ARE CONVENTIONAL RURAL BANKS MORE EFFICIENT THAN SHARIA: EMPIRICAL EVIDENCE FROM DEA

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ABSTRACT. This study examined and compared the efficiency level of conventional and Islamic rural banks. The analytical tool used was data envelopment analysis with the variable return scale approach. Furthermore, the input variables consist of total assets, third party funds, and costs. Meanwhile, the total financing and profit are the output variables from 2012 to 2019 for 15 rural banks in Aceh. The results showed conventional rural banks are more efficient than sharia. Therefore, Sharia banks need to engage in better socialization to the public. This is because 2021 is the beginning of *qanun* (law) of Islamic financial institutions enactment, which obliges change in shape to the sharia pattern. Also, universities are expected to open a study program on sharia bank as a rudiment for human resources in the future. Therefore, the study to compare conventional and sharia rural bank per province in Indonesia is important.

Keywords: Efficiency; Data Envelopment Analysis; conventional rural bank; sharia rural bank

APAKAH BPR KONVENSIONAL LEBIH EFISIEN DIBANDINGKAN SYARIAH: BUKTI EMPIRIS DARI DEA

ABSTRAK. Penelitian ini mengkaji dan membandingkan tingkat efisiensi BPR konvensional dan BPR syariah. Alat analisis yang digunakan adalah analisis data envelopment dengan pendekatan variable return scale. Selanjutnya, variabel input terdiri dari total aset, dana pihak ketiga, dan biaya. Sedangkan total pembiayaan dan laba merupakan variabel output dari tahun 2012 hingga 2019 untuk 15 BPR di Aceh. Hasil penelitian menunjukkan BPR konvensional lebih efisien dibandingkan dengan bank syariah. Oleh karena itu, bank syariah perlu melakukan sosialisasi yang lebih baik kepada masyarakat. Sebab, tahun 2021 merupakan awal dari qanun (undang-undang) lembaga keuangan syariah yang mewajibkan perubahan bentuk ke pola syariah. Selain itu, perguruan tinggi diharapkan membuka program studi tentang bank syariah sebagai bekal sumber daya manusia di masa depan. Oleh karena itu, kajian untuk membandingkan bank perkreditan rakyat konvensional dan syariah per provinsi di Indonesia menjadi penting.

Kata kunci: Efisiensi; Data Envelopment Analysis; BPR Konvensional; BPR Syariah

INTRODUCTION

A bank is an institution that collects and distributes funds to the public. An example is Bank Perkreditan Rakyat (BPR), which is part of the banking system with a significant share of the economy. The existence of conventional and Islamic Rural Bank has a special purpose to provide banking services and products to economically weak communities, as well as small and micro enterprises (SMEs) both in urban and rural areas (Muhari and Hosen, 2014). In general, the total number of micros, small, and medium enterprises in Indonesia reached 64,194,057 units (Kemenkop RI, 2019). There are several factors responsible for MSMEs growth, including less start-up capital, a simple level of technology, being flexible in adjusting to the market, and being able to create new jobs. At the end of 2018, the number of MSME sector workers who could be absorbed was 116,978,631 people (Kemenkop RI, 2019). With such a large number, it certainly absorbs a lot of labor in the country. However, there are still challenges such as low human resources, product marketing and traditional management (Bismala & Handayani, 2014). The number of UMKM units dominates the absorption of labor (Azhari, 2021).

The right and strategic financial institution to serve banking services to the public is the Rural Bank. BPR are required to withstand the current global economic crisis because they play an important role in providing financing to the MSME sector (Micro, Small and Medium Enterprises) in all regions. Furthermore, it has simple service procedures, fast processes with credit schemes, which are easier to adjust, and the locations are scattered throughout both urban and rural areas compared to commercial banks (Prayitno, 2018).

The development of rural banks in Indonesia shows encouraging indications, as shown by the trend of increasing numbers of offices, total assets, accumulation of funds and credit distribution, namely 4.8%, 22.0 %, 20.8% and 34.4% on average in the last five years each. Even though the economic scale of BPR is still relatively small, its ability to provide broader financial access to MSEs is very

important. Also, the growth rate for the 2011-2015 period increased by 16% and until the end of June 2016, it reached IDR105 trillion (1.6% of total bank assets. general). Furthermore, third party funds increased until June 2016 reaching IDR70 trillion (70% in the form of deposits), and credit increased to IDR79 trillion at the end of June 2016 (Perbarindo, 2016). Out of the total number of BPR / S of 1,797, most (1,184 BPR / 68%) have limited Core Capital (MI) (under IDR 6 billion), BPR / S with MI below IDR6 billion: have (a). Performance tends to be bad, as reflected by high NPL / NPF, high BOPO, low ROA (negative), and (b). Bad TKS / CAMELS. In accordance with POJK No. 12 / POJK.03 / 2016 concerning business activities based on core capital, BPR which cannot meet the capital requirements will be subject to operational restriction sanctions (Perbarindo, 2016). Nevertheless, there are other developments that need to be observed in relation to the BPR efficiency. Currently, the indicator commonly used to measure banking efficiency is the BOPO ratio, which is between operating costs and income.

Development of this ratio for the BPR industry in the last five years is still below the 94% figure (the limit of the efficiency value of the BOPO measure for BPR), but the value shows an increasing trend. Meanwhile, the average ratio for the BPR industry tends to increase above 80%, namely 81.02% at the end of 2003 and increased to 84.27% at the end of 2007. In addition, the savings and credit interest rates for rural banks are still relatively high when compared to commercial banks. At the end of 2007, the interest rate for BPR savings was 7.6% and for deposits at 11.6%, which are still much higher than the interest rates for commercial bank deposits, namely 3.5% and 7.5%. The relatively high cost of funds for BPR has an impact on the high interest rates for its loans, namely 22.7% per year, while lending rates for commercial banks in 2007 averaged only 13.8%.

This description shows an indication of inefficient performance of the BPR industry. Nevertheless, this industry with a high level of efficiency is very needed because it has a positive impact, in relation with its very strategic role and it is different from banking in general (Prayitno, 2018). According to Oral and Yolalan, (1990), the assessment of efficiency cannot be partially done, such as measuring the ratio of labor costs to income but needs to take into account all outputs and all existing inputs. Therefore, a more appropriate approach in measuring efficiency performance is to use a frontier method in the form of parametric and non-parametric analysis.

Several studies have been conducted in order to measure the efficiency of BPRs. Wasiaturrahma et al. (2020), conducted a study regarding the financial performance of several rural banks in Indonesia using DEA approach.

The study aimed to analyze the efficiency performance of conventional and Islamic rural banks, and the results showed both banks are efficient in terms of production. Also, it was found that they still lack efficiency in intermediation role.

A study on comparison between rural and Islamic banks has also been conducted by Almas (2018), which was quantitatively conducted using secondary data by implementing the variables of total assets, labor costs and third-party funds. The results showed conventional banks are more efficient than Islamic.

In order to understand the key factors that caused the inefficient state of Islamic rural banks, a study was conducted by Yahya in 2012. In this case, the meaning of efficiency is the measured performance of economic activity including input and output unit. The study found that Islamic rural banks in Central Java, had an average efficiency below expectation during the period of 2005-2010. Also, several factors have been found to have caused the inefficiency, including the policy time-lag, double tax and the lack of human resource in sharia banking.

Another study found that not only the Islamic rural banks in Indonesia have low efficiency level (Septianto & Widiharih, 2010). This was shown by the fact that only 6 out of 16 banks in Semarang city meet the requirement of efficiency, while the rest are considered to be inefficient. The study was conducted using Data Envelopment Analysis and constant return to scale assumption method. Furthermore, Welani et al., (2016) found that several rural banks in Bandung, West Java, are considered to be inefficient.

According to Muhari and Hosen (2014), the efficiency level of Islamic rural banks meet the requirement by using the parametric method. Unlike previous studies which used the non-parametric method.

This study compared the latest data on conventional and Sharia rural bank from 2012 to 2019 using the data envelopment analysis (DEA) method. DEA was first developed by Farrel (1957) which measured the technical efficiency of one input and output into multi-input and multi-output. Furthermore, it uses the relative efficiency value framework as the input ratio (single virtual input) to output (single virtual output). Sutawijaya and Lestari (2009) added that DEA can be used in various fields, including: health (health care), education,

transportation, factories (manufacturing), and banking. In fact, Purwantoro (2003) stated several advantages of the DEA method, including:

1. Can handle multiple inputs and outputs.
2. There is no need to assume a functional relationship between input and output variables.
3. The DMU is compared directly with each other.
4. Input and output can have different units of measurement.

This study is important to be included in literature on financial institutions, both conventional and sharia. In 2021, Aceh will implement *qanuns*, which basically obliges all financial institutions operating in the province to convert to sharia.

METHOD

The population includes input and output data from conventional and sharia rural bank from 2012-2019 (Perbarindo, 2016). Meanwhile, there are 15 BPR in Aceh, consisting of five conventional and 10 sharia BPR. The sample used was the entire population of as many as 15 BPR.

Table 1. Research Population

Conventional Rural banks	Sharia Rural Banks
BPR Arta Aceh Darussalam	BPRS Hikmah Wakilah
BPR Ingin Jaya	BPRS Baiturrahman
BPR Mustaqim Sukamakmur	BPRS Tgk. Chik Di Pante
BPR Berlian Global Aceh	BPRS Kota Juang
BPR Aceh Utara	BPRS Rahmania Dana Sejahtera
	BPRS Gayo
	BPRS Rahmah Hijrah Agung
	BPRS Adeco
	BPRS Serambi Mekkah
	BPRS Taman Indah Darussalam

Source: Financial Service Authority (2020)

Variable Input dan Output

The input variables are total assets, third party funds and costs. While the output are total financing and profit. Input and output variables were obtained from various studies, including Wasiaturrahma et al., (2020), Almas (2018), Prayitno, (2018), Yahya, (2012), Muhari & Hosen, (2014), Septianto & Widiharih, (2010) and Welani, Nugraha & Tanuatmodjo (2016) (Table 2.)

Data Envelopment Analysis (DEA) Method

DEA is a non-parametric mathematical program used to measure the efficiency of an organization called a decision-making unit (DMU) by using several inputs and outputs. There are two models of efficiency measurement based on the DEA, namely:

1. CCR Model (Charners-Cooper-Rhodes, 1978). They first discovered the DEA CCR (Charnes-Cooper-Rhodes) model in 1978. Muharam and Pusvitasari (2007) model assumes a Constant Return to Scale (CRS), meaning that the proportional change in the input level will result in the same proportional change in the output (for example: adding 1 percent of input will result in an increase of 1 percent of output).

2. Bankers, Charnes and Cooper (1984). The DEA BCC model was further developed (Bankers, Charnes and Cooper) in 1984, which assumes a Variable Return to Scale (VRS). This means measured units will produces changes at various levels of output and there is an assumption that the scale of production can affect efficiency. This is what distinguishes the CRS assumption which states that scale of production does not affect efficiency. Also, technology is one of the factors that influence VRS, therefore opening up the possibility that the scale of production affects efficiency. Muharam and Pusvitasari (2007).

Table 2. Input and Output Variables

Variable	Definition	Input / Output
Assets	The total assets owned by rural bank, both current and fixed	Input
Third Party Funds	The amount of funds collected from the public, in the form of savings, current, and time deposits	Input
Cost	The total costs incurred by the BPR during one period	Input
Financing	The amount of financing provided by the BPR to the community within a certain period of time	Output
Profit	The difference between BPR income and expenses in one period	Output

This study was built with findings by Koopmans (1951), Debreu (1951), and Farrell (1957), which laid the foundation for the literature on efficiency limits. It was shown that efficiency measure of the company can be calculated using many inputs. This study used the Data Envelopment Analysis (DEA) approach developed by Bankers, Charnes and Cooper (1984). Furthermore, the resulting unit of output can show an increasing, constant or decreasing proportion of the input unit increase. Also, the VRS model was used because it assumed that the ratio between addition of input and output is not the same (variable return to scale). This means the addition of input x times does not necessarily cause the output to increase by x times, and it can be smaller or greater than n times. Increasing the proportion can be in the form of increasing returns to scale (IRS) or it can also be decreasing returns to scale (DRS). The results of this model add to the convexity condition for the weight values of λ, by entering into the following constraint model:

$$\sum_{j=1}^{n} \lambda j = 1$$

The BCC model can be written with the following equation: λ Max π (DMU efficiency VRS Model)
Subject to:

$$\sum_{j=1}^{n} xij\lambda ij \geq \pi ioi = 1,2,\dots m \qquad (1)$$

$$\sum_{j=1}^{n} yrj\lambda j \geq yioi = 1,2,\dots s \qquad (2)$$

$$\sum_{j=1}^{n} \lambda j \geq 1 \qquad (VRS) \qquad (3)$$

$$\sum_{j=1}^{n} \lambda j \geq \theta j = 1,2,\dots n \qquad (4)$$

Where θ is the efficiency of the DMU, n is the number of DMUs, m is number of inputs, s is the number of outputs, xij is number of the i input DMU j, yrj is the number of the r output of DMU j λj the weight of the DMU j for the calculated DMU. Meanwhile, to calculate the level of BPR productivity, the study team used the Malmquist Index, with the following formula:

$$M_o\left(x^t,y^t,x^{t+1},y^{t+1}\right) = \frac{D_o^{t+1}\left(x^{t+1},y^{t+1}\right)}{D_o^t\left(x^t,y^t\right)} \times \left[\left(\frac{D_o^t\left(x^{t+1},y^{t+1}\right)}{D_o^{t+1}\left(x^{t+1},y^{t+1}\right)}\right)\left(\frac{D_o^t\left(x^t,y^t\right)}{D_o^{t+1}\left(x^t,y^t\right)}\right)\right]^{\frac{1}{2}} \quad (5)$$

where, $D_o^t\left(x^{t+1},y^{t+1}\right)$ is the distance from the period t + 1 observation to the technology t period.

The first ratio on the right side of Equation (3) measures the change in relative efficiency between years t and t + 1. Also, the total factor productivity will be estimated by the following *formula 1*:

Increase in efficiency according to the value of the malmquist index is greater than one. Meanwhile, decrease in efficiency value is when it is less than 1. Likewise with change and technical efficiency when the TECHch value is> 1. This means there is an increase in technology in the production process, or technical components are the main reason for increasing efficiency (TFP). Meanwhile, when EFFch> 1, it means that the process of managing input into output is efficient (frontier). With this formula, it is expected that the productivity of conventional and Islamic rural banks in Aceh be measured non-parametrically.

RESULTS AND DISCUSSION

Descriptive of Input and Output Variables
This study examines the level of efficiency between conventional and Islamic BPR in Aceh Province. Furthermore, data were obtained from the Financial Services Authority (OJK) of Indonesia. The variables used are total assets, third party funds (DPK) and costs as input variables. Meanwhile, the output variable consists of total BPR financing and profit from 2012 to 2019.

Formula 1

$$M_0\left(x^t,y^t,x^{t+1},y^{t+1}\right) = \left[\left(\frac{D_0^{t+1}\left(x^t,y^t\right)}{D_0^t\left(x^t,y^t\right)}\right)\left(\frac{D_0^{t+1}\left(x^{t+1},y^{t+1}\right)}{D_0^t\left(x^{t+1},y^{t+1}\right)}\right)\right]^{\frac{1}{2}} \times \left(\frac{D_0^t\left(x^t,y^t\right)}{D_0^{t+1}\left(x^{t+1},y^{t+1}\right)}\right) \times \left(\frac{D_0^{t+1}\left(x^t,y^t\right)D_0^{t+1}\left(x^{t+1},y^{t+1}\right)D_0^t\left(x^t,y^t\right)D_0^t\left(x^{t+1},y^{t+1}\right)}{D_0^{t+1}\left(x^t,y^t\right)D_0^{t+1}\left(x^{t+1},y^{t+1}\right)D_0^t\left(x^t,y^t\right)D_0^t\left(x^{t+1},y^{t+1}\right)}\right)^{\frac{1}{2}} \quad (6)$$

where: $\left[\left(\frac{D_o^{t+1}\left(x^t,y^t\right)}{D_o^t\left(x^t,y^t\right)}\right)\left(\frac{D_o^{t+1}\left(x^{t+1},y^{t+1}\right)}{D_o^t\left(x^{t+1},y^{t+1}\right)}\right)\right]^{\frac{1}{2}} = $ *Technical Change* (7)

$$\left(\frac{D_o^t\left(x^t,y^t\right)}{D_o^{t+1}\left(x^{t+1},y^{t+1}\right)}\right) = \text{Pure Efficiency Change (8)}$$

$$\left(\frac{D_o^{t+1}\left(x^t,y^t\right)D_o^{t+1}\left(x^{t+1},y^{t+1}\right)D_o^t\left(x^t,y^t\right)D_o^t\left(x^{t+1},y^{t+1}\right)}{D_o^{t+1}\left(x^t,y^t\right)D_o^{t+1}\left(x^{t+1},y^{t+1}\right)D_o^t\left(x^t,y^t\right)D_o^t\left(x^{t+1},y^{t+1}\right)}\right)^{\frac{1}{2}} = \text{Scale Efficiency Change (9)}$$

Table 3. Statistic Descriptif Variabel of Conventional rural bank (In Millions)

	Output		Input		
	Financing (IDR)	Profit/loss (IDR)	Asset (IDR)	DPK (IDR)	Cost (IDR)
Mean	27.520.276	1.155.340	43.242.886	22.323.337	5.898.422
Std Deviasi	30.407.655	1.392.301	49.174.309	22.619.348	7.171.973
Minimum	3.132.283	(408.686)	5.729.574	1.253.970	935.122
Maximum	95.507.144	4.834.153	158.056.160	77.712.333	25.028.320

Source: Data processed by eviews9

Table 3 shows the highest value of financing output variable was obtained by BPR Mustaqim Sukamakmur of IDR95.5 billion. Meanwhile, the lowest output was IDR 3.1 billion at Arta Aceh Sejahatera. Furthermore, the highest value profit variable was obtained by BPR Mustaqim Sukamakmur of IDR4.8 billion, and the lowest was Aceh Utara amounting to IDR 408 million.

As for the value of input assets, third-party funds and fees, BPR Mustaqim Sukamakmur has the highest input value, amounting to IDR158.05 billion, IDR77.7 billion, and IDR25.03 billion, respectively. On the other hand, the lowest input asset value was obtained by BPR Arta Aceh Sejahtera of IDR. 5.7 billion. Meanwhile, the lowest input value for third party funds and costs was obtained by BPR Aceh Utara and Berlian, which are IDR1.2 billion and IDR25.02 billion, respectively (Table 4)

Based on table 4, the highest value was obtained by Hikmah Wakilah of IDR.66.7 billion, and Taman Indah Darussalam had the lowest value of IDR.427.3 million. The highest profit output value was obtained by BPRS Adeco and the lowest was Baiturrahman, amounting to IDR2.1 billion and IDR (1.4) billion, respectively. On the other hand, the highest input value of assets, third party funds and costs were obtained by BPRS Hikmah Wakilah, amounting to IDR112 billion, IDR96.1 billion and IDR5.9 billion, respectively. Meanwhile, the lowest was obtained by Taman Indah Darussalam, amounting to IDR1.1 billion and IDR.464.3 million. Serambi Mekkah is a BPR that received the lowest third party fund input value of 555.08 million.

Efficiency of conventional BPR and Sharia BPR

Based on the results of data processing (Tables 5 and 6), it was shown that conventional BPRs overall achieved efficiency during the study period. It can be shown that the value of each BPR and the average value each year reaches an index value of 1 or 100 percent. Unlike the case with Islamic BPR as a whole, which is not efficient. However, several BPRs in Aceh had a value of one during the study period, namely BPRS Hikmah Wakilah, Kota Juang, Gayo, Adeco and Taman Indah Darussalam.

However, the test results also proved that there are Sharia BPR that have an index value of one in several years, such as Tgk Chik Di Pante achieving efficiency in 2018 and 2019. Furthermore, Rahmania Dana Sejahtera in 2012, 2014, 2017 and 2019. BPRS Rahmah Hijrah Agung in 2015, 2016 and 2019 had an index value of one, and BPRS SerambiMekkah had a level of efficiency in 2013, 2014, 2016, 2017, 2018 and 2019. Meanwhile, BPRS that had not yet had one index value during the study period was BPRS Baiturrahman.

Table 6 also revealed that five Islamic BPRs had efficiency levels during the period 2012 to 2019. While four BPRS had index values below one or 100 percent in several years, such as BPRS TgkChik Di Pante in 2012 (93.4%), 2013 (90%), 2014 (89.4%), 2015 (80.5%), 2016 (92.6%) and in 2017 (83%). BPRS Rahmania Dana Sejahtera in 2013 (96.9%), 2015 (96.5%), 2016 (95.3%) and 2018 (94.9%). BPRS Rahmah Hijrah Agung in 2012 (82.3%), 2013 (93.1%), 2014 (88.7%), 2017 (78.5%) and 2018 (97.6%). BPRS SerambiMekkah in 2012 (43.2%)

Table 4. Statistic Deskriptif Variabel of sharia rural bank (In Millions)

| | Output | | Input | | |
	Financing (IDR)	Profit/loss (IDR)	Asset (IDR)	DPK (IDR)	Cost (IDR)
Mean	12.500.516	254.262	19.404.254	12.324.401	1.793.734
Std Deviasi	12.784.447	670.547	20.576.794	16.386.861	1.215.184
Minimum	427.302	(1.365.515)	1.100.447	555.079	464.317
Maximum	66.685.982	2.130.268	111.993.276	96.151.116	5.927.488

Source: Data processed by eviews9

Table 5. The efficiency value of conventional rural bank

| No | BPR | Year | | | | | | | |
		2012	2013	2014	2015	2016	2017	2018	2019
1.	BPR Arta Aceh Sejatera	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2.	BPR Ingin Jaya	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3.	BPR MustaqimSukamakmur	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
4.	BPR Berlian Global Aceh	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5.	BPR Aceh Utara	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Mean	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Source: Data processed with DEAP 2.1

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and 2015 (89%). While BPRS Baiturrahman during the eight years of the research period, did not have an index value of one or 100%, 2012 (67.5%), 2013 (66.3%), 2014 (96.4%), 2015 (80.4%), 2016 (79.9%), 2017 (86%), 2018 (86.4%) and 2019 (82%). (Table 6)

The results are not in line with several previous studies including Almas (2018), which found that conventional BPRs are more efficient than Islamic BPRS. Likewise, Muhari and Hosen (2014), stated that Islamic BPR in East Java has a better level of efficiency measured by the parametric method. This is similar to Septianto and Widiharih (2010), which stated that 62% of BPRs in Semarang City are not efficient. Finally, Welani, Nugraha and Taniatmodjo (2016) study on BPR in Bandung Regency, found that BPR in the City were not efficient with non-parametric methods. In contrast, Wasiaturrahma, et., al., (2020) stated that Conventional and Sharia BPR were not efficient, but efficient in terms of production.

According to Welani, Nugraha & Tanuatmodjo (2016), it was suggested that the study location will have different results from the BPR location. This will greatly affect efficiency because the location is close to good facilities and infrastructure, therefore, the people's income will increase (Wasiaturrahma, et., Al., 2020).

There are several factors that cause Islamic BPR to be inefficient, including lack of socialization to the public about financial services owned by Islamic rural banks. It has been discovered that people are still not familiar with the presence of Islamic banking. Therefore, socialization plays an important role, especially for new products that are not yet known by the public. When people are accustomed to transacting with conventional schemes and find it easy, they will feel strange transacting using the sharia scheme which is considered quite complicated (Sadhana, 2012).

Furthermore, the human resource factor (HR) of Islamic financial institutions is still lacking, both in quality and quantity. hence, it will have an impact on customer service. Krisnanto (2012) stated that service quality is a very good rating scale, in other words, customers prioritize excellent service from Islamic banking. In addition, the lack of economics or Islamic banking study programs at the University is still deemed to be small (Yahya, 2012). Therefore, graduates have not met the HR needs of Islamic banking / BPRS.

CONCLUSION

This study aims to compare the level of efficiency between conventional and Islamic rural bank using the DEA method for the period 2012 - 2019. The results found that conventional banks are more efficient than Islamic BPR. Also, Sharia BPR are expected to increase efficiency level by increasing assets, third party funds, and financing. In addition, there is a lack of socialization regarding Islamic BPRs. Therefore, the government and sharia BPR actors should properly conduct socialization to the public. This is not an exaggeration because in 2021, Aceh will implement a *qanun* of sharia financial institutions. The study to compare conventional and sharia rural bank per province is a special attraction because the location of BPR and BPRS to operate will greatly affect their efficiency level.

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Table 6. The efficiency value of sharia rural bank

No	BPRS	Year							
		2012	2013	2014	2015	2016	2017	2018	2019
1.	BPRS Hikmah Wakilah	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2.	BPRS Baiturrahman	0.675	0.663	0.964	0.804	0.799	0.860	0.864	0.820
3.	BPRS TgkChik Di Pante	0.934	0.901	0.894	0.805	0.926	0.830	1.000	1.000
4.	BPRS Kota Juang	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5.	BPRS Rahmania Dana Sejahtera	1.000	0.969	1.000	0.965	0.953	1.000	0.949	1.000
6.	BPRS Gayo	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7.	BPRS Rahmah Hijrah Agung	0.823	0.931	0.887	1.000	1.000	0.785	0.976	1.000
8.	BPRS ADECO	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9.	BPRS SerambiMekkah	0.432	1.000	1.000	0.890	1.000	1.000	1.000	1.000
10.	BPRS Taman Indah Darussalam	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	Mean	0.886	0.946	0.975	0.946	0.968	0.948	0.979	0.982

Source: Data processed with DEAP 2.1

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