

Internal Financial Indicators and the Profitability of Listed Consumer Goods Firms in Nigeria

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Abstract

The study examined the impact of internal financial indicators on profitability of listed consumer goods firms in Nigeria between the periods of 2013-2022. The study made use of secondary data sourced from the annual reports and accounts of the various consumer goods firms listed in Nigeria Exchange Group for the measures of internal financial indicators [Size (SZ), Age (AG), Liquidity (LQ), Leverage (LV), Sales Growth (SGT) and Operating Expenses (OEXP)] in relation to profitability proxied with Operating Profitability (OP). The study conducted descriptive statistics and correlation analysis, followed by the panel unit root test, and the Pedroni panel cointegration test. The nature of the link between the independent variables and the dependent variables were investigated using descriptive statistics, correlation analysis, the panel unit root test, and the Pedroni panel cointegration test. In light of the hypotheses that will develop for this study, the type of data analysis that was selected is the multiple regression analysis that was carried out with the use of the computer programme E-VIEW 9.0. The findings revealed that SZ, LQ, SGT and OEXP have significant relationship on OP of consumer goods firms listed in Nigeria Exchange Group while AG and LV does not. Finally, the study concluded that there is a significant relationship between internal financial indicators and the profitability of listed of consumer goods firms listed in Nigeria Exchange Group. Size of the firm has a significant impact of OP, thus, this study recommends that listed consumer goods firms should maintain and improve their size so as to increase the OP of their firms.

Key Words: Internal, Financial, Liquidity, Leverage, Operating, Expenses & Profitability

Introduction

Nigeria's economy has grown due to consumer products. Despite employing only 15% of the workforce, the sector earned 85% of foreign exchange revenues and 60% or more of GDP (Etim, Ihenyen, & Nsima, 2020). The consumer products sector in Nigeria has been dominated by overseas corporations, which have had little impact on local employment (Onuorah, Ozurumba & Ojiaku, 2020). The subsector's social contributions have diminished due to market inefficiencies. Deregulation has helped the government boost economic performance (Efuntade & Akinola, 2020). Deregulation has increased competition, which has changed the corporate environment and could create more wealth and jobs. Thus, the transformation from a near-monopoly to a more competitive market structure requires research on the internal financial variables that affect consumer products companies listed on the Nigerian Exchange Group's profitability (Olatunji, 2018).

Company profitability measures its ability to make a profit or generate enough income to operate. It is often used to evaluate consumer product manufacturers' long-term financial health (Irom, Okpanachi, Nma Ahmed, and Tope, 2018). Consumer products companies' profitability depends on internal and external factors. Company profitability varies due to internal and external factors. External factors affect profitability even if management cannot control them (Dioha, Mohammed, & Okpanachi, 2018). According to Etim, Ihenyen, and Nsima (2020), firm age, size, liquidity, and leverage affect consumer products company profitability (Mule & Mukras, 2015). Endogenous and exogenous factors affect Consumer Goods Company profitability. Internal determinants are controlled and affect profitability across businesses, according to Onuorah & Osuji (2019). Uncontrolled, or external, factors affect a company's profitability but are outside management's control, according to Dioha et al. (2018).

Consumer products company qualities are classified by financial and non-financial factors. Financial information can be gathered from consumer products firms' financial statements. Firm age, size, sales growth rate, liquidity, leverage, operating expenses, and tangibility were essential to Dioha et al. (2018). Financial factors can be found in oil and gas or consumer products company financial statements. These statements cannot provide non-financial information (Onuorah, 2018). Management skills, age, and operational scale are internal factors, while exchange rate, inflation rate fluctuations, consumer price index, government expenditure, interest rates, and GDP growth rate are external factors (Abubakar, Isah, and Usman, 2019). Further external factors include interest rates and GDP growth.

Certain corporate qualities can boost or hurt profits. Firm size, leverage, liquidity, capital, age, dividend policy, market share, financial condition, activities, and operating expenses might affect a company's operations (Adebayo and Onyeiwu, 2018). Profitability depends on firm size. The size of a corporation influences its economic activity and economies of scale. Dioha et al. (2018) found that larger companies generate higher asset returns. The idea that a firm's risk level decreases and its survival rate increases with age affects its profitability. New businesses struggle to achieve economies of scale and have limited management resources and knowledge (Adebayo et al., 2018). Use financial instruments or borrowed funds, such margin, to boost a firm's ROI. It refers to a company's asset financing debt (Lin, Li, and Yung, 2016).

Companies need liquidity to meet short-term financial obligations and be profitable. Dioha et al. (2018) and Oyebanji (2015) suggest prioritising liquidity over profitability, which is risky. Another financial statement component affecting profitability is operating expenses. It's a company's daily operating costs (Onuorah, 2018). Running expenses include supplies, selling, general, and administrative costs for business operation (Dioha et al., 2018; Hassan, 2013). Manufacturers optimise asset usage and reduce losses for top performance. Due to peak shareholder pressure, financial resources for transformation are scarce. To compete, businesses must maximise asset value and decrease costs (Hassan, 2013, Abubakar et al., 2019). Companies use ROA to measure profitability. Consumer products firms' profitability depends on their ROA/total assets. Management can produce revenue from assets (Abubakar et al., 2019).

Dioha et al.'s 2018 study examines growth, which Al-Jafari and Al-Samman's 2015 study predicts will affect profitability. Sales and income growth affect rate of return and market value indicators because they represent industry profitability. Growth in one year may affect profitability and market value indicators in the following year, in simulated and real-world circumstances. Asset expansion affects sales and revenue growth now and in the future. This can replace plant and equipment costs and research intensity. This expansion may effect profitability and market value, according to Dioha et al. (2018) and Kugari (2013). Management cannot influence external macroeconomic aspects such social, environmental, and political challenges, suppliers, rivals, and government laws (Egbunike & Okerekeosti, 2018). Interest rates, GDP, stock market index, CPI, corporate taxation, and unemployment are economic indicators. Macro effects can boost or hurt a company's success. Management can affect minor difficulties but not severe ones (Dioha et al., 2018). Conversely, macroeconomic conditions don't effect firm performance. The resource-based view (RBV) theory asserts that internal attributes define an organization's competitive position. Organisational, human, and physical capital allow a company to create and implement productivity and performance-boosting measures (Oyebanji, 2015; Rajkumar, 2014), according to Efuntade et al. (2020). Research shows that company- and industry-specific variables predict profitability in Nigeria's consumer products and oil and gas industries. Nigerian consumer products companies' success factors are divided into two groups by this study. The internal profitability factors are liquidity, leverage, age, size, sales growth, operating costs, and tangibility. Exchange rates, inflation, government spending, interest rates, and growth affect profitability. This study focuses on internal financial variables that affect Nigerian Exchange Group-listed companies' profitability. Internal and external obstacles prevent most Nigerian consumer products companies from meeting their goals. Many stakeholders value the entity's profitability. Financial scholars have ignored Nigeria's consumer products sector's profitability based on company age and size, despite its relevance to their operations. This may be due to a lack of research on Nigeria's consumer goods sector's profitability aspects. Many studies have examined how many factors affect company profitability, but Boigues' (2016) US research stands out. Most studies on firm profitability do not use operating profitability (EBIT/TA). Several Nigerian studies, such as Abubakar et al. (2019), Efuntade et al. (2020), and Ehiedu & Imoagwu (2022), have examined how operational costs affect firm profitability. The researcher is unaware of any previous studies in this field that used the same variable composition and time duration. Previous research measured profitability using ROA, ROE, and Tobin's Q. Operating profitability—EBIT divided by total assets—has not been

assessed. This study evaluates profitability alongside ROA and ROE to close the gap. Operating profitability (EBIT/TA) is derived from Nigeria's consumer goods sectors' basic services and provides a detailed estimate of the business's profitability. New analysis covers 15 years from 2013 to 2022. Due to differences in economic conditions, time range, and qualities, identical overseas studies may not apply to Nigeria. A research gap led to a study on the internal financial variables that affect Nigerian consumer products manufacturers' profitability.

Literature Review

Conceptual Review

Internal Financial Indicators

Management controls internal factors most. Internal factors include age, sales growth, size, liquidity, and leverage. Thus, internal variables can affect business profitability. Size, value, profitability, structure, and other criteria can distinguish companies. Onyekwelu, Nwajei, and Ugwu (2017) say that internal components are unique to internal firms and give information users a perception. The company's distinctive internal features can be identified from its financial records for a certain accounting period (Stainer, 2016). Dean, Bulent, and Christopher (2016) say a company's features affect its success and profitability. This shows that internal qualities are one of the most important determinants in consumer products and oil and gas company performance. This study will examine these internal components:

i. Size: Company size can be determined by assets, revenues, employees, and market capitalization. Greater corporations are easier to raise outside capital, and larger capital means larger growth, etc. An investor seeks high-return enterprises to invest in. Investor cash makes it easier for businesses to invest (Kartikasari and Merianti, 2016). Existing empirical research has examined how firm size affects profitability (Alarussi & Alhaderi, 2018; Odusanya et al., 2018). Different findings have been obtained. Theory viewpoints are supported. The neoclassical method supports economies of scale, yet rigidities, inertia, and bureaucracy in large companies may negatively affect total assets (Olaniyi et al., 2017).

ii. Age: Scholars study age's effect on firm profitability. This indicates a company's age. However, this may have mixed effects. Older companies benefit from economies of scale and finance. Large organisations and product maturity can cause inertia, bureaucracy, and diseconomies of scale in older companies (Isik, 2017).

iii. Liquidity: At various periods, finance managers must make investment, financing, liquidity, and dividend decisions. Every aspect of financial management challenges the finance manager to maximise liquidity and profitability. The person must strike a balance (Odusanya et al., 2018). Liquidity requires the organisation to always have enough cash to pay payments and handle emergencies. This variable is represented by the natural logarithm of current assets minus current liabilities. Diverse factors affect profitability. While Goddard et al. (2015) and Pattitoni et al. (2016) postulate a positive relationship due to the availability of funds for unexpected opportunities and investment, researchers have also noted that excess funds may result in incorrect investments, reducing profitability.

iv. Leverage: A company's solvency ratio is used to determine its ability to satisfy short- and long-term obligations, especially when it is dissolved or liquidated (Onuorah & Enebeli, 2022). Ahmad (2016) says a high leverage ratio indicates considerable financial leverage. However, higher debt ratios increase shareholder profit uncertainty. However, intentional financial leverage enhances shareholder returns. It measures how debt and debt management affect profitability. Al-Jafari and Samman (2015) found that increasing a firm's debt reduces profitability due to interest payments.

v. Sales Growth: Advancement opportunities Companies with strong growth potential can make more money from their investments, therefore they have a high return. Thus, expansion should boost profitability. A firm's growth potential may affect profitability on a mixed basis. Expanding opportunities may boost staff productivity and profitability (Nunes et al., 2019; Pattitoni, 2016). However, if employees want fewer informal ties, growth objectives may reduce profitability (Isik, 2017).

vi. Operating Expenses: Asaolu and Nassar (2017) defined profitability as the difference between revenue and cost, while Kumar and Kaur (2016) defined cost behaviour as the study of how expenses vary or do not vary with the amount of activity in an organisation. The amount of work completed or the number of events that occurred were used to represent the degree of activity.

Profitability

The literature shows that management experts, investors, and researchers care about commercial organisation profitability. The best predictor of corporate growth is profitability, which shows a company's capability to grow its income (Ahmed, Naveed, and Usman, 2016). Thus, financial management's main goal is to maximise company owners' wealth and profitability, which improves financial performance (Malik, 2016). Accounting profitability includes profit, ROI, and economic value (Hassan, 2016). Tobin's Q, ROA, ROE, ROS, EPS, market capitalization growth, gross and net profit margins, economic profit, and other metrics were utilised to estimate profitability in most study. ROA encompasses company profitability factors. Multiple interpretations and implementations of this notion exist. The ROA of a company evaluates its profitability relative to its assets. Management efficiently uses its resources to benefit. ROA measures an organization's profitability to its assets. Our ROA shows how well management uses its resources to make money. The ROA is annual earnings divided by total assets (Haniffa and Huduib, 2016). A profitability analysis of EBIT/TA has not been done. Operating profit, ROA, and ROE are used to quantify profitability in this study to close the gap.

Theoretical Framework

Resource Based Theory (RBT)

Wernerfelt's 1984 RBT underpins the investigation. RBT claims that enterprises with "strategic resources" have a market advantage. Because rivals can easily get money and cars, they are not vital. Strategic resources are valuable, scarce, hard to replace, and all of the above. According to Pearce and Robinson (2016), the RBT evaluates a company's organisational assets, skills, competencies, and intangibles to determine its competitive advantages. Grant (1991) says it sees the business as a collection of assets that can be used to boost organisational strength and profit margins. Every firm can develop capabilities that, when correctly executed, build their competitive

advantages with these tools. This hypothesis highlights business features rather than industry challenges, helping explain intra-industry firm profitability variation. Since leverage ratios allow a corporation to borrow from debt providers for project funding, they are often used to evaluate its financial resources. Financial liquidity measures how readily available financial resources are for corporate operations. Knowledge offers a company an edge, while assets give it a more tangible one (Pearce and Robinson, 2016). According to the RBT, internal financial indicators can assist companies take advantage of opportunities and limit risks. It focuses on internal financial indicators rather than industry issues, which helps analyse profit variances.

Empirical Review

Further research on the relationship between liquidity and profitability ratios and pharmaceutical firm profit growth in Nigeria was conducted by Chika, Promise, Solomon, and Werikum (2022). From 2016 to 2021, the NGX, Nigeria's stock exchange market, had six listed pharmaceutical companies. The researcher analysed secondary data from these companies using panel regression. The study was conducted with 30 yearly observations from Nigeria's six pharmaceutical firms. An association between profit growth rate and the current and quick ratio liquidity ratios was shown to be statistically significant. ROA % and net profit margin are not statistically impacted by increases in profit.

Odukwu and Eke (2022) looked at industrial firm performance in Nigeria and financial data. The asset turnover ratio, ROE, and operating expenditure ratio of Nigerian manufacturing enterprises were investigated in this research. The financial outcomes of food manufacturing firms were hypothesised to be unaffected by the overhead cost ratio and assets turnover ratio in the study. NGX financial filings from a subset of industrial businesses' secondary data were analysed between 2014 and 2019. Employing Pearson Product Moment correlation and descriptive statistics from SPSS, the data was examined. Statistical evidence indicates a substantial correlation between ROE and asset turnover, but not between ROC and operating expense ratio. The ROE of Nigerian manufacturing firms was thus significantly impacted by financial disclosure. For manufacturing organisations looking to improve their ROE, the study recommends optimising asset turnover, exposure, and ROE.“

Rahmawati and Hadian calculated the debt-to-equity ratio, profits per share, price-earnings ratio, and stock prices of ASEAN-listed businesses in the commodities industry for the period of 2016–2018. There was explanation for this research. This was an explanation-based study. There are 34 consumer goods firms listed between 2016 and 2018 that are registered on the Indonesia Stock Exchange. This investigation used survey-based non-probability screening. Eviews 9 was utilised for panel data analysis based on regression in this study. Research revealed that three key ratios that influenced stock prices were debt to equity, earnings per share, and price to profit. In addition, the study discovered that 98.7% of stock prices are influenced by debt-to-equity, earnings per share, and price-earnings ratios.

They looked at the value for money and financial performance of manufacturing companies in Imo State, according to Eke and Odukwu (2022). The research investigated the potential cost-saving measures that quality and value analysis could offer industrial companies in Imo State. Research using descriptive methods was used in this study. 131 patients were first-rated using Taro Yamen's

technique, and the study comprised 94 participants from five manufacturing companies. Important data was gathered by the researchers through participant surveys. The Pearson Correlation Coefficient and Generalised Least Square methods enable SPSS analysis. Profit before taxes and value for money analysis were found to be correlated with efficacy and efficiency. The study indicates that value for money analysis has an impact on the financial efficiency of industrial firms in Imo State. In order to prevent squandering time and money prior to taxes, organisations should undertake a value for money analysis, per the report. Profit growth and profitability ratios of oil and gas businesses registered in Nigeria were studied by Appah et al. (2021). From the 2014–2019 annual reports of a sample of firms, the study gathered qualitative and ex post facto data. The public financial accounts of the selected organisations were analysed using descriptive, correlation matrix, and multiple regression methods. Multivariate analysis reveals that the following factors positively and significantly influence the profit growth of Nigerian listed oil and gas companies: ROE, ROCE, net working capital, profit margin, gross profit ratio, litmus test ratio, current ratio, and profit margin.

Research Methodology

Research done after the fact was used in this study. According to the design, in order to assess the data with the required tools, 15 out of the 28 consumer goods companies listed on the Nigeria Exchange Group (NEG) annual reports and accounts must provide secondary data. This was the study sample size because it was hard to get the annual reports and accounts of 15 of the 28 consumer products companies listed on the NEG. This inquiry employed quantitative data analysis. Analysis of the independent-dependent connection was done using correlation analysis and descriptive statistics. Correlation matrix, Pedroni panel cointegration test, and panel unit root test followed. For the panel least squares multiple regression analysis, E-VIEW 9.0 was utilised. Between dependent and independent variables, the model's hypotheses expected a linear connection. The model was designed to identify the major influence of internal financial indicators on profitability as measured by Operating Profitability (OP); Size (SZ), Age (AG), Liquidity (LQ), Leverage (LV), Sales Growth (SGT) and Operating Expenses (OEXP), is formulated as follows;

$$OP = f(SZ, AG, LQ, LV, SGT, OEXP)$$

$$OP = \beta_0 + \beta_1SZ + \beta_2AG + \beta_3LQ + \beta_4LV + \beta_5SGT + \beta_6OEXP + E$$

Where; E = Error Term, β_0 = Intercept and $\beta_1 - \beta_6$ = Coefficient of the Independent Variables.

The a priori expectation is $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$, is lesser or greater than 0.

Results and Discussion

Table 4.1: Descriptive Statistics Output

	OP	SZ	AG	LQ	LV	SGT	OEXP
Mean	3.045606	10.52946	1.449954	0.647824	0.607467	1.408140	5.188044
Median	0.047566	10.71961	1.477121	0.022103	0.587440	0.016600	0.061552
Maximum	13.35961	12.05345	1.812913	6.395096	4.384140	5.599736	5.318323
Minimum	-2.603597	0.000000	0.477121	-0.000769	-0.504471	-0.885420	0.000000
Std. Dev.	6.247461	1.250912	0.243161	0.850915	0.393913	3.797161	7.363454
Skewness	9.122028	-6.113027	-1.082866	2.248121	4.783661	-6.254709	8.335786
Kurtosis	7.825062	5.106310	4.593787	3.186786	4.586664	7.115121	4.744870

Jarque-Bera	61925.10	20496.15	60.25458	975.0250	16075.69	110579.3	44632.86
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	-609.1211	2105.893	289.9907	128.9169	121.4934	-281.6280	1032.421
Sum Sq. Dev.	139480.1	311.3912	11.76630	143.3632	30.87826	1088888.	280439.0
Observations	150	150	150	150	150	150	150

Source: Extracted from E-VIEW Outputs, 2023

Table 4.1 shows 150 observations for six internal financial indicators (SZ, AG, LQ, LV, SGT, OEXP) and one dependent variable (OP) for ten NEG consumer products companies from 2013 to 2022. Profitability with OP has the minimum and highest values were -2.6036 and 13.3596, while the mean and Std. Dev. were 3.0456 and 6.2475. OP grew steadily during evaluation since the mean value was lower than the Std. Dev. Minimum and maximum SZ values were 0.0000 and 12.0535. SZ a mean and SD of 10.5295 and 1.2509, the mean value is larger than the Std. Dev., indicating that the NEG consumer products companies have grown. AG ranged from 0.4771 to 1.8129. The natural log of AG's years has a mean of 1.4500 and a Std. Dev. of 0.2432. The NEG consumer products companies are older and perform better, as seen by the mean value exceeding the Std. Dev. LQ from -0.0008 to 6.3951 has NXG consumer goods firms have a LQ of 0.6478 and a Std. Dev. of 0.8509. The NXG 10 consumer products companies have positively changing LQ values because the mean is bigger than the Std. Dev. The LV variables vary from -0.5045 to 4.3841, a mean LV of 0.6675 and an SD of 0.3939. The NEG consumer products companies under research had greater mean LV than Std. Dev. SGT ranges from -0.8854 to 5.5997, based on revenue change, SGT has a mean of 1.4081 and a Std. Dev. of 3.7972 among the 15 NEG consumer products firms. The Std. Dev. is bigger than the mean value; hence the 10 NEG consumer products companies have various SGTs. The mean OEXP for NEG consumer goods enterprises is 5.1880 and the standard deviation is 7.3635. Since the mean value was lower than the standard deviation, OEXP increased gradually during evaluation.

Table 4.2: Correlation Output

	OP	SZ	AG	LQ	LV	SGT	OEXP
OP	1.000000						
SZ	0.132324	1.000000					
AG	0.172270	0.421794	1.000000				
LQ	-0.167441	-0.097251	-0.204870	1.000000			
LV	0.016069	0.251096	0.198260	0.027759	1.000000		
SGT	-0.001786	0.043950	-0.012358	-0.054325	-0.100255	1.000000	
OEXP	-0.486931	-0.143091	-0.182514	0.202884	-0.018958	0.002514	1.000000

Source: Extracted from E-VIEW Outputs, 2023

SZ and OP have a substantial positive connection ($r=0.1323$), which is greater than 0.05. The correlation coefficient of SZ shows that company size affects OP. AG and OP have a high positive

association ($r=0.1723$). This indicates that the number of years a company has been in operation affects its OP level, yielding results on every asset spent by stakeholders. Table 4.2 also demonstrated a weak negative connection between LQ and OP. Thus, firm OP rises with LQ. The correlation coefficient of -0.1331 demonstrates a substantial positive association between LV and OP. A corporation with a superior debt-equity mix has a higher OP level, producing a return on stakeholder assets. The slight negative connection between SGT and OP was shown in Table 4.2. This suggests a weak negative association between SGT and OP. Thus, increasing SGT decreases OP somewhat. Table 4.3.1 indicated a strong negative association between operating expenses and OP. Finally, OEXP has a substantial negative correlation value (-0.4869) with OP, indicating a strong negative link between SGT and OP. Thus, increasing SGT decreases OP. Table 4.3.1 indicated a strong negative association between operating expenses and OP.

Table 4.3: Panel Unit Root Test Result

Consumer Goods Firms					
Variable s	Method	Statistic s	Probabilit y	@Ist Diff.	Check for Stationar y
OP	Levin, Lin & Chu Test	- 9.12053	0.0000	1(1)	Stationary
	Im Pesaran and Shin W-Test	- 4.02894	0.0000	1(1)	Stationary
	Augmented Dicker-Fuller's Test	91.7507	0.0000	1(1)	Stationary
	PP Fisher Test	191.734	0.0000	1(1)	Stationary
SZ	Levin, Lin & Chu Test	- 7.19439	0.0000	1(1)	Stationary
	Im Pesaran and Shin W-Test	- 3.97281	0.0000	1(1)	Stationary
	Augmented Dicker-Fuller's Test	88.1660	0.0000	1(1)	Stationary
	PP Fisher Test	146.833	0.0000	1(1)	Stationary
AG	Levin, Lin & Chu Test	- 22.6950	0.0000	1(1)	Stationary
	Im Pesaran and Shin W-Test	- 187.549	0.0000	1(1)	Stationary
	Augmented Dicker-Fuller's Test	377.484	0.0000	1(1)	Stationary
	PP Fisher Test	313.999	0.0000	1(1)	Stationary
LQ	Levin, Lin & Chu Test	3.10993	0.0491	1(1)	Stationary
	Im Pesaran and Shin W-Test	- 2.04754	0.0203	1(1)	Stationary

	Augmented Dicker-Fuller's Test	62.4060	0.0075	1(1)	Stationary
	PP Fisher Test	226.015	0.0000	1(1)	Stationary
LV	Levin, Lin & Chu Test	- 11.2127	0.0000	1(1)	Stationary
	Im Pesaran and Shin W-Test	- 3.10387	0.0010	1(1)	Stationary
	Augmented Dicker-Fuller's Test	79.0833	0.0002	1(1)	Stationary
	PP Fisher Test	178.926	0.0000	1(1)	Stationary
SGT	Levin, Lin & Chu Test	- 12.5151	0.0000	1(1)	Stationary
	Im Pesaran and Shin W-Test	- 6.78824	0.0000	1(1)	Stationary
	Augmented Dicker-Fuller's Test	124.762	0.0000	1(1)	Stationary
	PP Fisher Test	279.563	0.0000	1(1)	Stationary
OEXP	Levin, Lin & Chu Test	- 23.4433	0.0000	1(1)	Stationary
	Im Pesaran and Shin W-Test	- 6.17321	0.0000	1(1)	Stationary
	Augmented Dicker-Fuller's Test	113.634	0.0000	1(1)	Stationary
	PP Fisher Test	118.828	0.0000	1(1)	Stationary

Source: E-Views 9.0 Output (2023).

Table 4.3 shows the panel unit root test results for the independent variables SZ, AG, LQ, LV, SGT, and OEXP and the dependent variable OP for the ten consumer goods companies listed in the Nigeria exchange group. Null hypothesis: data is not steady. If the Levin, Lin & Chu Test, Im Pesaran and Shin W-Test, Augmented Dicker-Fuller's Test, and PP Fisher Test yielded probability values below the critical value at any significance level, reject the null hypothesis. As shown in Table 4.3, Levin, Lin & Chu Test, Im Pesaran and Shin W-Test, Augmented Dicker-Fuller's Test, and PP Fisher Test for ten oil & gas and consumer products companies have probability values below 0.05. Thus, we reject the null hypothesis that the data is not stable and the data series are normally distributed and suited multiple regression.

Table 4.4: Pedroni Panel Cointegration Test Results

Consumer Goods Firms					
Panel Statistics			Group Statistics		
Panel	Statistics	Probability	Group	Statistics	Probability
v-Statistic	-5.166495	1.0000	rho-Statistic	7.121377	1.0000
rho-Statistic	5.464085	1.0000	PP-Statistic	-16.34565	0.0000
PP-Statistic	-22.37663	0.0000	ADF-Statistic	-4.750572	0.0000
ADF-Statistic	-4.884015	0.0000			

Source: E-VIEW, 9.0 Outputs, 2023.

Pedroni panel cointegration test results for panel and group Statistics with denotes statistical significance at 5% (0.05). Table 4.4 shows that panel statistics coefficients for v, panel PP, panel ADF, and group PP statistics and ADF were significant at 5%. All panel v, panel PP, and group PP and panel and group ADF values were statistically significant, rejecting the null hypothesis of no cointegration. Thus, panel cointegration tests indicate a long-term link between the variables. It helped solve the unit root test problem because the ADF has a probability smaller than 0.05, indicating that the data are stationary and suitable for multiple regression.

Table 4.5: Redundant Fixed Effects Tests and Correlated Hausman Test

Redundant Fixed Effects Tests				
Equation: Untitled				
Test cross-section fixed effects				
Effects Test		Statistic	d.f.	Prob.
Cross-section F		2.589319	(19,172)	0.0006
Cross-section Chi-square		49.808779	19	0.0001
Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		7.168613	6	0.0720

Source: Extracted from E-VIEW Outputs, 2023.

This research uses panel data in Table 4.5 to decide whether to analyse data using a fixed effect or a random effect. The fixed effect model suits this research. Because the fixed effect's p-value is 0.0001, much below the acknowledged threshold of significance of 0.05, and its Chi-Square is 49.8088, which is more than 10, it was selected. This suggests that the optimal outcome for the

panel data of the 15 consumer goods companies included in the study is the Random Effects OLS result.

Table 4.6: Fixed Effect Pooled Regression

Dependent Variable: OP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.137978	7.381541	-0.967004	0.3349
SZ	0.572209	0.226082	2.530980	0.0211
AG	-0.321250	4.424121	-0.072613	0.9422
LQ	3.264556	0.620790	5.258711	0.0000
LV	0.367106	0.881016	0.416686	0.6774
SGT	0.008735	0.004202	2.078457	0.0392
OEXP	-0.746068	0.010433	-71.51305	0.0000

Source: Extracted from E-VIEW Outputs, 2023.

Regression coefficients for SZ and OP in the consumer products business were noted. The consumer goods OP is positively impacted by SZ, with a value of 0.5722. Furthermore strong and positive was the SZ-OP link. At 0.0392, the p-value is both above and below the 95% confidence interval. This implies a relationship between SZ and OP of consumer products companies. This demonstrates that firm SZ has a favourable impact on the profitability of consumer goods companies listed in Nigeria and that a company's reported OP increases with its size. The size of a corporation has a positive and significant influence on its profitability, according to RBT. The results of the study are supported since SZ is substantial. Thus, it is imperative that Nigeria's leading consumer products firms develop guidelines to improve OP. While Irom et al. (2018) discovered a positive, significant link between SZ and OP, Dioha et al. (2018) identified a positive, negligible relationship.

The AG and OP of Nigerian consumer goods companies are also displayed in Table 4.6. AG's p-value of 0.9422 and negative coefficient of -0.3213 both pointed to a high negative correlation. The p-value of (0.9422) shows that AG has no effect on the OP of companies that make consumer goods. This shows that the AG of consumer goods companies was unable to forecast or explain the profitability of listed consumer goods firms in Nigeria during the course of the study period. This defies the RBT, which holds that organisations with more experience outperform those with less, as they are less prone to novelty. Dioha et al. (2018) observed a positive insignificant association between company AG and OP, which is congruent with the findings of Efuntade and Akinola (2020) who identified a positive significant link.

In consumer products companies in Nigeria, LQ increases OP and profitability. A p-value of 0.0000 at a 5% confidence interval and a LQ coefficient of 3.2646, which shows a positive relationship, indicated significance. At 0.0004, the significant p-value is less than 0.05 (5%). Furthermore, the confidence interval surpasses the 95% criterion by 100%. This indicates that

consumer goods companies with higher LQ also have higher OP. For this reason, LQ is an important consideration when making an investment in consumer goods assets. This supports the RBT, which states that LQ evaluates ad hoc financial resources for routine business operations. The results of Egbunike & Okerekeoti (2018) are consistent with Mohammed and Usman's (2016) lack of finding a significant positive connection between LQ and OP in consumer products in the NEG.

The LEV and OP regression coefficients of makers of consumer goods were noted. The OP of consumer goods companies has a substantial positive correlation (0.3671) with LV. With a p-value of 0.6774, the 95% confidence interval is not met and 0.05 is exceeded. The study concluded that increasing LV improves OP, suggesting that LV and firm OP are unrelated. LV ratios support the RBT since they quantify financial resources and allow the business to borrow money from debt providers to finance projects. In contrast to Efuntade and Akinola (2020) and Adebayo & Onyeiwu (2018), who discovered a positive significant association, Onyekwelu, Nwajei, and Ugwu (2017) found a positive insignificant link between LV and OP in consumer items in the NEG.

Additionally, Table 4.6 illustrates how SGT impacts profitability, particularly OP. The p-value of 0.0392 and the positive coefficient of 0.0087 for SGT indicated significance. The p-value of (0.0392) demonstrates how SGT influences the OP of manufacturers of consumer products. So, the OP of Nigerian makers of consumer goods is impacted by the SGT. The evidence supports the fitter thesis, which holds that prosperous organisations expand and thrive in the marketplace whereas unprofitable businesses continue to exist due to poor performance. It contradicts the results of Efuntade and Akinola (2020) and Onyekwelu, Nwajei & Ugwu (2017), which showed a minimal negative relationship between SGT and OP.

OEXP and OP for Nigerian producers of consumer products are also displayed in Table 4.6. The p-value of 0.0000 and the negative coefficient of -0.7461 for OEXP indicated the level of significance. Firm OP is impacted by OEXP, as indicated by the p-value of (0.0000). It suggests that raising OEXP would reduce the OP of producers of consumer products. Repurposing jobs that caused problems in the past due to ignorance is recommended by the Learning-By-Doing Theory for managers. More seasoned managers spend less time and energy on administrative work. According to Uwuigbe et al. and Ogunbajo (2016), there was a positive significant relationship between OEXP and OP. In contrast, Dioha et al. (2018) found a positive insignificant association.

Conclusion and Recommendations

The research investigated how listed consumer goods companies in Nigeria fared financially from 2013 to 2022 as a result of internal financial indicators. In contrast to AG and LV, the results showed that SZ, LQ, SGT, and OEXP have a substantial link on the OP of consumer goods firms listed in the Nigeria Exchange Group. After all, the research came to the conclusion that the profitability of consumer products companies listed on the Nigeria Exchange Group is significantly correlated with internal financial indicators. Recommendations made are as follows: 1. Since OP is heavily influenced by a firm's size, this study advises listed consumer goods companies to maintain and grow their size in order to boost OP.

2. As the firm's age has no bearing on the OP, the organisation should focus on using its assets more efficiently to increase profitability.
3. The findings indicate a positive and significant correlation between a firm's LQ and the overall performance of consumer goods enterprises. Since a high level of liquidity is said to boost profitability, consumer goods companies should continue to engage in capital projects at the existing asset level.
4. With regard to leverage, the management of consumer products companies ought to exercise caution. If additional shares are issued in the capital market and excessive loans and debentures are declined, the financing decision should favour equity over debt in order to prevent high leverage and low profitability.
5. Companies that manufacture and sell consumer goods in Nigeria shouldn't limit their focus to increasing sales at the expense of other avenues for increasing earnings, like making investments. They ought to concentrate more on producing goods that cater to their customers as that will increase sales income. It has been observed that operating expenses have a noteworthy impact on profitability. Consequently, consumer goods organisations ought to uphold an appropriate cost structure in order to enhance their profitability.

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