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Determinants of Non-Performing Financing in Sharia Banks in Indonesia, Oman, and United Arab Emirates

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Abstract

An increase in non-performing financing ratios occurred in several countries, such as Indonesia, Oman, and the United Arab Emirates from 2015 to 2019. This study aimed to determine the most influential factors that cause NPF. Hence, the growth of NPF can be controlled once the most influential factors are determined. The method used in this study is a Multiple Linear Regression Analysis to examine the influence of sales and purchase contracts, fit-sharing contracts, financing to deposit ratio, and financing allowances on non-performing financing. This study was conducted in Islamic banks in Indonesia, Oman, and United Arab Emirates. The results of this study indicate that sales and purchase contracts, profit-sharing contracts, and financing allowances have a significant effect on the NPF Ratio, while FDR does not affect NPF. Through this research, it is hoped that it can contribute to regulators implementing obligations that can control the NPF rate.

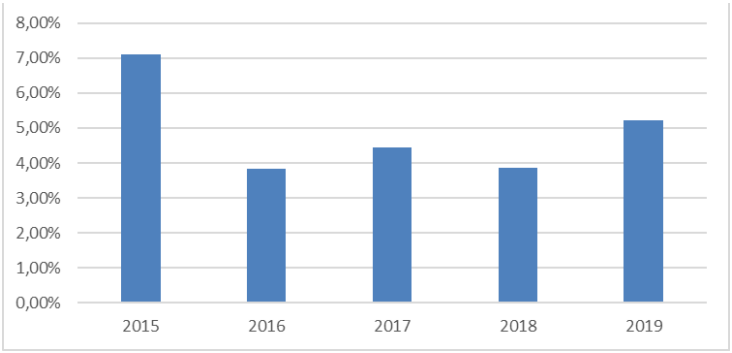
Keywords: NPF, FDR, Profit-Sharing Ratio, Financing Allowances, Sale and Purchase Ratio.

INTRODUCTION

Non-Performing Financing (NPF) is one of the many risks for Islamic banking. The risk of this financing increased from 2015 to 2019 in Indonesia, Oman, and the United Arab Emirates. This increase indicates that the bank's health is at high risk due to a large amount of uncollected financing, which affects the Return on Assets (Yuwita, 2018). ROA is important in increasing bank profitability which is included in bank health indicators.

The state-owned Islamic bank in Indonesia, BRI Syariah, experienced an increase in NPF in 2017 to almost 5%, which is the limit set through POJK No. 15/POJK.03/2017 concerning Status Determination and Follow-Up Supervision of Commercial Banks. This triggered BRI Syariah to form Bank Syariah Indonesia (BSI), which is a combination of Bank Negara Indonesia Syariah (BNI Syariah), Bank Mandiri Syariah, and Bank Rakyat Indonesia Syariah (BRI Syariah), making it a state-owned Syariah Bank in Indonesia.

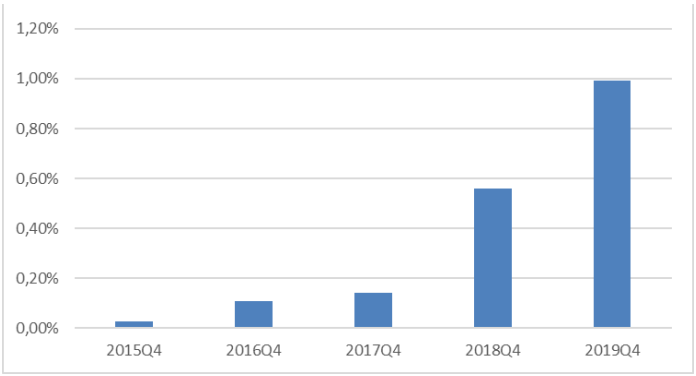
Image 1. NPF Growth in Bank Muamalat Indonesia



Source: Bank Muamalat Financial Statements

In 2019, Bank Muamalat, the first Islamic commercial bank in Indonesia, was reported to have difficulty distributing financing to the public. This is because Bank Muamalat focuses on channeling its financing to corporations such as mining and palm oil which should also be developed into retail entities. This caused the NPF of Bank Muamalat in 2019 to be 5.22% which showed a sharp increase from 2018 of 3.87%.

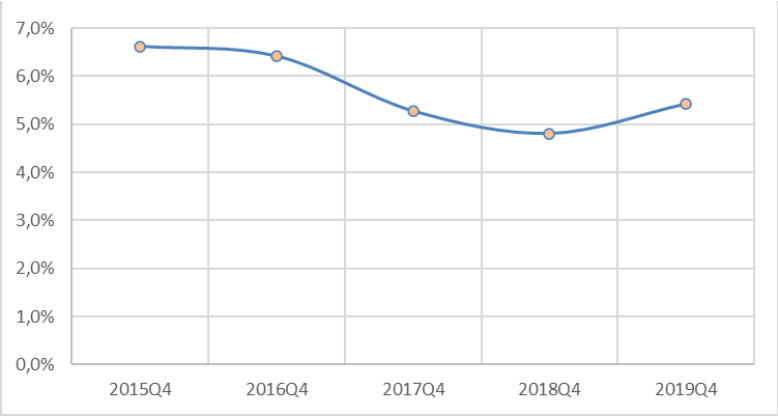
Image 2. NPF Growth in Oman



Source: International Financial Services Board (IFSB)

In Muscat, Oman also experienced a high NPF spike. Banks in Oman have uncollectible loans or high NPFs due to expatriate debtors living in the country, leaving Oman due to the economic downturn based on the news in The National News (Shaibany, 2017). This has increased the number increase in the last 2 (two) years. In the first half of 2016, 69% of the 26 banks in Oman reported an increase in their NPLs. The Central Bank of Oman set regulations to protect financial institutions from bad loans by setting aside 5% of the annual profit to cover losses on bad loans.

Image 3. NPF Growth in UAE



Source: International Financial Services Board (IFSB)

Problems related to 'bad loans in the Middle East were also found in the United Arab Emirates (UAE). According to the rating agency S&P, information obtained from the Reuters news channel shows that banks in the United Arab Emirates have the potential risk of bad loans because of the decline in oil prices and changes in macroeconomic conditions, the rating agency S&P. Based on other articles, the condition of the increase in bad loans in the United Arab Emirates has been going on for 5 (five) years. An increase in NPF caused by these factors could result in a deteriorating bank profitability ratio, as stated by the S&P rating agency.

The factor that causes NPF growth is the financing provided to the customers. The financing types provided to Islamic Banks customers include sales and purchase and profit-sharing contracts. Customers widely use the two types of contracts to receive financing from Islamic banks. According to Hidayat and Arfianto (2017), a large portion of financing can lead to uncollectible financing. The characteristics of each contract have different levels of risk; thus, their policies can cause different types of risks (Effendi et al., 2017).

Fianto et al. (2019), Fianto et al. (2018), Yasin and Widiastuti (2018), Shahari et al. (2015), Hidayat and Arfianto (2017), and Ariffin (2008) show an influence between sales and purchase contracts and profit-sharing distributed by banks to customers with a high level of NPF. The distribution of these two contracts has the potential for uncollectible financing, which can lead to NPF.

The Financing to Deposit Ratio (FDR) is a ratio to measure bank liquidity, as seen from the amount of funds received from the public to be channeled into financing. The higher the FDR ratio, the lower the bank's liquidity level. A bank's low level of liquidity is indicated by the high level of financing disbursed by banks using third-party funds (DPK). The amount of financing disbursed increases the risk of being uncollectible, which is related to NPF. Research on the Financing to Deposit Ratio (FDR) factor that causes NPF has been carried out by several

researchers, namely Elsa Ayu (2019), Shinta Amalina (2015), Mia (2016), Dendi (2020), Melianda (2017), Ambaroita (2015), Amelia (2019), and Hafidz & Setiawan (2015), Haifa & Wibowo (2015),

To reduce the risk of uncollectible financing, banking regulators in Indonesia, Oman, and the United Arab Emirates require Islamic banks to establish financing reserves. This provision is based on the number of non-performing financing categories. These categories include current, substandard, doubtful, and loss. The higher the reserves, the higher the NPF ratio in Islamic banks (Sholikhah, 2018). Research conducted by Komalasari (2015), Sholikhah (2018), Radivojevic and Jovovic (2017), Islam (2018), Messai (2013), Sari (2016), Waemustafa and Sukri (2015), and Hayati and Ahmad (2004) has shown the effect of financing allowances on financing risk or NPF in various conventional and Islamic financial institutions.

This research is different from previous studies conducted by Nasir and Khomariyah (2020), Darmawanti and Suprayogi (2020), and Haq and Suprayogi (2020); the addition of a new variable, Funding Allowance, is used to determine the role of risk management in tackling the growth of NPF as proxied by the International Accounting Standard (IAS) 39 and PSAK 55. This study took the subject of 3 (three) different countries; Indonesia, Oman, and the United Arab Emirates (UAE). This research was carried out in 2015 – 2019 because 2015 was the beginning of the increase in NPF in the country where the author made the research subject.

This research is expected to be useful for regulators, in this case, the Otoritas Jasa Keuangan (OJK), Central Bank of Oman (CBO), and Central Bank of United Arab Emirates to be able to evaluate policies that can control the growth rate of NPF in order to protect banking health, while for theoretical contribution, this research is expected to contribute to the development of research on NPF through the theory of financial intermediation, liquidity preference, and risk management.

RESEARCH METHOD

The population in this study was Islamic Commercial Banks from 2015 to 2019. The selection of this period was due to the beginning of a significant increase in NPF in Indonesia, Oman, and the United Arab Emirates from 2015 to 2019. In early 2020, the case of Covid-19 increased. Thus it would be the best option to exclude 2020 from this research. Sample selection was performed using a purposive sampling technique based on the predetermined sample selection criteria. This study uses secondary data from financial statements or annual reports of Islamic banks in Indonesia, Oman, and the United Arab Emirates from 2015 to 2019. The total observations in this study include 91 observations from 22 Islamic banks. The sample criteria used include Islamic banks registered in the governments of the countries sampled and publishing the 2015 – 2019 Financial Statements/Annual Reports on the websites of each Islamic Bank.

The research model used in this study was a Multiple Linear Regression model. This model is used for research with more than 1 (one) independent variable or independent variable (Sholihin & Anggraini, 2020). This model also aims to determine the influence of the independent variable on the dependent variable (Ghozali 2018). In this study, the Multiple Linear Regression Analysis model will test the influence of the Type of Financing, Financing to Deposit Ratio (FDR), and Financing Reserves on the NPF. The regression equation used in this study is as follows:

$$Y = \alpha + \beta_1 JB + \beta_2 BAGHAS + \beta_3 FDR + \beta_4 PROV + e$$

α = Constant

JB = Sale and Purchase Agreement

BAGHAS = Profit-Sharing Contract

FDR = Financing to Deposit Ratio

PROV = Financing Allowance

$\beta_1 - \beta_4$ = Regression Coefficient

e = Residual Value

Operational Definition of Variable Measurement

The operational definition of each variable is as follows:

a. There are 2 (two) types of non-performing financing (Y). Financing classified as quality (Koll) 3, 4, and 5 are included in the non-performing financing net. Gross non-performing financing includes qualities 2, 3, 4, and 5 (Adnan & Furywardhana, 2006). The following formula is used to determine the ratio of non-performing financing:

$$\text{NPF} = \frac{\text{Non} - \text{Performing financing (net)}}{\text{Total financing (gross)}} \times 100\%$$

b. The Sale and Purchase Agreement (JB) describes the agreement between the bank and the customer to purchase the contract object under the agreed ratio. This variable is proxied by the portion of Murabahah financing compared with the amount of financing disbursed by the bank. Research written by Hidayat and Arfianto (2017) defines the variables of the Sale and Purchase agreement as follows:

$$\text{Sale and Purchase Ratio} = \frac{\text{Sale and Purchase Agreement}}{\text{Total Financing}}$$

c. The profit-sharing Contract (BAGHAS) is a form of cooperation between the bank and the customer in an agreement described by the respective financing portion. The financing in the profit-sharing contract includes Musyarakah and Mudharabah. This variable is measured by comparing the share of profit-sharing financing with total financing. This variable can be operationally defined by Hidayat and Arfianto (2017) as follows:

$$\text{Profit} - \text{Sharing Ratio} = \frac{\text{Profit} - \text{Sharing Contract}}{\text{Total Financing}}$$

d. The ratio of financing to deposits, or FDR, describes Islamic banks' liquidity level. The FDR ratio indicates a high or low level of bank liquidity by comparing the total financing disbursed with the total third-party funds. Research conducted by Wibowo and Saputra (2017) defines the FDR variable as follows:

$$\text{Financing to Deposit Ratio} = \frac{\text{Total Financing}}{\text{Third} - \text{Party Funds}}$$

e. Islamic banks must establish an allowance (PROV) following earnings asset quality to reduce the risk of loss due to uncollectible financing. The financing allowance ratio is proxied by comparing the portion of the allowance formed with total earnings assets under the recommendation of Bank Indonesia as the regulator. The backup was based on the International Accounting Standard (IAS) 39 and PSAK 55 related to establishing Allowance for Impairment Losses (CKPN).

$$\text{Financing Allowances} = \frac{\text{Allowances Established}}{\text{Productive Assets}}$$

RESULT

Based on the results of a descriptive analysis of 91 Islamic Commercial Banks and Sharia Business Units in Indonesia, Oman, and the United Arab Emirates, these results generally describe the overall research object. The average (mean) NPF is 7.59%, which is higher than the standard the Financial Services Authority set in POJK No. 15/POJK.03/2017, which is 5%. This shows that the NPF in the sampled Islamic banks is at a level that needs special attention because the average NPF is higher than the standard that has been set. Meanwhile, suppose the NPF level is higher than the stipulated level. In that case, the health of the Islamic bank is in bad condition.

Table 1. Descriptive Analysis

	LOGNPF	JB	BAGHAS	FDR	PROV
mean	7.591096	39486.48	33826.51	92005.89	2156.593
median	8.014005	36292.00	26470.00	92986.00	1780,000
Maximum	9.435083	91215.00	95510.00	225072.0	8631,000
Minimum	3.465736	570.0000	61.00000	9780,000	-50.000000
Std. Dev.	1.423607	25702.15	28785.35	30074.31	1994,443
Skewness	-1.190629	0.150694	0.453767	0.812026	1.117679
Kurtosis	3.511287	1.821556	1.868238	9.802274	4.033725
Jarque-Bera	22.49141	5.610017	7.979583	185.4447	22.99804
Probability	0.000013	0.060506	0.018504	0.000000	0.000010
Sum	690.7898	3593270.	3078212.	8372536.	196250.0
Sum Sq. Dev.	182.3991	5.95E+10	7.46E+10	8.14E+10	3.58E+08
Observations	91	91	91	91	91

Source: E-views (2021)

Sale and Purchase Financing is the most widely used financing in Indonesia, Oman, and the United Arab Emirates compared to profit-sharing financing contracts. Sale and purchase contracts had an average value of 39486.48, whereas profit-sharing contracts had an average value of 33826.51. From the average number, Islamic banking is more likely to favour buying and selling financing than profit-sharing contracts. This can be seen in previous research conducted by Fianto et al. (2018), who showed that banks prefer buying and selling financing contracts because banks could project their income through a margin that had been agreed upon at the beginning of the contract. The highest buying and selling value of 91215.00 was owned by Bank Mega Syariah in 2016, while the Oman Arab Bank held the lowest in 2015. In contrast to profit-sharing contracts, in practice, they separate the authority between fund owners and fund managers, causing information asymmetry. The highest value of the profit-sharing contract was owned by the Panin Syariah Bank in 2019 (95510.00), while the lowest was owned by the Abu Dhabi Islamic Bank in 2017.

The average FDR ratio is 92005.89, which is still within the limits of adequate liquidity following the provisions stipulated in the Bank Indonesia Circular Letter No. 13/24/DPNP 2011. A high FDR ratio indicates that banks have low liquidity. This can be seen because banks use funds received from third parties (third-party funds) to channel financing to customers. Financing disbursed to customers demonstrates the potential for uncollectible financing, which can lead to NPF. The Ahli Bank obtained the highest FDR value in 2019 (225072). Bank Muscat owned the lowest FDR ratio in 2015.

The average Financing Allowance yield was 21%. This figure is obtained from the provision for financing compared to total earnings assets. A high financing allowance indicates a high NPF, so it is necessary to set up an allowance to reduce the risk of losses arising from the NPF. The Emirates Islamic Bank made the highest provision in 2017, while Bank Victoria Syariah held the lowest provision in 2017.

DISCUSSION

The R-squared value was 0.354693 (35.46 %). This shows that the independent variables of sales and purchase financing contracts, profit sharing, FDR, and financing allowances can explain 35.46% of the dependent variable, while other variables can explain the remaining 64.4% outside this study.

The F-test, which shows whether the independent variable can affect the dependent variable, is indicated by the F-statistical probability value, which is 0.000000 < F significance value

of 0.05. Therefore, it can be concluded that the independent variable can simultaneously affect the NPF dependent variable.

Table 2. Hypothetical Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.758648	0.601347	9.576252	0.0000
JB	2.05E-05	7.40E-06	2.774744	0.0068
BAGHAS	1.76E-05	6.43E-06	2.739442	0.0075
FDR	-1.67E-06	3.69E-06	-0.453186	0.6516
PROV	0.000283	4.67E-05	6.048379	0.0000
R-squared	0.354693			
Adjusted R-squared	0.324678			
SE of regression	0.394397			
F-statistics	11.81746			
Prob(F-statistic)	0.000000			

Source: E-views (2021)

The Effect of Sale and Purchase Financing on NPF

Table 2 presents the regression results using the random-effects model. The results of the study state that the significance value of the Sale and Purchase financing variable is 0.0068 <0.05; thus, it can be stated that the Sale and Purchase financing has a significant influence on the NPF, so the data support H1. The positive coefficient value of 2.05 indicates that every increase in the sales and purchase financing contract will affect the increase in NPF by 2.05.

These results follow those of Hidayat and Arfianto (2017), Jimenez and Saurina (2006), Fianto et al. (2019), Wahyuni (2016), and Ariffin et al. (2008) explain that financing with the Sale and Purchase type tends to be favoured by banks because the margin is determined from the beginning of the contract so that the bank can project its income in this contract. This triggers bank-to-channel financing through a sale and purchases agreement.

Following the theory of financial intermediation, banks and financial institutions act as intermediaries between those who have funds and those who require funds. One of the distributions of funds from banks to parties that need funds is based on a Sale and Purchase agreement. Financing by Sale and Purchase contracts is often used in Islamic banks under the advice of Allah SWT through QS Al-Baqarah (275), which forbids usury and justifies Sale and Purchase, as shown by the average ratio of financing for Sale and Purchase contracts which is higher than the financing ratio. Profit sharing contract. The amount of financing with a sales and purchase contract can result in a high NPF due to the high amount of financing. This is indicated by the average selling and buying contract financing ratio, which is higher than the profit-sharing contract financing ratio.

Effect of Profit-Sharing Financing on NPF

The significance value of the Profit-Sharing Financing variable is 0.0075 < 0.05, indicating that the independent variable Profit-Sharing Financing has a significant effect on NPF. It can be stated that the data support H2. The relationship between Profit-Sharing Financing and NPF is positive, as indicated by the coefficient value of 1.76 which indicates that any increase in Profit-Sharing Financing will affect the increase in NPF by 1.76. The results of this study are supported by previous research by Fianto, Dkk (2019), Fianto dkk (2018), Yasin and Widiastuti (2014), Warninda, Ekaputra, and Rokhim (2019), Adzimatinur and Manalu (2021), Priyadi, Utami, Muhammad, and Nugraheni (2021), and Widarjono, Anto, and Fakhrunnas (2020).

Financing with Profit-Sharing contracts is riskier than sales and purchase financing because, in profit-sharing contracts (Musyarakah and Mudharabah), the role of Islamic banks is not so much involved creating the potential for information asymmetry. In the theory of financial intermediation, banks channel funds to customers through available contracts with different characteristics. Effendi et al. (2017) through their research show that differences in characteristics between contracts indicate differences in risk levels, so that the policies of each contract can pose financing risks, such as in profit-sharing contracts which have the characteristics of the distribution of authority between the bank as the owner of the funds and the customer as the fund manager. Matters related to the profit-sharing contract have been explained in QS An-Nisa:12 and QS Saad:24 which explain the associations allowed by the Allah SWT. In the event of the misuse of funds provided by the bank, a higher NPF will occur to the related bank.

Effect of FDR on NPF

The results showed that FDR had no significant effect on NPF. It is characterised by a significance value of 0.6516 > 0.05, with a negative coefficient value. This means that FDR does not have a significant effect on NPF. Thus, H3 was not supported by the data. This is not following the research conducted by Wahab (2016), Ambaroita (2015), Sari (2016), Amelia (2016), Hafidz and Setiawan (2015), and Haifa and Wibowo (2015), because the FDR ratio only describes how much the bank allocates the funds it receives from third parties in the form of financing.

This is not in line with the theory of liquidity preference, namely the role of regulators in using the savings principle recommended by the National Sharia Council (DSN) No. 02/DSN-MUI/IV/2000 to control for the amount of money in circulation does not affect bank liquidity which has an impact on increasing NPF.

The results of the descriptive analysis show that the average FDR is still within the sufficient limit determined by BI, so it cannot affect the bank's health. The results of this study show that the level of bank liquidity has no effect on a high NPF ratio because the level of liquidity

described by the FDR variable does not always impact poor financing quality. The FDR ratio can only describe the level of bank liquidity and has no effect on NPF.

The Effect of Provision for Financing on NPF

Financing allowances significantly affect NPF, as indicated by 0.0000 < 0.05. The relationship between financing allowance and NPF has a positive effect, as indicated by the positive coefficient value of 0.000283. Following the results of this study, H4 was supported. This is in line with previous research by Komalasari (2015), Sholikhah (2018), Islam (2018), Radivojevic and Jovovic (2017), Islam (2018), Sari (2016), and Messai (2013).

The more visions are formed, the higher the level of NPF that needs to be reserved (Sholikhah, 2018). Radivojevic and Jovovic (2017) explain that banks form an allowance to anticipate capital losses caused by uncollected financing, to reduce income volatility and strengthen bank solvency ratios. An effective financing allowance shows that the bank has good risk management, which can be characterised by low financing risk (Sari, 2016). Regulators should detect banks that will experience an increase in NPF (Louzis, 2012) by controlling for the amount of allowance formed by banks.

According to QS. Yusuf 43 – 49, risk-management actions can reduce potential losses in the future, and establishing a financing allowance can reduce potential losses for Islamic Banks. In addition, this study results follow credit risk theory, namely, that banks or other financial institutions are required to establish an effective provision following the quality of their financing to reduce credit risk. From the results of this study, it can be seen that the Financing Allowance can be used to control the NPF rate as part of risk management to achieve the health of Islamic banks.

CONCLUSION

This study aimed to determine the effects of sales and purchase financing contracts, profit-sharing financing contracts, Financing to Deposit Ratios, and Financing Allowances on NPF. The results of this study indicate that sales and purchase financing have a significant positive effect because it is often used in Islamic banks, thus contributing to increasing NPF. In addition, profit-sharing financing also has a significant positive effect because it is quite risky and has the potential to cause NPF due to its financing characteristics that do not involve banks much in customers' business operations. The FDR ratio does not significantly affect NPF, because it only describes how Islamic banks can allocate funds obtained from third parties. Financing Allowance significantly affects NPF because more allowance indicates the number of NPF that need to be reserved, so both have a positive effect.

This study is limited by the number of countries used as research samples. For further research, it is hoped that additional countries will be used as research samples, especially countries with a high level of NPF. In addition, it is better if the independent variables that can affect NPF are added, which is known from the R-squared value which tends to be low at 0.354693 (35.46%). Variables that can be added can be external factors because this study only focuses on the internal factors of Islamic Banks.

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