MARKAZIY OSIYO MADANIY ME'ROSI VA TURIZM TENDENSIYALARI JURNALI

QOMAR.UZ

Vol. 2 No. 1 (August 2025)
ISSN: 3060-4834

https://qomar.uz/index.php/MOSTTJ

# Determinants of Market Value in Listed Companies: A Performance-Based Perspective

**Kayode O. FASUA**
ANAN University, Kwall, Plateau State
Kalovick1@gmail.com

**Published under peer review:**
Adilchaev Rustem Tursinbaevich
Associate Professor,
Republic of Karakalpakstan, Uzbekistan

**Annotation:** This study examined the determinants of market value in listed companies from a performance-based perspective, focusing on non-financial firms in Nigeria. While earlier studies largely addressed financial ratios within sector-specific contexts, this research provided a holistic analysis by simultaneously evaluating Return on Assets, Debt-to-Equity Ratio, Current Ratio and Debt-to-Asset Ratio. An ex post facto design was employed, using panel data from sixty-nine (69) firms over ten years (2014–2023). The Panel-Corrected Standard Errors regression technique was applied to control for heteroscedasticity and contemporaneous correlation. Findings revealed that Return on Assets had a positive but marginally insignificant effect on market value, while Debt-to-Equity Ratio was statistically insignificant. In contrast, Current Ratio and Debt-to-Asset Ratio showed significant negative effects, suggesting that excessive liquidity and high leverage adversely influenced market valuation. Although the model had low explanatory power ($R^2$ = 0.0109), it was jointly significant (Wald $chi^2$ = 30.17; p = 0.000). The study concluded that firm value was influenced more by prudent liquidity and leverage management than by profitability or firm size. Recommendations emphasised the importance of asset efficiency, cautious capital structuring, and financial transparency to enhance market value.

**Keywords:** Market Value, Tobin's Q, Return on Assets, Debt-to-Equity Ratio, Current Ratio, Debt-to-Asset Ratio, Panel Data Analysis

## INTRODUCTION(KIRISH)

In the dynamic and often volatile landscape of corporate finance, a firm's market value continues to serve as a fundamental indicator of investor sentiment, expected performance, and overall financial well-being. It represents how the investing public perceives the worth of a company, factoring in both internal performance metrics and external market dynamics. In developing economies such as Nigeria, this metric has gained increasing attention from researchers, regulators, investors, and policymakers due to its relevance in determining investment appeal, market stability, and long-term corporate viability.

Market value, frequently measured using proxies like Tobin's Q, is shaped by a complex web of internal and external variables. Among the most influential are financial ratios, standardized metrics that provide insights into various dimensions of corporate performance, including profitability, operational efficiency, liquidity, and leverage. These indicators are not only essential tools for investors and corporate managers but also serve as early signals of a firm's risk exposure and growth potential. In the Nigerian context, scholars such as Adamu and Hamidah (2024) and Omabu, Okoye, and Amahalu (2021) have emphasized the importance of financial ratios in shaping firm valuation. However, empirical findings have been mixed, with results varying widely across industries, time periods, and methodological approaches. This ambiguity is particularly salient in an environment marked by exchange rate fluctuations, regulatory reforms, and structural economic challenges.

Profitability, often proxied by Return on Assets (ROA), is a critical variable in firm valuation. ROA assesses how efficiently a firm utilizes its assets to generate earnings, offering a composite view of management performance and operational effectiveness. Higher ROA figures generally signal prudent resource management and strong earnings capacity, traits that enhance investor confidence and, by extension, firm market value (Aisyah & Utama, 2024). In contrast, leverage metrics like the Debt-to-Equity Ratio (DTE) capture the firm's capital structure, specifically, the balance between debt financing and shareholder equity. While the classical Modigliani-Miller (1958) framework argues for capital structure irrelevance under perfect conditions, real-world frictions such as taxes, bankruptcy costs, and information asymmetries often render leverage a significant variable in valuation outcomes.

Liquidity, another cornerstone of financial health, is typically assessed through the Current Ratio (CR). This ratio evaluates a firm's ability to meet its short-term liabilities with its short-term assets, making it a crucial indicator for creditors and investors concerned with near-term financial stability. Alhassan and Islam (2021) note that firms with robust liquidity positions are often rewarded in the market, as such profiles reduce the perceived risk of default and enhance operational resilience. Another important leverage metric, the Debt-to-Asset Ratio (DTA), gauges the extent to which a firm's assets are financed by debt. High DTA values may reflect aggressive financing strategies that could increase financial risk, thereby affecting how the market prices the firm's equity (Aggreh, Nworie, & Abiahu, 2022).

Despite a growing body of research, there is still no consensus on the direction or strength of the relationships between these financial ratios and firm market value in Nigeria. Some studies report significant positive effects, while others document weak or negative associations. These inconsistencies point to the possibility that contextual factors, such as firm size, sectoral characteristics, or macroeconomic volatility, may moderate these relationships (Okoye & Idodo, 2025; Ebimobowei, Uche, & Young-Arney, 2021).

Against this backdrop, the present study aims to critically assess the effect of financial ratios, specifically ROA, DTE, CR, and DTA on the market value of listed firms in Nigeria. By focusing on these key indicators within a performance-driven framework, the research seeks to contribute a nuanced understanding of how financial performance influences market valuation in the context of an emerging economy.

Objectives of the Study

The main aim of this study therefore, is to empirically examine the effect of financial ratios on the market value of listed firms in Nigeria, using Tobin's Q as a proxy for firm value. To achieve this, the specific objectives are as follows:

1. To evaluate the effect of Return on Assets (ROA) on the market value of listed firms in Nigeria.
2. To determine the effect of the Debt-to-Equity Ratio (DTE) on the market value of listed firms in Nigeria.
3. To assess the influence of the Current Ratio (CR) on market value of listed firms in Nigeria.
4. To investigate the influence of Debt-to-Asset Ratio (DTA) on market value of listed firms in Nigeria.

1.2 Statement of the Problem

Understanding the determinants of market value is crucial for investors, financial analysts, and corporate managers seeking to make informed economic decisions. Despite the theoretical frameworks of Modigliani and Miller (1958) on capital structure and Tobin's Q as a reliable market-based proxy for firm valuation (Ajibola, 2025), the empirical evidence regarding the effect of financial ratios [such as Return on Assets (ROA), Debt-to-Equity Ratio (DTE), Current Ratio (CR), and Debt-to-Asset Ratio (DTA)] on market value remains inconclusive, particularly within the Nigerian context.

Several studies have attempted to explore this relationship, yet their findings often diverge. For instance, Asiri and Hameed (2014) and Kadim et al. (2020) affirmed the predictive ability of financial ratios on firm value in international contexts, whereas Ofulue et al. (2022) and Enekwe et al. (2014) presented evidence of weak or inconsistent associations within Nigerian firms. The mixed results raise concerns about the contextual applicability of these financial indicators, especially in an emerging market characterized by economic volatility, regulatory inconsistencies, and structural inefficiencies. Moreover, the influence of liquidity (CR) and leverage ratios (DTE and DTA) on market value has been underexplored in a unified model. Although liquidity is essential to operational efficiency and market confidence (Alhassan & Islam, 2021), and leverage can either enhance or erode firm value depending on capital structure dynamics (Omabu et al., 2021; Aggreh et al., 2022), few studies have examined how these interact simultaneously to affect market valuation. Another concern lies in sectoral differences, as financial behaviors and market responses can vary across industries. While some research (Azaro et al., 2020; Fasua & Olatunji, 2020) included sectoral perspectives, most lacked a focused, integrated evaluation using comprehensive performance-based financial ratios and a market-based proxy like Tobin's Q.

This study, therefore, seeks to fill these gaps by empirically analyzing how ROA, DTE, CR, and DTA influence the market value of listed Nigerian firms. By doing so, it provides critical insights into whether these performance-based indicators are reliable predictors of market value within the unique operating environment of Nigeria's capital market.

2.1 Return on Assets (ROA) and Market Value

Return on Assets (ROA) is a widely recognized profitability metric that captures a firm's ability to generate earnings from its total assets. It reflects how efficiently a company utilizes its resources and is frequently used by investors and analysts to evaluate operational performance and managerial effectiveness. In emerging markets, where market inefficiencies and information asymmetries are prevalent, ROA often serves as a reliable proxy for firm performance, given the limited availability of comprehensive financial information (Maditinos et al., 2011; Sinebe, 2024; Aisyah et al., 2024).

The Signaling Theory (Spence, 1978) provides a theoretical foundation for the relevance of ROA in firm valuation. According to this framework, high profitability indicators such as ROA function as credible signals of firm stability and future prospects. Investors tend to interpret strong ROA figures as evidence of effective strategic management and financial prudence, which enhances investor confidence and drives up market valuation (Ajibola, 2025). Empirical research reinforces this theoretical perspective. For example, Rashid (2021) reported a significant positive relationship between ROA and market value among listed consumer goods firms, suggesting that profitability is a key driver of firm valuation. Similarly, studies by Susanti, Samara, and Hakim (2022), and Aisyah et al. (2024), found that ROA reliably predicts stock prices and market capitalization, particularly in capital-intensive sectors of the Indonesian economy.

In the Nigerian context, Fasua and Olatunji (2020) confirmed that ROA significantly influences profit growth in oil and gas firms, underlining its importance in value creation. Though most evidence supports a

positive association, some scholars caution that the impact of ROA may be contingent on contextual variables such as industry characteristics, firm size, and macroeconomic factors (Hertina et al., 2021; Purnomo, 2018), emphasizing the need for a more integrative approach when assessing firm value.

2.2 Debt-to-Equity Ratio (DTE) and Market Value

The Debt-to-Equity Ratio (DTE) is a critical leverage metric used to measure the extent to which a firm utilizes debt in its capital structure relative to shareholders' equity. It reflects the firm's financial risk and has been widely studied in relation to its effect on market value. Theoretically, the Modigliani et al. (1958) capital structure irrelevance proposition suggests that in a perfect market, the firm's value is independent of its capital structure. However, in reality, with taxes, bankruptcy costs, and agency conflicts, leverage becomes a significant determinant of firm value.

Empirical findings on the relationship between DTE and market value are mixed. Some studies assert a positive effect, arguing that moderate leverage can enhance firm value through the tax shield on debt (Sinebe & Emudainohwo, 2023; Fizabaniyah, Nurcahyono, Argojuwono & Hernawati, 2023). Fasua, Abubakar, Ojo and Umana, (2021) and Munir, Akram and Abbas, (2024) found that an optimal capital structure that includes a healthy level of debt contributes positively to firm value among listed firms. Similarly, Alvian and Munandar (2022) observed that firms with efficient debt utilization exhibit improved market valuation in the Indonesian context. Conversely, high DTE levels may signal financial distress, increased default risk, and poor financial management, thus reducing investor confidence and firm valuation. Enekwe, Agu and Eziedo, (2014), examining Nigerian pharmaceutical firms, reported a negative relationship between DTE and market value, highlighting that excessive leverage erodes shareholders' wealth due to high interest obligations and reduced profitability.

In addition, Okeke, Ezejiofor and Okoye, (2021), in their study of conglomerates firms in Nigeria, found that DTE had an insignificant effect on firm value, suggesting that industry characteristics and regulatory environments may moderate this relationship. Similarly, Otekunrin, et al. (2018) argue that the influence of DTE on market value may depend on firm size, asset tangibility, and macroeconomic stability. Furthermore, Ben Fatma and Chouaibi (2023), studying European financial institutions, emphasized that the governance framework and investor protection laws also play a vital role in shaping the DTE-market value nexus.

2.3 Current Ratio (CR) and Market Value

The Current Ratio (CR) is a widely used liquidity metric that reflects a firm's ability to meet short-term obligations with its current assets. It is a key indicator of operational efficiency and short-term financial health, which may influence investors' perception and, consequently, the firm's market value. While liquidity is essential for sustaining business continuity, its relationship with firm valuation remains a topic of empirical debate. Several studies have highlighted a positive link between liquidity and firm value. For instance, Taiwo, Owowlabi, Adedokun and Ogundajo, (2022), in a study of Nigerian quoted companies, found that a strong liquidity position, proxied by CR, positively influenced firm performance and indirectly enhanced market valuation. Similarly, Ebimobowei et al. (2021) emphasized that optimal liquidity enables firms to meet obligations timely, reducing risk perception among investors and boosting firm value.

Conversely, excessive liquidity may indicate inefficient asset utilization or a lack of investment opportunities, leading to diminished market confidence. Asiri and Hameed (2014), examining firms on the Bahrain Bourse, reported a negative relationship between CR and market value, suggesting that over-liquidity might signal suboptimal capital allocation or risk aversion. This aligns with the findings of Rashid (2021), who concluded that firms with lower but stable liquidity ratios tend to have higher valuations due to better resource management and reinvestment strategies. Moreover, some studies observe a non-significant or industry-dependent relationship. Okeke et al. (2021) found an insignificant impact of CR on firm value among Nigerian conglomerates, attributing this to sector-specific capital intensity and cash flow variability. This implies that the effect of liquidity on valuation is context-dependent, influenced by factors such as firm size, sector, macroeconomic conditions, and risk appetite.

2.4 Debt-to-Asset Ratio (DTA) and Market Value

The Debt-to-Asset Ratio (DTA) measures the proportion of a company's assets financed through debt, offering insight into its financial structure and risk profile. A firm's capital mix significantly affects its market value, as investors often assess leverage levels when determining firm risk, solvency, and profitability prospects. A number of studies have explored the influence of DTA on firm value with mixed outcomes. Azaro, Djajanto and Sari, (2020), in their analysis of Nigerian manufacturing firms, reported a significant negative relationship between DTA and market value. Their findings suggested that higher reliance on debt financing elevates financial risk and may erode shareholder value. Similarly, Ofulue, Ezeagba, Amahalu and Obi (2022) found that an increased DTA ratio adversely affected the value of quoted industrial goods firms, emphasizing the costs of debt in terms of interest payments and default risks.

Contrarily, Omabu, et al. (2021) indicated that moderate levels of debt financing, reflected in optimal DTA ratios, could positively influence market value by providing tax shields and enhancing firm growth potential through leverage. This perspective aligns with the Modigliani et al. (1958) capital structure theory, which posits that under certain conditions, debt can improve firm value. Moreover, Bahodirovich (2024) noted that the effect of DTA on market value varies across industries and economic contexts. Firms in capital-intensive sectors may tolerate higher DTA without a detrimental impact on valuation due to their asset-backed financing.

2.5 Tobin's Q as a Proxy for Market Value

Tobin's Q, defined as the ratio of a firm's market value to the replacement cost of its assets, is widely used in finance and economics as a proxy for assessing firm performance and market valuation. A Q ratio greater than one suggests that the market values the firm more than its asset replacement cost, often signaling strong investor confidence and growth potential, while a ratio below one may indicate undervaluation or inefficiency in asset utilization. Ajibola (2025) utilized Tobin's Q to evaluate the impact of corporate governance on bank performance in Nigeria and highlighted its robustness in capturing both market perception and firm fundamentals. Similarly, Susanti et al. (2025) adopted Tobin's Q in their study of Indonesian firms and argued that it offers a dynamic measure of value because it integrates both accounting and market data, thereby providing a more comprehensive view than traditional accounting ratios alone. The use of Tobin's Q is also prevalent in capital structure research. For instance, Kadim, Sunardi, and Husain (2020) employed it to examine how financial ratios, intellectual capital, and dividend policy influence firm value, reinforcing its versatility as a proxy for market performance. However, some scholars, such as Maditinos et al. (2011), caution that Tobin's Q may be sensitive to market volatility and speculative pricing, which could distort actual firm value.

2.6 Theoretical Framework (Signaling Theory)

Signaling theory, pioneered by Spence (1978), posits that firms use observable indicators to communicate unobservable qualities to the market. In the context of corporate finance, financial ratios serve as vital signals that convey the firm's profitability, risk profile, and growth prospects to investors and other stakeholders. According to Ben Fatma et al. (2023), firms that disclose strong financial metrics, such as high return on assets or low leverage, signal operational efficiency and reduced investment risk, thus enhancing perceived market value. Susanti et al. (2025) reinforce this perspective, arguing that strong financial performance, especially when supported by good corporate governance, signals managerial competence and organizational soundness, leading to higher firm valuation. Olayinka and Mustapha (2022) further explain that firms with favourable liquidity and leverage ratios communicate financial stability, which can influence investor decisions and share price positively. Likewise, Kadim et al. (2020) stress that signaling through financial performance metrics is particularly important in emerging markets like Nigeria, where information asymmetry is high.

2.7 Empirical Gap

Although numerous prior studies have explored the relationship between financial ratios and firm performance or value, most are limited by sector-specific or context-driven scopes. A comprehensive performance-based analysis that integrates multiple financial indicators across Nigeria's broader corporate

landscape remains scarce. This study addresses this gap by simultaneously evaluating Return on Assets (ROA), Debt-to-Equity Ratio (DTE), Current Ratio (CR), and Debt-to-Asset Ratio (DTA) using panel data drawn from a wide range of listed Nigerian firms, offering a more robust and inclusive understanding of market value determinants.

## METHODOLOGY(METODOLOGIYA)

This study adopted an ex post facto research design and utilized panel data regression techniques to analyze secondary data. A simple random sampling method was employed to select sixty-nine (69) non-financial firms that had complete and consistent data over a ten-year period, spanning from 2014 to 2023. By focusing on firms with uninterrupted data across the study period, the research ensures reliability and robustness in evaluating the impact of financial performance indicators on market value within the Nigerian corporate landscape.

**Model Specifications**

The model for this study is stated in econometrics terms below as;

Market Valuation = *f*(Financial Structure)

$TOBINSQ_{it} = f(ROA, DTE, CR, DTA, MACA)$ - - - *eq.i*

$TOBINSQ_{it} = \alpha_0 + \beta_1 ROA_{it} + \beta_2 DTE_{it} + \beta_3 CR_{it} + \beta_4 DTA_{it} + \beta_5 MAKCAP_{it} + \varepsilon_t$ *eq.ii*

Where;

| | | |
|---|---|---|
| **TOBINSQ** | Tobin's Q | measured as market capitalization plus total liabilities minus cash divided by total asset |
| **ROA** | Return on assets | measured as profit after tax divided by total asset (%) |
| **DTE** | Debt-to-equity ratio | Measured as total liabilities divided by total equity |
| **CR** | Current Ratio | measured as current asset divided by current liabilities |
| **DTA** | Debt-to-assets ratio | Total Debt divided by Total Assets |
| **MACA** | Market Capitalisation | Measured as natural log of the number of ordinary shares multiply by closing year share price |

$f$ = Stochastic error term capturing other unexplanatory variables

ί = firm identifier (69 firms)

t = time variable (10 Years)

$\varepsilon_t$ = error term

$\alpha o$ is the intercept of the regression.

$\beta_1$ $\beta_2$, and $\beta_3$ are the co-efficient of the regression equation.

The Apriori expectation: $\beta_1$ $\beta_2$ and $\beta_3$ is lesser or greater than 0.

## RESULTS AND DISCUSSION(NATIJALAR VA MUHOKAMA)

### 4.1 Descriptive statistics

**Table 1: Summary of Descriptive for TOBINSQ ROA DTE CR DTA MACA**

| VARIABLES | OBS | MEAN | STD. DEV | MIN | MAX |
|---|---|---|---|---|---|
| **TOBINSQ** | 690 | .7232797 | 1.234466 | .001 | 18.692 |
| **ROA** | 690 | 2.001984 | 15.08131 | -179.9173 | 89.5447 |
| **DTE** | 690 | 1.655 | 18.16449 | -343.17 | 131.08 |
| **CR** | 690 | 1.597725 | 2.710464 | 0 | 38.7 |
| **DTA** | 690 | 66.62168 | 42.92429 | -20.78 | 395.45 |

| | | | | | |
|---|---|---|---|---|---|
| **MACA** | 690 | 6.688486 | 1.064515 | 3.95424 | 9.64038 |

**Source: Regression Output, 2025.**

Table 1 presents the descriptive statistics for the study variables—TOBINSQ (proxy for market value), ROA, DTE, CR, DTA, and MACA—based on 690 observations for each variable, reflecting a balanced panel dataset. The average value of TOBINSQ is 0.723, implying that most firms are valued below their replacement cost, which may reflect investor pessimism or structural undervaluation. However, the large range (0.001 to 18.692) and high standard deviation (1.234) suggest substantial variation in market valuation across firms, likely due to differences in industry, firm size, or financial performance. ROA averages 2.00%, indicating modest profitability among sampled firms. The extreme minimum of -179.91 and maximum of 89.54, coupled with a high standard deviation (15.08), reveal significant outliers and volatility, possibly arising from sector-specific disruptions or operational inefficiencies. Such dispersion necessitates caution in regression analysis to mitigate the influence of extreme values. The DTE ratio has a mean of 1.655 but displays extraordinary variability (SD = 18.16), with some firms showing negative values as low as -343.17. These anomalies may reflect negative shareholder equity or accounting irregularities, underscoring capital structure instability. Similarly, the DTA mean of 66.62% indicates a debt-heavy financing pattern, although the wide spread (SD = 42.92) points to diverse leverage strategies among firms. CR averages 1.59, suggesting adequate short-term liquidity, though the maximum of 38.7 and SD of 2.71 indicate variability. In contrast, MACA is relatively stable, with a mean of 6.69 and a low SD of 1.06, implying consistency in firm size (logarithmic scale). Normality, multicollinearity, and stationarity checks will follow to ensure the robustness of regression analysis.

### 4.2 Normality Test

**Table 2: Shapiro-Wilk W test for normal data**

| VARIABLES | OBS | W | V | Z | PROB>Z |
|---|---|---|---|---|---|
| **TOBINSQ** | 690 | 0.48438 | 232.083 | 13.281 | 0.00000 |
| **ROA** | 690 | 0.65303 | 156.173 | 12.315 | 0.00000 |
| **DTE** | 690 | 0.17598 | 370.891 | 14.424 | 0.00000 |
| **CR** | 690 | 0.33211 | 300.618 | 13.912 | 0.00000 |
| **DTA** | 690 | 0.72087 | 125.637 | 11.785 | 0.00000 |
| **MACA** | 690 | 0.97806 | 9.875 | 5.583 | 0.00000 |

**Source: Regression Output, 2025.**

Table 2 presents the Shapiro-Wilk W test results for assessing the normality of the dataset's variables. A Shapiro-Wilk W value close to 1 indicates normality, while a value significantly lower implies deviation from normality. For all variables (TOBINSQ, ROA, DTE, CR, DTA, and MACA) the p-values (Prob > Z) are 0.00000, indicating strong statistical evidence to reject the null hypothesis of normal distribution at the 1% significance level. Notably, DTE (W = 0.17598) and CR (W = 0.33211) display severe non-normality, likely caused by extreme outliers or heavily skewed data distributions. TOBINSQ and ROA also show low W-values, suggesting that market value and profitability are highly dispersed and asymmetric across firms. Even DTA, though relatively better (W = 0.72087), does not conform to normality. MACA (W = 0.97806) is closest to a normal distribution, but it still falls short of the normality requirement. These deviations from normality are critical because most parametric statistical techniques, assume normally distributed residuals for valid inference. The results compel to conduct a non-parametric model that do not rely on normality assumptions.

### 4.3 Correlation Analysis

**Table 3:** Summary of Spearman Correlation TOBINSQ ROA DTE CR DTA MACA, stats (rho p) star (0.05)

| | TOBINSQ | ROA | DTE | CR | DTA | MACA |
|---|---|---|---|---|---|---|
| **TOBINSQ** | 1.0000 | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ROA** | 0.3580* | 1.0000 | | | | |
| | 0.0000 | | | | | |
| **DTE** | 0.0024 | -0.0372 | 1.0000 | | | |
| | 0.9507 | 0.3288 | | | | |
| **CR** | 0.0042 | 0.0117 | -0.2000* | 1.0000 | | |
| | 0.9132 | 0.7596 | 0.0000 | | | |
| **DTA** | -0.0738 | -0.0435 | 0.6223* | -0.4764* | | |
| | 0.0526 | 0.2538 | 0.0000 | 0.0000 | | |
| **MACA** | -0.0106 | -0.0629 | 0.1253* | -0.0834* | -0.0894* | 1.0000 |
| | 0.7802 | 0.0988 | 0.0010 | 0.0285 | 0.0189 | |

**Source: Regression Output, 2025.**

Table 3 presents the Spearman correlation results, a non-parametric method suited for assessing monotonic relationships, particularly appropriate here given earlier evidence of non-normality. The analysis highlights several key associations among the variables. TOBINSQ, used as a proxy for market value, shows a moderate, statistically significant positive correlation with ROA ($\varrho = 0.3580$, $p < 0.05$), suggesting that firms with higher profitability tend to experience stronger market valuation. This supports theoretical expectations, as profitable firms often inspire greater investor confidence. Conversely, TOBINSQ does not significantly correlate with DTE, CR, DTA, or MACA, indicating that in this sample, market value is not closely tied to leverage, liquidity, or firm size in a linear or monotonic fashion. DTE is negatively correlated with CR ($\varrho = -0.2000$, $p < 0.05$) and strongly positively correlated with DTA ($\varrho = 0.6223$, $p < 0.05$), reinforcing the notion that highly leveraged firms tend to be less liquid and more reliant on debt financing. CR also exhibits negative correlations with DTA ($\varrho = -0.4764$) and MACA ($\varrho = -0.0834$), suggesting liquidity diminishes as debt levels and firm size rise. MACA has a weak but significant positive relationship with DTE ($\varrho = 0.1253$), implying that larger firms may carry more debt, likely due to better creditworthiness. The results justify moving forward with regression analysis, while carefully checking for multicollinearity and potential interaction effects.

### 4.4 Result for Multicollinearity Test

**Table 4: VIF Test Result**

| VARIABLE | VIF | 1/VIF |
|---|---|---|
| **MACA** | 1.04 | 0.962251 |
| **DTA** | 1.04 | 0.962578 |
| **CR** | 1.03 | 0.973419 |
| **DTE** | 1.00 | 0.996998 |
| **ROA** | | 0.999245 |
| **Mean VIF** | 1.02 | |

**Source: Regression Output, 2025.**

Table 4 reports the results of the Variance Inflation Factor (VIF) test, used to detect multicollinearity among the independent variables. All variables—MACA (1.04), DTA (1.04), CR (1.03), DTE (1.00), and ROA (~1.00)—have VIF values near 1, with a mean VIF of 1.02. These figures are well below the commonly accepted thresholds of concern, indicating that multicollinearity is not present. This suggests the independent variables are not highly intercorrelated, ensuring stable and reliable coefficient estimates. The model is thus appropriate for multiple regression analysis without risk of distortion.

### 4.5 Other Diagnostic Tests

**Table 5: Breusch and Pagan Lagrangian Multiplier test**

| **Breusch and Pagan Lagrangian Multiplier test** |
|---|

| **Decision rule** | If p-value is statistically significant, then reject Ho and accept HA |
|---|---|
| Result | chibar2(1) = 22.05, Prob > chibar2 = 0.0000 |

**Source: Regression Output, 2025.**

Table 5 presents the results of the Breusch and Pagan Lagrangian Multiplier (LM) test, which determines whether a random effects model is more appropriate than a simple pooled OLS model. The test result shows a chibar² value of 22.05 with a p-value of 0.0000, indicating strong statistical significance. Based on the decision rule, the null hypothesis (Ho), which assumes no panel effect (i.e., pooled OLS is appropriate), is rejected in favor of the alternative hypothesis (HA). This outcome suggests that there are significant panel-level differences.

### 4.6 Levin-Lin-Chu Panel Unit Root Test

**Table 6:** Diagnostic Tests Results for all the variables

| Variable | Statistics | | P-value | Remarks | Implication |
|---|---|---|---|---|---|
| **TOBINSQ** | Unadjusted t | -18.9314 | | | stationary |
| | Adjusted t* | -14.5439 | 0.0000 | 1(0)* | |
| **ROA** | Unadjusted t | -15.7042 | | | stationary |
| | Adjusted t* | -5.9075 | 0.0000 | 1(0)* | |
| **DTE** | Unadjusted t | -43.8294 | | | stationary |
| | Adjusted t* | -42.6821 | 0.0000 | 1(0)* | |
| **CR** | Unadjusted t | -23.6418 | | | stationary |
| | Adjusted t* | -17.3323 | 0.0000 | 1(0)* | |
| **DTA** | Unadjusted t | -25.5561 | | | stationary |
| | Adjusted t* | -21.7841 | 0.0000 | 1(0)* | |
| **MACA** | Unadjusted t | -27.7676 | | | stationary |
| | Adjusted t* | -24.9724 | 0.0000 | 1(0)* | |

**Source: Regression Output, 2025.**

The Levin-Lin-Chu (LLC) panel unit root test is used to determine the stationarity of panel data variables, an essential prerequisite for valid regression analysis. Stationarity implies that the statistical properties of a variable (mean, variance) remain constant over time. Non-stationary variables may produce spurious regression results and misleading inferences. As shown in Table 6, all variables (TOBINSQ, ROA, DTE, CR, DTA, and MACA) have highly significant p-values (0.0000), indicating strong rejection of the null hypothesis of non-stationarity. The adjusted t-statistics for each variable are large in absolute terms and negative, further confirming the presence of stationarity at level, denoted as I(0). This outcome implies that the variables do not require first differencing, and the regression estimates derived from their level values will be reliable and not subject to the distortions of unit roots. The stationarity of all variables allows for the application of panel data regression models without concerns of spurious correlations.

### 4.7 Hypotheses Testing for Model

**Table 7:** Summary of **TOBINSQ ROA DTE CR DTA MACA**

| | **Panel-corrected** | | | |
|---|---|---|---|---|
| **Linear regression, correlated panels corrected standard errors (PCSEs)** | | | | |
| **TOBINSQ** | **COEF.** | **STD. ERR.** | **z** | **P>\|z\|** |
| **ROA** | .0051796 | .0027501 | 1.88 | 0.060 |
| **DTE** | .0003175 | .0014926 | 0.21 | 0.832 |
| **CR** | -.0228472 | .0086514 | -2.64 | 0.008 |
| **DTA** | -.0016258 | .000339 | -4.80 | 0.000 |
| **MACA** | .0336315 | .0573631 | 0.59 | 0.558 |
| **_CONS** | .6322603 | .3541313 | 1.79 | 0.074 |
| **N** | | | | 690 |

| | |
|---|---|
| **R-squared** | 0.0109 |
| **Wald chi2(5)** | 30.17 |
| **Prob > chi2** | 0.0000 |

**Source: Regression Output, 2025**

Table 7 presents the results of a panel-corrected standard errors (PCSE) regression model, designed to address panel-level heteroscedasticity and contemporaneous correlation across firms. The dependent variable is TOBINSQ, a proxy for firm market value, while the explanatory variables include ROA, DTE, CR, DTA, and MACA. ROA (coefficient = 0.0052, p = 0.060) exhibits a positive, marginally insignificant effect on market value at the 5% level. This suggests that higher profitability may enhance firm valuation, though the evidence is not robust, warranting cautious interpretation. DTE (coefficient = 0.0003, p = 0.832) is statistically insignificant, indicating that leverage, as measured by the debt-to-equity ratio, does not play a meaningful role in explaining market value within the sampled firms. This may reflect differing capital structure policies or investor indifference to debt levels under certain conditions. CR (coefficient = -0.0228, p = 0.008) shows a significant negative relationship with market value, implying that excessive liquidity may signal inefficient capital use or overly conservative financial management, which investors may view unfavorably. DTA (coefficient = -0.0016, p = 0.000) has a strong, highly significant negative effect on market value, suggesting that firms heavily reliant on debt financing relative to total assets are penalized by the market, possibly due to perceived financial vulnerability. MACA, a proxy for firm size, is statistically insignificant (p = 0.558), indicating that size does not materially affect valuation in this model. While the R-squared is low (0.0109), indicating limited explanatory power, the model is jointly significant (Wald $chi^2 = 30.17$, p = 0.000), justifying its use for inference.

### 4.7 Discussion of Findings

The findings from the regression model using Panel-Corrected Standard Errors (PCSEs) illuminate the nuanced effects of financial ratios on firm value, proxied by Tobin's Q, in Nigerian listed companies. The Return on Assets (ROA) displayed a positive but marginally insignificant relationship with Tobin's Q ($\beta = 0.0052$; $p = 0.060$), suggesting that while profitability tends to enhance firm value, the magnitude of this influence may vary across firms or industries. This aligns with prior research such as Aisyah et al. (2024) and Agbata, Osingor and Ezeala (2021), who argue that profitability ratios are foundational to firm valuation, though not always statistically robust in every context. In contrast, Debt-to-Equity Ratio (DTE) had an insignificant effect on firm value ($p = 0.832$), which corroborates findings by Aggreh et al. (2022) and Ofulue et al. (2022), emphasizing that debt composition alone does not strongly predict market valuation in all sectors. This outcome may be attributable to differing risk perceptions or capital structure thresholds among investors, as also discussed in Modigliani and Miller's (1958) capital structure irrelevance theory under ideal market conditions. More critically, both Current Ratio (CR) and Debt-to-Asset Ratio (DTA) exhibited significant negative effects on Tobin's Q (*CR:* $\beta = -0.0228$, $p = 0.008$; *DTA:* $\beta = -0.0016$, $p = 0.000$). These results suggest that excess liquidity or high leverage may be interpreted by investors as signs of inefficiency or financial risk, thus eroding market value. These findings support the insights of Alhassan et al. (2021) and Enekwe et al. (2014), who posited that liquidity hoarding or over-leveraging diminishes shareholder confidence and firm valuation.

## CONCLUSION(XULOSA)

### 5.1 Conclusion

The study concludes that market value, proxied by Tobin's Q, is significantly shaped by specific financial performance indicators among listed Nigerian firms. While ROA shows a positive but marginally insignificant influence, suggesting profitability's general role in enhancing firm value, its impact appears inconsistent across contexts. The DTE was found to be statistically insignificant, indicating that capital structure decisions alone may not decisively influence market perception in Nigeria. More notably, the significant negative effects of the CR and DTA highlight investor sensitivity to liquidity and leverage levels. Excess liquidity and high indebtedness may signal inefficiencies or heightened financial risk, thereby undermining firm valuation.

These results underscore the importance of a balanced financial strategy that optimizes profitability while managing liquidity and leverage prudently. Ultimately, firms aiming to enhance their market value must integrate efficient asset utilization with cautious liquidity and debt management tailored to investor expectations and market dynamics.

**5.2 Recommendations**

Based on the stated objectives and empirical findings, the following recommendations are proposed:

i. Since Return on Assets (ROA) showed a positive influence on market value, firms should focus on optimizing asset utilization and improving operational productivity to boost profitability. This includes investing in efficient technologies and streamlining resource allocation to increase returns from existing assets.

ii. Given the insignificant effect of Debt-to-Equity Ratio (DTE) on market value, corporate managers should adopt a tailored approach to capital structure, considering industry-specific thresholds and risk profiles. While debt may not directly impact valuation, excessive reliance on it could still expose firms to financial distress, especially during market volatility.

iii. The significant negative impact of the Current Ratio (CR) on market value suggests that excessive liquidity may signal inefficiency. Therefore, firms should avoid hoarding idle assets and instead reinvest excess cash into profitable ventures or distribute returns to shareholders to improve investor confidence.

iv. The negative effect of the Debt-to-Asset Ratio (DTA) on firm value highlights the need for prudent leverage management. Firms should strike a balance between using debt for growth and maintaining a sustainable debt burden. Transparent financial disclosures and credible repayment plans can mitigate investor concerns about default risk.

## REFERENCES(FOYDALANILGAN ADABIYOTLAR RO'YXATI):

Adamu, I., & Hamidah, H. (2024). Assessing The Impact of Capital Structure on Firm Value: A Quantitative Study of Financial Ratios and Stock Prices of Nigeria Food and Beverage Companies. *The Indonesian Journal of Accounting Research*, *26*(3), 483-516.

Agbata, A. E., Osingor, A. S., & Ezeala, G. (2021). Effect of financial ratios on firm performance: Study of selected brewery firms in Nigeria. *International Journal of Trend in Scientific Research and Development*, *5*(5), 1664-1671.

Aggreh, M., Nworie, G. O., & Abiahu, M. F. C. (2022). Debt structure and financial performance: evidence from listed construction firms in Nigeria. *Journal of Banking*, *10*(2), 145-195.

Ajibola, A. (2025). Tobin-Q Valuation Methodology of the Impact of Corporate Governance Structure on Organizational Performance: Evidence from Nigeria's Banking Sector. *BRICS Journal of Economics*, *6*(1), 35-52.

Aisyah, S., & Utama, A. N. B. (2024). Improving Company Performance Analysis Based on Return on Assets and Return on Equity Ratio. In *IECON: International Economics and Business Conference* (Vol. 2, No. 1, pp. 296-305).

Alhassan, I., & Islam, K. A. (2021). Liquidity management and financial performance of listed oil and gas companies in Nigeria. *International journal of accounting & finance review*, *8*(1), 15-25.

Alvian, R., & Munandar, A. (2022). The influence of debt-to-equity ratio, net profit margin, and cash ratio on firm value. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, *4*(7), 2682-2690.

Arhinful, R., & Radmehr, M. (2023). The effect of financial leverage on financial performance: evidence from non-financial institutions listed on the Tokyo stock market. *Journal of Capital Markets Studies*, *7*(1), 53-71.

Asiri, B. K., & Hameed, S. A. (2014). Financial ratios and firm's value in the Bahrain Bourse. *Research journal of finance and accounting*, *5*(7), 1-9.

Azaro, K., Djajanto, L., & Sari, P. A. (2020). The influence of financial ratios and firm size on firm value (an empirical study on manufacturing companies sector consumers goods industry listed in Indonesian stock exchange in 2013–2017). In *1st Annual management, business and economic conference (AMBEC 2019)* (pp. 142-147). Atlantis Press.

Bahodirovich, K. B. (2024). Financial leverage ratios and analysis. *Ethiopian International Journal of Multidisciplinary Research*, *11*(11), 418-426.

Ben Fatma, H., & Chouaibi, J. (2023). Corporate governance and firm value: a study on European financial institutions. *International Journal of Productivity and Performance Management*, *72*(5), 1392-1418.

Ebimobowei, A., Uche, O. J., & Young-Arney, T. (2021). Liquidity and Profitability Ratios on Growth of Profits of Listed Oil and Gas Firms in Nigeria. *African Journal of Accounting and Financial Research*, *4*(3), 1-14.

Enekwe, C. I., Agu, C. I., & Eziedo, K. N. (2014). The effect of financial leverage on financial performance: Evidence of quoted pharmaceutical companies in Nigeria. *IOSR Journal of Economics and Finance*, *5*(3), 17-25.

Fasua, K. O., & Olatunji, O. L. (2020). Effect of Firms Characteristics on Capital Structure of Listed Oil and Gas Firms in Nigeria. *The International Journal of Business & Management*, *8*(10).

Fasua, K. O., Abubakar, I. A., Ojo, L. O., & Umana, M. F. O. N. (2021). Ownership structure and capital structure: Evidence from listed agricultural firms in Nigeria. *International Journal of Social Science*, *5*(10), 50-67.

Fizabaniyah, R., Nurcahyono, N., Argojuwono, A. D. A., & Hernawati, R. I. (2023). Financial Ratio, Board Diversity and Financial Distress: Evidence from Indonesia. In *International Conference on Business, Accounting, Banking, and Economics (ICBABE 2022)* 307-320.

Hertina, D., Pratidina, Z. O., Debora, S., & Sinaga, O. (2021). Analysis Of Financial Ratio to Company Value. *Review of International Geographical Education Online*, *11*(7).

Kadim, A., Sunardi, N., & Husain, T. (2020). The modeling firm's value based on financial ratios, intellectual capital and dividend policy. *Accounting*, *6*(5), 859-870.

Maditinos, D., Chatzoudes, D., Tsairidis, C., & Theriou, G. (2011). The impact of intellectual capital on firms' market value and financial performance. *Journal of intellectual capital*, *12*(1), 132-151.

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American economic review*, *48*(3), 261-297.

Munir, Q., Akram, B., & Abbas, S. A. (2024). Understanding stock price dynamics with dividend-related metrics and financial indicators in Pakistan's non-financial sectors. *Journal of Business and Economic Options*, *7*(1), 1-9.

Ofulue, I., Ezeagba, C. E., Amahalu, N. N., & Obi, J. C. (2022). Financial leverage and financial performance of quoted industrial goods firms in Nigeria. *International Journal of Management Studies and Social Science Research*, *4*(1), 172-181.

Okeke, L. N., Ezejiofor, R. A., & Okoye, N. J. (2021). Leverage and cash ratio: an empirical study of conglomerates firm in Nigeria. *American Journal of Contemporary Management Sciences Research*, *5*(7), 76-84.

Okoye, P. V., & Idodo, M. (2025). Asset management and firm value of listed oil and gas firms in Nigeria. *Journal of Global Accounting*, *11*(2), 24-45.

Olayinka, A. A., & Mustapha, S. (2022). Analysing financial performance of listed cement industries in Nigeria: Financial Ratio Approach. *Annals of Management and Organization Research*, *3*(4), 231-244.

Omabu, S. E., Okoye, P. V., & Amahalu, N. N. (2021). Financial leverage and shareholders wealth creation of quoted industrial goods firms in Nigeria. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, *5*(6), 673-681.

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.

Purnomo, A. (2018). Influence of the ratio of profit margin, financial leverage ratio, current ratio, quick ratio against the conditions and financial distress. *Indonesian Journal of Business, Accounting and Management*, *1*(1), 9-17.

Rashid, C. A. (2021). The efficiency of financial ratios analysis to evaluate company's profitability. *Journal of Global Economics and Business*, *2*(4), 119-132.

Sinebe, M. T., & Emudainohwo, O. B. (2023). Tax planning and firms' value in Nigeria. *International Journal on Economics, Finance and Sustainable Development*, *5*(10), 24-36.

Sinebe, M. T. (2024). Board composition and market valuations in Nigeria. *Journal of the Management Sciences*, *61*(6), 35–46.

Spence, M. (1978). Job market signaling. In *Uncertainty in economics*. *Academic Press*, 281-306.

Susanti, M., Samara, A., & Hakim, M. Z. (2022). Pengaruh Earning Per Share (DTE), Dividen Payout Ratio (DPR) Dan Return on Aset (ROA) terhadap Nilai Perusahaan (Tobins' Q) pada Perusahaan Sektor Consumer Non-Cyclicals di Indonesia. *Journal of Accounting, Finance, Taxation, and Auditing (JAFTA)*, *4*(1), 29-55.

Susanti, W., Maieva, A. T., Triharyati, E., Nurhayati, Y., & Kesuma, I. M. (2025). Financial performance as a determinant of firm value: the moderating influence of good corporate governance in Indonesian LQ45 Companies. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi dan Bisnis*, *13*(2), 1949-1962.

Taiwo, O. J., Owowlabi, B. A., Adedokun, Y., & Ogundajo, G. (2022). Sustainability reporting and market value growth of quoted companies in Nigeria. *Journal of Financial Reporting and Accounting*, *20*(3/4), 542-557.