

## CHAPTER IV

### RESEARCH RESULTS AND DISCUSSION

#### 4.2. Description of Research Results

This study examines 40 Banking Subsector of the Finance Sector for 4 (four) years from 2018 to 2021, which means that this study contains 160 observational data. Based on the results of multiple regression analysis on 160 observational data, the resulting model does not follow the normal distribution and heteroscedasticity occurs, thus requiring the action of removing outlier data and performing Ln transformation. In this study, the data issued were 55 observation data, so that for the next multiple linear regression process there were 105 observation data.

##### 4.2.1. Classic assumption test

The use of regression analysis as an analytical model requires the fulfillment of assumption tests (classical assumptions) which include: Normality, Multicollinearity, Heteroscedasticity, and Autocorrelation.

##### 4.2.1.1. Normality test

Normality test can be done with the Kolmogorov-Smirnov test. If the residual follows a normal distribution, then the independent variable and the dependent variable automatically follow a normal distribution. The following are the results of the Kolmogorov-

Smirnov test:

**Table 4 Kolmogorov-Smirnov . Test Results**

	Score kolmogorov-smirnov	Significant level
Residual	0,685	0,736

Source: Data processed

The resulting Kolmogorov-Smirnov value is 0.736 with a significant level of more than 5% which means that the residuals follow a normal distribution, thus the variables Current Ratio (X1), Return on Assets (X2), Debt to Assets Ratio (X3), Total Asset Turnover ( X4) and Working Capital To Total Assets (Y) are also normally distributed.

##### 4.2.1.2. Multicollinearity Test

The regression model assumes the absence of multicollinearity or the absence of a perfect correlation (correlation) between one independent variable and the other independent variables. One way that is commonly used to detect the presence of multicollinearity is by looking at the value of the Variance Inflation Factor (VIF) of each independent variable, where if the value is  $VIF > 10$  then there are symptoms of multicollinearity in the regression model.

**Table 5 Multicollinearity Test Results**

No.	Variable	Collinearity Statistics		Decision
		Tolerance	VIF	
1.	lnx1	0.967	1.034	Multicollinearity did not occur
2.	lnx2	0.856	1.169	
3.	lnx3	0.848	1.179	
4.	lnx4	0.841	1.190	

Source: Data processed

Based on the table above, the results of the multicollinearity test show that the independent variable does not occur multicollinearity as indicated by the VIF value of each independent variable is less than 10, then the variable is declared to have no symptoms of multicollinearity in the regression model.

#### 4.2.1.3. Heteroscedasticity Test

The linear regression model assumes that the residual variance is constant or the same for various observations or there is no heteroscedasticity model in the regression model. The heteroscedasticity test used is the rank-spearman correlation, which correlates the independent variables with the residuals. The following are the results of the rank-spearman correlation test:

**Table 6 Heteroscedasticity Test Results**

No.	Variable	H		Decision
		Value	Sig	
1.	lnx1	-0.069	0.482	Heteroscedasticity did not occur
2.	lnx2	0.074	0.452	
3.	lnx3	-0.025	0.797	
4.	lnx4	0.131	0.182	

Source: Data processed

Based on the table above, the results of the heteroscedasticity test show that the independent variable does not occur heteroscedasticity, which is indicated by the value of each independent variable more than 5%.

#### 4.2.1.4 Autocorrelation Test

To find out whether there are symptoms of autocorrelation, you can use the Breusch-Godfrey test (LM Test), the results of which are:

**Table 7 Breusch-Godfrey Test (LM Test)**

	t-count	Sig
CR (X <sub>1</sub> )	- 0.042	0.967
ROA (X <sub>2</sub> )	0.030	0.976
DAR (X <sub>3</sub> )	- 0.004	0.997
TATO (X <sub>4</sub> )	- 0.150	0.881
res2	0.507	0.613

Source: Data processed

The output display shows that the parameter coefficient for the residual variable (Res\_2) gives a significant probability of 0.613. This shows an indication of the absence of autocorrelation.

#### 4.2.2. Multiple Linear Regression Analysis (After Outlier and Ln Transform)

Multiple linear regression analysis using SPSS version 22.00 for windows was carried out through several stages to determine the magnitude of the influence between independent variables on the dependent variable, then the results of multiple linear regression can be seen in the following table:

##### 1. Simultaneous Influence Test

To find out whether the variables Current Ratio (X<sub>1</sub>), Return on Assets (X<sub>2</sub>), Debt to Assets Ratio (X<sub>3</sub>) and Total Asset Turnover (X<sub>4</sub>) have a simultaneous effect on Working Capital to Total Assets (Y) can be seen from the results of the F test, namely:

**Table 8 F: Test Results**

	F count	Significant level
Residual	7,317	0.000 <sup>a</sup>

Source: Data processed

The table above shows that the resulting F value is 7.317 with a significant level of less than 5% (sig = 0.000) which means that the Current Ratio (X<sub>1</sub>), Return on Assets (X<sub>2</sub>), Debt to Assets Ratio (X<sub>3</sub>) and Total Asset Turnover (X<sub>4</sub>) has a simultaneous effect on Working Capital To Total Assets (Y).

Based on the calculation results, it can be seen that the multiple linear regression equation is:

$$\text{LnY} = 3.784 + 0.631 \text{ LnX}_1 + 0.241 \text{ LnX}_2 + 0.548 \text{ LnX}_3 + 0.345 \text{ LnX}_4$$

The equation can be interpreted:

- a. A constant of 3.784 means that if the variables Current Ratio (X<sub>1</sub>), Return on Assets (X<sub>2</sub>), Debt to Assets Ratio (X<sub>3</sub>) and Total Asset Turnover (X<sub>4</sub>) are zero, then the average value of the variable Working Capital To Total Assets (Y) will be 3,784.

- b. The regression coefficient value of the X1 variable (Current Ratio) is 0.631, which means that if the Current Ratio variable is increased by 1% it will cause an increase in Y (Working Capital To Total Assets) results of 0.631% with the assumption that other variables are constant.
- c. The regression coefficient value of the X2 (Return on Assets) variable is 0.241, which means that if the Return on Assets variable is increased by 1%, it will cause an increase in Y (Working Capital To Total Assets) results of 0.241% with the assumption that other variables are constant.
- d. The regression coefficient value of the X3 variable (Debt to Assets Ratio) is 0.548, which means that if the Debt to Assets Ratio variable is increased by 1%, it will cause an increase in Y (Working Capital To Total Assets) results of 0.548% with the assumption that other variables are constant.
- e. The regression coefficient value for the X4 variable (Total Asset Turnover) is 0.345, which means that if the Total Asset Turnover variable is increased by 1%, it will cause an increase in Y (Working Capital To Total Assets) results of 0.345% with the assumption that other variables are constant.

## 2. Coefficient of Determination Value

The value of R<sup>2</sup> is used to measure the proportion of the independent variables that are able to explain the dependent variable with regression. The value of R<sup>2</sup> ranges from 0-1. the higher the value of R<sup>2</sup>, the better the regression model in explaining the effect of the independent variable on the dependent variable. The results of this study can be seen in the following table:

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**Table 9 Model Test Results Summary**

Model	R Square
1	0.226

Source: Data processed

The value of the determinant coefficient (R Square) shows the contribution of the independent variables, namely Current Ratio (X1), Return on Assets (X2), Debt to Assets Ratio (X3) and Total Asset Turnover (X4) have an effect on the Working Capital To Total Assets (Y) variable. . So R Square 0.226 means that Current Ratio (X1), Return on Assets (X2), Debt to Assets Ratio (X3) and Total Asset Turnover (X4) have an influence on the Working Capital To Total Assets (Y) variable of 22.6% . , thus the remaining 77.4% is influenced by other variables that are not included in the equation model.

## 3. Partial Influence Test

To find out whether the variables Current Ratio (X1), Return on Assets (X2), Debt to Assets Ratio (X3) and Total Asset Turnover (X4) have a partial effect on Working Capital To Total Assets (Y) can be seen from the results of the t test, namely:

**Table 10 t test results**

	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
lnx1	0.631	0.138	4.588	0.000
lnx2	0.241	0.103	2.329	0.022
lnx3	0.548	0.301	1.822	0.071
lnx4	0.345	0.293	1.176	0.242

Source: Data processed

The table above shows that the t value produced by the CR variable (X1) is 4.588 with a significant level of less than 5% (sig = 0.000); the t value produced by the ROA (X2) variable is 2,329 with a significant level of less than 5% (sig = 0.022); The t value generated by the DAR variable (X3) is 1,822 with a significant level exceeding 5% (sig = 0.071) and the t value generated by the TATO variable (X4) is 1.176 with a significant level exceeding 5% (sig = 0.242). Thus, it can be concluded that the Current Ratio (X1) and Return on Assets (X2) variables have a partial effect on Working Capital To Total Assets (Y). While the variables Debt to Assets Ratio (X3) and Total Asset Turnover (X4) have no partial effect on Working Capital To Total Assets (Y).

### **4.3. Discussion**

#### **4.3.1. Effect of Current Ratio (X1) on Working Capital To Total Assets (Y)**

According to Altman quoted by (Frank Emmert-Streib & Matthias Dehmer, 2019). Which says that companies experiencing operating losses will continue to reduce current assets in relation to total assets, will cause a low working capital to total asset ratio. Based on this theory, it can be concluded that the current ratio has a positive relationship to WCTA, because if the current ratio increases, the WCTA will also increase. (Irma Handayani, 2021) This theory is in accordance with the results of this study, namely the Current Ratio (X1) has a partial effect on Working Capital To Total Assets (Y). X1) of 4,588 with a significant level of less than 5% (sig = 0.000).

#### **4.3.2. Effect of Return on Assets (X2) on Working Capital To Total Assets (Y)**

Companies that want to increase their working capital needs will invest some of their retained earnings in current assets. Return on Assets in a company is expected to increase by having sufficient working capital because it will most likely be allocated for long-term investment. This is in accordance with research (Alex Casteel & Nancy L. Bridier, 2021) which states that WC/TA has no significant positive effect on ROA. WC/TA shows the company's ability to generate net working capital from its total assets. Working capital is the total current assets available to finance the daily operational activities of the company. Companies with a high WC/TA ratio reflect the company's good ability to finance daily operational activities so that this can increase the company's profitability (Nanda Rizki Amalia, 2021). The theory is in accordance with the results of this study, namely Return on Assets (X2) has a partial effect on Working Capital To Total Assets (Y). significant level of less than 5% (sig = 0.022).



#### **4.3.3. Effect of Debt to Assets Ratio (X3) on Working Capital To Total Assets (Y)**

In carrying out business activities, it is not uncommon for companies to experience a lack of capital. However, if the debt owned by the company is greater than the capital it has, there will be an imbalance between capital and debt, then the company will experience a loss because from the measurement results proposed by (Soemitro Djojohadikusumo Building, 2020) if the ratio is high, it means that the more funding with debt then It is increasingly difficult for companies to obtain loans because it is feared that the company will not be able to cover its debts with its assets, in addition to companies with high Debt to Assets. The ratio has to bear higher financing and higher risk as well. This result according to research (Dedek Kurniawan Gultom, Bahril Datuk, Mei Indriani, 2021) This theory is not in accordance with the results of this study because the Debt to Assets Ratio (X3) does not partially affect Working Capital To Total Assets (Y) this can be seen from the results of the t test which shows that the t value produced by the DAR variable (X3) is 1.822 with a significant level exceeding 5% (sig = 0.071).

#### **4.3.4. Effect of Total Asset Turnover (X4) on Working Capital To Total Assets (Y)**

A high level of WCTA indicates that the company can manage working capital and assets well. The better the management of the company's assets, the more working capital will also increase. If sales increase, profits will also increase, thus the company's profit growth will also increase and assets will increase. The faster the total asset turnover of the company, the more working capital to the total assets produced by the company, which means the two variables influence each other. (Asmaul Husna, Ibnu Satri, 2019) This theory is not in accordance with the results of this study because Total Asset Turnover (X4) does not partially affect Working Capital To Total Assets (Y). This can be seen from the results of the t test which shows that the t value the resulting variable and the t value produced by the TATO variable (X4) is 1.176 with a significant level exceeding 5% (sig = 0.242).

#### **4.3.5. Effect of Current Ratio, Debt to Assets, Total Assets Turnover and Return on Assets Simultaneously on Working Capital Against Total Assets**

Return on assets which is a calculation of profitability can measure management effectiveness based on returns generated from sales and investments with adequate working capital, so that high profitability as measured by return on assets is able to meet the specified working capital needs. Companies with high ROA are able to pay all their obligations and meet capital requirements to keep the company liquid. Current Ratios, Total assets turnover, are several indicators to measure the financial performance of a company. The higher the total asset turnover rate of a company (Mimelientesa Irman & Astri Ayu Purwati & Juliyanti, 2020) the better the asset management for sales activities so that the profit level will also increase. And the Current Ratio is one of the important indicators to determine whether a company is in good health or not. This is because the company is able to maintain the stability of the company's debt. While the Working Capital Turnover Ratio is a ratio to measure the availability of capital compared to its assets. Thus it can be concluded that the Current Ratio, Debt to Assets, Total Asset Turnover and Return on Assets affect Working Capital on Total Assets. (Randa Mohammed Shams Addin Al-Mawsheki, Norzalina Bint Ahmad, Norhafiza Binti Nordin, 2019)

The theory is in accordance with the results of this study, namely Current Ratio (X1), Return on Assets (X2), Debt to Assets Ratio (X3) and Total Asset Turnover (X4) have a simultaneous effect on Working Capital To Total Assets (Y). it can be seen from the results of the F test which shows that the resulting F value is 7.317 with a significant level of less than 5% (sig = 0.000).

