

## Effect of Financial Leverage on Corporate Performance of Pharmaceutical Industries in Nigeria

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### Abstract

*The study sought to examine the effect of financial leverage on firm performance in pharmaceutical industries and also determine the relationship and effects among the identified variable using firm performance as dependent variable while forms debt ratio, total debt to total asset, debt to asset ratio, long term debt ratio, liquidity as independent variables. Five research questions and five hypotheses were developed for the study. Ex-post factor research design was considered appropriate for the study together with the study of six years' annual financial report of the listed pharmaceutical companies (2018-2023). Pearson moment correlation was adopted for data analysis, and the analysis revealed that Debt ratio has significant effect on performance of pharmaceutical firms in Nigeria, the result of the analysis also include that Total debt to total asset has significant effect on performance of pharmaceutical firms in Nigeria, among other. Based on the findings, it was recommended that Debt ratio should be increased steadily to sustain firm's value and investment in the organization because an increase in debt ratio is directly proportional to the robust performance of pharmaceutical firms in Nigeria. Among the findings are; Firms should be familiar with the timing of total debt to total asset to run with the number of times that is better and favourable to total debt to total asset to investors, Financial leverage pattern that is not properly checked will invariably hamper the performance of a firm, Debt to asset ratio increases the probability of a dividend cut rather than adjusting payouts the concept of leverage is used by both investors and companies. Among others.*

**Keywords; Financial leverage, Financial performance, Debt/Equity, Liquidity, Total assets.**

### Introduction

Advancement in financial markets in which capital can be generated have further complicated the task of generating funds for the executive bodies where the end goal is to optimize performance of the business. Owolabi and Inyang( 2013) maintained that the ideal position can be ascertained by analysing the trade-off amongst the cost of bankruptcy and the tax advantage that firms save through charging of interest expenses. In corporate finance, future growth opportunities and financing policy is a central issue. Therefore, financial leverage is the use of borrowed money (debt) to finance the purchase of assets with the expectation that the income or capital gain from the new asset will exceed the cost of borrowing.

Financial leverage entails companies' borrowing money to support their operational activities. Debt financing offers numerous benefits for corporate operations, such as a stable interest rate, enhanced financial maneuverability, and tax deductions (Santos et al., 2023). The appropriate level of debt a company employs to establish an optimal capital structure significantly impacts its financial performance (Akhtar et al., 2021). Also, the traditional capital structure encourages firms to use debt in their capital structure to a specific limit because the use of debt leads to better business performance. Additionally, using debt exposes a company to significant risk because failure to make debt payments results in the transfer of ownership from shareholders to bondholders or creditors (Sahminan, 2021). Thus, it has become important to study the impact of debt on the financial performance of firms to enable various stakeholders to understand how debt impacts financial performance. Financial leverage is very important external financing modes. It shows that a business needs finance to purchase new asset, enhance their production or operational activities, financial leverage is one of the best way for

organization to achieve its goal, with the help of financial leverage a company can not only achieve its goals but also maximize the value of its shareholders.

In perfect capital markets we can easily see impact of capital structure on profit value of a firm, and then can see presence of taxes and bankruptcy costs. Financial managers and researchers face the problem of association among a firm's assets configuration and its equity worth. Consequently, we may say that existent finance literature supports the idea that the benefits of firms are based on choice of capital structure Modigliani and Miller 1958, Myers and Majluf 1984).

The existence of a firm is to make profit and enhance growth and expansion, for pharmaceutical firms to invest in the best pharmaceutical drugs and medicines, they are faced with how to fund their business externally. Nigeria only imports finished pharmaceutical dosage forms as suspensions, syrups, tablets, creams, ointments. Suppositories, powders, capsules, all of which were imported by either multinational drug companies or government. Data for analysis were collated from the Annual Reports of the selected pharmaceutical firms listed in the Nigerian Stock Exchange which include; Glaxo Smithk line consumer, May and Baker Nigeria Pic, Neimeith international Pic, and Wisdom health care Pic, Alpha pharmacy, Med Plus pharmacy, Pax Pharmacy, Wisdom Pharmacy. God's Care Pharmacy, and Zion Noel Pharmacy. Their financial statements were used to analyze the effects of financial leverage on their performance by establishing a relationship between the level of debt and their performance for the period 2015-2020. Using the following variables, debt to assets ratio, total debt to total asset, long term debt ratio, Debt Ratio and liquidity, and Pearson moment method was applied for analysis of the data. The paper examines the effect of financial leverage on firm's financial performance with particular reference to quoted pharmaceutical firms in Nigeria.

*Statement of the Problem* An important financing decision that firms must take is to decide the proportion of debt and equity that will constitute their financial structure. It is usually a difficult task for managers to ensure that business organisations operate on the optimal mix of equity and debt. Any combination of common stock, preferred stock and debt used in financing the assets of a firm creates some level of financial risk. In other words, financial risk is directly related to the firm's capital and financial structure/leverage (Pandey 2010). There is an ever increasing and growing variance in performance of pharmaceutical with relation to financing of their operations. The study seeks to find how pharmacy are able to minimize risk and still remain optimally financed. The financial performance of companies is a subject that has attracted a lot of attention, comment and interests from both financial experts, researchers, the general public and the management of corporate entities. Yet, selecting out the most successful firms has always proved to be a difficult task to many as a firm may have a high level of profitability, but at the same time be in a very bad situation regarding its liquidity and efficiency (Omoni & Muturi, 2013). Financial management in public companies aims to maximize the company market value or to maximize stock value in the market. Achievement of this goal depends on a number of variables that vary in its impact on company's value from one variable to another and from one market to another and from one sector to another.

*Objective of the study:* The objectives of this study are to (a) ascertain the effect of debt ratio (debt /equity) on performance of pharmaceutical firms in Nigeria (b) find out the effect of total debt to total asset (debt / asset) on performance of pharmaceutical firms in Nigeria (c) determine the effect of debt to asset ratio (total property / total asset) on performance of pharmaceutical firms in Nigeria (d) examine the effect of long term debt ratio (long term debt / total property) on performance of pharmaceutical firms in Nigeria (e) find out the effect of liquidity on performance of pharmaceutical firms in Nigeria

*Research Questions* (a) What is the effect of debt ratio (debt /equity) on performance of pharmaceutical firms in Nigeria? (b) What is the extent of effect of total debt to total asset on performance of pharmaceutical firms in Nigeria? (c) What is the extent of effect of debt to asset ratio on performance of pharmaceutical firms in Nigeria? (d) What effect does long term debt ratio have on performance of pharmaceutical firms in Nigeria? (e) What effect does liquidity have on performance of pharmaceutical firms in Nigeria?

*Research Hypotheses:* (a) Ho1: Debt ratio has no significant effect on performance of pharmaceutical firms in Nigeria (b) Ho2: Total debt to total asset has no significant effect on performance of pharmaceutical firms in Nigeria. (c) Ho3: Debt to asset ratio has no significant effect on performance of pharmaceutical firms in Nigeria. (d) Ho4: Long term debt ratio has no significant effect on performance of pharmaceutical firms in Nigeria. (e) Ho5: Liquidity has no significant effect on performance of pharmaceutical firms in Nigeria.

## Literature Review

*Financial Leverage:* Leverage in the financial markets occurs when a borrower uses borrowed funds to purchase an asset, expecting a larger return than the cost of the loan itself (Adenugba et al., 2016). Therefore, financial leverage is an investment strategy that promotes business expansion and growth. Financial leverage is borrowing debt to expand one's asset base. Leverage is a way to get a higher rate of return on money that has been invested (Demiraj et al., 2023). There is a higher chance of failure if too much financial leverage is used, as servicing the loan becomes more challenging. The financial leverage formula is a valuable indicator of a company's borrowing capacity as a ratio of total debt to total assets. The debt-to-assets ratio is a standard indicator of financial leverage. Financial leverage is beneficial when interest payments are less than the profits from the debt's utilization (Nissim & Penman, 2003). Instead of selling new shares of stock to raise money, many companies use financial leverage, which can lower the value of each current shareholder's stake (Ghosh & Jain, 2000). Debt financing makes the most sense when stable cash flow is expected. This makes it much easier to budget for debt repayment. Cash flow stability is typical in markets with few competitors, considerable entry barriers, and few game-changing product innovations.

There are two main benefits to using financial leverage. It can improve a company's profit margin (Js Ramalho & da Silva, 2009). Second, interest is tax deductible in many tax systems, lowering the borrower's debt cost (Cole, 2017). However, financial leverage also carries the risk of disproportionate losses, as the resulting interest expense can be prohibitive if the borrower cannot generate adequate returns to cover it. This becomes a severe issue when interest rates increase, or asset returns fall. A similar dilemma faces an investor considering taking on debt to boost his or her purchase of assets. An investor could lose all of their money if the security's market price drops and the lender demands repayment of the lent funds.

*Total debt to total asset* According to Adam (2021), it is defined as a leverage ratio that defines the total amount of debt relative to assets owned by a company. . This will determine whether additional loans will be extended to the firm. Although, Khan (2012) and Amjed (2011) argue that the different types of debts instruments (such as short term debts, long term debt, or both of them) have different rate of returns investors will ask for, different risk element and by implication exert different impact on corporate performance, some researchers including Abor (2007) and Michael as, Chittenden and Putziouris (1999) caution that determining a single optimal leverage level and trying to establish a relationship between the debt level and corporate performance is likely to result in spurious conclusions. Sheikh and Wang (2011), examined non-financial firms listed on the Karachi Stock Exchange (KSE) in Pakistan and documented a negative relationship between total debt ratio and firm performance. In a different study performed by Boroujeni et al (2013), both long term and total debt ratios were found to be positively correlated with firm performance. Makanga (2015) found a weak negative correlation between total debts and return on assets (performance). Based on the review above, we propose the following hypothesis: HO3: There is no significant relationship between Total debts to asset ratio and corporate performance.

Debt ratio: by Jason Fernando it was updated February 19, 2022 reviewed by Julius Mansa is defined as used to evaluate a company's financial leverage and is calculated by dividing a company's total liabilities by its shareholder equity. Debt to asset ratio: by indeed editorial team February 23, 2021. A company's debt to asset ratio measures its assets financed by liabilities (debts) rather than its equity. By Richard best Debt to asset ratio is a measure of a company's financial risk. Investors and lenders look to the debt to asset ratio to assess a company's risk of becoming insolvent. Definition of Debt to

Assets Ratio according to Cashmere (2015), is a debt ratio used to measure the ratio between total debt and total assets. In other words, how much influence the company's assets have on asset management? Debt to Assets Ratio (DAR), according to Fahmi (2011), a ratio that looks at the company's debt ratio, which is obtained from the ratio of total debt divided by total assets.

Long term debt ratio: by Alicia Tuovila updated October 30, 2020 reviewed by khadjiakhartit is defined as a debt that matures in more than one year and is often treated differently from short term debt ratio. It includes bonds and long-term loans. Generally, these bonds and loans carry a higher interest rate, as lenders demand a higher return in exchange for taking on the greater risk of loaning money over a long period of time. In reality, long-term debt limits managerial discretion by making access to new funds and over-investment less likely (Hart & Moore, 1995). A study by Hernandez-Canovas and Koeter-Kant (2008) suggests that the most significant variables in determining a firm's performance are the long-term debts. Empirical evidences such as Onoja and Ovayio/a. (2015), Yan (2013); and Zeitun and Tian (2007) find clear evidence of a positive relationship between long-term debt and firms' performance variants of return on assets (ROA) and return on equity (ROE). On the other hand, Onaolapo & Kajola (2010) found negative relationship between long-term debt and profitability, while Makanga (2015) reported a negative correlation between long-term debt and firm performance proxied by return on assets.

Liquidity: refer to the efficiency or ease with which an asset or security can be converted into ready cash without affecting its market price. Liquidity is a way which is used by the bank or banking sector to transform assets into the shape of cash to made payment in cash (Diamond and Rajan, 2005). Jagongo and Makori (2013) opined that, this is a responsibility of all banks to encounter their fiscal duties, banks convert their current assets into the shape of cash to pay the due obligations. The banks having less amount in current assets will face difficulties in ongoing its processes and if the amount of currents assets is too high, this displays that the return on investment for the bank is not in the unspoiled state

*Empirical Review* Abdul and Badmus (2017), examined the relationship between leverage and firm performance of some selected chemical and paint firms quoted on the Nigeria Stock Exchange using ordinary least square method, during the period 2000-2009, considered Debt ratio as proxies. The result revealed that firms that are financed with more equity performs better than that of levered firms.. Ciweji and Karanja (2014) investigated the effect of financial leverage on firm performance of deposit taking savings and credit co-operative in Kenya. The study utilized secondary data sourced from financial statements of 40 savings and credit cooperative societies (SCCOS) sampled for the study from 2000 to 2012. Descriptive and analytical designs were both adopted. The result shows perfect positive correlation between financial leverage surrogated by debt-equity ratio with ROE and profit after tax at 99% confidence interval, and a weak positive correlation between debt-equity ratio with ROA and income growth.

Thaddeus and Chigbu (2012) examined the effect of financial leverage on bank performance using 6 banks from Nigeria. The study utilized secondary data from Nigerian Stock Exchange fact book and the financial statements of the sampled banks. Debt-equity and coverage ratios were taken as proxies for financial leverage and these constitute the independent variables, while earning per share (EPS) representing performance is the dependent variable. Multiple regression technique was used to establish whether relationship exist between financial leverage and performance of sampled banks. The findings show mixed results. While some banks report positive relationship between leverage and performance, others revealed negative relationship ietween leverage and performance.

Hasanzadeh et al. (2013) investigated the effects of financial leverage on future stock \alue at stock exchange. The research statistical population consist of those listed in Tehran stock exchange from 2005 to 2008. Taking financial leverage and market book \Jtie ratio as variable to analyze data and test hypothesis of the present research, descriptive and inferential analyzing methods. They concluded that leverage does not affect future stock value of the firm. The results indicate non-response of capital market against levered nature of the firm. Lack of relationship between leverage and firm value approves Net Operational Income (NOI) theory and Miller and Modigliani (MM) theory.

Akinmulegun (2012) evaluated of financial leverage on selected indicators of corporate performance [Earnings per Share (EPS), Net Assets per Share (NAPS)] in Nigeria using the Vector Auto-Regression (VAR) technique. Findings indicated that leverage shocks exert significantly on corporate performance. Also, the measures of corporate performance (EPS, NAPS) depends more on feedback shock and less on leverage shock but the leverage shocks on EPS indirectly affect NAPS of firms as the bulk of the shock on NAPS was received from EPS of the firms. Shah (2013) employed a sample of 35 listed companies from Food Producer sector of KSE. The research was conducted to find out the Relationship between financial leverage and financial performance.

Rehman (2013) investigated the relationship between financial leverage and financial performance in listed sugar companies of Pakistan. The results show positive relationship of debt equity ratio with return on asset and sales growth, and negative relationship of debt equity ratio with earning per share, net profit margin and return on equity. This negative relationship between debt equity ratio and Earnings PerShare (EPS) support the fact that as debt increases, the interest payment will also rise, so EPS will decrease.

### Methodology

Expo facto research design was considered appropriately for this study to determine the effect of financial leverage on performance of pharmaceutical companies in Nigeria.

*Presentation and Test of Hypothesis* The hypothesis of this study were tested using Pearson moment correlation. For the purpose of this analysis, the variables data under the study of a pharmaceutical company for the year 2018-2023 were used.

Table 1: RESULT OF DATA ANALYSIS

Year	Debt ratio	Total debt to total asset	Debt to asset ratio	Long term debt ratio	Liquidity
2018	22	24	2	18	11
2019	12	24	4	17	13
2020	22	26	4	17	13
2021	16	20	6	16	15
2022	21	28	4	15	14
2023	16	17	2	17	14

Source: Field survey 2024 (Annual report)

### Result of Data Analysis

Using a co-efficient of correlation as a test technique formula

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

Where:

r = correlation

n = no of years under study

$\Sigma$	=	summation
X	=	independent variable
Y	=	firm performance

Decision Rule: Reject null hypothesis and accept alternative hypothesis if P-value is higher than the computed value, but if otherwise, accept null hypothesis and reject alternative hypothesis.

#### Hypothesis 1

Ho: Debt ratio has no significant effect on performance of pharmaceutical firms in Nigeria.

Table 2: WHAT IS THE EFFECT OF DEBT RATIO (DEBT /EQUITY) ON PERFORMANCE OF PHARMACEUTICAL FIRMS IN NIGERIA?

X	Y	*y	X <sup>2</sup>	y <sup>2</sup>
.22	16	352	0.0484	256
.12	14	168	0.0144	196
.22	20	44	0.0484	400
.16	16	256	0.026	256
.21	30	630	0.0441	900
.16	21	336	0.026	441
109	117	1786	0.2073	2449

Source: Field survey 2024

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \times \sqrt{n\sum y^2 - (\sum y)^2}}$$

$$r = \frac{6(1786) - (109)(117)}{\sqrt{6(0.2073) - (109)^2} \times \sqrt{6(2449) - (117)^2}}$$

$$r = \frac{10716 - 12753}{\sqrt{1.2438 - 11881} \times \sqrt{14694 - 13689}}$$

$$r = \frac{3015}{-3455, 308}$$

$$r = 0.872570549$$

Calculating for P value

$$t = \frac{r}{\frac{\sqrt{1-r^2}}{n-2}}$$

Where:

- t = p value  
 r = correlation  
 1 = constant  
 2 = constant  
 n = no of response under study

$$r = \frac{0.872570549}{\sqrt{1-0.761379363}}$$

$$= \frac{0.872570549}{\sqrt{0.238620637}}$$

$$= \frac{0.872570549}{0.4884875159}$$

$$= 1.786244056$$

$$P\text{- value} = 3.572535452$$

Discussion of findings: P- value (3.572535452) is higher than the computed or calculated value (0.05), as such we reject null hypothesis (Hoi) and accept alternative hypothesis (Hai). This implies that Debt ratio has significant effect on performance of pharmaceutical firms in Nigeria.

Hypothesis 2

Ho2: Total debt to total asset has no significant effect on performance of pharmaceutical firms in Nigeria.

Table 3: WHAT IS THE EFFECT OF TOTAL DEBT TO TOTAL ASSET ON PERFORMANCE OF PHARMACEUTICAL FIRMS IN NIGERIA?

X	Y	Xy	X2	Y2
.16	15	240	0.0256	225
.16	13	208	0.0256	169
.16	19	304	0.0256	361

.20	15	300	0.0400	225
.28	29~t	840	0.0840	841
.17	20	340	0.0289	400
113	111	223	0.43706	2221

Source; Field survey 2024 (Annual report)

Using the formula above:

$$r = \frac{6(223)-(113)(111)}{\sqrt{6(0.43706) - (113) \times 6(2221) - (111)}}$$

$$r = \frac{6624 - 12543}{\sqrt{2.62236 - 12769 \times 13362 - 12321}}$$

$$r = 4.45379$$

Calculating for P value

$$\frac{\sqrt{1 - r^2}}{n-2}$$

Where:

- 1 = p value
- R = correlation
- 1 = constant
- 2 = constant
- n = no of response under study

$$r = \frac{4.45379}{\sqrt{1 - 4.45379^2}}$$

$$= \frac{4.45379}{\sqrt{3.45379}}$$

$$= \frac{4.45379}{1.85839}$$

$$= 2.40000$$

Discussion of findings: P- value (4.79304) is higher than the computed or calculated value (0.05), as such we reject null hypothesis (Ho2) and accept alternative hypothesis (Ha2). This implies that total debt to total asset has significant effect on performance of pharmaceutical firms in Nigeria.

Hypothesis 3

Ho3: Debt to asset ratio has no significant effect on performance of pharmaceutical firms in Nigeria

Table 4: WHAT IS THE EXTENT OF EFFECT OF DEBT TO ASSET RATIO ON PERFORMANCE OF PHARMACEUTICAL FIRMS IN NIGERIA?

X	Y	Xy	X <sup>2</sup>	Y <sup>2</sup>
.16	15	240	0.0256	225
.16	13	208	0.0256	169
.16	19	304	0.0256	361
.20	15	300	0.0400	225
.28	29~t	840	0.0840	841
.17	20	340	0.0289	400
113	111	223	0.43706	2221

Source: Field survey 2024 (Annual report)

Using the formula above:

$$r = \frac{6(223) - (113)(111)}{\sqrt{6(0.43706) - (113) \times 6(2221) - (111)}}$$

$$r = \frac{6624 - 12543}{\sqrt{2.62236 - 12769 \times 13362 - 12321}}$$

$$r = 4.45379$$

Calculating for P value

$$\frac{\sqrt{1 - r^2}}{n-2}$$

Where:

- 1 = p value
- R = correlation
- 1 = constant
- 2 = constant
- n = no of response under study

$$\frac{4.45379}{\quad}$$

$$r = \frac{\sqrt{1 - 4.45379}}{6 - 2}$$

$$\frac{4.45379}{\sqrt{3.45379}}$$

$$= 4.79304$$

Discussion of findings: P-value (4.79304) is higher than the computed or calculated value (0.05), as such we reject null hypothesis ( $H_0$ ) and accept alternative hypothesis ( $H_a$ ). This implies that debt to asset ratio has significant effect on performance of pharmaceutical firms in Nigeria.

Hypothesis 4.

$H_0$ : Long term debt ratio has no significant effect on performance of pharmaceutical firms in Nigeria.

Table 5: What effect does long term debt ratio have on performance of pharmaceutical firms in Nigeria?

X	Y	Xy	X <sup>2</sup>	Y <sup>2</sup>
18.0	10	180	324	100
17.0	15	255	289	255
17.0	23	391	289	529
16.0	52	832	256	2704
15.0	37	555	225	1369
17.0	41	697	289	1681
100	178	2910	1672	1608

Source: Field survey 2024 (Annual Report)

Using the formula above:

$$r = \frac{6(2910) - (100)(178)}{\sqrt{6(1672) - (100) \times 6(6608) - (178)}}$$

$$r = \frac{10032 - 17800}{\sqrt{1.2438 - 11881 \times 14694 - 13689}}$$

$$r = \frac{7770}{254848} = 0.03048877$$

Calculating for P value

$$t = \frac{r}{\frac{\sqrt{1-r^2}}{n-2}}$$

Where:

- t = p value
- r = correlation
- 1 = constant
- 2 = constant
- n = no of response under study

$$r = \frac{0.0304887}{\sqrt{1-0.000929565}}$$

$$= \frac{0.0304887}{\sqrt{0.999070435}}$$

$$= \frac{0.0304887}{1.099814087}$$

$$P\text{-value} = 0.0152865$$

P-value = 0.0152865

Discussion of findings: The computed or calculated value (0.05) is higher than the p- value (0.0152865), as such we accept null hypothesis (Ho4) and reject alternative hypothesis (Ha4). This implies that long term debt ratio has no significant effect on performance of pharmaceutical firms in Nigeria

Hypothesis 5.

Ho5: Liquidity has no significant effect on performance of pharmaceutical firms in Nigeria.

Table 6: What effect does liquidity have on performance of pharmaceutical firms in Nigeria?

X	Y	Xy	X <sup>2</sup>	Y <sup>2</sup>
.11	9	99	0.0121	81
.13	15	195	0.0169	225
.13	23	299	0.0169	529
.15	25	375	0.0225	625
.14	20	280	0.0196	400
.14	31	434	0.0196	961
j 0.80	123	1682	0.1076	2821

Source: Field survey 2024 (Annual Report)

Using the formula above:

$$r = \frac{6(1682) - (0.80)(123)}{\sqrt{6(0.1076) - (0.80) \times 6(2821) - (123)}}$$

$$r = \frac{10092 - 98.4}{\sqrt{1.6456 - 064 \times 16926 - 15129}}$$

$$r = \frac{9993.6}{10.0632} = 993.0837109$$

Calculating for P value

$$t = \frac{r}{\sqrt{\frac{1-r^2}{n-2}}}$$

Where:

- t = p value
- r = correlation
- 1 = constant
- 2 = constant
- n = no of response under study

$$r = \frac{993.0837109}{\sqrt{1-986215.2569}}$$

6-2

$$= \frac{993.0837109}{\sqrt[4]{-986214.2569}}$$

$$= \frac{993.0837109}{\sqrt[4]{-246553.5642}}$$

$$\frac{993.0837109}{-496.5416037}$$

P-value = -2.000001014

Discussion of findings: The computed or calculated value (0.05) is higher than the p-value (-2.000001014), as such we accept null hypothesis (Ho5) and reject alternative hypothesis (Ha5). This implies that Liquidity has no significant effect on performance of pharmaceutical firms in Nigeria

### Conclusion

The study sought to assess the effect of financial leverage on firm performance in pharmaceutical industries and also determine the relationship and effects among the identified variable using firm performance as dependent variable while forms debt ratio, total debt to total asset, debt to asset ratio, long term debt ratio, liquidity as independent variables. The results of the variables showed different effects and relationships with the independent variables as stated below; (a) Debt ratio has significant effect on performance of pharmaceutical firms in Nigeria (b) Total debt to total asset has significant effect on performance of pharmaceutical firms in Nigeria. (c) Debt to asset ratio has significant effect on performance of pharmaceutical firms in Nigeria. (d) Long term debt ratio has no significant effect on performance of pharmaceutical firms in Nigeria. (e) Liquidity has no significant effect on performance of pharmaceutical firms in Nigeria

We can therefore, conclude that financial leverage has both positive and negative effect on performance of pharmaceutical firms in Nigeria depending on the variables used in capturing financial leverage and firm performance at a particular time. Recommendations are (a) Debt ratio should be increased steadily to sustain firm's value and investment in the organization because an increase in debt ratio is directly proportional to the robust performance of pharmaceutical firms in Nigeria. (b) Firms should be familiar with the timing of total debt to total asset to run with the number of times that is better and favourable to total debt to total asset to investors. Financial leverage pattern that is not properly checked will invariably hamper the performance of a firm. (c) Debt to asset ratio increases the probability of a dividend cut rather than adjusting payouts the concept of leverage is used by both investors and companies. (d) The level of a company's long term debt ratio, whether high or low determines how attractive a company would be to an investor. It is a determinant factor in the performance of firms in Nigeria. Therefore, firms should capitalize more on their debt ratio. (e) Liquidity is one of the tools used to enhance the levels of firm performance. Every change in liquidity level is made in order to maximize shareholder profit.

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