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Effect of Liquidity, Profitability, Firm Size on Firm Value with Capital Structure as Intervening Variable

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Abstract

The purpose of this study is to analyze and obtain empirical evidence of the effect of liquidity, profitability, firm size on firm value with capital structure as an intervening variable. The population in this study were manufacturing companies in the primary industry and chemical subsectors listed on the Indonesia Stock Exchange for 2014-2019, with a sample size of 19 companies and using the purposive sampling method. Furthermore, the data were collected quantitatively using multiple regression using the SmartPLS v.3.2.8. This study indicates that liquidity, profitability, and firm size directly have a negative and significant effect on capital structure; liquidity directly has a negative and insignificant influence on firm value. Profitability and firm size directly have a positive and not significant impact on firm value. Capital structure has a negative and significant effect directly. And then, the capital structure can mediate the effect of liquidity, profitability, company size on company value.

Keywords: Liquidity; Profitability; Firm Size; Capital Structure; Firm Value

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1. Introduction

Every beginning of the company's establishment will not be separated from the goal to create and increase its value for its owners, namely by maximizing shareholder wealth (Ahmad et al., 2018). The higher the company value ratio, the more prosperous the owner will be (Arsyad et al., 2021). The value of the company can be reflected in the price of shares owned by the company. According to the opinion Brigham & Houston (2014), the higher the stock price, the higher the firm value. So that the higher the value of the company, the higher the shareholder wealth will be. According to Salvator, (2005) the primary goal of companies that have gone public is to increase the company's value. Therefore, the company's value will be significant because it will reflect the company's performance which can affect the perceptions and perspectives of investors towards the target company to be addressed. According to Brigham & Houston, (2014) financial performance will affect firm value and capital structure. When the company's financial performance improves, it will impact increasing the company's value. Financial statement analysis can assess economic performance, which can be seen in the company's financial statements. Financial statement analysis usually uses financial ratio analysis, namely by comparing one account to another. According to some expert literature, the company's value can describe the condition of the company's state and the company's performance. The company's performance in the market is also influenced by regional and global stock exchange conditions (Nurwulandari et al., 2020). With the better

company value, the company's performance will be seen as good by potential investors and the increasing share value if the company's value increases. The value of the company increases, which is indicated by a high rate of return on investment to shareholders. In its business activity, the company generates profits consisting of several industries: service companies, trading companies, and manufacturing companies. According to the Minister of Industry, the industry's contribution to GDP can be more than 20 percent. One factor applies in Indonesia by encouraging the manufacturing sector. Table 1 will be the object of research that has been processed; it can be seen that the financial statements of manufacturing companies in the primary and chemical industry sub-sectors are listed on the Indonesia Stock Exchange (IDX).

Table 1 Financial Statements of Manufacturing Companies

No	Description	2014	2015	2016	2017	2018	2019
1	Population	19	19	19	19	19	19
2	Assets (Billion)	6670.58	7280.06	8058.67	8629.71	9209.96	10994.48
	% Up (Down)	-	9.14%	10.70%	7.09%	6.72%	19.38%
3	Liabilities (Billion)	2497.91	2786.29	2925.64	3427.94	3613.75	5092.47
	% Up (Down)	-	11.54%	5.00%	17.17%	5.42%	40.92%
4	Equity (Billion)	4172.66	4493.76	5133.03	5201.76	5596.20	5901.96
	% Up (Down)	-	7.70%	14.23%	1.34%	7.58%	5.46%
5	Sales (Billion)	6517.40	6437.02	6985.53	8001.32	9127.66	9943.40
	% Up (Down)	-	(1.23%)	8.52%	14.54%	14.08%	8.94%
6	Profit (Billion)	767.61	693.47	777.89	460.95	722.84	639.91
	% Up (Down)	-	(9.66%)	12.17%	(40.74%)	56.82%	(11.47%)

Source: IDX data, processed 2020

From the average results on the list of company financial statements used as research samples, it can be seen that profit shows fluctuations that go up and down. From 2014 to 2015, there is a decrease of 9.66%, referring to the Central Statistics Agency (BPS). Indonesia's economic growth in 2015 of 4.88 percent was the lowest in the last six years. Then in 2016, there was an increase of 12.17% because the Indonesian economy in 2016 grew 5.03 percent higher than the 2015 achievement of 4.88 percent. Furthermore, in 2017 there was another decline of 40.74%. According to the Central Statistics Agency (BPS), Indonesia's economic growth throughout 2017 reached 5.07 percent or higher than the 2016 achievement of 5.03%. The 2017 financial growth figure was even the highest since 2014, but there was a decline in profits for companies with primary and chemical industries. It was due to the increase in the purchase price of raw materials, thereby reducing the profits of the sample companies. Then in 2018, there was a very high increase of 56.82%, according to the Ministry of Finance 06/02/2019. The Central Statistics Agency (BPS) released data that the Indonesian economy in 2018 grew 5.17 percent, higher than the 2017 achievement of 5. 07 percent. However, in 2019 there was a decline of 11.47%. According to the Central Bureau of Statistics (BPS), the Indonesian economy in 2019 grew 5.02 percent, lower than the 2018 achievement of 5.17 percent. In terms of production, the highest growth was achieved by Other Services Business Fields of 10.55 percent. The highest increase was acquired from the expenditure side by the Consumption Expenditure Component of Non-Profit Institutions Serving Households (PK-LNPRT) of 10.62 percent. So based on the results of the data, the company's performance fluctuating in profit (profit) will affect other components, namely the components of Assets, Liabilities, and also Equity can be seen in the table above.

The Research Gap phenomenon is that there are differences in the results of previous studies that produce different conclusions about the results of the analysis of the effect of liquidity, profitability, firm size on firm value with capital structure as an intervening variable. Research related to liquidity on the company's capital structure, which states that liquidity has a positive and significant effect on capital structure, is the conclusion (Bhawa & Dewi S, 2015; Putra & Sedana, 2019). Meanwhile, the results of other contradicting studies state that liquidity has a negative and significant effect on capital structure,

namely the conclusion according to (e.g., Warsono & Zoeboedi, 2019; Sari & Sedana, 2020; Zuhroh, 2019; Anjarwati et al., 2015). Research related to profitability on capital structure, which states that profitability has a positive and significant effect on capital structure, is the conclusion according to (i.e., Warsono & Zoeboedi, 2019; Sari & Sedana, 2020; Putra & Sedana, 2019; Djashan, 2019). Meanwhile, other contradicting research results state that profitability has a negative and significant effect on capital structure (See. Bhawa & Dewi S., 2015; Zuhroh 2019; Siddik & Chabachib, 2017; Anjarwati et al., 2015). Research related to company size on capital structure, which states that company size has a positive and significant effect on capital structure (See. Warsono & Zoeboedi, 2019; Djashan, 2019; Zuhroh, 2019; Setiadharma & Machali, 2017; Siddik & Chabachib, 2017; Hermuningsih, 2012). Meanwhile, other contradictory research results state that company size has a negative and significant effect on capital structure (Bhawa & Dewi S., 2015). Research related to liquidity on firm value, which states that liquidity has a positive and significant effect on firm value, is the conclusion according to (See. Yanti & Darmayanti, 2019; Juhandi et al., 2019; Marsha & Murtaqi, 2017; Putra & Sedana, 2019; Setiadharma & Machali, 2017; Ariyanti, 2019; Dewi et al., 2016). Meanwhile, other contradicting research results state that liquidity has a negative and insignificant effect on firm value, namely the conclusions according to (See. Thaib & Dewantoro, 2017; Sari & Sedana, 2020; Adiputra & Hermawan, 2020; Zuhroh, 2019; Patricia et al., 2018; Anjarwati et al., 2015). Other contradicting research results state that liquidity has a negative and significant effect on firm value, namely the conclusions according to (i.e., Hasanudin et al., 2020; Siddik & Chabachib, 2017, Warsono & Zoeboedi, 2019; Fajaria & Isnalita, 2018; Nuswandari et al., 2019). Research related to profitability on firm value, which states that profitability has a positive and significant effect on firm value (i.e., Hasanudin et al., 2020; Yanti & Darmayanti, 2019; Sari & Sedana, 2020; Putra & Sedana, 2019; Djashan, 2019; Sukmawardini & Ardiansari, 2018; Zuhroh, 2019). Meanwhile, other contradictory research results state that profitability has a negative and insignificant effect on firm value (Thaib & Dewantoro, 2017). Research related to firm size on firm value, which states that firm size has a positive and significant effect on firm value, is a conclusion according to (See. Yanti & Darmayanti, 2019; Anjarwati et al., 2015; Djashan, 2019; Fajaria & Isnalita, 2018). Meanwhile, other research results contradict this conclusion state that company size has a negative and significant effect on firm value, (Warsono & Zoeboedi, 2019). Research related to capital structure on firm value, which states that capital structure has a positive and significant effect on firm value, is a conclusion according to (i.e., Yanti & Darmayanti, 2019; Sari & Sedana, 2020; Putra & Sedana, 2019; Zuhroh, 2019; Mulyana & Saputra, 2017; Hermuningsih, 2012). Meanwhile, other contradicting research results state that capital structure has a negative and significant effect on firm value (e.,g Siddik & Chabachib, 2017; Dewi et al., 2016).

Research related to liquidity on firm value with capital structure as an intervening variable, which states that capital structure can mediate as an intervening variable (See. Warsono & Zoeboedi, 2019; Sari & Sedana, 2020; Putra & Sedana, 2019; Zuhroh, 2019; Anjarwati et al., 2015). Meanwhile, other contradicting research results state that capital structure cannot mediate into an intervening variable between liquidity and firm value (See. Wulandari 2013; Ariyanti, 2019; Dewi et al., 2016; Thaib, 2013; Dewantoro, 2017). Research related to profitability on firm value with capital structure as an intervening variable, which states that capital structure can mediate as an intervening variable (See. Warsono & Zoeboedi, 2019; Sari & Sedana, 2020; Putra & Sedana, 2019; Zuhroh, 2019; Ariyanti, 2019). Meanwhile, other contradicting research results state that capital structure cannot mediate the intervening variable between profitability and firm value (See. Wulandari, 2013; Djashan, 2019). Research related to firm size on firm value with capital structure as an intervening, which states that capital structure can mediate as an intervening variable (e.g., Warsono & Zoeboedi, 2019; Zuhroh, 2019; Hermuningsih, 2012). Meanwhile, other contradicting research results state that capital structure cannot mediate the intervening variable between firm size and firm value (See. Anjarwati et al., 2015; Ariyanti 2019; Djashan, 2019). The company's performance uses the Liquidity variable as proxied by the Current Ratio and Working Capital Total Asset indicators, which indicate the company's ability to meet short-term financial obligations on

time. The company size variable uses the natural logarithm of total assets, showing the number of assets owned. The other variable is profitability proxied by Net Profit Margin and Return On Assets which indicate the company's ability to earn profits concerning sales results. Meanwhile, the Capital Structure variable is proxied by the Debt To Equity Ratio and the Debt to Asset Ratio, indicating the ratio indicates the use of debt from loans as a capital structure. The variable value of the company is proxied by using Price Book Value which is used to measure the level of share value valued on the stock market through the Indonesian stock exchange.

Companies with high company performance ratios will prefer to use internal company funds to finance new investments and company operations. According to Myers and Majluf (1984) (in Husnan & Pudjiastuti, 2012), it is by the Pecking Order theory that it is by the Pecking Order theory order explains that companies are more likely to choose to fund companies using internal funds. According to the pecking order theory, firm size can be predicted to affect capital structure negatively. According to Smith & Warner (1979), large companies can easily finance their investments through the capital market because of the slight information asymmetry. Investors can get more information from prominent companies when compared to small companies. So, by obtaining funds through the capital market, the proportion of debt becomes smaller in the capital structure.

H1: Liquidity has a direct and significant adverse effect on capital structure
H2: Profitability has a direct and significant adverse effect on capital structure
H3: Firm size has a direct and significant adverse effect on capital structure

Based on the concept of signaling theory, the company's performance will signal from the company's operations that describes positive prospects based on the level of profit earned from the company's performance level. It will also directly affect the company's value, which is reflected in the share price value, representing its value. However, the higher the capital structure of a company, the higher the risk because funding from debt is more significant than equity. A high capital structure indicates that companies tend to use debt as a capital structure. Capital structure is a comparison between long-term sources that are loans to own capital and or assets. However, companies with high performance will reduce their capital structure by using internal funds for operations.

H4: Liquidity directly has a positive and significant effect on firm value
H5: Profitability directly has a positive and significant impact on firm value
H6: Firm size has a direct and consequential positive impact on firm value
H7: Capital structure has an immediate and substantial adverse effect on firm value

The significant level of the company's performance ratio and the company's size will reduce the status of the capital structure ratio. It is with paying off loan debt or reducing loan debt. So that it will result in an increase in the company's value as one of them is to reduce the loan interest expense.

H8: Liquidity has a positive and significant effect on firm value, with capital structure as a mediating variable
H9: Profitability has a positive and significant effect on firm value, with capital structure as a mediating variable
H10: Firm size has a positive and significant effect on firm value, with capital structure as a mediating variable

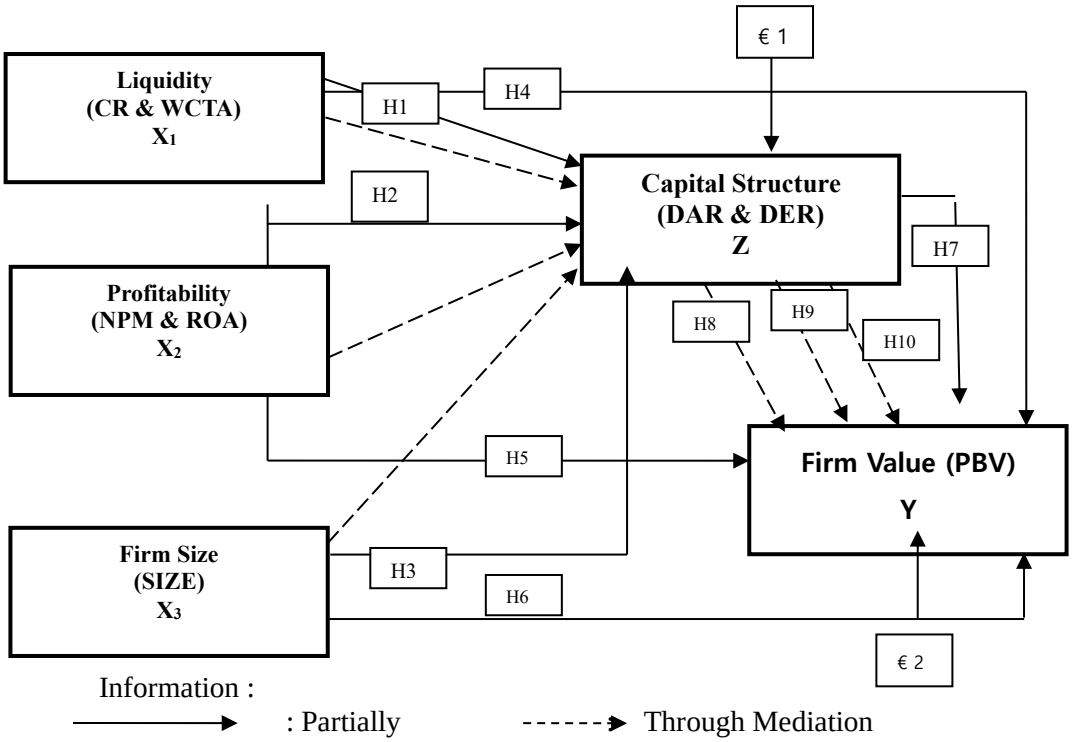

Figure 1. Research Model

2. Research Design and Method

The type of data used in this study is descriptive quantitative data. The source of data in this study is secondary data obtained from the 2014-2019 company Annual Report, specifically on the primary and chemical industry sub-sector, which was obtained through the company's website used as the research sample, the Stock Exchange website. Indonesian Effect www.IDX.co.id, and ICMD (Indonesian Capital Market Directory). The research was selected by the purposive sampling method, one of the sampling techniques based on several desired and predetermined criteria. Inferential statistics used are non-parametric statistics, which are statistics on the distribution of independent data or do not require the issuance of standard parameters. Besides that, non-parametric statistics usually use social measurement scales, namely nominal and ordinal, which are not typically distributed in the study using inferential statistics, assisted by analytical tools by the research model. By the formulated hypothesis, in this study, the analysis of inferential statistical data was measured using Partial Least Square (SmartPLS) V3.2.8 starting from the measurement model (outer model), model structure (inner model), and hypothesis testing, with Structural Equation Modeling. (SEM) model analysis. According to Sugiyono (2017), Operational Variables determine the constructor trait be studied to become a variable that can be measured. So that the operational definition explains the particular way used to research and operate the construct, making it possible for other researchers to replicate measurements in the same way or develop different ways of measuring constructs so that they produce better results.

Image captions of source mediating effects (Zhao et al., 2010)

a) *Complementary (partial mediation) if a*b is significant, c is significant, and a*b*c is significant*
b) *Competitive (partial mediation) if a*b is significant, c is substantial, but a*b*c is not significant*
c) *Indirect-only (full mediation) if a*b is significant, but c is not significant*
d) *Direct-only (no mediation) if a*b is not significant, but c is significant*
e) *No effect (no mediation) if a*b is not significant and c is not significant.*

Table 2. Operational Variables

No	Variable	Definition	Indicator	Scale
		Independent Variable		
1	Liquidity (X_1)	A ratio that shows the company's ability to pay its short-term debts (liabilities) that are due, or a ratio to determine its ability to finance and meet obligations (debts) when billed.	***Current Ratio (CR)*** $CR = \frac{\text{Current asset}}{\text{Current Liability}}$ ***Working Capital to Total Asset (WCTA)*** $WCTA = \frac{\text{Current Asset – Current Liability}}{\text{Total assets}}$	Ratio
2	Profitability (X_2)	The company's ability to earn profits concerning sales, total assets, and own capital. Thus, long-term investors will be very interested in this profitability analysis; for example, shareholders will see profits that will be received in the form of dividends.	***Net Profit Margin (NPM)*** $NPM = \frac{\text{Net profit}}{\text{Net sales}}$ ***Return OnAsset (ROA)*** $ROA = \frac{\text{Net profit}}{\text{Total Assets}}$	Ratio
3	Firm Size (X_3)	Firm size can be defined as the size of a company in various ways: income, number of employees, total assets, the market value of shares, and total capital.	***Firm Size (Size)*** Size = Ln (Total Assets)	Ratio
		Intervening Variable		
4	Capital Structure (Z)	Capital structure is a combination of debt with own capital. Capital structure is part of the financial structure used to determine how much debt the company will use to fund its assets.	***Debt To Asset Ratio (DAR)*** $DAR = \frac{\text{Debt}}{\text{Total Assets}}$ ***Debt To Equity Ratio (DER)*** $DER = \frac{\text{Debt}}{\text{Equity}}$	Ratio
		Dependent Variable		
5	Price Book Value (Y)	Firm value is the company's fair value, which describes the investor's perception of a particular issuer. The firm value is the investor's perception, which is always associated with stock prices.	***Price Book Value (PBV)*** $PBV = \frac{\text{Market Price per Share}}{\text{Book Value per Share}}$	Ratio

3. Results and Discussion

Result Analysis

The liquidity variable with the Current Ratio (CR) indicator has a minimum value of 0.704 and a maximum value of 21.705, and then the mean value is 2.900 with a standard deviation of 3.216. The current ratio shows an average of 2.9 times, which means that the average research sample company can still meet its short-term obligations from current assets owned by the company in one period as much as 2.9:1. While the Working Capital to Asset (WCTA) indicator has a minimum value of 0.103 and a maximum value of 0.736, the mean value is 0.328 with a standard deviation of 0.193. WCTA shows an average of 0.238 which means that the company still has free funds for running a business as much as 0.238 in one period. The profitability variable with Return on Assets (ROA) indicator has a minimum value of 0.036, a maximum value of 18.326, then a mean value of 6.23 with a standard deviation of 4.378. ROA shows an average of 6.23 which means that the company can return 6.23 of the total assets. While

the Net Profit Margin (NPM) indicator has a minimum value of 0.007, a maximum value of 27.653, then a mean value of 7.385 with a standard deviation of 6.006. NPM shows an average of 7,385 which means that the company can generate 7,385 total net sales. This ratio indicates that the higher the NPM, the better and attracts investors. Company Size has a minimum value of 4,917, a maximum value of 11,287, a mean value of 7,883, and a standard deviation of 1,588. It shows that the size of the company, which is calculated from total assets. If it is seen that the assets are small, it makes investors less confident in the company and vice versa. The higher the investor confidence is also increasing. The capital structure with the Debt to Equity Ratio (DER) indicator has a minimum value of 0.091, a maximum value of 6.341, then a mean value of 1.124 with a standard deviation of 1.122. The average DER is 1,124, which means it is above the industry standard average of 0.90. The higher the DER will indicate an increase in the value of debt, and if it is not good at managing it, it will harm the company, so the company must be careful in regulating the debt level to make it better. While the Debt to Asset Ratio (DAR) indicator has a minimum value of 0.084, a maximum weight of 0.864, then a mean value of 0.436 with a standard deviation of 0.204. The average DAR shows 0.436, meaning that it has a level of debt value to assets. The higher DAR will indicate an increase in the value of debt, and if it is not good at managing it, it will harm the company, so the company must be careful in regulating the debt level to make it better. Company value is proxied by Price Book Value (PBV) having a minimum value of 0.202, a maximum value of 11.051, then a mean value of 2.346 with a standard deviation of 1.972. The mean PBV value is greater than the standard deviation, indicating that the results are excellent. Because the standard deviation reflects very high deviations, the spread of the data shows normal results and causes unbiased results. If not biased, the data results indicate that the PBV fluctuates not too large.

Table 3. Descriptive Statistics

	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
CR	2.900	1.736	0.704	21.705	3.216	12.688	3.250
WCTA	0.238	0.186	-0.103	0.736	0.913	-0.304	0.659
ROA	6.230	5.403	0.036	18.326	4.378	-0.138	0.807
NPM	7.385	6.257	0.007	27.653	6.006	2.100	1.467
SIZE	7.883	7.730	4.917	11.287	1.588	-1.010	0.266
DER	1.124	0.788	0.091	6.341	1.122	6.251	2.276
DAR	0.436	0.441	0.084	0.864	0.204	-0.919	-0.009
PBV	2.346	1.771	0.202	11.051	1.972	3.533	1.667

Structural Equation Modeling (SEM) using SmartPLS (Partial Least Square) V.3.2.8 software in this study produced several outputs after performing algorithm calculations and bootstrapping (A. Nurwulandari & M. Darwin, 2020). Analysis of the Measurement Model (Outer Model), the test consists of Construct Reliability and Validity and Discriminant Validity.

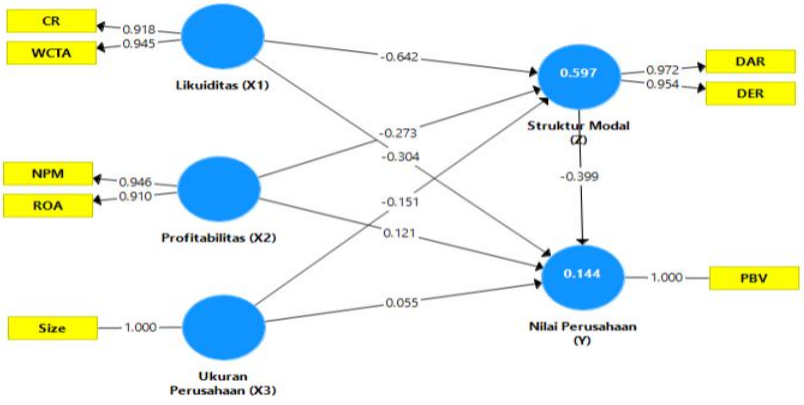

Figure 2. Research Model Test Results

Data sources processed, 2020

The first reliability test is the indicator reliability test in SmartPLS (Partial Least Square). In the test that the rule of thumb usually used, the loading factor value must be 0.50, which can be said to be reliable. The loading factor value of each indicator obtained in this study can be said to be reliable. It can be seen in Figure 3 and Table 4.

Table 4. Output Construct Reliability and validity

	Cronbach Alpha	rho_A	Composite Reliability	AVE
Liquidity	0.849	0.871	0.929	0.868
Firm Value	1.000	1.000	1.000	1.000
Profitability	0.841	0.877	0.925	0.861
Capital Structure	0.923	0.966	0.962	0.927
Firm Size	1.000	1.000	1.000	1.000

The second reliability test assesses internal consistency reliability by looking at the composite reliability value of the indicator block that measures the construct. The rule of thumb is that the composite reliability value obtained must be 0.70. It can be said to be reliable. Furthermore, it can be seen from the results of the smart pls output on the reliability test, which indicates that the constructs are excellent and reliable. The third reliability test, the reliability test, can be strengthened using the Cronbach's Alpha method. So if the result of Cronbach's Alpha value obtained is 0.70, it can be accepted, or the data used is reliable. The results of the Cronbach's Alpha value in this study can be seen as reliable. A validity test (outer model) on other smartPLS can be done using convergent validity. Convergent validity assessment is carried out by looking at the Average Variance Extracted (AVE) value results. The AVE value obtained if 0.50 means that the indicators used have met convergent validity. In conducting the Validity Test (outer model) on smart PLS, it can be strengthened again. It can also be done using discriminant validity. The discriminant validity test with the best measurement is to see the value of the Heterotrait-Monotrait ratio (HTMT) is an alternative method that is recommended to assess discriminant validity. This method uses a multitrait-multimethod matrix as the basis for measurement. So if the result of HTMT value < 0.90, then a construct has good discriminant validity. In this study, it can be seen in table 4.9. shows that all HTMT values between construct variables show values < 0.90 so that the data can be said to be valid and reasonable.

Table 5. HTML Analysis

	Liquidity	Firm Value	Profitability	Capital Structure	Firm Size
Liquidity					
Firm Value	0.031				
Profitability	0.405	0.262			
Capital Structure	0.756	0.270	0.606		
Firm Size	0.345	0.200	0.327	0.072	

Testing this structural model is done by looking at R-Square's value, a goodness-fit test of the model. The R-Square coefficient is used to see how much influence the independent variable has on the dependent variable. The greater the value means, the greater the effect because the number of indicators for each construct varies in number.

Table 6. R-Square Analysis

	R-Square	R-Square Adjusted
Firm Value	0.144	0.113
Capital Structure	0.597	0.586

Table 6 shows that the ability of the variables of Liquidity, Profitability, Company Size, Capital Structure in explaining Firm Value (Y) is 0.144, which means that the model results are weak (poor).

Meanwhile, from the data processing results, namely the ability of the variable liquidity, profitability, firm size, in explaining the capital structure (Z) of 0.597, which means it has a value with a moderate (medium) class model. The next test is to see the significant value of the influence of the independent variable on the dependent variable by looking at the parameter coefficient values and the T-statistical significance value. The process of conducting this test is the Direct Effect and Indirect Effect test. A positive value indicates a positive influence, and a negative value indicates a negative influence. To determine the direct effect of the independent variable on the dependent variable, it can be seen in Table 7. To determine the magnitude of the indirect effect of the independent variable on the dependent variable through the intervening variable, it can be seen in Table 7. Based on the data processing in Table 7, the indirect effect coefficient can be interpreted and can be calculated as follows:

The coefficient ($X1 \rightarrow Z$)*($Z \rightarrow Y$) (-0.642)*(-0.399) = 0.256 with P-Values 0.000 < 0.050 then indicates that liquidity has a Positive and Significant effect on Firm Value through Capital Structure as an intervening variable. According to Figure 2, the mediation category is Indirect Only (Full Mediation) from the calculation results. It is because the indirect effect has a significant impact. In contrast, the direct impact of X1→Y is not significant with P-Values 0.074 > 0.050. The coefficient ($X2 \rightarrow Z$) ($Z \rightarrow Y$) (-0.273) * (-0.399) = 0.109 with P-Values 0.003 < 0.050 then indicates that profitability has a Positive and Significant effect on Firm Value through Capital Structure as an intervening variable. According to Figure 2, from the calculation results, the mediation category is Indirect Only (Full Mediation); this is because the indirect effect has a significant impact, while the direct impact X2→Y is not significant with the results shown P-Values 0.260 > 0.050. The coefficient ($X3 \rightarrow Z$) ($Z \rightarrow Y$) (-0,151) * (-0,399) = 0,060 with P-Values 0,044 < 0,050 then indicates that Firm Size has a Positive and Significant effect on Company Value through Capital Structure as an intervening variable. According to Figure 3.2, the mediation category is Indirect Only (Full Mediation) from the calculation results. It is because the indirect effect has a significant effect. In contrast, the direct effect X3→Y is not significant, with the results shown that P-Values are 0.490 > 0.050. Hypothesis testing is done by looking at the path coefficient value or inner model results, showing the significance level in hypothesis testing. The path coefficient or inner model score indicated by the T-statistic value must be greater than the one-way test T-table value (> 1.982) with = 5%. While the path coefficient score or inner model indicated by the p-values must be below =5% so that the research hypothesis proposed in the study can be accepted.

Table 7. Direct and Indirect Effect

Direct Effect	Original Sample	Sample Mean	Standard Deviation	T-Statistic	P-Value
Liquidity → Firm Value	-0.304	-0.301	0.170	1.788	0.074
Liquidity → Capital Structure	-0.642	-0.647	0.053	12.139	0.000
Profitability → Firm Value	0.121	0.123	0.108	1.128	0.260
Profitability → Capital Structure	-0.273	-0.275	0.056	4.910	0.000
Capital Structure → Firm Value	-0.399	-0.399	0.108	3.678	0.000
Firm Size → Firm Value	0.055	0.056	0.079	0.691	0.490
Firm Value → Capital Structure	-0.151	-0.150	0.065	2.314	0.021
Direct Effect	**Original Sample**	**Sample Mean**	**Standard Deviation**	**T-Statistic**	**P-Value**
Liquidity→Capital Structure→ Firm Value	0.256	0.257	0.072	3.573	0.000
Profitability→Capital Structure→Firm Value	0.109	0.109	0.037	2.952	0.003
Firm Size→Capital Structure→Firm Value	0.060	0.059	0.030	2.018	0.044

Discussion

Liquidity has a Significant and Negative Effect on Capital Structure

The results of the research conducted with the t-test showed that the P-Values of Liquidity were 0.000 0.05 and similarly for the t-statistic (12.139) > t-estimated (1.982), while the magnitude of the effect was -0.642. So that the Liquidity variable has a negative and significant effect on the capital structure, then H1 is accepted. According to the Pecking Order theory, companies with high liquidity conditions tend to use internal funds to finance the company's operations. So that in the manufacturing industry, the level of liquidity needs to be maintained so that it is stable because it is essential for the company; with a steady level of liquidity, it will be easy to get the trust of external and internal parties. In this case, one of the internal parties, namely employees who will not worry about their salary payments being delayed or not being paid, will result in unrest and affect team member performance, impacting the company's development. The results of this study support the results of previous research by (Sari & Sedana, 2020), (Zuhroh 2019), (Warsono & Zoeboedi, 2019), (Anjarwati et al., 2015), which states that liquidity has a negative influence and Significant to the capital structure.

Profitability has a Significant and Negative Effect on Capital Structure

The results of the research conducted with the t-test showed that the P-Values Profitability was 0.000 0.05 and similarly for the t-statistic (4.910) > t-estimated (1.982), while the magnitude of the effect was -0.273. So that the Profitability variable has a Negative and Significant effect on the Capital Structure, then H2 is accepted. Based on the Pecking Order theory, a company with a high level of profitability will have a significant internal fund strength. Then will use internal funds first for investment financing purposes; the level of debt can be suppressed, which in the future can minimize the risk of failure to meet obligations, interest expenses, and bankruptcy conditions. So seen from the company's prospects will make investors more interested in investing their funds in the form of share ownership. From the results of this research, data processing indicates that the companies sampled in this study increase profitability used to reduce the debt because it can be seen that the analysis results have a negative and significant effect, which means that the results of the company's profit level are used to reduce debt ratios. The results of this study support the results of research conducted by (Zuhroh 2019), (Siddik & Chabachib, 2017), (Anjarwati et al., 2015), (Bhawa & Dewi S., 2015), which states that profitability has a negative effect and significant to the capital structure.

Firm size has a Negative and Significant Effect on Capital Structure.

The results of the research conducted with the t-test showed that the P-Values of Firm Size were 0.021 0.05 and similarly for the t-statistic (2.314) > t-estimated (1.982). While the magnitude of the effect was -0.151, the Firm Size variable had a negative and significant effect on the Capital Structure, then H3 is accepted. In the manufacturing companies studied, it can be seen that the use of debt or capital structure ratios looks small, so they use retained earnings more for company operations and other operational activities. The number of assets and the minimum amount of debt will attract investors because the company is considered healthy and can manage assets well and run production smoothly. The results of the data processing of this study indicate that the companies sampled in this research increase in assets not accompanied by an increase in debt but tend to decrease debt. Because it can be seen that the analysis results have a negative and significant effect, meaning that increasing the position of assets tends to reduce debt levels. The results of this study support the results of research that have been carried out (Nugroho, 2014), which states that company size has a negative and significant effect on capital structure.

Liquidity has a Positive and Significant Effect on Firm Value

The results of the research conducted with the t-test showed that the P-Values of Liquidity were 0.074 0.05 and similarly for the t-statistic (1.788) < t-estimated (1.982). In contrast, the magnitude of the

effect was -0.304. So that the Liquidity variable has a negative and insignificant influence on firm value, then H4 is rejected because the data processing results do not support the hypothesis. It shows that high and low liquidity will not significantly affect the value of the company. Therefore it can be said that investors in investing ignore the liquidity variable. However, because the liquidity value is too high, it will also indicate that many company funds are idle and not being used efficiently by its management. It reduces the company's profit capability, which will ease investors' ability to invest in the company. The results of this study support the results of research conducted by (Thaib & Dewantoro, 2017), (Patricia et al., 2018), (Anjarwati et al., 2015), (Sari & Sedana, 2020), (Zuhroh, 2019) which states that liquidity has a negative and insignificant effect on firm value.

Profitability has a Positive and Significant Effect on Firm Value

The results of the research conducted with the t-test showed that the P-Values Profitability was 0.260 0.05 and similarly for the t-statistic (1,128) < t-estimated (1,982), while the magnitude of the effect was 0.121. So that the profitability variable has a positive and insignificant influence on firm value, then H5 is rejected because the data processing results do not support the hypothesis. It indicates that the average value of the company is stagnant. However, profitability increases or decreases, so investors pay less attention to profitability because it is not the main thing about the value of profitability in investing their funds. Generally, profitability will affect the company's value, where profitability is the net profit achieved by the company in carrying out its operations. Profitability will be a benchmark for investors' assessment of the company, which can be seen from the amount of profit generated by the company and the gains worth distributing to shareholders in dividends. The results of this study support the results of research conducted by (Siddik & Chabachib, 2017), which states that probability has a positive and insignificant effect on firm value.

Firm Size has a Positive and Significant Effect on Firm Value

The results of the research conducted with the t-test showed that the P-Values of Firm Size were 0.490 0.05 and similarly for the t-statistic (0.691) < t-estimated (1.982), while the magnitude of the effect was 0.055. So that the Firm Size variable has a positive and insignificant influence on firm value, then H6 is rejected because the data processing results do not support the hypothesis. The data processing results from this study indicate that the company's size was analyzed using the Natural Logarithm (Ln). Total Assets have a positive and insignificant effect on the company's value. The company's size is not the only consideration for investors because of the large number of assets. Without optimal management will not have significant implications for the value of the company. Companies with large company sizes, but mishandling in managing sources of monetary funds, will not benefit. In general, the company's size will affect the assessment of investors in making investment decisions because the size of the company will predict the ability to earn the company's operating profit and will also be able to predict the level of stability in managing finances. Companies with large company sizes and the ability to generate profits will be more stable and pay more enormous dividends. In contrast, companies with small company sizes tend to be allocated to increase company assets and distribute fewer dividends. The results of this study support the results of research conducted by (Ariyanti 2019), (Patricia et al., 2018), (Siddik & Chabachib, 2017), stating that firm size has a positive and insignificant effect on firm value.

Capital Structure has a Negative and Significant Effect on Firm Value.

The results of the research conducted with the t-test showed that the P-Values of Capital Structure were 0.000 0.05 and similarly for the t-statistic (3.678) > t-estimated (1.982), while the magnitude of the effect was -0.399. So that the Capital Structure variable has a negative and significant effect on firm value, then H7 is accepted. The policy in the use of debt must be to a certain extent because if it is excessive, it will reduce its value. The trade-off theory explains that firm value increases with additional debt when the capital structure is below optimal. In addition, the use of debt to reduce the tax burden will increase the

company's value, but if the debt has reached the maximum limit, it will decrease because tax savings are unable to bear the risk. Pecking order theory states that companies like internal financing, and if external funding is needed, it is very urgent. Companies that use debt have obligations for interest and principal costs. The use of debt (external funding) has a considerable risk of non-payment of debt, so debt needs to pay attention to the company's ability to generate profits. The more outstanding the obligation to the company, the greater the potential for company failure to lead to business bankruptcy. In practice, no company uses 100% debt in its capital structure because it will risk its inability to pay interest and principal installments. In unfavorable economic conditions, the greater the liability causes the value of the company to decline. Companies must be able to determine the amount of debt because limiting the amount of debt to a certain extent will increase the company's value. However, if the amount of debt exceeds a specific limit, it will cause a decrease in the value of the company. The results of this study support the results of research conducted by (Dewi et al., 2016) (Siddik & Chabachib, 2017), which also states that capital structure has a negative and significant effect on firm value.

Liquidity has a Positive and Significant Effect on Firm Value with Capital Structure as an Intervening Variable

The results of the research conducted with the t-test showed that the P-Values of Liquidity were 0.000 0.05 and similarly for the t-statistic (3.573) > t-estimated (1.982), while the magnitude of the effect was 0.256. So that the Capital Structure variable can become an intervening variable for liquidity on firm value and has a positive and significant effect, then H8 is accepted. Investors in investing their investments pay less attention to the level of liquidity. It is reflected in the effect of liquidity on firm value. It is stated that the effect is negative and insignificant, but after being mediated by the capital structure, it turns out to be positive and significant. So that investors pay more attention to the amount of debt first. By paying attention to a well-managed capital structure, trust will increase because it indicates that there will be no difficulty in paying their loan obligations. Based on the data from this study, the company that is running the company's business needs operational funds obtained from the owner of the company and debt. The proceeds of loan funds received by the company are used to produce goods and services, purchase raw materials for production and sales purposes, purchases to hold inventories, and cash and buy securities, which are often called securities or securities for transaction purposes and to maintain company liquidity. The results of this study support the results of research conducted by (Zuhroh 2019), (Sari & Sedana 2020), (Putra & Sedana, 2019) (Anjarwati et al., 2015), which states that capital structure can be an intervening variable for the company's liquidity to the value of the company.

Profitability has a Positive and Significant Effect on Firm Value with Capital Structure as an Intervening Variable

The results of the research conducted with the t-test showed that the P-Values Profitability was 0.003 0.05 and similarly for the t-statistic (2.952) > t-estimated (1.982), while the magnitude of the effect was 0.109. So that the Capital Structure variable can become an intervening variable for profitability on firm value, the results have a positive and significant effect, then H9 is accepted. Profitability increases along with increasing the company's value, but followed by lowering the level of debt, it will attract investors to become the target investment target, hoping that the company will last longer and develop. Profitability is the level of net profit that can be achieved by the company when carrying out its operations. The profit that will be distributed to shareholders is the profit after interest and taxes. On the other hand, investors do not pay too much attention to the level of profitability. It can be seen from the statistical results showing a positive and insignificant effect between profitability and firm value. However, after being mediated through the capital structure, profitability has a positive and significant impact. It indicates that investors do not pay too much attention to profitability but pay more attention to managing the value of the capital structure. It is assumed that if the profitability ratio is high, the capital structure ratio is also high. It will be a concern because the result of a high profitability ratio is only to pay loan interest, so it is

likely to reduce and difficulty in paying dividends. The results of this study support the results of research conducted by (Zuhroh 2019), (Hermuningsih 2012), (Thaib & Dewantoro, 2017), (Ariyanti, 2019), (Sari & Sedana, 2020), (Putra & Sedana, 2019) which states that the capital structure variable is capable of being an intervening variable for profitability to firm value.

Firm Size has a Positive and Significant Effect on Firm Value with Capital Structure as an Intervening Variable

The results of the research conducted with the t-test obtained that the P-Values. Firm size is 0.044 0.05 and similarly for t-statistic(2.018) > t-estimated(1.982), while the magnitude of the effect is 0.060. so that the Capital Structure variable can become an intervening variable for Company Size on firm value, the results have a Positive and Significant effect, then H10 is accepted. The direct effect test shows that the company's size has a negative and significant effect on the capital structure. The capital structure has a negative and significant effect on the value of the company. Increasing the company's size by a particular value will reduce debt by a certain amount. A decrease in the amount of particular debt will increase the company's value. The results of this study indicate that the company's size is a policy that must be managed as well as possible so that many companies, both large and small, are chosen to increase company value. This choice will determine the ability to generate profits. In addition, a large company size will find it easier to get loans from outside parties to meet the need for funding by way of debt. Investors have an assessment point of view that the company's size can be a picture of the continuity of its operations, so it will be easier if people need loan funds. The results of this study support the results of research conducted by (Zuhroh 2019), (Warsono & Zoeboedi 2019), (Hermuningsih 2012), which states that the capital structure variable can be an intervening variable for firm size on firm value.

4. Conclusion

Liquidity, Profitability, and Firm Size directly have a negative and significant effect on the capital structure. Primary industry and chemical sub-sector companies tend to use internal funds to fund their operational activities. Meanwhile, Liquidity, Profitability, and Firm Size directly have a Positive and Insignificant effect on firm value. Investors pay more attention to the ratio of capital structure or debt ratio. Meanwhile, the capital structure directly has a negative and significant effect on firm value. It indicates that the capital structure policy by reducing external borrowing can provide better results on firm value. Capital structure can be an intervening variable (full mediation) for Liquidity, Profitability, Company Size to solid value. Liquidity to the company's value suggests that liquidity management must be adequately managed by not piling up too much inventory (stock control) so that funds do not stop at the list and can then increase the company's value. Profitability to the value of the company has not been optimally managed. It is recommended to increase the stability of profitability by increasing the number of sales and controlling the costs incurred to increase the company's value. The size of the company to the value of the company is not too optimal. It is recommended to increase the company's value by optimizing the use of available assets or adding production machines to increase the volume of products so that the company's size can increase its value. Capital structure on the company's value, it is advisable to use loans from outside parties with proper considerations and calculations to increase its value. Especially industries that have good corporate matters, such as the ceramic, chemical, animal feed, and cement industries

Reference

Adiputra, I. G., & Hermawan, A. (2020). The effect of corporate social responsibility, firm size, dividend policy and liquidity on firm value: Evidence from manufacturing companies in Indonesia. International Journal of Innovation, Creativity and Change, 11(6), 325–338.

Ahmad, H., Mappatompo, A., & Muslim, M. (2018). Capital Ownership Structure And Decision On Fi-

financial Market Reaction And Corporate Value. International Journal of Innovative Science and Research Technology, 3(9), 395-406.

Arsyad, M., Haeruddin, S. H., Muslim, M., & Pelu, M. F. A. (2021). The effect of activity ratios, liquidity, and profitability on the dividend payout ratio. Indonesia Accounting Journal, 3(1), 36-44.

A. Nurwulandari, Hasanudin, AJS. Budi. Analysis Of The Influence Of Interest Rate, Exchange Value, World Gold Prices, Dow Jones Index, AEX Index, DAX index, and Shanghai Index, On LQ 45 Index In Indonesia Stock Exchange 2012 -2018. Journal of Applied Business and Economics (JABE) Vol 7 No. 2 (Desember 2020) 135-147.

A Nurwulandari, M Darwin. Heywood Case Data Statistics, Using The Model Respesification TechniqueUsing The Model Respesification Techniquehttps://journal.neolectura.com/index.php/nucleus/article/view/173

Anjarwati, K., Chabachib, M., & Demi, I. R. (2015). Pengaruh Profitabilitas, Size, Dan Likuiditas Terhadap Nilai Perusahaan Manufaktur Di Indonesia Dengan Struktur Modal Sebagai Variabel Intervening. Diponegoro Journal of Finance.

Ariyanti, R. (2019). Pengaruh Tangible Asset, Roe, Firm Size, Liquidty Terhadap Price Book Value Dengan Struktur Modal Sebagai Variabel Intervening Pada Perusahaan Perbankan. Balance: Economic, Business, Management and Accounting Journal. https://doi.org/10.30651/blc.v16i1.2450

Bhawa, I., & Dewi S., N. (2015). Pengaruh Ukuran Perusahaan, Likuiditas, Profitabilitas, Dan Risiko Bisnis Terhadap Struktur Modal Perusahaan Farmasi. E-Jurnal Manajemen Universitas Udayana.

Brigham, E. F., & Houston, J. F. (2014a). Dasar-Dasar Manajemen Keuangan : Assetials Of Financial Management. In Salemba Empat. https://doi.org/10.1145/2505515.2507827

Brigham, E. F., & Houston, J. F. (2014b). Dasar-Dasar Manajemen Keuangan Edisi 11 Buku 1. In Salemba Empat Jakarta.

Dewi, N., Andini, R., & Santoso, E. B. (2016). Pengaruh Likuiditas dan Pertumbuhan Perusahaan Terhadap Nilai Perusahaan dengan Variabel Intervening. Jurnal of Accounting 2018.

Djashan, I. A. (2019). The Effect of Firm Size and Profitability on Firm Value with Capital Structure as Intervening Variables in Indonesia. Journal of International Business, Economics and Entrepreneurship.

Fajaria, A. Z., & Isnalita. (2018). The Effect of Profitability, Liquidity, Leverage and Firm Growth of Firm Value with its Dividend Policy as a Moderating Variable. International Journal of Managerial Studies and Research. https://doi.org/10.20431/2349-0349.0610005

Hasanudin, Nurwulandari, A., Adnyana, I. M., & Loviana, N. (2020). The effect of ownership and financial performance on the fair value of oil and gas mining companies in Indonesia. International Journal of Energy Economics and Policy, 10(5), 103–109. https://doi.org/10.32479/ijeep.9567

Hermuningsih, S. (2012). Pengaruh Profitabilitas, Size Terhadap Nilai Perusahaan Dengan Sruktur Modal Sebagai Variabel Intervening. Jurnal Siasat Bisnis. https://doi.org/10.20885/jsb.vol16.iss2.art8

Husnan, S., & Pudjiastuti, E. (2012). Dasar-dasar Manajemen Keuangan. Yogyakarta: UPP AMP YKPN. Ekonomi. https://doi.org/http://dx.doi.org/10.1186/s12913-017-2111-9

Juhandi, N., Fahlevi, M., Abdi, M. N., & Noviantoro, R. (2019). Liquidity, Firm Size and Dividend Policy to the Value of the Firm (Study in Manufacturing Sector Companies Listed on Indonesia Stock Exchange). Advances in Economics, Business and Management Research, 100(Icon), 313–317. https://doi.org/10.2991/icoi-19.2019.53

Marsha, N., & Murtaqi, I. (2017). The Effect of Financial Ratios on Firm Value in the Food and Beverage Sector of the IDX. Journal of Business and Management, 6(2), 214–226.

Mulyana, A., & Saputra, M. (2017). The Influence of Liquidity, Profitability and Leverage on Profit Management and Its Impact on Company Value in Manufacturing Company Listed on Indonesia Stock Exchange Year 2011-2015. International Journal of Managerial Studies and Research, 6(1), 8–14. https://doi.org/10.20431/2349-0349.0601002

Nugroho, N. C. (2014). Analisis Pengaruh Profitabilitas, Pertumbuhan Penjualan, Ukuran Perusahaan, Dan Umur Perusahaan Terhadap Struktur Modal Usaha Mikro Kecil Dan Menengah Kerajinan Kuningan Di Kabupaten Pati. Management Analysis Journal. http://journal.unnes.ac.id/sju/index.php/maj

Nuswandari, C., Sunarto, S., Jannah, A., & Ikromudin, I. (2019). Corporate Social Responsibility Moderated the Effect of Liquidity and Profitability on the Firm Value. Advances in Economics, Business and Management Research, 86(Icobame 2018), 87–90. https://doi.org/10.2991/icobame-18.2019.19

Patricia, Bangun, P., & Tarigan, M. U. (2018). Pengaruh Profitabilitas, Likuiditas, dan Ukuran Perusahaan Terhadap Nilai Perusahaan Dengan Kinerja Keuangan Sebagai Variabel Intervening (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia). Manajemen Bisnis Kompetensi.

Putra, I. G. W. R., & Sedana, I. B. P. (2019). Capital structure as a mediation variable: Profitability and liquidity on company value in real estate companies in Indonesia stock exchange. International Research Journal of Management, IT and Social Sciences. https://doi.org/10.21744/irjmis.v6n4.640

Salvator, D. (2005). Ekonomi Manajerial dalam Perekonomian Global. In Penerbit Salemba Empat.

Sari, I. A. G. D. M., & Sedana, I. B. P. (2020). Profitability and liquidity on firm value and capital structure as intervening variable. International Research Journal of Management, IT and Social Sciences. https://doi.org/10.21744/irjmis.v7n1.828

Setiadharma, S., & Machali, m. (2017). The Effect of Asset Structure and Firm Size on Firm Value with Capital Structure as Intervening Variable. Journal of Business & Financial Affairs, 06(04). https://doi.org/10.4172/2167-0234.1000298

Siddik, M. H., & Chabachib, M. (2017). Pengaruh Roe, Cr, Size, Dan Kepemilikan Institusional Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Intervening. Diponegoro Journal of Management.

Smith, C. W., & Warner, J. B. (1979). Bankruptcy, Secured Debt, and Optimal Capital Structure: Comment. In The Journal of Finance. https://doi.org/10.1111/j.1540-6261.1979.tb02085.x

Sugiyono. (2017). Metode Penelitian Bisnis (Pendekatan Kuantitatif, Kualitatif, Kombinasi dan R&D). In Metodelogi Penelitian.

Sukmawardini, D., & Ardiansari, A. (2018). the Influence of Institutional Ownership . Profitability ,. Management Analysis Journal, 7(2).

Thaib, I., & Dewantoro, A. (2017). Pengaruh Profitabilitas dan likuiditas terhadap nilai perusahaan dengan struktur modal sebagai variabel intervening. Jurnal Riset Perbankan Manajemen Dan Akuntansi.

Warsono, & Zoeboedi, F. (2019). Determinasi Nilai Perusahaan dengan Struktur Modal Sebagai Variabel Intervening Pada Perusahaan LQ45 di Indonesia. Jurnal Riset Bisnis, 3(1), 37–53.

Wulandari, dwi retno. (2013). Pengaruh Profitabilitas, Operating Leverage, Likuiditas Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Intervening. Accounting Analysis Journal, 2(4). https://doi.org/10.15294/aaj.v2i4.4172

Yanti, I. G. A. D. N., & Darmayanti, N. P. A. (2019). Pengaruh Profitabilitas, Ukuran Perusahaan, Struktur Modal, Dan Likuiditas Terhadap Nilai Perusahaan Makanan Dan Minuman. E-Jurnal Manajemen Universitas Udayana. https://doi.org/10.24843/ejmunud.2019.v08.i04.p15

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. Journal of Consumer Research. https://doi.org/10.1086/651257

Zuhroh, I. (2019). The Effects of Liquidity, Firm Size, and Profitability on the Firm Value with Mediating Leverage. KnE Social Sciences. https://doi.org/10.18502/kss.v3i13.4206