IJAAR PUBLISHING®

Scholarly Journal of Management Sciences Research | ISSN: **2955-0793**
Vol. 3, Issue 6 (June, 2024) | www.ijaar.org/sjmsr

EFFECT OF FINANCIAL RATIOS ON STOCK MARKET PERFORMANCE IN NIGERIA

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Abstract
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 objective was to investigate the effect of liquidity ratio, and activity ratio on stock return of listed manufacturing firms in Nigeria. The study used the ex-post facto research design. The population of the study comprised all 21 manufacturing firms which are listed under the consumer goods sector of the Nigerian Exchange Group. Data for the study were sourced from the published financial statements of the purposively sampled fifteen (15) firms from 2013 - 2022. Analyses of data were done using descriptive statistics and inferential analysis. Hypotheses were tested by means of ordinary least square regression technique at 5% significance level. The study found that liquidity ratio has a non-significant positive effect on stock return of listed manufacturing firms in Nigeria (p-value = 0.1322); while activity ratio has a non-significant negative effect on stock return of listed manufacturing firms in Nigeria. Hence, the study recommend that manufacturing firms in Nigeria should actively manage their short-term resources, focusing on efficient working capital practices to enhance liquidity, instill investor confidence, and potentially boost stock returns.

Keywords: Liquidity ratio, Activity ratio and Stock return

Ekwunife, E. N. (2024). Effect of Financial Ratios on Stock Market Performance in Nigeria. *Scholarly Journal of Management Sciences Research. 3*(6), 1-15. DOI: 10.5281/zenodo.11655953

INTRODUCTION

The impact of financial ratios on stock market performance lies in the perception they create among investors. 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). This is to say that favorable 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 favorable 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).

One of the key aspects in this context is liquidity ratios, which give insights into a company's ability to meet its short-term obligations. When a company demonstrates a healthy liquidity ratio, it reassures investors that it can swiftly handle financial emergencies, such as settling short-term debts. This sense of financial preparedness is highly attractive to investors, as it implies that their investments are safe from the immediate financial risks that can lead to substantial losses.

Conversely, unfavorable ratios can instill a sense of apprehension among potential investors. High debt levels, low liquidity, and weak profitability ratios 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 financial ratios on stock market performance is deeply entrenched in the realm of investor sentiment and perception. Favorable financial ratios convey strength, stability, and efficiency, attracting investors who seek to minimize risk. Conversely, unfavorable 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.

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. In this idyllic setting, the relationship between financial ratios and stock market performance would be a harmonious one, with investors utilizing these ratios as reliable indicators for their investment decisions.

However, poor financial ratios, such as low liquidity, high leverage, and declining profitability, have pointedly eroded investor confidence because investors typically rely on these ratios to gauge the financial stability and growth prospects of a company (Ichsani, Zaenudin, Damayanti, Tresia & Putri, 2021). When ratios indicate financial distress or inefficiency, it discourages investors, leading to reduced demand for the company's shares.

Consequently, stock prices plummet, causing market underperformance. Companies with poor financial ratios are seen as riskier propositions by lenders. When a company's leverage ratios are high and profitability is dwindling, 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 Odey, Owan and Owan (2023); Saputra (2022); Fathinah and Setiawan (2021); Sari and Yasa (2021); Almumani and Almazari (2021); Danladi (2020); Osamudiame, Celestina and Awele (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.

Review of Related Literature

The primary objective of financial statements is to furnish information about the financial position, performance, and financial adaptability of an enterprise. This information proves valuable to a diverse audience of users in making economic decisions (Fadli & Hongbing, 2020). Financial ratios, in this context, contribute by offering hints into management accountability, enabling the assessment of management's effectiveness in utilizing shareholder-provided resources for the operation of the enterprise (Kepramareni, Pradnyawati, & Muliahati, 2023). Thus, financial ratios serve as financial interpreters, translating the raw data from financial statements into meaningful indicators that show the company's economic well-being. These metrics encompass a diverse range, including liquidity ratios, profitability ratios, leverage ratios, and efficiency ratios, each illuminating a specific facet of the company's financial performance.

Financial ratios encompass a set of metrics utilized to gauge a firm's efficiency and profitability, drawing hints from its financial statements. These ratios establish a means of articulating the connection between various accounting data points. Financial ratios serve as a tool for meaningful comparisons, expressing the relationship between distinct accounting results (Wulandari, 2020). Regardless of institutional size, these ratios play a crucial role in financial decision-making, aiding in the assessment of a company's effectiveness and profitability based on its financial reports. A financial or accounting ratio, defined as the relative magnitude between two chosen numerical values extracted from an enterprise's financial statements, is integral to fundamental analysis. By providing a basis for evaluating a company's financial condition, strengths, and weaknesses, accounting ratios contribute significantly to the overall understanding of a company's performance (Kepramareni, Pradnyawati & Muliahati, 2023).

Liquidity ratio refers to financial indicators that evaluate a firm's capacity to fulfill its short-term debt obligations (Arsita & Sihombing, 2021). Generally, a higher proportion of liquid assets to short-term liabilities indicates a company's ability to pay off its debts in the near future and continue its operations (Kepramareni, Pradnyawati & Muliahati, 2023). Conversely, a low coverage rate may indicate that a company will struggle to operate and meet its obligations, which could raise concerns for investors. The liquidity ratio is a measure of a company's ability to satisfy its current debt with its current assets in the short term (Odey, Owan & Owan, 2023).

Firm liquidity refers to the ability of a company or business to meet its short-term financial obligations and cover its current liabilities (Otekunrin et al., 2018). It is a measure of the company's ability to convert its assets into cash quickly and efficiently to address any immediate financial needs or unexpected expenses. Having sufficient liquidity is crucial for a firm's financial stability and operational efficiency. A high level of liquidity ratio suggests that the firm can readily meet its financial obligations, invest in growth opportunities, and withstand economic downturns or adverse events (Fadli & Hongbing, 2020). Conversely, low liquidity ratio may indicate that the company could face challenges in managing its short-term obligations and might be at risk of financial distress. Striking the right balance between liquidity and other financial objectives is crucial for maintaining a healthy financial position for the firm (Arsita & Sihombing, 2021).

Companies that can fulfill their short-term debt obligations upon maturity may attract investor attention and earn the trust of creditors. The current ratio, which is a type of liquidity ratio, measures a company's capacity to pay off immediate short-term obligations or debt in full upon receipt of a bill (Imansyah & Mustafa, 2021). This ratio is calculated by comparing a company's total current assets to its total current liabilities. The primary ratios in this category are the current ratio and acid test ratio.

Profitability Analysis

Profitability Analysis: Under this, we have;

Return on Equity (ROE): ROE or Return on Equity is a financial metric that measures the net income returned as a percentage of the shareholders' equity. It is considered one of the most widely used measures of corporate financial performance, as it was stated by Rappaport in 1986 and confirmed by Monteiro in 2006. The reason behind its popularity among investors is that it connects the income statement (net profit/loss) to the balance sheet (shareholders' equity) (Ahsan 2012). This statement aims to demonstrate the portion of the company's earnings that is left for the shareholders to receive after all other capital providers have been paid. It is an evaluation of the company's profitability based on the investments made by the business owners (Egbunike, 2019).

ROCE is a financial metric that calculates the return on investment for common shareholders. It takes into account not only the operating expenses like cost of goods sold, selling and administration expenses, and income taxes but also the costs of financing debt and preferred stock that are senior to the common stock. In other words, ROCE measures the return to common shareholders after deducting all expenses, including the costs of financing the company's debts and preferred stocks (Wahlen, Baginski & Bradshaw, 2008).

Return on Asset (ROA): The rate of return on assets (ROA) is a measure of a company's ability to generate earnings through the efficient use of its assets, regardless of how those assets are financed. ROA assesses the company's asset management skills in a given period, taking into account the specific environmental factors and strategic decisions made by the company, such as product markets, operating choices, and financing policies. Importantly, ROA does not consider the financing means and costs of the company's net assets, such as the proportion of debt versus equity financing and their respective costs (Wahlen, Baginski and Bradshaw 2008).

Gross profit margin: Analysts use the term 'gross profit margin' as a financial metric to evaluate a company's financial well-being. It is calculated by deducting the cost of goods sold (COGS) from the profit. In simpler terms, gross profit margin is the income generated by a company after considering the expenses of running the business. This metric is usually

expressed as a percentage of sales and is also known as the gross margin ratio (https://www.investopedia.com/terms/g/gross_profit_margin.asp).

Net profit margin: This measure can be referred to as the Net Profit on Sales Ratio. It reflects the percentage of sales revenue that remains after all expenses have been deducted. A lower ratio indicates that operating expenses are significantly reducing the sales revenue. This situation requires implementation of control measures (Egbunike 2019).

Stock Market Performance

Understanding stock market performance also entails an exploration of market efficiency, liquidity, and investor confidence (Chaengkham & Wianwiwat, 2021). A highly efficient market reflects the rapid assimilation of information into stock prices, leaving little room for arbitrage opportunities. Liquidity, on the other hand, is a critical determinant, as it influences the ease with which assets can be bought or sold without causing significant price fluctuations. Investor confidence, often reflected in market sentiment indices, plays a pivotal role in shaping the overall tone of stock market performance (Odey, Owan & Owan, 2023).

The realm of stock market performance is not confined to domestic borders; it operates within the global framework. Global events, such as economic recessions, trade tensions, or geopolitical developments, have reverberations that transcend national boundaries, creating a ripple effect that influences the performance of stocks worldwide (Pražák & Stavárek, 2017). Moreover, technological advancements and the advent of algorithmic trading have added a layer of complexity to stock market performance. The speed at which information is processed and trades are executed has reached unprecedented levels, contributing to both the efficiency and volatility of markets. The interplay between human judgment and artificial intelligence further underscores the evolving nature of stock market dynamics. Thus, stock market performance serves as a multidimensional reflection of the financial setting, encapsulating the collective outcomes of a myriad of factors shaping the value of stocks and securities (Wijaya & Yustina, 2019). It is a narrative of market sentiment, economic conditions, and investor behavior in the stock market.

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, Wijaya, Hartono, Dizar, Magetsari, Anggara, & Sujono, 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 short-term 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 those 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.

Empirical Review

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 Modeling 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. Kepramareni, Pradnyawati, and Muliahati (2023) investigated the influence of financial ratios on the firm value of the consumer goods sector in Indonesia, focusing on the food and beverage industry. The study utilized 12 companies as samples, representing the sector, and collected data from 2018 to 2020, resulting in a total of 36 observations. Employing the non-participant observation method and regression analysis, the authors explored the impact of financial ratios (liquidity and profitability), ownership, and corporate size on the formation of corporate value. The findings indicated a positive relationship between financial ratios (liquidity and profitability) and corporate value, while factors such as leverage, managerial ownership, institutions, and corporate size did not exhibit a significant effect on corporate value. 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 analyze 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. Imansyah and Mustafa (2021) assessed the impact of financial ratios on the stock prices of Consumer

Goods Industry Sector Companies listed in the Kompas 100 Index from 2013 to 2019. The financial ratios considered were Current Ratio (CR), Net Profit Margin (NPM), Return on Equity (ROE), and Dividend Yield (DY). The research involved five Consumer Goods Industry companies selected through purposive sampling. Data collection utilized documentation, and panel data regression analysis was employed. The study found that NPM had a partially positive relationship with stock prices; ROE had a positive relationship at a confidence level of 90%, while CR and DY had no significant effects on stock prices. Collectively, CR, NPM, ROE, and DY explained 98.38% of the stock prices in the Consumer Goods Industry Sector companies listed in the Kompas 100 Index. 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-cyclicals 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. 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 Eviews 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. Danladi (2020) examined the effect of firm financial determinants on stock returns of listed healthcare firms in Nigeria from 2010-2019. Utilizing ordinary least square analysis, the study found that earnings per share and market value had a positive but insignificant effect on stock returns, asset growth had a negative insignificant effect, and return on equity had a positive significant effect. The study concluded that financial indicators significantly affected stock returns of healthcare firms. Tarmidi, Pramukty, and Akbar (2020) investigated the effect of financial ratios, including Return On Assets (ROA), Net Profit Margin (NPM), and Debt to Equity Ratio (DER), on stock prices before and after the publication of financial statements for manufacturing sector companies listed on the Indonesia Stock Exchange from 2014 to 2018. The study, conducted through purposive sampling, found that the impact of ROA and NPM on stock prices strengthened after publication, while DER had the opposite effect. The study suggested that financial ratios remained crucial benchmarks for investors in stock market transactions.

Marito and Sjarif (2020) investigated the impact of financial ratios on stock returns of manufacturing firms from 2012 to 2016. Financial ratios included current ratio, debt-to-equity ratio, and return on assets, while market ratio comprised dividend yield, and firm size was represented by market capitalization. Panel data regression analysis with a random effect model revealed that liquidity ratios (current ratio), leverage ratios (debt-to-equity ratio), and profitability ratios (return on assets) influenced stock market returns. Siregar and Sihombing (2020) explored the impact of financial ratios on stock returns in construction companies listed on the Indonesia Stock Exchange. The study focused on analyzing the effect of ROE, DER, CR, PBV, and TATO on stock returns for the period 2015-2019. Employing a comparative causal research approach with 13 sample companies selected through purposive sampling, the study used secondary data collected from Yahoo Finance. Panel data regression

analysis assisted by Eviews 9.0 software revealed that ROE, DER, CR, PBV, and TATO individually had a positive and significant effect on stock returns. Moreover, when considered together, these variables demonstrated a significant collective impact on stock returns. Banerjee (2019) investigated the influence of financial ratios on stock returns in the United Arab Emirates, focusing on thirty companies from the Dubai Financial Market (DFM) and Abu Dhabi Stock Exchange (ADX) during 2017. The study examined the predictive power of five independent variables—Earning Per Share ratio (EPS), Price Earning ratio (PE), Return on Equity ratio (ROE), Dividend Yield ratio (DY), and Debt Equity ratio (DE)—on stock returns. Regression analysis and correlation matrix results indicated that Dividend Yield and Return on Equity were statistically significant predictors of stock returns, while Earning Per Share, Price Earning, and Debt Equity were statistically insignificant. Otekunrin et al. (2018) investigated the relationship between Financial Ratio Analysis and Market Price of shares in selected quoted Agriculture and Agro-allied firms in Nigeria after the adoption of International Financial Reporting Standards (IFRS) from 2012 to 2016. Employing multiple regression analysis, the study found positive and significant relationships between Earnings per Share, Net Assets per Share, Debt Ratio, and Return on Asset Ratio with the market price of shares, while Liquidity Ratio and Return on Equity Ratio showed no significant association.

Agirman and Yilmaz (2018) delved into the influence of financial ratios on stock returns in the Borsa Istanbul (BIST) from 2004: II to 2014: IV. Employing price-to-book ratio (P/B), price-to-earning ratio (P/E), dividend per share (DPS), and firm size, the study utilized panel data analysis. Results suggested that financial ratios could predict stock returns, with firm size demonstrating a higher predictive power than dividend per share and price-to-book ratio. However, no significant relationship was observed between price-to-earnings ratio and stock returns.

Valkanas and Lyroudi (2018) examined the impact of financial ratios on stock price movement in the Athens Stock Exchange (ASE) from 2005 to 2014. The study highlighted that during the examined period, the assets turnover ratio, assets-to-equity ratio, and current ratio displayed a statistically significant positive relation with stock returns. The study's empirical results provide valuable insights for capital market analysts, investors, and company managers in predicting stock price movements and planning effective strategies.

The study examines the effect of financial ratios on stock market performance among listed manufacturing firms in Nigeria. This objective has been investigated by Odey, Owan and Owan (2023); Saputra (2022); Fathinah and Setiawan (2021); Sari and Yasa (2021); Almumani and Almazari (2021); Danladi (2020); Osamudiame, Celestina and Awele (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.

Methodology

A research design encompasses a plan for selecting the sources and types of information used to answer the research questions in a study. 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. Therefore, ex-post facto research design is suitable for the study because it allows the researcher to collect data on manufacturing firms' financial ratios and their stock return in order to establish the association between these two variables which have co-occurred in the past.

Population of the Study

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.

Sample Size and Sampling Technique

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

Method of Data Collection

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.

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:

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

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

$STR_{it} = \alpha_0 + \beta_1 LIQ_{it} + \beta_2 ACR_{it} + + \mu_{it}$ _____eqn (i)

Where,

STR_{it}	=	Stock Return for firm i in period t.
LIQ_{it}	=	Liquidity 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_{1-3}	=	coefficients of the predictors

Method of Data Analysis

Ordinary Least Squares (OLS) was chosen because it is the most efficient established technique for conducting linear regression analysis. Renowned for its simplicity and efficiency, OLS is a prevalent method employed for estimating coefficients within a linear regression model. Its widespread usage is attributed to its interpretability, where the coefficients derived through OLS offer transparent hints into the relationships between independent and dependent variables. Additionally, the hypotheses were tested via ordinary least square regression technique with the aid of E-views 10.

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.

Data Analysis

Table 1: Descriptive Analysis

	STR	LIQ	ACR
Mean	0.093786	1.143741	0.943349
Median	-0.054401	1.092436	0.891010
Maximum	3.074699	2.880813	4.344196
Minimum	-0.750000	0.072914	0.064439
Std. Dev.	0.613905	0.525669	0.518370
Skewness	2.210644	0.780678	3.144824
Kurtosis	9.082849	3.721357	19.53800
Jarque-Bera	353.4303	18.48867	1956.657
Probability	0.000000	0.000097	0.000000
Sum	14.06785	171.5612	141.5023
Sum Sq. Dev.	56.15499	41.17286	40.03746
Observations	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 liquidity ratio (LIQ) is 1.143741, reflecting an average liquidity level among the listed manufacturing firms. The range from a minimum of 0.072914 to a maximum of 2.880813 showcases variability in liquidity positions. The standard deviation of 0.525669 suggests moderate dispersion around the mean. The skewness of 0.780678 indicates a slight rightward skew, implying a tendency towards higher liquidity ratios. The kurtosis of 3.721357 indicates a distribution with heavier tails and potential outliers. The Jarque-Bera test's low probability (p-value of 0.000097) suggests a departure from normality, emphasizing non-normality in the distribution of liquidity 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 analyzed is re-stated as follows:

Table 2. 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.
LIQ	0.175979	0.116248	1.513826	0.1322
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

$H0_1$ Liquidity ratio has no significant effect on stock return of listed manufacturing firms in Nigeria.

Liquidity ratio has a coefficient value of 0.175979, indicating that a unit increase in the liquidity ratio is associated with a 0.175979-unit increase in stock return. However, the p-value of 0.1322 which exceeded 0.05 suggests that this relationship is not statistically significant at 5% significance level of 0.05. This leads to the acceptance of the null hypothesis that the effect of liquidity ratio on stock return of listed manufacturing firms in Nigeria is non-significant and positive (*p*-value = 0.1322).

Hypothesis Two

$H0_2$ Activity ratio has no significant effect on stock return of listed manufacturing firms in Nigeria.

Activity ratio has a coefficient value of -0.032122, indicating that a unit increase in the activity ratio is associated with a -0.032122 -unit increase in stock return. However, the p-value of 0.754 which is higher than 0.05 suggests that this effect is not statistically significant at 5% significance level of 0.05. This leads to the acceptance of the null hypothesis that the effect of activity ratio on stock return of listed manufacturing firms in Nigeria is insignificant and negative (*p*-value = 0.754).

Discussion of Findings

Contrary to liquidity ratio, the research suggests a negative but insignificant effect of activity ratios on stock returns among listed manufacturing firms in Nigeria. Activity ratios, reflecting a company's efficiency in managing its assets, seem to have an adverse impact on stock performance. Firms facing challenges in optimizing their asset utilization may experience lower stock returns, reflecting concerns about operational efficiency and potential inefficiencies in resource deployment. This finding is in contrary to the study by Odey, Owan, and Owan (2023); Sari and Yasa (2021); Zandi, Shahzad, and Lokanathan (2021) and Siahaan, Sadalia, and Silalahi (2021) which found a positive effect.

Conclusion and Recommendations

The impact of financial ratios on stock market performance lies in the perception they create among investors. 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. This study was carried out to assess the effect of liquidity ratio and activity ratio on stock return of listed manufacturing firms in Nigeria. From the findings, a higher Liquidity ratio indicates the firm's ability to meet short-term obligations, making it more attractive to investors. The positive effect on stock return may stem from the perception that a liquid firm is better positioned to withstand economic uncertainties, meet financial obligations, and potentially distribute dividends to shareholders, enhancing overall stock market performance.

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 favor companies that demonstrate better asset turnover, seeing them as more efficient and potentially more profitable in the long run. Thus, the positive effect of liquidity and leverage ratios suggests that investors value financial stability and strategic use of leverage for growth.

Recommendations

Based on the finding, the study recommended thus;

1. Manufacturing firms in Nigeria should actively manage their short-term resources, focusing on efficient working capital practices to enhance liquidity, instill investor confidence, and potentially boost stock returns.

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

Agirman, E., & Yilmaz, O. (2018). Value of Financial Ratios in Predicting Stock returns: A Study on Borsa Istanbul (BIST). *Journal of Business Economics and Finance*, *7*(2), 191-199.

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.

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.

Dimitropoulos, P. E., & Asteriou, D. (2009). The value relevance of financial statements and their impact on stock prices: Evidence from Greece. *Managerial Auditing Journal*, *24*(3), 248-265.

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.

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.

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.

Musallam, S. R. (2018). Exploring the relationship between financial ratios and market stock returns. *Eurasian Journal of Business and Economics*, *11*(21), 101-116.

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.

Ogbodo, O. C., & Osisioma, B. C. (2020). Value Relevance of Accounting Information and Share Price: An Empirical Study on Manufacturing Firms in Nigeria. *Journal DOI*, *6*(12).

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.

Saputra, F. (2022). Analysis Effect Return on Assets (ROA), Return on Equity (ROE) and Price Earning 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.

Sihono, R., & Widarti, R. (2021). Effect of Profitability Financial, Ratios Return on Assets, Return on Equity, Gross Profit Margin and Inflation Level of Stock Return Manufacturing Company Recorded Activities in LQ 45. *Research Journal of Finance and Accounting*, *12*(24), 49-64.

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.

Tarmidi, D., Pramukty, R., & Akbar, T. (2020). Fundamental Analysis of Financial Ratios on Stock Prices. *Saudi Journal of Economics and Finance*, *4*(5), 176-180.

Valkanas, P., & Lyroudi, K. (2018). Do Financial Ratios Affect Stock Returns in the Athens Stock Exchange?. *Economic Alternatives*, (4), 497-516.

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.