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LEVERAGE AND FINANCIAL PERFORMANCE OF LISTED PHARMACEUTICAL ENTERPRISES IN NIGERIA

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ABSTRACT

This study evaluated the association between leverage and financial performance of listed pharmaceutical companies in Nigeria. Specifically, the study ascertained the association between long-term debt and returns on assets of listed pharmaceutical companies in Nigeria. The study was an ex-post facto design. Data for the study was secondary data obtained from published financial statements of the companies between 2015 and 2020. Data was analysed with the use of multiple regression analysis. Findings of the study revealed that long term debt and return on assets have positive moderate relationship. The study concluded that long-term debt and return on assets have favourable correlation on the studied companies. It was however, recommended that, pharmaceutical companies should obtain some level of long-term obligation since it yields adequate level of returns, among others.

KEYWORDS: *Leverage, Financial, Companies, Performance, Long-Term, Short Term Debt.*

INTRODUCTION

The appropriate capital structure mix boosts financial performance and wealth among shareholders. Corporate bodies, like other entities, are constantly in need of capital to run their businesses. Internally or externally generated money has a variety of consequences on the organization's overall financial success. Shareholders, investors, consumers, workers, suppliers, and future investors are all stakeholders in these commercial organizations (Abor, 2015).

Several variables that lead to company failure may be addressed by strategies and financial decisions that encourage growth and achieve organizational objectives; hence, the importance of financial decisions cannot be overstated (Salawu, 2019).

Lack of finances is the primary source of financial distress (Salawu, 2019).

Poor funding decisions might lead to a company's collapse. For both management and investors, determining whether a proper capital structure exists is a challenging task. All financial decisions are made with the purpose of generating wealth, and the best way to judge the quality of a financing decision is to look at how it impacts the firm's performance (Salawu, 2019).

This paper will aid pharmaceutical companies in Nigeria understand the importance of leverage such long-term debt, short-term debt, etc,. The findings will also help businesses, financial managers, analysts, investors, and others make informed judgments about the capital structure mix that should be employed in their companies. Professors and students will benefit from this research in terms of teaching and learning about capital structure. Once financial managers understand the causes of the firm's capital structure, they may achieve their goal of optimizing financial performance to a considerable extent.

Statement of the Problem

Firms in Nigeria are faced with financing considerations about the best capital structure mix for their businesses, and such considerations are critical to the firm's success.

Investors in Nigeria, on the other hand, rarely evaluate the significance of the capital structure mix and how it influences the firm's performance.

Financial constraints have been a major factor influencing firm success in emerging countries, notably Nigeria. The depth and growth of diverse financial markets are the foundations for defining the optimal capital structure of Nigerian economic sectors. As a result, one element that is universal and significant among businesses around the world is the financial decisions that executives must make. Capital structure has been demonstrated to be a key predictor of a company's performance in a variety of empirical investigations. Wong (2014) found that capital structure is connected to common stock returns and risk in research. Wong (2014), discovered that in construction businesses, the success of a company as evaluated by ROE is inversely related to the long-term debt ratio.

On the contrary, managing capital structure is unquestionably one of the most critical financial choices associated with maximizing corporate value. How does a company choose its best capital structure? Is it better for the management to employ debt rather than equity? If that's the case, how do the bosses figure out what debt level they want to reach? What are the risk factors for investors when businesses rely substantially on debt financing, such as bond, loan, and reserve issuance? Will the debt-to-equity ratio determine a company's growth? Will businesses with a high leverage ratio use more debt than stock to fund their assets? Or would corporations that finance their assets with more stock than debt have more leverage? What is the best combination of several funding sources to achieve the best results? Is the choice of capital structure influenced by company performance? According to Akintoye(2018), the corporate sector is defined by a huge number of enterprises that operate in a very competitive and mostly unregulated environment. Financial liberalization has changed the working environment of Nigerian firms since 1987, providing financial managers more control over their companies' capital structure.

Studies, such as (Thuranira 2014, Campbell, 2012, Tariq, et al 2014) among others, revealed that they used suchvariables as EPS, ROA, and ROE, to quantify financial success, but did not attempt to use proxies like long-term debt, short-term debt, and retained earnings to measure capital structure. None of the research examined tried to cover pharmaceutical enterprises from 2015 to 2020 in order to determine whether there is a substantial capital structure of listed pharmaceutical businesses in Nigeria with favorable relationship of their financial success. The present study's demographic and sample size differ from those of earlier research. Similarly, the scope differs.

Purpose of the study

The purpose of this research was to determine the association between leverage and financial performance of listed pharmaceutical companies in Nigeria. Specifically the study

1. Ascertain the association between long-term debt and returns on assets of listed pharmaceutical companies in Nigeria.

Research Questions

1. What is the association between long-term debt and returns on assets of listed pharmaceutical companies in Nigeria?

Research Hypothesis

Ho_1. There is no association between long-term debt and returns on assets of listed pharmaceutical companies in Nigeria.

Review of Related Literature

Debt Financing

Long-term debt refers to the percentage of assets that are financed with debt that is due in more than a year. This category includes bonds as well as long-term loans. Because lenders are willing to take on the extra risk of lending money for a long time, these bonds and loans normally carry a higher interest rate. On the other hand, long-term debt restricts management options by blocking access to more funds and lowering the risk of over-investment (Hart & Moore, 2015).

In mathematics, the ratio of long-term debt to total assets is known as long-term debt financing. According to Wiley (2013), long-term debt financing is defined as debt with a maturity of more than one year. It happens when a firm sells corporate bonds, trade bills, or notes to private persons and/or institutions in order to obtain finance for working capital or capital expenditures. In return for a debt, individuals or organizations become creditors for an assurance that the loan will be repaid in full, including the principal and interest. Long-term debt refers to the percentage of assets that are financed with debt that is due in more than a year. This category includes bonds as well as long-term loans. Because lenders are willing to take on the extra risk of lending money for a long time, these bonds and loans normally carry a higher interest rate. On the other hand, long time debt restricts management options by blocking access to more funds and lowering the risk of over-investment (Hart & Moore, 2015).

Short Term Debt Financing

Any debt due within a year is classified as short-term debt, and it is included in a company's current liabilities financial statement, according to Olaniyi, Elulu, and Adams, (2014). Short-term bank loans, as well as other kinds of debt, are frequently included in a business's liabilities statement. Accounts receivable and inventory are two forms of short-term debt. Non-current liabilities, such as long-term debt or loans, are used to finance long-term assets such as land purchases and building or ship construction (Jensen, 2016). This is calculated by dividing total assets by current debts.

Financial Performance

Financial performance is defined as a measure of a company's ability to generate income by utilizing its available resources. It serves as a roadmap for future corporate choices, asset purchases, and management oversight (Tehrani & Rahnama, 2006). It indicates what the management has accomplished financially over time and may be used to compare similarly situated firms within the same sector. Financial performance, according to Olokoyo (2012), provides an outlet for objective monetary appraisal of corporate operations. It quantifies how much better off a shareholder is at the end of an accounting period than at the start, and it may be determined using financial ratios derived from financial statements or market share price data. Because the major objective of the business is to maximize shareholder value, performance evaluation assists in identifying how much money a shareholder gains over time as a consequence of investment choices (Berger & Patti, 2020). Revenues, costs, net income levels, earnings before interest and tax (EBIT), return on asset, and return on equity are just a few of the absolute and relative measures used to assess financial success. However, ROE and ROA are two of the most commonly utilized accounting-based performance measurements (Rajan & Zingales, 2015). ROE is calculated by dividing Net Profit after Taxes by Total Equity Capital to get the return on the shareholders' capital. It also depicts a company's profitability as a percentage of the total amount of money invested by its owners. The return on all assets of a corporation, on the other hand, is commonly utilized by businesses as an overall economic performance indicator. Net Income after Taxes is computed by multiplying Net Income by Total Assets (Khrawish, 2011). As a result, ROA will be used to assess listed firms' financial performance.

Return on Assets (ROA)

The return on assets (ROA) is a metric that assesses management's overall success in creating profits from its available assets. The higher the return on investment (ROI) of the company, the better. It also compares earnings to a company's whole revenue-generating assets. It shows how much profit a firm earns in comparison to its total assets; a greater ROA indicates that the company is profitable, while a lower ROA indicates that it is not.

The simplest method for calculating ROA, according to Gitman and Zutter (2012), Ehrhardt & Brigham (2011), and Ross et al., is to divide net income by total assets during a period (2011). On the other side, Lew (2012), Glantz (2003), Ross et al. (2003), Friedlob and Schleifer (2003) use EBIT and divide it by total assets to get a gross ROA (2003). This is a non-affected measure of a company's asset return efficiency. This study employed objective financial performance criteria adjusted for interest and taxes to evaluate management's performance objectively.

Theoretical Review

Trade off Theory

The trade-off hypothesis was invented by Modigliani and Miller in 1958. It asserts that the optimal debt-to-equity ratio is reached when the tax benefits of debt are outweighed by the costs of current market imperfection. The appropriate debt ratio for a company is typically thought to be defined by a trade-off between borrowing costs and advantages. Companies compare debt-related tax advantages against the expenses of bankruptcy. The theory's main conclusions are that leverage demonstrates goal modifications, which eventually eliminates deviations from the aim (Myers, 2014). Myers (1984) proposed the Static Trade-off Theory, which claims that capital structure matters. According to this hypothesis, businesses have a perfect capital structure and are on their way to achieving their goal. It also states that when debt is employed in capital structure, corporations face tax advantages as well as bankruptcy costs, demanding a trade-off between the two.

EMPIRICAL REVIEW

Khan (2013), The link between leverage and pharmaceutical business valuation in India was studied by academics between 2000 and 2012. The statistical approach applied was panel regression. There is a positive and significant correlation between financial leverage and firm performance. The link between leverage and pharmaceutical business valuation in India was studied by academics between 2000 and 2012. The statistical approach applied was panel regression. There is a positive and significant correlation between financial leverage and firm performance.

Margaritis and Psillaki (2010),Researchers studied the relationship between leverage and firm performance between 1998 and 2009. It was decided to use panel data. The analysis discovered a strong association between leverage and company performance with unfavorable outcomes.

Mwangi et al (2014), the effect of capital structure on the performance of non-financial firms listed on the Nigerian Securities Exchange was studied. The researchers arrived at this conclusion using panel data and Feasible Generalized Least Squares regression analysis. According to the study, financial leverage has a statistically significant negative association with performance as measured by return on assets (ROA) and return on equity (ROE).

Raluca (2014), the capital structure and corporate performance of Romanian publicly listed enterprises were studied using multiple regression techniques from 2010 to the present. The statistics reveal that capital structure has a significant influence on company performance as measured by ROA, ROE, RCA, and MBR.

Ahmed (2020), Researchers examined the relationship between capital structure and firm performance between 2003 and 2009. Pooled Ordinary Least Square (POLS) was the regression technique used. Financial leverage, as defined by short-term debt to total assets and total debt to total assets, has a negative correlation with corporate performance in Pakistan, ROA, GM, and Tobin's Q all contribute to this assessment. Return on equity (ROE) has a negligible but detrimental link with financial leverage (ROE). While asset size has no effect on firm performance as measured by ROA and GM, it has a negative and significant impact on Tobin's Q Mixed Results, according to the research. , This judgment is influenced by ROA, GM, and Tobin's Q. Return on equity (ROE) shows a minuscule but negative correlation with financial leverage (ROE).

Ovtchinnikov (2010), The study's objective was to ascertain the effect of capital structure on the financial performance of Nigerian manufacturing firms. Ex post facto descriptive statistics and regression method were employed as statistical instruments and methods. According to the study, capital structure has an effect on performance measures that is both statistically significant and non-significant.

METHODOLOGY

A retrospective research was done to determine the relationship between the predictor (capital structure) and the criterion (financial performance) of listed pharmaceutical companies in Nigeria. This method was adopted since it involves previous financial accounts, publications, and records. As a consequence of this, the researcher can better understand and explain the link between the capital structure and financial performance of listed pharmaceutical businesses in Nigeria. The study's target population was all NSE-listed pharmaceutical companies, while the study's accessible population is five (5) listed pharmaceutical companies in Nigeria. The research included the years 2015 through 2020. They are in the table below

Selected listed pharmaceutical firms

1. Glaxo Smithkline Plc
2. Morison Industries Plc
3. May and Baker Nigeria Plc
4. Niemeth International Pharmaceutical Plc
5. Eko Corp Plc.

The research gathered data from secondary sources. The Nigerian Stock Exchange's (NSE) group fact book was compiled using data from the annual reports of five (5) pharmaceutical businesses.

We used multiple linear regression to assess the association between capital structure and financial performance of pharmaceutical enterprises listed on the Nigerian Stock Exchange (NSE) from 2015 to 2020. (SPSS). As a result of the research, a functional connection was created for the variables the independent variable capital structure, indices such as Long-term debt (LTD), Short-term debt (STD), and Retained profits (RE). These matrices are used to calculate returns on assets (ROA) and earnings per share (EPS) (EPS).

Model Returns on Equity (ROA) model

ROA =f (LTD, STD,RE)……..3.1

This can be written in ordinary least square (OLS) form as

$ROA_1\ a_o+a_1LTD_1+a_2STD_1+a_3RE_1+U_1$…….3.2

$.a_1>0a_2>0a_3$

Where ROA = Returns on Asset, as proxy for financial performance

LTD = Long-term debt, as a proxy capital structure

Decision Rule

Accept H_o if the p-value of the independent variable is greater than 0.05

If the independent variable has a p-value less than 0.05, reject Ho.

If the independent variable's p-value is less than 0.05, it indicates that the variable has a significant effect on the dependent variable's fluctuations and vice versa.

DATA PRESENTATION, ANALYSIS, RESULTS AND DISCUSSION

Descriptive Statistics

The Describing statistics includes mean and standard deviation. These descriptive data cover five (5) listed pharmaceutical companies from 2015 through 2020.

TABLE 4.1 DESCRIPTIVE STATISTICS LEVERAGE AND FINANCIAL PERFORMANCE OF LISTED PHARMACEUTICAL ENTERPRISES IN NIGERIA OF INDEPENDENT AND DEPENDENT VARIABLES

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
LTD	30	0	9	170	3.68	1.640	2.688	5.166	.833
RTE	30	.00	8.51	168.20	2.6067	1.76557	3.117	5.751	.833
ROA	30	.00	5.77	25.10	2.8367	1.50839	2.275	4.990	.833
Valid N (listwis)	30								

Source NSE and SPSS output (21)

Table 4 contains the descriptive statistics for all of the study's variables. 1. Long-term debt was on average 3.68 and standard deviation was 1.640; return on asset was on average 2.8367 and standard deviation was 2.50839; the study's mean value exceeded 2.5. As a consequence, the researcher established that the variables were prevalent.

TABLE 4.3 CORRELATION TABLE ON THE STRENGTH OF RELATIONSHIP BETWEEN LONG-TERM DEBT AND RETURN ON ASSET

Correlations

		LTD	ROA
LTD	Pearson Correlation	1	.48
	Sig. (2-tailed)		.034
	N	30	30
ROA	Pearson Correlation	.48	1
	Sig. (2-tailed)	.034	
	N	30	30

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

Source SPSS output (21)

Table 4.3 shows the link between long-term debt and return on assets. That's 0.034 0.05, having a 0.48** correlation coefficient. It shows a modest relationship between long-term debt and return on assets for the five (5) listed pharmaceutical businesses in Nigeria (table 4.3). A rise in long-term debt is connected to an increase in return on asset among Nigeria's five (5) publicly listed pharmaceutical businesses. As a consequence, the researcher concludes that long-term debt and return on asset are modestly related in Nigeria's five listed pharmaceutical firms.

Test of Hypothesis 1

$H0_1$ There is no relationship between long-term debt and return on asset of five (5) listed Pharmaceutical firms in Nigeria.

According to Table 4.3, the probability/significant value is 0.034, with a 0.05 level of significance, indicating that the researcher rejects the null hypothesis and concludes that there is a moderately positive association between long-term debt and return on asset.

Summary of Findings

The following are the major findings of this study

The analysis was conducted using SPSS version 21 and Microsoft Excel. Descriptive statistics such as mean and standard deviation were used to analyze the relationship between leverage and financial performance. Long-term debt had a mean of 3.68 and a standard deviation of 1.640, while return on asset had a mean of 2.8367 and a standard deviation of 1.52578. As seen in Table 4.2, there is a positive moderate relationship between long-term debt and return on asset, with r = 0.48** being significant at pv = 0.000.05. Additionally, as shown in Table 4.2, long-term debt has a statistical effect on asset return.

Discussion of Findings

The extent and direction of the relationship between the predictor variables and Financial performance measures (long-term debt, short-term debt, and retained earnings) and capital structure effects on financial performance and measurements (return on asset, and earnings per share) were determined using secondary data obtained from the Nigeria stock exchange fact book, as well as the effect of capital structure on financial performance and measurements, as well as its predictive factors. As a consequence, it is necessary to evaluate the findings and make connections to the literature discussed in Chapter 2

According to the H_{01} test, there is a somewhat favorable correlation between long-term debt and return on investment asset, as shown in table 4.2, with r = 0.48** significant at pv = 0.000.05. Table 4.2 also revealed that long-term debt has a statistical impact on asset return. This research is similar to that of Dada& Ghazali (2016), who looked at the link between major business profitability and debt in Nigeria. The company's performance was measured using ROA and ROE, with short and long-term debt serving as independent variables in the research.

Conclusions

The investigation indicated that the regression model was credible and had a decent fit based on the ANOVA results. According to the findings of the research, long-term debt and return on assets have positive impact on the five (5) listed pharmaceutical companies studied. The positive

correlation between the predictor and dependent variables denotes this. The research study also concluded that a firm's long-term debt level has a positive impact on financial performance, implying that as a firm takes long-term loans to acquire fixed assets that will be used to increase the firm's liquidity level in meeting its short- and long-term debt obligations, the more profitable it becomes.

Recommendations

The following recommendations were made;

- Pharmaceutical companies should obtain moderate level of long-term obligation since it yields adequate level of returns
- Pharmaceutical companies should use long-term debt over short-term debt in financing their operations and asset acquisition to boost the profitability of the companies since long-term debt yields more earnings.
- Pharmaceutical companies should not rely solely on retained earnings in financing their operations but, rather combine it with other capital structure mix ensure to high rate of returns.

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