Saudi Journal of Economics and Finance

Abbreviated Key Title: Saudi J Econ Fin ISSN 2523-9414 (Print) | ISSN 2523-6563 (Online) Scholars Middle East Publishers, Dubai, United Arab Emirates Journal homepage: http://saudijournals.com

Original Research Article

Financial Performance Analysis of Sharia Banks in Indonesia and Malaysia Using Dupont System

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DOI: <u>10.36348/sjef.2021.v05i01.003</u> | **Received:** 10.01.2021 | **Accepted:** 21.01.2021 | **Published:** 22.01.2021

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Abstract

The purpose of this research is to analyze and determine the financial performance of Islamic banking in Indonesia and Islamic banking in Malaysia using the Dupont System, represented by the ratio of NPM (*Net Profit Margin*), TATO (*Total Asset Turnover*), ROI (*Return On Investment*), MER (*Multyplyer Equity*). Ratio) and ROE (*Return On Equity*). This research uses quantitative data, using secondary data sources by using library studies and library research using different test T in each ratio. Based on the results of the study, it shows that there are significant differences in the ratio of NPM, TATO, ROI and ROE. In contrast, for the MER ratio, there is no significant difference between Islamic banking in Indonesia and Malaysia.

Keywords: NPM, TATO, ROI, MER, ROE.

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Introduction

Asia plays an essential role in the global economy and the Islamic financial system. This is evidenced by total Islamic finance assets which recorded an annual growth of 13.1% between 2010 and 2016. Asia has been a pioneer in several Islamic financial institutions. Now Islamic financial institutions in Asia are increasingly innovative in creating economic growth that has an impact on economic advancement in Asian countries [1-5].

Malaysia, Bangladesh, Brunei, and Indonesia are some examples of countries that are concerned about developing Islamic banking in Asia. The total assets of Malaysian Islamic banking since its establishment amounted to 182.8 billion USD, which was 67.5% of the assets of Islamic banking in the Asian region in 2017—followed by Bangladesh with 30.3 billion USD or 11.2% and Indonesia with 26.9 billion USD or 9.9% [6-9].

Observing asset growth alone is not enough to provide an overview of the development of sharia. Other essential aspects must also be considered and explored including NPM (Net Proft Margin) to measure companies in generating net income, asset turnover as measured by TATO (Total Asset Turn Over), ROI (Return on Investment) measures the return on investment, MER (Multiplier Equity Ratio)

compares assets and equity and ROE (Return on Equity) capital in the company [10-15].

Performance evaluation is a method of measuring the achievement of a company based on predetermined targets. This is part of a control measure that can help the company improve its future performance by identifying deficiencies in its operations throughout the financial year. Having the right performance measurement system is essential, especially in today's borderless world, to remain financially competitive and robust [16-18].

Assessing the performance of Islamic banking is one way to determine the soundness of a bank because by looking at the performance it will be seen how the bank can carry out its function correctly as an intermediary institution, a trusted institution for the public to save money, and how Islamic banks can carry out their social functions (CSR). The measurement of financial performance is crucial in its role concerning this problem [19, 20].

In this study, to measure the financial performance of Islamic banking in Indonesia and Malaysia, the Dupont method is used [21].

LITERATURE REVIEW

Signalling Theory

Signal theory is one way to understand financial management in companies, especially Islamic

banking companies. This signal can be in the form of information on what direction has done in processing funds from investors.

From this information, investors can find out how changes in the financial performance of banks that occur each period so that it can influence the value of the banking sector itself. There is a positive correlation between the number of shares or the number of incoming funds and the company's financial statements. If there is "good news" presented, there will be many investors who invest in the company, and the opposite will apply.

Financial Statements

Financial reports are the result of an accounting process that is commonly used as a means of communication with interested parties based on financial conditions and the consequences of financial operations. The condition of the company can be seen from the company's financial statements. Likewise, with banking, banking financial reports aim to provide information relating to financial position, performance and changes in financial situation. Banking financial reports are also useful for decision making for external and internal parties.

Financial Performance

Financial performance is a reflection of the achievement of a company's success. It can be interpreted as the results that have been achieved for various activities that have been carried out. The company's financial performance is one of the bases for assessing the company's financial condition, which can be done based on an analysis of the company's financial ratios. Excellent or lousy banking financial performance and the success or failure of achieving business performance can be measured by a financial benchmark

called the financial ratio. Measurement of banking performance can be carried out.

Dupont System

The Dupont analysis method is often used in particular for division control; the process is called controlling the rate of return on investment (ROI). If the ROI for a particular division is below the target number, through the Dupont Method, the causes of the decrease in ROI can be traced. If the ROI is multiplied by the Equity Multiplier, it will produce ROE (Return On Equity). ROI (profit resulting from overall investment in assets) is a product of net profit margin (profit generated from sales) and total asset turnover (the company's ability to generate sales from its assets).

Hypothesis

H1: There is a significant difference in the value of Net Profit Margin (NPM) in Indonesia and Malaysia

H2: There is a significant difference in the value of Total Asset Turnover (TATO) in Indonesia and Malaysia

H3: There is a significant difference in the value of Return On Investment (ROI) in Indonesia and Malaysia H_4 : There is a significant difference in the value of Multiplier Equity Ratio (MER) in Indonesia and Malaysia

H5: There is a significant difference in the value of Return On Equity (ROE) in Indonesia and Malaysia

METHODOLOGY

This type of research data is secondary data research. The number of samples in this study was 105. The sampling technique in this study, namely by using a purposive sampling method. The test tool used in SPSS 25.

Data Analysis

1. Net Profit Margin

It is a measure of the percentage of each remaining sales after deducting all costs and expenses

Profit After Tax X 100%

Income

2. Total Asset Turnover

That has a utility to measure the velocity of turnover of assets used by the company in a certain period

Income Assets

3. Return On Investment

Namely, to see the rate of return received on investment issued.

NPM x TATO

4. Multiplier Equity Ratio

Namely, a financial ratio to calculate how much equity or capital is compared to the company's total assets or how much assets are financed by debt.

Assets Equity

5. Return On Equity

It is a ratio to measure the rate of return of the company or banking on all existing capital.

ROI x MER

RESULTS AND DISCUSSION

Results of Calculation of the Dupont System for Indonesian Islamic Banking 2014-2018

	NPM	TATO	ROI	MER	ROE
BCAS	8,43%	0,08	0,67%	4,86	3,30%
BJBS	-20,15%	0,10	-1,96%	8,31	-17,50%
BMI	1,38%	0,07	0,10%	14,68	1,50%
BMS	7,71%	0,12	0,78%	6,62	4,75%
BNIS	9,71%	0,10	0,94%	10,12	9,54%
BRIS	3,73%	0,09	0,35%	10,58	3,64%
BSB	-0,04%	0,09	-0,01%	9,03	-0,20%
BSM	4,39%	0,08	0,36%	12,72	4,36%
BVS	-7,84%	0,09	-0,75%	7,71	-6,28%
MSI	-80,69%	0,08	-7,46%	2,08	-15,09%
PSB	-18,96%	0,08	-1,77%	11,25	-67,84%

From the above data, it can be seen that in Islamic banking in Indonesia, the highest NPM ratio at BNIS (Bank Negara Indonesia Syariah) 9.71%. The highest TATO ratio is found in BMS (Bank Mega Syariah) of 0.12 times. The highest ROI ratio at BNIS is 0.94%. The highest MER ratio for BMI (Bank

Muamalat) is 14.68. The highest ROE ratio at BNIS was 9.54% [22, 23].

Results of Calculation of the Dupont System for Malaysian Islamic Banking 2014-2018

	NPM	TATO	ROI	MER	ROE
AFIBB	12,90%	0,04	0,51%	13,91	7,01%
ALIBB	40,09%	0,03	1,08%	10,56	11,44%
AMIB	94,11%	0,09	8,13%	1,20	9,67%
BIMB	19,65%	0,05	1,00%	13,71	13,84%
BMMB	12,38%	0,05	0,62%	11,29	6,93%
CIMBIB	18,01%	0,04	0,79%	16,41	12,98%
HONGIB	15,71%	0,04	0,66%	11,72	7,76%
MAYIB	43,12%	0,03	1,36%	8,64	11,70%
PURIBB	18,58%	0,04	0,79%	14,19	11,27%
RHBIB	15,00%	0,04	0,64%	16,63	10,62%

From the data above, it can be seen that in Islamic banking in Malaysia, the highest NPM ratio is AMIB (AmBank Islamic Berhad) of 94.11%. The highest TATO ratio is found in AMIB of 0.09 times. The highest ROI ratio at AMIB is 8.13%. The highest MER ratio on RHBIB (RHB Islamic Bank Berhad) is

16.63. The highest ROE ratio at BIMB (Bank Islam Malaysia Berhad) was 13.84% [24].

Hypothesis Testing NPM Descriptive Analysis

Descriptive Statistics								
	N	Range	Min	Max	Sum	Mean	Std. Dev.	
NPM Indonesia	11	0,904	-0,807	0,097	-0,924	-0,084	0,261	
NPM Malaysia	10	0,817	0,124	0,941	2,895	0,290	0,254	
Valid N (listwise)	10							

The number of research objects is 11 Indonesian Islamic banks and 10 Islamic banks in Malaysia, and it can be seen that the mean NPM in

Islamic banks in Malaysia is higher at 0.290, while in Indonesia it is -0.084, the difference between the two indexes is 0.3735 or 37.35% [25].

Normality Test

One-Sample Kolmogorov-Smirnov Test								
			NPM					
N			21					
Test Statistic			0,23					
Asymp. Sig. (2-tailed)			.005°					
Monte Carlo Sig. (2-tailed)	Sig.		.185 ^d					
	99% Confidence Interval	Lower Bound	0,175					
		Upper Bound	0,195					

Based on the data on the results of the normality test for the NPM ratio in Islamic banks in Indonesia and Malaysia for the 2014-2018 period, the value is statistical test 0.230 with a significant probability of 0.185 and the value is above 0.05 or $\alpha\!\!>$

0.05. This means that the null hypothesis is not rejected or the NPM variable is normally distributed [26].

Hypothesis 1 Testing

Independent Samples Test									
Levene's Test for Equality t-test for Equality of Means									
		of Varian							
		F	Sig.	T	Df	Sig. (2-tailed)			
NPM	Equal variances assumed	0,013	0,911	-3,3	19	0,004			
	Equal variances not assumed			-3,3	18,9	0,004			

The t value for NPM is -3.32 with a significance value of 0.004. Because the significance value is 0.004 < 0.05 on this basis, it can be concluded

that H0 is rejected or there is a significant difference in the ratio of NPM.

Hypothesis Testing TATO Descriptive Analysis

Descriptive Statistics							
	N	Range	Min	Max	Sum	Mean	Std. Deviation
TATO Indonesia	11	0,048	0,071	0,119	0,994	0,090	0,013
TATO Malaysia	10	0,060	0,027	0,087	0,459	0,046	0,016
Valid N (listwise)	10						

The average (mean) TATO Islamic bank in Malaysia is higher, amounting to 0.090, while Indonesia

amounted to 0,046 difference from the second index is 0.0444 or 4.44% [27].

Normality Test

One-Sample Kolmogorov-Smirnov Test								
			TATO					
N			21					
Test Statistic			0,18					
Asymp. Sig. (2-tailed)			.074 ^c					
Monte Carlo Sig. (2-tailed)	Sig.		.456 ^d					
_	99% Confidence Interval	Lower Bound	0,443					
		Upper Bound	0,469					

The results of the TATO ratio normality test showed a statistical value test of 0.18 with a significant probability of 0.456 and a value above 0.05 or value of

 α > 0.05. This means that the H0 is not rejected or the TATO variable is normally distributed.

Hypothesis 2 Testing

Independent Samples Test								
		Levene's Test for E	quality of Variances	t-test	for Equ	ality of Means		
		F	Sig.	t	Df	Sig. (2-tailed)		
TATO	Equal variances assumed	0,008	0,931	7,01	19	0,000		
	Equal variances not assumed			6,93	17,2	0,000		

The t value for the TATO ratio is 7,007 with a significance value of 0,000. Due to the significant value of 0.000 < 0.05 based on this we can conclude that H0 is

rejected or there is a significant difference in TATO ratio [28].

Hypothesis Testing ROI Descriptive Analysis

Descriptive Statistics								
	N	Range	Min	Max	Sum	Mean	Std. Dev.	
ROI Indonesia	11	0,084	-0,075	0,009	-0,089	-0,00809	0,024	
ROI Malaysia	10	0,076	0,005	0,081	0,156	0,0156	0,023	
Valid N (listwise)	10							

 Indonesia amounting to -0.008 difference of the two indexes amounted to 0.0245 or 2.45%.

Normality Test

One-Sample Kolmogorov-Smirnov Test								
			ROI					
N			21					
Test Statistic			0,274					
Asymp. Sig. (2-tailed)			.001°					
Monte Carlo Sig. (2-tailed)	Sig.		.125 ^d					
	99% Confidence Interval	Lower Bound	0,116					
		Upper Bound	0,134					

The results of the ROI ratio normality test showed a statistical value test of 0.274 with a significant probability of 0.125 and a value above 0.05

or value of α > 0.05. This means that the H0 is not rejected or the ROI variable is normally distribute [29].

Hypothesis 3 Testing

Indep	Independent Samples Test								
		Levene's Test for E	quality of Variances	t-test	for E	quality of Means			
		F	Sig.	Т	Df	Sig. (2-tailed)			
ROI	Equal variances assumed	0,151	0,702	-2,3	19	0,034			
	Equal variances not assumed			-2,3	19	0,034			

The t value for ROI is -2.28 with a significance value of 0.034. Because the significance value of 0.034 <0.05 on this basis, it can be concluded that H0 is

rejected or there is a significant difference in the ROI ratio.

Hypothesis Testing MER Descriptive Analysis

Descriptive Statistics								
	N	Range	Min	Max	Sum	Mean	Std. Dev.	
MER Indonesia	11	12,603	2,075	14,678	97,959	8,90536	3,57356	
MER Malaysia	10	15,434	1,197	16,631	118,256	11,8256	4,50456	
Valid N (listwise)	10							

It is known that the average (mean) MER in Islamic banks in Malaysia is higher, which is 11,826,

while in Indonesia, it is 8.9054, the difference between the two indices is 2.9203.

Normality Test

One-Sample Kolmogorov-Smirnov Test							
			MER				
N			21				
Test Statistic							
Asymp. Sig. (2-tailed)			.200 ^{c,d}				
Monte Carlo Sig. (2-tailed)	Sig.		.965 ^e				
-	99% Confidence Interval	Lower Bound	0,96				
		Upper Bound	0,969				

Based on the normality test data, the MER ratio shows a statistical value test of 0.102 with a significant probability of 0.965 and a value above 0.05 or value of α > 0.05. This means that the H0 is not

rejected or the MER variable is normally distributed [30].

Hypothesis 4 Testing

Independent Samples Test									
	Levene's Test for Equality of Variances		quality of Variances	t-test	for	Equality	of		
				Means					
		F	Sig.	T	Df	Sig. (2-tail	led)		
MER	Equal variances assumed	0,139	0,713	-1,7	19	0,115			
	Equal variances not assumed			-1,6	17,2	0,12			

The t value for MER is -1.65 with a significance value of 0.115. Because the significance value 0.115 > 0.05 on this basis, it can be concluded that

H0 is accepted or there is no significant difference in the MER ratio.

Hypothesis Testing ROE Descriptive Analysis

Descriptive Statistics							
	N	Range	Min	Max	Sum	Mean	Std. Dev.
ROE Indonesia	11	0,773	-0,678	0,095	-0,798	-0,0725	0,21796
ROE Malaysia	10	0,069	0,069	0,138	1,032	0,1032	0,02423
Valid N (listwise)	10						

It can be seen that the average (mean) ROE of Islamic banks in Malaysia is higher, namely, 1.0320, while in Indonesia, it is -0.0798, the difference between the two indices is 1.11.

Normality Test

ROE ratio normality test data shows a statistical value test of 0.28 with a significant probability of 0.059 and a value above 0.05 or value of α > 0.05. This means that the H0 is accepted or the ROE variable is normally distributed.

One-Sample Kolmogorov-Smirnov Test						
			ROE			
N			21			
Test Statistic			0,28			
Asymp. Sig. (2-tailed)			$.000^{c}$			
Monte Carlo Sig. (2-tailed)	Sig.		.059 ^d			
	99% Confidence Interval	Lower Bound	0,053			
		Upper Bound	0,065			

Hypothesis 5 Testing

Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2-tailed)		
ROE	Equal variances assumed	6,006	0,024	-2,5	19	0,02		
	Equal variances not assumed			-2,7	10,3	0,024		

The t value of ROE ratio is -2.53 with a significance value of 0.024. Because the significance value of 0.024 <0.05 on this basis, it can be concluded that H0 is rejected or there is a significant difference in the ROE ratio.

CONCLUSION

- 1. Ratio Net Profit Margin (NPM) there is a significant difference in the financial performance of Islamic banking in Indonesia and Malaysia for the 2014-2018 period.
- 2. Ratio Total Asset Turnover (TATO) there is a significant difference in the financial performance of Islamic banking in Indonesia and Malaysia for the 2014-2018 period.
- 3. The ratio of Return On Investments (ROI) there is a significant difference in the financial performance of Islamic banking in Indonesia and Malaysia for the 2014-2018 period.
- Ratio MultyplierEquity Ratio (MER) there is no significant difference in the financial performance of Islamic banking in Indonesia and Malaysia the period 2014-2018.
- The ratio Return on Equity (ROE) is a significant difference in the financial performance of Islamic banking in Indonesia and Malaysia for the 2014-2018 period

SUGGESTION

- For investors and potential investors in Islamic banks, you should pay attention to the financial banking ratios, predominantly the ROI and ROE ratios.
- For Islamic banking, especially in Indonesia, to take advantage of Islamic banking in Malaysia. Indonesia is one of the countries with the largest Muslim population in the world; this is a driving factor for the development of Islamic entities, especially banking.
- 3. For further researchers, it is hoped that it can increase the number of countries that will be used as the research sample and the more extended research year.

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