

**Article Type:** Research Paper

Analysis of Banking Stock Performance Before, During, and After the COVID-19 Pandemic on the Indonesia Stock Exchange (IDX)

Cherilyn Cristine Tompo*, Derrick Nelson Sidjaja, Arnold Thenikusuma, and Maichal Maichal

**AFFILIATION:**

Sekolah Tinggi Ilmu Ekonomi Ciputra,
South Sulawesi, Indonesia

***CORRESPONDENCE:**

cristine@student.ciputra.ac.id

THIS ARTICLE IS AVAILABLE IN:

<http://journal.umy.ac.id/index.php/jerss>

DOI: [10.18196/jerss.v9i2.24972](https://doi.org/10.18196/jerss.v9i2.24972)

CITATION:

Tompo, C. C., Sidjaja, D. N.,
Thenikusuma, A., & Maichal, M. (2025).
Analysis of Banking Stock Performance
Before, During, and After the COVID-19
Pandemic on the Indonesia Stock
Exchange (IDX). *Journal of Economics
Research and Social Sciences*, 9(2), 203-
217.

ARTICLE HISTORY**Received:**

2024-11-29

Revised:

2025-02-17

Accepted:

2025-05-19



This work is licensed under a Creative
Commons Attribution-ShareAlike 4.0
International (CC BY-SA 4.0)

Abstract: This study analyzes the performance differences of Indonesia's banking sector stocks, represented by the Infobank15 index, before, during, and after the COVID-19 pandemic. Using ANOVA and Post Hoc Testing, the study finds no significant differences in stock returns across these three periods despite the substantial economic disruption caused by the pandemic. Like other industries, the banking sector faced a downturn at the start of the pandemic but managed to recover. This finding underscores that the banking sector maintained stability across different periods due to the strong financial fundamentals, including consistent Non-Performing Loan (NPL) and Return on Assets (ROA) ratios throughout the pandemic. The government's support, such as credit restructuring policies and digitalization of banking services, facilitated the sector's adaptation to economic challenges, allowing for continued operations despite social restrictions. The study highlights that the banking sector's ability to expand its digital services mitigated the crisis's immediate impacts and positioned it as an attractive option for investors seeking stability. This study offers insights for policymakers and adds to the literature on the banking sector's resilience during global crises.

Keywords: bank stock performance; COVID-19 pandemic; infobank15; composite stock price index; digital payment

JEL Classification: H54, G21, G24

Introduction

The emergence of the SARS-CoV-2 virus at the end of 2019 in Wuhan, Hubei Province, China, disrupted global macroeconomic stability, leading to a sustained decline in the tourism sector, exports, household consumption, and investment. The COVID-19 pandemic spread rapidly, affecting all aspects of life in every country, including economic, social, political, and cultural dimensions. The International Monetary Fund (IMF) reported that the economic sector was among the hardest sector hit by the pandemic, with global economic losses amounting to \$12 trillion or approximately IDR 168,000 trillion, based on an exchange rate of IDR 14,000 at the time. The IMF projected that global economic growth during the COVID-19 pandemic experienced significant declines in advanced economies, such as the United States (-8%), Japan (-5.8%), the United Kingdom (-10.2%), Germany (-7.8%), France (-12.5%), and Italy and Spain (-12.8%).

These declines in global economic growth demonstrate that lockdowns and restrictions on business activities and daily life during COVID-19 significantly reduced consumer purchasing power worldwide (Coibion et al., 2020). Social restriction policies implemented in various countries triggered a slowdown in economic growth due to reduced purchasing power, leading to devaluation and business closures. This was evident in developing countries in East Asia, the Pacific, and China, where economic growth slowed to 2.1% in 2020 (Arianto, 2021). From a financial perspective, the COVID-19 pandemic became a significant cause of high market uncertainty and created uneven consequences for the performance of global financial markets (Sethi et al., 2021). The pandemic significantly impacted national economies due to the decline in international business production, consumer purchasing power, and banks' inability to meet corporate financial needs, ultimately leading to turmoil in the global stock market (Wren-Lewis, 2020). According to Zhang et al. (2020), February 2020 witnessed declines in 10 international stock markets due to the pandemic, which affected public health and political, educational, economic, and cultural aspects, including lifestyle patterns.

Asian stock markets experienced more significant negative turbulence than European markets (Topcu & Gulal, 2020). The negative impact on Asian stock markets was also evident in Indonesia's stock market. The Composite Stock Price Index (CSPI) on March 31, 2020, showed a correction of 26.43% compared to the Closing Index Value at the end of January 2020, accompanied by a market capitalization decline of IDR 5,368 trillion. The arrival of the COVID-19 pandemic in Indonesia sent a negative signal or bad news, affecting the capital market due to investor selling their stock holdings in response to the prevailing uncertainty (Kusnandar & Bintari, 2020). The COVID-19 pandemic significantly impacted economic growth, particularly in the banking sector, which accounts for 35% of the Composite Stock Price Index (CSPI) weight.

The dynamics in the stock market are influenced by signals circulating in society, specifically information from companies to investors, serving as positive or negative indicators for investment decisions, a concept known as signaling theory (Przepiorka & Berger, 2017). This theory was evident at the onset of the pandemic, when many banks experienced losses or declining profits due to the crisis, signaling negativity to investors who promptly sold their shares to mitigate risks. Sentiments from corporate losses and economic uncertainty triggered a decline in bank stock prices, leading to a sharp drop in the banking stock index (Sari & Syafitri, 2022). The condition of banking stocks in Indonesia can be observed through the performance of banks listed under the Infobank15 Index. Overall, the Infobank15 Index experienced a decline of approximately 38% during the pandemic, aligning with the trends seen in global and national stock markets due to economic uncertainty during the pandemic (Kristina, 2022).

A study by Natali & Suhendra (2023) revealed that COVID-19 significantly impacted the Infobank15 Index. The analysis indicated that after the announcement of the first COVID-19 case in March 2020, the Infobank15 Index experienced a drastic decline, reflecting high economic uncertainty. The drop in banking stock prices coincided with the rising number of COVID-19 cases and government efforts to implement social restrictions, which led to an overall decline in economic activity. Another Siswantoro (2020) study highlighted that

COVID-19 significantly impacted the stock prices of companies listed on the Indonesian Stock Exchange, including major banks. The decline in stock prices was driven by market uncertainty and concerns over rising non-performing loans. On the other hand, research by Saragih & Handayani (2021) identified a short-term recovery trend in banking stock performance. This recovery was attributed to new government and Bank Indonesia policies designed to support the banking sector's performance, which served as positive signals for investors.

This study focuses on identifying significant differences in the performance of Indonesian banking stocks across three distinct periods: before the COVID-19 pandemic, during the pandemic, and after the pandemic. While previous research has primarily concentrated on the impact of the pandemic itself, there is limited understanding of how stock performance varied across these periods and whether these variations are statistically significant. By analyzing the performance of banking stocks from 2018 to 2024, this research aims to provide a comprehensive assessment of the pandemic's influence on the banking sector, contributing to the broader discourse on financial market resilience during global crises. The findings of this study offer a new perspective on the nature of the COVID-19 crisis, demonstrating that it was primarily a health crisis rather than a financial crisis. Unlike traditional financial crises, which often cause prolonged instability in the banking sector, this study finds no significant differences in banking stock returns before, during, and after the pandemic. This suggests that strong financial fundamentals and government interventions helped prevent systemic financial instability. Additionally, these findings have important implications for investors, emphasizing the need to differentiate between different types of crises when making investment decisions. While financial crises often lead to severe market corrections, health crises may not necessarily trigger the same level of financial instability, making banking stocks a more stable investment option during such periods.

Research Method

This study utilizes secondary data from two primary sources: the Composite Stock Price Index (CSPI) and the Infobank15 Index to compare the performance of Indonesian banks before, during, and after the COVID-19 pandemic. While both indices were referenced, the data processing focused solely on the monthly stock returns of the Infobank15 Index. The data were collected through public databases and historical records provided by the Indonesia Stock Exchange. The data include monthly closing prices, which were used to calculate monthly stock returns by measuring the change in stock prices from one month to the next. The CSPI is the primary indicator of stock price movements on the Indonesia Stock Exchange, encompassing all listed stocks.

Meanwhile, the Infobank15 Index represents a curated group of 15 banking stocks with high market capitalization and liquidity, reflecting the performance of the banking sector. For the discussion section, additional insights were drawn from the financial data of four major banks (BBCA, BBNI, BBRI, and BMRI) to better understand banking sector fundamentals. These banks were selected due to their consistent inclusion in the

Infobank15 Index, high market capitalization, and significant role in Indonesia's banking industry.

The study uses monthly CSPI and Infobank15 Index data from January 2018 to March 2024, segmented into three COVID-19-related phases: (1) Pre-pandemic COVID-19 (January 2018 to February 2020), this phase covers the period before the COVID-19 pandemic, aiming to establish a baseline or reference for the banking sector's stock performance before the economic disruptions caused by the pandemic; (2) During COVID-19 (March 2020 to December 2022), this phase begins in March 2020, when the first COVID-19 case was reported in Indonesia, and extends to December 2022, marked by President Joko Widodo's announcement of the cessation of the Public Activity Restrictions (PPKM), signaling the end of significant pandemic-related restrictions; (3) Post-COVID-19 (January 2023 to March 2024), this phase reflects the period of economic recovery and market normalization following the end of the pandemic. Analysis during this phase is crucial to evaluate whether recovery or shifts in stock performance trends occurred after the pandemic's conclusion. By segmenting the data into these three phases, the study provides a comprehensive framework to assess the impact of the COVID-19 pandemic on the performance of Indonesian banking stocks.

Stock return is a measure of investment performance that indicates how the value of an investment changes over a specific period, typically expressed as a percentage. This study uses the formula for closing price return to calculate stock return. This formula is commonly used in stock analysis as it reflects the actual market value at the end of the trading period (Ross et al., 2003). The formula used is as follows:

$$R_t = \frac{p_t - p_{t-1}}{p_{t-1}}$$

Where R_t represents the stock return in month t , P_t is the closing stock price in month t , and P_{t-1} is the closing stock price in the previous month. This method enables the analysis of stock price changes over time, reflecting investment performance. This study utilizes SPSS Statistics 26 to support data processing. Data analysis is conducted through several step-by-step testing methods, starting with the normality test, followed by the homogeneity of variance test. If the data is confirmed normal and homogeneous, the study proceeds with ANOVA (Analysis of Variance).

Normality Test

The normality test ensures that the data follows a normal distribution, which is crucial for specific parametric statistical tests, such as ANOVA. This study employs two commonly used normality testing methods: the Kolmogorov-Smirnov and the Shapiro-Wilk tests. For both tests, the null hypothesis (H_0) assumes that the data is normally distributed, while the alternative hypothesis (H_1) assumes that the data is not normally distributed.

Homogeneity Test

The homogeneity of variance test is conducted to examine whether the variation in stock returns is consistent across different periods. Levene's test is used to test whether different samples have equal variances. Suppose Levene's test yields a p-value less than the significance level. In that case, it is concluded that the variances are not homogeneous, and specific approaches are required to address this issue in the ANOVA analysis.

Analysis of Variance (ANOVA)

ANOVA compares stock returns across three research periods (before, during, and after the pandemic). This test is conducted to determine whether there are significant differences between the mean returns. The hypotheses tested are as follows:

Null Hypothesis (H_0): There is no significant difference in the mean stock returns across the three periods.

Alternative Hypothesis (H_1): At least one period has a significantly different mean stock return. If the ANOVA results show a p-value less than the significance level of 0.05, the null hypothesis is rejected, indicating the presence of significant differences between the periods.

Result and Discussion

Statistical Results

In the data testing process, a significance level (α) of 5% or 0.05 was used, and the results were divided into several stages. In the first stage, a normality test was conducted to test the hypotheses:

H_0 : data is normally distributed, and H_1 : data is not normally distributed. Table 1 presents the normality test results for banking stock data in the Infobank15 Index across three periods using the Kolmogorov-Smirnov method. The p-value before COVID-19 was 0.2, the p-value during the COVID-19 pandemic was also 0.2, and the p-value after the COVID-19 pandemic was 0.2. These three significance values are all greater than the predetermined significance level of 0.05. Therefore, it can be concluded that H_0 is accepted, H_1 is rejected, meaning that all three datasets are considered normally distributed since Sig. (p-value) > 0.05.

Table 1 Normality Test

Stock Return Infobank15	Kolmogorov-Smirnov (Sig.)	Shapiro-Wilk (Sig.)
Before COVID-19 Pandemic	0,200	0,758
During COVID-19 Pandemic	0,200	0,033
After COVID-19 Pandemic	0,200	0,864

Subsequently, the data were subjected to a homogeneity test to evaluate the following hypotheses: H_0 : The variances of the data are homogeneous. H_1 : The variances of the data are not homogeneous.

Table 2 Homogeneity Test

Stock Return Infobank15	Levene Statistic	Sig.
Based on the Mean	4,486	0,015

This test assessed homogeneity using Levene's Test, with the results presented in Table 2. The p-value was 0.015, smaller than the predetermined significance level (Sig. < 0.05). Thus, the null hypothesis H_0 is rejected, and the alternative hypothesis H_1 is accepted, indicating that the variances of the data are not homogeneous. Since the homogeneity test results suggest that the data variances are not homogeneous, further analysis was conducted using One-Way ANOVA with a *non-equal variance* approach, followed by Post Hoc Testing ANOVA (multiple comparisons) using the Dunnett T3 and Games-Howell methods to evaluate return variations in banking stocks across different periods.

Based on the p-values obtained from the Post Hoc Testing, the significance values (p-values) are greater than the predetermined significance level. Therefore, H_0 is accepted, H_1 is rejected, indicating no significant difference in the stock returns of Infobank15 banking stocks across the pre-pandemic, during-pandemic, and post-pandemic periods.

Table 3 Post Hoc Testing ANOVA

Stock Return Infobank15		Dunnett T3 (Sig.)	Games-Howell (Sig.)
Before COVID-19 Pandemic	During COVID-19 Pandemic	0,981	0,938
	After COVID-19 Pandemic	0,749	0,644
During COVID-19 Pandemic	Before COVID-19 Pandemic	0,981	0,938
	After COVID-19 Pandemic	0,977	0,931
After COVID-19 Pandemic	Before COVID-19 Pandemic	0,749	0,644
	During COVID-19 Pandemic	0,977	0,931

The statistical analysis results indicate no significant differences in stock returns for banking companies across the pre-pandemic, during-pandemic, and post-pandemic periods of COVID-19. The results contrast with the research by Permana et al. (2022) and Martini et al. (2021), which stated a significant difference in Indonesian stock performance before and during the COVID-19 Pandemic. The COVID-19 outbreak caused a shock across all industries in Indonesia, including financial institutions, which faced increased risks due to sudden economic shifts. However, in this analysis, the banking sector demonstrated resilience by adapting to digital banking and leveraging government policy support, allowing banks to navigate the crisis effectively. These findings align with research by Salmita et al. (2024), which highlighted that there was no significant difference in conventional banking stock performance before and during the COVID-19 pandemic because of effective management strategies that helped the banks manage

their performance stability despite the uncertainty brought by the pandemic (Salmita, 2023). These findings can be compared with the stock movement data of the CSPI and Infobank15 Index throughout the 2018–2023 period, which reflect relatively consistent trends, thereby supporting the study's statistical result.

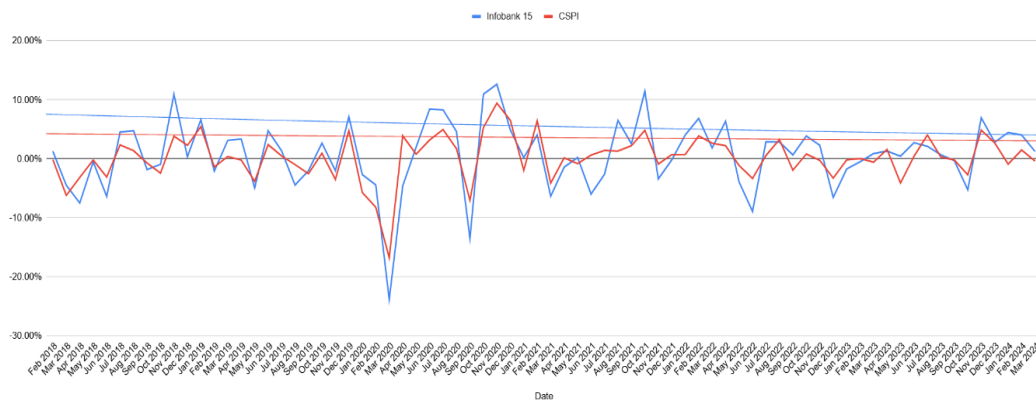


Figure 1 Monthly Performance of CSPI and Infobank15
Source: Indonesia Stock Exchange

The pre-COVID-19 period, from January 2018 to February 2020, was marked by fluctuating movements in the Infobank15 and CSPI indices due to various events. Between February and March 2018, both the CSPI and Infobank15 experienced a decline in performance, attributed to comments by Federal Reserve Chairman Jerome Powell regarding potential interest rate hikes beyond expectations, as well as a report from Indonesia's Central Statistics Agency (BPS) in March 2018 highlighting a trade balance deficit of USD 120 million in February 2018. Despite these challenges, the performance of the CSPI and Infobank15 showed a quick recovery, particularly in June 2018, following an increase in the benchmark interest rate by Bank Indonesia. This indicates that the banking sector demonstrated resilience to economic shocks before the pandemic, as reflected in the fluctuating yet stable return trends.

2019 CSPI increased by only 2.18%, due to economic slowdowns resulting from the trade war. During this period, the chart indicates no significant decline in the performance of banking stocks. The Infobank15 return followed the stable trend of the CSPI, reflecting a healthy banking sector before the onset of the pandemic. On March 2, 2020, President Joko Widodo announced the first confirmed case of COVID-19 in Indonesia. By the end of that month, the number of cases had exceeded 100. Simultaneously, 11 countries reported being affected by COVID-19, primarily triggered by individuals who had traveled to Wuhan, China. This situation contributed to a nearly 25% decline in the Infobank15 Index. During this period, the chart illustrates a sharp drop in March 2020, reflecting the initial impact of the pandemic on the stock market. This significant decline represents the market's immediate response to the global uncertainty caused by the COVID-19 pandemic.

From April to July 2020, the Infobank15 Index recorded positive performance. The surge in COVID-19 cases in Indonesia, reaching 5,000 cases, led the government to implement Pembatasan Sosial Berskala Besar (PSBB), including restrictions on foreign nationals entering Indonesia. This situation increased the demand for digital banking services, which became essential for many people. The volume of electronic money transactions rose sharply, contributing positively to the financial performance of the banking industry. The Infobank15 chart during this period showed a consistent recovery trend, although it did not fully return to pre-pandemic levels.

From August to September 2020, the Infobank15 Index re-recorded negative performance as daily positive COVID-19 cases reached new highs (up to 3,000 cases). The increase in daily cases raised concerns among investors, particularly due to business disruptions, fears of rising non-performing loans, and limited hospital capacity. This heightened volatility reflected the market's uncertainty during the pandemic's peak. In October and November 2020, the Infobank15 Index returned to positive performance, driven by the easing of PSBB measures and the reopening of various economic activities.

However, a subsequent decline occurred from December 2020 to January 2021, attributed to a surge in COVID-19 cases following the Christmas holiday. Optimism re-emerged in February 2021 with the commencement of the government's vaccination program, boosting market confidence as reflected in the rising Infobank15 Index during that month. Throughout 2021, the index performance remained volatile, impacted by the Delta variant mid-year and a decline in September due to the Federal Reserve's tapering policy and the extension of the PPKM policy (*Pemberlakuan Pembatasan Kegiatan Masyarakat*). Nonetheless, market optimism rebounded at the end of 2021, supported by increased vaccination rates and visible signs of economic recovery.

The post-COVID-19 period, spanning January 2023 to March 2024, showed weaker performance for both the CSPI and Infobank15 Index. In early 2023, the CSPI dropped by 5%, and the Infobank15 Index fell by 10%. A decline in banking credit growth by 1% compared to the previous year and global economic phenomena, such as a worldwide recession, further contributed to these declines. The global recession, driven by high inflation rates and interest rate adjustments (Afifah & Fauziyyah, 2023), pressured economic growth significantly. High inflation reduced consumer purchasing power, as people limited spending, leading to declines in corporate revenues.

By the end of 2023, however, the performance of both the CSPI and Infobank15 Index showed a positive trend, with increases of up to 10%. According to a press release by the Financial Services Authority (OJK), the banking sector remained stable, supported by a Q3 2023 GDP growth rate of 4.94% and declining inflation, which spurred higher household consumption and building investment. The upward trend in the CSPI and Infobank15 Index was further influenced by increased profitability (ROA) in banking stocks from October 2023 to the year's end. High ROA attracted significant investor interest, positively impacting stock prices and the CSPI (Reny et al., 2019).

Comparison of Infobank15 and CSPI Annual Performance

Figure 2 compares annual performance between the Infobank15 Index and the CSPI from 2019 to 2023. The chart highlights that Infobank15 outperformed the CSPI, particularly during the COVID-19 pandemic in 2020 and 2021, when the banking sector successfully leveraged digital transformation in its operations.

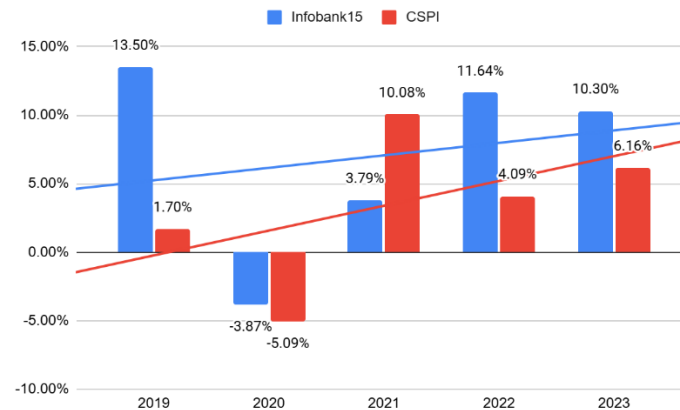


Figure 2 Comparison of Infobank15 Performance with CSPI from 2018 to 2023

Source: Indonesia Stock Exchange (Processed Data by Authors)

In 2020, Infobank15 recorded a decline of -3.87%, outperforming the CSPI, which dropped by -5.09%. This indicates the banking sector's adaptability in utilizing digital technologies such as digital marketing and digital payments, enabling banking services to continue despite the implementation of PSBB. These innovations allowed customers to transact digitally despite limited physical interactions.

In 2021, the CSPI achieved a positive performance of 10.08%, surpassing Infobank15's performance of 3.79%. This improvement was driven by the recovery of several sectors on the Indonesia Stock Exchange, such as property, miscellaneous industries, and consumption, which had previously been underperforming (Arman & Suade, 2022). The property and consumption sectors began to show positive performance in early 2021, followed by the miscellaneous industries sector in March 2021.

In 2022 and 2023, Infobank15 showed stronger performance, rising by 11.64% in 2022 and 10.3% in 2023, compared to the CSPI's growth of 4.09% in 2022 and 6.16% in 2023. This performance underscores the banking sector's ability to adapt to the pandemic and capitalize on the post-pandemic economic recovery. Continuous investment in digital services and effective management of post-pandemic challenges were key factors driving Infobank15's growth. For example, digital banking transaction values increased by 62.82% compared to the previous period as of January 2022 (Bank Indonesia, 2022).

Statistical results from this study reveal no significant differences in the stock returns of Infobank15 across the periods before, during, and after the pandemic. This consistency is

attributed to the banking sector's success in maintaining performance through digital technology adoption. Digitalization allowed banks to remain operational and relevant amidst drastic changes in economic activity due to social restrictions (Doran et al., 2022). The absence of significant differences across periods demonstrates the banking sector's resilience and adaptability during the pandemic. This is reflected in the annual performance chart, where Infobank15 exhibits higher stability and even outperforms the CSPI in the post-pandemic period.

The condition of ROA and NPL in the banking sector

This study also examines non-performing loans (NPL) and return on Assets (ROA) ratios using historical data from four of Indonesia's largest banks: BBKA, BBNI, BBRI, and BMRI. The Non-Performing Loan ratio is a metric used to assess a bank's ability to manage the risk of loan repayment failure by debtors. This ratio is a critical factor for investors, as banks' core business involves collecting public funds and redistributing them as loans or credit. Typically, the NPL ratio in banking hovers below 5%. However, if it exceeds this threshold, it indicates a higher proportion of non-performing loans than performing loans. ROA positively impacts stock prices; the higher the ROA, the higher the stock price (Hasanah & Purnama, 2022). Banks with a high and consistently increasing ROA each year demonstrate a strong ability to generate profits. This ratio is a vital consideration for investors, particularly for long-term investments. The study analyzed the NPL and ROA ratios from 2018 to 2024, yielding the following results.

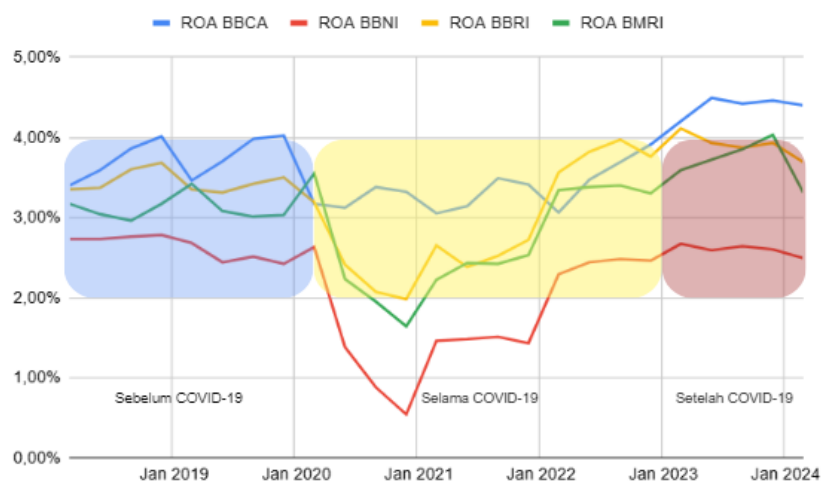


Figure 3 ROA Performance

Figure 3 presents the ROA ratios of four sampled banks across three periods: before COVID-19 (January 2018–February 2020), during COVID-19 (March 2020–December 2022), and after COVID-19 (January 2023–March 2024). The ROA ratios remained stable, with no significant changes observed. These findings align with the research conducted by Wastuti & Hasan (2022), which indicates no significant differences in the Return on Assets (ROA) ratio before and during the COVID-19 pandemic. However, they contradict

the study by Sinaga et al. (2022), which found that the pandemic negatively impacted the ROA of Indonesian conventional banks. Before COVID-19, the banks demonstrated steady performance, as evidenced by Bank Mandiri's ROA variation not exceeding 0.2%. During the pandemic, the ROA ratios remained relatively consistent with the pre-pandemic period, as seen in Bank BRI's ROA variation, which did not exceed 0.5%. Although some banks, including BNI, BRI, and Mandiri, experienced temporary declines due to the surge in COVID-19 cases, they recovered in 2021 and 2022, supported by government policies such as mandatory vaccinations. After the pandemic, the ROA ratios stabilized, with Bank BCA's ROA variation remaining within 0.5% of pre-pandemic levels. These findings highlight the banking sector's resilience and ability to maintain profitability despite the challenges posed by the pandemic.

The analysis shows that ROA ratios declined by 1%–2% for Bank BNI, BRI, and Mandiri during the pandemic. Meanwhile, Bank BCA maintained stability with an average ROA of 3%–4%. This demonstrates effective asset management despite the challenges of COVID-19. The results indicate no significant differences in ROA ratios across pre-pandemic, during-pandemic, and post-pandemic periods. These findings align with Ratri et al. (2022), confirming no considerable decline in ROA ratios during the pandemic and consistent returns for Infobank15 banking stocks across all periods.

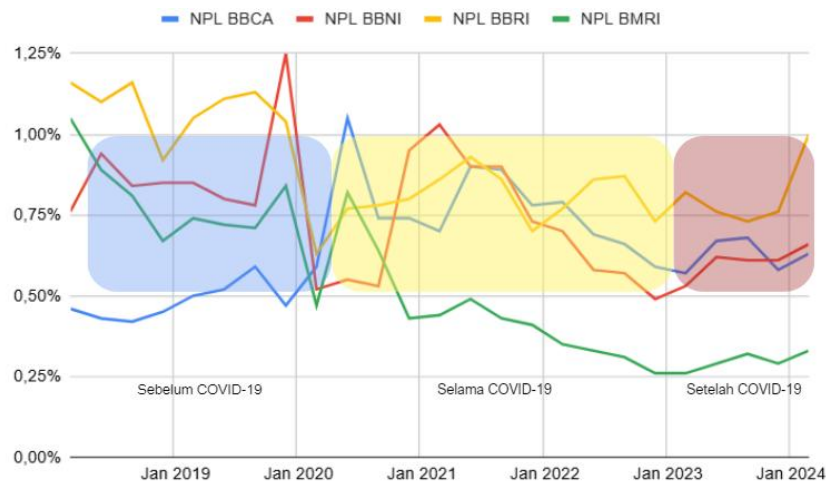


Figure 4 NPL Performance

The blue zone in the figure represents the NPL (Non-Performing Loan) ratio before COVID-19, covering January 2018 to February 2020. The figure shows no significant changes across the four sampled banks during this period, as evidenced by Bank BRI's NPL ratio variation, which did not exceed 0.4%. The yellow zone represents the NPL ratio during COVID-19, from March 2020 to December 2022. The figure indicates stability across the banks, with no significant changes observed. For instance, Bank BCA's NPL ratio variation remained below 0.4%. The red zone illustrates the NPL ratio after COVID-19, spanning January 2023 to March 2024. Similarly, the figure shows no significant changes during this period, with Bank BRI's NPL ratio variation not exceeding 0.25%. These findings highlight

the consistency of NPL ratios across all periods, demonstrating the resilience of the sampled banks in managing credit risks effectively.

Based on the collected data and analysis, it can be concluded that there were no significant differences in NPL ratios before, during, and after COVID-19. These findings align with the study by Anggraini et al. (2021), which also reported no significant differences in average NPL ratios between the pre-COVID-19 and during-COVID-19 periods. The NPL results further confirm no significant differences in stock returns for Infobank15 banking stocks across the three periods. Overall, the stability of NPL and ROA across all periods indicates that the Indonesian banking sector successfully maintained strong financial fundamentals, ensuring the stability of stock performance amid the economic fluctuations caused by the pandemic. The findings align with research conducted by Ratri et al. (2022), which revealed that there were no significant differences in the values of Non-Performing Loans (NPL) and Return on Assets (ROA) before and during the COVID-19 pandemic. Although the value of NPL increased during the transition from the pre-pandemic period to the COVID-19 phase due to decreased business performance and the ROA value decreased as the pandemic shock led to inefficient operations, the study successfully demonstrated that the banking industry has continued to strive for performance stability, as evidenced by the insignificant differences in the values of NPL and ROA during this period (Ratri et al., 2022). The absence of significant changes in NPL and ROA reassured investors that the banking sector remains a safe and stable investment. This explains why no significant differences in stock returns were observed across the three periods.

Conclusion

This study examines the performance differences of Indonesian banking stocks listed in the Infobank15 Index across three periods: before, during, and after the COVID-19 pandemic. The ANOVA and Post Hoc Testing results indicate no significant differences in stock returns during these periods, suggesting that the banking sector remained stable despite the crisis. Despite the initial impact of the pandemic on the stock market, the Indonesian banking sector demonstrated resilience, recovering and maintaining long-term stability in stock performance. Strong financial fundamentals and government interventions supported the sector's resilience, particularly credit restructuring programs that controlled non-performing loans (NPLs). Additionally, accelerating digital banking adoption helped maintain operational efficiency and investor confidence.

These findings highlight the sector's strong resistance to global economic crises, such as the COVID-19 pandemic, reflecting its inherent stability even under highly volatile conditions. Furthermore, this study reinforces that COVID-19 was primarily a health crisis rather than a financial crisis, which explains why the banking sector could recover without prolonged instability. While the industry experienced a decline at the onset of the pandemic, it successfully rebounded through performance improvements driven by innovations and the adoption of digital services. Overall, the banking sector's stability as revealed in this study reinforces its potential as a viable option for long-term investment,

particularly due to its ability to maintain robust performance amid uncertain economic conditions.

This study has certain limitations, as it focuses solely on the Infobank15 Index, which may not capture the performance of all financial institutions. Future research could expand the scope to other banks and non-bank financial institutions to gain a broader perspective. Additionally, incorporating macroeconomic factors such as interest rates, inflation, and GDP growth could provide deeper insights into the mechanisms behind financial market stability. Further studies could also explore the role of digital banking and fintech innovations in sustaining financial resilience and comparative analyses of different crisis types (health, financial, geopolitical) and their impact on stock markets.

References

- Afifah, S. N., & Fauziyyah, N. (2023). Dampak Resesi 2023 terhadap Harga Saham di Indonesia. *Mizania: Jurnal Ekonomi Dan Akuntansi*, 3(1), 292–299. <https://doi.org/10.47776/mizania.v3i1.612>
- Angraini, M., elina, M., & Ratih, A. (2021). Comparison of Indonesian Banking Performance Before and During The Covid-19 Pandemic. *International Journal of Economics and Management Studies*, 8(4), 68–75. <https://doi.org/10.14445/23939125/IJEMS-V8I4P109>
- Arianto, B. (2021). Dampak Pandemi COVID-19 terhadap Perekonomian Dunia. *Jurnal Ekonomi Perjuangan*, 2(2), 106–126. <https://doi.org/10.36423/jumper.v2i2.665>
- Arman, A., & Suade, Y. K. M. (2022). Analysis of the Sectoral Stock Price Index on the IDX During The Covid-19. *Jurnal Minds: Manajemen Ide Dan Inspirasi*, 9(1), 79–90. <https://doi.org/10.24252/minds.v9i1.25451>
- Bank Indonesia. (2022). *Pandemi Pendorong Digitalisasi*. <https://www.bi.go.id/id/publikasi/ruang-media/cerita-bi/Pages/Pandemi-Pendorong-Digitalisasi.aspx>
- Coibion, O., Gorodnichenko, Y., & Weber, M. (2020). The Cost of the Covid-19 Crisis: Lockdowns, Macroeconomic Expectations, and Consumer Spending. *National Bureau of Economic Research*. <https://doi.org/10.3386/w27141>
- Doran, N. M., Bădîrcea, R. M., & Manta, A. G. (2022). Digitization and Financial Performance of Banking Sectors Facing COVID-19 Challenges in Central and Eastern European Countries. *Electronics*, 11(21), 3483. <https://doi.org/10.3390/electronics11213483>
- Hasanah, U., & Purnama, I. (2022). Pengaruh Return on Assets, Return on Equity, dan Debt to Equity Ratio Terhadap Harga Saham Perbankan yang Go Publik di Bursa Efek Indonesia. *Jurnal Ekonomi & Bisnis*, 10(2), 187–196. <https://doi.org/10.58406/jeb.v10i2.923>
- Kristina, F. (2022). Analisis Harga Saham Perbankan Sebelum dan Setelah Pengumuman Covid-19 di Indonesia. *Jurnal Ilmu Sosial, Manajemen, Akuntansi Dan Bisnis*, 3(1), 13–24. <https://doi.org/10.47747/jismab.v3i1.623>
- Kusnandar, D. L., & Bintari, V. I. (2020). Perbandingan Abnormal Return Saham Sebelum dan Sesudah Perubahan Waktu Perdagangan Selama Pandemi Covid-19. *Jurnal Pasar Modal Dan Bisnis*, 2(2). <https://doi.org/10.37194/jpmb.v2i2.49>
- Martini, M., Fajarsari, H., & Djohan, H. A. (2021). Analisis Kinerja Saham LQ45 Sebelum dan Selama Pandemi Coronavirus Disease (Covid-19) Di Indonesia. *Jurnal Disrupsi Bisnis*, 4(2), 148. <https://doi.org/10.32493/drbs.v4i2.8905>

- Natali, D. A., & Suhendra, E. S. (2023). Pengaruh Pandemi Covid-19, Inflasi, Nilai Tukar Rupiah (Kurs), Foreign Buy Dan Foreign Sell Terhadap Indeks Saham Perbankan. *Jurnal Ilmiah Ekonomi Bisnis*, 28(1), 69–83. <https://doi.org/10.35760/eb.2023.v28i1.5567>
- Permana, A., Nurpiana, I., Kosim, B., & Hidayat, R. (2022). Perbedaan Kinerja Saham Indonesia Sebelum dan Selama Masa Pandemi Covid-19. *Motivasi*, 7(1), 31. <https://doi.org/10.32502/mti.v7i1.4516>
- Przepiorka, W., & Berger, J. (2017). Signaling Theory Evolving: Signals and Signs of Trustworthiness in Social Exchange. In *Social dilemmas, institutions, and the evolution of cooperation* (pp. 373–392). De Gruyter. <https://doi.org/10.1515/9783110472974-018>
- Ratri, A. M., Suwandar, A., Brimantyo, H., Nugraha, G. I. K., & Rasyid, A. (2022). Comparison of Indonesian Banking Performance Pre and Post Pandemic Covid-19. *Jurnal Bisnis Dan Manajemen*, 9(1), 109–118. <https://doi.org/10.26905/jbm.v9i1.7637>
- Reny, A. R., Saleh, M. Y., & Sapiri, M. (2019). Pengaruh Return on Asset dan Tobin's Q Terhadap Volume Perdagangan Saham Pada Perusahaan Perbankan yang Listing di Bursa Efek Indonesia Periode Tahun 2013-2017. *Indonesian Journal of Business and Management*, 1(2), 09–16. <https://doi.org/10.35965/jbm.v1i2.294>
- Ross, S. A., Westerfield, R., & Jordan, B. D. (2003). *Fundamentals of Corporate Finance*. McGrawHill.
- Salmita, D. (2023). Analisis Risk Management Disclosure : Leverage, Profitabilitas dan Kepemilikan Publik (Studi pada Perbankan yang terdaftar di Bursa Efek Indonesia). *Jurnal Ilmu Perbankan Dan Keuangan Syariah*, 5(1), 52–66. <https://doi.org/10.24239/jipsya.v5i1.144.52-66>
- Salmita, D., Bachmid, A., & Bachmid, S. (2024). Banking Stock Performance in the Conventional Banking Industry: An Examination Before and During Covid-19 Pandemic. *Jurnal Ilmu Perbankan Dan Keuangan Syariah*, 6(2), 127–248. <https://doi.org/10.24239/jipsya.v6i2.284.237-248>
- Saragih, M. A. P., & Handayani, P. W. (2021). *Evaluasi Dampak Kebijakan Stimulus Pemerintah terhadap Perbankan dan UMKM pada Masa Pandemi*. 3(1), 103–123.
- Sari, R., & Syafitri, L. (2022). Analisis Kinerja Perbankan di Masa Pandemi Covid 2019. *Riset, Ekonomi, Akuntansi Dan Perpajakan (Rekan)*, 3(2), 137–146. <https://doi.org/10.30812/rekan.v3i2.2375>
- Sethi, M., Dash, S. R., Swain, R. K., & Das, S. (2021). Economic Consequences of Covid-19 Pandemic: An Analysis of Exchange Rate Behaviour. *Organizations and Markets in Emerging Economies*, 12(2), 258–284. <https://doi.org/10.15388/omee.2021.12.56>
- Sinaga, M. S., Kurnianingsih, H. T., Riana, Z., & Lubis, F. K. (2022). Analisis Kelayakan Penyaluran Kredit Konsumtif Dan Kredit Produktif Pada Bank Konvensional Yang Terdaftar Di Bursa Efek Indonesia Terhadap Roa Perbankan Sebelum Dan Sesudah Pandemi Covid-19. *JRAM (Jurnal Riset Akuntansi Multiparadigma)*, 9(1), 1–10. <https://doi.org/10.30743/akutansi.v9i1.5698>
- Siswanto. (2020). Pengaruh Efek Diumumkannya Kasus Pertama Covid-19 Terhadap Harga Saham dan Total Saham yang Diperdagangkan (The Effect of The First Covid-19 Case Announcement on Stock Prices and Stock Trading Totals). *Jurnal Akuntansi Keuangan Dan Manajemen*, 1(3), 227–238. <https://doi.org/10.35912/jakman.v1i3.38>
- Topcu, M., & Gulal, O. S. (2020). The impact of COVID-19 on emerging stock markets. *Finance Research Letters*, 36, 101691. <https://doi.org/10.1016/j.frl.2020.101691>
- Wastuti, W., & Hasan, A. (2022). Financial Performance of Islamic Commercial Banks Before and During the Covid-19 Pandemic in Indonesia. *Indonesian Interdisciplinary Journal of Sharia Economics (IJSE)*, 5(2), 550–572. <https://doi.org/10.31538/ijse.v5i2.2135>
- Wren-Lewis, S. (2020). The Economic Effects of a Pandemic. *Social Europe*. <https://www.socialeurope.eu/the-economic-effects-of-a-pandemic>

Tompo, Sidjaja, Thenikusuma & Maichal

Analysis of Banking Stock Performance Before, During, and After the COVID-19 Pandemic ...

Zhang, D., Hu, M., & Ji, Q. (2020). Financial markets under the global pandemic of COVID-19. *Finance Research Letters*, 36, 101528. <https://doi.org/10.1016/j.frl.2020.101528>