



Differences in Financial Performance of LQ45 Companies Listed on the Indonesian Stock Exchange during the Covid-19 Pandemic

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ABSTRACT: The global economy has been hit by a crisis, including the Covid-19 pandemic, which is no different than what Indonesia is experiencing. The pandemic has infected and affected the economic power of all countries. Performance during a pandemic should be studied very diligently. This phenomenon led to the first research on Indonesian companies. The purpose of this study is to determine the company's performance before the pandemic and during his Covid-19 pandemic. For this, the researcher uses the "strong" firms in the Indonesian capital market - his LQ-45 firms. A total of 45 and 21 companies from various sectors were obtained using a targeted random sampling method. This data is collected through annual financial reporting for the 2018-2019 pre-pandemic and 2020-2021 during the Co-19 pandemic. Variables used to define company performance are current ratio (CR), gearing (DER), total assets turnover (earnings), return on equity (ROE), and earnings per share (EPS) is. Using these variables is suggested by researchers as representative of each company's financial metrics. The research method used is another test of paired data. A data normality test was previously performed and found that the data used were not normally distributed. Therefore, for further analysis to determine whether there were differences before and during the Covid-19 pandemic, the Wilcoxon paired difference test was used in the analysis. We found no difference in firm performance between CR and DER variables before and during. However, when it comes to revenue, ROE and EPS, there are differences in company performance in the LQ-45. Apart from that, these results also show that business performance has declined during the Covid-19 pandemic.

KEYWORDS: Current Ratio, DER, EPS, Financial Performance, ROE, Total Asset Turnover.

INTRODUCTION

The global economic crisis of 2020 was felt by all countries of the world, including Indonesia. This condition is associated with the Covid-19 pandemic. The pandemic has lasted over 2 years from november 2019 to 2022. The state of the Covid-19 pandemic has affected various sectors of the Indonesian economy. (Kurniawan & Makarim, 2022) stated that one of the most affected industry sectors is the hotel, restaurants and tourism sub-sector. (Kurniawan & Makarim, 2022) stated that the trading sector has been affected by a decrease in demand for goods, which in turn has also affected industrial activity. (Sitohang, 2021) stated that all industry indices showed negative performance, led by various industrial sectors (-19.34 percent), financial sector (-18.58 percent) and infrastructure sector (-14.76 percent). The Covid-19 pandemic has affected almost every industry, both primary and secondary.

The Covid-19 pandemic has affected various industries, causing a downturn in the national economy. Several stock prices in Indonesia declined due to company fundamentals and economic conditions in the country (Fatimah, Prihastiwi, & Islamiciyatun, 2021). According to (Krismawati, 2022), in the investment world, especially in the capital market industry, the COVID-19 pandemic has been responded by a sharp decline in stock prices in various stock market around the world. There were 7 companies that experienced a decline in their stock prices during the pandemic, including PT Astra International Tbk., PT Perusahaan Gas Negara Tbk., PT Semen Indonesia Tbk., PT United Tractor., PT Gudang Garam Tbk., PT Indocement Tunggol. Perkasa Tbk., PT Bank Negara Indonesia (Violandani, 2021). Share prices are subject to change due to company fundamental conditions, investor buying and selling trends, share price manipulation and panic, and economic conditions in the country. Investor anxiety is a trigger for falling stock prices.

The Indonesian government's efforts to slow down the spread of the Covid-19 virus is through the adoption of several policies in 2020, such as 1). Calling people to 3M (wearing masks, washing hand and keeping distance) (Hayati, 2020), 2). Introduction of LSR (large scale social restrictions) from april 2020 and several times change of names and formats to transitional LSR, emergency RCM, four-level RCM at the end of July 2021 (Permatasari, 2021), 3) vaccination program starting in January 2021 (Ministry of Health, 2021). Since the vaccination was done, the government has relaxed the community to go to school, work and worship as before.



According to the Asian Development Bank, Indonesia's economic growth is projected at 5,3%. This forecast is based on the assumption that the Indonesian economy has returned to stability and the Covid-19 virus is under control with a vaccine (Setiawan & Setiadin, 2020).

Other researchers (Fatimah, Prihastiw, & Islamiciyatun, 2021) analyzed the financial statements of LQ45 companies before and during Covid, and the results showed that their financial performance was even better before the pandemic. According to a study conducted by (Martini, 2020) regarding the analysis of the performance of LQ45 shares before and during the Covid-19 pandemic in Indonesia, the results showed that the performance of LQ45 shares on the Indonesian stock exchange declined during the pandemic. A study of companies with the LQ45 index on the Indonesian stock exchange was carried out. Companies with the LQ45 index are interesting to study, because they are the ones investors are most interested in. In addition, the shares of the LQ45 index have a high level of liquidity and market capitalization.

Based on the phenomenon of the covid-19 pandemic in Indonesia, which has had a negative impact on various business sectors, and in line with several policies implemented by the Indonesian government between 2020 and 2021, especially after the vaccination program, the researchers want to analyze how differences in financial companies that indexed LQ45 during the 2020 and 2021 pandemics. 2020 and 2022 financial statements will be used. companies with LQ45 index, listed on Indonesian stock exchanges.

LITERATURE REVIEW

The financial performance of a company can be measured with several ratios that show the company's ability to manage the company's finances. Several ratios that can be used as a benchmark to measure a company's financial performance include:

1. Liquidity Ratio

The current ratio (CR) is a ratio that compares how a company's short-term debt can be repaid against the current assets owned by the company (Candradewi, 2016).

$$\text{CR} = \text{Current Asset/Current Liabiliteis}$$

2. Solvability Ratio

Debt to Equity Ratio (DER), which is one of the financial ratios where this ratio can pay off all long-term and short-term debts. The larger this ratio, the more unprofitable it will be, because the greater the risk associated with the failure that can occur in the company (Anisa & Putri, 2022).

$$\text{DER} = \text{Debt/Equity}$$

3. Activity Ratio

Total Asset Turnover (TATO) According to Brigham & Houston in (Irsan, Hasibuan, & Mapita, 2021) is a ratio that measures the turnover of all company assets and is calculated by dividing sales by total assets.

$$\text{TATO} = \text{Net Sales/Total Asset}$$

4. Profitability Ratio

Return on equity (ROE) is a ratio used to measure the net income received by managers from the capital invested by the company's owners. ROE is measured by comparing net income and total equity (Seventeen & Shinta, 2021).

$$\text{ROE} = \text{Net Profit/Total Equity}$$

5. Market Value Ratio

Earnings per share (EPS), according to Fahmi in (Sari, Rahmawati, & Helmmiati, 2022). EPS is a form of providing benefits to shareholders and each share they own. Where EPS is the ratio being compared.

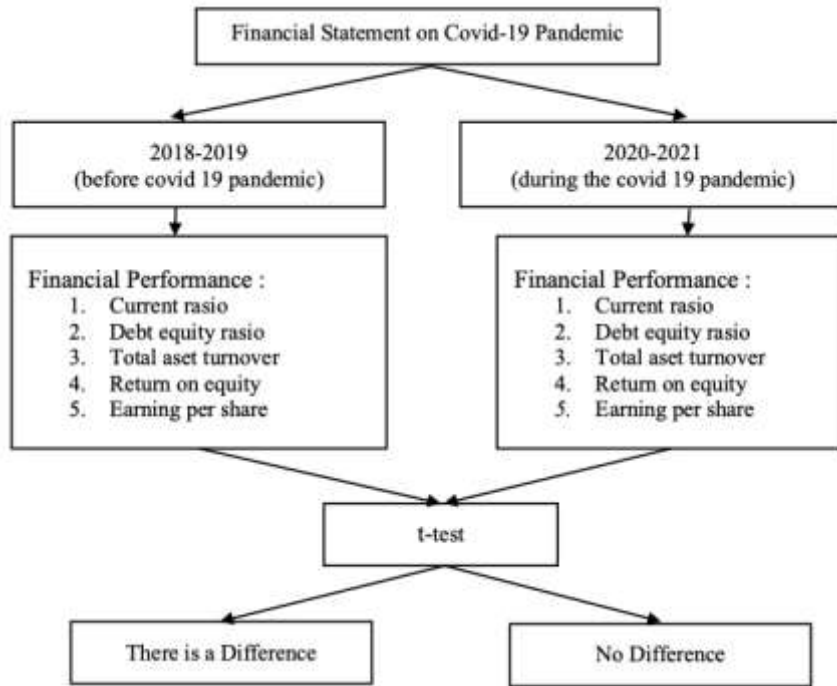
$$\text{EPS} = \text{Net Income/Total Outstanding Share}$$

METHODOLIGY

This study is a type of comparative study with a quantitative approach. This is based on the purpose of the study, which is to find out if there were differences in financial performance before and during the Covid-19 pandemic in companies included in the LQ45 index.



CONCEPTUAL FRAMEWORK



According to (Sekaran & Bougie, 2017) a population is a group of people, events, or interesting things for which researchers want to make opinions (based on sample statistics). The population of this study is companies that are members of the LQ45 Index for the period 2018 to 2021. The population in this study is 45 companies engaged in various sectors.

The sample in the study was selected using the purposive sampling method. According to (Sugiyono, 2018) purposive sampling is a sampling technique with certain considerations. In this study the criteria for sample selection are:

1. Companies incorporated in the LQ45 Index during 2018 to 2021 according to research case studies.
2. Companies that are not the type of financial institutions. This is because the financial ratios in companies with financial institution types are different from non-financial institution companies.
3. Provide annual financial statements that are reported regularly and completely according to the variables used in research case studies on the Indonesia Stock Exchange during 2018 to 2021.

Based on the criteria above, a sample of 21 companies from 45 companies was obtained. The sample will be described in chapter four.

Research Data and Sources

Below is described the types and sources of data used and their collection techniques.

Data Types and Sources

The source of this research data is secondary data. Secondary data in this study are interim financial statements that have been published by the company from the research sample. The financial report is obtained from the Indonesia Stock Exchange (IDX, 2022) website.

Data Collection Techniques

The data collection method used is a method of collecting data from a database, because researchers take secondary data. This method is carried out through the collection and recording of financial statement data originating from the website of the Indonesia Stock Exchange (IDX) organization, namely idx.co.id. Secondary data taken for all variables starting from 2018 to 2021 for each manufacturing company listed on the Indonesia Stock Exchange.



Data Analysis Methods

In this study, the methods for data analysis are descriptive statistics, normality tests, while the average difference tests used are paired sample t-test and Wilcoxon signed rank test.

Descriptive Statistics

Descriptive statistics are statistics that provide an overview or description of a data seen from the mean, standard deviation, variance, maximum, minimum, sum, range, kurtosis, astonishing distribution. The presentation of descriptive statistics in this study is limited to the calculation of minimum, maximum, average, and standard deviation.

Data Normality Test

The normality test is carried out to determine whether the data from the research variables are normally distributed or not. This test must be done because it is to do the next test. To perform this normality test, the research sample amounted to more than 30 samples. This normality test was performed using the Kolmogorov-Smirnov Test and Shapiro Wilk. According to (Ghozali, 2018) the provisions used are residuals said to be normal if the significant value of Kolmogorov-Smirnov and Shapiro Wilk is greater than 0.05. If the significance value is less than 0.05, then the research data is not normally distributed. If the data is normally distributed, then the test performed is a paired sample t-test. Meanwhile, if the data is not normally distributed, then the test carried out is the Wilcoxon signed rank test.

Paired Sample T-Test

This study compares financial ratios before and during the Covid-19 pandemic, so the test carried out is a paired sample t-test. The paired sample t-test is carried out with the aim of finding out whether different treatments or conditions will give different results on the statistical average. According to (Santoso, 2014) after the data is normally distributed, it can be continued with the t-test difference test. This test was performed on two paired samples. A paired sample is defined as a sample with the same.

As a subject but subjected to two different measurements. Similarly, the research conducted (Mengkuningtyas & Adib, 2016), based on the results of hypothesis testing if the significance > 0.05, then the data is not different, while if the significance is < 0.05, the data is different.

The following is a formula for finding a comparison using a paired sample t-test:

$$H_0: \mu_1 = \mu_2$$

$$H_1: \mu_1 \neq \mu_2$$

So, the formula is used:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \text{ dengan } s^2 = \frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}$$

So, it can be concluded with an accepted hypothesis if, $|t| < t_{1-1/2\alpha(n_1+n_2-2)}$

Information:

μ_1 : Average population before Covid-19

μ_2 : Average population during Covid-19

n_1 : Total data before Covid-19

n_2 : Total data during Covid-19

\bar{X}_1 : Average before Covid-19

\bar{X}_2 : Average during Covid-19

S_1 : Standard deviation before the Covid-19 period

S_2 : Standard deviation during Covid-19



RESULTS AND DISCUSSION

Research Results

Different Tests Before and During the Covid-19 Pandemic

At this stage, it shows the results of rank testing based on the values produced by the variables CR, DER, TO, ROE, and EPS before and during the Covid-19 period. These results occur in the Table. 1 following:

Table 1. Wilcoxon Signed Rank Test Results of CR, DER, TO, ROE, and EPS Variables on Data Before and During Covid-19

		N	Mean Rank	Sum of Ranks
CR_on_pandemic CR_before_pandemic	-Negative Ranks	19 ^A	23.45	445.50
	Positive Ranks	23 ^b	19.89	457.50
	Ties	0 ^c		
	Total	42		
DER_on_pandemic DER_before_pandemic	-Negative Ranks	18 ^s	18.28	329.00
	Positive Ranks	23 ^e	23.13	532.00
	Ties	1 ^f		
	Total	42		
TO_on_pandemic TO_before_pandemic	-Negative Ranks	37 ^g	22.32	826.00
	Positive Ranks	5 ^h	15.40	77.00
	Ties	0 ⁱ		
	Total	42		
ROE_on_pandemic ROE_before_pandemic	-Negative Ranks	37 ^h	23.62	874.00
	Positive Ranks	5 ^k	5.80	29.00
	Ties	0 ^l		
	Total	42		
EPS_on_pandemic EPS_before_pandemic	-Negative Ranks	26 ^m	24.96	649.00
	Positive Ranks	16 ⁿ	15.88	254.00
	Ties	0 ^o		
	Total	42		

Source: processed data (2022)

From Table 3 above, it is explained that in the variables CR, TO, ROE, and EPS the value of Ties (the distance of values between groups before and during the Covid-19 period) is 0, which means that there is no similarity in values both before and during the Covid-19 period. Meanwhile, the results of hypothesis testing of average differences in data before and during the Covid-19 period are presented in the Table. The following 4:

Table 2. Results of Financial Performance Analysis Before and During the Covid-19 Pandemic

	DER_on_ CR_on_pandemic	TO_on_ -pandemic	ROE_on_ -pandemic	-EPS_on_pandemic
	DER_before_pande mic	TO_before_pande emic	ROE_before_pande mic	EPS_before_pandemic
Z	-.075 ^b	-1.316 ^b	-4.684 ^C	-5.283 ^C
Asymp. Sig. (2-tailed)	.940	.188	.000	.000

Source: processed data (2022)



From Table 2 above, based on the SPSS output, Wilcoxon test results for CR and DER variables obtained significance values of 0.940 and 0.188, resulting in more than $\alpha = 0.05$, so that H_0 is accepted, this shows that there is no difference in CR and DER variables both before and during Covid-19. As for the TO, ROE, and EPS variables, a significant value of 0.000 and 0.014 is produced, so that H_0 is rejected. So, from the output results above, there are average differences in TO, ROE, and EPS variables before and during the Covid-19 period.

Based on the problems in this study, whether there is a difference or not in the Current Ratio variable before and during Covid-19 in LQ45 companies, it shows that there is no difference. This shows that companies indexed by LQ45 show good performance through their ability to pay debts or short-term obligations both before and during the pandemic, as stated by Candradewi (2016) that the Current ratio is a ratio that compares how the company's short-term debt can be met with the company's current assets.

In line with the research problem, whether there is a difference in *Debt Equity Ratio* in LQ45 companies before and during the Covid-19 pandemic also shows that there is no difference. According to the understanding of Anisa (2022), the *Debt Equity Ratio* is one of the financial ratios, where this ratio can pay off all long-term and short-term debts. The analysis shows that LQ45's performance in terms of fulfilling its obligations to repay long-term debt both before and during the Covid-19 pandemic was quite good.

In contrast to the research problem, whether there is a difference in *Total Asset Turnover* in LQ45 companies before and during the Covid-19 pandemic shows that there are differences. Based on the understanding expressed by Brigham & Houston in (Irsan, 2021) *Total Asset Turnover* is a ratio that measures the turnover of all company assets, and is calculated by dividing sales by total assets. The difference in performance before and during the Covid-19 pandemic in terms of sales was felt by all business sectors that experienced a decrease in revenue through sales. This decline in sales can be seen from the data on the decline in stock prices during the Covid-19 pandemic in 2020.

Likewise, the issue of research whether there are differences in *Return on Equity* in LQ45 companies before and during the Covid-19 pandemic shows that there are differences. Based on the understanding expressed by Seventeen, (2021) that *Return on Equity* (ROE) is a ratio used to measure the net profit obtained by capital managers invested by company owners and ROE is measured by a comparison between net profit and total capital (Seventeen, 2021). Because ROE is a ratio to measure the level of profit obtained from sales with total capital, then, when sales experience a decline as described in the third problem, it also indirectly has an impact on one measure of company performance in the profitability ratio.

The last research problem is whether there are differences in *Earnings Per Share* in LQ45 companies before and during the Covid-19 pandemic also shows that there are differences. according to Fahmi in Sari (2022), EPS is a form of providing benefits to shareholders and every share owned. Where EPS is a ratio that compares net income with the number of outstanding shares, it is in line with the decline in sales in the previous problem which had an impact on decreasing revenue, it also has an impact on the percentage value of EPS. The results of the analysis of this latest problem are also supported by data on the decline in stock prices in the capital market in 2020 during the Covid-19 pandemic.

CONCLUSIONS AND SUGGESTION

Based on the results of research on the LQ-45 company for 2018 to 2021, two main conclusions can be drawn. First, there is no difference in financial performance when viewed from the variables Current Ratio (CR) and Debt to Equity Ratio (DER) before and during the Covid-19 period. However, looking at the results of Wilcoxon's analysis, the conclusions of these two studies show that there are differences in financial performance when viewed from the variables Turnover (TO), Return on Equity (ROE), and Earnings Per Share (EPS) before and during the Covid-19 period.

From the results of this study, researchers expect to provide additional study materials in the field of financial management, especially on the theme of financial performance during special conditions such as the COVID-19 pandemic. Further research is recommended to add several things such as indicators of each financial ratio used, companies listed on other indices besides LQ-45, and other research places besides Indonesia as a developing country.



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