

SALES GROWTH AND FINANCIAL PERFORMANCE OF LISTED CONSUMER GOODS FIRMS IN NIGERIA

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Abstract

This study examined the influence of sales growth on the financial performance of listed consumer goods firms in Nigeria. The objective was to determine how sales growth shapes key performance indicators such as return on equity, return on assets, and net profit margin. An ex post facto research design was adopted, and purposive sampling technique was used to extract data from the Annual Reports and Accounts of fifteen (15) listed consumer goods firms selected from the twenty-one (21) firms on the Nigerian Exchange. The study covered a ten-year period from 2014 to 2023. Prior to estimation, relevant diagnostic tests were conducted to ensure the validity and reliability of the regression model. Panel data was employed to assess the extent to which sales growth affects the financial performance of the sampled firms. The findings indicated that sales growth has a positive and statistically significant effect on return on equity. Conversely, no significant relationship was found between sales growth and return on assets or net profit margin. Based on these outcomes, the study recommends that consumer goods firms in Nigeria strengthen operational efficiency strategies to enhance cost control and optimize resource utilization.

Keywords: sales growth, return on assets, return on equity, net profit margin

1. Introduction

Profitability is a key indicator of financial performance, reflecting a firm's ability to generate returns, sustain operations, and create shareholder value. Shubita (2024) notes that financial performance encompasses both a firm's current achievements and its capacity for long-term growth and stability, while Hayati et al. (2022) emphasize its importance in evaluating managerial decisions, strategic direction, and resource utilization. Financial performance is commonly measured using return on assets (ROA), return on equity (ROE), and net profit margin (NPM). ROA assesses how efficiently assets generate profit, ROE measures returns to shareholders, while NPM indicates the proportion of revenue retained as net profit. In Nigeria, sustaining profitability has become increasingly difficult for consumer goods firms due to inflation, currency depreciation, infrastructural challenges, unstable power supply, and other macroeconomic pressures. Against this background, this study examines the relationship between sales growth and the financial performance of listed consumer goods firms in Nigeria from 2014 to 2023, a period characterized by significant economic disruptions, including recession, the COVID-19 pandemic, foreign exchange instability, and persistent inflation.

The relationship between sales growth and profitability is particularly important in the Nigerian fast-moving consumer goods (FMCG) sector. NielsenIQ (2024) reported that the

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sector recorded an 18.1% increase in sales value in 2023, despite a 3.3% decline in sales volume, suggesting that price increases rather than higher consumption largely accounted for the growth in sales value. Furthermore, FMCG transaction volumes declined by 17.4% in 2024, reflecting continued pressure on consumers' purchasing power. These trends raise questions about whether increases in sales revenue translate into improved profitability, as rising production and operating costs may offset revenue gains. Therefore, this study investigates the impact of sales growth on the financial performance of listed consumer goods firms in Nigeria, using ROA, ROE, and NPM as measures of financial performance.

1.1 Aim and Objectives.

The main aim of this study is to assess the impact of sales growth and financial performance of listed consumer goods firms in Nigeria. While the specific objectives are to:

- i. Examine the relationship between sales growth and Return of Asset of listed consumer goods firms in Nigeria.
- ii. Investigate the impact of sales growth on Return of Equity of listed consumer goods firms in Nigeria.
- iii. Examine the impact of sales growth and Net Profit Margin of listed consumer goods firms in Nigeria.

1.2 Research Questions

- i. What is the relationship between sales growth and Return on Asset of listed consumer goods firms in Nigeria?
- ii. What is the impact of sales growth on Return on Equity of listed consumer goods firms in Nigeria?
- iii. What is the impact of sales growth on Net Profit Margin of listed consumer goods firms in Nigeria?

1.3 Research Hypotheses

The research hypothesis is stated in null form:

- i. **H₀1:** Sales growth has no significant impact on the Return on Asset in listed consumer goods firms in Nigeria
- ii. **H₀2:** Sales growth has no significant impact on the Return on Equity of listed consumer goods firms in Nigeria.
- iii. **H₀3:** Sales growth has no significant impact on the Net Profit Margin of listed consumer goods firms in Nigeria.

1.4 Significance of the Study

The significance of this study lies in its ability to provide valuable insights into how sales growth influences the financial performance of consumer goods firms—an essential sector often affected by market volatility and shifting consumer preferences (Khurana et al., 2022). Academically, the study contributes to corporate finance literature by deepening understanding of the dynamic relationship between sales fluctuations and firm performance. Ultimately, these insights support not only firm-level success but also broader economic development and social well-being.

1.5 Scope of the Study

This study focuses on Nigeria's consumer goods sector, covering firms that produce essential items such as food, beverages, personal care products, electronics, and household goods. The 2014–2023 period was selected to capture key financial and operational shifts, including declines in FMCG profit margins and transaction volumes (Ologunabe, 2023; Aghogho, 2024), as well as major disruptions such as the 2016 recession, the COVID-19 pandemic, and persistent inflation—all of which affected sales performance. The sample consists of 15 listed consumer goods firms on the Nigerian Exchange Group (NGX), selected for their relevance and data availability.

2. Literature Review

2.1 Conceptual Review

Financial performance

Financial performance reflects a firm's ability to use its resources efficiently to generate profit and create value. Profitability is a key component, commonly measured by Net Profit Margin (NPM), Return on Assets (ROA), and Return on Equity (ROE). NPM measures the proportion of revenue converted into profit, ROA assesses how efficiently assets generate returns, while ROE indicates the returns earned on shareholders' equity. These measures provide useful insights into a firm's financial health, profitability, and ability to create shareholder value (Sriyono & Andesto, 2022; Sumilat et al., 2023; Ariyo-Edu, 2023).

Revenue growth is also important to financial performance because sustained increases in revenue support profitability and business continuity. Revenue growth is measured as the percentage change in revenue between periods and may indicate a firm's ability to expand its market and remain competitive. However, increased revenue does not always translate into higher profits, as rising operating and production costs can reduce margins (Qiao et al., 2019; Lee, 2014). NPM therefore provides an important measure of how effectively firms convert sales revenue into profit, with higher margins generally indicating better cost control and profitability (Nikmah & Wahyuningrum, 2020).

Sales Growth

Sales growth represents the increase in a firm's revenue over time and indicates market demand, competitiveness, and business expansion (Goh et al., 2022; Raman et al., 2022). It can strengthen a firm's ability to attract customers, expand market share, generate profits, and meet financial obligations. However, the effect of sales growth on profitability depends on factors such as economies of scale, operating efficiency, cost management, and market conditions (Helo et al., 2022; Shubita et al., 2019).

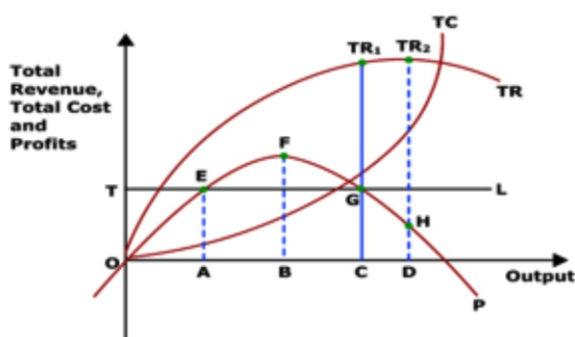
Empirical evidence on the relationship between sales growth and financial performance remains mixed. Some studies report a positive effect on profitability, particularly ROE (Salim et al., 2019; Latief & Mahiri, 2022; Sumilat et al., 2023), while others find no significant relationship (Amalia, 2021; Pramesti et al., 2021). Thus, increased sales do not necessarily lead to higher profitability, as the outcome depends on how efficiently firms manage costs and convert revenue growth into financial returns.

2.2 Theoretical Review

Sales Revenue Maximization Theory

Baumol's Sales Revenue Maximization Theory (1958) suggests that managers of firms with separated ownership and control may prioritize sales revenue over profit maximization. After achieving a satisfactory profit level, managers focus on increasing sales to enhance market share, competitiveness, managerial rewards, and job security. Sales expansion can also support economies of scale and long-term sustainability (Baumol, 1959; Yadav et al., 2022). However, excessive emphasis on sales growth may increase financial risks and conflict with shareholders' interests (Olaoye, 2022).

Fig 1 Baumol's Revenue Maximization Model



Source : *Researchers' illustration based on Baumol (1967).*

Baumol's model shows that a firm maximizes profit at output level OA, where total profit (P) is highest at point E. Sales maximization, however, occurs at a higher output OD, where total revenue (TR) reaches its maximum (TR2), but is subject to a minimum profit constraint represented by line TL. The firm prioritizes maximizing sales rather than profits while ensuring profits do not fall below the minimum level.

2.3 Empirical Review

Empirical evidence on sales growth and financial performance remains mixed across countries and sectors. Some studies report positive effects of sales growth on profitability and firm value (Kurniawati & Anggraini, 2023; Sani & Abubakar, 2022; Sumilat et al., 2023; Olaoye & Olaoye, 2022), while others find no significant relationship (Afinindy et al., 2023; Iskandar, 2021; Nur & Mahiri, 2022). These differences suggest that the effect of sales growth may depend on industry conditions, cost management, leverage, and operational efficiency.

Studies in Nigeria provide further evidence of a positive relationship. Sani and Abubakar (2022) found that sales growth significantly improves profitability in healthcare firms, while Olaoeye and Olaoeye (2022) reported a positive relationship between sales revenue and profitability in brewery firms. Similarly, Okerekeoti (2022) found that revenue growth positively influences financial performance in Nigerian manufacturing firms.

3. Methodology

3.1 Research Design

This study employed an **ex post facto research design** to achieve its objectives. This approach is appropriate as it focuses on events that have already occurred, as highlighted by Nwala et al. (2020). Quantitative data was collected from each sampled firm over a ten-year period (2014–2023) to examine sales revenue impact **Return on Assets (ROA)**, **Return on Equity (ROE)**, and/or **Net Profit Margin (NPM)**.

3.2 Population, Sample Size and Sampling Technique

The study population comprises 21 consumer goods firms listed on the Nigerian Exchange Group (NGX) as of December 2023. A purposive sampling technique was used to select 15 firms with complete financial data for 2014–2023. The remaining six firms were excluded due to incomplete information.

3.3 Source of Data

The study employed secondary data obtained from the annual reports of 15 selected listed consumer goods firms for 2014–2023. Data on sales revenue, total assets, shareholders' equity, operating costs, net profit after tax, and debt components were extracted and used to compute sales growth, operating efficiency, financial performance, and capital structure measures.

3.4 Method of Data Analysis

The study employed panel data analysis to examine the effect of sales growth on the financial performance of the sampled firms. Three separate panel regression models were estimated, using ROA, ROE, and NPM as the dependent variables.

Diagnostic tests were conducted to ensure the reliability of the results, including tests for heteroscedasticity and autocorrelation. The t-test and F-test were used to assess the significance of individual variables and the overall models, respectively, while R^2 was used to determine the explanatory power of the models.

3.5 Measurement and Description of Variables

The variables in the study include the independent variable, sales revenue and the dependent variable, financial performance. Sales revenue is proxied by sales growth, while financial performance is measured using return on capital employed (ROA), return on equity (ROE), and net profit margin (NPM).

Table 1 Measurement and Description of Variables

	Variables	Definitions and Measurement	Scale	source
1.	Sales growth	Change in sales/sales _{t-1}	Ratio	Latief Z Nur1, Eli Achmad Mahiri 2022
2.	Return on Asset	EAT/Total Asset X 100%	Ratio	Nur et al.(2022), Fatoki et al (2021)
3.	Return on Equity	EAT/Total Equity X 100	Ratio	Choiriyah et al.(2020)
4.	Net Profit Margin	EAT/sales X 100	Ratio	Choiriyah et al.(2020)

Source: Researcher's Measurement and Description of Variable, 2025.

Model Specifications

$$FP_{it} = \beta_0 + \beta_1 SG_{it} + \mu_{it} \dots\dots\dots (I)$$

$$ROA_{it} = \beta_0 + \beta_1 SG_{it} + \mu_{it} \dots\dots\dots (i)$$

$$ROE_{it} = \beta_0 + \beta_1 SG_{it} + \mu_{it} \dots\dots\dots (ii)$$

$$NPM_{it} = \beta_0 + \beta_1 SG_{it} + \mu_{it} \dots\dots\dots (iii)$$

Where:

FP = Dependent variable (Financial Performance, measured as ROA, ROE, NPM)

Independent variables SG = Sales Growth

β_0 = Intercept/constant;

β_0, β_1 = Coefficients for independent variables that estimate the direct impact of revenue expansion, capital structure on financial performance.

μ = the residual/error term

it = Panel data

4. Analysis and Discussion

4.1 Summary statistics of the variables

Table 2: Descriptive statistics results

Variable	Observations	Mean	Std. dev.	Minimum	maximum
ROE	150	0.1138884	0.5197691	-3.723443	2.93071
ROA	150	0.0402398	0.0882179	-0.3009522	0.3005281
NPM	150	0.0641766	0.6270159	1.215387	7.417728
S.G	150	0.1364128	0.3259755	-0.9993271	2.301891

Source: Researchers' Computation (2025)

The descriptive statistics in Table 2 summarize key metrics. The mean ROA was 0.0402 (SD = 0.0882), ranging from -0.3010 to 0.0301, indicating wide variation and occasional losses relative to assets. The mean ROE was 0.1139 (SD = 0.5198), with a range of -3.7234 to 2.9307, showing significant differences in shareholder returns. Net profit margin averaged 0.0642 (SD = 0.6270), with values from -1.2154 to 7.4177, suggesting firms generally experienced losses. Sales growth had a mean of 0.1364 (SD = 0.3260), ranging from -0.999 to 2.302, indicating overall growth but a non-normal distribution.

4.2 Correlation Analysis

Table 3 Correlation Analysis

	ROA	ROE	NPM	SG	F.AGE
ROA	1.0000				
ROE	0.3275	1.0000			
NPM	0.5264	0.1918	1.0000		
SG	0.0732	0.0930	0.0303	1.0000	
F.AGE	-0.2601	0.0175	-0.0704	-0.1720	1.0000

Source: Researchers' Computation (2025)

The correlation analysis was carried out to check the strength of the statistical relationship between the independent variables sales growth and the dependent variable proxied by

(return on asset, return on equity and net profit margin). In table 3 above, it is revealed that there exists a positive relationship. ROA and NPM have a strong positive correlation (0.5264), meaning firms with higher margins tend to also have better returns on assets.

4.3 Examining the impact of Sales growth on Financial performance of Listed Consumer Goods Firms in Nigeria

$$\text{Model 1: } FP_{it} = \beta_0 + \beta_1 SG_{it} + \mu_{it} \dots\dots\dots (I)$$

Table 4 Diagnostic Test for Model Validity in Panel Data Regression

	Tests	χ^2	P-value
Heteroskedasticity	Breusch-Pagan / cook -Weisberg test	87.77	0.0000
Normality	Jacque Bera test		0.0000
Autocorrelation	Wooldridge test	0.546	0.4722
Hausman Specification	Hausman Specification test	4.02	0.4035
Panel Test	Breusch and Pagan Lagrangian Multiplier test for random effect	59.11	0.0000

Source: Researchers' Computation (2025)

The heteroscedasticity test showed p-values below 0.05, indicating non-constant error variance, which can lead to inefficient regression estimates. The null hypothesis of homoscedasticity was rejected ($p = 0.0000$). Residuals were also found to be non-normally distributed based on skewness and kurtosis ($p = 0.0000$). Autocorrelation testing returned a p-value of 0.4722, suggesting residuals are independent and free from serial correlation.

To address heteroscedasticity, robust or feasible GLS methods can be applied. The Hausman test favored the Random Effects (RE) model over Fixed Effects (FE) ($p = 0.4035$), indicating no endogeneity concerns. The Breusch-Pagan Lagrange Multiplier (LM) test confirmed significant variation across entities ($p = 0.000$), supporting the use of RE over pooled OLS. Overall, panel data models are more appropriate than pooled regression for analyzing the effect of sales growth on financial performance for NGX-listed firms.

$$\text{Model 1: } ROE_{it} = \beta_0 + \beta_1 SG_{it} + \mu_{it} \dots\dots\dots (i)$$

Table 5: Feasible GLS Analysis: Sales Growth and Return on Equity of Listed consumer goods firms in Nigeria.

ROE	COEF.	ROBUST STD.ERR.	Z	P> Z	(95%CONF.	INTERVAL)
SG	.2497331	.079215	3.15	0.002	.0944746	.4049915
F.AGE	.0017918	.0027784	.64	0.519	-.0036537	.0072374
CONS	.2452329	.1297347	1.89	0.059	-.0090424	.4995082
Wald χ^2	20.76			0.0004		
Obs	150/15					

Source: Researchers' Computation (2025)

Model 2: $ROA_{it} = \beta_0 + \beta_1 SG_{it} + \mu_{it}$ (eqn i)

Table 6: Feasible GLS Analysis: Sales Growth and Return on Asset of Listed consumer goods firms in Nigeria.

ROA	COEF.	ROBUST STD.ERR.	Z	P>/Z/	(95%CONF.	INTERVAL)
SG	.0085609	.0205005	0.42	0.676	-.0316194	.0487412
F.AGE	-.0011155	.0006746	-1.65	0.098	-.0024378	.0002067
CONS	.1682534	.0421978	3.99	0.000	.0855471	.2509596
Wald χ^2	25.31			0.000		
Obs	150/15					

Source: Researchers' Computation (2025)

Model 3: $NPM_{it} = \beta_0 + \beta_1 SG_{it} + \mu_{it}$ (eqn i)

Table 7 Feasible GLS Analysis: Sales Growth and Return on Net Profit Margin of Listed consumer goods firms in Nigeria.

NPM	COEF.	PANELCORRECTED STD.ERR.	Z	P>/Z/	(95%CONF.	INTERVAL)
SG	.0359865	.906107	0.40	0.691	-.1416072	.2135803
F.AGE	.0010363	.0004635	-	0.025	-.0019447	-.001279
CONS	.1748147	.0384754	2.24	0.000	.0992044	.250025
Wald χ^2	12.67		4.54	0.0130		
Observation	150/15					

Source: Researchers' Computation (2025)

4.4 Discussion of findings

In table 7, Using the Random Effects Generalized Least Squares (GLS) regression model—selected on the basis of the Hausman and model-selection tests which confirmed its superiority over the pooled OLS model—this study assessed the effect of sales growth on the financial performance of listed consumer goods firms. The model exhibited adequate explanatory power ($R^2 = 0.3483$ for ROE) and a statistically significant Wald chi-square statistic, indicating overall robustness. The results reveal that sales growth has a positive and statistically significant effect on Return on Equity (coefficient = 0.2497, $p = 0.002$), implying that firms with higher sales growth tend to generate stronger equity returns. This finding aligns with the work of Nasution (2018), Ullah et al. (2020) and Sumilat et al. (2023), who reported a positive and significant impact of profitability measures on firm growth, but contrasts with Onaolapo and Kajola (2010) who documented a negative relationship between ROE and earnings growth. Conversely, when financial performance is measured by Net Profit Margin (NPM), sales growth exerts a positive but statistically insignificant influence (coefficient = 0.03599, $p = 0.691$), supporting earlier evidence by Gusti (2020) and Rini Meidiyustiani (2016) that sales growth does not necessarily translate into improved profitability, yet diverging from Hayati (2022) and Muhammad Basir et al. (2021) who observed a significant positive effect of sales growth on net income. Accordingly, the null hypothesis of no effect is rejected for ROE but retained for NPM,

underscoring that while sales growth significantly drives equity returns in Nigeria's listed consumer goods firms, it does not automatically improve profit margins.

According to Ramadhani and Nisa (2019), positive sales growth reflects a company's good financial condition, while negative sales growth indicates financial distress. Therefore, sales growth is a key metric that, when positive, suggests strong financial performance and operational stability, helping the company maintain its position in the market. Amanda (2019) found that increased sales growth reduces the potential for financial distress, a finding corroborated by Lifia's study (2020).

The results indicate that sales growth has a significant positive effect on return on equity (ROE). This implies that as firms successfully expand their revenues, they deliver greater value to shareholders, resulting in higher returns. This finding aligns with the study by Sumilat et al. (2023), which revealed that sales growth positively influences ROE, suggesting that firms with higher sales growth tend to achieve better profitability ratios. Furthermore, the outcome supports the Revenue Maximization Theory proposed by Baumol (1959), which posits that firms pursuing sustained revenue growth ultimately enhance shareholder wealth. Similarly, the findings of Shubita (2024) revealed a significant negative relationship between profitability (measured by ROA) and tax avoidance, indicating that higher profitability reduces firms' tendencies to engage in tax avoidance practices.

The findings of this study provide valuable insights into the key determinants of financial performance among listed consumer goods firms in Nigeria. The analysis reveals several important patterns that contribute to the broader understanding of financial dynamics within the sector. The study confirms that Sales Growth (SG) has a nuanced impact on financial performance, partially supporting the initial hypotheses. Specifically, SG exerts a statistically significant effect only on Return on Equity (ROE), while demonstrating no significant impact on Return on Assets (ROA) and Net Profit Margin (NPM). This indicates that while top-line revenue expansion successfully enhances shareholder returns, it does not inherently drive broader asset efficiency or core profit margins. Consequently, an increase in sales volume alone is insufficient for comprehensive financial health, as its impact is likely diluted by underlying cost structures, pricing strategies, or capital allocation decisions.

5. Conclusion and Recommendation

This study investigates the impact of sales growth on the financial performance of listed consumer goods firms in Nigeria. Specifically, it focuses on fifteen firms selected from the twenty-one consumer goods companies listed on the Nigerian Exchange Group, covering a ten-year period. Drawing on data from audited annual reports and employing rigorous statistical analysis, the study identifies key factors influencing the improvement—or lack thereof—in financial performance within the sector. This study significantly advances the literature on financial performance by empirically examining the interplay between sales growth and profitability in listed consumer goods firms in Nigeria. Unlike prior studies that

often rely on short-term or regionally constrained datasets, this research leverages a decade of audited financial data (2014–2023) from Nigeria's fast-moving consumer goods (FMCG) sector. By applying multiple regression and OLS techniques, the study offers robust, context-specific insights that are both empirically grounded and practically relevant. It establishes a clear and positive relationship between sales growth and return on equity, validating the Revenue Maximization Theory within the Nigerian FMCG context.

Based on the findings of this study, the following recommendations are deemed imperative for enhancing sales growth and financial performance in listed consumer goods firms in Nigeria:

Implement Revenue Growth Strategies: Companies should invest in strategies that stimulate sustainable revenue growth, such as product innovation, market expansion, customer loyalty programs, and digital transformation initiatives that tap into emerging markets.

Adopt Integrated Financial Planning: Firms should incorporate integrated financial planning that aligns revenue growth objectives with financing strategies. This ensures that expansion efforts are supported by a stable financial foundation, minimizing risks associated with over-leverage or inefficient resource allocation.

Develop Risk Management Frameworks: Given the volatility of external factors such as exchange rates and inflation, firms must adopt comprehensive risk management practices to protect revenue streams and profitability from macroeconomic shocks.

References

- Afinindy, I., Salim, U., & Ratnawati, K. (2021). The effect of profitability, firm size, liquidity, and sales growth on firm value mediated by capital structure. *International Journal of Business, Economics and Law*, 24(4), 1–10.
- Amelia, K., & Mustaqin, H. (Eds.). (2021). *Merdeka Campus Series 2: COVID-19 challenges to the implementation of the Merdeka Campus*. Shia Kuala University Press.
- Anyamaobi, C., & Zukbee, J. D. (2023). Corporate size and return on equity of quoted consumer goods manufacturing firms in Nigeria. *Journal of Accounting and Financial Management*, 9(12), 120–138. <https://doi.org/10.56201/jafm.v9.no12.2023.pg120.138>
- Arief, H., Chau, C., Saratian, E. T. P., & Soelton, M. (2023). The influence of sales growth, profitability, and activity on financial distress. *Judicious*, 4(1). <https://doi.org/10.37010/jdc.v4i1.1277>
- Baby, A., Mia, M. A., & Pitchay, A. A. (2024). A systematic review of financial performance in the manufacturing industry. *Future Business Journal*, 10, Article 70. <https://doi.org/10.1186/s43093-024-00353-1>
- Baumol, W. J. (1959). *Business behavior, value and growth*. Macmillan.
- Becker-Blease, J. R., Kaen, F. R., & Etebari, A. (2010). Employees, firm size and profitability in U.S. manufacturing industries. *Investment Management and Financial Innovations*, 7(2), 7–23.
- Budiharjo, R. (2023). The effect of sales growth, financial performance, and firm size on firm value: Using Indonesian infrastructure companies. *Asian Journal of Economics, Business and Accounting*, 23(18), 9–15. <https://doi.org/10.9734/AJEBA/2023/v23i181053>
- Goddard, J., Tavakoli, M., & Wilson, J. O. S. (2005). Determinants of profitability in European manufacturing and services: Evidence from a dynamic panel model. *Applied Financial Economics*, 15(18), 1269–1282. <https://doi.org/10.1080/09603100500107630>
- Goh, T. S., Henry, & Erika. (2022). Sales growth and firm size impact on firm value with ROA as a moderating variable. *AlbertMIX: Jurnal Ilmiah Manajemen*, 12(1). https://doi.org/10.22441/jurnal_mix.2022.v12i1.008
- Hayati, D. R., Liztiara, M., & Muchtar, S. (2022). Debt financing and firm performance on manufacturing companies listed on the IDX. *Jurnal Ekonomi*, 27(1), 80–93. <https://doi.org/10.24912/je.v27i1.856>
- Helo, P., & Hao, Y. (2022). Artificial intelligence in operations management and supply chain management: An exploratory case study. *Production Planning & Control*, 33(16), 1573–1590. <https://doi.org/10.1080/09537287.2021.1882690>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Jónsson, B. (2007). Does the size matter? The relationship between size and profitability of Icelandic firms. *Bifrost Journal of Social Science*, 1, 43–55.
- Khurana, R., Mugabe, D., & Etienne, X. L. (2022). Climate change, natural disasters, and

- institutional integrity. *World Development*, 157, 105931. <https://doi.org/10.1016/j.worlddev.2022.105931>
- Lim, H., & Rokhim, R. (2021). Factors affecting profitability of pharmaceutical companies: An Indonesian evidence. *Journal of Economic Studies*, 48(5), 981–995. <https://doi.org/10.1108/JES-01-2020-0021>
- NielsenIQ. (2024a, March 13). *State of the nation 2023 of the FMCG industry in Kenya and Nigeria*.
- NielsenIQ. (2024b, May 23). *FMCG resilience: How to navigate through turbulent times and recover volume*.
- Nikmah, U., & Wahyuningrum, I. F. S. (2020). The effect of financial performance on profit growth moderated by CSR disclosure. *Accounting Analysis Journal*, 9(2), 179–185. <https://journal.unnes.ac.id/sju/index.php/aaj>
- Oguntuase, A. T., Oyeneye, T. E., Olabisi, J., & Oyedele, O. D. (2024). Government expenditure: A catalyst for economic growth in Nigeria. *Malet Journal of Accounting and Finance*, 4(2).
- Okerekeoti, C. U. (2022). Effect of size of company on debt of consumer goods manufacturing companies in Nigeria. *Scholarly Journal of Management Sciences Research*, 1(1).
- Pane, A. A., Dalimunthe, H., & Ananda, R. F. (2023). How sales growth and leverage affect financial distress. *International Journal of Applied Finance and Business Studies*, 11(1), 35–41. <https://doi.org/10.35335/ijafibs.v11i1.84>
- Rahman, M. (2023). The effect of business intelligence on bank operational efficiency and perceptions of profitability. *FinTech*, 2, 99–119.
- Rahmiyati, N., Mulatsih, L. S., Alfiana, P., Afriyeni, P., & Wibowo, T. S. (2023). The effect of firm size and sales growth on profitability mediated by capital structure (Study on manufacturing companies registered on the IDX in the consumer good industry sub-sector). *Kontigensi: Jurnal Ilmiah Manajemen*, 11(1), 105–114.
- Salim, M. N., & Susilowati, R. (2019). The effect of internal factors on capital structure and its impact on firm value: Empirical evidence from the food and beverages industry listed on the Indonesian Stock Exchange (2013–2017). *International Journal of Engineering Technologies and Management Research*, 6(7), 173–191. <https://doi.org/10.29121/ijetmr.v6.i7.2019.434>
- Santoso, A., & Susilowati, T. (2020). Firm size moderates the effect of capital structure on firm value. *Adbis: Journal of Administration and Business*, 13(2), 156–167.
- Serrasqueiro, Z. S., & Paulo, M. N. (2008). Performance and size: Empirical evidence from Portuguese SMEs. *Small Business Economics*, 31(2), 195–217.
- Shubita, M. F. (2019). Specification of the relationship between the sales expenses and the sales in Jordanian companies. *Innovative Marketing*, 15(4), 57–65. [https://doi.org/10.21511/im.15\(4\).2019.05](https://doi.org/10.21511/im.15(4).2019.05)
- Shubita, M. F. (2024). The relationship between sales growth, profitability, and tax avoidance. *Innovative Marketing*, 20(1), 113–121. [https://doi.org/10.21511/im.20\(1\).2024.10](https://doi.org/10.21511/im.20(1).2024.10)
- Sriyono, S., & Andesto, R. (2022). The effect of profitability, leverage, and sales growth on tax avoidance with the size of the company as a moderation variable. *Dinasti*

- International Journal of Management Science*, 4(1), 112–126.
<https://doi.org/10.31933/dijms.v4i1.1408>
- Sukenti, S. (2023). Financial management concepts: A review. *Journal of Contemporary Administration and Management (ADMAN)*, 1(1), 13–16.
<https://doi.org/10.61100/adman.v1i1.4>
- Sumilat, C. I., Soleh, E. A., Henny, & Sari, R. K. (2023). Effect of sales growth, leverage, and size on ROE during COVID-19 pandemic: Empirical study on IDX-listed property companies 2019–2021. *E3S Web of Conferences*, 426, 02078.
<https://doi.org/10.1051/e3sconf/202342602078>
- Supriyadi, T. (2021). Effect of return on assets (ROA), return on equity (ROE), and net profit margin (NPM) on the company's value in manufacturing companies listed on the Indonesia Stock Exchange year 2016–2019. *International Journal of Economics, Business and Management Research*, 5(4), 219–230.
https://www.ijebmr.com/uploads/pdf/archivepdf/2021/IJEBMR_778.pdf
- Tabares, S., & Parida, V. (2022). *Barrier enabler analysis for business model innovation: Fulfilling customer pains of public procurement in the railway industry in Sweden* [Report]. Luleå University of Technology. <https://www.diva-portal.org/smash/record.jsf?pid=diva2%3A1709045>
- Uchechi, U. J., Iheukwumere, I. V., & Ogbonna, B. M. (2022). Impact of debt sustainability on Nigerian economic development. *Central Asian Journal of Innovations on Tourism Management and Finance*, 3(6), 110–127.
- World Bank. (2026). *Nigeria: Data*. World Bank Data.