



International Journal of Research Publications

FINANCIAL RISK ANALYSIS ON PROFITABILITY ISLAMIC BANKS IN INDONESIA

CICI WIDYA PRASETYANDARI

Programs Master of Management, Faculty of Economics and Business, University of
Jember

Jln. Kalimantan 37, Jember 68 121

E-mail:ciciwidyaprasetyandari@gmail.com

Abstract

This study aimed to analyze the effect of credit risk, liquidity risk, market risk and operational risk to ROA. The population in this study consists of 13 Islamic banks, while the calculation of the sample using purposive sampling method resulted in 10 Islamic banks. This research method using multiple linear regression analysis. The study states that the Partial credit risk, market risk and operational risk significant effect on profitability ROA, but liquidity risk does not affect the profitability ROA. Simultaneous credit risk, likuiditasl risk, market risk and operational risk jointly affect the profitability ROA.

Keywords: credit risk, liquidity risk, market risk, operational risk, profitability

INTRODUCTION

Islamic banks are financial institutions that conduct their activities based on Islamic principles. Banking in Indonesia is an institution that greatly affect the economic and financial development of the State, because it serves as an intermediary institution an organization whose function channel back funds owned by the society that is surplus to the public deficit. The existence of the banking world in addition to improving the economy of a country also aims to enhance national development. Therefore, the performance of banks is very important to note.

Financial performance of a bank can be measured using profitability. Profitability According to Kasmir (2014: 115), is the ratio to assess the ability of the enterprise for profit. This ratio also provides a measure of the effectiveness of management of a company. This is demonstrated by the profit generated from sales and investment income. Profitability ratios can be projected by using Return on Assets (ROA). ROA is a financial ratio that is primarily used to assess the ability of banks to generate profits seen from the total assetsnya. ROA The bigger the better the performance of the bank.

Banks are the institutions most vulnerable to the risks, particularly risks related to finance. In general, the risks faced by conventional banks are also faced by Islamic banks. Risks faced by banks is credit risk (financing), liquidity risk, market risk, operational risk, strategic risk, legal risk, juridical risk, and compliance risk (Sulhan and Siswanto, 2008; 152).

Risks faced by banking can be classified into two categories, namely the risk associated with the financial and risk inherent in the bank as the basis of compliance with banking regulations. Banking risks focus on financial issues for the banking business is a business that is engaged in financial services (Fahmi, 2011: 101). Financial risks in banking include credit risk (financing), liquidity risk, market risk, and operational risk. Financial risks are risks that affect the company's profit. Banking financial risk must be managed properly so that the performance of banks continue to rise.

Financing risk is the risk caused by the inability of the debtor to meet its obligations as required by the creditor (Fahmi, 2014: 104). Financing risks in Islamic banking is measured using non performing finance (NPF). NPF is a ratio which is very important to assess the risks in the banking one. The higher the NPF in a bank, then the bank can be said to be in a high risk. Islamic banking financing risks are risks that need to be considered, the higher the risk it will affect corporate profits. Effect of empirical studies on the NPF to ROA has been studied previously, Joseph (2017), Sari (2017), Ridhoilahi (2015), Fitriyah (2016) suggests that the NPF and ROA have significant influence. While Fakrudin and Purwanti (2015),

Liquidity risk arises when the bank suffered an inability to meet the funding requirements (cash flow) immediately and the appropriate fee, both to meet the needs of everyday transactions and to meet urgent cash needs (Machmud and Rukmana, 2009: 135). Islamic bank liquidity risk is measured using the ratio of FDR (Financing Deposit Ratio). Banking liquidity ratio also affects the profits of a bank. Research conducted by Joseph (2017), Fakhurudin and Purwanti (2015), Afifah (2014) and Sari (2017) shows the results of research that FDR significant effect on ROA. Ramadanti and Meiranto (2015) stated that FDR did not signikan positive effect on ROA. Other results indicated by Ridhoilahi (2015), Fitriyah (2016) and Pratama (2018) stated that FDR had no effect on ROA.

Market risk is a condition suffered by a company due to changes in market conditions and circumstances beyond the control of the company (Fahmi, 2011: 69). The main components of market risk is interest rate risk, equity risk, commodity risk and currency risk (Greuning and Bratanovic, 2011: 163). This study focused on the interest rate risk, as in any banking activities can not be separated from the term interest. Interest in Islamic banking termed the results. Market risk in Islamic banking commonly known as Net Operating Margin (NOM). Research on the effect of NOM and ROA researched by Joseph (2017), Afifah (2014) and Fitriyah (2016) which states that the NIM effect on ROA,

Operational risk is the risk that among other things due to insufficient or failed

internal processes, human error, system failure, the external problems affecting the operations of the bank (Rival and Arifin, 2010: 989). Operational risk is measured using ROA ratio (Operating Expenses to Operating Income). Empirical studies conducted by Joseph (2017) showed that BOPO effect on ROA, however Fitriyah (2016) and Hartini (2016) expressed another opinion, namely BOPO effect on ROA.

The previous study express opinions inconsistent, therefore it needs to be examined again about the effects of the financial risk to the profitability of Islamic banking in Indonesia. The purpose of this study was to be to analyze the effect of the financing risk, liquidity risk, market risk and operational risk on the profitability of Islamic Banks in Indonesia. The hypothesis in this study is organized as follows;

- H1 : Credit Risk effect on profitability
- H2 : Liquidity Risk effect on profitability
- H3 : Market Risk effect on profitability
- H4 : Operational Risk effect on profitability

RESEARCH METHODS

Research design

This Penetian analyze the influence of independent variable relationship to the dependent variable. This type of research is Explanatory Research study, the research analyzed the causal relationship variables influence credit risk, liquidity risk, market risk and operational risk to profitability.

Population and Sample

The population in this study are all Islamic banks in Indonesia, which amounted to 13 banks. While this method of sampling in this study using purposive sampling method. Sampling criteria are;

- a. Islamic commercial bank that issued the financial statements in a row in the study period ie the period 2011-2017.

- b. Islamic commercial bank that provides complete data on the research data, the ratio of the NPF, FDR, NOM, ROA and ROA.

Types and Sources of Data

The type of data in this research is quantitative data, while the data source of this research is secondary data derived from the financial statements of banks that can be accessed through the official website of Bank Indonesia, namely www.bi.go.id

Data analysis method

The research data were obtained in the form of ratio data were analyzed using multiple linear regression analysis. Conditions perform multiple linear regression analysis is to test the classical assumption first. If it meets the linearity assumption, it can be continued by using multiple linear regression analysis. However, if it does not meet the assumptions of linearity, then use a non-parametric statistics.

RESEARCH RESULT

An Overview of Research Object

The population in this study were 13 Islamic banks. However, not all banking research sample, because the method of taking the sample using purposive sampling method. The election results of samples using these methods can be seen in Table 1.

Table 1. The election process Research Samples

No.	Information	Total Islamic banking
1	Islamic Banks registered in BI in the period 2011-2017	13
2	Islamic commercial bank that issued the financial statements in a row in the study period ie the period 2011-2017.	(1)
3	Islamic commercial bank that provides	(2)

complete data on the research data, the ratio of the NPF, FDR, NOM, ROA and ROA.	
The number of samples that meet the criteria	10

Based on table 1, it can be seen that the selected sample consists of 13 Islamic banks. The bank details are sampled can be seen as follows;

Table 2. List of Commercial Bank Names sharia used as Sample Research

No.	Islamic Banks
1	PT. Bank BRI Syariah
2	PT. Bank BCA Syariah
3	PT. Islamic Bank Panin Tbk
4	PT. Bank BNI Syariah
5	PT. Bank Syariah Mandiri
6	PT. Bank Muamalat Indonesia
7	PT. Bank Aceh
8	PT. Bank Syariah Bukopin
9	PT. Bank Jabar Banten Syariah
10	PT. Bank Mega Syariah

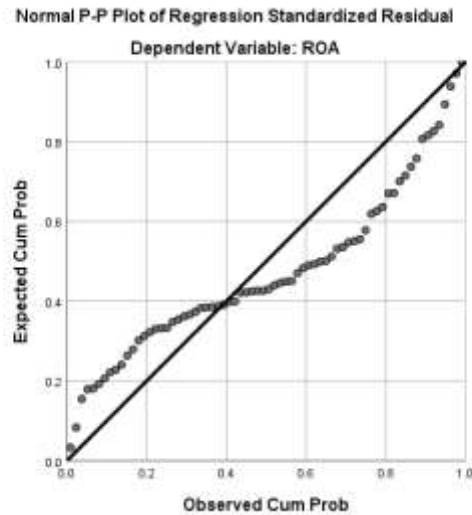
THE RESULTS OF THE DATA ANALYSIS

Normality Test Model

Normality test aims to test whether the regression model, or residual confounding variables have a normal distribution. This study uses a graphical analysis in calculating the normality test models. Normality test chart to analysis using SPSS with chart analysis Normal Probability Plot. Basic decisions normality test in this study wasif data is spread

around the diagonal line and follow the direction of the diagonal line, then the data is said to be normally distributed.

Figure 1. Results of testing Normality model using Normal Probability Plot



The test results using the Normal Probability Plot shows that the points spread around the diagonal line and follow the direction of the diagonal line. That is confounding variable data can be said to be normally distributed.

test multicollinearity

Multicollinearity test was used to test whether there is a correlation between independent variables NPF, FDR, NOM and ROA. Between independent variables should not correlated between the independent variables with other variables. Multicollinearity can be seen with nilain VIF (Variance Inflation Factor). If the tolerance value ≥ 0.10 and ≤ 10 then VIF regression models are free from multicollinearity.

Table 3 Test Results multicollinearity

Coefficientsa							
Coefficients unstandardized		standardized Coefficients		collinearity Statistics			
Model	B	Std. Error	beta	t	Sig.	tolerance	VIF
1 (Constant)	8627	.897		9,620	.000		

NPL	.011	.001	.425	8639	.000	.848	1,179
FDR	-.003	.007	-.023	-.500	.619	.957	1045
NOM	.074	.033	.107	2,228	.029	.885	1,130
BOPO	-.085	.005	-.969	-18 529	.000	.750	1,333

a. Dependent Variable: ROA

Based on test results Multicollinearity in Table 3, it can be seen that the overall tolerance value ≥ 0.10 and \leq overall VIF 10. That is, the regression model free of multicollinearity.

test heteroskedastisitas

Priyatno (2012: 158) defines heteroskedastisitas test is a situation where in the regression model variants of residual inequality occurs in an observation to another observation, a good regression model is not happening heteroskedastisitas. This study uses glejser test to see whether there heteroskedastisitas. Significance level used was 5%. That is, if the significance value greater than 0.05 then it does not happen gejala heteroskedastisitas.

Table 4 heteroskedastisitas test results with use test glejser

Coefficientsa					
Model		Coefficients unstandardized		standardized Coefficients	Sig.
		B	Std. Error	beta	
1	(Constant)	-.933	.709		.193
	NPL	-.001	.001	-.150	.255
	FDR	.008	.005	.179	.152
	NOM	.021	.026	.104	.421
	BOPO	.005	.004	.194	.167

a. Dependent Variable: Abs_RES

In Table 4 it can be seen that the test results glejser overall test showed the significance of above 0.05, suppose the FDR ratio of Islamic banks which have the most significant value is small compared to the others, that is equal to 0.152. However, this figure is greater than α

= 0.05. That is, the data comes from a normal distributed population and data suitable for use in subsequent testing.

autocorrelation test

Autocorrelation test is used for data that is time series. Interest correlation test is to determine whether in a linear regression model was no correlation between bullies error in period t with an error in period $t-1$ (Santoso, 2012; 241). The approach will be used to test for autocorrelation in this research is to test the Darbin Watson. According to Santoso (2012; 242) decision of whether there is autocorrelation seen;

- If the value of DW is below -2 means there is positive autocorrelation.
- If the value of DW is located between -2 to +2 means no autocorrelation.
- When the value of DW is above +2 means there is negative autocorrelation.

Table 5 autocorrelation test results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.931 ^a	.866	.858	.66220	1,624

a. Predictors: (Constant), ROA, FDR, NOM, NPL

b. Dependent Variable: ROA

Based on the analysis in Table 5, it can be seen that the value Darbin Watson amounted to 1,624. That is, the value of DW is located between -2 to +2 means no autocorrelation.

Hypothesis testing

Hypothesis test used to determine the effect of independent variables on the dependent variable. test this hypothesis using partial test (t test) and a simultaneous test (F test). significance level used was 5%. That is, the independent variables and the dependent variable has a significant influence if the significance value ≤ 0.05 .

Table 6 the results of simultaneous regression analysis testing

ANOVA^a

Model		Sum of Squares	df	mean Square	F	Sig.
1	Regression	185 002	4	46.250	105 471	.000b
	residual	28 503	65	.439		
	Total	213 505	69			

a. Dependent Variable: ROA

b. Predictors: (Constant), ROA ', FDR, NOM, NPF

Based on the above test results, it can be seen that the significance value shows the value of 0.00. That amount is less than 0.05. That is, NPF, FDR, NOM and ROA simultaneously affect the ROA.

Table 7 partial test results

Coefficients ^a						
		Coefficients unstandardized		standardized Coefficients		
Model		B	Std. Error	beta	t	Sig.
1	(Constant)	8627	.897		9,620	.000
	NPF	.011	.001	.425	8639	.000
	FDR	-.003	.007	-.023	-.500	.619
	NOM	.074	.033	.107	2,228	.029
	BOPO '1	-.085	.005	-.969	-18 529	.000

a. Dependent Variable: ROA

Based on Table 7, it can be seen that the FDR showed a significance value of 0.619. That is, FDR did not have a significant effect on ROA. while NPF, NOM and ROA respectively show the significant value ≤ 0.05 . This means that the NPF, NOM and ROA partially have a significant influence on ROA.

DISCUSSION

Credit Risk influence on profitability

Partial test results indicate that the credit risk of a significant effect on profitability. Credit risk is the risk that due to a failure to pay its obligations to the bank's customers. The greater the ratio of profitability it will affect the bank's profit, of course this will affect the performance of the company. Islamic bank credit risk to be managed properly, this risk is the description of the bank in determining the success of managing funding channeled. The

results of this study agree with Joseph (2017), Sari (2017), Ridhoilahi (2015), Fitriyah (2016) which states that the NPF and ROA have significant influence.

Liquidity risk influence on profitability

Based on the test results of test statistics above, it can be seen that the liquidity risk does not affect the profitability, this is due to that the liquidity risk is temporary, this research Supports several previous studies, the research done by Ridhoilahi (2015), Fitriyah (2016) and Pratiwi (2018) stated that FDR had no effect on ROA.

Market Risk influence on profitability

The results showed that the risk of a significant effect on the profitability of the market. This suggests that the market risk / returns are uncertain effect on profitability. The Bank is a business engaged in the services sector, therefore, the rate of return is very important to note. The rate of return a company will affect profitability. The results support the research conducted by Joseph (2017), Afifah (2014) and Fitriyah (2016) which states that the NIM effect on ROA. uncertain conditions affecting the company outside the banking profit.

Influence of Operational Risk on to profitability

The results showed that operational risk significant effect on profitability. Operational risk is the risk arising from human error. This human error sometimes cause huge losses. System errors caused by human error fatal to the banks. these conditions will affect the profitability of the company. to avoid operational risks, the need to monitor employees manajmen continuously. The results support the idea of Joseph (2017) which states that BOPO effect on ROA,

CONCLUSION

This study was conducted to determine the effect of credit risk, liquidity risk, market risk and operational risk to profitability. Partially credit risk, market risk and operational risk significant effect on ROA, but liquidity risk does not affect the ROA. simultaneous credit risk, l liquidity risk, market risk and operational risk jointly affect the ROA.

LIMITATIONS OF RESEARCH

The limitation in this study is that some banks do not provide complete data, so the sample consists of only 10 Islamic commercial banks.

RECOMMENDATIONS

The recommendations that can be given by the researcher are;

It is expected that further research uses a broader object, for example researching all existing Islamic banks in Indonesia, besides that researchers can also compare between Islamic banking and conventional banking. Subsequent research can add research variables, for example the CAMEL ratio that examines the level of banking health

References

- Afifah, Gina Zahra. 2014. Analisis Faktor-Faktor Yang Memengaruhi Profitabilitas Bank Umum Syariah di Indonesia. Thesis Faculty of Economics and Management, Bogor Agricultural University.
- Fahmi, Irham. 2011. Manajemen Risiko Teori, Kasus, Dan Solusi. Bandung: Alfabeta.
- Fahmi, Irham. 2014. Pengantar Perbankan Teori & Aplikasi. Bandung: Alfabeta.
- Fakhrudin, Iwan and Purwanti, Tri. 2015. Pengaruh Rasio Kesehatan Bank Terhadap Kinerja Keuangan Bank Syariah Periode 2010-2013. COMPARTMENT, Vol. XIII 2, September 2015. 116-131.
- Fitriyah, Rahmi. 2016. Pengaruh FDR, NIM, NPF dan BOPO Terhadap Profitabilitas (Roa) Pada Bank Umum Syariah Devisa Di Indonesia (Periode Maret 2011 – Desember 2015). Thesis Faculty of Economics and Business Syarif Hidayatullah State Islamic University Jakarta.
- Greuning, Hennie Van and Bratonic, Sonja Brajovic. 2011. Analyzing Banking Risk. Third Edition. Jakarta: Selemba Four.
- Hartini, Titin. 2016. Pengaruh Biaya Operasional Dan Pendapatan Operasional (Bopo) Terhadap Profitabilitas Bank Syariah Di Indonesia. Vol. 2. No. 1. July 2016. Page 20-34.
- Kasmir. 2015. Analisis Laporan Keuangan, edition of unity, mold eighth. Jakarta: PT. King Grafindo Persada.
- Machmud, Amir and Rukmana. 2009. Bank Syariah Teori, Kebijakan Dan Studi Empiris Di Indonesia. Jakarta: Erland.
- Pratiwi, Nanda Galuh. 2018. Analisis Pengaruh Car, Bopo, Nim, Npf Dan Fdr Terhadap Profitabilitas Bank Syariah Di Indonesia Tahun 2014-2016. Journal article Faculty of Economics and Business Universitas Muhammadiyah Surakarta. It 1-9.
- Ramadanti, Fani and Meiranto, Revelation. 2015. Analisis Pengaruh Risiko Likuiditas Terhadap Profitabilitas perusahaan Perbankan di Indonesia. Diponogoro Journal of

Accounting. Vol 4. No. 2. 1-10.

- Ridhoilahi, Negta Dasanova et al. 2015. Pengaruh Risiko Pembiayaan, Risiko Likuiditas, Risiko Modal, dan Risiko Deposito Terhadap Profitabilitas Pada Bank Syariah di Indonesia. 2015. Student Scientific Articles 1-8.
- Rival, Veitzhai and Arifin, Arviyan. 2010 Islamic Bankking Sistem Bank Islam Bukan Hanya Solusi Menghadapi Krisis Namun Solusi Dalam Menghadapi Berbagai Persoalan Perbankan Dan Ekonomi Global, Sebuah Teori, Konsep Dan Aplikasi. Jakarta: Earth Literacy
- Sari, Retna Atika. 2017. Pengaruh Risiko Kredit, Risiko Likuiditas, Dan Permodalan Terhadap Profitabilitas Perbankan (Studi Kasus Pada Bank Umum Go Public Yang Terdaftar Di Bursa Efek Indonesia Tahun 2012-2015). Articles Faculty of Economics and Business Universitas Muhammadiyah Surakarta. It 1-9.
- Sulhan and Siswanto, Ely. 2008. Manajemen Bank Konvensional Dan Syariah. Malang: UIN-Malang press.
- Yusuf, Muhammad. 2017 Dampak Indikator Rasio Keuangan terhadap Profitabilitas Bank Umum Syariah di Indonesia. Journal of Finance and Banking, Vol 13 No. June 2, 2017 Page: 141-151.