Stock Market Performance of Nigerian Consumer Goods Firms: Does Leverage Level Matter?

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Abstract

The broad objective of the study is to examine the effect of leverage level on stock market performance of listed consumer goods firms in Nigeria. The proxy of leverage level is debt to asset ratio while stock return represented stock market performance. The study used the expost facto research design. The population of the study comprised all 21 firms listed under the consumer goods sector of the Nigerian Exchange Group. Data for the study were sourced from the published financial statements of a purposively sampled fifteen (15) firms from 2013 - 2022. Analyses of data were done using descriptive statistics while hypotheses were tested by means of Pooled Ordinary Least Square technique at 5% significance level. We found that leverage ratio significantly and positively affects stock return of listed consumer goods firms in Nigeria (p-value = 0.0029). Hence, we recommend that consumer goods firms in Nigeria should judiciously use leverage while striking a careful balance to avoid excessive debt that could pose risks to financial stability.

Keywords: Leverage, Stock Market Performance, Debt to Asset Ratio, Stock Return

1.0 INTRODUCTION

Financial markets are vital components of any economy as they facilitate the allocation of resources, investments, and capital, playing a pivotal role in economic development. The stock market, in particular, is a key indicator of a country's economic performance and vitality, serving as a barometer for investor sentiment and a source of capital for businesses (Odey, Owan & Owan, 2023). The performance of the stock market can have an extensive effects on a nation's economy, making it essential to understand the factors that influence it. Investors in the stock market are keen on making informed decisions that will yield returns on their investments. Thus, they are always on the lookout for signals that provide insights into a company's financial health and stability. By analyzing a firm's financial ratios, investors can better assess its potential and risks (Arsita & Sihombing, 2021). Financial ratios, as quantitative tools, provide a means of assessing a company's financial health and stability (Kepramareni, Pradnyawati & Muliahati, 2023). These ratios encompass liquidity ratios, leverage ratios, profitability ratios, and activity ratios, among others. Leverage ratios assess a company's reliance on debt for financing its operations. A high leverage ratio can signal risk for investors, as excessive debt can lead to financial instability. When a company exhibits favorable ratios, it signals strength and resilience, attracting investors and positively affecting stock prices. Conversely, unfavorable ratios can deter potential investors, leading to a decline in stock prices

(Imansyah & Mustafa, 2021). Companies that maintain a balanced and manageable level of debt compared to equity often exhibit favorable leverage ratios. Such companies are seen as more resilient in times of financial instability, as their lower debt burdens make them less vulnerable to financial shocks (Goenawan, 2023). Investors tend to favor these firms because they pose less financial risk, as a smaller portion of their income is earmarked for servicing debts. The positive perception of these firms not only attracts investors but can also lead to increased demand for their shares in the stock market.

High debt levels can signify financial distress, which is a major red flag for investors. Fearing that a company's financial instability may result in plummeting stock prices, investors are likely to steer clear of such investments. In such cases, a lack of investor interest can lead to a decline in demand for the company's shares, which, in turn, can lead to a decrease in stock prices (Hartono, Wijaya, Hartono, Dizar, Magetsari, Anggara & Sujono, 2023). Therefore, the impact of leverage level on stock market performance is deeply entrenched in the realm of investor sentiment and perception. Favorable leverage ratios convey strength, stability, and efficiency, attracting investors who seek to minimize risk. Conversely, unfavorable debt ratios raise concerns about a company's financial health, discouraging potential investors and potentially causing a decline in stock prices (Siahaan, Sadalia & Silalahi, 2021).

Financial markets operate efficiently when stock prices reflect the true value of a company based on rigorous analysis of its financial health and performance. Investors make informed decisions, and stock market performance accurately mirrors the underlying economic fundamentals. However, high leverage have pointedly eroded investor confidence because investors typically rely on this ratio to gauge the financial stability and growth prospects of a company (Ichsani, Zaenudin, Damayanti, Tresia & Putri, 2021). When high leverage ratio indicates financial distress or inefficiency, it discourages investors, leading to reduced demand for the company's shares. Consequently, stock prices plummet, causing market underperformance. When a company's leverage ratios are high, borrowing costs typically rise as lenders seek to compensate for the increased risk. This results in higher interest expenses, reducing profitability and causing stock prices to decline (Siahaan, Sadalia & Silalahi, 2021).

This problem has been investigated by Goenawan (2023); Kepramareni, Pradnyawati, and Muliahati (2023); Odey, Owan and Owan (2023); Fathinah and Setiawan (2021); Sari and Yasa (2021); Danladi (2020); Osamudiame, Celestina and Awele (2020); and others. However, none of the above studies focused on the stock return of listed consumer goods firms in Nigeria, hence the gap in literature which this study will bridge. The broad objective of the study is to examine the effect of leverage level on stock market performance among listed consumer goods firms in Nigeria.

2.0 REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

2.1.1 Leverage Ratio

Firm leverage refers to the degree to which a company uses debt or borrowed funds to finance its operations and investments (Zandi, Shahzad & Lokanathan, 2021). It represents the proportion of debt relative to equity or shareholders' funds in a company's capital structure. In other words, firm leverage measures the extent to which a company relies on external sources of funding, such as loans or bonds, as opposed to its own retained earnings or equity financing. Firm leverage is an essential aspect of financial analysis, as it helps investors, creditors, and analysts assess a company's financial health and risk profile (Arsita & Sihombing, 2021). Companies must strike a balance between using debt as a tool for growth and managing the associated risks to ensure sustainable financial performance and stability. Leverage ratios measure the extent to which a company is using debt or borrowed funds to finance its operations and investments, relative to its equity.

Leverage ratios are important because they help investors and creditors evaluate the level of risk associated with a company's debt obligations and its ability to meet those obligations (Otekunrin et al., 2018). Common leverage ratios include the debt-to-equity ratio, debt ratio, and interest coverage ratio. Leverage indicators are a type of corporate financial information that reveals a company's capacity to meet its long-term liabilities (Fadli & Hongbing, 2020). This financial information provides hint into the company's ability to fulfill its obligations to external parties as well as internal parties. Leverage ratios also show the proportion of a company's capital structure that consists of external debt or liabilities (Sari & Yasa, 2021).

In general, the higher a company's leverage, or the greater the proportion of debt financing relative to equity financing, the greater the risk of long-term insolvency (Zandi, Shahzad & Lokanathan, 2021). However, higher leverage is often associated with higher expected returns. There are several common financial leverage indicators, including total debt ratios, debt-to-equity ratios, long-term debt ratios, times interest earned ratios, fixed charge coverage ratios, and cash coverage ratios. In this study, leverage level is determined using debt to asset ratio.

2.1.2 Stock Market Performance

Stock market performance refers to the overall results and changes in the value of stocks and securities traded on a stock exchange, indicating how well or poorly investments have fared (Odey, Owan & Owan, 2023). It encompasses the comprehensive outcomes and fluctuations in the value of stocks and securities transacted on a stock exchange. Stock market performance is a reflection of the ebb and flow of market dynamics, capturing the aggregate impact of myriad factors on the valuation of publicly traded assets. These factors span a broad spectrum, ranging from macroeconomic indicators and geopolitical events to industry-specific trends and company-specific news. The constant interplay of these variables manifests in the continuous oscillation of stock prices (Ligocká & Stavárek, 2019), ultimately shaping the overarching narrative of market performance.

The value of stocks and securities is a testament to the collective wisdom, or sometimes the volatility, of market participants (Setiawan & Rosa, 2023). Investors keenly observe the indices and benchmarks, such as the firm value, or the financial ratios, as these indices distill the overall performance of the market and serve as benchmarks against which individual stock performances are often measured (Pražák & Stavárek, 2017).

2.1.2.1 Stock Return

Stock return, often expressed as a percentage, represents the gain or loss an investor realizes from holding a stock over a specific period, accounting for price changes and dividends (Iwayan & Anom, 2020). It measures the financial outcomes an investor accrues by holding a particular stock over a designated timeframe. This metric serves as a comprehensive gauge of

the profitability or detriment associated with an investment, factoring in both the fluctuation in stock prices and the income generated through dividends (Hartono et al., 2023). Stock return embodies the dynamic nexus between an investor and the financial markets, providing a tangible representation of the performance of a specific equity investment. This measure is typically articulated as a percentage, offering a standardized lens through which investors can assess the relative success or failure of their investment decisions.

The calculation of stock return involves a meticulous consideration of two primary components: capital appreciation and dividend income. Capital appreciation captures the alteration in the market value of the stock over the given period, reflecting the degree to which the stock price has risen or fallen (Ligocká & Stavárek, 2019). This facet of stock return is pivotal in delineating the impact of market trends, investor sentiment, and company-specific developments on the overall value of the investment.

In addition to capital appreciation, dividends contribute significantly to the overall stock return. Dividends represent a portion of a company's profits distributed to its shareholders, often as a regular payment. Incorporating dividends into the calculation of stock return acknowledges the income aspect of investing, providing a more holistic perspective on the financial outcomes of holding a particular stock. This becomes especially crucial for income-focused investors who prioritize the steady flow of dividends as a source of returns.

The period over which stock return is assessed is a variable element that can range from shortterm assessments, such as daily, weekly, or monthly returns, to long-term evaluations spanning years or even decades (Iwayan & Anom, 2020). Short-term returns are particularly sensitive to market volatility, investor sentiment, and macroeconomic trends, while long-term returns provide a more encompassing view that factors in the resilience of the investment through various market cycles.

Furthermore, the concept of stock return extends beyond individual stock analysis to portfolio management. In a diversified investment portfolio, the aggregate stock return is a composite measure, reflecting the cumulative outcomes of all individual stock investments. Portfolio managers and investors frequently employ this comprehensive approach to evaluate the overall performance of their investment holdings and make informed decisions regarding asset allocation and investment strategy. Stock return, therefore, becomes a metric that encapsulates the financial journey of an investor in the stock market (Odey, Owan & Owan, 2023). It serves as a narrative that unfolds over time, influenced by a myriad of economic, market, and company-specific factors. This metric, expressed as a percentage, not only quantifies financial outcomes but also provides a valuable tool for investors to assess risk, make strategic decisions, and gauge the efficacy of their investment strategies.

2.2 Hypotheses Development from Theoretical Framework

2.2.1 Theory of Market Value Relevance

Market value relevance was initially propounded by Eugene Fama, an American economist and Nobel laureate, in the 1960s. Fama's research revolved around the efficient market hypothesis, asserting the efficiency of financial markets and the complete integration of asset prices with all available information. Over the years, the theory of market value relevance has garnered widespread acceptance, carrying substantial implications for financial reporting and investment decision-making. It highlights the pivotal role of furnishing precise and meaningful financial information to investors, directly influencing their decisions in buying or selling securities. The theory of Market Value Relevance explores the correlation between corporate accounting ratios and firm profitability, emphasizing how these ratios succinctly encapsulate information that underlies a firm's performance, stock prices, and overall value (Kopecká, 2018).

In straightforward terms, the demonstration of the value relevance of corporate financial information is evident in the statistical association between financial data and stock prices or returns (Lako, 2007). The Market Value Relevance theory underscores the importance of financial information conveyed through ratios in shaping a firm's profitability, as investors heavily rely on this data for making well-informed decisions regarding their investments (Olowolaju & Ogunsan, 2016). Accounting ratios are regarded as a succinct and valuable summary of a company's financial performance, holding a pivotal role in the perspective of investors (Fadli & Hongbing, 2020). Thus, the theory of market value relevance asserts that a statistical connection exists between corporate financial information and stock prices or returns.

In line with postulations of market value relevance theory, leverage level influences stock market performance and stock returns due to its impact on a company's risk profile and financial stability. High leverage, indicated by a higher debt ratio, can amplify both potential gains and losses. When a company uses debt to finance its operations, it can potentially achieve higher returns on equity due to the tax benefits of interest payments and the increased capital for growth (Aggreh, Nworie & Abiahu, 2022; Nworie & Mba, 2022). However, high leverage also raises the risk of financial distress (Nworie, Onyeka & Anaike, 2023), especially during economic downturns, as fixed debt obligations must be met regardless of the company's revenue performance. Investors often react to leverage levels by adjusting their perceptions of risk; thus, companies with high leverage may experience greater stock price volatility. Conversely, low leverage typically suggests a more stable financial structure, which may attract risk-averse investors and result in steadier stock performance. Therefore, the relationship between leverage and stock returns is complex and reflects a trade-off between potential high returns and increased financial risk. We therefore hypothesise that: *leverage level is a significant determinant of stock market* performance.

2.3 Empirical Evidence from Prior Studies

Goenawan (2023) examined the effect of solvency on stock prices in Indonesia, using sixteen companies regularly participating in the LQ45 selection. Data analysis was conducted through Structural Equation Modeling Partial Least Square with the Smart PLS 3.2.9 tool, revealing that leverage ratio did not significantly influence stock prices.

Kepramareni, Pradnyawati, and Muliahati (2023) assessed the influence of financial ratios on firm value within Indonesia's consumer goods sector, specifically the food and beverage industry. The study used a sample of 12 companies from 2018 to 2020, totaling 36 observations. Non-participant observation and regression analysis were used to explore the impact of liquidity, profitability, ownership, and corporate size on firm value, finding that leverage had no significant effect.

Odey, Owan, and Owan (2023) explored the relationship between financial indicators and stock market performance in Nigeria. Analyzing annual time series data from 1985 to 2021 sourced from the Central Bank of Nigeria and the Nigerian Stock Exchange, the study employed bound testing and the Autoregressive Distributed Lag model. Results indicated a long-run relationship, showing a positive association between market profitability, liquidity, efficiency, and stock market performance.

Awalakki and Da (2021) investigated the relationship between financial ratios and stock returns of companies listed on the National Stock Exchange. Using data from 160 firms collected over ten years (2010-2020) from the CMIE Prowess database, the study applied a Panel Data Regression Model. Findings revealed that leverage positively and significantly impacted stock returns.

Imansyah and Mustafa (2021) studied the impact of financial ratios on stock prices of Consumer Goods Industry Sector Companies listed in the Kompas 100 Index from 2013 to 2019. The research included five companies chosen through purposive sampling, employing documentation for data collection and panel data regression analysis. Results showed that NPM and ROE had positive relationships with stock prices, while CR and DY had no significant effects. Collectively, these ratios explained 98.38% of stock price variation.

Siahaan, Sadalia, and Silalahi (2021) conducted a comparative causal study to analyze the effect of financial ratios on stock returns in Indonesian banking companies from 2012 to 2017. Using multiple linear regression and moderated variable regression analysis, the study found that the debt to equity ratio (DER) had a negative and significant effect.

Arsita and Sihombing (2021) examined the impact of solvency ratio on stock returns in the consumer non-cyclicals sector listed on the Indonesia Stock Exchange from 2015 to 2020. The study, which involved 57 companies and 228 observations selected through purposive sampling, employed a path analysis approach and panel data processed with EViews 10, demonstrating a positive influence of solvency on stock returns.

Zandi, Shahzad, and Lokanathan (2021) investigated the relationship between financial ratios and share performance on the Shanghai Stock Exchange. Using multiple regression to analyze financial statement data, the study focused on activity, debt, and liquidity ratios, finding that debt had non-significant negative effects on share performance.

Fathinah and Setiawan (2021) assessed the impact of financial ratios on stock prices in Indonesia's consumer goods industry, using variables such as PBV, EPS, DER, SIZE, NPM, and ROA, with PER as a moderating variable. The study involved seven companies over the 2015-2019 period, using multiple and moderated regression analysis. Findings indicated that the debt equity ratio significantly affected stock prices, explaining 64.02% of the variation.

Sari and Yasa (2021) explored the effect of financial ratios on changes in stock prices in the building construction sub-sector on the Indonesia Stock Exchange during the COVID-19 pandemic. Using 51 samples and multiple linear regression, the study found that the solvency ratio did not significantly affect share price changes, while the activity ratio had a positive effect during the pandemic.

Almumani and Almazari (2021) examined the influence of major financial indicators on market capitalization in Jordanian financial companies listed on the ASE. Analyzing data from 76

companies over 2013-2019 using multiple regression, the study found that Dividends Per Share, Earnings Per Share, Price to Book Value, Return on Assets, Total Assets Turnover, and Debt Ratio had significant effects on market capitalization.

Osamudiame, Celestina, and Awele (2020) studied the impact of financial ratios on stock market returns of quoted Nigerian companies. Using descriptive statistics, correlation matrix, and OLS techniques, the study found that none of the financial ratios had statistically significant relationships with stock returns. The explanatory variables jointly lacked significance in explaining stock return variation.

Danladi (2020) investigated the effect of firm financial determinants on stock returns of listed healthcare firms in Nigeria from 2010-2019. Using OLS analysis, the study found that earnings per share and market value had positive but insignificant effects on stock returns, asset growth had a negative insignificant effect, and return on equity had a positive significant effect.

Marito and Sjarif (2020) investigated the impact of financial ratios on stock returns of manufacturing firms from 2012 to 2016. The study used panel data regression analysis with a random effect model, finding that liquidity (current ratio), leverage (debt-to-equity ratio), and profitability (return on assets) influenced stock returns.

Siregar and Sihombing (2020) explored the impact of financial ratios on stock returns in Indonesian construction companies from 2015-2019. Using secondary data and panel data regression, the study found that ROE, DER, CR, PBV, and TATO individually and collectively had significant positive effects on stock returns.

Banerjee (2019) investigated the influence of financial ratios on stock returns in the UAE, focusing on 30 companies from the DFM and ADX in 2017. Regression analysis indicated that Debt Equity does not affect stock return.

Otekunrin et al. (2018) examined the relationship between Financial Ratio Analysis and market price of shares in Nigerian agriculture and agro-allied firms post-IFRS adoption. Using multiple regression analysis, the study found significant positive relationships between Earnings per Share, Net Assets per Share, Debt Ratio, and Return on Asset Ratio with market share price, while Liquidity Ratio and Return on Equity Ratio showed no significant association.

Suciati (2018) explored the impact of financial ratios and firm size on stock returns in Indonesian property and real estate companies from 2012 to 2016. The study found that leverage significantly affected stock returns, whereas other variables like liquidity, profitability, and firm size had no effect.

3.0 METHODOLOGY

The study used the ex-post facto research design. An ex-post facto study is one in which the data collected cannot be manipulated because the events studied have taken place already in the past (Nworie, Okafor & John-Akamelu, 2022). Therefore, ex-post facto research design is suitable for the study because it allows the researcher to collect data on consumer goods firms' leverage level and their stock return in order to establish the association between these two variables which have co-occurred in the past. The population of the study comprised all 21 firms which are listed under the consumer goods sector of the Nigerian Exchange Group as at 31st December, 2022. **Table** 3.1 shows the list of the firms.

Table 3.1 Population of the Study

1. Bua Foods Plc
2. Cadbury Nigeria Plc.
3. Champion Brew. Plc.
4. Dangote Sugar Refinery Plc
5. Dn Tyre & Rubber Plc
6. Flour Mills Nig. Plc.
7. Golden Guinea Brew. Plc.
8. Guinness Nig Plc
9. Honeywell Flour Mill Plc
10. International Breweries Plc.
11. Mcnichols Plc
12. Multi-Trex Integrated Foods Plc
13. N Nig. Flour Mills Plc.
14. Nascon Allied Industries Plc
15. Nestle Nigeria Plc.
16. Nigerian Brew. Plc.
17. Nigerian Enamelware Plc.
18. P Z Cussons Nigeria Plc.
19. Unilever Nigeria Plc.
20. Union Dicon Salt Plc.
21. Vitafoam Nig Plc.

Source: Nigerian Exchange Group (2023)

Based on purposive sampling, only consumer goods firms with complete annual reports from 2013 to 2022 were included in the study. **Table 3.2** shows the sampled firms.

Table 3.2 Sample Size

1.	Cadbury Nigeria Plc.
2.	Champion Brewery Nig. Plc.
З.	Dangote Sugar Refinery Plc.
4.	Flour Mills Nig. Plc.
5.	Guinness Nig. Plc
6.	Honeywell Flour Mill Plc.
7.	International Breweries Plc.
8.	Northern Nig. Flour Mills Plc
9.	Nascon Allied Industries Plc.
10.	Nestle Nigeria Plc
11.	Nigerian Breweries Plc
12.	Nigerian Enamelware Plc
13.	PZ Cussons Nigeria Plc.
14.	Unilever Nigeria Plc.
15.	Vitafoam Nigeria Plc.

Researchers' Compilations (2023)

The data were sourced from the published financial statements of the sampled firms from 2013 - 2022. These data include: total assets, total sales, total liabilities, current assets, current liabilities, and share price (see Table 3.3).

Table 3.3	Operationalizat	ion of Variables
1 4010 5.5	operationalizat	ion of variables

Variable	Proxy	Measurement
1. Stock Return	Stock Return	(Closing Share Price – Opening share price)/Opening share price
2. Leverage ratio	Debt to Equity Ratio	Total Liabilities/Total Asset

Source: Researcher's Compilation, 2023

To analyze the collected data, statistical methods were applied, including the use of a measure of central tendency (specifically, the mean) and a measure of dispersion (specifically, the standard deviation and range). Additionally, the hypotheses were tested via Pooled Ordinary Least Square technique with the aid of Eviews 10. Pooled Ordinary Least Squares (POLS) is suitable for this study because it combines cross-sectional and time-series data, allowing for a comprehensive analysis of the relationship between leverage (debt to asset ratio) and stock market performance (stock returns) across multiple listed consumer goods firms in Nigeria over time. By pooling the data, POLS increases the sample size and statistical power, providing more reliable and robust estimates of the impact of leverage on stock returns. Additionally, POLS assumes homogeneity across firms and time periods, which simplifies the model and interpretation, making it a practical choice for examining general trends and effects within the dataset (Ceesay & Moussa, 2022).

The model used in the study was adapted from the study carried out by Odey, Owan, and Owan (2023), which specified the model below:

 $ASI_{it} = \beta_0 + \beta_1 PROF_t + \beta_2 LIQ_i + \beta_3 EFF_t + \beta_4 EXCHR_t + \beta_5 INFLA_t + \beta_6 MKTGDP_t + U_t$ i

Where: ASI = All share index, measuring stock market performance in Nigeria (in basis point),

PROF = Profitability, measured by return on asset (ROA),

LIQ = Liquidity, measured by stock turnover ratio or trading volume;

EFF = Efficiency, measured by efficiency scores of the firms;

EXCHR= Exchange rate (Units of naira per US dollar);

INFLA = Inflation rate, measured in percentage;

MKTGDP = The ratio of market capitalization to gross domestic product (measuring capital market deepening);

 U_t = Stochastic error terms;

t = time dimension

___eqn (ii)

The *a priori* expectations are: β_{0} , β_{1} , β_{2} , β_{3} , $\beta_{4,\beta6} > 0$; $\beta_{5} < 0$.

The model in eqn i above is modified to produce the model in eqn ii below.

$STR_{it} = \alpha_0 + \beta_1 \beta_1 LEVR_{it} + \mu_{it}$			
Where,			
STR _{it}	=	Stock Return for firm i in period t.	
LEVR _{it}	=	Leverage ratio for firm i in period t	
μ_{it}	=	white noise for firm i in period t.	
α_0	=	constant.	
β_1	=	coefficient of the predictor	

4.0 ANALYSIS OF DATA

Table 4.1 shows the descriptive statistical analysis.

	STR	LEVR
Mean	0.093786	0.597297
Median	-0.054401	0.593053
Maximum	3.074699	1.504326
Minimum	-0.750000	0.193620
Std. Dev.	0.613905	0.172363
Skewness	2.210644	0.813924
Kurtosis	9.082849	7.212833
Jarque-Bera	353.4303	127.4866
Probability	0.000000	0.000000
Sum	14.06785	89.59457
Sum Sq. Dev.	56.15499	4.426629
Observations	150	150

Table 4.1 Descriptive Analysis

Source: Analysis Output using Eviews 10 (2024)

The mean stock return (STR) for listed consumer goods firms in Nigeria is 0.093786, indicating a positive average return. The maximum observed STR is 3.074699, while the minimum is - 0.750000, revealing a wide range of stock performance. The standard deviation of 0.613905 suggests moderate variability in stock returns. The skewness of 2.210644 indicates a rightward skew, suggesting a distribution with a tail towards higher returns. The high kurtosis of 9.082849 signifies a leptokurtic distribution, indicating the presence of outliers and a higher likelihood of extreme values. The Jarque-Bera test's low probability (p-value of 0.000000) rejects the null hypothesis of normality, reinforcing the non-normal distribution of stock returns.

The mean leverage ratio (LEVR) is 0.597297, indicating a moderate average level of leverage among listed consumer goods firms. The range from a minimum of 0.193620 to a maximum of 1.504326 illustrates variability in leverage positions. The standard deviation of 0.172363 suggests relatively low variability around the mean. The skewness of 0.813924 indicates a slight rightward skew, suggesting a tendency towards higher leverage ratios. The kurtosis of 7.212833 signifies a distribution with heavier tails and potential outliers. The Jarque-Bera test's low probability (p-value of 0.000000) rejects normality, reinforcing the non-normal distribution of leverage ratios.

4.2 Test of Hypothesis

H0: Leverage level does not significantly affect stock market performance (proxy by stock return) of listed consumer goods firms in Nigeria.

The hypotheses of the study were tested via Pooled Ordinary Least square regression technique as shown in table 4.2 below.

Table 4.2 Summary of Pooled Ordinary Least Square Regression Estimates

Dependent Variable: STR Method: Pooled Least Squares Date: 06/12/24 Time: 08:51 Sample: 2013 2022 Included observations: 150 Cross-sections included: 1 Total pool (balanced) observations: 150

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LEVR C	0.636003 -0.286097	0.288065 0.179035	2.207847 -1.597994	0.0288 0.1122
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.031886 0.025345 0.606075 54.36442 -136.7214 4.874588 0.028794	Mean deper S.D. depend Akaike info Schwarz cr Hannan-Qu Durbin-Wa	ndent var dent var o criterion iterion iinn criter. itson stat	0.093786 0.613905 1.849618 1.889760 1.865927 1.876558

Source: Analysis Output using Eviews 10 (2024)

The regression analysis was conducted to examine the effect of leverage, measured by the debt to asset ratio (DAR), on the stock market performance, indicated by stock returns, among listed consumer goods firms in Nigeria. The regression result in Table 4.2 shows the R-squared value of 0.031886 which indicates that approximately 3.19% of the variability in stock returns can be explained by the debt to asset ratio. While this is a modest proportion, it is important to note that stock returns are influenced by various factors, and leverage is just one of them. Thus, the R-squared value suggests that while leverage is significant, other variables may also play a substantial role in determining stock returns.

The F-statistic value of 4.874588 with a p-value of 0.0288 is statistically significant. This indicates that, overall, the model provides a significantly good fit than a model without the explanatory variable (leverage). The constant term has a coefficient of -0.286097. This negative coefficient indicates that when leverage is zero, the stock return is expected to be -0.286097. This suggests that, in the absence of leverage, the firms might experience negative stock returns, highlighting the importance of leverage in generating positive stock market performance.

Table 4.2 shows that the coefficient for the leverage level is 0.636003, indicating that for every unit increase in debt to asset ratio, the stock return increases by approximately 0.636003 units. This positive coefficient suggests that higher leverage is associated with higher stock returns for the listed consumer goods firms in Nigeria. The p-value of 0.0288 is highly significant (below the conventional threshold of 0.05), suggesting that the relationship between leverage level and stock return is statistically significant. Therefore, leverage positively affects stock market performance in this context. The alternate hypothesis is therefore accepted that there is a statistically significant positive relationship between leverage ratios and stock returns in Nigerian manufacturing firms. The positive effect implies that firms utilizing leverage judiciously may experience higher stock returns. This could be attributed to the strategic use of debt to finance growth initiatives, which, when successful, contributes to enhanced profitability and, consequently, higher stock valuations. Similar findings were realised by Awalakki and Da (2021) and Siregar and Sihombing (2020); but opposite result was found by Siahaan, Sadalia, and Silalahi (2021) and Zandi, Shahzad, and Lokanathan (2021).

5.0 CONCLUSION AND RECOMMENDATION

The impact of leverage ratio on stock market performance lies in the perception they create among investors. The premise upon which this study was conducted was that when a company exhibits favourable debt ratio, it signals strength and resilience, attracting investors and positively affecting stock prices. Conversely, unfavorable ratios can deter potential investors, leading to a decline in stock prices. However, the finding that leverage positively affects stock market performance, specifically stock returns, suggests several underlying mechanisms at play in the relationship between leverage and equity returns. Leverage can amplify returns when the cost of debt is lower than the returns generated by investments funded through debt. This situation is often described as financial leverage or gearing, where borrowing allows companies to invest in projects or operations that yield higher returns than the cost of borrowing. Moreover, leverage can also enhance equity returns by magnifying the impact of positive earnings on shareholder equity. However, this relationship is not without risks; higher leverage also increases financial risk, making the company more vulnerable to economic downturns or changes in interest rates. Therefore, while leverage can boost returns in favourable conditions, investors and analysts must also consider the associated risks and the company's ability to manage its debt effectively in varying market environments. We therefore recommend that consumer goods firms should judiciously use leverage, striking a careful balance to avoid excessive debt that could pose risks to financial stability.

REFERENCES

- Aggreh, M., Nworie, G. O., & Abiahu, M. F. C. (2022). Debt structure and financial performance: evidence from listed construction firms in Nigeria. *Journal of Banking*, 10(2), 145-195.
- Almumani, M. A. Y., & Almazari, A. A. (2021). The Effect Of Major Financial Indicators On Market Capitalization In Jordanian Financial Companies Listed In Amman Stock Exchange. *International Journal of Economics, Commerce and Management*, 9(6), 1-16.
- Arsita, Y., & Sihombing, P. (2021). Analysis of the Effect of Financial Ratio on Stock Returns of Non Cyclicals Consumer Companies Listed on IDX 2015-2020. *International Journal of Innovative Science and Research Technology*, 6(9), 1086-1096.
- Awalakki, M. M., & Da, H. N. (2021). Impact of financial performance ratios on stock returns– A study with reference to national stock exchange. *Int. J. of Aquatic Science*, *12*(3), 2151-2167.
- Banerjee, A. (2019). Predicting stock return of UAE listed companies using financial ratios. *Accounting and Finance Research*, 8(2), 214-225.
- Ceesay, E. K., & Moussa, Y. M. (2022). Pooled ordinary least-square, fixed effects and random effects modelling in a panel data regression analysis: a consideration of international commodity price and economic growth indicators in 35 Sub-Saharan African countries. *International Journal of Technology Transfer and Commercialisation*, 19(1), 23-44.
- Danladi, I. Y. (2020). Effect of Firm Financial Determinants on Stock Return of Listed Health Care Firms in Nigeria. *LAPAI International Journal of Management and Social Sciences*, 12(2), 74-85.
- Fadli, F., & Hongbing, O. (2020). Can Financial Ratio Change Stock Price?(LQ 45 Index Case Study For 2010-2018). International Journal of Information, Business and Management, 12(2), 21-34.
- Fathinah, H., & Setiawan, C. (2021). The Effect of Financial Ratios and Firm Size Toward Stock Price of Consumer Goods Industry Listed in the IDX. *Nusantara Science and Technology Proceedings*, 203-211.
- Goenawan, Y. A. (2023). Effect of Profitability and Solvency on Stock Prices With Dividend Policy as An Intervening Variable. *APTISI Transactions on Management (ATM)*, 7(2), 143-151.
- Hartono, P. G., Wijaya, R., Hartono, A. B., Dizar, S., Magetsari, O. N. N., Anggara, I. S., & Sujono, M. I. (2023, February). Factors affecting stock price of maritime companies in Indonesia. In *AIP Conference Proceedings* (Vol. 2675, No. 1). AIP Publishing.
- Ichsani, S., Zaenudin, A. I. N., Damayanti, G. N., Tresia, V., & Putri, V. A. (2021). The effect of financial ratio on firm value: empirical evidence from listed firms in the IDX30 Index. *The Journal of Asian Finance, Economics and Business*, 8(6), 103-112.

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- Imansyah, S., & Mustafa, M. H. (2021). The analysis of financial ratios effect on the stock price of consumer goods sector companies listed in kompas100 index. *Dinasti International Journal of Digital Business Management*, 2(2), 371-384.
- Iwayan, J., & Anom, P. I. B. (2020). The effect of financial performance on stock return at manufacturing company of Indonesia stock exchange. *Russian Journal of Agricultural* and Socio-Economic Sciences, 97(1), 11-19.
- Kepramareni, P., Pradnyawati, S. O., & Muliahati, K. A. (2023). Analysis of the effect using financial ratios, ownership and corporate size on corporate value in food and beverage corporate. *International Journal of Applied Business and International Management* (IJABIM), 8(1), 101-112.
- Kopecká, N. (2018). A literature review of financial performance measures and value relevance. In *The Impact of Globalization on International Finance and Accounting:* 18th Annual Conference on Finance and Accounting (ACFA) (pp. 385-393). Springer International Publishing.
- Lako, A. (2007). Value Relevance of Financial Statements Information to Stock Market: Testing Based on Valuation and Efficient Market Theory. *Market theory*.
- Ligocká, M., & Stavárek, D. (2019). The relationship between financial ratios and the stock prices of selected European food companies listed on stock exchanges. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 67(1).
- Marito, B. C., & Sjarif, A. D. (2020). The impact of current ratio, debt to equity ratio, return on assets, dividend yield, and market capitalization on stock return (Evidence from listed manufacturing companies in Indonesia Stock Exchange). *Economics*, 7(1), 10-16.
- Nworie, G. O., & Mba, C. J. (2022). Modelling financial performance of food and beverages companies listed on Nigerian exchange group: the firm characteristics effect. *Journal of Global Accounting*, 8(3), 37-52.
- Nworie, G. O., Onyeka, C. M., & Anaike, C. L. (2023). Evaluating the Financial Performance of Listed Food Product Enterprises in Nigeria: The Cost of Capital Factor. *Central Asian Journal of Innovations on Tourism Management and Finance*, 4(9), 31-45.
- Nworie, G.O., Okafor, T.G. & John-Akamelu, C.R. (2022). Firm-level traits and the adoption of computerised accounting information system among listed manufacturing firms in Nigeria. *Journal of Global Accounting*, 8(3), 128-148. Retrieved from <u>https://journals.unizik.edu.ng/index.php/joga/article/view/1858</u>
- Odey, F. I., Owan, J. O., & Owan, J. N. (2023). Financial Indicators and Stock Market Performance in Nigeria. *Global Journal of Arts, Humanities and Social Sciences*, 11(5), 53-69.
- Olowolaju, P. S. & Ogunsan, J. O. (2016). Value relevance of accounting information in the determination of shares prices of quoted Nigerian deposit money banks. *International Journal of Economics, Commerce and Management*, 4(10), 128-147.

- Osamudiame, O. R., Celestina, E. O., & Awele, U. C. (2020). Impact of Financial Ratios on Stock market returns of quoted companies in Nigeria. *Journal of Accounting, Business and Social sciences*.
- Otekunrin, A. O., Nwanji, T. I., Olowookere, J. K., Egbide, B. C., Fakile, S. A., Lawal, A. I., ... & Eluyela, F. D. (2018). Financial ratio analysis and market price of share of selected quoted agriculture and agro-allied firms in Nigeria afteradoption of international financial reporting standard. *The Journal of Social Sciences Research*, 4(12), 736-744.
- Pražák, T., & Stavárek, D. (2017). The effect of financial ratios on the stock price development. *Interdiscip. Econ. Bus. Res*, 43, 3.
- Sari, N. M., & Yasa, G. W. (2021). The Effect of Financial Ratios on Changes in Stock Prices of Building Construction Subsectors in Indonesia Stock Exchange During Covid-19 Pandemic in 2020. American Journal of Humanities and Social Sciences Research (AJHSSR), 491-497.
- Setiawan, C. A., & Rosa, T. (2023). The Analysis of The Effect of Return of Investment (ROI) on Stock Price and Financial Performance of a Company. *Journal of Accounting, Management, Economics, and Business (ANALYSIS)*, 1(1), 20-29.
- Siahaan, S., Sadalia, I., & Silalahi, A. S. (2021). Effect of financial ratios on stock returns with earning per share as moderating variable in banking companies on the Indonesia Stock Exchange (2012–2017 Period). *International Journal of Research and Review*, 8(8), 398-406.
- Siregar, M. R. A., & Sihombing, P. (2020). Determinant Analysis of Financial ratio On Stock Returns In Construction Companies Registered At Indonesia Stock Exchange 2015-2019. Dinasti International Journal of Education Management And Social Science, 2(1), 67-80.
- Suciati, N. H. D. (2018). The effect of financial ratio and firm size on stock return in property and real estate companies listed on the Indonesia stock exchange. *The Indonesian Accounting Review*, 8(1), 96-108.
- Zandi, G., Shahzad, I. A., & Lokanathan, V. (2021). Financial ratios and company stock performance: an empirical study of public companies listed on shanghai stock exchange (SSE). *Academy of Entrepreneurship Journal*, 27(6), 1-9.