

Capital Structure and Its Implication on Profitability: An Empirical Study from Sharia Banks in Indonesia

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Abstract

Profitability is one of the business goals that need to be achieved to ensure sustainability, as well as a chance to expand. Capital structure is the subject of an interesting discussion in determining profitability. This study aims at examining the influence of capital structure on profitability in sharia banks in Indonesia in which the management of sharia banks is different from conventional banks. A capital structure used in this study comprises the Debt-to-Equity Ratio (DER) and Debt-to-Asset Ratio (DAR), while profitability comprises Return-on-Equity (ROE) and Return-on-Asset (ROA) in sharia banks in Indonesia for five years. The findings revealed that there was no significant influence between capital structure and profitability in sharia banks in Indonesia, both measured using DER, DAR on ROE, and ROA. This study implies that the findings are different from previous studies, but the results of the correlation coefficient show a negative direction. In other words, the higher the use of debt, the lower the profitability. The use of debt that is too high can reduce the level of profitability, and not produce assets at the optimal point. Therefore, the composition of debt in sharia banks needs special attention to increase the expected profit.

Keywords

capital structure; profitability; ROA; ROE; sharia banks



I. Introduction

The banking industry plays a significant role both as a financial institution in supporting the payment system and also as the national economy, including sharia banking. Sharia banking in Indonesia has grown rapidly in the last five years in terms of assets, third-party funds, and financing provided. The Islamic Financial Services Board stated that with the potential of Muslims as much as 13% of the world's population, sharia banking still has a very large space to develop. Indonesia is the 9th largest sharia banking asset globally (Puspaningtyas, 2018). Based on Law No. 21 of 2008, sharia banking is a bank that carries out business activities based on sharia principles/law principles. Even in 2015, the Minister of Finance, Bambang Brodjonegoro, said that sharia banks were able to survive and continue to grow amidst the crisis conditions (Rachman, 2015). Sharia banks do not deal with foreign exchange much and fluctuating Sharia banks are less affected (Sitompul and Nasution, 2019). On a national scale, in May 2018 there were 13 sharia banks (Ariadin et al., 2020). Currently, there are 14 sharia banks operating in Indonesia with 1,875 sharia offices.

Sharia banking is one of the financial institutions that has the function of balancing, coordinating and coordinating various sectors of the economy. The strategic role in the development is to improve the quality of livelihoods of citizens as a whole through national stability and economic growth. Meanwhile, the bank is "Department of store, which is a body or organization that provides services / services for various financial

services where the vital activities are receiving payments, savings, current deposits and deposits, which is used to be able to make credit / money loans aimed at every community needs, and banks are places used in exchanging money. (Ichsan et al, 2021)

These days, the banking system has experienced massive revolution which has brought about turnaround performance in the survival, growth and behaviour of the industry. The reforms were focused on ease of banking, guaranteed competition and positioning the banking industry to carry out the role of financial intermediation and economic development (Kama 2006, Okpara 2011, Essien, 2012). Critical to the survival and growth of the banking system is the nature of organizational strategies adopted by participating banks within the system. The formulation and implementation of organizational strategies by banks inform the long-term direction of the organization, development of new initiatives, and actions capable of keeping them in position to gain and maintain sustained success (Olujide & Aremu in Mansaray, 2020).

The data from the Financial Services Authority (OJK – Otoritas Jasa Keuangan) states that the profit owned by sharia conventional banking and sharia business units (UUS – Unit Usaha Syariah) has decreased by Rp1.79 trillion, but in August 2015, based on the OJK Indonesia Banking Statistic, the position of the return on assets rate was 0.46% (Kania & Harefa, 2015). The ability to generate profitability in sharia banking is fairly low. In 2017, the level of profitability risk (ROA) was 1.1%, and increased in March 2018 with a value of 1.23%, even though the profit income obtained by sharia banking was quite good. According to the OJK's data, the level of ROA obtained by sharia banking was low as of June 2018 (Yudistira, 2018a). Based on the ability to generate profits from the effectiveness of banking in generating income, since 2018, there has been a twofold increase in the return of assets of sharia banks from 0.73% to 1.26%, while for UUS, the risk of profitability in 2017 was 2.9%, and decreased in 2018 to 2.4% (Puspaningtyas, 2018; Yudistira, 2018a).

Previous research conducted by Supiyadi et al. (2018) and Yunesti et al. (2017) revealed that capital structure affects profitability. The better the level of the capital structure owned, the better the condition for the profitability obtained. Since some research also provided different results, this research seeks to examine the relationship of these variables using the variable Debt to Equity Ratio, Debt to Asset, Return on Equity, and Return on Asset in sharia banks in Indonesia using a five-year observation period.

II. Review of Literature

2.1. Capital Structure

Capital structure is a complex financial decision due to its relationship with other financial decision variables, which is beneficial for maximizing banking wealth by understanding the risks that will be faced from the depiction of its capital structure (Mawarni et al., 2016). According to Ameen and Shahzadi (2017), a capital structure is an important factor in making investment decisions because it can affect banking performance, and also profitability. In addition, they added that the capital structure was a balance between debt, preferred stock, and equity. Capital structure is the amount of long-term debt and equity in fulfilling banking needs so that it is expected to provide benefits to banks and by controlling capital properly to make a balance between debt and equity owned (Septariani and Johan, 2018). According to Weston and Copelan (2009), capital structure is permanent financing consisting of long-term debt, preferred stock, and shareholder's capital, the book value of shareholder's capital including common stock. Although having preferred stock, paid-up capital accumulated retained earnings will be

added by the shareholders. Keown et al. (2005) state that capital structure is the mix of long-term sources of funds by banks (Supiyadi et al., 2018). The capital structure is described based on the structure of assets and debt, both short and long term, contained in each financial statement that is expected to benefit banks and shareholders. The optimal capital structure can optimize the balance between risk and return in order to maximize share prices. Capital structure is measured using the calculation of the debt to equity ratio and the debt of asset ratio.

2.2. Debt-to-Equity Ratio (DER)

The Debt-to-Equity Ratio (DER) is the ratio between total debt and equity owned by creditors or bank owners (Septariani and Johan, 2018). According to Kasmir (2010), DER is the ratio used to assess debt and equity. Harahap (2010) states that DER indicates that the extent to which bank owner's capital can cover debts from outside parties (Arista and Topowijono, 2017). DER is the valuation ratio between total debt and total equity (Violita and Sulasmiyati, 2017).

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$$

2.3. Debt-of-Asset Ratio (DAR)

Syamsuddin (2009) defines the Debt-of-Asset Ratio (DAR) as total assets owned by banks to pay creditors, the higher the resulting ratio, the more loan capital is used to generate profits. DAR is the valuation ratio to compare between total debt and total assets (Violita and Sulasmiyati, 2017). According to Harahap (2010), DAR is the extent to which total assets cover debt (Marusya and Magantar, 2016). In addition, DAR is total assets issued from the proceeds of debt made by banks. The higher the DAR level, the more debt the bank will bear (Septariani and Johan, 2018).

$$DAR = \frac{\text{Total Debt}}{\text{Total Assets}}$$

2.4. Profitability

Capital structure has a relationship with profitability, the higher the value of the capital structure, the higher the level of bank profitability. The level of profitability can affect the value of banking. The higher the level of profitability, the higher the banking value and welfare of the owners or shareholders of the company. According to Ichsan et al. (2021), Profitability is a measure to assess the ability of banks to generate profits (Syarib and Prijati, 2016:3 in Septariani and Johan, 2018). Profitability is related to the calculation of Return-of-Equity (ROE) and Return-of-Assets (ROA). The presence of ROE or ROA can determine the success of these banks in making a profit.

2.5. Return-of-Equity (ROE)

Return-of-Equity (ROE) is the ability of a bank to utilize its capital for profit (Sudirman, 2013 in Rionita and Abudanti, 2018). Hanafi (2010:42) states that ROE the ratio of net income to equity (Violita and Sulasmiyati, 2017). ROE can be seen and assessed from the perspective of shareholders because of the comparison between net income and share capital (Septariani and Johan, 2018). Therefore, ROE is a calculation from the comparison between the net profit obtained by the bank and the capital owned by the bank. The higher the level of the resulting ratio, the higher the net profit generated by banks.

$$\text{ROE} = \frac{\text{Total Net Profit}}{\text{Total Equity}} \times 100\%$$

2.6. Return-of-Asset (ROA)

Return-of-Asset (ROA) is the ratio used by banks in determining the effectiveness of the company in generating profits by utilizing total assets (Marusya dan Magantar, 2016). Moreover, ROA is the comprehensive company's ability to generate profits with the total number of assets or assets available in banking (Kashmir, 2008 in Violita and Sulasmiyati, 2017). ROA shows the ability to generate profits from the use of banking assets. The formulation is that the greater the ROA, the better the banking performance (Limpaphayom and Ngamwutikul, 2004).

$$\text{ROA} = \frac{\text{Total Net Profit}}{\text{Total Assets}} \times 100\%$$

III. Research Methods

Research using the variable of profitability and capital structure has been carried out before but has given different results. The research conducted by Astuti et al. (2015) examining the top 100 companies that go public reveals that there is a significant positive influence between the two variables. Meanwhile, Mawarni et al. (2016) researched a specific object, namely one of the major banks in Indonesia. The findings show that the composition of wadi'ah (funds) will have an impact on the ability to pay wadi'ah bonuses with a certain EBBWT level. Moreover, the research conducted by Marayusa and Magantar (2016) using Objects in tobacco manufacturing companies resulted in the finding that the capital structure contained in DAR and DER on profitability (ROA). Furthermore, Ameen and Shahzadi (2017) found that there is a significant influence between debt ratio on ROA and ROE. Violita and Sulasmiyati (2017) revealed that capital structure (DER) has a positive influence on ROA and ROE. In addition, Septariani and Johan (2018) stated that DER affects ROE, while DAR affects ROA. The analytical research results' conducted by Das (2018) revealed that there were 65% of research, which found that is a relationship between capital structure and profitability, while 15% did not show a relationship. Rionita and Abudanti (2018) also found that DER has a negative influence on ROE. Meanwhile, Supiyadi et al. (2018) found that there is a positive influence between capital structure and profitability, while Ramadhani and Suwitho (2019) revealed that DAR and DER affect ROE.

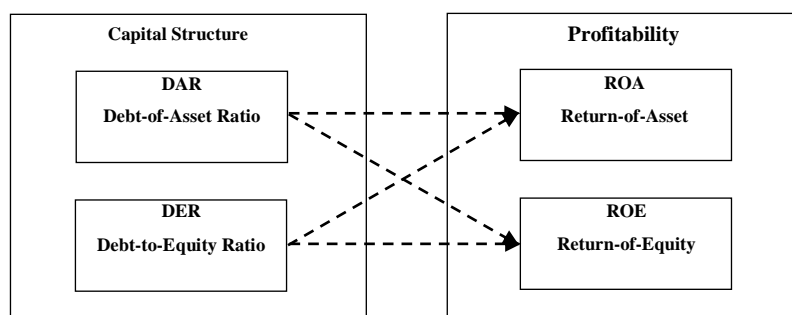


Figure 1. Research Framework

Hypothesis 1: The variables of DAR and DER simultaneously have a significant influence on ROA.

Hypothesis 2: The variable of DAR partially has a significant influence on ROA.

Hypothesis 3: The variable of DER partially has a significant influence on ROA.

Hypothesis 4: The variables of DAR and DER simultaneously have a significant influence on ROE.

Hypothesis 5: The variable of DAR partially has a significant influence on ROE.

Hypothesis 6: The variable of DER partially has a significant influence on ROE.

This research was conducted to examine the influence of DAR and DER on ROA and ROE in 12 sharia banks in Indonesia. There were 240 pieces of data from 5 observation periods, which were then analyzed using multiple linear regression analysis to examine the six hypotheses. Before examining the hypotheses, the classical assumption test was carried out to include the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation. Indrawati (2015:190) states that the normality test is carried out to ensure that the data in the research fulfills the normal distribution so that it is valid for analysis; the multicollinearity test is carried out to ensure that the data does not correlate between independent variables; the heteroscedasticity test examines whether there are similarities in the variables from one observation residual to another, and the autocorrelation test shows whether there is a correlation between the variables in the prediction of changes in time. After the data was valid in the classical assumption test, then multiple linear regression analysis and coefficient of determination were carried out, and hypothesis testing was carried out by using the F-test and t-test.

IV. Results and Discussion

The data from DER, DAR, ROE, and ROA were tested for normality, multicollinearity, heteroscedasticity, and autocorrelation. The results of the normality test show that the data was normally distributed, there were no multicollinearity, heteroscedasticity, and autocorrelation problems. The coefficient of determination in this research is presented in Table 1 below.

Table 1. The Influence of the Variables of DAR, DER, ROA, and ROE

Variable	R Square	Conclusion
DAR and DER on ROA	0.074	The influence of DAR and DER on ROA was 7.4%, the remaining 92.6% was influenced by other factors outside of this research.
DAR and DER on ROE	0.059	The influence of DAR and DER on ROE was 5.9%, the remaining 94.1% was influenced by other factors outside of this research.

a. The Influence of DAR on ROA

Based on the results of the t-test (partial) in the regression model, the value of tcount was 0.824 and the significant value of the DAR variable was $0.411 > 0.05$ (a significant level of %), indicating that the DAR variable did not have a significant influence on ROA.

b. The Influence of DER on ROA

Based on the results of the t-test (partial) in the regression model, the value of tcount was 0.942 and the significant value of the DER variable was $0.347 > 0.05$ (a significant level of %), indicating that the DER variable did not have a significant influence on ROA.

c. The Influence of DAR on ROE

Based on the results of the t-test (partial) in the regression model, the value of tcount was 0.608 and the significant value of the DAR variable was $0.608 > 0.05$ (a significant level of %), indicating that the DAR variable did not have a significant influence on ROE.

d. The Influence of DER on ROE

Based on the results of the t-test (partial) in the regression model, the value of tcount was 0.398 and the significant value of the DER variable was $0.398 > 0.05$ (a significant level of %), indicating that the DER variable did not have a significant influence on ROE.

e. The Influence of Capital Structure on Profitability

Based on the results of the F test (partial) in the regression model, The significant value of the two independent variables was $0.659 > 0.05$ (a significant level of %), indicating that the two independent variables did not have a significant influence on ROA simultaneously. This research's results were in line with the research conducted by Tamba et al. (2017), but it was not in line with the research conducted by Violita and Sulasmiyati (2017) and Arista and Topowijono (2017), stating that DAR has a positive influence on ROA.

Based on the results of the F test (partial) in the regression model, The significant value of the two independent variables was $0.659 > 0.05$ (a significant level of %), indicating that the two independent variables did not have a significant influence simultaneously on ROE in sharia banks in Indonesia. The research results were in line with the research conducted by Rionita and Abundanti (2018), showing that DER has a negative influence on ROE. However, it was not in line with the research conducted by Ramadhani and Suwitho (2019) and Astuti et al. (2015), stating that DER has a positive influence on ROA.

V. Conclusion

This research reveals that there was no significant influence between the two models, namely DER and DAR, which also did not have an influence either simultaneously or partially on both ROA and ROE in sharia banks in Indonesia. However, based on the negative correlation coefficient between variables, indicating that an increase in debt will cause a decrease in profitability in terms of ROA, an increase in the use of debt will cause an increase in profitability in terms of ROE. It can be underlined that the use of a low debt capital structure needs to be considered by sharia banking practitioners in order to increase ROA and ROE. In theory, companies that have more debt will reduce the company's net income because the company needs to pay more interest, while if the company does not increase in terms of assets and equity, it will cause returns of these two components to also decrease. From an investor's perspective, investing in sharia banking can consider investing in a company that has a lower debt composition because it will have a higher chance of returns to investors. For further research, it is expected to be able to add many other variables that influence profitability. This research can be compared with practices in other sectors, such as conventional banking or other types of banks (foreign banking), in order to provide other insight.

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