

Effect of Firm Characteristics on Financial Performance Of Listed Food and Beverage Companies in Nigeria

Olusola Gabriel Oladapo¹, John Oluwademilade Adewumi², Samuel Nilayefah Fawedikimo³, Quadri Ige Adeshola⁴, Sadat Badanga Iyadi⁵, Hussein Abalaka Faruna⁵

¹ *Achievers University*

M 1, Idasen/Uteh Road, Owo, Ondo State, Nigeria

² *Nassarawa State University, Keffi*

P. M. B. 1022, Keffi, Nigeria, Nigeria

³ *Federal University Otuoke*

P. M. B. 126, Yenagoa, Nigeria

⁴ *Osun State Polytechnic, Iree*

Iree, Osun State, 231115, Nigeria

⁵ *Salem University*

KM 16 Lokoja – Ajaokuta Road, PMB 1060, Lokoja, Kogi State, Nigeria

DOI: [10.22178/pos.119-3](https://doi.org/10.22178/pos.119-3)

JEL Classification: M41

Received 27.05.2025

Accepted 25.06.2025

Published online 30.06.2025

Corresponding Author:

Olusola Gabriel Oladapo

maugab2@gmail.com

© 2025 The Authors. This article is licensed under a [Creative Commons Attribution 4.0](https://creativecommons.org/licenses/by/4.0/)

License 

Abstract. This study examines the influence of firm characteristics—specifically, firm age, size, leverage, and liquidity—on the financial performance of listed food and beverage companies in Nigeria from 2008 to 2017. Using an ex post facto research design and panel data regression analysis on data collected from 14 firms listed on the Nigerian Stock Exchange, the study examined how these organisational attributes influence Return on Assets (ROA). Results reveal that the model explains 33.53% ($R^2 = 0.3353$) of the variation in financial performance, with firm size ($\beta = 2.4884$, $p < 0.0001$) and liquidity ($\beta = 6.0807$, $p = 0.0204$) showing significant positive relationships with ROA. In contrast, leverage ($\beta = -0.1359$, $p < 0.0001$) demonstrated a significant negative impact, and firm age ($\beta = -0.0465$, $p = 0.4288$) showed no significant influence. The study concludes that internal firm characteristics play a crucial role in determining the financial performance of Nigerian food and beverage companies. It recommends that management should prioritise efficient asset utilisation, implement strategic growth initiatives, exercise caution in capital structure decisions by favouring equity over debt financing, and enhance liquidity management to improve financial outcomes.

Keywords: Firm characteristics; financial performance; firm size; leverage; liquidity; firm age.

INTRODUCTION

Businesses are intentionally created structures aimed at achieving defined objectives, primarily the maximisation of shareholder value. Company performance, in this context, represents the degree to which organisations fulfil set goals, typically reflected through quantifiable outputs compared to expected targets. Financial performance, in particular, serves as a key indicator of an enterprise's ability to generate income, realise prof-

its, and enhance shareholder value [1]. A firm's performance not only influences its valuation but also contributes to broader industry growth and national economic development.

Financial performance has consistently been a focal point of scholarly investigation and corporate strategy, with both researchers and practitioners emphasising its importance due to its implications for business sustainability and long-term viability. High levels of performance indi-

cate effective resource management, which in turn strengthens the macroeconomic environment [2].

Extensive literature has evaluated how internal and external attributes, such as leverage, size, liquidity, age, and business diversification, affect corporate performance. Among these, firm size has received substantial attention as a key organisational characteristic. Research [3, 4] highlights its significance, as it links size to factors such as sunk costs, market concentration, integration, and sector-wide profitability [5]. Similarly, leverage – defined by [6] as the degree to which firms employ debt and fixed-return instruments — can influence the dynamics of financial risk and return.

Liquidity refers to a company's ability to meet its short-term obligations through liquid assets, typically measured by the current ratio. It reflects the firm's efficiency in managing its working capital [7]. Comparatively, firm age may correspond to a decline in organisational agility over time, potentially affecting competitiveness, as older firms may lose market responsiveness [8].

Despite numerous studies examining the effects of firm characteristics on performance, results have been inconsistent. For instance, authors [9] reported a positive relationship between firm size and profitability using multiple size and performance indicators. Similarly, the author [10] found that larger firms are more profitable but less productive. The author [11] observed that financially sound and larger firms in the insurance sector tend to hold more private debt.

In Nigeria, research on this subject has largely focused on financial institutions [12]. One of the few studies on non-financial firms is that by [13], which assessed the impact of firm characteristics on listed consumer goods firms. Although it used Return on Sales (ROS) as a profitability proxy, it covered only the period from 2011 to 2016.

Given these gaps, the current study aims to investigate how firm-specific attributes – namely, firm age, size, liquidity, and leverage – impact the financial performance of listed food and beverage firms in Nigeria.

Research Hypotheses:

H01: Firm age has no significant impact on the financial performance of listed food and beverage companies in Nigeria.

H02: Firm size does not significantly influence the performance of listed food and beverage firms.

H03: Liquidity has no statistically significant effect on the financial outcomes of the companies under review.

H04: Leverage does not significantly impact the financial performance of listed food and beverage companies.

Literature Review

This study draws its foundation from the Resource-Based Theory (RBT), a strategic management concept introduced by Wernerfelt in 1984. Authors [14] describe the RBT as a strategic tool that identifies a firm's competitive edge by assessing its unique combination of assets, capabilities, and intangible elements. The theory posits that firms gain a competitive advantage by effectively harnessing and deploying these internal resources.

The author [15] elaborates that businesses are essentially reservoirs of resources that, when strategically combined, give rise to competencies capable of driving superior profitability. These competencies, once fully developed, become the foundation for sustained competitive advantage. RBT is particularly useful in explaining variations in profitability among companies within the same industry, as it emphasises firm-level factors rather than sector-wide dynamics.

From this perspective:

Financial resources (e.g., capital structure and debt levels) are reflected in leverage metrics.

Liquidity represents the ease with which firms can meet short-term obligations, impacting operational smoothness.

Physical resources, such as the size of a firm's asset base, can be leveraged for scale and efficiency advantages.

Experience and longevity, or firm age, can contribute to institutional learning, strategic depth, and enhanced organisational capabilities.

Thus, under RBT, these firm-specific factors are expected to shape financial performance, positioning some firms to outperform others even within the same competitive environment.

METHODOLOGY

This investigation employed an ex post facto research design, which is appropriate for studies examining historical data without manipulating any variables. The population for this study consisted of 14 publicly listed food and beverage companies on the Nigerian Stock Exchange as of December 31, 2017. These firms were selected based on the availability and reliability of their financial statements over the study period.

A census sampling technique was employed, meaning that all companies in the target population were included in the sample, ensuring comprehensive coverage of the sector. The study relied exclusively on secondary data, extracted from the annual financial reports of these firms for the years 2008 to 2017.

To analyse the data, the study applied multiple regression analysis using a panel data approach. This statistical method enabled the researchers to assess the influence of firm-specific characteristics—namely, firm age, firm size, liquidity, and leverage—on financial performance, as measured by the Return on Assets (ROA) metric.

The regression model used in the study is expressed as:

$$ROA = f(\text{FAGE}, \text{FSZE}, \text{LEV}, \text{LIQ}) \quad (1)$$

Table 1 – Descriptive Statistics

Variable	Mean	Median	Maximum	Minimum	Std. Dev.
FAGE	27.11450	31.00000	52.00000	0.000000	14.02889
FSIZE	7.247710	7.600000	8.560000	0.000000	1.474383
LEV	62.91656	62.48000	305.8000	0.000000	31.77528
LIQ	0.041221	0.090000	0.380000	-2.300000	0.298756
ROA	8.643664	7.230000	37.60000	-19.66000	9.783336

Over the ten years from 2008 to 2017, based on 131 firm-year observations from 14 listed food and beverage companies, the average return on assets (ROA) was 8.64%. The standard deviation of 9.78% reveals a wide disparity in profitability levels, with some firms experiencing substantial losses (as low as -19.66%), while others recorded impressive returns, peaking at 37.60%.

For firm age, expressed as the logarithmic transformation of the number of years in operation, the mean value was 27.11, and the standard deviation was 14.03. This highlights significant dif-

Formally represented as:

$$ROA_{it} = \beta_0 + \beta_1 \text{FAGE}_{it} + \beta_2 \text{FSZE}_{it} + \beta_3 \text{LEV}_{it} + \beta_4 \text{LIQ}_{it} + \varepsilon_{it} \quad (2)$$

where ROA – Return on Assets, computed as profit before tax divided by total assets; FAGE – Firm Age, determined by the logarithm of the number of years since incorporation; FSZE – Firm Size, measured as the natural logarithm of total assets; LEV – leverage, calculated as the ratio of total liabilities to total assets; LIQ – Liquidity, determined by the ratio of current assets to current liabilities; β_0 = Constant term; β_1 – β_4 – Coefficients of the independent variables; ε = Error term; i = Individual firm; t = Period.

This model allowed the researchers to isolate and quantify the individual effects of each firm characteristic on profitability, facilitating a robust analysis of financial performance drivers in Nigeria's food and beverage industry.

RESULTS AND DISCUSSION

Table 1 summarises the descriptive metrics for both the dependent and independent variables employed in the analysis.

ferences in corporate maturity across the sample, ranging from newly incorporated firms to long-standing businesses with over five decades of operation.

Firm size, gauged using the natural logarithm of total assets, averaged 7.25 with a standard deviation of 1.47. These figures reveal marked variations in organisational scale, which, as suggested by later regression outputs, may have consequential implications for profitability outcomes.

In terms of liquidity, the average ratio of current assets to current liabilities was 0.04, indicating

that, on average, firms had only four kobo in current assets for every 1 naira owed in short-term obligations. The data ranged from severely illiquid positions (0.07) to firms with healthier liquidity ratios of up to 0.38.

Lastly, the leverage ratio—a measure of the proportion of debt relative to total assets—had a mean value of 62.92%. This suggests that, on average, debt accounted for nearly two-thirds of

firms' asset financing. However, the dispersion was considerable, with some firms operating entirely debt-free (0%), while others exhibited extremely high leverage levels, reaching 305.80%. The analysis that follows seeks to determine the extent to which such variability in internal firm characteristics explains differences in financial performance among the sampled firms.

Table 2 – Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FAGE	-0.046498	0.058571	-0.793885	0.4288
FSIZE	2.488370	0.575393	4.324648	0.0000
LEV	-0.135947	0.025087	-5.419081	0.0000
LIQ	6.080690	2.589132	2.348544	0.0204
C	0.172121	3.621990	0.047521	0.9622
R ²	0.335256	Mean dependent var		8.643664
Adjusted R ²	0.314153	S.D. dependent var		9.783336
F-statistic	15.88667	Durbin-Watson stat		0.569636
Prob(F-statistic)	0.000000			

The coefficient of determination (R^2) for the model is 33.53%, indicating that the selected explanatory variables collectively account for approximately one-third of the variation in the financial performance (ROA) of the sampled firms. The age of food and beverage companies, computed as the natural logarithm of the difference between the year under review and the year of incorporation, yielded a coefficient of -0.0465 and an associated p-value of 0.4288. This statistically insignificant outcome suggests that firm longevity does not exert a meaningful influence on financial outcomes within the observed timeframe. This contradicts the assumptions of the Resource-Based Theory, which posits that older firms, being more experienced and stable, typically outperform newer entrants. The result is consistent with the findings [16] but diverges from [17]. As the evidence fails to reject the null hypothesis, H_{01} is retained.

In contrast, firm size returned a coefficient of 2.4884 with a highly significant p-value of 0.0000, signifying a strong and positive association with return on assets. This suggests that larger organisations within the consumer goods sector tend to exhibit superior financial performance. The result confirms the predictions of the Resource-Based Theory, which posits that larger firms benefit from economies of scale and broad-

er resource availability. It also supports findings. Since the result contradicts the null hypothesis, H_{02} is rejected, validating the alternative.

Regarding liquidity, measured by the ratio of current assets to current liabilities, the model produced a coefficient of 6.0807, which is statistically significant ($p = 0.0204$). This result implies that firms with stronger liquidity positions are more likely to post higher financial returns. The evidence aligns with the Resource-Based Theory, which views liquidity as a critical resource enabling smooth operations and resilience. At a 5% significance level, the null hypothesis H_{03} is rejected, confirming a significant and positive relationship between liquidity and firm performance.

Finally, leverage displayed a coefficient of -0.1359 with a highly significant p-value of 0.0000, suggesting that increased reliance on debt is detrimental to profitability. This means that firms with higher debt loads tend to experience reduced financial performance. While the outcome aligns with [16], it contradicts the findings of [18]. Additionally, it contradicts the tenets of Resource-Based Theory, which traditionally assumes that judicious use of leverage can enhance a firm's value. Given its significance, the null hypothesis H_{04} is rejected, establishing a negative relationship between leverage and profitability.

CONCLUSIONS

This research examined the impact of specific organisational attributes on the financial performance of consumer goods companies listed on the Nigerian stock exchange. The analysis relied on secondary data derived from the published annual financial statements of these firms. Findings from the regression analysis demonstrated that most firm-level characteristics—including

size, leverage, and liquidity—had statistically significant effects on profitability. At the same time, firm age did not exhibit a meaningful impact. In light of these findings, the study concludes that internal firm attributes play a critical role in shaping the financial performance of Nigeria's listed consumer goods companies.

REFERENCES

1. Asimakopoulou, I., Samitas, A., & Papadogonas, T. (2009). Firm-specific and economy wide determinants of firm profitability. *Managerial Finance*, 35(11), 930–939. doi: [10.1108/03074350910993818](https://doi.org/10.1108/03074350910993818)
2. Mitra, G., Gupta, V., & Gupta, G. (2023). Impact of macroeconomic factors on firm performance: Empirical evidence from India. *Investment Management and Financial Innovations*, 20(4), 1–12. doi: [10.21511/imfi.20\(4\).2023.01](https://doi.org/10.21511/imfi.20(4).2023.01)
3. Mintzberg, H. (1979). *The Structuring Organizations*. Retrieved from <https://www.nrc.gov/docs/ML0907/ML090710600.pdf>
4. Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. *The Academy of Management Review*, 9(2), 193. doi: [10.2307/258434](https://doi.org/10.2307/258434)
5. Bhargava, A., Jamison, D. T., Lau, L. J., & Murray, C. J. L. (2001). Modeling the effects of health on economic growth. *Journal of Health Economics*, 20(3), 423–440. doi: [10.1016/s0167-6296\(01\)00073-x](https://doi.org/10.1016/s0167-6296(01)00073-x)
6. Kaguri, A. W. (2013). *Relationship between firm characteristics and financial performance of life insurance companies in Kenya*. Retrieved from <https://erepository.uonbi.ac.ke/handle/11295/63507>
7. Ahmeti, Y., & Iseni, E. (2022). Factors Affecting Profitability of Insurance Companies. Evidence from Kosovo. *Academicus International Scientific Journal*, 25, 122–142. doi: [10.7336/academicus.2022.25.08](https://doi.org/10.7336/academicus.2022.25.08)
8. Loderer, C. F., & Waelchli, U. (2010). Firm Age and Performance. *SSRN Electronic Journal*. doi: [10.2139/ssrn.1342248](https://doi.org/10.2139/ssrn.1342248)
9. Babalola, Y. (2013). *The Effect of Firm Size on Firms Profitability in Nigeria*. *Journal of Economics and Sustainable Development*, 4(5), 90–94.
10. Majumdar, S. K. (1997). The Impact of Size and Age on Firm-Level Performance: Some Evidence from India. *Review of Industrial Organization*, 12(2), 231–241. doi: [10.1023/a:1007766324749](https://doi.org/10.1023/a:1007766324749)
11. Pottier, S. W. (2007). *The Determinants of Private Debt Holdings: Evidence from the Life Insurance Industry*. *The Journal of Risk and Insurance*, 74(3), 591–612.
12. Sakanau, S., Usman, B., & Garba Gwarmai, A. (2024). The Effect Of Firms Characteristics On Financial Performance Of Listed Insurances Firms In Nigeria. *International Journal of Financial Research and Business Development*, 6. doi: [10.70382/mejfrbd.v6i7.013](https://doi.org/10.70382/mejfrbd.v6i7.013)
13. Charles, D., Ahmed, M. N., & Joshua, O. (2018). Effect of Firm Characteristics on Profitability of Listed Consumer Goods Companies in Nigeria. *Journal of Accounting, Finance and Auditing Studies*, 4(2). doi: [10.56578/jafas040202](https://doi.org/10.56578/jafas040202)
14. Pearce, J. A., & Robinson, R. B. (2011). *Strategic management: Formulation, implementation and control* (12th ed.). New York.

15. Grant, R. (1999). The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation. *Knowledge and Strategy*, 3–23. doi: [10.1016/b978-0-7506-7088-3.50004-8](https://doi.org/10.1016/b978-0-7506-7088-3.50004-8)
16. Sambasivam, Y. (2020). *A study on the performance of insurance companies in Ethiopia*. Retrieved from https://www.academia.edu/72698609/A_Study_on_the_Performance_of_Insurance_Companies_in_Ethiopia
17. Bilal, Khan, J., Tufail, S., & Sehar, N. (2013). *Determinants of Profitability Panel Data: Evidence from Insurance Sector of Pakistan*. Retrieved from https://www.researchgate.net/publication/237837272_Determinants_of_Profitability_Panel_Data_Evidence_from_Insurance_Sector_of_Pakistan
18. Abba, M., & Usman, S. (2016). *Corporate attributes and share value of listed pharmaceutical firms in Nigeria*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3040146