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THE IMPACTS OF GEARING ON PROFITABILITY OF MANUFACTURING COMPANIES IN NIGERIA

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ABSTRACT

The objective of the study is to examine the impacts of gearing on the profitability of manufacturing companies in Nigeria The researcher employed descriptive statistics to test the profitability of the companies used at case study when geared and un-geared The study reveals the reason for the use of long-term debts (debentures) to include the need to increase the amount of resources available to a company for growth and expansion, the desire to reduce the Weighted Average Cost Of Capital (WACC thereby increasing profitability and capital appreciation, the adoption of agency theory and the need for dynamism among others. Most importantly, there is empirical evidence that the profitability of the three companies used as the case study-Guinness Nigeria Pic The West African Portland Cement Plc and CFAO Nigeria Plc-was better when long- term debts were not used, though the effects vary from one company to another. The shady concludes that gearing has always been a controversial topic both among academics and financial experts and as such projects should be properly evaluated and appropriate source(s) of finance used in order to maximize shareholders' wealth

Keywords: Gearing. Profitability, Weighted Average Cost of Capital (WACC). Shareholders wealth, Un-geared

INTRODUCTION

It is widely held that the amount of capital a firm needs is its major financial consideration. However, equally important is the capital mix: the kinds of capital that form the company's financial base, its capital structure. How much will be equity money, representing the funds owned by the shareholders in the enterprise? How much will be borrowed? How much will be raised by other means? In the sometimes-heady business of corporate finance, some combinations go well together, some do not. The sources of the capital structure are easy enough to single out. They include debt, both long and short term, preferred and common stock and earned surplus, all which are readily identifiable in the balance sheet. What is not easy to determine is the proper mix to go into a company' capital structure.

The needs of the business firm will, in large measure, determine the kind of capital structure it should have. It is important to remember, however, that the kind of financing a firm adopts at one point will affect both the cost and availability of capital it seeks to raise in the future. Leaving many other factors that will enter the picture for the moment (money market conditions,

the state of the economy, the firm's profitability and the like), it may still happen that the previous financing may force the company to either pay a higher price for a new loan or raise the money from equity holders. The latter could come about if the capital structure was too hevy with debt, making additional borrowing unlikely or too expensive. From the forgoing, it becomes obvious that capital mix of a company, be it manufacturing, financial, trading and so on, exerts great influence on the availability of funds to an organization, and this therefore suggests that such decision plays a significant role in the financial decisions a business entity is forced to make. Consequently, evaluating the capital structure of selected manufacturing companies in Nigeria as to how it affects the overall well-being of such enterprises forma the bedrock of this research work. The paper is divided into six parts. The first part gives the introduction. The second part delves into brief history of each of the companies used as the case study. The third part is on review of related literature on the topic. The fourth is on research methodology and model specification. The fith gives an analytical evidence of the effects of gearing on profitability of manufacturing companies while the last part concludes the study.

HISTORICAL BACKGROUND GUINNESS NIGERIA PLC.

Guinness Nigeria Plc

Guinness Nigeria Plc is one of the big companies in Nigeria. It emerged from its parent company that has a long history dating back to more than 200 years. The original Guinness Brewery at St James Gat Dublin was founded in 1759. In 1936, the second Brewery, Park Royal Brewery was opened in London and then in 1963, the third brewery at Ikeja, Nigeria came into existence. Guinness Nigeria Plc was the sixth most capitalized company in Nigeria at the end of 2002 (SEC, 2002:62) with a market capitalization of N31,150.24 million, coming second in the manufacturing sub-sector of the Nigerian economy .The capitalization rose to N113,274.24 million in 2005 (SEC, 2005:164) making it the fourth most cap company in the country but still the second in the manufacturing sub-sector. The company made us of long term debt capital between 1996 and 1999 (i.e., four years) while it did not for the next four years (i.e 2000 to 2003), thus making it suitable for this research work.

WEST AFRICAN PORTLAND CEMENT PLC.

The West African Portland Cement Plc was incorporated on 26" February 1959. It is engaged manufacturing and marketing of cement. The first cement factory of the company was commission 1960 at Ewekoro in Ogun State. The West African Portland Cement Plc with a total market capitalization of N21,575.37 million was the tenth most capitalized company in Nigeria as at the end of 2002 (SEC, 202:62) and the first in the cement industry. It slipped to the sixteenth position in 2005 with a market capitalization of N51,927.68 million (SEC 2005:164) but still maintaining its first position in the cement industry company did not make use of long-term debts in 1997 and 1998 but became geared from the following y In fact, the gearing ratio

steadily increased from 4.50 % in 1996 to 761.09% in 2004, thus, making it suitable for inclusion as a case study.

CFAO NIGERIA PLC.

The company was incorporated in Nigeria on 13 September 1969 as a wholly owned subsidiary of CF France. The company became a Public Quoted Company on 20" August 1971. Its principal s include: distribution of general goods, fabrication of steel water tanks, travel agency, distribution servicing of motor vehicles, motorcycles, office equipment among many others. The company, with market capitalization of N1,289,60 million was the sixty-first most capitalized company in Nigeria as a end of 2002. It went down to the seventy-seventh position in 2005 with a market capitalization of 1.8 million. The company's gearing decreased steadily from 15.81% in 1996 to 1.22% in 2002, It bes ungeared from 2003, thus making it suitable for inclusion in the case study.

REVIEW OF RELATED LITERATURE

The cost of funds employed by a firm is referred to as the cost of capital. Each source of finance has costs, while to the firm as a corporate entity, there is the overall or composite cost of capital, which is weighted, averaged of the costs of the alternative finance sources. The minimization of this cost is often taken as the fundamental financial goal of the firm. It is usually explained by its equivalent, the maximization of the market value of a firm's securities or maximization of the shareholders' wealth. This regarded as the long-run objective of the firm because it maximizes the possible consumption opportunities available to the firm' owners. The firm will still strive to find the financing mix (or capital structure minimizes the cost of capital or maximizes the firm' market value. This financing mix is referred to as te optimal capital structure.

CAPITAL STRUCTURE.

Brigham (1982) defined capital structure as the percentage of each type of capital used by the firm, such a debt, preferred stock and common equity. Keown (1986) defined it as the mix of long-term sources of find used by the firm, the relative percentage of each type of funds being emphasized. Horne and Wachows (1993) defined it as the mix or proportion of a firm's permanent long-term financing represented by preferred stock and common equity. An appropriate capital structure is a critical decision for any business organization. The decision is important not only because of the need to maximize returns to various organizational constituencies, but also because of the impact such a decision has on an organization's ability to deal with its competitive environment. The prevailing argument, originally developed by Modigliani and Miller (1958:261-297), is that an optimal capital structure exists which balances the risk of bankruptcy w the tax savings debt. Once established, this capital structure should provide greater returns to stockholders than they would receive from an all equity firm. Despite its theoretical appeal, researchers in financial management have not found the optimal capital structure. The best that academics and practitioners have been able to achieve are prescriptions

that satisfy short-term goals (Simerly, 2007). For an example, in a recent Harvard Business Review article, readers were left with the impression that the use of leverage was the best way to improve the performance of an organization (Champion, 1999:19-22). A better understanding of the issues at bond requires a look at the genesis of the concept of using debt to control managers and to reconcile this thing with the need to survive in the competitive business environment.

One of the defining characteristics of business in the 1990s was the adoption of prescriptions from agency theory to address the issue of managerial excesses of the 1970s and 1980s. The classic agency theory concept was developed by Hole and Means (1932). They observed that ownership and control had become separated in larger corporations as a result of the dilution in equity positions. This situation provided an opportunity for professional managers, a those in control, to act in their own best interest. Today, the central issue for agency theory is how to the conflict between owners and managers over the control of corporate resources through the use of which seek to allocate decision rights and incentives (Simerly, 2007). A distinguishing characteristic of the strategic management discipline is the emphasis it places on the firm's competitive contracts, In a research work covering over 700 firms across 31 Industries, Simerly (2007) found out that those firms characterized as exhibiting high level of dynamism were more successful if they had relatively environment. low levels of debt. In other words, debt was negatively related to profit in those industries. But is there an optimal debt-equity relationship?

To Loth (2006), debt is a good example of the proverbial two-edged sword. Astute use of debt increases the amount of financial resources available to a company for growth and expansion. A company considered too highly geared may find its freedom of action restricted by its creditors and/or may have its profitability hurt as a result of paying the high interest costs, Of course, the worst case scenario would be having trouble meeting operating and debt liabilities during periods of adverse economic conditions. Lastly, a company in a highly competitive business, if hobbled by high debt, may find its competitors taking advantage of its problems to grab more market share. Unfortunately, there is no magic proportion of debt that a company can take on. The debt-equity relationship varies according to industries involved, a company' line of business and its stage of development. However, because investors are better companies should have, generally speaking, lower debt and higher equity levels (Loth, 2006). Elumilade (2001:115-116) shares the traditional believe that gearing will affect the Weighted Average Cost Of Capital (WACC) of a company and is because of the theoretical lower eat or den introduces debt into its capital structure, so the WACC falls bed Healy debt financer cost of debt finance compared with equity finance. According to Palepu and Healy (1988), debt finance always provides additional earnings and this leads to possibility of higher dividends. However, as the level of debt increases, the return required by the ordinary shareholders will begin to rise because of the following factors:

(i) The equity providers will start to get worried about the adequacy of operating profits to meet the huge debenture interests and still pay dividends, and

(ii) The equity providers are also worried over the possibility that debenture holders can interfere with the management of the company. And lastly,

(iii) The possibility of forced liquidation in case of failure to meet loan interests.

The above factors put together are referred to as financial risk. As the return required by equity holders increases, the WACC will continue to fall because of the proportion of debt, and hence its weight is becoming larger. Eventually, a point is reached where providers of debentures themselves will demand higher returns. The increasing cost of equity, coupled with the now increasing cost of debt will force the WACC to increase. Landier and Thesmar (2007) added another dimension to capital structure by introducing optimism and its effects on capital structure. In a research that covered 1994 - 2000 and involving approximately 23,000 firms, they found out that optimism plays an important role in whether entrepreneurs select long-term or short-term financing. They found that optimistic entrepreneurs prefer short-term over long-term debt, and prefer inside rather than outside financing.

Measures of Profitability

Three indicators, namely: Net Interest Margin (NIM), Return on Assets (ROA) and Return on Equity (ROE) are identified by Ahmed (2003) to be widely employed in the literature to measure profitability in banks (the last two are good for other companies). However, there were divergent views among scholars on the superiority of one indicator over the others as a good measure of profitability. For instance, Wall (1987), Goudreau and Whitehead (1989) and Uchendu (1995) believe that the three indicators are all good. Hancock (1989) used only ROE to measure profitability in her study. Also, Odufalu (1994) used only the gross profit margin in measuring profitability. Ogunleye (1995) did not believe that profit level per se could constitute a good measure of profitability and therefore used ROA and ROE. What this means in summary is that anyone or a combination of the indicators can be used to measure profitability of a firm depending on the objective of the analyst. We shall stick to ROE for the purpose of this research work and we shall take it to mean Earnings Per Share (EPS).

RESEARCH METHODOLOGY AND MODEL SPECIFICATION

RESEARCH METHODOLOGY

The researcher made use of secondary data obtained from the Annual Reports And Accounts of companies used as case studies and information from the FACT book of the Nigerian Stock Exchange The data obtained include: Long-term debt, Equity, Gearing, Market Price Per Share and Earnings Per Share & various periods from 1996 to 2005. The statistical method employed for the test of the hypothesis is o t-test. This is because among other uses, t-test is a statistical tool used to test the significance difference between two sample means. Oloyo (2001) highlighted the underlying assumptions governing t validity of test of significance of the

difference between two sample means. These are: Independence of the two sampled drawn from the separate populations and Equality or homogeneity of the variances of the two populations.

The researcher tested only one hypothesis in his efforts to make the research objective achievable. This is:

Ho: Gearing has no significant effect on the Earnings Per Share (EPS) of Guinness Nigeria Plc, The Wes African Portland Nigeria Ple and CFAO Nigeria Plc. Hi: Gearing has a significant effect on the EPS of the three companies.

MODEL SPECIFICATION

As earlier stated, the test of significant difference between two means carried out with calculated t-value is:

$$t_{cal} = \frac{Xu - Xg}{\sqrt{\frac{Vu}{Nu} - \frac{Vg}{ng}}}$$

Where:

Xg-Mean of EPS of the geared period.

Xu Mean of EPS of the un-geared period.

Vg = Variance of EPS during the geared period

Vu = Variance of EPS during the un geared period.

Ng = Number of years of the grand period

Nu = Number of years of the ungeared period.

The calculated t-value is compared with the tabulated value at 0.05 level of significance.

DECISION RULE

Accept Ho if teal < ttab

Reject Ho if teal > ttab

FINDINGS AND DISCUSSIONS.

Tables 1-3 contain the data used in the computation and analysis required to test the hypothesis. The table contain for each of the years under review, the amount of debt, equity, and the gearing ratio, the earning per share and the market price per share.

The Hypothesis

Ho: Gearing has no significant effect on the Earnings Per Share (EPS) of Guinness Nigeria Plc, The West African Portland Nigeria Plc and CFAO Nigeria Plc.

Hi: Gearing has a significant effect on the EPS of the three companies.

As shown in Table 4, the mean EPS of Guinness Nigeria Plc during the un-geared period is 635.00 compared with 170.50k during the geared period. Its calculated t-value of 5.97, which is the test of significance, is more than the tabulated value of 3.18. Thus, we fail to accept the alternative hypothesis, ba accept the null hypothesis, meaning that gearing has a significant effect on earnings per share. The same thing happens to the West African Portland Cement Company Nigeria Plc. Its mean EPS of 296.00k during the un-geared period is more than the mere 75.00k during the geared period. Again, the t-calculated valed 26.91 is greater than the t-tabulated value of 12.71. Thus, we fail to accept the alternative hypothes meaning that gearing has a significant effect on earnings per share. The reverse is the case for CFAO N Plc. Though the mean EPS of the un-geared period (213.33k) is more than the 119.00k of the geared peri the calculated t-value of 3.31 is less than the tabulated value of 4.30, making us to fail to reject the hypothesis.

CONCLUSION

The paper seeks to present a review of empirical evidence of the effects of gearing on profile of manufacturing companies. There is evidence that though the use of long-term debt ass source of finance may reduce the Weighted Average Cost of Capital (WACC), it may be counterproductive in the long r thereby leading to reduction in profitability. Modigliani and Miller (1961) had argued that for comp the same class, the total market value and the WACC are independent of the debt-equity combination (the level of gearing) but are dependent on the future expected earnings discounted at the rate appropriate to the business risk class. The study therefore recommends that a company should always strive to enbaren projects that are worthwhile and profitable and also evaluate the capital structure to apply in financing sch projects. Such capital should enable the company to have the lowest WACC that will give a higher total value of a company ultimately leading to a higher EPS. All these will lead to the maximization of shareholders' wealth.

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Table 1: Guinness Nigeria Plc

Year	Debt (N)	Equity (N)	Gearing %	EPS (KOBO)	MPPS*** (KOBO)
1996*	70, 000, 000	4, 579, 887, 000	1.53	81	815
19997	50, 000, 000	7, 414, 217, 000	6.74	102	760
1998*	40, 000, 000	7, 894, 245, 000	5.02	129	810
1999*	20, 000, 000	9, 265, 698, 000	2.16	370	2, 000
2000**	NIL	10, 681, 154, 000	NIL	437	2,,040
2001**	NIL	12, 663, 140, 000	NIL	580	3, 785
2002**	NIL	14, 157, 810, 000	NIL	586	4, 830
2003**	NIL	15, 189, 428, 000	NIL	937	7, 000
2004	5, 000, 000, 000	16, 908, 244, 000	29.57	671	6, 100
2005	8, 5000, 000, 000	18, 277, 442, 000	46.51	412	8, 700

Source: Annual Reports and Accounts of Guinness Nigeria Plc; Fact Book of Nigerian Stock Exchange

*The geared period used for the research

**The un-geared period used for the research

***MPPS = Market Price Per Share

Table 2: The West African Portland Cement Plc

Year	Debt (N)	Equity (N)	Gearing %	EPS (KOBO)	MPPS*** (KOBO)
1996	30, 000, 000	6, 619, 723, 000	4.53	326	4.650
1997**	NIL	7, 901, 204, 000	NIL	285	4.500
1998**	NIL	9, 200, 171, 000	NIL	307	3.100
1999*	3, 338, 442, 000	9, 559, 855, 000	55.84	112	2.109
2000*	5, 337, 953, 000	9, 598, 182, 000	55.61	38	2.059
2001	6, 839, 340, 000	10, 586, 759, 000	64.60	58	2.200
2002	11, 541, 436, 000	9, 203, 212, 000	125.41	(81)	1.415
2003	12, 133, 853, 000	6, 028, 256, 000	201.28	(185)	1.851
2004	19, 994, 675, 000	2, 627, 127, 000	761.09	(198)	1.130
2005	10, 539, 420, 000	15, 238, 187, 000	69.16	92	1.730

Source: Annual Reports and Accounts of Guinness Nigeria Plc; Fact Book of Nigerian Stock Exchange

*The geared period used for the research

**The un-geared period used for the research

***MPPS = Market Price Per Share

Table 3: CFAO Nigeria Plc

Year	Debt (N)	Equity (N)	Gearing %	EPS (KOBO)
1996	175, 000,000	1, 106, 828, 000	15.81	74
1997	175, 000, 000	1, 283, 091, 000	13.64	86
1998	150, 000, 000	1, 460, 836, 000	10.27	92
1999	120, 000, 000	1, 590, 506, 000	7.54	73
2000*	90, 000, 000	1, 610, 814, 000	5.59	60
2001*	60, 000, 000	2, 037, 934, 000	2.94	154
2002*	30, 000, 000	2, 463, 541, 000	1.22	143
2003**	NIL	2, 741, 427, 000	NIL	86
2004**	NIL	1, 653, 913, 000	NIL	260
2005**	NIL	1, 328, 278, 000	NIL	294

Source: Annual Reports and Accounts of Guinness Nigeria Plc; Fact Book of Nigerian Stock Exchange

*The geared period used for the research

**The un-geared period used for the research

Table 4: Test of Significance Differences in during the geared and un-geared periods

Companies	Paired	No	Mean	Std Dev	/t – cal/	/t-tab/	Comments
Guinness	Un-geared	4	635.00	212.79	5.97	3.18	Significant
	Geared	4	170.50	134.44	2.54	3.18	
WAPCO	Un-geared	2	296.00	15.56	26.91	12.71	Significant
	Geared	2	75.00	52.33	2.03	12.71	
CFAO	Un-geared	3	213.33	111.58	3.31	4.30	Not
	Geared	3	119.00	51.39	4.01	4.30	Significant

Source : Computations with SPSS (2008)