
Fundamental Analysis of Stocks Before and After the COVID-19 Pandemic on the Indonesia Stock Exchange (An Empirical Study of the IDX30 Index)

Arum Jayati*¹

Pasti Yohana Zein²

Perina Rama Jihan³

Accounting Study Program, Faculty of Economy and Business, Universitas Muhammadiyah Riau, Indonesia^{1,2,3}

arumjayati0@gmail.com¹

ABSTRACT

The purpose of this study is to analyze the performance of stocks listed in the IDX30 index on the Indonesia Stock Exchange before and after the COVID-19 pandemic, covering the period from 2017 to 2021, using fundamental analysis. This analysis aims to determine whether stock performance during this period was beneficial or detrimental to investors. The study focuses on key fundamental indicators, including Earnings Per Share (EPS), Price to Earnings Ratio (PER), Debt to Equity Ratio (DER), Return on Assets (ROA), and Return on Equity (ROE). Using purposive sampling, the study selected 15 companies that were consistently listed in the IDX30 index throughout the 2017–2021 period.

Keywords: Stock Analysis; Fundamental Analysis; IDX30

1. Introduction

In the modern business world, companies are highly competitive in striving to sustain their existence and promote growth. One of the essential aspects of business continuity is acquiring working capital required for operational and expansion purposes. This capital can be sourced through various means, with the financial market serving as a significant channel. The market reflects a high level of public trust in the potential returns that can be generated from financial instruments. The capital market plays a vital role in supporting the financial sector by connecting investors with companies in need of funding (Ardila et al., 2024; Ashraf, 2020).

The capital market offers several financial instruments, including stocks, bonds, warrants, and options. Among these, stocks are one of the most commonly traded instruments, representing ownership in a company that has gone public. Stocks are a primary investment product in the capital market, making it essential for investors to carefully analyze a company's financial condition before making any investment decisions. A company's increasing profitability typically leads to a rise in its stock price, thereby benefiting investors. To minimize risks, investors must accurately analyze which companies are worth investing in and have the potential to generate profits (Fama, 1970; Pratama & Arifin, 2021).

Before investing in stocks, investors must examine the factors influencing a company's financial condition. This analysis helps investors gain an accurate understanding of a company's future viability. Stock analysis can be performed using two main techniques: fundamental analysis and technical analysis. Fundamental analysis simplifies the process for investors by utilizing financial ratios presented in financial statements. These ratios, such as ROA (return on assets), ROE (return on equity), EPS (earnings per share), DER (debt to equity ratio), and PER (price-earnings ratio), provide crucial insights into the financial health of a company (Faisal et al., 2021; Sekaran & Bougie, 2019). Many investors rely on fundamental analysis as an initial step in forming their investment portfolios (Datar et al., 1998).

Stock indices serve as benchmarks that combine the performance of various stocks and provide a measure of the overall performance of the market. A highly liquid and large-capitalized index is the IDX30, which tracks the performance of the 30 most liquid companies

with significant market capitalization in Indonesia. The IDX30 index is supported by companies with solid fundamentals, and the Indonesian Stock Exchange (IDX) regularly evaluates this index every three and six months. During the COVID-19 pandemic, however, many sectors faced economic challenges, including a decline in stock market performance (Akhtaruzzaman et al., 2020; Ashraf, 2020; Pratama & Arifin, 2021).

The COVID-19 pandemic has had widespread negative impacts on various aspects of life, including public health and the economy. Several studies have examined fundamental analysis in the context of the Indonesian Stock Exchange (IDX) (Rahmadhoni, 2021; Wijaya, 2021), but none have compared fundamental stock analysis of the IDX30 index before and after the pandemic. This study aims to fill this research gap by presenting an analysis of stocks listed on the Indonesia Stock Exchange, particularly the IDX30 index, before and after the COVID-19 pandemic from 2017 to 2021. By utilizing fundamental analysis, this research will provide valuable insights into the impact of the pandemic on stock performance and guide investors in making informed decisions (Dianti & Badjra, 2016; Trisnowati & Muditomo, 2021).

This research is significant due to its novelty in examining the effects of the pandemic on stock performance in the IDX30 index specifically, and it will provide useful insights into how investors can adapt their strategies in light of the new economic reality. It is essential to understand the long-term effects of the pandemic on financial markets and to help investors identify resilient stocks that could offer opportunities for growth despite global disruptions. By providing a comprehensive study, this research also aims to contribute to the existing literature on fundamental analysis and the impact of global crises on stock market performance (Sekaran & Bougie, 2019; Amanda, 2013).

2. Literature Review

Fundamental Analysis

Fundamental analysis is a method used to evaluate the intrinsic value of a security by examining macroeconomic factors, industry conditions, and the specific financial performance of a company. This approach aims to help investors determine whether a security is undervalued or overvalued in the market. The analysis process begins with the assessment of macroeconomic indicators such as Gross Domestic Product (GDP) growth, inflation, interest rates, and government policies that affect the overall market conditions (Fama, 1970; Sekaran & Bougie, 2019).

Next, the analysis focuses on industry-specific factors such as the level of competition, demand and supply dynamics, and the impact of government regulations. In the final stage, the analysis is directed toward the financial condition and operational efficiency of the company issuing the security to assess its profitability potential. This approach is particularly important in facing market dynamics triggered by extraordinary events such as the COVID-19 pandemic, which caused high volatility in capital markets (Ashraf, 2020; Akhtaruzzaman et al., 2020).

Profitability Ratios

Profitability ratios measure a company's ability to generate profits relative to its revenue, assets, and equity. These ratios are critical for investors as they indicate how efficiently a company is managing its resources to generate income. High profitability typically reflects a healthy business condition and can lead to increased stock prices, while low profitability may signal a decline in stock value (Audy et al., 2022; Ardila et al., 2024).

Return on Assets (ROA)

ROA measures a company's effectiveness in generating profit from its total assets. It is calculated by dividing net income by total assets. A high ROA indicates that the company is

efficiently utilizing its assets to generate profit, which also reflects strong management performance. Investors use ROA to compare operational efficiency across companies within the same industry (Faisal et al., 2021; Campbell et al., 1997).

Return on Equity (ROE)

ROE evaluates a company's profitability in relation to shareholders' equity. The formula is net income divided by total equity. A high ROE indicates that the company effectively uses shareholders' capital to generate profit, making it an attractive investment option. Conversely, a low ROE may indicate inefficiency or a heavy reliance on debt (Agustin & Lukito, 2023; Nurcahyono et al., 2020).

Price-to-Earnings Ratio (P/E Ratio)

The P/E ratio compares a company's stock price to its earnings per share (EPS). This ratio helps investors assess whether a stock is overpriced or underpriced relative to its earnings potential. A high P/E may suggest strong growth expectations from investors, while a low P/E could indicate undervaluation or weak growth expectations (Datar et al., 1998; Ardila et al., 2024).

Earnings Per Share (EPS)

EPS indicates the portion of a company's profit allocated to each outstanding common share. It is a key metric for investors as it is directly related to stock valuation. A high EPS signifies strong profitability and suggests potential for higher dividends or reinvestment, making the stock more appealing to investors (Dianti & Badjra, 2016; Al-Awadhia et al., 2020).

Debt-to-Equity Ratio (DER)

DER measures a company's capital structure by comparing its total liabilities to shareholders' equity. A high DER indicates a greater reliance on debt financing, which may increase financial risk. In contrast, a low DER reflects a more conservative capital structure and greater financial stability. Investors use DER to evaluate a company's risk profile, especially during periods of economic uncertainty such as the pandemic era (Trisnowati & Muditomo, 2021; Fakhrunnas & Ramadhani, 2024).

3. Methodology

Research Methodology

The population used in this study consists of companies listed in the IDX30 index on the Indonesia Stock Exchange (IDX). The researcher employed a purposive sampling technique with the criterion that the companies must have been consistently included in the IDX30 index over a five-year period, from 2017 to 2021.

Table 1. Research Sample

No	Stock Code	Company Name
1	ADRO	Adaro Energy Tbk
2	ASII	Astra International Tbk
3	BBCA	Bank Central Asia Tbk
4	BBNI	Bank Negara Indonesia (Persero) Tbk
5	BMRI	Bank Mandiri (Persero) Tbk
6	HMSP	H.M. Sampoerna Tbk
7	GGRM	Gudang Garam Tbk
8	INDF	Indofood Sukses Makmur Tbk
9	ICBP	Indofood CBP Sukses Makmur Tbk
10	KLBF	Kalbe Farma Tbk

11	PGAS	Perusahaan Gas Negara Tbk
12	SMGR	Semen Indonesia (Persero) Tbk
13	TLKM	Telkom Indonesia (Persero) Tbk
14	UNTR	United Tractors Tbk
15	UNVR	Unilever Indonesia Tbk

The secondary data used in this study consists of the annual financial statements of IDX30-listed companies for the 2017–2021 period, as recorded on the Indonesia Stock Exchange. The study employed quantitative data in the form of financial ratios derived from the companies' annual reports. The data collection technique used is documentation, whereby financial statements of the selected companies over the specified period were gathered and analyzed.

The data analysis technique applied in this study is descriptive statistics. Fundamental analysis was carried out using financial ratios reported in the financial statements of the sampled companies. Profitability ratios were used to assess the companies' ability to generate profit. These included Earnings Per Share (EPS), Price Earnings Ratio (PER), Return on Assets (ROA), and Return on Equity (ROE). In addition, solvency ratios were used to evaluate the companies' ability to fulfill all of their financial obligations, specifically using the Debt to Equity Ratio (DER).

4. Results

Stock Analysis Using Fundamental Ratios Before and After the COVID-19 Pandemic

Stock analysis in this study is conducted using fundamental analysis through key financial ratios: Earnings Per Share (EPS), Price to Earnings Ratio (PER), Debt to Equity Ratio (DER), Return on Assets (ROA), and Return on Equity (ROE). The analysis is applied to companies listed in the IDX30 on the Indonesia Stock Exchange (IDX), comparing the financial performance before and after the COVID-19 pandemic. The results are summarized in the following table:

Table 2. Summary of Fundamental Analysis Results

No	Ticker	EPS	PER	DER	ROA	ROE
		2020	2019	2020	2019	2020
1	ADRO	0	0.00012	0.01404	0.00026	61%
2	ASII	0	0	0.31731	0.21224	73%
3	BBCA	1.25883	2.27405	0.00022	0.00021	479%
4	BBNI	0.00023	0.00099	0.00149	0.00041	661%
5	BMRI	0.00045	0.55152	0.00011	0.00019	594%
6	HMSP	0.00007	0.00012	0.00018	0.00015	64%
7	GGRM	3.97473	5.6131	0.004	0.00455	34%
8	INDF	12.57294	11.78651	0.00001	0.00002	106%
9	ICBP	0.00064	0.00049	0.00001	0.00001	106%
10	KLBF	61.14374	53.6157	0	0	23%
11	PGAS	0.0153	0.0094	0	0	155%
12	SMGR	0.39066	0.38239	0.00558	0.0057	119%
13	TLKM	0.74696	1.22967	0.12738	0.15661	104%
14	UNTR	0.91199	1.45848	0.00005	0.00003	37%
15	UNVR	0.92485	0.18585	0	0	316%

Table 2 presents the financial ratio calculations for the 15 companies included in the research sample, based on their annual financial statements from 2017 to 2021. On average,

there was a decrease of nearly 50% across most companies, indicating that not all companies were able to generate earnings per share amid the challenges of the COVID-19 pandemic.

The PER results show that six companies—ADRO, ASII, BBCA, BBNI, HMSP, and UNTR—experienced an increase in their price-to-earnings ratio. Meanwhile, the remaining companies saw a decline in PER, suggesting that BMRI, GGRM, INDF, SMGR, and TLKM had higher stock valuations in 2020 compared to 2019 and were able to maintain their market presence during the pandemic better than others.

The DER values from the analysis were generally below the industry average, indicating strong financial health and the companies' ability to meet their obligations each year. Most companies showed an increase in DER from 2019 to 2020, with the exception of SMGR, TLKM, and UNTR, which experienced a decline.

The ROA values recorded by the companies aligned with the industry benchmark ($\geq 40\%$), indicating efficient use of assets to generate profit. In 2019, all companies demonstrated good asset management, as evidenced by the positive and relatively high ROA figures. Similarly, ROE values also met the industry standard ($\geq 30\%$), showing effective use of equity to generate profits. Notably, companies such as KLBF and TLKM experienced an increase in ROE in 2020 compared to 2019.

The COVID-19 pandemic had a measurable impact on company performance in 2020. This is empirically demonstrated by the financial performance of companies listed in the IDX30 during that period.

5. Conclusion

Based on the fundamental analysis using financial ratios such as EPS, PER, DER, ROA, and ROE, it can be concluded that PT Unilever Indonesia Tbk and PT Perusahaan Gas Negara Tbk demonstrated solid financial performance that aligns well with the established criteria. The values obtained from the calculations indicate relatively strong positions compared to other companies and reflect their ability to maintain stable performance even during the COVID-19 pandemic.

Future research could expand the scope by including more companies across different sectors to provide a broader comparative analysis. Additionally, incorporating other financial and non-financial indicators—such as market sentiment, ESG (Environmental, Social, and Governance) factors, or macroeconomic variables—could offer deeper insights into the resilience and long-term performance of companies, especially during economic disruptions like a global pandemic.

References:

- Agustin, I. N., & Lukito, I. (2023). Fundamental analysis in predicting stock returns for Indonesia transportation and logistics companies during COVID-19 pandemic. *Jurnal Manajemen Bisnis dan Kewirausahaan*, 7(6), 1339–1349. <https://doi.org/10.24912/jmbk.v7i6.27270>
- Ardila, L. N., Saputra, D. A., Budiwati, C., & Syafiqurrahman, M. (2024). Stock price determinants: Before and during the COVID-19 pandemic. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 8(4). <https://doi.org/10.29040/ijebar.v8i4.16560>
- Audy, N. A., Harunnurasyid, H., & Andaiyani, S. (2022). The COVID-19 pandemic: What factors can affect BUMN-20 stock return in Indonesia? *Jurnal Ekonomi Pembangunan*, 20(1), 67–76. <https://doi.org/10.29259/jep.v20i1.17926>
- Ashraf, B. N. (2020). Stock markets' reaction to COVID-19: Cases or fatalities? *Research in International Business and Finance*, 54, 101249. <https://doi.org/10.1016/j.ribaf.2020.101249>

- Faisal, A., Hasanah, A., & Adam, A. M. (2021). The fundamental effect of company and capital market reaction before and during the COVID-19 pandemic on stock returns (Case study of the Jakarta Islamic Index 2016–2020 period). *Jurnal Ekonomi Syariah Teori dan Terapan*, 8(6), 771–784. <https://doi.org/10.20473/vol8iss20216pp771-784>
- Fakhrunnas, F., & Ramadhani, A. (2024). Examining Indonesian stock price movement amid COVID-19 pandemic: Which sectors that underperformed the most? *Jurnal Economia*, 20(2). <https://doi.org/10.21831/economia.v20i2.43390>
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*, 25(2), 383–417. <https://doi.org/10.1111/j.1540-6261.1970.tb00518.x>
- Dianti, O., & Badjra, I. (2016). Pengaruh earning per share, tingkat pertumbuhan perusahaan dan current ratio terhadap kebijakan dividen. *E-Jurnal Manajemen Unud*, 5(11), 6795–6824. <https://ojs.unud.ac.id/index.php/manajemen/article/view/21704>
- Datar, V. T., Naik, N. Y., & Radcliff, R. (1998). Liquidity and stock returns: An alternative test. *Journal of Financial Markets*, 1(2), 203–219. [https://doi.org/10.1016/S1386-4181\(97\)00002-3](https://doi.org/10.1016/S1386-4181(97)00002-3)
- Campbell, J. Y., Lo, A. W., & MacKinlay, A. C. (1997). *The econometrics of financial markets*. Princeton University Press.
- Al-Awadhia, A. M., Alsaifia, K., Al-Awadhib, A., & Alhammadi, S. (2020). Death and contagious infectious diseases: Impact of the COVID-19 virus on stock market returns. *Journal of Behavioural and Experimental Finance*, 27, 100326. <https://doi.org/10.1016/j.jbef.2020.100326>
- Akhtaruzzaman, Md., Boubaker, S., & Sensoy, A. (2020). Financial contagion during COVID–19 crisis. *International Review of Financial Analysis*, 71, 101576. <https://doi.org/10.1016/j.irfa.2020.101576>
- Pratama, A. Y., & Arifin, L. (2021). The effect of the COVID-19 pandemic on the performance and stability of companies listed on the Indonesia Stock Exchange in 2018–2021. *Journal of Applied Finance and Accounting*, 10(2). <https://doi.org/10.21512/jafa.v10i2.9930>
- Trisnowati, Y., & Muditomo, A. (2021). COVID-19 and stock market reaction in Indonesia. *Journal of Accounting and Investment*, 22(1). <https://doi.org/10.18196/jai.22117743>
- Sekaran, U., & Bougie, R. (2019). *Research methods for business: A skill-building approach* (8th ed.). Wiley.
- Nurcahyono, N., Hanum, A. N., & Sukesti, F. (2020). The COVID-19 outbreak and stock market return: Evidence from Indonesia. *Jurnal Dinamika Akuntansi dan Bisnis*. <https://doi.org/10.24815/jdab.v7i2.18934>