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Performance Analysis of Nigerian Brewery Industry

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ABSTRACT

This research attempted to assess the financial performance of the firms in the brewery industry using financial ratios. It adopted a descriptive ex-post facto research design by using brewery firms of the Nigeria Stock Exchange (NSE) from 2011-2015. The result suggests that the brewery industry is profitable and efficient in using its asset to generate profit and return it to its shareholders. Similarly, the industry financial risk is relatively low, and manager in the industry manage their stocks efficiently. This suggests that managers of firms should endeavor to reduce the amount of debt in their capital structure and manage a reasonable amount of debt in its capital structure since a high debt implies a high financial risk.

Keywords: financial performance, brewery industry, Nigeria Stock Exchange (NSE)

INTRODUCTION

A well designed and implemented financial management is expected to contribute positively to the creation of a firm's value. However, the dilemma in financial management is to achieve the desired trade-off between a firm's liquidity, solvency, and profitability (Padachi, 2006; Lazaridis, 2006). Financial management in liquidity, solvency and profitability management is vital for financial performance as it has a direct impact on profitability of firms (Rajesh & Ramana, 2011). The essential part in managing firms' finance and working capital requires maintaining firms' liquidity for day-to-day operation to ensure the firm runs smoothly and to enhance its ability to meet its obligation (Eljelly, 2004). Hence, the ultimate goal of profitability can be achieved by efficient utilization of resources with the maximization of shareholders value (Panwala, 2009). According to Bhunia, Mukhuti and Roy (2011), it can be attained through financial performance analysis.

Financial performance analysis entails ascertaining the operating and financial characteristics of an organization from the financial statements. It aims to determine the firm's efficiency and performance. It is an attempt to measure liquidity, profitability, solvency, and other performance indicators and to ascertain whether the firm is operated in a rational and normal way. Thus, ensuring sufficient returns to the shareholders maintains its market value (Bhunia *et al*., 2011).

According to Sterling Capital (2010), Nigeria's brewery industry is the second largest industry in Africa after South Africa. It is rapidly emerging as the continent's most promising market given the population growth and the influx of foreign direct investment in the sector by multinational beer companies. However, in 2015, Deutsche Bank Market Research placed Nigeria as Africa's largest alcohol consumer. It was 36% of Africa's formal alcohol market. Beer production in Nigeria grew from 6,8 million hectolitres in 2004 to 15,46 million hectolitres in 2009. It was an aggregate growth of 126,47% in five years. The growth of 23 million hectolitres by 2015 was premised on the combined impact of beer Per Capita Consumption (PCC) growth (13 litres expected vs. 10 litres currently), population build-up (2,8% p.a.) and nominal per capita income growth (8,3% p.a.) (Vetiva Capital Management Limited, 2010). It was projected that market would rise from 15,6 million hectolitres

in 2009 to about 25,9 million hectolitres in 2012 (a five-year CAGR of 13,21%). This equated to beer consumption per capita rising from 11,2 liters in 2009 to 14,3 liters in 2012. According to GTI Securities Research (2015), the Nigerian brewery industry currently has 35,9% of the growth in the industrial sector, which grew in 2014 by 6,41% as against 0,87% in 2013.

Nigerian brewery sector is increasingly attracting the attention of global industry players such as SAB Miller, Carlsberg, and Castel. These interests reaffirm the growth opportunities embedded in the brewery industry. It is expected to generate a positive development for the sector regarding volume growth and deeper market penetration. The industry has proven its mettle inability of value creation as reflected in the superior Return on Equity (ROE). It is related to the other sectors in the country. Moreover, instructive is the fact that this return is less levered as the brewers are highly cash generative and parade low-debt capital structures. Regarding market returns, the brewery industry has done pretty well in outperforming Brazil, Russia, India, and China (BRIC) and emerging markets by a wide margin over the past ten years (Vetiva Capital Management Limited, 2010). Hence, this research attempts to assess the financial performance of the firms in the brewery industry using financial ratios from 2011 to 2015.

Structure Conduct Performance (SCP) theory was first introduced by Mason in 1939 as a method of analyzing markets and firms (Worthington, Briton, & Rees, 2001). It explained that the concentration of market promoted collusion among large firms in the industry which subsequently led to greater profits. Moreover, the performance of industry was determined by the suppliers and consumers who in turn was determined by market structure. Hence, the performance of the Nigerian Brewery Industry is expected to be determined by the players in the industry and the market structure.

Literature based on structural approaches has reported how market concentration weakens the market competition by fostering collusive behaviour among firms. Meanwhile, the structure, conduct, performance paradigm recognizes the positive relationship between market concentration and performance as a result of anti-competitive behaviour of firms with large market share (Berger & Hannan, 1989). On the other hand, the Efficient Structure Hypothesis (ESH) states that aggressive behaviour of efficient firms in the market leads to increase in those firm size and market share. This behaviour of the efficient firms allows such firms to concentrate and earn higher profits which further enhance their market share. Those firms can maximize profits by maintaining the present level of price and firms size or by reducing price and expanding the firm size.

Ohlson (1980) considered a large sample of 105 bankrupt firms and 2058 non bankrupt firms from US and used logit model to predict the bankruptcy on the bases of financial indicators. The bankruptcy of the firm could be predicted by size, leverage, profitability, and liquidity of the firm. Moreover, LoPucki (1983) investigated the factors that varied between failed and non-failed firms. It could be concluded that financial indicators significantly varied between failed and non-failed firm. Meanwhile, Altman (1968) carried out a discriminant analysis between bankrupt and non-bankrupt firms between 1964-1965. The researcher employed five ratios that included liquidity, profitability, solvency, leverage, and activity ratios. The research concluded that bankrupt firms were different from other firms regarding the number of financial ratios. Then, Storey *et al*. (2016) examined 636 manufacturing firms from United Kingdom. They found that the financial ratios matters in the survival of the firms and confirmed that financial ratios have significant power of failure prediction.

Mostafa (2009) in Egypt assessed the relative efficiency in companies using intelligent modeling techniques. Four inputs-assets (employees, market value, and share price) and two outputs (revenue and profit) were used for the Data Envelopment Analysis (DEA). The result of the DEA approach showed that only ten companies out of 62 companies were efficient.

In Pakistan, Din, Ghani, and Mahmood (2007) investigated the technical efficiency of large-scale manufacturing sector using DEA. Data were collected from 101 industries for two periods. It was from 1995 to 1996, and 2000 to 2001. Outputs used were contribution of GDP. Meanwhile, the inputs were capital, labor, industrial cost, and non- industrial cost. The findings revealed an increase in technical efficiency of large-scale manufacturing sector.

Moreover, Bhunia *et al*. (2011) in India identified the financial strengths and Blum pharmaceutical enterprises. The research covered two public sectors in drug and pharmaceutical enterprises listed on Bucharest Stock Exchange (BSE) for twelve years (1997-2009). The result revealed that the liquidity position was strongly suggesting that the firms could meet short-term obligations. Moreover, they relied more on external funds like long-term borrowing, so it provided a lower degree of protection to the creditors. Financial stability of both the selected companies also showed a downward trend. It implied that the financial stability of the selected pharmaceutical companies in India had been decreasing at an intense rate.

In Malaysia, Sulairnan, Jili, and Sanda (2001) investigated the corporate failure. The research developed a logit model and investigated the factor that could be used to predict the failure of firms. They found that leverage, interest coverage, and total assets turnover had a significant prediction power. Meanwhile, Abdullah and Ahmad (2008) concluded that out of ten determinants of corporate performance studied, firm leverage, net income growth, and return on assets had significant power to predict the failure of the firm.

Burja (2011) investigated how economic performance was achieved in the Romanian chemical industry for the period of 1999-2009. The research used

regression model. It revealed that the efficiency use of current asset, debt level, financial level, and efficiency of capital had positive effect on profitability of the firms. Similarly, Vintila and Nenu (2015) analyzed the factors influencing the financial performance of 46 Romanian company listed on BSE from 2009-2013. It was revealed that leverage, growth, total asset, and a number of employees in sales had negative effect on performance if it used the accounting based measure of performance. Using the market-based measure, total asset, leverage, and company age had negative impact on performance. Meanwhile, growth in sales had an increase in the profit of the firm.

Mehran and Izah (2012) examined the performance of 14 manufacturing companies in Pakistan using financial accounting ratios. Total assets, expenses, sales, profit before tax, and Return on Asset (ROA) were compared and analyzed from 2006 to 2010. It was revealed that the largest company by total assets over three years (2006, 2007 and 2008) had more expenses, low sales, low profit before tax, and ROA compared to the other firms. The research also showed that a positive relationship existed between sales, total assets, and profit before tax. It indicated economies of scale and suggested that large firms were able to take advantage of their size.

Demirhan and Anwar (2014) investigated the factors affecting firm performance during the international financial crisis which also affected Turkish economy. It used 140 non-financial firms for the financial crisis period in 2008. The results suggested that the firm's liquidity positively affected the firm's market value, while high leverage negatively affected the firm's performance.

METHODS

This research adopts a descriptive ex-post facto research design. It relies on secondary data obtained after the occurrence of the event which the researchers have no control over. Brewery firms in Nigeria Stock Exchange (NSE) are selected for this research from 2011-2015. This research attempts to describe the characteristics of the financial ratio in the brewery industry. Presently, there are 13 brewery companies in Nigeria with only four listed under NSE (GTI Securities Research, 2015). Hence, four firms make up the population considered as the sample size in the research. The four brewery firms are Champion Brewery (CB), Nigeria Brewery (NB), International Brewery (IB), and Guinness Nigeria Brewery (GN). This research also adopts a ratio analysis to compare the performance of firms in the brewery industry. The ratios in Table 1 adapted from different researchers are used in this research.

Table 1 Variable Description

	Variables	Measurement	References
1	Total assets		(Lin, Liu, & Chu, 2005); (Wu & Ho, 2007); (Wang, 2008); (Mostafa, 2009); (Yusof, Razali, & Tahir 2010); (Mehran & Izah, 2012)
2	Sales		(Lin, Liu, & Chu, 2005); (Wu et al., 2006); (Sharma, 2008); (Wang. 2008), (Yusof, Razali, & Tahir 2010); (Mehran & Izah 2012)
3	Profit after tax		(Wu & Ho, 2007)
4	Return on assets	Profit after tax/ total assets	(Lin, Liu, & Chu, 2005); (Wu & Ho, 2007); (Wang, 2008); (Mohammad & Said, 2010); (Mehran & Izah, 2012)
5	Return on earnings	Profit after tax/ shareholders equity	(Bhunia, Mukhuti, & Roy, 2011)
7	Debt/equity ratio	Total debt/equity	(Bhunia, Mukhuti, & Roy, 2011)
8	Inventory turnover ratio	Annual sales/cost of sales	(Bhunia, Mukhuti, & Roy, 2011)

(Source: Authors, 2017)

RESULTS AND DISCUSSIONS

The performance trend in ROA is in Table 2. ROA measures the effect of management capacity to use the firm assets to generate profit. It is discovered that CB has negative ROA except for 2011. Hence, the average value of ROA for CB is also negative (-0,1252). This suggests that CB has not been able to generate profit from the asset acquired.

On the other hand, NB records positive ROA over the period studied and has the highest value in 2011 (15,6%). However, it has continued to fluctuate over the period. The average for the period studied is about 14%. It implies that NB has been able to generate about 14% of its profit from the financial and real resources of the firm. It is also discovered that NB has the highest average value and performs better compared to other firms in the industry in ROA.

Similarly, IB had a negative ROA in 2011 and a positive value from 2012-2015. The highest value was in 2013 (10,1%). The average value of ROA is about 4%. It implies that IB can generate about 4% of its revenue from its financial and real asset. Moreover, for GN, it had positive ROA over period recording the highest value in 2011, but the value had been dropping over time. In 2015, it had dropped to about 6%. This suggests that the asset of the firm has not been employed efficiently to generate sufficient profit as it continues to fall yearly. It is also found out that the average value of ROA for GN is about 7% implying that over the years, 7% of the profit of the firm is generated from the asset of the firm.

On the industry average, it was revealed that ROA had a positive value over the period and it was at the highest in 2011 (7%). This suggests that the brewery industry in Nigeria has been able to generate profit from the use of its asset. However, it has continued to decline over the period studied.

The performance trend in terms of ROE is in Table 3. The ROE is a measure of a firm's efficiency at generating profits from every unit of shareholders' equity. It shows how investment funds are used by firms to generate earnings. It was discovered in 2011 that only IB recorded a negative ROE (-1,06) while others were positive with NB as the highest value (0,50). The industry average in 2011 was negative. It implies that the industry does not perform well in generating profits from shareholders' equity.

In 2012, only CB had a negative ROE. The others were positive with the highest value (0,40) in NB. However, the industry performed well in 2012 with a positive ROE. Similarly, in 2013, NB led the industry in ROE (0,38) followed by GN (0,25). CB also recorded a negative value. The same result was also obtained in 2014 and 2015 that NB led the industry and CB recorded a negative value.

It is noteworthy to mention the negative ROE recorded by CB. It is observed that the value has been improving and can be projected to a positive value in later periods. Meanwhile, the other firms have positive values. They have been recording consistent drop in value during the period studied. Similarly, the industry performed best in 2013 as it recorded the highest value and was the worst in 2011 with a negative industry average.

On the average only, NB and GN have a positive mean value while CB and IB record negative value. This suggests that only NB and GN can efficiently generate profits from shareholders' equity and use investment funds to generate growth in earnings.

Table 2 Return on Asset (ROA)

	2011	2012	2013	2014	2015
CB	0,06961	-0,2685	-0,1462	-0,1721	-0,1090
NB	0,1562	0,1499	0,1704	0,1215	0,1066
IB	-0,1179	0,0645	0,1010	0,0863	0,0645
GN	0,1943	0,1430	0,0979	0,0723	0,0637
Industry Average	0,0755	0,0222	0,0557	0,0270	0,0314

Table 3 Return on Equity (ROE)

	2011	2012	2013	2014	2015	Average
CB	0,0953	-0,3227	-0,1846	-0,1228	-0,0730	-0,1215
NB	0,5083	0,4071	0,3834	0,2473	0,2212	0,3534
IB	-1,0644	0,2350	0,2481	0,1868	0,1599	-0,0469
GN	0,4450	0,3635	0,2576	0,2124	0,1612	0,1989
Industry Average	-0,0039	0,1707	0,1761	0,1309	0,1173	0,0960

Table 4 shows the debt-equity ratio of the firms in the brewery industry. It shows the vulnerability of available earnings for shareholders. It also indicates the level of financial risk that a company is exposed to. A high debt-equity ratio usually indicates that the business has high risk since the firm must meet up its obligation to pay back the principal and interest on debt. In 2011, the industry average was 3,52. When it is compared with the debt-equity ratio of each firm in the industry, it can be asserted that IB has a very high debt-equity ratio (9,27). It implies that the firm is highly geared and finances most of its operation using debt. Similarly, in 2012, the industry average was 1,86, and IB recorded a debt-equity ratio of 2,41 which is higher than the industry average. This condition suggests that IB is highly geared in line with the industry average.

In 2013, both CB and GN recorded a higher debt-equity ratio than the industry average (1,55), while NB and IB recorded a relatively low value. This suggests that CB and GN are highly adjusted to the industry average. Meanwhile, in 2014, the industry had a relatively low debt-equity ratio compared to the previous periods (1,13). It was also discovered that only CB and NB had relatively low debt-equity ratio. The industry average rose slightly in 2015 by 0,04, and it showed that IB and GN had a high debt-equity ratio. On the average, it can be asserted that in the period studied, IB is relatively highly geared (3,10) compared to other firms in the industry. However, CB has a relatively low debt to equity ratio. This suggests that IB is exposed to high level of financial risk.

The inventory turnover ratio measures the efficiency of inventory and stock management and is depicted in Table 5. A low inventory ratio suggests that there is slow moving inventory or goods. It is an indication of poor performance in the management of inventory. In 2011, NB and GN performed better than the industry average as they recorded a value above the industry average. However, CB and IB had low inventory ratio. Similarly, in 2012, 2013, 2014, and 2015, CB recorded poor stock management compared to the industry average. Meanwhile, NB, IB, and GN performed better in the efficient management of its inventory in 2012, 2013, 201,4 and 2015. This suggests that CB has poor performance in the management of inventory. The average inventory turnover for each firm in the industry also shows that NB performs better. Then, CB records the lowest average inventory turnover ratio in the period.

The findings show that in ROA as a measure of performance, NB performs better, and CB indicates a poor performance. This suggests that NB has efficient and effective management capacity in using the firm assets to generate profit. Similarly, ROE as a measure of performance also shows that NB performs stronger compared to its counterparts. However, CB and IB perform poorly. It implies that NB generates profits from every unit of shareholders' equity efficiently compared to its counterparts in the industry. IB has the highest debt-equity ratio, which suggests that it is exposed to a high financial risk. Meanwhile, CB has a relatively low financial risk. It can be concluded that inventory management is strong in NB and it is so poor in CB. Thereby, it reflects the ability of the company to manage its stock inefficiently.

Table 4 Debt-Equity Ratio

	2011	2012	2013	2014	2015	Average
CB	1,7531	1,8082	1,8987	0,3880	0,3105	1,2317
NB	2,0298	1,7141	1,2495	1,0343	1,0727	1,4201
IB	9,0242	2,4137	1,4558	1,1624	1,4795	3,1071
GN	1,2748	1,5409	1,6295	1,9366	1,8183	1,3850
Industry Average	3,5205	1,8692	1,5584	1,1303	1,1702	1,7860

Table 5 Inventory Turnover Ratio

	2011	2012	2013	2014	2015	Average
CB	0,8257	0,7928	1,0117	1,2403	1,3995	1,0540
NB	2,1104	1,9860	2,0158	2,0538	1,9406	2,0213
IB	1,4603	1,8908	1,7949	1,9282	1,7819	1,7712
GN	1,7643	1,8404	1,8447	1,8870	1,8927	1,4929
Industry Average	1,5402	1,6275	1,6668	1,7773	1,7537	1,5849

CONCLUSIONS

A firm's ability to analyze its financial position and strength is essential to improve the firm competitive position in the industry and marketplace. Through a careful analysis of the financial performance, the firms can identify opportunities and prospects to improve the firm performance. It can be deduced from this research that some of the firms have poor performance in ROA and ROE. Meanwhile, the debt-equity ratio for some firms is high. Hence, it indicates high financial risk. Based on the average performance of the industry, it can be concluded that the industry is profitable and efficient in using its asset to generate profit and return to its shareholders. Similarly, the industry financial risk is relatively low, and manager in the industry efficiently manage their stocks. Thus, the researchers suggest that managers of firms should endeavor to reduce the amount of debt in their capital structure to reduce their financial risk. Moreover, firms should reduce inventory in its warehouse and employ more marketing strategies to market their product. Then, the government should make the industry more attractive by granting tax incentives to investors.

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