Religious organization hospital business sustainability in the covid-19 pandemic

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Info Artikel	ABSTRAK
	The purpose of this research is to analize Covid-19 outbreak have impact with healthcare sector's financial performance. Parameter that used are liquidity ratio, profitability ratio and solvability ratio. Result will show from the difference of financial performance before and after pandemic. Two type of data that being used are secondary and analysis data. Secondary data is in the form of financial statement from private hospital owned by religious organization. Analysis data that being used are comparison between financial statement in 2019 and 2020 from related hospital as an illustration of condition before and after Covid-19 pandemic. Research variable that used in this paper are liquidity ratio proxied by current ratio, profitability ratio proxied by profit margin and solvability ratio proxied by debt to-equity ratio. The result indicate there is no significant difference towards liquidity ratio, solvability ratio, and profitability before and after Covid-19 pandemic outbreak. Prediction of financial performance for the next 5 years in terms of liquidity will show some increase as show in solvability's term. As opposed, in terms of profitability will show some decrease. The research outcome expected to be suggestion for management to conduct efficiency and evaluation related to debt management.

INTRODUCTION

The first cases of Covid-19 in Indonesia were found in two Indonesian citizens (WNI) domiciled in Depok who were positive for the SARS Cov-2 virus, (Nuraini, 2020). As of June 29, 2021, the distribution data in Indonesia are as follows, Positive 2,156,456 people, 1,869,606 people recovered and 58,024 people died (KPCPEN, 2021), as shown in Figure 1.
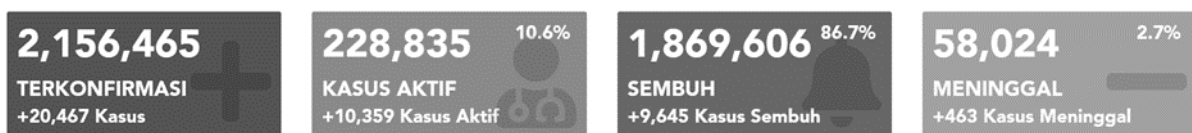

Figure 1 Distribution data in Indonesia

One of the government's efforts to control COVID- 19 is to develop facilities and infrastructure to handle the so-called PDP controlled cases. The implementation of PDP requires an independent unit that meets the requirements for controlling infectious diseases. Many hospitals in Indonesia are starting to improve themselves in order to manage several emerging and infectious diseases, especially COVID-19. On March 10, 2020, the government established 132 referral hospitals through the Decree of the Minister of Health Number 169 of 2020 concerning the Designation of Referral Hospitals for the Management of Certain Emerging Infectious Diseases (Decree of the Minister of Health of the Republic of Indonesia, 2020).

Figure 2 Types of Business during the Covid-19 Pandemic
Source : Dcode economic & financial consulting (2020)

A recent study of translated economic and financial consulting (Figure 2) in Egypt and the Middle East and Africa shows various trade sectors to prevent a pandemic . Red indicates that the business sector will not survive, while green indicates that the business sector will succeed. The health business sector is green , indicating that the sector will be able to survive the impact of the CVD-19 epidemic, (Dcode economic & financial consulting, 2020)

The survey of 8 (eight) pharmaceutical companies showed that 6 (six) companies experienced an increase in revenue, one company decreased and one company was relatively stable. At the liquid level, there are 3 (three) pharmaceutical companies (Prasetya, 2021). According to Kalbe Pharma's study, Kalbe Pharma's financial performance was better before entering into a joint venture (Kurniawati, 2021).

BPR and BPR research shows that the Islamic BPR and BPR industries are in a healthy condition, maintained and still growing positively (Sofyan, 2021). The impact of Covid-19 on the financial performance of Indonesian financial companies shows that there are differences in the financial performance of financial companies in Indonesia before and after Covid-19 (Esomar, 2021). Studies on Islamic commercial banks show that there is no difference between ROA, ROE and BOPO before and during the Covid-19 epidemic (Bustami et al., 2021).

A study of construction companies in Ghana showed that due to border closures, there has been a decrease in work costs, late payments, and an increase in material costs (Agyekum et al., 2021). Entrepreneurs in Asia saw a 26% decline in business activity during the critical 2-month period, and a 21% sustained loss in activity in May and 10% in June 2020. The industry is a high-risk group for losses (Fairlie, 2020).

There are 2,925 hospitals spread throughout Indonesia. Of these, 187 hospitals are owned by religious organizations. There are 110 hospitals belonging to Islamic organizations, 45 hospitals belonging to Catholic organizations, 29 hospitals belonging to Protestant organizations, and 3 hospitals belonging to Hindu mass organizations. The distribution of hospitals in Indonesia is shown in Figure 3.
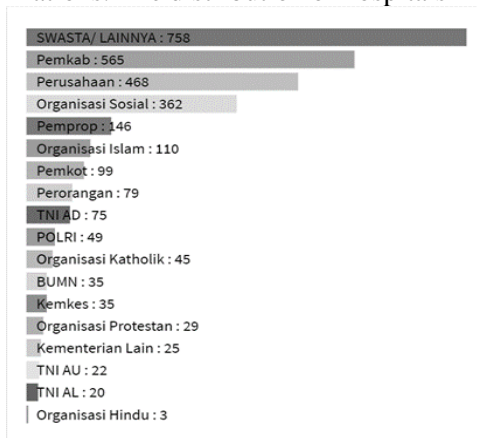

Figure 3 Hospital Data by Ownership
Source : https:// sirs.yankes.kemkes.go.id/

Hospitals run by religious organizations are not only for profit, but are passionate about professional health efforts (Mukisi, 2021). In addition, another goal of establishing a hospital is to develop comprehensive health services that include physical, social, economic and spiritual aspects. Hospital funding comes from the community or its members in the form of donations or donations. In the event of a CVD-19 outbreak .

Financial performance plays an important role in the business world, one of which is evaluating business viability. The financial performance used in this study is the current ratio, profit margin and debt equity ratio. The current ratio provides an overview of the company's ability to pay its debts in one year. According to this ratio, lenders, like lenders, want to ensure that the company is able to repay the loan at the agreed interest rate. Profit Margin provides an overview of how a company creates and uses assets. The Debt to Equity Rate (DER) provides an overview of how the company manages its assets and the company's long-term debt capacity.
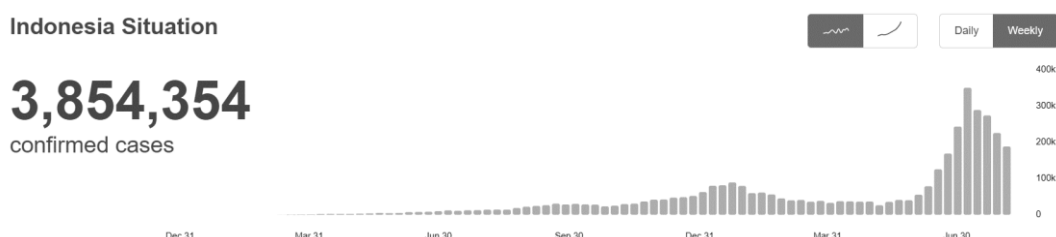

Figure 4 Confirmed cases in Indonesia
Source: World Health Organization (2021)

Figure 4 shows the situation of the number of confirmed cases of Covid-19 from December 2019 to August 9, 2021. This shows that the Covid-19 pandemic is still ongoing and the number of confirmed cases is high. As a reference for the Spanish flu in 1918, it took two years to handle, therefore the Covid-19 pandemic is expected to end in December 2021. Business continuity predictions during and after the pandemic are needed to determine the hospital's business strategy.

This study aims to see: (1) differences in the financial performance of religious organization hospitals before and during the Covid-19 pandemic? and (2) the sustainability of the hospital business in the next 5 years?

During this pandemic, the availability of cash is very much needed to fund the hospital's operational activities. Purchasing medicines from the supplier is only given a payment period of 30 days from the time of purchase. When the hospital has not been able to pay off the bill, the supplier's system will be automatically locked and the hospital cannot order medicines. This will greatly disrupt the continuity of service to patients.

H1. *There is a difference in Current Ratio between before and during the pandemic*

It is not easy for hospitals to make profits during a pandemic, even though hospital organizations are organizations / businesses that are able to survive during a pandemic. For this reason, the profitability ratio is needed as an indicator of the hospital's success in surviving and maintaining business sustainability during and after the pandemic.

H2. *There is a PM difference between before and during the pandemic.*

Hospitals require substantial capital to procure fixed assets, for example medical equipment and buildings with special specifications. Most of these fixed assets were obtained by making long-term loans to the fund providers (creditors). During a pandemic, creditors need to ensure that long-term debts that have been given are paid off. Seeing the global economic conditions that declined sharply, many companies went bankrupt, so the debt management ratio or solvency acts as an indicator of the company's ability to pay off its long-term obligations.

H3. *There is a difference in DER between before and during the pandemic*

Figure 4 shows a framework to prove whether there are differences in financial performance before and during the pandemic.
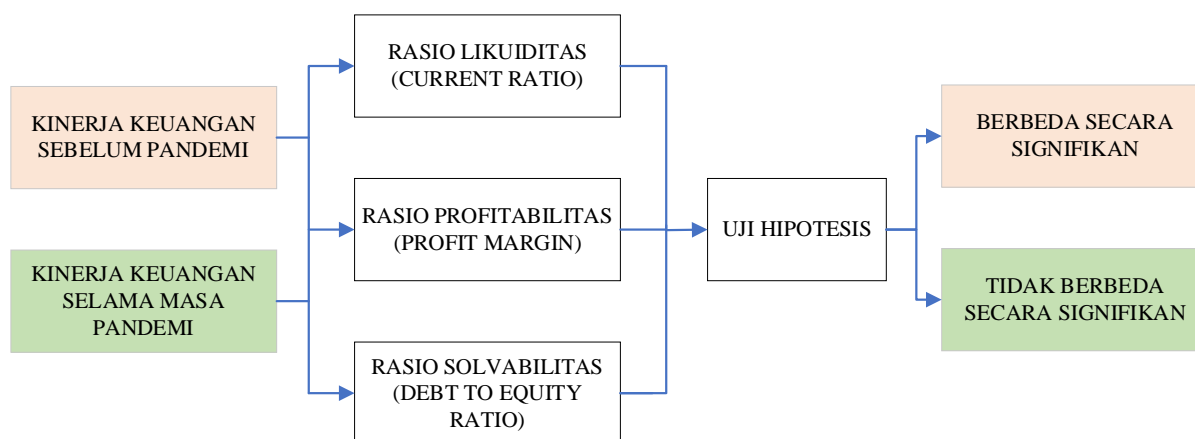
Figure 4 Thinking Framework

This study uses a comparative analysis using the paired sample t-test. Paired sample t-test aims to compare the mean values between two dependent samples, eg differences between samples are related to time (Xu et al., 2017). The results of the comparison are obtained from financial ratios, where the first result is before and the second result is during the pandemic (Daryanto et al., 2021).

RESEARCH METHODS

The study used quantitative data in the form of financial statements and analyzed by quantitative descriptive methods. The sample selection used the *purposive* sampling method at one of the Covid-19 referral hospitals in Southern Sumatra.

Data is collected in monthly and yearly periods for different purposes. Monthly data is used to test the difference between before and during the Covid-19 pandemic, while annual data is used to predict hospital business continuity.

Table 1 Data Collection

Period	Time period
Annual	2015 - 2020
Monthly	January to December 2019 - before Covid-19
	January to December 2020 - during the Covid-19 period

Operational Variables

The practical variables in this study are (1) financial performance before the epidemic, during the 2019 and 2020 epidemics, and (2) 3 (three) analyzes of financial performance: fluidity, profitability and efficiency. Liquid is a proxy for current ratio, profitability is total profit margin (GPM), and solvent is a proxy for debt and equity ratio (DER).

Table 2 Operational Variables

Variable Operation	Proxy	Before the pandemic	During the pandemic
Liquidity	$CR = \dfrac{Aset\ lancar}{Hutang\ lancar}$	2019	2020
Profitability	$GPM = \dfrac{Penjualan - Beban}{Penjualan}$	2019	2020
Solvency	$DER = \dfrac{Total\ Hutang}{Total\ Hutang + Total\ Ekuitas}$	2019	2020

Analysis Method

The data analysis technique uses Paired Sample T-Test, or paired sample test to test the average of two data groups or paired samples. To predict the hospital business, forecasting techniques are *used*. Forecasting techniques or *forecasting* by calculating or predicting future values along a *linear trend* using existing values.

RESULT AND DISCUSSION

During the last 6 years, the hospital business of religious organizations has grown from year to year. The epidemic at the end of 2019 will have an impact on revenue, as shown in Figure 5. However, there will be an increase in 2020. This shows that the hospital business is a viable sector. This Decorative Economics and Finance Advisor supports studies in Egypt, the Middle East and Africa.
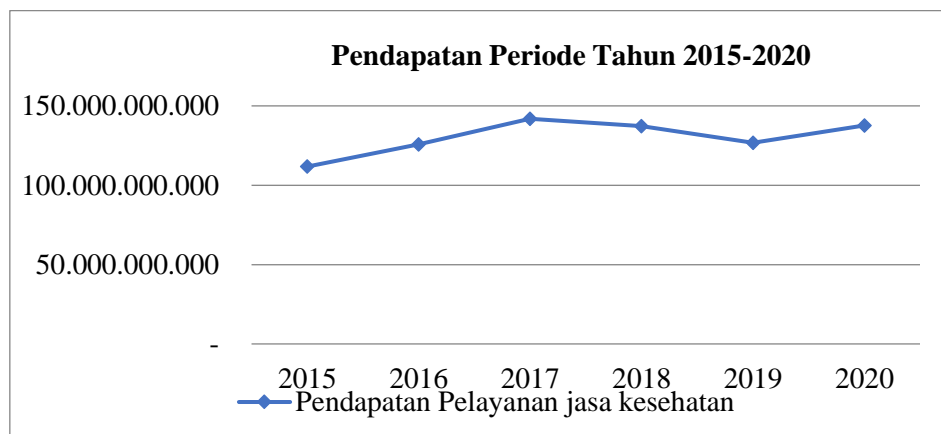

Figure 5 Income for the 2015-2020 period
Source : Ministry of Health (2020)

While hospital revenues recovered in 2020, this was not the case with existing properties. Figure 6 shows the most volatile fluctuations during the 2019 outbreak. Hospitals experienced very low cash and bank deductions, but rising bills. This means that the hospital does not pay for the services provided, because it is related to a third party (Ministry of Health - Ministry of Health and or BPJS Health).

To overcome this, the hospital has provided financial support to support its activities. However, this cannot be done consistently, because there is a tendency for the number of recipients to increase. Therefore, various attempts have been made to borrow loans from state banks. This is in accordance with a study conducted by Kalogiannidis, 2020, one of the strongest economies in the G3 countries (United States, European Union and China). In times of outbreak, small businesses have little money to spend. They have to lower costs, increase debt, or go bankrup.

Table 3 Descriptive Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	$CR0$	3,2533	12	,82147	,23714
	$CR1$	2,5458	12	,53321	,15393
Pair 2	PM0	,0542	12	,06082	,01756
	PM1	,0550	12	,06802	,01964
Pair 3	DER0	,3500	12	,05309	,01532
	DER1	,3117	12	,04783	,01381

Source : SPSS (2022)

The combined test results with the data obtained show a decrease in the volume of the liquid, which is a proxy for the current ratio. The current mean before the epidemic was 3.2533 and 2.5458 during the epidemic. This indicates a decrease in the proxies of profitability but not too significant. The average profit margin before the outbreak was 0.0542 and the GPM during the outbreak was 0.0550. The solution in the DER proxy showed a decrease, but not significant. Average debt before the outbreak was 0.3500 and DER 0.3117 during the outbreak. The results of data processing can be seen in Table 2 below.

Different Test Results
Liquidity

The results from the various experiments included in Table 3 show that the current fluxes did not differ from before and during the epidemic. This shows a value of 0.09 > of 0.05. With this important value, H1 which states that there is a difference between before and during the epidemic, is rejected.

These results support the study of public bodies on the IDX which showed no significant difference between the ratios before and after the epidemic (Devi et al., 2020). However, the results of this study do not support research in the financial sector (Esomar, 2021).

The results of a different test prove that the hospital business is able to maintain the *current ratio* because of the cash inflows supported by government policies (department of health) in payment of claims related to the handling of Covid-19 patients. Hospitals in collaboration with BPJS Kesehatan have utilized the *Supply Chain Financing* (SCF) program in collaboration with banks since 2017. This program can help hospital *cash flow to maintain liquidity,* (Social Security Administering Agency, 2020) .

Given the fact that there is no difference in the *current ratio* before and during the Covid-19, it can be said that the hospital business is very safe in terms of the ability to pay short-term obligations. The average *current ratio* before and during the pandemic was above 200%. This shows that the hospital can guarantee 2 times its short-term obligations.

Although the average *current ratio* decreased by 0.7 or 70% during the pandemic (Table 4), this still shows good conditions. Current debts owned by hospitals are mostly due to the purchase of medicines. Seeing the value of this decline, the hospital should carry out management of the purchase of drug supplies. Purchases of medical supplies that are not carried out carefully will have an impact on (1) stockpiling and inventory turnover, (2) risk of expiration, (3) system locking by suppliers in case of late payment (maximum 30 days).

Table 4 Different Test Results

					Paired Differences				
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	CR0 - CR1	,70750	1,32030	,38114	-,13138	1,54638	1,856	11	,090
Pair 2	PM0 - PM1	-,00083	,07621	,02200	-,04926	,04759	-,038	11	,970
Pair 3	DER0 - DER1	,03833	,08526	,02461	-,01584	,09251	1,557	11	,148

Source : SPSS (2022)

Profitability

Various test scores indicate a maximum value of 0.970 or > 0.05 in the PM proxy profitability ratio. This shows that before the outbreak and there is no difference in PM. Therefore, H2 claims that there is a difference between before the outbreak and between PM.

These results indicate that there is no difference in profitability before and during the Covd-19 epidemic, according to a study of Islamic trading banks listed on the Indonesia Stock Exchange (Bustami et al., 2021). Various results have been found in the financial performance of public bodies listed on the IDX (Devi et al., 2020).

The average *gross profit margin* for hospitals before and during the Covid-19 pandemic was 0.05 or 5%. This figure shows that the hospital is able to generate the difference in sales over the expenses incurred. Considering the hospital is a non-profit oriented entity, the ability to generate a gross profit of 5% is already a good thing.

The decrease in the average *gross profit margin* before and during the pandemic was only -0.00083 or -0.083%. This decrease was not significant due to bed conversion, meaning that the existing beds in hospitals that were previously used for non-COVID-19 services were now shifted to COVID-19. (Ministry of Health, 2021) . In order to maintain *the gross profit margin* so as not to experience significant changes, hospital management needs to adapt services according to changing conditions.
Debt Management Ratio or Solvency

The solvent ratio shows a value of 0.148 where the value is above 0.05. Therefore, there was almost no difference between DER before and during the outbreak in hospitals belonging to religious organizations. The hypothesis that there was a difference between before the outbreak and DER 3 or H3 was rejected. This supports the research of Devi et al (2020). This study shows that there is no significant difference in the level of use of public bodies listed on the IDX .

The average *debt to equity ratio* of hospitals before and during the pandemic was above 30%. This shows that hospital wealth is funded by only 30% of long-term debt. Based on this ratio, the hospital's ability to pay back its long-term debt is unquestionable.

Long-term debts incurred by hospitals are carried out in order to invest or procure fixed assets. Investment or procurement of fixed assets in the form of buildings and equipment, medical equipment and transportation equipment whose value is material. In making the decision to take advantage of long-term debt, hospital management considers the ability to generate profits. This is evident from the absence of a *gross difference profit margin* before and during the pandemic. From the creditor's point of view, the decision to provide long-term credit is based on the hospital's ability to generate profits and guarantees shown in the hospital's equity value .

Even though there is no difference in the *debt to equity ratio* , hospital management in making investment decisions or procuring fixed assets must consider cash flow to arrange installment payments. This is to maintain the credibility of the hospital in the eyes of creditors and the sustainability of cooperation in financing investment or procurement of fixed assets.

Prediction of Financial Performance for the Next 5 Years
Liquidiy

The liquidity of religious organizations is expected to increase as shown in Figure 7. This prediction can be written in the equation:

$$Y = 2.5579 + 0.0725X$$

Positive Coalition Value Indicates that there will be an increase in the liquid ratio represented by the current ratio over the next 5 years. An increase in the current ratio indicates the hospital's ability to meet short-term obligations. This guarantees that the lender will make short-term transactions.
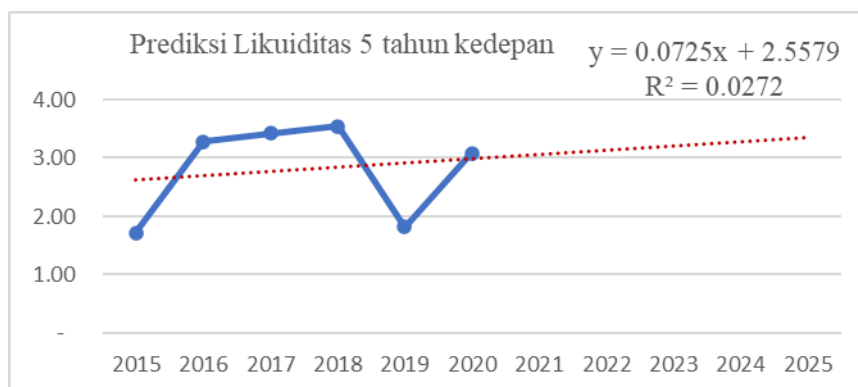

Figure 6 Liquidity Prediction for the Next 5 Years

Profitability

Prediction of the profitability ratio proxied by *gross profit margin,* hospitals belonging to religious organizations tend to experience a decline. The equation formed from the data from 6 years ago is:
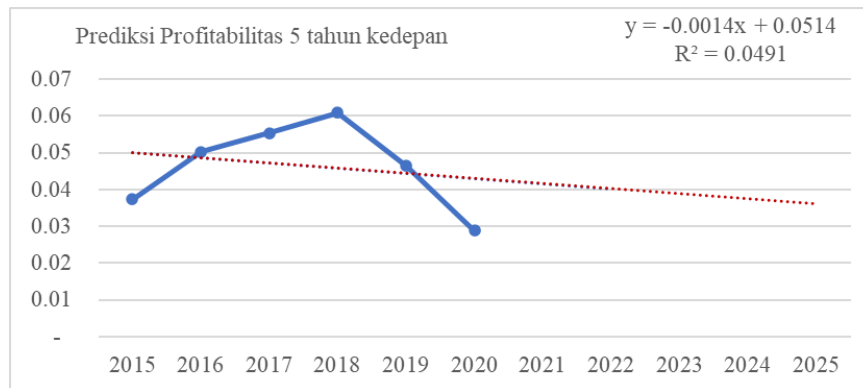
$$Y = 0.0514 - 0.0014X$$

Figure 7 Profitability Prediction for the next 5 years

The negative coordination value is shown in Figure 8, indicating a decrease in the hospital's profit potential in the coming years. Predicting lost profitability, he warned hospitals to do two things: increase revenue and improve cost efficiency. These forecast results support a study of construction companies that suffered financial losses during the epidemic (Daryanto et al., 2021).

Solvancy

The projected debt and equity ratio for the next 5 years shows that the proportion of debt and equity will increase. This shows that hospitals of religious organizations are based on foreign capital (debt to lenders). The results of these estimates can be used for debt-related assessments. Management must be extra careful when deciding on a loan. Because debt makes companies riskier than capital-sponsored ones (Brigham & Houston, 2021).
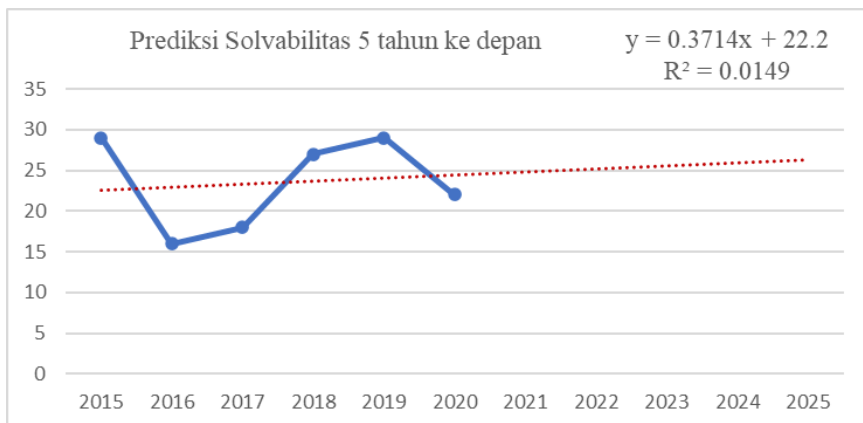

Figure 8 Solvency Prediction for the Next 5 Years

CONCLUSION

Study results may include a summary of: (1) Depending on the results of various tests, there are no significant differences in financial performance before and during the epidemic. (2) Forecasts of fiscal performance will increase over the next 5 years. Estimated profitability will decline over the next 5 years, and efficiency will increase over the next 5 years.

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