AL-AMWAL: JURNAL EKONOMI DAN PERBANKAN SYARI'AH (2023) Vol 15: 57-72
DOI: 10.24235/amwal.v%vi%i.11962

Al-Amwal: Jurnal Ekonomi dan Perbankan Syariah
ISSN: 2303-1573 e-ISSN: 2527-3876
Homepage:
https://www.syekhnurjati.ac.id/jurnal/index.php/amwal
email: jurnalalamwal@syekhnurjati.ac.id

Analysis of Efficiency and Reflexivity of Bank Syariah Indonesia With Islamic Values

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ABSTRACT

The purpose of this study is to measure the level of efficiency and reflexivity of Bank Syariah Indonesia (BSI) by using sharia values in the city of South Tangerang for the 2019-2021 period. This study used Data Envelopment Analysis (DEA) to measure the efficiency level of each BSI. The input variables in this study used deposits and assets. Meanwhile, the output variables in this study used financing and operating income. The results of this study show that the effectiveness of BSI is volatile. Bank Syariah Indonesia recorded an efficiency level of 60.8% in 2020-2021 and was also inefficient. This study also provides recommendations to overcome the inefficiency of Bank Syariah Indonesia. Sharia values and performance have differences for each Bank Syariah Indonesia
***Keywords:** Efficiency, Reflexivity, Data Envelopment Analysis (DEA), BSI*

ABSTRAK

Tujuan dari penelitian ini untuk mengukur tingkat efisiensi dan refleksivitas Bank Syariah Indonesia (BSI) dengan menggunakan nilai syariah di kota Tangerang Selatan periode 2019-2021. Penelitian ini menggunakan Data Envelopment Analysis (DEA) untuk mengukur tingkat efisiensi masing-masing BSI. Variabel input pada penelitian ini menggunakan simpanan dan aset. Sedangkan Variabel output pada penelitian ini menggunakan pembiayaan dan pendapatan operasional. Hasil penelitian ini menunjukkan bahwa efektivitas BSI bersifat fluktuatif. Bank Syariah Indonesia mencatat tingkat efisiensi mencapai 60,8% pada 2020-2021 dan juga tidak efisien. Kajian ini juga memberikan rekomendasi untuk mengatasi inefisiensi Bank Syariah Indonesia. Nilai dan kinerja syariah memiliki perbedaan untuk masing-masing Bank Syariah Indonesia
Kata Kunci: *Efisiensi, Refleksivitas, Data Envelopment Analysis (DEA), BSI*

INTRODUCTION

The banking world as an intermediation institution needs to take rational and efficient steps, this is one of the keywords to keep in mind. Iswardono S. Permono and Darmawan (2000) emphasize that it is very important to feel the issue of efficiency in banking now and in the future, also because: (1) skills are increasingly scarce; (2) problems resulting from reduced resources; (3) improved standards of customer satisfaction. Therefore, it is necessary to conduct banking efficiency in Indonesia to identify and select the reasons for how the level of efficiency has changed and then take corrective steps in the implementation of efficiency improvement if necessary. (Powell, K., Hyatt, J. M., & Link, N. W. 2022).

The considered issue of banking efficiency is useful in reducing risk. This is very important because of several reasons, including so that the use of resources can be more effective and efficient, every company needs to understand how the structure of the company's operational costs is to carry out its role as an intermediary. Inefficiencies that occur in a bank that is inefficient in carrying out its business will result in a lack of competitiveness in managing and distributing public funds to those who need it as working capital (Tresch, R. W. 2022).

The ratio of operating expenses to Return on Assets (ROA) and operating costs to income (BOPO) can describe the level of efficiency in banking services. According to Subaweh (2008), BOPO is a measurement of the level of efficiency used to measure the ability of bank management to manage operational costs with operating profit. The bank's performance is efficient if the BOPO ratio decreases. According to Sudiyatno (2010), Return on Assets (ROA) is useful in measuring the efficiency and effectiveness of companies to generate profits using their assets. The higher ROA will have an impact on better performance. (Safitri, V. A. D., & Nani, D. A. 2021).

Table 1

BSI Performance Development for the 2019 – 2021 Period

Performance Indicators	Period		
	2019	**2020**	**2021**
BOPO	85,27%	84,61%	80,46%
NPF	2,93%	2,88%	0,05%
Roa	1,44%	1,38%	1,61%

Source: Bank Syariah Indonesia, (2022)

Based on table 1.1, the development of BSI's performance for the 2018-2021 period shows that the BOPO value during the period has fluctuated and is already above 80%. In 2019 the percentage value of BOPO was 85.27%, in 2020 it fell by 84.61% and in 2021

it fell again by 80.64%. The relatively high percentage of BOPO shows that BSI is still not too effective in terms of operational efficiency so there are still inefficiencies in Indonesian Islamic banks.

The development of Return On Assets (ROA) in 2019-2021 looks volatile. In 2019 there was a decrease of 1.44%, in 2020 the ROA value of BSI fell to 1.38% and the ROA value again increased in 2021 by 1.61% or with an increase of 0.23% compared to 2020. The reduced fluctuations and increase in ROA value indicate that there are still inefficiencies in BSI (Putri, L. W., & Ningtyas, M. N. 2022).

Referring to the research of Muhaemin and Wiliasih (2016), NPF is known to have a significant negative influence on ROA (profitability). The negative value of NPF can be explained by the fact that an increase in NPF reduces profits. a rise in NPF will shake BSI's liquidity. BSI will have a hard time distributing free money because of the traffic jam. Profitability can also be used as a measure of the efficiency of the enterprise. The new efficiency can be known by comparing the goods received with the goods used to make this profit. (Muhaemin and Wiliasih, 2016).

From 2015 until the end of April 2016, 8 BSI were liquidated by OJK, two of them (25%) were BSI. 3 BSI was liquidated in 2015, one of them (33%). Meanwhile, until the end of April 2016, 5 BSIs have been liquidated by OJK, of which 1 (20%) have been liquidated. The data above shows that the development of BSI in the last 2 years is quite worrying, as seen from the data that every year there is a BSI that is closed. Currently, there may be several BSIs that have apprehensive conditions and are subject to special supervision from the OJK. These BSIs can be liquidated or their business licenses revoked if they cannot recover within the specified time. The revocation of BSI's business license (liquidation) is a big concern in the Islamic banking environment. Islamic banking, one of which is BSI is considered safe because it is impossible to close it, previously because it was not expected that it would be closed, but is now starting to experience the same experience as BPR (Ohueri, C. C. 2022).

With increasing pressure for commercial banks to move to smaller cities. Therefore, the competition between BSI banks and commercial banks is increasing. Meanwhile, the advantages of commercial banks that are currently developing in the micro market are in their capital capacity, information technology, and more capable human resources. Therefore, BSI needs to be maintained properly to compete with commercial banks, especially in the microfinance segment. However, both the performance measurement results and the existing solutions cannot be generalized because BSI has its character in several areas, which makes BSI relatively different in providing solutions (Ward, J. P., Hendry, K. R., Arndt, S., Faust, J. C., Freitas, F. S., Henley, S. F., ... & Tessin, A. C. 2022).

The banking sector is the most important sector of Islamic finance. The banking sector is not only the fastest-growing of all Islamic financial institutions but also the largest investor in Islamic financial institutions worldwide, accounting for 78.9% in 2016 (Islamic Financial Services Council, 2017). Although the total assets of the global Islamic banking system are $1.493 trillion, the market share of Islamic banks in the global financial sector fell in 2016 but did not exceed it. However, the Islamic financial market has experienced a decline, eight countries are developed countries and the remaining 18

countries are stable (Islamic Financial Services Council, 2017). The largest market shares are Brunei Darussalam (57%) and Saudi Arabia (51.1%) as well as Islamic countries Iran and Sudan. Meanwhile, Indonesia's market capitalization only penetrated 5% (5.03%) in December 2016, when the Aceh Regional Bank was converted into a Sharia Bank. Of the total Islamic banking assets, Iran (33%) contributed the most, followed by Saudi Arabia (20.6%) and Malaysia (9.3%). Indonesia contributed 1.6% (Islamic Council for Financial Services, 2017). (Benzell, S. G., Kotlikoff, L. J., Kazakova, M., LaGarda, G., Nesterova, K., Ye, V. Y., & Zubarev, A. 2022)

The market share of Islamic banks is expected to increase based on the large number of Muslim communities who have not yet become users of Islamic banks, Indonesia is a country with a majority Muslim population (only about 5%). Indonesia's 24% market share is significantly lower than Malaysia's. A low market share estimate may be a lack of interest due to usury or even a lack of public trust in Islamic Sharia-compliant transactions (Heravi, F. A. 2022).

One of the factors that hinder the development of the Islamic banking system is the existence of doubts about sharia values in society in the implementation of the Islamic banking system. Some people consider that the Islamic banking system is the same as the banking system of conventional banks, only the difference is in the sharia label. Of course, the stigma of thinking like that hurts the development of the Islamic banking system in Indonesia. Therefore, multi-stakeholder collaboration is needed to eliminate the stigma of negative public thinking related to the application of Islamic values in the implementation of Islamic banking (N El-Bassiouny, 2014). Therefore, the purpose of researching on Indonesian Islamic banks is to measure the efficiency and effectiveness of Indonesian Islamic banks using data envelopment analysis (DEA). (Asrar, M., Mulyany, R., & Darwanis, D. 2022).

LITERATURE REVIEW

Bank Syariah Indonesia (BSI)

BSI is a Sharia bank formed from the merger of three Islamic banks into one, that is PT Bank BRI Syariah (BRIS), PT Bank Syariah Mandiri (BSM), and PT Banca BNI. Syariah (BNIS) which is under the Ministry of SOEs and the largest Islamic bank in Indonesia. The government's revolutionary policy of incorporating Islamic banks hopes to provide more comprehensive services, wider coverage, and better capital capacity. This is a combination of the advantages of the three Islamic banks. (Boone, C., Özcan, S., & Li, J. 2022)

The business activities of Bank Syariah Indonesia (BSI) are the same as the business activities of Islamic banks, especially in terms of raising funds, disbursing funds, and service sector activities. Uniquely, Sharia Commercial Banks (BSI) Indonesia is not authorized to provide payment transaction services such as participation in the clearing, collection, and control of current account deposits (Dodig, A. 2022).

Efficiency

According to Hidayat (2011), efficiency is a comparison between inputs and outputs. An enterprise can be said to be efficient. Companies that can produce more outputs than the inputs used, or can obtain the same output with much fewer inputs. According to Rosyadi and Fauzan (2011), efficiency is the act of intensifying performance with minimal capital investment. Another view argues that efficiency is the comparison of a successful effort or sacrifice with all the efforts or sacrifices made to achieve a certain result, that is, the comparison of inputs and outputs. According to Rifai and Eko (2022). Banks, as financial intermediaries, play a major role in the country's economy. Therefore, banks need to have a healthy or good performance. The level of compliance that has been achieved by the bank is a good performance indicator. The ability to achieve optimal performance with specific inputs becomes an expectation in performance measures (Li, W., & Becker, D. M. 2021).

Reflexivity

Reflexivity refers to how the researcher always asks whether the acquired truth is "true". In this case, the researcher continues to have a dialogue between what he receives and what he understands (including some theories related to his research). While reflexivity refers to the researcher's understanding of its role in the study. He must be aware that not only does he collect and analyze data, but he also understands that the way he collects and analyzes data will greatly affect the results of the study. (Enders, C. K. 2022).

Islamic values

Value in a large dictionary Indonesian the meaning of price. In different contexts values have different meanings. Mulya defines value as a guideline and belief in decision-making. The basis of the general concept is the economic concept of value that resides in society. The relationship between goods or services and goods that a person is willing to pay leads to the concept of value, while the definition of value in economics is interpreted as everything that human desires and needs to be fulfilled, in this case, what contains goods is goods. Therefore, the concepts and beliefs that exist in humans related to the main problems regarding Islam are used as guidelines in behavior. Islamic values contained in sharia-based business units must respect Islamic Sharia based on the Qur'an and the Al-Hadith as guidelines for the world and the Hereafter. So, all the things we do have a certain direction and purpose. Islamic law is a law that is believed to be related to the sources and teachings of Islam, especially the practice of law in terms of human relations (Islamic crimes) (Ayus et al, 2017; Auda, J. 2022).

Islamic banking conducts its business based on three sharia values, namely; honesty, equality, and fairness. Of the three Islamic values, it is a guideline for the Sharia Supervisory Board (DPS) to organize and implement Islamic values based on Sharia through good governance and transparency. (Fadilah, A. S., Nurcholisah, K., Nurleli, N., Sukarmanto, E., & Hernawati, N. 2022).

Data Envelopment Analysis (DEA)

Data Envelopment Analysis (DEA) is a method with a non-parametric approach or can also be said to be a technique with a linear programming base. The way DEA works begins with the identification process of the units for these inputs and outputs, then the process of calculating the production value and re-identifying it to determine what units are still inefficient in using inputs or obtaining outputs ineffectively. The nature of the productivity measurement is comparative or relative because all that is done is to compare each unit that is measured on the same data (McCann, P. 2020).

DEA aims to find out how the efficiency value of using resources (inputs) to achieve results (outputs) that maximize efficiency. Not only that but the DEA is also used to calculate the relative efficiency of an organization that has the best quality performance in the same group. There is a symbol used to describe each unit that will be analyzed, namely the DMU (Decision Making Unit) or (UPK) Decision Making Unit (Kusuma, S. I., & Atahau, A. D. R. 2019).

According to Cooper et al (2002), DEA, which is useful as an analytical tool, has advantages, including First, a researcher can use DEA to analyze unsolved cases with other methods because of the complexity that exists in the relationship of each input and output in the institution. Second, the DEA can be used to determine how the function forms are required in the *statistical regression approach*. Third, the measurement of several variables that contain relationships *(constraints)* can be completed using DEA. This certainly helps the problems that many researchers often encounter when an approach has limitations in choosing inputs and outputs (Schmitt, N., & Schmitt, D. 2020).

Theory of Hahslm

Islam is defined as a system that can be comprehensive or holistic. Islam becomes a way of thinking or epistemology in determining the concept of *kaffah* financial institutions that are being developed. Starting from the ontological form of Islam which is the reason for life, one of which is in economics with the epistemology of the financial institution system used is *kaffah* and finally in axiology in the form of institutional development with two things, namely the relationship between horizontal functions and vertical structures. With the concept of kaffah formed, it has two sides side by side fitrah. These two things become parables like men and women, light and dark (Mochamad Aziz, R. (2020).

In a system, there must be Islamic values that make the kaffah system will consist of three components, namely God, Nature, and Worship. These three components will change because they are adapted to the content of the topic in focus. According to Roikhan (2016) among them, the word Islam obtained 4 variables, namely alif, sin, lam, and mim. The 4 variables, it will be a benchmark for developing other formulas (Roikhan, 2016).

Literature Review

The research conducted by Fitri Sagantha entitled Analysis of Sharia Banking Efficiency analyzes how Islamic Banking conducts efficiency through 4 Islamic Banks in the period 2010-2016 and reviews the development of Islamic Bank due to input variables consisting of labor expenses and third-party rights to profit-sharing, as well as other variables of operating income and fund management income into output variables. The results showed that Islamic banks have a level of efficiency with Islamic values fluctuating in the 2010-2016 period. Based on these results, proves the influence caused by Islamic values on the efficiency of Islamic Banks. There are also negative influences, namely on the variable income of fund management and the right of third parties to profit sharing as well as a positive influence on other operating income and labor expenses on the development of Islamic Banks.

In Sani and Sofyan's research entitled Efficiency Analysis of Sharia Commercial Banks in Indonesia with the Data Envelopment Analysis (DEA) Method for the 2013-2015 Period. This quantitative type of research makes the Non-Parametric Statistical Test the DEA method used with an intermediation approach. In this study, assets, total deposits, and operating expenses were input variables, while operating income and financing as output variables. This study obtained results in the form of known efficiency levels in 11 Sharia Commercial Banks in Indonesia which were measured using the DEA method showing relatively unchanged results but not yet reaching 100% efficiency during the 2013-2015 period.

RESEARCH METHODS

This study used the object of Bank Syariah Indonesia (BSI) located in the South Tangerang City area, namely BSI KCP UIN Syarif Hidayatullah Jakarta. The research period used as the basis starts from 2019 to 2021. This type of research is quantitative using the Data Envelopment Analysis (DEA) research method with Islamic Values. (Hibatullah, I., & Nurcahyani, A. 2022). The data in this study uses secondary data obtained from the Financial Statements of Bank Syariah Indonesia located in South Tangerang City from 2019 to 2021. Bank Syariah Indonesia (BSI) Financial Statement data is contained in the publication report on the website of the authorized institution and surveyed Bank Syariah Indonesia (BSI). (Maulida, N. A. Z., al-Anshor, D. S., & Budiwati, A. 2022). This research uses the document study method as a data collection method, which is a data collection method by collecting and analyzing documents, both in the form of writing, electronic, and images.

Measurement of Efficiency of Bank Syariah Indonesia (BSI) using the *Data Envelopment Analysis* (DEA) method. In measuring the efficiency of Bank Syariah Indonesia (BSI) in this study, the DEA method was used in non-parametric statistical tests. This analysis is based on an assessment of the relative effectiveness of comparable values on the UPK. An effective UPK will also form a limit. If the UPK is above the top, then it can be said that the UPK is relatively more efficient than other UPKs in a sample or per group. In addition to the resulting efficiency values for each UPK, the DEA also shows inefficient units of reference. (Nurmalasari, N., Efril, J., & Widarwati, E. 2022) .

The general formula for using DEA is to compare the efficiency of some types of units of activity (UKE) n. Any UKE that can produce an output of type s needs to be used as input of type s. For example, Xij> 0 is a UKE j that uses the number of inputs I and in case Yrj> 0 is the result of UKE j in the form of the number of outputs r. The case variable is each input and output k UKE that receives each weight. Vik is the unit of activity k that accepts the input I and Urk is the UKE k that gives weight to the output r. The decision variable consists of Vik and Urk decision variables, that is, the values contained in the variables are determined by the interaction of fractional linear programs, and linear programming formulas for each UKE in the test. The formulation of the goal function is (Rakesh, B., & Sultana, H. P. 2022).

Maximize:

$$Z_k = \frac{\sum_{r=1}^{s} U_{rk}, Y_{rk}}{\sum_{i=1}^{m} V_{ik}, X_{ik}} \qquad (1)$$

The general criterion requires that no other economic unit has a percentage of more than 1% or 100% as a constraint or limitation. If the weight of the choice of the unit of economic activity is used by another economic unit. k, so the next formula is:

$$Z_k = \frac{\sum_{r=1}^{s} U_{rk}, Y_{rk}}{\sum_{i=1}^{m} V_{ik}, X_{ik}} \leq 1; j = 1. \dots \dots \dots, .n \qquad (2)$$

$$V_{rk} \geq 0; r = 1. \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots, .s$$

$$V_{ik} \geq 0; r = 1. \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots, .m$$

Next, fractional linear programs are transformed into simple linear and common methods for solving them. The transformation is as follows:

Maximize

$$Z_k = \sum_{r=1}^{s} U_{rk}, Y_{rk} \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots ,, \qquad (3)$$

With limitations or constraints

$$\sum_{r=1}^{s} V_{rk}, Y_{rj} - \sum_{r=1}^{m} V_{ik}, X_{ij} \leq 0; j = 1. \dots \dots \dots \dots \dots .n \qquad (4)$$

$$\sum_{r=1}^{m} V_{ik}, X_{ij} = 1. \dots \dots \dots \dots \dots .n \ (3)$$

$$U_{rk} \geq 0; r = 1. \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots, .s$$

$$V_{rk} \geq 0; i = 1. \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots, .s$$

Yrk is the result of sector k in the form of the multiplicity of output r; Xik is the number of sector k needs of the input i; Yrj is the result of sector j in the form of a large number of output r; Xij is a number of sector j needs from input i; s displayahe large number of analysis results from the sector; m is the multiplicity of uses of inputs; Vik is

the result of each k sector being the weighted weight of the output r; while Zk is an indicator of sector efficiency k in the form of optimal value. (Gavalas, D., Syriopoulos, T., & Tsatsaronis, M. 2022).

H test

H is the dependent variable from the abbreviation Huda or instructions. In a sense, in this theory H is perceived as a Y variable which means that in this study the H/Y variable is the expected return. While a is a constant which is a differentiating variable or known as variance, which in meaning means the path of the abbreviation alif, in this study the variable a is the variable Return On Assets (ROA). For the main variable or super variable which is a translation of S or Sin which means Human or internal variable, in this study the S/internal variable is operational cost to operational income (BOPO) then L or Lam stands for Lillah which means to Allah or variable external, meaning that the L/external variable in this study is the Non-Performing Finance (NPF) variable. And finally there is M or Mim which stands for Masjid which means worship, in the sense that the variable M in this study is the Shariah Economic Market Share variable.

From the above research we can know the results of the H test:

$$Y = a + a_1X_1 + a_2X_2 + a_3X_3 + e \quad (5)$$

$$H = a + a_1S + a_2L + a_3M + h \quad (6)$$

$Y = H$ = Dependent variable
$a = a$ = Constant
$e = h$ = Error rate
$X_1 = S$ = internal variable
$X_2 = L$ = external variable
$X_3 = M$ = religiosity variable
a_1, a_2, a_3 = coefficient of the independent variable

In the elaboration of the equation above, it can be interpreted that internal, external and religiosity factors support economic growth through people's purchasing power with the application of the Islamic economic system to create returns from the results of an investment or business. The equation also includes the variable h as the level of sharia compliance as a helping medium and a deducting factor from returns. The author has the reason that the lower the level of sharia compliance will cause risks such as increased compliance and reputation. So that if this risk occurs it will reduce returns because it will be used as a fee for violations that occur such as fines by regulators and loss of trust from the public.

Table 2
H Test Results and Efficiency

H	**A**	**H**	**S**	**L**	**M**
Efficiency	Return On Assets (ROA)	Level of sharia	compliance Operating Costs to Operating Income (BOPO)	Non Performing Finance (NPF)	Market Share (Religiosity)

Source: Analysis, 2022

Theory H has a differentiation in the Causal Loop Diagram which consists of 3 (three) basic elements, namely external elements that lead to internal elements that lead to religiosity elements and then return to external elements. The description of the interaction of these three elements is as follows: L or the external factor which means in this study is Non Performing Finance (NPF) regulates S or the internal factor which means in this study is as Operational Cost to Operational Income (BOPO) h or hanif or is called the straight path in this study is the level of sharia compliance with a or alif or called the road in this study as Return On Assets (ROA) for M or in this study as market share of the sharia economy as a religious commitment to carry out or implement a sharia-based economy.

Meanwhile, the theory curve H has a specificity on the third line, namely line M or line X3 in this case is the sharia economic market share which is the internal and external variable parameter in encouraging society, Non-Performing Finance and Operational Costs against Operational Income to gain profit.

RESULTS AND DISCUSSION

This study used BSI Tangerang City, namely BSI KCP UIN Syarif Hidayatullah Jakarta. The period in this study covers the years 2019-2021. Before looking at the results of efficiency measurement, this study presents a statistical summary of the variables to be tested at the BSI efficiency measurement stage, with data obtained from BSI's financial statements for deposit variables and operating income variables.

Table 3

Statistics of Research Data for 2019-2021 (in thousands of Rupiah)

Variable	**Periode**		
Input	**2019**	**2020**	**2021**
Deposits	37,563,868	60,403,583	57,247,890
Assets	205,297,027	239,581,524	265,289,081
Output	**2019**	**2020**	**2021**
Operating Income	17,808,432	16,929,592	15,739,431
Financing	135,651,242	156,693,725	171,291,158

Source: Analysis, 2022.

Based on Table 2, it can be seen that the number of input variables for BSI UIN Syarif Hidayatullah Deposits has increased and decreased from 2019-2021. In 2019 it was 37,563,868, in 2020 it experienced an increase of 60,403,583 and in 2021 it experienced a decrease of 57,247,890. Table 2 shows, Assets at BSI UIN Syarif

Hidayatullah, total assets have increased and decreased from 2019-2021. In 2019 a total of 205,297,027, in 2020 it experienced a decrease of 239,581,524 and in 2021 it experienced an increase of 265,289,081.

Table 2 shows that the number of variable outputs for Operating Income continues to decline from 2019-2021. In 2019 a total of 17,808,432 until 2021 amounted to 15,739,431. Table 2 shows that financing at BSI UIN Syarif Hidayatullah, continues to increase from 2019-2021. In 2019 a total of 135,651,242 until 2021 a total of 171,291,158.

Results of Calculation of Efficiency Level of Bank Syariah Indonesia (BSI)

The calculations in this study used the Data Envelopment Analysis (DEA) method in the 2019-2021 period and the average efficiency achieved in that period. Data related to input and output variables were obtained from BSI's publication reports at the Financial Services Authority and Bank Indonesia. In the DEA method, with a range of 1-100%. A score of 100% will give an idea of measuring the level of efficiency regarding BSI's ability to maximize all resources owned. If the efficiency value moves away from 100% it indicates that a BSI is included in the category of inefficient in maximizing resources and carrying out the role of an intermediation institution optimally.

Table 4

BSI Uin Syarif Hidayatullah Indonesia Efficiency Level 2019-2021

Year	Variable Efficiency	
	Input	**Output**
2019	0,000001%	0,000001%
2020	60.8%	0,000001%

Source: Analysis, 2022

Table 3 shows the results of the calculation of the efficiency level of the Indonesian Islamic Bank (BSI) UIN Syarif Hidayatullah from 2019 to 2021. This data shows efficiency with a low number, which is at an efficiency level of 0.000001% which takes place during the 2019 and 2021 periods at the Bank. Sharia UIN Syarif Hidayatullah. The efficiency level for Islamic banks in 2020 is an efficiency level that is considered to have good numbers compared to other years because in the calculation for the 2019 to 2021 period every year we find an efficiency level of 100%, this will have an effect if the data from each variable can be seen. Sharia UIN Syarif Hidayatullah Jakarta will get an average year of the year growth rate which does not experience sharp and good fluctuations, although based on the volume (quantity) the 2019 figure is lower than 2020, this shows that it does not mean that Islamic banks that find larger numbers or large revenues will get a better level of efficiency. In 2021 the Islamic Bank of UIN Syarif Hidayatullah there has an inefficiency of 60.799999% and in 2018 it is also inefficient at 60.799999%. The efficiency level of Islamic banks in the 2021 period is 68% efficient

and in 2021, while 2021 the inefficiency level is 0.000001%, 2021 is 60.8% inefficient and in 2020 it is 30.4% inefficient.

While the average efficiency level of Islamic banks in 2019 is 0.000001%%, in 2020 it is 30.4%, and in 2021 it is 0.001%. Thus, it can be concluded that the average efficiency level of Islamic Banks experiences fluctuating conditions in each research period. There was only one research period where all Islamic Banks had a fixed level of efficiency, namely in 2016 which was efficient at the level of 100%, while in the 2010–2015 period Islamic Banks had fluctuating efficiency levels. The calculation figure only reaches 60.8%, meaning that in 2019-2021 BSI Syarif Hidayatullah is still not efficient. In 2020-2021, BSI UIN Syarif Hidayatullah experienced a decrease in the efficiency level of 0.000001%, meaning that there was an inefficiency of 0.000001%.

Calculation of Prayer Value Efficiency

Based on the data above, it can be seen that the prayer assessment given by the researcher to Bank Syariah Indonesia is based on certain criteria. From an interview conducted with one of the employees of Bank Syariah Indonesia, it was found that employees at the branch office had prayer room facilities for visitors who wanted to worship. In the period from 2019 to 2020, there was a decrease in the weight of prayer values. However, in 2020 the assessment weight decreased from the previous year, this was due to the COVID-19 Pandemic that hit Indonesia and government policies issued to inhibit the spread of the virus. As a result, Bank Syariah Indonesia's activities have been hampered, employees are required to be able to work *from home*. Then in 2021, the value weight increased, Bank Syariah Indonesia again carried out activities that were hampered so that banking and joint worship activities can be re-implemented.

After knowing the amount of prayer weight, then the calculation of the reflectivity value is carried out with the formula:

Reflexivity = Efficiency x Prayer

Table 5

Year	Efficiency	The Value of Prayer	Sum
2019	0,000001%	80	0,0000008
2020	60.8%	65	39,52
2021	0.000001%	70	0,0000007

Source: Analysis, 2022

Based on the above data shows that the average achievement of BSI efficiency fluctuates during the observation period. BSI UIN Syarif Hidayatullah experienced inefficiency in 2019 – 2021.

This inefficiency is caused by the suboptimal use of inputs and outputs by Bank Syariah Indonesia, both for BSI and UIN Syarif Hidayatullah. Inefficiencies in this study occurred in the input variable for deposits and the output variable was operating income.

BSI that is inefficient in using deposits occurs due to the number of deposits that have increased and decreased in the period 2019 - 2021. To achieve the goal of building an efficient, competitive, and sustainable Islamic banking industry, some strategies can be carried out by increasing capital to increase business scale. As for other things, namely in terms of assets, BSI has increased the number of assets every year, which can cause banks to experience an increase in productivity as well.

To improve and develop BSI, good quality resources with great performance and competence are needed to realize a supportive work area. Thus, the increase in education, training, and observation spending and the increase is an effort to create quality resources. In addition to increasing the total number of employees, this is also balanced by optimizing resources to achieve optimal performance as well.

The Covid-19 pandemic that has resulted in inefficiencies arising from operating income is caused by the Covid-19 pandemic which is one of the most influential factors in every line of the country's life. To prevent inefficiencies in BSI, the operating income level will be lowered to the required target level and fundraising will be diverted to savings funds or other sources of wealth to efficiently become a source of wealth that can share large returns for BSI.

BSI can make several other efforts in developing new savings financing products that attract customers to BSI so that BSI can raise money from financing that is lower than deposits so that the *cost of funds* is not large. BSI needs to be able to commit to developing fundraising products more diversely to reach a larger customer base. So that BSI can protect its existence and be able to compete with other financial institutions. Management with Islamic values will certainly apply them to operational activities or industrial policies. Religious values can be inflammatory in a person's decision-making process, including management provisions. When religious values are well implemented, management provisions must also be good to add success (Macharia, B. H. 2022)

First, the use of sharia values by the BSI administration has a positive impact on bank performance as measured by sharia value weights. *Second*, each BSI, viewed separately, has its advantages in the use of sharia values. *Third*, reviewing the number of assets, where BSI UIN Syarif Hidayatullah has fairly good total assets, meaning that existing assets can record good efficiency by implementing sharia values in daily operations. Furthermore, the use of sharia values management can influence people's points of view and form public confidence. Banking is a faith-based business, so applying Sharia values can certainly foster people's hopes of saving and doing business with Islamic banks. Therefore, it requires awareness and practice of good Islamic values in Islamic banks so that the data can be revised shortly and the public can fully trust BSI.

CONCLUSION

Based on the analysis and discussion in the previous chapter, it can be concluded that the level of BSI efficiency using the *Data Envelopment Analysis* (DEA) method can be seen that the number of input variables for BSI UIN Syarif Hidayatullah Deposit has increased and decreased from 2019-2021. In 2019 it was 37,563,868, in 2020 it experienced an increase of 60,403,583 and in 2021 it experienced a decrease of 57,247,890. BSI UIN Syarif Hidayatullah's assets have increased and decreased from 2019-2021. In 2019 a total of 205,297,027, in 2020 it experienced a decrease of 239,581,524 and in 2021 it experienced an increase of 265,289,081.

The number of variable outputs for Operating Income continues to decline from 2019-2021. In 2019 a total of 17,808,432 until 2021 amounted to 15,739,431. Financing at BSI UIN Syarif Hidayatullah continues to increase from 2019-2021. In 2019 a total of 135,651,242 until 2021 a total of 171,291,158. BSI UIN Syarif Hidayatullah shows that the results of calculating the level of efficiency from 2019 to 2021 the calculation figure only reaches 60.8%, meaning that in 2019-2021 BSI Syarif Hidayatullah is still inefficient. In 2020-2021, BSI UIN Syarif Hidayatullah experienced a decrease in efficiency level by 0.000001%, meaning that there was an inefficiency of 60.799999%.

The cause of this condition is due to the suboptimal use of inputs and outputs by Bank Syariah Indonesia, both for BSI UIN Syarif Hidayatullah. The lack of efficiency occurs in the input variable for deposits and the output variable is operating income. To improve and develop BSI, good quality resources with high performance and competence are needed to create a more supportive work environment. Thus, increasing spending on education, training, research and development is an effort to produce good-quality resources. In addition to increasing the number of manpower, it can also offset maximum resource management so as to get maximum output as well.

Another effort that can be done by BSI is to innovate to increase the interest of BSI customers in BSI's new savings funding products so that BSI can obtain funds sourced from funding that is not more expensive than deposits so that high *costs of funds* can be avoided. In addition, to reach a wider range of customers, BSI needs to create diverse fund-raising products. This is done with the aim that BSI can maintain its existence and be able to compete with other financial institutions.

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