FINANCIAL PERFORMANCE ANALYSIS OF PUBLIC HOSPITALS BEFORE AND DURING THE COVID-19 PANDEMIC

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ABSTRACT
This study is purposed to analyze the financial performance of public hospitals companies registered at the Indonesian Stock Exchange before and during the Covid-19 Pandemic. This study shows the difference of financial performance and financial ratio’s changes within hospital due to the Covid-19 condition. The method of this study is quantitative. The data used are secondary data from financial reports of hospital between the period of second quarter of 2019 until first quarter of 2021. Financial performance of hospital is measured from statistical calculation on Current Ratio, Quick Ratio, Debt-to-Equity Ratio, Debt Ratio, Total Asset Turnover, Inventory Turnover, Net Profit Margin, and Return on Equity before and during the Covid-19 Pandemic. Result of Normality Data Test by using Kolmogorov Smirnov shows that asymp sig is < 0.05, so H0 is accepted and H1 is rejected, thus not normally distributed. Continued with the Wilcoxon Test with average rank of not so much different. Also, Statistical Test shows that asymp sig for each financial ratio is > 0.05, so that the hypothesis is rejected and thus can be concluded that the financial performance of public hospitals companies registered at Indonesian Stock Exchange are not significantly different. The changes of financial ratios of public hospitals due to Covid-19 Pandemic condition are noticeable in the decreasing of profitability ratio. This shows that public hospitals are in the conditions of the Covid-19 Pandemic, although hospital capacity looks overloaded, in terms of profitability, it has decreased, this can be due to the increasing operational burden of hospitals with special policies during the pandemic. Meanwhile, in terms of other financial ratios, the condition of the Covid-19 Pandemic did not make the hospital's financial performance better than before the Covid-19 Pandemic.

Keywords: Financial performance, hospitals, Covid-19 Pandemic, financial ratio

1. INTRODUCTION

The Covid-19 Pandemic has occurred since the end of 2019 globally, starting to enter Indonesia in March 2020. Health is the main sector that is directly involved to the Covid-19 Pandemic. The health sector is an important socioeconomic asset, and a major supporter of human development. Hospital as a place to deal with patients affected by covid-19 must be able to operate properly. Hospital services are not only focusing on covid-19 but also on all forms of handling other diseases (pre-existing diseases). The hospital's policy in providing services is to carry out screening for Covid-19, in which all service procedures must ensure whether the patient is infected with Covid-19 or not. This causes the hospital's operational burden to increase even though there seems to be a surge in patients in the hospital. A good hospital will be able to operate in providing health services if it has good financial performance, even though the operational burden increases.[1] Thus, it is expected that the health sector, especially hospitals, as well as the economic sector are fulfilled properly. It becomes very important, especially in the situation of the Covid-19 Pandemic, where health is the main factor that must be pursued for the entire world community, including in Indonesia. Hospitals that are not able to maintain a balanced financial condition with operating expenses will lose competitiveness, ultimately resulting in the hospital's operational failure. The company's operational activities can be seen from the financial reports published at the Stock Exchange. The development of stock exchange investment, as an indicator of the
progress of the country's economy, can be directly observed through the development of activities in the capital market, namely the Indonesia Stock Exchange (IDX). [2,3,4]

The implementation of strict restriction policies such as lockdowns in several countries has resulted in public concern about daily health needs. This has led to a surge in health check-ups and drug purchases, both for routine as well as for increasing immunity at all types of health services, including in hospitals and drug industry. However, this is more evident in countries that are geographically more prosperous than other countries. Of course, if left unchecked, it will have a negative impact on the balance of the economy and health in other more vulnerable countries. With a surge in activities like this, health services such as hospitals should be able to properly manage the company's operational conditions so that it can continue to run well. [5] Strong control and control from the government in each country in tackling the Covid-19 Pandemic is important to maintain economic stability and public welfare. Japan, China, and Korea immediately quarantined and isolated their citizens so that they could prevent the wider spread of covid-19, and make immediate socio-economic policies. In Indonesia, the government continues to pay attention to the welfare of the people by carrying out economic activities adapted to the conditions of the Covid-19 Pandemic. [6]

**Research Purpose**

Knowing the differences and changes in financial ratios (liquidity ratio, solvency ratio, activity ratio, and profitability ratio) due to the Covid-19 Pandemic condition in hospitals listed on the Indonesia Stock Exchange (IDX).

**Paper Structure**

The composition of this article is as follows: Section 1: Explains the phenomenon (background of the problem) on the occurrence of the Covid-19 Pandemic at the end of 2019 globally and at the beginning of March 2020 in Indonesia, the main problems, objectives and scope of the research, as well as the benefits of the research. Section 2: Describes a literature review of the impact of the Covid-19 Pandemic on the economy and financial performance of hospitals in the world and Indonesia, through the assessment on financial ratios, previous research, the framework (concept) of this research. Section 3: Describes the research method used, population and sample, as well as operational definitions of research variables, data analysis, and statistical hypotheses and research testing. Section 4: Explains the analysis and discussion of this research so that it can answer the research objectives (research hypotheses), explains the financial performance of the hospital and its changes. Section 5: Explains the conclusions of this study and provides suggestions for further research.

**Our Contribution**

This article can contribute to the following: (1) Development of knowledge: especially financial management economics, so that in the end it can be used as a reference in the event of similar conditions that have an impact on the local and global economy in the future. (2) Government: can be used as a consideration for taking steps in carrying out economic policies in Indonesia, especially if unexpected conditions occur such as the Covid-19 Pandemic in the future. (3) Health service centres, especially hospitals: used as a consideration for taking steps in carrying out operational activities in balance with hospital finances, especially in unexpected conditions with increased health service activities during times such as the Covid-19 Pandemic, so that hospitals can continue to operate well in
meeting its needs as a health service centre to improve public health, as well as in terms of the resulting economic stability.

2. BACKGROUND

Impact of the Covid-19 Pandemic on the World Economy

The Covid-19 Pandemic has impacted various countries, from China, America, to Indonesia. There is a policy to control the transmission of covid-19 infection so that it does not spread, by implementing a lockdown system. Global economic activity declined sharply so that if it continues, a global recession will occur. [7] World economic growth is estimated to contract by 3.0 percent (YoY) in 2020, and is predicted to grow slowly at 5.8 percent in 2021. This condition will be achieved if the economy returns to normal, however, the next economic growth will remain lower if compared to before the Covid-19 Pandemic. Further economic growth is influenced by the way and speed of various countries in controlling the spread of covid-19. [8,9]

The economic consequences that have arisen due to the Covid-19 Pandemic are based on three main lines, namely: the direct impact related to the policy of restricting social activities resulting in reduced purchases of certain types of goods and services. And the long duration of the Covid-19 Pandemic has also resulted in people being even more selective in spending money to meet the most important needs while doing activities at home. People tend to save and reduce consumptive spending. In addition, in terms of production and supply of needs, there has also been a reduction in business activities as a result of the restrictive policy on community activities, as described previously. This then becomes very dynamic and is influenced by the response of the governments of each country in determining economic policies and in tackling the spread of Covid-19. [10]

Impact of the Covid-19 Pandemic on the Indonesian Economy

The Indonesia economic growth was 2.97 percent (YoY), although slowing but still growing positively. Especially in the service sector, particularly health services and social activities at 10.4 percent (YoY), after financial services and insurance, at 10.7 percent (YoY), followed by communication and information services at 9.8 percent (YoY). The projection of Indonesia's economic growth in the health services sector is estimated to grow by 11.2 – 13.3 percent (YoY). Overall, however, Indonesia's economic growth is projected to slow down by -0.4 – 2.3 percent (YoY) with a peak of the slowdown in the second – third quarter of 2020. [8,11]

The Indonesian government is still trying to control the impact of the Covid-19 Pandemic on the economy. Indonesia. The efforts made by the Indonesian government are to design an aggressive budget to help the Indonesian economy since the beginning of 2020. The Indonesian government has a challenge ahead to reduce the covid-19 infection to a more manageable stage, so that the Indonesian economy can recover as well as business activities and financial markets can be sustainable. [8,12]

Impact of the Covid-19 Pandemic on Hospitals

In the world's health systems, the Covid-19 Pandemic is causing unprecedented and changing challenges from previous health systems. Deep dynamic changes in health systems are underway, leading to widespread investment in disease prevention tools and accelerated
digital transformation of healthcare delivery. This health system includes health care facilities (hospitals and clinics). [6,14,15,16] There has been an increase in activity in the health sector, especially hospitals as one of the main health care facilities during the Covid-19 Pandemic. This gives hospitals the opportunity to experience increased financial performance growth. Covid-19 is a new disease for which there is no clear flow of patient handling, this often results in overloading the capacity of patients in hospitals and the work capacity of medical personnel being very high and causing burnout. [6,17,18,19,20]

Although there is an opportunity to increase financial performance growth with increasing demand for health services in hospitals, with the Covid-19 Pandemic, which requires separating and even limiting contact between covid and non-covid patients in various types of services in hospitals, both inpatient and outpatient, eventually can have an impact on increasing the operating costs of the hospital itself. There was also a change from a normal treatment room to a covid-19 isolation treatment room, so that the use of the number of available beds became less effective and had an impact on revenue and of course the hospital's financial performance. [21,22,23]

**Hospital and Financial Performance (Financial Ratio)**

Hospitals in Indonesia in handling the Covid-19 Pandemic are used as the main infrastructure of trying to reduce the number of cases and the number of covid-19 spreads. Various policy programs were made specifically to maintain hospital services during the Covid-19 Pandemic so that they are as good as before the Covid-19 Pandemic. This is adjusted to the social and economic conditions of Indonesia as a developing country. The existence of a payment system for handling covid-19 patients in hospitals is expected to assist hospital operational activities. [23,24,25]

Whether or not a company's financial operating conditions are good (financial performance), can be seen from the financial statements. It contains financial ratios, as indicators that show the financial health (performance) of the company. The financial ratios assessed include: (1) Liquidity Ratio, which is a financial ratio that measures the company's ability to handle short-term debt, (2) Solvency Ratio, which is a financial ratio that describes the company's ability to meet debt using assets or assets owned, (3) Activity ratio, which is a financial ratio that measures the speed of conversion of company accounts into sales/cash value (the effectiveness of the company's operational activities in utilizing assets), (4) Profitability ratios, namely financial ratios that describe company profits. [26,27,28]

**Previous Research**

The Covid-19 Pandemic has caused major changes in various aspects of people's lives, especially the economy and health. These two main areas are closely related to the hospital as a centre for health services and improving people's welfare is related to the economic field. Several previous studies have described the assessment of the financial performance of health services, especially hospitals. However, previous research has not found global conditions such as the Covid-19 Pandemic that affect the financial performance of a health service, especially hospitals.

Several previous studies that are relevant to the analysis of financial performance, especially hospitals with the Covid-19 Pandemic situation, include:

b. Gloria J. Bazzoli, Naleef Fareed, and Teresa M. Waters, in 2014, through the title “Hospital Financial Performance in The Recent Recession and Implications for Institutions that Remain Financially Weak”, conducted observations and examinations of private hospitals that went through recession in the past in fulfilling their operational financial health of the hospital which also complies with the prevailing laws and regulations at that time. [30]

3. RESEARCH METHODS

Research Type and Period

This quantitative study explains the results of the analysis of the financial performance of hospitals listed on the IDX before and during the Covid-19 Pandemic. This study analyzes the financial ratios of public hospitals in the second, third and fourth quarters of 2019 in the first quarter of 2020 with the financial statements for 2020, the second, third, and fourth quarters, 2021, the first quarter.

Data Sources and Type

Secondary data sources are taken from hospital financial reports on the IDX. Can be accessed through the website www.idx.co.id. The type of data used is quantitative data presented in the form of numbers.

Population and Sample

The population of this study were hospitals listed on the IDX, with a total of 10 companies. The sample taken with the objective method has the following criteria: hospitals that are listed on the IDX until the year the research is carried out (2021) and which have published financial reports in Rupiah every quarter, until the first quarter of 2021.

Table 1. Population and Sample of Hospitals Listed on IDX in 2021

<table>
<thead>
<tr>
<th>No.</th>
<th>Hospital Population</th>
<th>Hospital Sample</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PT. Medikaloka Hermina Tbk</td>
<td>PT. Medikaloka Hermina Tbk</td>
<td>HEAL</td>
</tr>
<tr>
<td>2</td>
<td>PT. Siloam International Hospitals Tbk</td>
<td>PT. Siloam International Hospitals Tbk</td>
<td>SILO</td>
</tr>
<tr>
<td>3</td>
<td>PT. Mitra Keluarga Karyawan Tbk</td>
<td>PT. Mitra Keluarga Karyawan Tbk</td>
<td>MIKA</td>
</tr>
<tr>
<td>4</td>
<td>PT. Sarana Meditama Metropolitan Tbk</td>
<td>PT. Sarana Meditama Metropolitan Tbk</td>
<td>SAME</td>
</tr>
<tr>
<td>5</td>
<td>PT. Sejahtera Raya Anugrahjaya Tbk</td>
<td>PT. Sejahtera Raya Anugrahjaya Tbk</td>
<td>SRAJ</td>
</tr>
<tr>
<td>6</td>
<td>PT. Royal Prima Tbk</td>
<td>PT. Royal Prima Tbk</td>
<td>PRIM</td>
</tr>
<tr>
<td>7</td>
<td>PT. Bunda Medik Tbk</td>
<td></td>
<td>BMHS</td>
</tr>
<tr>
<td>8</td>
<td>PT. Kedoya Adraya Tbk</td>
<td></td>
<td>RSGK</td>
</tr>
<tr>
<td>9</td>
<td>PT. Metrohealthcare Indonesia Tbk</td>
<td></td>
<td>CARE</td>
</tr>
<tr>
<td>10</td>
<td>PT. Saratoga Investama Sedaya Tbk</td>
<td></td>
<td>SRTG</td>
</tr>
</tbody>
</table>

Source: Data 2021
Operational Definition and Research Variable

Liquidity Ratio:
Current Ratio (CR) = Current Assets / Current Liabilities
Quick Ratio (QR) = (Current assets – Inventory) / Current Liabilities

Solvency Ratio:
Debt to Equity Ratio (DER) = Total Liabilities / Total Equity
Debt Ratio (DR) = Total Liabilities / Total Assets

Activity Ratio:
Total Assets Turnover (TAT) = Sales / Total Assets
Inventory turnover (IT) = Cost of Goods Sold / Inventory

Profitability Ratios:
Return on Equity (ROE) = Net Income / Total Equity
Net Profit Margin (NPM) = Net Income / Net Sales

Data Analysis and Methods

Using SPSS version 26 for normality test (Kolmogorov Smirnov), the data is not normally distributed and continued with the Wilcoxon test, with the average rank not too much different. Furthermore, the Statistical Test tested the research hypothesis: "There is a difference in the financial performance of the public hospitals before and during the Covid-19 Pandemic." With a significance level (alpha) of error tolerance of 0.05. Significance value > 0.05 then the hypothesis is rejected (no difference).

4. RESULTS AND DISCUSSIONS

<table>
<thead>
<tr>
<th></th>
<th>Current Ratio</th>
<th>Quick Ratio</th>
<th>Debt-to-Equity Ratio</th>
<th>Debt Ratio</th>
<th>Return-on-Equity</th>
<th>Net Profit Margin</th>
<th>Total Asset Turnover</th>
<th>Inventory Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>-.443</td>
<td>-.443</td>
<td>-1.669</td>
<td>-1.478</td>
<td>-.198</td>
<td>-.639</td>
<td>-1.678</td>
<td>-1.514</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.658</td>
<td>.658</td>
<td>.095</td>
<td>.139</td>
<td>.843</td>
<td>.523</td>
<td>.093</td>
<td>.130</td>
</tr>
<tr>
<td>Source: Data 2021</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Normality Test Results Data using Kolmogorov Smirnov showed the value of asymp sig < 0.05, then H0 was accepted and H1 was rejected, so that the data for each public hospitals financial ratio was not normally distributed. The Wilcoxon Test was continued with the average rank not too much different before and during the Covid-19 Pandemic.
In the statistical test there is an asymp sig value for each financial ratio > 0.05, so the hypothesis is rejected, it can be concluded that the financial performance of the public hospitals before and during the Covid-19 Pandemic was not significantly different, meaning that it had the same good performance.

Table 3. Average on Total Hospital Financial Ratio Before and During Covid-19 Pandemic

<table>
<thead>
<tr>
<th>Financial Ratio</th>
<th>Average on Total Financial Ratio</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Covid-19 Pandemic</td>
<td>During Covid-19 Pandemic</td>
</tr>
<tr>
<td>Liquidity Ratio</td>
<td>CR 2.09</td>
<td>1.96</td>
</tr>
<tr>
<td></td>
<td>QR 1.96</td>
<td>1.85</td>
</tr>
<tr>
<td>Solvability Ratio</td>
<td>DER 1.74</td>
<td>1.87</td>
</tr>
<tr>
<td></td>
<td>DR 1.42</td>
<td>1.38</td>
</tr>
<tr>
<td>Activity Ratio</td>
<td>TAT 0.31</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>IT 0.15</td>
<td>0.12</td>
</tr>
<tr>
<td>Profitability Ratio</td>
<td>ROE 0.09</td>
<td>-0.10</td>
</tr>
<tr>
<td></td>
<td>NPM 0.07</td>
<td>-0.32</td>
</tr>
</tbody>
</table>

Source: Data 2021

Based on the table of changes in financial ratios (Table 3), the liquidity ratio of hospitals listed at the Indonesia Stock Exchange decreased in value by 0.13 for the Current Ratio and 0.11 for the Quick Ratio due to the Covid-19 Pandemic. This shows that hospitals are increasingly difficult to handle their short-term debt and tend to have illiquid financial conditions.

For changes in the solvency ratio of hospitals listed at the Indonesia Stock Exchange due to the Covid-19 Pandemic, the value increased by 0.13 for the Debt-to-Equity Ratio and experienced a slight decrease in the value for the Debt to Ratio, which was 0.04. This shows that hospitals are increasingly difficult to meet debts with their assets. This condition tends to be less favorable for investors to keep investing in hospitals during the Covid-19 Pandemic.

Meanwhile, the change in the activity ratio of hospitals listed at the Indonesia Stock Exchange due to the Covid-19 Pandemic decreased by 0.01 for Total Asset Turnover and 0.03 for Inventory Turnover. This shows that the hospital’s ability to change the hospital’s inventory to generate cash and income is reduced, meaning that the hospital’s operations are not more productive and not more effective even though the hospital has increased demand for services to make the patient’s capacity to be excessive.

Judging from the changes in the profitability ratios of hospitals listed at the Indonesia Stock Exchange with the Covid-19 Pandemic condition experienced a decrease in value of 0.19 for Return on Equity and a decrease in value of 0.39 for Net Profit Margin. This shows that even though the hospital's capacity is seen to be overloaded, the hospital's ability to generate net profit from sales and profits from investors is relatively declining. This can be caused by the operational burden of hospitals with special policies, such as the separation of services and contacts for covid and non-covid patients, when the pandemic is increasing.
From the hospital's financial performance analysis, seen from changes in hospital financial ratios with the Covid-19 Pandemic, it does not make the hospital's financial performance better than that before the Covid-19 Pandemic.

5. CONCLUSIONS AND SUGGESTIONS

The implications of this study is as a reference for hospitals in carrying out a balanced management between hospital service operations and the hospital's financial condition, especially in a global situation such as the Covid-19 Pandemic, by paying attention to special policies that require hospitals to separate health services for covid-19 patients and non-covid; so that even in the conditions of the Covid-19 Pandemic and hopefully also in the post-Covid-19 Pandemic conditions, hospitals can still carry out operations properly according to their function as health services, and generate profits and have good financial performance.

REFERENCES


