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FACTORS AFFECTING RETURN ON DEPOSIT (ROD) OF SHARIA BANKS IN INDONESIA

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Abstract. This study examines the effect of Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), board of directors' size (BOARD), sharia supervisory board (DPS), bank size (SIZE), and interest rate (INT) and sharia bank ownership status (DFOR) to Return on Deposit (ROD). The sample used in this research is 11 sharia banks operating in Indonesia. By using multiple regression analysis technique, it was found that CAR and SIZE have a significant negative effect on ROD) of sharia banks in Indonesia. While the FDR, BOARD and INT have a significant positive effect on ROD of sharia banks in Indonesia. Meanwhile, DPS and DFOR have no significant effect on ROD of sharia bank in Indonesia.

Keywords: sharia bank, Return on Deposit (ROD), Sharia Supervisory Board, foreign ownership, Capital Adequacy Ratio (CAR).

JEL Classification: G21, G29.

Introduction

Islamic banking (sharia banking) arises because Islam forbids Muslims to withdraw or pay interest (usury, *riba*). Islam's rejection of this interest raises the question of what can replace the mechanism of application of interest within the framework of Islam. This is where the principle of profit sharing (profit-loss-sharing) entry replaces the interest system as in conventional banks (Ernayani et al. 2017, Ismal 2009, Majid et al. 2014). According to Khediri et al. (2015), there are many differences between sharia banks and conventional banks. For example, interest-based contracts in conventional banks are replaced by yield-based contracts with sharia banks, where profits and losses, as well as risks, are shared between creditors and borrowers. Sharia banking also could prevent money laundering and terrorism financing because sharia principles that become its foundation strongly prohibited sources of illegal financing as stated by Kordík and Kurilovská (2017), such as natural resource theft; drug, even alcohol traficking; smuggling; extortion; and some illegal sponsorship. Sharia banking is not only an institution in the field of economy, but also as an institution that is responsible for maintaining moral and morals of society (Hassan and Aliyu 2018).

Rivai and Arifin (2010) said that the function of sharia bank in general is almost the same as conventional banks, which are both intermediary institutions that collect funds from people who have excess funds and then channeled to communities in need of funds with the form of financing. The main difference is in the treatment and the type of return obtained by the bank for each transaction performed. Conventional banks earn profits based on interest income. Islamic banks derive from fee-base income, mark-up, and profit-sharing (loss and profit sharing). Sharia bank is a bank that operates without resting on interest. Sharia Bank is a financial institution with its main business is channeling financing as well as other services on payment transactions and money circulation where operates accordance Islamic principles (Muhammad 2005).

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In Indonesia, sharia banking is still relatively early. The first sharia bank in Indonesia was Bank Muamalat which was established in 1992. The phenomenon of sharia banks became more attractive when sharia banks survived successfully during the Asian financial crisis of 1997–1998 and the global financial crisis 2007–2008, at which time banks conventional facing financial difficulties even to failure. Aysan et al. (2013) argued that the Islamic banking system can contribute to boosting economic growth thanks to the sharing features that enable sharia banks to borrow for longer projects for better risk and returns. Jankelová et al. (2018) even stated that growing interest in creating various types of strategic partnership is conditioned by the creation and the course of the economic crisis. This various strategic partnership also could reached by using sharia based financing scheme which focused on profit sharing scheme rather than based on interest. This scheme also could use to SME's which according to Abbas (2018), play vital role in assisting and fostering entrepreneurial activity.

Khediri et al. (2015) describes the differences between sharia banks and conventional banks. Islamic banks collect funds through demand deposits (guaranteed and without returns) and investment deposits (similar to mutual fund sheets and do not guarantee a fixed return). Islamic banks have developed a free product of conventional financing system based on profit sharing (profit or loss) and markup principle (Anuar et al. 2014).

The purpose of establishing a sharia bank is the same as that of the company in general, that is, to make a profit. But for sharia banks, this profit is earned through investment returns that will increase owner wealth. This goal is not only a reference of the owner of sharia banks but also depositors who participate in investing funds in the investment-based revenue sharing. The level of profitability is the main reference for depositors in considering whether to stay in the bank or move the funds to other banks (Rahim 2017). Banks are required to compete primarily in improving their profitability performance (Masood and Ashraf 2012). Sharia banks that provide yields below conventional bank interest rates or high yield fluctuations will tend to be difficult to compete in attracting customers. Customers will prefer other sharia banks that offer more favorable returns or conventional banks that provide higher interest rates. The customer, in this case, will always consider the rate of return on the sharia bank. Therefore it is necessary for Islamic banks in maintaining the quality of yield (Hamza 2016, Robiyanto 2018b).

Deposits become one of the Islamic instruments based on profit sharing and profit sharing rates of these deposits is very important to note to compete with conventional banks and other Islamic banks. The rate of return on these deposits becomes the main reference for depositors in considering whether to stay in the bank or transfer funds to other banks. One measure of profitability relating to sharia banks is Return on Deposit (ROD) but not much research involving to Return on Deposit (ROD) as dependent variable to proportion the probability of sharia bank, especially in Indonesia. Though ROD is a reflection of the fulfillment of the principle of profit sharing (Hamza 2016).

Some research on ROD has been done, for example, Hamza (2016) concluded that CAR had positive effect on ROD, but Diaw and Mbow (2011) found that CAR had negative effect on ROD. On the size of the board of directors and the size of the Sharia Supervisory Board, according to research conducted by Ghaffar (2014), the size of the board of directors and the size of the Sharia Supervisory Board have a positive effect on the ROD.

Research conducted by Hamza (2016) stated that the size of the board of directors and the size of the Sharia Supervisory Board does not influence the ROD. Another researcher, Mollah and Zaman (2015) found a negative effect on the size of the directors of the ROD and the positive influence of the size of the Sharia Supervisory Board on the ROD. Meanwhile, related to FDR, Gozali (2006) found that FDR had positive effect on ROD, whereas Hamza (2016) found that FDR had negative effect on ROD. On the other hand, Fahmy (2013) found that FDR does not affect ROD. As for asset size, Aysan et al. (2013); Bashir (1999) concluded that bank size had a positive effect on ROD, while Hamza (2016) found that bank size did not affect ROD. Furthermore, Chong and Liu (2006); Hamza (2016) found a positive influence on interest rates on ROD, which contrasts with the findings of Haron et al. (2013) who found that interest rates had a negative effect.

Therefore, this study will focus on factors that may affect the ROD. The factors which have been analyzed in this research are Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Board of Director, Sharia Supervisory Board, Bank size, and interest rate and Sharia Bank ownership status. These factors are studied further because of the inconsistency of the research results related to the effect on ROD.

1. Review of literature and historical framework

Hassan and Aliyu (2018) stated that Islamic banking practices are arise from the need to apply the principles of sharia that are closely linked in the guide to Islamic ideology. The development of banking based on Islamic economic concepts and principles is an innovation in the international banking system. The characteristics of this sharia banking, operating on the principle of profit sharing (*mudaraba*) in the absence of interest (*riba*) it is because interest (*riba*) in the shariah law is prohibited (*haram*) (Basri et al. 2016).

According to Hassan and Aliyu (2018); Rivai and Arifin (2010), the differences between sharia and conventional banks are (1) *Akad* (agreement) and legality. *Akad* on Islamic banking has the consequences of the world and the

afterlife. The contract is implemented on the basis of Islamic law. (2) Organizational structure. Sharia banks should have Sharia Supervisory Board as operational supervisor and bank products in line with Islamic law. (3) Businesses that are financed should be justified by the provisions of Islam. (4) Work environment and organizational culture. The nature of *shidiq* (honest), trustworthy, *fathanah* (intelligent, professional) and *tabligh* (communicative, friendly and openness) should be the foundation of Islamic banking practitioners.

The detailed explanation about the sharia bank's principles are explain in the next section.

1.1. The principles of sharia bank

To be considered as a sharia bank, bank must certainly run its business that adheres to the principles of Islamic banks that are allowed in Islam. This sharia principle then becomes a feature that differentiates sharia banks with conventional banks. Wirdyaningsih et al. (2005) argued that the main principles adhered to by sharia banks are: (1) the prohibition of usury (interest) in any transaction of any kind; (2) conduct business and trading activities based on obtaining legitimate benefits according to sharia; and (3) cultivate *zakat*. Further according to Wirdyaningsih et al. (2005), based on the main principle, then there is a fundamental difference in the implementation of conventional banks and sharia banks.

1.2. Profitability ratio of sharia banks

The most common profitability ratios used in Sharia Banks are Return on Deposit (ROD), Return on Assets (ROA), Return on Equity (ROE). Return on Deposit (ROD) represents the rate of return earned from total investment deposits managed by sharia banks (Amelia 2015). This ratio shows the percentage of return on each Rupiah of customer deposits. In other words, this ratio indicates the effectiveness of sharia banks in converting deposits into profits (Rosly and Bakar 2003). Return on Asset (ROA) is a ratio that measures a company's ability with all capital working in it to generate profit. This ratio reflects the company's ability to use the investments used for its operations to generate profits (Rosly and Bakar 2003). This ratio is often referred to as earning power. In this research, only ROD is used as a proxy of profitability of the ratio. This is because ROD indicates the effectiveness of sharia bank in converting the deposit to be profit (Rosly and Bakar 2003).

2. Method of the research

This section will described the research method used in this study. Population and sample, data collection method, hypothesis development and analytical technique discussed in this section.

2.1. Population and sample

The population in this research is sharia bank that operated in Indonesia. Not all sharia banks in Indonesia are subject to this research because there are sharia banks that do not meet the criteria of the research. Therefore, the research sample was chosen by using purposive sampling method, where the sampling according to criteria as follows: (1) Sharia Banks in the form of stand-alone entities (Sharia Commercial Banks); (2) Sharia banks that have been established from 2011 to 2015; (3) Sharia bank that has completed the information in the 2011–2015 period of financial statements that is audited and adequate for the research and has been published either on the site of sample banks or on the website of Bank Indonesia.

In Table 1, it can be seen the process of sampling based on the criteria that have been determined above.

Based on the above criteria, there are 11 sharia banks which are adequate to be the object of this research. The names of the bank becoming the sample can be seen on the Table 2.

Table 1. Sampling process

No	Criteria	Total
1	Sharia banks in form of stand-alone entities in Indonesia	12
2	Sharia banks which have been operated in time of this research	11
3	There is an adequate information in financial report for the period of 2011–2015 audited, and proper for the research and have been published either on the bank site or Bank Indonesia site	11

Table 2. Bank samples

No	Sharia banks	Website
1	Bank Muamalat Indonesia	www.bankmuamalat.co.id
2	Bank Victoria Syariah	www.bankvictoriasyariah.co.id
3	BRI Syariah	www.brisyariah.co.id
4	BPD Jawa Barat Banten Syariah	www.bjbsyariah.co.id
5	BNI Syariah	www.bnisyariah.co.id
6	Bank Syariah Mandiri	www.syariahmandiri.co.id
7	Bank Mega Syariah Indonesia	www.megasyariah.co.id
8	Bank Panin Syariah	www.paninbanksyariah.co.id
9	Bank Syariah Bukopin	www.syariahbukopin.co.id
10	BCA Syariah	www.bcasyariah.co.id
11	Bank Maybank Syariah	www.maybanksyariah.co.id

2.2. Data

The data used in this research is secondary data. Data obtained from external sources through the website of Bank Indonesia is www.bi.go.id or the website of each sharia bank. Data on Islamic bank governance system is obtained from the site of each sharia bank. Market interest rate data is obtained from Indonesian Banking Statistics published on the Financial Services Authority website.

2.3. Hypothesis development

This section will focus on the hypothesis development. Some arguments for each hypothesis development discussed as follows.

2.3.1. Return on deposit and CAR

According to Hamza (2016), Capital Adequacy Ratio (CAR) measures the capital adequacy of banks to support the risk-bearing assets. This capital adequacy ratio is an indicator of the bank's ability to cover its decline in assets as a result of bank losses caused by risky assets. With the increase in CAR, there is an increased risk taken by shareholders and depositors; the increased risk is expected to be a trade-off to obtain higher returns that will be reflected in the ROD of sharia banks (Hamza 2016).

According to Aysan et al. (2013), the higher CARs can also become a space for sharia banks to expand their market share and so with broader markets is expected to improve the performance of Islamic banks. In his research, Hamza (2016) and Aysan et al. (2013) found that the CAR has a positive effect on return on investment deposits of sharia banks. Therefore, the hypothesis is formulated as follows:

H1: CAR has positive effect on ROD of sharia bank

2.3.2. Return on deposit and Financing to Deposit Ratio (FDR)

Financing to Deposit Ratio (FDR) is a ratio similar to the Loan to Deposit Ratio (LDR) in a conventional bank. This ratio is used to measure the extent to which loan funds are sourced from the third parties. This low ratio shows the level of liquidity of the bank so that if the higher the size of an Islamic bank's FDR illustrates a less liquid state than a sharia bank with a lower FDR size. Conversely, the lower the size of the FDR of an Islamic bank, the bank can maintain an excessive liquidity tool and will cause pressure on the income of Islamic banks in the form of high cost of maintenance of idle cash (Gozali 2006). Therefore, the greater opportunity of sharia banks to increase their income by optimizing the distribution of financing will increase the ROD of sharia banks. Gozali (2006) found a positive relationship between FDR and ROD in sharia bank so formulated hypothesis as follows:

H2: FDR has positive effect on ROD of sharia bank

2.3.3. Return on deposit and size of board of director

Ghaffar (2014) argued that the larger size of board director is necessary because of the experience of sharia banks that are still relatively new. The large board of director will be useful in setting better strategies and supervision to compete with conventional banks. The size of the board of directors will affect the performance of sharia banks. Ghaffar (2014) found a positive correlation of the size of the directors to ROD in sharia banks. Based on this, the hypothesis is formulated as follows:

H3: The size of the board of director has a positive effect on ROD of sharia banks

2.3.4. Return on deposit and size of sharia supervisory board

Mollah and Zaman (2015) argued that the existence of Sharia Supervisory Board is the element that distinguishes between sharia banks and other conventional banks. The main role of the Sharia Supervisory Board is to oversee the day-to-day operations of the bank in keeping with the provisions of sharia. This is because transactions applicable in Islamic banks are very special when compared to conventional banks. Also, the Sharia Supervisory Board also plays a role in researching and making new product recommendations from the banks under its supervision. The risk of non-compliance and non-credibility in sharia bank is caused by the incompetence of management in mastering the science of sharia which impact on the withdrawal of funds by depositors and then impact on the performance of Islamic banks. This is where the role of Sharia Supervisory Board is needed to supervise sharia banks remain in the path without having contradiction to the principles of sharia and the role to share knowledge and input.

Ghaffar (2014) argued that a small Sharia Supervisory Board will be easily controlled and influenced by executives and boards of directors, while the existence of a large Sharia Supervisory Board with various experiences and skills of sharia will lead to a better interpretation of products and operations of sharia banks. The size of a large Sharia Supervisory Board can encourage the credibility of banks because it prioritizes compliance with Islamic law so that the protection of the rights of depositors is more secure and it can avoid the withdrawal of depositors' funds. This can then be reflected in the performance of Islamic banks especially profitability as evidenced by Ghaffar (2014); Mollah and Zaman (2015). Based on the description above, the hypothesis is formulated as follows:

H4: Sharia Supervisory Board has a positive effect on ROD of sharia banks

2.3.5. Return on deposit and bank size

According to Aysan et al. (2013), the size of the bank can be seen from the total assets, and it is a signal for depositors regarding the performance and competitiveness of banks

that encourage depositors to invest their funds to the sharia banks concerned. Also, according to Bashir (1999), sharia banks with larger assets will benefit economies of scale that impact on the yields offered. In his research, Aysan et al. (2013) and Bashir (1999) found a positive relationship between the size of the bank and the return on sharia bank deposits. Based on the description above, the hypothesis is formulated as follows:

H5: Asset size positively affects return on investment of sharia bank

2.3.6. Return on deposit and interest rate

Both Islamic banks and conventional banks compete in obtaining deposits. Islamic banks face the intense competition against conventional banks because conventional banks offer guaranteed returns in the form of a fixed interest rate. Islamic banks may refer to interest rates if they can not obtain benchmark yields offered in a profit-sharing transaction Hamza (2016). In his research, Hamza (2016) found that the ROD of sharia banks is influenced by conventional bank interest rates. Based on the description above, the hypothesis is formulated as follows:

H6: Bank interest rates have a positive effect on ROD of sharia banks

2.3.7. Return on deposit and foreign ownership

Zouari and Taktak (2014) argued that the companies with large foreign holdings tend to exercise an effective oversight, have superior technical, managerial, and broad funding access so that the foreign ownership will have a positive contribution in improving the company performance. Zouari and Taktak (2014) found that sharia banks with the foreign ownership will earn higher ROD than sharia banks with domestic ownership. Based on the description above, the hypothesis is formulated as follows:

H7: Foreign-owned sharia banks have higher ROD than domestic sharia banks

2.4. Analytical technique

The analytical technique used in this study used multiple linear regression with dummy variable included. The regression equation in this research is

$$ROD_{it} = \alpha + \beta 1CAR_{it} + \beta 2FDR_{it} + \beta 3BOARD_{it} + \beta 4DPS_{it} + \beta 5SIZE_{it} + \beta 5INT_{it} + \beta 6\ DFOR_{it} + \varepsilon_{it}.$$

Note:

ROD_{it} = Return on Deposit (ROD) sharia bank i (i = 1, …, 11) in the year of t (t = 2011, …, 2015)

CAR_{it} = Capital Adequacy Ratio (CAR) sharia bank i (i = 1, …, 11 in the year of t + 1 (t = 2011, …, 2015)

FDR_{it} = Financing to Deposit Ratio (FDR) sharia bank i (i = 1, …, 11) in the year of t (t = 2011, …, 2015)

ROD_{it} = Return on Deposit (ROD) sharia bank i (i = 1, …, 11) in the year of t (t = 2011, …, 2015)

$BOARD_{it}$ = directors' size i (i = 1, …, 11) in the year of t (t = 2011, …, 2015)

DPS_{it} = Sharia Supervisory Board i (i = 1, …, 11) in the year of t (t = 2011, …, 2015)

$SIZE_{it}$ = The size of sharia bank i (i = 1, …, 11) in the year of t (t = 2011, …, 2015)

$DFOR_{it}$ = Dummy of foreign ownership i (i = 1, …, 11) in the year of t (t = 2011, …, 2015), 1 = sharia foreign bank, 0 = sharia domestic bank

α = constant

β(1–6) = regression coefficient

The operational definition of variables are shown in Table 3.

Hypothesis testing in this study includes F test, t-test, and test coefficient of determination (R^2). Before testing the hypothesis, the classical assumption test will be done first.

Table 3. The Operational Definition of Variables

Name of Variable	Measurements	Variable
Return on Deposit (ROD)	$\frac{\text{The Capital of Bank}}{\text{Total of deposit investment}} \times 100\%$	Dependent
Capital Adequacy Ratio (CAR)	$\frac{\text{The Capital of Bank}}{\text{Risk-Weighted Asset}} \times 100\%$	Independent
Financing to Deposit Ratio (FDR)	$\frac{\text{Total Funding}}{\text{Third Party Fund}} \times 100\%$	Independent
The size of board of director (BOARD)	Number of board of director's member	Independent
Sharia Supervisory Board (DPS)	Number of Sharia Supervisory Board's member	Independent
The size of the bank (SIZE)	Ln Total asset	Independent
The interest (INT)	The average of deposit of the conventional banks in a year	Independent
Foreign ownership Dummy (DFOR)	1 = sharia foreign banks; 0 = sharia domectic banks	Independent

3. Result and discussion

The result and discussion consists of descriptive statistics, the result of classical assumption tests, the result of multiple regression analysis, and discussion. Each section described as follows.

3.1. Descriptive statistics

Descriptive statistics provides the descriptions of data viewed from the mean, standard deviation, variance, maximum, and minimum values. This study uses a 5-year observation period from 2011 to 2015. The data on dependent, independent, and control variables are obtained from the financial statements of sharia banks obtained from the website of Bank Indonesia or the website of the sharia bank concerned. The specific interest rate variables are obtained from Sharia Bank Statistics obtained from the Indonesian Financial Services Authority website. In Table 4 it can be seen the descriptive statistics of the 11 sample companies over the period 2011–2015.

Table 4. Descriptive statistics (source: secondary data, processed)

	N	Minimum	Maximum	Mean	Std. Deviation
ROD (%)	55	2.47	11.06	5.84	1.85
CAR (%)	55	11.03	73.44	23.32	14.96
FDR (%)	55	46.08	289.20	99.52	34.99
SIZE (million)	55	642,026	70,369,708	15,429,901	130,218
BOARD (person)	55	3	7	4	.9993
DPS (person)	55	2	3	2	.4664
INT (%)	55	6.05	8.76	7.47	1.05

The ROD variable shows the percentage of return on each Rupiah of customer deposits. In other words, this ratio indicates the effectiveness of sharia banks that converting deposits into profits is one measure of the profitability of sharia banks. ROD represents the rate of return earned from the total investment deposits managed by sharia bank. Of the overall ROD, sample shows an average of 5.845%, indicating that the average of the total sample has total assets of 218.43% compared with current liabilities. The highest ROD level obtained by Bank BJB Syariah in 2015 amounted to 11.06% while the smallest ROD level of Maybank Syariah Bank in 2012 amounted to 2.47%. The standard deviation of the ROD variable is smaller than the average indicating that the ROD variable data is spread fairly evenly.

CAR variables measure the capital adequacy of banks to measure the adequacy of capital owned by banks to support assets that contain risks. In other words, CAR is the bank's performance ratio to measure the capital adequacy of a bank to support assets that contain or generate risk. It can be seen that the average CAR of the total sample is 23.317% indicating that the average sharia bank in Indonesia has fulfilled the minimum CAR requirement that is at least 8%. This 23.317% is far more than the minimum required. The standard deviation of this variable is also smaller than the average that is equal to 14.958% which indicates that the data of this variable is spread evenly. The largest CAR is owned by Bank Maybank Sharia in 2015 amounted to 73.44% while the smallest CAR owned by Bank Muamalat in 2012 amounted to 11.03%. Although CAR is the smallest among sharia banks in Indonesia, it still meets the minimum required CAR of Islamic banks by 8%.

The FDR variable is the ratio used to measure the liquidity of a bank in repaying the withdrawal of funds by the depositor. This variable is used to measure how far the ability of banks to repay the withdrawal of funds made by depositors by relying on the financing provided as a source of liquidity. Therefore, the FDR is calculated by comparison between the financing provided by the sharia bank and the third party funds which has successfully been deployed by the sharia bank; it can be seen from the above table the average FDR of the total sample is 99.52%. This figure is still within reasonable limits given that the ideal range is 80–100%. The standard deviation of this variable is smaller than the average of 34.99% indicating that the data of these variables are spread evenly. The largest FDR rate obtained by Maybank Sharia in 2011 was 289.20%, while the smallest FDR rate was owned by Bank Victoria Sharia in 2011 amounting to 46.08%.

The board of directors' size in this study shows how many members of the board of directors in Islamic banks. Therefore, it is proxied by the number of members in the board of directors of sharia banks. In the descriptive statistics Table 4, on the average sharia bank in Indonesia has four directors on the board of directors. The standard deviation of the director's size smaller than the average of .999 indicates that the data size of the directors spread evenly. The largest director size is 7 and the smallest director's size is 3 which shows that sharia banks in Indonesia have directors of between 3 and 7 people.

The Sharia Supervisory Board's size variables show how many members of the Sharia Supervisory Board are at sharia banks in Indonesia. This is to investigate the extent to which the number of Sharia Supervisory Board is effective in carrying out its duties to oversee the daily operations of banks to always comply with the provisions of sharia and to provide innovations of sharia products that can improve the performance of Islamic banks. From Table 4, it can be seen that the average size of the Sharia Supervisory Board is 2.31, this indicates that on the average sharia bank that

has been sampled has a Sharia Supervisory Board of 2.31 and this figure is greater than the standard deviation of the same variable that is equal to 2.31 indicates that the Sharia Supervisory Board's size data is quite evenly distributed. The largest Sharia Supervisory Board is three whereas the smallest Sharia Supervisory Board measure is 2. This shows that Islamic banks in Indonesia have Sharia Supervisory Board between two and three people.

The variable size of the bank shows the size of a company shown by total assets, total sales, average total sales and average total assets so that it can be concluded a size of a bank can be said big if seen from the amount of the assets owned. The natural logarithm of total assets is used as a proxy for the independent variable of bank size. Natural logarithm is used to overcome the problem of value disparity (Bashir 1999). From Table 4, it can be seen that the average size of sharia banks of the total sample is 15,429,901. The standard deviation of the size of Islamic banks is smaller than the average that is equal to 130,218 indicates that the variable data size sharia bank spread evenly. The size of the largest Islamic banks is Bank Syariah Mandiri in 2015 amounted to 70,369,708 while the size of the smallest sharia bank is the Bank of Victoria Syariah in 2011 amounted to 642,026.

The interest rate variable is proxied by the average of the conventional interbank deposit rate in Indonesia with a period of one year. Islamic banks may refer to the interest rate if they cannot obtain the benchmark yield offered in the profit-sharing transaction (Hamza 2016). Table 4 shows that the average interest rate of 1-year conventional bank during the period 2011 to 2015 was 7.47%. The lowest interest rate is 6.05% in 2012 while the highest interest rate is 8.76% in 2014.

3.2. The result of classical assumption tests

Classical assumption tests consists of normality test, multicollinearity test, and heteroscedasticity test. The results of each test, described as follows.

3.2.1. Normality test

Kolmogorov-Smirnov non-parametric statistical test is used to detect whether residuals are normally distributed or not (Ernayani et al. 2017, Robiyanto 2018a). This method is used because using graphical analysis is considered subjective so it can be misleading especially for small sample quantities. A regression model can be said to meet the normality test if the Kolmogorov-Smirnov non-parametric statistical test result shows a significant value above .05. Kolmogorov-Smirnov test statistic is .076.

The test showing the level of significant value .200, this value is above .05. This shows that the residual data is distributed normally.

3.2.2. Multicollinearity test

This test is performed to detect whether in the regression model found the correlation between independent variables. To analyze the presence of multicollinearity is indicated by a correlation value greater than 95% and can also be indicated through the tolerance value ≤ 0.01 and VIF value ≥10 (Ghozali 2011, Robiyanto 2018a). Multicollinearity test results can be seen in Table 5.

Table 5. Multicollinearity testing result (source: secondary data, has been processed)

Variable	Collinearity Statistics	
	Tolerance	VIF
CAR	.298	3.359
FDR	.414	2.413
SIZE	.339	2.948
BOARD	.446	2.243
DPS	.576	1.737
INT	.926	1.079
DFOR	.235	4.249

In Table 5. It can be seen that there is no evidence of multicollinearity since all variables have VIF value ≤ 10 and tolerance value > .1. So it can be concluded that there is no multicollinearity.

3.2.3. Heteroscedasticity test

Heteroscedasticity test is performed to test whether there are unequal variances of the residual to other observations on the regression model used (Robiyanto and Puryandani 2015, Robiyanto et al. 2017). If there are symptoms of the same variance, it is called homoscedasticity. The heteroscedasticity test done by using the Glejser test. The results of the Glejser test shown in Table 6.

Table 6. The result of the Glejser test fo heteroscedasticity (source: secondary data, has been processed)

Variable	*t*	*p.*
CAR	.918	.360
FDR	1.887	.066
SIZE	.982	.332
BOARD	–.859	.391
DPS	1.010	.319
INT	–.132	.896
DFOR	.953	.347

Based on Table 6, the Glejser test result shows that none of independent variable has a significant effect toward the absolute errors. Thus, it can be proven that there

are no symptoms of heteroscedasticity or in other words, the regression equation satisfies the assumption of non-heteroscedasticity.

3.3. The result of multiple linear regression analysis

Based on the testing of the classical assumption that has been done, it can be concluded that this research model has fulfilled all the classical assumptions. The next step that can be done is to perform hypothesis analysis by using multiple linear regression analysis method with Ordinary Least Square model. The analysis aims to test the influence of independent variable to dependent variable. In this research, multiple regression analysis is used to test the effect of CAR, FDR, the board of directors, Sharia Supervisory Board, bank size, and interest rate on Return on Deposit (ROD) of sharia bank by adding foreign bank ownership variable as dummy variable. This analysis is done by regression model as follows:

$$ROD_{it} = \alpha + \beta 1\ CAR_{it} + \beta 2FDR_{it} + \beta 3BOARD_{it} + \beta 4DPS_{it} + \beta 5SIZE_{it} + \beta 5INT_{it} + \beta 6\ DFOR_{it} + \varepsilon_{it}\ .$$

The result of the regression analysis can be seen in Table 7.

A regression model formed from the Table 7 is:

$$ROD_{it} = 26.50 - .071CAR_{it} + .17FDR_{it} + .441BOARD_{it} + .411DPS_{it} - 1.090SIZE_{it} + 1.188INT_{it} - 1.690DFOR_{it} + \varepsilon_{it}\ .$$

A testing based on the model shows that the variable of FDR, BOARD, and INT have a significant positive effect to ROD variable. Variable CAR and SIZE have a significant negative effect to ROD variable. Whereas DPS variable does not affect ROD. DUMMY variable shows significant negative sign which means that foreign sharia banks are no better than domestic sharia banks in obtaining ROD.

3.3.1. Coefficient of determination (R^2)

Based on the result of the analysis, it is obtained a coefficient of determination of .664. This indicates that 66.4% of the dependent variable on the model, which consists of CAR, FDR, board size (BOARD), size of Sharia Supervisory Board (DPS), bank size (SIZE), interest rate (INT), and foreign ownership (DFOR). While the rest of 33.6% is explained by the variables outside the model.

3.3.2. Simultaneous Statistics test (F Test)

F test is used to show whether all independent variables simultaneously affect the dependent variable. Based on the results of the analysis, it is obtained the value of F of 16.221 with a probability of .000. Since the probability is much less than .05, the regression model can be used to predict ROD.

3.3.3. Individual Parameter Significance Test (t-test)

Based on Table 7, it can be seen that the Sharia Supervisory Board (DPS) size and foreign ownership dummy variables (DFOR) have no significant effect on Return on Deposit (ROD). A Financing to Deposit Ratio (FDR) variable has a positive effect on Return on Deposit (ROD) on 5% significance. The size of the board of directors (BOARD) also positively affects the ROD at the 5% significant level. The interest rate variable (INT) has a positive effect on the level of significance of 1%. Capital Adequacy Ratio (CAR) and bank size (SIZE) variables have negative and significant influence at 1% significant level.

3.4. Discussion

The effect of each independent variables toward ROD are described as follows.

Table 7. The Result of Multiple Linear Regression Analysis (source: secondary data, has been processed)

Model	Unstandardized Coefficients		Standardized Coefficients	t	p.
	B	Std. Error	Beta		
(Constant)	26.503	5.233		5.064	.000
CAR	–.071	.018	–.575	–3.977	.000
FDR	.017	.006	.316	2.580	.013
BOARD	.441	.219	.238	2.017	.049
DPS	.411	.413	.104	.995	.325
SIZE	–1.090	.193	–.767	–5.660	.000
INT	1.188	.144	.675	8.227	.000
DFOR	–1.690	1.037	–.265	–1.629	.110
Adjusted R^2: 0.644 F: 16.211					

3.4.1. The effect of CAR on the ROD

CAR has a significant negative effect on ROD. This can be seen from the significant value of .000 which is smaller than .050. The value of the CAR variable regression coefficient is –.71, meaning if the CAR variable has increased by one unit, while the other independent variable is considered constant (value 0), then ROD will experience decrease of .71. This result is inconsistent with the research conducted by Hamza (2016) and Aysan et al. (2013) who found that CAR affects ROD positively.

This study provides an evidence that sharia banks in Indonesia have not guaranteed a higher return on excessive risk-taking. The negative result indicates that the larger, the smaller CAR of ROD obtained by sharia banks in Indonesia. This condition can be seen from Figure 1. In this figure it can be seen that the average ROD in 2011 to 2013 was in opposite direction with the average movement of CAR in the same year period. Similarly, in the year 2014–2015, the movement of ROD and CAR were also in an opposite direction. Also, the CAR of sharia banks in Indonesia has far exceeded the mandatory minimum requirement of 8%, so it appears to bring a negative impact on ROD.

3.4.2. The effect of FDR on the ROD

FDR has a significant positive effect on ROD. This result is in line with Gozali (2006) found that Financing to Deposit Ratio (FDR) has a positive and significant effect on Return on Deposit (ROD). The FDR ratio is used to measure the extent to which loan fund is sourced from a third party. This low ratio shows the level of liquidity of the bank so that if the higher the size of an Islamic bank's FDR illustrates a less liquid state than a sharia bank with a lower FDR size. Conversely, the lower the size of the FDR of an Islamic bank then the bank can maintain an excessive liquidity tool and will cause pressure on the income of Islamic banks in the form of high cost of maintenance of idle cash. Therefore, the greater opportunity of sharia banks to increase their income by optimizing the distribution of financing and in this case, it will also increase the profitability of sharia banks, especially ROD.

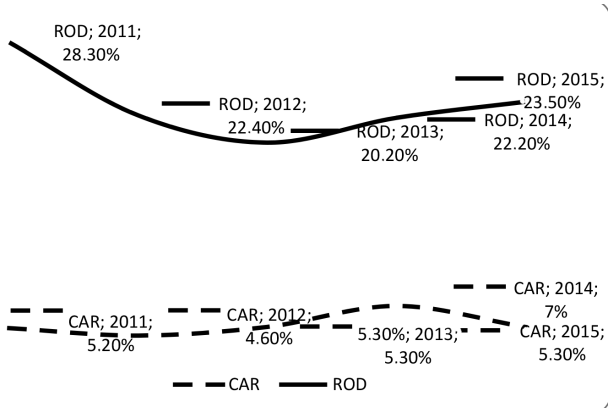

Figure 1. The Average of ROD and CAR on Sharia Bank in Indonesia (source: the financial repot of bank sample)

3.4.3. The effect of the size of the directors on the ROD

The Board size (BOARD) has a negative and significant effect on ROD. The result of this study is in line with the result of the research conducted by Ghaffar (2014). This result indicated that the more the number of directors the more effective the supervision so that it will have an impact on the performance of sharia banks. According to Ghaffar (2014), the larger size of directors is needed because the experience of sharia banks is still relatively new. Therefore, more board size is needed to establish a better strategy and a supervision to compete with conventional banks that will affect the performance of sharia banks.

3.4.4. The effect of the Sharia Supervisory Board's size on the ROD

The size of the Sharia Supervisory Board (DPS) has no significant effect on ROD. This result does not support the results of the research conducted by Ghaffar (2014) which stated that a small Sharia Supervisory Board will be easily controlled and influenced by executives and boards of directors, while the existence of a large Sharia Supervisory Board with various experiences and skills of sharia – will lead to a better interpretation of Sharia bank products and operations. The size of a large Sharia Supervisory Board can encourage the credibility of banks because it prioritizes compliance with Islamic law so that the protection of the rights of depositors is more secure and it avoids the withdrawal of depositors' funds. This will then encourage the performance of Islamic banks, especially profitability. Nevertheless, the result of this study supports Hamza (2016). According to Hamza (2016), this insignificant result showed that the increase in the number of Sharia Supervisory Boards is not effective in controlling the ROD. Therefore, sharia banks do not need to add members of the Sharia Supervisory Board to encourage the increase of ROD.

3.4.5. The effect bank size on the ROD

The size of the bank (SIZE) has a negative and significant influence on ROD. This result does not support the research conducted by Aysan et al. (2013) and Bashir (1999). According to Aysan et al. (2013), the size of the bank can be a signal for depositors regarding the performance and competitiveness of banks that encourage depositors to invest their funds into the sharia banks concerned. Meanwhile, according to Bashir (1999), sharia banks that have greater assets can benefit economies of scale that impact on the increase of Islamic banking's ROD. Nevertheless, the results of this study support the findings of Hamza (2016) who

found that the size of sharia banks had a significant negative effect on ROD. According to Hamza (2016), these results indicate that smaller sharia banks offer better returns. Large banks seem to be overwhelmed in managing large assets so that efficiency as a benefit of economies of scale is still unattainable.

3.4.6. The Influence of interest rate on ROD

The study found that interest rates (INT) had a significant positive effect on ROD. The results of this study support Hamza (2016) who found that interest rates have a significant positive effect on ROD. Hamza (2016) stated that Islamic banks can make conventional bank benchmark interest rates in offering return on investment deposits to depositors because Islamic banks are also involved in competition with conventional banks in attracting customers. Islamic banks face intense competition against conventional banks because conventional banks offer yield guarantees in the form of interest rates.

3.4.7. The influence of foreign ownership on ROD

This study found that the ownership status (DFOR) of sharia banks did not have a significant effect on ROD. The results of this study are in line with Hamza (2016) which also found that there is no influence of foreign ownership of sharia banks against ROD. This shows that foreign sharia banks are no better than domestic sharia banks in obtaining ROD.

Conclusion and suggestion

This section discussed the conclusion and suggestion made based on the results of this study.

Conclusion

This study aims to examine the factors that affect the Return on Deposit (ROD) on Islamic banks in Indonesia. These factors include Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), the size of directors, the size of the Sharia Supervisory Board, the size of the bank, and the interest rate. The study also adds a dummy variable to see if there are significant differences in ROD obtained in sharia banks regarding ownership status, i.e., foreign ownership and domestic ownership. The results of this study indicate that not all variables studied have a significant influence on ROD. Capital Adequacy Ratio (CAR) and bank size (SIZE) have a significant negative effect on Return on Deposit (ROD) on sharia bank in Indonesia. While the FDR, the size of directors and interest rates have a significant positive effect on Return on Deposit (ROD) in Islamic banks in Indonesia. Meanwhile, Sharia Supervisory Board and foreign ownership sizes have no significant effect on Return on Deposit (ROD) on sharia bank in Indonesia.

Suggestion

This study has some limitations among other samples which have been studied. It is also limited to sharia banks in the form of sharia public banks where it does not involve sharia financing banks. Therefore, a future research needs to specifically conduct to study on sharia financing banks. Depositors in sharia banks do not need to consider the size of the sharia supervisory board and the bank's ownership status in depositing the funds since the size of the sharia supervisory board does not affect the ROD and there is no difference between foreign and domestic sharia banks. However, depositors need to consider the CAR, bank size, FDR, the size of the board of directors and the prevailing interest rate because it has a significant impact. The depositor should choose sharia banks with high FDR and well managed (i.e. have bigger board size to ensure good corporate governance implementation). The depositor also suggested to consider sharia banks with smaller size because it can provide better return on deposit, but again some consideration, i.e. risks must concerned.

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