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Abstract

Purpose: The Food and Beverage industry is extremely important in any society because it meets basic human needs and has a considerable impact on human existence since the dawn of time. However, studies have shown that quoted food and beverage firms are faced with the struggle to maintain substantial level of net profit before tax, earnings per share, return on assets, return on equity and dividend per share, which are likely due to weak corporate governance (ownership structure, board composition, board diversity, CEO tenure, and board size). Therefore, this study investigated the effect of corporate governance on return on assets of quoted food and beverage firms in Nigeria.

Methodology: The study adopted ex-post facto research design. The population of the study was 21 food and beverage firms quoted on Nigerian Exchange as at December 31st, 2021. The study used purposive sampling technique to choose the sample size of 14 quoted food and beverage firms based on the years of listing and data availability. The data used for the study were extracted from the audited annual financial statement of the sampled firms from 2014 to 2021. Descriptive and inferential (multiple regression) statistics were used to analyse the data at 10% significance level.

Findings: Findings revealed that corporate governance had significant effect on return on asset (Adj.R2 = 0.05, F (5, 106) = 2.09, p < 0.10). The study concluded that corporate governance enhanced return on asset of quoted food and beverage firms in Nigeria.

Recommendations: The study therefore recommended that food and beverage firms should ensure the independence of the board is embraced and enhanced at all times to ensure improved financial performance and ensure returns on asset.

Keywords: Corporate Governance, Return on Assets, Food, Beverage Firms
1.0 INTRODUCTION

The Food and Beverage industry is extremely important in any society because it meets basic human needs and has a considerable impact on human existence since the dawn of time. Statistic evidence from several countries across the world has confirmed the overwhelming contribution of food and beverage industry towards growth in international trade and nations’ economic growth. Globally, every country has a food and beverage industry, this has resulted into the growth of food and beverage companies on every continent, and the food and beverage industry is one of the fastest growing industries due to the constant high demand for food and beverage. However, return on assets of firms in the industry has become challenging with irregular profit, resulting from high competitiveness in the industry, as the sector is not reflecting high returns corresponding to the demand in the industry.

The world’s population of over 7.5 billion people requires food and beverages for survival and effective functioning. Nigeria, in particular, has approximately 180 million people who rely heavily on food and beverages to motivate them to improve their performance (FAO, 2021). However, due to global changes in the business landscape, the assumed high profitability in the sector, based on the simple demand and supply mechanism of the economic sector, could not be achieved. Rapid technological change and globalisation have made manufacturing more open; new products are flooding the market, but many food and beverage companies are not profitable due to industry competition. Firms must adapt to and use the competitive environment to increase growth, profitability, and survival (Farida & Setiawan, 2022). The food and beverage industry is an essential part of any nation economy; despite the fact that it is the main survival agent for the global population, it also plays active role in the nation’s economy.

In America continent, specifically in the United State of America economy, the food and beverage industry is a vital part of the country’s economy. The sector contributes about 5% of the country’s gross domestic product (GDP) and 10% of employment; the industry consists of close to 27,000 organisations and employs up to 1.5 million people (CED, 2017). The sector's growth is relatively low, but it is considered more stable than other sectors of the economy; despite historically low profit margins, firms are not expected to shrink further in the near future. There is significant price competition in the sector, which contributes to the low profit margins; they compete for market share by providing appealing offers to the market. The food preferences of Americans are changing; consumers are becoming more interested in healthy diets and with the growing demand for convenience, consumers are increasingly ordering food online. The recent challenge for the food and beverage industry in the United States is a decline in consumer confidence in food safety, with growing concern about safe production.

In the Asian continent, China’s food and beverage industry is massive and plays a critical role in the country’s economy. China's food and beverage industry is a significant contributor to the country's economy, with a massive market that feeds over 1.425 million people. The industry is also the largest consumer market for food and beverages globally, with an impressive growth trajectory that has attracted the attention of investors worldwide. The growth of the sector has been fueled by several factors, including the increasing size of the middle class population, which has become a critical driver of market growth. According to Bivona and Cruz (2021), the food and beverage industry in China has been experiencing significant growth in recent years. This growth can be attributed to the country’s large population, rising income levels, and increasing urbanization. As the Chinese middle class continues to expand, they are demanding higher quality...
and more diverse food and beverage options. This has led to an increase in both domestic and foreign investment in the industry, with many multinational companies expanding their operations in China. Additionally, the Chinese government has been actively promoting the development of the food and beverage industry as part of its economic growth strategy. This has resulted in the implementation of supportive policies and regulations, such as tax incentives and streamlined approval processes for new businesses. Despite this growth, the industry still faces several challenges, such as food safety concerns and rising labor costs. However, with continued government support and increased consumer demand, the food and beverage industry in China is poised to continue its upward trajectory in the coming years.

Nigeria has never been short of regulations that are laws and codes directing corporations on how to act, nevertheless, it seems corporate executives always have a way of getting around the rules which affects corporate sustainability (Anazonwu, Egbunike & Gunardi, 2018). Interestingly, many corporate executives are noted for their reckless disregard of international best practices. The explosion of information technology, coupled with an increasingly borderless world has opened up new markets and created new opportunities. This has also attracted higher risk in the form of expropriation and fraud, which are inimical to the ability of any firm recording high returns. Investors are only willing to commit funds when they are satisfied that the possibility of expropriation, mismanagement and unethical practice is low (Ashwin, Krishnan & George, 2016). This has affected the return on assets of different organisations. According to Hertina (2021), there is a gap in the performance of food and beverage firm’s liquidity, proxied by current ratio has increased, while profitability proxyed by Return on Assets has decreased. The gap occurred again in the span of two consecutive years, namely in 2016-2018, where the liquidity proxied by current ratio increased, while the profitability proxies by Return on Assets decreased. Current ratio and ROA move in opposite direction, and liquidity is a factor that determines the success or failure of a company in terms of profitability.

Return on assets and corporate governance has been identified as one of the mechanisms that aid maximum efficiency and play a vital role in productivity, and profitability to meet the new challenges of a quota-free global environment. Corporate governance is the structure by which the companies can be directed and controlled. Mangaba (2017), states that good governance is an integral part of the overall management process of an organization, covering finance, administration, program implementation, monitoring and evaluation, human resources, and communication, which is on the top agenda of organizations, both profit and non-profit. This emphasises that good governance filters into every aspect of an organization and this influences the long-term sustainability of the firm. Hence good corporate governance is essential in order to protect corporate stakeholders, and maintain control and prevent collapse of the firms. To achieve firm objective of long time survival polices and decision are made by the firm’s board that guides the governance of the firm.

Corporate governance is a process that aims to allocate corporate resources in a manner that maximizes value for all stakeholders; shareholders, investors, employees, customers, suppliers, environment, and the community at large and holds those at the helms to account by evaluating their decisions on transparency, inclusivity, equity, and responsibility (Lakmal, 2014). In Nigeria, many companies experienced a crisis of corporate governance, as a result of the high under-capitalization of deposit takings, weakness in the regulatory and supervisory framework. Also contributing weak management practices, fraud, illegal maintenance of parallel accounts,
concealment of assets, unauthorised massive funding of group companies, unlawful investments in real estate and stock market by the directors, money laundering, window dressing of account, irregular accounting and other corrupt practices (Oyebola, 2016; Adeoye & Amupitan, 2015). The corporate scandals and failures had shaken the confidence of shareholders and threatened the survival and sustainability of firms.

**Statement of the Problem**

Studies on return on assets have been carried out in different contexts and countries such as United States, United Kingdom, Malaysia, China and other developed nations (Larasati, & Rivai, 2020; Pointer, & Khoi, 2019; Ghorashi, & Darabi, 2017). However, it is observed that studies are scarce on the linkage between corporate governance and return on assets, especially in the food and beverage sector (Mangantar et al. 2020; Widyastuti, 2019). Nigeria has never been short of regulations that are laws and codes directing corporations on how to act, nevertheless, it seems corporate executives always have a way of getting around the rules which affects corporate sustainability (Anazonwu et al. 2018). Interestingly, many corporate executives are noted for their reckless disregard of international best practices. The explosion of information technology, coupled with an increasingly borderless world has opened up new markets and created new opportunities. This has also attracted higher risk in the form of expropriation and fraud, which are inimical to the ability of any firm recording high returns. Investors are only willing to commit funds when they are satisfied that the possibility of expropriation, mismanagement and unethical practice is low (Ashwin et al. 2016). This has affected the return on assets of different organisations. According to Hertina (2021), there is a gap in the performance of food and beverage firm’s liquidity, proxied by current ratio has increased, while profitability proxied by Return on Assets has decreased. The gap occurred again in the span of two consecutive years, namely in 2016-2018, where the liquidity proxied by current ratio increased, while the profitability proxies by Return on Assets decreased. Current ratio and ROA move in opposite direction, and liquidity is a factor that determines the success or failure of a company in terms of profitability.

**2.0 LITERATURE REVIEW**

This section discusses corporate governance and its dimensions (ownership structure, board composition, board diversity, and CEO tenure and board size) and return on assets.

**Corporate Governance**

Corporate governance is a recent concept in the corporate world, which has increasingly expanded in the latest centuries due to the request for new corporate philosophy and stricter compliance with the rule of the land and financial liberalization and deregulation of business. Corporate governance is defined as a set of relationships between a company’s management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. Good corporate governance should provide proper incentive for the board and management to pursue objectives that are in the interest of the firm and its shareholders and should facilitate effective monitoring. Cadbury Report (1992) defines corporate governance as the system by which companies are directed and controlled. The report goes further to expatiate that corporate governance is concerned with holding the balance between economic and social goals, and between individual and commercial goals. The report attempted to harmonise the various views of corporate governance. Olusanya and Oluwasanya (2014) state that corporate
governance refers to the manner in which the power of a corporation is exercised, in the management of the corporation total portfolio of assets and resources, with the objective of maintaining and increasing shareholders’ value and the satisfaction of other stakeholders in the context of its corporate mission. Streeti (2017) states that corporate governance is the process through which corporate resources are allocated in a manner that maximizes value for stakeholders such as shareholders, investors, employees, customers, suppliers, the environment and the community at large.

Ownership Structure

Ownership structure refers to the types and composition of shareholders in a corporation, researchers often measure ownership structures by using some observable measure of ownership concentration or the extent of inside ownership. Ownership structure is among the central mechanisms of corporate governance and is generally accepted as an important component of corporate governance it had been a consideration seeker to both scholars and analysts alike. Ownership structure is defined by the distribution of equity concerning votes and capital, and also by the identity of the equity owners (Ajagbe & Ismail, 2014). Ownership structure is classified as concentrated, when few people own a large number of shares and is considered dispersed when majority of shareholders are there and everyone has a small number of the outstanding share. These structures are of major importance in corporate governance Galego, Mira and Silva (2019) argued that ownership structure is considered as one of the most effective tools employed to assist the board of directors in enhancing the financial performance of the firm, also that the owners determine the incentives of managers and thus the economic efficiency of the corporations they manage.

Board Composition

Board composition is often measured as the proportion of executive to non-executive directors on the board (Eke, Akpanuko & Umoffong, 2019). Dabari, Kwaji and Ghazali (2017) stated that board composition normally concerns issues related to board independence and diversity (firm and industry experience, functional background) of board members. Board independence refers to a corporate board that has a majority of independent outside directors. Section 359 (4) of CAMA (2004), provides for board composition to be on equal proportion, but the new Security and Exchange Commission (SEC) guideline was silent on the number, however the global practice is to have more of non-executive directors than executive directors. The corporate board consists of directors elected by shareholders to represent them and protect their interest. The composition of the board should ensure diversity of experience without compromising compatibility, integrity, availability, and independence. An independent director is one who is independent of management and free from any business or other relationship that could materially interfere with the exercise of independent judgment, explaining in a simple form Onyeizugbe (2014) states that the independence implies that the directors are not employees of the company and are not dependent on the company for their livelihood.

Board Size

Board size is a term, which describes the number of persons on the board of directors of a company in a given period, consisting of the executive and non-executive directors. The board size shows the total number of directors who can impact the corporate governance policies of business and the company’s financial performance (Gallego-Álvarez & Pucheta-Martínez, 2020), thus the board
size, plays an important role in affecting the value of a firm, serves as proxy for the overall value the firm place on the board. The shareholders appoint the directors; they are responsible to the shareholders and are supposed to govern the company. The board size can affect the decision-making process and effectiveness of the board. It can also affect the role of supervising and monitoring the management of the firm and the quality of internal control. Identifying the ideal board size that affects, its ability to function effectively has been issues of intellectual debate over decades, (Goel, & Sharma, 2020).

**Board Diversity**

Board diversity does not have a cleared cut definition, but in the simplest sense, it means having many individuals that are different from one another, in terms of skill, ethnicity background, gender, age, education, among other factors. Board diversity is considered as a significant element of board of directors in corporate governance, it refers to differences between board members and has been categorized between cognitive dimension (educational level) and demographic dimension entailing; gender, age and ethnicity also structural dimension as CEO duality, director ownership (Martínez-Ferrero, Lozano & Vivas, 2021). The presence of women on corporate boards has increased a lot the active role in monitoring managerial performance. Female directors do their best to balance the answerable behaviour of firms toward the society and shareholders. This research examines board diversity through the demographic dimension with emphasis on gender distribution on corporate board that is the percentage of female members on the board, with the changing business environment and the increasing complexity of corporations. There is increasing attention to the importance of appointing female directors on corporate boards to facilitate effective board functioning (Chapple & Humphrey, 2014).

**CEO Tenure**

CEOs play a vital role in bringing organisational success, as they are responsible for designing firms’ financial policies and presenting the same to the board of directors for ratification (Abdullah, 2020). CEOs are also responsible for integrating firms’ policy into daily business operation, which is the overall operation may include delegating and directing operation, driving profit, managing the organization structure and communicating with the board, thus Khani, Rajabدوری and Sadri (2019), opined that CEO is ultimately held responsible for all aspects of the company’s performance. Some scholars infer that CEO’s characteristics like; tenure, gender, age, ethnicity, political connectedness, educational level, power of the CEO is associated to firm’s performance (Setiawan & Gestanti, 2022). There are diverse opinions on CEO’s tenure. One view states that as CEOs’ tenure increases they become more familiar with their enterprises, and have a stronger ability to avoid institutional restraints within and outside of their enterprises. This makes it easier to obtain core resources and pursue their own interests. On the other hand, CEOs with long tenure will accumulate more working experience in their companies, which deepens their recognition of resources and enhances their ability to identify the outside environment (Tanikawa & Jung, 2019).

**Return on Assets**

Return on assets (ROA) measures how efficient a company's management is in earning a profit from their assets on their balance sheet, it also shows the percentage of how profitable a company's assets are in generating revenue. Arumona, Lambe and Ogunmakinde (2020), aver that return on assets (ROA) is a ratio between assets and turnover for a certain period. Return on assets, on the
other hand, is determined by dividing net income by total assets. ROA indicates how well a company is performing by comparing the profit (net income) it is generating to the capital it is invested in assets. Return on assets that rises over time indicates the company is doing well at increasing its profits with each investment in terms of unit monetary value it spends. A falling ROA implies that the company might have over-invested in assets that have failed to produce revenue growth, this is an indication that the company may be in some trouble. Usually, a ROA over 5% is considered good, and above 20% is considered excellent, this number express what the company can do with what it has, that is how much earnings it derive from each unit of assets they control. Investors can use ROA to find stock opportunities, because the ROA shows how efficient a company is at using its assets to generate profits.

Empirical Review

Previous studies on corporate governance and return on asset (Al-Homaidi, Al-Matari, Tabash, Khaled & Senan, 2021; Hasnan, Mohd Razali & Mohamed Hussain, 2020; Azhar & Mahmood, 2018; Sulaiman, Mijinyawa & Khadijah, 2018.), among others works all present diverse results from their studies. Pham, et. al., (2021), research findings indicate a positive relationship between corporate sustainability and financial performance measured by return on asset. Sulaiman, et al. (2018) study reveals that board size, women on board, have positive significant effect on return on assets while board independence, ownership structure have insignificant effect on return on assets. Contrary to Sulaiman et al’s finding, Khaled and Senan, (2021), outcomes concerning return on assets reveal that, board size and board composition have an insignificant association with return on asset.

Mohamad, et.al. (2020) examined the relationship between corporate governance and firm performance used return on asset as one the measures for firm performance, discovered a significant association between non-executive directors, board size but not significant when ownership concentration was used as a proxy of corporate governance.

The research carried out by Azhar and Mahmood (2018), did not find a direct association between the three corporate governance structures; including audit committee composition, board composition, and board size, based on the two performance variables including net profit ratio and return on assets. A latter study conducted by Khaled and Senan (2021) revealed that board size and board composition have an insignificant association with ROA. Ahmed and Hamdan (2015), report positive significant effect between ownership structure and return on assets.

Ali and Abed Rhumah (2020) research finding showed that institutional shareholdings have significant effect on return on asset. Ibrahim and Abdullah (2019), found that corporate governance measure by board size, board independence and board gender diversity have an impact on return on assets but none of the impacts was found to be statistically significant, but Board composition has positive and significant effect on return on assets, of listed non-financial firms in Nigeria.

Prusty and Al-ahdal, (2018), finding revealed that audit committee meeting and board size had insignificant relationship with profitability measuring by return on equity. Sanusi, & Wiayanti (2022), found that profitability variable proxied by return on equity has a positive and significant effect on stock returns. Board skills and competence have negative relationship with return on equity and net assets per share, while board gender diversity results indicated positive relationship with return on equity and net assets per share, the findings of Kalu (2016) from the research conducted to examine corporate governance and profitability of listed food and beverages firms in
Nigeria. Despite the mixed results, it can be argued that the empirical results support the contention that corporate governance has a positive relationship with profitability of firms. With divergence in the results of various literatures, this study hypothesizes that:

H01: Corporate governance (ownership structure, board composition, board diversity, CEO tenure, and board size) have no significant effect on return on equity.

Research Conceptual Model

![Conceptual Model (Corporate Governance and Return On Assets)](image)

**Source:** Author’s Research Model (2023)

The figure above presented the conceptual model based upon the review of literature and it showed the effect of corporate governance (ownership structure, board composition, board diversity, CEO tenure, and board size) on return on assets

Theoretical Review

**Agency Theory**

Agency theory is among the underpinning theories in corporate governance issues, and is considered as the earliest theory, from which the other theories evolved. The theory has been identified as propositions in governing a modern firms that is highly characterized by large number of shareholders or owner who allow separate individuals to control and use the capital for future gain (Jensen, 1993). Agency theory is centered on maximizing shareholders value, the established objective of the organisations and the aim of corporate governance is to correct deviation from the objective. The theory defines the relationship between the shareholders and directors of the company, Olusanya and Oluwasanya (2014), states that agency theory presents governance as a contract between directors and the shareholders.

Agency theory is based on the idea that when a company is first established, its owners are usually also its managers. As a company grows, the owners appoint managers to run the company. The owners expect the managers to run the company in the best interests of the owners therefore; a
form of agency relationship exists between the owners and the managers. The owners expect the managers to run the company in the best interests of the owners, thus establishing an agency relationship exists between the owners and the managers (principal-agent relationship). Jensen and Mecklin (1976) developed agency theory; they suggested a theory of how the governance of a company is based on the conflicts of interest between the company’s owners and its managers. This theory helps in implementing the various governance mechanisms to control the agents’ action in the jointly held corporations (Panda & Leepsa, 2017). Puni and Osei (2015) and Eisenhardt (1989), also viewed agency theory as contractual relationship between two parties, the principal (shareholders) and the agent (directors, managers). Agency theory is used to understand the relationships between agents and principals.

3.0 METHODOLOGY

The study adopted ex-post facto research design. The population of study of this research was restricted to 21 Food and Beverages firms listed on Nigeria Stock Exchange in 2022. The study made use of 14 firms with their 8 year data (2014-2021), this produced (14*8) 112 data set used for this research. The choice of 8 year data used was based on availability of audited annual report financial statement of data of the chosen firms.

The study used purposive sampling method to choose 14 quoted food and beverage firms based on the year of listing and availability of complete data required for the research. The selected quoted Food and Beverage firms based on the date of listing on Nigeria Stock Exchange and availability of complete record are; Cadbury Plc.; Nestle Nigeria Plc.; Champion Breweries; Mcnichols Consolidated; Unilever Nigeria; Nigerian Northern Flour Mill; Nigeria Breweries Plc; Dangote Sugar Plc.; Pz Cussons; Flour Mills Nigeria.; International Breweries; Nascon Allied; Guinness Nigeria Plc., and Honeywell Flour Plc. These are firms that grouped as food, food processing/ allied food produce and beverage products.

Secondary data was used in this research and was extracted from the financial records of the sample firms chosen for the study. The data used in this study were extracted from the audited annual reports and financial statements of the study sample firms from 2014-2021. Prior empirical studies on corporate governance employed secondary data among which include; Ezejiofor, Oranefo and Ndum (2021); Ibrahim and Abdullahi (2019).

The validity and reliability of the data was premised on the auditors’ and regulatory agencies’ certification of the source documents. Descriptive and inferential (multiple regression) statistics were used to analyse the data at 10% significance level. Multiple regression analysis was used for hypothesis testing. Regression analysis was considered the most appropriate statistical tool for establishing the degree and nature of relationship between dependent and independent variables and its model has been proved to be the most effective tool in the prediction of occurrences of future relationship between variables (Gujarati & Porter, 2009).

Model Specification

Functional relationship $Y= f(x)$ and Regression models for the study.

X-Independent variables (Corporate governance) $X = (x1, x2, x3, x4, x5)$

Y – Dependent variable (Return on Assets)
Hypothesis

\[ Y = f (x_1, x_2, x_3, x_4, x_5) \]

\[
\text{ROA}_{it} = b_0 + b_1 \text{OWNST}_{it} + b_2 \text{BDCOM}_{it} + b_3 \text{BDIV}_{it} + b_4 \text{CEOT}_{it} + b_5 \text{BDSZ}_{it} + \varepsilon_{it} \]

Where; \( b_0 \) = constant term; \( b_1 – b_5 \) = coefficients of the independent variable; \( \varepsilon_{it} \) = error term

**A Prior Expectation**

The result from the statistical analysis assisted in explaining the degree of effect between the dependent and independent variables, also the expected outcome of the relationship between the sub-variables of both the dependent and independent variables was stated as follows.

**Table 1: A priori Expectations and Decision Rule**

<table>
<thead>
<tr>
<th>S/ N</th>
<th>Models</th>
<th>Decision Rule</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>H0</td>
<td>In\text{ROA}<em>{it} = \beta_0 + \beta_1 \text{OWNST}</em>{it} + \beta_2 \text{BDCOM}<em>{it} + \beta_3 \text{BDIV}</em>{it} + \beta_4 \text{CEOT}<em>{it} + \beta_5 \text{BDSZ}</em>{it} + \varepsilon_{it} |</td>
<td>\text{P} \leq 0.10</td>
<td>\text{H}_0 \text{ would be rejected}</td>
</tr>
</tbody>
</table>

*Source: Author’s Computation (2023)*

**4.0 FINDINGS**

This study made used of secondary data. The data was gathered from the annual accounts and financial reports of the chosen eight quoted Food and Beverages firms. The data used covers a period of six years 2014 – 2021. The data set of the study consists of 112 observations; the number of years of observation multiplied by the sample size (8*14 =112).

**Table 2: Regression Result of Model**

<table>
<thead>
<tr>
<th>Dependent – NPBT</th>
<th>Pooled OLS Regression with Cluster standard errors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MODEL ONE</td>
</tr>
<tr>
<td></td>
<td>Coeff</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>11.68</td>
</tr>
<tr>
<td>OWNST</td>
<td>-0.02</td>
</tr>
<tr>
<td>BDCOM</td>
<td>-0.01</td>
</tr>
<tr>
<td>BDIV</td>
<td>0.03</td>
</tr>
<tr>
<td>CEOOT</td>
<td>0.29</td>
</tr>
<tr>
<td>BDSIZ</td>
<td>0.34</td>
</tr>
<tr>
<td>LOWNST*G</td>
<td></td>
</tr>
<tr>
<td>LBDCOM*G</td>
<td></td>
</tr>
<tr>
<td>LBDIV*G</td>
<td></td>
</tr>
<tr>
<td>LCEO<em>T</em>G</td>
<td></td>
</tr>
<tr>
<td>LBDSIZ*G</td>
<td></td>
</tr>
<tr>
<td>AdjR2</td>
<td>0.23</td>
</tr>
<tr>
<td>F-Stat/Wald Stat</td>
<td>F (5, 106) = 6.54 (0.00)</td>
</tr>
<tr>
<td>Hausman Test</td>
<td>Chi2(5) = 2.84 (0.72)</td>
</tr>
<tr>
<td>LM Test</td>
<td>chibar2(01) = 211.38 (1.00)</td>
</tr>
<tr>
<td>Heteroscedasticity Test</td>
<td>Chi2(1) = 15.02 (0.00)</td>
</tr>
<tr>
<td>Serial Correlation Test</td>
<td>F (1, 12) = 18.069 (0.00)</td>
</tr>
</tbody>
</table>
Interpretation of Diagnostic Test

The decision of this study to choose the appropriate estimating technique among Fixed-effects, Random-effects, and Pooled Ordinary Least Square Regression methods lies in the results of the Hausman test and its confirmatory test. Based on the Hausman result with probability value of 0.19 which align with its null hypothesis implies that Random-effects is more appropriate than Fixed-effects for the Model One. The LM test for random effects result with probability value of 1.00 negates the outcome of the Hausman test and thus Pooled OLS is more appropriate than Random-effects.

The results of the Ordinary Least Square post-estimations tests, heteroscedasticity test, and serial correlation test and revealed that: there is heteroscedasticity problem with the probability value of 0.01 negates the null hypothesis of the test which states that “the model is homoscedastic”; that is the residuals of the model are variant over time; the serial correlation result with the probability value of 0.00, it revealed that that the coefficients and the residual of the model are correlated and thus, there is presence of serial correlation problem in the model. Due to the presence of heteroscedasticity, and serial correlation problem in the model, Pooled OLS regression with cluster standard errors was used for the estimation of model five.

Interpretation of Model

Based on the findings from the regression coefficients in the table above, the regression model for the hypothesis (H0) is presented as;

\[ \text{ROA} = \beta_0 + \beta_1(\text{OWNST}) + \beta_2(\text{BDCOM}) + \beta_3(\text{BDIV}) + \beta_4(\text{CEOT}) + \beta_5(\text{BDSIZ}) + \mu \]

\[ \text{ROA} = 12.35631 - 0.0330(\text{OWNST}) - 0.0118(\text{BDCOM}) + 0.0142(\text{BDIV}) + 0.1360(\text{CEOT}) - 0.6101(\text{BDSIZ}) + \mu \]

\[ \text{Tvalue} = (2.63) (-0.93) (-0.25) (0.21) (0.10) (-2.77) \]

\[ \text{F (5, 106)} = 2.09 \]

\[ \text{Adj R-squared} = 0.0468 \]

From the model presented above based on the result in the table 4.7, there is evidence that BDIV and CEOT have positive relationship with return on asset (ROA) of the selected listed food and beverage firms in Nigeria while OWNST, BDCOM and BDSIZ have negative relationship with return on asset (ROA) of the selected food and beverages firms in Nigeria.

Concerning the magnitudes of the estimated parameters 1unit increase in BDIV and CEOT will lead to 0.0142 and 0.1360 increases in the return on asset (ROA) of selected listed food and beverage firms in Nigeria, while 1unit increase in OWNST, BDCOM, and BDSIZ will lead to 0.0330, 0.0118 and 0.6101 decrease in the return on asset (ROA) of selected listed food and beverage firms in Nigeria respectively.

The F-statistic (2.09) at P-value of 0.0000 which is less than significant level 10% (0.1) reveals that the overall model was statistically significant and the independent variables (ownership structure (OWNST), board composition (BDCOM), board diversity (BDIV), CEO tenure (CEOT), and board size (BDSIZ)) are good predictors of Return on Asset (ROA). This implies that the companies’ ROA is strongly enhanced by the independent variables at 10% level of significant.
The Adjusted R^2 (0.05) which measure the proportion of the changes in the NPBT as a result of changes in OWNST, BDCOM, BDIV, CEO and BDSIZ explains about 5% per cent changes in the ROA of selected listed food and beverage firms in Nigeria, while the remaining 95% per cent were other factors explaining changes in the Return on Asset (ROA) of selected listed food and beverage firms in Nigeria but where not captured in the model.

**Discussion of Findings**

Hypotheses five investigated the effect of corporate governance (ownership structure, board composition, board diversity, CEO tenure, and board size) on return on assets of quoted food and beverages firms in Nigeria. The result of the hypotheses showed that there is evidence that board composition and board size have positive relationship with return on asset of the selected food and beverages firms in Nigeria, while ownership tenure, board diversity and CEO tenure have negative relationship with return on asset of the selected listed food and beverage firms in Nigeria. In addition, there is evidence that ownership tenure has significant relationship with the return on asset of selected listed food and beverage firms in Nigeria. In sharp contrast, there is evidence that board composition, board diversity, CEO tenure, and board size have no significant relationship with the return on asset of selected quoted food and beverage firms in Nigeria. The result of overall significance of the model shows that the null that there is no significant effect of corporate governance dimensions have no significant effect on return on asset of quoted food and beverages firms in Nigeria was rejected and the alternative hypothesis that there is significant effect of corporate governance dimensions have significant effect on return on asset of quoted food and beverages firms in Nigeria was accepted. The result correlates with the findings of Raza et al.2020 that observe the impact of insider-outsider director proportion on financial performance that there is a positive relationship between outsider-dominated boards and the performance of the company. Ahmed and Hadi (2017) note that, many empirical studies that have examined the impact to the insider-outsider ratio on boards have found no consistent evidence to suggest that increasing the percentage of outsiders on the board will enhance performance. If anything, they suggested that pushing too far to remove insider and affiliated directors may harm firm performance by depriving boards of the valuable firm and industry specific knowledge they provide.

**5.0 CONCLUSION AND RECOMMENDATION**

Based on the empirical findings, this study concludes that corporate governance dimensions, (ownership structure, board composition, board diversity, CEO tenure and board size) had statistically significant effect on return on assets of quoted food and beverage firms in Nigeria. It suggests that paying attention to governance practices can have a positive impact on return on assets of quoted food and beverage firms in Nigeria.

The study recommended that food and beverage firms should ensure the independence of the board is embraced and enhanced at all times to ensure improved financial performance and ensure returns on asset. Also, the food and beverage firms should make gender diversity of the board to be more gender inclusive to enhance policies that will improve returns on asset.
REFERENCES


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