# Determinant of Capital Mix in Developing Economies; Evidence from Nigeria Breweries Sector

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**Abstract:** This research work is carried out on the determinant of capital mix in emerging economy; evidence from Nigeria Breweries sector. The study aims at examining the capital mix and the effect on firm performance and to take a critical view of the adopted assets financing measures of the Nigeria firms and attempt to see how it has been achieved. Secondary data from annual reports of the seven selected breweries companies from 2009-2013 were employed, ratio analysis was used to analyze the data collected which is one of best statistical and accounting tool for measuring capital and financial performance of firm. The result of the test analyzed indicates that Guinness Nigeria plc. possessed huge amounts of current assets than Nigerian Breweries plc. It was also deduced that inventories and debtors were very high in case of the Guinness Nigeria whereas current liabilities were still on the moderate level except in 2013 which recorded a higher current liabilities than the current asset. Cash balances were comparatively high in both cases. This also, investigated the effect of Return on Capital Employed (ROCE), Net Assets, firm size and profitability Margin on ROCE Ratio and Debt Ratios. The results show that in static version of pecking order, all variables have significant relationship with capital mix but, in dynamic version of pecking order, fixed assets have positive relationship and networking assets have negative relationship with capital structure. The major recommendation of this study is Firms should try to maintain optimal liquidity position in order to finance their activities internally, to avoid high cost that associate with debt and equity financing.

**Key words:** Capital Structure • Debt • Equity • Return on Capital Employed (ROCE) and Nigerian Stock Exchange (NSE)

### INTRODUCTION

Capital mix of a firm is made up of equity and debt to finance its assets. According to capital structure theory, capital structure refers to the way an organization finances its assets. However, it is important for the firm to find the particular combination of debt and equity that maximizes its overall market value. A firm can be financed by 100% ordinary shares or with some mix of shares and debt. It is an important decision, how the assets of a firm are financed.

Study of the capital mix and the effects of financial leverage in the emerging economy is still a matter of concern. This problem is differently manifested in every country, depending on numerous factors [1, 2]. The main issue is the level of progress in capital market development, availability of various financing sources, the level of investor protection, legal stability and management quality. Each of these factors could affect

certain firms with different intensity, depending on the country. The differences between developed and developing markets are significant [3]. In contrast to developed markets, undeveloped markets are characterized by insufficient information transparency, poor functioning of primary market, low liquidity of secondary market and slow adjustment of prices to new information signals [4]. Under such circumstances, company management is often faced with inflexible capital structure, dominantly composed of capital and credit sources. Therefore, it is logical that usual capital structure determinants are differently manifested.

The importance of studying the peculiarities of capital structure choices of firms operating in emerging and transition economies was highlighted for the first time by [5]. Recently, there has been much research on capital mix aiming to explore the unique features of capital structure choices in Nigerian firms and other countries. But, such research may have not tailored in brewery

sector. The aim of this study is to fill the gap by explores the determinants of capital structure in Nigerian breweries sector, by accessing the capital mix of breweries industries listed in the floor of Nigeria Stock Exchange (NSE) through the use of Retained Earning/Reserve, Debt and Equity as the variables to measure its assets financing.

The Statement of the Problem: For an economy to grow and thrive there is need for firms to operate efficiently in production. This can be achieved when firms have sufficient capital to finance their assets. Firm can invest using internal funds, debt or equity. Breweries industries that are operating under emerging economy like Nigeria are facing economic hardship ranging from poor infrastructural development, insufficient information transparency and poor functioning of primary market, low liquidity of secondary market and slow adjustment of prices to new information signals. The following problems prompt the need to access the choice of capital that will maximize the market value of brewery business in Nigeria by examining the Retained Earnings, Debt and Equity financing as a source of financing their assets.

**The Objectives of the Study:** The current study was premised on the following objectives:

- To ascertain the relationship between debt capital and ROCE in breweries industries in Nigeria.
- To ascertain the relationship between equity capital and ROCE in breweries industries in Nigeria.
- To ascertain the relationship between Retaining Earning and total assets of breweries industries in Nigeria.

**Research Questions:** Finding of the study would answer the following question;

- To what extent does debt capital affect the ROCE breweries industries in Nigeria?
- To what extent does equity capital affect the ROCE breweries industries in Nigeria?
- How does Retaining Earning/Reserveaids the financing assets in breweries industries?

## MATERIALS AND METHODS

The research method to be applied in this study is quantitative. Besides, both the historical and ex-post facto research design shall be adopted. The population of this study is the entire brewery companies quoted on the Nigeria Stock Exchange Market. The researcher randomly select sample of two breweries companies out the seven breweries companies quoted in the Nigeria Stock Exchange (NSE). The selection was however justified due to the publicly availability and accessibility of needed data for the selected period. These companies are Guinness Nigeria plc. and Nigerian Breweries plc. Most of the information and data needed for the study would be gathered from existing literature, relevant journals and from annual reports of the selected companies from 2009 to 2013. Annual data coverage of various years shall be used for the empirical analysis in this research.

#### Measurement of Variables

**Ratio Analyses:** Accounting Ratios are analysis is one of the most important and widely used tools of analyzing the assets financing and its return. The various ratios that will be calculated are as follows:

**Debt/Leverage Ratio:** The Gearing ratio measures the percentage of total funds used to finance business operations, is generated from outside sources, it assesses the business stability. The Gearing Ratio were calculate as follows:

- Gearing/Debt Ratio = Debt Capital/Capital Employed × 100/1
- Debt/Equity Ratio = Total liabilities/Shareholder's Equity

**Return on Capital Employed:** This ratio indicates the percentage return generated by total funds employed to finance the operations of a business during the year. The Return on Capital Employed (ROCE) were calculate:

- ROCE = Profit/Capital Employed  $\times 100$
- Profit Margin = Net Profit/Sales or Turnover × 100.
- Net Assets Turnover = Sales or Turnover/Capital Employed × 100

**Liquidity Ratios:** These ratios threw light on the liquidity position of the concern. The following ratios were calculated:

- Current Ratio: Current Ratio = Current Assets/ Current Liabilities
- Quick Ratio: Quick Ratio = Current Assets Inventory/ Current Liabilities.

Table 1

Table 1								
DEBT/LEVERAGE RATIO								
Nigerian Breweries plc.			Guinness Nigeria Plc.					
Year	DR	DER	Year	DR	DER			
2009	1.29	1.29	2009	1.34	1.34			
2010	1.27	1.27	2010	1.29	1.29			
2011	1.5	1.5	2011	1.28	1.28			
2012	0.63	1.7	2012	0.63	1.7			
2013	0.55	1.24	2013	0.6	1.6			

Source: Computed by the researcher from the Nigerian Breweries plc and Guinness Nigeria plc Annual Report

Table 2:

RETURN ON CAPITAL EMPLOYED								
Nigerian Breweries plc.				Guinness Nigeria plc.				
Year	ROCE	PM	NAT	Year	ROCE	PM	NAT	
2009	59.9	16.99	3.4	2009	42.95	15.2	2.8	
2010	60.4	16.3	3.7	2010	40.16	12.55	3.2	
2011	48.96	16.97	2.88	2011	44.5	14.5	3.1	
2012	14.99	15.0	0.99	2012	13.4	12.2	1.1	
2013	17.0	16.0	1.0	2013	9.79	9.68	1.0	

Source: Computed by the researcher from the Nigerian Breweries plc and Guinness Nigeria plc Annual Report

Table 3:

LIQUIDITY RATIO							
Nigeria Breweries plc			Guinness Nigeria ple				
Year	CR	QR	Year	CR	QR		
2009	0.88	0.36	2009	1.14	0.60		
2010	0.89	0.42	2010	1.25	0.72		
2011	0.84	0.48	2011	1.21	0.73		
2012	0.65	0.37	2012	0.96	0.40		
2013	0.45	0.24	2013	0.62	0.38		

Source: Computed by the researcher from the Nigerian Breweries plc and Guinness Nigeria plc Annual Report

#### **Data Analysis**

**Interpretation:** From Table 1 below shows the Debt/Leverage ratios of Guinness Nigeria plc. and Nigeria Breweries plc. It shows that Nigerian Breweries plc. is equitable geared in 2009 - 2011 but fairly optimally earned in 2012 and 2013 since the ratios is within 0.50. While Guinness Nigeria plc. is equitable geared throughout the five years under study.

**Interpretations:** From Table 2 Below shows the Return on Capital Employed of Guinness Nigeria plc and Nigerian Breweries plc. It shows Net profit ratio to Capital Employed of the two companies between the periods of 2009-2013. Nigerian Breweries plc records the highest return on Capital Employed in 2010 and 2009 with a ratio of 60.5 and 59.9 it show that profit increase proportionately with capital employed. While 48.96 records in 2011shows fairly return but 14.99 and 17.0

records in 2012 and 2013 show low return on Capital Employed. The Profit Margin Ratio (PMR) for five years is very optimally, Net Assets Turnover (NAT) is also optimal except in 2012. The profit of Guinness Nigeria plc is not proportionately increase with Capital Employed; it shows low return for the five years under study. While Profit Margin Ratio (PMR) and Net Assets Turnover (NAT) is optimal.

**Interpretations:** From Table 3 Below shows the liquidity ratios of Guinness Nigeria plc and Nigeria Breweries plc. It shows the current ratio and Quick ratio of the two companies between the periods of 2009-2013. Guinness Nigeria plc records the highest current ratio in 2010 with a ratio of 1.25 while the highest quick ratio was in 2011 with a ratio of 0.73. For Nigerian Breweries plc, the highest current ratio was recorded in 2010 with a ratio 0.89 while the highest quick ratio was also in 2011 with ratio of 0.48.

#### **RESULTS AND Discussion**

The study examined the determinant of capital structure in an emerging economy; evidence from Nigeria Breweries sector. Two leading industries in Breweries sector, Nigeria Breweries plc and Guinness Nigeria plc were selected as a sample out of six Breweries industries listed in Nigeria Stock Exchange. Capital structure determinants such Debt/ leverage, Equity and Retained Earning with some other explanatory variables was used such as Debt/leverage Ratio (DR), Return on Capital Employed (ROCE) and Liquidity Ratio (LR) as performance indicators. The following findings were made in the course of this research work. That there is a positive significant relationship between capital structure (DR)/(DER) and performance value (ROCE) of a firm. Also, fixed assets turnover have a positive effect on capital structure. This result emphasis on the use of debt in capital structure when companies fixed assets increased. This positive meaningful relationship between fixed assets and capital structure is in aligned with [6, 7] studies. Firm size like fixed assets have a positive effect on capital structure of firms listed on Tehran Stock Exchange and inconsistency with [8] studies. That firm's leverage (TDER) has an insignificant and negative impact on firms Return on Asset of manufacturing listed in Nigeria stock Exchange. The impact of firm size in determining financial options of capital structure is more than other variables. Large companies with more sales have more opportunities to use bank loans. Regarding their reputation, they convince banks and financial institutions that they could repay their debts using these financial resources. Optimality on Capital Employed also has positive meaningful effect on capital structure. But, high profit margin has positive effect on capital structure. This result is consistent with [9]'s research results. Due to this fact that companies with high profitability could use internal financing and have fewer tendencies to use debt and equity financing. Firms should try to finance their activities with retained earnings and use debt as a last option as supported by Pecking Order theory. On the behalf of Working Capital Management it was observed that the working capital amount an average was higher than all other concerns as followed in Guinness Nigeria and Nigerian Breweries plc. Guinness Nigeria possessed huge amounts of current assets than Nigerian Breweries plc. It was also deduced that inventories and debtors were very high in case of the Guinness Nigeria whereas current liabilities where still on the moderate level except in 2013 which recorded a higher current liabilities than the current asset.

**Recommendations:** Based on the findings made in the cause of this study, the following recommendations are made;

- Policy should be made to moderate debt levels in capital structure. High levels of interest payments reduce the availability of internal funds for reinvestment.
- Firms should try to finance their activities with internal funds or retained earnings before sourcing debt financing as supported by Pecking Order theory.
- Firms should try to maintain optimal liquidity position in order to finance their activities internally, to avoid high cost that associate with debt and equity financing.
- Debt financing should be long-term loans to enable firms to invest in equipment and machinery.

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