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THE INFLUENCE OF LIQUIDITY RATIOS AND SOLVENCY RATIOS ON FINANCIAL PERFORMANCE IN MANUFACTURING COMPANIES LISTED ONTHE INDONESIAN STOCK EXCHANGE (PERIOD 2020-2022)

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ABSTRACT

This study aims to determine the effect of liquidity ratios and solvency ratios on financial performance in manufacturing companies listed on the Indonesia Stock Exchange (2020- 2022 Period). The data in this study were obtained from financial reports that have been published by the company and obtained from the Indonesia Stock Exchange with the time period 2020-2022. The population in this study were industrial sub-sector companies listedon the IDX and the sample in this study used a saturated sample of 30 companies. The analysis method used in this research is multiple linear regression, t test and f test to obtain results regarding the effect of the independent variable on the dependent variable. The results showed that the Liquidity Ratio as measured using the Current Ratio has a positive effect on Financial Performance as measured using Return On Asset. The Solvency Ratio as measured using Debt to Equity has a positive effect on Financial Performance as measured using Return On Asset. Liquidity Ratio and Solvency Ratio simultaneously affect Financial Performance. The coefficient of determination (R^2) shows that the Liquidity Ratio and Solvency Ratio variables have an influence of 21.50% on Financial Performance. While the remaining 78.50% is influenced by other factors not discussed in this study.

Keywords: Liquidity Ratio, Solvency Ratio, and Financial Performance

1. INTRODUCTION

Financial performance is an analysis conducted to see the extent to which a company has implemented using the rules of financial implementation properly and correctly. Good company financial performance is the implementation of applicable rules that have been carried out properly and correctly (Fahmi, 2018). Financial performance can be shown through financial statements. The information disclosed by the company in the financial statements is a manifestation of management's responsibility to the owners of the company and as an indicator of the company's success in achieving its goals, as well as material in consideration of decision making for stakeholders (Wijaya, 2017). Statement of Financial Accounting Standards (PSAK) No. 1 of 2022 describes the definition of financial statements, which is a structured presentation of the financial position and financial performance of an entity.

Performance measurement can be done by analyzing financial statements using analytical tools in the form of financial ratios. That to measure the company's financial performance using financial ratios can be done with several financial ratios (Hafsah, 2017). Financial ratios show the company's ability to earn profits or a measure of the effectiveness of the company's management (Barus, 2017). In general, financial ratios that are often used to assess the company's financial performance are liquidity ratios, profitability ratios, activity ratios, and solvency ratios. However, in this study, the analysis of financial statementsthrough the use of liquidity ratios and solvency ratios. The liquidity ratio reflects the

company's ability to pay off its short-term obligations (Sukamulja, 2019). Liquidity is not only concerned with the overall financial condition of the company, but also with its ability to convert current assets into cash (Syamsuddin, 2011). In addition, financial statement analysis can also use solvency ratios. The solvency ratio/leverage ratio is a ratio used to measure how much debt burden the company must bear in order to fulfill its assets.

The manufacturing sector made the largest contribution to the national Gross Domestic Product (GDP) in the second quarter of 2021, namely 17.34%. The top five contributors to GDP in this period are the food and beverage industry at 6.66%, the chemical, pharmaceutical and traditional medicine industries at 1.96%, the metal goods industry,computers, electronic goods, optics and electrical equipment at 1.57%, the transportation equipment industry 1.46. Throughout 2021, investment in the manufacturing sector reached IDR 325.4 trillion. This figure exceeds the manufacturing investment achievement target projected by the Ministry of Industry (Kemenperin) of IDR 280 trillion to IDR 290 trillion, and an increase of 19% from 2020 (IDR 272.9 trillion). As a comparison, in 2019, investmentrealization in this sector was IDR215.9 trillion (Arif, 2022).

This indicates an expansion in Indonesia's manufacturing sector, which continues into 2022. According to IHS Markit, demand conditions have generally strengthened, driving up purchasing activity and employment aspects. During the pandemic, the industrial sector is still operating despite a decline in utilization. In December 2021, the average utilization of the industrial sector had reached 66.7%, an increase from the condition at the beginning of the year which was 60.30% (Kartasasmita, 2021).

Based on the above phenomenon, the authors are interested in conducting research on manufacturing industry companies in Indonesia with the title "The Effect of Liquidity Ratios and Solvency Ratios on Financial Performance in Manufacturing Companies Listed on the IDX (2020-2022 Period)".

2. THEORETICAL REVIEW

2.1 Financial Report

Statement of Financial Accounting Standards (PSAK) No. 1 of 2022 defines financial statements as a structured presentation of the financial position and financial performance ofan entity. In general, financial statements consist of a statement of financial position, income statement, statement of changes in equity, cash flow statement and notes to financial statements. The financial statements are the final result of the company's activities that describe the performance or financial performance of the company concerned. Financial reports are the result of an accounting process that can be used as a tool to communicate financial data or company activities to interested parties (Hery, 2017: 3).

2.2 Financial Statement Analysis

Financial statement analysis is an attempt to analyze the entity's financial condition, the entity's past work results & future estimates to determine the entity's performance to date andestimate it in the future (Sujarweni, 2019). Meanwhile, according to Subramanyam (2019) financial statement analysis is the application of tools and techniques to analyze financial statements with relevant data that has a general purpose that is useful for producing estimates and conclusions that can be used in business analysis.

2.3 Financial Ratios

Financial Ratio is a comparison of two numbers or amounts, where the comparison can be expressed in various ways. Financial ratio analysis is a way to analyze the relationship of various series of financial statements (Hayat, 2021).

2.4 Liquidity Ratio

Liquidity ratio is a ratio that describes the company's ability to meet short-term obligations or debts. So it can be interpreted that the company will be able to pay debts or obligations, especially debts and obligations that are due (Weston, 2019: 129).

Liquidity Ratio Measurement

The current ratio illustrates how much the availability of current assets the company has compared to current liabilities. The higher this ratio number, the more liquid the company. Conversely, the lower this ratio number, the more illiquid the company (Anwar, 2019: 172).

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$$

2.5 Solvency Ratio

The solvency ratio is used to measure the company's ability to meet all its obligations, both short and long term. How effectively the company uses its resources, resources such as receivables and capital and assets (Sujarweni, 2019).

Solvency Ratio Measurement

Debt to Equity Ratio is a ratio used to assess debt with equity. This ratio is sought by comparing all debt to all equity. This ratio is useful for knowing the amount of funds provided by borrowers (creditors) with company owners. In other words, this ratio serves to find out every rupiah of own capital used as debt collateral (Kasmir, 2016: 155).

$$Debt\ to\ Equity\ ratio = \frac{Total\ Debt}{Total\ Assets}$$

2.6 Financial Performance

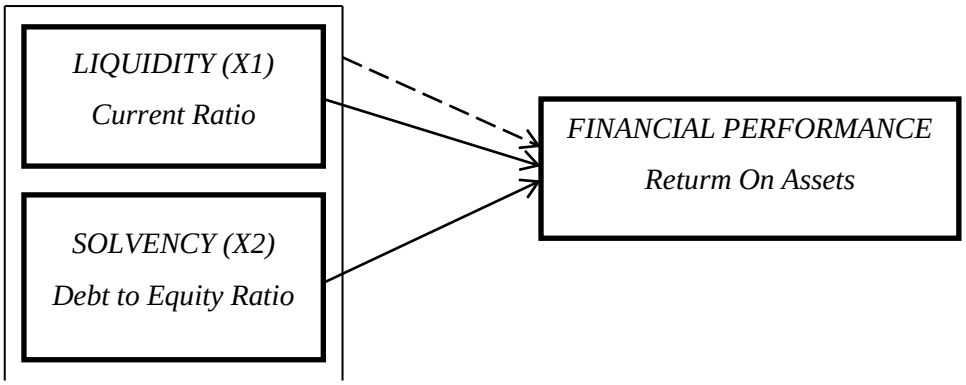
Financial performance is an analysis conducted to see the extent to which a company has carried out using the rules of financial implementation properly and correctly (Fahmi, 2020: 271).

Financial Performance Measurement

According to Sjahrial (2017: 215), that the measuring tool that can be used as an alternative in calculating Asset is Return On Asset (ROA) because this ratio is often used as a benchmark for assessing overall management performance so that with this the company can compare the financial performance of a period with other periods**.**

$$Return\ On\ Asset = \frac{Net\ Income}{Total\ Assets}\ \text{X } 100\%$$

2.7 Frame of Thinking


LIQUIDITY (X1)
Current Ratio
SOLVENCY (X2)
Debt to Equity Ratio
FINANCIAL PERFORMANCE
Return On Assets

2.8 Research Hypothesis

H1 : The effect of Current Ratio (X1) partially on Return On Asset (Y).
H2 : The effect of Debt to Equity Ratio (X2) partially on Return On Asset (Y).
H3 : The Effect of Current Ratio (X1) and Debt To Equity Ratio (X2) Simultaneously on Return On Asset (Y).

3. Research Methods

3.1 Data Type

This study uses a quantitative research approach. According to Sugiyono (2019: 17) quantitative research is defined as a research method based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, data analysis is quantitative / statistical, with the aim of testing predetermined hypotheses.

3.2 Population and Sample

The population in this study are manufacturing companies listed on the Indonesia Stock Exchange which include annual financial reports for the 2020-2022 period. In conducting this research, the authors used a saturated sample where the entire population was sampled. According to Sugiyono (2019) Saturated Sampling is a sample selection technique if all members of the population are sampled.

3.3 Data and Data Sources

In this study, the data sources used are secondary data in the form of annual financial reports of manufacturing companies obtained from the Indonesia Stock Exchange for the 2020-2022 period. According to Sugiyono (2019) secondary data is a source that does not directly provide data to data collectors, for example through other people or through documents.

4. Results and Discussion

4.1 Multicollinearity Test

Multicollinearity test is used to determine whether there is a correlation between independent variables in the regression model. To detect whether multicollinearity occurs, it can be seen from the Tolerance and VIF (Variance Inflation Factor) values.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.388258	1.918202	-2.287693	0.0246
X1	2.555420	0.847367	3.015719	0.0034
X2	1.998467	0.476977	4.189864	0.0001

Based on the results of multicollinearity testing, it is known that the coefficient value between variables is smaller than 10.00. This is in accordance with the test criteria that the results of the multicollinearity test have no correlation coefficient value between variables that is more than 10.00, so it can be concluded that the data does not have multicollinearity problems.

4.2 Heteroscedasticity test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. If the variance is fixed, it is called homoscedasticity and if it is different, it is called heteroscedasticity.

Heteroskedasticity Test: White
Null hypothesis: Homoskedasticity

F-statistic	3.476187	Prob. F(5,84)	0.0066
Obs*R-squared	15.42977	Prob. Chi-Square(5)	0.0087
Scaled explained SS	34.21906	Prob. Chi-Square(5)	0.0000

Based on the results of heteroscedasticity testing, it is known that the probability value of Obs * R- square is 0.0087. This is in accordance with the white test test criteria that the results of the white test have an Obs*R-square probability value greater than the significance (0.0087>0.05). So it can be concluded that the data has a heteroscedacity problem.

4.3 Autocorrelation Test

The Autocorrelation test aims to test whether in a multiple linear regression model there is a correlation between confounding errors in period t and confounding errors in period t-1 (previous).

Durbin-Watson stat	1.251677

Based on the test results, it can be seen that there is no autocorrelation because the results of the Durbin Watson test are below 4.00 because the results of this test are 1.251677 < 4.

4.4 Multiple linear regression analysis

Multiple linear regression is used to model the relationship between the dependent variable and the independent variable, with more than one independent variable (Yamin, 2011: 29).

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.388258	1.918202	-2.287693	0.0246
X1	2.555420	0.847367	3.015719	0.0034
X2	1.998467	0.476977	4.189864	0.0001

R-squared	0.215030	Mean dependent var	1.939667
Adjusted R-squared	0.196985	S.D. dependent var	10.13321
S.E. of regression	9.080484	Akaike info criterion	7.282897
Sum squared resid	7173.601	Schwarz criterion	7.366224
Log likelihood	-324.7304	Hannan-Quinn criter.	7.316499
F-statistic	11.91614	Durbin-Watson stat	1.211755
Prob(F-statistic)	0.000027		

Based on the results of the previous calculations, the multiple linear regression equation is as follows:

$$Y = -4.388258 + 2.555420X1 + 1.998467X2$$

From the multiple linear regression equation above, it can be concluded as follows: First, the constant value of - 4.388258 states that if the independent variables CR (X1) and DER (X2) value is 0, then the value of ROA (Y) is - 4.388258. Second, the CR variable regression coefficient of 2.555420 indicates that the positive relationship between CR and ROA, where every 1 unit increase in CR with the assumption that DER is constant will cause an increase in ROA of 2.555420. On the other hand, if CR decreases by 1 unit with the assumption that DER is constant, it will decrease ROA by 2.555420. Third, the regression coefficient of the DER variable of 1.998467 shows that the positive relationship between DER and ROA, whereevery 1 unit increase in DER with the assumption that CR is constant will cause an increase in ROA of 1.998467. On the other hand, if DER decreases by 1 unit assuming CR is constant, it will decrease ROA by 1.998467.

4.5 t test

The t test aims to determine whether the independent variables partially or individually have a significant effect on the dependent variable.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.388258	1.918202	-2.287693	0.0246
X1	2.555420	0.847367	3.015719	0.0034
X2	1.998467	0.476977	4.189864	0.0001

Based on the results of the t test above, the Current Ratio variable has a t-Statistic of 3.015719> 1.66256 with a Prob. (Significance) value of 0.0034 (<0.05), it can be concluded that the Current Ratio variable has a positive effect on the Return On Assets variable. While the Debt to Equity Ratio variable has a t-Statistic of 4.189864> 1.66256 with a Prob.(Significance) value of 0.0001 (<0.05), it can be concluded that the Debt to Equity Ratio variable has a positive effect on the Return On Assets variable.

4.6 f Test

The f-statistical test is used to determine how much influence Current Ratio, Debt to Equity Ratio have on Return On Assets of Manufacturing Companies listed on the IDX during the 2020-2022 period simultaneously.

F-statistic	11.91614
Prob(F-statistic)	0.000027

Based on the results of the f test above, it is known that the F-Statistic value is 11.91614 with a Prob. (F Statistic) value of 0.000027 (<0.05), it can be concluded that the Independent Variables (X1, and X2) have a significant effect simultaneously on the Dependent variable (Y).

4.7 Test Coefficient of Determination

The coefficient of determination (R^2) aims to determine how far the ability of the independent variable to explain the dependent variable.

R-squared	0.215030	Mean dependent var	1.939667
Adjusted R-squared	0.196985	S.D. dependent var	10.13321
S.E. of regression	9.080484	Akaike info criterion	7.282897
Sum squared resid	7173.601	Schwarz criterion	7.366224
Log likelihood	-324.7304	Hannan-Quinn criter.	7.316499
F-statistic	11.91614	Durbin-Watson stat	1.211755
Prob(F-statistic)	0.000027		

Based on the results of the coefficient of determination test, it is known that the adjusted (R^2) result of the independent variables in this study is 0.215030 or 21.50%. This means that 21.50% of Return On Assets is influenced and can be explained by the two independent variables in this study, namely Current Ratio and Debt to Equity Ratio. While the other 78.50% is explained by other variables outside the regression model.

4.8 The Effect of Liquidity Ratio (CR) on Financial Performance (ROA)

Based on the results previously presented, the test results $H_a$were successfully accepted. This shows that the liquidity ratio has an influence on financial performance, which in this case is measured using ROA. That the more the company is able to pay its short-term obligations in a timely manner, the financial performance of a company will increase. This is because the availability of sufficient capital allows the company to operate optimally and not experience a financial crisis.

4.9 The Effect of Solvency Ratio (DER) on Financial Performance (ROA)

Based on the results previously presented, the test results of H_a were successfully accepted. This shows that the solvency ratio has an influence on financial performance, which in this case is measured using ROA. That the higher the Debt to Equity Ratio value, the greater the company's dividends are funded by debt rather than equity. In industrial sector companies when the value of Debt to Equity Ratio increases, it will result in an increase in profits as measured using Return On Asset. This is because the higher the DER value indicates greater trust from outsiders which allows for improved financial performance. Because with large capital, the opportunity to achieve a greater level of profit.

*4.10*The Effect of Liquidity Ratio (CR) and Solvency Ratio (DER) on Financial Performance (ROA)

Based on the results previously presented, the test results of H_a were successfully accepted. This shows that the solvency ratio has an influence on financial performance, which in this case is measured using ROA. That the higher the Debt to Equity Ratio value, the greater the company's dividends funded by debt rather than equity. In industrial sector companies when the value of Debt to Equity Ratio increases, it will result in an increase in profits as measured using Return On Asset. This is because the higher the DER value indicates greater trust from outsiders which makes it possible to improve financial performance. Because with large capital, the opportunity to achieve a greater level of profit.

5. CONCLUSION

This study was conducted to be able to examine the effect of Liquidity Ratio as measured using Current Ratio and Solvency Ratio as measured using Debt Equity to Equity Ratio, on

Financial Performance as measured using Return On Assets in industrial sector Manufacturing companies listed on the Indonesia Stock Exchange in 2020-2022. Based onthe results of the analysis that has been carried out in the previous section, the following conclusions can be obtained:

1. There is a partial influence of the Liquidity variable on Financial Performance inindustrial sub-sector companies listed on the Indonesia Stock Exchange for the period 2020-2022.
2. There is a partial influence of the Solvency variable on Financial Performance inindustrial sub-sector companies listed on the Indonesia Stock Exchange for the period 2020-2022.
3. There is a simultaneous influence of Liquidity and Solvency variables on Financial Performance in industrial subsector companies listed on the IDX for the 2020-2022 period.

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