

Capital Structure and Profitability: A Critical Analysis of Quoted Manufacturing Companies in Nigeria

Aransiola Solomon Yinka^{*}, Aransiola Oluwadetan

Department of Accounting and Finance, Crawford University, Faith City, Igbesa, Ogun State, Nigeria

Abstract

Capital structure decision is a vital one in any organisation that is striving to achieve profitability. Therefore, the main objective of this study is to examine the effect of capital structure on performance of quoted manufacturing companies in Nigeria. In achieving this, Secondary data source was employed; data was collected from the Nigerian stock exchange factbook and the annual report of the selected companies. Due to the nature of the study, Panel data analysis was used. Both descriptive and inferential methods were used to analyse the data collected. Correlation analysis was used to determine the relationship between the variables while regression analysis was used to determine how the independent variable affects the dependent variable. The study established that there is a negative relationship between capital structure and profitability performance of quoted manufacturing companies in Nigeria. Recommendations were made that: Performance standards should be established and communicated to the investors (members of the companies), the optimal capital structure which lowers cost of capital and reduce risk associated with debt finance should be pursued, and inadequate capital to achieve firm's financial performance might also pose a challenge. Therefore, banks, other financial institutions and government should promote facilities to increase companies' profitability performance.

Keywords

Capital Structure, Profitability, Performance, Quoted, and Manufacturing Companies

Received: April 8, 2015 / Accepted: May 15, 2015 / Published online: June 23, 2015

@ 2015 The Authors. Published by American Institute of Science. This Open Access article is under the CC BY-NC license. http://creativecommons.org/licenses/by-nc/4.0/

1. Introduction

The capital structure decision is the vital one since the profitability of an enterprise is directly affected by such decision. Hence, proper care and attention need to be given while determining the capital structure decision. In the statement of affairs of an enterprise, the overall position of the enterprise regarding all kinds of assets, liabilities are shown. Capital is a vital part of that statement (hereafter called comprehensive financial statement).

Firms can use either debt or equity capital to finance their assets. The best choice is a mix of debt and equity. In the case where interest was not tax deductible, firms' owners would

be indifferent as to whether they used debt or equity, and where interest was tax deductible, they would maximize the value of their firms by using 100% debt financing (Azhagaiah and Gavoury, 2011). The use of debt in capital structure of the firm leads to agency costs. Agency costs arise as a result of the relationships between shareholders and managers, and those between debt- holders and shareholders (Jensen and Meckling, 1976).

The pecking order hypothesis suggests that firms are willing to sell equity when the market overvalues it (Myers, 1984; Chittenden et al., 1996). This is based on the assumption that managers act in favor of the interest of existing shareholders. Consequently, they refuse to issue undervalued shares unless

* Corresponding author

E-mail address: aransiola.solomon@yahoo.com (A. S. Yinka)

the value transfer from "old" to new shareholders is more than offset by the net present value of the growth opportunity. It can be concluded that new shares are only issued at a higher price than that imposed by the real market value of the firm. Therefore, investors interpret the issuance of equity by a firm as signal of overpricing. If external financing is unavoidable, the firm will opt for secured debt as opposed to risky debt and firms will only issue common stocks as a last resort (Abor, 2005).

Hence, the higher the debt ratio, the greater the risk, and thus higher the interest rate will be. At the same time, rising interest rates overwhelm the tax advantages of debt. If the firm falls on hard times and if it's operating income is insufficient to cover interest charges, then stockholders will have to make up the short fall, and if they can't, the firm may be forced into bankruptcy. Good times may be just around the corner. But too much debt can keep the company wipe out shareholders in the process (Azhagaiah and Gavoury, 2011).

The relationship between capital structure decisions and firm value has been extensively investigated in the past few decades. Capital structure could have two effects; according to Desai (2007) firms of the same risk class could possibly have higher cost of capital with higher leverage. Second, capital structure may affect the valuation of the firm, with more leveraged firms, being riskier and consequently valued lower than the less leveraged firms. Ogebe, Patrick; Ogebe, Joseph and Alewi, Kemi (2013).

If capital structure is not irrelevant, then there is also another thing to consider: the interaction between financing and investment. In order to try to distinguish the effects of various determinants on capital structure, it is assumed that the investment decision is held constant. The choice of capital structure of a firm is determined by a number of factors which include the market forces, type of industry, internal policies of the firm, size of the firm, profitability, corporate tax and bankruptcy costs. Ogebe et al

Capital structure decision is the mix of debt and equity that a company uses to finance its business (Damodaran, 2001). Capital structure may affect the valuation of the firm, with more leveraged firms, being riskier and consequently valued lower than the less leveraged firms. If the manager of a firm has the shareholders' wealth maximization as his objective, then capital structure is an important decision, for it could lead to an optimal financing mix which maximizes the market price per share of the firm.

Of all the aspects of capital investment decision, capital structure decision is the vital one. Since the profitability of an enterprise is directly affected by such decision. There could be hundreds of options but to decide which option is best in firms interest in a particular scenario needs to have deep insight in the field of finance as use of more proportion of debt in the capital structure can be effective as its less costly than equity but it also has some limitations because after a certain limit it affects company's leverage. Therefore a balance needs to be maintained.

In Nigeria, most corporate decisions are dictated by managers. Equity issues are often favoured over debt in spite of debt being a cheaper source of fund; even where debts are employed, it is usually on the short term basis. This could be as a result of the manager's tendency to protect his human capital and avoid the performance pressure associated with debt commitment. More often, when debts are issued voluntarily, particularly long term debt, it is used as an anttake- over device against the challenge of potential corporate rider. The corporate sector in the country is characterized by a large number of firms operating in a largely deregulated and increasingly competitive environment.

According to Bierman and Smidt and Guthman and Donglalls capital structure is the relative proportion of the various kinds of securities a company has used. The opinions of Taylor and Venhorne regarding capital structure is that is the total sum of outstanding long-term securities, both equity and debt. Weston and Bringham(1978) define it as the permanent financing of the firm represented by long-term debt plus preferred stock and net worth. Though there are different views about the total nature of 'capital structure' it is obvious that majority agreed about the common items, i.e. total of equity and long- term debt which represent the permanent source of financing of a company. Therefore, capital structure may be defined as the permanent source of capital in the form of long- term debt, preference shares, ordinary shares, reserve and surplus.

Most studies found a negative relationship between profitability and leverage. Within this framework, Titman& Wessels (1988) contend that firms with high profit levels, all things being equal, would maintain relatively lower debt levels since they can realize such funds from internal sources.

There have been various schools of thoughts on the relevance of capital structure to a firm's performance in the developed countries, In Nigeria also studies have been conducted on this particular subjec matter but it is yet to be established the actual effect that capital structure has on the ability of quoted companies to achieve its profitability performance objective.

2. Methodology

Out of the forty- six (46) Quoted manufacturing companies according to the classification of companies in Nigeria by the stock exchange commission, ten (10) companies were purposively selected. Therefore, secondary annual data coverage of ten years (2008 - 2013) has been collected from the ten (10) different quoted manufacturing companies selected for the empirical analysis in this study. The two main methods of analysis were used in the course of this study.

- a. Descriptive Analysis: This is the collection of large data with the aim of analysing them.
- b. The second approach which is quantitative techniques include tables and test for the hypotheses, inferential statistics specifically regression analysis method was used in order to determine the effect of capital structure on profitability performance of selected quoted companies in Nigeria. To do this, a software package E-views was used

to perform the regression.

For the purpose of this study, two set of variables are considered namely the independent and dependent variables. The independent variable is capital structure and the dependent variable is profitability performance. The profitability performance is measured using profit before tax, profit, and profit after tax. The independent variable is measured by the total asset, equity, total asset over equity.

3. Results and Discussions

3.1. Data Presentation

SN	ID	Company	YEAR	Profit before tax	Profit after tax	Total asset	Debt	Capital_ structure	Return On Asset	Debt On Total Asset
294	72	GUINNESS NIGERIA PLC	2003	9901668	6636335	39394825	36817858	2.42	0.17	0.934586
295	72	GUINNESS NIGERIA PLC	2004	11687494	7913503	49000996	38797605	2.29	0.16	0.791772
296	72	GUINNESS NIGERIA PLC	2005	6276167	4859019	49966616	35788885	1.96	0.1	0.716256
297	72	GUINNESS NIGERIA PLC	2006	11436771	7440102	59850189	44416419	2.12	0.12	0.742127
298	72	GUINNESS NIGERIA PLC	2007	14884450	10691060	71809427	51583586	1.63	0.15	0.71834
299	72	GUINNESS NIGERIA PLC	2008	17092950	11860880	74655667	54799830	1.49	0.16	0.734034
300	72	GUINNESS NIGERIA PLC	2009	18991762	13541189	73868737	72324791	2.29	0.18	0.979099
301	72	GUINNESS NIGERIA PLC	2010	19988735	13736359	78396876	63454388	1.86	0.18	0.809399
302	72	GUINNESS NIGERIA PLC	2011	26176966	17927934	92227824	72527700	1.8	0.19	0.786397
303	72	GUINNESS NIGERIA PLC	2012	21074950	14671195	1.03E+08	82707359	2.05	0.14	0.806632
304	72	GUINNESS NIGERIA PLC	2013	17008875	11863726	1.21E+08	95525469	3.74	0.1	0.789071
362	75	NIGERIAN BREWERIES PLC	2003	10992047	7352287	85097508	52338364	2	0.09	0.61504
363	75	NIGERIAN BREWERIES PLC	2004	9148139	5086403	82543977	45131412	1.6	0.06	0.546756
365	75	NIGERIAN BREWERIES PLC	2005	12897746	8254557	73507983	33624088	1.17	0.11	0.457421
366	75	NIGERIAN BREWERIES PLC	2006	16436255	10900524	75657062	24364942	0.67	0.14	0.322045
367	75	NIGERIAN BREWERIES PLC	2007	27876336	18942856	90548282	29896777	0.69	0.21	0.330175
368	75	NIGERIAN BREWERIES PLC	2008	37519114	25700593	1.04E+08	55237436	1.71	0.25	0.52903
369	75	NIGERIAN BREWERIES PLC	2009	41399796	27910091	1.07E+08	42778082	0.92	0.26	0.39984
370	75	NIGERIAN BREWERIES PLC	2010	44880248	30332118	1.14E+08	45328091	0.9	0.27	0.396261
371	75	NIGERIAN BREWERIES PLC	2011	56397878	38050756	2.36E+08	91557391	0.64	0.16	0.388447
372	75	NIGERIAN BREWERIES PLC	2012	55624366	38042714	2.54E+08	87265764	0.34	0.15	0.344062
575	87	AFRICAN PAINTS (NIG). PLC	2003	-18313	-22990	278435	276674	14.62	-0.08	0.993675

Table 1. Presentation of the data of selected manufacturing companies.

SN	ID	Company	YEAR	Profit before tax	Profit after tax	Total asset	Debt	Capital_ structure	Return On Asset	Debt On Total Asset
576	87	AFRICAN PAINTS (NIG), PLC	2004	-63725	-63986	376514	285891	2.66	-0.17	0.75931
577	87	AFRICAN PAINTS (NIG). PLC	2005	-66689	-66939	330817	289028	6.54	-0.2	0.873679
578	87	AFRICAN PAINTS (NIG). PLC	2006	-22040	-22299	319725	44577	1.82	-0.07	0.139423
579	87	AFRICAN PAINTS (NIG). PLC	2007	-49587	-16189	292711	296950	36.63	-0.06	1.014482
580	87	AFRICAN PAINTS (NIG). PLC	2008	-61505	-61807	375990	342173	6.92	-0.16	0.910059
581	87	AFRICAN PAINTS (NIG). PLC	2009	-31144	-31622	377692	310487	3.75	-0.08	0.822064
582	87	AFRICAN PAINTS (NIG). PLC	2010	-13999	-14389	357122	304306	4.45	-0.04	0.852107
583	87	AFRICAN PAINTS (NIG). PLC	2011	-49850	-50248	347539	344862	18.96	-0.14	0.992297
584	87	AFRICAN PAINTS (NIG). PLC	2011	-49850	-50248	347539	344850	18.96	-0.14	0.992263
1292	130	CADBURY NIGERIA PLC	2003	3792506	2684927	14730532	6487443	0.79	0.18	0.440408
1293	130	CADBURY NIGERIA PLC	2004	3849273	2812623	20872012	11412285	1.21	0.13	0.546775
1294	130	CADBURY NIGERIA PLC	2005	3853094	2710921	32065142	14862387	1.37	0.08	0.463506
1295	130	CADBURY NIGERIA PLC	2006	-5762809	-4665459			0	0	
1296	130	CADBURY NIGERIA PLC	2007	-4197948	-726978	24282617	24247795	696.34	-0.03	0.998566
1297	130	CADBURY NIGERIA PLC	2008	-2847703	-2752268	23901206	26913976	-9.12	-0.12	1.126051
1298	130	CADBURY NIGERIA PLC	2009	-2379440	-1235917	25246926	12581691	0.99	-0.05	0.498345
1299	130	CADBURY NIGERIA PLC	2010	1952559	1168167	28325844	15381563	1.18	0.04	0.543022
1300	130	CADBURY NIGERIA PLC	2011	5082637	3700170	33711121	17067181	1.03	0.11	0.506277
1301	130	CADBURY NIGERIA PLC	2012	5511518	3454991	40156508	23328880	1.39	0.09	0.580949
1303	131	DANGOTE FLOUR MILLS PLC	2006	721983	721983	33224851	19071331	1.35	0.02	0.574008
1304	131	DANGOTE FLOUR MILLS PLC	2007	675703	561559	58119789	35974655	1.64	0.01	0.618974
1305	131	DANGOTE FLOUR MILLS PLC	2008	3167625	2989559	68750589	44120786	1.81	0.04	0.641751
1306	131	DANGOTE FLOUR MILLS PLC	2009	5374056	5561080	64103643	35401974	1.24	0.09	0.552261
1307	131	DANGOTE FLOUR MILLS PLC	2010	4911885	2722575	70225348	43078473	1.6	0.04	0.613432
1308	131	DANGOTE FLOUR MILLS PLC	2011	396709	115704	83453596	56608156	2.14	0	0.678319
1309	131	DANGOTE FLOUR MILLS PLC	2012	-4000351	-4000351	77449018	66927275	6.36	-0.05	0.864146
1311	132	DANGOTE SUGAR REFINERY PLC	2006	16657066	16657066	38999540	11021950	0.39	0.43	0.282617
1312	132	DANGOTE SUGAR REFINERY PLC	2007	30660730	9478561	50124116	24167965	0.93	0.19	0.482162
1313	132	DANGOTE SUGAR REFINERY PLC	2008	30151378	21871047	58173389	25546191	0.78	0.38	0.439139
1314	132	DANGOTE SUGAR REFINERY PLC	2009	19586932	13185599	78707221	37094424	0.89	0.17	0.471296
1315	132	DANGOTE SUGAR REFINERY PLC	2010	16146930	11282240	62293982	21398945	0.52	0.18	0.343515
1316	132	DANGOTE SUGAR REFINERY PLC	2011	10553872	7111318	69106905	29615390	0.75	0.1	0.428545
1317	132	DANGOTE SUGAR REFINERY PLC	2012	16331679	10796416	83051450	36782291	0.44	0.13	0.442886

SN	ID	Company	YEAR	Profit before tax	Profit after tax	Total asset	Debt	Capital_ structure	Return On Asset	Debt On Total Asset
1352	136	HONEYWELL FLOUR MILLS PLC	2006	776881	722557	17555810		0	0.04	0
1353	136	HONEYWELL FLOUR MILLS PLC	2007	697709	636343	16979215		0	0.04	0
1354	136	HONEYWELL FLOUR MILLS PLC	2008	889950	816452	32872124		0	0.02	0
1355	136	HONEYWELL FLOUR MILLS PLC	2009	1227304	217115	23533049	15173159	1.81	0.01	0.64476
1356	136	HONEYWELL FLOUR MILLS PLC	2010	2330273	1175922	30007660	14119919	1.05	0.04	0.470544
1357	136	HONEYWELL FLOUR MILLS PLC	2011	3515785	2492397	29137607	12675241	0.84	0.09	0.435013
1358	136	HONEYWELL FLOUR MILLS PLC	2012	3663134	2702431	44940080	21894024	1.3	0.06	0.487183
1359	136	HONEYWELL FLOUR MILLS PLC NESTLE NIGERIA	2013	3814599	2843520	55437478	31311345	1.3	0.05	0.564805
1402	139	PLC (FOOD SPECIALTIES NIG. LTD)	2003	5846923	3804114			0	0	
1403	139	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. LTD)	2004	6100281	3935495			0	0	
1404	139	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. LTD)	2005	7907848	5303128	23058408	15122272	8.63	0.23	0.655825
1405	139	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. LTD)	2006	8197897	5660329	26244230	12547723	1.97	0.22	0.478114
1406	139	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. LTD)	2007	8463788	5441899	31688272	15015799	2.41	0.17	0.47386
1407	139	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. LTD)	2008	11862213	8331599	42976900	20128312	2.23	0.19	0.468352
1408	139	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. LTD)	2009	13783244	9783578	69654988	33706437	3.2	0.14	0.483906
1409	139	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. LTD)	2010	18244454	12602109	1.01E+08	45481709	3.06	0.13	0.452155
1410	139	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. LTD)	2011	18539669	16808764	1.32E+08	53452906	2.28	0.13	0.40514
1411	139	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. LTD)	2012	25050172	21217204	88963218	54777656	1.6	0.24	0.615734
1724	162	MAY & BAKER NIGERIA PLC	2003	134489	79167	1275338	635941	0.99	0.06	0.498645
1725	162	MAY & BAKER NIGERIA PLC	2004	126158	91139	1342468	627322	0.88	0.07	0.46729
1726	162	MAY & BAKER NIGERIA PLC	2005	154621	101759	1946135	1194384	1.59	0.05	0.613721
1727	162	MAY & BAKER NIGERIA PLC	2006	266191	211470	3964572	1347226	0.51	0.05	0.339816
1728	162	MAY & BAKER NIGERIA PLC	2007	398078	208318	4454791	1839127	0.7	0.05	0.412842

SN	ID	Company	YEAR	Profit before tax	Profit after tax	Total asset	Debt	Capital_ structure	Return On Asset	Debt On Total Asset
1729	162	MAY &BAKER NIGERIA PLC	2007	398078	209000	4454791	1839127	0.7	0.05	0.412842
1730	162	MAY & BAKER NIGERIA PLC	2008	708312	417962	5730109	2976483	1.08	0.07	0.519446
1731	162	MAY & BAKER NIGERIA PLC	2009	344162	232081	6153848	3448141	1.27	0.04	0.560323
1732	162	MAY & BAKER NIGERIA PLC	2010	307790	192977	6816916	3933532	1.36	0.03	0.577025
1733	162	MAY & BAKER NIGERIA PLC	2011	339474	255472	7045658	3906802	1.24	0.04	0.554498
1734	162	MAY & BAKER NIGERIA PLC	2012	44522	13101	8069406	4937110	0.61	0	0.611831
2015	184	VITAFOAM (NIG). PLC	2003	485659	306859	2564268	1867873	2.68	0.12	0.728423
2016	184	VITAFOAM (NIG). PLC	2004	402234	272234	2062632	1290563	1.67	0.13	0.625687
2017	184	VITAFOAM (NIG). PLC	2005	173492	111647	1938818	1153382	1.47	0.06	0.594889
2018	184	VITAFOAM (NIG). PLC	2006	302564	275118	2414614	1452340	1.51	0.11	0.601479
2019	184	VITAFOAM (NIG). PLC	2006	302564	275118	2414614	1452340	1.51	0.11	0.601479
2020	184	VITAFOAM (NIG). PLC	2007	652284	439314	3422555	2020967	1.44	0.13	0.590485
2021	184	VITAFOAM (NIG). PLC	2008	1013719	698296	4627969	2732835	1.44	0.15	0.590504
2022	184	VITAFOAM (NIG). PLC	2009	780915	510776	5435971	3029432	1.4	0.09	0.557294
2023	184	VITAFOAM (NIG). PLC	2010	823252	512783	6109452	3641209	1.47	0.08	0.595996
2024	184	VITAFOAM (NIG). PLC	2011	823566	518850	9292771	6192130	2.22	0.06	0.666338
2025	184	VITAFOAM (NIG). PLC	2012	813250	502115	10423641	7339906	2.36	0.05	0.70416

Source: Author's computation from Data gotten from Nigeria Stock Exchange Factbook 2013 edition.

Table 2. Descriptive Statistic of Dependent and independent variables.

	capital structure	return on asset
Mean	10.42	0.08
Standard Error	7.81	0.01
Median	1.51	0.09
Mode	0.70	(0.14)
Standard Deviation	73.70	0.11
Sample Variance	5,432.07	0.01
Kurtosis	88.16	1.06
Skewness	9.37	(0.09)
Range	705.46	0.63
Minimum	(9.12)	(0.20)
Maximum	696.34	0.43

Source: Author's computation 2014.

The descriptive statistics show that over the period under study, the financial performance ratios measured by return on assets averaged 8%. The leverage ratio stood at 10.42. This is an indication that approximately 104% of total capital in the listed ten (10) manufacturing firms is represented by debt.

Here, the maximum values for leverage ratio and ROA are 69634%, 43% respectively. On the other side, the minimum values for leverage ratio and ROA are -912%, and -20%

respectively confirming presence of loss performance. The standard deviation shows the level of risk involved in choice of financing which is high at 73.70. This also confirms that the portion of debt in the capital structure is high.

The mean of ROA is at 9% this implies that for every N100 worth of asset of the companies under this study, return is N9, pointing out low accounting performance for the firms

Standard deviation measures level of risk and in this case leverage of 73.70 shows debt financing is high resulting in higher level of risk. When compared with ROA of 11% the level of risk indicates other factors aside capital structure plays a part in performance.

3.2. Correlation Analysis

Correlation is describes the strength of relationship between two variables. In this study the correlation co-efficient analysis is under taken to find out the relationship between capital structure and financial performance. It can be said that what relationship exist among variables. Here, dependent variable financial performance is correlated with independent variable capital structure. Correlation analysis is performed to find out the relationship between variables; Capital structure and ROA.

Table 3. Correlation matrix between capital structure and ROA.

	Capital structure	Return on Asset
Capital structure	1	
Return on Asset	-0.134339396	1

Source: Author's computation 2014.

The above table illustrates the relationship among leverage ratio and Return on assets. The correlation value between leverage and Return on Asset is r = (-0.134) this shows that there is negative relationship between capital structure and Return on Asset of the ten companies analyzed in this study.

3.3. Regression Analysis

Regression analysis is carried out to test the impact of capital structure on financial performance. Here capital structure is the independent variable and financial performance is the dependent variable. From these independent and dependent variables, the following relationships are formulated. Financial performance of the manufacturing firms is dependent upon the capital structure. It is represented as follows;

Which shows performance is the function of capital structure.

Where;

FP = Financial performance

CS = Capital Structure

Here, financial performance is measured with the help of two ratios return on equity and return on assets. Capital structure is measured through leverage ratio. Therefore, the regression model will be formulated in the following manner;

$$ROA = \hat{a}0 + \hat{a}1x1 \tag{1}$$

Where;

X1 = Leverage ratio

 $\hat{a}0 = Constant$

ROA = Return on Assets

Table 4. Regression model for capital structure and ROA.

Regression Statistics	
Multiple R	0.127535239
R Square	0.016265237
Adjusted R Square	0.005687444

Source: Author's computation 2014.

Here, R2 value is computed to identify the impact of leverage ratio on return on assets. The R2 value is 0.016. This means leverage ratio contributed to determine return on assets by 1.6%. The remaining 98.4% is influenced by other factors

which are not considered for this study.

3.4. Hypothesis Testing

H0: capital structure has no significant effect on profitability of a manufacturing firm.

H1: capital structure has a significant effect on the profitability of a manufacturing firm

According to the regression analysis, it showed that the r2 value between leverage and ROA is 0.016 with 95% level of confidence. Therefore, leverage has no significance impact on ROA. Here, H0 is accepted and H1 is rejected. H0: capital structure has no significant relationship with profitability of a manufacturing firm.

H1: capital structure has a significant relationship with the profitability of a manufacturing firm

From the study, correlation analysis showed that the correlation between leverage and ROE is (-0.134). Therefore, there is no significance relationship between leverage and ROA. Here, H0 is accepted and H1 rejected.

4. Conclusion

The aim of this study is to examine the effect of capital structure on profitability performance of quoted manufacturing firms. The study shows that there is a negative or inverse relationship between the leverage ratio and the return on asset. This means that an increase in capital structure will cause a decrease in profitability performance and vice versa. The magnitude of the contributory effect of leverage ratio on the change in return on asset is very low with a regressive value of 0.016. This therefore implies that the rate of effect is 1.6% leaving the remaining 98.4% to other contributory factors.

The descriptive statistics show that over the period under study, there is an indication that approximately 104% of total capital in the listed ten (10) manufacturing firms is represented by debt. The standard deviation shows the level of risk involved in choice of financing which is high. It was also confirmed that the portion of debt in the capital structure is high.

The mean of ROA is at 9%, this implies that for every N100 worth of asset of the companies under this study, return is N9, pointing out low accounting performance for the firms.

Two hypotheses were stated and tested in this study, capital structure has no significant effect on profitability of a manufacturing firm and capital structure has a significant effect on profitability of a manufacturing firm. According to the regression analysis and correlation analysis, capital structure has no significant relationship on the profitability of manufacturing firms. As much as capital structure decision is the vital one since the profitability of an enterprise is directly affected by such decision. There are other factors that form a larger part of the contributory effect to the rise, stability or fall of the profitability of a firm.

Based on the findings of this study, capital structure has effect on the profitability performance of quoted manufacturing companies however, the effect is not significant. The study also showed that there are other contributory factors to the change in the profitability of a firm.

References

- [1] Abor. J., (2005)."The effect of capital structure on profitability: empirical analysis of listed firms In Ghana". Journal of Risk Finance, 6(5):438-445.
- [2] Azhagaiah, R., and Candasamy, G., (2011)."The Impact of Capital Structure on Profitability with special Reference to IT Industry in India". Managing Global Transitions 9(4): 371-392.
- [3] Booth, L., Aivazian, V., Demirguc-Kunt, A.E. and Maksimovic, V. (2001). "Capital Structure in developing countries", Journal of Finance, Vol. 56 No. 1, pp. 87-130.
- [4] Chiang, Y.H., Chan, P.C.A., & Hui, C.M.E., (2002). "Capital structure and profitability of the property and construction sectors in Hong Kong". Journal of Property Investment and firms. 20(6), pp. 434-454. 5.
- [5] Chittenden, F., Hall, G., & Hutchinson, p., (1996). "Small firm growth, access to capital markets And financial structure: review of issues used and an empirical investigation". Small Business Economics, 8(1): 59-67.

- [6] Ehrhardt, M.C., Brigham, E.F. Corporate Finance: A Focused Approach, (1st ed.), Mason, Thomson, 2003. 8.
- [7] Fox, J., (1991). "Regression diagnostics. Thousand oaks, CA: Stage publication", Qualitative applications in the social sciences, pp. 79.
- [8] Gemmill, G. Capital Structure and Firm value: A Study of Split-Capital Closed- End funds in the UK, City, 2001. 9.
- [9] Gleason, K. C., L. K. Mathur, and I. Mathur, (2000). "The Interrelationship between Cultures, Capital Structure, and Performance: Evidence from European Retailers". Journal of Business Research, 50 (2): 185–191.
- [10] Graham, J, (2000). "How Big is the Tax Advantage to Debt?" Journal of Finance,55 (5): 1901–1941.
- [11] Guthman, H.G., Dougalls, H.E. Corporate and Financial Policy, 4th ed, Prentice Hall Ic, Englewood Cliffs New Jersey. 10.
- [12] Hennessy, C. A., and T. M.Whited. 2005. "Debt Dynamics". Journal of Finance, 60 (3):1129–1165.
- [13] Mendell, B.C., Sydor, T., & Mishra, N., (2006). "Capital structure in the united states forest Products industry: The influence of debt and taxes". Forest Science, 52(5): 540- 548.
- [14] Mohammed Fawzi Shubita & Jaafer Maroof Alsawalhah "The Relationship between Capital Structure and Profitability". International Journal of Business and Social Science 3 16 [Special Issue- August 2012]
- [15] Raheman, A., B. Zulfiqar, and Mustafa. (2007). "Capital Structure and Profitability: A Case of Islamabad Stock Exchange". International Review of Business Research Papers, 3 (5):347–361.
- [16] Sarkar, S., and F. Zapatero. (2003). "The Trade-Off Model with Mean Reverting Earnings: Theory and Empirical Tests". The Economic Journal, 113 (490): 834–60.