

FINANCING GROWTH AND ITS RISKS IN ISLAMIC BANKING IN INDONESIA, MALAYSIA AND BAHRAIN

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ABSTRACT

Purpose-This study aims to analyze financing growth and other factors that affect the risk and stability of Islamic banks in Indonesia, Malaysia and Bahrain. **Methodology-**This study uses a quantitative approach with a dynamic panel type that uses the Generalized Method of Moment (GMM) method to analyze the impact of financing growth and the factors that affect financing risk and the stability of Islamic banks. **Findings-**The results showed that faster growth in Islamic bank financing increased non-performing financing which resulted in losses and worsened the stability of Islamic banks. Variables of Capital and Size of the bank moderate the growth of financing which increases the non-performing financing of Islamic Banks. Furthermore, profitability describes the level of efficiency which indicates the low financing risk faced. **Implication-**These results imply that the growth of Islamic bank financing needs more regulation further by strengthening financing risk management as long as financing demand and financing growth increase, by the application of Prudential Banking principles, it is necessary to minimize financing risk and maintain Islamic Bank Stability. **Originality-**Research on the impact of financing growth on the risk and stability of Islamic banks is still limited. Therefore, this research will contribute to financing growth and the factors that affect the risk and stability of Islamic banks.

Keywords : Islamic Banking, Indonesia, Bahrain, Malaysia

INTRODUCTION

The development of Islamic banks after the global financial crisis has increased rapidly. In 2010 the total assets of Islamic Banks have reached USD 939 billion (Cevik and Charap, 2011). In 2013 it has grown to USD 1.2 trillion, which is predicted to continue to grow by 10% - 15% per year (Ernst and Young, 2015). Launching data from the Salaam Gateway Market Report, total Islamic financial assets in 2019 reached USD 2.88 Trillion, an increase of 13.9% from the 2018 position of USD 2.52 trillion.

Table : 1. Financing Growth in Islamic Bank 2016 - 2020

No	Country	Year				
		2016	2017	2018	2019	2020
1	Indonesia	5.79%	6.54%	7.21%	5.55%	10.38%
2	Malaysia	7.32%	7.36%	9.30%	10.40%	8.00%
3	Bahrain	8.98%	9.59%	11.21%	13.00%	-3.9%

Source: Islamic Financial Service Board. 2021

In five years the total financing growth in Malaysia became the highest with an annual average rate of USD 72,043.06 million or 8.47% making Malaysia the country with the highest financing growth rate both in terms of nominal and percentage compared to Indonesia and Bahrain. The growth in financing indicates that Islamic banks are expanding their financing to

increase profits. Basically, the financing disbursed by Islamic banks comes from public funds collected. Every fund disbursed by a Sharia Bank is responsible for returning to the community along with the yield.

Fast financing growth carries a higher risk of default which results in losses, reduces bank capital and worsens bank stability (Foos et al, 2010; Festic et al, 2011; Dang, 2019; Sobarsyah et al, 2020; Bhowmik and Sarker, 2021). Islamic banks with large assets and capital tend to take higher risks in financing distribution to offset the cost of capital (Bitar et al, 2013). The growth of financing originating from new financing carries a higher risk of default than existing financing. Islamic banks tend to relax financing requirements as long as the demand for financing is high to achieve the targets set, easing financing requirements results in the risk of large losses in the future (Kabir et al, 2015).

Assets and capital owned by banks affect bank performance in financing distribution, banks with large size and capital have high moral hazard in financing distribution which makes banks experience losses due to increased non-performing financing (Basher et al, 2017). Banks are more selective in financing distribution when they have a good solvency ratio, this control can limit non-performing financing (Bhowmik and Sarker, 2021). The financing risk faced by Islamic banks will affect the stability of the bank, the higher the level of risk faced will worsen the stability of Islamic banks.

Malaysia is a country with the fastest development of the Islamic banking industry in the ASEAN region (Ghozali et al. 2019). In a research collaboration between Thomson Reuters and the Islamic Corporation for The Development of The Private Sector (ICD), it was shown that Bahrain is the country with the second best Islamic finance industry after Malaysia, besides that Bahrain also has the second best Islamic economic quality in the world (Yunice and Arief, 2018). Indonesia also continues to develop Islamic banking, it is appropriate to refer to Malaysia and Bahrain as references in developing Islamic finance.

A number of studies have examined this issue in conventional banking, but studies relating to Islamic banks are still few. Conventional banks are more flexible in using collateral to adjust customer risk profiles, while Islamic banks are still difficult to reduce the impact of financing risk because Islamic banks do not use collateral to cover losses. In addition, the lack of control to handle asymmetric information makes Islamic banks face more complex financing and stability risks (Abedifar, 2013).

This study aims to analyze the relationship between the risk of default and the stability of Islamic banks with the factors that are considered influential, namely financing growth, bank size, capital, solvency, and profitability.

Section 2 discusses the literature on financing growth. Section 3 discusses the data, variables and methods used. In section 4, we discuss the results and empirical discussion. The last section concludes the important findings and provides policy implications.

LITERATURE REVIEW

Financing is the main source of income for banks (Bhowmik and Sarker, 2021). Bank financing is a significant source of capital in supporting the economy. There is significant evidence that economic development in developing countries is based on the functioning of banks and good financing practices. The government's policy to increase economic growth through the central bank by lowering the benchmark interest rate encourages banks to expand financing, the reasons for banks to expand financing include the desire to benefit from new financing prospects, expanding new market share

The relationship between Islamic banks and mudharib is explained in an agency perspective, in agency theory it is explained that agency conflicts can occur because of hidden information. The banking business is a business that is not transparent and has the potential to cause agency conflicts, in the banking world it is often referred to as asymmetric information, this can happen because mudharib have more comprehensive information about the business being undertaken compared to Islamic banks (Caprio and Levine, 2007). In high asymmetric information, Islamic banks cannot monitor the actions of mudharib in running their business, making it difficult to determine the contract used for financing.

Several studies have examined the impact of financing growth on the risk and stability of Islamic banks. The first group states that financing growth that is too fast increases non-performing financing which results in banks experiencing losses and worsens bank stability (Foos et al, 2010; Sobarsyah et al, 2020; Bhowmik and Sarker 2021). The easing of financing requirements during periods of high financing demand with the aim of achieving the set targets to maximize profits is the cause of poor financing quality (Kashif et al, 2015)

While the second group states that financing growth will reduce financing risk when the ability to mobilize capital is good to balance bank liquidity when managing risk effectively (Amador et al, 2013; Wu et al, 2022).

RESEARCH METHODS

This study uses purposive sampling to determine the sample according to the criteria, namely Islamic banking which is ranked in the top 5 based on total assets in each country in 2020. Second, Islamic banking which publishes annual financial reports from 2010-2020. Secondary data in this study were obtained from the annual report of each bank. The number of bank samples used in this study were 15 banks consisting of five banks in Indonesia, 5 banks in Malaysia and five banks in Bahrain. The research samples are as follows:

Table: 2. Sample Islamic Banking

Country	No	Bank
Indonesia	1	Mandiri Syariah
	2	BNi Syariah
	3	BRI Syariah
	4	Bank Muamalat Indonesia
	5	BTPN Syariah
Malaysia	6	CIMB Islamic Bank Berhad
	7	Malaysian Islamic Bank Berhad
	8	RHB Islamic Bank
	9	MayBank Islamic Berhad
	10	Hong Leong Bank Berhad
Bahrain	11	Bahrain Islamic Bank
	12	Al Salam Islamic Bank
	13	Kheleeji Commercial Bank
	14	Ithmar Bank Bahrain
	15	Al Baraka Banking Group

Source: Bank Annual Data Processed

The equation in this study is a dynamic panel which is estimated using the Generalized Method of Moment (GMM) approach, the GMM method produces an unbiased and consistent estimator. Heteroscedasticity and multicollinearity tests were used as a prerequisite for the estimation of the GMM method. In the first equation analysis is used to determine the effect of financing growth on non-performing financing of Islamic Banks with bank-specific variables, namely, bank size, capital, solvency and profitability. The second equation is used to determine the effect of financing growth on the stability of Islamic banks, with bank-specific variables, namely, bank size, capital, solvency and profitability. The following is the mathematical equation of the GMM method:

Model for bank risk:

$$NPF = \beta_0 + \beta_1 NPF_{it-1} + \beta_2 FING_{it} + \beta_3 SIZE_{it} + \beta_4 CAP_{it} + \beta_5 EQTA_{it} + \beta_6 PROF_{it} + C_{it} \dots \dots \dots (1)$$

Model for bank stability:

$$Z_{score} = \beta_0 + \beta_1 Z_{score \text{ it-1}} + \beta_2 FING_{it} + \beta_3 SIZE_{it} + \beta_4 CAP_{it} + \beta_5 EQTA_{it} + \beta_6 PROF_{it} + \dots \dots \dots (2)$$

Where:

- NPF = Financing risks faced by banks
- NPF_{it-1} = Lag dependent variable
- Z_{score} = bank stability
- $Z_{score \text{ it-1}}$ = Lag dependent variable
- $\beta_2 FING$ = Bank profitability, year t
- $\beta_3 SIZE_{it}$ = Bank size, year t
- $\beta_4 CAP_{it}$ = Bank capital, year t
- $\beta_5 EQTA_{it}$ = Bank solvency, year t
- $\beta_6 PROFIT_{it}$ = Bank profitability, year t
- β_0 = Constant
- $\beta_1, \beta_2, \dots, \beta_6$ = Regression coefficient
- C_{it} = Standard error

RESULTS AND DISCUSSION

4.1. Statistic Discriptive

Descriptive statistics is a general description of the research sample that represents the research population. The results of descriptive statistics:

Table : 3. Statistic Descriptive

Variable	Mean	Median	Maximum	Minimum	Std. Dev
NPF	551.3897	245.0160	3,453,026	0.310055	787.3813
Z_{score}	36.02041	36,42754	114.8665	1.831578	24,56253
FING	21,744,9605	3,452,295	127,939,127	12.5794	32220.931
SIZE	34,143,130	5,867,201	213.520,939	246,4828	49966,333
CAP	3,145,4712	592,841	21,706,8598	18,8882	4744,1665
EQTA	11.1032	9.4600	35.7557	3.48	5.5715
PROF	1,297	1.16	13.58	-3.54	1.91770

Source: Processed Data

Based on Table. 3, during the research period the average non-performing financing was USD 551.38 million, nominally MayBank Islamic Berhad which is one of the Islamic banks in Malaysia has the highest non-performing financing of USD 3,453.02 million, but in terms of

Malaysia's NPF ratio, it is at countries with the lowest average NPF ratio of 2.09% compared to Indonesia at 3.48% and Bahrain at 11.79%, this proves the financing of Islamic banks in Malaysia is the best. The average level of the Zscore ratio is 36.02, Malaysia is the country with the highest Zscore level of 55.09, followed by Bahrain at 32.70 and Indonesia at 20.26. this shows that the stability of Islamic banks in Malaysia is better than Indonesia and Bahrain. For indicators of bank size and capital, Islamic banks in Malaysia are the highest compared to Indonesia and Bahrain with an average capital of USD 874.14 million and total bank assets of USD 91,708.25 million.

4.2. Heteroscedasticity Test

Heteroscedasticity test was conducted to determine whether in the regression model there was an inequality of variance from the residuals of one observation to another observation. The results are as follows:

Table: 4. Heteroscedasticity Test

Variable	NPF	Z _{score}
	Prob	Prob
Lag of Dependent Variable	0.0558	0.6900
FING	0.1507	0.6403
SIZE	0.0591	0.8129
CAP	0.1055	0.9428
EQTA	0.0804	0.5793
PROF	0.7264	0.7386

Source: Processed Data

Based on Table 4, it is known that all independent variables have no significant effect on the absolute of the first and second residual equations, so it can be concluded that there is no heteroscedasticity problem for all research variables as indicated by the value of Prob > 0.05.

4.3. Multicollinearity Test

Multicollinearity test was conducted to determine whether the regression model found correlations between independent variables. The results of the multicollinearity test can be seen in the following table:

Table: 5. Multicollinearity Test Results

	FING	SIZE	CAP	EQTA	PROF
FING	1				
SIZE	-0.180	1			
CAP	-0.153	0.776	1		
EQTA	-0.189	-0.445	-0.248	1	
PROF	-0.151	-0.126	-0.040	0.516	1

Source: Processed Data

Referring to Kervin (1992), based on the table above the correlation coefficient is below 0.8, which means that there is no multicollinearity problem between independent variables.

4.4. GMM Model Estimation Results

Table: 6. GMM Results

Variable	NPF		Z _{score}	
	C	P	C	P
Lag of Dependent Variable	0.102	0.033*	0.142	0.002*
FING	0.376	0.003*	-0.334	0.004*
SIZE	5,620	0.043*	-29,728	0.000*
CAP	-4,303	0.159	-28,165	0.000*
EQTA	0.778	0.000*	-0.515	0.119
PROF	-0.997	0.000*	0.295	0.012*
AR (1)	0.158		0.992	
P-Val. Ar(1)	0.876		0.321	
AR (2)	-0.206		1,661	
P-Val. Ar(2)	0.837		0.097	
J-stats	8,442		7,869	
Prob (J-statistics)	0.490		0.547	

Note: *) significant at $p < 0.05$

The results of the two models are reported in Table 6. The null hypothesis (H0) regarding the validity of the instrument is not rejected (J-statistical probability is greater than 5%)

4.5. Financing growth, bank size, capital, solvency and profitability of non-performing financing

We found a positive effect of financing growth on non-performing financing as indicated by a positive FING coefficient value (0.376) and a significant (p value (0.003) < 0.05) affecting the NPF ratio. This finding supports previous findings which stated that the rapid growth of Islamic bank financing increases non-performing financing (Foos et al, 2010; Sobarsyah et al, 2020; Bhowmik and Sarker, 2021). Financing risk arises as a result of mudharib failing to pay the financing provided by a good Islamic bank. The cause of the increase in non-performing financing is because Islamic banks are too required to take advantage of their liquidity so that it is too easy for Islamic banks to provide financing when the demand for financing increases which reduces the quality of financing.

The positive effect of bank size on non-performing financing is indicated by a positive SIZE coefficient value (5.620) and a significant (p-value (0.043) < 0.05) affects the NPF ratio. This finding supports previous findings which stated that the larger bank size and wider market share exacerbated the moral hazard in financing distribution which caused problematic financing to increase (Abedifar et al, 2013; Bitar et al, 2018). Moral hazard in the distribution of financing makes Islamic banks take higher risks, the consequence of taking this risk is poor financing quality and results in an increase in non-performing financing.

The negative effect of capital on non-performing financing as indicated by the positive CAP coefficient value (4.303) and significant (p value (0.159) > 0.05) affecting the NPF ratio. It can be concluded that the capital variable has no effect on non-performing financing. This finding

is in line with the study of Dang (2019) which shows that capital has no effect on financing disbursed by banks in Vietnam.

The positive effect of solvency on non-performing financing is indicated by a positive EQTA coefficient value (0.779) and a significant (p value (0.000) < 0.05) affecting the NPF ratio. This finding is in line with the study of Curak et al (2013) which found a positive relationship between solvency and non-performing financing because the provision of financing triggered more capitalization in previous years, resulting in an increase in non-performing financing in the current year.

The negative effect of profitability on non-performing financing is indicated by a negative PROF coefficient value (-0.997) and a significant (p value (0.000) < 0.05) affects the NPF ratio. This finding is in line with the study of Kashif et al (2016) which shows the effectiveness of financing disbursed by Islamic banks as evidenced by the low level of non-performing financing. The increase in the profitability ratio shows the level of financing efficiency which is described by low non-performing financing. Smooth financing increases the ROA of Islamic Banks.

4.6. Financing growth, bank size, capital, solvency and profitability on Bank stability

We found a negative effect of financing growth on bank stability as indicated by a negative FING coefficient value (-0.334) and a significant (p value (0.002) < 0.05) affecting the Z_{score} ratio. This finding supports Tolo and Viren (2021), Nguyen and Le (2020) who show that financing growth that is too fast increases the risk of non-performing financing causing losses, eroding bank capital which worsens bank stability.

The negative effect of bank size on bank stability is indicated by the negative SIZE coefficient value (-29.728) and significantly (p value (0.000) < 0.05) affects the Z_{score} ratio. The “too big too fail” effect is related to the moral hazard of a large bank with a wider bank size (Beck and Leaven, 2006). This is in line with the findings of Bhowmik and Sarker (2021) which show that a larger bank size encourages higher risk taking which worsens the stability of the bank.

The negative effect of capital on bank stability is indicated by the negative CAP coefficient value (-28.728) and significantly (p value (0.000) > 0.05) affects the Z_{score} ratio. Capital plays an important role in financing expansion, but on the other hand, growing capital encourages Islamic banks to take higher risks in financing distribution to offset the cost of capital (Abbas and Ali, 2016; Shinjaku, 2017; Sobarsyah et al, 2020)

The negative effect of solvency on bank stability as indicated by the negative EQTA coefficient value (0.515) and significant (p value (0.119) < 0.05) affecting the Z_{score} ratio. It can be concluded that the solvency variable has no effect on the Zscore. This finding is in line with the study of Wu et al (2022) which showed that solvency had no effect on bank stability in Vietnam

The negative effect of profitability on bank stability as indicated by the positive PROF coefficient value (0.295) and significant (p value (0.012) < 0.05) affecting the Z_{score} ratio. Banks with high ROA levels often have high Zscore ratios, which reflects the better stability of individual banks (Bhowmik and Sarker, 2021; Sobarsyah et al, 2020). The results of other studies conducted (Dang, 2019; Amador et al, 2013; Kashif, 2016) show that a high level of profitability reflects the low risk of non-performing financing faced.

CONCLUSION

This study provides evidence that supports the theory that financing growth is the cause of poor bank performance, thereby reducing bank stability (Bhowmik and Sarker, 2021). During times of high demand for financing, Islamic bank managers tend to loosen financing requirements which reduce the quality of financing, resulting in losses and worsening the stability of Islamic banks. Increased profitability shows the financing efficiency of Islamic banks. Many studies show that the growth of indirect financing shows an increase in non-performing financing, but takes one to 3 years in the future (Foos et al, 2010; Salas and Saurina, 2002; Sobarsyah et al, 2020).

This study recommends further regulation on strengthening financing risk management as long as financing demand and financing growth increase. Therefore, financing growth needs to pay attention to the principles of Prudential Banking in order to minimize financing risk and maintain the stability of Islamic banks.

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