financial performance. More so, short term debt (STD) was found to have negative significant effect on financial performance on ROCE, with a positive relationship on NPM of listed oil and gas firms in Nigeria. The study therefore, concluded that short term debt is one of the strong determinants of the equity of listed oil and gas firms in Nigeria. The study recommends that further work is necessarily required in other sectors in Nigerian economy along with developing new hypothesis and also to design new variables to reflect the institutional influences. In addition, another work is needed urgently to lay a solid foundation on the resultant relationship between the use of equity and financial performance of list firms (oil & gas) in Nigeria using the same period of study along with different proxies as measures of financial performance.*

**Keywords: Short Term Debt, Equity, Financial Performance, Oil and Gas**

### **INTRODUCTION**

The capital structure of the company directly affects its financial risk, which can be considered as the risk linked to the use of financial leverage. Take advantage of the limitations in the associated relationship between earnings before interest and taxes (EBIT) and pre-tax profits (EBT). According to Kochhar (1997), "the decision of a bad capital structure can lead to possible reductions or losses in value derived from strategic activities. Therefore, the ability of a company to manage its financial policies plays an important role if the company wants to profit from its specialized resources". When a company adopts a perfect ideology to raise funds in its operations, the company can probably do well in its operations; Therefore, it is necessarily necessary and important that Nigerian companies know the best combination of debt and capital that offers optimal performance. Meanwhile, it has been argued that profitable companies were less likely to rely on debt in their capital structure than less profitable companies with high growth rates have a high debt to capital ratios (see Haris and Raviv, 1991, Krishnan and Moyer, 1997, Tian and Zeitun, 2007). If the alleged statement or argument is correct, does it imply that a company should make greater use of the percentage of debt in its capital structure? Because any increase in debt financing will result in greater profits for shareholders. However, it is more relevant to know or remember that there is a list of factors relating to decisions on capital structure, such as profitability, business growth, company size, debt maturity, debt / GDP ratio, taxes and tangibility; however, considering the factors that influence the decision on the capital structure, they can be studied in the condition of risk minimization. Therefore, a stable capital structure should be developed for risk because it has a direct relationship with value (Krishnan and Moyer, 1997).

Despite the relativity of the capital structure, in a practical sense, companies differ in objectives, aspirations and mutual aspirations and also in nature, profits, size, cost of funds, competitive conditions, market expectations and related risks. On the basis of this, the capital structure could provide a broad theoretical framework to analyze the correlation associated with financial leverage,

the cost of capital and the value of the company. In view of this, a financial manager is advised to look beyond these considerations and to incorporate all the factors of qualitative, quantitative and subjective ingredients into the planning and design process of an asset structure of the company as a whole with the greatest desired advantage of the 'company; taking into account the interests of the shareholders, the holders of the debt, the legal disposition and the direction concerning the capital structure.

### **Debt Structure**

Without doubt, the benefits are associated with the use of debt in the combination of the company's capital. The main advantage of debt financing is the tax deduction of interest, which translates into relatively higher profits for shareholders. "Does this mean that a company should continue to increase the percentage of debt in its capital structure indefinitely? If every increase in debt financing increased the profits for shareholders, then all companies would fully finance the debt. However, there are some costs associated with debt financing, so between the two extremes of total capital financing and total debt financing, a particular combination of debt capital must be decided" (Pandey, 2001).

Meanwhile, "current financial theories argue that in a situation where there are no bankruptcy costs, the adequate capital structure for a company would almost entirely consist of diminishing debt yields that are linked to additional debt in the combination of capital" (Kwansa and Cho, 1995). Therefore, an adequate capital structure beyond which the increases in bankruptcy costs exceed the marginal advantage of fiscal protection associated with a greater replacement of the debt with capital in the combination of capital. "Managers who are willing to recognize and maintain this combination of adequate capital minimize the financing costs of free cash flow theory; Very high levels will increase a company's value, despite the threat of financial difficulties, when the company's operating cash flow significantly exceeds its profitable investment opportunities" (Myers, 2001).

Talking about performance, Murphy et al (1996), research on firm performance, can be traced to organization theory and strategic management. "Performance measures are either financial or organizational financial performance such as profit maximization; maximizing profit on asset and maximizing shareholders benefit are at the core of firm's effectiveness" (Chakravarthy, 1986; Tian & Zeitun, 2007). Tian and Zeitun (2007) states that, "in practice, firm's managers who are able to identify the optimal capital mix are rewarded by minimizing the firms cost of finance thereby maximizing the firms revenue". Meanwhile Graham and Harvey (2001) observed that "firms issue equity rather than debt when their stock prices are high". Baker and Wurgler (2002) also find out that "the level of a firm's stock price is a major determinant of which security to issue". Welch (2004) establishes that "firms let their capital structure change with their stock prices rather than issuing securities to counter the mechanical relationship between stock returns on capital mix".

### **Short Term Debt**

This measures the way in which a company's short-term debts must be paid within an accounting period. Some scholars have argued that the shorter the debt, the better the company will improve its performance. "Short-term debt is a measure of the company's financial leverage. Indicates what percentage of the assets is financed with short-term debt. Short-term debt is a debt that must be paid within 12 months or less and is not included in the figure of long-term liabilities in the balance sheet. Includes creditors and accumulations" (Akinyomi, 2013) "Short-term debt represents the financial position of the company's ability to meet its current financial requirements payable within one accounting year. Shows the percentage of company assets financed with loans and other financial obligations that last more than a year" The short-term debt ratio is calculated by dividing current liabilities by total assets. Both numbers are easily available in the balance sheet. A lower debt ratio generally implies a more stable activity with the potential for longevity since a company

with a lower ratio also has a short-term debt. Furthermore, it was further debated that "short-term debts adversely affect the profitability of the companies due to the fact that they are exposed to refinancing risk" (Khalaf, 2013, Nerrender, et al, 2007; Pratheepkanti, 2011; Shah et al, 2011 , Onaolaporkajola, 2010; Pandey, 2001, Stohs & Mauer, 1996). Based on this, it is expected that the debt maturity index (short-term debts) will have a significant effect on the company's profitability in the oil and gas industries in Nigeria due to the effectiveness of the bank deposit policy.

### **Equity**

"Equity is the difference between the values of assets / interests and the cost of liabilities of something you own. In the accounting context, the net assets (share capital, shareholders funds, shareholders equity or similar conditions) represent the net assets of a company divided between the individual shareholders of ordinary or preferred shares" (Kurfi, 2003). Accounting shareholders carry cheaper risks, as they deal with the public. "In financial accounting, the shareholders' equity is the net asset, which is the difference between the total asset of the entity and all its liabilities. Equity generally appears in the statement of financial position, which is one of the four main financial statements. The assets of an entity can be made up of material and immaterial elements. Intangible assets include items such as trademarks, copyrights or goodwill. Tangible assets include land, equipment and liquidity" (Akinsulire, 2014). The net equity is the residual interest in the assets of the entity after having deducted all the liabilities (IASB framework). "Equity is what the owners of an entity have invested in a company. It represents what the company owes to its owners. It is also a reflection of the residual capital in the asset after the entity's assets have been used to pay outstanding liabilities. This is what the owners bring home in case of liquidation of the entity" (Erasmus, 2008). Equity is the value of the owners of an asset or group of assets. It also refers to the value of the assets contributed by the owners. This is added to the total income received and retained by the company to provide the total value of the company's capital. This description of equity is correct but very simplistic. A more in-depth description is actually that used by the homeowner, or the value of the owners in an asset or group of assets.

### **Empirical Review**

Omet and Masharawe, (2002), examined the nature and the determining factor in the choice of the patrimonial structure of the listed non-financial companies in Jordan, Kuwait, Omani and Saudi Arabia from 1996-2001. The results reveal that "companies in these countries have a significantly low leverage rate. The study empirically concludes that the financing decision of the studied companies can be explained by the determinants suggested by the conventional corporate finance models"

Soumadi and Hayajneh (2012) studied "the relationship between capital structure and company performance in Jordanian equity companies" The study used multiple least squares regression models (MCOs) to establish the link between the capital structure and corporate performance of companies over a 5-year period. The results showed that "the capital structure was negatively and statistically associated with the performance of the companies in the sample. Another result of the study was that there was no significant difference in the impact of leverage between high-leverage companies and low-leverage companies in their performance. The study also concluded that the relationship between the capital structure and the company's performance was negative for both high-growth and low-growth companies"

Salawu (2007) conducted an empirical survey on "the analysis of the capital structure of 50 selected non-financial companies listed in Nigeria from 1990-2004" The study examines the main determinants of capital structure. Two different analytical techniques, namely descriptive statistics and inferential statistics (panel data econometrics techniques) in the analysis of secondary data obtained from the annual reports of the selected companies of the Nigerian stock exchange. The

descriptive analyzes used in the evaluation of the selected variable were the mean, the mode, the median, the interval and the standard deviation. In the analysis of the data the grouped ordinary least squares model (POLS), the fixed effects model and the random effects model were used. The empirical result shows that "the debt financing of publicly listed companies in the period in question corresponded mainly to short-term debt. Leverage was negatively correlated with profitability" while size of the firms found to be positively correlated with the total debts giving support to the suggestion that large firms can be better with higher debt ratios than small firms.

Kochhar (1997) examined "the relationship between a company's financial management capacity and its competitive advantage. The study stated in particular that decisions on the structure of corporate capital are important for obtaining profits from their precious and idiosyncratic resource. The study explores the role of financial management in generating superior performance for a company and concludes that, the company's financial policies must conform to its sources of economic income, good financial management gives companies the ability to get present economic income in their strategic activities"

Rojan and Zingales (1995) examined "the determinants of capital structure by analyzing the financial decisions of public companies in the major industrialized countries to determine whether their influence is similar in the G-7 countries. The leverage was calculated in the study for each country after the accounting adjustment and the necessary implementations. The study went further to undertake a comparative study of the transversal determinants of the choice of capital structure in the G-7 countries" Furthermore, the study uses data obtained from the global Vantage database on international companies from 1987-1991. The sample used covered between 30% and 70% of listed companies in each country, representing over 50% of the market capitalization of each country. Therefore, it was observed in the study that, at the aggregate level, leverage is quite similar in all G-7 countries. They also state that the factors identified by previous studies are correlated in the cross section with the leverage effect of the company; one equally related in other countries. The study also states that a closer examination of US and foreign evidence suggests that the theoretical foundations of the correlation observed are still largely unresolved.

Chen (2004) developed a preliminary study to explore "the determinants of the capital structure of publicly traded companies in China using company-level panel data. The study uses data from the annual reports of 88 listed Chinese companies from 1995 to 2000. The variables chosen for the study were general leverage, long-term leverage, profitability, size, growth opportunities, capital structure, cost of financial difficulties and the effects of the tax shield; analyzed using three estimation techniques and precisely; fixed effect method, random effect method and regrouped OLS regression method" The results empirically show that "some of the ideas of the modern financial theory of capital structure are portable for China in such a way that some specific company factors relevant to explaining the capital structure in developed economies are also relevant in China. However, it has been claimed that both the compensation model and the theory of hierarchical order (hypothesis) derived from the Western environment do not provide a substantial explanation to the point of convincing the capital structure of Chinese companies to follow a new order hierarchical: undistributed profits, own capital and long-term debt"

Gleason, Mathur and Mathur (2000) stressed that "culture influences the choice of capital structure if it is used as a moderating variable; the choice of capital structure will affect company performance" The study collected data from 198 retailers in the European community of 14 countries by 1994. The 14 selected European countries were divided into four different groups to show the influence of culture as a control variable. In this study, the variables were analyzed using the MCO method (Ordinary Minimum Square Minimum Regression Stimulation). Once again, four performance measures have been employed, namely; return on assets (ROA), income before sales taxes (PTAX), sales per employee (SL / EMP) and percentage growth in sales (GSALES). Empirically, the results show that the capital structures for retailers in Europe vary according to their cultural group. By adopting financial and operational performance measures, the study also

reveals that the capital structure influences company performance. However, a negative relationship was established between the capital structure and the return, which suggests that the agency's problems could lead to the use of a higher debt level than is appropriate in capital formation, thus reducing the return general.

Bauer (2004) studied "the determinants of capital structure in the Czech Republic's transitional economy to determine if there are differences with the existing theories on capital structure options. The study uses the data collected from the financial reports of the companies listed in Zech in the period 2000-2001. Data were analyzed using the Ordinary Minimum Square Regression (MCO) method. The variables examined were size, return on assets (ROA), tangibility, growth opportunities, tax rate, tax shield without debt and volatility. The leverage measures were the total liabilities index (TL), the total debt index (TD), the total liabilities index (MTL) and the total debt index (MTD) together with the business analysis carried out. Empirical results show lower leverage with Czech companies than G7 countries and companies in most developing countries when measured by the total accounting accountability index. Companies listed on the Czech leverage are positively correlated to size, taxes and negatively to profitability, tangibility and growth opportunities" It has been observed that the negative relationship between financial leverage and profitability makes the study in line with the hypothesis of the hierarchical order with respect to static compensation models.

Almustapha (2014), examined the correlation between capital structure and firm performance during and after the global financial crisis in Malaysian. The study employed a panel data approach with a sample size of 278 non-financial firms. The regression results showed that long-term debt to total asset has a significant negative relationship with firm performance. Akinyomi (2013), carried on a research on the relationship between capital structure in financial performance in Nigeria. Data was gotten from annual reports of the sampled firms covering a period of 2007-2011. The findings revealed an insignificant relationship between long term debts to total assets and financial performance.

## **CONCLUSION**

Therefore, based on the empirical findings stated above from both descriptive/correlation matrix to ascertain the level of relationship between variables under study and the observation made in the regression result, it was absolutely obvious that debt structure statistically has both positive and negative influence on financial performance (profitability) of listed oil and gas firms in Nigeria. This study therefore gives support to the pecking order theory and advised that management to depend more on internally generated fund before resorting to issuing external equity as their source of funding or financing.

## **RECOMMENDATIONS**

In line with the findings of the study, the following recommendations are made:

- i. Though, evidence shows mix relationship between debt structure on financial performance of listed oil and gas firms but however the result does not translate to encourage shareholders. Hence, firms should set a standard for external fund that will be optimal in their structure, which in turns maximize their performance (profitability) capable of reflecting a high positive influence of debt structure on accounting performance. Therefore, management should formulate a suitable means of equity financing rather than external financing, giving credence to the Pecking Order Theory.
- ii. More so, the empirical result shows that, listed oil and gas firms in Nigeria do not use much of long term debt (LTD) in their debts structure. This could be likened to the overall behavioural participation of both public and private sectors in the capital market. To encourage fund providers as well as attractive participation, NSE should strive to formulate policy's in a more flexible manner free from hindering the effective participation of

companies. Economic policies that could aid to further develop the capital market to absorb increase in demand for fund should also be formulated.

- iii. Finally, financial institution, government and individuals who are fund providers to formulate policy's liberal enough to arouse the interest and zeal of users of funds to appropriately participate and government to create or provide a very conducive environment for active participation.

## REFERENCES

- Akinyomi, O.J. (2013). Relationship between capital structure on firm performance: evidence from Nigeria manufacturing industry. *International Journal of Innovation Research and Studies*, 2(9), 1-13.
- Almustapha, M. S. (2014). Capital structure and firm performance during and after the global financial crisis among Malaysian listed companies. Published M.sc Thesis, University Utara Malaysia.
- Baker, M. & Wurgler, J. (2002). Market timing and capital structure. *Journal of Finance*, 57, 1 – 32.
- Bauer, P. (2004), "Determinants of Capital Structure: Empirical Evidence from the Czech Republic", *Czech Journal of Economic and Finance*, 54, 1 -21
- Chakravarthy, B. S. (1986). Measuring strategic performance. *Strategic Management Journal*. 7, 437 – 458.
- Chen J. J. (2004), Determinants of capital structure of Chinese-listed companies. *Journal of Business Research*. 57, 1341 – 1351.
- Graham, J. & Harvey, C. (2001).The theory and practice of corporate finance: Evidence from the field. *Journal of Financial Economics*. 60, 187- 243.
- Gleason K.C., Mathur,L.K. & Mathur, I.(2000). The interrelationship between culture, capital structure and performance: Evidence from Europeans retailers. *Journal of Business Research*. 50, 185 -191.
- Harris, M. & Raviv, A. (1991).The theory of capital structure. *Journal of Finance*. 48, 297 – 356.
- Kochha, R. (1997). Strategic assets, capital structure and firm performance.*Journal of Financial and Strategic Decisions*. 10(3), 1065 -1102
- Krishnan, V. S. & Moyer, R. C. (1997). Performance, capital structure and home country: An analysis of Asian corporations.*Global Finance Journal*, 8(1), 129 -143.
- Kwansa, F. A. & Cho, M. (1995). Bankruptcy cost and capital structure: The significance of indirect cost, *International Journal of Hospitality Management*,14(3/4), 339 -350
- Murphy G. B., Trailer, J.W. & Hill, R.C. (1996). Measuring research performance in entrepreneurship. *Journal of Business Research*. 36, 15 – 23.

- Omet, G. & Mashharawe, F. (2002). The capital structure choice in tax contrasting environment: Evidence from Jordanian, Kuwaiti, Omani and Saudi corporate sectors. *The Economic Research Forum*, 10th Annual Conference, Morocco.
- Pandey, I. M. (2001). Capital structure and the firm characteristics: Evidence from an emerging market. *IIMA Working Paper*, No 2001-10-04, SSRN
- Rajan, R. & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*. 50, 1421 - 1460
- Tian, G. G. & ,Zeitun, R. (2007). Capital structure and corporate performance: Evidence from Jordan. *Australasian Accounting Business & Finance Journal*. 1(4), 40 – 61.