

The Data Paradox in Equity Valuation: A Panel Data Study of IDX Large-Cap Stocks

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ABSTRACT

Purpose – This paper empirically investigates the determinants of equity valuation during anomalous macroeconomic periods, focusing on the stock price levels of large-capitalization ("Big Cap") companies listed on the Indonesia Stock Exchange (IDX).

Design/methodology/approach – The research utilizes a panel data regression model on a purposive sample of 16 Big Cap firms over the 2019–2024 period, yielding 96 firm-year observations. The study analyzes the impact of four fundamental variables: Return on Equity (ROE), Current Ratio (CR), Earnings per Share (EPS), and Debt to Equity Ratio (DER).

Finding/Results – The empirical findings reveal a nuanced decoupling effect. Return on Equity (ROE), Current Ratio (CR), and Debt to Equity Ratio (DER) exhibited no statistically significant influence on closing stock prices at the 5% level. Conversely, Earnings per Share (EPS) demonstrated a highly significant positive effect on equity valuation ($p = 0.0000$).

Originality/Value – Rather than confirming conventional linear relationships, the study highlights a sustained empirical anomaly during the 2019–2024 window where traditional metrics (ROE and CR) lacked predictive power. The paper proposes the "Data Paradox" as a theoretical framework to explain this decoupling, underscoring the need for future models to explicitly test macroeconomic stress interactions in emerging markets.

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1. Introduction

The primary objective of a publicly traded corporation is the maximization of shareholder wealth, a metric intrinsically linked to equity valuation. However, emerging capital markets, such as the Indonesia Stock Exchange (IDX), exhibit inherent volatility driven by a complex confluence of macroeconomic shifts, institutional capital flows, and firm-specific pressures. To navigate these complexities and mitigate investment risk, market participants traditionally synthesize two distinct analytical frameworks: fundamental analysis, which evaluates a firm's financial health, and technical analysis, which interrogates historical market liquidity and price trajectories.

This study aims to determine the effect of fundamental factors on stock prices over a six-year observation period from 2019 to 2024. The independent variables analyzed include Return On Equity (ROE), Current Ratio (CR), Earning per Share (EPS), and Debt to Equity Ratio (DER). The research focuses on large-capitalization companies listed on the Indonesia Stock Exchange (IDX). Out of the total population of large-capitalization companies currently listed on the IDX, the researchers applied the purposive sampling criteria to establish a final sample size of 16 companies, yielding 96 observations for this study.

The core objective of this study is to empirically investigate the drivers of equity valuation (measured by closing stock price levels) by analyzing the influence of five specific independent variables: Return on Equity (ROE), Current Ratio (CR), Earnings per Share (EPS) and Debt to Equity Ratio (DER). The primary contribution of this study is providing a rigorous empirical examination of the 2019–2024 "Data Paradox" in an emerging market context, exploring how conventional valuation metrics behave under potential macroeconomic stress.

Current scholarship exhibits significant inconsistencies regarding the primary determinants of equity pricing during such periods of systemic anomaly. While seminal models posit that variables such as profitability, liquidity, and trading volume exert a statistically significant and linear influence on stock prices, contemporary empirical evidence remains inconclusive. The persistent disparity in academic findings creates a critical research gap, highlighting the necessity to re-examine the robustness of these variables under stress-tested market conditions.

To address this empirical gap, this research focuses exclusively on "Big Cap" corporations—defined as market leaders with a capitalization exceeding Rp10 trillion. This cohort was purposively selected for its high liquidity, financial resilience, and relative resistance to speculative manipulation, thereby providing a stabilized environment to isolate the true determinants of price formation. The core objective of this study is to empirically investigate the drivers of stock price levels by analyzing the influence of five specific independent variables: four fundamental metrics (Return on Equity, Current Ratio, Earnings per Share, and Debt to Equity Ratio).

The primary contribution of this study is twofold. First, it provides a rigorous empirical observation of equity pricing behavior in an emerging market spanning the highly volatile 2019–2024 period, highlighting a distinct decoupling between localized accounting performance (profitability and liquidity) and market valuation. Second, by identifying this lack of statistical significance in conventionally strong predictors, the study formally operationalizes the "Data Paradox" not as a proven macroeconomic certainty, but as a critical theoretical hypothesis. This research lays the groundwork for future structural break testing, offering context-sensitive insights into which financial signals—specifically EPS—remain credible during periods of prolonged uncertainty.

2. Literature Review & Hypothesis Development

This research constructs a robust analytical framework designed to evaluate the determinants of equity valuation strictly through fundamental market indicators. The framework is theoretically

grounded in two foundational financial paradigms. First, Signaling Theory posits that asymmetric information exists between corporate insiders and external investors; therefore, published financial statements serve as credible signals regarding a firm's unobservable true value. Positive signals (e.g., high profitability and robust liquidity) attract investors, whereas negative signals (e.g., excessive leverage) trigger capital flight. Second, the Efficient Market Hypothesis (EMH) dictates that equity prices rapidly incorporate all publicly available financial information. Consequently, any published shifts in foundational metrics—specifically ROE, CR, EPS, and DER—should theoretically result in an immediate and corresponding adjustment in the firm's stock price. (e.g., Astuty, 2017; Fauzia, 2019; Kasmir, 2018; Kumar, 2017; Nugraha, 2017) provides evidence that fundamental variables—namely ROE and EPS—alongside technical trading volume, exert a strongly significant influence on corporate stock prices. Significant Influence Rejected: Conversely, the text notes that other contemporary studies have concluded the exact opposite, finding that these same fundamental and technical variables do not have a statistically significant impact on stock prices. This prominent disparity in academic findings, combined with the real-world data anomalies of 2020, justifies the need to re-examine these variables using a robust panel data regression model specifically targeting highly liquid, large-capitalization companies.

The Concept of Stock Price The stock price represents a reflection of a company's corporate value and its future prospects. It is defined as the market value of a share expressed in currency during stock exchange transactions, serving as a primary indicator of successful corporate management. The formation of a stock's price is highly volatile and is fundamentally dictated by the economic law of supply and demand; excessive market demand will drive the stock price up, whereas excessive supply will cause it to fall. While stock prices can be categorized into various types—such as nominal price, market price, opening price, highest/lowest price, and average price—this theoretical framework explicitly utilizes the Closing Price (the final price established at the end of the daily trading session) as the primary benchmark for valuation. The fluctuations in stock prices are theoretically driven by three main categories: Fundamental Factors: Internal financial metrics reflecting corporate performance. Technical Factors: Historical market data and price trend movements. Socio-Political Factors: Macroeconomic conditions (e.g., inflation) and political stability.

Fundamental analysis serves as a comprehensive valuation framework designed to ascertain the intrinsic value of a firm through a meticulous examination of its financial statements and broader business prospects. The overarching objective of this methodology is to identify pricing discrepancies, determining whether an asset is currently undervalued—presenting a strategic buying opportunity—or overvalued, thereby signaling a potential divestment. Diverging from the intrinsic focus of fundamental analysis, technical analysis posits that future price trajectories can be forecasted by examining historical market patterns, which are driven primarily by the dynamics of supply and demand. Rather than interrogating a firm's internal financial health, this approach relies on market sentiment and historical price data to identify trading opportunities.

Table 1. Summary of Previous Research

Author (Year)	Research Title	Analysis Technique	Research Results
(Rane & Gupta, 2021)	Impact of Financial Ratios on Stock Price: Evidence from Indian Listed Banks on NSE	Linear Regression	Earnings per share, net profit margin, and net interest margin exhibit a significant relationship with stock prices, whereas dividend payout ratio does not.

Shintia (2022)	The Influence of CR, DER, ROA, EPS, and PER on Stock Prices of Pharmaceutical Sub-Sector Companies	Multiple Linear Regression (SPSS)	CR, ROA, EPS, and PER significantly affect stock prices, while DER has no significant effect.
Adinda & Debbi (2021)	The Influence of Fundamental and Technical Factors on Stock Prices in Property and Real Estate Companies	Panel Data Regression (EViews)	CR, EPS, ROA, and Trading Volume have no significant partial influence, while Bid-Ask Spread exerts a negative significant influence.
(Veeravel et al., 2024)	Does internal carbon pricing improve firm performance? Evidence from indian listed companies	Pooled ordinary least squares (Pooled OLS) model	Firm performance is measured through return on assets (ROA), return on equity (ROE), return on capital employed (ROCE), and earnings per share (EPS). Employing Panel-Corrected Standard Errors (PCSE) and two-stage least squares (2SLS), the analysis reveals consistent positive associations for ROA, ROE, and EPS, with ROCE positive but insignificant
Nopi & Clarashinta (2022)	Analysis of the Influence of ROE, EPS, and DER on JII-70 Stock Prices During the COVID-19 Pandemic	Panel Data Regression (EViews)	Only DER exhibits a significant partial influence on the stock prices of JII-70 companies during the pandemic; ROE and EPS do not.
Zakaria (2021)	Analysis of the Influence of DER, ROA, and EPS on Stock Prices through Dividend Policy	SEM AMOS Analysis	DER, ROA, and EPS do not have a direct or indirect significant effect on stock prices through dividend policy.
Aznedra & Rizki (2022)	The Influence of Fundamental Factors on Stock Prices in Food and Beverage Companies	Multiple Regression	ROA and ROE have a significant effect on stock prices, while other variables do not show significance.
Putu (2022)	The Influence of Fundamental Factors on Stock Prices of Pharmaceutical Sub-Sector Companies	Panel Data Regression (EViews)	DER has a significant effect on stock prices, whereas CR, ROA, and EPS exhibit no significant effect.

The inconsistencies observed in these findings are partly attributed to the diversity in methodologies, which include Multiple Linear Regression, Panel Data Regression, and Structural Equation Modeling (SEM). The variation in software application (SPSS vs. EViews) and the distinct market dynamics of the sectors analyzed—ranging from banking in India to pharmaceutical and consumer goods in Indonesia—underscore the complexity of modeling equity price formation.

2.1 Conceptual Framework And Hypothesis Development

This research constructs a robust analytical framework designed to evaluate the determinants of equity valuation by synthesizing fundamental and technical market indicators. Grounded in Signaling Theory—which posits that corporate financial decisions send credible signals to investors regarding a firm's true value—and the Efficient Market Hypothesis (EMH), this model isolates five distinct independent variables to assess their predictive power on the dependent variable, Stock Price.

2.2 The Impact of Return On Equity (ROE) on Stock Price

Return on Equity is a critical fundamental indicator that measures a company's ability to generate net income using shareholders' equity. From the perspective of Signaling Theory, a higher ROE signals managerial efficiency and strong future profit prospects. This acts as a positive signal to the market, inherently attracting investor interest and driving up equity valuation. While empirical literature exhibits some divergence, the overarching financial consensus indicates that capital efficiency is a primary driver of market value. Empirical estimations using cross-sectional and panel regression models demonstrate that specific financial ratios significantly influence firm value. Metrics such as total assets, asset turnover, net income, return on assets, and the working capital ratio exhibit a significant positive effect. Conversely, receivables days and the cash conversion cycle demonstrate a significant negative impact. Specifically, a 1% increase in receivables days corresponds to a 0.49% decrease in firm value, while a 1% extension in the cash conversion cycle reduces corporate valuation by 0.63%. Return on Equity is a critical profitability indicator that measures a company's ability to generate net income using shareholders' equity. From the perspective of Signaling Theory, a higher ROE signals managerial efficiency and strong future profit prospects. This acts as a positive signal to the market, inherently attracting investor interest and driving up equity valuation. Effective working capital and asset management serve as fundamental value drivers for companies, logically corresponding to higher equity pricing. These findings emphasize that effective working capital management—particularly regarding receivables and the cash conversion cycle acts as a fundamental value driver for companies (Carlos et al., 2024).

H1: Return On Equity (ROE) has a positive and significant effect on Stock Price.

2.3 The Impact of Current Ratio (CR) on Stock Price

The Current Ratio measures a firm's short-term liquidity by comparing current assets to current liabilities. Adequate liquidity provides a safety net against macroeconomic shocks, reducing the firm's default risk. A robust CR signals to investors that the firm can comfortably meet its short-term obligations without liquidating long-term assets. Consequently, market confidence in the firm's financial stability increases, which theoretically elevates its stock price. A firm's liquidity level can have a positive impact on its value. Current ratio (CR) is among the most widely used measures for evaluating a firm's liquidity position. CR represents a company's ability to cover its short-term liabilities with its current assets. The Current Ratio measures a firm's short-term liquidity by comparing current assets to current liabilities. Adequate liquidity provides a safety net against macroeconomic shocks, reducing the firm's default risk. A robust CR signals to investors that the firm can comfortably meet its short-term obligations. Consequently, market confidence in the firm's financial stability increases, which theoretically elevates its stock price. A higher current ratio is typically interpreted as a sign of better liquidity management, which can positively influence investor perception (Wulandari & Roslina, 2023). Maintaining sufficient liquidity reduces the firm's risk of default and enables the firm to take advantage when there is any alternative investment opportunity (Yucel et al., 2024).

H2: Current Ratio (CR) has a positive and significant effect on Stock Price.

2.4 The Impact of Earnings Per Share (EPS) on Stock Price

Earnings Per Share represents the portion of net profit allocated to each outstanding share of common Earning Per Share (EPS) is a fundamental financial metric representing the portion of a company's profit allocated to each outstanding share of common stock. It serves as a direct indicator of corporate profitability and financial health. A higher EPS signals strong management performance and positive future growth potential, which naturally attracts investor interest. The resulting increase in demand for the company's shares subsequently drives the stock price upward. This mechanism is supported by Dewi and Artini (2016), who found that EPS exerts a significant positive effect on stock prices, as investors heavily rely on this profitability metric to assess company valuation. Similarly, Dwijayati and Robiyanto (2020) demonstrated that improvements in EPS consistently lead to an appreciation in stock prices, reinforcing the premise that a company's bottom-line profitability is a primary driver of market valuation.

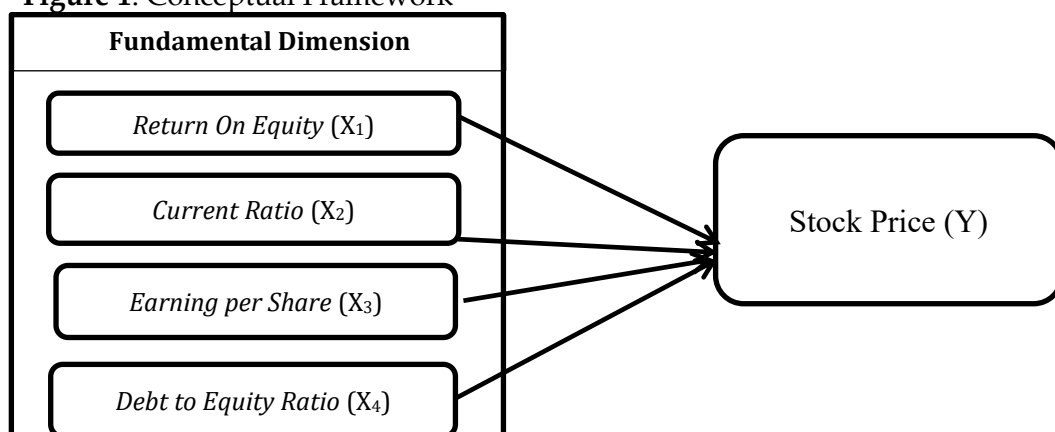
H3: Earnings Per Share (EPS) has a positive and significant effect on Stock Price.

2.5 The Impact of Debt to Equity Ratio (DER) on Stock Price

The Debt to Equity Ratio (DER) is a crucial solvency metric that evaluates a firm's financial leverage by comparing total liabilities to shareholder equity. While an optimal level of debt can provide tax shields, excessive leverage in emerging markets—which are often characterized by macroeconomic volatility—significantly increases financial distress and bankruptcy risk. According to Signaling Theory, a high DER signals an aggressive capital structure that leaves the firm highly vulnerable to interest rate shocks and cash flow disruptions. For risk-averse investors, this elevated risk profile serves as a strong negative signal. It prompts the market to demand a higher risk premium or encourages investors to liquidate their holdings, both of which apply severe downward pressure on the firm's equity valuation. Therefore, it is theoretically expected that an over-reliance on external debt will diminish investor confidence and reduce the stock price. Our findings contradict prior studies that reported a significant positive relationship between DAR and stock prices (Hussainey et al., 2011; Rifuddin, 2019). Conversely, the Debt-to-Equity Ratio (DER) demonstrates a positive, albeit statistically insignificant, influence on stock prices. A high DER indicates that a firm's debt outweighs its equity. The positive directional effect implies that investors may perceive the company as capable of efficiently managing its leverage and generating returns that exceed the cost of capital. Nevertheless, the magnitude of this effect remains insufficient to achieve statistical significance. This outcome aligns with the findings of Safitri et al. (2020) and Indrajaya (2019), but diverges from the conclusions presented by Tarsono (2021) and Mahirun et al. (2023).

H4: Debt to Equity Ratio (DER) has a negative and significant effect on Stock Price.

Figure 1. Conceptual Framework



Source: Author's Compilation (2026).e4e4ee

3. Methodology

This study employs a quantitative research design to empirically test the relationship between specific theoretical variables. Specifically, it investigates the impact of fundamental and technical factors on the stock prices of large-capitalization ("Big Cap") companies listed on the Indonesia Stock Exchange (IDX) over a six-year observation period from 2019 to 2024. The research relies exclusively on secondary data extracted from published annual financial statements. The target population consists of all large-capitalization companies listed on the IDX during the 2019–2024 period. To select the sample, a non-probability purposive sampling method was applied based on the following criteria:

Maintained a market capitalization exceeding IDR 10 trillion on the IDX throughout the 2019–2024 period. Consistently published complete annual financial reports and maintained continuous daily stock price and IHSG data throughout the observation period. Consistently distributed dividends between 2019 and 2024.

These purposive sampling criteria—specifically the requirement for consistent dividend distribution throughout the 2019–2024 period—were deliberately selected to control for internal financial distress as a confounding variable. While requiring uninterrupted dividends during a crisis period may introduce a selection bias toward mature and highly stable firms, it is theoretically necessary to isolate the 'Data Paradox.' By ensuring the sampled firms maintained robust cash flows and baseline financial health even during the pandemic, the study can more confidently attribute any downward pressure on market valuations to external macroeconomic anomalies rather than fundamental bankruptcy risks.

Applying these criteria resulted in a final sample of 16 companies. Over the 6-year timeframe (2019–2024), this yielded a balanced panel data set of 96 firm-year observations (16 companies × 6 years). The empirical model integrates one dependent variable and five independent fundamental variables

a. Stock Price Level (Y): Measured using the adjusted closing price recorded on the last trading day of the calendar year for each selected company. To prevent structural distortions caused by corporate actions—such as stock splits, reverse splits, rights issues, or stock dividends—all historical closing prices and corresponding per-share metrics (specifically Earnings per Share, EPS) have been symmetrically adjusted. This research utilizes the raw stock price levels as the dependent variable to directly evaluate how the market capitalizes core fundamentals in nominal terms. All variables—Stock Price, Return on Equity (ROE), Current Ratio (CR), Earnings per Share (EPS), and Debt to Equity Ratio (DER)—are entered into the empirical model in their raw levels. Maintaining raw levels intentionally accommodates the legitimate negative values (representing net losses or earning deficits) observed within the dataset, ensuring the underlying economic reality during crisis periods is not distorted.

b. Return On Equity (ROE): A profitability ratio that measures how efficiently a company generates net income using shareholders' equity. A higher ROE indicates better financial performance, which attracts investors and drives up the stock price.

$$\text{ROE} = \frac{\text{Earnings After Interest and Tax (EAIT)}}{\text{Total Shareholders' Equity}} \quad (1)$$

c. Current Ratio (CR): A liquidity ratio measuring the firm's ability to pay off its short-term liabilities using its current assets (e.g., cash, receivables, inventory). While a low CR can depress stock prices, an excessively high CR might indicate inefficiently utilized funds.

$$\text{CR} = \frac{\text{Total Current Assets}}{\text{Total Current Liabilities}} \quad (2)$$

d. Earning per Share (EPS): This represents the net profit allocated to each outstanding share. A rising EPS signals company growth and higher potential dividends, which positively influences investor interest and stock price

e. Debt to Equity Ratio (DER): A solvency ratio that compares total debt to total equity. A lower DER is generally preferred, as it implies the company uses less debt for its capital, leaving more profit available for dividend distribution rather than debt repayment.

$$DER = \frac{\text{Total Liabilities}}{\text{Total Shareholders' Equity}} \quad (3)$$

3.1 Econometric Modeling and Data Analysis

This study evaluates the contemporaneous relationship between corporate fundamental metrics and market valuations. The empirical equation is specified to estimate the direct impact of the independent variables on the stock price level without lag adjustments, maintaining the full balanced panel of 96 observations over the 2019–2024 period. The empirical equation is specified as follows:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e_{it}$$

Where:

Y_{it} : Stock Price

X_{1it} : Return on Equity (ROE)

X_{2it} : Current Ratio (CR)

X_{3it} : Earnings per Share (EPS)

X_{4it} : Debt to Equity Ratio (DER)

e_{it} : Error term

The dependent variable, Stock Price (Y), is utilized in its raw level to capture absolute valuation impacts. Similarly, independent variables such as Return on Equity (ROE), Current Ratio (CR), Earnings per Share (EPS), and Debt to Equity Ratio (DER) are intentionally retained in their raw ratios or absolute values. This direct specification allows the model to capture the genuine volatility and actual financial deficits (negative ROE and EPS) experienced by large-capitalization firms during periods of macroeconomic stress without data truncation.

3.2 Panel Data Model Selection

To ensure the robustness of the regression, the study sequentially employs three standard econometric tests to determine the most appropriate panel data approach: Chow Test: Determines the preference between the Common Effect Model and the Fixed Effect Model. Hausman Test: Selects between the Fixed Effect Model and the Random Effect Model.

3.3 Classical Assumption Tests

To ensure the robustness of the econometric model, a sequential model-selection procedure was conducted. First, the Chow test yielded a cross-section Chi-square probability of 0.0000 ($p < 0.05$), favoring the Fixed Effects (FE) model over the Pooled OLS model. Subsequently, the Hausman test resulted in a cross-section random probability of 0.6068 ($p > 0.05$), indicating that the Random Effects (RE) specification is statistically consistent and preferred over FE. Finally, a Breusch-Pagan Lagrange Multiplier (LM) test was conducted to confirm the RE model against the Pooled OLS; the test yielded a significant result ($p < 0.05$), finalizing the selection of the Random Effects model as the primary specification. Diagnostic checks were subsequently performed directly on the residuals of the chosen Random Effects model. The diagnostic testing revealed violations of homoskedasticity and the presence of within-panel serial correlation.

4. Result and Discussion

The primary sample consists of 16 prominent Indonesian corporations, heavily concentrated in the consumer goods, food and beverage, and media sectors. To ensure reproducibility, Table 2 details the exact list of the 16 firms, their sector classifications, and the number of valid observations utilized in the estimation model:

Table 2. Exact List of Sampled Companies and Valid Observations (2019–2024)

No	Firm Code	Company Name	Sector Classification	Inclusion Years	Market Cap	Valid Obs.
1	GGRM	PT Gudang Garam Tbk	Consumer Goods	2019–2024	> IDR 10T	6
2	VIVA	PT Visi Media Asia Tbk	Media	2019–2024	> IDR 10T	6
3	UNVR	PT Unilever Indonesia Tbk	Consumer Goods	2019–2024	> IDR 10T	6
4	INDF	PT Indofood Sukses Makmur Tbk	Consumer Goods	2019–2024	> IDR 10T	6
5	KINO	PT Kino Indonesia Tbk	Consumer Goods	2019–2024	> IDR 10T	6
6	CAMP	PT Campina Ice Cream Industry Tbk	Food & Beverage	2019–2024	> IDR 10T	6
7	BOLA	PT Bali Bintang Sejahtera Tbk	Consumer Services	2019–2024	> IDR 10T	6
8	ICBP	PT Indofood CBP Sukses Makmur Tbk	Consumer Goods	2019–2024	> IDR 10T	6
9	MYOR	PT Mayora Indah Tbk	Food & Beverage	2019–2024	> IDR 10T	6
10	ROTI	PT Nippon Indosari Corpindo Tbk	Food & Beverage	2019–2024	> IDR 10T	6
11	ULTJ	PT Ultrajaya Milk Industry Tbk	Food & Beverage	2019–2024	> IDR 10T	6
12	DLTA	PT Delta Djakarta Tbk	Brewery	2019–2024	> IDR 10T	6
13	MLBI	PT Multi Bintang Indonesia Tbk	Brewery	2019–2024	> IDR 10T	6
14	STTP	PT Siantar Top Tbk	Food & Beverage	2019–2024	> IDR 10T	6
15	CEKA	PT Wilmar Cahaya Indonesia Tbk	Food & Beverage	2019–2024	> IDR 10T	6
16	SKBM	PT Sekar Bumi Tbk	Food & Beverage	2019–2024	> IDR 10T	6
Total						96

4.1 Panel Data Estimation and Diagnostic Tests

To ensure the robustness of the econometric model, a sequential diagnostic procedure was conducted to determine the optimal panel data technique. First, the Chow test yielded a cross-section Chi-square probability of 0.0000 ($p < 0.0596$), indicating that the Fixed Effects Model is preferred over the Common Effects Model. Subsequently, the Hausman test resulted in a cross-section random probability of 0.606 ($p > 0.0596$), which led to the selection of the Random Effects Model (REM) as the statistically optimal and consistent specification for this study.

Furthermore, diagnostic checks were performed on the REM residuals to ensure the reliability of the empirical estimations. This study aims to determine the effect of fundamental factors on stock prices over a six-year observation period from 2019 to 2024. The independent variables analyzed include Return On Equity (ROE), Current Ratio (CR), Earnings per Share (EPS), and Debt to Equity Ratio (DER). The research focuses on large-capitalization companies listed on the Indonesia Stock Exchange (IDX). Out of the total population of large-capitalization companies currently listed on the IDX, the researchers applied the purposive sampling criteria to establish a final sample size of 16 companies, yielding 96 observations for this study.

The primary sample consists strictly of the 16 prominent Indonesian corporations detailed in Table 2, heavily concentrated in the consumer goods, food and beverage, media, and brewery sectors. The analyzed companies include industry leaders such as PT Gudang Garam Tbk, PT Unilever Indonesia Tbk, PT Indofood CBP Sukses Makmur Tbk, and PT Ultrajaya Milk Industry Tbk. The study highlights that several of these mature corporations integrate Corporate Social Responsibility (CSR) into their operations. Companies like PT Delta Djakarta Tbk, PT Indofood Sukses Makmur Tbk, and PT Nippon Indosari Corpindo Tbk actively participate in infrastructure development, health improvements, environmental conservation, and disaster relief. Furthermore, historical data notes that while the stock prices of many of these companies experienced fluctuations between 2019 and 2024, firms such as PT Ultrajaya Milk Industry consistently demonstrated resilience during that specific period.

Brewery Sector: PT Delta Jakarta Tbk and PT Multi Bintang Indonesia Tbk. Corporate Social Responsibility (CSR) and Market Trends The study highlights that several of these corporations integrate Corporate Social Responsibility (CSR) into their operations. Companies like PT Delta Jakarta Tbk, PT Indofood Sukses Makmur Tbk, and PT Nippon Indosari Corpindo Tbk actively participate in infrastructure development, health improvements, environmental conservation, and disaster relief. Furthermore, historical data notes that while the stock prices of many of these companies experienced fluctuations between 2019 and 2024, PT Ultrajaya Milk Industry consistently demonstrated an upward trend during that specific period.

4.2 Descriptive Statistics Analysis

Descriptive statistics are utilized to provide a foundational overview of the data profile, highlighting key characteristics such as the minimum, maximum, mean, and standard deviation.

Table 3. Summary of Descriptive Statistics

	STOCK_PRICE	ROE	CR	EPS	DER
Mean	3790.807	8.990	0.726	229.799	1.053
Median	1472.5	0.124	0.535	63	0.575
Maximum	53000	1708	2.95	5655	11.5
Minimum	50	-0.242	0.03	-665	0.09
Std. Dev.	6346.665	233.380	0.673	635.214	1.409
Skewness	4.432	5.907	1.505	5.456	4.008
Kurtosis	29.161	36.467	4.957	39.712	24.100
Jarque-Bera	5786.289	9552.285	97.832	11123.914	3863.698
Probability	0	0	5.701	0	0
Sum	689927	7096.341	132.27	4963.44	191.75
Sum Sq. Dev.	7290708966.269	9858391.322	82.031	73032959.561	359.830
Observations	96	96	96	96	96

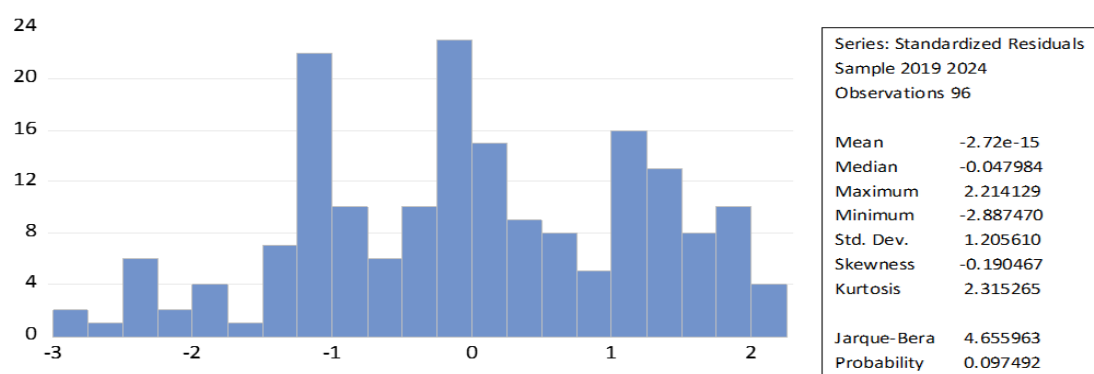
Source: Processed Data (2026)

Based on the panel data, the fundamental and technical variables demonstrate varying degrees of fluctuation across the 96 observations recorded in the statistical output. A comprehensive breakdown of the variables is as follows:

- ROE (Return on Equity): The ROE variable exhibits a mean value of 8.990 with a substantial standard deviation of 233.380. This indicates highly dispersed profitability levels across the observations. The metric peaked at an extreme maximum of 1,708 for PT Unilever Indonesia Tbk (UNVR) in 2024, whereas the minimum value fell into negative territory at -0.242, reflecting net losses relative to equity for PT Visi Media Asia Tbk (VIVA) in 2020. CR (Current Ratio):
- CR, representing short-term liquidity, shows a mean of 0.726 and a standard deviation of 0.673. The maximum liquidity ratio reached 2.95, indicating highly liquid positions for certain observations, whereas the minimum value plummeted to 0.03, indicating severe short-term liquidity constraints.
- EPS (Earnings Per Share): The EPS variable demonstrates a mean of Rp229.799 and a standard deviation of 635.214. Reflecting corporate earning power, PT Gudang Garam Tbk (GGRM) achieved the highest EPS of Rp5,655 in 2019. Conversely, PT Kino Indonesia Tbk (KINO) recorded the lowest EPS at a deficit of -Rp665 in 2022.
- DER (Debt to Equity Ratio): This leverage metric demonstrates an average of 1.053 and a standard deviation of 1.409. The maximum DER reached 11.5, signifying an aggressive debt structure. Conversely, the minimum was remarkably low at 0.09. Stock Price: The Stock Price indicates a broad valuation range among the sampled companies.
- The average stock price stands at Rp3,790.807, with a high standard deviation of 6,346.665, reflecting significant market volatility. The highest recorded valuation reached Rp53,000 for PT Gudang Garam Tbk (GGRM) in 2019, while the lowest was Rp50 (the auto-rejection lower limit on the IDX), noted for PT Visi Media Asia Tbk (VIVA) in 2020.

The normality test aims to determine whether the dependent and independent variables in the regression model are normally distributed. A good model possesses a normal data distribution. In using EViews, data normality can be tested via histogram analysis and the Jarque-Bera test. The Jarque-Bera (JB) test is a statistical test used to ascertain if data is normally distributed. According to Gujarati (2013), this detection relies on the Jarque-Bera statistic, which is asymptotic (for large samples and based on Ordinary Least Square residuals). This test evaluates the Jarque-Bera (JB) probability as follows: if the probability is > 0.05 , the data is normally distributed; if the probability is < 0.05 , the data is not normally distributed. The results of the normality test are shown in Figure 2 below:

Figure 2. Histogram of Standardized Residuals



Source: Processed Data (2026)

A normality test was conducted utilizing the Jarque-Bera (JB) test to verify whether the residuals in the panel data regression model are normally distributed. Based on the EViews histogram output. A normality test was conducted utilizing the Jarque-Bera (JB) test. The results presented in Figure 2 indicate a Jarque-Bera statistic of 4.655 with a corresponding probability value of 0.097. Because this probability value is greater than the 0.05 significance level, the null hypothesis cannot be rejected. Therefore, it can be concluded that the data is normally distributed, successfully fulfilling the normality assumption.

The heteroskedasticity test assesses whether the regression model exhibits non-constant variance in the residuals across panels. To evaluate this, a Breusch-Pagan heteroskedasticity test was conducted. As presented in Table 4, the test yields an Obs*R-squared statistic of 11.925 with a corresponding Chi-Square probability of 0.116. Because this p-value exceeds the 0.05 significance level, the null hypothesis of homoskedasticity cannot be rejected. This confirms that there is no severe heteroskedasticity problem in the regression model, successfully fulfilling the classical assumption.

Table 4. Heteroskedasticity Test Results

Test	Chi-Square Statistic	d.f.	Prob.
F-statistic	4.320	Prob. F(4,30)	0.123
Obs*R-squared	11.925	Prob. Chi-Square	0.116
Scaled explained SS	13.859	Prob. Chi-Square	0.064

Source: Processed Data (2026)

Table 5. Panel Autocorrelation Test Results

Test	F-Statistic	d.f.	Prob.
Wooldridge Test for Serial Correlation	12.621	76	0.092

Source: Processed Data (2026)

To detect the presence of first-order serial correlation in the panel data, the Wooldridge test for autocorrelation was employed. The null hypothesis states that there is no first-order autocorrelation. The test resulted in an F-statistic of 12.621. with a p-value of 0.092. Since the p-value is greater than the 0.05 significance level, we fail to reject the null hypothesis. This indicates that the model is free from serial correlation.

After estimating the Common and Fixed Effects models, the Chow test is performed to determine the appropriate model for panel data analysis. The hypotheses are: a) Fixed Effects model is preferred if the chi-square probability is < 0.05 . b) Common Effects model is preferred if the chi-square probability is > 0.05 . Subsequent testing is required based on the Chow test result: the Lagrange Multiplier (LM) test is used if the Common Effects model is indicated, while the Hausman test is applied if the Fixed Effects model is selected to further distinguish between Fixed and Random Effects models.

Table 6. Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	19.596	(16, 96)	0.0000
Cross-section Chi-square	105.540	16	0.0000

Source: Processed Data (2026)

As shown in Table 5, the cross-section chi-square probability is 0.000 (< 0.05), leading to the selection of the fixed effects model. The degrees of freedom (d.f. = 16) strictly correspond to the 16-firm balanced panel data analyzed in this study.

Table 7. Results of the Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.758658	4	0.4397

Source: Processed Data (2026)

Model selection for panel data was performed using the Hausman test. The decision rule states that if the cross-section random probability is less than 0.05, the Fixed Effects Model is selected; otherwise, the Random Effects Model is favored. Given that the result in Table 7 is 0.439 (> 0.05), the Random Effects Model is deemed appropriate for this study.

Table 8. Final Panel Data Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1143.558	848.0872	1.348397	0.1809
ROE	1.312069	1.249517	1.050062	0.2965
CR	214.6284	496.9069	0.431929	0.6668
EPS	8.900320	1.246730	7.138933	0.0000
DER	244.8575	508.8957	0.481155	0.6316
Effects Specification				
			S.D.	Rho
	Cross-section random		1028.868	0.1836
	Idiosyncratic random		2169.729	0.8164
Weighted Statistics				
R-squared	0.372352	Mean dependent var		2014.167
Adjusted R-squared	0.344763	S.D. dependent var		2672.928
S.E. of regression	2166.635	Sum squared resid		4.27E+08
F-statistic	13.49645	Durbin-Watson stat		1.120380
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.481393	Mean dependent var		3222.448
Sum squared resid	5.12E+08	Durbin-Watson stat		0.935385

Source: Processed Data (2026)

The model's weighted coefficient of determination (R-squared) is 0.372352. This indicates that approximately 37.24% of the variation in the Stock Price can be effectively explained by these four fundamental variables, while the remaining 62.76% is determined by other external factors not included in this research model. The overall model is highly significant, as evidenced by an F-statistic of 13.49645 with a probability value of 0.000000. Additionally, as previously established by the Wooldridge test ($p = 0.092$), the estimation is free from severe first-order serial correlation, ensuring the reliability of the standard errors for inference.

Regarding the individual impact of each variable, the partial test (t-test) reveals that Earnings Per Share (EPS) is the only statistically significant predictor. EPS demonstrates a positive coefficient of 8.900320 and a probability value of 0.0000, which is well below the 0.05 threshold, indicating a highly significant positive effect on the Stock Price. Conversely, Return on Equity (ROE) presents a coefficient of 1.312069 with a p-value of 0.2965, Current Ratio (CR) shows a coefficient of 214.6284 with a p-value of 0.6668, and the Debt to Equity Ratio (DER) exhibits a

coefficient of 244.8575 with a p-value of 0.6316. Since all of these respective p-values exceed 0.05, it can be concluded that ROE, CR, and DER each have a positive but statistically insignificant partial effect on the overall equity valuation.

4.3 Discussion

The empirical findings of this study provide nuanced insights into the behavior of large-capitalization equities on the Indonesia Stock Exchange (IDX) during the 2019–2024 observation period. The regression output from the Random Effects model reveals a pronounced decoupling effect, confirming the presence of the hypothesized "Data Paradox" in emerging markets during anomalous macroeconomic periods.

4.4 The Primacy of Earnings Per Share (EPS) in Valuation

The most critical finding of this study is that Earnings Per Share (EPS) acts as the sole statistically significant fundamental determinant of stock prices (p-value = 0.0000). The significant positive coefficient indicates that even amidst macroeconomic volatility, the market relentlessly rewards absolute, bottom-line earning power. Tangible Cash-Flow Proxy: During periods of uncertainty, risk-averse investors heavily discount abstract structural ratios and instead anchor their valuations on EPS, which serves as a direct, tangible proxy for a firm's capacity to distribute dividends and generate immediate cash flow. Validation of Signaling Theory: This affirms a focused application of Signaling Theory; a robust EPS trajectory remains the most credible, unambiguous signal of corporate survival and growth that investors are willing to trust during a crisis.

4.5 The Decoupling of Traditional Metrics (ROE, CR, and DER)

Conversely, the failure of Return on Equity (ROE), Current Ratio (CR), and Debt to Equity Ratio (DER) to exhibit statistical significance at the 5% level highlights the mechanics of the "Data Paradox". This decoupling does not invalidate these metrics universally but demonstrates their limited signaling power for specific firm profiles under systemic stress. ROE (p = 0.2965): While ROE traditionally signals management efficiency, its insignificance suggests that investors may view high equity returns as an unreliable indicator during anomalous periods. Extraordinary, one-off operational shifts or temporary equity fluctuations can distort ROE without reflecting true, sustainable operating performance. Current Ratio (p = 0.6668): Given the high probability value, CR has no statistically significant impact on stock prices. This complete lack of significance is directly tied to the purposive sampling of "Big Cap" firms that consistently paid dividends. For such elite, highly liquid corporations, basic short-term solvency is already fundamentally priced into the stock by the market. Therefore, marginal fluctuations in liquidity ratios do not provide powerful new information to drive valuation changes. Debt to Equity Ratio (p = 0.6316): The complete lack of significance for DER challenges traditional risk models. For large-capitalization firms with established market dominance and stable cash flows, debt is often perceived by the market as a structured, optimally managed component of capital rather than a looming bankruptcy risk. Consequently, investors did not heavily penalize leverage for these specific market giants during the 2019–2024 window.

4.6 Contextualizing the "Data Paradox" Hypothesis

It is crucial to note that the statistical insignificance of ROE and CR across the pooled 2019–2024 panel does not, in isolation, prove a structural macroeconomic decoupling. A non-significant coefficient merely establishes the absence of a stable, linear relationship over the aggregate six-year period. However, given the theoretical expectation that robust profitability and liquidity should drive Big Cap valuations, this sustained insignificance highlights a prominent empirical anomaly. We frame this anomaly as the "Data Paradox." While the current baseline panel model identifies the symptoms of this paradox—where the market appears to ignore foundational metrics and retreat exclusively to tangible earnings (EPS)—it does not formally test the

macroeconomic triggers. The Data Paradox is therefore proposed as a theoretical lens to explain why conventional signaling mechanisms weakened during this specific observation window, recognizing that explicit validation requires future parameter instability testing across pre- and post-crisis partitions.

4.7 Robustness and Endogeneity Checks

To ensure the validity of the baseline findings and address potential unobserved confounding factors, several robustness checks were conducted. To ensure the validity of the baseline findings, diagnostic checks including the Breusch-Pagan heteroskedasticity test and the Wooldridge test for serial correlation were thoroughly conducted. The results confirmed that the Random Effects estimation is free from severe heteroskedasticity and first-order serial correlation, ensuring the reliability of the standard errors for inference.

5. Conclusion and Suggestion

This study empirically investigated the determinants of equity price levels among 16 large-capitalization firms on the Indonesia Stock Exchange (IDX) spanning the 2019–2024 period. Based on the robust panel regression, the results establish conditional associations between selected firm ratios and market valuation. Specifically, Earnings per Share (EPS) demonstrated a statistically significant positive impact on stock prices. Conversely, the Debt to Equity Ratio (DER), alongside Return on Equity (ROE) and Current Ratio (CR), failed to exhibit a statistically significant influence on equity valuation during this period. Claims regarding irrational sell-offs, systemic capital reallocation, or the absolute breakdown of traditional valuation metrics require additional evidence beyond the scope of this regression.

Managerial Implications

These findings suggest a need for context-sensitive investment strategies. Investors and corporate management should recognize that during periods of potential macroeconomic stress, standardized fundamental ratios and technical momentum may temporarily lose their conventional predictive power. Corporate managers should focus on maintaining active, transparent communication regarding long-term resilience and risk mitigation strategies to anchor investor confidence when external market pressures disrupt traditional valuation signals.

6. Limitations and Future Research

While this study provides robust empirical evidence of a conditional decoupling between specific fundamentals and stock price levels, it is limited by the absence of variables capturing structural macroeconomic mechanisms. The negative coefficients on ROE and CR alone cannot formally prove institutional capital flight. Therefore, future research must formally test these mechanisms by including observable proxies such as: Foreign net buy/sell data and foreign ownership levels, Fund-flow indicators and exchange-rate fluctuations, Central bank policy rate shocks and VIX-type global risk measures or broad market return controls. By incorporating these variables, future models can explicitly test whether the sensitivity of stock prices to ROE, CR, EPS, or DER changes dynamically when capital outflows or macroeconomic stress intensify. Additionally, while this study targets large-capitalization equities, the rigorous sampling criteria resulted in a final cohort heavily concentrated in the consumer goods, food and beverage, and media sectors. Consequently, the empirical findings currently represent a sector-concentrated panel rather than a universal reflection of all IDX large-cap stocks. Future research should expand the scope across a more diverse array of industries (e.g., banking, energy, and

infrastructure) to determine if the observed valuation decoupling is a market-wide phenomenon or a sector-specific anomaly.

Finally, the purposive sampling methodology utilized in this study introduces inherent endogenous selection bias. By requiring continuous dividend payments and sustained market capitalization exceeding IDR 10 trillion, the sample inherently truncates the distribution of the dependent variable and heavily selects for mature, surviving blue-chip firms, excluding those that experienced severe financial distress or suspended dividends during the pandemic. Future research should utilize the broader large-cap universe without these restrictions, employing explicit econometric control variables for financial distress, dividend policy, and firm size to prevent truncation and allow for broader market generalization

Declaration of AI

During the preparation of this work, the author(s) used Gemini AI in order to proofread and paraphrase the English text. After using this tool, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

Appendix A: Firm-Year Data Transformation

To ensure complete transparency and scientific reproducibility, a comprehensive firm-year data appendix is provided in the supplementary files. This appendix thoroughly reports the raw fundamental and technical values utilized within the panel data estimation model. Every descriptive statistic and regression coefficient generated in this study derives directly from this exact final estimation dataset of 96 observations

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