

## **COMPARATIVE ANALYSIS OF FINANCIAL PERFORMANCE BEFORE AND DURING COVID-19 PANDEMIC**

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### **ABSTRACT**

*Many industries around the world are impacted by COVID-19 pandemic. In this research, we aim to examine the impact of COVID-19 pandemic to firms' financial performance by analyzing whether there is significant difference between firms' profitability, liquidity, solvency, and activity before and during COVID-19 pandemic. This study uses purposive sampling method which resulted in 105 companies from food and beverages, telecommunication, transportation, tourism, restaurant, and hotel subsectors listed in Indonesia Stock Exchange from 2019 to 2020. We first divide the data into two period, 2019 for the period before COVID-19 pandemic and 2020 for the period during COVID-19 pandemic. Then, we uses paired samples t-test and Wilcoxon signed-rank test for hypothesis testing. The data is processed using IBM SPSS Statistics 26. The results indicate that the profitability and activity of food and beverages companies differ significantly, while liquidity and solvency do not. The solvency of telecommunication companies differs significantly, while profitability, liquidity, and activity do not. The profitability, solvency, and activity of transportation companies differ significantly, while liquidity does not. The profitability, liquidity, solvency, and activity of tourism, restaurant, and hotel companies differ significantly.*

**Keywords:** *COVID-19 Pandemic, Profitability, Liquidity, Solvency, Activity*

### **1. INTRODUCTION**

The COVID-19 pandemic is an event in which the coronavirus disease 2019 spreads widely and rapidly throughout the world. The first case of COVID-19 was discovered in Wuhan, China in December 2019. The disease caused by the SARS-CoV-2 virus is spreading rapidly throughout the world. This outbreak was officially designated by the World Health Organization (WHO) as a pandemic on March 11, 2020. The COVID-19 pandemic caused a health crisis and a global economic crisis. The International Monetary Fund (IMF) stated that the world experienced the worst recession since 1930 with an estimated global economic growth rate of minus 3.5%. The impact of the global recession in 2020 affected more than 92.9% of the countries in the world.

On March 2, 2020, Indonesia announced its first COVID-19 case. The COVID-19 pandemic is spreading rapidly to all provinces in Indonesia. Strict health protocols were implemented to prevent the spread of the 2019 coronavirus disease. Various policies were also set by the government to deal with the COVID-19 pandemic, namely Pembatasan Sosial Berskala Besar (PSBB) in 2020 which were replaced by Pemberlakuan Pembatasan Kegiatan Masyarakat (PPKM) in 2021. The implementation of various policies by the government has a major impact on society. Community activities are restricted due to the shutdown of public places and transportation routes. The drastic decline in community mobility has an impact on people's purchasing power and consumption. Statistics Indonesia, locally known as Badan Pusat Statistik (BPS) stated that Indonesia's household consumption was minus two point six three percent in 2020. The decline in purchasing power or public consumption led to a decline in company income in various industries. The decrease in income has a direct effect

on the performance of these companies. However, not all industries experienced a decline in performance. Several industries such as the food and beverages, pharmaceutical, textile, telecommunication, and logistic services industry are expected to benefit. The public and the state need to know the impact of the COVID-19 pandemic on companies in various industries that form the basis of the Indonesian economy. The increase or decrease in the financial performance of these companies will affect the country's economy as a whole.

The company's financial performance is one of the things that stakeholders consider when making decisions. Financial performance refers to how effectively and efficiently a company utilizes its resources to generate profits. According to Zheng et al. [1], financial performance determines the long-term growth and viability of the company so it is an important aspect of company performance. Financial performance can be assessed through financial statement analysis. Financial statement analysis using financial ratios is the best choice if stakeholders want to find out about the company's financial condition and development. In the analysis of financial statements, financial ratios are grouped according to the interests of management, investors, and creditors, into profitability, liquidity, solvency, and activity ratios. Many uncertainties in the midst of the COVID-19 pandemic have caused people to hesitate to invest. Having information about the company's financial performance in the midst of the COVID-19 pandemic can reduce public doubts and enable stakeholders to make the right decisions. Evaluation of the impact of the COVID-19 pandemic on the company's financial performance can help companies to take the right steps in dealing with the crisis.

### ***Related Theory***

#### *Signaling Theory*

Spence [2] explains about two parties who have access to different information in signaling theory. One party will decide whether or not to convey the information it has to the other party. The information will influence the recipient of the information when making a decision. Zhang and Wiersema [3] stated that management sends signals or information about the company in the form of financial statements. Management is assumed to have better information about the company's growth and development than external stakeholders. Information in published financial reports provides external stakeholders with an overview of the company's prospects. Signaling theory addresses the interpretation of signals by stakeholders whether as good or bad signals. An increase in financial performance is interpreted as a good signal while a decrease in financial performance is interpreted as a bad signal. The company will experience profit or loss depending on the decisions taken by external stakeholders based on signal interpretation. Elmarzouky et al. [4] stated that disclosure of information regarding COVID-19 associated with disclosure of performance can provide a signal to stakeholders and the market about the company's ability to deal with the COVID-19 pandemic.

### ***Our Contribution***

This paper presents some differences based on the research conducted by Daryanto et al. [5]. In contrast to the said research which used quarterly data for the 2019-2020 period, this study uses annual data for the 2019-2020 period. This study analyzes the financial performance of companies in several subsectors on the Indonesia Stock Exchange, in contrast to the research conducted by Daryanto et al. [5] which analyzes the financial performance of one company. This study is expected to be able to help companies, potential investors and creditors, as well

as the public to gain an understanding of the impact of the COVID-19 pandemic on the company's financial performance.

### ***Paper Structure***

The rest of the paper is organized as follows. Section 2 provides the conceptual definitions of the variables used in this paper, which include financial performance, profitability ratio, liquidity ratio, solvency ratio, activity ratio, and COVID-19 pandemic. Section 3 presents the hypothesis development in this study. Then, the methodology used in this study is explained in Section 4. Section 5 presents the results and discussion for this study. Finally, Section 6 concludes the paper and presents direction for future research.

## **2. CONCEPTUAL DEFINITIONS**

### ***Financial Performance***

Nnamani et al. [6] stated that financial performance is a subjective measure of how well a company utilizes its assets to generate resources. The company's financial performance will be better if the company utilizes its assets effectively and efficiently. Devi et al. [7] stated that financial performance is strongly influenced by the strategies, actions, and policies implemented by management in order to achieve company goals. Financial performance reflects the company's financial condition based on predetermined standards, criteria and objectives. Stakeholders not only assess the performance and financial condition of the company in one period, but also assess changes that occur between periods. A company's financial performance can be seen in the financial statement, which includes statement of cash flow, statement of financial position, and income statement. The company's financial performance can be analyzed by calculating and interpreting financial ratios from financial statements as explained by Gitman and Zutter [8]. Fraser and Ormiston [9] stated that financial ratios are calculations performed to analyze and compare financial data. There are three ways to compare financial ratios, namely cross-sectional analysis, time-series analysis, and combined analysis. Miswanto et al. [10] stated that financial statement analysis using financial ratios is the best way to find out the company's financial condition. In the analysis of financial performance, financial ratios are categorized into profitability ratios, liquidity ratios, solvency ratios, and activity ratio.

### ***Profitability Ratio***

Brigham and Houston [11] explained that profitability ratio is a set of ratios that show the results obtained from asset and debt management by the company. The better the company manages its assets, liabilities, and equity to generate profits, the higher the company's profitability ratio.

### ***Liquidity Ratio***

Brigham and Houston [11] explained that liquidity ratio is a ratio that shows the relationship between cash and other current assets and the company's short-term liabilities. A high liquidity ratio reflects that the company is able to settle the company's short-term obligations with its current assets. However, a liquidity ratio that is too high indicates that the company is less effective and efficient in managing its current assets.

### ***Solvency Ratio***

Brigham and Houston [11] explained that solvency ratio is a ratio that measures how effective the company is in managing its debt. The use of debt as a source of financing has a greater risk than equity. The use of debt can provide benefits for the company if the interest expense can be covered. A high solvency ratio indicates that the company is having difficulty paying off debt.

### ***Activity Ratio***

Brigham and Houston [11] that activity ratio is a ratio that measures how effective the company is in managing its assets. The acquisition of too few assets can reduce the company's opportunity to earn income, on the contrary, the acquisition of too many assets can reduce the company's profit because of the large cost of capital. The more effectively and efficiently the company manages its assets, the higher the activity ratio.

### ***COVID-19 Pandemic***

The COVID-19 pandemic is an event that spreads the coronavirus disease 2019 around the world. Symptoms of this disease range from mild symptoms to severe symptoms that can lead to death. The government establishes health protocols and various policies that limit community activities to prevent the spread of this disease. The spread of this disease resulted in a crisis in the Indonesian economy and the world.

## **3. HYPHOTESIS DEVELOPMENT**

### ***Profitability Ratio and the COVID-19 Pandemic***

The COVID-19 pandemic has caused a decline in people's purchasing power or consumption. The decrease in demand for products or services due to a decrease in people's purchasing power resulted in a decrease in the company's sales level. According to Santoso [12], the increase in the cost of goods sold occurred in companies, especially for those which obtained raw materials from China. A decrease in the company's sales level that is not accompanied by a decrease in expenses will result in a decrease in company profits. Rababah et al. [13] stated that a few industries had opportunities in the midst of the COVID-19 pandemic. Companies in these industries will experience an increase in demand which will trigger an increase in company profits. The company's profitability ratio will be affected by the increase or decrease in profit during the COVID-19 pandemic.

**H<sub>1</sub>:** There is a significant difference in the profitability ratio of food and beverages companies before and during COVID-19 pandemic.

**H<sub>2</sub>:** There is a significant difference in the profitability ratio of telecommunication companies before and during COVID-19 pandemic.

**H<sub>3</sub>:** There is a significant difference in the profitability ratio of transportation companies before and during COVID-19 pandemic.

**H<sub>4</sub>:** There is a significant difference in the profitability ratio of tourism, restaurant, and hotel companies before and during COVID-19 pandemic.

### ***Liquidity Ratio and the COVID-19 Pandemic***

Daryanto et al. [5] stated that the COVID-19 pandemic has made it difficult for companies to obtain cash. The decline in people's purchasing power due to the COVID-19 pandemic resulted in reduced cash inflows from sales. On the other hand, Khatib and Nour [14] stated that companies may increase cash to reduce operational risk due to the COVID-19 pandemic. According to Devi et al. [7], the decrease in purchasing power also causes a buildup of company inventories. The company's liquidity ratio will be affected by the increase or decrease in current assets owned by the company during the COVID-19 pandemic.

**H<sub>5</sub>:** There is a significant difference in the liquidity ratio of food and beverages companies before and during COVID-19 pandemic.

**H<sub>6</sub>:** There is a significant difference in the liquidity ratio of telecommunication companies before and during COVID-19 pandemic.

**H<sub>7</sub>:** There is a significant difference in the liquidity ratio of transportation companies before and during COVID-19 pandemic.

**H<sub>8</sub>:** There is a significant difference in the liquidity ratio of tourism, restaurant, and hotel companies before and during COVID-19 pandemic.

### ***Solvency Ratio and the COVID-19 Pandemic***

Lowardi and Abdi [15] stated that the COVID-19 pandemic has caused companies to increase debt to finance their operational activities. On the other hand, Devi et al. [7] stated that the decline in company performance during the COVID-19 pandemic resulted in doubts for creditors to provide loans. In accordance with signal theory, disclosure of company performance will provide a signal regarding the company's ability to handle the crisis in the midst of the COVID-19 pandemic [4]. This can influence the creditor's decision to provide loans to the company. The company's solvency ratio will be affected by the increase or decrease in debt levels during the COVID-19 pandemic.

**H<sub>9</sub>:** There is a significant difference in the solvency ratio of food and beverages companies before and during COVID-19 pandemic.

**H<sub>10</sub>:** There is a significant difference in the solvency ratio of telecommunication companies before and during COVID-19 pandemic.

**H<sub>11</sub>:** There is a significant difference in the solvency ratio of transportation companies before and during COVID-19 pandemic.

**H<sub>12</sub>:** There is a significant difference in the solvency ratio of tourism, restaurant, and hotel companies before and during COVID-19 pandemic.

### ***Activity Ratio and the COVID-19 Pandemic***

Devi et al. [7] stated that the COVID-19 pandemic resulted in a decrease in people's purchasing power. A decrease in people's purchasing power or consumption will cause a decrease in company income. Hevia and Neumeyer, in Sugiharto et al. [16] stated that work delays due to social restrictions during the COVID-19 pandemic caused a decline in company output. This results in reduced opportunities for the company to generate revenue. On the other hand, several industries experienced an increase in demand [1]. The increase in demand will result in an increase in the company's revenue. The company's activity ratio will be affected by the increase or decrease in revenue during the COVID-19 pandemic.

- H<sub>13</sub>:** There is a significant difference in the activity ratio of food and beverages companies before and during COVID-19 pandemic.
- H<sub>14</sub>:** There is a significant difference in the activity ratio of telecommunication companies before and during COVID-19 pandemic.
- H<sub>15</sub>:** There is a significant difference in the activity ratio of transportation companies before and during COVID-19 pandemic.
- H<sub>16</sub>:** There is a significant difference in the activity ratio of tourism, restaurant, and hotel companies before and during COVID-19 pandemic.

#### **4. METHODOLOGY**

##### ***Population, Sample, and Sample Selection Technique***

All companies included in the food and beverages, telecommunication, transportation, tourism, restaurant, and hotel subsectors consistently listed on the Indonesia Stock Exchange from 2019 to 2020 constitute the population of this study. The sample in this study was selected using the purposive sampling method with several criteria, namely: (1) Companies that are consistently listed on the Indonesia Stock Exchange in 2019-2020, (2) Companies that issue financial statements consistently from 2019-2020, and (3) Companies that present financial statements as of December 31. Based on these criteria, samples of 105 companies consisting of 29 companies in the food and beverages subsector, 6 companies in the telecommunication subsector, 39 companies in the transportation subsector, and 31 companies in the tourism, restaurant, and hotel subsector was obtained.

##### ***Data Collection Technique***

All data was collected from the company website, the Indonesia Stock Exchange website ([www.idx.co.id](http://www.idx.co.id)), and the IDN Financials website ([www.idnfinancials.com](http://www.idnfinancials.com)). The data was processed using IBM SPSS Statistics 26.

##### ***Variable Operationalization***

Financial performance is the dependent variable in this study. Financial performance is analyzed by several ratios, namely profitability ratios, liquidity ratios, solvency ratios, and activity ratios. The profitability ratio used is return on assets. The profitability ratio is calculated by dividing net income divided by total assets (Daryanto et al., 2021). The liquidity ratio used is the current ratio. The liquidity ratio is calculated by dividing current assets divided by current liabilities (Daryanto et al., 2021). The solvency ratio used is the debt to assets ratio. The solvency ratio is calculated by dividing total debt divided by total assets (Daryanto et al., 2021). The activity ratio used is asset turnover. The activity ratio is calculated by dividing sales revenue divided by total assets (Daryanto et al., 2021).

The data collected will be tested for each subsector. The normality test was carried out on the data for each subsector. The normality test used for this research is the Shapiro-Wilk test because the sample for each subsector is smaller than 50. The normality test is carried out to determine the test used in hypothesis testing. If the difference in paired data (before and during the COVID-19 pandemic) is normally distributed, hypothesis testing is carried out using paired samples t-test. If the difference in paired data (before and during the COVID-19 pandemic) was not normally distributed, the hypothesis was tested using the Wilcoxon signed-ranks test.

## 5. RESULTS AND DISCUSSION

### *Descriptive Statistics*

Below are the results of descriptive statistics for each subsector.

**Table 1** Descriptive Statistics Results

|   | N  | Minimum   | Maximum     | Mean         | Std. Deviation |
|---|----|-----------|-------------|--------------|----------------|
| <b>Food and Beverages Companies</b>             |    |           |             |              |                |
| ROA BEFORE COVID19                              | 29 | -1.369320 | 0.607168    | 0.05163824   | 0.306988659    |
| ROA DURING COVID19                              | 29 | -0.154406 | 8.302364    | 0.33827176   | 1.537917403    |
| CR BEFORE COVID19                               | 29 | 0.023173  | 12.633702   | 2.56014931   | 2.583100711    |
| CR DURING COVID19                               | 29 | 0.011482  | 98.634346   | 5.77751438   | 18.041081912   |
| DAR BEFORE COVID19                              | 29 | 0.065126  | 2.182957    | 0.51652403   | 0.459782492    |
| DAR DURING COVID19                              | 29 | 0.073567  | 8.207719    | 0.70268576   | 1.455052058    |
| AT BEFORE COVID19                               | 29 | 0.052222  | 2.240315    | 1.03024352   | 0.552791912    |
| AT DURING COVID19                               | 29 | 0.000000  | 2.319754    | 0.85541776   | 0.542838656    |
| <b>Telecommunication Companies</b>              |    |           |             |              |                |
| ROA BEFORE COVID19                              | 6  | -1.484914 | 0.124733    | -0.22926867  | 0.618530820    |
| ROA DURING COVID19                              | 6  | -3.510104 | 0.119716    | -0.59330850  | 1.431119180    |
| CR BEFORE COVID19                               | 6  | 0.000405  | 1.380183    | 0.54721850   | 0.475838075    |
| CR DURING COVID19                               | 6  | 0.002422  | 1.153136    | 0.49465683   | 0.388320614    |
| DAR BEFORE COVID19                              | 6  | 0.396986  | 973.406455  | 162.71495550 | 397.156127991  |
| DAR DURING COVID19                              | 6  | 0.510458  | 3461.977648 | 577.53180683 | 1413.084104906 |
| AT BEFORE COVID19                               | 6  | 0.252719  | 0.692995    | 0.50507633   | 0.174404786    |
| AT DURING COVID19                               | 6  | 0.243197  | 3.226271    | 0.89820867   | 1.146110025    |
| <b>Transportation Companies</b>                 |    |           |             |              |                |
| ROA BEFORE COVID19                              | 39 | -0.576034 | 0.251374    | -0.00261979  | 0.119345234    |
| ROA DURING COVID19                              | 39 | -0.453019 | 0.148910    | -0.04961654  | 0.119154138    |
| CR BEFORE COVID19                               | 39 | 0.133217  | 11.721851   | 1.64664662   | 2.106064162    |
| CR DURING COVID19                               | 39 | 0.034831  | 6.723407    | 1.35527882   | 1.313305055    |
| DAR BEFORE COVID19                              | 39 | 0.030345  | 1.947414    | 0.51796246   | 0.333795660    |
| DAR DURING COVID19                              | 39 | 0.121994  | 3.138601    | 0.60536151   | 0.516216306    |
| AT BEFORE COVID19                               | 39 | 0.169682  | 2.567402    | 0.64016049   | 0.578277895    |
| AT DURING COVID19                               | 39 | 0.088539  | 2.146186    | 0.47328908   | 0.428249926    |
| <b>Tourism, Restaurant, and Hotel Companies</b> |    |           |             |              |                |
| ROA BEFORE COVID19                              | 31 | -0.174768 | 0.260471    | 0.01304535   | 0.074257696    |
| ROA DURING COVID19                              | 31 | -0.257469 | 0.019722    | -0.05820719  | 0.058753701    |
| CR BEFORE COVID19                               | 31 | 0.500357  | 39.129482   | 3.12083274   | 6.813409838    |
| CR DURING COVID19                               | 31 | 0.055773  | 140.245199  | 6.09418774   | 24.974243962   |
| DAR BEFORE COVID19                              | 31 | 0.005899  | 0.725594    | 0.36546913   | 0.178649979    |
| DAR DURING COVID19                              | 31 | 0.001453  | 0.815296    | 0.40413926   | 0.219006857    |
| AT BEFORE COVID19                               | 31 | 0.011683  | 2.951800    | 0.53549368   | 0.749647609    |
| AT DURING COVID19                               | 31 | 0.000580  | 1.549975    | 0.28049074   | 0.395401568    |

The average profitability ratio during the COVID-19 pandemic has increased compared to the period before the COVID-19 pandemic in Food and Beverages subsector, while it decreased in Telecommunication, Transportation, and Tourism, Restaurant, and Hotel subsectors. The average liquidity ratio during the COVID-19 pandemic has increased compared to the period before the COVID-19 pandemic in Food and Beverages, Tourism, Restaurant, and Hotel subsectors, while it decreased in Telecommunication and Transportation subsectors. The

average solvency ratio during the COVID-19 pandemic has increased compared to the period before the COVID-19 pandemic in Food and Beverages, Telecommunication, Transportation, and Tourism, Restaurant, and Hotel subsectors. The average activity ratio during the COVID-19 pandemic has decreased compared to the period before the COVID-19 pandemic in Food and Beverages, Transportation, and Tourism, Restaurant, and Hotel subsectors, while it increased in Telecommunication subsector.

### **Normality Test**

Based on the results of the normality test for each subsector, it is concluded that all data are not normally distributed, except for the activity ratio in food and beverages companies and the liquidity ratio in telecommunication companies which have Sig. value greater than 0.05.

### **Hypothesis Testing**

Below are the results of hypothesis testing for each subsector.

**Table 2** Hypothesis Testing Results

| <b>Subsector</b>                         | <b>Variable</b>                         | <b>Paired Samples T-Test<br/>Sig. (2-tailed)</b> | <b>Wilcoxon Signed-Ranks Test<br/>Asymp. Sig. (2-tailed)</b> |
|--|---|--|--|
| Food and Beverages Companies             | ROA DURING COVID19 – ROA BEFORE COVID19 | 0.001  | 0.018  |
|  | CR DURING COVID19 – CR BEFORE COVID19   |  | 0.469  |
|  | DAR DURING COVID19 – DAR BEFORE COVID19 |  | 0.304  |
|  | AT BEFORE COVID19 – AT DURING COVID19   |  |  |
| Telecommunication Companies              | ROA DURING COVID19 – ROA BEFORE COVID19 | 0.296  | 0.173  |
|  | CR BEFORE COVID19 – CR DURING COVID19   |  |  |
|  | DAR DURING COVID19 – DAR BEFORE COVID19 |  | 0.028  |
|  | AT DURING COVID19 – AT BEFORE COVID19   |  | 0.753  |
| Transportation Companies                 | ROA DURING COVID19 – ROA BEFORE COVID19 |  | 0.001  |
|  | CR DURING COVID19 – CR BEFORE COVID19   |  | 0.089  |
|  | DAR DURING COVID19 – DAR BEFORE COVID19 |  | 0.005  |
|  | AT DURING COVID19 – AT BEFORE COVID19   |  | 0.001  |
| Tourism, Restaurant, and Hotel Companies | ROA DURING COVID19 – ROA BEFORE COVID19 |  | 0.000  |
|  | CR DURING COVID19 – CR BEFORE COVID19   |  | 0.014  |
|  | DAR DURING COVID19 – DAR BEFORE COVID19 |  | 0.002  |
|  | AT DURING COVID19 – AT BEFORE COVID19   |  | 0.000  |

Based on the results of hypothesis testing, there are significant differences in profitability ratios before and during the COVID-19 pandemic in food and beverages (sig. = 0.018), transportation (sig. = 0.001), tourism, restaurant, and hotel companies (sig. = 0.000), but there is no significant difference in telecommunication companies (sig. = 0.173). The significant difference experienced by the said subsectors is because of the impact of COVID-19 pandemic in people's mobility and consumption power which cause a decrease in companies depending on people's mobility such as transportation, tourism, restaurant, and hotel companies. The food and beverages companies experienced an increase because of panic buying done by people during pandemic. On the other hand, the profitability ratio of telecommunication subsector do not differ significantly because the rise in individual customers is being offsetted by the drop in corporate customers because of the restriction of activity implemented by the government during COVID-19 pandemic.

There is a significant difference in the liquidity ratio before and during the COVID-19 pandemic in tourism, restaurant, and hotel companies (sig. = 0.014), but there is no significant difference in food and beverages (sig. = 0.469), telecommunication (sig. = 0.296), and transportation companies (sig. = 0.089). The significant difference in the said subsector is caused by the decrease of the current assets, such as cash and receivables, obtained by company during pandemic, while there is no decrease in current liabilities. Hence, the liquidity ratio decreased during pandemic. The liquidity ratio in food and beverages, telecommunication, and transportation do not differ significantly because the company choose to focus on the continuity and stability of the company during pandemic so there is no significant changes made with the current assets and liabilities during pandemic. The other reason is because of the creditors' reluctance in providing fund for the companies during this uncertain period.

There are significant differences in solvency ratio before and during the COVID-19 pandemic in telecommunication (sig. = 0.028), transportation (sig. = 0.005), tourism, restaurant, and hotel companies (sig. = 0.002), but there is no significant difference between companies. food and beverages (sig. = 0.304). The difference in solvency ratio of telecommunication companies is mainly caused by the liabilities obtained to improve the infrastructure because of the high demand of better connection during pandemic, while the differences in liquidity ratio of transportation, tourism, restaurant, and hotel companies are caused by the lack of increase in assets and the liabilities accumulated because the companies have difficulty in settling their debt during COVID-19 pandemic. On the other hand, the food and beverages companies are able to maintain their solvency during pandemic and didn't increase a significant amount of debt due to the uncertainties during COVID-19 pandemic, so the solvency ratio do not differs significantly.

There was a significant difference in the activity ratio before and during the COVID-19 pandemic in food and beverages (sig. = 0.001), transportation (sig. = 0.001), tourism, restaurant, and hotel companies (sig. = 0.000), but there was no significant difference in telecommunication companies (sig. = 0.753). The significant difference in activity ratio of food and beverages, transportation, tourism, restaurant, and hotel companies is because of the restriction in people's mobility and activity during pandemic. It caused the ineffectiveness and inefficiency of food and beverages companies in using their resources resulting in the decrease of output generated by the companies during pandemic. As for the difference in transportation, tourism, restaurant, and hotel companies, the restriction in people's mobility caused the decrease in the usage of the companies' services during COVID-19 pandemic. The activity ratio of telecommunication companies do not differ significantly because of the offset

of the increase in individual customers' demand by the decrease in corporate customers' demand.

## **6. CONCLUSION**

Based on the results of this study, it can be seen that differences in financial performance before and during the COVID-19 pandemic varied between subsectors. Whether or not there are differences in financial performance as measured by profitability ratios, liquidity ratios, solvency ratios, and activity ratios, it depends on how much impact the COVID-19 pandemic has on the subsector and the decisions taken by the company in dealing with the COVID-19 pandemic. Companies that experience a significant positive or negative impact due to the COVID-19 pandemic will have differences in the ratio of profitability, liquidity, solvency, and activity before and during the COVID-19 pandemic, while companies that are affected are small or are able to maintain their performance in the midst of the COVID-19 pandemic. 19 does not have a significant difference in the ratio of profitability, liquidity, solvency, and activities. The company's decisions and strategies in dealing with the crisis in the midst of the COVID-19 pandemic, such as adding distribution channels, developing new products and services, reducing operational time, temporarily stopping its business, and so on can affect the company's performance in the midst of the COVID-19 pandemic.

The limitations of this research are the small number of subsectors studied and also the short period of the research used. Further research can be carried out by adding to the use of various other sectors or subsectors, such as the automotive subsector and its components, textiles and garments, pharmaceuticals, and others. In addition, research can also be carried out by extending the research period and analyzing changes in the situation caused by the COVID-19 pandemic in the future. Further researchers can also use other financial ratios in order to expand the scope of the variables analyzed. For further research can do regression analysis by using the global covid 19 pandemic as a dummy variable to see its effect on various financial performance variables.

Researchers can also use dummy variables between industries to see the performance of the industrial sectors most affected by the global COVID-19 pandemic

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