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RESEARCH PAPER

Does Spin-off Obligation of Sharia Business Units from its Parent Commercial Banks Enhance Their Performance?

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Abstract
The purpose of this study was to compare banks ratios: return on assets (ROA), the ratio of operating costs to operating incomes (BOPO), and the ratio of financing to total third party funding (FDR) before and after the spin-off, as well as ROA, FDR, and BOPO between pure spin-off through separation and impure spin-off through acquisitions and conversion. In 2019, there were eleven sharia banks as the population. This study included five banks in the research samples based on quarterly data availability three years before and after the spin-off. The method used is the two related samples Wilcoxon test due to the abnormally distributed data before and after the spin-off and the independent sample t-test for comparing ROA of a pure and impure spin-off, also used Mann-Whitney test to compare FDR and BOPO between pure and impure spin-off. The results are that ROA after spin-off is higher but insignificant than before spin-off; BOPO after spin-off is significantly higher than before spin-off. FDR after spin-off is significantly lower than before spin-off. Furthermore, an impure spin-off provides a significantly higher ROA than a pure spin-off. Impure spin-off gives higher BOPO but insignificant. Finally, impure spin-off results in a significantly higher FDR than the pure one. These results imply that the limited-service coverages due to their small size challenge newborn BUSes to increase their market share. The too-small sizes also become the burden of newborn BUSes to benefit-cost reduction through economies of scale.
Keywords: Return on Asset, Finance to Deposit Ratio, Operating Expenses to Operating Income, Spin-Off, Sharia Banks.
JEL Classification: G21, G28, G34, L25.

Introduction

The liberalization of the banking sector in Indonesia was marked by the deregulation package in 1988 that the regulation leaded banks' rapid growth. The liberalization was believed to create an efficient market. The increasing number of banks will increase competitiveness through resource allocation (Buchs and Mathisen, 2005; Usman et al., 2018). The increase in competitiveness will lead banks to be efficient and enhance productivity (Weill, 2004). The regulation relaxed the requirement of bank establishment, including the relaxation of the minimum required amount of capital, the permission to establish banks in the rural and remote areas, and banks' permission to determine its interest (Bank Indonesia, 1988). The freedom to determine interest leads to Ulema and Muslim banking practitioners establishing an Islamic bank in 1991, namely Bank Muamalat (Satibi et al., 2018). The Islamic banking system does not adopt the interest-charge concept but adopts loss-profit sharing. After that, some Islamic banks were established. The relaxation increased people's chance to get financial access and services. Accordingly, economic growth increased rapidly.

Nevertheless, the regulation's unanticipated excess leads to the Indonesian system's

collapse in 1998 when the economic crises hit. The poor practices, including insider lending and the low of capital adequacy, increased bank risk. In 1997 when the economic crisis hit, the banking system in Indonesia collapsed. Many banks experience dried liquidity and getting bankrupt. The failure required Indonesia to restructure the banks, and the costs reached 47% of the gross domestic product (Stiglitz, 2000). However, Islamic banks still firmly exist. The economic crisis did not significantly affect Islamic banks (Mitton, 2002; Nugroho et al., 2017).

Considering the strength of Islamic banks from the economic crisis, the Indonesian government began to support Islamic banking by issuing Law No. 10 of 1998 allows conventional banks to implement a dual banking system (the commercial bank with interest concept and sharia with profit-loss sharing concept). After the introduction, many conventional banks opened Sharia Business Units (UUS) to create a new market. Before 2008, there were only five Islamic commercial banks. In 2019, there were 14 Islamic commercial banks (BUS), 20 sharia business units (UUS) as a unit business of conventional banks, and 150 Sharia Rural Banks.

There was a growing concern on the importance of separate sharia business with profit-loss sharing concept from conventional practices with interest concepts as required by the Islamic Law (Hasan, 2009). To passionate Islamic banks in a clear and firm position and to give greater flexibility in their operation, the government issued Law no. 21 of 2008, and Bank Indonesia issued Regulation No. 11/10 / PBI / 2009 to strengthen it. This regulation is known as a "spin-off policy." This law's essential issue is an article regulating the separation of sharia business units (UUS) from its conventional bank. It converts it into a new business entity of sharia commercial banks (BUS). The separation of UUS from its conventional bank must be finished by 2023. To establish a new BUS, the bank needs a minimum equity IDR of 500,000,000,000. Furthermore, the BUS must increase it to IDR 1,000,000,000,000 at the latest ten years after the new BUS establishment. If the UUS has not been separated after 2023, the operation license can be deprived.

Some researchers suggest that efficiency can be achieved through specialization (Schaeck et al., 2009). Arafah and Nugroho (2016) argued that different from commercial banks, which apply interest for their transaction practices, Islamic banks adopt the sharia principle, i.e., profit-loss sharing. Thus, the different principal and business practices between conventional and sharia banks affect the accuracy of financial indicators to measure bank efficiency, asset quality, and stability when the different principles are mixed. From this perspective, UUS needs to be separated from its parent so that this kind of bank can focus on the sharia system and be more specialized to a certain market.

However, other studies argue that the rapid increase in banking industries' competition requires banks to be more cost-efficient and productive (Zarutskie, 2009). Some researchers recommend that bank size enhances its power, reduces risk, and lower costs by capitalizing on the scale (Garbois et al., 2012). Hence, it improves financial stability through efficient distribution (Schaeck and Cihák, 2014; Yusgiantoro et al., 2019). This suggestion implies the policy that banks should be consolidated to increase their size.

Concerning the spin-off policy, size is one of the main difficulties to be achieved by sharia banks, which is "too small to have economies of scale." Spin-off threatens new BUS from losing the potential joint revenues, disrupting the business during the transitions and following the spin-off (Prasetyo, 2019). It also threatens the conventional parent bank from losing the benefits of diversification and reducing its equity. This spin-off will reduce the parent equity so that it will reduce the parent size. The equity reduction downgrades the bank-grade (from book level 2 to book level 1). It will decline the conventional bank financial service coverage. Thus, the parent will be disadvantaged from losing its potential revenues from losing the service coverage. Accordingly, a spin-off's suitable strategy will be a crucial

factor to minimize the detrimental effect of both the new BUS and the conventional parent banks. There are two methods in separating UUS from its parent bank carried out in Indonesia: pure separation (separation spin-off) using a new legal entity, a conventional bank separates its UUS, and the separated UUS becomes a new Sharia Commercial Bank (BUS). Secondly, an impure spin-off (through acquisition and conversion) using an existing legal entity, a conventional bank that already has a UUS acquires a relatively small bank, and then converts it to sharia, then separates it and combines it with the UUS, and finally, convert the UUS combination into a BUS.

Many studies have been conducted to compare Syariah banks' performance and conventional banks' (Beck et al., 2013; Satibi et al., 2018). Many studies have also been conducted to examine the effect of spin-off of sharia banks (Al_Arif, 2015; Jubaedah et al., 2020; Pernamasari, 2020; Trinugroho et al., 2020). Trinugroho et al. (2020) used regression analysis to examine the effect of the spin-off on ROA, and the result is that the ROA of BUS is lower than the ROA of UUS. The regression model of Trinugroho et al. (2020), however, has weaknesses. The authors used all banks conducting spin-off (13 BUS and 20 UUS) from 2008 to 2019 and assign score one for BUS and zero for UUS. This approach has a weakness: the authors did not differentiate older BUSes and younger BUSes, and many are newborns. As a new business entity, the BUSes have not been settled; they are still struggling to adapt to the new business standard and system and face the cost inefficiency to still exist in the competitions. They also ignored the compatibility and comparability data when the authors included all UUS which have not conducted spin-off. The UUS that have not conducted spin-off benefit from using parents' infrastructure and enjoying its parents' synergy advantages.
Moreover, previous research has not compared the available used methods to the spin-off. It is necessary to understand better which method promising better performance is necessary to recommend the other twenty conventional banks with UUS to conduct spin-off by 2023. This study, therefore, is intended to bridge the gap. This study compares the performance before and after the spin-off; to compare the performance between spin-off with pure separation and impure spin-off through acquisition and conversion.

The structure of this paper flows that in Section 2 presenting literature review and hypothesis development. Section 3 provides Research methods. Section 4 presents the results and discussion. Finally, Section 5 concludes the findings and provides suggestions.

Literature Review and Hypothesis Development

Spin-off

A spin-off can be defined as an asset separation of a company that later becomes a new business entity, knowing as a subsidiary company. The company separating or transferring its assets still operates. The company becomes a holding company (Rizqullah, 2013). A spin-off is a company strategy to increase competitiveness by focusing on its core business (Beeson and Hyden, 2002). According to Indonesian Regulation Law No 21 Tahun 2008, Indonesian conventional banks implemented two spin-off methods with their UUS: pure spin-off through separation and impure spin-off through acquisitions and conversion. Pure separation (separation spin-off) using a new legal entity, a conventional bank separates its UUS, and the separated UUS becomes a new Sharia Commercial Bank (BUS). An acquisition can be defined as a business union or consolidation between sharia business units. Using an existing legal entity, a conventional bank that already has a UUS acquires a relatively small bank, converts it to sharia, then separates it, combines it with the UUS, and finally converts the UUS combination into a BUS. The union between UUS can enlarge the new BUS (Miftah & Wibowo, 2017). Conversion can be defined as a full conversion. The conventional bank is fully converted into an Islamic commercial bank (BUS).

Many studies have been conducted to examine the spin-off effect on sharia banks' performance (CAR, NPF, FDR, ROA, and ROE), and the result is inconclusive. Some recorded positive results in BUS performance (Hamid, 2015; Khairunnisa and Khasanah, 2018; Nasuha, 2012; Taga et al., 2019). Other researchers found that spin-off reduces financial performance (Al_Arif, 2015; Al_Arif et al., 2017; Haribowo, 2017). The success factor of a spin-off is the size of the parent company. The bigger company promises success because a great company can provide more capital to support growth. Furthermore, a rigorous process is required for a successful story, including the minimum adequacy capital. Sufficient capital improves the capability of BUS to extend lending activities as well as to reduce lending risk. To be successful, the BUS should have a core capital of IDR 1,000,000,000,000, and the parent should have assets minimum of IDR 20,000,000,000,000. Secondly, the parent banks should perform well at least five years before spin-off (Muhammad Budi Prasetyo et al., 2019). Thirdly, the parent should prepare the spin-off process regarding technical aspects and improve UUS performance. Fourthly, the parent should commit to the development of the Islamic banking industry.

Financial Performance

Measurement of financial performance can be used to assess a company's ability to generate profit, work efficiency, and work at a risk tolerated. This study used three ratios: firstly, return on assets (ROA). ROA is used to see the company's ability to generate profits from the total assets used. The higher ROA is, the better. Bank Indonesia (2004) provides an equation to calculate the ROA of banks as following.

$$\text{ROA} = \frac{\text{Earning Before Interest and Tax}}{\text{Total Assets}}$$

Secondly, the ratio of operating expenses to operating income (BOPO) is known as the efficiency ratio. It is used to measure the efficiency level by comparing its operating expenses with operating revenues. The smaller this ratio, the more efficient the bank's operational costs are. The ratio should be less than 95 percent, and it is much better if the company has a BOPO of less than 75 percent (Bank Indonesia, 2004). The equation can be seen as follows

$$\text{BOPO} = \frac{\text{Operational costs}}{\text{Operating Revenues}}$$

Thirdly, finance deposit ratio (FDR) is the ratio used by Islamic banks to measure the amount of financing provided by a bank with third party funds received by the bank, excluding credit (financing) to other banks, against third party funds, which include demand deposits, savings, and currency foreign. FDR is a ratio measuring the level of liquidity and the ability of a company to channel credit. On one side, too high FDR is not recommended because the liquidity risk will increase; on another side, too low FDR is not recommended. The low FDR reflects a company's low ability to channel funding to people to see the profit below. Until now, Bank Indonesia and Financial Services Authority (OJK) has not determined the optimal level for FDR, but Bank Indonesia has provided an optimal level of LDR (for conventional banks) at the level from 78 percent to 92 percent (Bank Indonesia, 2004). Hence, this study will use that range of numbers as a benchmark. The FDR can be calculated as follows:

$$\text{FDR} = \frac{\text{Total financing}}{\text{Total third party funding}}$$

Hypothesis Development

The resource-based theory is a theory that explains that the company's performance will be optimal if the company has a competitive advantage. Competitive advantage is inherent in the company and difficult for other companies to imitate. Competitive advantage is obtained through specialization (Schaeck et al., 2009) and providing a niche market (Porter, 1980). Niche strategy is acknowledged to provide better profits for firms (Noy, 2010). Regarding the separating UUS from its conventional parent banks, the specialization and niche market became a relevant theory of the improvement of UUS after becoming BUS. This improvement may be achieved when the Indonesian Moslems are more confident to fund their business from sharia banks. When the customers realize the fair practices of profit-loss sharing, they may increase their involvement to the BUS. BUS can exploit people who are tight up with their belief in Islamic business practices. These people prefer BUS than conventional banks although the cost of BUS may be higher due to too small of BUS to gain economies of scale. However, when the BUS has been firmly established, it may begin to improve their service, and accordingly, more people utilize BUS services. Finally, operating costs can be reduced through economies of scale. Hence, a hypothesis can be drawn that the performance after spin-off is better than before spin-off. In specific, the following hypothesis will be examined:

1. ROA after spin-off is different from ROA before the spin-off. It is expected that ROA after spin-off is higher than before spin-off.
2. BOPO after spin-off is different from BOPO before the spin-off. It is expected that BOPO after spin-off is lower than before spin-off.
3. FDR after spin-off is different from FDR before the spin-off. It is expected that FDR after spin-off is lower than FDR before the spin-off. This conclusion is drawn based on the average value of FDR that is still more than 100 percent.

In choosing an alternative to a spin-off, a company should consider the requirement, such as the parent company's total assets. The minimum amount of capital must be provided by the parent to its spin-off UUS. When the parent company has total assets more than the requirement, pure spin-off can be considered because the transferred capital to the separated UUS will not significantly impact the parent performance and may not reduce its service coverage. When the capital of parent assets is not strong enough, and when pure alternative spin-off jeopardizes the company performance, impure alternative spin-off through acquisition may become the best alternative. This alternative may imply to the old parent that the separated UUS will be owned by the parent and the other UUS owner. Hence, the parent may not have full control of its BUS. The parent must share control with other owners. When the parent does not share its control and does not have enough capital to be separated, the full conversion may be the best alternative. Hence, the hypotheses can be drawn as pure separation has different ROA, BOPO, and FDR from impure separation through acquisition and conversion.

Research Methods

This study only considers the banks which conduct spin-off. Hence eleven conventional banks have UUS. From the eleventh banks, we select the research samples by using a purposive sampling method. The sampling criterion is that the banks' financial reports must be available quarterly for three years before and after the spin-off. This criterion is due to the issue of equality and comparability. The data should be fair in the circumstances. We only compare companies that experience the same event. Five sharia banks are chosen from eleven commercial sharia banks. The banks are Bank Syariah BRI, Bank Syariah Bukopin, Bank

BTPN Syariah, Bank Jabar Banten Syariah, and BNI Syariah. We only get five BUSes because financial report before spin-off of many conventional banks before OJK was established in 2011 was not available. The data can be accessed from the Bank Indonesia website and OJK official website.

The study compared ROA, BOPO, and FDR before and after the spin-off and compared ROA, BOPO, and FDR of a pure spin-off and impure spin-off. Before conducting the tests, we tested the normality of the data. Because the data is not normal, we used the Wilcoxon test to compare two paired samples to test ROA, BOPO, and FDR before and after the spin-off. We also used two independent Mann-Whitney tests to compare ROA, FDR, and BOPO between a pure spin-off and impure spin-off.

Results and Discussion

Results

Table 1 describes the descriptive statistics of ROA, BOPO, and FDR before and after the spin-off. The descriptive statistics include the number of cases (data observation), minimum, maximum, and standard deviation. The number of cases consists of 60 cases based on five BUSes for quarterly data for three years. The data before after spin-off is equal because the sample is paired.

Table 1. Descriptive Statistics before and after Spin-off

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	**Statistic**	**Statistic**	**Statistic**	**Statistic**
ROA_Before	60	-4.77	9.53	.943	2.16246
ROA_After	60	-12.02	10.38	1.661	3.33876
BOPO_Before	60	27.25	190.44	71.333	31.40696
BOPO_After	60	37.11	304.60	95.915	34.60490
FDR_Before	60	75.60	331.23	156.886	75.88701
FDR_After	60	53.40	283.64	100.322	32.22963
Valid N (listwise)	60				

Source: Research finding.

Table 2 describes the descriptive statistics of ROA, BOPO, and FDR of a pure spin-off and impure spin-off. The number of cases is different between an impure spin-off and a pure spin-off. The impure spin-off data consists of 36 cases because three BUSes use impure spin-off through acquisition and conversion (Bank Syariah BRI, Bank Syariah Bukopin, and Bank BTPN Syariah). The pure spin-off data consists of 24 cases because two BUSes involved spin-off through separation (Bank Jabar Banten Syariah and BNI Syariah).

Table 2. Descriptive Statistics Pure Spin-Off and Impure Spin-Off

	N	Minimum	Maximum	Mean	Std. Deviation
ROA_Impure	36	-2.98	10.38	2.4892	3.41938
ROA_Pure	24	-12.02	3.42	.4188	2.84940
BOPO_Impure	36	37.11	215.58	94.0219	25.52557
BOPO_Pure	24	67.98	304.60	98.7533	45.45694
FDR_Impure	36	81.12	283.64	107.4106	35.80019
FDR_Pure	24	53.40	140.08	89.6892	22.75201
Valid N (listwise)	24				

Source: Research finding.

Before conducting the comparative test, we test the normality test of ROA, BOPO, and FDR before and after spin-off as it is required for the comparative t-test. If the data is normal, then the t-test can be conducted. However, if the data is not normal, we used a comparative test for the parametric test.

Table 3. Normality Test of ROA, BOPO, and FDR before and after the Spin-Off

		ROA_ Before	ROA_ After	BOPO_ Before	BOPO_ After	FDR_ Before	FDR_ After
N		**60**	**60**	**60**	**60**	**60**	**60**
Normal Parameters[a,b]	Mean	.9425	1.6610	71.3325	95.9145	156.8860	100.3220
	Std. Deviation	2.16246	3.33876	31.40696	34.60490	75.88701	32.22963
Most Extreme Differences	Absolute	.172	.184	.126	.289	.212	.213
	Positive	.172	.184	.126	.289	.212	.213
	Negative	-.172	-.166	-.097	-.204	-.142	-.150
Kolmogorov-Smirnov Z		1.335	1.422	.977	2.241	1.644	1.648
Asymp. Sig. (2-tailed)		.057	.035	.295	.000	.009	.009

a. Test distribution is Normal.
b. Calculated from data

Source: Research finding.

Table 4. Result of Comparative Test with Two Related Samples Before and After the Spin-Off

Ranks

		N	Mean Rank	Sum of Ranks
ROA_After - ROA_Before	Negative Ranks	26[a]	27.44	713.50
	Positive Ranks	34[b]	32.84	1116.50
	Ties	0[c]		
	Total	60		
BOPO_After - BOPO_Before	Negative Ranks	18[d]	19.89	358.00
	Positive Ranks	42[e]	35.05	1472.00
	Ties	0[f]		
	Total	60		
FDR_After - FDR_Before	Negative Ranks	47[g]	35.89	1687.00
	Positive Ranks	13[h]	11.00	143.00
	Ties	0[i]		
	Total	60		

a. ROA_After < ROA_Before
b. ROA_After > ROA_Before
c. ROA_After = ROA_Before
d. BOPO_After < BOPO_Before
e. BOPO_After > BOPO_Before
f. BOPO_After = BOPO_Before
g. FDR_After < FDR_Before
h. FDR_After > FDR_Before
i. FDR_After = FDR_Before

Test Statistics

	ROA_After - ROA_Before	BOPO_After - BOPO_Before	FDR_After - FDR_Before
Z	-1.483[b]	-4.100[b]	-5.683[c]
Asymp. Sig. (2-tailed)	.138	.000	.000

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.
c. Based on positive ranks.

Source: Research finding.

The result shows that ROA data and BOPO data before spin-off is normal because the significant value is more than 0.05. However, the data for after spin-off are not normal because the significant value is less than 0.05. Because only one of the data is normal, the comparative test applicable is a nonparametric test with two related samples or Wilcoxon Signed Ranks Test. The result of the comparative test can be seen in Table 4.

When we see N, the 26 means that there are 26 cases (negative ranks) experiencing a decline in ROA after the spin-off, and the mean of these 26 cases is 27.44. Moreover, the N figure is 34 means that these 34 cases (positive ranks) experiencing an increase in ROA after the spin-off, and the mean is 32.85. The mean of positive ranks (experiencing an increase in ROA after spin-off), 32.84, is higher than the mean of negative ranks (experiencing a decrease in ROA after spin-off), 27.44. In brief, there is an increase in ROA after the spin-off. However, when we check the value of Asymp Sig. (2-tailed), the value is 0.138. The figure implies that ROA before and after spin-off is not significantly different since the Asymp. Sig value is more than 0.05.

BOPO and FDR before and after spin-off are significantly different since the Asymp. Sig value is 0.000 less than 0.05. The BOPO after spin-off is higher than BOPO before the spin-off, and the difference is significant. The FDR after spin-off is lower than FDR before the spin-off, and the divergence is significant.

We also conduct a normality test for the data of ROA, BOPO, and FDR of the impure spin-off and pure spin-off. The result can be seen in Table 5.

Tabel 5. Normality Test of ROA, BOPO, and FDR of the Impure Spin-Off and Pure Spin-Off

		ROA_ Impure	**ROA_ Pure**	**BOPO_ Impure**	**BOPO_ Pure**	**FDR_ Impure**	**FDR_ Pure**
N		36	24	36	24	36	24
Normal Parameters[a,b]	Mean	2.4892	.4187	94.0219	98.7533	107.4106	89.6892
	Std. Deviation	3.41938	2.84940	25.52557	45.45694	35.80019	22.75201
Most Extreme Differences	Absolute	.211	.277	.281	.302	.289	.174
	Positive	.211	.205	.281	.302	.289	.174
	Negative	-.128	-.277	-.158	-.249	-.247	-.092
Kolmogorov-Smirnov Z		1.267	1.356	1.686	1.480	1.733	.852
Asymp. Sig. (2-tailed)		.081	.051	.007	.025	.005	.463

a. Test distribution is Normal.

b. Calculated from data.

Source: Research finding.

The result shows that ROA data of impure spin-off and the pure spin-off is normal since the significant value is more than 0.05, so that we use the t-test for independent samples to compare ROA between impure and pure spin-off. Accordingly, we use a nonparametric test with two independent samples. The result of the test can be seen in Table 6.

The result shows that the significant value of Levene's Test is 0.023, less than 0.05. It means that the variance is not homogeny so that we use the value of equal variances not assumed to check the significance of the t-test. The Sig value of the t-test is 0.014, less than 0.05. It means that there is a different mean of ROA impure spin-off and ROA pure spin-off. The mean of ROA impure spin-off provided a higher ROA, 2.4892, than ROA pure spin-off, 4187.

Table 6. Result of Comparative Test Two Independent Samples T-Test: ROA of Impure and Pure Spin-Off

Group Statistics					
	Group	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
ROA_Post	Impure_spinoff	36	2.4892	3.41938	.56990
	Pure_spinoff	24	.4187	2.84940	.58163

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
ROA_ Post	Equal variances assumed	5.471	.023	2.451	58	.017	2.07042	.84472	.37952	3.7613
	Equal variances not assumed			2.543	55.030	.014	2.07042	.81430	.43855	3.7023

Source: Research finding.

Furthermore, based on Table 5, BOPO and FDR of the impure and pure spin-off are not normal since the significant value is less than 0.05. Accordingly, we use a nonparametric test with two independent samples of the Mann Whitney test. The result of the test can be seen in Table 7.

Table 7. Result of Comparative Test Two Independent Samples Mann-Whitney U Test: BOPO and FDR of Impure and Pure Spin-Off

Ranks				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
BOPO_Post	Impure_spinoff	36	32.03	1153.00
	Pure_spinoff	24	28.21	677.00
	Total	60		
FDR_Post	Impure_spinoff	36	36.36	1309.00
	Pure_spinoff	24	21.71	521.00
	Total	60		

Test Statistics		
	BOPO_Post	FDR_Post
Mann-Whitney U	377.000	221.000
Wilcoxon W	677.000	521.000
Z	-.830	-3.184
Asymp. Sig. (2-tailed)	.407	.001
a. Grouping Variable: Group		

Source: Research finding.

Based on Table 7, the BOPO of the impure spin-off (through acquisition and conversion), 32.03, is higher than the BOPO of the pure spin-off (through separation), 28.21. However, the difference is not significant since the Asymp. Sig of the Z test is 0.407 more than 0.05. The FDR of the impure spin-off, 36.36, is higher than FDR pure spin-off, 21.71. The difference is significant since the Asymp. Sig of the Z test is 0.001 less than 0.05.

Discussion

ROA, BOPO, and LDR before and after the Spin-Off

Although the ROA after spin-off is higher than ROA before the spin-off, the significance is not different. The result does not confirm the hypothesis, but at least there is an improvement. The increase in ROA after spin-off is as expected. The insignificant result is probably because the new BUSes may still be struggling to gain many new customers to increase their revenues. The fewer outlets than its conventional one burden the company's effort to generate revenues (Nugroho et al., 2017). This result indicates that the new BUS can attract customers to increase its market share, but its number is not large enough to provide sufficient value-added. This result implies that having strong marketing teams and providing sufficient infrastructures are crucial. This condition might also happen because, after the spin-off, the management of BUS is more careful to channel funds so that it burdens the company to generate profits so that the profit achievement has not been optimal. The companies have not gained the advantage of economies scale yet due to their small size. Based on the descriptive statistics, the mean value of ROA after spin-off is higher, but the standard deviation is higher than before spin-off. It means that the business risk of the BUSes is higher than UUS. The business risk can be from the variability of revenues and variability of operating costs.

The result of BOPO testing before and after the spin-off is a significant difference. BOPO after spin-off is significantly higher than BOPO before the spin-off. This result is not as expected. It means that bank management of the new BUSes is less efficient in carrying out its operational activities than they were UUSes. This inefficiency may be from the higher portion of operating income because the BUSes are no longer enjoying a synergy with their parents. As new business entities, the employees of BUSes still learn and adjust to the new system and standard. Furthermore, comparing with the parent, these BUSes have smaller sizes. The smaller total assets may reduce the companies' ability to gain economies of scale.

The result of FDR testing before and after the spin-off is a significant difference. FDR after spin-off is lower than FDR before the spin-off. The FDR of Islamic banks after the spin-off shows a decline. As we can see, the average FDR before spin-off is 156.89, and after spin-off is 100.32. It means that there is an improvement of FDR. The lowering FDR means that the risk level is reduced. FDR's level is enclosed to the optimum level between 78 and 92 percent (Bank_Indonesia, 2004). The reduction may be caused by the decline in total financing and also the increase in third-party funding. These results support the findings of Al Arif et al. (2018), Pambuko (2019), and Shidiqi and Rachmawati (2018), which state that banks will be more efficient when they can distribute more financing. In ideal conditions, a bank that can channel more financing can increase income while considering maintaining the level of liquidity to meet depositors' needs when they are drawn their money.

Comparison of ROA, BOPO, and FDR between a Pure Spin-Off and Spin-Off Through Acquisition and Conversion

Based on the result in Table 6, the ROA of impure spin-off BUSes (through acquisition and conversion) is higher than the ROA of BUSes pure spin-off through separation. This result confirms the hypothesis. The acquisition may cause this result, and conversion provides a larger capital amount than the separation one. The larger amount of capital can provide better flexibility of BUSes to their service coverage. They can channel a larger amount of financing; accordingly, they can generate more revenues. The acquisition and conversion have all infrastructures, such as offices, outlets, and ATM. For the separation, they must provide all infrastructures needed. Accordingly, for the separation, they have to make much investment

in fixed assets. This large amount of investment will reduce the flexibility of the BUSes with separation to channel funding since their investment in fixed assets needs a large amount of cash.

Based on the result, the BOPO of impure spin-off BUSes (through acquisition and conversion) is higher than the BOPO of the pure spin-off (through separation), but the difference is not significant. The insignificant difference may be caused by the fact that the impure spin-off group and the pure spin-off group are all the conditions after the spin-off. This result may be because spin-off through acquisition and conversion produces a larger size than spin-off through separation, but the larger size may still not be big enough to provide larger economies of scale for the BUS. Furthermore, an acquisition may produce higher operating costs because combining two companies bring another challenge for the employees and team management. Besides, they have to adapt with other team management and another group of employees from the combined companies; they have to adapt to the new system and standard of sharia practices. This result also implies that the expected synergy from joining two companies maybe not high enough to cover the operating costs. The operation of both impure spin-off and pure spin-off BUS is still not efficient. The average BOPO of both groups is still more than 75 percent.

Based on the result, the FDR impure spin-off (through acquisition and conversion) is higher than FDR pure spin-off (through separation). The difference is significant. This result proves the hypothesis that it is significantly different between FDR impure spin-off and pure spin-offs. The FDR of the impure spin-off is higher than the FDR of the pure spin-off, and the difference is significant. This result may be because that acquisition and conversion are established from joining several UUS the convert them into BUS or the conventional banks are fully converted into BUS. The old business entity may have a higher FDR than a pure spin-off from how the impure spin-off BUS is established. This result may also be caused by impure spin-off BUS to channel funding is higher than pure spin-off BUS. The higher the FDR is, the higher the potency of the BUS to generate revenues. However, it will increase the BUS liquidity risk. This result may also be why the impure spin-off BUS has a higher ROA than the pure spin-off BUS. The larger size of the impure spin-off BUS increases the BUS capability to attract people to deposit their money to the BUS because people may trust the bigger BUS than the smaller (pure spin-off BUS). Accordingly, this condition increases the ability of impure spin-off BUS to do funding.

Conclusion

Based on the results of research and discussion, some conclusions can be made as follows:

1. An insignificant difference in ROA before and after spin-off implies that, after three years, spin-off BUSes still struggled to generate revenues to produce much more profit.
2. After the spin-off, a significantly higher BOPO implies that operating BUS may need higher operating costs since the BUS has still not reached the economies of scale due to the too-small size of BUS.
3. A significantly lower FDR after spin-off indicates that the liquidity risk of BUS is lowering. On one side, the funding activities are reduced that which will reduce revenues.
4. A significantly higher ROA of the impure spin-off (through acquisition and conversion) than pure spin-off through separation. The impure spin-off can provide better profit due to their size. The size allows BUS to provide larger service coverage and more flexible with their capital.
5. An insignificant BOPO between impure and pure spin-off.
6. A significantly higher FDR of impure spin-off BUS than pure spin-off BUS because they carried out a higher LDR (loan to deposit ratio) from their old companies.

Suggestion

Based on the test results above, this study's result has several implications: The obligated spin-off gives the challenge from the not improved ROA after the spin-off and increasing BOPO. The difficulties in increasing their financing and collecting the third fund become another issue of BUS. The higher cost of capital from banks' creditors' perspectives than the conventional bank interest constrains BUS to enlarge their market share. The limited-service coverage also becomes an issue to attract consumers. BUS should have an innovative marketing strategy to gain new market especially penetrate to the people or institution with strong emotion to Islam. Size also becomes the issue of newborn BUS. The relatively small size of the BUS burdens it to gain cost reduction from economies of scale and limit the flexibility to provide larger service coverages. Accordingly, increasing the banks' capital becomes essential to consider since they must achieve a minimum amount of capital from the separation.

Impure spin-off through acquisition and the full conversion will provide BUS with a relatively larger capital than the separation spin-off. Impure spin-off BUS is proven to provide higher ROA. However, besides tackling the new method of their business, they should handle combining two companies. This alternative needs a rigorous feasibility study for a feasibility study for merging decisions and a feasibility study for spinning-off decisions. If the equity capital of a conventional company is not large enough, it may do conversion fully. If the equity capital of a conventional company is large enough, separation may become a suitable alternative. All alternatives contain risk, robust feasibility, and innovative business plan with smart strategy are required to ensure the success of the new business entity.

For future researchers, this study only covers three years with quarterly data. A three-year period of study may not sufficiently capture the upward or downward trend of BUS performance. Future research may use longer time series of data to make a future projection. This research cannot capture the learning curve of newborn business entities. Future research may develop modeling studies to capture newborn companies' learning costs with unique circumstances like the UUS spin-off phenomenon. Hence, we can predict how many years are required for newborn BUSes to begin enjoying the economies of scale.

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