

# Analysis of the Impact of the COVID-19 Pandemic and Gross Domestic Product (GDP) on Stock Transaction Volume and Stock Prices in the Tourism Company Group Listed on Indonesia Stock Exchange in 2018-2023

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## Abstract

*This study aims to analyse the effect of COVID-19 and Gross Domestic Product (GDP) on the volume of stock transactions and stock prices in the tourism company group listed on the IDX in 2018-2023. This study uses quantitative research methods with panel data analysis and is processed using Eviews 12. The dependent variable is the volume of stock transactions and stock prices. The independent variables in this study are the value of Gross Domestic Product (GDP) and COVID-19, which are used as dummy numbers. This research shows that COVID-19 has a significant negative effect on the price of shares and a significant positive effect on the volume of stock transactions. Meanwhile, Gross Domestic Product (GDP) does not affect changes in stock prices or stock transaction volume.*

*Keywords: COVID-19, GDP, stock transaction volume, stock price.*

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## 1. INTRODUCTION

Since March 2020, the world has been shaken by the emergence of the COVID-19 (Coronavirus Disease) virus, an infectious disease caused by a newly discovered virus. The presence of this virus did not only bring adverse effects on human health but, also, significantly weakened the economic activities in various sectors.

In Indonesia, the economic situation became highly unstable, many business sectors experienced recession, including the manufacturing sector, which was forced to reduce production volume due to cost considerations and declining demand. Similar situations affected in the financial sector, where company performance declined due to increased non-performing loans, as debtors struggled economically. The tourism and aviation sectors were among the most severely impacted, as

government-imposed Large-Scale Social Restrictions (PSBB) and temporary closures of tourist destinations leading to an almost total closure, directly reducing company revenues (Budi, 2020).

A concrete example of COVID-19's impact on the tourism sector was experienced by PT Pembangunan Jaya Ancol Tbk (PJAA), the operator of Ancol and Dunia Fantasi (Dufan) amusement parks. In 2020, the company recorded a loss of IDR 392.83 billion, a stark contrast to 2019 when it posted a net profit of IDR 230.42 billion (Olavia, 2021). This decline was due to limitation of 25%–50% visitor and full closures during PSBB. Although there was an increase in PJAA's stock transaction volume due to a rise in investor numbers, this was not supported by a corresponding increase in stock price.

Aside from the pandemic, Gross Domestic Product (GDP) is another external variable that can significantly influence stock prices. GDP is an important indicator that reflects a country's economic health. Fluctuations in Indonesia's GDP during the pandemic had a major impact on business performance across sectors, including tourism.

According to the Ministry of Communication and Information Technology (2022), while Indonesia's GDP contracted by -2.07% in 2020, it grew by 3.69% in 2021. However, the contribution from the tourism sector had not returned to the pre-pandemic level. In 2021, the tourism sector's contribution to GDP increased by 0.15% compared to 2020 and had yet to reach pre-COVID-19 figures.

In 2022, the tourism sector's contribution to GDP decreased to 3.6%, lower than the 4.2% recorded in 2021. This figure also fell short of the government's target of 4.3% (Soehadi et al., 2022). Nonetheless, the tourism sector's foreign exchange revenue reached US\$4.26 billion in 2022, significantly exceeding the target of US\$1.71 billion.

The number of foreign tourists arriving in December 2022 was 895,120 thousands, an increase of 447.08% compared to December 2021. Throughout 2022, the total number of international tourist arrivals in Indonesia reached 5.47 million, a 251.28% increase from the previous year (Hasibuan, 2023).

The Minister of Tourism and Creative Economy, Sandiaga Uno, stated that 2023 marked the transition toward the endemic phase. This period presented opportunities for all sectors to adapt and not only meet but exceed their targets. With the spirit of "3G": Gercep (fast response), Geber (acceleration), and Gaspol (full throttle), the tourism and creative economy sectors aimed to support the economic recovery and job creation.

By 2023, the tourism sector showed significant signs of recovery. As of October 2023, international tourist arrivals reached nearly 9.5 million, surpassing the target of 8.5 million. Foreign exchange earnings totaled US\$10.46 billion, and the sector's GDP contribution was estimated at 3.8%. Domestic tourist movements also surged to 688.78 million trips, exceeding the figures from 2019 before the pandemic.

The tourism sector's contribution to Indonesia's Gross Domestic Product (GDP) experienced significant fluctuations between 2020 and 2023 due to the impact of the COVID-19 pandemic. In 2020, when the pandemic reached its peak and large-scale social restrictions (PSBB) were widely enforced, the tourism sector's contribution to

GDP declined sharply. According to data from the Ministry of Tourism and Creative Economy, the contribution dropped to approximately 2.8%, a significant decrease from pre-pandemic levels, which exceeded 5%.

In 2021, a slight improvement was recorded as several tourist destinations began reopening under limited capacity and national vaccination programs gradually increased public mobility. Despite this progress, the recovery remained modest, with the sector's GDP contribution rising only marginally to around 3.2%. This increase was also uneven, as many small- and medium-sized tourism businesses continued to struggle to recover from the economic downturn.

By 2022, the government had set a target of 4.3% for the tourism sector's contribution to GDP. However, the actual realization fell short at 3.6%. This was primarily due to the continued low volume of international tourist arrivals and the incomplete recovery of activities such as meetings, incentives, conventions, and exhibitions (MICE). Nonetheless, the sector showed early signs of economic rebound, particularly through foreign exchange earnings that exceeded government targets.

A more stable recovery emerged in 2023, when the pandemic transitioned into an endemic phase. The tourism sector's contribution to Indonesia's GDP was estimated to reach 3.8%. This growth was supported by the significant increase in both domestic and international tourist arrivals, along with the revival of creative economy activities that are closely integrated with tourism.

In conclusion, although the tourism sector has yet to return to its pre-pandemic contribution levels, the gradual increase in its share of GDP from 2020 to 2023 reflects a positive recovery trajectory. To fully restore and enhance its role in the national economy, sustainable and comprehensive policy support is required from the government and all relevant stakeholders.

Tourism is among the most vulnerable sectors to external shocks, particularly those involving mobility restrictions and public health crises. During the COVID-19 pandemic, this sector experienced the most severe and immediate impacts compared to other industries. Unlike manufacturing or agriculture, which could maintain partial operations through adjustments in supply chains or labor shifts, tourism is highly dependent on the movement of people, social interaction, and discretionary spending. The implementation of travel bans, the closure of international borders, and restrictions on public gatherings resulted in an abrupt halt to both domestic and international tourism activities.

Data from the United Nations World Tourism Organization (UNWTO) show that global international tourist arrivals declined by 73% in 2020 compared to the previous year, the worst recorded in modern tourism history. In Indonesia, the number of foreign tourist arrivals dropped by more than 75% from 16.1 million in 2019 to just around 4 million in 2020. This sharp decline directly affected businesses such as hotels, airlines, travel agencies, restaurants, and entertainment services, leading to massive layoffs and business closures.

Among all economic sectors, tourism displayed the highest level of volatility and long-term vulnerability during the pandemic. The recovery process for this sector is also expected to take longer, as it relies not only on economic variables but also on

public confidence in health and safety, which cannot be restored instantly. These facts indicate that tourism was indeed the sector most affected by operational disruption and financial performance.

In contrast, sectors such as agriculture, information technology, and certain manufacturing industries were relatively more resilient. For instance, the agriculture sector was able to maintain operations to ensure food supply, and the digital economy even experienced growth due to increased demand for online services. The financial sector, while experiencing pressure from increased loan defaults, was supported by regulatory relief and stimulus packages that enabled partial recovery. These differences underscore the extent to which the tourism sector was uniquely exposed to the effects of the pandemic.

Based on the aforementioned facts and data, the tried to further investigate the relationship between COVID-19, GDP, stock prices, and stock trading volume, particularly within the tourism sector. This research aims to determine whether COVID-19 and Gross Domestic Product (GDP) have significant influences on stock prices and transaction volumes of tourism-related companies.

The purpose of this study is to analyze the influence of the COVID-19 pandemic and Gross Domestic Product (GDP) on stock prices and trading volume in Indonesia's tourism sector. Specifically, the research aimed to determine whether these two macroeconomic factors have significant and measurable impacts on the performance of tourism-related stocks during and after the pandemic period. Through this analysis, the study seeks to provide a better understanding of how external shocks and economic indicators affect capital market dynamics, particularly in vulnerable sectors such as tourism.

## **2. LITERATURE REVIEW**

### **2.1. Theoretical Framework: Efficient Market Hypothesis and Signal Theory**

The relationship between macroeconomic variables, such as Gross Domestic Product (GDP) and stock price movements, can be understood through the lens of established financial theories. One of the most widely accepted frameworks is the Efficient Market Hypothesis (EMH), introduced by Fama (1970). According to EMH, stock prices fully reflect all available information in the market, including both firm-specific data and broader economic indicators. Under this assumption, any significant change in GDP, as a macroeconomic indicator, should be, immediately, reflected in the valuation of stocks, particularly those operating in sensitive sectors such as tourism.

In this context, the dramatic contraction in Indonesia's GDP in 2020, followed by a partial recovery in the subsequent years, serves as an important informational input for investors. The tourism sector, which showed highly volatile performance during this period, offers a critical case for testing the responsiveness of stock prices to macroeconomic changes. The performance of tourism-related stocks like PJAA and JSPT can thus be analyzed to assess whether investor behavior aligns with EMH predictions.

Additionally, Signal Theory (Spence, 1973) offers a complementary perspective. GDP growth, foreign tourist arrival statistics, and government tourism targets function as economic signals that inform investor expectations. Positive signals, such as a rebound in GDP or surpassing foreign exchange targets from tourism, may reduce perceived uncertainty and lead to increased investor confidence. Conversely, missed targets or declining sector-specific contributions to GDP may show sectoral weakness, potentially leading to reduced investment in tourism-related equities.

Together, EMH and Signal Theory provide a robust theoretical foundation for examining the extent to which stock prices and trading volumes in the tourism sector are influenced by macroeconomic developments during the Covid-19 pandemic. These frameworks support the hypothesis that the volatility in tourism company stocks is not random but reflects rational investor responses to credible economic signals and sector performance metrics.

## **2.2. COVID-19 Pandemic**

The COVID-19 is a contagious disease outbreak that compromises human health. It was first identified in 2019 in Wuhan, China, before spreading globally, including to Indonesia. The outbreak was officially detected in Indonesia in March 2020, the same year the World Health Organization (WHO) declared COVID-19 a global health emergency.

In Indonesia, the pandemic had a significant public health impact. In 2020, a total of 22,138 deaths were recorded due to COVID-19, and by December 2021, this number had risen sharply to 160,476. To mitigate the spread of the virus, the Indonesian Government implemented a policy known as Large-Scale Social Restrictions (*Pembatasan Sosial Berskala Besar* or PSBB). PSBB comprises a set of regulatory measures to minimize public mobility and social interaction. These measures resulted in substantial economic uncertainty across the country. Changes in consumer behaviors, travel restrictions, and supply chain disruptions contributed to notable fluctuations in economic activity.

The impacts of this policy varied across sectors. Certain industries experienced more intense effects, particularly those related to tourism, hospitality, transportation, and trading (Setiawan et al., 2020). The consequences of these disruptions directly influenced the financial performance of companies operating within these sectors since financial performance, in turn, is a critical factor for investor decision-making (Alam, 2021).

Since investor participation plays an essential role in the sustainability of publicly listed companies, capital injections provided by investors support the execution of business strategies and enable firms to maintain operations under volatile market conditions. In the context of the Covid 19 pandemic, fluctuations in corporate financial performance have become a key consideration in the investment climate.

## **2.3. Gross Domestic Product (GDP)**

Gross Domestic Product (GDP) is a key indicator in measuring a country's economic health. The concept of GDP refers to the total value of all goods and

services produced within a country's borders during a certain period (Al-Hadi, 2022). Essentially, GDP reflects the magnitude of a country's economic production, whether produced by companies, governments, or society as a whole. GDP measurement includes various components, including individual and household consumption, corporate investment, government spending, and net exports.

GDP is an important reflection of a country's size and economic activities. Economic activities in a country include business activities in that country, such as individual consumption, investment, government spending, and exports, which collectively form the foundation of a diverse and dynamic economy (Al-Hadi, 2022). When GDP grows, business sectors related to consumer goods, manufacturing, and services usually experience an increase in demand (Haloho and Sipahutara, 2023). For example, as public consumption increases, the retail and consumer goods sectors will experience a boost in growth. This increase in business activity can, then, be reflected in companies' performance and stock prices. As business sectors expand, their associated companies will experience increased revenues and profits. This is especially true in sectors that are strongly linked to GDP growth, such as technology, manufacturing, and infrastructure.

GDP growth or decline can provide clues about the economic development direction, whether it will expand or contract (Sijabat and Yuliana, 2021). Positive GDP growth is generally interpreted as a sign of good economic health, while GDP contraction could indicate potential economic problems such as recession.

#### **2.4. Capital Market**

The capital market is a place where investors meet to conduct long-term buying and selling transactions. Instruments in the capital market that can be traded are securities that can be bought and sold by their owners, ownership capital market instruments in the form of shares, and debt instruments in the form of bonds.

The capital market plays an important role in a country's economy. According to Rustiadi et al. (2022), there are several roles and benefits of the capital market as a means for allocating funds efficiently, as an alternative investment, enabling investors to own healthy and prospective companies, implementing professional and transparent company management, and increasing national economic activities.

#### **2.5. Stock Price**

The stock price is the price set for a company to those who want to take part in having share ownership rights (Putri, 2020), or in other words, the stock price is the price set for a share at that time in the stock market. It is the price an investor must pay to buy stocks or the price received when an investor sells them. Stock prices can fluctuate daily, even moment-to-moment, depending on the actions of investors and the factors that influence them. Some factors often affect stock prices, namely the law of supply and demand.

According to Lilianti (2018), stock prices can be determined by the law of supply and demand. If many people buy shares, the share price will increase, and vice versa, if many people sell company shares, the share price will decrease. In addition to the law of supply and demand, other factors affect stock prices: company financial

performance, economic news, company events, market sentiment, technical factors, market regulation, macroeconomic conditions, and risk (Oktavia & Nugraha, 2018).

Several factors can trigger an increase or decrease in stock prices, especially during the current COVID-19 Pandemic outbreak (Febriyanti, 2020), government policy announcements, changes in business activity, company financial performance, news about new vaccines or treatments, changes in consumer demand, and long-term outlook.

After studying the various factors above, the stock price reflects the market's expectations of the company's future performance. Therefore, the value of the stock price can change at any time. Stock price movements are always observed by investors and are used as samples in their observations. This kind of thing will be of concern to financial managers. One of the objectives of the financial manager is to maximize the value of the Company (Rosmawati, 2023). This goal will be achieved by companies that go public by maximizing the value of their share price. In a macroeconomic country, stock prices indicate the economic condition of the country concerned in the field of industry that is engaged in (Putri, 2020).

## **2.6. Stock Trading Volume**

According to Fauziah (2013) as quoted by Priana and Muliarta (2017), stock trading volume is the number of company stocks traded in the capital market daily at a price agreed upon by buyers and sellers. Stock trading volume is important for investors because the volume of stock trading illustrates the condition of securities traded in the capital market, which can have an impact on stock prices (Priana and Muliarta, 2017).

Stock trading volume activity is the number of stocks actively traded by capital owners in stock market (Febriyanti, 2020). The volume can be measured through the amount of trading volume activity (AVP). Stock trading volume is the ability to convert shares into cash in a short time at a fair price, at the closing price of securities in the current market, with the number and quality of stocks being the main requirements. The better quality the stock is, the more it is considered to provide a good return, thus attracting investors to buy and vice versa (Irawan & Suaryana, 2016).

Investors usually make investment decisions related to risk and expected returns. This information is useful for investors when analyzing stocks. The existence of information circulating in the capital market can change investors' confidence in making decisions; any information circulating can cause market reactions. The market reaction can be seen from the trading volume activity.

## **2.7. Hypotheses**

Based on the theoretical framework discussed earlier, it can be inferred that changes in macroeconomic conditions, particularly gross domestic product (GDP) growth, can influence stock prices and trading volumes, especially in sectors highly sensitive to mobility and social interaction, such as tourism. According to the efficient market hypothesis (EMH) proposed by Fama (1970), the market is considered efficient if all relevant information, including macroeconomic indicators like GDP, is fully and immediately reflected in stock prices. Thus, significant fluctuations in GDP are expected to prompt corresponding movements in sector-related stock prices.

Meanwhile, Signal Theory (Spence, 1973) suggests that macroeconomic indicators such as GDP growth and foreign exchange earnings from tourism function as economic signals that shape investor perceptions. When interpreted positively, these signals may boost investor confidence in the tourism sector, resulting in increased demand for tourism-related stocks and subsequently higher prices and trading volumes.

Drawing from these theoretical perspectives and the observed volatility of the tourism sector in Indonesia amid the COVID-19 pandemic, the following hypotheses are proposed:

**H1:** Gross Domestic Product (GDP) has a significant effect on the stock prices of tourism sector companies in Indonesia during the COVID-19 pandemic.

**H2:** Gross Domestic Product (GDP) has a significant effect on the stock trading volume of tourism sector companies in Indonesia during the Covid-19 pandemic.

**H3:** The number of international tourist arrivals has a significant effect on the stock prices of tourism sector companies.

**H4:** The number of international tourist arrivals has a significant effect on the stock trading volume of tourism sector companies.

These hypotheses will be empirically tested using quantitative data from publicly listed tourism companies on the Indonesia Stock Exchange, such as PT Pembangunan Jaya Ancol Tbk (PJAA) and PT Jakarta Setiabudi Internasional Tbk (JSPT), over the period from 2020 to 2023.

### **3. METHODOLOGY**

This research was conducted on a group of tourism companies listed on the Indonesia Stock Exchange (IDX) during the 2018–2023 period. The study uses secondary data, which refers to information that has already been processed and published by the original source, in this case, the company management. Data were obtained from annual reports published through the IDX website or the official websites of the respective companies.

The data collection technique applied in this study is the documentation method using secondary sources. According to Sugiyono (2018: 456), secondary data refers to sources that do not directly provide data to data collectors, such as data obtained through documents or intermediaries. All financial data used in this study were retrieved from the official IDX website ([www.idx.co.id](http://www.idx.co.id)) and are, therefore, considered secondary.

This research applies an ex post facto design, which is used to examine variables which occurrences have already taken place before the research begins (Arikunto, 2010). Based on the level of explanation, this study is categorized as causal associative research, aiming to analyze the influence of independent variables on dependent variables (Sugiyono, 2019). The purpose of this study is to determine the effect of Covid-19 and gross domestic product (GDP) on stock prices and stock transaction volume in the tourism sector listed on the IDX.

The analytical method employed in this study is econometric analysis using panel data regression. This technique is suitable for analyzing time-series and cross-sectional data, particularly to assess variations in stock prices and transaction volumes before and after the COVID-19 pandemic. Panel data regression, which involves the movement of individual units over time, is analyzed using EViews software (Gujarati & Porter, 2012). Classical assumption tests and estimation procedures were also carried out to ensure model reliability.

## 4. RESULTS AND DISCUSSION

### 4.1. Descriptive Statistics

Descriptive statistical analysis aims to provide an overview or describe the data in the variables seen from the average (mean), minimum, maximum, and standard deviation. The results of descriptive statistical analysis based on the collected variable data are as follows:

**Table 1.** Descriptive Statistics of the Independent Variable Price

Variable	N	Minimum	Maximum	Mean	Standard Deviation
<b>Stock Price</b>					
COVID-19 (Dummy)	111	0.000000	1.000000	0.657658	0.476645
GDP (Gross Domestic Product)	111	1.48E+13	2.09E+13	1.72E+13	2.21E+12
<b>Transaction Volume</b>					
COVID-19 (Dummy)	98	0.000000	1.000000	0.704082	0.458801
GDP (Gross Domestic Product)	98	1.48E+13	2.09E+13	1.74E+13	2.23E+12

Source: Processed Data (2025).

### 4.2. Classical Assumption Analysis Results

**Table 2.** Normality Test Results (Dependent Variable: Stock Price)

N	Minimum	Maximum	Mean	Standard Deviation
111	-1,756.917	1,703.268	1.69E-14	447.197
<b>Jarque-Bera</b>			213.477	
<b>Probability</b>			0.000	

Source: Processed Data (2025).

**Table 3.** Normality Test Results (Dependent Variable: Transaction Volume)

N	Minimum	Maximum	Mean	Std. Deviation
98	-47,857,727	182,000,000	-384,585	54,639,770
<b>Jarque-Bera</b>			71.349	
<b>Probability</b>			0.000	

Source: Processed Data (2025).

Based on Table 2 and Table 3 above, it can be seen that the probability is  $0.00000 < 0.05$ . So, it can be concluded that the data is not normally distributed. Based on the Central Limit Theorem in Ahad et al. (2011), if the number of data observations in the study exceeds 30 ( $\geq 30$ ), it is assumed that the data has a normal distribution or is close to a normal distribution. In this study, there are 76 data observations, which implies that the data have a normal distribution.

#### 4.3. Multicollinearity Test Results

**Table 4.** Multicollinearity Test Results (Dependent Variable: Stock Price)

Variable	GDP	COVID-19
GDP	1	0.603208
COVID-19	0.603208	1
<b>Result:</b> No multicollinearity problem detected.		
Source: Processed Data (2025).		

**Table 5.** Multicollinearity Test Results (Dependent Variable: Transaction Volume)

Variable	GDP	COVID-19
GDP	1	0.586848
COVID-19	0.586848	1
<b>Result:</b> No multicollinearity problem detected.		
Source: Processed Data (2025).		

Table 4 and Table 5 show that the correlation value between X1 and Covid-19 is  $0.6 < 0.90$  and  $0.5 < 0.90$ . Respectively, it can be concluded that there is no multicollinearity problem.

#### 4.4. Heteroscedasticity Test Result

**Table 6.** Heteroscedasticity Test Results (Dependent Variable: Stock Price)

Test Statistic	Value
F-Statistic	0.836717
Prob. Chi-Square	0.493600
Source: Processed Data (2025).	

**Table 7.** Heteroscedasticity Test Results (Dependent Variable: Transaction Volume)

Test Statistic	Value
F-Statistic	1.146627
Prob. Chi-Square	0.330200
Source: Processed Data (2025).	

Based on Table 6 and Table 7 above, the Prob. Chi-Square (the Obs\*R-squared) is  $0.4936 > 0.05$  and  $0.3302 > 0.05$ , respectively, and it can be concluded that there is no Heteroskedasticity problem.

#### 4.5. Autocorrelation Test Results

Autocorrelation analysis aims to test whether there is a correlation in a linear regression model between confounding errors in period  $t$  and in period  $t-1$  (previous) (Ghozali, 2016). According to Basuki and Prawoto (2017), autocorrelation analysis will not be useful for non-time series data. Because this study uses a panel data model consisting of cross-sectional and time series data, it did not conduct an autocorrelation test. It is assumed that there is no autocorrelation in the panel data model.

#### 4.6. Multiple Regression Test Results

The regression model chosen to analyze the effect of COVID-19 and Gross Domestic Product (GDP) on the share price of tourism companies is the FEM (Fixed Effect Model) model. The results are shown in Table 8.

**Table 8.** Coefficient of Determination (Dependent Variable: Stock Price)

Statistic	Value
R-Squared	0.859779
Adjusted R-Squared	0.828619

Source: Processed Data (2025).

Table 8 shows the adjusted R Square value of 0.828619. These results indicate that the dependent variable, stock price, can be explained by the independent variables, namely, COVID-19 and Gross Domestic Product (GDP), by 82%, while the remaining  $(100\% - 82\%) = 18\%$  is explained by other variables not examined in this study.

**Table 9.** Coefficient of Determination (Dependent Variable: Transaction Volume)

Statistic	Value
R-Squared	0.716211
Adjusted R-Squared	0.584217

Source: Processed Data (2025).

Table 9 shows the adjusted R-squared value is 0.584217. These result shows that the dependent variable transaction volume can be explained by the independent variables, namely COVID-19 and Gross Domestic Product (GDP), by 58%. In comparison, the remaining  $(100\% - 58\%) = 42\%$  is explained by other variables not examined in this study.

#### 4.7. F-Statistic Test

The F-statistic test essentially shows whether overall, all independent variables included in the model have a significant impact on the dependent variable.

**Table 10.** F-Test Results (Dependent Variable: Stock Price)

Test Statistic	Value
F-statistic	27.59223
Prob. (F-statistic)	0.000000

Source: Processed Data (2025).

Based on Table 10, the calculated F value is 20.18794 with a probability (Prob F-statistic) of 0.000000. Because the probability value is <0.05, it can be concluded that the independent variables, consisting of GDP and COVID-19, have an effect on stock prices.

**Table 11.** F-Test Results (Dependent Variable: Transaction Volume)

Test Statistic	Value
F-statistic	2.652407
Prob. (F-statistic)	0.001712

Source: Processed Data (2025).

#### 4.8. T-Test (Partial)

This t-test provides information on whether there is a significant individual effect of each independent variable on the dependent variable. The results of the t-test calculation can be found in the following table:

**Table 12.** T-Test Results (Dependent Variable: Stock Price)

Variable	Coefficient	t-Statistic	Prob.
C	1,141.586	2.704886	0.0082
COVID-19	-350.6693	-2.827508	0.0058
GDP	-6.72E-12	-0.249211	0.8038

Source: Processed Data (2025).

By looking at Table 12, the multiple linear regression equation for stock price can be constructed as follows:

$$\text{Stock Price} = 1141.586 - 350.669(\text{COVID-19}) - 0.0000000000672(\text{GDP})$$

The regression results show that the stock price before the Covid-19 pandemic (dummy variable Covid-19 = 0) is 1141.586. This situation occurs when the value of stock prices is when the variable Covid-19 = 0 and GDP=0. During the COVID-19 pandemic, there is a difference of -350.6693 points. Then the share price during Covid-19 is 790.9167 (1141.586 - 350.6693), indicating GDP does not affect the share price.

**Table 13.** T-Test Results (Dependent Variable: Transaction Volume)

Variable	Coefficient	t-Statistic	Prob.
C	-43,733,562	-1.864043	0.0661
COVID-19	25,737,360	0.770627	0.0422
GDP	7.39E-05	2.066073	0.4433

Source: Processed Data (2025).

By looking at Table 13, the multiple linear regression equation for transaction volume can be constructed as follows:

$$\text{Stock Transaction Volume} = -43,733,562 + 25,737,360(\text{COVID-19}) + 0.0000739(\text{GDP})$$

From the equation model above, it can be interpreted as follows: the stock price when the COVID-19 pandemic has not occurred (dummy variable COVID-19 = 0) is -43,733,562. This situation occurs when the volume of stock transactions is high, when the COVID-19 variable = 0, and GDP = 0. During the COVID-19 pandemic, there was a difference of 25,737,360 million shares. Then the volume of stock transactions during COVID-19 is -17,996,202 (-43,733,562 + 25,737,360), indicating that GDP does not affect the volume of stock transactions.

## 5. CONCLUSION

Based on the results and discussion in the previous chapters, it can be concluded that the Covid-19 pandemic has an effect on the share price and volume of stock transactions in tourism companies listed on the Indonesia Stock Exchange during the 2018-2023 period. The decline in tourism company revenues as a result of this pandemic has the potential to affect investors' decisions to buy shares. According to Lilianti (2018), stock prices are influenced by the law of supply and demand, where an increase in demand for a company's shares tends to increase its stock price, and vice versa. Stock transaction volume is based on several reasons: market uncertainty, portfolio rebalancing, recovery expectation, and speculative activities. When the share price of the tourism sector falls, investors look away. The results showed that gross domestic product (GDP) had no effect on the stock price and volume of stock transactions in the tourism sector during the period 2018-2023. This findings suggest that other factors may have a more dominant role in determining the share price of tourism companies, which may be related to the internal characteristics of these companies. GDP and stock transaction volume are two different concepts and have a complex relationship. The volume of stock transactions is influenced by more specific market and financial factors, such as investor sentiment, company news, financial reports, and stock prices.

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