Pre and Spread Covid-19 of Market and Financial Performance on Transportation Companies

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Abstract

This research is intended to examine the extent to which financial performance and market performance encourage financial stability in the long term, especially during the pandemic for 50 transportation companies in Indonesia. The purpose of this study focuses on measuring the financial performance of 2 ratios, namely the Retun On Asset and Debt Equity Ratio, and market performance as measured by Price Earning Ratio and Price Book Value, before and during the pandemic. This research is quantitative. by using secondary data. The sampling used in this study was purposive sampling, with a sample of 50 transportation companies listed on the IDX from 2018 to 2021 with a total of 600 data. Hypothesis testing in this study used a non-parametric test, namely the Wilcoxon-signed rank test to analyze the difference in the mean of two related variables. This test is to see differences in the financial and market performance of transportation companies before and during the covid-19 pandemic in Indonesia. The data processing in this study uses SPSS version 26. The Wilcoxon Signed Rank results show that there are differences in PER, PBV and ROA were significant before and during the COVID-19 pandemic, while there was no difference in DER.

Keywords: Financial Performance, Market Performance, Covid-19

1. Introduction

China, especially the city of Wuhan, became the beginning of the emergence of Covid-19 which was officially announced by the world health agency on December 31, 2019. Covid 19 has an impact that is difficult to predict, especially economic and social impacts because we are still in the midst of a crisis. (Rababah et.al, 2020). Indonesia has also been heavily impacted by the Covid pandemic, particularly in the health sector. So the Indonesian government imposed PSBB (Large-Scale Social Restrictions) to suppress the spread of Covid. According to the Minister of Finance of the Republic of Indonesia, PSBB has a bad impact on companies because of the lack of production activities, especially for tourism companies and transportation companies. (Hidayat, 2021). The Indonesian Chamber of Commerce and Industry (Kadin) for Transportation explained that the company's revenue in the transportation sector has decreased between 25% - 50%, especially for air and sea transportation (Stephanie & Widoatmodjo, 2021). The decline in passengers in transportation companies can be seen from figure 1 below:
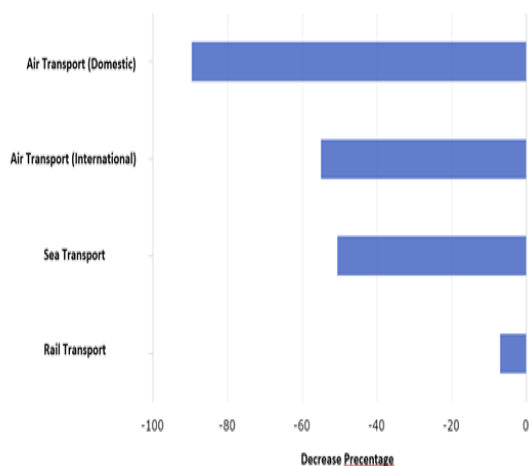
Source : Central Bureau of Statistics (BPS), July, 2020
Figure 1. Passenger Drop Percentage April - May 2020

Figure 1 illustrates the decline in passengers at transportation companies in Indonesia from May 2020 to April 2020. Air transportation experienced the biggest loss because it experienced a decrease in the number of domestic passengers by 89.6% or 87 thousand domestic passengers from April 2020. Meanwhile, international passengers declined. 55% or only 11.7 thousand from April 2020. Meanwhile, the decrease in the number of passengers on sea transportation decreased to 50.7% in May 2020. Sea transportation also experienced a decrease in the number of passengers by 50.7% or 275.7 thousand in May 2020 Rail transportation decreased by 7% or 5.48 million passengers.

This research seeks something new, namely examining the extent to which financial performance and market performance encourage financial stability in the long term, especially during the pandemic for 50 transportation companies in Indonesia. The purpose of this study focuses on measuring the financial performance of 2 ratios, namely the profitability ratio (ROA) and the solvency ratio (DER) before and during the pandemic. Meanwhile, market performance is measured by PER (Price Earning Value) and PBV (Price Book Value) before and during the pandemic.

1.1 Financial Performance

The COVID-19 pandemic has imposed a state of health emergency, so that countries in the world are forced to implement social distancing and quarantine measures as well

as lock down. The country's actions led to the decline indemand for most goods and services worldwide, economic downturn, and a decline in exports and imports. The Covid pandemic has caused a decrease in the company's revenue, one of which is a transportation company by 32% of daily revenue. This decrease in income will make it difficult to increase tax relaxation for the state (Daryanto et.al, 2021).

Several studies have studied the impact of the Covid pandemic on the oil processing process (Narayan, 2020), the impact of the Covid pandemic on MSE (Rababah, 2020), the impact of the Covid pandemic on the financial balance of public companies (Batrancea, 2021), the impact of the Covid pandemic on performance logistics company finance (Atayah et.al, 2021). Previous research also found that there were significant differences in financial performance as measured by profitability (ROA) and solvability (DER) before and during the COVID-19 pandemic (Lumenta et al., 2021; Hilman & Laturette, 2021; Candera & Indah, 2020). The results of previous studies also found that there was no significant difference in financial performance before and during the covid-19 pandemic (Bustami et al., 2021; Rahmawati et al., 2020). Based on the previous research above, we propose the following hypothesis:

H1. There is a significant difference between the Return On Asset before and during the Covid-19 pandemic for companies in the transportation sector.

H2. There is a significant difference between the Debt to Equity Ratio before and during the Covid-19 pandemic for companies in the transportation sector.

1.2 Market Performance

The company's decision making is mainly to predict future performance based on data from the company's financial statements. This is where financial reports are needed and have great benefits for the survival of the company. (Ginting, 2021). Accurate decision making is obtained by conducting a profitability analysis and market performance of a company. (Aliyi et.al, 2021). The Indonesian government's actions with the lockdown and social distancing have resulted in restrictions on economic

activities, thus encouraging investors to sell their shares as a preference for holding cash. This investor action resulted in the world stock market index dropping drastically from the closing price at the end of 2019 (Indrayono, 2021). The PER ratio is commonly used to measure the company's prospects in the eyes of investors. This ratio is seen in the price of shares that investors are willing to buy for every rupiah of profit received by the company. The higher this ratio indicates a good expectation of the company's growth. (Sukono et.al, 2017). For investors, the higher the PER ratio, the expected profit will also increase and vice versa. Based on the previous research above, we propose the following hypothesis:

H3. There is a significant difference between the Price Earning Value (PER) before and during the Covid-19 pandemic for companies in the transportation sector.

H4. There is a significant difference between the Price Book Value (PBV) before and during the Covid-19 pandemic for companies in the transportation sector.

2. Method
2.1 Procedures
This research is a quantitative research. More specifically, this research is quantitative empirical by testing hypotheses. This study uses secondary archival data. The hypothesis testing in this study used a non-parametric test, namely the Wilcoxon signed rank test to analyse the mean difference for two related variables. This test is used to see differences in the financial and market performance of transportation companies before the covid-19 pandemic and during the covid-19 pandemic in Indonesia from 2018 to 2020. The data processing in this study uses SPSS version 26.

2.2 Data analysis
The sampling used in this study was purposive sampling, with the number of samples used as many as 50 transportation companies listed on the IDX from 2018 to 2020 with totally data are 600 data. The data are PER, PBV, DER and ROA, in the form of annual financial reports of companies engaged in transportation through the official website of the Indonesia Stock Exchange (IDX), namely www.idx.co.id.

3. Findings And Discussion
3.1 Descriptive Statistical Test

Table 1. Results of Descriptive Statistical Test

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
PER Pre Cov-19	50	32.94	112.990	-365	467
PER During Cov-19	50	-3.52	112.043	-293	562
PBV Pre Cov-19	50	2.28	3.880	-6	18
PBV During Cov-19	50	5.43	49.787	-64	343
DER Pre Cov-19	50	1.09	3.187	-8	15
DER During Cov-19	50	1.78	12.044	-26	80
ROA Pre Cov-19	50	-.05	7.778	-26	11
ROA During Cov-19	50	-4.04	10.186	-39	18

Table 1. above describes some information regarding the minimum, maximum, average and value standard deviation of PER, PBV, DER and ROA. The average PER value before the covid-19 pandemic was 32.94 times and during the covid-19 pandemic it was -3.52 times. The average PER value has decreased from before the pandemic to the time of the pandemic.

The average PBV value before the covid-19 pandemic was 2.28 times and during the pandemic it was 5.43 times. This condition is influenced by the passing of the new normal era which triggers changes in people's habits that used to transact offline, now switch to online transactions so that transportation and logistics services in general play an important role. The increase in PBV shows that investors still have high expectations of the company in creating company value compared to the amount of capital invested. However, if the PBV is too high, investors will also consider reinvesting because the stock price is getting more expensive.

The average DER value before the pandemic was 1.09% and during the pandemic it rose to 1.78%, the increase in this ratio indicates a decrease in the company's ability to obtain additional funds from creditors because of the risk that will be borne by creditors if the company's transportation suffers a loss.

The average ROA value before the pandemic was -0.05% and dropped to -4.04% during the pandemic. One of the causes of the decline in ROA of transportation companies is the Covid-19 pandemic which forced the government to implement Large-Scale Social Restrictions (PSBB) which drastically reduced people's mobility. This causes the

company's revenues and profits in the transportation sector to decline, some even suffer losses.

3.2 Normality Test

Table 2. Normality Test Result

		PER Pre Cov-19	PER During Cov-19	PBV Pre Cov-19	PBV During Cov-19	DER Pre Cov-19	DER During Cov-19	ROA Pre Cov-19	ROA During Cov-19
N		50	50	50	50	50	50	50	50
Normal Parameters[a,b]	Mean	32.94	-3.52	2.28	5.43	1.09	1.78	-.05	-4.04
	Std. Deviation	112.990	112.043	3.880	49.787	3.187	12.044	7.778	10.186
Most Extreme Differences	Absolute	.325	.297	.301	.452	.293	.396	.152	.161
	Positive	.325	.297	.301	.452	.293	.396	.094	.107
	Negative	-.280	-.245	-.234	-.382	-.247	-.322	-.152	-.161
Test Statistic		.325	.297	.301	.452	.293	.396	.152	.161
Asymp. Sig. (2-tailed)		.000[c]	.000[c]	.000[c]	.000[c]	.000[c]	.000[c]	.006[c]	.002[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Table 2. above shows the results of the data normality test and the significance values of PER, PBV, DER and ROA before and during the COVID-19 pandemic were not normally distributed because the significance value of the four ratios was < 0.05. The normality test shows that the data is not normally distributed, so that the hypothesis testing in this study uses Wilcoxon as a non-parametric test. Wilcoxon marked rating test on PER, PBV, DER and ROA before and during the COVID-19 pandemic.

3.3 Hypothesis Test

Table 3.. Ranks

		N	Mean Rank	Sum of Ranks
PER During Cov-19 - PER Pre Cov-19	Negative Ranks	36[a]	25.22	908.00
	Positive Ranks	14[b]	26.21	367.00
	Ties	0[c]		
	Total	50		
PBV During Cov-19 - PBV Pre Cov-19	Negative Ranks	38[d]	26.36	1001.50
	Positive Ranks	11[e]	20.32	223.50
	Ties	1[f]		
	Total	50		
DER During Cov-19 - DER Pre Cov-19	Negative Ranks	23[g]	23.74	546.00
	Positive Ranks	27[h]	27.00	729.00
	Ties	0[i]		
	Total	50		
ROA During Cov-19 - ROA Pre Cov-19	Negative Ranks	35[j]	27.70	969.50
	Positive Ranks	15[k]	20.37	305.50
	Ties	0[l]		
	Total	50		

a. PER During Cov-19 < PER Pre Cov-19
b. PER During Cov-19 > PER Pre Cov-19
c. PER During Cov-19 = PER Pre Cov-19
d. PBV During Cov-19 < PBV Pre Cov-19
e. PBV During Cov-19 > PBV Pre Cov-19
f. PBV During Cov-19 = PBV Pre Cov-19
g. DER During Cov-19 < DER Pre Cov-19
h. DER During Cov-19 > DER Pre Cov-19
i. DER During Cov-19 = DER Pre Cov-19
j. ROA During Cov-19 < ROA Pre Cov-19
k. ROA During Cov-19 > ROA Pre Cov-19
l. ROA During Cov-19 = ROA Pre Cov-19

Table 4. Test Statistics[a]

	PER During Cov-19 - PER Pre Cov-19	PBV During Cov-19 - PBV Pre Cov-19	DER During Cov-19 - DER Pre Cov-19	ROA During Cov-19 - ROA Pre Cov-19
Z	-2.611[b]	-3.870[b]	-.883[c]	-3.205[b]
Asymp. Sig. (2-tailed)	.009	.000	.377	.001

a. Wilcoxon Signed Ranks Test.

b. Based on positive ranks.

c. Based on negative ranks.

The results of the Wilcoxon Signed Rank Test on Return On Assets from a total of 50 samples (600 data) processed, there are 35 samples (420 data) showing ROA during the covid-19 pandemic < ROA before the covid-19 pandemic. Based on table 3 above, the results of the z value are –3.205 and the Asymp value. The signature (2-tail) is 0.001. Asim Value. The (2-tailed) signature is the significance value of the Wilcoxon signed rank test. The significance value of the return on asset ratio variable is 0.000, which means <0.05. Therefore, it can be concluded that there is a significant difference between the ROA value during the COVID-19 pandemic and before the COVID-19 pandemic. Thus H1 is accepted.

The results of the Wilcoxon Signed Rank Test on the Debt to Equity Ratio of 50 samples (600 data) the amount of data processed there are 23 samples (276 data) which shows DER during the covid-19 pandemic < DER before the covid-19 pandemic. Based on table 3 above, the results of the z value are -0.883 and the Asymp value. The signature (2-tails) is 0.337. Asim Value. The (2-tailed) signature is the significance value of the Wilcoxon signed rank test. The significance value of the debt to equity ratio variable is 0.337, which means > from 0.05. Thus, it can be concluded that there is no significant difference between the DER value during the COVID-19 pandemic and before the COVID-19 pandemic. Thus H2 is rejected.

The results of the Wilcoxon Signed Rank Test on the Price to Earning Ratio of 50 samples (600 data) the amount of data processed there are 36 samples (432 data) data which

shows PER during the covid-19 pandemic < PER before the covid-19 pandemic. Based on table 3 above, the results of the z value are -2,611 and the Asymp value. The signature (2-tail) is 0.009. Asim Value. The (2-tailed) signature is the significance value of the Wilcoxon signed rank test. The significance value of the price to earnings ratio variable is 0.009, which means <0.05. Thus, it can be concluded that there is a significant difference between the PER value during the COVID-19 pandemic and before the COVID-19 pandemic. Thus H3 is accepted.

The results of the Wilcoxon Signed Rank Test on the Price Book Ratio of a total of 50 samples (600 data) processed, there are 38 samples (456 data) showing PBV during the covid-19 pandemic < PBV before the covid-19 pandemic. Based on table 3 above, the results of the z value are -3870 and the Asymp value. The signature (2-tail) is 0.000. Asim Value. The (2-tailed) signature is the significance value of the Wilcoxon signed rank test. The significance value of the price book ratio variable is 0.000, which means <0.05. Therefore, it can be concluded that there is a significant difference between the PBV values during the COVID-19 pandemic and before the COVID-19 pandemic. Thus H4 is accepted.

4. Conclusion

This study aims to examine differences in Return On Assets (ROA), Debt to Equity Ratio (DER), Price Equity Ratio (PER), and Price Book Value (PBV) before and during the COVID-19 pandemic in transportation sector companies listed on the Indonesia Stock Exchange in 2018 to 2021. The results of this study indicate that there are significant differences in PER, PBV and ROA before and during the COVID-19 pandemic. DER did not show a significant difference before and during the Covid-19 pandemic. Although the average ROA of transportation companies has decreased due to government policies that have implemented large-scale social restrictions (PSBB), the average PBV of transportation companies has increased because investors see business opportunities in the transportation sector are still large, especially in the transportation sector in the middle of the new normal. The potential is wide open because during the pandemic, people prefer to shop online, which means that the transportation and logistics industry plays a big role.

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