# ISSN: 2828-4216

# **Analysis Determinants of Capital Structure on Sharia Commercial Banks**

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### **ABSTRACT**

This research aims to analyze the influence of profitability, liquidity and asset structure on the capital structure of Sharia Commercial Banks in Indonesia for the 2018-2022 period. The independent variables in this research consist of profitability using the Return on Assets (ROA) ratio, liquidity using the Financing to Deposit Ratio (FDR) ratio, and asset structure using the Fixed Asset Ratio (FAR) ratio, as well as the dependent variable in the form of capital structure using Debt to Equity Ratio (DER). The sampling technique used purposive sampling from a population of 15 Sharia Commercial Banks to 11 Sharia Commercial Banks. This research is quantitative research using secondary data. Secondary data was taken from financial reports or annual reports of Sharia Commercial Banks for the 2018-2022 period. The research method used is quantitative with a descriptive approach. Data analysis was carried out using the panel data regression method. The results of this research are that the profitability and liquidity variables have no influence on the capital structure of Sharia Commercial Banks for the 2018-2022 period, while the asset structure variables have an influence on the capital structure. The capital structure of Sharia Commercial Banks in Indonesia for the 2018-2022 period is more inclined towards Pecking Order Theory, where companies use internal funds more than external funds in the composition of the company's capital structure. It is hoped that this research can contribute to improving the performance of Sharia Commercial Banks in Indonesia through making appropriate and optimal capital structure decisions, as well as being a reference for investors in making investments and assessing the shares of Sharia Commercial Banks that are members of the Indonesia Stock Exchange (BEI).

Keywords: Profitability, Liquidity, Asset Structure, Capital Structure, Pecking Order theory, Trade-Off Theory.

MSR Journal, Vol 3 issue-3 2024 INTRODUCTION

The company was founded with the aim of making the company owner or shareholder prosperous (Suad, 2008). This goal can be realized by maximizing company value with the assumption that company owners or shareholders will prosper if their wealth increases. Therefore, to achieve this goal, the company should pay attention to all company activities, one of which is company financial management. Financial management itself is influenced by financial decisions, including funding or financing decisions (Betavia, 2019). In making decisions, it is a matter of how much debt is used compared to equity when financing company investments or decisions aimed at determining the best capital structure so as to increase company value (Ahmed Sheikh & Wang, 2011).

The company's capital structure describes the comparison between long-term debt and own capital used by the company (Nursyamsu, 2016). In determining the capital structure, financial managers are required to analyze and consider the composition of debt and own capital which will be used to finance all company activities, both for company expenses, running company operations, and for investments that require funding (Mayasari, 2018). According to Brigham and Houston (2001), company funding consists of internal and external capital. Internal capital is obtained from equity, while external capital is obtained from debt, both short-term debt and long-term debt. Funding a company using debt has two benefits for the company, namely reducing taxes (tax deductibles) and providing benefits to shareholders because there is no need to share profits to repay debt if the business runs well.

Kasmir (2014) in a book on financial report analysis reveals that debt to equity ratio (DER) is a ratio used to assess debt versus equity in the capital structure. This ratio is found by comparing debt, including current debt, with all equity. This ratio is useful for knowing the amount of funds provided by the borrower to the company owner. The following is a graph of the average capital structure value (DER) in the Sharia Commercial Bank banking sector:

Figure 1 Average Value of Capital Structure BUS Banking for the 2018-2022 Period



Picture 1. Author's Processed Data

In 2018 the capital structure as measured using the debt to equity ratio (DER) was 95%, in 2019 it rose to 96%, in 2020 the DER increased to 142%. The Covid-19 pandemic is one of the causes of increasing DER because in difficult economic times companies tend to need external funds for company operations (cnbcindonesia.com). Even though it experienced fluctuations in the following year, in 2021 the DER fell by a difference of 53%. In the following year, the DER value experienced a significant increase of 203% in 2022. In response to this problem, the capital structure in a company can experience fluctuations, this change will affect the risk level of each type of capital, in choosing the right capital you must have a combination that can produce a capital structure, which is very optimal. A company's progress can be influenced by management policies regarding capital structure, placing the right capital structure will prevent the company concerned from going bankrupt (Alfiani & Mulyati, 2022).

According to Kasmir (2016) The profitability ratio is a ratio to assess the company's ability to make a profit. This ratio provides a measure of the level of effectiveness of a company's management. The profitability ratio used is Return on Assets (ROA). Fred Weston stated that the liquidity ratio is a ratio that describes the company's ability to meet short-term obligations (debt). The liquidity ratio used is the Financing to Deposit Ratio (FDR). Asset structure is a comparison between fixed assets and total assets owned by the company. This asset structure plays an important role in the capital structure because if the company has debt and has difficulty paying it, the debt will be repaid using tangible and intangible assets. The asset structure ratio used is the Fixed Asset Ratio (FAR) (Hubbi & Ovami, 2023).

The following table presents the development of Return on Assets (ROA), Financing to Deposit Ratio (FDR), Fixed Asset Ratio (FAR) and Debt to Equity Ratio (DER) for the 2018-2022 period.

Table 1 Development of ROA, FDR, FAR, DER in BUS for the 2018-2022 period

Year	ROA	FDR	FAR	DER
2018	1,28	78,53	2,22	95%
2019	1,73	77,91	3,16	96%
2020	1,40	76,36	2,14	142%
2021	1,55	70,12	2,09	89%
2022	2,00	75,19	1,88	203%

Source: Author's Processed Data

ISSN: 2828-4216 The phenomenon described previously has received attention in previous research. However, there are still gaps and inconsistent research results. If you look at the table above, profitability in the 2018-2022 period as measured using the return on assets (ROA) ratio has increased. Meanwhile, the debt to equity ratio (DER) in the 2018-2022 period generally decreased and increased in 2022, meaning that ROA has a positive effect on DER according to (Bukair, 2019; Khotimah, 2023). The higher the profitability value of a bank, the better and higher the debt to equity ratio (DER) value, meaning that this is contrary to research (Ibrahim & Sudirgo, 2023) where DER has a significant negative effect on capital structure, meaning that the changes that occur are not influence each other, so the influence of ROA on DER needs to be carried out further research.

The liquidity aspect using the financial to deposit ratio (FDR) during the 2018-2022 period experienced a decline from 2018 to 2021, which is related to previous research which revealed that partial liquidity values have no influence on capital structure (Hutauruk, 2020), and this is different from research from Fadilla & Putri (2020) that FDR has an influence on the capital structure of Sharia Commercial Banks. This means that there are differences in the results of previous research and there is a lack of information obtained on the influence of FDR on capital structure in Sharia Commercial Banks, so further research needs to be carried out.

The asset structure aspect as measured using the fixed asset ratio (FAR) during the 2018-2022 period experienced a decline. Meanwhile, DER generally experienced an increase and experienced a decrease in 2021, meaning that Asset Structure has a positive effect on Capital Structure According to (Alamsyah, 2020; Hubbi & Ovami, 2023). This is contrary to research (Ibrahim & Sudirgo, 2023) which states that Asset Structure has a negative and significant effect on capital structure. Apart from that, research (Khotimah, 2023) shows that asset structure has no effect on capital structure. By looking at this research gap, the influence of FAR on DER needs to be carried out further research.

The urgency of this research is to present information regarding the capital structure of Sharia Commercial Banks in Indonesia for the 2018-2022 period, in order to help make appropriate and optimal capital structure decisions, as well as being a reference for investors in making investments and evaluating shares of Sharia Commercial Banks. which is a member of the Indonesian Stock Exchange (BEI).

The formulation of the problem in this research is whether Return on Assets (ROA), Financing to Deposit Ratio (FDR), Fixed Asset Ratio (FAR) have an effect on the capital structure of Sharia Commercial Banks in Indonesia in 2018-2022, either partially or simultaneously. The aim of this research is to determine the influence of Return on Assets (ROA), Financing to Deposit Ratio (FDR), Fixed Asset MSR Journal, Vol 3 issue-3 2024
Ratio (FAR) on the capital structure of Sharia Commercial Banks in Indonesia in 2018-2022, both partially and simultaneously.

### LITERATURE REVIEW

## **Trade-Off Theory**

Trade-off theory was developed to include market imperfections and explain debt which is nothing more than trying to explain capital structure (Hayat et al., 2021). Capital structure is said to be optimal when there is a balance between bankruptcy costs (financial distress) and agency costs with the benefits of using debt (leverage) or tax savings (Myers, 1977). In fact, an increase in debt is associated with the risk of bankruptcy, resulting in an increase in the expected costs associated with financial distress. Shows that the trade-off between tax benefits and bankruptcy costs largely determines the optimal capital ratio for banks (Toumi et al., 2012).

## **Pecking Order Theory**

Pecking order theory is one of the theories related to capital structure (Khotimah, 2023). This theory explains the level or sequence based on risk in a company's search for funds which shows that companies prefer to use internal funds in looking for alternative funding starting from the company's retained earnings, debt, and choosing financing using equity as the last option (Myers & Majluf, 1984). Which explains the level or sequence based on disbursement of company funds which shows that the company prefers to use internal funds in seeking alternative funding starting from the company's retained earnings, debt, and chooses financing using equity as the last option as stated by (Mayasari, 2018).

### **Sharia Commercial Bank Capital Structure**

In general, capital or equity or which shows the authority possessed by the company because investors have invested in the company. Equity is initial funding in a business or in starting something related to finance. Equity or capital is a fundamental part that a company must have (Alamsyah, 2020). In the context of Islamic banking, the capital structure consists of debt and shareholder equity where current accounts and investment accounts are the main sources of debt (Bukair, 2019). According to (Riyanto, 1999) capital or equity is the result of production that has been used for further production. Then, in subsequent developments, what is called capital or equity is assessed based on its value, purchasing power, or power in using or employing that capital.

Islamic banks can increase their capital by issuing and selling additional shares. This source of capital increases when the owner injects funds through purchasing shares. Profits that are not distributed to shareholders can also contribute further to equity. However, raising equity in the banking industry is

ISSN: 2828-4216 often considered to be costly, as shares are usually sold below book value. Even if the share price is below book value, there is still potential for a significant increase, because the shares are valued too high and too low (Vira, 2021). It is possible that capital structure decisions can directly influence the level of risk borne by shareholders as well as the expected level of return or profit.

Debt is the largest part of capital so debt is the main element that can influence capital structure (Bukair, 2019). Debt in Islamic banking is also referred to as a liability. Because banks have huge obligations towards customers who hold third party funds, these funds can reach 80% to 90% of the total funds the bank has for its operations. Therefore, banks have an important responsibility to manage these funds well because if banks cannot manage these funds well, then the bank will be faced with the problem of the bank's inability to continue its operations (Vira, 2021). According to (Mardiyanto, 2009) the core of the capital structure problem is finding a way to balance the costs and benefits of debt. The benefits of obligations or debt for Islamic banks come from financing management which can provide a level of decision certainty when providing credit. The decision to provide credit will increase along with an increase in public funds. The fees come from the profit sharing that the bank gives to clients who save funds. So, apart from debt equity, Islamic banks can also use it to meet their capital needs.

Companies that have a poor capital structure are those where the company has very large debts, which will place a very heavy burden on the company concerned (Hubbi & Ovami, 2023).

### **Capital Structure Factors**

According to (Mulyawan, 2015), several factors influence capital structure, including interest rates, earnings stability, asset composition, asset risk, amount of capital required, capital market conditions, nature of management, and company size. Meanwhile, according to Brigham & Houston (2001), the factors that influence capital structure decision making include asset structure and profitability.

### **RESEARCH METHOD**

The research method uses quantitative research with a descriptive approach. Quantitative research is also defined as research that uses a lot of numbers, starting from the data collection process, data analysis and data appearance. And research with a quantitative approach emphasizes analysis of numerical data (numbers) which are then analyzed using appropriate statistical methods (Hardani et al., 2020).

The population in this research is Sharia Commercial Banks (BUS) registered with the Financial Services Authority (OJK) for the 2018-2022 period, consisting of 15 Sharia Commercial Banks. Sampling MSR Journal, Vol 3 issue-3 2024 ISSN: 2828-4216 from the population was carried out purposive sampling by selecting samples using certain criteria. The criteria are as follows:

- 1. Sharia Commercial Banks (BUS) in Indonesia registered with the Financial Services Authority (OJK) for the 2018-2022 period.
- 2. Sharia Commercial Banks (BUS) in Indonesia which routinely publish financial reports or annual reports for the 2018-2022 period.

Based on determining these criteria, 11 samples of Sharia Commercial Banks were obtained, including:

**Table 2 List of Research Samples** 

No	Name of Sharia Commercial Bank
1.	PT Bank Aceh Syariah
2.	PT BPD Nusa Tenggara Barat Syariah
3.	PT Bank Muamalat Indonesia
4.	PT Bank Jabar Banten Syariah
5.	PT Bank Mega Syariah
6.	PT Bank Panin Syariah
7.	PT Bank Victoria Syariah
8.	PT Bank Syariah Bukopin
9.	PT Bank BCA Syariah
10.	PT Maybank Syariah Indonesia
11.	PT Bank Tabungan Pensiunan Nasional Syariah

Source: Author's Processed Data

The type of data in this research uses secondary data. Secondary data describes data obtained indirectly from research objects originating from sources that have been collected by other parties (Hardani et al., 2020). Secondary data results are usually used to determine the growth of a phenomenon over time. Secondary data is used in the form of financial reports or annual reports per year of Sharia Commercial Banks in Indonesia for the period 2018 - 2022. These annual financial reports are sourced and can be accessed through the websites of each Sharia Commercial Bank, so this research includes panel data. Because the data used is a combination of time series and cross section data.

The literature study carried out in this research consisted of collecting journals related to the topic being studied, as well as related theoretical books. And documentation studies in collecting the necessary data. Then secondary data was collected in the form of financial reports or annual reports of Sharia

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Commercial Banks (BUS) registered with the Financial Services Authority (OJK) for the 2018-2022 period.

In this research, quantitative descriptive data analysis techniques were used using panel data regression. This research chooses panel data regression because the data is panel data which uses time and the same companies each year. This panel data regression was chosen because this research aims to find out how much influence Return on assets (X1), Financing to deposit ratio (X2), and Fixed asset ratio (X3) have on the capital structure of Sharia Commercial Banks in Indonesia for the periode 2018-2022 partially or simultaneously. Descriptive statistics are used to describe collected data without intending to draw conclusions that apply generally (Alamsyah, 2016). This descriptive analysis provides tables and descriptions of the conditions for each variable. Then select the panel data regression model using the Chow test, Hausman test and Lagrange multiplier test. Next, a classical assumption test is carried out to provide certainty that the regression equation obtained is accurate in estimation, unbiased and consistent and the classical assumption test is a requirement that must be carried out before carrying out hypothesis testing. After that, a hypothesis test is carried out using the t test which aims to see whether or not there is an influence of the independent (free) variable partially on the dependent (bound) variable (Notoadmojo & Rahmawaty, 2017), then the F test to test all the independent variables in the whether the model together influences the dependent variable (Pandoyo & Sofyan, 2016).

### **RESULT AND DISCUSSION**

#### Research Analysis Results

The results of the research analysis carried out were obtained from data processing with a data processing application in the form of Eviews version 12 which will be explained in the next discussion.

## **Results of Descriptive Statistical Analysis**

**Table 3 Descriptive Analysis Results** 

	DER	FAR.	FDR	ROA
Mean	1.049692	22.80050	98835.65	2.359636
Median	0.778699	17.50821	88.82000	1.200000
Maximum	3.648942	61.94914	5006600.	13.60000
Minimum	0.062315	0.000000	0.000000	-6.860000
Std. Dev.	0.862490	16.81067	676446.8	4.070412
Skewness	1.174786	0.688234	7.136424	1.047294
Kurtosis	3.796572	2.434491	52.26218	4.534740
Jarque-Bera	14.10525	5.074818	6028.176	15.45207
Probability	0.000865	0.079071	0.000000	0.000441
Sum	57.73308	1254.028	5435961.	129.7800
Sum Sq. Dev.	40.16998	15260.33	2.47E+13	894.6858
Observations	55	55	55	55

Source: Data processed by the author of Eviews 12, 2023

The results of the descriptive statistical analysis in the table above can explain the condition of the dependent variable (Y), namely Debt Equation to Ratio (DER) and the independent variables (X1, X2, X3) namely Return on Assets (ROA), Financing to Deposit Ratio (FDR), Fixed Asset Ratio (FAR), which are used in research.

## 1. Debt Equity to Ratio (DER)

DER as the dependent variable (Y) has a maximum value of 3.648942 owned by Bank Syariah Bukopin in 2021, and the minimum value obtained is 0.062315 owned by Bank Aladin Syariah in 2020. The average obtained is 1.049692 with a standard deviation of 0.862490 so it has This means that the data used in the DER variable has a large spread.

### 2. Return on Assets (ROA)

ROA is an independent variable (X1) which has a maximum value of 13.60000 owned by Bank BTPN Syariah in 2019, and the minimum value obtained is -6.860000 owned by Bank Aladin Syariah in 2018. The average obtained is 2.359636, with the standard deviation obtained amounting to 4.070412. From this data it can be seen that the standard deviation is greater than the average so that the data used for the ROA variable has a large spread.

### 3. Financing to Deposit Ratio (FDR)

FDR as an independent variable (X2) has a maximum value of 5006600,000 owned by Bank Aladin Syariah in 2019, and a minimum value of 0.000000 owned by Bank Aladin Syariah in 2021. The average obtained is 98835.65 with a standard deviation obtained of 67644.8. From the data that has been explained, the average is greater than the standard deviation so that the data used for the FDR variable has a small spread.

### 4. Fixed Asset Ratio (FAR)

The FAR as an independent variable (X3) has a maximum value of 61.94914 owned by Bank Muamalat Indonesia in 2019, and a minimum value of 0.000000 owned by Bank Aladin Syariah in 2018 and 2019. The average obtained is 22.80050 with a standard deviation obtained of 0.862490. So the data shows that the standard deviation is smaller than the average so that the data used for the FAR variable has a small spread.

### **Panel Data Regression Model Estimation Test Results**

The selection of the most appropriate estimated regression model contained in panel data is carried out using three test methods including the Chow Test (CEM), Hausman Test, and Lagrange Multiplier Test (LM).

### **Chow Test Results**

The chow test was carried out to produce the best model between the Common Effect (CEM) and the Fixed Effect Model (FEM). The following test results have been obtained:

### **Table 4 Chow Test Results**

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.576648	(10,41)	0.0002
Cross-section Chi-square	41.230660	10	0.0000

Source: Data processed by the author of Eviews 12, 2023

Based on table 4, the results obtained from the chow test in this study show that the Cross-section Chi-square probability value is 0.0000 < 0.05. So the panel data regression model selected according to the Chow test is the fixed effect model, and furthermore a Hausman test is needed to get a more precise model.

### **Hausman Test Results**

#### **Table 5 Hausman Test Results**

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	23.384511	3	0.0000

Source: Data processed by the author of Eviews 12, 2023

The Hausman test is used to obtain the most appropriate regression model between the random effect model and the fixed effect model. Based on the table above, this research shows that the random cross-section probability value is 0.0000 < 0.5. So these results indicate that H0 is rejected so that the best panel data model to use is the fixed effect model compared to the random effect model and there is no need for the next test, namely the Lagrange Multiplier (LM) test.

## **Classic Assumption Test Results**

### **Multicollinearity Test Results**

The multicollinearity test is used to see whether there is a relationship between the independent variables in the regression model, whether they are correlated or not. The results of the multicollinearity test that have been obtained from the author's data processing are as follows:

**Table 6 Multicollinearity Test Results** 

	FAR	FDR	ROA
FAR	1.000000	-0.201669	-0.158990
FDR	-0.201669	1.000000	0.269647
ROA	-0.158990	0.269647	1.000000

Source: Data processed by the author of Eviews 12, 2023

Based on the test results in the table above, it is known that the correlation coefficient value between variables is not more than 0.80. This means that it can be concluded that the data used in this research is free from multicollinearity.

### **Heteroscedasticity Test Results**

The heteroscedasticity test in this study used the Glejser Heteroskedasticity Test. The results required from the basis of decision making are where the significance value is > 0.05, then heteroscedasticity does not occur, but if the significance value is < 0.05, then heteroscedasticity occurs.

Table 7 Heteroscedasticity Test Results

Heteros kedas ticity Tes t: Glejs er Null hypothes is: Homos kedas ticity

F-statistic	0.847774	Prob. F(3,51)	0.4742
Obs*R-s quared	2.612515	Prob. Chi-Square(3)	0.4553
Scaled explained SS	2.862576	Prob. Chi-Square(3)	0.4133

Test Equation: Dependent Variable: AR ESID Method: Least Squares Date: 04/26/24 Time: 21:47

Sample: 155

Included observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C FDR FAR ROA	0.440124 -6.66E-08 0.003624	0.112073 9.29E-08 0.003647	3.927113 -0.716411 0.993848 -0.481259	0.0003 0.4770 0.3250 0.6324
R OA         -0.007373         0.015320           R-s quared         0.047500         Mean dependence           Adjusted R-s quared         -0.008529         S.D. dependence           S.E. of regression         0.438531         Akaike infood           Sum s quared resid         9.807795         Schwarz crit           Log lik elihood         -30.82734         Hannan-Qui           F-s tatis tic         0.847774         Durbin-Wats           Prob(F-s tatis tic)         0.474212		ent var ent var iterion rion in criter.	0.498787 0.436673 1.259176 1.405164 1.315631 1.411656	

Source: Data processed by the author of Eviews 12, 2023

ISSN: 2828-4216 Based on table 4.5, it can be seen that the Chi-square probability value is 0.4553 > 0.05.

Therefore, it can be concluded from this research that the data used in this research does not have heteroscedasticity.

## **Panel Data Regression Model**

Panel data regression model has been carried out. In this research it is a Fixed Effect Model. The following are the results of the Fixed Effect Model:

### **Table 8 Panel Data Regression Model**

Dependent Variable: DER Method: Panel Least Squares Date: 04/26/24 Time: 21:29 Sample: 2018 2022 Periods included: 5

Cross-sections included: 11

Total panel (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.			
С	1.710038	0.322479	5.302792	0.0000			
FAR	-0.031493	0.013658	-2.305826	0.0263			
FDR	-1.10E-07	1.31E-07	-0.840326	0.4056			
ROA	0.029057	0.030498	0.952758	0.3463			
Effects Specification  Cross-section fixed (dummy variables)							
		•					
R-s quared	0.717912	Mean depend		1.049692			
Adjus ted R-s quared	0.628469	S.D. dependent var		0.862490			
S.E. of regression	0.525716	Akaike info criterion		1.767219			
Sum s quared resid	11.33147	Schwarz criterion		2.278176			
Log lik elihood	-34.59851	Hannan-Quinn criter.		1.964810			
F-s tatis tic	8.026514	Durbin-Watsonstat 2.26		2.261269			
Prob(F-s tatis tic)	0.000000						

Source: Data processed by the author of Eviews 12, 2023

Based on table 4.6, the panel data regression equation obtained in this study is as follows:

DER = 1.71003824049 - 0.0314926824497\*FAR - 1.09891476307e-07\*FDR + 0.029057137035\*ROA From the equation above, the model interpretation is carried out as follows:

- 1. The constant value is 1.710038 which shows that all independent variables including ROA, FDR, FAR are considered constant or have not changed, so the rate of increase in the dependent variable DER is 171.0038%.
- 2. The regression coefficient value of the ROA variable is 0.029057, which means that ROA can explain DER disclosure of 0.029057%. If ROA increases by one unit, then DER disclosure will increase by 0.029057 assuming the other independent variables remain constant.

ISSN: 2828-4216 3. The coefficient value for the Financing to Deposit Ratio (FDR) variable obtained is -1.098914. These results show that if the FDR variable increases in units, the company's Debt to Equity Ratio (DER) will experience a decrease of 1.098914 with the assumption that the other independent variables are constant.

4. The coefficient value for the Fixed Asset Ratio (FAR) variable obtained is -0.031493. These results show that if the FAR variable increases in units, the company's Debt to Equity Ratio (DER) will experience a decrease of 0.031493 with the assumption that the other independent variables are in a constant condition.

## **Hypothesis Testing Results**

Hypothesis testing is used to carry out coefficient significance tests based on the best panel data model that has been determined in the previous test. The best model chosen is the Fixed Effect Model. The following are the results of hypothesis testing from the selected model: t test

The t test was carried out to determine the effect of each independent variable on the dependent variable. Based on table 4.6, the results of the t test in this study are:

- 1. H1: Return on Assets (ROA) has no effect on the Debt to Equity Ratio (DER) variable The Return on Assets (ROA) variable shows that the ROA t-Statistic result is 0.952758 with a probability value of 0.3463 > 0.05. Therefore, it can be concluded that ROA partially has no effect on the Debt to Equity Ratio (DER) and the hypothesis is rejected.
- 2. H2: Financing to Deposit Ratio (FDR) has no effect on the Debt to Equity Ratio (DER) variable It can be seen that the FDR t-statistic result is -0.840326 with a probability value of 0.4056 > 0.05. Therefore, it can be concluded that partial FDR has no significant effect on the Debt to Equity Ratio (DER) and the hypothesis is rejected.
- 3. H3: Fixed Asset Ratio (FAR) has a significant negative effect on the Debt to Equity Ratio (DER) variable
  - It can be seen that the t-Statistic result is -2.305826 with a probability value of 0.0263. Therefore, it can be concluded that it has a significant negative effect on the Debt to Equity Ratio (DER) and the hypothesis is accepted.

### F test

The F statistical test is basically to see that all independent variables included in the model have a joint influence on the dependent variable. Judging from table 4.6, the F test results show that the F-statistic value is 8.026514 and the Probability (F-statistic) value is 0.000000 < 0.05. This can be interpreted as meaning that all independent variables simultaneously have a significant positive effect on the dependent variable, namely the Debt Equity Ratio (DER), which means that this research model is feasible and the hypothesis is accepted.

Coefficient of Determination Results (R2)

The Adjusted R-squared value is 0.628489 or 62.8489%. This value shows that the independent variables consisting of ROA, FDR, FAR are able to explain the dependent variable, namely DER at Sharia Commercial Banks in Indonesia of 62.8489%. the remaining 37.1511% is shown by other variables not included in this research.

### **Discussion of Research Results**

Based on the results of the f test (simultaneous) that has been carried out, it is known that the independent variables consisting of profitability (ROA), liquidity (FDR), and asset structure (FAR) have a significant positive influence on the dependent variable, namely capital structure (DER). Meanwhile, the results of the t (partial) test that has been carried out show one variable that has an influence on the capital structure (DER) of Sharia Commercial Banks, namely the asset structure variable (FAR). A description of the results obtained is explained as follows:

The Effect of Return on Assets (ROA) on Debt to Equity Ratio (DER)

Based on the results in table 4.6, ROA has a coefficient value of 0.029057 and a probability value of 0.3463 which is greater than the significance value (0.3463 > 0.05). ROA partially does not have a significant relationship with DER. The results of this research are in line with research by (Ahmed Sheikh & Wang, 2011; Alamsyah, 2020; Hutauruk, 2020; Ibrahim & Sudirgo, 2023) stating that profitability (ROA) has no effect on capital structure (DER), this research does not support research that conducted by (Bukair, 2019; Hubbi & Ovami, 2023; Mutawali et al., 2023) which states that profitability (ROA) influences the capital structure (DER) of Islamic Commercial Banks.

The results of this study indicate that information on changes in ROA available from financial reports has no effect on changes in capital structure. This can also be because banks in making decisions when making funding prefer internal capital over debt because of the high rate of return. In line with the

MSR Journal, Vol 3 issue-3 2024 ISSN: 2828-4216 opinion of (Brigham & Houston, 2001) states that the factors that influence decision making, companies tend to finance most of their funding needs with internally generated funds. In the pecking order theory itself (Myers & Majluf, 1984) that companies prefer to use internal funds in seeking alternative funding starting from the company's retained earnings, debt, and choosing financing using equity as part of the last option.

Return on assets measures management's success in generating profits, where the smaller this ratio means the lack of bank management's ability to manage assets to increase income and reduce costs for each bank (Bank Indonesia Circular Letter No. 9/24/DPbS 2007). The research results show that ROA has increased in every sharia bank every year, so that the company is declared very healthy. However, Bank Panin Syariah received a minus score among all existing Sharia Banks, namely -40%, where the industry standard value for ROA that can be said to be good is 5%. Therefore, Bank Panin Syariah is considered incapable and not optimal in managing company assets into profits.

### The Effect of Financing to Deposit Ratio (FDR) on Debt to Equity Ratio (DER)

The results in table 4.6 FDR have a coefficient value of -1.098914 and a probability value of 0.4056 which is greater than the significance value (0.4056 > 0.05). Partially, FDR has no significant effect on DER. The results of this research are in line with research by (Alamsyah, 2020; Efendi et al., 2021; Fathiya Luthfita et al., 2022; Hutauruk, 2020) which states that liquidity (FDR) has no effect on capital structure (DER). However, the results of this research are not in line with research conducted by (Listyawati et al., 2017), and (Fadilla & Putri, 2020).

The results of this research mean that liquidity (FDR) has no influence on changes in capital structure. Because the higher the liquidity, the lower the capital structure will be because short-term obligations have been met (Alamsyah, 2020). However, this is different from the tests that have been carried out on Sharia Commercial Banks in Indonesia, where every year it shows instability in its FDR because the lower the liquidity, the higher the capital obtained. This means that the more financing (Murabahah, Musyarakah and Mudharabah) that is disbursed, the greater the profits or profits from profit sharing obtained by the company, meaning that the company to finance most of its operational activity needs uses internal funding for its operational activities with a large rate of return on the financing process. that has been conveyed to customers or the public.

Viewed from the perspective of pecking order theory, the results of this research show that liquidity as proxied by the financing to deposit ratio (FDR) actually has no impact on the capital structure of Islamic banking companies in Indonesia in meeting their short-term obligations with available assets.

ISSN: 2828-4216 This shows that sharia banking in Indonesia tends to use its internal funding sources to finance its shortterm obligations, as seen in the increase in financing distributed such as murabahah, musyarakah and mudharabah which can ultimately increase profits or profits for the company. And in accordance with the pecking order theory, companies tend to use internal funds before deciding to take external loans.

From the research results, the FDR value for sharia banking for the 2018-2022 period has a good limit value for FDR of 86%-100% (Rachmah, 2023). This means that if this limit exceeds the bank's liquidity, it becomes one of the bad categories. FDR has increased every year in sharia banking over a period of 5 years so that the company can be declared very healthy. However, the Maybank Syariah bank received a score of 493,790.63% on the industry standard value which should not exceed 100%. So the management of Maybank Syariah Bank needs attention so that it can anticipate liquidity needs and implement liquidity risk management, and increase the FDR value which is ranked 5 to rank 2 to 1.

## Influence of Fixed Asset Ratio (FAR) on Debt to Equity Ratio (DER)

Based on the results obtained in table 4.6, FAR has a coefficient value of -0.031493 and a probability value of 0.02363 which is smaller than the significance value (0.02363<0.05), so FAR has an effect on DER. This research supports research (Alamsyah, 2020; Fathiya Luthfita et al., 2022; Ibrahim & Sudirgo, 2023) which states that FAR has an effect on DER. However, this research does not support research (Efendi et al., 2021; Khotimah, 2023) which states that FAR has no effect on DER.

The research results show that the greater the assets, the greater the debt or the higher the asset structure, the higher the capital structure (Priambodo, 2014). Companies operating in the service sector, such as banking, tend to have assets that are larger than fixed assets, this is because their products are cash, securities and deposits which require rapid disbursement of funds. Companies that have relatively large fixed assets tend to use foreign capital in their capital structure. In addition, dominant companies use debt to purchase assets, and utilize the capital structure to increase the growth of their company and expand their company's operations. Companies that have large amounts of fixed assets can also use high amounts of debt because these assets can be used as collateral for company loans (S.m., 2021). This also allows the company to access more of its operational capabilities and company growth.

The results of this research also explain that the asset structure in Islamic banking in Indonesia is more directed towards the use of trade-off theory rather than pecking order theory, because companies that have large fixed assets are more likely to use debt because these assets can be used as collateral and can reduce costs. Bankruptcy can also increase the company's borrowing capacity. Companies that MSR Journal, Vol 3 issue-3 2024
use high levels of fixed assets are also in line with the Trade-off theory, this can be done by sharia banking in Indonesia to create an optimal capital structure by utilizing foreign debt with lower interest rates or more favorable terms.

### **CONCLUSION**

This research was conducted to determine the effect of profitability (ROA), liquidity (FDR), and asset structure (FAR) on the capital structure of Sharia Commercial Banks in Indonesia. The results of panel data regression with a fixed effect model (FEM) show that the simultaneous results of profitability, liquidity and asset structure variables have a significant influence on the capital structure of Sharia Commercial Banks. Apart from that, the following are conclusions from each independent variable regarding the dependent variable.

- 1. Profitability has no effect on the Capital Structure of Sharia Commercial Banks in Indonesia.
- 2. Liquidity has no effect on the Capital Structure of Sharia Commercial Banks in Indonesia.
- 3. Asset structure influences the capital structure of Islamic commercial banks in Indonesia.

The following are suggestions that can be given to related parties, including:

1. For Sharia Commercial Banks in Indonesia.

Sharia Commercial Bank management should pay more attention to and manage their asset structure more effectively. Improving the quality of fixed asset management can help optimize the capital structure and increase the bank's financial stability. In addition, even though Return on Assets (ROA) and Financing to Deposit Ratio (FDR) do not show a partial influence on DER, it is still important for banks to continue to monitor and improve their profitability and liquidity to support long-term growth and sustainability. Implementing managerial strategies that focus on optimizing assets and wise capital management will be very beneficial for the progress of sharia banking in Indonesia.

### 2. For Investors

You should be able to choose shares in Sharia Commercial Banks in Indonesia more carefully in evaluating the bank's fixed asset structure before investing. Even though Return on Assets (ROA) and Financing to Deposit Ratio (FDR) do not show a partial influence on DER, investors still need to consider bank profitability and liquidity as important factors in making investment decisions. By paying attention to optimal fixed asset management and capital structure, investors can reduce risks and increase potential profits from their investments in the Islamic banking sector.

3. Further research can extend the research period so that more data can be sampled and add other variables so that the research results become more accurate. The addition of variables can be used



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as a novelty that can provide new insights so that you can find out what factors can influence the disclosure of Capital Structure.

4. It is hoped that further research will be able to add Sharia Commercial Banks in other countries so that in the future the research results can be used as a source of new literature.

### REFERENCE

- Ahmed Sheikh, N., & Wang, Z. (2011). Determinants Of Capital Structure: An Empirical Study Of Firms
  In Manufacturing Industry Of Pakistan. Managerial Finance, 37(2), 117–133.

  Https://Doi.Org/10.1108/03074351111103668
- Alamsyah, L. (2020). Pengaruh Tingkat Pertumbuhan, Struktur Aktiva, Likuiditas Dan Profitabilitas Terhadap Struktur Modal (Studi Kasus Tiga Perusahaan Sektor Perbankan Yang Terdaftar Di Indeks Saham Syariah Indonesia) [Preprint]. Open Science Framework. Https://Doi.Org/10.31219/Osf.lo/Zbx4c
- Alfiani, A., & Mulyati, H. (2022). Analisis Dampak Pandemi Covid-19 Terhadap Struktur Aktiva Dan Struktur Modal Pada Perusahaan Bumn Yang Terdaftar Di Bursa Efek Indonesia. Mandiri, 1(2), 1–8.
- Betavia, A. E. (2019). Analisis Pengaruh Profitabilitas, Likuiditas, Kebijakan Dividen, Pertumbuhan Perusahaan Dan Struktur Aktiva Terhadap Struktur Modal. Jurnal Eksplorasi Akuntansi, 1(4), Article 4. Https://Doi.Org/10.24036/Jea.V1i4.173
- Brigham, E. F., & Houston, J. F. (2001). Manajemen Keuangan (8 Ed.). Erlangga.
- Bukair, A. A. A. (2019). Factors Influencing Islamic Banks' Capital Structure In Developing Economies. Journal Of Islamic Accounting And Business Research, 10(1), 2–20. Https://Doi.Org/10.1108/Jiabr-02-2014-0008
- Fadilla, & Putri, W. (2020). Rentabilitas & Likuiditas Terhadap Struktur Modal Pada Bank Bumn Syariah Di Indonesia. Jurnal Keuangan Dan Bisnis, 18(1), Article 1.
- Fathiya Luthfita, Hesty Ervianni Zulaecha, Imam Hidayat, & Sigit Budi Santoso. (2022). Pengaruh Profitabilitas, Struktur Aset, Likuiditas, Pertumbuhan Penjualan Dan Leverage Terhadap Struktur Modal. Jurnal Ekonomi, Bisnis Dan Manajemen, 1(4), 131–147. Https://Doi.Org/10.58192/Ebismen.V1i4.152
- Hayat, A., Hamdani, Azhar, I., & Yahya, M. N. (2021). Manajemen Keuangan (Teori, Konsep, Dan Aplikasi) Yayasan Pengembang Tahun 2001 Untversitas Nbgert Yogyakarta PDF Free Download. Adoc.Pub. https://adoc.pub/manajemen-keuangan-teori-konsep-dan-aplikasi-yayasan-pengemb.html
- Hardani, Helmina, A., Ustiawaty, J., Utami, E. F., & Istiqomah, R. R. (2020). Metode Penelitian Kualitatif & Kuantitatif. Cv. Pustaka Ilmu.
- Hubbi, A. W., & Ovami, D. C. (2023). Analisis Determinan Struktur Modal: Studi Indonesia. Owner: Riset

- MSR Journal, Vol 3 issue-3 2024 ISSN: 2828-4216 Dan Jurnal Akuntansi, 7(4), Article 4. Https://Doi.Org/10.33395/Owner.V7i4.1713
- Hutauruk, F. N. (2020). Ukuran Perusahaan Sebagai Pemoderasi Dalam Hubungan Profitabilitas Dan Likuiditas Terhadap Struktur Modal Bank Umum Syariah. Ekonomika Syariah: Journal Of Economic Studies, 4(2), Article 2. Https://Doi.Org/10.30983/Es.V4i2.3633
- Ibrahim, B. P., & Sudirgo, T. (2023). Pengaruh Likuiditas, Profitabilitas, Ukuran Perusahaan, Dan Struktur Aktiva Terhadap Struktur Modal. Jurnal Paradigma Akuntansi, 5(1), 2044–2054. Https://Doi.Org/10.24912/Jpa.V5i1.22166
- Kasmir. (2014). Analisis Laporan Keuangan (1 Ed.). Pt.Rajagrafindo Persada.
- Kasmir. (2016). Analisis Laporan Keuangan (1 Ed.). Rajawali Pers.
- Khotimah, C. (2023). Pengaruh Profitabilitas, Likuiditas, Dan Struktur Aktiva Terhadap Struktur Modal Pada Perusahaan Sektor Industri Barang Konsumsi Yang Terdaftar Di Bei. Ristansi: Riset Akuntansi, 4(1), 111–124. Https://Doi.Org/10.32815/Ristansi.V4i1.1124
- Listyawati, L., Oemar, A., & Supriyanto, A. (2017). Pengaruh Ukuran Perusahaan (Size), Profitabilitas (Roa), Growth Dan Likuiditas Terhadap Struktur Modal Perusahaan Perbankan Syariah Periode Tahun 2011—2014. Journal Of Accounting, 3(3), Article 3. Https://Jurnal.Unpand.Ac.Id/Index.Php/Aks/Article/View/675
- Mardiyanto, H. (2009). Intisari Manajemen Keuangan: Teori. Soal dan Jawaban, Grasindo, Jakarta.
- Mayasari, I. (2018). Capital Structure Determinants Of Manufacturing Firms Listed On Indonesia Stock Exchange. International Journal Of Business, Economics And Law, 16(5), 184–197.
- Mulyawan, S. (2015). Manajemen Keuangan: Pengantar Prof. Dr H. Mohammad Najib.
- Mutawali, M., Lestari, I., & Widiyanti, S. D. (2023). Pengaruh Profitabilitas Dan Struktur Aset Terhadap Struktur Modal (Studi Empiris Pada Perusahaan Properti Dan Real Estate Yang Terdaftar Di Bei Tahun 2016 2021). Jurnal Arastirma, 3(2), Article 2. Https://Doi.Org/10.32493/Arastirma.V3i2.32010
- Myers, S. C. (1977). Determinants Of Corporate Borrowing. Journal Of Financial Economics, 5(2), 147–175. Https://Doi.Org/10.1016/0304-405x(77)90015-0
- Myers, S. C. (1984). The Capital Structure Puzzle. The Journal Of Finance, 39(3), 574–592. Https://Doi.Org/10.1111/J.1540-6261.1984.Tb03646.X
- Myers, S. C., & Majluf, N. S. (1984). Corporate Financing And Investment Decisions When Firms Have Information That Investors Do Not Have. Journal Of Financial Economics, 13(2), 187–221. Https://Doi.Org/10.1016/0304-405x(84)90023-0

- Notoadmojo, I., & Rahmawaty, A. (2017). Analisis Faktor-Faktor Yang Memengaruhi Financial Sustainability Ratio Pada Bank Umum Syariah Di Indonesia Periode 2010—2014. Equilibrium: Jurnal Ekonomi Syariah, 4(1), 20. Https://Doi.Org/10.21043/Equilibrium.V4i1.1836
- Nursyamsu, N. (2016). Struktur Modal Pada Perbankan Syariah. Bilancia: Jurnal Studi Ilmu Syariah Dan Hukum, 10(1), 68–85. Https://Doi.Org/10.24239/Blc.V10i1.280
- Pandoyo, & Sofyan, M. (2016). Metodelogi Penelitian Keuangan Dan Bisnis. In Media.
- Priambodo, T. J. (2014). Pengaruh Struktur Aktiva, Tingkat Pertumbuhan Penjualan Dan Profitabilitas Terhadap Struktur Modal (Studi Pada Perusahaan Tekstil Dan Garmen Yang Listing Di Bei Periode 2010-2012). Jurnal Administrasi Bisnis, 9(1), Article 1. Http://Administrasibisnis.Studentjournal.Ub.Ac.ld/Index.Php/Jab/Article/View/392
- Rachmah, T. N. (2023). Analisis Determinan Struktur Modal Perbankan Umum Syariah Di Indonesia (Periode Q1.2016-Q4.2020). https://dspace.uii.ac.id/handle/123456789/42818
- Riyanto, B. (1999). Dasar-Dasar Pembelajaran Perusahaan. BPFE.
- S.m, I. (2021). Pengaruh Struktur Aktiva, Ukuran Perusahaan, Dan Profitabilitas Terhadap Struktur Modal (Studi Pada Perusahaan Makanan dan Minuman Yang Terdaftar Di Bursa Efek Indonesia). Jurnal Ilmiah Mahasiswa FEB, 9(2), Article 2. https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/7593
- Suad, H. (2008). Manajemen Keuangan: Teori Dan Penerapan Buku 1 (4 Ed.). BPFE.
- Surat Edaran Bank Indonesia No. 9/24/DPbS Sistem Penilaian Tingkat Kesehatan Bank Umum Berdasarkan Prinsip Syariah. (t.t.). Diambil 25 Juni 2024, dari https://www.bi.go.id/id/publikasi/peraturan/Pages/se\_092407.aspx
- Toumi, K., Louhichi, W., & Viviani, J.-L. (2012). Alternative Financial Decision Principles: Theoretical Foundations of Islamic Banks' Capital Structure. Dalam W. A. Barnett & F. Jawadi (Ed.), International Symposia in Economic Theory and Econometrics (hlm. 157–172). Emerald Group Publishing Limited. https://doi.org/10.1108/S1571-0386(2012)0000022013
- Vira, L. M. (2021). Pengaruh Faktor Mikro Dan Makro Ekonomi Terhadap Struktur Modal Bank Umum Syariah Di Indonesia Periode 2013-2019. Industrial Research Workshop and National Seminar (IRWNS), 12. https://garuda.kemdikbud.go.id/documents/detail/2944239