



EFFECT OF FINANCIAL RATIOS ON STOCK MARKET PERFORMANCE IN NIGERIAN CONSUMER GOODS MANUFACTURING FIRMS

Uzochukwu Ezekwere PhD

Kingsley Zumba Mbadiwe University, Ideato Imo State Email:

uzochukwu.ezekwere@komu.edu.ng

Abstract

The broad objective of the study is to examine the effect of financial ratios on stock market performance of manufacturing firms in Nigeria. The specific objective was to investigate the effect of leverage ratio and activity ratio on stock return of manufacturing firms in Nigeria. The study used the *ex-post facto* research design. The population of the study comprised all 21 manufacturing firms listed under the consumer goods sector of the Nigerian Exchange Group. A sample of fifteen firms was used for the study, and data for the study were extracted from the published financial statements of the purposively sampled firms from 2013 to 2022. Data were analysed with descriptive statistics and inferential analysis was used to test the hypotheses with ordinary least square regression technique at 5% significance level. The study found that leverage ratio significantly and positively affects stock return of listed manufacturing firms in Nigeria (p -value = 0.0083) and activity ratio has a non-significant negative effect on stock return of listed manufacturing firms in Nigeria (p -value = 0.7540). The study therefore recommended that manufacturing firms in Nigeria should actively manage their short-term resources, focusing on efficient working capital practices to enhance liquidity, instil investor confidence, and potentially boost stock returns.

Keywords: Leverage ratio, Activity ratio and 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 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 analysing a firm's financial ratios, investors can better assess its potential and risks (Chaengkham & Wianwiwat, 2021; 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. The relationship between these financial ratios and stock market performance is multifaceted and crucial for understanding the dynamics of capital markets. Liquidity ratios, for instance, measure a company's ability to meet short-term financial obligations. Higher liquidity can make a company more attractive to investors as it implies greater stability and less risk. Leverage ratios, on the other hand, 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. Profitability ratios, as the name suggests, gauge a company's ability to generate profits, with higher profitability ratios often correlating with increased stock market performance (Saputra, 2022; Awalakki & Da, 2021). The activity ratios focus on how efficiently a company utilizes its assets to generate revenue. Higher activity ratios can indicate better performance, leading to more attractive stock options. Collectively, these financial ratios provide a comprehensive view of a

company's financial strength and potential, which can significantly affect its attractiveness to investors.

The impact of financial ratios on stock market performance lies in the perception they create among investors. When a company exhibits favourable ratios, it signals strength and resilience, attracting investors and positively affecting stock prices. Conversely, unfavourable ratios can deter potential investors, leading to a decline in stock prices (Imansyah & Mustafa, 2021). This is to say that favourable ratios are indicative of a company's robustness, portraying it as a financially stable entity capable of weathering economic storms. Such a perception tends to attract investors who are inherently risk-averse, as they seek investments that offer a degree of safety and stability (Setiawan & Rosa, 2023). This allure stems from the notion that a company with strong financial ratios is better equipped to protect shareholders' interests and sustain profitability, even in the face of economic downturns. As a result, a company exhibiting these favourable ratios tends to draw more investors into its fold, which, in turn, fuels demand for its shares (Otekunrin, Nwanji, Olowookere, Egbide, Fakile, Lawal & Eluyela, 2018).

Similarly, leverage ratios play a pivotal role in shaping investor perception. Companies that maintain a balanced and manageable level of debt compared to equity often exhibit favourable 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 favour 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.

Moreover, a company's activity ratios can influence its stock market performance significantly. High activity ratios suggest that a company efficiently utilizes its assets to generate revenue. This efficiency creates a positive perception among investors, as it indicates that the company is making optimal use of its resources, potentially leading to higher profitability. Investors are inclined to favour companies with strong activity ratios, as they are seen as more capable of delivering robust returns, which can lead to increased stock prices.

Therefore, the impact of financial ratios on stock market performance is deeply entrenched in the realm of investor sentiment and perception. Favourable financial ratios convey strength, stability, and efficiency, attracting investors who seek to minimize risk. Conversely, unfavourable ratios raise concerns about a company's financial health, discouraging potential investors and potentially causing a decline in stock prices (Siahaan, Sadalia & Silalahi, 2021). In this way, financial ratios have a profound effect on the decisions of investors and, ultimately, on the stock market's performance. It is against the background enunciated above that this study examines the effect of financial ratios on stock market performance using listed manufacturing firms in Nigeria as a case of reference.

Poor financial ratios also constrain a company's ability to invest in growth opportunities. Of note, limited liquidity may prevent a company from undertaking expansion projects or research and development initiatives. Such constraints hinder a firm's potential for future growth, thereby diminishing its attractiveness to investors (Zandi, Shahzad & Lokanathan, 2021). A lack of growth prospects can lead to stock market underperformance. In fact, the impact of poor financial ratios on stock market performance is extensive since investors' confidence is undermined, potential investors shy away, borrowing costs rise, growth opportunities are limited and regulatory scrutiny increases. The consequences are not limited to individual companies; they can impair the overall health and stability of the stock market and, by extension, the broader economy.



The related study has been investigated by Odey, Owan and Owan (2023); Saputra (2022); Fathinah and Setiawan (2021); Almumani and Almazari (2021); Danladi (2020); Edem, Ekwe and Azubike (2018); and others. However, none of the above studies focused on the stock return of listed manufacturing 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 financial ratios on stock market performance among listed manufacturing firms in Nigeria. The specific objectives are:

1. To examine the effect of leverage ratio on stock return on listed manufacturing firms in Nigeria.
2. To ascertain the effect of activity ratio on stock return on listed manufacturing firms in Nigeria.

2.1. CONCEPTUAL REVIEW

2.1.1. Financial Ratios: Financial ratios are quantitative metrics used to assess a company's financial health and performance by analysing its financial statements (Wulandari, 2020). Financial ratios, regarded as indispensable quantitative metrics, play a pivotal role in providing a comprehensive evaluation of a company's financial health and performance. These ratios are instrumental tools employed by analysts, investors, and stakeholders to analyse company's financial statements, extracting useful hints for the sake of investment decision (Ligocká & Stavárek, 2019). The essence of financial ratios lies in their ability to quantify various aspects of a company's financial position, operating efficiency, and overall profitability. By meticulously examining the financial statements, which typically include the balance sheet, income statement, and cash flow statement, these ratios indicate the underlying dynamics of a company's financial health. Financial ratios are numerical values derived from two or more data points extracted from a company's financial statements (Wijaya & Yustina, 2019), including its statement of financial position, income statement, or statement of cash flow. Typically expressed as a percentage, multiple, or ratio, accounting ratios serve the purpose of assessing a company's financial, operational performance, and competitiveness (Ichسانی et al., 2021). Financial ratio analysis has evolved into more than just an evaluative tool, playing a crucial role in aiding tax departments, credit analysts in banks, financial market councils, and investors in discerning which firm to invest in (Pražák & Stavárek, 2017). Financial ratio is the mathematical and logical connection between two accounting variables, and in ratio analysis, various ratios are computed to extract hints from financial statements based on the management's needs and requirements. The results of ratio analysis form the basis for drawing inferences and making recommendations to guide managerial decisions (Ligocká & Stavárek, 2019). This analytical approach involves establishing relationships between two financial statement variables and systematically studying them to acquire essential information for managerial decision-making. Practically, financial ratios derived from accounting information find widespread use (Wijaya & Yustina, 2019). Investors, bankers, brokers, and other stakeholders employ these ratios to scrutinize a company's financial condition and performance (Chaengkham & Wianwiwat, 2021). They play a crucial role in establishing covenants in lending agreements or other commercial arrangements. In essence, financial ratios are indices that articulate the relationship between two accounting numbers, obtained through division. They serve as tools for interpreting financial statements, providing a foundation for valuing securities and evaluating both financial and management performance (Fadli & Hongbing, 2020). Ratio analysis involves the calculation and interpretation of these accounting ratios extracted from financial reports to assess a firm comprehensively.

2.1.2. 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 fulfil 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).

2.1.3. Activity Ratio: Activity ratio refers to a set of corporate financial indicators that measure how efficiently a business operates by utilizing its available resources, such as assets, to generate sales. These indicators are also known as efficiency ratios, financial operation ratios, or asset management ratios. They help investors assess a company's ability to effectively manage its assets to generate earnings and sales (Arsita & Sihombing, 2021). Examples of activity ratios include inventory turnover, receivables turnover, payables turnover, working capital turnover, fixed asset turnover, and total asset turnover. By using these ratios, investors can evaluate a company's resource utilization and the effectiveness of its inventory and sales management in generating cash.

Activity ratios, which are alternatively called financial operation ratios, or asset management ratios, refer to a set of financial indicators that evaluate a company's ability to utilize its available resources efficiently to generate sales and profits (Zandi, Shahzad & Lokanathan, 2021). These ratios help investors assess a company's operational effectiveness and resource utilization, which can impact its financial performance and competitiveness. Activity ratios are commonly used by investors to evaluate a company's performance and financial health (Arsita & Sihombing, 2021). These ratios measure different aspects of a company's operations, such as inventory management, receivables management, payables management, working capital management, fixed asset management, and total asset management. By analysing these ratios, investors can determine whether a company is effectively utilizing its resources to generate sales and profits.

2.1.4. 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 distil the overall performance of the market and serve as benchmarks against which individual stock performances are often measured (Pražák & Stavárek, 2017). Market performance extends beyond the mere upward or downward movement of stock prices. It encapsulates the totality of returns generated by investments, comprising both capital appreciation and dividends. This holistic perspective on performance allows investors to gauge the true value and potential of their investments over time, acknowledging the dual impact of market movements and income generation.

2.2. Empirical Review

Odey, Owan, and Owan (2023) investigated the correlation between financial indicators and stock market performance in Nigeria. Utilizing annual time series data spanning from 1985 to 2021 from the Central Bank of Nigeria and Nigerian Stock Exchange, the study assessed stock market performance through the all-share index, while financial indicators included stock market profitability, liquidity, and efficiency. The analysis employed bound testing and Autoregressive Distributed Lag model estimation techniques, revealing a long-run relationship among the variables. The results indicated a positive association between market profitability, liquidity, efficiency, and stock market performance in Nigeria. Goenawan (2023) explored the impact of profitability and solvency on stock prices in Indonesia. The study utilized the annual closing stock price, with profitability represented by ROA, solvency by DER, and dividend policy by DPR. Sixteen companies consistently participating in the LQ45 selection were sampled for the study. Data analysis involved Structural Equation Modelling Partial Least Square using Smart PLS 3.2.9 analysis tool. The findings suggested that stock prices were not significantly influenced by profitability, DER, and dividend policies. Saputra (2022) explored the impact of return on assets (ROA), return on equity (ROE), and price-earnings ratio (PER) on the stock prices of coal companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2021. The study assessed these indicators individually and collectively to determine their effects on stock prices. The data encompassed ROA, ROE, PER, and stock prices of 15 coal companies on the IDX during the specified period. The analysis included classical assumptions, multiple linear regression, correlation coefficients, and coefficient of determination, F-test, and T-test. The results from the F-test indicated that ROA, ROE, and PER collectively influenced stock prices by 39%, while the T-test revealed that ROA had no significant impact on stock prices, and both ROE and PER also did not affect stock prices. Awalakki and Da (2021) investigated the relationship between financial ratios and stock returns for companies listed on the National Stock Exchange. The data, collected from the CMIE Prowess database spanning ten years from 2010 to 2020, included 160 firms selected based on inclusion and exclusion criteria. The study employed a Panel Data Regression Model to analyse the relationship between six dependent variables and one independent variable. The findings indicated that all independent variables had a positive and significant impact on determining stock returns. The study suggested that managerial success in stock valuation depends on a proper understanding of effective resources and recommended that managers enhance their company's stock value through the appropriate use and combination of factors effective in stock valuation. Siahaan, Sadalia, and Silalahi (2021) conducted a comparative causal study to analyse the impact of financial ratios on stock returns, with earnings per share serving as a moderating variable in Banking Companies listed on the Indonesia Stock Exchange during the period 2012–2017. The research employed multiple linear regression analysis and moderated variable regression analysis using the absolute difference value test method to test hypotheses. The findings revealed that the current ratio (CR) and total asset turnover (TAT) positively and significantly influenced stock returns, while the debt to equity ratio (DER) exhibited a negative and significant effect. Additionally, return on investment (ROI) positively and significantly influenced stock returns. Arsita and



Sihombing (2021) investigated the impact of liquidity ratios, solvency, activity, profitability, and market value on stock returns in companies within the consumer non-cyclical sector listed on the Indonesia Stock Exchange for the period 2015–2020. Using a path analysis approach and panel data processed with E-views 10, the study included 57 companies, with 38 selected through purposive sampling, resulting in 228 observations. The analysis, employing the Fixed Effect Model, demonstrated that solvency, activity, profitability, and market value positively influenced stock returns, while liquidity had no significant effect. Zandi, Shahzad, and Lokanathan (2021) explored the relationship between financial ratios and the performance of companies' shares on the Shanghai Stock Exchange. The researchers collected financial statement data from public companies listed on the Shanghai Stock Exchange (SSE) and utilized multiple regression to analyse relationship patterns. The study focused on three financial ratios—activity, debt, and liquidity. The findings indicated that the activity ratio had a significant positive impact on the performance of the company's shares, while debt and liquidity showed non-significant negative effects. Fathinah and Setiawan (2021) investigated the impact of financial ratios and firm size on stock prices in the consumer goods industry in Indonesia from 2015 to 2019. The study employed independent variables such as PBV, EPS, DER, SIZE, NPM, and ROA, with PER serving as a moderating variable and stock price as the dependent variable. Utilizing multiple and moderated regression analysis. The findings indicated that EPS, DER, SIZE, and NPM had statistically significant effects on stock prices, collectively explaining 64.02% of the variation in stock price. Sari and Yasa (2021) investigated the impact of financial ratios on changes in stock prices within the building construction sub-sector on the Indonesia Stock Exchange (IDX). The study, conducted during the COVID-19 pandemic in 2020, included 51 samples selected through purposive sampling. Data collection involved non-participant observation, and the analysis employed multiple linear regression techniques. The results revealed that liquidity ratio, profitability ratio, and solvency ratio did not have a significant effect on changes in share prices, while the activity ratio exhibited a positive effect on share price changes during the pandemic. Almunani and Almazari (2021) explored the influence of major financial indicators on market capitalization in Jordanian financial companies listed on the ASE. The study considered Dividends per Share, Earnings per Share ratio, Price to Book Value ratio, Return on Assets ratio, Return on Equity ratio, Total Assets Turnover ratio, and Debit ratio as independent variables. Using a sample of 76 companies and 608 observations from 2013 to 2019, the study employed a descriptive and analytical method, including ANOVA, Reliability Test, and Multiple Regression Test. The results indicated a statistically significant effect on market capitalization for each of Dividends Per Share, Earnings Per Share ratio, Price to Book Value Ratio, Return on Assets Ratio, Total Assets Turnover Ratio, and Debit Ratio. Sihono and Widarti (2021) conducted an analysis on the influence of financial performance on stock returns in manufacturing companies listed on the Indonesia Stock Exchange from 2013 to 2017. Financial performance, encompassing Return on Assets (ROA), Return On Equity (ROE), Gross Profit Margin (GPM), and Inflation Rate, served as the independent variable, while Stock Return was the dependent variable. The study, categorized as comparative causal research, included 13 manufacturing companies in the consumer goods sector, selected through purposive sampling. Multiple linear regression analysis using E-views 9.0 revealed that ROE, GPM, and Inflation Rate had a significant positive impact on stock returns individually, whereas ROA did not. Simultaneously, all variables jointly influenced stock returns. Osamudiamé, Celestina, and Awele (2020) investigated the impact of financial ratios on stock market returns of quoted companies in Nigeria. Analysing earning yield (EY), price to earnings (P/E), dividend yield (DY), earnings per share (EPS), and return on asset (ROA), the study employed descriptive statistics, correlation matrix, and ordinary least squared (OLS) techniques on panel data sets. The results indicated that none of the financial ratios had statistically significant relationships with stock returns at the 0.05 level of significance. The goodness of fit test revealed that

the explanatory variables jointly lacked significance in explaining variation in stock returns. Widagdo, Jihadi, Bachitar, Safitri, and Singh (2020) assessed the effect of financial ratios and macroeconomics on Islamic stock returns listed in Jakarta Islamic Index (JII). Using SEM with AMOS 21 program, the study found that only financial ratios affected Sharia stock returns and investment risk, and investment risk did not act as a mediating variable between financial ratios, macroeconomics, and Islamic stock return. Suciati (2018) explored the impact of financial ratios and firm size on stock returns, focusing on property and real estate companies listed on the Indonesia Stock Exchange from 2012 to 2016. The study employed independent variables such as liquidity, profitability, activity, leverage, and firm size, with stock return as the dependent variable. Findings indicated that leverage significantly affected stock return, whereas liquidity, profitability, activity, and firm size had no discernible effect.

3.1 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.

The population of the study comprised all 21 manufacturing firms which are listed under the consumer goods sector of the Nigerian Exchange Group as at 31st December, 2022.

Based on purposive sampling, only consumer goods manufacturing firms with complete annual reports from 2013 to 2022 were included in the study.

Table 1: Sample Size

1. Cadbury Nigeria Plc.
2. Champion Brewery Nig. Plc.
3. 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 (2024)

Method of Data Collection

The data were sourced from the published financial statements of the sampled firms from 2013 - 2022. These data include: financial position and comprehensive income statement.

Model Specification

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

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

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

The *a priori* expectations are: $\beta_0, \beta_1, \beta_2, > 0$; $\beta_2 < 0$.

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

$$STR_{it} = \alpha_0 + \beta_1 LVR_{it} + \beta_2 ACR_{it} + \mu_{it} \quad \text{eqn (i)}$$

Where,

STR_{it} = Stock Return for firm *i* in period *t*.

LVR_{it} = Leverage ratio for firm *i* in period *t*

ACR_{it} = Activity ratio for firm *i* in period *t*

μ_{it} = white noise for firm *i* in period *t*.

α_0 = constant.

β_{1-2} = coefficients of the predictors

3.2 Method of Data Analysis

To analyse 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 ordinary least square regression technique with the aid of E-views 10.

The mean was used as a measure of central tendency to determine the average value of the collected data. The standard deviation, on the other hand, was used as a measure of dispersion to determine how spread out the data was from the mean. More also, the ordinary least square regression technique is a widely used statistical method that helps to identify the relationship between two variables. This technique was used to test the hypothesis in this study, which involved investigating the relationship between financial ratios and stock market performance.

3.2.1 Decision Rule

The test of hypothesis of the study was conducted using 5% level of significance. As a decision rule, accept the null hypothesis and reject the alternate hypothesis if the p -value is greater than 0.05. Otherwise, reject the null hypothesis and accept the alternate hypothesis if the p -value is less than 0.05.

4.1 DATA ANALYSIS AND RESULTS

Table 2: Descriptive Analysis

	STR	LVR	ACR
<i>Mean</i>	0.093786	0.597297	0.943349
<i>Median</i>	-0.054401	0.593053	0.891010
<i>Maximum</i>	3.074699	1.504326	4.344196
<i>Minimum</i>	-0.750000	0.193620	0.064439
<i>Std. Dev.</i>	0.613905	0.172363	0.518370
<i>Skewness</i>	2.210644	0.813924	3.144824
<i>Kurtosis</i>	9.082849	7.212833	19.53800
<i>Jarque-Bera</i>	353.4303	127.4866	1956.657
<i>Probability</i>	0.000000	0.000000	0.000000
<i>Sum</i>	14.06785	89.59457	141.5023
<i>Sum Sq. Dev.</i>	56.15499	4.426629	40.03746
<i>Observations</i>	150	150	150

Source: Analysis Output using E-views 10 (2024)

The mean stock return (STR) for listed manufacturing 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 (LVR) is 0.597297, indicating a moderate average level of leverage among listed manufacturing 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.

The mean activity ratio (ACR) is 0.943349, indicating a moderate average activity level among listed manufacturing firms. The range from a minimum of 0.064439 to a maximum of 4.344196 highlights substantial variability in activity levels. The standard deviation of 0.518370 suggests moderate variability around the mean. The skewness of 3.144824 indicates a pronounced rightward skew, implying a distribution with a tail towards higher activity ratios. The high kurtosis of 19.53800 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 normality, emphasizing the non-normal distribution of activity ratios.

Test of Hypotheses

The hypotheses of the study were tested via ordinary least square regression technique. The regression model analysed is re-stated as follows:

Table 3 Result of OLS Regression

Dependent Variable: STR

Method: Least Squares

Date: 01/02/24 Time: 15:59

Sample: 1 150

Included observations: 150

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LVR	0.896953	0.334925	2.678070	0.0083
ACR	-0.032122	0.102294	-0.314016	0.7540
C	-0.612934	0.291547	-2.102350	0.0372
R-squared	0.047111	Mean dependent var		0.093786
Adjusted R-squared	0.027531	S.D. dependent var		0.613905
S.E. of regression	0.605395	Akaike info criterion		1.860434
Sum squared resid	53.50948	Schwarz criterion		1.940717
Log likelihood	-135.5325	Hannan-Quinn criter.		1.893051
F-statistic	2.406087	Durbin-Watson stat		1.868848
Prob(F-statistic)	0.069716			

Source: Analysis Output using Eviews 10 (2024)

The regression analysis results show the model's explanatory power and overall fit. The R-squared value, representing the proportion of variance in stock return explained by the

financial ratios, is 0.047111. This suggests that approximately 4.71% of the variability in stock return can be accounted for by the liquidity ratio, leverage ratio, and activity ratio.

The F-statistic, with a value of 2.406087, tests the overall significance of the model. The associated p-value of 0.069716 indicates that the model's overall fit is not statistically significant at the significance level of 0.05. The Durbin-Watson statistic, measuring the presence of autocorrelation in the residuals, is 1.868848, suggesting a potential lack of independence among the residuals. The regression analysis reveals the coefficients and p-values associated with the effect of financial ratios on stock return among listed manufacturing firms in Nigeria.

Test of Hypothesis One

H₀₁: Leverage ratio has no significant effect on stock return of listed manufacturing firms in Nigeria.

Leverage ratio (LVR) has a coefficient value of 0.896953, suggesting that a unit increase in the leverage ratio corresponds to a substantial 0.896953-unit increase in stock return. The p-value of 0.0083 is lower than 0.05, indicating statistical significance. This provides evidence for the acceptance of the alternate hypothesis, hence Leverage ratio significantly and positively affects stock return of listed manufacturing firms in Nigeria (p -value = 0.0083).

Hypothesis Two

H₀₂: Activity ratio has no significant effect on stock return of listed manufacturing firms in Nigeria.

Activity ratio (ACR) has a coefficient value of -0.032122, indicating that a unit increase in the activity ratio results in a decrease of 0.032122 units in stock return. However, the p-value of 0.7540 that is higher than 0.05 suggests a lack of statistical significance. By implication, the null hypothesis is accepted, showing that the effect of activity ratio on stock return of listed manufacturing firms in Nigeria is non-significant and negative (p -value = 0.7540).

5.1 CONCLUSION AND RECOMMENDATIONS

5.1.1 Conclusion

The impact of financial ratios on stock market performance lies in the perception they create among investors. When a company exhibits favourable ratios, it signals strength and resilience, attracting investors and positively affecting stock prices. Conversely, unfavourable ratios can deter potential investors, leading to a decline in stock prices. This study was carried out to assess the effect of leverage ratio and activity ratio on stock return of listed manufacturing firms in Nigeria. The positive impact of leverage ratio on stock return suggests that, within certain limits, using debt to finance operations can enhance returns for shareholders. This may be due to the amplifying effect of borrowed capital on profits. However, it is crucial for firms to strike a balance, as excessive leverage can increase risk and negatively impact stock return. Finally, a negative impact of Activity ratio on stock return suggests that firms with lower efficiency in converting assets into sales may experience reduced stock returns. This could be attributed to operational inefficiencies, higher costs, or suboptimal utilization of resources. Investors may favour companies that demonstrate better asset turnover, seeing them as more efficient and potentially more profitable in the long run.



5.1.2 Recommendations

1. To positively influence stock returns, manufacturing firms should judiciously use leverage, striking a careful balance to avoid excessive debt that could pose risks to financial stability.
2. To counter the negative impact on stock returns, manufacturing firms should prioritize initiatives that streamline processes, optimize resource utilization, and implement cost-effective strategies, fostering improved operational efficiency and investor confidence.

References

- 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 Cyclical 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.
- Chaengkham, S., & Wianwiwat, S. (2021). The impacts of macroeconomic and financial indicators on stock market index: evidence from Thailand. *International Journal of Trade and Global Markets*, 14(2), 197-205.
- 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.
- Edem, I. N., Ekwe, M. C., & Azubike, J. U. B. (2018). The inter-play between financial ratios and stock market prices of deposit money banks in Nigeria. *Accounting and taxation review*, 2(2), 117-130.
- 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.
- 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.
- 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.
- Kepramareni, P., Pradnyawati, S. O., & Muliawati, 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.



- 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).
- 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.
- Osamudiamé, 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 after adoption 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.
- Saputra, F. (2022). Analysis Effect Return on Assets (ROA), Return on Equity (ROE) and Price Earnings Ratio (PER) on Stock Prices of Coal Companies in the Indonesia Stock Exchange (IDX) Period 2018-2021. *Dinasti International Journal of Economics, Finance & Accounting*, 3(1), 82-94.
- 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.
- 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.
- Widagdo, B., Jihadi, M., Bachitar, Y., Safitri, O. E., & Singh, S. K. (2020). Financial Ratio, Macro Economy, and Investment Risk on Sharia Stock Return. *The Journal of Asian Finance, Economics and Business*, 7(12), 919-926.
- Wijaya, M., & Yustina, A. I. (2019). The impact of financial ratio toward stock price: evidence from banking companies. *JAAF (Journal of Applied Accounting and Finance)*, 1(1), 27-44.
- Wulandari, S. (2020). The effect of financial ratios on share price consumer goods sector companies listed in Indonesia stock exchange. *Journal of Research in Business, Economics, and Education*, 2(1), 348-359.
- 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.