


Liquidity Analysis Before and During the Covid-19 Pandemic

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Article Info	ABSTRACT
<p>Keywords: Cash Ratio, Quick Ratio, Current Ratio</p>	<p>This study aims to explore the liquidity trends of banking companies with case study of PT Bank Mandiri Tbk, before and during COVID-19 pandemic. This study discusses three proxies, namely: Cash Ratio, Quick Ratio and Current Ratio. The techniques used in this research are verification and descriptive with a quantitative approach, so the research techniques used an explanatory survey methods and descriptive survey methods. In this research, as an object with the population framework. The type of data used is secondary data and collected techniques used a library research (library research) and field research (field research). By using SPSS statistical program, where the results showed that Cash Ratio, Quick Ratio and Current Ratio still increased before the COVID-19 pandemic and decreased during the COVID-19 pandemic. Based on this research, the company used as a case study is still limited on banking company of PT Bank Mandiri Tbk which is listed on Indonesia Stock Exchange. So further research must be carried out using a different research sample with a longer observation period, so it is hoped that the results obtained can be generalized.</p>
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INTRODUCTION

Currently, era of competition on business world is very tight, whether large or small companies, profit or non-profit oriented, every company needs to improve its performance, especially on its financial performance (Latifi et.al, 2021). One of the main supporting factors for companies in preparing their strategy is effective and efficient throught financial performance. The success or not of company will be greatly influenced by goods or bad financial performance of the company. Financial performance is very influential in setting the direction of company's development and also measure, assess and evaluate the company's financial performance (Tudose et.al, 2022). It can be carried out by presenting financial reporting consisting of a balance sheet, profit and loss calculation report, cash flow statement and capital change report. By carrying out financial reporting analysis, the company will get very crucial information that can provide an overview of the company's financial condition more transparently and accurately, so that top management will get more complete information to be used as material for decision making.

To analyze financial statements can be run by analyzing financial ratios. Ratio analysis is a technique that is often used to analyze financial statements of a company and has advantages over methods of analysis. Generally, the financial ratios used in assessing the company's financial performance are solvency ratios, liquidity ratios, profitability ratios, and activity ratios. With this analysis, the company can find out the state of the company's financial performance in the past and present, so that it can be re-evaluated to improve its financial performance. Financial ratios are a company analysis tool in assessing the performance of a company by comparing financial data presented in financial reporting.

Financial performance is an analysis in assessing how far a company has carried out activities in line with the rules correctly and well. Financial performance evaluation is a technique that can be carried out by managers in fulfilling debts to share holders and can also achieve the goals set by the company (Turegun, 2022). One of the financial ratios used to measure financial performance is the solvency liquidity ratio which is quite strongly related to the company's capacity to generate profit or profit because the liquidity ratio shows the level of working capital required by the company with company's operating assets. With the presence of good working capital, it is possible for the company to run optimally and reduce the risk of difficulties due to a financial crisis. However, management must also avoid excessive working capital because it shows that there are unproductive funds. In exploring whether or not company's assets are effective in its financial performance. It is necessary to analyze liquidity ratios in the form of Current Ratio, Quick Ratio, and Cash Ratio analysis as carried out on this study. According to this explanation, research will be carried out in listed companies on the Indonesia Stock Exchange which are running (on banking sector).

Indonesian Law number 10 of 1998 revises Indonesian Law number 7 of 1992 concerning banking; explaining the purpose of banks is a business institution that collects funds from the public in the form of deposits and distributes them back to the community in the form of credit or other forms for efforts to improve people's lives so that banks must maintain public trust and in maintaining this trust so that banks must maintain financial performance. Banking financial performance is a description of bank's financial condition within a certain period of time covering aspects of raising funds or channeling funds. An indicator in assessing financial performance banking by reviewing. Liquidity is a ratio that gives attention to the relationship of company's cash and other current assets to their current debt (Brigham & Houston, 2010). By using the liquidity ratio, it can be reviewed the development of short-term debt or current assets of a company for now or in the future. So that it can be decided on the state of the Company in a good or bad state is not good. Liquidity results are crucial to financial performance because this ratio is quite strongly related to the company's capacity to earn profits.

It shows the level of working capital required in company's operational activities. Based on the opinion of Sari, D.W. (2021), "Liquidity ratio is the ratio in tracing the capacity to pay short-term debt, which is divided into current ratio, quick ratio and cash ratio". The following is a description of the trend development of the Liquidity Ratio before the COVID-19 pandemic during quarterly 2019 and during the COVID-19 pandemic during quarterly 2020 both Current Ratio, Quick Ratio, Cash Ratio:



Source: Data Processed

Figure 1. Trend of Current Ratio



Source: Data Processed

Figure 2. Trend of Quick Ratio



Source: Data Processed

Figure 3. Trend Cash Ratio

In its development before the COVID-19 pandemic Current ratio, Quick ratio, Cash ratio there was an increase although some of them experienced a decrease, on the other hand during the COVID-19 pandemic Current ratio, Quick ratio, Cash ratio there was a decrease although some of them experienced an increase.

Management is a stage in developing desires that will be achieved or marked in a company or social or other government organization, (Effendi, 2014). While based on, (Abror, 2021), Management is the art and science of organizing the stages of using resources or human resources effectively and efficiently in achieving a certain goal. This definition explains that management is a science and art in which in its implementation a manager must look for techniques in empowering existing resources efficiently and effectively in order to achieve company goals. Based on Musthafa (2017) Financial management describes several policies that must be carried out, namely investment funding policies and policies in meeting funding needs and dividend policies. Based on the opinion of Sartono (2011), financial management can be defined as fund management both with regard to the allocation of funds in the form of effective investment or efforts to spend efficiently or raise funds in investment funding.

The executor of financial management is the financial manager. Although the function of a financial manager in each company is not the same, in principle it has the main function, namely to plan the search and utilization by allocating funds in various ways in optimizing resources or efficiency of company operations. Based on the opinion of Darsono & Tjatjuk (2011), financial management is the activity of borrowing or company owners to obtain capital sources cheaply and use them economically efficiently and effectively in making a profit. Financial management is related to three activities, namely:

1. Asset management activities, namely after funds are obtained and placed in the form of fund assets, must be processed efficiently.
2. Fund acquisition activities are activities carried out in obtaining sources of funds either from external or internal companies.
3. The use off undsactivity is an activity inproviding investment of funds from various assets.

Liquidity ratio is a type of ratio that is divided into several types. Generally, there are 3 types of liquidity ratios, namely:

Current Ratio

Current Ratio is the current ratio provides a measurement of the company's capacity to pay debts that are due immediately when collected or short-term liabilities. Then it can be stated that the amount of current assets available in meeting short-term liabilities that are due assoon as possible (Kasmir 2012). Meanwhile, according to Mahardhika & Marbun (2016), the current ratio is the simplest way to review the company's capacity to meet its short-term debt (obligations). The equation in tracing the Current Ratio that can be used, below:

$$\text{Current Ratio} = \text{Curret Assets} / \text{Current Liabilities}$$

Quick Ratio

If the current ratio shows a balance of 1: 1 or 100%, it means that current assets can pay short-term liabilities company situation. If the ratio is 1: 1 or 100% so that the company's liquidity is good. If there are liquidity problems so that the company will be easy to carry out changes in assets into money in paying off debt (liabilities).

Cash Ratio

Cash ratio is a measuring tool in measuring the amount of cash available to pay debts. This matter can be shownfrom the existence of cash or cash equivalents such as checking accounts. This ratio shows the actual capacity for the company to pay short-term debt..

Based on Fahmi (2013), financial performance is a description of the results of the company's successwhich is interpreted as the results that have been achieved from various operational activities carried out. So it can be explained that financial performance is an analysis carried out in reviewing how far the company has run by using various rules of financial administration correctly and well. Based on the opinion (Agnes, 2010) Financial performance is an assessment of the financial situation which is the company's achievement which requires analysis with some parameters such as indices and ratios so that 2 financial words can be connected between 1 and the other. Financial ratios are activities by comparing the values of numbers contained in financial statements with the technical division of one number with another. The financial ratios used are liquidity ratios which include ratio sused in measuring the company's short-term liquidity capacity by reviewing the company's current assets which tend to current debt. The liquidity ratios used in this research are *Current Ratio, Quick Ratio, and Cash Ratio*.

There are several benefits and objectives of the liquidity ratio, including first in measuring the company'scapacity to pay short-term debt that is due when collected. Second in measuring the company's capacity to payshort-term debt with current assets comprehensively. Third, in measuring the company's capacity to pay off short-term debt with current assets, it appears to take into account accounts receivable or inventory. Fourth in comparing or measuring between inventory and the company's working capital. Fifth in measuring the amount of cash available in paying debts as a

means of further planning, especially with regard to receivables and cash plans. In reviewing the position and condition of the company's liquidity at any time.

Based on Horne and Wachowicz (2014), the effect of liquidity on the company is that the higher the liquid assets, the more liquid the company. The level of liquidity requires a small amount of risk, but the profitability is also small. On the other hand, based on pecking order theory, a high leverage ratio forces the company to bear large interest funds that it must bear, thus affecting the company's profitability.

Theoretical Framework

The framework in this research can be described as below:

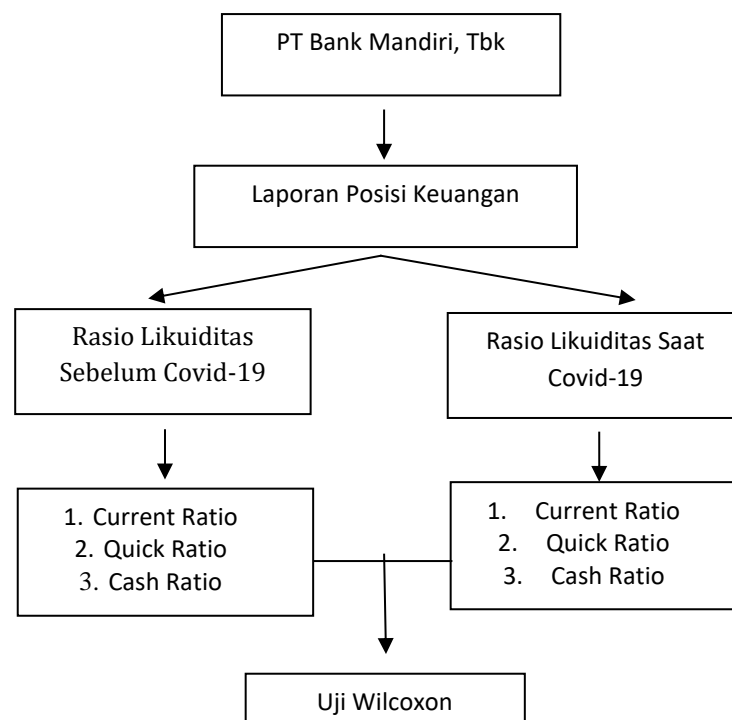


Figure 4. Theoretical Framework

METHODS

The approach used in this research is a quantitative approach. The data source used is secondary data obtained from the official website of PT Bank Mandiri Tbk. The form of quarterly report documents for 2019 and 2020. Causal quantitative research design can be implemented with subject of this research is PT Bank Mandiri Tbk. While the object of this research is profitability and liquidity. Based on Sugiyono (2017), the sample is part of the characteristics and numbers in population. The sampling technique used in this research is purposive sampling. All data collected will be tested with SPSS and using the Wilcoxon test.

To provide answers to the formulation of the problems available, researchers will process company data into calculations of several financial ratios. This ratio used in this research is the liquidity ratio which is divided into Current Ratio, Quick Ratio and Cash Ratio. Next, the findings of the data calculation using financial ratios will be calculated using trend analysis on percentages. Data that has been managed with liquidity ratio calculations and trend analysis calculations, will produce information in the form of numerical values in the form of percentages. These findings will then be

listed in tabular form, which will be accompanied by a more detailed descriptive explanation for better understanding. Trend analysis (*tendency position*) is a technique or method of analysis in recognizing tendencies compared to financial conditions, whether showing a tendency to remain, increase, or even decrease. Trend analysis shows changes in company finances expressed in percentages (Munawir, 2014).

Trend calculation results can be shown in the form of an index or percentage. Trend for percentage is calculated by selecting the first year as the basis of comparison or as the base year. Generally, the data of financial statements from the earliest year in the series of financial statements being analyzed are considered as the base year. The base year is given a value of 100%. Then the data for other years than the base year data (Lumenta et.al, 2021).

RESULTS AND DISCUSSION

This study also presents validity and reliability tests by presenting the convergent validity of data as in table 1.

Liquidity ratio is the ratio in assessing the company's ability to carry out profit operations in a certain period. Short-term operations and the ability to fulfill its current debt where the pandemic Quarterly COVID-10 in 2019. There is still an increase in the ratio of Current Ratio, Quick Ratio, Cash Ratio, and there is still a decrease, during the quarterly COVID-10 pandemic in 2020 both Current Ratio, Quick Ratio, Cash Ratio, and increased, as shown in the table below:

Table 1. Current Ratio

Current Ratio	2019 in Quarterly (Millions IDR)				2020 in Quarterly (Millions IDR)			
	1	2	3	4	1	2	3	4
Current Assets	1.128.68 3.875.	1.058.35 1.022.	1.097.658 .366.	1.128.68 3.875.	1.130.70 7.835.	1.168.34 4.738.	1.205.616. 993.	1.128.6 83.875.
Current Payables	934.222. 530.	881.381. 226.	910.385.8 97.	934.222. 530.	967.556. 086.	999.946. 202.	1.032.030. 493.	934.222 .530.
Current Ratio (In%)	120,82	120,0	120,5	120,8	116,8	116,8	116,8	120,8

(Source: Data Processed 2019-2020)

Table 2. Quick Ratio

QuickRatio	2019 in Quarterly (Millions IDR)				2020 in Quarterly (Millions IDR)			
	1	2	3	4	1	2	3	4
QuickAssets	1.070.72 0.035.	1.002.86 1.587.	1.039.082 .157.	1.070.72 0.035.	1.066.52 1.949.	1.102.09 7.342.	1.138.835 .096.	1.070.72 0.035.
Current payables	934.222. 530.	881.381. 226.	910.385.8 97.	934.222. 530.	967.556. 086.	999.946. 202.	1.032.030 .493.	934.222. 530.
Quick Ratio (In%)	114,61	113,78	114,14	114,61	110,23	110,22	110,35	114,61

(Source: Data Processed 2019-2020)

Table 3. Cash Ratio

CashRatio	2019 in Quarterly (Millions IDR)				2020 in Quarterly (Millions IDR)			
	1	2	3	4	1	2	3	4
CashAssets	25.356.3 93.	21.502.6 58.	20.216.60 9.	25.356.3 93.	22.291.9 74.	17.492.9 50.	14.614.13 2.	25.356.3 93.
Current Payables	934.222. 530.	881.381. 226.	910.385.8 97.	934.222. 530.	967.556. 086.	999.946. 202.	1.032.030 .493.	934.222. 530.
Cash Ratio (In%)	2,71%	2,44%	2,22%	2,71%	2,30%	1,75%	1,42%	2,71%

(Source: Data Processed 2019-2020)

Descriptive statistics

Table 4. Descriptive Statistics

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	
CR19	4	120.08	120.82	120.5675	.34423	
CR20	4	116.82	120.82	117.8350	1.99007	
QR19	4	113.78	114.61	114.2850	.40303	
QR20	4	110.22	114.61	111.3525	2.17247	
CR19	4	2.22	2.71	2.5200	.23707	
CR20	4	1.42	2.71	2.0450	.57297	
ValidN(listwise)	4					

Source: Data Processed

The Current Ratio (CR) variable shows a higher average value than the standard deviation, in the period before covid-19 $120.5675 > 0.34423$ and when covid-19 $117.8350 > 1.99007$, indicating that the distribution of data for the current ratio tends to be normally distributed. The second variable, the quick ratio, shows that the mean is higher than the standard deviation, in the period before covid-19 $114.2850 > 0.40303$ and when covid-19 $111.3525 > 2.17247$ this indicates that the distribution of quick ratio data is normal. Likewise with the cash ratio variable which shows a mean value greater than the standard deviation in the period before covid-19 $2.5200 > 0.23707$ and when covid-19 $2.0450 > 0.57297$, this shows that the distribution of cash ratio data is normal.

Normality Test

Table 5. Normality Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CR19	.253	4	.	.841	4	.199
CR20	.438	4	.	.638	4	.002
QR19	.290	4	.	.863	4	.272
QR20	.428	4	.	.651	4	.003
CR19	.289	4	.	.864	4	.275
CR20	.197	4	.	.971	4	.849

Source: Data Processed

The findings of normality test revealed that:

1. Current Ratio 2020 and Quick Ratio 2020 with a significance value < 0.05 means that the data is not normally distributed.
2. Current Ratio 2019, Quick Ratio 2019, Cash Ratio 2019 and 2020 the significance value is > 0.05 so the data is normally distributed.

Hypothesis Test

This research tests whether there is a difference in the liquidity ratio before and when covid-19 using non-parametric statistics. It is known that there are only two objects used so that hypothesis testing uses the Wilcoxon test.

Ho: There is no significant difference between the liquidity ratio before and during the pandemic. H1: There is a significant difference between the liquidity ratio before and during the pandemic.

The test decision is seen if the probability (sig) > 0.05 so Ho is accepted, and vice versa if the probability(sig) < 0.05 so Ho is rejected.

Table 6. Hypothesis Test

	Test Statistics ^a		
	CR20-CR19	QR20-QR19	CR20-CR19
Z	-1.604 ^b	-1.604 ^b	-1.604 ^b
Asymp.Sig.(2-tailed)	.109	.109	.109

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

Source: Data Processed

The test results using Wilcoxon test resulted in the following decisions:

1. First hypothesis (H1); Based on the table, the Current Ratio Sig (2-tailed) is 0.109 > 0.05, meaning that there is no significant difference before and during the pandemic.
2. Second hypothesis (H2); Based on the table, the Quick Ratio Sig (2-tailed) is 0.109 > 0.05, meaning that there is no significant difference before and during the pandemic.
3. Third hypothesis (H3); Based on the table, the Cash Ratio Sig (2-tailed) is 0.109 > 0.05, meaning that there is no significant difference before and during the pandemic.

CONCLUSION

According to these explanation, we can conclude; Based on descriptive tests by comparing the average to the standard deviation, the Current Ratio, Quick Ratio, and Cash Ratio of PT Bank Mandiri Tbk. listed on the IDX, the entire distribution of Current Ratio, Quick Ratio, and Cash Ratio data tends to be normally distributed, both before and during the COVID-19 pandemic, while with the Shapiro-Wilk normality test, the Current Ratio and Quick Ratio are not normally distributed, while the Cashratio is normally distributed. Then, Wilcoxon hypothesis test; Current Ratio and Quick Ratio there is no significant difference before and during covid-19. While the Cash Ratio has a significant difference before and during covid-19. The suggestion for research is for banks to always pay attention to their financial performance, which in this study is concentrated on the liquidity ratio. Suggestions for other researchers are to be able to increase the research period and enrich other financial ratios.

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