

Do Religion-based Banks Perform Better than Conventional Banks: A Case from Indonesia

Noversyah^a, E.S. Margiati^b, Hotniar Siringoringo^c

^aGunadarma University, Management, Jakarta, Indonesia. E-mail:noversyah@staff.gunadarma.ac.id
<https://www.orcid.org/0000-0001-5375-1850>

^bGunadarma University, Management, Jakarta, Indonesia. E-mail:margianti@gunadarma.ac.id
<https://www.orcid.org/0000-0002-8152-5049>

^cGunadarma University, Industrial Engineering and Management, Jakarta, Indonesia. E-mail:
hotniars@staff.gunadarma.ac.id
<https://www.orcid.org/0000-0003-4261-189X>

Abstract

This study aimed to measure the growth and performance of Islamic Banking (IB) in Indonesia and to compare it with the conventional (commercial and rural) bank. To answer this objective, data sourced from OJK was deployed. IB in this context is the commercial bank (both sharia commercial-SCB bank and sharia unit business) and sharia rural bank (BPRS). Data were analyzed using descriptive statistic method. Generally, SCB showed higher mean growth compared to the conventional commercial bank (CCB). But among them, only TPF and assets better in the SCB than the CCB. The CCB is better than the SCB based on NPL, CAR, and ROA. We found that the growth of the TPF was higher in the non-sharia rural bank (BPR) than the BPRS. Organization number and credit total of BPRS were higher and different significantly from BPR. BPRS has higher NPL and LDR, and lower ROA and ROE than BPR.

Keywords

Sharia, Commercial Bank, Rural Bank, Bank Growth, Bank Performance.

1. INTRODUCTION

Indonesia is the biggest Moslem country based on the religion of the population. According to census 2010 conducted by Statistic Indonesia, the percentage of the Moslem population is 87.18% of 238,518,800 population. It is equal to 207,940,690 population. If the same percentage used in 2020 data, the Moslem population in Indonesia is 235,560,360. It places Indonesia as the biggest Moslem country in the world.

Over the past decades, banking businessman has been inspired by the sharia concept. The implementation of sharia in banking produces Islamic Banking (IB). IB in this context was included commercial banks and the rural bank that implemented the sharia concept in their business. In Indonesia, IB has been introduced in 1992 (Noversyah and Siringoringo, 2015:1), marked by the dual banking system introduced by the Indonesian government (Ascarya and Yumanita, 2005:56). Since the majority of the potential customer is Moslem, the IB is supposed to playing a pivotal role as an interest-free institution under the shadow of Islamic laws.

IB carries out banking business activities based on the sharia principle. Implementation of sharia principles in IB is in term of agreement based on Islamic law between banks and other parties (depositing funds and/or financing business activities), or other activities declared in accordance with Sharia. IB is different from the conventional bank in terms of operational foundation practiced. The Conventional bank is operated based on interest whilst IB is operated based on profit sharing. According to Ascarya and Yumanita (2005:5), IB should practice no interest (riba), free from gambling business (maysir), free from unclear or doubtful things (gharar), free from things that are damaged or invalid (bathil), and only finance halal business activities.

In addition, the majority of Indonesian Moslem obey the Islam theologian (ulama) guidance that is called a fatwa. On 26th July 1975 on the first ulama conference was established Majelis Ulama Indonesia (MUI – Indonesian ulama council). MUI is a non-governmental organization of ulama, zu'ama, and Islamic scholars in Indonesia to guide, foster, and nurture Moslem throughout Indonesia (Anonim, 2020a). This obedience is showed by Kurniawati and Savitri (2020:522) that halal awareness of Indonesian consumers is very good (very high) with an index of 94.91. Related to IB, MUI issued a Fatwa in 2004 concerning that bank interest is haram (illegitimate).

The Indonesian government also intervened to accelerate the growth of IB. Accordingly, the IB is expected to grow faster (Imam and Kpodar, 2013:112). However, according to statistics published by OJK monthly, market share of IB in Indonesia is only 5.6 per cent and 5.68 per cent in the year 2019. Until the year 2019, IB customer is 31.89 million, equal to 13.37 per cent of the Moslem population in Indonesia. It is obviously IB in Indonesia has not succeeded to win Moslem customer.

Indeed the IB in Indonesia was established far too late after the conventional bank. Adopting the concept of the product life cycle as proposed by Levitt (1965) IB in Indonesia has crossed the introduction stage and entering the growth stage. But does it grow significantly? How does it grow compare to conventional banking? So thus this study tried to answer those questions. Nevertheless, the extensive research done by scholars related to IB (Sarim et al., 2019; Noversyah and Siringoringo, 2015, 2016; Abduh and Omar, 2012; Hutapea and Kasri, 2010), the topic of IB growth is scarce, especially for Indonesia case.

A few studies related to IB in Indonesia have been conducted by a few researchers (Hutapea and Kasri, 2010; Abduh and Omar, 2012; Puteh et al., 2017). Despite the very few studies discussed IB in Indonesia, there is no one discussion on the growth of IB. Generally, they studied the relationship between Islamic financial development and economic growth (Abduh and Omar, 2010), bank efficiency (Puteh et al., 2017), and comparison between Islamic and conventional banks based on bank margin (Hutapea and Kasri, 2010). Our research apart from using the latest data, the study of IB growth is scarce.

A good growth certainly will relate to good performance. When the IB shows a good performance, lenders will trust the bank and save more money, or attracts new customers. Vice versa, as depicted by formula used to calculated bank performance, when the growth is good the performance will also be good.

Considering all facts and flow of thought abovementioned, the objectives of this study were three folds:

1. Measuring and comparing the growth of IB and conventional bank in Indonesia.
2. Measuring and comparing the performance of IB and conventional bank in Indonesia.
3. Analyzing the relationship between bank growth and performance.

2. RESEARCH METHOD

2.1. The Object and Subject of the Research

Based on the nature of the business, bank is classified into commercial bank and rural bank. The objects of this research were commercial bank and rural bank. Based on the principle of the operation, again a bank can be classified as Islamic Banking (IB) and conventional banking.

For the sake of equality, we compared sharia bank with conventional bank and BPRS with BPR. Since our objective was to study the prospect of sharia in the banking business, so thus the commercial banking in our study is consists of conventional and sharia banks, and rural banking is consists of the conventional rural bank (BPR) and sharia rural bank (BPRS). Sharia bank and BPRS in this respect refer to IB.

2.2. Data and Variable

Banking growth may be measured based on various indicators. Lu and Swisher (2020) use the number of bank organisations, assets total, deposits total, and loans total as the indicators of bank and credit union growth. In this study, the concept of growth was viewed based on the new bank organisation, operational office, assets total, third-party fund (TPF), credit total, and the operating profit. In this case, we added one indicator to Lu and Swisher (2020), i.e. the operating profit. However the operating profit was only used in commercial bank, not in rural bank. Rural bank does not report monthly operating profit so thus there is no such data in OJK statistics. Data deployed was percentage added yearly of new bank organisation, operational office, assets total, TPF, credit total, and the operating profit.

There are many indicators that used to measured bank performance. Central Bank of Indonesia issued the regulation related to bank performance measurement and reporting (regulation number 13/1/PBI/2011 for commercial conventional bank, number 9/1/PBI/2007 for sharia bank, number 30/12/KEP/DIR 1997 for BPR, and number 9/17/PBI/2007 for BPRS). In order to be able to make comparison between commercial conventional bank and sharia bank, the indicators adopted from the regulation were Non-Performing Loan (NPL), Return on Asset (ROA), the Capital Adequacy Ratio (CAR), Operating Expenses to Operating Income (BOPO) and Loan to Deposit Ratio (LDR). Similarly, for rural banks, we used the NPL, ROA, Return on Equity (ROE), and LDR indicators.

Table 1. Bank Growth and Performance Indicators

No	Indicator	Description	Commercial bank	Rural bank
1.	Percentage growth of bank brands	Total bank brands of year t divided by total bank brands of year t-1	√	√
2.	Percentage growth of offices	Total offices of year t divided by total offices of year t-1	√	√
3.	Percentage growth of assets	Total assets of year t divided by total assets of year t-1	√	√
4.	Percentage growth of TPF	Total TPF of year t divided by total TPF of year t-1	√	√
5.	Percentage growth of credit	Total credit of year t divided by total credit of year t-1	√	√
6.	Percentage growth of operating profit	Total operating profit of year t divided by total operating profit of year t-1	√	
7.	Percentage growth of NPL	Total NPL of year t divided by total NPL of year t-1	√	√
8.	Percentage growth of ROA	Total ROA of year t divided by total ROA of year t-1	√	√
9.	Percentage growth of LDR	Total LDR of year t divided by total LDR of year t-1	√	√
10.	Percentage growth of BOPO	Total BOPO of year t divided by total BOPO of year t-1	√	
11.	Percentage growth of CAR	Total CAR of year t divided by total CAR of year t-1	√	
12.	Percentage growth of ROE	Total ROE of year t divided by total ROE of year t-1		√

2.3. Data Collection and Analysis

Data related to bank growth and performance indicators are categorized as secondary data. Data was downloaded from Otoritas Jasa Keuangan (OJK-The Financial Service Authority) website. Data was published in "Statistik Perbankan Indonesia (SPI-Indonesia Banking Statistics)" and Statistik Perbankan Syariah (SPS-Sharia Banking Statistics)". The data by OJK was generated based on a monthly report of the conventional commercial bank, sharia commercial bank, BPR, and BPRS. Table 1 shows the description of the secondary data deployed.

Data collected further was analyzed using the statistical method. In order to analyze the bank's growth and performance, descriptive statistics, t-test, and correlation were deployed. The average growth of sharia bank, conventional bank, BPRS, and BPR were calculated individually using descriptive statistics. The comparison of mean growth between sharia bank and conventional bank, and also between BPRS and BPR was performed using the t-test. Further, the relationship between growth and performance was analyzed individually on sharia bank, conventional bank, BPRS, and BPR using the correlation.

3. RESULT

3.1. IB Growth and Performance, and Its Comparison to Conventional Bank

The discussion of growth and performance is divided into two sections in accordance with the separation between the commercial bank and rural bank. The first section is focused on the commercial bank, i.e. between sharia bank and conventional bank. The second section is focussed on the rural bank, i.e. between BPR and BPRS.

3.1.1. Sharia and Conventional Commercial Banks Growth and Performance

Drawing on 18 years of data (2002-2019), we analyse the growth and performance of IB (sharia bank and BPRS) and compare it to conventional banking (conventional bank and BPR). We started the discussion with sharia and conventional banks.

Table 2. The Comparison Mean Growth Between Sharia and Conventional Commercial Banks

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
percentage of bank organisation growth	Equal variances assumed	3,599	,067	-1,965	32	,058	-10,953	5,575	-22,309	,403
	Equal variances not assumed			-1,965	24,090					
percentage of office growth	Equal variances assumed	1,912	,176	-1,231	32	,227	-9,06586	7,36732	-24,07259	5,94087
	Equal variances not assumed			-1,231	31,942					
percentage of credit growth	Equal variances assumed	8,472	,007	-1,872	32	,070	-13,42999	7,17513	-28,04525	1,18527
	Equal variances not assumed			-1,872	18,436					
percentage of third party fund growth	Equal variances assumed	11,762	,002	-2,926	32	,006	-21,64361	7,39720	-36,71121	-6,57602
	Equal variances not assumed			-2,926	16,714					
percentage of asset growth	Equal variances assumed	10,879	,002	-6,044	32	,000	-37,19908	6,15445	-49,73529	-24,66288
	Equal variances not assumed			-6,044	16,827					
percentage of operating profit growth	Equal variances assumed	,006	,940	-,703	29	,487	-10,51812	14,95408	-41,10265	20,06640
	Equal variances not assumed			-,708	28,428					

Table 2 shows the average growth of the conventional bank and sharia bank yearly from 2003 until 2019. Despite the low market share, the growth of the sharia bank is increasing. Based on bank organisation number, sharia bank enjoying positive growth (10.28 per cent on average) whilst conventional bank experiencing negative growth (-0.67 per cent on average). It shows that the sharia bank is more resilient to economic recession than the conventional bank.

Worldwide comparison, the growth of sharia bank organization in Indonesia is better. Comparison of total sharia bank worldwide attracts attention. The total number of sharia banks in Indonesia in the year 2014 and 2017 is stable at 20. Whilst sharia bank over the world decreased in 2017 to become 298 (Anonim, 2020b) compared to the year 2014 that was 400 (Global Finance). Surprisingly, the growth of sharia bank was not statistically different from the conventional bank based on bank organisation number, as can be seen in Table 3.

Table 3. The Average Performance of Commercial Bank

Group Statistics					
	banktype	N	Mean	Std. Deviation	Std. Error Mean
NPL	conventional bank	18	3,6906	1,95739	,46136
	shariah bank	15	5,3762	3,24871	,83881
CAR	conventional bank	18	19,8644	2,43672	,57434
	shariah bank	15	15,2307	3,01080	,77739
ROA	conventional bank	18	2,6983	,43204	,10183
	shariah bank	15	1,4020	,54185	,13991
BOPO	conventional bank	18	83,1800	6,23033	1,46850
	shariah bank	15	83,4360	7,46176	1,92662
LDR	conventional bank	18	74,7367	18,00200	4,24311
	shariah bank	15	94,0780	9,44456	2,43858

In line with the growth of the total number of sharia bank organisation, the growth of total offices also increases during the period 2003-2019. Although both bank types experience positive growth, yet sharia bank (19.73 per cent) enjoys higher growth than the conventional bank (10.67 per cent) as depicted in Table 2. However, the growth of total offices of sharia bank was not differed statistically from the conventional bank, as shown in Table 3.

Using credit as an indicator, the growth of sharia bank (31.09 per cent) was higher than the conventional bank (17.67 per cent) during the time period of research as shown in Table 2. The growth of both types of bank was positive. However, similar to the number of bank organizations and offices, the growth of total credit in sharia bank was not differ significantly from in conventional bank, as depicted in Table 3. Based on the TPF indicator, the sharia bank enjoyed higher growth than the conventional bank, as can be seen in Table 2. Accordingly, as shown in Table 3, the TPF growth in sharia bank was different significantly with the conventional bank at 5 per cent. It means the TPF growth in sharia bank is better than in the conventional bank.

Another indicator that place the growth of sharia bank better than conventional is the total of the assets. Not only it is higher in sharia bank but also significant different at 1 per cent from the conventional bank. So thus sharia bank enjoyed better growth than conventional bank based on the total of the assets. When the average growth of the total of assets year 2002-2019 in the conventional bank is negative (-2.21 per cent) as shown in Table 2, sharia bank enjoyed positive growth at 34.99 per cent. The evidence also provides an increasing growth of operating profit in sharia and conventional banks during the period of 2003-2019. Similar to previously discussed indicators, operating profit growth in sharia bank (36.57 per cent) is higher than in conventional bank (26.05 per cent). However, there is no enough evidence to show the difference between the two types of banks based on operating profit.

Good performance is the goal of every organization. As discussed and used in practical extensively, we deployed NPL, CAR, ROA, BOPO, and LDR as key indicator performance (KIP) of commercial banks. We measured the growth of KIP in both banks type and analysed the comparison.

Table 4. The Comparison of Performance Between Sharia and Conventional Commercial Banks

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
NPL	Equal variances assumed	4,846	,035	-1,840	31	,075	-1,68564	,91616	-3,55417	,18288
	Equal variances not assumed			-1,761	22,087	,092	-1,68564	,95732	-3,67055	,29926
CAR	Equal variances assumed	,407	,528	4,889	31	,000	4,63378	,94780	2,70072	6,56683
	Equal variances not assumed			4,794	26,863	,000	4,63378	,96654	2,65013	6,61742
ROA	Equal variances assumed	1,050	,314	7,650	31	,000	1,29633	,16946	,95072	1,64195
	Equal variances not assumed			7,491	26,612	,000	1,29633	,17304	,94104	1,65163
BOPO	Equal variances assumed	,378	,543	-,107	31	,915	-,25600	2,38222	-5,11457	4,60257
	Equal variances not assumed			-,106	27,382	,917	-,25600	2,42247	-5,22326	4,71126
LDR	Equal variances assumed	5,335	,028	-3,747	31	,001	-19,34133	5,16183	-29,86896	-8,81370
	Equal variances not assumed			-3,952	26,565	,001	-19,34133	4,89394	-29,39056	-9,29211

Table 4 shows this KIP both on sharia and conventional banks. As depicted in Table 4, the average of CAR and ROA of the conventional bank are higher than the sharia bank. The average of CAR of the conventional bank is 19.86 per cent compared to 15.23 per cent of sharia bank. The average of ROA of the conventional bank is 2.70 per cent compared to 1.4 per cent of sharia bank. The ROA of both bank type can't be categorized as strong. According to Choudry (2018) a bank can be categorized as strong when ROA indicator above 10 per cent. It implies both bank type do not have the ability to manage their assets in producing the benefits (Athanasoglou et al., 2008). But for Indonesian case, The Central Bank of Indonesia (bank Indonesia) set up ROA greater than 1.5 per cent as the first rank. It means using Bank Indonesia regulation, both sharia and conventional banks indicate good profitability. However, it can't be concluded that both bank types were experiencing a loss (Athanasoglou et al., 2008) or good profit (Ginting et al., 2012), since ROA is not the only indicator of profitability. Bank Indonesia set up ROA as supported indicator of profitability (Ginting et al., 2012).

The NPL of sharia bank is higher than of conventional bank. The NPL of sharia bank exceeds the safe limit of a bank according to Mustika et al. (2015). Based on Bank Indonesia rank, the sharia bank is categorized in third rank ($5 \leq \text{NPL} < 8$) whilst conventional bank at the second rank ($3 \leq \text{NPL} < 5$) (Ginting et al., 2012). Using Bank Indonesia regulation of BOPO, both bank type do not show the best performance but fall into a good range. Bank Indonesia set up BOPO 99.2 per cent as the best although less than it still good (Ginting et al., 2012). The LDR of sharia bank are higher than in the conventional bank but both bank type show a good performance. The LDR of both bank type ranges between 70 per cent and 100 per cent so thus there is no excess liquidity and inadequate refunds indication nor excess asset growth indication (Choudry, 2018).

Different magnitude means nothing until we test whether there is a significant difference between them. Table 4 shows the outputs of statistical differences in the performance of conventional and sharia banks. There is enough evidence at 5 per cent level that sharia and conventional banks significantly different based on the indicators of CAR, ROA, and LDR. Moreover based on the CAR and ROA indicators sharia and conventional banks are significantly different at the 1 per cent level.

However, although CAR of both banks' types different significantly, both banks' types are included in the safe category. According to Mustika et al. (2015), a bank is categorized as safe if it has a minimum CAR of 8 per cent. Although the average CAR of sharia bank is smaller than

the conventional bank and they differ significantly, because it is still above 8% (15.23 per cent), then sharia bank is yet categorized as safe.

As shown in Table 4, the NPL of sharia and the conventional bank are differed significantly. Based on NPL, the conventional commercial bank is better than the sharia commercial bank. The sharia commercial bank is categorized as unsafe because its NPL is above 5 per cent, while the conventional bank is still within safe limits with an NPL below 5 per cent (Mustika et al., 2015).

Using BOPO as a bank efficiency indicator, we found that there's no difference in efficiency between sharia commercial bank and conventional commercial bank. Both are inefficient, with the percentage of the efficiency of sharia commercial bank is 83.44 per cent slightly higher than the conventional commercial bank that is 83.18 per cent. The t-test showed that BOPO is not significantly differed between sharia commercial bank and conventional commercial bank.

Table 5. The Correlation Between Sharia Bank Growth and Performance

		Correlations										
		NPL	CAR	ROA	BOPO	LDR	banktotal	officetotal	credit	TPF	assets	operationalprofit
NPL	Pearson Correlation	1	,687**	-,502	,709**	-,686**	-,318	-,614*	-,556*	-,486	-,651**	-,229
	Sig. (2-tailed)		,005	,057	,003	,005	,248	,015	,031	,066	,009	,431
	N	15	15	15	15	15	15	15	15	15	15	14
CAR	Pearson Correlation	,687**	1	-,278	,429	-,607**	-,491	-,437	-,379	-,371	-,509	-,077
	Sig. (2-tailed)	,005		,316	,111	,016	,063	,103	,164	,174	,053	,793
	N	15	15	15	15	15	15	15	15	15	15	14
ROA	Pearson Correlation	-,502	-,278	1	-,819**	,089	,282	,579*	,746**	,538*	,577*	,332
	Sig. (2-tailed)	,057	,316		,000	,752	,309	,024	,001	,038	,024	,246
	N	15	15	15	15	15	15	15	15	15	15	14
BOPO	Pearson Correlation	,709**	,429	-,819**	1	-,442	-,388	-,589*	-,775**	-,632*	-,590*	-,503
	Sig. (2-tailed)	,003	,111	,000		,099	,153	,021	,001	,011	,021	,067
	N	15	15	15	15	15	15	15	15	15	15	14
LDR	Pearson Correlation	-,686**	-,607**	,089	-,442	1	,247	,170	,059	-,016	,068	-,012
	Sig. (2-tailed)	,005	,016	,752	,099		,375	,545	,834	,955	,810	,967
	N	15	15	15	15	15	15	15	15	15	15	14
banktotal	Pearson Correlation	-,318	-,491	,282	-,388	,247	1	,395	,435	,270	,484	-,069
	Sig. (2-tailed)	,248	,063	,309	,153	,375		,145	,105	,331	,067	,816
	N	15	15	15	15	15	15	15	15	15	15	14
officetotal	Pearson Correlation	-,614*	-,437	,579*	-,589*	,170	,395	1	,778**	,785**	,797**	,035
	Sig. (2-tailed)	,015	,103	,024	,021	,545	,145		,001	,001	,000	,904
	N	15	15	15	15	15	15	15	15	15	15	14
credit	Pearson Correlation	-,556*	-,379	,746**	-,775**	,059	,435	,778**	1	,897**	,904**	,189
	Sig. (2-tailed)	,031	,164	,001	,001	,834	,105	,001		,000	,000	,518
	N	15	15	15	15	15	15	15	15	15	15	14
TPF	Pearson Correlation	-,486	-,371	,538*	-,632*	-,016	,270	,785**	,897**	1	,865**	,205
	Sig. (2-tailed)	,066	,174	,038	,011	,955	,331	,001	,000		,000	,481
	N	15	15	15	15	15	15	15	15	15	15	14
assets	Pearson Correlation	-,651**	-,509	,577*	-,590*	,068	,484	,797**	,904**	,865**	1	,089
	Sig. (2-tailed)	,009	,053	,024	,021	,810	,067	,000	,000	,000		,762
	N	15	15	15	15	15	15	15	15	15	15	14
operationalprofit	Pearson Correlation	-,229	-,077	,332	-,503	-,012	-,069	,035	,189	,205	,089	1
	Sig. (2-tailed)	,431	,793	,246	,067	,967	,816	,904	,518	,481	,762	
	N	14	14	14	14	14	14	14	14	14	14	14

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Further investigation of the relationship between growth and performance of sharia bank is shown in Table 5. Before performing the correlation calculation, the normality of the data was checked. It was found that data is distributed normally. So thus, Product Moment Pearson was used to calculate the correlation. As depicted in Table 5, NPL was correlated negatively with all growth indicators, and only show strong correlation with office total, credit total and asset. Same evidence with CAR in terms of the sign of the correlation but there is no strong correlation with any of growth indicators.

Conversely, ROA has positive correlation with each of growth indicators. Office total, credit total, TPF, and asset total show strong correlation with ROA. BOPO again is similar with NPL and CAR in terms of the sign of the correlation with all growth indicators, but it similar to ROA in terms of the strength of the correlation. BOPO show strong correlation with Office total, credit total, TPF,

and asset total. LDR just like ROA has positive correlation with all growth indicators, but all the correlation were weak.

3.1.2. BPRS and BPR Growth and Performance

The rural bank is a financial institution that is close to the community because of the ease in their business processes. The total number of rural banks is far above commercial banks. Drawing on 15 years of data (2005-2019) of BPRS and 18 years of data (2002-2019) of BPR, we analysed the growth of BPRS and BPR based on mean total bank organization, mean total offices, mean credit, mean TPF, and mean assets, as shown in Table 6.

Table 6. The Average Growth of BPRS and BPR

Group Statistics					
	type	N	Mean	Std. Deviation	Std. Error Mean
percentage of the growth of organisasition	BPRS	17	4,34778	5,026058	1,218998
	BPR	17	-1,87806	2,160068	,523893
percentage growth of the office	BPRS	17	13,8619	18,58809	4,50827
	BPR	17	4,8990	7,66936	1,86009
percentage growth of the credit	BPRS	14	25,9688	12,26910	3,27906
	BPR	17	18,0932	8,18142	1,98429
percentage growth of the third party fund	BPRS	14	29,0441	31,04257	8,29648
	BPR	17	71,3778	249,73438	60,56948
percentage growth of the assest	BPRS	12	22,8119	9,00035	2,59818
	BPR	17	18,1646	8,04035	1,95007

As can be seen in Table 6, BPRS shows the average value of growth higher than BPR on all indicators, except for the TPF. The BPR experienced an average growth in TPF during the research period of 71.38 per cent, while BPRS was only around 29.04 percent. But contrarily, the growth of BPR based on the number of bank organizations has decreased on average around -1.88 per cent. Although the average number of BPR decreased, the TPF collected by BPR is higher than of BPRS.

Higher average magnitude does not mean anything unless it is supported by significant evidence. Table 6 provide evidence of a significant difference between BPR and BPRS at 5 per cent based on the total number of organizations and credit. This means that at the 5 per cent level of significance, the average growth of BPRS is higher significantly than that of BPR based on the total number of the organization. There is also enough evidence showing that at the 5 per cent level, the average growth of credit of BPRS is higher significantly than that of BPR. This fact shows that more BPRS organizations are being established. On the other three indicators, i.e. the number of offices, TPF, and assets, the growth of BPRS and BPR did not differ significantly.

Table 7. The Comparison of the Growth of BPRS and BPR

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
percentage of the growth of organisation	Equal variances assumed	11,878	,002	4,692	32	,000	6,225843	1,326809	3,523222	8,928463
	Equal variances not assumed			4,692	21,716	,000	6,225843	1,326809	3,472119	8,979566
percentage growth of the office	Equal variances assumed	3,580	,068	1,838	32	,075	8,96288	4,87693	-,97111	18,89687
	Equal variances not assumed			1,838	21,294	,080	8,96288	4,87693	-1,17073	19,09650
percentage growth of the credit	Equal variances assumed	3,189	,085	2,136	29	,041	7,87565	3,68776	,33335	15,41796
	Equal variances not assumed			2,055	21,880	,052	7,87565	3,83270	-,07540	15,82671
percentage growth of the third party fund	Equal variances assumed	2,514	,124	-,628	29	,535	-42,33368	67,36600	-180,11263	95,44527
	Equal variances not assumed			-,692	16,599	,498	-42,33368	61,13505	-171,55523	86,88788
percentage growth of the assest	Equal variances assumed	,551	,464	1,460	27	,156	4,64736	3,18394	-1,88555	11,18027
	Equal variances not assumed			1,431	22,069	,167	4,64736	3,24858	-2,08857	11,38329

As discussed in the commercial bank section, good performance is also the goal of rural bank management. The performance of BPRS and BPR is measured using NPL, ROA, LDR, and ROE. In the BPRS concept, LDR is measured as FDR. Drawing of 16 years of data for BPRS (2004-2019) and 18 years of data for BPR (2002-2019) we conducted performance analysis as shown in Tables 7 and 8. Table 7 shows the average growth performance of BPRS and BPR. Similar to the case of conventional and sharia banks, the average NPL value in BPRS (7.88 per cent) is higher than that of BPR (6.59 per cent). Both BPR and BPRS are categorized as risky (Mustika et al., 2015) or fall in third rank based on Bank Indonesia regulation (Ginting et al., 2012). This certainly makes sense because the rural bank business system is different from the commercial bank. There are no guarantees at the rural bank, and crediting procedures are not followed obediently as in commercial banks due to various conditions.

The average ROA was slightly higher for BPR (3.10 per cent) than of BPRS (2.61 per cent). ROA of both bank type fall into the first rank based on Bank Indonesia regulation (Ginting et al., 2012). In terms of ROE, BPR (25.11 per cent) also experienced higher growth than in BPRS (16.67 per cent). Using the regulation set up by Bank Indonesia, BPR ranks in first place whilst BPRS in third rank (Ginting et al., 2012). But based on LDR, BPRS experienced higher growth (around 105.34 percent) than BPR (79.01 per cent). Based on Choudry (2018) grouping, BPR is included in a good performance. Whilst BPRS shows excess asset growth indication (Choudry, 2018). We continued to analyse whether there was a significant difference between the two types of rural banks based on all performance indicators. The result is shown in Table 8.

Table 8. The Average Performance of BPRS and BPR

Group Statistics					
type	N	Mean	Std. Deviation	Std. Error Mean	
NPL BPRS	16	7,8800	1,28584	,32146	
BPR	18	6,5922	1,93522	,45614	
ROA BPRS	16	2,6138	,42366	,10592	
BPR	18	3,1017	,81431	,19193	
LDR BPRS	16	105,3394	19,34900	4,83725	
BPR	18	79,0078	3,87370	,91304	
ROE BPRS	15	16,6727	4,78129	1,23452	
BPR	18	25,1133	3,66590	,86406	

Based on Table 8, we concluded the significant differences between BPRS and BPR at the level of 5 per cent for all indicators. Even, LDR and ROE were significantly different at the 1 per cent level. It can be stated that although BPR and BPRS are both insecure in terms of NPL, BPRS is significantly less secure than its counterpart BPR.

Further investigation of the relationship between growth and performance of BPRS was conducted. Prior to the calculation of correlation between the two indicators, normality test was performed. Result shows all data suit to normal distribution so thus Product Moment Pearson correlation was deployed to check the relationship.

Table 9. The Comparison of Performance between BPRS and BPR

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper
NPL	Equal variances assumed	2,924	,097	2,254	32	,031	1,28778	,57129	,12409 2,45146
	Equal variances not assumed			2,308	29,760	,028	1,28778	,55803	,14775 2,42781
ROA	Equal variances assumed	1,582	,218	-2,150	32	,039	-,48792	,22698	-,95026 -,02557
	Equal variances not assumed			-2,226	26,179	,035	-,48792	,21922	-,93838 -,03746
LDR	Equal variances assumed	68,997	,000	5,658	32	,000	26,33160	4,65392	16,85188 35,81132
	Equal variances not assumed			5,349	16,070	,000	26,33160	4,92266	15,89970 36,76349
ROE	Equal variances assumed	1,825	,187	-5,740	31	,000	-8,44067	1,47057	-11,43992 -5,44141
	Equal variances not assumed			-5,601	25,948	,000	-8,44067	1,50687	-11,53838 -5,34295

Table 10. The Correlation Between Growth and Performance Indicators of BPRS

Correlations										
		percentage of the growth of organisatio n	percentage growth of the office	percentage growth of the credit	percentage growth of the third party fund	percentage growth of the asset	NPL	ROA	LDR	ROE
percentage of the growth of organisation	Pearson Correlation	1	,577 ⁺	,128	-,623 ^{**}	,194	-,563 ⁺	,404	-,591 ⁺	,396
	Sig. (2-tailed)		,015	,626	,008	,457	,019	,108	,013	,115
	N	17	17	17	17	17	17	17	17	17
percentage growth of the office	Pearson Correlation	,577 ⁺	1	,206	-,494 ⁺	,362	-,122	,089	-,332	,236
	Sig. (2-tailed)	,015		,427	,044	,154	,640	,735	,193	,362
	N	17	17	17	17	17	17	17	17	17
percentage growth of the credit	Pearson Correlation	,128	,206	1	,044	,924 ^{**}	,409	,011	,111	,242
	Sig. (2-tailed)	,626	,427		,868	,000	,103	,967	,671	,350
	N	17	17	17	17	17	17	17	17	17
percentage growth of the third party fund	Pearson Correlation	-,623 ^{**}	-,494 ⁺	,044	1	,103	,192	-,035	,177	,007
	Sig. (2-tailed)	,008	,044	,868		,694	,460	,893	,496	,979
	N	17	17	17	17	17	17	17	17	17
percentage growth of the asset	Pearson Correlation	,194	,362	,924 ^{**}	,103	1	,288	,120	-,122	,260
	Sig. (2-tailed)	,457	,154	,000	,694		,262	,647	,641	,313
	N	17	17	17	17	17	17	17	17	17
NPL	Pearson Correlation	-,563 ⁺	-,122	,409	,192	,288	1	-,653 ^{**}	,449	-,560 ⁺
	Sig. (2-tailed)	,019	,640	,103	,460	,262		,004	,071	,019
	N	17	17	17	17	17	17	17	17	17
ROA	Pearson Correlation	,404	,089	,011	-,035	,120	-,653 ^{**}	1	-,310	,350
	Sig. (2-tailed)	,108	,735	,967	,893	,647	,004		,226	,168
	N	17	17	17	17	17	17	17	17	17
LDR	Pearson Correlation	-,591 ⁺	-,332	,111	,177	-,122	,449	-,310	1	-,028
	Sig. (2-tailed)	,013	,193	,671	,496	,641	,071	,226		,914
	N	17	17	17	17	17	17	17	17	17
ROE	Pearson Correlation	,396	,236	,242	,007	,260	-,560 ⁺	,350	-,028	1
	Sig. (2-tailed)	,115	,362	,350	,979	,313	,019	,168	,914	
	N	17	17	17	17	17	17	17	17	17

*, Correlation is significant at the 0.05 level (2-tailed).

**, Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 10 the growth of number of BPRS organisation has strong negative relationship with NPL and LDR. On the other hand, the growth of number of BPRS organisation has weak positive relationship with ROA and ROE. Similar evidence were found for the direction of the relationship between the number of offices and performance indicators, but no strong relationship was found.

The growth of credit shows positive relationship with NPL, ROA, ROE, and LDR. All the relationships are weak. The weak relationship was also found between the growth of TPF and all performance indicators (NPL, ROA, ROE, and ROA), whereas negative relationship with ROA and positive with others. The same result was also shown on the relationship between the growth of asset total and performance indicators (NPL, ROA, ROE, and ROA), but in this relationship negative direction was found only with ROE.

Based on the information above, it can be stated that the growth of IB in Indonesia in the last two decades has been better than that of conventional banking. Good growth is supported by the top-level government and political policies. The highest level of political support was evidenced by the formation of "Komite Nasional Keuangan Syariah (KNKS)" with the chair President Joko Widodo. KNKS is a national committee of sharia financial. As an example, in 2019 The Islamic Finance-Country Index placed Indonesia in rank number one among 48 countries in terms of its leadership and potential in global Islamic banking and finance. Indonesia jumped from 6th position in 2018.

4. DISCUSSION AND CONCLUSION

IB in Indonesia is growing although its market share is still much lower than its counterpart, conventional banking. During 2003-2019 the sharia commercial bank growth based on credit total, third-party fund, and the total of the asset are better than the conventional commercial bank. Whilst based on bank organisation, offices, and operating profit indicators, there is no significant difference between the sharia commercial bank and conventional commercial bank growth. The sharia commercial bank growth based on bank organisation and asset was never been negative as evidence with the conventional commercial bank growth.

However, based on performance, the sharia commercial bank is worse on NPL and LDR than the conventional commercial bank. The sharia commercial bank is categorized as a risky bank based on NPL. The management of sharia commercial bank is required to re-evaluate the crediting procedures. Indeed management must manage the third-party funds to businesses, but they must carry out a strict selection or mentoring properly so that credit recipients become productive businesses. Further research may be conducted to re-evaluate the crediting procedures as well as to identify factors that cause high NPL. Although the LDR of sharia bank bigger than CCB but it is still below the excess asset growth indication. However LDR is not the only indicator of liquidity hence further research is suggested to evaluate the liquidity using other indicators.

Although the IB is showing good growth and performance, it has not been efficient. As shown by the BOPO indicator, the average efficiency during 2002-2019 is only 83.44 per cent lower than efficiency of shorter period (based on 2012-2016 data) that measured by Puteh et al. (2017). Puteh et al. (2017) measured the efficiency of IB in Indonesia ranges between 89.73 per cent and 94.16 percent and categorized as inefficient. However, according to Puteh (2017) individual bank efficiency during 2012-2016 is higher. Bank Mega Syariah shows the lowest average and Bank Muamalat shows the highest average (Puteh et al, 2017). Efficiency is important to IB management since inefficiency can be a determinant of a bank failure. Further research is suggested to evaluate the factors that affect the inefficiency of the bank.

In the rural bank sector, BPRS shows higher growth than BPR. But statistically, BPRS growth higher significantly than BPR only on the number of organization and credit parameters. But BPRS management should be aware of NPL. Credit is related to NPL. Although both rural banks show high NPL and risky, BPRS NPL is higher than BPR. Both BPRS and BPR management should evaluate the crediting policy. Further research is suggested to perform this along with identifying factors that affect the NPL.

Despite the good growth and performance of IB is generally better than in conventional, the market share of IB in Indonesia is very small. According to OJK IB's market share in Indonesia up to 2019 is always below 6 per cent. But in June 2020, IB market share reaches 6.18 per cent. The biggest contribution of this market share percentage is sharia commercial bank (65.33 per cent), following by BPRS (32.17 per cent), and sharia unit business (2.5 per cent). It shows the customer decision in choosing IB products is not based on performance solely.

As the IB is founded on the basis of the sharia principle, whereas prohibiting riba (interest), the more religious people are supposed to choose the IB. As stated by O'Cass (2013), religious consumers tend to be less materialistic. It is then important to conduct further research in order to identify factors that affect IB adoption in Indonesia. It might relate to the sharia concept implementation. Sarim et al. (2019) found that "there are various conflicting issues that exist among business operations of Islamic financial industry, for example lacking uniformity of Halal/Haram transactions.

Further interesting research is evaluating factors affected IB performance. Bank performance can be influenced by internal mechanisms and capital regulations (Ayadi et al., 2019), professional qualification of CEOs in finance (Gupta and Mahakud, 2020), and corporate governance (Aslam and Haron, 2021). Those variables can be adopted to identify the factors affect IB performance in Indonesia.

REFERENCES

- Abduh, M., & Omar, M.A. (2012). Islamic banking and economic growth: the Indonesian experience, *International Journal of Islamic and Middle Eastern Finance and Management*, 5(1), 35-47.
- Anonim (2020a). <https://mui.or.id/sejarah-mui/>. Accessed on 31st July 2020.
- Anonim (2020b). Global Islamic Finance Market - Growth, Trends, and Forecast (2018 - 2024), https://www.researchandmarkets.com/research/bq7pb4/global_islamic?w=12 Anonim. (2019), Islamic Finance-Country Index (IFCI, 2019), Global Islamic Finance Report 2019.
- Yumanita, D. (2005), Bank Syariah: Gambaran Umum, Pusat Kependidikan dan Studi Kebanksentralan, Jakarta.
- Aslam, E., & Haron, R. (2021). Corporate governance and banking performance: the mediating role of intellectual capital among OIC countries, *Corporate Governance*, 21(1), 111-136.
- Athanasoglou, P.P., Brissimis, S.N., & Delis, M.D. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability, *Journal of International Financial Markets, Institutions and Money*, (18), 121-136.
- Ayadi, M.A., Ayadi, N., & Trabelsi, S. Corporate governance, European bank performance and the financial crisis, *Managerial Auditing Journal*, 34(3), 338-371.
- Byrne, B.M. (2011), A primer of Lisrel: Basic Application and Programming for Confirmatory Factor Analytic Models, Springer-Verlag, New York.
- Choudhry, M. (2018), An Introduction to Banking Principles, Strategy and Risk Management, John Wiley & Sons Ltd, West Sussex, United Kingdom.
- Ginting, R., Murniadi, C., Iskandar, D., Wuryandani, G., Sitompul, Z., Astiyah, S., Hidayat, W. Y., Dewi, K., Novriana, W. A., Hutabarat, C. N., & dan Rosdiana, R. (2012), Kodifikasi peraturan Bank Indonesia: Kelembagaan "Penilaian Tingkat Kesehatan Bank". Pusat Riset dan Edukasi Bank Sentral (PRES) Bank Indonesia, Jakarta, Indonesia.

- Gupta, N., & Mahakud, J. (2020). CEO characteristics and bank performance: evidence from India, *Managerial Auditing Journal*, 35(8), 1057-1093.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010), *Multivariate data analysis: A global perspective* (7th Ed.). London: Pearson
- Hair, J., Money, A., Samouel, P., & Page, M. (2007), *Research Methods for Business*, John Wiley and Sons, West Sussex.
- Hutapea, E.G., & Kasri, R. A. (2010). Bank margin determination: a comparison between Islamic and conventional banks in Indonesia, *International Journal of Islamic and Middle Eastern Finance and Management*, 3(1), 65-82
- Imam, P. and Kpodar, K. (2013). Islamic banking: how has it expanded?, *Emerging Markets Finance and Trade*, 49(6), 112-137.
- Islam, T., & Chandrasekaran, U. (2019). Religiosity, values and consumer behaviour: a study of young Indian Muslim consumers, *Journal of Consumer Marketing*, 36(7), 948-961.
- Jara-Bertin, M., Moya, J.A., & Perales, A.R. (2014). Determinants of bank performance: evidence for Latin America, *Academia Revista Latinoamericana de Administración*, 27(2), 164-182.
- Kaawaase, T.K., & Nalukwago, L. (2017). Religiosity and Islamic banking in Uganda, *Makerere Business Journal*, 13(1), 70-93.
- Kurniawati, D.A., & Savitri, H. (2020). Awareness level analysis of Indonesian consumers toward halal products, *Journal of Islamic Marketing*, 11(2), 522-546.
- Levitt, T. (1965). Exploit the product life cycle, *Harvard Business Review*, 43(November): 81-94.
- Lu, W., & Swisher, J. (2020). A comparison of bank and credit union growth around the financial crisis, *American Journal of Business*, early cite.
- Mustika, G Suryatinc, E., Hall, M.J.B. dan Simper, R. (2015). Did Bank Indonesia cause the credit crunch of 2006-2008?, *Review of Quantitative Finance and Accounting*, 44(2): 269-298.
- Siringoringo, H. (2015). The theory of reasoned action of islamic banking consumer behavior, *International Journal of Research in Management Science and Technology*, 3(5), 3501-3511.
- Siringoringo, H. (2016). IB in Indonesia: Review and future research, *International Journal of Research in Management Science and Technology*, 4(2), 4201-4218.
- O'Cass, A., Lee, W.J., & Siahtiri, V. (2013). Can Islam and status consumption live together in the house of fashion clothing? *Journal of Fashion Marketing and Management*, 17(4), 440-459.
- Puteh, A., Rasyidin, M., & Mawaddah, N. (2017). Islamic Banks in Indonesia: Analysis of Efficiency, *Emerald Reach Proceedings Series*, (1), 331-336 Emerald Publishing Limited 2516-2853 .
- Sarim, M., Khan, A., Akhtar, A., & Tabash, M.I. (2019). Islamic finance and corporate governance: a proposed universal model, *International Journal of Business Excellence*, 19(2): 243 – 266.
- Schumacker, R.E., & Loamax, R.G. (2010), *A Beginner's Guide to Structural Equation Modeling*, Routledge, New York,
- Salah, S., & Alhabeeb, A. A. (2020). Quality management and business excellence studies from an Islamic-culture perspective: a literature review, *International Journal of Business Excellence*, 20(4), 471 – 499.