

# Financial and Stock Market Performance Conditions of the Transportation Sector before and During the Corona Pandemic in Indonesia

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**Abstract:- This research was conducted to find out the differences in financial performance, stock trading & abnormal returns before and during the Corona Pandemic in Indonesia in 2018-2021. This research was conducted at Transportation Companies registered on the IDX website (<https://www.idx.co.id/id>). Sampling in this study used the saturated sample method and obtained 112 research samples with a four-year period which was divided into 2 periods, namely 2 years before the Corona pandemic and 2 years during the Corona pandemic in Indonesia. The data analysis method uses comparative statistics using SPSS version 26. The results show that the DAR, NPM, and ROI and Return values are abnormally different before and during the Corona pandemic. while the values of CR, Cash Ratio, DER, TATO and WCOT and stock trading were not different before and during the Corona pandemic in Indonesia.**

**Keywords:-** Financial Performance, Stock Trading, Abnormal Return, Corona.

## I. INTRODUCTION

BPS revealed that the participation of the entire transportation sector in GDP in 2018 increased by 8.23% compared to the previous year. Information cited in (Supply Chain Indonesia) ([supplychainindonesia.com](http://supplychainindonesia.com)) in 2019 describes the Indonesian transportation sector in 2018 dominated by the land transportation sub-sector participating by 53.15%, air transportation (36.10%). Rail transportation (1.57%), and other transportation giving low participation, including sea transportation (6.77%), lake, river and ferry transportation (2.41%).

The participation of the five transportation sub-sectors in GDP in 2018 increased by (8.23%) compared to 2017. Of the five transportation sub-sectors, rail transportation (railway) showed the highest change in contribution, namely 14.16% from 9, 17 trillion in 2017 to 10.46 trillion in 2018. In addition to the increase in GDP in transportation and logistics companies, there was an increase in investment in transportation and logistics companies in the first quarter of 2019. The Investment Coordinating Board recorded investment realization in the warehousing, telecommunication and transportation sectors. Transportation and logistics companies grew significantly to IDR 37.3 trillion. compared to the first quarter of 2018.

However, this situation was inversely proportional at the end of 2019.

At the end of 2019 the Corona virus emerged from Wuhan City in China. This virus spread quickly and has spread to several countries, including Indonesia. The Corona pandemic case in Indonesia was announced on March 2, 2020. This pandemic made the Indonesian government implement PSBB which resulted in people's outdoor activities dropping. This regulation caused a decline in the income and profits of companies in the transportation sector, some of which even made losses. According to the information quoted in the word data for 2020. There are several transportation and logistics companies that have experienced a decrease in income and profits during the Corona pandemic in Indonesia, including.

PT Garuda Indonesia is an air transportation sector company that has been affected by the Corona pandemic. the existence of large-scale social restrictions caused community activities to decrease. thereby affecting the company's income directly. In semester 1 of 2020 the company recorded revenue of US\$ 917.28 million, down 58.18% compared to last year's period of US\$ 2.19 billion.

Apart from PT Garuda Indonesia, there are several other transportation companies that are experiencing a financial crisis as a result of the Corona that hit Indonesia. from the land transportation sector, PT Blue Bird, a company engaged in the field of taxi transportation services, recorded a loss of Rp. 93.67 billion in the first semester of 2020. Due to the Corona pandemic, the company suffered a loss of Rp. This is different from last year's period, when the company managed to obtain a net profit of IDR 158.37 billion. In addition, PT Express Transindo Utama, which is in the same field, experienced a financial crisis during the Corona Pandemic in Indonesia. PT Express Transindo Utama recorded a loss of IDR 43.44 billion during the first half of 2020, down 62.47% compared to the loss the company experienced in the last year's period. PT KAI's financial performance, a rail transportation company managed by BUMN, also suffered a crushing blow during the corona pandemic. During the first semester of 2020, this state-owned company recorded a net loss of IDR 1.35 billion, while in the first semester of 2019 the company recorded a profit of IDR 1.21 billion.

The Corona pandemic has also had an impact on the financial performance of the sea transportation sector. PT Transcoal Pacific, a company that provides boat rental services and goods transportation services, was still able to record profits throughout the first half of 2020, namely Rp. 31.47 billion. However, this achievement decreased by 79.88% compared to last year, where the company was able to record a net profit of IDR 156.46 billion. In addition to affecting the company's finances. This pandemic also affected the JCI value. the JCI value during the Corona Pandemic touched its lowest level on Tuesday, March 2, 2020, namely at the level of IDR 3,937. And the JCI value as of April 17 2020 rose to the position of IDR 4,635.

## II. LITERATURE REVIEW

Signaling theory Explains the sender or signal in the form of information that reflects the condition of a company that is beneficial to the recipient (financier) Spence (1973) in Firmansyah et al (2022). Investors' responses to signals can affect market conditions. Investors will react in various ways in response to these signals, such as waiting and watching developments and then taking action. and to understand that the "wait and see" decision is not something that is not good or wrong but that it is seen as a regional government reaction to avoid greater risks Handini & Astawinetu (2020). The content of this signal theory is different from the event study theory which studies the reaction of investors in the capital market to the occurrence of an event whose information has been released (Hartono, 2017 in Suganda 2018).

This study uses financial performance variables with indicators of financial ratios to look for differences in the conditions of transportation financial performance before and during the Corona Pandemic. According to Hutabarat & Puspita (2021) financial ratios are a measuring tool in assessing a company's financial performance. The financial ratio used in this study is the liquidity ratio. Solvability, Profitability and Activity.

According to Anwar (2019) in Asmin et al (2021), liquidity is the ratio that describes a company's ability to pay off short-term debt. The indicators used in this study include (1) CR is a ratio to measure a company's ability to pay short-term debt (2) Cash ratio according to Kasmir (2015) in Asmin et al (2021) is a tool used to measure how much cash is available available to pay debts.

According to Kasmir (2015) in Asmin et al. (2021), Solvency is a ratio to measure how much debt the company bears compared to its assets. The indicators used in this study include (1) DAR According to Kasmir (2015) in Asmin et al (2021) is the debt ratio used to measure the ratio between total debt and total assets. (2) DER According to Kasmir (2015) in Asmin et al (2021) is the ratio used to assess equity debt. This ratio can be found by dividing all the debt owned by the company by the equity owned by the company.

According to Munawir (2016) in Asmin et al (2021), Profitability or Profitability is a company's ability to generate profits over a certain period. The indicators used in this study include (1) NPM According to Kasmir (2015) in Asmin et al (2021) is the ratio used to measure the profit margin on sales. (2) ROI According to Kasmir (2015) in Asmin et al. (2021) is a ratio that shows the return on the total assets used in the company.

According to Hery (2015) in Arum et al (2022). The activity ratio is a tool that serves to measure the effectiveness of a company in utilizing all its sources. The indicators used in this study include (1) TATO is a ratio that shows the efficiency of using the entire company's assets in generating sales volume. Syamsuddin (2016) in Arum et al (2022). (2) WCTO is the ratio of sales to net working capital of Van horne & jr. John (1995) in Arum et al (2022).

This study uses other variables such as stock trading to determine differences in stock trading transactions that occurred in transportation companies before and during the Corona Pandemic on the IDX. as well as using abnormal returns to look for excess differences from returns. Actually, they occurred on normal returns in transportation and logistics companies before and during the Corona Pandemic pandemic in Indonesia.

## III. RESEARCH METHOD

### ➤ *Types of research*

According to Hermawan (2019) Comparative research method is a method that aims to find out whether two variables have differences in an aspect being studied.

### ➤ *Sample*

The population in this study are all companies engaged in the transportation sector that are registered on the IDX in 2018–2021. The sampling technique uses a saturated sampling method in which the entire population is sampled.

### ➤ *Normality Test*

According to Hardisman (2020) The normality test is a test to find out whether the distribution of numerical data is normally distributed or not. Statistically, the normality test can use the Kolmogorov-Smirnov or Shapiro Wilk test.

- Kolmogorov-Smirnov is used if the sample is used ( $> 50$ ). The data distribution is said to be normal if the p value  $> 0.05$ .
- Shapiro wilk is used if the sample is used ( $< 50$ ). The data distribution is said to be normal if the p value  $> 0.05$ . the normality test is the standard for determining if data meets the requirements for parametric statistical tests (Hardisman 2020)

### ➤ *Hypothesis*

Hypothesis testing is a science of statistics to test the truth of a statement statistically from a statement being tested. This study uses the results of the normality test to determine the test equipment to be used to test the hypothesis. if the data is normally distributed then the

parametric Paired Sample T-Test is used to test the hypothesis and if the data is not normal then use the Wilcoxon Non-parametric test.

**IV. RESULTS AND DISCUSSION**

*A. Normality Test*

➤ *Financial Performance*

The data normality test uses the Kolmogorov-Smirnov test from financial report data which consists of 56 sample data before and during the Corona pandemic. Based on the normality test on the liability ratio which consists of CR and Cash Ratio, the significance value of CR before and during the Corona Pandemic was 0.000. this value indicates that the CR variable is not normally distributed. and on the Cash Ratio the significance value before and during the Corona pandemic was 0.000. shows that the Cash Ratio variable is not normally distributed.

The results of the normality test on the Solvency Ratio which consists of DAR and DER are that the significance value of DAR before the pandemic was 0.044 and during the Corona pandemic it was 0.000. this value indicates that the DAR variable is not normally distributed. and in DER the significance value before and during the Corona pandemic was 0.000. It shows that the DER variable is not normally distributed.

The results of the normality test on the Profitability Ratio which consists of NPM and ROI are the significance

value of NPM before and during the Corona pandemic of 0.000. this value indicates that the NPM variable is not normally distributed. and on ROI the significance value before and during the Corona pandemic was 0.000. shows that the ROI variable is not normally distributed.

The results of the normality test on the Activity Ratio which consists of TATO and WCTO data is that the significance value of TATO before and during the Corona pandemic was 0.000. this value indicates that the TATO variable is not normally distributed. and at the WCTO the significance value before and during the Corona pandemic was 0.000. shows that the WCTO variable is not normally distributed.

➤ *Stock Trades*

The significance value of stock trading before and during the Corona pandemic was 0.200. this explains the normal distribution of stock trading variables.

➤ *Abnormal Returns*

The significance value of abnormal return before the Corona pandemic was 0.84 and during the Corona pandemic it was 0.145. this shows that the variable Return is not normally normally distributed

*B. Hypothesis*

➤ *Financial Performance*

Table 1 Financial Performance Hypothesis

Test Statistics <sup>a</sup>		
		Nilai Sig.
Current Ratio SAAT - Current Ratio SBLM	-.469 <sup>b</sup>	.639
Cash Ratio SAAT - Cash Ratio SBLM	-.255 <sup>c</sup>	.799
DAR SAAT - DAR SBLM	-3.268 <sup>c</sup>	.001
DER SAAT - DER SBLM	-.844 <sup>c</sup>	.398
NPM SAAT - NPM SBLM	-2.479 <sup>b</sup>	.013
ROI SAAT - ROI SBLM	-2.272 <sup>b</sup>	.023
TATO SAAT - TATO SBLM	-1.550 <sup>b</sup>	.121
WCTO SAAT - WCTO sblm	-.918 <sup>c</sup>	.359
a. Wilcoxon Signed Ranks Test		
b. Based on positive ranks.		
c. Based on negative ranks.		

➤ *Table 1 can Explain:*

- Significant value CR during & before the pandemic was 0.639. this explains that the CR value before and during the Corona pandemic was no different.
- Significant value Cash ratio during & before the pandemic was 0.799. this explains that the Cash Ratio value before and during the Corona pandemic was no different.
- Significant value DAR during & before the 0.001 pandemic. this explains the different DAR values before and during the Corona pandemic.

- Significant value DER during & before the pandemic 0.398. this explains that the DER value before and during the Corona pandemic was no different.
- Significant value NPM & before pandemic 0.013. this explains that the value of NPM before and during the Corona pandemic was different.
- Significant value ROI during & before the pandemic 0.023. this explains the different ROI values before and during the Corona pandemic.
- Significant value TATO during & before the pandemic 0.121. this explains that the value of TATO before and during the Corona pandemic was different.

- Significant value WCTO during & before pandemic 0.359. this explains the different WCTO values before and during the Corona pandemic.

➤ *Stock Trades*

Table 2 Stock Trades Hypothesis

	<b>Sig. (2-tailed)</b>
RTVAsebelum - RTVAaat	.397

Significant value before and during the corona pandemic Stock trading was 0.397. this explains the value of trading shares does not Different.

➤ *Abnormal Returns*

Table 3 Abnormal Returns Hypothesis

	<b>Sig. (2-tailed)</b>
AARsebelum - AARsaat	.014

Significant value efore and during the corona pandemic Return was not normal 0.014. this explains the different abnormal Return values

**V. DISCUSSION**

➤ *Financial Performance of Transportation Companies before and During the Corona Pandemic in Indonesia*

- *CR before and During the Corona Pandemic*

According to Wilcoxon stated, CR values before & during the Corona Pandemic were no different. The reason is that most of the CR values of transportation companies from before and during the Corona Pandemic were not in good condition. This condition explains that before and during the Corona Pandemic, most of it explains that the company's current assets are considered unable to pay off its current debts and the company still depends on loans.

- *Cash Ratio before and During the Corona Pandemic*

According to the Wilcoxon Stating test, the Cash Ratio value before & during the Corona Pandemic was no different. The reason is the condition of cash & cash equivalent values Most of the transportation and logistics companies before and during the Corona Pandemic had a lower value compared to the value of their current liabilities. from this explanation it can be concluded that most of the cash & cash equivalents owned by the company have not been able to pay off its current debts. The cash ratio value during the Corona Pandemic pandemic decreased, this decrease could be caused by the enactment of the PSBB policy in Indonesia. so that transportation and logistics companies experienced a decrease in passengers which resulted in the company not receiving cash & cash equivalents from ticket sales for transportation services.

- *DAR before and During the Corona Pandemic*

According to the Wilcoxon Stating test, the DAR value before & during the Corona Pandemic was different. The reason is that during the Corona Pandemic in Indonesia there were eight transportation companies where the

majority of the company's assets were obtained/financed using debt which increased significantly. Assets that are acquired/financed with debt are not good for the company's financial health. It is feared that the company will not be able to pay debts with its assets.

- *DER before and During the Corona Pandemic*

According to the Wilcoxon Stating test, the DER values before & during the Corona Pandemic were no different. The reason is that most of the total debt-to-equity value of transportation companies before and during the Corona Pandemic was not in good condition. Where the total value of debt before and during the pandemic was higher than the equity it owned. from this explanation it is concluded that the company's equity has not been able to pay off the total debt it has.

- *NPM before and During the Corona Pandemic*

According to the Wilcoxon Test, the NPM value before & during the Corona Pandemic was different.. The reason was that before the Corona Pandemic entered Indonesia, most transportation and logistics companies suffered losses. This loss is caused by the value of the company's operating expenses is greater than the value of the income generated. This is inversely proportional to the time of the Corona Pandemic in Indonesia, the NPM value increased. this is due to the fact that in 2021 PT Express Transindo Utama Tbk generates a larger net profit compared to income . The biggest profit that the company gets comes from other income and profits from debt relief. This is the reason why NPM for transportation companies was different before the pandemic and during the Corona Pandemic in Indonesia.

- *ROI and During the Corona Pandemic*

According to the Wilcoxon test, it stated that the ROI value before & during the Corona Pandemic was different. The reason is that during the Corona Pandemic PT Express Transindo Utama Tbk produced the highest ROI value compared to other transportation and logistics companies. The ROI value is obtained from the value of the net profit received from other income and the profit from writing off the company's debt is greater than the total assets it owns in 2021.

- *TATO before and During the Corona Pandemic*

According to the Wilcoxon test stated that, the TATO value before & during the Corona Pandemic. The reason: Most of the income generated by transportation companies before and during the Corona Pandemic was lower in value compared to the total value of their assets. from this explanation it can be concluded that most transportation and logistics companies have not been able to maximize all of their assets to generate income. The value of the TATO ratio in transportation and logistics companies decreased during the Corona Pandemic in Indonesia. the decrease in value was caused by the implementation of PSBB Regulations in Indonesia to reduce the spread of the corona virus so that activities outside the home were limited. As a result of the implementation of this regulation, it has an impact on reducing users of transportation services in Indonesia. so that during the Corona Pandemic, Transportation and

Logistics companies could not use their assets to the maximum to generate income.

• *WCTO before and During the Corona Pandemic*

According to the Wilcoxon test, WCTO values before & during the Corona pandemic were no different. The reason is that before and during the Corona Pandemic, most of the working capital conditions owned by transportation and logistics companies have not been able to generate maximum income. During Corona the WCTO value increased. This increase in ratio was caused by eight companies that had the highest working capital value during Corona in Indonesia. so that the eight companies can use their working capital to contribute as contributors to the highest ratio value.

➤ *Trading in Transportation Company shares before and During the Corona Pandemic in Indonesia*

According to the paired sample t-test, stock trading values before & during the corona pandemic were no different. The reason is that investors do not make share buying and selling transactions. during the case of the value of stock trading before and during the Corona Pandemic and tends to wait and see the situation on the capital market. the Corona Pandemic event which was announced by President Jokowi and the Minister of Health did not react to stock trading. This was because investors tended to invest in other companies that received large profits during the pandemic or investors withheld their capital to invest until the Corona Pandemic in Indonesia ended

➤ *Abnormal Returns of Transportation Companies before and During the Corona Pandemic in Indonesia*

According to the paired sample t-test, the Return value was not normal before & during the Corona Pandemic pandemic, it was different. The reason is that the Corona Pandemic in Indonesia sent a strong signal to the capital market in Indonesia and brought positive information to investors and showed that the capital market absorbed this information quickly.

## VI. CONCLUSION

➤ *The Conclusions of this Study are:*

- CR values did not differ between before & during the Corona pandemic. The reason is that most of the CR values of transportation companies from before and during the Corona Pandemic were not in good condition.
- Cash ratio values did not differ between before & during the Corona Pandemic. The reason for this is the condition of cash & cash equivalent values. Most of the transportation and logistics companies before and during the Corona Pandemic had a lower value compared to the value of their current liabilities.
- The DAR value experienced a difference between before & during the Corona Pandemic. The reason is that during the Corona Pandemic there were eight transportation companies where the majority of the company's assets were acquired/financed using increased debt.

- The DER value did not differ between before & during the Corona Pandemic. The reason is that most of the total debt-to-equity value of transportation and logistics companies before and during the Corona Pandemic was not in good condition.
- The NPM value was different between before & during the Corona Pandemic. The reason was that before the Corona Pandemic entered Indonesia, most of the transportation sector companies experienced losses. This loss is caused by the value of the expense being greater than the value of the income generated. This was inversely proportional during the Corona Pandemic.
- The ROI value was different. The reason was that during the Corona pandemic, PT Express Transindo Utama produced the highest ROI value.
- The TATO value did not differ between before & during the Corona Pandemic. The reason is that the income conditions generated by most of the transportation and logistics companies before and during the Corona Pandemic were lower in value compared to the total value of their assets. (8) The WCTO score did not differ between before & during the Corona Pandemic. The reason is that before and during the Corona Pandemic, most of the working capital conditions owned by transportation companies were not able to generate maximum income.
- Stock trading was no different before & during the Corona Pandemic. The reason is that investors tend to wait and see the situation in the capital market during the Corona Pandemic.
- There was a significant abnormal return during the Corona Pandemic. This event brings positive information to the capital market and investors.

## VII. SUGGESTION

- To the management of the company to devise a suitable strategy for the company to deal with unexpected events such as this corona event. This needs to be done so that the company can face and survive events that can disrupt the company's performance.
- Investors are expected to analyze the factors that can affect capital market conditions and be able to analyze the movement of capital market conditions in Indonesia.
- This research can broaden knowledge for readers and as a tool for future researchers. It is hoped that the next researcher will use the vulnerable time before and after the corona pandemic in Indonesia.

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