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Unveiling Firm Value: Exploring Price to Book Value Method in Nigerian Food and Beverage Companies

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ABSTRAK

Penelitian ini menguji pengaruh efektivitas aset, profitabilitas, leverage, likuiditas, dan ukuran perusahaan terhadap nilai perusahaan pada perusahaan Makanan dan Minuman yang terdaftar di Bursa Efek Nigeria. Penelitian ini menggunakan metode desain penelitian deskriptif, dan teknik purposive sampling digunakan untuk memilih 10 dari 23 perusahaan makanan dan minuman yang terdaftar di Nigerian Stock. Data sekunder dikumpulkan dari laporan keuangan lima tahun perusahaan. Penelitian ini mengadopsi E-views 12 untuk menganalisis semua data dalam penelitian ini. Temuan penelitian ini menunjukkan bahwa Current Asset (CR) berpengaruh negatif dan tidak signifikan terhadap PBV perusahaan makanan dan minuman, Debt-Equity Ratio (DER) berpengaruh positif dan signifikan terhadap PBV, Return on Asset (ROE) berpengaruh positif dan signifikan terhadap PBV. berpengaruh positif dan tidak signifikan terhadap PBV dan Ukuran Perusahaan (CS) berpengaruh negatif dan signifikan terhadap PBV. Studi ini merekomendasikan bahwa; perusahaan harus mencapai keseimbangan antara likuiditas dan efisiensi untuk memaksimalkan nilai perusahaan. Perusahaan harus berusaha mencapai keseimbangan antara utang dan ekuitas yang selaras dengan tujuan strategis dan toleransi risiko mereka. Perusahaan harus meninjau dan menyesuaikan rasio DER mereka secara berkala sebagai bagian dari strategi keuangan mereka secara keseluruhan. Investor dan analis harus mengadopsi pendekatan komprehensif untuk mengevaluasi nilai perusahaan.

Kata Kunci: Nilai Perusahaan, Price-To-Book Value, Current Ratio, Debt-Equity Ratio

ABSTRACT

This study examined the effect of asset effectiveness, profitability, leverage, liquidity, and company size on firm value in the Food and Beverage companies that are listed on the Nigerian Stock Exchange. The study employed the descriptive research design method, and purposive sampling techniques were used to select 10 out of 23 food and beverage companies listed in the Nigerian Stock. Secondary data was collected from the five-year financial statements of the companies. The study adopted E-views 12 to analyze all the data in this study. The finding of this study revealed that Current Asset (CR) has a negative and insignificant effect on food and beverages firms' PBV, Debt-Equity Ratio (DER) has a positive and significant impact on PBV, Return on Asset (ROE) has a positive and an insignificant impact on PBV and Company Size (CS) has a negative and a significant impact on PBV. The study recommends that; firms must strike a balance between liquidity and efficiency to maximize firm value. Companies should aim to strike a balance between debt and equity that aligns with their strategic objectives and risk tolerance. Companies should regularly review and adjust their DER ratios as part of their overall financial strategy. Investors and analysts should adopt a comprehensive approach to evaluating firm value.

Keywords: Firm Value, Price-To-Book Value, Current Ratio, Debt-Equity Ratio

INTRODUCTION

The price-to-book value (PBV) ratio is a crucial financial metric used to compare a company's market value to its book value. It provides valuable insights into market valuation and undervaluation of a stock. In the Nigerian food and beverage industry, the P/B ratio helps analysts and investors understand the value of tangible assets like production facilities and inventories. This information can inform portfolio strategies, risk management approaches, and investment decision-making processes. The PBV ratio method holds significant implications for stakeholders in the Nigerian food and beverage sector. Firm value refers to the measure of a company's success and prosperity, which is closely related to the price of its shares in the stock market. It is an unbiased and reliable metric that stakeholders, shareholders, potential investors, and managers use to assess the performance and operations of an enterprise. According to Hirdinis (2019), corporate value is the result of the work management does in several dimensions, including net cash flow from investment decisions, growth, and capital cost of the company. For investors, corporate value is an important concept because corporate value is an indicator of how the market perceives the company. The value of a firm reflects its growth potential and is influenced by factors such as political connections, investment decisions, funding decisions, and dividend policies. The determination of firm value is crucial for various purposes, including; company sale, merger, and acquisition, and for identifying sources of value creation in the company. Firm Value is represented by the market price of the company's common stock which reflects the firm's investment, financing, and dividend decisions.

The objective of a firm is to maximize its value to its shareholders, this is done by working and enhancing the company's value to achieve financial stability and profitability, growth and expansion, increase customer satisfaction, employee satisfaction and development, social responsibility, and sustainability. According to Hameed and Tsoho (2020) one of the goals of any company is to create value by providing returns for the shareholders of the company. The company will try to maximize the value of all the stakeholders' investments, by increasing the company's financial performance. Hartika qmd Iswara (2024) further maintained that the increase in company value is the reflection of shareholders' fund's optimization, which is frequently valued by Price to Book Value (PBV). The food and beverage industry is critical to every economy in the world, and Nigeria is no exception. In recent years, the performance and contribution of the players in this industry to the Nigerian economy, have grown in value and relevance. The food and beverages industries are one of the potential and important industries that have greatly boosted the Nigerian economy. In 2018, the Central Bank of Nigeria (CBN) Governor noted that Nigerians spend an average of 73% of their income on food and beverages products, however given the choice, a vast majority of Nigerian consumers will opt for food and beverage products made outside of the country. Nevertheless, in the last five years, more indigenous brands have been coming up or expanding, to meet the needs of Nigerian consumers who prefer local flavors.

Major stakeholders and players in the subsector include Nestle Food Nigeria Plc, UAC Food, Cadbury Nigeria Plc, Nigeria Bottling Company Plc, Honey Well Plc, Bua Group, Dangote Group, Flour Mill of Nigeria Plc etc. The complaint of many companies in the food and beverage sub-sector in Nigeria has been on the harsh operating business environment in the country. The major challenges facing the food and beverage industry in Nigeria include; inadequate infrastructure, high production costs, inadequate access to finance, lack of access to

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markets, limited access to quality inputs, weak enforcement of food safety standards, and the prevalence of counterfeiting and adulteration. These companies are faced with the problem of enhancing their firms' value.

Nigeria is the largest food market in Africa, with significant investment in the local industry and high imports. The food and beverage (F&B) sector contributes 22.5% of the manufacturing industry value and 4.6% of the country's GDP. However, F&B firms in Nigeria face challenges in growth and development. Previous research on factors influencing company value, such as Return on Equity, Debt to Equity, Dividend Payout Ratio, and Firm Size, has been inconsistent. Some studies found that Return on Equity had a significant positive effect on firm value, while others found that profitability, proxied by Return on Equity, did not affect firm value. This study aims to examine the effect of asset effectiveness, profitability, leverage, liquidity, and company size on firm value in F&B companies listed on the Nigerian Stock Exchange. Astuti and Sjarif (2022) found that profitability, as measured by Return on Equity, does not affect firm value, Lestari and Armayah (2016), Tantra et al (2022) and Gunawan and Alpi (2018) found that Return on Equity had a significant positive effect on firm value. Moreover, Akhtar et al (2016) discovered that the debt-to-equity ratio did not affect firm value, contrary to the claims made (Pasukodewo & Susanti, 2020: Aduroh & Paramu, 2021). This study examines how firm value is affected in F&B enterprises that are listed on the Nigerian Stock Exchange by asset effectiveness, profitability, leverage, liquidity, and company size.

Bahraini et al (2021) studied the determinants of firm value using the Price to Book Value (PBV) in the food and beverage (F&B) industry listed on the Indonesia Stock Exchange (ISE). They adopted the following determinants; Total Asset Turnover (TATO), company size (SIZE), Current Ratio (CR), Return on Equity (ROE), and Debt to Equity Ratio (DER). The research method used is a panel data regression model with a sample of 17 companies in the F&B sector from 2015 to 2019. The results of the study concluded that the increase in the TATO, CR, and Company Size factors results in a decrease in firm value, while the impact of ROE and DER factors, on the contrary, causes PBV to increase. Adeyemi and Oboh (2011) examined the relationship between capital structure and firm value. Their study used chi-square to measure longitudinal data. Their findings revealed a significant positive relationship between the choice of capital structure and market value. Also, Antwi et al (2012) used cross-sectional data on 34 quoted firms in Ghana and their result shows that the component of capital structure, i.e. equity capital is important to the firm value, long-term debt as the key determinant of firm value is discovered to have more impact than equity capital. A study by Adeleke and Ogebe (2013) established a significant negative relationship between leverage and performance. From their study, they strongly recommended that firms should use more equity than debt in financing their business activities. Also, Chechet and Olayiwola (2014) examined the capital structure and profitability of the Nigeria-listed firms. The result of the study showed that the debt ratio was negatively related to profitability while equity was directly related to profitability.

METHOD

The study employed the descriptive research design; data are obtained from the published financial report of the sampled listed food and beverages industries in Nigeria. The study aimed to investigate the determinant of firm value in Nigerian food and beverage industries listed on the Nigeria Stock Exchange. Data collection procedures were systematic, ensuring the reliability and validity of collected data. The target population consisted of 23 food and beverage industries listed on the Nigerian Stock Exchange. Data analysis involved using panel data regression methods, including random effect, common effect, and fixed effect. The random effect model overcomes the weaknesses of fixed effect models, while the Fixed Effect Model handles differences between intercepts. The Common Effect model combines time series data with cross-sectional data and calculates the model using Ordinary Least Square. Secondary data was obtained from published financial reports of the sampled firms. A research instrument was adopted, which included experiments, surveys, questionnaires, interviews, tests, and observations. The experiment research instrument involved manipulating one or more independent variables to observe their effect on dependent variables. The study covered five years from 2018 to 2022, with ten firms listed on the Nigerian Stock Exchange as the sample size. A research analytical tool was used to analyze all data, using E-views 12 for data analysis. The findings of this study can help in generating meaningful conclusions and testing hypotheses in the food and beverage industry in Nigeria.

RESULTS AND DISCUSSION

Table 1. Descriptive statistics

	PBV	CR	DER	ROE	FZ
Mean	16.78840	1.281329	4.172084	2.990155	17.54529
Median	4.449250	1.236750	1.223450	0.131200	18.00580
Maximum	451.8072	3.972200	131.0757	131.0756	20.18310
Minimum	0.090000	-0.399200	0.062800	-0.173800	10.50420
Std. Dev.	63.70632	1.015982	18.39388	18.49996	2.121923
Skewness	6.562752	0.985460	6.765991	6.838585	-1.035592
Kurtosis	45.28293	3.947522	47.18360	47.85184	3.933499
Jarque-Bera	4083.593	9.963170	4448.552	4580.734	10.75255
Probability	0.000000	0.006863	0.000000	0.000000	0.004625
Sum	839.4199	64.06644	208.6042	149.5078	877.2643
Sum Sq. Dev.	198866.3	50.57878	16578.41	16770.18	220.6252
Observations	50	50	50	50	50

From the descriptive statistics, the price-to-book value has a mean value of 16.78840 and a median value of 4.449250. The maximum value is 451.8072 while the minimum value is 0.090000 with a standard deviation of 63.70632. The current ratio has a mean value of 11.281329 and a median value of 1.238750. The maximum value is 3.972200, the minimum value is -0.399200 and the standard deviation is 1.015982. The Debt-to-equity ratio on the other hand has a mean value of 4.172084, a median value of 1.223450. The Maximum value is 131.0757; the minimum value is 0.062800 while the standard deviation is 18.39388. The return on equity has a mean value of 2.990155 and a median value of 0.131200. The maximum value is 131.0756, the minimum value is -0.173800 and the standard deviation is 18.49996. The firm Size (FZ) has a mean value of 17.54529, and a median value of 18.00580. The maximum value is 20.18310; the minimum value is 10.50420 while the standard deviation is 2.121923.

Table 2. Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CR	-1.182024	1.130427	-1.045644	0.3013
DER	2.002541	0.773258	2.589743	0.0129
ROE	1.252452	0.767542	1.631771	0.1097
FZ	-2.753396	0.615890	-4.470597	0.0001
C	54.51227	11.07335	4.922835	0.0000
R-squared	0.985809	Mean dependent var	16.78840	
Adjusted R-squared	0.984548	S.D. dependent var	63.70632	
S.E. of regression	7.919135	Akaike info criterion	7.071080	
Sum squared resid	2822.071	Schwarz criterion	7.262283	
Log likelihood	-171.7770	Hannan-Quinn criter.	7.143891	
F-statistic	781.5172	Durbin-Watson stat	2.192258	
Prob(F-statistic)	0.000000			

About the regression table above, the C is 54.51227, meaning that if the Current ratio, Debt-equity ratio, Return of Equity, and Firm Size variables are constant, then the Price-to-book value variable is 54.51227. CR regression coeff. -1.182024 indicates that an increase in CR of 1% (percent) would affect a -1.182024 PVB. The DER regression coeff. of 2.002541 states that one unit of DER increase would affect a 2.002541 PBV increase, given that the other independent variables are stable. Regression coeff. of ROE 1.252452 states that a one-unit increase in ROE would affect a 1.252452 increase in PBV, given that the other independent variables remain stable.

The Firm size coefficient of -2.753396 states that a one-unit increase of -2.753396 would affect a -2.753396 decrease in PVB given that other independent variables remain stable. The R^2 = 0.99 explains the variations in the dependent variable by all the independent variables CR, ROE, DER, and SIZE by 99%. That means 1% can be explained by other variables not captured in the study model. The Adj R^2 = 0.98 indicates that all independent variables included in this analysis will explain 98% of differences in PBV after considering the DF, while the remaining 2% were explained by other factors not investigated in the research. Based on the statistical data processing, findings provided in Table 2 show that the F-Stat is 0.0000 lower than α = 0.05, which indicates that CR, ROE, DER, and FSIZE combined have a major influence on the Food and Beverages companies' PBV. The findings of the t-test in Table 2 indicate that each determining factor has the following effect on the PBV.

1. The current ratio (CR) has a coefficient. of β -1.182024 with a value of t-stat of – 1.045644 and a sig. value of 0.3013 where the value is greater than 0.05. This indicates that the CR has a negative and insignificant effect on food and beverage firms' PBV.
2. Debt to Equity Ratio (DER) has a coeff. of β 2.002541 with a value of t-stat. 2.589743 and a sig. value of 0.0129 where the value is smaller than 0.05. This shows that in the food and beverages industries, the DER has a positive and significant impact on PBV.
3. The Return on Equity (ROE) has a β coeff. of 1.252452 with a t-stat. value of 1.631771 and a significant value of 0.1097 where the value is greater than 0.05. This indicates that ROE in food and beverage companies has a positive and insignificant impact on PBV.
4. Firm Size (FZ) has a coeff. of β -2.753396 with a value of t-stat of –4.470597 and a significant value of 0.0001 where the value is less than 0.05. This suggests that in food and beverage companies, the company size indicator is seen to have a negative and significant impact on PBV.

The findings of this study support the findings of previous studies carried out by Karaca and Savsar (2012). Endri and Fathony (2020) stated that a CR value that is too high can indicate excess current assets that are idle or not utilized by the company. So, this will have a bad impact on company profitability because current assets will produce a lower rate of return than fixed assets. This can reduce the value of the company because investors are reluctant to invest in companies with low returns. The findings from the study suggest that firm value can be decreased by a high ROE value. This is against the study of Shahnia et al. (2020) which states that there is a high degree of profitability for firms with good prospects, so investors will respond favorably and firm value will grow. The findings of the study affirmed the findings of previous studies carried out by Utami and Hasan (2021). The results of this study indicate that the firm value can be increased by a high DER value. The findings of this study are in line with Myer's trade-off theory (Myer, 1984).

CONCLUSION

The Price Book Value method is a crucial tool for assessing firm value in Nigerian food and beverage companies. It provides a reliable measure of a company's stock value compared to its book value per share, revealing market perceptions of a company's asset base and future profits. However, it also requires understanding sectoral variances, market sentiment, growth prospects, investment strategies, and regulatory environment. The P/B method helps identify opportunities for capital appreciation and income generation but requires prudent risk management and a comprehensive understanding of sectoral dynamics. The report suggests that current asset turnover negatively impacts PBV, suggesting firms should balance liquidity and

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efficiency to maximize value. It also suggests that debt-to-equity ratios (DER) should align with strategic objectives and risk tolerance. Regularly reviewing and adjusting DER ratios is recommended as part of the financial strategy. It also suggests a comprehensive approach to evaluating firm value, considering ROE as just one component.

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