

ANALYSIS OF THE IMPACT OF LEVERAGE, VALUE ADDED AND SIZE ON EARNING MANAGEMENT AND FINANCIAL PERFORMANCE OF INDONESIAN SHARIAH BANKING

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Abstract—The main issues of researches about earnings management have been conducted extensively. Nowadays, the scope of research on earning management is extended to business fields based on Islamic finance. So this research objective is to determine the influence of value added, leverage and size on Shariah banking financial performance through earning management. Discretionary Accrual in Modified Jones Model is used in this research to measure earning management. Then, indicator Return On Asset is used in measuring shariah banking financial performance. Based on data of 12 shariah banking in Indonesia for the period 2012 to 2017, the study conduct path analysis model with Smart-PLS. After conducted the analysis test, this study provide the evidence that value added, leverage and size have no significant effect on Return On Asset. For earning management, both leverage and size have significant effect on earning management otherwise value added has no significant effect on earning management. Finally, earning management significantly act as intervening variable between leverage, size to return on asset but have insignificant result in the relationship between value added and return on asset.

Keywords—*earning management, financial performance, leverage, value added, size, shariah bank.*

I. INTRODUCTION

Emerging of Islamic finance began to be a dynamic focus nowadays because it is an alternative principle in managing finance compare to conventional finance. One of institutions using Islamic principle is banking. Islamic banking in the banking business which its vision, mission and operations based on Shariah

principles. As a banking, the shariah banking also have an important role just like conventional bank in an economic system. Many research have been extensively conduct the research with the earnings management and creative accounting as the main issues according to Hossain, Karim, & Eddine (2014)¹. This began with Enron's accounting scandal caused by earnings management behaviour (e.g., Healy & Palepu, 2003)² (Ronen & Yaari, 2008)³. At other times researcher such as Ibrahim, Darus, Yusoff, & Muhamad, (2015)⁴ found that companies offering Islamic products and services tend to practise sustainability reporting, which are also less involved in earnings management behaviour. However, according to Suryanto (2017)⁵, earning management has the same probability will occur not only in conventional banks but also in Islamic banks. In reality, earning management has been carried out by corporations that have large business scales. The tendency of companies to conduct Earning Management also occur in Indonesia not only business based on conventional principle but also the one whom based on shariah principle. A case of alleged deviation from the financing of Bank Syariah Mandiri in 2015 is also indicated so that it has the potential to cause losses to the State (CNNIndonesia.com)⁶. Banking financial performance is the most important indicator for management and other stakeholders to determine the successful of the bank. Management as the authority have a fully control on internal factors of the bank to produce profitability as the determinant of financial performance. There are several internal determinant that influence financial performance that is leverage, value added and size. Based on Qudah& Jaradat (2013)⁷ research found that Jordan bank size and leverage has a negative and significant effect on financial performance. On the contrary, Javaid et al, (2011)⁸ found that bigger size and leverage not significantly increase on overall financial performance in Pakistan.

Therefore, this study has an important purpose is that to identify the existence of earning management behavior in Shariah Banking and to identify whether the leverage factor, value added and size can have an impact on Indonesian Shariah Banking financial performance through earning management.

II. LITERATURE REVIEW

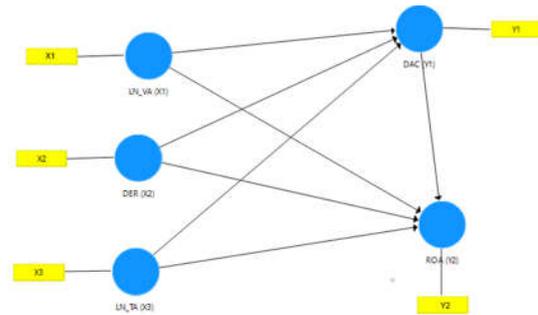
Shariah bank is an Islamic Banking in banking business whose aims and operations based on Shariah principle. This banking business must focus on halal activities and justice. Islamic bank operates based on profit sharing plus trading rent. (Ahmad et al, 2013)⁹. In its operation, Islamic bank should perform a good result. Information about the result of performing finance in a business is important for everyone working in finance and also important to anyone who has made investment in a business. There are many different ways to measure financial performance such as Return On Asset. Return on assets is an indicator of how profitable a company is relative to its total assets. Return on assets gives an idea of how efficient management is at using its assets to generate earnings. (Brigham and Houston, 2015)¹⁰. Most regulators and researches believe that ROA is the best measure of bank profitability (Hassan & Bashir, 2003)¹¹; (Yahaya et al, 2016)¹². But there is an opportunity that management do earning management. Ronen et al, (2008)¹³ defined earning management is a collection of managerial decisions that result in not reporting the true short-term, value-maximizing earnings as known to earning management. To capture managers' earning management behaviour, this research use measures of discretionary accruals as calculated by the modified Jones model because it is considered better among other models for measuring earnings management because this model separates non-discretionary accruals with discretionary accruals (Dechow, et al 1995)¹⁴. The results of study of Vania et al, (2018)¹⁵ reveal that earnings management occur in Islamic banks in Indonesia and Malaysia.

Beside that value added is the most objective indicator to assess business success and demonstrate the company's ability in value creation. VA is calculated as the difference between output and input. Output (OUT) represents revenue and covers all products and services sold in the market, while input (IN) includes all expenses used in generating revenue. (Tan, 2007)¹⁶. Leverage is any technique involving the use of debt rather than fresh equity. Leverage can be calculated by debt to equity ratio. Calculation of the business's total liabilities in contrast to the shareholders' equity is considered debt to equity ratio. This indicates the way the business is funding its growth and the way that the business utilize shareholders' investment. Several prior researches have found that there is positive influence of debt to equity ratio on Islamic bank profitability revealed by Rajha & Alslehat,(2014)¹⁷ ; Hafeez, (2018)¹⁸. Pandey (2004)¹⁹ define that the firm size in terms of total assets held by an organization. The firm

size play an important role to determine the kind of whole asset that the firm needs in processing activity in order to increase their profitability and performance.

Bank management as the agent who manage the bank have authority on controllable internal factors than other parties. Therefore, management have obligation to disclose all information about management activities such as leverage,value added and size which transform into financial information regardless of whether it is a conventional or shariah based company.Then, this study will only focus on the internal determinant only which leverage, value added and size will have impact on bank financial performance towards earning management.

Based on the conceptual framework described and Figure 1, the research hypothesis is as follows: There is significant influence between leverage, value added and size on earning management and financial performance of Indonesian Shariah Banking. The earning management has significant effect as intervening variable between leverage, value added and size on earning management and financial performance of Indonesian Shariah Banking.



(source: Author's Calculation (2019))

Figure 1. Model Path Analysis.

III. METHODS

The aim of this research is to analyze the existence of earning management behavior in shariah compliant banking as the intervening variable on the impact between leverage,value added and size and financial performance with sample of 12 shariah banking registered in Indonesia period 2012-2017. Data were analyzed by using descriptive analysis and path analysis. Descriptive analysis was used to describe the summarize of the basic features of data in this research. Path analysis was used to show the intermediate of earning management on the impact of leverage, value added and size on shariah banking financial performance. SmartPLS application was used to analyze the data. The acceptance or rejection criteria for the hypothesis will be based on the p-value. Decisions are based on probability as follows. If p-value > 0.05, the hypothesis is rejected (not significant) and if p-value is < 0.05, the hypothesis is accepted (significant).

IV.RESULTS AND DISCUSSION

A. The Result of Validity Test

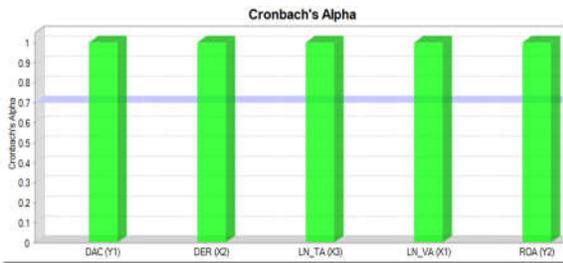
An indicator variable is said to be valid if the value of the loading factor is > 0.4. Based on the results of the loading factor in Table 1, it is known that the loading factor values from LN_VA, DER, LN_TA, DAC and ROA are 1, which is greater than 0.4, which means that it meets the validity requirements based on the assessment of loading factors.

TABLE 1. OUTER LOADING

Variable	Indicator	Outer loading
Value Added	Ln VA	1.000
Leverage	Debt To Equity Ratio	1.000
Size	Ln Total Asset	1.000
Earning Management	Discretionary Accrual	1.000
Financial Performance	Return On Asset	1.000

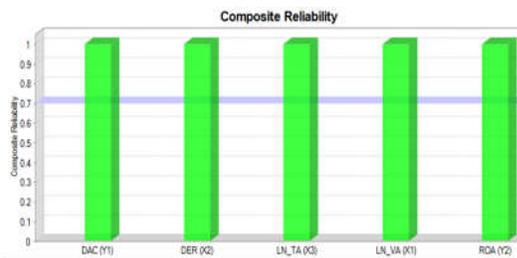
(Source: Author's Calculation (2019))

Reliability evaluation was assessed based on Cronbach's Alpha and Composite Reliability. Figure 1 and Figure 2 present the Cronbach's Alpha values and Composite Reliability for each variable. The recommended Cronbach Alpha value is above 0.7. While the Composite Reliability limit value is above 0.7. Based on Figure 1, it shows that the Cronbach Alpha values for LN_VA, DER, LN_TA, DAC and ROA variables are above 0.7, while the Composite Reliability of LN_VA, DER, LN_TA, DAC and ROA values are also above 0.7.



(Source: Author's Calculation (2019))

Figure 2. Cronbach's Alpha.



(Source: Author's Calculation (2019))

Figure 3. Composite Reliability.

B. Descriptive Statistics Analysis

Descriptive statistical analysis is used to determine the description of data that is seen based on minimum,

maximum, average and standard deviation values. Table 2 presents various descriptive measures based on LN_VA, DER, LN_TA, DAC and ROA variables. Based on Table 2, it is known that the minimum value of LN_VA is 21.23, while the maximum value of LN_VA is 29.45. The average value of LN_VA is 26.75, while the standard deviation value of LN_VA is 2.1. The minimum value of DER is -0.33, while the maximum value of DER is 23.86. The average value of DER is 5.54, while the standard deviation value of DER is 4.43. The minimum value of LN_TA is 26.24, while the maximum value of LN_TA is 34.07. The average value of LN_TA is 30.08, while the standard deviation value of LN_TA is 1.77. The minimum value of DAC is -0.96, while the maximum value of DAC is 7.54. The average value of DAC is 0.14, while the standard deviation value of DAC is 1.04. It is known that the minimum value of ROA is -16.89, while the maximum value of ROA is 8.04. The average value of ROA is 0.8, while the standard deviation value of ROA is 3.69.

Table 2. Descriptive Analysis

Variable	Min	Max	Mean	Std. Deviation
LN_VA (X1)	21.23	29.45	26.75	2.1
DER (X2)	-0.33	23.86	5.54	4.43
LN_TA (X3)	26.24	34.07	30.08	1.77
DAC (Y1)	-0.96	7.54	0.14	1.04
ROA (Y2)	-16.89	8.04	0.8	3.69

(Source: Author's Calculation (2019))

C. Inner model Evaluation

TABLE 3. BOOTSTRAPING

	O.Sample	(STDEV)	T.Stat	P Values
Ln VA → DAC	-1.101	0.081	1.240	0.216
DER → DAC	0.653	0.194	3.367	0.001
Ln TA → DAC	-0.437	0.136	3.202	0.001
Ln VA → ROA	0.046	0.189	0.419	0.676
DER → ROA	0.119	0.118	1.182	0.238
Ln TA → ROA	0.007	0.107	0.068	0.946
DAC → ROA	0.632	0.204	3.098	0.002

(Source: Author's Calculation (2019))

- *Relationship of Value Added on Earning Management.* It is known that the coefficient value of LN_VA against DAC is -0.101, which is negative. This means LN_VA has a negative effect on DAC. It is known that the P-Values value is 0.216 > 0.05, so LN_VA has no significant effect on DAC.
- *Relationship of DER on Earning Management.* It is known that the DER coefficient value against DAC is 0.653, which is positive. This means that DER has a positive effect on DAC. It is known

that the P-Values value is $0.001 < 0.05$, then DER has a significant effect on DAC.

- *Relationship of Ln TA on Earning Management.* It is known that the LN_TA coefficient value of DAC is -0.437, which is negative. This means that LN_TA has a negative effect on DAC. It is known that the P-Values value is $0.001 < 0.05$, so LN_TA has a significant effect on DAC.
- *Relationship of Value Added on ROA.* It is known that the coefficient value of LN_VA on ROA is 0.046, which is positive. This means that LN_VA has a positive effect on ROA. It is known that the P-Values value is $0.676 > 0.05$, then LN_VA does not significantly influence ROA.
- *Relationship of DER on ROA.* It is known that the DER coefficient value to ROA is -0.119, which is negative. This means that DER has a negative effect on ROA. It is known that the P-Values value is $0.238 > 0.05$, then DER has no significant effect on ROA .
- *Relationship of ln TA on ROA.* It is known that the coefficient of LN_TA to ROA is 0.007, which is positive. This means that LN_TA has a positive effect on ROA. It is known that the P-Values value is $0.946 > 0.05$, then LN_TA has no significant effect on ROA.
- *Relationship of DAC on ROA.* It is known that the DAC coefficient value to ROA is -0,632, which is negative. This means that DAC has a negative effect on ROA. It is known that the P-Values value is $0.002 < 0.05$, then the DAC has a significant effect on ROA in a negative way.

R Square : Based on Table 4 showed :

- R Square value for Earning Management variable of 49.5% which means that earning management can be explained by leverage, value added and size by 49.5%. While the remaining 50.5% is explained by other variables not include in the research model.
- The R Square value for the Financial Performance variable is 52.5% which means that financial performance can be explain by leverage, value added and size by 52.5%. While the remaining 47.5% is explained by other variables not include in the research model.

TABLE 4. OUTPUT R SQUARE

Variable	R Square
EM (DAC)	0.495
FP (ROA)	0.525

(Source: Author's Calculation (2019))

TABLE 5. BOOTSTRAPPING (INDIRECT EFFECT)

	O.Sample	(STDEV)	T.Stat	P Values
DER → ROA	-0.412	0.160	2.585	0.010
Ln TA → ROA	0.276	0.121	2.288	0.023
Ln VA →ROA	0.064	0.945	1.414	0.158

(Source: Author's Calculation (2019))

Based on Table 5 show that the indirect effect of DER on ROA, through DAC is -0.412, with P-Values value $0.010 < 0.05$, then DAC is significant in mediating the effect of DER on ROA. The indirect effect of LN_TA on ROA, through DAC is 0.276, with a P-Values value of $0.023 < 0.05$, then DAC is significant in mediating the effect of LN_TA on ROA. Finding of the study reveal that leverage has a positive significant effect on earning management and size has a negative significant effect on earning management. It mean that if shariah bank use more debt compare to equity, it will increase the probability that management will conduct earning management behaviour. Shariah-compliant companies with high leverage also tend to engage in earnings-increasing through accruals. (Wang et al., 2016)²⁰; (Huang & Sletten, 2017)²¹; (Godsell, Welker, & Zhang, 2017)²². Then, if the size increases, it will lessen the earning management behaviour. This finding contrary with the finding of Jledan (2016)²³ that said there is a positive significant relationship between size and earning management. Mean while, value added has no significant effect on earning management. Furthermore, the result obtained from this study show that all of the variables value added, leverage and size has no significant effect on shariah banking financial performance. This result partially supported by Shahar & Shahar (2015)²⁴ which showed that leverage proxy by Debt to Equity Ratio and size does not have any impact toward Shariah compliant companies. This finding different from research of Pratomo and Ismail (2006)²⁵ that said the size of Islamic banking is correlated to bank's performance. Eventhough, in this study the value of $R^2=52.5\%$ does not mean it can describe the whole unique variance explained by each variable. This is suggesting, there might be other variable which can give more effect to the shariah banking financial performance. For variable earning management has negative significant effect to financial performance. This condition contrary with Alsaadi et al (2017)²⁶ who found that companies with better financial performance are more likely to engage earning management behaviour. The indirect effect of leverage to financial performance is found so that earning management become the intervening variable which mediates the relationship between leverage and financial performance. Finally, earning management is also proved to be an intervening variable on the influence of size to shariah banking financial performing.

V. CONCLUSION

Based on the research finding, it can be conclude that earning management can be presence in shariah banking. Therefore, it is consider important that shariah complaint companies to give attention for developing good ethical behaviour, especially Islamic Banking industry because Islamic Banking industry also play an important role in the development of Indonesia economy. Therefore, it is important to identify and determine the factors that contribute the performance of Islamic Banks to ensure the sustainability of the banking industry. Although, the financial performance do not always infer better profitability based on the effect of better leverage, value added and size. The implementation of Islamic Banking system should improve any factors other than variable leverage, value added and size in order to be more successful through several approach that include comprehensive legal framework, improvement human resources competence.

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