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Spin-Off Policy of Sharia Bank: Is It Profitable?

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Abstract. *According to Law No 21/ 2008, a Sharia Business Unit (SBU) owned by a Conventional Commercial Bank (CCB) is required to separate from its Parent Bank before 2023. Some Sharia Business Units have initiated a separation step from Conventional Commercial Bank. At the same time, they are required to keep the level of efficiency in running their business operations. This paper is intended to analyze the efficiency level of Sharia Business Units that have separated from its parent bank and compare the efficiency level before and after separation. The method used is Data Envelopment Analysis (DEA) and Paired Sample t-Test. The results show that, based on the total average efficiency of all spin-off sharia banks (in this case four sharia banks namely BNI Sharia, BRI Sharia, BJB Sharia and Bukopin Sharia Bank), there is a decrease in technical efficiency and pure technical efficiency before and after the spin-off. This is a cost adjustment is needed in the early periods of spin-off. Sharia banks require a 'weaning' from their parents. Nevertheless, there is no statistically significant difference in the efficiency levels between before and after the spin-off.*

Keywords: *Efficiency, Sharia Business Unit, Spin-off (separation)*

Abstrak. *Menurut UU No 21/2008, Unit Bisnis Syariah (SBU) yang dimiliki oleh Bank Umum Konvensional (CCB) diharuskan untuk berpisah dari Induknya sebelum tahun 2023. Beberapa Unit Bisnis Syariah telah memulai langkah pemisahan dari Bank Umum Konvensional. Akan tetapi, mereka dituntut untuk menjaga tingkat efisiensi dalam menjalankan bisnisnya. Studi ini menganalisis tingkat efisiensi Unit Bisnis Syariah yang telah terpisah dari induknya dan kemudian membandingkan tingkat efisiensi sebelum dan sesudah pemisahan. Metode yang digunakan adalah Data Envelopment Analysis (DEA) dan Paired Sample t-Test. Hasil penelitian ini menunjukkan bahwa berdasarkan total efisiensi rata-rata semua spin-off bank syariah (dalam hal ini empat bank syariah yaitu BNI Syariah, BRI Syariah, BJB Syariah dan Bank Syariah Bukopin), ada penurunan efisiensi secara teknis di bank syariah dari sebelum dan sesudah spin-off. Hal ini terjadi karena pada periode awal spin-off, ada penyesuaian biaya pada*

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spin-off bank syariah. Bank syariah membutuhkan 'penyapihan' dari orang tua mereka. Namun demikian, tidak ada perbedaan yang signifikan secara statistik dalam tingkat efisiensi antara sebelum dan sesudah pemisahan. Hal ini dapat menjadi referensi bagi Unit Bisnis Syariah lainnya dalam mengambil keputusan untuk segera melakukan spin-off, tentu saja, disertai dengan perencanaan dan implementasi yang hati-hati dan bijaksana.

Kata kunci: *Efisiensi, Unit Bisnis Syariah, Spin-off (pemisahan)*

Introduction

Law No. 21 of 2008 concerning Sharia Banking stipulates that Sharia Business Unit (SBU) owned by Conventional Commercial Bank must conduct *spin-off* at the latest 15 years after the issuance of the law. In other words, the SBU is required to separate from the parent of a Conventional Commercial Bank (CCB) before 2023 ends. This obligation also applies to an SBU that already has an asset value of 50% of the total value of its parent bank. If this obligation is not implemented, then the government, the current Financial Services Authority (OJK), may revoke the business license of the SBU (PBI number 11/10/PBI/2009 article 43 (1)).

However, SBU may also be separated from CCB prior to the fulfillment of these two conditions. The separation of the SBU from its parent bank (Sharia Commercial Bank (SCB)) is a strategic step to capture market opportunities or the needs of the community for sharia financial services. In addition, Umam (2010) said that with the separation of SBU from SCB, the level of adherence to sharia could also increase considering that the transformed SBU into SCB has its own legal entity separate from its parent (subsidiary). Thus, the transformation of SBU into SCB should continue to be pursued.

In the effort to separate the SBU from CCB, the principle of prudence must be maintained. Article 2 of Law No. 21 of 2008 states that Sharia Banking is based on Sharia principles, economic democracy, and prudential principles in conducting its business activities. It is explained in the appendix of the law that "prudential principle" is the Bank's mandatory management guideline should be exercised in order to achieve healthy, robust and efficient banking system in accordance with the provisions of laws and regulations.

One of the concerns in the prudential principle is the realization of efficient banking management. Increased efficiency also became the vision of the banking blueprint issued by Bank Indonesia (2007), "a healthy, robust and efficient banking system to create a stable financial system to foster national economic growth".

However, in the process of separation of SBU from SCB, the efficiency level of the business unit may be disrupted; its NPF ratio may exceed 5% or may result in the amount of fund disbursement exceeding the maximum limit. Taking note of this, Bank Indonesia affirms that the above two constraints must be settled within 1 year (PBI number 11/10 / PBI / 2009 article 41, paragraph 5). If such provision is not fulfilled, then administrative sanction will be applied for violating Article 40 paragraph (1) and 41 paragraph (5) of PBI number 11/10 / PBI / 2009. Details of sanctions in accordance with Article 58 of Law Number 21 of 2008.

Based on sharia banking statistics in May 2017, the number of SCB reached 13 units, while the SBU reached 21 Units. Furthermore, it is explained that the level of NPF and BOPO SCB rates tend to be higher than the SBU. The operational cost of SBU is lower than that of SCB. This is fairness considering that the SBU receives operational assistance from its parent. Therefore, it becomes the concern of the SBU that wishes to separate itself from the SCB, in relation to the increase in operating expenses to be borne.

Thus, the process of separation must be done with prudently and careful calculation to maintain performance. Some SBUs has dared to separate themselves from CCB as described above. On this basis, it is necessary to conduct a study that traces the efficiency of sharia banking before and after the *spin-off*. Is the separation caused the banks to experience financial turbulence that impacts on the low level of efficiency? Which of the separation experience that can be used as a benchmark by other SBU before converting into SCB?

Literature Review

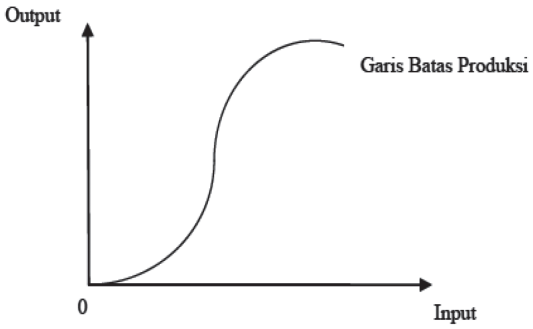
Concept of Efficiency

For a business entity, efficiency is very important. The concept of efficiency is often defined as doing the thing right. This is usually associated with how a company achieve its objectives. Therefore, the concept of efficiency is often seen from the cost as input and profit as output. The business entity always tries to keep the cost level down to a minimum level in order to produce output level in maximum profit.

The concept of efficiency comes from the microeconomic concept, namely producer theory. Producer theory attempts to maximize profits or minimize costs from the producer's point of view. In the theory of producers, there is a production frontier curve which describes the relationship between input and output of the production process. This production frontier curve represents the maximum output

level of any input usage that represents the use of technology from a company or industry (Ascarya and Yumanita, 2007).

Graph 1. Production Frontier Curve



In the economic theory, there are two types of efficiency, namely economic efficiency and technical efficiency. Economic efficiency has a macroeconomic picture, while technical efficiency has a microeconomic picture — the measurement of technical efficiency is only for engineering and operational relationships in the process of using inputs to outputs. The term efficiency in DEA refers more to the definition of technical efficiency, i.e. the relationship between input and output in a business unit.

Meanwhile, in the company's point of view, there are three kinds of efficiency, namely: technical efficiency, allocative efficiency and economic efficiency. Technical Efficiency reflects the company's ability to achieve the optimal level of output by using a certain level of input. This efficiency measures the production process in generating a certain amount of output by using the minimum input. In other words, a production process is considered to be technically efficient when the output of good can no longer be increased without reducing the output of another good.

Allocative efficiency reflects the company's ability to optimize its input utilization with its price structure and technology. With regards to the term efficiency, Pareto is often equated with the allocative efficiency in honor of Italian economist Vilfredo Pareto who developed the concept of efficiency in exchange. The efficiency of Pareto posits that production inputs are efficiently used when they are no longer possible to be used to improve business without causing at least the other business to be worse. In other words, if the input is allocated to produce output that can not be used or unwanted by consumers, this means that the input is not used efficiently.

Economic efficiency refers to the combination of technical efficiency and allocative efficiency. Economic efficiency is implicitly the least-cost production concept. For a given level of output, a production company is said to be economically efficient if it uses the cost at which the unit cost of output is the most minimum. In other words, for a given level of output, a production process is considered to be economically efficient if no other process can be used to produce that level of output at the smallest unit cost.

In general, efficiency measurement is divided into two, namely parametric and nonparametric. Nonparametric analysis widely uses the method of Data Envelopment Analysis (DEA). The first DEA model is the CRS or CCR approach introduced by Charnes et al. (1978). The second model is the VRS or BCC approach introduced by Banker, Charnes and Cooper (1984). Furthermore, there are many DEA model developments for measuring efficiency and productivity levels in various fields. The following are some DEA models that have been inventoried.

Table 1. The Development of Data Envelopment Analysis (DEA) Model

NO	MODEL	YEAR	AUTHOR	SOURCE
1	**DEA Model CCR**	1978	Charnes, Cooper, Rhodes	Charnes, A., Cooper, W.W., and Rhodes, E. (1978), "Measuring the efficiency of decision-making unit", *European Journal of Operational Research*, Vol. 2, pp. 429-444.
2	**Malmquist Productivity Index [MPI]**	1982	Caves, Christensen, Diewert	Caves, D.W., Christensen, L.R., and Diewert, W.E. (1982), "The economic theory of index numbers and the measurement of input, output and productivity", *Econometrica*, Vol. 50, pp. 1393-1414.
3	**DEA Model BCC**	1984	Banker, Charnes, Cooper	Banker, R.D., Charnes, A., and Cooper, W.W. (1984), "Some models for estimating technical & scale inefficiencies in data envelopment analysis", *Management Science*, Vol. 30, No. 9, pp. 1078-1092.
4	**Free Disposal Hull [FDH]**	1984	Deprins, Simar, Tulkens	Deprins, D., Simar, L., and Tulkens, H. (1984), "Measuring labour-efficiency in post offices", in Marchand, M., Pestieau, P., and Tulkens, H. (Eds). *The performance of public enterprises – Concepts & measurement,* Amsterdam, North-Holland, 243-267.
5	**Additive Model**	1985	Charnes, Cooper, Golany, Seiford, Stutz	Charnes, A., Cooper, W.W., Golany, B., Seiford, L.M., and Stutz, J. (1985), "Foundations of DEA and Pareto-Koopmans empirical production functions", *Journal of Econometrics*, Vol. 30: 91-107.

NO	MODEL	YEAR	AUTHOR	SOURCE
6	**Window Analysis**	1985	Charnes, Clarke, Cooper, Golany	Charnes, A., Clarke, C., Cooper, W.W., and Golany, B. (1985), "A development study of DEA in measuring the effect of maintenance units in the US Air Force", *Annals Operation Research,* Vol.2:95-112
7	**Assurance Region [DEA-AR]**	1986	Thompson, Singleton, Thrall, Smith	Thompson, R.G., Singleton, Jr.F.D, Thrall, R.M., and Smith, B.A. (1986), "Comparative site evaluations for locating a high-energy physics lab in Texas", *Interfaces*, Vol. 16, pp. 35-49.
8	**Cross Efficiency**	1986	Sexton, Silkman, Hogan	Sexton, T.R., Silkman, R.H., Hogan, A.J. (1986), "Data envelopment analysis: Critique and extensions". In: Silkman, R.H. (Ed), *Measuring Efficiency: An assessment of Data Envelopment Analysis,* Vol. 32, Jossey-Bass, San Francisco, pp. 73-105.
9	**Facet Model**	1988	Bessent, Bessent, Elam, Clark	Bessent, A.M., Bessent, E.W., Elam, J., and Clark, C.T. (1988), "Efficiency frontier determination by constrained facet analysis", *Operations Research*, Vol. 36, pp. 785-796.
10	**Cone Ratio**	1990	Charnes, Cooper, Huang, Sun	Charnes, A., Cooper, W.W., Huang, Z.M., and Sun, D.B. (1990), "Polyhedral cone-ratio DEA models with an illustrative application to large commercial bank", *Journal of Econometrics,* Vol.46:73-91
11	**Fuzzy DEA**	1992	Sengupta	Sengupta, J.K. (1992), "A fuzzy systems approach in data envelopment analysis", *Computers & Mathematics with Applications*, Vol. 24(9): 259-266.
12	**Super Efficiency**	1993	Andersen & Peterson	Andersen, P., and Petersen, N.C. (1993), "A procedure for ranking efficient units in DEA", *Management Science*, Vol.39: 1261-1264.
13	**Network-Dynamic DEA**	1996	Fare & Grosskopf	Fare, R., and Grosskopf, S. (1996), *Intertemporal Production Frontiers: With Dynamic DEA*. Boston, MA: Kluwer Academic.
14	**Hierarchical Model**	1998	Cook, Chai, Doyle, Green	Cook, W.D., Chai, D., Doyle, J., and Green, R.H. (1998), "Hierarchies and groups in DEA", *Journal of Productivity Analysis*, Vol.10:177-198
15	**Bootstrapped DEA**	1998	Simar & Wilson	Simar, L, and Wilson, P.W. (1998), "Sensitivity analysis of efficiency scores: How to bootstrap in nonparametric frontier models", *Management Science*, Vol. 44(1): 49-61.
16	**Russell Measure [ERM]**	1999	Pastor, Ruiz, Sirvent	Pastor, J.T., Ruiz, J.L., and Sirvent, I. (1999), "An enhanced DEA Russel graph efficiency measure", *European Journal of Operational Research*, Vol. 115, pp. 596-607.

NO	MODEL	YEAR	AUTHOR	SOURCE
17	**Imprecise Data [IDEA]**	1999	Cooper, Park, Yu	Cooper, W.W., Park, K.S., and Yu, G. (1999), "IDEA and AR-IDEA: Models for dealing with imprecise data in DEA", *Management Science*, Vol. 45, pp. 597-607.
18	**Multicomponent/ Parallel Model**	2000	Cook, Hababou, Tuenter	Cook, W.D., Hababou, M., Tuenter, H. (2000), "Multi-component efficiency measurement and shared inputs in data envelopment analysis: An application to sales and service performance in bank branches", *Journal of Productivity Analysis*, Vol. 14, pp. 209-224.
19	**Slack Based Measure [SBM]**	2001	Tone	Tone, K. (2001), "A slacks-based measure of efficiency in DEA", *European Journal of Operational Research* Vol. 130:498-509.

Previous Studies

There are some studies related to measuring the level of efficiency of Sharia banks in Indonesia. Hosen and Rahmawati (2014) tried to analyze the efficiency, profitability and health of Sharia Commercial Bank in Indonesia period 2010-2013. The results show that the highest average efficiency is as follow: Mega Sharia Bank (92.38%), Mandiri Sharia Bank (87.96%), Bukopin Sharia Bank (84.92%), Bank Muamalat Indonesia (BMI) (83.28%) and Bank Rakyat Indonesia Sharia Bank (78.35%). There are several significant variables that influence the level of efficiencies, such as operational expense, profit sharing, total financing and securities.

Firdaus and Hosen (2013) also examined the efficiency of SCB with two stages of the DEA approach. The findings are, in general, 10 (ten) SCBs efficiency level has a fluctuating trend during the study period. Individually, BMI has the highest average efficiency level with 93.82% score, and Victoria Sharia Bank has the lowest efficiency level with a score of 72.12%.

In contrast to two studies above, Wahab, Hosen and Muhari (2014) compared the technical efficiency of Conventional Commercial Bank (CCB) and Sharia Commercial Bank (SCB) in Indonesia. The result is that the average efficiency of CCB is better than SCB. This is possible because the CCB has been operating relatively longer than the SCB. In addition, there are operational differences between CCB and SCB, namely the profit-sharing system. The profit share in SCB is unpredictable at the outset because it is based on the realization of the results of the existing SCB, while the profit at CCB is directly determined in advance.

The same study using DEA was done by Ascarya and Yumanita (2007)

during the period of 2000-2004. The results show that the technical efficiency of sharia banks reached intermediate approach to 100% and production to 85% in 2004. Similarly, the relative efficiency of scale from intermediation approach was 87%, and production was 97%. In general, the sharia bank's production approach experienced a decrease in technical efficiency but experienced an increase in scale efficiency because, at that time, the sharia bank was quite aggressive in expanding the opening of new offices. The research related to the efficiency of other Sharia banks is also done by Effendi (2016).

There also several other studies on Islamic bank in Indonesia. For example, research conducted by Rusydiana and Sanrego (2018) and Rusydiana and Firmansyah (2017) uses the *maslahah* efficiency framework to evaluate the performance of an Islamic bank. Rusydiana (2018) tries to measure the productivity of Islamic bank in Indonesia, and Rusydiana and Alparisi (2016) have taken measurement of Islamic bank performance in Indonesia using *maqasid* index and profitability.

From the above studies, none of them specifically see the efficiency performance of sharia banks in relation to the *spin-off* case in Indonesia. So, this research becomes significant.

Research Methodology

Research Data

The objects of this study are four SBUs that separated themselves from CCBs (table 1). The sampling of the four SBUs is based on the density of the separation year, i.e. the end of 2008 to mid-2010. This is necessary to make the comparison more accurate, apple to apple.

Tabel 2. Research Objects

No	Name of Bank	Operating as Sharia Business Unit	Operating as Full-fledge Islamic Bank
1	BRI (Bank Rakyat Indonesia) Sharia	14 April 2002	1 January 2009
2	BNI (Bank Nasional Indonesia) Sharia	29 April 2000 (establishment)	19 June 2010
3	BJB (Bank Jawa Barat) Sharia	20 May 2000 (establishment)	6 May 2010
4	Bukopin Sharia	27 October 2008 (the acquisition of a bank in 2005)	9 December 2008

The data used are based on secondary data, such as financial statements issued by each bank.

Research Methods

This research uses two methods: 1) Data Envelopment Analysis (DEA) and 2) Differential Test (Paired t-Test).

Data Envelopment Analysis

The Data Envelopment Analysis (DEA) method is used to see the efficiency level of SBU that has *spin-off* relatively. In this case, relative is to compare the efficiency level of the Decision-Making Unit (DMU) with other DMUs that serve as research objects. Relative means no specific standard is used in determining the efficiency level. Efficient, in this case, means that the DMU is the most efficient compared to other DMUs that become the object of this research.

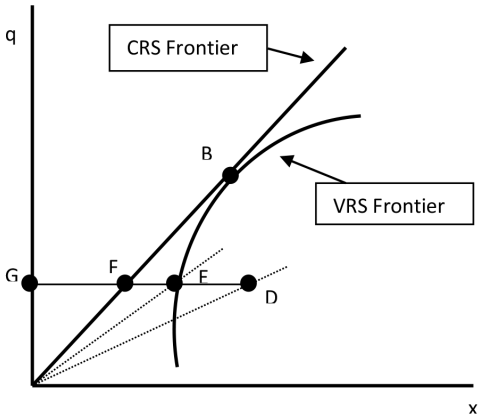
DEA has advantages compared to other methods of research, such as (Siswadi and Purwantoro, 2005):

1. DEA is capable of handling relative efficiency measurements for some similar Decision-Making Units (DMUs) using multiple inputs and outputs.
2. This method does not require the assumption of the functional form of the relationship between input and output variables as applied to ordinary regression.
3. In DEA, the DMUs are compared directly with each other.
4. The input and output factors can have different units of measurement. For example, 1 (X1) can be the number of lives saved, whereas output 2 (X2) the amount of revenue received in rupiah units, without need to change the units of the two variables.

There are two model approaches in the DEA method: a) CCR model (Charnes, Cooper and Rhodes), b) Banker, Charnes and Cooper (BCC). The fundamental difference between the two models lies in the assumption of Return to Scale (RTS). The first model requires the assumption of Constant Return to Scale (CRS), i.e. every change of input amount will be followed by a change of output amount with the same proportion. While the second model requires the assumption of Variable Return to Scale (RTS), the change in the number of inputs in certain proportions allows the change in the number of outputs with

different proportions, which can be larger, equal or even smaller proportions. The condition in which it can produce a larger output is called Increasing Return to Scale (IRS). And if it produces less than n times (smaller proportions), it is called the Decreasing Return to Scale (DRS) condition. The efficiency calculated by the VRS assumption is referred to as "pure technical efficiency" (Pure Technical Efficiency). (Ascarya and Yumanita, 2006).

Graphic 2. The efficiency of CRS and VRS



Source: Coelli, et al. (2005)

The straight centerline is CRS, which describes the performance of a company that works on an optimum scale. The curved line is the VRS line, which describes the technical efficiency of firms working on different scales between one company and another. Point E denotes a technically efficient company but has not worked on an optimum scale. For that, the firm at point D and E should increase its scale until it reaches point B, which is efficient in overall.

In this study, the authors chose to use the intermediation approach, which is to look at financial institutions as intermediary institutions in financial services, which change and transfer financial assets from surplus units to deficit units. In this case, inputs such as labor costs, capital, and interest payments on deposits, with outputs measured in the form of loan credits and financial investments. (Hadad et al., 2003).

The input and output variables used in this research are as follows:

Table 2. Specification of Input and Output

Input Variable	Data Source
Total of Deposit (DPK)	Balance Sheet
Asset	Balance Sheet
Output Variable	**Data Source**
Total of Financing	Balance Sheet
Revenues	Income Statement

Paired Samples t-Test

This method is used to test the mean values of two interrelated population samples, such as before and after. A t-test is required to test the initial hypothesis; whether any difference between before and after, and whether before smaller than after or before greater than after. (Groebner et al., 2008).

Results and Discussions

Analysis Each of the Sharia Bank *Spin-off*

The following is the analysis and evaluation of the efficiency in four sharia banks in the periods of before and after the *spin-off*. The analysis employs the intermediation approach, with the variables, include deposits and assets as input variables; and financing and income as output variables. To be more comprehensive, CCR and BCC model of analysis are used.

BRI Sharia

BRI Sharia started its sharia business by establishing a Sharia Business Unit (SBU) which commenced operations on 14 April 2002 with two branch offices: Jakarta and Serang. BRI Sharia officially operated on 17 November 2008. This began with the acquisition of PT Bank Rakyat Indonesia against Jasa Arta Bank on 19 December 2007, and then the issuance of a license from Bank Indonesia on 16 October 2008 through its letter No.10/67/KEP. GBI.DpG/2008. Banking activities with the Sharia Principles were firstly carried out by BRI Sharia on 19 December 2008 with the signing of the deed of separation of Sharia Business Unit of PT Bank Rakyat Indonesia to merge into PT Bank BRI Sharia (*spin-off*) and the separation of SBU into SCB has been effective since 1 January 2009. (www.brisyariah.co.id).

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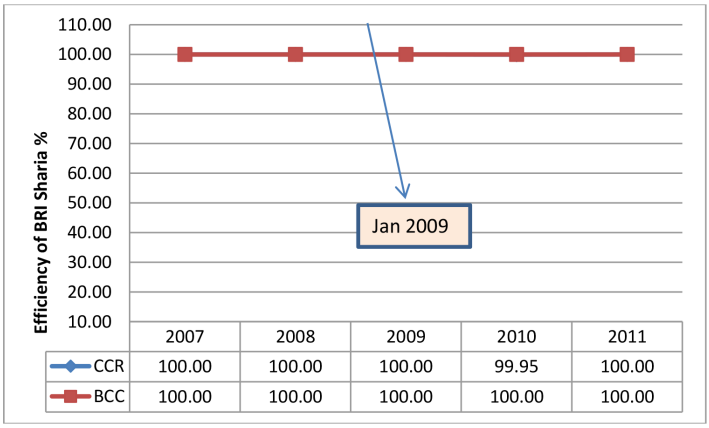
Graphic 3. Trend of BRI Sharia Efficiency Score

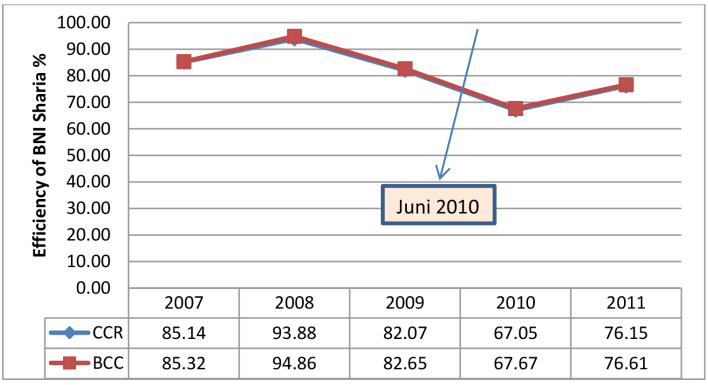


The trend efficiency score of BRI Sharia, both technically and pure technically, indeed show very encouraging growth. The comparison between before and after the *spin-off* shows that BRI Sharia is feasible to be independent (by splitting from its parent bank) but still efficient from year to year. Based on the information found, BRI Sharia is one of the Sharia banks that focus on the middle to lower segment and has a target to become a modern retail bank with a variety of banking products and services. In 2011, BRI Sharia was crowned as the third-largest Sharia bank by assets, in which BRI Sharia grew very well in terms of assets, financing and Third Party Funds (DPK). Thus, it can be concluded that either before or after the *spin-off*, BRI Sharia is good enough in terms of asset management, financing and DPK acquisition so as to achieve optimum trend rate efficiency.

BNI Sharia

The monetary crisis in 1997 also gave evidence that the Sharia banking system is quite resilient to financial threats. Therefore, based on Law Number 10 of 1998, the establishment of Sharia Business Unit (SBU) BNI started from 5 branch offices in Yogyakarta, Malang, Pekalongan, Jepara and Banjarmasin. This stance was made on 29 April 2000. Then, based on the Decree of the Governor of Bank Indonesia Number 12/41/ KEP.GBI/2010 dated 21 May 2010 regarding the granting of business license to PT Bank BNI Sharia, whereby in the corporate plan SBU BNI year 2000 stipulated that the status of SBU is only contemporary and will be a *spin-off* in 2009. So, based on the corporate plan, the *spin-off* can be done on 19 June 2010 with the operation of BNI Sharia as Sharia Commercial Bank. (www.bnisyariah.co.id).

Graphic 4. Trend of BNI Sharia Efficiency Score



	2007	2008	2009	2010	2011
CCR	85.14	93.88	82.07	67.05	76.15
BCC	85.32	94.86	82.65	67.67	76.61

The trend of efficiency score of BNI Sharia both technically and pure technically has experienced an increase in 2008, but it decreased in the following years, 2009 and 2010. The trend, after that, experienced an improvement in 2011. Decreasing efficiency happened before the *spin-off*, but it takes a little time to improve the efficiency of BNI Sharia after the *spin-off*. Some works of literature indicate that there are some differences in the financial condition of BNI Sharia before and after the *spin-off*. For example, the liquidity ratio is different between before and after *spin-off* but not significant. The fluctuations are also experienced in the solvency ratio caused by the decrease in long-term debt after the *spin-off*, but this can increase again. While the profitability ratio experienced a significant change because it is influenced by the separation of capital from the parent bank.

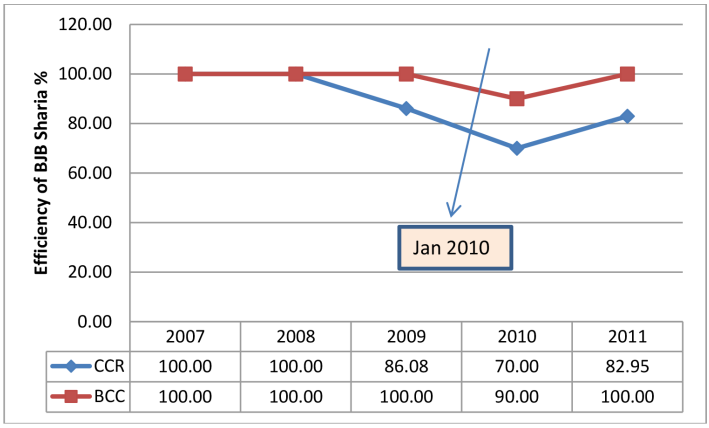
BNI Sharia banking activities started from the establishment of Sharia Business Unit (SBU) since 2000 and just changed to SCB in 2010. This could also impact the fast growth of BNI Sharia efficiency shortly after the *spin-off*. Operating as SBU since 2000 and starting *spin-off* preparation in 2008 and finally becoming SCB in 2010 caused BNI Sharia to rapidly re-increase in technical efficiency as it is considered stable both in technology and human resources.

BJB Sharia

The beginning of the establishment of BJB Sharia began with the establishment of Sharia Business Unit by PT Bank Pembangunan Daerah Jawa Barat and BantenTbk on 20 May 2000. As a follow up of the General Meeting of Shareholders (AGM) of PT BPD West Java and BantenTBk, on the 15 January 2010, PT Bank BJB Sharia was established based on Deed of Establishment No. 4;

and was approved by the Ministry of Justice and Human Rights No. AHU.04317. AH.01.01 dated 26 January 2010. On 6 May 2010, PT Bank BJB Sharia started its SCBiness, after obtaining License SCBiness from Bank Indonesia Number 12/629 / DPbS dated 30 April 2010. (www.bjbsyariah.co.id).

Graphic 5. Trend of BJB Sharia Efficiency Score



	2007	2008	2009	2010	2011
CCR	100.00	100.00	86.08	70.00	82.95
BCC	100.00	100.00	100.00	90.00	100.00

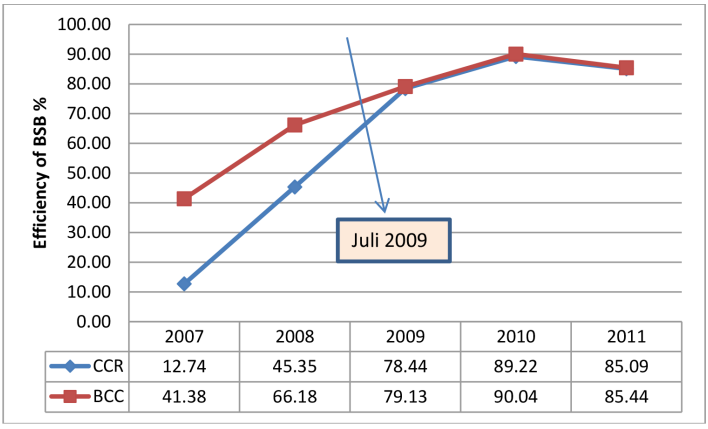
The pure technical efficiency of BJB Sharia's efficiency trends was 100% stable in 2007, 2008 and 2009, respectively. After that, the efficiency trends decreased in 2010 and again increased in 2011. While the trend of efficiency score, BJB Sharia technical experience experienced perfect efficiency in 2007 and 2008 but decreased in the next years until again increased in 2011 but only 82.95%. BJB Sharia started the *spin-off* in January 2010. Before the *spin-off*, the Bank experienced a decreased inefficiency but not significant and again achieved perfect efficiency sometimes after the *spin-off*. As of December 31, 2010, the Company's total equity of IDR 505.39 billion consisted of paid-in capital of IDR 500 billion and profit of IDR 5.39 billion in 2010. Therefore, the capital adequacy ratio (CAR) BJB Sharia was at the level of 31.39%. This condition certainly provides an opportunity for BJB Sharia to continue to grow.

Nevertheless, based on information from BJB Sharia's annual report in 2010, in the implementation of banking activities, operational risks faced by BJB Sharia have an increasing trend. This is due to the gradual development and the development of business units undertaken by BJB Sharia after *spin-off* to develop the target market and market share.

Bukopin Sharia Bank

PT Bukopin Sharia Bank operates on the principle of Sharia originating from the consortium of PT Bukopin Sharia Bank, Tbk., the acquisition of PT Bank Persyarikatan Indonesia by PT Bukopin Bank, Tbk. The acquisition process was done gradually from 2005 to 2008. In 2008, after obtaining a license SCBiness activities of commercial banks operating under the principle of Sharia-based on the Decree of the Governor of Bank Indonesia No. 10/69 / KEP.GBI / DpG / 2008 dated October 27, 2008, the name of PT Bukopin Sharia Bank was started to be formally used on 9 December 2008. (www.syariahbukopin.co.id).

Graphic 6. Trend of Bukopin Sharia Bank Efficiency Score



	2007	2008	2009	2010	2011
CCR	12.74	45.35	78.44	89.22	85.09
BCC	41.38	66.18	79.13	90.04	85.44

Unlike the three Sharia banks that *spin-off* above (i.e. BNI Sharia, BRI Sharia, and BJB Sharia), the efficiency of Bukopin Sharia Bank has increased but never reached perfect efficiency before and after *spin-off* during the period of this research. Based on the results of Bukopin Sharia annual report, it can be concluded that the financial performance of Bukopin Sharia Bank also experienced growth. As in the case of total assets, financing, acquisition of Third Party Funds (DPK), the financial performance experienced growth both before and after the *spin-off*. However, the ratio, Capital Adequacy Ratio (CAR) decreased, and the ratio of Non-Performing Financing (NPF) increased with the addition of total financing to Third Party Funds in 2009. This has an impact on the lack of maximum performance of Bukopin Sharia Bank but, still, the efficiency can be improved even though not yet reached 100%.

Analysis of Sharia Bank Industry *Spin-off*

The following is the analysis of the above findings on Sharia banking efficiency evaluation, resulted from the *spin-off*. The efficiency of sharia-based banking will be analyzed based on the intermediation approach. Variables used in this intermediation approach are deposits and assets, as input and financing variables, and income as output variables. In order to be more comprehensive, this paper will elaborate on the analysis using the CCR and BCC model. The below table shows the efficiency score of Sharia banks *spin-off*. In addition, the table below also displays related information about RTS (Return to Scale).

Table 3. Results of Sharia Banking Efficiency *Spin-off*

Name of SCB	CCR	BCC	Scale	RTS
2007-BRI Sharia	100	100	100	constant
2008-BRI Sharia	100	100	100	constant
2008-BJB Sharia	100	100	100	constant
2010-BJB Sharia	100	100	100	constant
2009-BRI Sharia	100	100	100	constant
2011-BRI Sharia	100	100	100	constant
2010-BRI Sharia	99.95	100	99.95	constant
2007-BJB Sharia	93.25	100	93.25	constant
2008-BNI Sharia	93.88	94.86	98.97	increasing
2010-Bukopin Sharia	89.22	90.04	99.09	decreasing
2011-Bukopin Sharia	85.09	85.44	99.59	decreasing
2007-BNI Sharia	85.14	85.32	99.79	increasing
2009-BJB Sharia	80.48	83.41	96.49	decreasing
2009-BNI Sharia	82.07	82.65	99.30	increasing
2009-Bukopin Sharia	78.44	79.13	99.13	decreasing
2011-BNI Sharia	76.15	76.61	99.40	increasing
2011-BJB Sharia	75.53	76.22	99.09	decreasing
2010-BNI Sharia	67.05	67.67	99.08	increasing
2008-Bukopin Sharia	45.35	66.18	68.53	decreasing
2007-Bukopin Sharia	12.74	41.38	30.79	decreasing

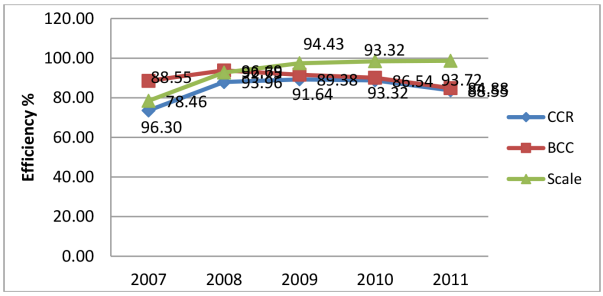
The efficiency ratio at DEA ranges from 0-1. Figure 1 indicates that efficiency is perfect while getting away from the number one means the efficiency is low. The table above shows the efficiency of Sharia banks *spin-off* period 2007-2011. Based

on the above table it can be seen that based on the CCR (Constant) and Scale model, there are 6 (six) efficient DMUs, which are: BRI Sharia in 2007; BRI Sharia and BJB Sharia in 2008; BRI Sharia in 2009; BJB Sharia in 2010. In 2011, BRI Sharia showed perfect efficiency figures.

Based on the BCC model, there are 8 (eight) efficient DMUs, namely BRI Sharia and BJB Sharia in 2007; BRI Sharia and BJB Sharia in 2008; BRI Sharia in 2009; and BRI Sharia and BJB Sharia in 2010. In 2011, again, BRI Sharia showed perfect efficiency figures.

The table above shows that among the Sharia banks with a *spin-off*, the lowest efficiency was experienced by Bukopin Sharia Bank in 2007, 2008 and 2009; BNI Sharia in and 2010. Meanwhile, two DMUs with the lowest efficiency level in 2011 were BJB Sharia and BNI Sharia. This can certainly be a PR for SCB that has not yet achieved efficiency to improve its technical efficiency (pure technical efficiency), overall efficiency (technical efficiency) and scale efficiency.

Graphic 7. Trend Score Efficiency of Sharia Banking *Spin-off* (Year)



In general, the above graph illustrates the comparison of technical efficiency scores, purely technical, and scale based on the total average of all Sharia *spin-off* banks (in this case there are four Sharia banks namely BNI Sharia, BRI Sharia, BJB Sharia and BukopinSharia Bank). In trend, there was a scale efficiency improvement in Bank Sharia *spin-off* from year to year and stable in 2010 and 2011. However, there was a decrease in technical and technical efficiency from 2008 to 2011. This means that there was a decrease in technical and pure efficiency technical on Sharia banks starting from before and after the *spin-off*.

Based on the results of efficiency gains in the graph above, it can be concluded that technical efficiency is one of the managerial problems that require more output generated on a number of specific resources. During those years, especially 2009 and 2010 were the years of transfer from bank SBU to SCB. Consequently, the

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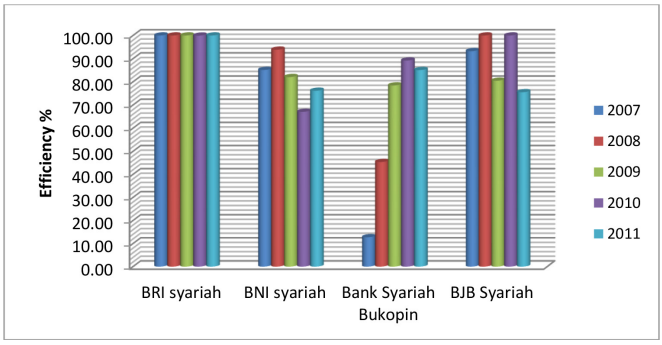
conversion of SBU to SCB was likely to greatly impact the decrease in revenue when compared with the resources used. In this case, the new SCB need to work harder to earn revenue, especially in acquiring customers.

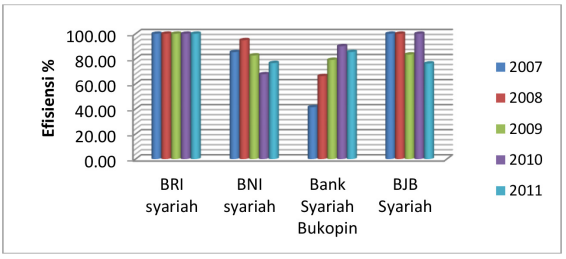
Graphic 8. Comparison of Technical Efficiency Score of Sharia Banking *Spin-off*



However, if viewed based on the comparison of technical efficiency score in trend (from year to year), it can be seen in the graph above that BRI Sharia is the only sharia bank that managed to achieve technical efficiency from year to year during the *spin-off*. Three other banks (BNI Sharia, Bukopin Sharia Bank, and BJB Sharia), on the other hand, had a quite fluctuating efficiency achievement from year to year.

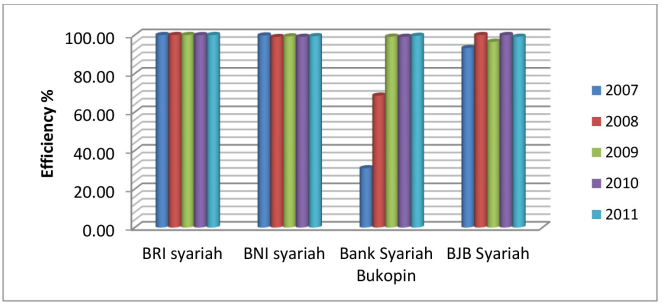
BRI Sharia is one of the Sharia banks that focuses on the lower-middle segment and has a target to become a modern retail bank with a variety of banking products and services. In 2011, BRI Sharia was crowned as the third-largest Sharia bank by assets, in which BRI Sharia grew very well in terms of assets, financing and Third Party Funds (DPK). Thus, it can be concluded that either before or after *spin-off* BRI Sharia is good enough in terms of asset management, financing and DPK acquisition so as to achieve optimum trend rate efficiency.

Graphic 9. Comparison Efficiency Score of Pure Technical Sharia Banking *Spin-off*



Similarly, the comparison of technical efficiency scores, comparison of pure technical efficiency score (year to year), also shows that BRI Sharia is still the only Bank Sharia underwent *spin-off* but had achieved technical efficiency from year to year while the other three banks (BNI Sharia, Bukopin Sharia Bank, and BJB Sharia) had a quite fluctuating efficiency achievement.

Graphic 10. Comparison Efficiency Score of Sharia Banking Scale *Spin-off*



However, it is quite different in the comparison of technical efficiency score and technical pure, comparison of score scale efficiency scores (year to year), indicating that not only BRI Sharia achieved scale efficiency from year to year, but also followed by BNI Sharia. Meanwhile, the Bukopin Sharia Bank almost achieved perfect efficiency figures in the year after the *spin-off* of in 2009, 2010, and 2011. BJB Sharia, on the other hand, reached its efficiency in 2008 and 2010.

Scale efficiency is a term used to explain the decrease in cost per unit due to the addition of units produced. In microeconomic theory, economies of scale are the existence of cost-saving activities undertaken by firms when expanding. Scale efficiency may occur in Sharia banks as the results of *spin-off* activity. Despite the *spin-off*, some of the technologies used in the Sharia bank are still induced by their parent banks or conventional banks. One example is BNI Sharia. Although BNI Sharia has split from conventional BNI, some of the technologies from the latest are still used, such as ATMs. Furthermore, office channelling activities with the parent bank are also maintained as one form of cost savings by the *spin-off* banks. Theoretically, the inefficiency on a scale can only be overcome by adopting new technology or service production processes.

Comparative Analysis of Bank Sharia Before and After *Spin-off*

This chapter describes and analyzes the difference in efficiency before and the *spin-off* of four Sharia banks (i.e. BNI Sharia, BRI Sharia, BJB Sharia, and Bukopin

Sharia Bank). The analysis employs t-test (paired-sample t-test) using efficiency score data before and after the *spin-off* period. The table below describes the results of the paired sample test on all four SCBs based on the average number.

Table 4. Test Results Paired Sample t-test On SCB Before and After *Spin-off*

SCB (*Spin-off*)	Pra	Post	Condition	Sig Paired Sample Test
BRI Sharia	100.00	99.98	decrease	0.834
BNI Sharia	87.61	72.14	decrease	
Bukopin Sharia	53.78	84.87	increase	
BJB Sharia	94.47	88.11	decrease	

The table above shows that before the *spin-off,* BRI Sharia experienced an average efficiency of 100%, but after the *spin-off* the average efficiency decreased to 99.98%. So it can be concluded that BRI Sharia decreased efficiency after the *spin-off*. On the other hand, before the *spin-off,* BNI Sharia experienced an average efficiency of 87.61%, but after the *spin-off,* the average efficiency decreased to 72.14%. It can be concluded that BNI Sharia has decreased efficiency after the *spin-off*.

As for BJB Sharia, it experienced an average efficiency of 94.47% before the *spin-off*. However, after the *spin-off,* the average efficiency decreased to 88.11%. It can be concluded that BJB Sharia experienced a decrease in efficiency after the *spin-off*. However, unlike the three previous Sharia banks, the Bukopin Sharia Bank experienced an increase in average efficiency before and after the *spin-off*. This shows that Bukopin Sharia Bank is able to improve its efficiency after the *spin-off*. However, based on the result of the paired sample t-test a significance obtained the figure of 0834 or> of 5%. It can be concluded that there is no significant difference in the efficiency of Sharia banks before and after the *spin-off*.

Conclusion and Suggestion

This study aims to compare the impact of *spin-off* in four Sharia banks, namely BNI Sharia, BRI Sharia, BJB Sharia and BukopinSharia Bank. The comparison is made on data before and after the *spin-off*. This study concludes that based on the total average efficiency of the four sharia banks that experienced the s*pin-off*, there was a scale efficiency improvement from year to year; and they were stable in 2010 and 2011. However, there was a decrease in technical and technical pure efficiency

from 2008 to 2011. This means that the sharia banks experienced a decrease in technical efficiency and technical pure before and after *spin-off*.

The industry analysis can explain that BRI Sharia and BJB Sharia experienced a decrease in efficiency after the *spin-off*. Meanwhile, Bukopin Sharia experienced increases in average efficiency before and after the *spin-off*. However, different test results indicate that there is no significant difference between Bank Sharia efficiency before and after the *spin-off*.

Based on this study, some suggestions to be proposed such as 1) *spin-off* means that a sharia bank is given political freedom in determining the direction of growth policy from, formerly, Sharia Business Unit (SBU) to Sharia Commercial Bank (SCB). 2) Improving efficiency after the *spin-off* can be done through two approaches, which are the input approach and output approach.

Based on the input approach, Sharia *spin-off* bank should be able to maximize the use of third party funds (DPK) to be channelled in the form of financing to increase revenue. Then, based on the output approach, Sharia banks should undergo a *spin-off* to increase their earnings and achieve efficiency. Strategies to be done by sharia banks that intended undergo a *spin-off* in the future are by improving service quality and product diversity, as well as socializing sharia banking products to the public so that the target of increasing revenue and growth of market share can be achieved.

The absence of a difference in the level of efficiency between before and after the *spin-off* should be a booster to other SBUs to decide to immediately *spin-off*. This, of course, needs to be accompanied by careful planning and implementation.

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