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Research Article

Efficiency Strategy for Indonesian Islamic Commercial Banks During the Covid-19 Pandemic

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ABSTRACT

Islamic Commercial Banks must be aware of their degree of efficiency to optimize each bank's potential and take advantage of every opportunity. For a bank to succeed, its operations must be efficient; if they are, the value of the business will rise. This investigation used 12 Islamic commercial banks as its subject to assess the level of efficacy of Islamic retail banks in Indonesia. The data analysis method in this study is the Data Envelopment Analysis (DEA) method using the Charnes Chooper and Rhodes (CCR) model, specifically the Constant Return to Scale (CRS) approach. The two variables employed in this study were used as input and output variables. TPF, Assets, Operational Costs, and Non-Operational Costs are the input variables. The function of funding is the output variable—income from operations and non-operational sources. In addition, a SWOT analysis is conducted based on the findings of the DEA study to determine the strategies used during the Covid-19 pandemic. According to the Input and Output method, two banks have been inefficient for 4 years, and five have changed BUS efficiency from 2015 to 2018. BTPN Syariah, BJB Syariah, Bank Mega Syariah, Bank Syariah Bukopin, Bank Victoria Syariah, and Bank Panin Dubai Syariah are the five (five) banks in question. The average efficiency of Indonesia's Islamic Commercial Banks for that period, from 2015 to 2018, was 91%, which suggests that despite falling short of 100% (excellent).

Keywords: *Data Envelopment Analysis (DEA), Efficiency, Islamic commercial banks*

Introduction

The growth of Islamic banking industry assets has slowed significantly in the last 2 years; based on data as of the first semester of 2019, this is due to the size of investments and the low ratio of financing to Islamic bank funding recorded at 80% (Sulmaihati, Katadata. id.

2019). In general, the purpose of establishing a bank is to have a significant target or final goal to be achieved, namely to obtain maximum profit or profit. A bank can improve product quality and make new investments by getting maximum profits or by banking targets. The urgency that must be observed at this time is that

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profits must support the ownership of Islamic Commercial Bank assets which continues to increase yearly, to produce sound financial performance. It is to maintain the financial stability of Islamic Commercial Banks. In addition, in the global market, Indonesia is included in the ten largest countries with the world's most extensive Islamic financial index.

For Islamic Commercial Banks, it is essential to know the efficiency level to maximize the potential possessed by the bank so that each potential will generate maximum profit or profit. Weill (2004) states that the efficiency of the banking industry can be seen from the micro and macro aspects; from the micro part, banks must be able to compete with marketing strategies, product innovation, and sound financial management. And from the macro-efficiency element of the banking industry can affect financial intermediation costs and financial system stability (Weill, 2004).

A bank is said to be efficient if it can produce with a predetermined target with the minimum cost possible, so efficiency is managing the available inputs optimally to produce maximum output. An efficient bank, in its operations, uses a certain amount of information to have many results (Hadad, 2003).

Efficiency measurement is based on input and output orientation. The aim is to determine how much efficiency Islamic Commercial Banks have in collecting funds and channeling them with a certain number of inputs (output orientation) or how much information can be reduced with the same number of outputs (input orientation). A Sharia Commercial Bank is said to be efficient if its value reaches 100%. The more he moves away from 100% or closer to 0%, the more inefficient he is.

In measuring efficiency, according to Hadad Muliaman D et al. (2003), there are 3 (three) approaches used in the non-parametric Data Envelopment Analysis (DEA) method to define the relationship between input and output in the financial activities of a financial institution, namely, Asset Approach, Production Approach, and Production Approach. Intermediate (Hadad, 2003). The non-parametric method of

Data Envelopment Analysis (DEA) is intended to assess the relative efficiency of an operational unit by calculating the efficiency value of each team in a collection (DMU) (Tanjung & Abrista, 2012).

Based on the background and study of related research results, the authors are interested in analyzing the Efficiency Strategy of Islamic Commercial Banks in Indonesia, case studies of BUS financial statements for the 2015-2018 period using Data Envelopment Analysis (DEA) and SWOT Analysis, to determine the level of efficiency achieved and the strategies adopted. Implemented by Islamic Commercial Banks in Indonesia during the COVID-19 pandemic.

Methods

This study uses a descriptive method with a non-parametric quantitative approach, quantitative data (nominal) in the form of the Financial Statements of Islamic Commercial Banks in Indonesia for the 2015-2018 period published by the Financial Services Authority (OJK) on its official website (www.ojk.go.id). The objects in this study are 12 (twelve) Islamic Commercial Banks in Indonesia based on data from the Financial Services Authority.

This study uses two (2) input and output variables. The input variables consist of TPF (balance sheet), Assets (balance sheet), Operational Costs (profit and loss), and Non-Operating Costs (profit and loss). The output variables consist of financing (balance sheet), operating income (profit and loss), and non-operating income (profit and loss).

The data analysis technique used in this research is Data Envelopment Analysis (DEA) with an intermediation approach with the Constant Return to Scale (CRS) model to analyze the input and output variables. In the Data Envelopment Analysis (DEA) method, Islamic banks can be considered efficient if the ratio between output and input is equal to 1 (efficiency value = 100 percent); in analyzing this efficiency using Frontier Analyst software, namely Banxia Frontier Analyst 4 (Tanjung & Abrista, 2012).

Result and Discussion

The results of the analysis of the efficiency of Islamic Commercial Banks (BUS) in 2015-

2018 with the Data Envelopment Analysis (DEA) approach obtained the following data presented in table 1.

Table 1. Efficiency Level of Islamic Commercial Banks in 2015-2018

DMU	2015	2016	2017	2018	Mean
Bank Muamalat Indonesia	100	100	100	88,9	97,225
Bank Syariah Mandiri	62,3	68,1	74,5	65,2	67,525
BCA Syariah	92,6	100	100	95,3	96,975
Bank BNI syariah	100	86,9	75,8	62,8	81,375
Bank BRI Syariah	75,4	76,5	76,5	69	74,35
BTPN Syariah	100	100	100	100	100
BJB Syariah	100	100	100	100	100
Bank Mega Syariah	100	100	100	100	100
Bank Syariah Bukopin	100	100	100	100	100
Bank Panin Dubai Syariah	88	100	100	100	97
Bank Victoria Syariah	100	100	100	100	100
Maybank Syariah Indonesia	82,3	66,2	100	63,4	77,975

Data is processed from Frontier Analyst 4, 2019

The comparison of the efficiency level between many sharia bank commercials in 2015-2018 can be seen in figure 1 below.

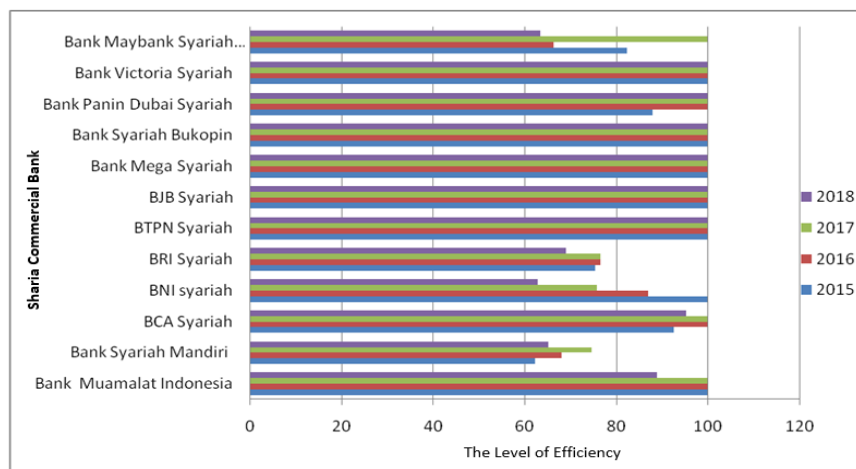


Figure 1. Graph of the Efficiency Level of Islamic Banks in 2015 – 2018

The color from the chart shows many different levels of efficiency, which can be seen at below2 as below. The efficiency Efficiency of Islamic Commercial Banks in Indonesia for the 2015-2018 period

Year	Green (100%)	Yellow (81-99%)	Red (0-80%)
2015	7	3	2
2016	8	1	3
2017	9	-	3
2018	6	2	4

Based on the data in tables 1 and 2 and Figure 1, the efficiency level for the 2015-2018 period can be explained below:

1. Analysis of the Efficiency of Islamic Commercial Banks in Indonesia 2015

The results of the efficiency analysis of Islamic commercial banks are 7 (seven) Islamic Commercial Banks achieving efficiency (100%), namely Bank Muamalat Indonesia, BNI Syariah, BTPN Syariah, BJB Syariah, Mega Syariah Bank, Bukopin Syariah Bank and Victoria Syariah Bank and 5 (five) Banks that do not achieve efficiency (<100%) are Bank Syariah Mandiri, Bank BCA Syariah, Bank BRI Syariah, Bank Panin Dubai Syariah, and Bank Maybank Syariah.

2. Analysis of the efficiency of Islamic Commercial Banks in Indonesia in 2016

The results of the efficiency analysis of Islamic commercial banks are 8 (eight) Islamic Commercial Banks achieving efficiency (100%), namely Bank Muamalat Indonesia, Bank BCA Syariah, BTPN Syariah, BJB Syariah, Bank Mega Syariah, Bank Syariah Bukopin, Bank Victoria Syariah and Bank Panin Dubai Syariah and 4 (four) other banks are not efficient (<100%), namely Bank Syariah Mandiri, BNI Syariah, Bank BRI Syariah, and Bank Maybank Syariah.

3. Analysis of the efficiency of Islamic Commercial Banks in Indonesia in 2017

The results of the efficiency analysis of Sharia Commercial Banks are 9 (nine) Sharia Commercial Banks achieving efficiency (100%), namely Bank Muamalat Indonesia, Bank BCA Syariah, BTPN Syariah, BJB Syariah, Bank Mega Syariah, Bank Syariah Bukopin, Bank Victoria Syariah and Bank Panin Dubai. Syariah and 4 (four) other banks did not achieve efficiency (<100%), namely Bank Syariah Mandiri, BNI Syariah, and Bank BRI Syariah.

4. Analysis of the efficiency of Islamic Commercial Banks in Indonesia in 2018

The results of the efficiency analysis of Islamic commercial banks are 6 (six) Islamic Commercial Banks achieving efficiency (100%), namely BTPN Syariah, BJB Syariah, Mega Syariah Bank, Bukopin Syariah Bank, Victoria Syariah Bank and Panin Dubai Syariah Bank and 6 (six) other banks not

achieving efficiency (<100%) namely Bank Muamalat Indonesia, Bank Syariah Mandiri, Bank BCA Syariah, BNI Syariah, Bank BRI Syariah, and Bank Maybank Syariah.

So, from the data above, the 2015-2018 BUS efficiency level with the Input and Output approach, there are 5 (five) banks experiencing fluctuations, there are 5 (five) banks for 4 years achieving efficiency (100%), namely BTPN Syariah, BJB Syariah, Bank Mega Sharia, Bukopin Sharia Bank, Victoria Sharia Bank, and Panin Dubai Sharia Bank, as well as 2 (two) banks that were inefficient for 4 (years) in a row. In general, the average efficiency during 2015-2018 was 91%, meaning that the efficiency level of Islamic Commercial Banks in Indonesia for the 2015-2018 period reached 91% (good), although it did not get excellent efficiency (100%). Efficiency is a precise way of doing things, with usability, efficiency, skill, and ability to carry out tasks correctly and precisely by not wasting time, energy, and costs ((Tanjung & Abrista, 2012).

Then in 2018, the number of inefficient BUSs increased significantly, where 50% of BUSs experienced inefficiency. And the efficiency level in 2018 (mean: 87%) is the lowest compared to previous years. The factors that cause inefficiency are the decrease in long-term savings (DPK) and high operational and non-operational costs; this affects the output variable, namely the amount of financing disbursed, low FDR ratio, and operating income; economists define production as generating wealth through human exploitation of environmental resources. Or conventionally, production produces or adds value to an item or service using existing resources. In terms of production, two terms can be used to explain the meaning of this production, namely "al-Kasab" or "al-intj" (Fordebi, 2017). The source of inefficiency is caused by financing and operational income variables (Wijayanti & Hartono, 2018).

In a broad sense, costs are expenditures of economic resources in the form of finance that have occurred, are occurring, or may occur to obtain more profitable returns. Meanwhile, in a narrow sense, costs are expenditures of economic resources to get income-related goods and services (Rosidah, 2015). So, the efficiency level of Islamic Commercial Banks in Indonesia

in the 2015-2018 period experienced diversity and fluctuation, reaching an average of 91%; this shows the efficiency level of Islamic Commercial Banks for the 2015-2018 period in the yellow category (sound).

Conclusion

The level of BUS efficiency in 2015-2018 with the Input and Output approach there are 5 (five) banks experiencing fluctuations, there are 5 (five) banks for 4 years achieving efficiency (100%), namely BTPN Syariah, BJB Syariah, Bank Mega Syariah, Bank Syariah Bukopin, Bank Victoria Syariah and Bank Panin Dubai Syariah, and there are 2 (two) banks that are inefficient for 4 (years) in a row. In general, the average efficiency during 2015-2018 was 91%, meaning that the efficiency level of Islamic Commercial Banks in Indonesia for the 2015-2018 period reached 91% (good), although it did not get excellent efficiency (100%). And in 2018, the number of inefficient BUSs increased significantly, where 50% of BUSs were inadequate. And the efficiency level in 2018 (mean: 87%) is the lowest compared to previous years.

The increasing number of sharia bank efficiency levels in Indonesia opens up opportunities for all sharia banks to be more competitive in capturing market opportunities (Ferari & Sudarsono, 2017). The policy of the Bank of Indonesia (BI) to support the development of the efficiency of the Shari'ah bank has been issued since the sharia bank was established. Similarly, Sharia banking has given policies on operational and technical platforms, such as product innovation, provisions for profit/margin, emergency standards, and service systems. Therefore, the sharia bank must be more efficient in increasing efficiency development in an increasingly competitive climate between sharia banks and conventional banks.

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References

- F. Sulmaiati, OJK Akan Terbitkan Aturan Sinergi Bank Umum dengan Anak Usaha Syariah Artikel ini telah tayang di Katadata.co.id dengan judul 'OJK Akan Terbitkan Aturan Sinergi Bank Umum dengan Anak Usaha Syariah' , <https://katadata.co.id/happyfajrian/finansial/5e9a503a8>," Katadata, 2019. [Online]. Available: <https://katadata.co.id/happyfajrian/finansial/5e9a503a85669/ojk-akan-terbitkan-aturan-sinergi-bank-umum-dengan-anak-usaha-syariah>. [Accessed date: 15-Dec-2019].
- L. Weill, (2004) Measuring Cost Efficiency in European Banking: A Comparison of Frontier Techniques. *J. Product. Anal.*, 21(2):133-152.
- M. D. . Hadad, "Analisis Efisiensi Industri Perbankan Indonesi; Penggunaan Metode Non Parametrik Data Envelopment Analysis (DEA) Buletin Ekonomi Moneter dan Perbankan," Bank Indonesia, 2003. [Online]. Available: [https://www.bi.go.id/id/publikasi/kajian/Pages/Penggunaan Metode Nonparametrik Data Envelopment Analysis \(DEA\).aspx](https://www.bi.go.id/id/publikasi/kajian/Pages/Penggunaan%20Metode%20Nonparametrik%20Data%20Envelopment%20Analysis%20(DEA).aspx). [Accessed: 15-Apr-2019].
- H. Tanjung and D. Abrista. (2013) Metode Penelitian Ekonomi Islam, 1st Edition. Jakarta: Penerbit Gramata Publishing.
- Departemen Pendidikan Nasional. (2012), Kamus Besar Bahasa Indonesia (KBBI) Edisi Empat. 4th Edition. Jakarta: PT Gramedia Pustaka Utama.
- A. Fordebi. (2017) *Ekonomi dan Bisnis Islam Seri Konsep dan Aplikasi Ekonomi dan Bisnis Islam*. 1st Edition. Depok: Rajawali Pers.
- D. E. Wijayanti and D. Hartono. (2018) Efisiensikah Bank Umum Syariah di Indonesia. *J. Bisnis Manaj.*, 18(1):53-67.
- E. Rosidah. (2015) *Akuntansi Biaya*, 1st Edition. Bandung: Mujahid Press.
- N. Ferari and H. Sudarsono. (2017) Tingkat Efisiensi Perbankan Syariah Dan Konvensional Dengan Menggunakan Data Envelopment Analysis (DEA). *J. Ekon. Keuang. Islam*, 1(2):141-148.