



Analysis of Financial Performance Before and During the Covid-19 Pandemic on The Risk of Bankruptcy of LQ45 Companies

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Abstract. Analysis of Financial Performance Before and During the COVID-19 Pandemic Against the Risk of Bankruptcy of LQ45 Companies. The decline in performance every day if it lasts for one year or even more, will make the company bankrupt. To find out whether financial performance before and during the spread of the COVID-19 Pandemic had a positive or negative effect on financial performance, companies listed on the IDX, financial ratio analysis was carried out using the Profitability Ratio, Liquidity Ratio, and Solvency Ratio. To determine the prediction of company bankruptcy, the indicator used is the Altman Z-Score Method because this method is accurate enough to predict company bankruptcy and to determine the company's health condition. [2]. The results showed that Based on the results of SPSS data processing that has been carried out by researchers, the conclusion that the *debt to asset ratio* before (*DARs*) covid-19 has a significant influence on *financial distress*. Meanwhile, the ratio (*ROAs*) and (*CRs*) do not have a significant influence on the company's *financial distress*. In conditions during the pandemic *ratio return on assets (ROAsa)* has a significant effect on financial distress. Meanwhile, the ratios (*CRsa*) and (*DARsa*) during the covid-19 pandemic did not have a significant effect on *financial distress*.

Keywords: Financial performance, Risk, Ratio Analysis, Bankruptcy

1 Introduction

The first case of the spread of the COVID-19 virus into Indonesia occurred in early 2020 around March, right in March the government also determined that the COVID-19 Pandemic became a national scale disaster. [3].

The COVID-19 pandemic is still happening today, causing impacts on various sectors such as the global sector, health, politics, education, culture, tourism and an economic crisis that is getting higher and harder to avoid. This can certainly complicate the flow of state revenues and even companies and business entities in Indonesia. From the results of the report of the *organisation for economic co-operation and development* (OECD) which states that the covid-19 pandemic has an impact on the threat of an economic crisis which in conclusion leads to uncertainty. The impact on the economy cannot be separated from companies that experience a decrease in revenue every day. The decline in revenue can be seen from the company's performance. Which can be analysed through financial performance. Financial performance can be interpreted as a reflection of the company's financial condition, to find out the achievements and shortcomings that affect the financial performance of the company's industry with a certain period, can be done by analysing the financial statements of the company using financial ratios.

The decline in performance every day if it lasts for one year or even more, will make the company bankrupt. Where a bankruptcy can occur if a company cannot pay off the company's debt and the company has difficulty generating profits to pay off its debt so that the company is expected to go bankrupt slowly. To find out whether financial performance before and during the spread of the COVID-19 Pandemic had a positive or negative effect on financial performance, companies listed on the IDX, financial ratio analysis was carried out using the Profitability Ratio, Liquidity Ratio, and Solvency Ratio. [1]. Every company or business run by a company both small and on a large scale will certainly face what is called risk, because of every profit obtained there must also be a risk that the company will receive. To determine the prediction of company bankruptcy, the indicator used is the Altman Z-Score Method because this method is accurate enough to predict company bankruptcy and to determine the company's health condition. [2].

This research focuses on LQ45 companies where these companies are companies that are always evaluated every month and LQ45 companies are the most liquid companies on the IDX for the top 45 companies. so knowing the differences before and after will make investors, entrepreneurs, government, society, and academics know what urgency must be resolved. Therefore, this research is here for the specific purpose of providing information related to companies before and during the pandemic so that stakeholders are able to provide the best solution that refers to this research.

This research is very feasible to do. This is related to the condition of the Indonesian economy, where the price of goods is increasing every day, making it difficult for people, MSME entrepreneurs, to do business and fulfil their daily needs.

2 Literature Review

Financial ratio analysis is an activity to analyse financial statements by comparing one account with another account in the financial statements, the comparison can be between accounts in the financial statements either on the balance sheet or on the profit and loss. [8]. Benefits of Financial Ratio Analysis to Predict Bankruptcy Various studies have been conducted to examine the benefits that can be reaped from financial ratio analysis. Such as Altman (1968), is an early study that examines the use of financial ratio analysis as a tool to predict bankruptcy that occurs in the company.

The profitability ratio is the final result of decisions and policies made by the company, with this ratio it can measure the effectiveness of the company's management in using its assets and capital to generate profits. The liquidity ratios include *Current Ratio* and *Cash Ratio*. This ratio is used to determine the level of the company's ability to pay debts and pay off the company's short-term debt. Solvency Ratio (*Leverage Ratio*) is a ratio used to assess the company's ability to pay all its debts. [9]. what is meant by bankruptcy is an event of failure or inability experienced by the company to fulfil its obligations. obligations to debtors because the company experiences insufficient funds to run its business so that the goal of achieving the expected profit is not fulfilled. that before there is bankruptcy experienced by the company, one of which is a decrease in financial performance. The term bankruptcy can be equated with the term financial distress. Altman Z-score model is one of the bankruptcy performance measurements that is not stagnant but develops over time, along with the conditions in which the method is applied. The Modified Altman Z-score method is the latest method

of the Altman Z-score used to determine the risk of bankruptcy in the company, so this method is more appropriate for calculating the risk of bankruptcy in the company.

Measuring the company's financial performance, an analysis is carried out using financial ratios such as Profitability Ratio, Liquidity Ratio, and Solvency Ratio. The Profitability Ratio is measured using *Return on Asset (ROA)*, this ratio is used to determine the company's ability to generate profits or profits generated by the company, and for the Liquidity Ratio measured using the *Current Ratio*, this ratio is used to determine the company's ability to pay off the company's short-term debt. And the last for the Solvency Ratio is measured using the *Debt to Total Asset Ratio (DAR)* which is this ratio used to determine the company's ability to pay off all company debts both short-term and long-term debt. Meanwhile, to predict the risk of company bankruptcy, it can be measured using the Altman Z-Score method. The Altman Z-Score method is used as an indicator in assessing the level and risk of bankruptcy of a company.

3 Research Methods

This section is completed with a flow chart of the research carried out during the research time. The research chart must be made as a whole with clear stages, including research instruments and data analysis techniques used. All stages to achieve the output along with the targeted achievement indicators must also be made intact. In this section, the tasks must also be explained. This research has the following flow chart:

This research is quantitative research. According to Sugiyono, quantitative research methods are methods based on the philosophy of *positivism*, which are used to examine certain populations or samples, data collection using research instruments, quantitative or statistical data analysis that aims to test previous hypotheses. As for the data used in this study is secondary data. This is intended to make it easier for researchers to access data in the form of numbers contained in the financial statements of companies that have gone public on the Indonesia Stock Exchange.

This study measures the risk of corporate bankruptcy using the Altman Z-Score method. He stated that the *financial distress* analysis that is often used in a study is the Altman model Z-Score analysis. Springate model, and Zmijewski model. Why this analysis is often used is because this analysis is known for its easy procedure and its accuracy in predicting the level of risk of corporate bankruptcy. In this study, the profitability ratio is calculated using the formula $ROA = \text{Net Income} / \text{Total Assets}$. The liquidity ratio uses $\text{Current Ratio} = \text{Current Assets} / \text{Current Debt}$. While the *Debt to Asset Ratio* uses $\text{Total Debt} / \text{Total Assets}$.

The population in this company is LQ45 companies listed on the Indonesia Stock Exchange. The sample is part of a population that will be studied later. According to Widiyanto (2013) The sample is part of the entire population selected as the source of research data. The data that will be used as a sample in this study is from the population of all LQ45 companies which will be eliminated in accordance with the provisions of *purposive sampling*. *Purposive sampling* is a sampling method guided by certain provisions. The following are the criteria for selecting from the sample:

1. LQ45 companies that have been listed on the Indonesia Stock Exchange
 2. LQ45 companies that publish annual financial reports in the 2018-2021 period
- LQ45 companies listed on the IDX that do not report financial statements for the 2018-2021 period

3. LQ45 companies listed on the IDX which in the presentation of financial statements do not support the period 2018-2021

4 Data Quality Test

Descriptive statistics are statistics that provide an overview or explanation of the data in the form of average values, standard deviation, maximum, minimum, sum, range, kurtosis and skewness (skewness of distribution). Descriptive statistics are used to describe data seen from the average (mean), standard deviation, and maximum-minimum.

The purpose of the normality test is to test whether the disturbance or residual variables in the regression model are normally distributed. Normality checking uses the Kolmogorov-Smirnov test method in the SPSS programme. Based on taking independent variables, Kolmogorov-Smirnov was used to test the normality of the data in this study. In other words, if the independent variable $\geq$ the specified alpha value of 5% (0.05) then the data is normally distributed, and vice versa if the independent variable $<$ than 5% (0.05) then the data is not normally distributed.

Multicollinearity test, used to test whether there is a correlation between the independent variables of the regression model. Multicollinearity aims to determine whether the regression model has detected a correlation between the independent variables. A good regression model should not have a strong enough correlation between the independent variables. Statistical identification of the presence or absence of multicollinearity is done by checking the Variance Inflation Factor (VIF) value. The presence of multicollinearity is indicated when the VIF value ≥ 10 or the tolerance value ≤ 0.1 . Conversely, if the VIF value ≤ 10 or the tolerance value ≥ 0.1 , there is no multicollinearity.

This test aims to determine whether a regression model has an unpleasant deviation from the residuals of one observation to another. [13]. If in the test there are different variants, it is called heteroscedasticity. To find out whether there are signs of non-uniform variance in multiple linear regression models, namely by paying attention to the scatter plot graph or the Glejser test. Researchers use the Glejser test to test for heteroscedasticity, this is done by regressing the residuals using the independent variable. The results are said to be significant if they are above the 0.005 or 5% confidence level. A good research model is one that does not occur heteroscedasticity.

The autocorrelation test aims to check whether there is a correlation between the model t usage error and the previous usage error in the linear regression model. [13]. Autocorrelation test is a method of testing the correlation between members of a set of observations in time series or cross-sectional data. Autocorrelation can be positive or negative. Statistical identification to show the presence or absence of autocorrelation is done by looking at the prob-chi2 value. If the prob-chi2 value is significant (less than 5%) then there is autocorrelation but if the prob-chi2 value is not significant (more than 5%) then there is no autocorrelation.

5 Research Results and Discussion

5.1 Overview of Research Objects

This study uses LQ45 companies that have been evaluated by the Indonesia Stock Exchange. From the existing data, a sample is then sought based on the population that has been determined. So, the sample after being carried out or sorted according to the criteria in this study was 24 companies. The information is presented comprehensively in the Table 1.

Table 1. Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ROAs	.169	48	.002	.829	48	.000
ROAsa	.188	48	.000	.832	48	.000
CRs	.140	48	.020	.937	48	.012
CRsa	.120	48	.080	.931	48	.007
DARs	.063	48	.200*	.975	48	.396
DARsa	.086	48	.200*	.958	48	.083
FDs	.197	48	.000	.787	48	.000
FDsa	.138	48	.023	.918	48	.002

Source: output SPSS processed by researchers, 2022

Based on the results of the *Kolmogorov-Smirnov* normality test shows that of the eight variables there are CRsa variables that have normal data distribution and DERs and DERsa variables which are also normally distributed, while for the variables ROAs, ROAsa, CRs, FDs, and FDsa do not have normally distributed data marked by the acquisition of *Asymp. Sign 2 Tailed* ROAs of $0.002 < 0.05$, ROAsa $0.000 < 0.05$, CRs $0.020 < 0.05$, FDs $0.000 < 0.05$ and FDsa $0.023 < 0.05$, so it can be concluded that the data distribution in these sample groups is not normally distributed. Meanwhile, for variables that get a value *asymp. Sign 2 tailed* greater than 0.05%, it is said that the data is normally distributed, where in the results of this normality test the normally distributed variables are CRsa, DARs and DARsa variables which have a *sig* value greater than 0.05%. from the results of the normality test above, a rare different test can be taken using the *Wilcoxon* test for data that is not normally distributed and the *paired samples T-test* test for data with normal distribution.

Based on the results of the *Paired samples T-Test* test in the table above shows the test results of the *t* table value with a real level (α) 0.05 (df) = $N-1$ ($48-1$) = 47 of 1.67722 Judging from t_{count} value of *Debt to Asset Ratio (DAR)* before and during the covid-19 pandemic is -0.228, then $t_{count} < t_{table}$ or the value of *Sig. (2-Tailed)* which is $0.821 > 0.05$, then the decision obtained is H_0 is accepted and H_a is rejected so that it can be It is concluded that there is no difference in the *Debt to Asset Ratio (DAR)* both before and during the *covid-19 pandemic* in LQ45 companies. The information is presented comprehensively in the Table 2.

Table 2. T-test (*Wilcoxon Signed Rank Test*) Test Statistics

	ROAsa - ROAs	CRsa - CRs
Z	-1.944 ^b	-.256 ^b

Asymp. Sig. (2-tailed)	.052	.798
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Source: SPSS output processed by researchers, 2022

Based on the results of the *wilcoxon signed rank test* in the table above, the results show that there is no difference before or during the covid-19 pandemic in the *ROA* ratio and in the *CR* ratio, so that hypothesis 1,2 is rejected because the value of the sig value > 0.05%. which means that there is no difference before or during the covid-19 pandemic in the *return on asset (ROA)* and *current ratio (CR)* ratios. The information is presented comprehensively in the Table 3.

5.3 Financial Distress Test Before

Table 3. Case Processing Summary

		N	Marginal Percentage
FDs	Sehat	45	93.8%
	Gray Area	1	2.1%
	Distress	2	4.2%
Valid		48	100.0%
Missing		0	
Total		48	
Subpopulation		48 ^a	

a. The dependent variable has only one value observed in 48 (100,0%) subpopulations.

Based on the test results in the Case Processing Summary table above, it can be seen that there is no missing data (Missing = 0) with a total data of 48. Based on these results, there are 45 companies that fall into the category of healthy companies, 1 company that is in the Gray Area and 2 companies that are in the category of *distress* conditions .

The test in the table above shows whether by entering the independent variable into the model the results will be better than the model that only includes the intercept. The table above shows that the -2 log *likelihood* number at the intercept alone is 26.263, while when entering the independent variable, the -2 log *likelihood* value drops to 0.000 or it can be said that there is a decrease in *Chi - Square* by 26.263 and with a significant value at α of 0.000. so it can be concluded that the model with independent variables provides better accuracy in predicting. The information is presented comprehensively in the Table 4.

Table 4. Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	.000	88	1.000
Deviance	.000	88	1.000

Based on the *goodness of fit* test in the table above, it explains that the *Chi-Square* is 0.000 for the *Pearson Coefficient* with a significant value of 1.000 and a chi-square of 0.000 for the *Deviance Coefficient*. So that the significance value of *Pearson* is

smaller than the value of α (0.05), it can be concluded that the multinomial logit regression model does not fit the data.

Based on the test, it can be explained that the value of the *Cox and Snell Coefficient* is 0.421. While the *Nagelkerke* value is 1,000 which means that the dependent variables (Financial Distress) can be explained by all independent variables (*ROA*, *CR*, *DAR*) with a value level of 100%.

Based on the *Likelihood Ratio Test* table, it shows the contribution of each independent variable to the model. In the Sig. column, it can be seen that for variables X1(*ROAs*), X2(*CRs*) has a significant value greater than the Significant value of 0.05, meaning that the two independent variables above have no effect on the company's *financial distress* and vice versa variable X3(*DARs* before) has a significant effect with a value of $0.020 < 0.05$ on *financial distress* before the covid-19 pandemic so it can be decided that the variable *debt to asset ratio (DARs)* before the covid-19 pandemic has an effect on the *financial distress of LQ45 companies*. The information is presented comprehensively in the Table 5.

Table 5. Likelihood Ratio Tests

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	.000 ^a	.000	2	1.000
ROAs	4.919	4.919	2	.085
CRs	3.884	3.884	2	.143
DARs	7.836	7.836	2	.020

The test results through multinomial logit regression analysis in the parameter estimates table, show that:

- In the "healthy" category, none of the independent variables (X1, X2 and X4) have an effect on bankruptcy risk. This is because the Sig. value of variable X1 (*CRs*) is $0.998 > 0.05$ and variable X2(*CRs*) is $0.995 > 0.05$, sedangkan untuk variabel X3(*DARs*) sebesar $0.984 > 0.05$, artinya tidak ada satupun variabel yang dapat membedakan kondisi sehat dengan kondisi *financial distress*.
- In the "Gray Area" category, none of the independent variables X1, X2, X3 have an effect on *financial distress*. This is because the Sig. X1 is 0.997, Sig value. X2 is 0.999, Sig value. X3 is 0.997. in this case it means that variables X1 to X3 cannot distinguish between "Gray Area conditions" and "*financial ditress*". The information is presented comprehensively in the Table 6.

Table 6. Classification

Observed	Predicted			Percent Correct
	Sehat	Gray Area	Distress	
Sehat	45	0	0	100.0%
Gray Area	0	1	0	100.0%
Distress	0	0	2	100.0%
Overall Percentage	93.8%	2.1%	4.2%	100.0%

Based on the results of the *classification* table, the *multinomial logit regression* model has the ability to predict from the original data by 100.0% correctly. The ability to correctly predict the "Healthy" category by 100.0%, in the "Gray Area" category by 100.0%, and in the "Poor condition" category by 100.0%.

5.4 Financial Distress Test when Pandemic

Based on the test results in the Case Processing Summary table above, it can be seen that there is no missing data (Missing = 0) with a total data of 48. Based on these results, there are 41 companies that are categorised as healthy companies, 3 companies that are in the Gray Area and 4 companies that are in the *distress* condition category.

The test in the table above shows whether by including independent variables in the model the results will be better than the model that only includes intercepts. The table above shows that the -2 log *likelihood* number at the intercept alone is 49,440, while when entering the independent variable, the -2 log *likelihood* value drops to 17,582 or it can be said that there is a decrease in *Chi - Square* by 31,858 and with a significant value at α of 0.000. so it can be concluded that the model with independent variables provides better accuracy in predicting *financial distress*. The information is presented comprehensively in the Table 7.

Table 7. Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	21.924	88	1.000
Deviance	17.582	88	1.000

Berdasarkan uji *goodness of fit* pada tabel The above explains that the *Chi-Square* is 21.924 for the *Pearson Coefficient* with a significant value of 1.000 and a chi-square of 17.582 for the *Deviance Coefficient*. So that the *Pearson* significance value is greater than the value of α (0.05), it can be concluded that the multinomial logit regression model fits the data. The information is presented comprehensively in the Table 8.

Table 8. Pseudo R-Square

Cox and Snell	.485
Nagelkerke	.754
McFadden	.644

Based on the table above, it can be explained that the value of the *Cox and Snell Coefficient* is 0.485. While the *Nagelkerke* value is 0.754 which means that the dependent variables (*Financial Distress*) can be explained by all independent variables (*ROA*, *CR*, *DAR*) with a value level of 75.4%. the remaining 24.6% is explained by variables outside the model. The information is presented comprehensively in the Table 9.

Table 9. Likelihood Ratio Tests

Effect	Model Fitting Criteria	Likelihood Ratio Tests
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	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	17.597	.015	2	.993
ROAsa	29.425	11.843	2	.003
CRsa	19.390	1.808	2	.405
DARsa	17.647	.066	2	.968

Based on the *Likelihood Ratio Test* table, it shows the contribution of each independent variable to the model. In the Sig. column it can be seen that for variables X2(CRsa), X3(DARsa) has a significant value > 0.05 , meaning that the two independent variables above have no effect on the company's *financial distress* and on the other hand variable X1(ROAsa) has a significant effect of $0.003 < 0.05$ on *financial distress* during the covid-19 pandemic so it can be decided that the variable *return on assets (ROAsa)* during the covid-19 pandemic has an effect on the *financial distress* of LQ45 companies.

The test results through multinomial logit regression analysis in the parameter estimates table, show that:

- In the "healthy" category, there is only one variable, namely variable X3 (DARsa) which affects the financial distress of LQ45 companies, because it has a sig value $< 0.05\%$. While the variables X1 and X2 have no effect on financial distress. This is because the Sig. value of the X1 variable (ROAsa) is $0.969 > 0.05$ and the X2 variable(CRsa) is $0.979 > 0.05$.
- In the "Gray Area" category, only one variable, namely variable X3 (DARsa) has an effect on financial distress with a sig. value of $0.0 < 0.05$. On the other hand, the variables X1 and X2 have no effect on *financial distress*. This is because the Sig. X1 is 0.973, Sig value. X2 is 0.981. so the variables X1 to X2 cannot distinguish between "Gray Area conditions" and "*financial ditress*".

Based on the results of the *classification* table, the *multinomial logit regression* model has the ability to predict from the original data by 93.8% correctly. The ability to correctly predict the "Healthy" category by 100.0%, in the "Gray Area" category by 0.0%, and in the "Distress" category by 100.0%.

6 Discussion

6.1 The difference in ROA ratio before and during the covid-19 pandemic

This hypothesis testing was carried out in order to prove the difference in *Return on Asset (ROAs-ROAsa)* by comparing the conditions before and during the covid-19 pandemic which was carried out with a different test (*Wilcoxon signed rank t-test*). The test results show that the *return on Asset (ROAs-ROAsa)* variable does not have a significant difference both in the conditions before and during the covid-19 pandemic. This can be seen in the value *asympt. Sig. (2-tailed) Return on Asset (ROA)* before and during the covid-19 pandemic is equal to $0.052 > 0.05$ so that the decision obtained is H_0 accepted and H_a rejected, which means that there is no difference between ROA ratios before and during the *co-19 pandemic* in BUMN companies. So that the first hypothesis in this study which states that there is a difference in the *Return on Asset (ROA)* ratio before and during the *co-19 pandemic* is not supported.

The higher the company's ROA level means that the company will be able to avoid the potential risk of bankruptcy because with high profits, the company's obligations

will be fulfilled more quickly so that it will not result in a large level of liability and obligations will be paid off more quickly.

6.2 Differences in CR ratios before and during the covid-19 pandemic

This hypothesis testing was carried out in order to prove the difference in *Current Ratio* ($CRs-CRsa$) before and during the covid-19 pandemic which was carried out with a different test (*Wilcoxon Signed Rank Test*). The test results show that the *Current Ratio* (CR) variable does not have a significant difference both before and during the covid-19 pandemic. This can be seen in the value *Asymp. Sig. (2-tailed) Current Ratio* ($CRs-CRsa$) before and during the covid-19 pandemic is $0.798 > 0.05$, then the decision obtained H_0 is accepted and H_a is rejected so it can be concluded that there is no difference in *Current Ratio* (CR) both before and during the covid-19 pandemic in LQ45 companies. When the calculation results show no difference, this indicates that the company can still survive in the conditions of the co-19 pandemic, the company is still able to pay off the company's obligations within the agreed time frame, this is what causes LQ45 companies to be measured using the *Current* ratio to determine the company's ability to pay off the company's obligations. In this case the company managed to survive and was not affected so that it did not show differences in the aspect of corporate obligations. So that the second hypothesis in this study which states that there are differences in the *Current Ratio* (CR) ratio before and during the covid-19 pandemic is not supported.

6.3 Difference in DAR ratio before and during the pandemic covid-19

This hypothesis testing was carried out in order to prove the difference in *Debt to Asset Ratio* ($DARs-DARsa$) before and during the covid-19 pandemic which was carried out with a *Paired sample T-Test*. The test results show that the *Debt to Asset Ratio* (DAR) variable does not have a significant difference both before and during the covid-19 pandemic. This can be seen in the t_{count} value of *Debt to Asset Ratio* (DAR) before and during the covid-19 pandemic is -0.228 with a t_{table} value of 1.67722 , then the decision obtained H_0 is accepted and H_a is rejected so it can be concluded that there is no difference in the *Debt to Asset Ratio* ($DARs-DARsa$) either before or during the covid-19 pandemic in LQ45 companies.

The *Debt to Asset Ratio* (DAR) ratio before and during the covid-19 pandemic has no difference, this means that the company in terms of paying off the company's short-term obligations is not affected even in the covid-19 pandemic. Both in the year before the pandemic the DAR ratio continue to pay off and during the pandemic the LQ45 companies remained consistent in paying off the company's obligations. So that the third hypothesis in this study which states that there are differences in the Solvency ratio proxied by the *Debt to Asset Ratio* ($DARs-DARsa$) before and during the covid-19 pandemic is not supported.

6.4 The effect of ROA before and during the covid-19 pandemic on financial distress

In this study, *Return on Assets (ROAs)* does not have a significant effect on *financial distress* of LQ45 companies, but *Return on Assets (ROAs)* during the covid-19 pandemic has a significant effect on *financial distress*, which means that the company's *Return on Assets (ROAs)* in the conditions before the pandemic was not affected, therefore the LQ45 companies are still able to manage the company's assets and profits well, this can prevent the company from *financial distress* during the economic crisis that hit the world.

However, during the covid-19 pandemic, *return on assets (ROAs)* was also affected by the economic crisis that hit, as a result the profit generated by the company was not optimal and the company's assets experienced constraints and the company's ability to generate profits was not as optimal as the conditions before the covid-19 pandemic. When the company is able to generate large profits in the company, the level of bankruptcy and financial difficulties faced by the company will be smaller and reduce the potential financial distress that the company will experience.

6.5 The effect of CR before and during the covid-19 pandemic on financial distress

This hypothesis testing was carried out with the aim of proving the effect of *Current Ratio (CRs-CRs)* Before and during the covid-19 pandemic which has a sig. value greater than 0.05, meaning that the *current ratio* has no significant effect on *financial distress*. This indicates that the *Current Ratio (CR)* before and during the pandemic can still survive in the conditions of this economic crisis, this is because if the year before the *covid-19 pandemic* the company's liabilities must be paid off before the due date, and there are no problems in paying off the company's obligations, the company's financial distress level is not problematic, Likewise, with the conditions during the Covid-19 pandemic, the government provided policies to banks in Indonesia by providing relief for the repayment of obligations due to the unstable state of the world economy, the government also provided policies for companies that were affected. This is what causes the *Current ratio (CRs-CRs)* of LQ45 companies to have no significant effect on *Financial distress* because companies can still work stably in this economic crisis.

6.6 The effect of DAR before and during the covid-19 pandemic on financial distress

This hypothesis testing was carried out to prove the effect of *Debt to Asset Ratio (DARs-DARs)* before and during the covid-19 pandemic which was carried out by *multinomial logistic regression* test. The test results show that the *Debt to Asset Ratio (DARs)* ratio before the pandemic has a significant effect on *financial distress*. The solvency ratio is a ratio used to determine how much the company's assets are assisted by debt.

Financial distress occurs if the company has difficulty in generating profits and difficulty in paying off the company's overdue obligations. In this case, LQ45 companies before having a significant effect on financial distress means that LQ45 companies in the pre-pandemic condition experienced obstacles in paying off their obligations, so that the company's debt became even greater and experienced financial difficulties. company. Meanwhile, *Debt to Asset Ratio (DARs)* during a pandemic does not have a significant effect on financial distress because there are several policies

that provide leeway to companies in paying off corporate debt. Although in reality, with a pandemic, there must be many companies that feel the impact. However, LQ45 companies during the pandemic can still run stably and are not affected by financial distress.

7 Conclusions and Suggestions

Based on the results of SPSS data processing that has been carried out by researchers, the conclusion that can be drawn is from the results of the *normality* test as a condition of the T-Test using the *paired samples T-Test* test, Normally distributed data is the liquidity variable proxied by the *debt to asset ratio (DAR)*, while the *return on assets (ROA)* and *current ratio (CR)* ratios are not normally distributed, so that based on the *paired samples t-test* it can be concluded that the ratio (*DARs & DARsa*) before and during the pandemic. *DARsa*) before and during the Covid-19 pandemic there was no significant difference in financial distress, as well as when the *Wilcoxon signed ranks test* was carried out the *ratio of return on assets (ROA)* and *current ratio (CR)* before and during the Covid-19 pandemic there was no significant difference in the financial distress of LQ45 companies.

Based on the effect test using the multinomial *logistic regression* test on the *debt to asset ratio ratio* before (*DARs*) covid-19 has a significant effect on *financial distress*. Meanwhile, the ratio (*ROAs*) and (*CRs*) does not have a significant effect on the company's *financial distress*. In conditions during the pandemic, the *return on asset ratio (ROAsa)* has a significant effect on financial distress. Meanwhile, the ratios (*CRsa*) and (*DARsa*) during the covid-19 pandemic did not have a significant effect on *financial distress*.

Researchers suggest for future researchers, to increase the research period to be longer, such as the period before, during and after the co-19 pandemic, so that the differences studied will be more visible, and change the object of research to a case study that is more detailed than previous research and add more research variables.

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