



Driving Nvidia's Market Value: The Roles of ROA, Current Ratio, and Debt to Equity Ratio

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ABSTRACT

Keywords:

Stock Price; Return on Assets; Current Ratio; Debt to Equity Ratio

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This study aims to examine the effects of Return on Assets (ROA), Current Ratio (CR), and Debt to Equity Ratio (DER) on stock prices during the period 2015–2025. The research employed a quantitative explanatory approach using quarterly financial statement and stock price data, resulting in 44 observations. Data were analyzed using multiple linear regression with HAC (Newey–West) standard errors to address autocorrelation issues in time-series data. Prior to hypothesis testing, classical assumption tests including normality, multicollinearity, heteroscedasticity, and autocorrelation tests were conducted. The findings reveal that Return on Assets (ROA) has a positive and significant effect on stock prices, indicating that profitability remains a key factor influencing investor valuation. Debt to Equity Ratio (DER) also demonstrates a positive and significant effect, suggesting that leverage is perceived as a strategic financing instrument supporting growth opportunities. In contrast, Current Ratio (CR) does not significantly affect stock prices, implying that liquidity information is less relevant to investors compared to profitability and growth prospects. Simultaneously, ROA, CR, and DER significantly influence stock prices, with an adjusted R^2 of 72.49%. The study contributes to the literature by highlighting the differing relevance of financial ratios in technology-driven firms and supports Signaling Theory, Trade-off Theory, and Adaptive Market Hypothesis in explaining investor behavior during periods of technological transformation.

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INTRODUCTION

The rapid advancement of digital technology and Artificial Intelligence (AI) has transformed economic activities, business models, and investment behavior worldwide. The increasing adoption of AI, cloud computing, and high-performance computing systems has generated unprecedented demand for semiconductor products, making technology firms central actors in global

financial markets. This issue is important because stock market performance influences investment decisions, wealth creation, pension funds, and economic growth. According to PwC (2018), AI is expected to contribute trillions of dollars to the global economy, while semiconductor companies have become strategic enablers of technological transformation. As investors increasingly allocate capital to technology firms, understanding the determinants of stock prices becomes essential for both individual and institutional stakeholders. Stock prices serve as a reflection of market expectations regarding a company's future performance and sustainability (Bodie et al., 2021). Therefore, identifying the financial factors that influence stock prices is not merely a corporate concern but also a societal necessity because investment efficiency contributes to broader economic stability and capital market development.

Despite the increasing sophistication of financial markets, investors continue to face substantial challenges in evaluating technology companies whose stock prices fluctuate dramatically. Traditional financial theory suggests that stock prices are influenced by firm fundamentals, particularly profitability, liquidity, and leverage indicators. The Efficient Market Hypothesis developed by Eugene F. Fama argues that stock prices incorporate available information efficiently, while Signaling Theory proposed by Michael Spence explains that financial information serves as a signal regarding future corporate prospects. In practice, however, market reactions often deviate from theoretical expectations. Investors frequently encounter uncertainty when interpreting financial reports because stock prices may rise despite deteriorating financial ratios or decline despite strong earnings performance. This problem is particularly evident in technology firms operating in innovation-intensive industries. Consequently, understanding whether financial ratios remain relevant predictors of stock prices has become increasingly important. The issue is not only academic but also practical because inaccurate investment assessments can lead to inefficient capital allocation and increased market risk.

Financial ratio analysis remains one of the most widely used approaches for evaluating corporate performance and predicting market valuation. Profitability is commonly measured through Return on Assets (ROA), which reflects management's ability to generate earnings from available assets (Fahmi, 2020; Hery, 2023). According to Signaling Theory, higher profitability sends positive signals regarding future growth opportunities and should attract investor demand, thereby increasing stock prices. Liquidity, measured by the Current Ratio (CR), represents a firm's capacity to fulfill short-term obligations and is associated with financial flexibility and operational stability. Firms with stronger liquidity are generally perceived as less risky by investors. Meanwhile, leverage, measured through the Debt-to-Equity Ratio (DER), reflects capital

structure decisions and financial risk exposure (Sujarweni, 2022; Darmawan, 2020). Trade-off theory suggests that debt can create value through tax advantages but may also increase financial distress risk. Therefore, ROA, CR, and DER theoretically influence stock prices through different channels, making their simultaneous examination essential for understanding market valuation mechanisms.

Previous studies have extensively examined the relationship between financial ratios and stock prices, producing generally supportive but inconsistent findings. Research conducted by Handayani (2021), Hardianti et al. (2023), Mujino et al. (2021), and Nugraha and Artini (2022) found that profitability indicators significantly and positively influence stock prices, suggesting that investors reward firms capable of generating sustainable earnings. Similarly, studies by Lubis et al. (2021), Yogiani et al. (2021), and Surbakti et al. (2023) reported that liquidity and profitability contribute positively to market valuation. Furthermore, Partomuan (2021), Nuryani et al. (2020), and Aryani et al. (2024) identified significant relationships between leverage-related indicators and stock prices. These findings support the argument that investors utilize accounting information as an important basis for investment decisions. However, most of these studies were conducted in emerging markets, particularly Indonesia, and primarily focused on manufacturing, banking, property, or consumer goods sectors, limiting their applicability to highly innovative global technology companies.

Although prior studies have enriched the understanding of financial ratio effects on stock prices, empirical inconsistencies remain unresolved. Mahendra and Sahibuddin (2022) reported that profitability and liquidity did not significantly affect firm value, while Silkfan and Azwir (2022) and Nurhasanah and Metta (2020) found contrasting results regarding the impact of leverage. Similar inconsistencies are observed in studies examining ROA, CR, and DER, where some researchers identified positive effects, whereas others reported insignificant relationships. Furthermore, existing studies predominantly focus on companies listed on the Indonesia Stock Exchange, leaving a substantial gap regarding technology firms listed on global exchanges such as NASDAQ. The characteristics of technology companies differ considerably from conventional firms because they rely heavily on innovation, research and development investment, intangible assets, and future growth expectations. Consequently, findings from traditional sectors cannot be generalized directly to technology giants. This unresolved inconsistency creates an important research gap that requires empirical investigation in a global technology context.

This study offers a distinct perspective by examining the effects of Return on Assets, Current Ratio, and Debt-to-Equity Ratio on the stock price of NVIDIA Corporation during the 2015–2025 period, which coincides with the rapid expansion of Artificial Intelligence technologies. Unlike previous studies that mainly focused on domestic companies operating in traditional industries, this research investigates a global semiconductor leader whose business performance is closely linked to AI-driven innovation and high-growth expectations. The study captures a unique environment characterized by extraordinary technological transformation, unprecedented demand for advanced computing infrastructure, and significant stock market volatility. By focusing on a leading AI-related company, this research seeks to determine whether traditional financial indicators retain explanatory power in a market environment dominated by innovation narratives, growth opportunities, and technological disruption. Therefore, the study provides a contemporary perspective on financial analysis in the era of AI-driven capital markets.

Based on the identified theoretical inconsistencies, empirical contradictions, and industrial uniqueness, an important research question emerges: Do Return on Assets, Current Ratio, and Debt-to-Equity Ratio significantly influence NVIDIA Corporation's stock price during the 2015–2025 period? This study argues that financial ratios remain relevant indicators of corporate value, even within highly innovative technology firms. However, the magnitude and direction of their influence may differ from those observed in conventional industries because investors increasingly consider growth potential, technological leadership, and future innovation capacity when evaluating firms. Therefore, profitability is expected to positively influence stock prices through favorable earnings signals, liquidity may provide confidence regarding operational resilience, and leverage may affect investor perceptions of risk and growth financing. By empirically testing these relationships, the study contributes to the refinement of financial theory in technology-intensive markets while providing practical insights for investors, corporate managers, and policymakers seeking to understand valuation dynamics in the AI era.

RESEARCH METHODS

This study employs a quantitative research design with an associative-causal approach aimed at examining the influence of financial ratios on stock prices. Quantitative research, based on the positivist paradigm, is suitable for testing hypotheses through structured data analysis (Sugiyono, 2024). An associative-causal design allows the investigation of cause-and-effect relationships between independent variables, namely Return on Assets (ROA), Current Ratio (CR), and Debt-to-Equity Ratio (DER), and the dependent variable,

stock price. This design is particularly appropriate given the need to empirically test whether financial fundamentals influence stock valuation in a high-tech global context like NVIDIA Corporation. The approach ensures systematic data collection, precise measurement, and statistically verifiable results that can be generalized to the target phenomenon within the 2015–2025 period.

The research focuses on NVIDIA Corporation, a global technology firm listed on NASDAQ, chosen due to its central role in the semiconductor industry and its responsiveness to AI-driven market dynamics. NVIDIA’s financial performance and stock price volatility provide a rich context for exploring financial ratio effects on market valuation (Mardianto et al., 2025; Jin et al., 2022). Selecting NVIDIA allows researchers to observe a real-world example of financial anomalies, where traditional financial theory may not fully explain stock price behavior, particularly during periods of rapid technological growth. The location of data collection—NASDAQ, Yahoo Finance, and Macrotrends—ensures access to reliable, official, and longitudinal financial information necessary for accurate analysis.

The population comprises all quarterly financial statements and stock prices of NVIDIA Corporation from 2015 to 2025. Since the study focuses on a single firm, the entire dataset serves as the population, ensuring comprehensive coverage of the variables of interest. A purposive sampling technique is applied to select observations that meet criteria such as complete quarterly financial reporting and consistent stock price availability. Table 1 summarizes the sample selection criteria and data points.

Table 1. Sample Selection Criteria and Observation Summary

No	Criteria	Description
1	Complete Financial Reports	Quarterly reports published consistently from 2015–2025
2	Stock Price Availability	Closing prices available and accessible from NASDAQ, Yahoo Finance, and Macrotrends
3	Consistency	Data without missing or irregular entries
Total Observations	44	Four quarterly data points per year over 11 years

Data are collected using documentation and library research methods, capturing secondary data from official financial statements and market databases (Jaya, 2026). Financial ratios—ROA, CR, and DER—are calculated according to standard formulas, and stock prices are recorded as closing values in USD. Data analysis combines descriptive statistics and verificative analysis, including multiple linear regression, t-tests, F-tests, and the coefficient of determination (R^2) to evaluate both partial and simultaneous effects of independent variables on stock prices. Classical assumption tests, including normality, multicollinearity,

heteroskedasticity, and autocorrelation checks, are conducted to ensure model validity and reliability. The analysis is executed using statistical software (EViews), enabling precise interpretation and hypothesis testing for NVIDIA's stock price determinants.

RESULTS AND DISCUSSION

Results

Overview of the Unit of Analysis

NVIDIA Corporation is a technology company founded in 1993 that specializes in the development of Graphics Processing Units (GPUs), accelerated computing, artificial intelligence (AI), data centers, gaming technologies, and high-performance computing solutions. Initially recognized as a graphics card manufacturer for the gaming industry, NVIDIA successfully transformed its business model into a leading provider of AI infrastructure, becoming one of the most influential companies in the global technology ecosystem.

The study period from 2015 to 2025 represents a critical phase in NVIDIA's strategic transformation, coinciding with the rapid advancement of artificial intelligence technologies worldwide. Between 2015 and 2021, the company's growth was primarily driven by its gaming and graphics computing segments. However, NVIDIA gradually expanded its data center business through the development of GPUs designed for machine learning and deep learning applications, laying the foundation for its future expansion.

A major turning point occurred following the launch of ChatGPT in late 2022, which accelerated the adoption of generative AI across industries. This development substantially increased demand for GPU-based computing infrastructure used in training and deploying large-scale AI models. As a dominant supplier of AI chips, NVIDIA benefited significantly from this surge in demand, particularly through its H100 GPUs and AI computing platforms.

By 2024, the data center segment had become NVIDIA's largest revenue contributor. The rapid growth of the AI industry not only strengthened the company's financial performance but also substantially increased its market capitalization and stock price. Consequently, NVIDIA provides a highly relevant case for examining the relationship between financial performance and stock price behavior during the AI-driven technological transformation era.

Descriptive Research Results

Descriptive analysis was conducted to provide an overview of the characteristics of the research variables, namely Stock Price, Return on Assets (ROA), Current Ratio (CR), and Debt-to-Equity Ratio (DER) during the 2015–2025 period. The analysis includes the mean, maximum value, minimum value, and standard deviation of each variable.

Table 2. Descriptive Statistics of Research Variables

Variable	Mean	Maximum	Minimum	Std. Dev.
Stock Price	31.51182	202.4700	0.4600	49.69909
ROA	29.56000	78.81000	7.42000	22.04879
CR	5.592273	10.29000	2.44000	2.123437
DER	0.610455	0.900000	0.360000	0.149697

Source: Processed using EViews 13

Based on Table 2, NVIDIA's stock price recorded an average value of 31.51 with a standard deviation of 49.70, indicating considerable volatility throughout the observation period. Return on Assets (ROA) had an average value of 29.56%, reflecting the company's strong ability to generate earnings from its asset base. The Current Ratio (CR) averaged 5.59, suggesting a strong liquidity position and an adequate capacity to meet short-term obligations. Meanwhile, the Debt-to-Equity Ratio (DER) averaged 0.61, indicating a relatively stable capital structure with a moderate level of debt utilization.

Stock Price Development

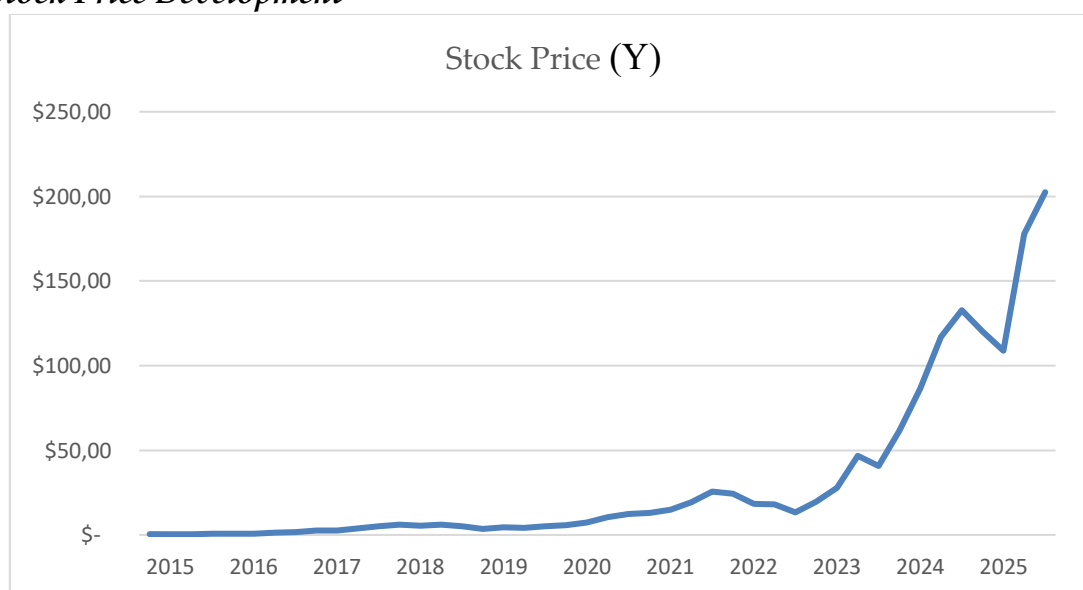


Figure 1. Stock Price Trend of NVIDIA Corporation (2015–2025)

Figure 1 illustrates the development of NVIDIA's stock price over the study period. Overall, the stock price exhibited a strong upward trend, with substantial acceleration after 2023. At the beginning of the observation period, the stock price remained below US\$1 per share. However, driven by increasing demand for AI technologies and data center solutions, the stock price rose significantly and reached US\$202.47 in the fourth quarter of 2025.

This remarkable increase reflects growing investor confidence in NVIDIA's future prospects, particularly as the company emerged as one of the primary beneficiaries of the global AI expansion. The stock price appreciation was supported by revenue growth, data center business expansion, and NVIDIA's dominant position in the AI semiconductor industry.

Return on Assets (ROA) Development

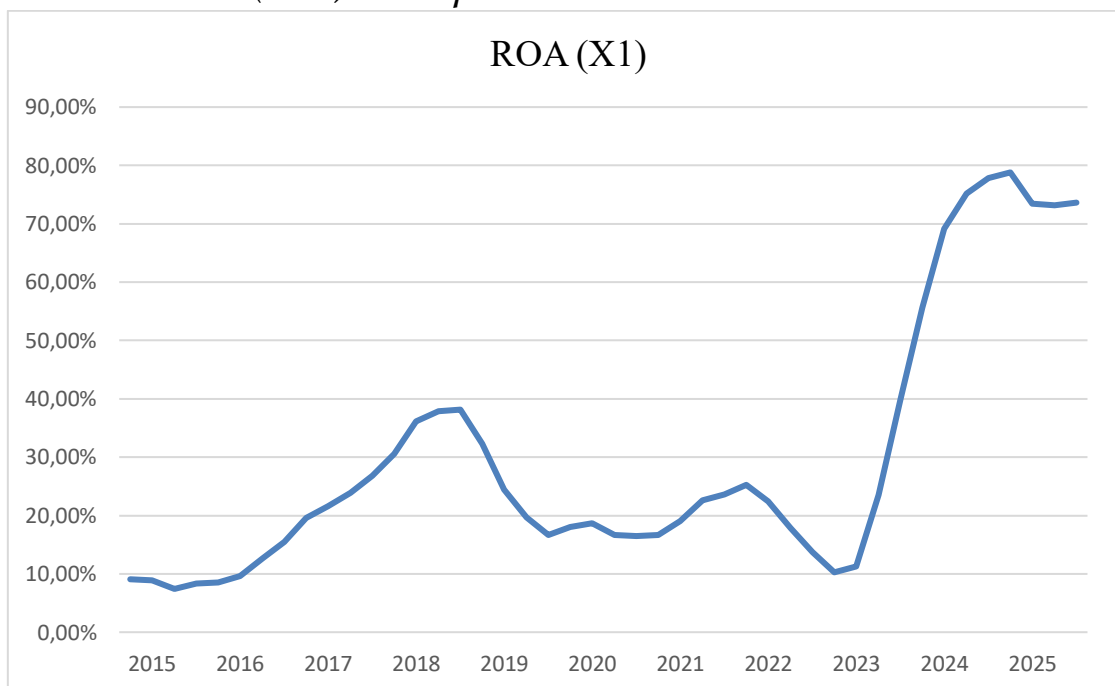


Figure 2. Return on Assets (ROA) Trend of NVIDIA Corporation (2015–2025)

Figure 2 demonstrates that NVIDIA's ROA generally increased throughout the observation period despite several short-term fluctuations. The lowest ROA was recorded at 7.42% in 2015, while the highest reached 78.81% in 2025. This improvement indicates the company's increasing efficiency in utilizing assets to generate profits.

The most significant increase occurred after 2023, when demand for AI-related products expanded rapidly. Revenue growth from the data center and AI computing segments became the primary driver of the company's enhanced profitability.

Current Ratio (CR) Development

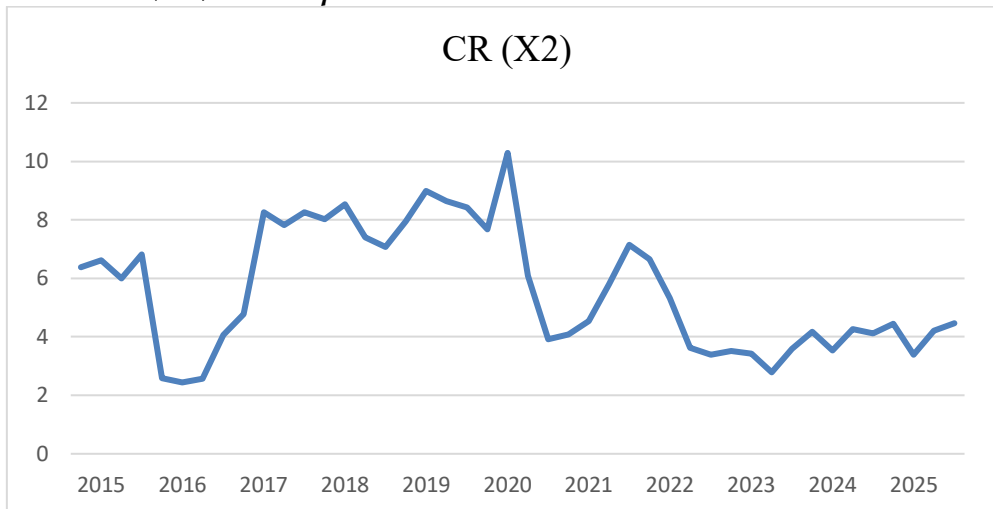


Figure 3. Current Ratio (CR) Trend of NVIDIA Corporation (2015–2025)

Figure 3 shows that NVIDIA's Current Ratio fluctuated during the study period. Nevertheless, most values remained well above 1, indicating that the company consistently maintained sufficient liquidity to meet its short-term liabilities.

Changes in the Current Ratio reflect adjustments in the management of current assets and current liabilities. Overall, NVIDIA maintained a strong liquidity position that effectively supported both operational activities and business expansion initiatives throughout the period under study.

Debt-to-Equity Ratio (DER) Development

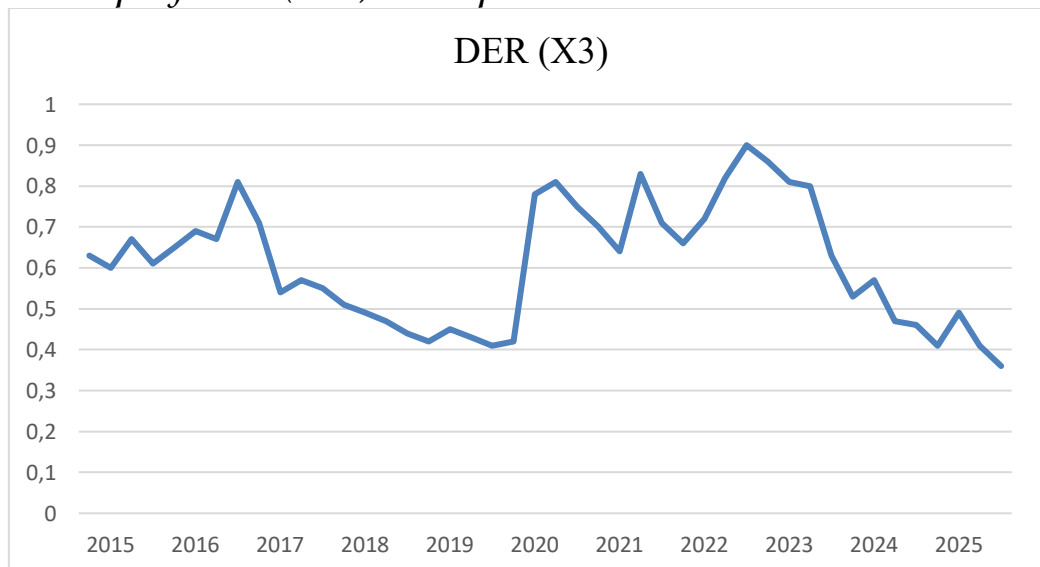


Figure 4. Debt-to-Equity Ratio (DER) Trend of NVIDIA Corporation (2015–2025)

Figure 4 indicates that NVIDIA's Debt-to-Equity Ratio remained relatively stable throughout the study period, ranging from 0.36 to 0.90. This stability suggests that the company successfully maintained a balanced financing structure between debt and equity.

Although DER increased during several periods, the company's leverage level remained relatively moderate compared with the growth of shareholders' equity. This finding indicates that NVIDIA maintained a healthy capital structure and effectively managed financing risks while supporting long-term business growth.

Classical Assumption Tests

Normality Test

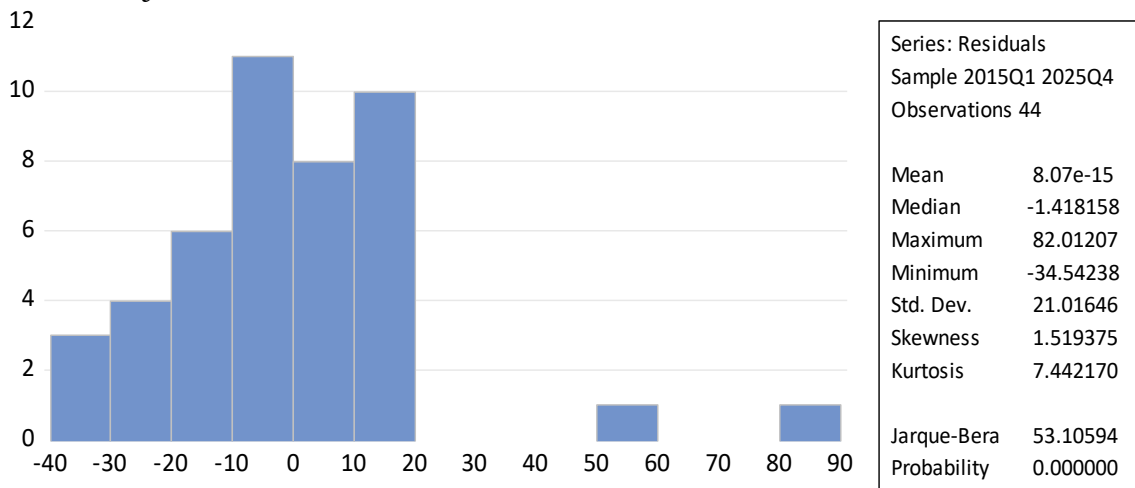


Figure 5. Normality Test Results Before LN Transformation

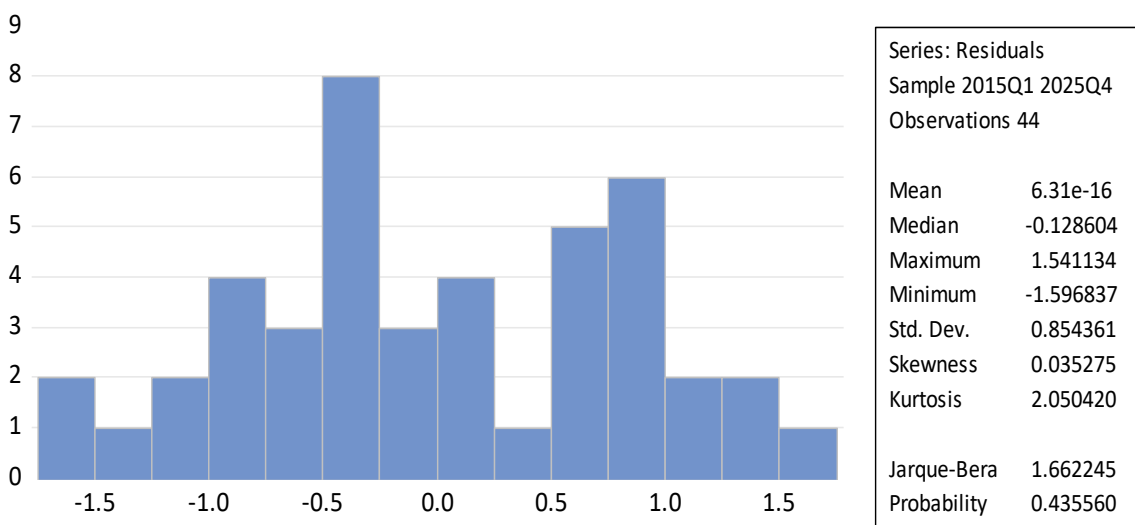


Figure 6. Normality Test Results After LN Transformation

Source: Processed Data Using EViews 13

Based on the initial testing, it was found that the residual data were not normally distributed due to the presence of extreme outliers in NVIDIA's stock price movements. Therefore, the researcher applied a Natural Logarithm (LN) transformation to the dependent variable (Y). Consequently, the multiple linear regression model used in the verificative analysis was adjusted as follows:

$$\ln(Y) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Keterangan:

- $\ln(Y)$ = Logaritma Natural dari Harga Saham
- X_1 = *Return on Assets* (ROA)
- X_2 = *Current Ratio* (CR)
- X_3 = *Debt to Equity Ratio* (DER)"

The decision criterion for the Jarque–Bera normality test is based on the Probability (Prob.) value. If the Probability value exceeds the significance level of 0.05 (> 0.05), the residuals are considered normally distributed. Based on Figure 4.6, the Jarque–Bera statistic is 1.662245 with a Probability value of 0.435560. Since this Probability value is greater than 0.05 ($0.435560 > 0.05$), H_0 is accepted. Therefore, it can be concluded that the residuals of the regression model are normally distributed and satisfy the normality assumption.

Multicollinearity Test

Table 3. Multicollinearity Test Results (Variance Inflation Factors)

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	5.023510	216.0661	NA
X1	0.000237	23.73533	5.131391
X2	0.010717	18.91317	2.099675
X3	4.761626	67.68790	3.429967

Source: Processed Data Using EViews 13

Based on the multicollinearity test results presented in Table 4.6, the Centered VIF values for the independent variables are 5.131391 for Return on Assets (X1), 2.099675 for Current Ratio (X2), and 3.429967 for Debt to Equity Ratio (X3). According to the established decision criteria, since all Centered VIF values are below 10 (< 10), it can be concluded that the regression model does not exhibit multicollinearity problems. This indicates that there is no strong linear relationship or high correlation among the independent variables. Therefore, the regression model is free from multicollinearity and is suitable for further analysis.

Heteroscedasticity Test

Table 4. Heteroscedasticity Test Results

Heteroskedasticity Test: Glejser				
Null hypothesis: Homoskedasticity				
Statistic	Value	Probability		
F-statistic	4.978286	Prob. F(3,40)		0.0050
Obs*R-squared	11.96205	Prob. Chi-Square(3)		0.0075
Scaled explained SS	5.474658	Prob. Chi-Square(3)		0.1402
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.70887	7.751759	1.381476	0.1748
X1	0.084281	0.049707	1.695551	0.0977
X2	-0.091859	0.449160	-0.204514	0.8390
X3	-9.151252	7.779587	-1.176316	0.2464
Additional Statistics	Value	Additional Statistics	Value	
R-squared	0.271865	Mean dependent var	7.100097	
Adjusted R-squared	0.217255	S.D. dependent var	5.528132	
S.E. of regression	4.890898	Akaike info criterion	6.099137	
Sum squared resid	956.8354	Schwarz criterion	6.261336	
Log likelihood	-130.1810	Hannan-Quinn criter.	6.159288	
F-statistic	4.978286	Durbin-Watson stat	1.720763	
Prob(F-statistic)	0.004987			

Source: Processed Data Using EViews 13

Based on the Glejser heteroscedasticity test results shown in Table 4.7, all independent variables have probability values greater than 0.05. The probability values are 0.0977 for Return on Assets (X1), 0.8390 for Current Ratio (X2), and 0.2464 for Debt to Equity Ratio (X3). Therefore, it can be concluded that the regression model does not suffer from heteroscedasticity problems.

Autocorrelation Test

Table 5. Autocorrelation Test Results

Breusch-Godfrey Serial Correlation LM Test:			
Null hypothesis: No serial correlation at up to 2 lags			
Statistic	Value	Probability	Statistic
F-statistic	27.74723	Prob. F(2,38)	0.0000
Obs*R-squared	26.11659	Prob. Chi-Square(2)	0.0000
Test Equation:			
Dependent Variable: RESID			
Method: Least Squares			
Date: 05/27/26 Time: 22:23			
Sample: 2015Q1 2025Q4			
Included observations: 44			
Presample missing value lagged residuals set to zero.			

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.445615	1.059329	2.308646	0.0265
X1	-0.011678	0.006468	-1.805551	0.0789
X2	-0.096663	0.056709	-1.704538	0.0964
X3	-2.524680	1.073222	-2.352430	0.0239
RESID(-1)	0.724924	0.153765	4.714499	0.0000
RESID(-2)	0.139441	0.170528	0.817705	0.4186
Additional Statistics	Value	Additional Statistics	Value	
R-squared	0.593559	Mean dependent var	6.31E-16	
Adjusted R-squared	0.540080	S.D. dependent var	0.854361	
S.E. of regression	0.579406	Akaike info criterion	1.872497	
Sum squared resid	12.75703	Schwarz criterion	2.115796	
Log likelihood	-35.19493	Hannan-Quinn criter.	1.962724	
F-statistic	11.09889	Durbin-Watson stat	1.341198	
Prob(F-statistic)	0.000001			

Source: Processed Data Using EViews 13

Based on the Breusch–Godfrey Serial Correlation LM Test, the Prob. Chi-Square(2) value is 0.0000, which is lower than 0.05. This indicates that the regression model statistically contains autocorrelation, a common phenomenon in stock price time-series data characterized by high volatility, such as NVIDIA Corporation. To prevent biased estimation caused by this violation, the researcher employed HAC (Newey–West) Standard Errors in estimating the multiple linear regression model. According to econometric theory, the Newey–West correction automatically adjusts the variance and standard errors without altering the original data, ensuring that the partial significance test (t-test) and simultaneous significance test (F-test) remain valid, consistent, and reliable for drawing conclusions.

Multiple Linear Regression Model

To determine the direction and magnitude of the influence of the independent variables, namely Return on Assets (X1), Current Ratio (X2), and Debt to Equity Ratio (X3), on the dependent variable Stock Price (Y), which has been transformed into its Natural Logarithm (ln(Y)), multiple linear regression analysis was conducted using EViews software. HAC (Newey–West) Standard Errors were applied to ensure consistent and unbiased estimation results despite the presence of residual variance issues. The regression results are presented in Table 4.9.

Table 6. Multiple Linear Regression Analysis

HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.960019	2.241319	-1.766825	0.0849

X1	0.083250	0.015410	5.402438	0.0000
X2	0.046790	0.103522	0.451977	0.6537
X3	5.728182	2.182115	2.625060	0.0122
Additional Statistics	Value	Additional Statistics	Value	
R-squared	0.744103	Mean dependent var	2.259301	
Adjusted R-squared	0.724911	S.D. dependent var	1.688921	
S.E. of regression	0.885821	Akaike info criterion	2.681904	
Sum squared resid	31.38714	Schwarz criterion	2.844103	
Log likelihood	-55.00188	Hannan-Quinn criter.	2.742055	
F-statistic	38.77106	Durbin-Watson stat	0.463816	
Prob(F-statistic)	0.000000	Wald F-statistic	24.17609	
Prob(Wald F-statistic)	0.000000			

Source: Processed Data Using EViews 13

Based on Table 4.9, the multiple linear regression equation can be formulated as follows:

$$\ln(Y) = -3.960019 + 0.083250(X_1) + 0.046790(X_2) + 5.728182(X_3) + e$$

The constant (α) value of -3.960019 indicates that if Return on Assets (X1), Current Ratio (X2), and Debt to Equity Ratio (X3) are assumed to be constant or equal to zero, the Natural Logarithm of NVIDIA's stock price would be -3.960019.

The coefficient of Return on Assets (X1) is 0.083250, indicating that every one-unit increase in ROA will increase the Natural Logarithm of Stock Price by 0.083250, or approximately 8.33%, assuming other variables remain constant. This variable has a positive and statistically significant effect.

The coefficient of Current Ratio (X2) is 0.046790, indicating that every one-unit increase in CR will increase the Natural Logarithm of Stock Price by 0.046790, or approximately 4.68%, assuming other variables remain constant. However, this effect is not statistically significant.

The coefficient of Debt to Equity Ratio (X3) is 5.728182, indicating that every one-unit increase in DER will increase the Natural Logarithm of Stock Price by 5.728182, assuming other variables remain unchanged. This variable has a positive and statistically significant effect on stock price.

Hypothesis Testing

Partial Significance Test (t-test)

The t-test was conducted to determine whether each independent variable individually has a significant effect on the dependent variable.

The test results show that the significance value (Prob.) for Return on Assets (X1) is 0.0000. Since this value is lower than 0.05 ($0.0000 < 0.05$), H_0 is rejected and H_1 is accepted. Therefore, Return on Assets (X1) has a positive and significant effect on NVIDIA Corporation's stock price on a partial basis.

The significance value (Prob.) for Current Ratio (X2) is 0.6537. Since this value is greater than 0.05 ($0.6537 > 0.05$), H_0 is accepted and H_2 is rejected. Therefore, Current Ratio (X2) does not have a significant effect on NVIDIA Corporation's stock price on a partial basis.

The significance value (Prob.) for Debt to Equity Ratio (X3) is 0.0122. Since this value is lower than 0.05 ($0.0122 < 0.05$), H_0 is rejected and H_3 is accepted. Therefore, Debt to Equity Ratio (X3) has a positive and significant effect on NVIDIA Corporation's stock price on a partial basis.

Simultaneous Significance Test (F-test)

Based on the results presented in Table 4.9, the Prob(F-statistic) value is 0.000000. Since this probability value is far below the significance level of 0.05 ($0.000000 < 0.05$), H_0 is rejected and H_4 is accepted. Therefore, it can be concluded that Return on Assets (ROA), Current Ratio (CR), and Debt to Equity Ratio (DER) simultaneously affect NVIDIA Corporation's stock price during the 2015–2025 period.

Coefficient of Determination (R²)

Table 4.9 shows an Adjusted R-squared value of 0.724911. This indicates that 72.49% of the variation in NVIDIA Corporation's stock price can be explained by the three independent variables included in the model, namely Return on Assets (ROA), Current Ratio (CR), and Debt to Equity Ratio (DER). The remaining 27.51% ($100\% - 72.49\%$) is explained by other factors outside the scope of this study that were not examined by the researcher.

Discussion

The findings indicate that Return on Assets (ROA) has a positive and significant effect on NVIDIA Corporation's stock price during the 2015–2025 period. This result confirms that profitability remains a critical factor in investors' valuation decisions, particularly in technology-intensive industries characterized by rapid innovation and strong growth expectations. The substantial increase in NVIDIA's profitability during the Artificial Intelligence (AI) boom demonstrates the company's ability to utilize its assets efficiently to generate earnings and capture emerging market opportunities (Tohet & Nuraini, 2026; Tsoka, 2026). As demand for AI-related infrastructure expanded, investors responded positively to the company's improving financial performance. This finding is consistent with previous studies by Maulana and Sutanti (2026) and Wiyati et al. (2021), which reported that higher profitability significantly enhances investor

confidence and contributes to stock price appreciation. From a theoretical perspective, the result supports Signaling Theory, suggesting that strong profitability conveys positive information regarding future business prospects, thereby increasing market demand for the company's shares and strengthening firm valuation.

In contrast, Current Ratio (CR) was found to have no significant effect on NVIDIA's stock price. This finding suggests that liquidity is not a primary consideration for investors when assessing a mature global technology company with substantial cash reserves and a strong ability to meet short-term obligations. As NVIDIA operates within a high-growth and innovation-driven environment, investors appear to focus more on strategic indicators related to future expansion than on short-term liquidity conditions. This result aligns with studies conducted by Permatasari and Mukaram (2019) and Mahendra and Sahibuddin (2022), which found that liquidity ratios often have limited explanatory power when profitability and growth opportunities dominate investment decisions. In NVIDIA's context, market participants are more concerned with the company's AI leadership, technological capabilities, and revenue growth potential (Nurhaida & Asdiqoh, 2026; Tabina & Dora, 2025). Consequently, fluctuations in liquidity do not provide sufficiently valuable information to influence investor perceptions or materially affect stock price movements.

The study further demonstrates that Debt-to-Equity Ratio (DER) positively and significantly affects stock price performance (Fadere et al., 2024; Khair, 2025). This finding indicates that investors do not necessarily perceive leverage as a source of financial distress. Instead, debt utilization is viewed as a strategic financing mechanism that enables firms to support innovation, technological development, and market expansion. During the AI boom, NVIDIA intensified investments in infrastructure and product development to maintain its competitive position within the semiconductor and artificial intelligence industries. As a result, leverage was interpreted as an instrument supporting future growth rather than as an indicator of financial risk. This finding is consistent with the studies of Yogiani et al. (2021) and Aryani et al. (2024), which reported that productive leverage can increase firm value when debt is allocated efficiently to profitable projects. The result also supports Trade-off Theory, suggesting that firms may maximize market value by balancing the benefits and costs of debt financing within an optimal capital structure.

Simultaneously, ROA, CR, and DER significantly influence NVIDIA's stock price, indicating that financial fundamentals remain relevant in explaining stock valuation. However, the findings reveal that investors do not assign equal importance to all financial indicators. Profitability and leverage emerge as dominant determinants, while liquidity plays a comparatively minor role. This

result is consistent with the findings of Hardianti et al. (2023) and Nugraha and Artini (2022), who emphasized that financial performance remains an important driver of market valuation. Nevertheless, the present study demonstrates that investor interpretation of financial information varies according to industry characteristics and growth expectations. In highly innovative technology firms, market participants tend to prioritize indicators that reflect future earnings potential and competitive advantages. Therefore, the relationship between financial ratios and stock prices in technology companies differs from patterns commonly observed in conventional industries, where liquidity often receives greater consideration from investors and financial analysts.

A notable contribution of this study lies in its ability to explain the existence of financial anomalies during the AI Boom period. The extraordinary increase in NVIDIA's stock price cannot be fully explained by traditional financial indicators alone. Investor expectations regarding artificial intelligence adoption, technological leadership, and future growth opportunities appear to play a substantial role in shaping market behavior. This observation supports the Adaptive Market Hypothesis (AMH), which argues that investor decision-making evolves in response to changing economic, technological, and informational environments. As artificial intelligence transformed business models and investment trends worldwide, investors adapted their evaluation criteria by assigning greater importance to growth-oriented signals than to conventional liquidity measures. Consequently, market valuation became increasingly influenced by expectations about future innovation and competitive positioning. The findings suggest that stock price movements in technology firms are shaped not only by financial performance but also by dynamic market perceptions regarding long-term growth potential.

The novelty of this research stems from its focus on NVIDIA Corporation as a global technology leader operating within the AI-driven semiconductor industry during the 2015–2025 period. Unlike most previous studies that examined firms listed on emerging stock exchanges or companies operating in traditional industries, this study investigates financial ratio behavior within a high-growth environment characterized by innovation, disruption, and exceptional investor expectations. Consequently, the research extends the application of Signaling Theory, Trade-off Theory, and Adaptive Market Hypothesis in explaining stock valuation within AI-driven capital markets. The study contributes to the literature by providing empirical evidence that the determinants of stock prices in global technology firms may differ substantially from those observed in conventional sectors. These findings enrich contemporary discussions in finance, investment, and capital market research while offering a broader understanding of how technological transformation influences investor behavior and market valuation mechanisms.

CONCLUSION

This study provides important evidence that financial ratios continue to play a significant role in explaining stock price movements in global technology companies. The findings reveal that Return on Assets (ROA) and Debt-to-Equity Ratio (DER) have a positive and significant effect on NVIDIA Corporation's stock price, while Current Ratio (CR) does not significantly influence stock price performance during the 2015–2025 period. The main lesson derived from this research is that investors in the AI-driven technology sector tend to place greater emphasis on profitability and growth-financing capacity than on short-term liquidity conditions. These results contribute to the literature on capital markets by extending the application of Signaling Theory, Trade-off Theory, and Adaptive Market Hypothesis (AMH) within the context of global technology firms. Unlike most previous studies that focused on emerging-market companies and conventional industries, this study demonstrates that investor responses to financial information may differ substantially in highly innovative firms operating in rapidly evolving technological environments.

Despite its contributions, this study has several limitations. First, the analysis is restricted to a single company, NVIDIA Corporation, which may limit the generalizability of the findings to other technology firms or industries. Second, the study only examines three financial ratios, whereas stock prices may also be influenced by other factors such as earnings per share, firm size, research and development expenditure, macroeconomic conditions, investor sentiment, and artificial intelligence market expectations. Third, the study relies on historical financial data and therefore may not fully capture behavioral and external market dynamics. Future research is recommended to include multiple global technology companies, extend the observation period, incorporate additional financial and non-financial variables, and employ more advanced analytical approaches to provide a deeper understanding of stock valuation in the era of artificial intelligence and technological transformation.

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