

## CORPORATE FINANCIAL PERFORMANCE: IS THERE ANY RELATIONSHIP WITH COVID-19?

Nelly Masnila, M. Husni Mubarak, Trizaurah Armiani

*Politeknik Negeri Sriwijaya*

*[nellymasnila@polsri.ac.id](mailto:nellymasnila@polsri.ac.id), [hu5ni\\_mubarak@yahoo.co.id](mailto:hu5ni_mubarak@yahoo.co.id), [trizaurah.armiani@polsri.ac.id](mailto:trizaurah.armiani@polsri.ac.id)*

### ABSTRACT

The research was conducted to determine the impact of the COVID-19 pandemic on companies listed on the Indonesia Stock Exchange. The population in this study is a transportation company listed on the IDX. The data collected for processing are data on the financial ratios of transportation companies for a period of 4 years, namely 2 years before the pandemic (2018-2019) and data for 2 years when the pandemic occurred (2020-2021). The data analysis used in this study used descriptive analysis and comparative test models. The comparison test was performed using t-paired samples and Wilcoxon tests with the help of the program of the view. The results showed that although there were differences in the financial ratios of transportation companies before and during the Covid-19 pandemic, the results of the comparison test showed that there were no significant differences in the company's current ratio (liquidity ratio), solvency ratio (Solvability ratio), and profitability ratio (profitability ratio) before and during the Covid-19 pandemic. For the activity ratio, there is a significant difference in the ratio of receivable turnover (RTO) and asset turnover (ATO), while fixed asset turnover (FATO) and working capital turnover (WCTO) show no significant difference.

**Keywords:** *financial ratios, covid 19 pandemic, comparison test*

This article is licensed under [CC BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/) 

### INTRODUCTION

At the beginning of 2020 the Covid Pandemic broke out. The disease caused by the virus first appeared in Wuhan, China at the end of 2019 and then spread to all corners of the world. Covid disease is a disease caused by coronavirus infection, which is actually one type with the virus in the common cold. Because it is considered nothing more than a common cold virus, the Covid-19 disease has caused economic activities almost all over the world to experience tremendous paralysis for months, especially in 2020 and 2021. Lockdowns are carried out everywhere around the world, business closures, and restrictions on the movement of all human activities, except health care activities (Yoo et al., 2021).

In Indonesia itself, cases of the Covid-19 virus occurred in early March 2020, with the first case in the city of Depok, West Java. Every day infected cases are increasing and resulting in an extraordinary number of deaths and causing paralysis of activity in all fields. In an effort to overcome the rapid and massive spread, on April 17, 2020 the Indonesian government used large-scale social restrictions (PSBB) and imposed Community Activity Restrictions (PPKM) with various levels (1-4) which continued to be extended until conditions were sufficient for the easing of these restrictions. During the pandemic, the company's operational activities were hampered. The industry is required to follow various health protocols, which not only results in swelling the cost of overcoming the disaster due to covid for all employees and their families, but also results in a reduction or even cessation of the company's business activities (Hjelmgren et al., 2001).

Health protocols related to industrial activities include in accordance with the Circular Letter of the Minister of Industry Number 4 of 2020 concerning the implementation of factory operations during the Covid-19 public health emergency. As of early September 2020, around 17,967 Industrial Activity Mobility and Operational Permits (IOMKI) have been issued with the number of workers affected by IOMKI having been issued with the number of affected workers from all industries as many as 5.13 million people. The implementation of IOMKI itself receives strict supervision from the Ministry of Industry as we have stipulated in the Circular Letter of the Minister of Industry Number 8 of 2020 concerning Reporting Obligations for Industrial Companies and Industrial Estate Companies that have IOMKI. However, even in the midst of a deep contraction in the second quarter of 2020, there is a manufacturing industry sector that still recorded a positive performance. These resilient sectors, including the chemical, pharmaceutical and traditional medicine industries, grew by 8.65% (Industry Media Magazine, 2020 Edition).

The Central Statistics Agency (BPS) survey results noted that 82.85% of companies were affected by the Covid-19 coronavirus pandemic. The BPS survey was conducted on 34,559 business actors on July 10-26, 2020. Data collection was carried out through computer-assisted web and self interviewing (CASWI) methods or online surveys. Based on the sector, the accommodation and food/beverage business was the most likely to experience a decrease in revenue, namely 92.47%. Other services became the sector that experienced the second largest decline in revenue, namely 90.90%. This position was followed by the transportation and warehousing sector, construction, processing industry, and trade (source: katadata.co.id)

As a result of the BPS survey, one of the sectors affected by Covid 19 is the transportation sector. According to Bisnis Indonesia news daily (Tuesday, June 23, 2020), from early March to June 2020, bookings for domestic flights fell by 30%, while international flights fell by 70% or in other words from 1,200 flights a day to only 200 flights. Until May 2020, the number of GIAA passengers dropped by 90% and left only 10%. Not only that, grounded aircraft touched the level of 75% of the total 204 aircraft units. The number of planes flying and parked aircraft is inversely proportional compared to previous years.

Based on the description of the research background, it can be formulated that the problem of this research is the impact of the Covid pandemic on the financial performance of companies listed on the IDX. This research focused on transportation companies listed on the IDX in 2020 as many as 12 companies.

### **Covid 19 pandemic**

Pandemic is a term for epidemics that have spread widely to various countries, while epidemic is the use of the term to indicate an increase in the number of cases of a disease or outbreak that arises and / or occurs suddenly in a group of people in a certain region. Basically, pandemics refer to the extent of the spread and not to the high rate of cases of that particular disease/outbreak. Covid-19 which is a new strain of influenza virus (H1N1) occurred at the end of 2019 in the city of Wuhan, China. The disease caused by this virus then became endemic in Wuhan and then spread throughout the country, which then caused it to no longer be endemic, but became a pandemic. This disease is very contagious. The virus spreads through fluid (droplets) from an infected person's mouth or nose. These droplets can be very fine and small

droplets (aerosols) that can enter or infect through the respiratory tract, eyes, and/or mouth, or when limbs touch the surface of objects or things that have been terminated by this covid.

The nature of its rapid and massive spread causes a high number of sufferers with various complaints ranging from low-level to severe pain symptoms, even to the point of requiring special handlers. This disease which was originally considered mild turned out to have a very bad and widespread impact, not only on a country but on the whole world. It even resulted in the paralysis of the economy, both at the time of the incident, and the aftermath of which is suspected to continue to be a domino effect of economic problems in the future.

### **Company Financial Performance**

Financial performance is a description of the company's ability to achieve results for various activities that have been carried out. According to Rudianto (2013: 189) financial performance is the result or achievement that has been achieved by the company's management in carrying out its function of managing company assets effectively during a certain period. Devi and Masdiantini (2020) stated that financial performance is a situation that describes a company's financial condition based on its objectives, standards, and predetermined criteria. Meanwhile, Cho & Saki (2022), stated that financial performance refers to the company's operational and financial results that reflect the company's ability to compete and carry out the company's operational activities efficiently and effectively. Munizu (2010), shows that the company's performance can be seen, among others, through increased growth: (1) turnover, (2) profit, (3) equity, (4) number of workers, (5) market and market share.

Company performance needs to be measured periodically from time to time. Measuring company performance is very important because from the results of the performance measurement can be known the company's financial condition and position in the business competition map, as well as can be used as a basis for policy-making in deciding the company's steps forward. One tool that can be used to measure financial performance is through financial ratio analysis.

### **Ratio Analysis to Measure the Company's Financial Performance**

Financial performance measurement is a way to measure the company's financial quality and to determine the effectiveness and efficiency of the company's business activities in a certain accounting period (Elgazzar et al., 2012). Measurement of financial performance, among others, can be done using ratio analysis. This ratio analysis is a process of assessing financial statements in the form of numbers or values by comparing one value with another. Ratio analysis aims to assess the company's liquidity, solvency, operational performance, as well as the level of profit generated (Kasmir, 2016).

Analysis activities using ratios are carried out to review financial statements by comparing one account with another account contained in the financial statements, can be used to compare between accounts in various financial statements (Sujarweni, 2017). Based on the information contained in the financial statements, ratio analysis that is commonly used includes: (1) liquidity ratio, (2) solvency ratio, (3) activity ratio, and (4) profitability ratio.

According to Kasmir (2016), the liquidity ratio is a ratio used to measure how capable a company is in paying off its short-term obligations. Still in Kasmir (2016) it is stated that the solvency ratio shows the company's ability to meet its financial obligations, both short-term

and long-term financial obligations. Activity Ratio is a ratio used to measure the effectiveness of the company in using its assets. Profitability is a ratio used to indicate a company's ability to generate profits over a certain period. This profitability ratio provides an overview for company management regarding the effectiveness of managing the company's operational activities.

## **METHOD**

The population in this study are 12 transportation companies listed on IDX. The entire population is used as the research sample. The population in this study of transportation companies listed on the IDX are 12 companies. The sample selection method used is a saturated sample, which means that the entire population is sampled in this study.

The data to be analyzed is financial ratio data consisting of: (1) Liquidity Ratio / Liquidity Ratio (Current Ratio and Cash ratio); (2) Solvability Ratio (Debt to Asset Ratio and Debt to Equity Ratio); (3) Profitability Ratio (Gross Margin Ratio, Net Margin Ratio, Return on Assets, and Return on Equity); (4) Activity Ratio (Receivable Turnover Ratio, Asset Turnover Ratio, Fixed Asset Turnover Ratio, and Working Capital Turnover Ratio).

The data analysis used is a comparative test model to compare company performance data before and during the Covid-19 pandemic. The comparison test was performed using t-paired samples and Wilcoxon tests with the help of the Eviews program. T-paired tests are used when normality test results show normally distributed data, while Wilcoxon tests are used when normality test results show abnormally distributed data.

## **RESULTS AND DISCUSSION**

### **Differences in Financial Ratios of Transportation Companies Before and After the Covid-19 Pandemic**

This research was conducted in addition to seeing how the financial ratios of transportation companies before and during the Covid-19 pandemic also to statistically determine whether there were differences in ratios before and during the pandemic period (Bintang et al., 2019). The difference is done through a difference test, namely the t-Paired test or Wilcoxon test. The determination of whether a ratio is tested for difference using the t-Paired test or Wilcoxon test depends on whether the results of the data normality test show whether the data is normally distributed or abnormally distributed. If the probability  $< 0.05$ , then the data is Abnormal and if the probability is  $> 0.05$  then the data is Normal. The t-paired test is used when the data is normally distributed, while the Wilcoxon test is used if the data shows it is not normally distributed (Esomar & Christianty, 2021).

The determination of whether there is a significant difference in financial ratios before and during the Covid-19 pandemic can be seen from the test results, namely by looking at the probability value of the t-Paired test results or Wilcoxon test. If the probability of the test results shows a value of  $< 0.05$  then there is a significant difference, on the other hand if the probability of  $> 0.05$  then there is no significant difference in the financial ratios of transportation companies before and during the pandemic.

### **Table 1.**

Recapitulation of Financial Ratio Difference Test Results

	<b>Prob Jarque-Bera</b>	<b>Data Normality</b>	<b>Testing</b>	<b>Prob Testing</b>	<b>Test Results</b>
CR	0.000013	Abnormal	Wilcoxon	0.6650	There is no difference
CaR	0.000284	Abnormal	Wilcoxon	0.1939	There is no difference
DAR	0.293043	Normal	t-paired	0.5190	There is no difference
DER	0.109656	Normal	t-paired	0.4303	There is no difference
GPM	0.000000	Abnormal	Wilcoxon	0.3123	There is no difference
NPM	0.000000	Abnormal	Wilcoxon	0.5444	There is no difference
ROA	0.000000	Abnormal	Wilcoxon	0.6650	There is no difference
ROE	0.003546	Abnormal	Wilcoxon	0.7950	There is no difference
RTO	0.856544	Normal	t-paired	0.0364	There is a difference
ATO	0.000000	Abnormal	Wilcoxon	0.0404	There is a difference
FATO	0.000000	Abnormal	Wilcoxon	0.0783	There is no difference
WCTO	0.000000	Abnormal	Wilcoxon	0.4357	There is no difference

From the results of the test recapitulation to see the difference in the financial ratios of transportation companies listed on the Indonesia Stock Exchange before the pandemic period (2018-2019) with the pandemic (2020-2021), it can be seen that the liquidity ratio represented by the current ratio and cash ratio shows no significant difference between the two financial ratios when compared to conditions before the pandemic.

The COVID-19 pandemic has affected the global economy. In an economic condition that experiences a decline (crisis) companies can experience liquidity difficulties (Devi et al., 2020). The results of this study support the research of Ambardi & Nurhaniah (2021), which shows that the current ratio of companies listed on the Indonesia Stock Exchange does not show significant differences before and during the Covid-19 pandemic. This result is also in line with Chan and Aziz's (2017) research based on research in Malaysian companies showing that the economic crisis, although it causes the current ratio and quick ratio to decrease, is not significant so statistically the liquidity ratio before and during the crisis does not show a significant difference. Similarly, Esomar & Chritianty's (2021) research with empirical results showed no significant difference in the company's liquidity ratio before and after the first Covid-19 case was announced in Indonesia.

Although numerically there was a change in the amount of current assets and current debt, the change was not significant and/or there was a balanced change between the amount of current assets and the amount of current debt. Research by Saputro and Hapsari (2022) which

conducted research on plantation and mining companies in Indonesia and stated that although there was a decrease in the company's liquidity ratio between before and after the corona pandemic, there was no significant difference in the liquidity ratio before and after the covid 19 pandemic. In other words, although there are changes in the company's current assets, it is also followed by changes in the current debt side, so that liquidity ratios tend not to differ significantly. This causes statistically it can be said that there is no significant difference in the liquidity ratio of transportation companies listed on the Indonesia Stock Exchange before the pandemic period (2018-2019) with when the pandemic occurred (2020-2021).

This research is not in line with the research of Bintang, et al. (2019) in the manufacturing sector, whose research shows that there are differences in the company's current ratio before and after the financial crisis. This difference is possible due to different types of industries where in an economic crisis there are often certain manufacturing sectors that are greatly affected and some are less affected by the crisis.

In this study, the solvency ratio was tested using debt to asset ratio (DAR) and debt to equity ratio (DER). The results of this study showed a t-paired test probability for DAR of 0.5190 and a t-paired test probability for DER of 0.4303, both of which showed a  $>$  of 0.05, which means that there was no significant difference in the solvency ratio of transportation companies listed on the Indonesia Stock Exchange before and during the Covid-19 pandemic.

The results of this study are in line with research conducted by Devi et al (2020) and Saputro & Hapsari (2022), and Chan and Aziz (2017). Research by Devi, et al (2020) stated that before and during the Covid-19 DER pandemic there was no significant difference. Meanwhile, Saputro and Hapsari (2022), who conducted research on plantation and mining companies, stated that there was an increase in DER during a pandemic, in other words, there was an increase in debt and/or a decrease in company equity during the pandemic which resulted in an increase in the ratio. Meanwhile, DAR, although also increased, but not significantly. But in general, when viewed from the difference in statistical analysis results, it shows that there is no difference in solvency ratios before and during the Covid-19 pandemic. Unlike the previous three researchers, Esomar and Christianty's (2021) research showed different results, namely there were significant differences in the company's solvency ratio before and during the Covid-19 pandemic.

When viewed from the profitability ratio, this study shows that all profitability ratios studied, namely GPM, NPM, ROA, and ROE, although numerically show there are differences in value, but statistically, it is proven that there is no significant difference in profitability in transportation companies listed on the Indonesia Stock Exchange. This is possible because the transportation companies studied have different types of fleets, namely air, sea, and land, and have different consumers. This difference may cause not all companies to be adversely affected by the pandemic in 2020-2021. In particular, freight transportation continues to operate considering that the distribution of food and health goods still has to take place.

This study supports previous research conducted by Saputro and Hapsari, where in the study although NPM, ROA, and ROI changed but did not show a significant difference. This research is also in line with the research of Chan and Aziz (2017). However, it is different from Darma's research (2021) which shows a difference in profitability ratios. This happened because the industrial sector studied by Darma was the health sector, which indeed during the pandemic actually experienced a very significant increase in sales which caused the profitability ratio to

differ significantly before and during the Covid-19 pandemic. The results of Esomar and Christianty's (2021) research support Darma's (2021) research where the profitability ratio shows a significant difference.

For the activity ratio in this study, 4 ratios were used, namely RTO, ATO, FATO, and WCTO. For RTO and ATO showed a significant difference while FATO and WCTO showed an insignificant difference. Receivables collection activities during the pandemic had a huge impact, namely the large number of uncollectible receivables caused by declining economic growth and reduced people's purchasing ability (Devi, et al, 2020). However, the research of Saputro and Hapsari (2022) actually shows the opposite, namely a different but not significant activity ratio.

## **CONCLUSION**

The results of the study on the difference in financial ratios of transportation companies listed on the Indonesia Stock Exchange before and during the covid 19 pandemic, namely there was no significant difference in the company's current ratio (liquidity ratio) before and during the covid 19 pandemic. There was no significant difference in the company's solvency ratio before and during the Covid-19 pandemic. There was no significant difference in the company's profitability ratio before and during the Covid-19 pandemic. For the activity ratio, there is a significant difference in the ratio of receivable turnover (RTO) and asset turnover (ATO), while fixed asset turnover (FATO) and working capital turnover (WCTO) show no significant difference.

This research was conducted on transportation companies listed on the Indonesia Stock Exchange. For the suggestions conveyed from the results of this study intended for the next researcher to examine the impact of changes in economic conditions caused by factors beyond the company's ability to control it (uncontrollable conditions) such as pandemics or other global economic crises, the advice given. The group of industries studied may be further expanded considering that there are 9 industry groups on the Indonesia Stock Exchange. With so many industry groups representing the study, it may be possible to provide better results so that conclusions are more generalizable. Companies listed on the Indonesia Stock Exchange, are companies with a strong capital capitalization, allowing the company to be more resilient and survive during an economic crisis, so that the impact may even exist but can still be controlled by the company so that financial performance is not too affected. Thus, it is also necessary to conduct research on companies outside those listed on the IDX.

## **REFERENCES**

- Ambardi, A., & Nurhaniah, H. (2021). Dampak Pandemi Terhadap Kinerja Keuangan Emiten Ritel Di Bursa Efek Indonesia. *Kreatif: Jurnal Ilmiah Prodi Manajemen Universitas Pamulang*, 9(2), 28–35.
- Bintang, F. M., Malikhah, A., & Afifudin, A. (2019). Pengaruh Opini Audit Tahun Sebelumnya, Debt Default, Rasio Likuiditas, Rasio Leverage Terhadap Opini Audit Going Concern (Studi: Perusahaan manufaktur yang terdaftar di BEI periode 2016–2018). *E\_Jurnal Ilmiah Riset Akuntansi*, 8(10).
- Chan, Toong Khuan; Abdul-Rashid Abdul-Aziz. (2017). Financial performance and operating strategies of Malaysian property development companies during the global financial

- crisis. *Journal of Financial Management of Property and Construction*. Bingley Vol. 22, Iss. 2 : 174-191.
- Cho, B., & Saki, Z. (2022). Firm performance under the COVID-19 pandemic: The case of the US textile and apparel industry. *The Journal of The Textile Institute*, 113(8), 1637–1647.
- Darma, F. A. (2021). Analysis gross profit margin and net profit margin at healthcare companies listed in Indonesian stock exchange during and before covid-19. *Cross-Border Journal of Business Management*, 1(1), 65–73
- Devi, S., Warasniasih, N. M. S., Masdiantini, P. R., & Musmini, L. S. (2020). The impact of COVID-19 pandemic on the financial performance of firms on the Indonesia stock exchange. *Journal of Economics, Business, & Accountancy Ventura*, 23(2), 226–242.
- Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. *Journal of Business Research*, 117, 284–289
- Elgazzar, S. H., Tipi, N. S., Hubbard, N. J., & Leach, D. Z. (2012). Linking supply chain processes' performance to a company's financial strategic objectives. *European Journal of Operational Research*, 223(1), 276–289.
- Esomar, M. J. F., & Christianty, R. (2021). Dampak pandemi covid-19 terhadap kinerja keuangan perusahaan sektor jasa di BEI. *Jkbn (Jurnal Konsep Bisnis Dan Manajemen)*, 7(2), 227–233.
- Hjelmgren, J., Berggren, F., & Andersson, F. (2001). Health economic guidelines—similarities, differences and some implications. *Value in Health*, 4(3), 225–250.
- Munizu, M. (2010). Pengaruh faktor-faktor eksternal dan internal terhadap kinerja usaha mikro dan kecil (UMK) di Sulawesi Selatan. *Jurnal Manajemen Dan Kewirausahaan*, 12(1), 33–41.
- Rababah A, Al-Haddad L, Sial MS, Chunmei Z, Cherian J. Analyzing the effects of COVID-19 pandemic on the financial performance of Chinese listed companies. *J Public Affairs*. 2020;e2440. <https://doi.org/10.1002/pa.2440>
- Saputro, D. F. H., & Hapsari, D. I. (2022). Dampak pandemi corona terhadap kinerja keuangan perusahaan pertambangan dan perkebunan. *Proceeding of National Conference on Accounting & Finance*, 66–72.
- Sujarweni, V. W. (2017). *Analisis Laporan Keuangan: teori, aplikasi, dan hasil penelitian/V. Wiratna Sujarweni*.
- Yoo, S., Keeley, A. R., & Managi, S. (2021). Does sustainability activities performance matter during financial crises? Investigating the case of COVID-19. *Energy Policy*, 155, 112330.