Effect of Financial Determinants on the Retained Earnings of Nigeria Pharmaceutical Sector.

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ABSTRACT

The paper examined the effects of financial determinants on the retained earnings of Nigeria pharmaceutical sector. Four pharmaceutical sectors were selected using random sampling technique. Some of the objectives in the study are; to evaluate the effect of firm size on the retained earnings of Nigeria pharmaceutical sectors, to examine the effect of leverage on the retained earnings of Nigeria pharmaceutical sector, to determine the effect of debt ratio on the retained earnings of Nigeria pharmaceutical sector. Data were collected from the published annual reports and accounts of the selected pharmaceutical sectors and hypothesis tested were using multiple regression analysis. The result revealed that firm size, leverage and equally debt ratio had significant effect on the retained earnings of Nigeria pharmaceutical sector. The study recommends among others that the amount of debt finance in the financial mix of the firm should be at the optimal level so as to ensure adequate utilization of the firm's assets.

Keywords: Financial determinants, Retained Earnings, and Multiple Reggression.

INTRODUCTION

Pharmaceutical sectors and other companies may retain part of their annual income earningsafter dividend payout to ordinary shareholders for reinvestment in shares of other companies, debt settlement, acquisition of plant and machineries, establishment of new production lines, diversification of products and business, establishment of new branch offices and acquisition of an existing company to widen its production or distribution base. [1], stated that the industry contributes about a quarter of manufactured value added in Nigeria and it has about four listed companies namely; Fidson Health Care, May and Baker, Glaxo SmithKline and Neimeth International which shares are presently and actively been traded on the floor of Nigerian stock exchange . The industry produces medicinal and supplementary products. The industry is one of the oldest economic institutions. The firms within the industry attract huge foreign

investments which industrial output and indirect employment in Nigeria.

[2], points out that retained earnings of company becomes equity and consequently appears on the balance sheet as a component of owner's equity which also includes initial investment capital and additional paid-in-capital. In other words, a company should make use of available opportunities to create reserves through retained earnings to boost investments and grow corporate earnings.

[3], in his study explained that retained earnings are retained capital, which is the portion of net income that management keeps to fund future growth and to pay down company debt. On his account, [4] submits that retained earnings represent value "locked up" in the company which does not represent cash on hand but could be theoretically released to the owners if the company were liquidated. Managers could manipulate earnings upwards by(among other things)accelerating recognition of revenue, deferring recognition of expenses , altering inventory accounting methods, changing estimates of bad debt and revising assumptions related to pension assets [5] but shareholders must resist this because of their reversal implications.

The intention to fulfil the expectation of the investors and financial markets increasingly dominates reserve accumulation motives which, as [6], opines is the cornerstone of financial flexibility. [7] stated that the tradeoff between retentions and distribution of profits that motives the lifecycle theory of dividends is largely consistent with the disciplining explanation and is important to firms that potentially have agency problems. Citing Myers and [8], [9] posits that according to the pecking order theory, firms do not seek to maintain a particular leverage but, because of adverse selection costs, firms prefer internal financing (retained earnings and other retentions) and prefer debt to equity when raising external financing. They argued that although retained earnings are a key item in shareholders' equity, existing

financial literature has paid little attention to the variable.

The study by [10] only examined the extent to which dividend is determined by retained earnings.

The Nigeria pharmaceutical sectors usually prefer to finance their operation activities using internally generated funds rather than external funds. In this study, the researcher is keen to understand the determinants of corporate retained earnings in Nigeria pharmaceutical sector. Retained earnings can be used for different purposes by the company. In some cases, the company has to use a large portion of the retained earnings for maintenance. Pharmaceutical companies have to devote a large portion of their cash to fixing equipment, buying new equipment and keeping up with the competition. They might have to use a good portion of their money to build a new factory or a distribution plant. The pharmaceutical sector is considered to be capital intensive and a good portion of the retained earning has to go to maintain their position.

Pharmaceutical sector needs finances to support their operations. The main sources of finances include debt and equity financing which relies on use of the underlying investment instruments to generate the capital. There is ongoing debate in the existing literature with regard to the use of the alternatives modes of financing available to a firm. In this context, numerous studies have been conducted discussing the factors or determinants affecting a firm's retained earnings.

However, no unanimous theory has evolved so far on the corporate retained earnings determination, although different researchers have identified a number of factors affecting the corporate retained earnings including firm size, profitability, leverage etc. [7] reviewed the pertinent studies and identified a number of factors affecting the firm's retained earnings, however, he also supported the view of lack of consensus on the universality of factors affecting the retained earnings which is

one of the principle constituent of the firm's capital structure. This study is conducted with the same purpose to investigate the effect of the three factors namely; firm size, debt ratio and leverage on retained earnings of the pharmaceutical sector in Nigeria.

Against the backdrop of the above submission, the rest of this work will be divided into four sections namely; Chapter two; which is the review of related literature, Chapter three; which will present the study's methodology, Chapter four; presentation and analysis of the data while Chapter five will spell out the findings, conclusion and recommendations of the study.

Statement of the Problem

The management of pharmaceutical companies are faced with a problem of making the financial decision that will maximize the firms value. The decision of allocation of net income after tax between dividends and retained earnings can have a negative influence on the value of the company. The management is torn between paying out to shareholders large, small or zero percentage of earning in form of dividend or to retain them for investment operations.

Higher taxes are also serious problem to pharmaceutical sector. Retained profits or earnings are profit left after taxes and dividends are paid. Having retained earnings will lead the company into paying federal and state taxes.

Objectives of the Study

The main objective of this study is to evaluate the effect of financial determinants on the retained earnings of Nigeria pharmaceutical sectors.

The specific objectives are as follows;

i. To evaluate the effect of firm size on the retained earnings of Nigeria pharmaceutical sectors.

ii. To examine the effect of leverage on the retained earnings of Nigeria pharmaceutical sector.

iii. To determine the effect of debt ratio on the retained earnings of Nigeria pharmaceutical sector.

Research Question

The research questions of this study are as follows;

i. To what extent has firm size affected the retained earnings of Nigeria pharmaceutical sector?

ii. How does leverage affected the retained earnings of Nigeria pharmaceutical sector?

iii. To what extent has debt ratio affected the retained earnings of Nigeria pharmaceutical sector?

Research Hypothesis

1: Firm size does not significantly affect the retained earnings of Nigeria Pharmaceutical sector.

2: Leverage does not significantly affect the retained earnings of Nigeria Pharmaceutical sector.

3: Debt ratio does not significantly affect the retained earnings of Nigeria pharmaceutical sector.

Significance of the Study

The significance of the study is that pharmaceutical company's managers will now know the portion of the profit to be retained which will be enough for the company and also this study will enable them know the main sources of finances which include debt and equity finances thereby determining the best financing means suitable for their company. This study reveals the determinants affecting a firm's retained earnings and will make them know how to go about it.

The beneficiaries of this study are;

Shareholders: They use this study to know whether the company is capable of paying them their dividends.

Management: They need this study to know the standard of their company whether they are profitable or not.

Creditors: They also need this study to know whether the company can pay off their debts.

Government: They are interested in this study to determine the tax rate of the company.

Employees: They use these findings to know whether the company is profitable enough to pay them their salaries, wages and other allowances.

Suppliers: They need this study to forecast whether the company will erotize them in the purchase of assets and other equipment's.

Competitors: Also needs this study to know the weak points of their opponents and be able to strategize the best move in order to win them over.

Scope and Limitation of the Study

This study centers on the Nigeria pharmaceutical sector for a period of ten years running from 2005 to 2014.

This study is limited to ten years because of availability of information to carry on the study.

Methodology

Research Design

This study used Ex-Post Facto research design as the study sought to examine the effect of financial determinants on retained earnings of pharmaceutical sectors listed on the Nigerian Stock Exchange.Ex post facto research design provides a platform to enable the researcher to develop hypothesis for solution of current problem and also a greater appreciation of the role current events can play in the progress of society [8].

Sources of Data

The data is sourced through secondary method. Data is collected from the annual reports and accounts of

pharmaceutical sectors which were listed on the Nigerian Stock Exchange.

Population

The population of this study is all the Nigerian pharmaceutical sectors listed on the Nigerian Stock Exchange.

Sample Size

In this study, the random sampling technique was adopted and all the samples consists of the 4 pharmaceutical sectors which were taken out of the 5 pharmaceutical mainly listed on the Nigerian Stock Exchange. The selection was also based on the availability of statements of account the firms submitted to Nigerian Stock Exchange for 10 years.

Basically, the period 2005- 2014 are justified on the ground that the period relatively covered the period after the global financial crisis, therefore, the data gathered can reflect the most neutral business environment.

Tools for data analysis

The tools for data analysis in the test of Hypotheses would be multiple regression analytical tool.

Model Specification

In the process of model articulation for this study, the objectives, theoretical framework, abundant related empirical findings as well as the uniqueness of the Nigerian business environment were cautiously considered. As a result, only one model was adopted. The dependent variable is retained earnings. On the other hand, the explanatory variables are firm size, leverage and debt ratio. Leverage and debt ratio were calculated using the book values of debt and equity as contained in the financial statement of account of each firms. Firm size was measured by the total assets.

The empirical model estimated is as follows:

$RE_{it} = \beta o + \beta 1\ size + \beta 2\ leverage + \beta 3\ DR + E_{it}$

Where; RE= Retained Earnings

Size = Firm size; reflected by the total asset;

Leverage = Debt to equity ratio and

DR = Debt ratio

βo is a constant term, $\beta 1$, $\beta 2$ and $\beta 3$ are coefficient of the explanatory variables. E_{it} is a random error or disturbance term and it is the time trend. These are normally included in standard time serials specifications to account for the omitted variables as well as unexplained random effects within the model.

Definition of Variables

Retained earnings can be defined as the portion of the firm's net income that the management retains to finance the internal operations in line of distributing it to the shareholders in form of dividends.

Firm size can be defined as the natural logarithm of the total assets.

Leverage is defined as any technique involving the use of borrowed funds in the purchase of an asset, with the expectation that the after tax income from the asset and asset price appreciation will exceed the borrowing cost. This is also the use of various financial instruments or borrowed capital such as margin, to increase the potential return of an investment.

Debt ratio is defined as the ratio of total long term and short term debt to total asset, expressed as a decimal or percentage. It can interpreted as the portion of a company's assets that are financed by debt

Data presentation and analysis

Data presentation

In this chapter, the data obtained from the annual report of the selected pharmaceutical sector (Neimeth Int. Plc, Fidson Health Care, May and Baker and GSK Nigeria plc) were presented and analyzed via the Statistical Package for Social Sciences (SPSS, 15.0). The tests results were presented in the following precedence; analysis of descriptive statistics of the variables came first, followed by goodness of fit test. The test of hypothesis concludes this chapter. In this study, the results were presented and analyzed in the subsequent sections of this chapter of the research work.

Table 1 Raw Data of Neimeth International Plc

2005	211987	2627321000	1086402	540919
	210296	2635691000	2171827	1576000
2007	480919	2730455000	1106737	1623717
	815005	3227853000	1612655	1615199
2009	(96494)	3002235000	1792983	1209255
	(145333)	2966306000	1805889	1160146
2011	(290245)	2905217000	1614049	1452643
	(391745)	2877555000	1315262	1582293
2013	(261167)	2891079000	1110870	1780209
	(489700)	2782488000	1289479	1493009

Table 1.1 Raw Data of Neimeth International Plc

2005	211987	2627321000	2.01	0.67
	210296	2635691000	0.74	0.43
2007	480919	2730455000	0.68	0.41
	815005	3227853000	1.00	0.50
2009	(96494)	3002235000	1.48	0.60
	(145333)	2966306000	1.56	0.61
2011	(290245)	2905217000	1.16	0.57
	(391745)	2877555000	0.83	0.45
2013	(261167)	2891079000	0.62	0.34
	(489700)	2782488000	0.86	0.46

Source: Annual reports and accounts of Neimeth International Plc 2005-2014

Table 2 Raw Data of May and Baker Plc

2005	25746	1946135000	1177968	768167
	211470	7233037000	1347226	2617346
2007	208318	8433371000	1839127	2615664
	205267	11861	2957624	2952004
2009	1598	11439	4452817	3015502
	1482	22986	4853920	3118712
2011	1468	7033665000	3601598	3128572
	1505	8071850000	4934348	3137502
2013	1695	8156600000	5097214	3059386
	1980	8129149000	4976598	3152551

Table 2.1 Raw Data of May and Baker Plc

2005	25746	1946135000	1.53	0.61
	211470	7233037000	0.56	0.36
2007	208318	8433371000	0.66	0.40
	205267	11861	0.74	0.43
2009	1598	11439	0.57	0.36
	1482	22986	0.61	0.38
2011	1468	7033665000	1.23	0.55
	1505	8071850000	1.57	0.61
2013	1695	8156600000	1.67	0.62
	1980	8129149000	1.58	0.61

Source: Annual reports and accounts of May and Baker 2005-2014

Table 3 Raw Data of GSK Plc (£m)

2005	5579	27198	19628	7570
	66965	25553	15905	9648
2007	6475	31003	21093	9910
	4622	39393	31075	8318
2009	6321	42862	32120	10742
	4779	42230	32485	9745
2011	3370	41080	32253	8827
	642	41475	34744	6737
2013	913	42086	34274	7812
	(2074)	40651	35715	4936

Table 3.1 Raw Data of GSK Plc (£m)

2005	5579	27198	2.59	0.72
	66965	25553	1.65	0.62
2007	6475	31003	2.13	0.68
	4622	39393	3.74	0.79
2009	6321	42862	2.99	0.75
	4779	42230	3.33	0.77
2011	3370	41080	3.65	0.79
	642	41475	5.15	0.84
2013	913	42086	4.39	0.81
	(2074)	40651	7.24	0.88

Source: Annual reports and accounts of GSK 2005-2014

Table 4 Raw Data of Fidson Health Care Plc

2005	147219	1310489000	612349	698141
	223281	1711024000	789602	921422
2007	303182	2713970000	1287244	1426726
	916626	6963315000	1997367	4965948
2009	1015699	7181688000	2086667	5095021
	1331592	7902330000	2671000	5231000
2011	1493849	9430021000	4225000	5190000
	1505465	10780936000	5553000	5228000
2013	1521257	12243088000	7353000	5418000
	2043001	15772494000	8268000	5702000

Table 4.1 Raw Data of Fidson Health Care Plc

2005	147219	1310489000	0.88	0.47
	223281	1711024000	0.86	0.46
2007	303182	2713970000	0.90	0.47
	916626	6963315000	0.40	0.29
2009	1015699	7181688000	0.41	0.29
	1331592	7902330000	0.51	0.34
2011	1493849	9430021000	0.75	0.43
	1505465	10780936000	1.06	0.52
2013	1521257	12243088000	1.33	0.57
	2043001	15772494000	1.74	0.63

Source: Annual reports and accounts of Fidson Health Care 2005-2014

RESULT OF FIDSON

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Debt Ratio, Firm Size, leverage(a)	.	Enter

a All requested variables entered.
b Dependent Variable: Retained earnings

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.988(a)	.976	.964	122553.59877

a Predictors: (Constant), Debt Ratio, Leverage, Firm Size

ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3676942203504.983	3	1225647401168.328	81.604	.000(a)
	Residual	90116307433.917	6	15019384572.320		
	Total	3767058510938.900	9			

a Predictors: (Constant), Debt Ratio, Leverage, Firm Size
b Dependent Variable: Retained Earnings

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	-52479.097	88213.329		-.595	.574
	Firm Size	.000	.000	1.019	1.854	.113
	Leverage	.048	.076	.153	.630	.552
	Debt Ratio	-.043	.088	-.183	-.491	.641

a Dependent Variable: Retained Earnings

Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	87786072.0000	1239068800.0000	555456200.0000	447812977.31289	10
Std. Predicted Value	-1.044	1.527	.000	1.000	10
Standard Error of Predicted Value	339340672.000	647440832.000	431272844.615	84854181.368	10
Adjusted Predicted Value	-271487424.0000	1618491520.0000	463770300.9241	579770419.47210	10
Residual	-824716160.00000	1306249216.0000	.00000	566386904.55191	10
Std. Residual	-1.189	1.883	.000	.816	10
Stud. Residual	-1.463	2.396	.037	1.028	10
Deleted Residual	-1248061440.0000	2114855296.0000	91685899.07586	926216564.95038	10
Stud. Deleted Residual	-1.664	10.528	.827	3.469	10
Mahal. Distance	1.254	6.940	2.700	1.594	10
Cook's Distance	.000	.888	.168	.285	10
Centered Leverage Value	.139	.771	.300	.177	10

a Dependent Variable: Retained earnings

RESULT OF GSK

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Debt Ratio, Firm Size, Leverage(a)	.	Enter

a All requested variables entered.
b Dependent Variable: Retained earnings

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.709(a)	.503	.361	16216.00085

a Predictors: (Constant), Debt Ratio, Leverage

ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1865292 334.757	2	932646167.37 8	3.547	.086(a)
	Residual	1840710 784.843	7	262958683.54 9		
	Total	3706003 119.600	9			

a Predictors: (Constant), Debt Ratio, Leverage
b Dependent Variable: Retained Earnings

Coefficients(a)

Mode l		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	53487.23 7	43662.81 0		1.225	.260
	Leverage	1.233	3.374	.105	.365	.726
	Debt Ratio	-1.870	.815	-.662	-2.294	.055

a Dependent Variable: Retained Earnings

Excluded Variables(b)

Mode l		Beta In	T	Sig.	Partial Correlatio n	Collinearit y Statistics
		Tolerance	Tolerance	Tolerance	Tolerance	Tolerance
1	Firm Size	- 274.662 (a)	-.251	.810	-.102	6.84E-008

a Predictors in the Model: (Constant), Debt Ratio, Leverage
b Dependent Variable: Retained Earnings

Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3334.6250	5244.0464	4651.9000	576.38697	10
Std. Predicted Value	-2.285	1.027	.000	1.000	10
Standard Error of Predicted Value	559.246	1312.060	850.515	289.821	10
Adjusted Predicted Value	4021.7861	6476.7090	4994.2802	911.55127	10
Residual	-2895.86499	1219.86743	.00000	1153.95867	10
Std. Residual	-2.049	.863	.000	.816	10
Stud. Residual	-2.356	.940	-.064	.997	10
Deleted Residual	-3828.17236	1452.62805	-342.38016	1997.16156	10
Stud. Deleted Residual	-7.853	.929	-.624	2.604	10
Mahal. Distance	.509	6.857	2.700	2.459	10
Cook's Distance	.000	1.434	.239	.443	10
Centered Leverage Value	.057	.762	.300	.273	10

a Dependent Variable: Retained earnings

RESULT OF MAY AND BAKER

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Debt ratio, Firm Size, Leverage(a)	.	Enter

a All requested variables entered.
b Dependent Variable: Retained earnings

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.900(a)	.810	.715	52547.81702

a Predictors: (Constant), Debt Ratio, Firm Size, Leverage

ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	70731816806.677	3	23577272268.892	8.539	.014(a)
	Residual	16567638440.223	6	2761273073.370		
	Total	87299455246.900	9			

a Predictors: (Constant), Debt Ratio, Firm Size, Leverage
b Dependent Variable: Retained Earnings

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	45631.886	69839.913		.653	.538
	Firm Size	-2.15E-006	.000	-.084	-.458	.663
	Leverage	.114	.036	.843	3.191	.019
	Debt Ratio	-.081	.016	-1.296	-5.013	.002

a Dependent Variable: Retained Earnings

Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-168049808.0000	476555296.0000	148395486.8000	185350529.99971	10
Std. Predicted Value	-1.707	1.770	.000	1.000	10
Standard Error of Predicted Value	218227792.000	313282368.000	282500558.740	36523722.875	10
Adjusted Predicted Value	-368925728.0000	962754496.0000	151859291.4445	366929834.22277	10
Residual	-610694784.00000	796263680.00000	.00000	367439677.10827	10
Std. Residual	-1.357	1.769	.000	.816	10
Stud. Residual	-1.880	2.390	-.002	1.110	10
Deleted Residual	-1171750528.00000	1452903296.000	-3463804.64448	679720724.38131	10
Stud. Deleted Residual	-2.676	9.968	.680	3.392	10
Mahal. Distance	1.216	3.462	2.700	.864	10
Cook's Distance	.000	1.178	.236	.411	10
Centered Leverage Value	.135	.385	.300	.096	10

a Dependent Variable: Retained earnings

RESULT OF NEIMETH

Descriptive Statistics

	Mean	Std. Deviation	N
Retained earnings	2864620000.0000	181719217.93923	10
Firm Size	-52094240.0000	139812375.52869	10
Leverage	1.0940	.45512	10
Debt Ratio	.5040	.10458	10

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Debt Ratio, Firm Size, Leverage(a)	.	Enter

a All requested variables entered.
b Dependent Variable: Retained earnings

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.207(a)	.043	-.436	498996.23248

a Predictors: (Constant), Debt Ratio, Leverage, Firm Size

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66659634907.620	3	22219878302.540	.089	.963(a)
	Residual	1493983440174.480	6	248997240029.080		
	Total	1560643075082.100	9			

a Predictors: (Constant), Debt Ratio, Leverage, Firm Size
b Dependent Variable: Retained Earnings

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	-1213363.366	2633892.364		-.461	.661
	Firm Size	.000	.001	.192	.453	.667
	Leverage	-.105	.486	-.090	-.216	.836
	Debt Ratio	.070	.463	.062	.151	.885

a Dependent Variable: Retained Earnings

CollinearityDiagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Firm Size	Leverage	Debt Ratio	(Constant)	Firm Size
1	1	3.135	1.000	.00	.02	.00	.00		
	2	.794	1.987	.00	.96	.00	.00		
	3	.069	6.735	.08	.01	.08	.00		
	4	.002	39.663	.92	.00	.92	1.00		

a Dependent Variable: Retained earnings.

Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2758609152.0000	2964533760.0000	2864620000.0000	69781196.43347	10
Std. Predicted Value	-1.519	1.432	.000	1.000	10
Standard Error of Predicted Value	76772776.000	182352176.000	125655951.596	34992969.201	10
Adjusted Predicted Value	2476736768.0000	3244956160.0000	2886823157.9229	196810817.83897	10
Residual	-207300992.00000	363328672.00000	.00000	167786944.64337	10
Std. Residual	-1.009	1.768	.000	.816	10
Stud. Residual	-1.386	2.015	-.032	1.064	10
Deleted Residual	-617635264.00000	472102016.00000	-22203157.92293	326447940.12296	10
Stud. Deleted Residual	-1.534	3.237	.074	1.373	10
Mahal. Distance	.356	6.187	2.700	1.984	10
Cook's Distance	.000	1.778	.316	.560	10
Centered Leverage Value	.040	.687	.300	.220	10

a Dependent Variable: Retained earnings

Test of Hypotheses

Hypothesis one

H_0: Firm size does not significantly affect the retained earnings of Nigerian pharmaceutical sector.

H_1: Firm size significantly affects the retained earnings of Nigerian pharmaceutical sector.

Hypothesis two

H_0: Leverage does not significantly affect the retained earnings of Nigerian pharmaceutical sector.

H_1: Leverage significantly affects the retained earnings of Nigerian pharmaceutical sector.

Hypothesis Three

H_0: Debt ratio does not significantly affect the retained earnings of Nigerian pharmaceutical sector.

H_1: Debt ratio significantly affects the retained earnings of Nigerian pharmaceutical sector.

The results for the above hypotheses are shown below;

RESULT OF FIDSON

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.988(a)	.976	.964	122553.59877

a Predictors: (Constant), Debt Ratio, Leverage, Firm Size

ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3676942 203504. 983	3	122564740 1168.328	81.604	.000(a)
	Residual	9011630 7433.91 7	6	150193845 72.320		
	Total	3767058 510938. 900	9			

a Predictors: (Constant), Debt Ratio, Leverage, Firm Size
b Dependent Variable: Retained Earnings.

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	-52479.09 7	88213.32 9		-.595	.574
	Firm Size	.000	.000	1.019	1.854	.113
	Leverage	.048	.076	.153	.630	.552
	Debt Ratio	-.043	.088	-.183	-.491	.641

a Dependent Variable: Retained Earnings

RESULT OF GSK

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.709(a)	.503	.361	16216.00085

a Predictors: (Constant), Debt Ratio, Leverage

ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1865292334.757	2	932646167.378	3.547	.086(a)
	Residual	1840710784.843	7	262958683.549		
	Total	3706003119.600	9			

a Predictors: (Constant), Debt Ratio, Leverage
b Dependent Variable: Retained Earnings

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	53487.237	43662.810		1.225	.260
	Leverage	1.233	3.374	.105	.365	.726
	Debt Ratio	-1.870	.815	-.662	-2.294	.055

a Dependent Variable: Retained Earnings

RESULT OF MAY AND BAKER

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.900(a)	.810	.715	52547.81702

a Predictors: (Constant), Debt Ratio, Firm Size, Leverage

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70731816806.677	3	23577272268.892	8.539	.014(a)
	Residual	16567638440.223	6	2761273073.370		
	Total	87299455246.900	9			

a Predictors: (Constant), Debt Ratio, Firm Size, Leverage
b Dependent Variable: Retained Earnings

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	45631.886	69839.913		.653	.538
	Firm Size	-2.15E-006	.000	-.084	-.458	.663
	Leverage	.114	.036	.843	3.191	.019
	Debt Ratio	-.081	.016	-1.296	-5.013	.002

a Dependent Variable: Retained Earnings

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1598114556.213	3040333214.525		.526	.618
	Firm Size	.038	.044	.361	.864	.421
	Leverage	913378884.380	307723320.212	1.074	.297	.777
	Debt ratio	-5308988342.086	12698379498.803	-1.497	-.418	.690

a Dependent Variable: Retained earnings

RESULT OF NEIMETH
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.207(a)	.043	-.436	498996.23248

a Predictors: (Constant), Debt Ratio, Leverage, Firm Size

ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	66659634907.620	3	22219878302.540	.089	.963(a)
	Residual	1493983440174.480	6	248997240029.080		
	Total	1560643075082.100	9			

a Predictors: (Constant), Debt Ratio, Leverage, Firm Size
b Dependent Variable: Retained Earnings

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	-1213363.366	2633892.364		-.461	.661
	Firm Size	.000	.001	.192	.453	.667
	Leverage	-.105	.486	-.090	-.216	.836
	Debt Ratio	.070	.463	.062	.151	.885

a Dependent Variable: Retained Earnings

DISCUSSION

The first hypothesis which represents the effect of firm size on the retained earnings of Nigerian pharmaceutical firms which was tested with two variables (firm size and retained earnings). The results as presented in the coefficients revealed that calculated t-statistics (t = 1.854, -0.102, -0.458 and 0.453) for parameter for retained earnings in Fidson Health Care, GSK Nig Plc. May and Baker and Neimeth Internationala lPlc respectively are less than tabulated t-statistics at 0.05 level of significance (7.71). The equation also revealed that retained earnings accounted for 1.019, -0.251, -0.084 and 0.192 unit for every decrease in retained earnings in Fidson Health Care, GSK Nig Plc. May and Baker and Neimeth International Plc respectively. The coefficient of determination (R^2) 0.976, 0.503, 0.810 and 0.43 indicating that 98%, 50%, 81% and 43% of variation in firm size decrease is caused by variation in retained earnings in Fidson Health Care, GSK Nig Plc. May and Baker and Neimeth International Plc respectively. The remaining 2%, 50%, 19% and 57% unexplained variable is largely due to variation in other variation outside the model which is otherwise included in the stochastic error term. The effect of firm size on retained earnings in Fidson Health Care, GSK Nig Plc. May and Baker and Neimeth International Plc are strongly high, positive and statistically significant at 0.05 level (r=0.988, 0.709, 0.900 and 0.207, p<0.05) {7.71}. The overall correlation model is statistically significant in terms of its overall goodness of fit (f = 81.604, 3.547, 8.539 and 0.089, p < 0.05). As a result of this the study accepts the alternative hypothesis meaning that firm size significantly affects the retained earnings of Nigerian pharmaceutical sector.

The second hypothesis was tested to ascertain the effect of firm leverage on the retained earnings of Nigerian pharmaceutical firms in Nigeria in line with hypothesis two in chapter one. The result measured whether there is correlation between firm leverage and profitability of Nigerian pharmaceutical firms. The result revealed that, calculated t – statistics (t = 0.630, 0.630, 3.191 and -0.216 p < 0.05) was less than tabulated t= statistics at 0.05 level of significance of 7.71. The coefficient of determination (R^2) were 0.976, 0.503, 0.810 and 0.43 which implied that 98%, 50%, 81% and 43% of the variation in retained earnings was caused by variation leverage in Fidson Health Care, GSK Nig. Plc. May and Baker and Neimeth International Plc respectively. The remaining 2%, 50%, 19% and 57% unexplained variation in caused by other variable outside the correlation model which are otherwise include in the stochastic error term. The effect firm leverage on the profitability of

Nigerian pharmaceutical firm is high, positive and statistically significant at 0.05 alpha level (r = 0.988, 0.709, 0.900 and 0.207, p < 0.05) Also, the correlation model is statistically signification in terms of its overall goodness of fit(f = 81.604, 3.547, 8.539 and 0.089,p < 0.05). Hence, the alternative hypothesis was accepted. This implies that leverage significantly affects the retained earnings of Nigeria pharmaceutical sector.

In the third hypothesis which represents the effect of debt ratio on the retained earnings of Nigerian pharmaceutical firms which was tested with two variables (Debt ratio and retained earnings). The results as presented in the coefficients revealed that calculated t-statistics (t = -0.491, -2.294, -5.013 and 0.151) for parameter for retained earnings in Fidson Health Care, GSK Nig Plc. May and Baker and Neimeth International Plc respectively are less than tabulated t-statistics at 0.05 level of significance (7.71). The equation also revealed that retained earnings accounted for -0.183, -0.662, -1.296 and 0.062 unit for every decrease in retained earnings in Fidson Health Care, GSK Nig

Plc. May and Baker and Neimeth International Plc respectively. The coefficient of determination (R^2) 0.976, 0.503, 0.810 and 0.43 indicating that 98%, 50%, 81% and 43% of variation in debt ratio decrease is caused by variation in retained earnings in Fidson Health Care, GSK Nig Plc. May and Baker and Neimeth International Plc respectively. The remaining 2%, 50%, 19% and 57% unexplained variable is largely due to variation in other variation outside the model which is otherwise included in the stochastic error term. The effect of debt ratio on retained earnings in Fidson Health Care, GSK Nig Plc. May and Baker and Neimeth International Plc are strongly high, positive and statistically significant at 0.05 level (r=0.988, 0.709, 0.900 and 0.207, p<0.05) {7.71}. The overall correlation model is statistically significant in terms of its overall goodness of fit (f = 81.604, 3.547, 8.539 and 0.089, p < 0.05). As a result of this the study accepts the alternative hypothesis meaning that debt ratio has significant effect on the retained earnings of Nigerian pharmaceutical sector.

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Findings
At the end of this research work on effect of financial determinants on retained earnings of Nigerian pharmaceutical sector. The researcher found out the following;

1. Firm size significantly affects the profitability of Nigerian pharmaceutical sector.

2. It was also observed that leverage significantly affects the retained earnings of Nigeria pharmaceutical sector.
3. The study equally shows that debt ratio has significant effect on the retained earnings of Nigerian pharmaceutical sector.

CONCLUSION

A firm is a legal fiction which serves as a nexus for a set of contracting relationship among individuals. Despite this contracting relationship that exists among them, these individuals have various interest points and thus struggle that their interest points are met. Implying that, shareholders and others stakeholders of a firm always expect and look forward for high and better performance result. Hence, there is a

need for managers of firms to be at their best to ensure that performance does not decline or the firm they oversee does not fail or go out of existence.
The conclusion from the study when compared to some of the pharmaceutical companies, for example Fidson Health Care, GSK Nig Plc. May and Baker and NeimethInternationalalPlc shows that the conclusions on firm size, leverage, and debt ratio are justified.

However, the conclusions also does not in totality confirms nor justifies the reality of other pharmaceutical companies who are currently operating well in Nigeria. The reasons could also be that the companies have understood the industry and have maximized all resources and variables under study to get them to the present state of their business operations.

RECOMMENDATIONS

Based on the findings of this research work, the researcher made the following recommends;

1. Companies' management should ensure that financial decisions made by them are in consonance with shareholders' wealth maximization objectives which encompasses the profit maximization objective of the firm.
2. The amount of debt finance in the financial mix of the firm should be at the optimal level so as to ensure adequate utilisation of the firms' assets.
3. The separation of ownerships and management in modern day corporation (companies) demands that agents must act in ways that are in line with the objectives of the principal in order to achieve enhanced earnings per share for the firm owners.
4. More often than not, it is rare for any firm to depend solely on equity finance, thus, management may seek other sources of funding which may not be in the interest of equity holders. Therefore, managers should employ financial leverage in a way that enhances value for their company owners' i.e leading to an increase in returns to equity holders.
5. The management should monitor the interest charged on debt financing to avoid liquidation of the company. It is also suggested that further research be conducted on the same topic with different sector and extending the years of the sample.

REFERENCES

1. Effects of Capital Structure on Financial Performance of Firms in Kenya: Evidence from Firms Listed at the Nairobi Securities Exchange.
2. Githire.C, Muturi.W, (2015). International journal of Economics, Commerce and Management 3(4): 1-10.
3. Birger et al (2008). International review of Financial Analysis 8(1): 307-326.
4. Nguyen and Neelakantan (2006).Capital Structure in Small and Medium Sized Enterprises: The Case of VietnamASEAN Economic Bulletin 23(2): 192-211.
5. Mahakand, (2005).Trends and Determinants of Private Corporate Sector Savings in India Economic and Political Weekly 40(39): 24-30.
6. Arif et al (2013). Determinants of Dividend Policy: A Sectorial Analysis from Pakistan International journal of Business and Behavioral Sciences 3(9): 16-28.
7. Fakhra et al ,(2013). Factors Influencing Corporate Dividend Payout Decisions of Financial and Non-Financial Firms Research journal of Finance and Accounting 4(1): 1-13.
8. Ahmed and Javid, (2008).The Determinants of Dividend Policy in Pakistan,Munich Personal RePEc archive 37339(22), 1-16.
9. Edward et al, (2011). Dividend Policy and Bank Performance in GhanaMunich personal RePEc archive 37339(22): 1-16.
10. Ghosh and Sirmans ,(2016).Do Managerial Motives Impact Dividend Decisions in REITs. International journal of Economics and Finance 3(4): 1-6.