

## ANALYSIS OF THE INFLUENCE OF FINANCIAL RATIO ON VALUE OF MANUFACTURING COMPANIES

Jordan Adam Simanjuntak\*<sup>1)</sup>, Mas Intan Purba<sup>2)</sup>

<sup>1,2</sup>Universitas Prima Indonesia

Email: [jordansimanjuntak046@gmail.com](mailto:jordansimanjuntak046@gmail.com)

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### Abstract

**Background :** A company is an organization consisting of 2 or more people whose goal is to create a product for profit. A company listed on the IDX is a company that has shares that can be purchased by the general public. Basically, a company listed on the IDX must be a company that have large capital. what determines investors will invest their capital in the company is the company's financial performance. investors will make decisions to invest some capital in the company through the company's financial performance. **Method :** This study aims to determine the effect of CR, DER, TATO, ROA, on the PBV Ratio manufacturing companies in the pharmaceutical sub-sector industry listed on the IDX in 2016-2019 This research approach uses a quantitative approach and uses a purposive sampling technique, 11 samples of manufacturing companies in the pharmaceutical sub-sector industry listed on the IDX in 2016-2019. used is secondary data. Secondary data is the financial statements of manufacturing companies in the pharmaceutical sub-sector industry listed on the Indonesia Stock Exchange in 2016-2019 on the web [www.idx.co.id](http://www.idx.co.id). **Result :** The result is that CR, DER, TATO, ROA have a simultaneous influence on the PBV Ratio of manufacturing companies in the pharmaceutical sub-sector industry listed on the IDX in 2016-2019. **Conclusion :** ROA has a significant and partial effect on the PBV Ratio.

**Keywords:** CR, DER, TATO, ROA dan PBV Ratio

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## INTRODUCTION

A company is a legal entity formed by a group of people involved in running a business entity in a commercial or industrial capacity (Kadim et al., 2020). A company listed on a stock exchange is a company that is a publicly traded company. That is, shares in the company can be owned (purchased) by the public. Basically, companies that have the potential to become large companies with large capital will be easily registered. And one of the factors seen by potential investors to determine investment is the company's financial performance. For a company, maintaining and improving financial performance is a must in order to remain in demand by investors. The financial statements issued by a company are a reflection of the financial performance of a company (Widagdo et al., 2020). Financial performance can be measured by the level of company profitability (Amalia, 2021).

Company value is the price that prospective buyers are willing to pay if the company's shares are sold. The higher the value of the company, the greater the prosperity that will be received by the owner of the company (Husnan and Pudjiastuti 2002). For companies that have gone public, the market value is determined by the mechanism of supply and demand on the stock exchange, which is reflected in the listing price. In this study using liquidity ratios, solvency ratios, profitability ratios and activity ratios (Fadah et al., 2020).

The liquidity ratio helps us see how the company's ability to manage the funds they have to meet their various short-term obligations. The relationship between the

liquidity ratio and firm value is the higher the level of liquidity the company has good performance, so it will increase the value of the company (Islami & Rio, 2019).

Solvency ratio is used to assess the company's ability to pay off all of its obligations, both short-term and long-term, with guaranteed assets or assets owned by the company until the company closes or is liquidated. Solvency Ratio relationship to firm value is the increase or decrease in solvency has a significant effect on firm value (Luthfiah & Suherman, 2018).

Profitability ratios are used by analysts and investors to measure and evaluate a company's ability to generate revenue (profit) relative to revenue, balance sheet assets, operating costs, and shareholder equity over a given period of time. The relationship between profitability ratios and firm value is a method for measuring the company's ability to generate profits (Izzalqurny et al., 2019).

Activity Ratio as a financial indicator used to measure how efficient and effective a company is in using its assets to generate revenue. The relationship between the activity ratio and firm value is that the higher the activity ratio, the higher the firm's assets, so that it has a direct effect on the increase in firm value (Kadim et al., 2020).

## RESEARCH METHODS

The research method used in this study is quantitative analysis because the data used are numbers. The selected research variables are in the form of units that can be calculated and measured. This analysis method uses SPSS software tools





to parse the results of the tests carried out such as the classical assumption test and multiple linear regression.

Sugiyono (2018) states that the population is a generalization area that includes objects and subjects that have characteristics and qualities chosen by researchers to be the focus and can be concluded (Michael, 2019). Research Population The population in this study are manufacturing companies listed on the Indonesia Stock Exchange in the 2016-2019 period based on data obtained through the website [www.idx.co.id](http://www.idx.co.id) as many as 181 companies

## RESULTS AND DISCUSSION

Indonesia's manufacturing industry is growing very rapidly. Judging from the number of records each year. Manufacturing companies are companies listed on the IDX, including listed companies, these companies must have a high level of transparency and need to make financial reports that are assessed on time. The Indonesian economy is closely related to manufacturing, because manufacturing is an industrial sector that provides added value and is the most important sector in Indonesian industry.

	N	Minimum	Maximum	Mean	Std. Deviation
X1	44	,96	8,32	3,0789	2,02706
X2	44	4,18	546,33	134,3964	149,49277
X3	44	,07	1,39	,5089	,32328
X4	44	,00	,99	,0955	,16236
Y	44	,29	7073,61	1155,4230	1827,60878
Valid N (listwise)	44				

Table 1. Statistic Description

Based on table above, it states that the minimum value, maximum value, average value (mean), and standard deviation of the variables CR (X1), DER (X2), TATO (X3), and ROA (X4) to the PBV Ratio (Y), that is:

1. The CR variable has a min value of 0.96 at PT. Phapros Tbk 2019, max score of 8.32 at PT. Sido Muncul in 2016. The mean value is 3.0789 with a standard deviation of 2.02706.
2. The DER variable has a min value of 4.18 at PT Darya-Varia Laboratoria Tbk in 2016, a max value of 546.33 at PT Merck Sharp Dohme Pharma Tbk in 2017. The mean value is 134.3964 with a standard deviation of 149.49277.
3. The TATO variable has a min value of 0.07 at PT. Phapros Tbk in 2018, the max value is 1.39 at PT Merck Indonesia Tbk in 2016. The mean value is 0.5089 with a standard deviation of 0.32328.
4. The ROA variable has a min value of 0.002 at PT. Kimia Farma in 2019, the max value is 0.99 at PT Kalbe Farma Tbk 2018. The mean value is 0.0955 with a standard deviation of 0.16236.

The PBV Ratio variable has a min value of 0.29 at Millennium Pharmacon Int. In 2019, the maximum value is 7073.61 at PT. Merck Indonesia Tbk in 2016. The results mean 1155,4230 with a standard deviation of 1827,60878.

This test is used to test the normality of the distribution of residual data. In this study, the researcher used the non-parametric statistical normality test of the Kolmogorov Smirnov test, which was used as a reference in determining the decision to make the data close to or normally





distributed, and the condition is the sig value.  $> 0.05$  Research data are normally distributed, if the value of sig.  $< 0.05$  then the research data is not normally distributed.

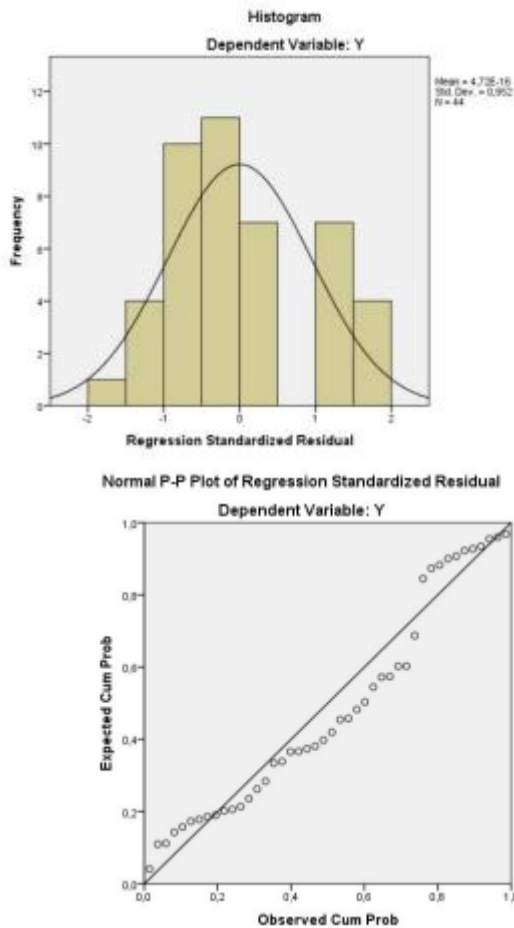


Figure 1. Graphic Analytic

The conclusion is that the variables are normally distributed. As can be seen from the data above, the variables are neither distributed to the left nor to the right (bell curve). In this test, the cumulative distribution of the original data is compared with the cumulative distribution of the normal distribution. The normal distribution produces a straight diagonal line that will be compared with the plotted data.

		Unstandardized Residual
N		44
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	2,66836004
Most Extreme Differences	Absolute	,120
	Positive	,120
	Negative	-,112
Test Statistic		,120
Asymp. Sig. (2-tailed)		,124 <sup>c</sup>

Table 2. One-Sample Kolmogorov-Smirnov Test

Table above states that the variables CR (X1), DER (X2), TATO (X3), and ROA (X4) to the PBV Ratio (Y) are normally distributed as evidenced by a significance value of  $0.124 > 0.05$ .

	Unstandardized Coefficients	Standardized Coefficients		Collinearity Statistics
Model	B	Std. Error	t	Sig. Tolerance
1 (Constant)	2,162	3,147	,687	,496
X1	,203	1,020	,037	,1993
X2	1,268	,575	,441	,633
X3	1,801	,647	,353	,48
X4	-,631	,347	-,260	,57

Table 3. Multicollinearity Test Results

Based on table 3.3, it shows the tolerance value of the variables CR (X1), DER (X2), TATO (X3), and ROA (X4)  $> 0.1$ , the conclusion is that there is no multicollinearity. The VIF value obtained for the variables CR (X1), DER (X2), TATO (X3), and ROA (X4)  $< 10$  the conclusion does not experience multicollinearity.





Model	R	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.648 <sup>a</sup>	.420	2,80186	1,953

Table 4. Multicollinearity Test

Based on table above, it shows the tolerance value of the variables CR (X1), DER (X2), TATO (X3), and ROA (X4) > 0.1, the conclusion is that there is no multicollinearity. The VIF value obtained for the variables CR (X1), DER (X2), TATO (X3), and ROA (X4) < 10 the conclusion does not experience multicollinearity.

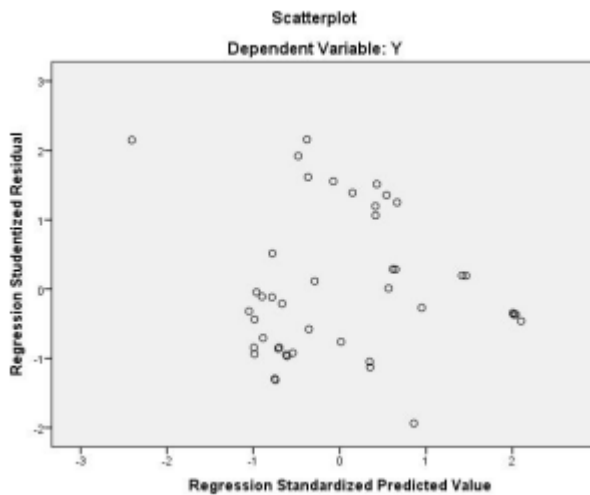


Figure 2. Heteroscedasticity Test

Heteroscedasticity test was run to test the occurrence of variance inequality in the regression model from the residuals of one observation to another. Heteroscedasticity detection was carried out using graph plots and the glejser test. In the scatterplot graph, Heteroscedasticity is detected by observing the presence of a pattern in the scatterplot graph, and the distribution of the data is around 0 on the Y axis. Figure above states that the data do not form and are scattered in a pattern. The spread of data above and below the 0 line

on the Y axis means that there is no heteroscedasticity.

**RESULT**

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
1 (Constant)	-.079	1,616		-.049	,961
X1	1,110	,524		,4732,120	,040
X2	,343	,295		,2791,161	,253
X3	-.538	,332		-.2471,620	,113
X4	,214	,178		,2061,198	,238

Table 5. Glejser Test Results

Table above shows that there is no significant independent variable on the dependent variable with the value of the Natural Logarithm (Ln). It can be seen from the PBV Ratio whose significance is > the 0.05 level of confidence. The conclusion is that in this study the CR, DER, TATO, and ROA significance above the 0.05 confidence level did not experience heteroscedasticity.

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
1 (Constant)	-2,162	3,147		-.687	,496
X1	,203	1,020		,037	,199
X2	1,268	,575		,4412,206	,033
X3	1,801	,647		,3532,784	,008
X4	-.631	,347		-.2601,815	,077

Table 6. Multiple Linear Regression Analysis

Based on the results of the analysis in Table 3.6 the regression equation used is as follows:

$$PBV = 2.162 + 0.203 CR + 1.268 DER + 1.801 TATO - 0.631 ROA$$





The regression equation means:

1. The value of the coefficient -2.162 means that when all independent variables have a statistic of 0 then the value of the dependent variable is 2.162.
2. The CR variable has a regression coefficient of 0.203 which shows that there is a positive impact between the CR variable (X1) on the PBV Ratio of 0.203, meaning that if it increases by 1 unit, the PBV Ratio will increase by 0.203 with the thought of other independent variables remaining.
3. The DER variable has a regression coefficient of 1.268 at the PBV Ratio of 1.268, meaning that if the DER increases by 1 unit, the PBV Ratio will increase by 1.268 with the thought of other independent variables remaining.
4. The TATO variable has a regression coefficient of 1.801 in the PBV Ratio of 1.801, meaning that if the TATO increases by 1 unit, the PBV Ratio increases by 1.801 with the thought that other independent variables remain.
5. The ROA variable has a regression coefficient of -0.631 at a PBV Ratio of -0.631 means ROA if it increases by 1 unit PBV Ratio decreases -0.631 with the thought that other independent variables are fixed

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	222,153	4	55,538	7,075	,000 <sup>b</sup>
Residual	306,166	39	7,850		
Total	528,319	43			

Table 7. F . Statistical Test Results

In table above the result of Fcount is 7.075 with a sig value. 0.000 while Ftable is 2.61 with sig. 0.05 means that Fcount >

Ftable which is 7.075 > 2.61 and sig. 0.000 < 0.05, it means that H0 is accepted and Ha is rejected. The variables CR, DER, TATO, and ROA have a simultaneous and significant impact on the PBV Ratio in manufacturing companies in the pharmaceutical sub-sector listed on the IDX in 2016 – 2019.

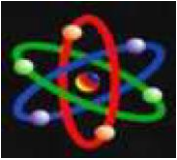
Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	-2,162	3,147		-,687	,496
X1	,203	1,020	,037	,199	,843
X2	1,268	,575	,441	2,206	,033
X3	1,801	,647	,353	2,784	,008
X4	-,631	,347	-,260	1,815	,077

Table 6. Statistical Test Results t

Partial statistical test results are as follows:

1. CR variable has a tcount value of 0.199 with sig. 0.843 , ttable 1.684 with sig. 0.05 it can be concluded that tcount < ttable is 0.199 < 1.684 and sig. 0.843 > 0.05, meaning that H0 is accepted and Ha is rejected with the CR variable having no impact and not partially significant on the PBV Ratio.
2. DER variable has a tcount value of 2,206 with sig. 0.033 , t table 2.61 with sig. 0.05 it can be concluded that tcount < ttable is 2.206 > 1.684 and sig. 0.033 < 0.05, meaning that H0 is rejected and Ha is accepted with the DER variable having a positive and partially significant impact on the PBV Ratio.
- 3 TATO variable has a tcount value of 2.784 with sig. 0.008 , t table 1.684 with sig. 0.05, it can be concluded that tcount < ttable is 2.784 > 1.684 and sig. 0.008





<0.05, meaning that  $H_0$  is rejected and  $H_a$  is accepted with the AR variable having a positive and partially significant impact on the PBV Ratio.

4. ROA variable has a tcount of -0.260 with sig. 0.077, ttable 1.683 sig. 0.05 it can be concluded that tcount < ttable is -0.260 < 1.684 and sig. 0.077 > 0.05, meaning that  $H_0$  is accepted and  $H_a$  is rejected with the ROA variable having no impact and not partially significant on the PBV Ratio

## CONCLUSION

From the results of this study, it can be concluded that in manufacturing companies in the consumer goods industry listed on the IDX in 2016-2019 that, ROA has a significant and partial effect on the PBV Ratio. DER has no impact and is not partially significant on the PBV Ratio. NPM has a partial and significant effect on the PBV Ratio. DAR has a partial and significant impact on the PBV Ratio. DPR has no impact and is not partially significant on the PBV Ratio. ROA, DER, NPM, DAR, and DPR have a simultaneous impact on the PBV Ratio.

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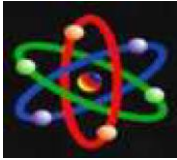
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