EFFECT OF CORPORATE ASSETS ON PROFITABILITY OF BREWERY INDUSTRY IN NIGERIA

Chinweoda Damian Ezugwu and Prof. Inyiama Oliver .I.

Department of Accounting and Finance School of Post Graduate Studies Godfrey Okoye University, Ugwuomu-Nike, Enugu

Abstract: This study sought to determine the effect of corporate assets on profitability of brewery industry in Nigeria because of poor earning potentials that have affected many manufacturing industries in Nigeria which made suppliers and investors to be reluctant in supplying and investing. This study was a time-series study that covered a period of 2014-2018 with target population of ten(10) selected breweries industry in Nigeria made up of five(5) breweries industry listed on Nigeria stock exchange and five(5) breweries industry not listed on Nigeria stock exchange. The sampling technique was purposive, in sample selection the study made use of data from annual report and accounts of Guinness Nigeria breweries Plc, Golden Guinea breweries Plc, Champion breweries Plc, international breweries Plc and Nigeria breweries Plc. A multiple regression, correlation matrix with aid of E-views output version 9.0 was used to analyse the data collected for this study. The result of this study indicated that corporate assets have negative effect on profitability (EPR/BEPR) of brewery industry in Nigeria. In particular, non-current assets have negative effect but statistical significant on profitability. Current assets also have negative effect but insignificant on profitability of brewery industry in Nigeria. The result equally revealed that non-current assets(NCA) was found to be negatively and weakly associated with EPR while current assets(CA) was found to be positively associated with EPR(profitability). The implication of the results was that one percent (1%) increase in non-current assets would automatically diminish earning power. Also one percent (1%) increase in current assets would automatically decrease earning power (profitability). Some of the recommendation(s) of this study were that brewery industry in Nigeria should be carrying assets appraisal before buying expensive non-current assets because it drains cash and increase their debts. Also authority of brewery industry in Nigeria should ensure that a lot of funds should not be allocated to current assets to prevent them from starving fund to be used in other productive sector and too little funds should not be held as a current assets, in order not to lose competitive position in the market.

Keywords: Non-current Assets, current Assets, and profitability

INTRODUCTION

Most business entity relies on its profitability or performance for survival, as a result of that, every business entity become conscious of determinants of its profitability/performance like assets structure, capital structure, firm

attributes, size and age, etc. A company statement of financial position consist assets, liabilities, and shareholders' equity. Assets are classified into current assets and non-current assets. The classification between non-current assets and current assets lies in their lifespan. Current assets are liquid assets that are expected to be converted within a year, such as cash and cash equivalents, inventory, prepaid expenses and account receivable. Non-current assets is a property possessed by business entity which cannot be change into cash example noncurrent assets, intangible assets, long-term investments and deferred charges. Fixed assets are assets that have physical form and charged to statement of financial position as property, plant and equipment. Intangible assets are assets that do not have physical property but can last long. Long-term investments are investments that will not sold or mature within a year. Deferred charges are long-term prepaid expenses which continues to exist in a statement of financial position until, it is being used example, premium, rents and prepaid insurance (Kento, 2020).

Current assets are assets that are not hard to change into cash. It is used to pay off current liabilities within accounting period and helps a company to run a day-to-day business, covering expenses as they occur and ensuring the smooth functioning of business activities examples, cash, inventory, account receivable – money that customers owe company, prepaid liabilities or other liquid assets. Non-current assets are long-term investment that cannot be changed to cash easily, for instance, land, property and investments in other companies, machinery and equipment. Intangible asset is one of the non-current assets that comprise intellectual property, goodwill, trademarks and branding (Sebkuhnert, 2018).

Profitability of a firm will not be easily understood without relating income(s) to its sources, because operating income or net income is not profitability. One of the profitability indicators is earning power ratio. Earning power is a company's capacity to earn profit, especially profits on its operations. Shareholders and financial analysts compute earning power to ascertain whether a company is worth investing (marketbusiness.com).

Uslegal.com, states that "earning power is the ability of a business to earn profit on invested capital after paying owners and employers, servicing obligations and fully recognizing its cost while following good accounting practices". Earning power ratio is one of profitability in relation to investment. It is computed as sales/total assets x Pat/sales (Oleka, 2004). Basic earning power ratio is an indicator that does not recognize income taxes and financial leverage while computing the existing power of a business. It is derived as profit before interest and taxes divided by total assets. It is like return on assets ratio in relation to denominator but differs in relation to numerator because both of them use total assets as a denominator and different profit in numerator. Return on assets measures the net-earning power, while basic earning power computes the operating earning power (Obaidullah, 2018). Higher basic earning power ratio indicates that a company is generating more income from its assets. Basic earning power ratio considers all income realized by the company, not just income from operating activity and provides a comprehensive picture of how company's earns income. Basic earning power ratio provides room for effective comparisons of company's performances and recommends that investors should select a company with a lower earnings ratio since it extracts more value from its assets (Kalibri.teacherinabox.org.au). Basic earning power ratio is a percentage of earnings relative to total assets and indication of how effectively assets are used to generate earning. It is computed as EBIT divided by the total assets (www.finance.com). Earning power is a measure that shows the capacity of business to generate profit over a long period assuming all current operational generally remains intact. Equity analysts usually analyzes company's earning power ratio to find out if a company's inventory is worth investing before advising investors to buy and sell (Bloomentathal,

2019). On this background, the study is trying to examine the effect of corporate assets on profitability of brewery industry in Nigeria.

1.2 Statement of the Problem

In Nigeria, there is an indication of mismanagement of corporate assets e.g. misappropriate of assets in many manufacturing industry. Misappropriation of assets means theft of an entity's assets that causes the financial statement not to be presented in conformity with generally accepted accounting principles (GAAP). Misappropriation of assets includes false or misleading records or documents, possibly created by circumventing controls examples include but not limited to embezzling funds, theft assets, causing an entity to pay for goods and services that have not been received. Skimming revenues, pay rolls (www.polonious.system.com). Obviously investors are reluctant to invest in manufacturing industries in Nigeria, because of their poor earning potentials. Also suppliers are reluctant to supply because of manufacturing industries low performance. This signifies that amounts owe to them may not be paid to them hence there is no sufficient profit. We all know that if corporate assets of business organization lack the capacity to generate income, that it affects all the profitability elements. The study will examine the corporate assets of the industry against profitability element example earning power ratio (EPR) that would help to know the extent of effect corporate assets have on profitability/operating performance and possible solution to recommend.

1.3 Objectives of the Study

The broad objective of the study is to examine the effect of corporate assets on profitability of brewery industry in Nigeria.

The specific objectives of the study are:

To examine the effect of non-current assets on the profitability of brewery industry in Nigeria.

To determine whether current assets has a significant effect on the profitability of the firm.

1.4 Research Questions

1. What is the extent of the effect of non-current asset on profitability of the brewery industry in Nigeria?
2. What effect do current assets have on profitability of the brewery industry in Nigeria?

1.5 Research Hypotheses

In line with the research problems and objectives, the following hypotheses are formulated to be tested.

Ho1:   Non-Current assets have no significant effect on profitability of the brewery industry in Nigeria.

H02:   Current assets have no significant effect on profitability of brewery industry in Nigeria.

Review of Related Literature

Conceptual Review

2.1.1 Corporate Assets

Assets, in the context of corporate finance, represent valuable resources that individuals, corporations, and countries acquire with the anticipation of future benefits (Barone, 2020). These assets, documented in a statement of financial position, may include tangible items like property, plant, and equipment, as well as intangible assets like patents. The Oxford Dictionary defines assets as items of property owned by individuals or companies, recognized for their value and availability to meet debts, commitments, or legacies (www.nibusinessinfo.co.uk). Assets play crucial roles in business, such as reducing tax bills, achieving potential savings through leasing, protecting intangible assets like patents, contributing to business equity, and mitigating risks by managing physical assets efficiently.

Physical assets, a subset of assets, encompass tangible fixed assets like office buildings, manufacturing equipment, and computers. Asset management, facilitated by information technology, involves organized and systematic approaches to decision-making in maintaining, upgrading, and operating physical assets (Basu, 2020). Additionally, assets can be categorized as economic resources owned by a business entity, providing future benefits and constituting stores of purchasing power, money claims, and tangible/intangible items (Pandy, 1991). Overall, assets are integral to a company's financial position and performance, influencing its efficiency, tax implications, and risk management (Sharma, 2015).

2.1.2 Non-Current Assets

Non-current assets, a term used interchangeably with fixed assets in accounting, refer to corporate assets that extend beyond a single accounting period, typically lasting more than twelve months (IFRSs 5; Basu, 2020). These assets, such as property, plant, and equipment (PPE), undergo gradual reductions in value over time. Non-current assets, if not depreciated properly, may require additional equity infusion at the end of their useful life for replacement or new acquisitions. Expenses related to procuring non-current assets are considered capital expenditures, and their value cannot be written off in the statement of profit (IFRSs 5). International Financial Reporting Standards (IFRSs) discuss non-current assets, emphasizing the need for proper accounting treatment and depreciation to reflect their changing values (Willey, 2020).

2.1.3 Current Assets

Current assets, in contrast to non-current assets, are those assets expected to be consumed within a single accounting period, typically twelve months (Horton, 2019). These assets include closing inventory, net receivables, cash equivalents, prepayments, and other short-term items. Unlike non-current assets, current assets do not suffer from depreciation, with only closing inventory susceptible to losses due to factors like weather conditions (Horton, 2019). Current assets play a crucial role in calculating working capital for day-to-day business operations and are instrumental in computing financial ratios such as the acid-test ratio (Horton, 2019).

2.1.4 Profitability

Profitability is a vital metric for assessing a company's efficiency, success, and capacity (Kenton, 2020). It goes beyond calculating profits alone, providing insights into how effectively a company utilizes its resources and capital. Investors use profitability to evaluate the worth of an investment, considering a company's ability to generate returns on investment compared to alternative opportunities (Horton, 2019). Profitability ratios, categorized as margin ratios and return ratios, offer detailed financial indicators (corporatefinanceinstitute.com). Margin ratios, including gross profit margin and net profit margin, reveal the relationship between sales and profits. Return ratios assess a company's efficiency in generating returns on assets and equity (corporatefinanceinstitute.com). Profitability analysis covers return on investment, operating performance, and assets utilization, contributing to an overall understanding of a company's financial health (Wild, Subramanyam, and Halsey, 2007).

In the context of the brewery industry in Nigeria, profitability becomes a critical factor for investors (Nweze, 2004). The ability of a brewery to earn satisfactory profits and provide a return on investment influences stock prices and dividend potential. Both investors and creditors are cautious about associating with entities demonstrating poor profitability, as it impacts their returns and the likelihood of debt repayment (Nweze, 2004). Profitability analysis, encompassing various financial ratios, serves as a valuable tool for comparing companies within the industry and across diverse sectors (Zarafat and Vejezajic, 2013).

2.1.5 Origin of Brewery Industry in Nigeria

The brewery industry in Nigeria, belonging to the manufacturing sector, has a history dating back over six decades (http://www.ukessays.com). The pioneer companies, Nigerian Breweries in 1949 and Guinness Nigeria Breweries in 1962, marked the beginning of the industry. The major products of the brewery industry include beer, stout, and non-alcoholic drinks. Challenges, such as high operational costs, importation expenses, skilled labor requirements, and machinery maintenance, have led to the closure of small firms, leaving only large firms with robust financial bases (http://www.ukessays.com). Nigeria, located in West Africa, produces a significant amount of beer annually, with the industry listed under the consumer goods sector of the Nigeria Stock Exchange (NSE). The presence of key players like International Breweries Plc, Golden Guinea Breweries Plc, Guinness Nigeria Plc, and Nigeria Breweries highlights the competitive landscape of the beer industry in Nigeria (Esowe, 2019).

Theoretical Review

2.2.2   The Keynesian theory of investment:

Keynesian theory of investment is an investment theory originated by Keynes (1936) which states that investment decisions are taken by comparing the marginal efficiency of capital (MEC) with the real rate of interest (R). This theory made it known that if marginal efficiency capital is greater than real rate of interest, new investment in plant, equipment and machinery will take place. However, if more and more capital is used in the production process, the marginal efficiency capital will fall due to the decreasing marginal product of capital and as soon marginal efficiency of capital (MEC) is equated to real rate of interest (R) no new investment will be made in any income – earning assets. This theory also states that the amount of investment undertaken depends not only on expected returns but also on the cost of capital.

Therefore, the relevance of this theory to this study is that it would help investors and companies to compare marginal efficiency capital (MEC) and the real rate of interest (RRI) of a company before they invest or procure non-current assets, since this theory has made it known that whenever MEC is greater than RRI that new investment in plant, equipment and machinery will take place.

Empirical Review

Opeyemi and Oyelade (2019), examined the impact of firm size on firms performance in Nigeria: a comparative study of selected firms in the building industry in Nigeria. The study grouped firms performance into two (a) financial performance (b) productivity performance under financial performance ROA and ROE represented financial performance. Under productivity performance output per labour and output per capital was used to represent productivity performance. Panel analysis was employed to analyse data. The study revealed that age and total sales were statistically significant in determine return on assets (ROA) since incorporated and age of firm since incorporated has a negative effect on return on assets. It was observed that only leverage was significant in determine return on equity. Based on productive performance age and total sales were statistically significant in determine output per labour since incorporated. The findings also revealed that total sales and age of firm since incorporated have positive effect on output per labour and total number of employee and leverage has a negative significant impact on output per labour. The study concluded that only age of firm since incorporated as a measure of size and liquidity ratio has a positive significant effect on output per capital.

Ulfat et al (2015) researched on impact of fixed asset on form profitability in Pakistan the study used sample of three manufacturing sector such as sugar, cement and textile over five year period from 2010 to 2014. Regression analysis was used to show the impact of fixed asset on firm profitability and the results revealed that investment on non-current asset does not have strong impact on corporation profitability. The major findings of this study was that there was a significant relationship between dependent variable and the independent variable.

The study used net profit as a proxy for dependent variable and fixed assets as a proxy for independent variable. Evci and Sak (2017) assessed the effect of working capital management on profitability in emerging countries: Evidence from Turkey. The population of the study is the number of firm's listed on Borsa Istanbul industry index in turkey but an annual data of 41 firms were used for the period 2005 – 2016. Effects panel regression model was used to determine the effect of working capital proxies and firm's profitability trade off. The study shows that a negative relationship exists between return on assets and payables deferral period, cash conversion on cycle, the ratio of short-term financial debts to short-term debts, and the ratio of fixed assets to total assets while return on assets is positively related to inventory conversion period and sales growth.

Adnan and Kaddumi (2012) studied on the impact of assets quality management on profitability and shareholders' value – the case of Jordanian listed commercial banks (2001 – 2012). The study employed total credit to total assets ratio and total investment to total assets as a proxy for independent variable on the bank's performance represented by EPS, ROA, ROE and book value per share. The EPS, ROA, ROE and Book value per share are the dependent variable. The study applied multi and simple regression analysis on the data collected from Jordanian listed commercial banks. The results of the analysis showed that bank's assets quality indicators collectively have a positive impact on the profitability and shareholders' value indicators.

Adebayo and Oladele (2013) conducted research on the effect of firm size on profitability: Evidence from Nigerian Manufacturing Sector. The study population consist manufacturing companies listed in the Nigerian Stock Exchange. The period of the study covered years between 2005 and 2012. The sample consisted five (5) selected beverages manufacturing companies per year, yielding a total of forty (4) observations for the period under consideration. Secondary data sources were used as a method of data collection. ppmcc and regression with aid of SPSS statistical package 17.0 version was used to analyse data. The study indicated that firm size both in terms of total assets and in terms of total sales, has a positive effect on the profitability of Nigerian manufacturing companies. The study recommends that future researchers should investigate sector effects on the relationship between firm size and profitability in Nigeria.

Asete and Kung (2018) examined the effects of liquidity management on profitability of quoted manufacturing firms in Kenya. The population of the study involved 12 quoted manufacturing companies in Kenya between 2010 and 2015. Ex-post facto was the research design, secondary data collected covered a period of six years. The study used descriptive statistic: mean, standard deviation, minimum and maximum values and inferential statistics. Correlation, regression and Anova for the test of hypothesis and analyses of data. The regressor variables (the company's liquidity) was measured using the current ratio, quick ratio, cash ratio and cash conversion cycle and regress and was measured by ROA (return on assets). The findings of the analysis revealed that all the independent variables had a significant combined effect on profitability of manufacturing firms in Kenya. The study recommends that the manufacturing firms should increase their cash flow through reduction of supplier repayment period and engaging experts in management of their receivables.

Papadogonas (2007) studied on the financial performance of large and small firms: evidence from Greece. The aim of the study was to outline possible difference in the main factor that determine firm probability with the help of data from Greek manufacturing firms from 1995 – 1999 period. The population of the study consisted both large and small firms of Greek manufacturing sector but a longitudinal sample size of 3035 firms was used for the study. Regression models was applied to analyse the data. The results showed that size, managerial efficiency, debt structure, investment in fixed assets and sales growth affect significantly firm profitability. Anjili (2014) examined effect of Asset and liability management on the financial performance of commercial banks in Kenya for a period of 2004 – 2013. The population of the study comprised commercial banks in Kenya. Sample of 43 commercial banks were used for the study. Secondary data was obtained from Annual Central Bank of Kenya banks supervision reports. The tools of data used for the study includes Spss version 2.0, t-test with 5% level of significance, Anova& correlation coefficient. The findings of the study indicated that camel factor (capital adequacy, asset quality, management efficiency, liquidity and operational efficiency) had a statistically significant influence on financial performance. The study recommended policies that ensure revenue diversification, reduce operational costs, minimize credit risk and encourage banks to minimize their liquidity holdings.

Pervan, Ivica and Curak (2019) conducted research on determinants of firm profitability in the Croatian manufacturing industry. Evidence from dynamic panel analysis. The population of the study comprised listed manufacturing industry in the Croatia Stock Exchange but the study used sample size of 935 firm. Pairwise correlation with the aid of the general method of moments (9m.m) dynamic estimator panel was applied to analyse financial data collected from Amadeus data base compiled by Bureau Van Dijk for a period of 2006 to 2015. The results of the study revealed that a firm's age, labour cost and industry concentration, as well as GDP growth and inflation, have significant effect on a firm's profitability.

Okwo, Okelue and Nweze (2012) studied on investment in fixed assets and firm profitability: evidence from the Nigerian Brewery industry. The aim of the study was to determine whether investment in fixed asset has any effect on its operating profit margin. Four brewery companies listed on Nigeria stock exchange was used for the study which includes Nigerian breweries Plc. Guinness Nigeria Plc, and international breweries Plc. and champion breweries plc. A cross sectional data was collected for the analysis from the annual reports of the sampled brewery firms for a period of 1995 to 2009. The study applied multiple linear regression in hypothesis testing and the hypotheses result showed that the level of investment in fixed asset does not have strong and significant impact on the level of reported profit of breweries in Nigeria.

Sitorus and Denny (2017) examined the influence of asset and profitability toward share value; mediation effect on liquid asset for a period of 2010 to 2014. In the methodology of the study testing model of structural equation modeling (SEM) was used to test the hypotheses of the study. The result showed the followings: Asset provides a significant positive influence on the value of share. The asset gives significant influence on the liquid asset. Profitability gives a significantly positive influence on share value.

Profitability gives a significantly positive influence on the liquid asset because when beta coefficient has a positive sign, the profitability variable is in the direction of the liquid asset variable.

Irom et al (2016) studied on effect of firm attributes on return on Asset of listed manufacturing companies in Nigeria. The population and sample size of the study comprised 41 listed manufacturing companies in the Nigeria Stock Exchange as at 31 December 2016. The study applied random effect regression for the hypothesis of the study and the results revealed that firm size had a negative and significance effect on return on asset. The study

recommended that listed manufacturing firms should reduce firm size and operating expenses so as to increase the return on assets of their firms and short term cash should not channeled to fund capital asset.

Alani (2014) studies on effect of Assets structures on the financial performance: evidence from sultanate of Oman. The study used annual report of 28 companies from total population of 70 companies for period of 2008 – 2012 as the secondary data of the study. Convenient sampling method was used to select the sample size. The results of the study showed that asset structure does not have a strong impact on profitability in terms of ROE. Also, the result indicated that only the fixed assets have impact on ROE unlike ROA. The study concluded that the effects of asset structure have an impact on ROE only in petro chemical sector.

Nasution, Siregar and Panygabean (2017) studied effect of profitability Asset Tangibility, corporate tax, non – debt – tax shield and inflation upon the financial capital structure of the manufacturing companies listed on the Indonesian Stock Exchange. The populations of the study are the manufacturing companies in the consumption goods sectors that are listed on the Indonesia Stock Exchange from 2014 to 2016. The sample size of the study was 36 of manufacturing companies listed on the Indonesian Stock Exchange. The tools of data analysis employed were descriptive statistics and tests of classical assumption used were multiple linear regression. The results of the study revealed data processing for individual variables show that profitability and non-debt tax shield have a negative influence on the financial capital structure. It was observed from the study that Tangible Assets have a positive influence on the financial capital structure. The results also showed that neither corporate tax nor inflation rate has any significant influence upon the financial capital structure of the manufacturing companies listed on Indonesian Stock Exchange. The study concluded that profitability, Asset Tangibility, corporate tax, non-debt tax shield, and rate of inflation together has a significant influence upon the financial capital structure of the manufacturing companies listed on the Indonesia Stock Exchange.

Nwaniki and Omagwa (2017) studied on asset structure and financial performance: A case of firms quoted under commercial and services sector at the Nairobi securities exchange, Kenya. The study target population was the secondary data from the annual reports of the firms for the period of 2014 to 2010. The study tool of data collection was a document review guide. A multiple regression analysis was conducted with the aid of statistical programs SPSS version 21. The results of the study indicated that asset structure had a significant effect on the financial performance. It was observed that non-current assets and long term investment and funds have a statistically significant effect on financial performance while current assets and intangible assets do not have statistical significant on financial performance. The study concluded that firms should increase the allocation of resources towards long term investments and fund, and utilize available resources in terms of the PPE effectively.

Blease et al (2010) studied on employees, firm size and profitability in United States manufacturing industries. In the methodology, ex-post facto was used to gather data regression model was used for hypotheses and analyses of data. The results showed that profitability is negatively correlated with the number of employees for firms of a given size measured in terms of total assets and sales.

Pervan and Visic (2012) conducted research on influence of firm size on its business success. The period of the study covered from 2002 – 2010. The analysis of data collected was carried out by the financial ratio computed and the result showed that firm size has a significant positive (although weak) influence on firm profitability. In addition, results revealed that assets turnover and debt ratio has statistically significant influence on firm's performance while current ratio didn't prove to be an essential explanatory variable of firm's profitability.

Lubyanaya et al (2016) examined evaluation of the effect of non-current/fixed asset on profitability and management efficiency in the study. Deductive approach was used to gather data and the tools of analysis employed was quantitative analysis to analyse the data collected. The results of the research were that the differences in the measurement of accounting figures under, FRS and EAS may directly affect the numerator of ratio calculations, their denominator or both.

Methodology

3.1 Research Design

The research design utilized in this study is an ex-post facto research design, a retrospective approach aiming to establish causal relationships between the current phenomenon under study and past or existing events. This design is analytical, focusing on rational variables and their impact on the cases under investigation.

3.2 Area of Study

The study is focused on the brewery industry in Nigeria, specifically exploring the relationship between corporate assets and profitability in this sector.

3.3 Sources of Data

Secondary sources were employed for data collection, utilizing annual reports and accounts of selected brewery companies from 2014 to 2018. These documents were sourced from the respective companies' websites/portals, Nigeria Stock Exchange websites, journals, textbooks, and published research projects.

3.4 Tools of Data Collection

The primary tools for data collection included annual reports and accounts of the selected breweries, spanning the years 2014 to 2018. Financial records such as non-current assets, current assets values, and profitability metrics (earning power ratio) were extracted for analysis.

3.5 Method of Data Collection

The method of data collection was document and records-based research. Financial records, specifically annual reports and accounts, were used for the extraction of non-current assets, current assets values, and profitability metrics. The data collected were then converted into log forms to facilitate statistical analysis.

3.6 Population of the Study

The population of the study included ten breweries in Nigeria, namely Bature Brewery, Guinness Nigeria Breweries Plc, Intafact Beverages Limited, International Breweries Plc, Mopa Breweries Plc, Champion Breweries Plc, Sona Breweries, Pabod Breweries, Nigerian Breweries Plc, and Golden Guinea Breweries Plc.

3.7 Sample and Sampling Techniques

Out of the ten breweries, a purposive sampling technique was applied, selecting five breweries based on specific criteria such as being listed on the Nigeria Stock Exchange, strong financial base, high operational costs, and historical establishment. The selected breweries were Guinness Nigeria Breweries Plc, Golden Guinea Breweries Plc, Champion Breweries Plc, International Breweries Plc, and Nigerian Breweries Plc.

3.8 Data Analysis Techniques

For data analysis, multiple regression, correlation matrix, and ratio computation were employed. E-views output version 9.0 was utilized for the analysis, with earning power ratios serving as proxies for profitability.

3.9 Procedure for Data Analysis

The study aimed to explore the effect of corporate assets on the profitability of the brewery industry in Nigeria. Multiple regression analysis and correlation models were developed to identify the impact of non-current assets

and current assets on earning power ratios. Data analysis involved converting values into log forms for statistical tools, and the results were used to derive conclusions and recommendations.

3.10 Model Specification

The multiple regression analysis and correlation model were structured to assess the relationship between non-current assets, current assets, and earning power ratios (profitability). The models incorporated regression coefficients, interception terms, and error terms to quantify the effects of independent variables (non-current assets and current assets) on the dependent variable (earning power ratios). The correlation model aimed to measure the association between assets and profitability, with a correlation result close to unity indicating a significant positive association.

In this study a multiple regression analysis and correlation model was developed below: $EPR = Mo + M_1 (NCA) + M_2 (CA) + E$. based on the specific objective, the following regression models were developed as:

i. $EPR_1 = Mo + M_1 (NCA)$

ii. $EPR_2 = Mo + M_2 (CA)$

Where

EPR = Earning Power Ratio (Profitability)

Mo = Interception

E = Error term

$M_1 - M_2$ = the Regression Coefficients

NCA = Non-Current Assets

CA = Current Assets

Earning power ratio is the profitability, the dependent variable.

NCA and CA are the independent variables.

So, the effects on NCA and CA on EPR is what this study intends to achieve Correlation model (for real values of data): $R = \dfrac{smap}{\sqrt{(Sma^2)(Smp^2)}}$

Where: sm=sum, a=assets, p=profitability. R=correlation result, If 'R' result is =1 it means that association of variables are positive, and if 'R' result is 0.5 and above it means that association of the variables are significant since it is close to unity and vice versa.

4.3 Test of Hypothesis

Statement of Hypothesis One

The Test of hypotheses was carried out as follows:

Step 1: Re-statement of the hypotheses in the null and alternate form.

Step 2: Statement of Decision Criteria

Step 3: Presentation of Test Result

Step 4: Decision

Step 1: Restatement of the hypothesis in the null and alternate form

Test of Hypothesis One

Restatement of Hypothesis One

Ho: Non-current assets have no significant effect on profitability of the brewery industry.

Hi: Non-current assets have significant effect on profitability of the brewery industry.

Step 2: Statement of Decision Criteria: Reject Ho if p-value <0.05 level of significance and Accept Ho if p-value > 0.05 level of significance (t-statistics).

Table 4.9: Regression results of non-current assets and profitability (EPR)

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Dependent Variable: EPR
Method: Panel Least Squares
Date: 10/19/20   Time: 15:45
Sample: 2014 2018
Periods included: 5
Cross-sections included: 5
Total panel (balanced) observations: 25
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Variable	Coefficient	Std. Error	t-Statistic	Prob.
NCA	-0.688570	0.187977	-3.663046	0.0014
CA	-0.001881	0.231846	-0.008113	0.9936
C	4.221635	2.114422	1.996591	0.0584

R-squared	0.379247	Mean dependent var	-1.390440
Adjusted R-squared	0.322815	S.D. dependent var	1.140131
S.E. of regression	0.938228	Akaike info criterion	2.822520
Sum squared resid	19.36599	Schwarz criterion	2.968785
Log likelihood	-32.28149	Hannan-Quinn criter.	2.863087
F-statistic	6.720404	Durbin-Watson stat	0.973336
Prob(F-statistic)	0.005274		

SOURCE: *Researchers computation using E-view.*

Regression Equation for Non-current assets and Earning Power

Earning Power= $4.221635 + (-0.688570_{NCA}) + e$

The estimated coefficient for earning power ratio is negative for non-current assets, indicating that there exists a negative effect of earning power ratio and non-current assets of the studied firms. These indicate that when non-current assets are constant earning power will decrease. One percent increase of non-current will bring about corresponding decreases in earning power ratio.

Co-efficient of Determination (R)

Model Summary

Table 4.9 sowed that R Square, Coefficient of determination, i.e., the squared value of the multiple correlation coefficient value to be 0.379247 meaning that, approximately 38% of the variance in the dependent variable earning power was explained by the model of non-current assets. (In simple term, it shows that 38% (0.379*100) changes in the dependent variable earning power is caused by changes in the independent variable (non-current assets). It therefore means that the remaining 62 percent (100-38%) is caused by other variables not found in the equation but indicated by the error term.

Adjusted R^2

The adjusted R^2 value of 0.322815 means that the model is about 32 percent (0.3228*100) goodness fit.

Step 4: Decision

Given the decision criteria to: Reject Ho if p-value <0.05 level of significance and Accept Ho if p-value > 0.05 level of significance (t-statistics).

Non-current Asset (NCA), based on the t-value of -3.663046 and P-value of 0.0014, in table 4.9 was found to have a negative effect on the quoted breweries firms (earning power ratio) and this influence is statically significant at 5% level of significance as the P-value is within 5% significance level. This result, therefore suggests that we should reject our null hypothesis (Ho) which states that non-current assets have no significant effect on profitability of the brewing industry. This means that in Nigeria, there is a high level usage of non-current assets affects earning power ratio of the breweries firms negatively, thus, leading to the brewery industry poor performance.

Test of Hypothesis Two

Restatement of Hypothesis Two

Ho: Current assets have no significant effect on profitability of the brewery industry.

H1:   Current assets have a significant effect on profitability of the brewery industry.

Table 4.10: Regression Results of Current Assets and Profitability (EPR)

Dependent Variable: EPR
Method: Panel Least Squares
Date: 10/19/20   Time: 15:45
Sample: 2014 2018
Periods included: 5
Cross-sections included: 5
Total panel (balanced) observations: 25

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NCA	-0.688570	0.187977	-3.663046	0.0014
CA	-0.001881	0.231846	-0.008113	0.9936
C	4.221635	2.114422	1.996591	0.0584

R-squared	0.379247	Mean dependent var		-1.390440
Adjusted R-squared	0.322815	S.D. dependent var		1.140131
S.E. of regression	0.938228	Akaike info criterion		2.822520
Sum squared resid	19.36599	Schwarz criterion		2.968785
Log likelihood	-32.28149	Hannan-Quinn criter.		2.863087
F-statistic	6.720404	Durbin-Watson stat		0.973536
Prob(F-statistic)	0.005274			

SOURCE: *Researchers computation using E-view.*

Regression Equation for Current assets and Earning Power
Earning Power $= 4.221635 + (-0.001881_{CA}) + e$

The estimated coefficient for earning power is negative for current assets, indicating that there exists a negative effect between earning power and current assets of the studied firms. These indicate that when current assets are constant earning power will decrease. One percent increase of non-current assets will bring about corresponding decreases in earning power.

Step 4: Decision

Given the decision criteria to: Reject Ho if p-value <0.05 level of significance and Accept Ho if p-value > 0.05 level of significance (t-statistics).

Table 4.10 shows the sign of the coefficient of non-current assets to be negative, the t-statistics of -0.008113 with a probability of the t-statistics of 0.9936>0.05. Given the negative sign of the coefficient, we accept the null hypothesis (H$_o$) and conclude that current asset has a negative but insignificant effect on profitability of the brewing industry.

4.4 Discussion of Findings

The general objectives was to determine the effect of corporate assets on profitability of brewery industry in Nigeria. The results of this study indicated that corporate assets have negative effect on profitability (EPR) of brewery industry in Nigeria.

The first specific objective was to examine the effect of non-current assets on profitability (EPR) of brewery industry in Nigeria. Table 4.9 correlation analysis result revealed that non-current assets which was one of the independent variables was negatively and weakly associated with earning power(profitability).

This study result was in line with the study studied by Okwo,OKelue and Nweze (2012) that conducted study on investment of fixed assets and Firm's profitability: evidence from the Nigeria brewery.

It was also in line with, the study carried out by Irom et al (2015) that studied on effect of firm attributes on return of assets of listed manufacturing companies in Nigeria.

It is also contrary to the study by Nasution, Siregar and Panaggabean (2017) on effect of profitability, assets tangibility, corporate tax, non debt tax shield and inflation upon financial capital structure of the manufacturing companies listed on the Indonesia stock exchange.

The study was in line with the study by Mwaniki and Omagwa (2017) that studied on assets structure and financial performance :a case of firms quoted under commercial and service sector at Nairobi security exchange.

It was also in line with the study conducted by Alani (2014) on the effect of assets structure on financial performance of manufacturing company listed on muscat securities market in Russia.

In addition the study was contrary to the study by Adan and Kuddumi (2012) on impact of Assets quality managements on profitability and shareholder's value.

5.2 Conclusion

Corporate assets have negative effect on profitability of brewery industry in Nigeria, from the results of the study, non-current assets have negative effect but statistically significant on profitability of brewery industry in Nigeria and current assets equal have negative effect and insignificant on profitability (earning power) of brewery in Nigeria at 5% level of significance. Non-current assets also have negatively and weakly associations with the profitability (EPR).Current assets have positive associations with profitability.

The underlining lessons from the findings of the study were as follows: when non-current assets and current assets are constant, profitability (earning power) decrease, and one percent (1%) increase in non-current assets and current assets will lead to automatic decrease on profitability. It was also obtained from the results of the study that there was a high level of usage of non-current assets which affect the profitability of the breweries negatively, thus leading to the industries poor performance. More so, if non-current assets have negative effect on profitability of manufacturing firms, it is an indication of the following: the manufacturing firm do not have positive cash flow, there is no effective utilization of non –current assets in generating sales, there will be low return on investments and low productive activities and management in efficiency in making use of company's resources.

5.3 Recommendations

Based on the objectives and summary of findings of this study which some of the findings indicated that non-current assets e.g. property, plant, intangible assets, long term investment etc have negative effect but statistical significant on profitability of brewery industry in Nigeria and current assets that displayed negative effect but insignificant on profitability (EPR).The following recommendation(s) were addressed to the authorities/management of the brewery industry in Nigeria:

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1. Authority of brewery industry in Nigeria should be carrying out assets appraisal before buying expensive non-current assets because it drains cash and increase their debts.
2. Authority of brewery industry in Nigeria should ensure that a lot of fund should not allocate to current assets to prevent them from starving funds to be used in other productive sector and too little funds should not held as a current assets ,in order not to lose competitive position in the market.

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