

## **Analysis of Efficiency Level of SRB West Java Region for the period of 2018-2020**

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**ABSTRACT.** *This study aims to measure the efficiency level of Islamic Rural Bank (BPRS) using the Data Envelopment Analysis (DEA) method. The research is a quantitative study using secondary data. The population in this study are all BPRS in the West Java region registered with the financial services Authority as of December 2018 as many as 27. And the sample used in this study was 12. This study used an intermediation approach with orientation input and using BBC/VRS measurements. The result of this study is 1 BPRS that achieve perfect efficiency levels achieve perfect efficiency levels in constant positions base on Score (SE).*

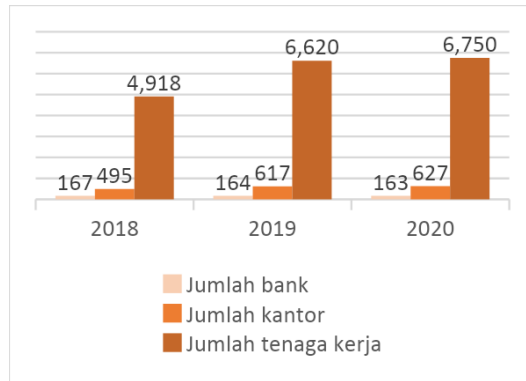
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### **1. INTRODUCTION**

According to Law Number 21 of 2008 concerning Islamic Banking, Sharia Rural Banks are Islamic banks which do not provide services in payment traffic in their activities. These banks are entities that collect funds from the public or in other words as institutions that carry out financial intermediation functions, there are two types of banking operational systems in Indonesia; Conventional Banks and Islamic Banks. BPRS only focuses on serving Micro and Small Enterprises (UMK) which have easy processes and requirements as well as fast services, which makes BPRS have a different market share compared to Islamic banks and other financial institutions (Fauzi, 2018).

MSMEs have an important role in the Indonesian economy because they have made a significant contribution, especially to the formation of gross domestic product and employment. MSMEs are a business sector that has the potential to leverage the economy in the real sector, the growth and improvement of BPRS in terms of assets or the number of offices can certainly have an impact on the development of M SMEs. which currently absorbs a large number of workers and controls around 96.92% of the labor market share in 2019 (Ministry of KUKM, 2021). In this case, BPRS has an important role to support MSME activities in each region. It can be seen in graph 1.1 where the growth in the number of Islamic rural banks from 2018-2020 has decreased. However, based on the number of offices in 2018-2020 there has been an increase, as well as accompanied by a significant increase in the number of workers in 2018-2020,

Graph 1.1 Number of Banks, Offices and Employees of Islamic People's Financing Banks in 2018-2020

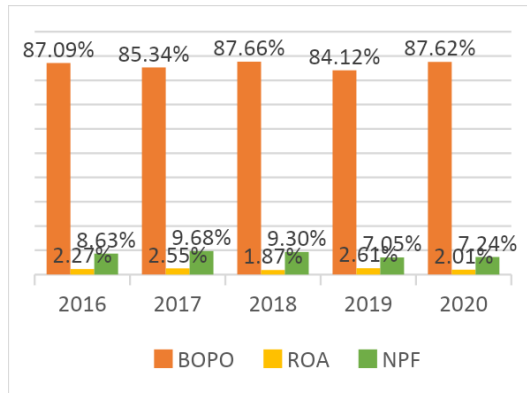


Source: Financial Services Authority 2020

The growth in the number of banks and offices is spread across 24 provinces in the territory of Indonesia, the provinces with the highest number of BPRS are West Java and East Java with a total of The same amount of 27 BPRS was recorded in 2020.

Efficiency analysis is very important because the collection and distribution of financing without considering efficiency factors will affect the profitability of the bank, efficiency is also one of the benchmarks that can be used to measure the performance of BPRS (Hanifa Khairunnisa & Laila, 2020 ). The ratio that reflects the level of efficiency or performance of a bank is shown by the ratio of operational costs compared to operational expenses (BOPO) and Return On Assets (Naufal & Firdaus, 2018). Meanwhile, according to Pebrianti (2021), the performance of the BPRS is still less than optimal if there are several reasons, namely, there has been no significant change in the BOPO of BPRS in Indonesia during the last 5 years, this can reflect that the BPRS has not been efficient in managing its funds where the funds spent are greater than profits. In addition, it can be seen from the NFP value which has continued to increase over the last 5 years because the higher the NFP indicates the bank's performance is getting worse, the NFP is a comparison of the amount of non-current financing with substandard or non-performing financing. The following is data on the BOPO Ratio, ROA and NFP of Islamic Rural Banks for the last five years during the 2016-2020 period, which can be seen in table 1.1 below.

Graph 1.2 Performance Developments of Islamic People's Financing Banks for the 2018-2020 Period



Source: (Financial Services Authority, 2021) data processed

From Graph 1.2, it can be seen that the BOPO Ratio in Islamic people's financing banks has fluctuated or changed from 2016 to 2020, as well as with ROA at Islamic people financing banks increased in 2019 and then decreased in 2020. In addition, the high NFP value in 2016-2018 showed poor bank performance but improved in 2019 and increased again in 2020. This is shows that there is a gap between theory and facts, which is seen from the BOPO ratio of BPRS which fluctuates from 2016-2020, indicating that the bank is not yet very effective in terms of the efficiency of its operational activities. The author chose West Java as the population of this study because apart from East Java, the West Java region is the area with the most BPRS according to the Islamic banking statistics report of the Financial Services Authority, (2020) which is 27 BPRS per year 2020.

In addition, West Java regional BPRS is a BPRS with the highest asset value in a row in 2018-2020 as well as the value of TPF, Financing and Operational Income compared to the East Java region which is the area with the most BPRS as well, according to data from the Financial Services Authority, (2020). The Financing value is greater than the existing TPF, although it has increased every year and can be seen from the NFP value of BPRS in the West Java region which is still fluctuating which has decreased in 2019 by around 2.08% but in 2020 it has increased again to 5.75% this is reflects that the West Java BPRS is still not efficient in managing its funds, but how to measure bank efficiency cannot be done by only comparing banking performance indicators and financial ratios (Naufal & Firdaus, 2018).

Therefore, it is necessary to pay attention and improve the performance of BPRS in West Java region to support economic development in the real sector through MSMEs, namely by measuring efficiency in order to support the performance of BPRS because it is not only BPRS that facilitates in providing financing to MSMEs to carry out their business activities, to measure efficiency. The efficiency measurement method that will be used in this research is Data Envelopment Analysis DEA. Amirillah (2014) stated DEA is a technique specifically designed to measure the relative efficiency of

a bank by using many inputs and many outputs. Relative efficiency is the efficiency of a bank compared to other banks in the sample that have the same type of input and output.

The inputs and outputs used in this study are based on an intermediation approach in which the input variables are TPF, Fixed Assets, Operational Costs, while the output variables used to measure efficiency are Financing, and Operational Income.

## **2. LITERATURE REVIEW**

### **1.1 Banks**

Bank is a business entity that collects funds from the public in the form of savings and distributes it to the public in the form of credit or other services in order to improve the standard of living of the community, besides that commercial banks are banks that carry out activities conventionally and or based on sharia principles, which in their activities provide services in payment traffic. Banks that carry out their business activities conventionally by type consist of conventional commercial banks and rural credit banks (BPR) while banks that carry out business activities based on sharia principles by type consist of Islamic commercial banks and Islamic people's financing banks (BPRS).

Meanwhile, according to Law Number 21 of 2008 concerning Sharia Banking, Sharia People's Financing Bank (BPRS) is a bank which in its activities does not provide services in payment traffic. In accordance with POJK No. 3 of 2016 which regulates sharia people's financing banks that the legal entity form of a BPRS is a limited liability company and a BPRS can only be established and operate after obtaining permission from the Financial Services Authority. In addition, the BPRS is required to carry out its business activities based on the precautionary principle and sharia principles in order to maintain and improve the health level of the BPRS. (Hasbi & Apriyana, 2021).

### **1.2 BPRS Business Activities**

Based on Circular Letter of the Financial Services Authority (SEOJK) No.37/SEOJK.03/2015 concerning products and activities of Islamic rural financing banks for BPRS, product codification and activities of sharia people financing banks are as follows:

#### **1. Funding, in the form of:**

Deposits in the form of Savings or equivalent, Investment in the form of Deposits or Savings or other equivalent forms.

#### **2. Distribution of Funds, in the form of:**

Financing based on profit sharing principles, Musyarakah Mutanaqishah (MMQ) Financing, Financing based on the principle of Leasing, Ijarah Financing, Ijarah Muntahiyah Bitamlik (IMBT) Financing, Multiservice Financing. Financing based on the principle of buying and selling, namely

Murabaha Financing, Gold Ownership Financing, Istishna Financing, Salam Financing. Financing based on the principle of borrowing and borrowing, namely Qord Financing, Qord Financing with gold backed. Syndicated financing Refinancing, Transfer of debt or financing, Islamic factoring.

### 3. Other Activities, in the Form of:

Financial service agents without an office for financial inclusion (Laku Pandai), Payroll, Electronic money (e-money) sales agents, Transfer of Funds, and Safe Deposit Boxes (SDB).

### 1.3 Efficiency and the Concept of Efficiency

Efficiency is the ability of an organization or company in completing its tasks and work well by looking at the size of the comparison ratio between input and output variables. A company is said to be efficient if the company uses inputs with fewer quantities than other companies in producing the same quantity of output, and companies that produce the same inputs as other companies but the company produces a larger quantity of output, efficiency can be interpreted as a ratio between output and input (Hanifah Rahmi, 2019).

According to Hanifah Rahmi, (2019) there are three efficiency concepts, namely technical efficiency, which is the ability of a company to produce maximum output compared to the amount of input used, allocative efficiency, namely the company's ability to use inputs in the most optimal amount. based on a certain input price level. And then the total efficiency measurement results will be obtained from the combination of the two concepts, this is what is called economic efficiency, a company will achieve efficiency if it is able to produce in economies of scale.

### 1.4 Efficiency Measurement Techniques

Based on Research conducted by Awaluddi (2019), he stated that the measurement of banking efficiency can be carried out based on three types of approaches including:

#### 1. Ratio Approach

Measurement with this ratio approach is carried out by calculating the ratio of output and input used, this approach will be considered to have high efficiency if can produce the maximum amount of output with the minimum amount of input.

$$\text{Efficiency} = (\text{Output})/(\text{Input})$$

The disadvantage of this approach is that if there are many inputs and outputs to be calculated and carried out simultaneously, it will cause many calculation results to form unequivocal assumptions.

#### 2. Regression

Approach This approach measures efficiency using a model with a certain level of output as a function of various levels of certain inputs. The regression function is as follows.

$$Y=f(X1,X2,X3,X4,.....Xn)$$

Where: Y= Output, X = Input

The regression approach will provide an estimate of the relationship that can be used to produce the level of output of an Economic Activity Unit (UKE) at a certain input level . UKE/DMU is considered efficient if it can produce more output than the estimated input. This is because only one output indicator can be included in the regression equation, if many outputs are combined into one indicator, the resulting information becomes less detailed or not detailed.

### 3. Frontier approach

In measuring efficiency, this approach is divided into two types, namely Parametric and Non-Parametric Frontier Approaches, Parametric tests are testing whose models stipulate certain conditions regarding the population parameters that are the source of the research, while non-parametric statistical tests are tests whose models do not determine the requirements regarding the population parameters which are the parent of the research sample.

## 1.5 Efficiency Approach Input and Output Relationship

Measurement of efficiency model according to Puspitasari et al., (2018) is seen through two approaches, namely:

### 1. Input Side

Approach This approach is used when the market has experienced a saturation point so that the company must know the level of efficiency of existing resources, This input side also means how much input must be reduced proportionally to produce the same amount of output.

### 2. Output Side

Approach This approach is used when market conditions are still good, so that producers can maintain by increasing output but with the same amount of input.

Furthermore, based on research, (Septiani & Rani, 2020) There are three types of approaches used in the Parametric Stochastic Frontier (SFA) and Distribution Free Approach (DFA) methods as well as the Non-Parametric Data Envelopment Analysis (DEA) method to define the relationship between inputs and outputs in the financial activities of financial institutions, including the following:

#### 1. Asset approach (The Asset Approach)

This approach reflects the primary function of a financial institution as the creator of loans. In this asset approach, output is actually defined in terms of assets. Meanwhile, according to Hanifah Rahmi, (2019) the outputs used in this approach are loans, securities, and other assets.

## 2. Production Approach (The Production Approach)

The production approach considers financial institutions as producers of deposit accounts and credit accounts and defines output as labor, capital expenditures on fixed and material assets.

## 3. The Intermediation Approach

The intermediation approach views a financial institution as an intermediary, namely changing and transferring financial assets from deficit units. In this case, institutional inputs such as labor costs, capital and interest payments on deposits, then measurement of output in the form of loans and financial investments.

The approach used in this study is the intermediation approach, because the intermediation approach considers the vital function of banks as financial intermediation which collects funds from surplus units and distributes them to deficit units. into disbursed loans (Puspitasari et al., 2018).

### 1.6 Data Envelopment Analysis (DEA)

method DEA was first introduced by Charnes, Coopers and Rhodes (CCR) in 1978. This DEA method is a model that can minimize input or maximize output, focusing on input orientation, namely by reducing the number of inputs as much as possible by maintaining the current level of output, while the output orientation aims to maximize the level of output by maintaining the same input at that time (Marjanović et al., 2018).

DEA is used to build efficiency based on organizational or company performance without requiring special equations for building an efficient frontier, this efficient frontier was introduced by Charnes (1987) with the assumption of constant return to scale – CRS and by Banker (1988) with the assumption of a return to scale variable. -VRS (Dinh et al., 2019). According to Septiani and Rani, (2020) there are two DEA models that are often used in measuring efficiency including:

#### 1. The CCR/CRS (Constant Return to Scale)

model This model was developed by Charnes in 1978. This model assumes that the ratio between the addition of inputs and outputs are the same, so if there is an increase in input by  $x$  times, then the output will increase by  $x$  times as well. ). In addition, the CCR model assesses the gross efficiency of a DMU which consists of technical efficiency and scale efficiency. The following is a general form of mathematical equations in the CCR (Constants Return to Scale) model to maximize output and minimize input (Price et al., 2014).

$$\sum_{j=1}^n \lambda_j x_{ij} \leq x_{io} \quad i = 1, 2, \dots, m;$$

$$\sum_{j=1}^n \lambda_j y_{rj} \geq y_{ro} \quad r = 1, 2, \dots, s;$$

$$\lambda_j \geq 0 \quad j = 1, 2, \dots, n.$$

Description:

j=dmu unit ke...

x=input

y=output

i=input dmu ke..

r=output dmu ke..

## 2. VRS (Variable Return to Scale)

model This model was developed by Banker in 1984, this model assumes that the ratio of additions between inputs and outputs is not the same, so that adding x times the input will not cause the output to increase x times, it can be smaller or larger.

$$\theta^* = \min$$

$$\sum_{j=1}^n \lambda_j x_{ij} \leq \theta x_{io} \quad i = 1, 2, \dots, m;$$

$$\sum_{j=1}^n \lambda_j y_{rj} \geq y_{ro} \quad r = 1, 2, \dots, s;$$

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

$$\lambda_j \geq 0 \quad j = 1, 2, \dots, n.$$

Description:

j=dmu unit to...



$x$ =input

$y$ =output

$i$ =input dmu to..

$r$ =output dmu to..

According to Hanifah Rahmi, (2019) from the two measurement methods of the model above, a scale efficiency performance is formulated which is called the Scale Efficiency (SE), with the following equation:

$$SE = OE/TE$$

Diket:

SE = Scale Efficiency

OE = Overall Efficiency (CRS Model)

TE = Technical Efficiency (VRS Model)

Based on research conducted by Hidayah et al., (2018) each company must be sensitive to issues related to Return to Scale, the company will fulfill one of the three conditions of Return to Scale, following conditions Return to Scale:

#### 1. Increasing Return to Scale (IRS)

This condition is obtained if the value  $<1$  from the CCR model and is the value of the DEA calculation. If the company is in this IRS condition, the addition of 1% input will add more than 1% of output, therefore the company will continue to increase its production capacity.

#### 2. Constant Return to Scale (CRS)

This condition is obtained if the efficiency value of CCR = 1 or = 1 for the CCR model, in this case the addition of 1 input will result in an additional 1% of output so that the company will reduce its input.

#### 3. Decreasing Return to Scale (DRS).

This condition is obtained if the input is added by 1%, the output will decrease from 1%.

### **1.7 Advantages and Weaknesses of the DEA Method**

According to (Awaluddin et al., (2019), this DEA method has weaknesses and strengths including:

1. The advantages of the DEA method are:
  - a. Can handle many inputs and outputs
  - b. No need to assume a functional relationship between input and output variables
  - c. UKE/DMU compared directly with each other
  - d. Input and output can have different units of measurement
2. Weaknesses of the DEA method are:
  - a. It is sample specific DEA assumes that each input or output is identical to other units of the same type
  - b. It is an extreme point technique
  - c. Measurement errors can be fatal
  - d. Only to measure the relative productivity of UKE, not absolute productivity.
  - e. Statistical hypothesis testing on the results of DEA is difficult.

### **1.8 Benefits of the DEA Method**

According to Mulyadi, (2021) DEA analysis has the following benefits:

#### **1. Scoring and Ranking**

The results of DEA calculations can show which unit is the most efficient and inefficient usually efficient unit score is 100 and Even those with unit scores below 100 are less efficient.

#### **2. Performance Improvement**

DEA also provides information and solutions so that inefficient units become efficient, how many outputs should be increased or inputs reduced and in which factors and given a target for improvement in order to reach the point of efficiency.

#### **3. Benchmarking**

The results of the DEA analysis provide information on units that are less efficient in order to benchmark which units are efficient .

#### **4. Resources Allocation**

DEA analysis provides information regarding what resources are needed for efficient operations and provides direction for expansion.

#### **5. Optimum Operational Scale**

DEA analysis can show the optimum operational scale and how many resources need to be invested at that optimum scale.

#### 6. Cross Efficiency Analysis

DEA analysis provides an overview of how to calculate the performance of individual units with different external conditions.

### 3. RESEARCH METHODOLOGY

The type of research used in this research is quantitative research. In this research, the author uses secondary data, meaning that the data obtained by the researcher indirectly through intermediary media are generally in the form of evidence, historical/financial reports and various documents, literature, books and other scientific works. The data collection technique used in conducting this research is the library research method. The population in this study were all Indonesian Islamic People's Financing Banks located in the West Java region, namely a number of 27 BPRS during the 2018-2020 period which were registered in the OJK Islamic banking statistics report. The sampling technique used in this study is purposive sampling or judgment sampling, namely the method of determining the sample based on certain criteria (Enny Radjab & Andi Jam'an, 2017). criteria for selecting the sample in this study are as follows:

1. Islamic People's Financing Bank (BPRS) for the West Java region registered with the OJK as of December 2018.
2. Sharia People's Financing Bank (BPRS) for the West Java region, which has been established for 5 years.
3. Islamic People's Financing Bank (BPRS) for the West Java region which has an official website.
4. Islamic People's Financing Bank (BPRS) for the West Java region which publishes financial reports for the 2018-2020 period.
5. Islamic People's Financing Bank (BPRS) West Java region which has complete data related to research.

Based on the criteria set above, there are 12 BPRS in West Java which were selected as samples in this study, namely: BPRS Amanah Rabbaniah, BPRS Amanah Ummah, BPRS Bina Amwalul Hasanah, BPRS AlMasoem, BPRS Daarut Tauhiid, BPRS Harta Insan Karimah Parahyangan, BPRS Bina Rahm, BPRS Amanah Insani, BPRS Cita Artha Jaya, BPRS Cita Artha Jaya, BPRS Artha Madani, BPRS Al Salaam Amal Salman, BPRS Patriot Bekasi.

### 4. DISCUSSION

#### 4.1. Results of Data Analysis

This study uses quantitative analysis methods, namely in data management in the form of inputs and outputs taken from the income statement and balance sheet of each BPRS. This analysis uses Data Envelopment Analysis. The processing process uses MaxDEA 8 software. In addition,

researchers also use Microsoft Excel software as a supporter. The approach used in this study uses the VRS/BBC assumption with input orientation because according to Hanifa Khairunnisa & Laila, (2020) this input orientation is where management is able to reduce and add input easily.

#### 4.2. Results of Efficiency Level Analysis

According to Solikah, (2020) the results of the efficiency level values in the DEA method are divided into 5 categories, namely:

1. Category 1: 100% (Very Efficient)
2. Category 2: 80% to 99.99% (Efficient)
3. Category 3: 60 % to 79.99% (Enough Efficient)
4. Category 4: 40% to 59.99% (Inefficient)
5. Category 5: 0% to 39.99% (Very Inefficient)

Table 1.2 Results of Analysis of the Efficiency Level of BPRS West Java Region Year 2018-2020

No	DMU	Year		
		2018	2019	2020
1	Al Salam Amal Salman	57.4%	100.0%	99.8%
2	AlMasoem	57.9%	100.0%	33.1%
3	Amanah Insani	76.0%	100.0%	30.3%
4	Amanah Robaniah	77.2%	45.4%	54.9%
5	Amanah Ummah	67.7%	52.9%	12.3%
6	Artha Madani	92.5%	41.6%	34.0%
7	Bina Amwalul Hasanah	95.7%	56.0%	100.0%
8	Bina Rahmah	66.3%	29.2%	29.7%
9	Daarut Tauhiid	41.7%	47.7%	49.7%
10	Assets of Insan	100.0%	100.0%	100.0%

	Karimah Parahyangan			
11	Citra Artha Jaya	Personnel 100.0%	67.6%	70.7%
12	Patriot Bekasi	100.0%	100.0%	91.5%
	<b>Average</b>	<b>77,7%</b>	<b>70.0%</b>	<b>58.8%</b>

Source: MaxDEA 8, data processed

From the calculation results above, it can be seen the efficiency level of 12 BPRS for three years, namely 2018-2020. There are 3 BPRS that have experienced a very efficient level of efficiency, reaching 100% in 2018, namely Harta Insan Karimah Parahyangan, Insan Citra Artha Jaya, and Patriot Bekasi. The rest of the BPRS that did not achieve the efficiency level perfectly or less than 100% were 9 BPRS including: Al Salam Amal Salman with an efficiency level of 57.4% (Inefficient), AlMasoem with an efficiency level of 57.9% (Inefficient), Amanah Insani with an efficiency level of 76.0% (efficient enough), Amanah Rabaniah with an efficiency rating of 77.2 (efficient enough), Amanah Ummah with an efficiency level of 67.7% (efficient enough), Artha Madani with an efficiency level of 92.5% (Efficient), Bina Amwalul Hasanah with an efficiency level of 95.7% (Efficient), Bina Rahmah with an efficiency level of 66.3% (enough efficiency), and Darut Tauhiid with an efficiency level of 41.7% (Not efficient).

As seen from the results of the analysis of the average Potential Improvement for 2018-2020 below, the variable that has the most influence on efficiency is the Input Variable where the Potential Improvement every year from 2018-2020 is greater than the Output Variable, namely DPK in 2020 reaching 49% and fixed assets reached 47% and Operational Costs reached 43%. Where the results of this Potential Improvement are a presentation of the expected changes or changes that the entity must make to achieve the level of efficiency. The following table shows the results of the analysis of Average Potential Improvement of BPRS for 2018-2020.

**4.3. Results of Efficiency Analysis Based on Score (SE)**

Table 1.3 Results of Analysis of Average Potential Improvement of BPRS for 2018-2020

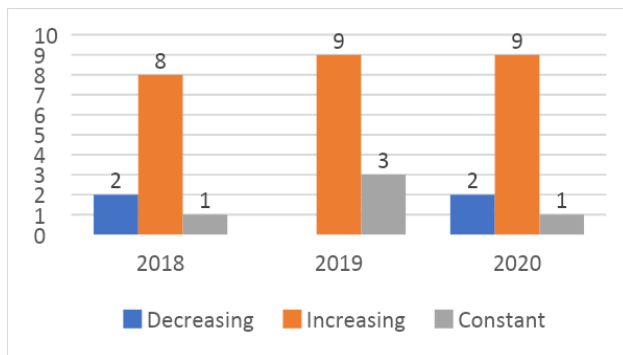
Keterangan	2018	2019	2020	Rata-Rata
Dana Pihak Ketiga (X1)	28%	35%	47%	37%
Asset Tetap (X2)	38%	33%	49%	40%
Beban Oprasional (X3)	30%	32%	43%	35%
Pembiayaan (Y1)	0%	0%	-1%	0%
Pendapatan Oprasional (Y2)	0%	-3%	-5%	-3%

*Source: MaxDea 8 software, data processed, 2022*

Results of efficiency analysis based on Scala Efficiency Score (SE) includes Technical Efficiency Score (CRS), Pure Technical Efficiency Score (VRS), Scala Efficiency Score (SE), and Return to Scale (RTS). The Scala Efficiency Score (SE) is the combined result of the Technical Efficiency Score (CRS) with Pure Technical Efficiency (VRS), and what is important in this Score (SE) is the Return to Scale (RTS) where each DMU will be in the wrong one condition, namely the Increasing, Decreasing, or Constant condition.

#### 4.4. Return to Scale (RTS)

Graph 1.3 Return to Scale (RTS) of BPRS 2018-2020



*Source: MaxDea 8 software, data processed*

Based on the graph above each DMU occupies the condition of each RTS, Increasing is a condition where an entity or company adds one company input will produce or receive more than one output, Decreasing is a condition when an entity or company adds one input, it turns out that the output is reduced by one, and Constant conditions when the company adds one input then the company will receive one output. In this case, not all DMUs that have perfect efficiency enter a constant state.

In 2018, there were 8 BPRS that met Increasing conditions, namely AlMasoem BPRS, Amanah Insani, Amanah Robaniah, Amanah Ummah, Artha Madani, Bina Amwalul Hasanah, Bina Rahmah, Daarut Tauhid. And Decreasing amounted to 2, namely Al Salam Amal Salman, Human Assets Karimah Parahyangan. And there are 1 BPRS that hold constant positions, namely Insan Citra Artha Jaya.

In 2020 there are 9 BPRS that fulfill Increasing conditions, namely Al Masoem BPRS, Amanah Insani, Amanah Robaniah, Amanah Ummah, Artha Madani, Bina Amwalul Hasanah, Bina Rahmah, Daarut Tauhid, Citra Artha Jaya Personnel. As well as the BPRS that held the position of Constant, there were 3, namely Al Salam Amal Salma, Harta Insan Karimah

Parahyangan, Patriot Bekasi. This year there is no BPRS that fulfills decreasing conditions.

In 2020, there are 9 BPRS that fulfill Increasing conditions, namely Al Salam Amal Salman, AlMasoem, Amanah Insani, Amanah Robaniah, Amanah Ummah, Artha Madani, Bina Rahmah, Daarut Tauhid, Citra Artha Jaya Personnel. And there are 2 Decreasing, namely BPRS Harta Insan Karimah Parahyangan, Patriot Bekasi. As well as the BPRS that held the position of Constant, there were 3, namely Al Salam Amal Salma, Harta Insan Karimah Parahyangan, Patriot Bekasi.

## 5. CONCLUSION

The purpose of this research is to analyze the efficiency level of BPRS in West Java for the 2018-2020 period with the Data Envelopment Analysis method, the following conclusions can be drawn:

Results of the Analysis of Efficiency Levels Based on the BBC input Oriented Model, namely from the 12 BPRS sampled by the researcher, there is 1 BPRS, namely Human Assets Karimah Parahyangan who achieved a perfect level of efficiency in managing income and expenses at the bank with an average efficiency value of 100%, and there were 3 BPRS that achieved an efficiency level with an average efficiency value of 80%-99.99%, namely BPRS Patriot Bekasi, BPRS Al Salam Amal Salman, and BPRS Bina Amwalul Hasanah. As well as the results of the Efficiency Level Analysis Based on the Score (SE) there are as many as 5 BPRS that achieve perfect efficiency on the Scale Efficiency Score and occupy constant conditions on the Return to Scale (RTS), namely BPRS Insan Citra Artha Jaya, BPRS Patriot Bekasi, BPRS Al Salam Amal Salman, BPRS Harta Insan Karimah Parahyangan.

Based on the results of the analysis above, it is concluded that there is a significant influence between Third Party Funds, Fixed Assets, Operational Expenses, Financing, and Operational Income on the efficiency of BPRS in the West Java region.

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