# THE EFFECT OF LIQUIDITY AND LEVERAGE ON COMPANY VALUE WITH PROFITABILITY AS A MEDIATING VARIABLE ON MANUFACTURING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE FOR THE PERIOD OF 2017-2019

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Article Info	Abstract
Article History	This study aims to determine the effect of Liquidity, Leverage on
Received: 12 October 2021	Company Value with Profitability as a mediating variable. The sample of this study was a manufacturing company listed on the Indonesia Stock Exchange by using purposive sampling method.
Accepted: 02 November 2021	There are 66 manufacturing companies selected for three years, so the total sample was 198. This study applied secondary data from annual reports. This research was a quantitative research using panel data regression and path analysis using Eviews
Published: 31 December 2021	software. The results of this study indicate that the current ratio has no effect on return on assets, debt to equity ratio has a
	negative and significant effect on return on assets, return on assets has a positive effect on price to book value, current ratio
	has a positive effect on price to book value, debt to equity ratio has a positive effect on price to book value, return on assets does
	not mediate the effect of the current ratio on price to book value, but return on assets mediates the effect of debt to equity
	ratio on price to book value.
	Keywords: Current Ratio (CR), Debt to Equity Ratio (DER),
	Return on Assets (ROA), Price to Book Value (PBV), SIZE

## INTRODUCTION

The company will make an effort to advance and improve the company's business, so it can develop and carry out activities to obtain funds aiming to further advance the company's business. According to Thaib dan Dewantoro (2017), a company is an object possesing legal power and legally formed by an individual who can make an agreement and own property on behalf of the company itself. The company's goal is to maximize the welfare of the company owners by maximizing stock prices (Rahmantio et al., 2018). Therefore, it takes professional expertise in terms of human resources to carry out the company's business activities.

This study employed a Price to Book Value (PBV) proxy to measure firm value. According to Putra et al (2020), price to book value is used to illustrate a comparison between the price per share and the book value per share contained in the financial statements. Firm value is able to influence the level of perception of potential investors (Yanti & Abudanti, 2019). Liquidity is the ability of a company to meet short-term financial obligations that must be met as soon as possible at maturity to maintain liquidity. This study used the current ratio proxy to measure liquidity. The increasing current ratio value will increase the price to book value (Artati, 2020). The level of liquidation will be stated well if the current ratio has a greater percentage.

According to Ukhriyawati dan Putri (2016), leverage is used to measure the company's ability to fulfill all of its financial obligations consisting of short-term and long-term debt. It can be interpreted that leverage is a description of the company's expertise to maintain assets that have fixed asset funds (fixed expenses) in increasing the level of income for shareholders. In this study, the leverage ratio used the Debt to Equity Ratio (DER) proxy as a measurement. Debt to equity ratio is used to measure the extent to which a company's ability to pay off its debts using its own capital (Rahmantio et al., 2018).

Profitability is the profit earned by a company at a certain time or period (Kadim & Sunardi, 2019). The proxy used to measure the profitability ratio is return on assets. Return on assets is used as a mediating variable because shareholders measure the level of efficiency in a company through the achievement of profits. Return on assets is a comparison of profit after tax with total assets (Utami dan Prasetiono, 2016). In line with Sutrisno dan Adi (2019), the results reveal that the current ratio has a negative effect on price to book value. This study contradicts the results of research conducted by Kahfi et al (2018), indicating that the current ratio has a positive effect on firm value. Research conducted by Samo dan Murad (2019), indicates the results that the current ratio has a positive effect on return on assets. Meanwhile, the research results conducted by Nidya Afrinda (2013), shows that the current ratio has a negative and significant effect on return on assets.

This study is a replication study of previous research that has been studied by Samo dan Murad (2019), regarding the effect of liquidity and financial leverage on company profitability. The study took the sample in the form of textile industry companies in Pakistan during the period 2006-2011. The sampling technique applied purposive sampling technique; the sample was taken from the entire population that meets certain predetermined criteria. The results conclude that the current ratio has a strong and positive effect on return on assets, while debt to equity has a negative and not strong effect on return on assets. The results in the study also conclude that the current ratio has a strong and positive effect on return on equity, while debt to equity has a negative effect

on return on equity. The difference between this study and the research conducted by Samo dan Murad (2019), lies in the research sample, the research period and the addition of the firm value variable as the dependent variable. The sample in this study used samples from manufacturing companies listed on the Indonesia Stock Exchange for the period of 2017-2019.

#### LITERATURE REVIEW

#### Company Value

According to Artati (2020), company value is the result of a company's performance in one period. The better the company's performance will make it easier to attract potential investors to invest their funds in the company. The value of the company will increase if the share price increases, so the increase in the share price can increase the share value for shareholders (Astrinita, 2019). This study uses a Price to book value (PBV) proxy to measure firm value. According to Laksitaputri (2012), the ratio of price to book value (PBV) or what is called the book value of the company is a ratio that shows the level of a company's ability to create value relative to the amount of capital invested. A high price to book value will indicate a high share price when compared to the book value per share.

### Liquidity

Liquidity is a ratio used to measure the level of a company's ability to pay the company's short-term obligations at maturity or when billed (Nidya Afrinda, 2013). The ratio used in this study is the Current Ratio. Current ratio is the company's ability to meet short-term debt with current assets. This ratio is a comparison between total current assets and current liabilities (Dasuha, 2016).

#### Leverage

Leverage is a funding policy related to a company's decision to finance a company (Bagus et al., 2016). Companies employing debt have obligations related to interest expenses and principal costs of loans. If a company does not pay attention to the proportion of leverage, it can cause a decrease in profitability because the use of debt causes a fixed interest expense (PA & Marbun, 2016). Debt to Equity (DER) is one of the indicators for calculating the leverage ratio, DER is able to measure how far the company's ability to pay off its forest debt using its own capital (Rahmantio et al., 2018).

#### **Profitability**

According to Jayanti et al (2020), profitability refers to the comparison between profit and the capital generating the profit and is expressed as a percentage. The proxy used to measure the profitability ratio is return on assets. Return on assets is one indicator of the profitability ratio used

to measure the ability of a company to use total assets and costs used to fund assets to earn a profit (Ikhwal, 2016).

# **Company Size**

Company size is the scale of a company used to explain and to describe the level of success (Dewi & Sudiartha, 2017). The higher the size of the company, the greater the need for a company to obtain additional funds that can be sourced from debt (Dewi & Sudiartha, 2017).

#### HYPOTHESIS DEVELOPMENT

# Effect of Liquidity on Profitability

Current ratio is a liquidity ratio to measure the ability of related companies to meet short-term obligations. According to Khan et al (2013), the relationship between liquidity and profitability can be positive if long and medium-term periods are taken into account, based on the concept that a low amount of liquidity assets in a business can lead to a decrease in earning power due to higher demand for loans and profitability which may not generate enough cash.

The research results conducted by Samo dan Murad (2019), indicates that the current ratio has a strong and positive effect on return on assets. The results of the study are in line with research conducted by Utama dan Muid (2014), showing that the current ratio has a positive and significant effect on return on assets. Based on the description above, the hypothesis in this study is as follows: H1: Current ratio has a positive effect on return on assets

#### Effect of Leverage on Profitability

The higher the value of the debt to equity ratio refers to the higher the company's burden on external parties, so it will reduce the company's performance (Nidya Afrinda, 2013). The high debt will affect the net profit that will be obtained by a company. This is because the high debt provides a fairly high interest expense, so the company's net profit will decrease. The smaller the net profit obtained by the company, the smaller the ROA of the company (Sutrisno & Adi, 2019).

The results of a research on profitability conducted by Samo dan Murad (2019), shows that the debt to equity ratio has a negative and significant effect on return on assets. In line with research conducted by Linggasari dan Adnantara (2020), it reveals that the debt to equity ratio has a negative and significant effect on return on assets. Based on the description above, the hypothesis in this study is as follows:

H2: Debt to equity ratio has a negative effect on return on assets

# The Effect of Profitability on Company Value

Bagus et al (2016) claims that the ratio of return on assets is a profitability ratio to measure the financial performance of a company. Increased profitability will indicate that the performance

of a company is in good condition and the company's prospects are also getting better. The results of research conducted by Utami dan Prasetiono (2016), reveals that return on assets had a significant positive effect on company value. The results of the study are in line with research conducted by Sutrisno dan Adi (2019), showing that return on assets has a positive effect on price to book value. Based on the description above, the hypothesis in this study is as follows:

H3: Return on assets has a positive effect on price to book value

#### Effect of Liquidity on Company Value

Imanah et al (2021), explains that current ratio is a liquidity ratio describing that the higher the current ratio value indicates the company can pay off its short-term debt because the company has a current asset value that is greater than the current debt value. Research conducted by Pardede et al (2019), shows the results that the current ratio has a positive effect on firm value (Price to Book Value). This means that if the current ratio increases, the value of the company will increase and vice versa. If the current ratio decreases, the value of the company will also decrease. Supported by research conducted by Imanah et al (2021), the result shows that the current ratio has a positive effect on price to book value. Based on the description above, the hypothesis in this study is as follows:

H4: Current ratio has a positive effect on price to book value

### Effect of Leverage on Company Value

The debt to equity ratio is an illustration related to the comparison between total debt and total equity owned by a company. An increase in DER refers to an increase in interest expense owned or borne by a company. This will result in a decrease in the profitability of a company. The impact of a decrease in profitability is a decrease in the company's stock price (Utami & Prasetiono, 2016). The results of research conducted by Septariani (2017), show that the debt to equity ratio had a negative and significant effect on price to book value. The results of the study are in line with the research of Sitepu dan Wibisono (2015), which state that the debt to equity ratio has a negative effect on price to book value. Based on the description above, the hypothesis in this study is as follows:

H5: Debt to equity ratio has a negative effect on price to book value.

# Effect of Profitability Mediation on the Relationship between Liquidity and Company Value

Imanah et al (2021), explains that current ratio is a liquidity ratio describing that the higher the current ratio value indicates the company can pay off its short-term debt because the company has a current asset value that is greater than the current debt value. The result of research conducted by Samo dan Murad (2019), obtains that the current ratio has a positive effect on return

on assets. Besides, research conducted by Imanah et al (2021), shows the results that the current ratio has a positive effect on price to book value. Based on the description above, the hypothesis in this study is as follows:

H6: Return on assets mediates the relationship between current ratio and price to book value.

# Effect of Profitability Mediation on the Relationship between Leverage and Company Value

Debt to equity ratio is a financial ratio used to assess debt with equity of a company. If the company maintains the proportion of debt, the return on assets will have a high value. Thus, the main goal of the company will be realized; maximizing the value of the company (Imanah et al., 2021). Based on the results of research conducted by Septariani (2017), it is found that the debt to equity ratio has a negative and significant effect on price to book value. Besides, the debt to equity ratio has a negative and significant effect on return on assets (Samo & Murad, 2019). Based on the description above, the hypothesis in this study is as follows:

H7: Return on assessment mediates the relationship between debt to equity ratio and price to book value.

#### **METHOD**

### Sampling Design

This study applied a population of manufacturing companies listed on the Indonesia Stock Exchange for the period of 2017-2019. The sampling method used purposive sampling technique; the sampling technique with a certain consideration or setting certain criteria. The sampling criteria used in this study are as follows:

- 1. Manufacturing companies listed on the Indonesia Stock Exchange in a row in 2017-2019.
- 2. Manufacturing companies report financial statements for the period of 2017-2019
- 3. Manufacturing companies use rupiah currency
- 4. The company earns profit in a row
- 5. Possessing complete data used in research.

Table 1. Sample Selection Criteria

NO	DESCRIPTION	TOTAL
1	The entire population of manufacturing companies listed on the	182
	IDX	
2	Companies that are not listed in a row	(39)
3	Companies that do not report financial statements	(6)
4	Companies that use dollars	(34)
5	Companies that do not make a profit (loss)	(37)
6	Companies that do not have complete data used in research	0

	Number of Sample Companies	66
	Total observation data $(N) = 66 \times 3 \text{ years}$	198

# **Data Analysis Method**

This study used panel data regression analysis and path analysis to determine the effect of liquidity and leverage on company value with profitability as a mediating variable. Path analysis is an extension of multiple regression analysis. Data processing techniques applied Eviews 9 software.

#### **RESULTS AND DISCUSSION**

#### **Descriptive Statistics**

Descriptive statistical analysis was conducted to provide an overview of the data used. Table 2 shows the descriptive statistics of each variable encompassing liquidity (CR) and leverage (DER) as independent variables, profitability (ROA) as the intervening variable, firm size control variable (SIZE) and firm value (PBV) as the dependent variable. The results of descriptive research statistics are presented in the following table.

Table 2. Variable Descriptive Statistics

	PBV	CR	DER	ROA	SIZE
Mean	2.322325	2.736329	0.891121	0.082438	28.71910
Median	1.152065	1.833260	0.584310	0.051650	28.55946
Maximum	28.87448	32.71204	10.73314	0.576950	33.49453
Minimum	0.054720	0.096610	0.090590	0.000280	21.35918
Std. Dev.	3.944290	2.897014	1.009078	0.095722	1.641075
Observations	198	198	198	198	198

Source: Data processed with eviews 9, 2021

# Selection of Panel Data Regression Model

Determination of the best estimation model using the Chow test and Hausman test to determine the choice of panel data regression model.

#### Chow Test

The results of the Chow test in Table 3 show the probability value of the cross-section chi square in equations 1 and 2, each of which is 0.000, smaller than alpha (0.05), so Ha is accepted. Thus, the appropriate method to perform the regression test in equations 1 and 2 is the fixed effect model.

Table 3. The Result of Chow Test

	Prob. cross section	Alpha Level		Final
Model	chi-square	(a = 5 %)	Hypothesis	Result
Equation1	0.0000	0.0000 < 0.05	H <sub>a</sub> accepted	Fixed Effect

Source: Data processed with eviews 10, 2021

#### Hausman test

The Hausman test was also carried out to choose which one is more suitable to use between the fixed effect and the random effect. Based on table 4, it is revealed that the random cross-section probability in equations 1 and 2 is 0.0381 and 0.0000 is smaller than alpha (0.05), so Ha is accepted. Thus, the appropriate method to perform the regression test in equations 1 and 2 is the fixed effect model. The results of the Chow test and Hausman test show that the best estimation model in equations 1 and 2 is the fixed effect model. Therefore, there is no need for the Lagrange Multiplier test, so the best and appropriate estimation model used in this study is the fixed effect model.

Table 4. Hausman test

	Prob. cross	Alpha Level		Final
Model	section random	(a = 5 %)	Hypothesis	Result
Equation 1	0.0381	0.0381 < 0.05	H <sub>a</sub> accepted	Fixed Effect
Equation 2	0.0000	0.0000 < 0.05	H <sub>a</sub> accepted	Fixed Effect

Source: Data processed with eviews 10, 2021

### **Classical Assumption Test**

This study used Jarque-Bera to see the data were normally distributed. If the value of J-B > 2, it means that the data is normally distributed and if the p value is < 5%, it means that the data is normally distributed. Based on the figure, it is known that the value of prob. JB count 0.0610 > 0.05, so it can be concluded that the residuals are normally distributed, means that the classical assumptions about normality have been met. Multilinearity test is used to determine whether there is a correlation among independent variables, a good regression model should not have a correlation among independent variables. If the correlation coefficient between the independent variables is 0.8 (80%), it means that there is multicollinearity. Table 5 shows the correlation coefficient between the independent variables liquidity (CR) and leverage (DER) and the intervening variable profitability (ROA) is smaller (<) 0.80, so it can be concluded that the regression model in this study does not have multicollinearity problems.

Table 5. Multicollinearity Test Results

	CR	DER	ROA
CR	1	-0.69089	0.210395
DER	-0.69089	1	-0.20129
ROA	0.210395	-0.20129	1

Source: Data processed with eviews 10, 2021

The autocorrelation test was conducted to test whether in a linear regression model there is a correlation between the confounding error in period t and the error in period t-1 (previous). Table 6 shows that the dw value is 2.0940 and the du value in the Durbin Watson table is 1.8519, so a comparison of 1.8519 < 2.0940 < 2.1481 (4-1.8519) is obtained, meaning that the data in the study does not experience autocorrelation problems.

Table 6. Autocorrelation Test Results

Durbin-Watson stat	DU
2.0940	1.8519
a = 5 %	N = 198, K = 3

Source: Data processed with eviews 9, 2021

To test heteroscedasticity, this study applied statistical methods with the Glejser test. Table 7 shows that the prob of each independent variable of liquidity (CR) and leverage (DER) and the intervening variable of profitability (ROA) has a value > alpha 0.05, so it can be concluded that the regression model does not experience heteroscedasticity problems.

Table 7. Heteroscedasticity Test Results

Variable	Prob.
С	0.4445
CR	0.2090
DER	0.1560
ROA	0.1308

Source: Data processed with eviews 9, 2021

#### Multiple Regression Analysis of Panel Data

# Multiple Regression Analysis of Equation 1

Based on the regression results in table 8, the relationship between liquidity and leverage variables on profitability can be presented in the following equation:

Table 8. Results of Panel Data Regression of Fixed Effect Model of Equation 1

Variable	Coefficient
С	-0.722842
CR	-0.023718
DER	-0.598285

Source: Data processed with eviews 10, 2021

The constant a is 0.7228, meaning that if the independent variables of liquidity and leverage are 0 (no change), then profitability has a value of 0.7228. The regression coefficient for the liquidity variable is -0.0237 indicating a negative direction. This means that if liquidity decreases by 1 percent while leverage is variable, then profitability will increase by 2.37 percent. The regression coefficient of the leverage variable is -0.5983 indicating a negative direction. This means that if

leverage decreases by 1 percent while the liquidity variable is constant, then profitability will increase by 59.83 percent. To calculate the error value can use the formula  $e = \sqrt{(1 - R^2)}$ . The coefficient of determination  $R^2$  is 0.8326, so it can be seen that the error value is  $e = \sqrt{(1 - 0.8326)} = \sqrt{0.1674} = 0.4091$ 

### Multiple Regression Analysis of Panel Data of Equation 2

Based on the regression results in table 9, the relationship between the variables of liquidity, leverage and profitability on company value is presented in the following equation:

Table 9. Results of Panel Data Regression of Fixed Effect of Model Equation 2

Variable	Coefficient
С	1.902443
CR	0.208186
DER	0.350581
ROA	0.157192

Source: Data processed with eviews 10, 2021

The equation above has a constant a meaning of 1.9024, meaning that if the independent variables of liquidity, leverage and profitability are 0 (no change), then the value of the company in manufacturing companies listed on the Indonesia Stock Exchange for the period of 2017-2019 has a value of 1.9024. The liquidity variable regression coefficient of 0.2082 indicates a positive direction. This means that if the liquidity variable increases by 1 percent while the leverage and profitability variables are constant, then the firm value will increase by 20.82%. The regression coefficient of the leverage variable of 0.3506 indicates a positive direction. This means that if the leverage variable increases by 1 percent while the liquidity and profitability variables are constant, then the company value in manufacturing companies listed on the Indonesia Stock Exchange for the period of 2017-2019 will increase by 35.06 percent.

The profitability variable regression coefficient of 0.1572 indicates a positive direction. This means that if the profitability variable increases by 1 percent while the liquidity and leverage variables are constant, then the company value in manufacturing companies listed on the Indonesia Stock Exchange for the period of 2017-2019 will increase by 15.72%. To calculate the error value can use the formula  $e = \sqrt{(1 - R^2)}$ . The coefficient of determination  $e^2$  is 0.9713, so it can be seen that the error value is  $e = \sqrt{(1 - 0.9713)} = \sqrt{0.0287} = 0.1694$ .

#### **Hypothesis Test**

#### Coefficient of Determination (R<sup>2</sup>)

The adjusted-square value in equation 1 is 0.7444 indicating that liquidity and leverage have a strong relationship to profitability. The proportion of the effect of liquidity and leverage on the

company's profitability is 74.44 percent while the remaining 25.56% (100 - 74.44%) is influenced by other variables not examined in the study. Adjusted R-square value in equation 2 is 0.9559 indicating that liquidity, leverage and profitability have a strong relationship with firm value. The proportion of the effect of liquidity, leverage and profitability on company value is 95.59 percent while the remaining is 4.41% (100 - 95.59%) is influenced by other variables not examined in the study.

Table 10. Regression Model of Equation 1

Variable	Regression Coefficient	Std. Error	t-test	Sig.	
Intercept	-0.722842	1.473386	-0.490600	0.6245	
CR	-0.023718	0.148825	-0.159366	0.8736	
DER	-0.598285	0.236244	-2.532492	0.0125	
$R^2 =$	0,832629				
Adjusted $R^2 =$	0,744403				
F_test =	9,44				
Sig. =	0,0000				
Dependent Varible: ROA					

Source: Data processed

Table 11. Regression Model of Equation 2

Variable	Regression Coefficient	Std. Error	t-test	Sig.	
Intercept	1.902443	0.517249	3.678005	0.0003	
CR	0.208186	0.052203	3.987977	0.0001	
DR	0.350581	0.084893	4.129656	0.0001	
ROA	0.157192	0.030880	5.090328	0.0000	
$R^2 =$	0,971394				
Adjusted $R^2 =$	0,955973				
F_test =	62,99				
Sig. =	0,0000				
Dependent Variable: PBV					

Source: Data processed

#### Simultaneous Test (F Statistical Test)

The f test is used to prove whether all the independent variables together have an effect on the dependent variable. If the probability value (F-statistic) > 0.05 and the F-statistic value < F-table, then Ha is accepted; the independent variable has no simultaneous effect on the dependent

variable. If the probability value (F-statistic)  $\leq 0.05$  and the F-statistical value > F-table, then H0 is accepted; the independent variable has a simultaneous effect on the dependent variable. To find out the F table at a significance level of 0.05 is df = n-k-1 = 198-2-1 = 195, so that the f table is 3.04.

The test results in the table above show that the prob value. F (Statistic) of 0.000 is smaller than the 0.05 level of significance and the value of F statistic is > than F table which is 9.44 > 3.04. This means that liquidity and leverage simultaneously affect the profitability of manufacturing companies listed on the Indonesia Stock Exchange for the perio of 2017-2019.

The test results in table IV.19, show that the prob value. F (Statistic) of 0.000 is smaller than the 0.05 significance level and the value of F statistic > from F table is 62.99 > 2.65. This means that liquidity, leverage and profitability simultaneously affect company value in manufacturing companies listed on the Indonesia Stock Exchange for the period of 2017-2019.

#### Partial Test (T Test)

According to T test result above, it reveals that:

- 1) Hypothesis 1: Current ratio has a positive effect on return on assets Probability value of liquidity variable (CR) > critical probability value (α = 5%) of 0.8736 > 0.05 and the value of t count < t table of 0.1594 < 1.9722. This indicates that liquidity (CR) has no effect on profitability. The regression coefficient of -0.0237 indicates a negative direction. This means that liquidity (CR) does not have a positive effect on profitability. The conclusion of the study is to reject the first hypothesis</p>
- 2) Hypothesis 2: Debt to equity ratio has a negative effect on return on assets Prob value of leverage variable (DER) < critical probability value ( $\alpha = 5\%$ ) of 0.0125 < 0.05 and t count > t table of 2.5325 < 1.9722. This indicates that leverage (DER) has an effect on profitability. The regression coefficient of -0.5983 indicates a negative direction. This means that leverage (DER) has a negative effect on profitability. The conclusion of the study is to accept the second hypothesis.
- 3) Hypothesis 3: Return on assets has a positive effect on price to book value Prob value of profitability variable (ROA) < critical probability value ( $\alpha = 5\%$ ) of 0.0000 < 0.05 and t count > t table of 5.0903 > 1.9723. This indicates that profitability (ROA) has an effect on price to book value. The regression coefficient of 0.1572 indicates a positive direction. This means that profitability (ROA) has a positive effect on price to book value. The conclusion of the study is to accept the third hypothesis.
- 4) Hypothesis 4: Current ratio has a positive effect on price to book value.

Prob value of liquidity variable (CR) < critical probability value ( $\alpha = 5\%$ ) of 0.0001 < 0.05 and t count value > t table of 3.9879 > 1.9723. This indicates that liquidity (CR) has an effect on price to book value. The regression coefficient of 0.2082 indicates a positive direction. This means that liquidity (CR) has a positive effect on price to book value. The conclusion of the study is to accept the fourth hypothesis.

- 5) Hypothesis 5: Debt to equity ratio has a negative effect on price to book value Prob value of leverage variable (DER) < critical probability value ( $\alpha = 5\%$ ) of 0.0001 < 0.05 and t count > t table of 4.1297 > 1.9723. This shows that leverage (DER) has an effect on price to book value. The regression coefficient of 0.3506 indicates a positive direction. This means that leverage (DER) has a positive effect on price to book value. The conclusion of the study is to reject the fifth hypothesis.
- 6) Hypothesis 6: Return on assets mediates the relationship between the current ratio and price to book value.
  - The z value of the liquidity variable (CR) < Z table value ( $\alpha = 5\%$ ) of 0.16 < 1.96. This means that profitability (ROA) cannot mediate the relationship between liquidity (CR) and firm value (PBV) in manufacturing companies that listed on the Indonesia Stock Exchange for the period of 2017-2019. The conclusion of the study is to reject the sixth hypothesis.
- 7) Hypothesis 7: Return on assets mediates the relationship between debt to equity ratio and price to book value
  The z value of the leverage variable (DER) > the Z table value (α = 5%) is 2.28 > 1.96. This indicates that profitability (ROA) can mediate the relationship between leverage (DER) and firm value (PBV) in listed manufacturing companies on the Indonesia Stock Exchange for the

period of 2017-2019. The conclusion of the study is to accept the seventh hypothesis.

#### **DISCUSSION**

Based on the regression test, the results show that the Current Ratio (CR) had no effect on Return on Assets (ROA), so the first hypothesis is rejected. According to Supardi et al (2018), Current Ratio possessing a high value will indicate that the availability of current assets is also high to pay off current liabilities. However, a high current ratio does not guarantee a company has cash to pay off its current liabilities. The results of this study are in line with the results of research conducted by Supardi et al (2018) and Setyaningsih & Cunengsih (2018), showing that bahwa Current Ratio (CR) has no effect on Return on Assets (ROA). The results of this study are not in line with the research conducted by Samo & Murad (2019), showing the results that the Current Ratio (CR) has an effect on Return on Assets (ROA).

Based on the regression test, the results indicate that the Debt to Equity Ratio (DER) had a negative effect on Return on Assets (ROA). This is because the high debt provides a fairly high interest expense, so the company's net profit will decrease. The smaller the net profit obtained by the company, the smaller the ROA of the company (Sutrisno & Adi, 2019). The results of research on profitability conducted by Samo dan Murad (2019), obtain that the debt to equity ratio has a negative and significant effect on return on assets. The results of the study are in line with research conducted by Linggasari dan Adnantara (2020), showing that the debt to equity ratio has a negative and significant effect on return on assets.

Based on the regression test, the results indicate that Return on Assets (ROA) has a positive effect on Price to Book Value (PBV). This means that if the return on assets increases, the price to book value will increase. According to Bagus et al (2016), the high value of return on assets owned by the company reflects that the company has a high level of efficiency, so that the company's performance will look good. An increase of return on assets can increase the value of the company; the higher the return on assets, the higher the value of the company (Utami & Prasetiono, 2016). The results of research conducted by Utami dan Prasetiono (2016), show that return on assets had a significant positive effect on firm value. The results of the study are in line with research conducted by Sutrisno dan Adi (2019), which states that return on assets has a positive effect on price to book value.

Based on the regression test, the result reveals that the Current Ratio (CR) has a positive effect on Price to Book Value (PBV). This means that the higher the value of liquidity, the possibility of the company being able to pay off its obligations, causing the value of the company to continue to increase. The current ratio increases, the value of the company will increase and vice versa. If the current ratio decreases, the value of the company will also decrease (Pardede et al., 2019). The results of this study are in line with research conducted by Pardede et al (2019) and Imanah et al (2021), showing that the current ratio has a positive effect on price to book value.

Based on the regression test, the results indicates that the Debt to Equity Ratio (DER) has a positive effect on Price to Book Value (PBV). This means that the better use of leverage in a company will increase the value of the company. The results of this study are in line with research conducted by Syahadatina & Suwitho (2015) and Kurniasari (2017), which show that the Debt to Equity Ratio (DER) has a positive effect on Price to Book Value (PBV). However, it is not in line with the results of the research by Sitepu dan Wibisono (2015), which states that the debt to equity ratio has a negative effect on price to book value.

Based on the study results, it indicates that the Current Ratio (CR) has a direct effect on Price to Book Value (PBV). The results of this study are in line with research conducted by Misran

& Chabachib (2017), revealing that Return on Assets (ROA) does not mediate the effect of Current Ratio (CR) on Price to Book Value (PBV). The results of the study are also consistent with the research conducted by Sutrisno & Adi (2019), showing that Return on Assets (ROA) does not mediate the effect of Current Ratio (CR) on Price to Book Value (PBV).

Based on the study results, it shows that the Debt to Equity Ratio (DER) has a direct effect on Price to Book Value (PBV) of 0.5892 and the Current Ratio has an indirect effect of -0.090. The magnitude of the coefficient of indirect influence is smaller than the coefficient of direct influence. Based on the Sobel test, the value of z count is greater (2.28 > 1.96). This indicates that profitability (ROA) can mediate the relationship between leverage (DER) and company value (PBV) in manufacturing companies listed on the Indonesia Stock Exchange for the 2017-2019 period. The results of this study are in line with research conducted by Misran & Chabachib (2017), showing the results that Return on Assets (ROA) mediates the effect of Debt to Equity Ratio on Price to Book Value (PBV).

#### **CONCLUSION AND SUGGESTION**

Based on the research results and discussion on the effect of Liquidity and Leverage on Company Value with Profitability as a Mediating Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2017-2019 Period, measured by using the Current Ratio (CR) proxy, Debt to Equity Ratio (DER), Return on Assets (ROA), Price to Book Value (PBV), it can be concluded as follows: Liquidity variable (Current Ratio) has no effect on profitability (Return on Assets). The leverage variable (Debt to Equity Ratio) has a negative and significant effect on Profitability (Return on Assets). Profitability variable (Return on Assets) has a positive effect on company value (Price to Book Value). Liquidity variable (Current Ratio) has a positive effect on firm value (Price to Book Value). Based on the Sobel test, the profitability variable (Return on Assets) cannot mediate the effect of liquidity (Current Ratio) on company value (Price to Book Value). Based on the Sobel test, the profitability variable (Return on Assets) can mediate the effect of leverage (Debt to Equity Ratio) on company value (Price to Book Value).

Based on the research results and discussion, it is recommended for next researchers to use a longer and more recent observation period so that the research results can be more accurate. The next researchers can change variables or add variables for further research. They can also use different proxies for measuring liquidity, leverage, firm value and profitability.

The research implication is the company must pay attention to the capital structure. A lower capital structure will eliminate the opportunity for companies to take advantage of the tax shield.

Conversely, a capital structure with a higher leverage will reduce the company's financial performance which in turn will reduce the value of the company. Therefore, it is important for the company to develop an optimal capital structure, so it will improve the company's financial performance and lead to an increase in company value.

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