REANALYSIS OF SPIN-OFF ISLAMIC BANKS IN INDONESIA: EFFICIENT OR NOT?

M. Fuad Hadziq[1*], Yosi Mardoni[2], Syafwendi Syafril[3]

[12]Universitas Terbuka, Tangerang Selatan, Indonesia

[3]University of Malaya, Kuala Lumpur, Malaysia

[1]fuadhadziq@ecampus.ut.ac.id,[2]yosimardoni@ecampus.ut.ac.id,
[3]syafwendi05@gmail.com

Abstract

The market share of Islamic banks in Indonesia is around 6,3%. Although starting 2008, BI had been a spin-off to enrich the Islamic bank market share, the efficiency did not surmount the big problem from an Islamic bank. This study aims to reanalysis efficiency policy in Indonesia's spin-off in 2011-2019. The research sample is Islamic banking in Indonesia, including BUS and UUS that was doing spin-off yet. This research used an analysis method of DEA by using CRS and VRS. The variables consisted of input and output, such as liquid assets, total financing, profit-sharing income, operating cost, personnel cost, and fixed assets. The result and findings show that BUS after the spin-off is inefficient. Moreover, several Islamic commercial banks decreased inefficiency in many periods. The spin-off does not affect efficiency, especially in the market share of Islamic banks. UUS was more efficient than BUS. One of the factors because of operational cost. However, the BUS is more inefficient than UUS in producing Islamic financial products and services. Besides that, labor costs cannot cut and always grow every time. Finally, making a load of the company to be weight thus consumer prize more expensive

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*Corresponding author

I. Introduction

Having a significant muslim population, Islamic bank does not necessarily make more efficient than a conventional bank (Rianto et al., 2019). Islamic banks' market share in Indonesia continues to grow, though not significantly. The total number of customers at Islamic banks is still limited in contrast to the population of Indonesians. According to the Financial Services Authority (FSA) or Otoritas Jasa Keuangan (OJK), Islamic banks account for roughly 5.9% of total bank assets in Indonesia in 2019 (OJK, 2020). The amount of Islamic

commercial banks (BUS) are 13 banks, 22 sharia business units (UUS), 163 Islamic people's finance bank (BPRS), and 2950 office channeling in Indonesia.

Table 1: Market share of Islamic banking in Indonesia 2009-2018
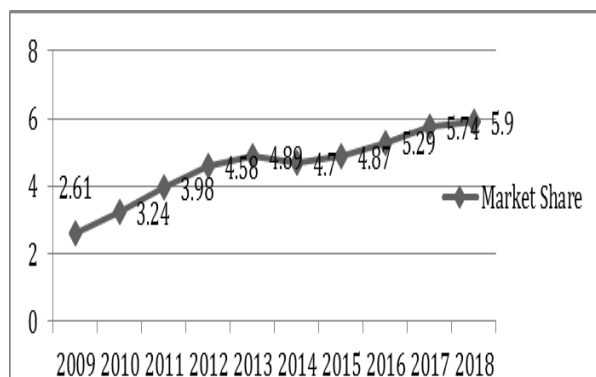
Source: Publication of Bank Indonesia Sharia Financial Progress Report (Bank Indonesia, 2019)

The Islamic banking sector accounts for only 5,9% of the total banking sector in the country. It is the highest mark for expanding an Islamic bank in Indonesia. As a result, Indonesia is one of the world's most promising countries. Indonesia can become the global center of Islamic economics due to its substantial capital. Several Islamic banks have parted from their parent companies or spun out to boost their expansion. Many elements contributed to the spin-success off's (Al-Arif,2014). The parts were law, the bank's profit, contract, efficiency, and others. UUS separated from bank holding, then become the BUS. The reason was to advance Islamic banking and to make independent in organization management.

In developing Islamic banking, the Bank of Indonesia (BI) compiled the blueprint for Islamic banking's development industry in 2002. BI also arranged the acceleration programs to achieve a market share of 5% in 2008 because of Islamic banking's slow growth over the decade. Islamic banking growth only reached 2.10% in 2008, 3.5% in 2009, and 4.75% in 2010. Moreover, the target of 5% had not been born in 2014 yet, so the term "five percent trap" in the Islamic banking industry (Ismail, 2011). The five percent trap occurred in the long year, although many efforts were made by BI and the government (Rianto & Arif, 2014). The Islamic banking market share is lower than the national bank's total asset, even though the BI target was 15% in 2020. So it needed a real solution in developing Islamic economics in Indonesia (Syukron, 2013).

Result BUS from the spin-off was BNI Syariah and Bank Jabar Banten Syariah; another BUS was built with acquisition and conversion. Although based on the criteria of UU No. 21 2008, nine of BUS of the spin-off did not have any mandatory to the spin-off. UUS must be separated if the asset reached 50% of bank holding or after 15 years UU No 21 2008 enacted. It can be said; the spin-off was premature because no criteria from this law (Al-Arif, 2014). The vital program should be prepared from a long time ago, not in a hurry. Moreover, the

object from spin-off is a trust institution bank.

According to the statement above, the spin-off policy began in 2008. Islamic banking has not significantly influenced it (Al-Arif, 2014). Otherwise, the total amount of financing was decreased in 2012. The most important, market share had not been achieved yet on 5% national banking assets. The financial ratio indicator was not good. For example: increasing the problematic financing as indicated by NPF, decreased ROA and ROE, and increased BOPO that operational cost was reduced in Islamic banking. This is an enormous problem that must be given a solution. Will the spin-off continue or not?

In sum, this study is essential to analyze the efficient process of separating sharia business units into sharia commercial banks. Is the BUS that has been done by spinning off in an efficient or inefficient category? The result will compare BUS and UUS in their field efficiency. Then reached more effectively between the BUS and the UUS based on several indicators of the financial statements.

Research Method

Data Envelopment Analysis

In comparing BUS and UUS efficiency, DEA analysis was applied to this study. Data Envelopment Analysis (DEA) is

mathematical programming that is used to measure the decision-making unit (DMU) to other similar DMU's (Repkova, 2015). The first appearance of DEA was introduced by Charnes et al. (1978). Charnes et al. developed a constant return to scale (CRS) model to measure the efficiency score based on the DMU input and output combination. Thus, (Banker et al., 1984) discovered a new DEA model with a variable return to scale (VRS). One of the primary advantages of the DEA model is the integration of multiple inputs and outputs simultaneously.

This study develops the VRS model by assuming that Islamic banking does not run and operate at an optimum scale in Indonesia. The condition set in Indonesia Islamic banking industries faced various constraints such as financial and regulation. Besides, in practice, DMU's might face either economies or diseconomies to scale (Repkova, 2015). The VRS model was chosen based on empirical and theoretical studies finding from DEA's application in measuring banking efficiency in some previous studies. This study adopted an output-oriented approach due to Indonesian government regulation No. 21 of 2008, which ordered Islamic banks to spin-off to increase the market share and Islamic bank assets.

To achieve an efficiency score, applying DEA analysis is important to determine the

weights to maximize each DMU variable's efficiency score. The weights established can be seen as follows:

$$\max h_0 = \sum_{r=1}^{s} u_r y_{r0} \quad \text{subject to} \quad \sum_{r=1}^{S} u_r y_{rj} \leq 1$$

bers (Banker et al., 1984; Repkova, 2015). The maximum efficiency rate score is equal to 1, and the lower value shows the relative efficiency of the object being analyzed. Furthermore, VRS technology allowed us calculating a scaling efficiency due to CRS technical efficiency (TE) and VRS pure technical efficiency (PTE) score upon the same data. This ratio can explain in the formula as (Coelly, 1996)**:**

$$\mathbf{TE_{CRS} = TE_{VRS} \times SE}$$

We can easily modify CRS to become VRS by adding vector $N1'\lambda = 1$ as constant value to develop:

$$\max_{\varphi,\lambda} \varphi,$$

subject to:
$-\varphi y_i + Y\lambda \geq 0,$
$x_i - X\lambda \geq 0,$
$N1'\lambda = 1$
and $\lambda \geq 0$

Then, the scale inefficiency can be calculated between the VRS TE score and the CRS TE score.

Data Collection Technique

This study uses both primary and secondary data. Primary data is obtained through interviews with several institutions based on the objective study. The interview result will

$$\sum_{i=1}^{m} v_i x_{i0} \quad \sum_{i=1}^{M} v_i x_{ij}$$

u_r , $v_i \geq 0$;   r = 1,…,s;   i = 1,…,m; j = 1,…, n.

Each DMU reference set is referred to as j=1,..., n, and evaluated to other set mem reinforce the Islamic banking industry's situation, BUS, and UUS. The Islamic banking practitioners' response to UU No. 21 of 2008 regarding the Islamic banking industry could be investigated.

Also, secondary data is obtained from multiple annual reports on Islamic banking. This data consists of a time series of financial and income statements over the period 2011-2019. We analyze only BUS and UUS from a conventional bank, which consistently updates the annual reports from 2011-2019. Therefore, another justification is that banks have not changed their status due to restructured corporate actions (acquisition, merger, or spin-off). Doing this process, we compile five BUS and five UUS to be analyzed further.

The data collected is then classified into two categories, namely inputs and outputs components. Four main approaches have been promoted in financial institution behavior: production, intermediation, asset, and profit approach. This study adopted an intermediation approach assuming that banks accumulate deposits to alter them by using labor and physical asset in loans

(Sufian, 2011; Ghafoorian et al., 2014). Personnel cost, operating cost, and the fixed asset are defined as input components. Thus, we employ a liquid asset, total financing, and profit-sharing income as output components. We determine the labor cost by personnel cost and related associated expenses. The fixed asset is measured from bank property to generate an income and support financing service activity. Total financing is measure from the sum amount of *mudharabah* and *musyarakah* financing. A liquid asset is represented by cash, total account receivable, current account, and marketable securities. The detail of these can be seen in table 1 down below:

Table 2: Inputs and Outputs for DEA
Estimation Efficiency Value

Inputs and Outputs Code	Variable	Source
O1	Liquid asset	Balance Sheet
O2	Total Financing	Balance Sheet
O3	Profit-sharing income	Income statement
I1	Operating cost	Income statement
I2	Personnel cost	Income statement
I3	Fixed asset	Balance Sheet

This research used several variables above. The variable is essential and influenced in efficiency from input-output Islamic banking. First, efficiency in labor costs can be optimal to employ, such as increasing skills or competencies. It refers to research

from (Ascarya & Diana, 2007) with the production frontier line that described the relation between input and output. The addition of labor will increase production (output). However, when the production boundary line continues to increase, labor will decrease productivity or enact the law of diminishing marginal return.

Second, a fixed asset is the total of fixed assets and inventory, such as buildings, land, vehicles, and depreciation accumulation. Compared to conventional banking, these assets are prohibitive costs, requiring efficiency as a new bank. The aim is to prevent making heavy burdens, especially in the development of Islamic banking. The effort of efficiency is the realization of branchless program banking (services without the physical office). In line with (Alamsyah, 2012), the improvement of Islamic banking service can align with Islamic banking service. One of them uses information technology access, such as Automatic Teller Machine (ATM), mobile banking, and internet banking. Especially BI encourages developing the information technology networks for BUS and UUS, which are their subsidiaries (Faisol & Yuliati, 2015).

Third total loans are the most significant sector in issuing money and will generate cashback. Financing has a significant vital in banking finances. Islamic

banking financing is closer to the real sector because of the product offered. It always uses underlying transactions in the real sector. So the impact is more fundamental in driving economic growth (Alamsyah, 2012). This case is different from conventional banks that are more extensive in loans and focused on the real sector. Partnership relationships with customers provide passion or positive energy for the community to deal with Islamic banks (Faisol & Yuliati, 2015).

Fourth liquid asset, the percentage of UUS assets liquid is lower than the BUS. This case is due to funding support from holding banks to the business branch (UUS). To aim and generate profit from function as an intermediation institution, Islamic banking must also maintain the liquidity at an optimal level. Any time customers withdraw the funds, the bank can fulfill the liquidity. Therefore, current assets that cash and placements in Indonesian Bank (giro, *wadiah*, and certificate *wadiah* of Indonesian bank) as a measure of liquidity must be maintained by banks at an optimal level to cover all deposits (Muharam, 2007).

II.   Discussion

Spin-off in Islamic Banks

Islam is advised to be effective in the utilization of capital and money. This statement has been explained in the Al Quran. Following the verse of Al Quran that destructive behavior is not recommended in Islam. If the material is applied in an organization, a significant business may be concluded: have the tools (inputs) been used optimally?. The rest of the efficiency concept in Islamic economics is reflected in the word of God in the letter Al-Israa verses 26-27. Tabdzir word (waste) is interpreted as expenditures that are not good. This means that humans use resources that must match their needs and not waste (Alayya & Rani, 2019).

The purpose of efficiency is the work parameters that are pretty popular to measure banks and companies' performance. Efficiency is one solution to difficulties in calculating performance measures, such as the level of technical efficiency, locations, and total efficiency (Hadad et al., 2003). Correlation of efficiency measures with financial performance In order to complement the results of efficiency measures. (Isik & Hassan, 2002).

Two methods for measuring efficiency performance are parametric and non-parametric. The distinguishing aspect is the non-parametric method using non-parametric approaches and statistical assumptions. Non-parametric methods use non-econometric strategies that do not require statistical assumptions. The procedure uses three methods, namely the Stochastic Frontier Approach (SFA), Distribution Free Approach (DFA), and

Thick Frontier Approach (TFA) (Berger & Humphrey, 1997). Data envelopment analysis (DEA), as a helpful and popular nonparametric modeling approach, is applied to estimate efficiency. The DEA technique has been implemented to appraise the company's efficiency across a variety of organizations, including industrial, commercial, educational, and financial services (H et al., 2014)

A spin-off is a prorated distribution of shares of a subsidiary company to a holding company without any cash transaction. After this process, the holding company still has shares in both companies (Veld & Veld-merkoulova, 2002). As part of corporate restructuring, a spin-off or separation is essentially the parent company's act of separating operations with the same objective as the founding of a subsidiary (Hilman, 2018). A spin-off describes an additional derivative product or another product or yield from the last. The separation type can differ but generally requires essential control, risk, and benefit distribution. Technology transfer and ownership transferred from holding to a new company (Nasuha, 2012).

Many methods build the bank, especially on Islamic banking. The method of establishing a bank affected the performance. According to (Rizqullah, 2013), he studied UUS's selection spin-off became BUS with

Analytical Network Process (ANP) approach. The result of the research is a spin-off that is the best alternative method to establishment BUS. According to (Beeson, Jonn, 2002) Spin-off made the company distributes company shares to owners on a prorated basis, usually through a unique dividend distribution statement. The spin-off can be followed by a public offering of shares for a minority stake in the subsidiary's shares.

Then, after the bank exists, the bank has performed in some variable. The research of (Nasuha, 2012) analyzed UUS's differences in spin-off (BNI Syariah, BRI Syariah, BJB Syariah, BSB, dan Bank Victoria Syariah) year before and after the spin-off. The research result obtained any differentiation before and after spin-off on three variables: asset, financing, and third-party funds (DPK). While CAR, FDR, ROA, and ROE did not inform the different performance between one year before and after the spin-off.

Performance impacted the efficiency of the Islamic bank. There are kinds of efficiency from each Islamic bank. Then Muharam (2007) measured and analyzed Islamic banks' efficiency in Indonesia in 2005. The research informed that three banks are efficient 100% (BTN Syariah, Bank Niaga Syariah, dan Bank Permata Syariah) from twelve banks. The other nine banks in the

sample experienced fluctuations in their attainment of efficiency levels throughout 2005. (Assaf et al., 2011) analyzed the efficiency of Saudi Bank with the DEA model in two stages. This research found that Saudi banks have consistently experienced improvements in efficiency since 2004. The study also found that Saudi banks with foreign capital had to improve their technical efficiency because they were less efficient, so they needed to be evaluated. Moreover, after Islamic banks' spin-off occurred, Islamic banks and conventional banks have different efficiency. Some of the banks have increased efficiency or even decreased. The research of (Ascarya & Diana, 2007) measured, analyzed and compared the efficiency between Islamic banks and conventional banks in 2002 – 2006. Islamic banks are relatively more efficient than conventional banks. Islamic bank performance had increased in 2002 –

2006, except in 2004 because the Islamic bank took expansive steps. This research also illustrated that BUS's average efficiency is relatively better than that of UUS or BPRS.

Analysis of Efficiency

This research has conducted an output-oriented approach due to 10 Islamic banks obtaining an efficiency core. The computer software, called MaxDEA, has been used as a programming tool to analyze efficiency score based on DEA under the assumption of VRS. The result of efficiency measurement with the intermediation model is in table 3 and table 5. DEA can estimate efficiency from financial banking, especially in Islamic banking. For empirical analysis, we used DEA software to calculate this efficiency. The results of the DEA efficiency scores based on constant in this table:

Table 3: Efficiency Score in BUS in

Table 3. Efficiency Score in BUS in Indonesia, 2011-2019

Period		Measurement	2011	2012	2013	2014	2015	2016	2017	2018	2019
BUS	B	CRS-TE	0.789	0.954	0.608	0.979	0.850	0.701	0.335	0.384	0.393
	M	VRS-PTE	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	I	SE	0.789	0.954	0.608	0.979	0.850	0.701	0.335	0.384	0.393
		Remarks	DRS	DRS	DRS	DRS	DRS	DRS	DRS	DRS	DRS
	B	CRS-TE	0.413	0.460	0.383	0.538	0.514	0.359	0.171	0.311	0.335
	S	VRS-PTE	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	M	SE	0.413	0.460	0.383	0.538	0.514	0.359	0.171	0.311	0.335
		Remarks	DRS	DRS	DRS	DRS	DRS	DRS	DRS	DRS	DRS
	B	CRS-TE	0.525	0.691	0.552	1.000	1.000	0.689	0.432	0.331	0.466
	B	VRS-PTE	0.629	0.702	0.568	1.000	1.000	0.723	0.451	0.417	1.000
	K	SE	0.835	0.984	0.972	1.000	1.000	0.953	0.957	0.793	0.466
	P	Remarks	DRS	DRS	IRS	-	-	DRS	DRS	IRS	IRS
	S										
	B	CRS-TE	1.000	0.570	0.563	0.889	0.960	0.567	0.129	0.331	0.325
	J	VRS-PTE	1.000	0.750	0.639	0.940	0.981	0.629	0.203	0.451	0.382
	B	SE	1.000	0.760	0.881	0.946	0.978	0.901	0.637	0.735	0.849
	S	Remarks	-	DRS	DRS	DRS	DRS	DRS	DRS	DRS	DRS
	B	CRS-TE	0.657	0.890	0.445	1.000	1.000	1.000	0.321	0.221	0.389
	C	VRS-PTE	1.000	1.000	1.000	1.000	1.000	1.000	0.333	0.547	0.459
	A	SE	0.657	0.890	0.445	1.000	1.000	1.000	0.963	0.404	0.848
	S	Remarks	IRS	IRS	IRS	-	-	-	DRS	IRS	IRS

Islamic banks after the spin-off are not all efficient. Moreover, several Islamic commercial banks decreased inefficiency. It can be said that spin-off does not affect efficiency. This research same with the ([Pambuko](), 2019) Islamic banks productifity after spin-off didn't differ in productivity, although my research inefficiency. The efficiency score of each BUS is unstable for

each period, based on the statistical conclusion above. Except for BMI and BSM, which are still efficient according to PTE scores from 2011 to 2019, there is no BUS with total TE, PTE, and SE.

In contrast, in all periods (until 2011 for BJBS), BMI, BSM, and BJBS were running at Decreasing Return to Scale (DRS), which means that the amount of output was reduced due to a rise in input or average cost. Meanwhile, the operating results of BBKPS and BCAS differ. However, BCAS outperforms BBKPS in terms of being able to function with increasing Return to Sacle (IRS) for the years 2011, 2012, 2013, 2018, and 2019. They cut average costs to boost output throughout that time period. Furthermore, from 2014 to 2016, BCAS was fully

operational for three years in a row instead of BBKPS, which was fully operational in 2014 and 2015. In a nutshell, each BUS received the most excellent efficiency score throughout the 2014 timeframe.

If we can rank the BUS according to the mean's of scale efficiency (SE), the ranking of efficiency in Islamic commercial banks as follow:

Table 4: BUS efficiency Ranking from 2011 to 2019

BUS	MEAN of CRS-TE	MEAN of VRS-PTE	MEAN of SE	Ranking [1]
BMI	0.666	1.000	0.666	4
BSM	0.387	1.000	0.387	5
BBKPS	0.632	0.721	0.884	1
BJBS	0.593	0.664	0.854	2
BCAS	0.658	0.815	0.801	3

According to the table above, BBKPS was the most efficient BUS in its operation from 2011 to 2019, followed by BJBS, BCAS, BMI, and BSM. In summary, spin-offs do not always result in greater efficiency for banks; some banks are inefficient. Moreover, generally more inefficient than efficient in BUS. This is a strange spin-off impact that should be efficient for BUS.

Table 5: Efficiency Score in UUS in Indonesia, 2011-2019

Period		Measurement	2011	2012	2013	2014	2015	2016	2017	2018	2019
UUS	B P D S	CRS-TE	0.710	1.000	0.852	1.000	1.000	1.000	0.641	0.355	0.359
		VRS-PTE	1.000	1.000	1.000	1.000	1.000	1.000	0.828	0.368	0.408
		SE	0.710	1.000	0.852	1.000	1.000	1.000	0.774	0.965	0.880
		Remarks	IRS	-	IRS	-	-	-	DRS	IRS	IRS
	B D	CRS-TE	1.000	1.000	0.499	1.000	1.000	1.000	1.000	0.495	0.424
		VRS-PTE	1.000	1.000	0.512	1.000	1.000	1.000	1.000	1.000	1.000
		SE	1.000	1.000	0.975	1.000	1.000	1.000	1.000	0.495	0.424
		Remarks	-	-	IRS	-	-	-	-	IRS	IRS
	B P	CRS-TE	1.000	1.000	1.000	0.978	0.627	0.595	0.453	1.000	1.000
		VRS-PTE	1.000	1.000	1.000	1.000	0.645	0.651	0.515	1.000	1.000
		SE	1.000	1.000	1.000	0.978	0.973	0.914	0.879	1.000	1.000
		Remarks	-	-	-	DRS	DRS	DRS	DRS	-	-
	C I M B S	CRS-TE	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
		VRS-PTE	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
		SE	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
		Remarks	-	-	-	-	-	-	-	-	-
	B T N S	CRS-TE	1.000	1.000	1.000	1.000	1.000	1.000	0.625	1.000	1.000
		VRS-PTE	1.000	1.000	1.000	1.000	1.000	1.000	0.792	1.000	1.000
		SE	1.000	1.000	1.000	1.000	1.000	1.000	0.789	1.000	1.000
		Remarks	-	-	-	-	-	-	DRS	-	-

Based on tables 3 and 5 above, UUS has a higher score in SE compared to BUS. It means that the BUS is more inefficient than UUS in producing Islamic financial products and services. Most of the BUS bank over the period 2011-2019 shows the DRS on their measurement scales such as BMI, BSM, and BJBS. DRS has the interpretation that increasing some inputs is not affected by increasing proportional outputs. It means that BUS experience no efficiency in this stage.

If we look more specifically at table 5 regarding the UUS efficiency score, CIMBS and BTN become the most efficient Islamic bank in Indonesia. CIMB and BTNS achieved total TE, PTE, and SE score except 2017 for BTNS, where BTNS has been recorded fell into 38% and 21% from the previous year with the DRS scale. UUS such as BP, BD, and BPDS demonstrate different efficiency scores each year. BP was slightly falling to 98% in 2014 and 2015, 91% in 2016, and 88% in 2017. DRS indicates that BP experiences an increase in the average cost of input from 2014 to 2017. In turn, it climbed again to fully efficient for the next two years.

Unlike BP, BD took use of the Internal Revenue Service in 2013, 2018, and 2019. BD has performed an IRS in the last two years by reducing people and financing expenditures to maximize output. On the IRS scale, BPDS follows BD's footsteps in the same year (2013, 2018, and 2019), although its TE and PTE ratings are lower than BD's. However, the DRS score was also collected by BPDS in 2017. In conclusion, if we order UUS from most to least efficient based on the SE score, CIMBS is the most

efficient, followed by BTNS, BP, BPDS, and BD.

Table 6: UUS efficiency Ranking from 2011 to 2019

UUS	MEAN of CRS-TE	MEAN of VRS-PTE	MEAN of SE	Ranking[2]
BPDS	0.769	0.845	0.909	4
BD	0.824	0.946	0.877	5
BP	0.850	0.868	0.972	3
CIMBS	1.000	1.000	1.000	1
BTNS	0.958	0.977	0.977	2

UUS is more efficient than BUS in general, especially in terms of operational costs. A large proportion of operating costs are included in the financial report. The reason for this is the expense of labor/salary. Labor expenses cannot be reduced while the economy grows simultaneously. Finally, the company's load increases, leading to a higher consumer price. As a result, our results are comparable to that of (Faisol et al., 2015; Hidayati et al., 2017; Mulazid, 2017; Norfitriani, 2017; Nugroho et al., 2019; Rianto et al., 2019), who found that the UUS is much more efficient than the BUS. Furthermore, this study discovered that BUS must manage their assets and costs to strengthen their company and mitigate potential losses from an operational standpoint, as we know BUS is inefficient, with the majority of these banks working at the DRS.

Table 7: Efficiency Comparison Between BUS and UUS

Comparation	MEAN of CRS-TE Score	MEAN of VRS-PTE Score	MEAN of SE Score
BUS			
BMI	0.666	1.000	0.666
BSM	0.387	1.000	0.387
BBKPS	0.632	0.721	0.884
BJBS	0.593	0.664	0.854
BCAS	0.658	0.815	0.801
UUS			
BPDS	0.769	0.845	0.909
BD	0.824	0.946	0.877
BP	0.850	0.868	0.972
CIMBS	1.000	1.000	1.000
BTNS	0.958	0.977	0.977

The spin-off has yet to have a significant impact, particularly on financial banking ratio efficiency. The spin-off bank had little effect on market share. The separation had little effect on operating efficiency. BUS's goal after the spin-off should be to broaden the market. However, the result of the spin-off is an increase in operational costs. The spin-off, it could be stated, is still restricted to the separation of powers. It does not yet have any plans in place to improve banking

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[2] From the most efficient to the less efficient, represent with numbers (i.e 1,2,3,4…so on)

efficiency. The efficiency of BUS that has already spun off vs UUS that has not yet spun off is not very high. BUS, on the other hand, is not as inefficient as UUS. It may prevent banks from spinning off because they're profitable. Furthermore, the spin-off will prevent UUS from improving its profit margins. As a result, UUS will be safe in the saving zone: it will not be a spin-off or a follow-on to a traditional bank.

In the other hand, the research of (Nasuha, 2012) and (Hisyam & Septiarini, 2016) stated that asset, financing, third party funds, net incomes, dan five ratios: CAR, NPF, FDR, ROA, and ROE. The result of this study is that four variables indicate differences in financial performance after spin-off. From this research, the result only informed that spin-off impact different from research variable not influenced. The other research from (Al Arif, 2015) shows a relationship between the separation policy and the level of operational efficiency in the Islamic banking industry as measured by the BOPO. This means that the Islamic banking industry after the separation policy is less efficient when compared to conditions before the separation. This research only examined the BOPO from Islamic bank after spin-off, the result is inefficient. While my research described more variables and wider than the last research, The result is the same both of them.

III. Conclusion

The purpose of the spin-off was initially for efficiency purposes, but the BUS after the spin-off was not all efficient. In addition, some BUS even experienced a decrease in inefficiency in many periods. In general, the spin-off does not have a strong impact on efficiency, especially on the market share of Islamic banks. In fact, UUS is more efficient than BUS. One of the factors is operating costs. However, BUS is more inefficient than UUS in producing Islamic financial products and services. A huge burden in inefficiency is that labor costs cannot be cut and are always increasing all the time. Finally, make the company's burden into a weight; thus, consumer prices are more expensive. So that's way, the spin-off need evaluation more to the next time to become a decision as a measurement of efficiency.

This study's shortcoming is that the financial report information for each Islamic bank is not same. For one time in the final year of the inquiry, Muamalat Bank's financial report was missing. In addition, the Islamic Bank's review was not entered since its financial statements were incomplete.

Since Islamic banks and conventional banks are distinct entities, the advice of this study is for BI and OJK to strengthen their efforts on productivity. They must establish a rule for measuring efficiency in Islamic

banking, which is distinct from regular banks. In application, the use of methodological tools other than DEA to examine conventional banking sector efficiencies.

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