

## Value of Efficiency and Worship in Islamic Bank XYZ

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### Abstract

*This study aims to analyze Islamic Bank XYZ efficiency level with the DEA method and Islamic Values for the period 2015 to 2019 and to see the effect of input and output variables on Islamic Bank XYZ growth rate. Measuring the degree of efficiency in this study uses the DEA method and Islamic Values with an input variable consisting of the right of a third party to profit-sharing, operating expenses and a variable of operating revenue production. This study is desk research with references from journal, book, and internet media. Methodology uses quantitative comparative with method of Development Envelope Analysis (DEA). The results of this research show that Islamic Bank XYZ efficiency in 2018 and 2019 has an efficiency level of 100 percent, while in 2015, 2016, and 2017 there were inefficiencies of less than 100 percent. The output variable has a good production value effectively producing output, and has a good contribution to Islamic Bank XYZ development compared to the input variable, so the efficiency value has fluctuations in each period. The weighting applied to Islamic Bank XYZ was achieved in the calculation of the reflexivity value with high percentages.*

### Keywords

efficiency; worship; islamic; bank; value



## I. Introduction

The banking system in the current economic condition has a very significant role to play in a country's economic growth (Abbas, 2010). Islamic banking growth is aimed at providing the society with the greatest value and contributing optimally to the national economy. The Islamic finance industry's rapid development, especially Islamic banking, has greatly increased. Significant innovations make the field of banking a significant position for society. Defense is needed to maintain the level of public confidence in the banking industry in the face of competition. To face competition, several factors need to be considered, one of which is seen from the measurement of the efficiency level (Merkert, 2014).

Efficiency is a picture of the performance of a company, as well as a factor that banks must consider to act rationally to minimize the level of risk they face (Hmieleski, 2008). There are two general concepts in economic theory regarding efficiency, namely efficiency in terms of economic concepts and efficiency in terms of concepts of output. efficiency that the economic concept reviews have a wider scope that is viewed from a macro perspective, whereas efficiency from a production point of view is viewed from a micro perspective (Barth, 2008).

Efficiency in the macro concept looks broadly at resource allocation in an economy that brings social prosperity (Sen, 2013). Whereas the concept of efficiency derives from the theory of microeconomics, namely the theory of producers and consumers. Producer theory says producers are attempting to maximize profits and minimize costs. Whereas

consumer theory states that consumers are trying to maximize the level of utility or satisfaction. There is a frontier line of production in producer theory. This line illustrates the relation in the production process between inputs and outputs. This frontier line of production represents the maximum output level from each use of input resources that represents a company or industry's use of technology (Huda and Nasution, 2009: 10).

To recognize performance improvements, it is important to assess trends in the Islamic banking industry which can be seen from data on financial ratios such as Non-Performing Financing (NPF) and Finance to Deposit Ratio (FDR) to show that banks have handled their financial resources well to increase growth and investment (Ichsan, 2021).

**Table 1.** Performance of Islamic Bank XYZ in 2015-2019

	2015	2016	2017	2018	2019
NPF	4.05%	3.13%	2.71%	1.56%	1.00%
FDR	79.36%	76.83%	75.43%	74.89%	75.54%

Source: Islamic Bank XYZ Annual Report, 2020

Based on the Islamic Banking Statistics data published in December 2019 by the Financial Services Authority, it was reported that the Islamic Banking NPF ratio was 1.88 percent, while the FDR ratio was 77.91 percent. Based on these data it can be concluded that Islamic Bank XYZ's NPF and FDR ratio in December 2019 is relatively better than the performance of Islamic Banks in Indonesia published by OJK (Otoritas Jasa Keuangan, Financial Services Authority).

Resource use can be said to be productive if: (1) all available resources are completely utilized; (2) use style is already such that there are no other consumption patterns that will give the community / individual additional prosperity (Sukirno, 2008). Technically and operationally, efficiency in production concepts tends to be judged, so efficiency in production concepts is generally seen from a technical and cost perspective. efficiency in the production concept is limited to seeing technical and operational relations in a manufacturing process, namely the conversion of inputs into outputs (Sutawijaya, Adrian, et al, 2009: 53).

Bank efficiency is an important tool for analyzing a bank's performance, besides it is also a means to increase monetary policy effectiveness (Dang, 2020). When efficiency measurements are performed, banks are confronted with the conditions for achieving the optimum output level with the existing input level, or with the minimum input level with a certain output level. Another important aspect in achieving banking efficiency is by cutting production costs (Hadad, 2003).

The complexity of the problems in Islamic banking needs a measuring tool to survive in the face of competition, in addition to the efficiency function that can measure the performance value of many analytical tools being developed, it is felt necessary to add an analytical tool of the value of worship in addition to enhancing the spiritual value also benefits in the world and beyond. The sense of worship in any aspect of life including the economy is a natural cycle. According to the Quran Surat Adz-Dzariyat [51]: 56 that reads:

وما خلقت الجن والإنس إلا ليعبدون

Meaning: And I did not create the jinn and mankind except to worship Me.

So far, the research has been based on linear thinking from the approach that separates science from religion, so the meaning of worship in the process of thought is

automatically uprooted by itself. Now Muslim scholars are taking a genuine approach from Islam by immersing in the process of analyzing instruments in the form of worship or worship meaning (Francis, 2008).

However, the analytical tools that have been developed so far are still felt to be important in the process of analytical tools to instill the sense of worship, so that the object of economic analysis provides multiple benefits, namely the earth and the hereafter (Underwood, 2006). The meaning of worship in every activity of human life including the economy is a natural process. God emphasized that the purpose of worship must lie in life. Until now, economic scholarship has copied Western analytical tools such as linear programming, multiple regression, and so on. The great likelihood of the analytical tool lacking in the importance of religion is that Westerners often remove the religious element of research by building the analytical tool. For this reason, Muslim researchers in congregations need to be encouraged to change the concept of analytical tools by Islamic thinking models, so that they can provide benchmarks by Islamic values (Aziz, 2016).

The concept gained appreciation from various points of view in the instruments of Islamic economic analysis. Some begin with the monotheistic philosophy, some depart from the maslahah perspective, some see the meaning of worship. In principle H which stands for HAHSLM uses worship values. The meaning of H theory from the word HAHSLM are (Aziz, 2015):

1. Narrowly, H theory is described in the five dimensions of an invariant structure as a simple theory of three dominant, with different contexts.
2. Broadly speaking, it is possible to interpret the most general use of the theory H as a basic concept theory of the pattern of creation with certain relations. H arises from equation  $H = a.h (s, l, m)$ . H means the letter of Hijr from Quran, also stands for guidance of life.

Combination between efficiency in Islamic Bank and worship as obligation for muslim employees can be described in H theory with wider meaning, such as (Aziz, 2015):

1. A complete or integrated set or integrated part will consist of 3 (three) main elements which can be charged positively, from management board as source to employees as output of the system with outcome as efficiency and values in worship.
2. These three elements will fulfill the statement that employees will do opportunities in Islamic Bank XYZ under direction of directors and commissioners.

The H theory philosophy can be interpreted as an Islamic principle, with a definition having the sense of efficiency of third party fund and worship and life.

## II. Research Methods

This research provides an overview of Islamic Bank XYZ effectiveness level for the 2015-2019 period using the Data Envelopment Analysis (DEA) approach and Islamic principles. The data used is Islamic Bank XYZh's financial statements by taking two input and output variables. DEA is a nonparametric approach that is a linear technique of programming. DEA works by identifying units that are not assessed as units of input and output. Then measure the productivity value and classify which units do not efficiently use inputs, or do not effectively generate output. The calculated efficiency is comparable, as it only compares units of measurement from the same data set (Odeck, 2012).

The purpose of the DEA analysis is to evaluate efficiency in the use of resources (inputs) to achieve results (outputs) to maximize efficiency (Chen, 2017). Furthermore, DEA tests an organization's effectiveness within a group against the best organizational

results in the same category. Each unit analyzed in DEA is symbolized as DMU (Decision Making Unit) or UPK Unit Pengambilan Keputusan (Suhendra, 2021).

There are two input variables in this research, namely the right of the third party to profit sharing and operating expenses whilst operating income is the output variable. The timeframe used for this is 2015-2019. Data Envelopment Analysis (DEA) is used in the first stage of this study and then the second stage uses a methodological approach with the value of worship. The data collection method used in this study is to use the financial statements from Islamic Bank XYZ for the period of 2015-2019.

The result of efficiency by DEA will be combined into weight matrix based on the values of worship in daily activity of this bank (Samad, 2020). There are some weight relating with worship values to be calculated with values of efficiency. So, the last result will show the values of efficiency with the weight of worship. This method is based on statement from Holy Book and also approach about integration between banking activity and religiosity activity.

### III. Results and Discussion

In this study using the Data Envelopment Analysis (DEA) process, nonparametric analysis is used. To recognize an improvement in efficiency, the DEA task is to calculate the importance of effectiveness (Sherman, 2006). In this study, there are input variables, namely rights of third parties over profit sharing and operating expenses and output variables seen from other operating income derived from the financial statements of Islamic Bank XYZ for the period 2015-2019, following the report data:

**Table 2.** Target Units Annually Islamic Bank XYZ

Variable	Year	Actual	Target	To Gain	Achieved
third party's right to profit sharing	2015	2,438,224	2,194,402	10%	90%
	2016	2,339,720	2,222,734	5%	95%
	2017	2,541,130	2,490,307	2%	98%
	2018	2,659,310	2,659,310	0%	100%
	2019	3,014,676	3,014,676	0%	100%
Operating Expenses	2015	4,090,736	3,681,662	10%	90%
	2016	4,545,261	4,317,998	5%	95%
	2017	5,218,590	5,114,218	2%	98%
	2018	5,794,548	5,794,548	0%	100%
	2019	5,460,048	5,460,048	0%	100%
Operating Revenue	2015	10,420,667	10,420,667	0%	100%
	2016	11,456,145	11,456,145	0%	100%
	2017	12,975,470	12,975,470	0%	100%
	2018	14,323,331	14,323,331	0%	100%
	2019	15,687,062	15,687,062	0%	100%

Source: Analysis, Islamic Bank XYZ Annual Report, 2020

In the above calculation, the right of the third party to profit-sharing variables experienced efficiency in 2018 and 2019, while in 2014, 2015, and 2016 there were inefficiencies with scores of 90%, 95%, and 98% (less than 100%). In the 2018 and 2019 operating expenditure measures, while in 2014, 2015, and 2016 there were inefficiencies with ratings of 90%, 95%, and 98% (less than 100% respectively).

There is no problem with the variable operating income in 2015, 2016, 2017, 2018, and 2019 as it has reached the level of efficiency by achieving targets and has a score of 100 percent per annum. It can be inferred that Islamic Bank XYZ's inefficiency for the period 2015-2017 is due to inefficient input management.

After values of efficiency was calculated by DEA Application, then the accumulation can be continued to calculation of worship values. The definition parameters used in this study to describe the relationship between Islam and Islamic Bank XYZ level of efficiency are the dedication and continuity of Islamic Bank XYZ employees in the conduct of congregational worship, the number of worship and places of worship (mosques). Using this definition approach will determine the Bank's output efficiency level that includes Islamic principles that are aligned using Islamic teachings. Throughout the engineering phase, data collection is performed and is analyzed in the implementation of this theory.

**Table 3. Worship Value Weight**

Year	Value Weight
2019	95
2018	95
2017	86
2016	75
2015	75

Source: Analysis, 2020

Viewed from the calculation results with the weight of the worship assessment added to Islamic Bank XYZ, based on the data above. From the data, I got through an interview with one of Islamic Bank XYZ employees that they've been doing daily congregational worship, and it's been the in the last 2 years, namely 2018 and 2019. After deciding the amount of weight of the worship, then determined with the formula Reflection value: Reflexivity = efficiency x Worship.

**Table 4. Reflexivity Value**

Year	Efficiency	Worship Value	Result
2019	100%	95%	95%
2018	100%	95%	95%
2017	98%	86%	84%
2016	95%	75%	71%
2015	90%	75%	68%

Source: Analysis, 2020

From the calculation results above, the highest reflexivity value was found in 2018-2019 with a value of 95 percent and for 2015, 2016, and 2017 with values of 68 percent, 71 percent, and 84 percent, respectively.

While the study is conducted, suddenly Indonesia was affected by Covid. The first case of Covid 19, which has been declared on 2 March 2020 by the Government of the Republic of Indonesia has an impact on the world economy. Pandemic Covid 19 has now entered more than 200 countries with more than 3 million positive patients and more than 200 thousand people died as a result of this outbreak.

Covid 19 's answer is physical distancing in Indonesia and also applied in several other countries. The government has appealed to all Indonesian people to physically separate themselves and then followed by the introduction of large-scale social restrictions (PSBB) in many regions and eventually the effects on Indonesia's economic situation.



Preventing the spread of Covid 19 and calling on the government to restrict activities resulted in slowing economic growth and, ultimately, increasing unemployment in Indonesia because companies are reducing their production activities.

There are potential risks facing banks linked to the command pandemic 19 specifically for the banking industry in Indonesia, including difficulties of the bank in lending, increasing the potential for problem loans, and bank interest margin spreads.

Related to the first risk, the difficulties of Islamic banks in lending, due to the cessation of the business sector, the impact of pandemic prevention 19 with the enactment of large-scale Social Restrictions (PSBB, Pembatasan Sosial Berskala Besar) as well as the decrease in demand for certain goods/services to reduce the demand for bank financing.

The second risk is an increase in the potential for non-performing loans, due, among other things, to the cessation of the production of goods due to the falling demand for these goods and also the termination of employment (layoffs) which leads to difficulties in making bank loan installments payments.

Linked to the third risk which is the interest margin payable directly for this risk on customer funds in Islamic banks. Islamic banks generally have advantages compared to conventional banks. That is because Islamic banks use a system of profit sharing. For a profit-sharing scheme, the volume of costs reserved for profit-sharing payments will also decrease with the resulting revenues of Islamic bank.

Based on the definition and analysis, it can be concluded that Islamic banks would be more vulnerable to the economic crisis triggered by the COVID-19 pandemic as compared with conventional banks.

#### IV. Conclusion

Based on the calculation of efficiency at Islamic Bank XYZ in 2018 and 2019 it had an efficiency level of 100%, while in 2015, 2016 and 2017 experienced inefficiency with a value of 90%, 95%, and 98% (less than 100%), it can be concluded that the inefficiency of Islamic Bank XYZ for the 2015-2017 period was due to inefficient input management. The output variable has a good productivity value and produces output effectively and has a good contribution to the development of Islamic Bank XYZ compared to the input variable, thus the efficiency value fluctuates in each period. In the calculation of the reflexivity value with an average obtained of 84% assuming a weight rating of 75%, the reflexivity value has already achieved the weight applied to Islamic Bank XYZ.

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