

Productivity Of Zakat Institutions (OPZ) In Indonesia

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ABSTRACT

This paper evaluates the productivity level of Zakat institutions (OPZ) in Indonesia, both in terms of changes in efficiency and also looking at its technological side. This study employs Malmquist Productivity Index method. Eleven Zakat institutions are observed during the research period from 2016-2019. The input variables are total assets and operational costs, while, the output variables are collected funds and disbursed funds. The results showed that all observed Zakat institutions experienced an increase in productivity values during the 2016-2019 period, which means that all OPZs increased their achievements in the field of Zakat management. It is found that the values of EFFCH (1.224), PECH (1.187), and SECH (1.031) are more than 1. On the other hand, technology change or TECH decreased below 1 (0.887). This means that the main sources that influence the increase in OPZ productivity during the 2016-2019 period are the high change in efficiency value (EFFCH) and the stagnation of technological innovation change (TECH). This implies that Zakat institutions (OPZ) in Indonesia must improve their technological aspect.

Keywords: Zakat institutions, Productivity, Malmquist Productivity Index.

INTRODUCTION

Indonesia is a developing country, with a population that continues to increase every year. In 2020, Indonesia's population was around 270.20 million people and the country has a GDP of Rp 15,434.2 trillion. Poverty and inequality are still serious problems and are the focus of the Indonesian government. The number of poor people in 2020 was recorded at 27.55 million people (10.19%), an increase of 2.76 million (0.97%) compared to 2019. The Indonesian government has made various efforts to alleviate this increase in poverty. They have allocated IDR 292.8 trillion in 2018 to reduce poverty by around 9.5 - 10 percent. However, the target was not achieved. In fact, it could only reduce poverty by 0.46 percent (BPS, 2018). Therefore, the role of the third sector (philanthropy) is important to help the government in poverty alleviation.

Zakat is one of the most important instruments in Islamic economics which is a tool to distribute wealth to reduce poverty and economic inequality (Beik, 2009).

According to PUSKAS BAZNAS 2019, Zakat has a significant impact on macroeconomic indicators such as the level of GDP and aggregate consumption in 2015-2018. This further strengthens the role of Zakat in reducing poverty and inequality. Furthermore, Zakat is one of the five pillars of Islam that must be implemented and has a very wide scope dimension as a representation of faith, economy, and social. 80% of Indonesians are predominantly Muslims and it is the country with the largest Muslim population in the world. This is a potential dimension to be managed and developed (Khasanah, 2010). Based on a study conducted by PUSKAS BAZNAS in 2019, the potential for Zakat in Indonesia reached 233.8 trillion rupiah and this potential is equivalent to 1.72 percent of Indonesia's 2017 GDP of Rp. 13,588.8 trillion. Zakat on income is the highest Zakat potential reaching 139.07 trillion rupiah and then followed by Zakat money, agricultural Zakat, livestock Zakat, and company Zakat (Puskas BAZNAS, 2019). The amount of Zakat funds collected and distributed managed by OPZ has increased every year.

In 2016, the collected Zakat funds amounted to IDR 5 trillion and in 2019, they increased to IDR 10.2 trillion. It is also known that the Zakat funds distributed in 2016 were IDR 2.9 trillion and in 2019, the figure rose to IDR 8.6 trillion.

All funds collected must be processed and managed optimally with a good Zakat management system. Zakat management is carried out directly by a special institution or organization that handles Zakat, which are called the Zakat institutions. In its management, Indonesia has a semi-government institution that has the authority to collect and distribute Zakat to Zakat mustahik, namely Badan Amil Zakat Nasional (BAZNAS). Also, there is provision for non-government institution, namely the Lembaga Amil Zakat (LAZ) which is regulated in the Act. No. 23 of 2011 which contains regulations regarding Zakat management in Indonesia, in order to facilitate the convenient collection of Zakat, and also to ensure that Zakat management becomes more optimal on the implementation side. In the law, it is explained that OPZ is a non-profit social intermediary institution, which is tasked with collecting and distributing Zakat funds to mustahik.

In order to determine the effectiveness of Zakat institutions' performance, measurement of Zakat institutions' performance is required. Productivity is essential in improving performance. A company's capacity may be increased by ensuring productivity and efficient resource utilization. (Diaz-Chao et al., 2015). Productivity in Zakat institutions is essential to improve service quality and also to optimize resource allocation. As an organization that manages Zakat funds, measuring efficiency and productivity in OPZ is a vital thing in order

to realize greater benefits for the community, especially for mustahik. More efficient and productive the OPZ, the more it will have positive impact in the collection, management and distribution of Zakat funds. Zakat institutions (OPZ) in Indonesia must always optimize their achievements, so that they can collect and distribute Zakat funds optimally. Studies on Zakat institutions in Indonesia currently only cover a few aspects of productivity analysis utilizing the Malmquist Productivity Index (MPI). Previous researches have examined the efficiency of Zakat such as study by Akbar (2009), Ahmad & Ma'in (2014), Lestari (2015), Dyayusman & Bil Haq (2015), Alam (2018) and Al-Ayubi et al. (2018). So far, only a few researchers such as Rusydiana (2018) and Al Parisi (2017) have examined the efficiency and productivity of Zakat institutions in Indonesia. Al-Muharrami (2007) asserts that knowledge of productivity growth will be very helpful to regulators in assessing the effects of modifications in market structure, and other businesses that buy subsidiaries or form partnerships.

Given the importance of this analysis, this study focuses on examining the level of productivity of Zakat institutions in Indonesia during the period 2016 – 2019. It looks at the collection of Zakat in Indonesia which experienced an average growth of 30.55 percent during that period. This study is also expected to focus on examining the productivity performance of Indonesian Zakat institutions since there are still limited number of studies in this area. When evaluating the relationship between productivity and the growth of Zakat institutions in Indonesia, this study argues that measuring productivity is another important issue.

LITERATURE REVIEW

Zakat Management

At the time of the Prophet Muhammad SAW, the collection and distribution of Zakat was the responsibility

of the government. In its capacity as the ruler of an Islamic state, the government was responsible for the collection and distribution of Zakat funds. The Prophet appointed Zakat officers who would be responsible for the collection and distribution of Zakat. They were also tasked with assessing the needs of people who are entitled to receive Zakat and physically distributing Zakat as Amilin. Amilin received Zakat and reported their activities to the head of government in Medina (Derus, 2013).

After the Prophet died, the management of Zakat was continued by the Khulafaur Rasyidin. Caliph Abu Bakr continued the distribution system of the prophet. He also fought those who refused to pay Zakat after the death of the Prophet. Caliph Umar bin Khatab continued the management system, by building the baitul maal as a place to manage Zakat led by Abdullah bin Arqam. Caliph Uthman bin Affan continued the baitul maal system for managing Zakat.

In terms of the distribution of Zakat assets, Allah divided and determined the groups who could receive Zakat distribution (Uqaily, 2010). This is explained in the Qur'an in Chapter Taubah verse 60. Allah says:

“Indeed, Zakat is only for the needy, the poor, the managers, the converts, and for the slaves, the debtors, and the sabilillah, and those who are on their way, as a decree that has been required by Allah. And Allah is All-Knowing, All-Wise.” (Surat At-Taubah: 60). (Ministry of Religion RI, 2009).

This commandment of Zakat provides the basis for the growth and development of the socio-economic strength of the people. It covers broad and complex values, not only spiritual and moral values of worship, but also economic and worldly values. Zakat funds that are well managed and properly distributed can

have an impact on alleviating poverty and providing welfare to the community.

The history of Zakat management in Indonesia has experienced dynamic development throughout history. There are at least three phases in the development of Zakat in Indonesia. First, the early practice until the colonial period. At this time, the policy of the Dutch colonial government chose to be neutral and not intervene in the management of Zakat. At this time, Zakat was completely a personal matter. Second, the period of independence until the reformation era. At this time, at the beginning of independence, the government only continued the policies implemented by the Dutch colonial rulers. Then during the New Order, President Soerharto became the personal Zakat Amil. Although in the end, Suharto resigned due to very minimal public response. But on the other hand, the wave of the emergence of large Zakat institutions began with provincial BAZ in the 70s, followed by SOE-based LAZ in the 80s, and pure LAZ formed by civil society in the 90s as well as amil Zakat institutions in Islamic boarding schools and mosques. Third, the period of Zakat management after 1999. This is the period after the end of the New Order regime. In this period, the number of Zakat institutions increased dramatically. This period is also the most important period in national Zakat landscape. Earlier, Zakat can be managed by BAZ which is formed by the government and LAZ which is formed by the community. Afterwards, Law no. 23 of 2011 redirected Zakat management in centralized manner with BAZNAS as the regulator and operator (Wibisono, 2015).

Rusydiana (2018) in his research said that the Zakat institutions (OPZ) are tasked with collecting and distributing Zakat and other social funds, because OPZ is an intermediary agency engaged in the social sector. Thus, OPZ needs to prioritize the principles of professionalism, accountability, and transparency so that OPZ can function effectively and efficiently.

Concept of Efficiency and Productivity

One of the main problems in the economy is the limited resources available to meet relatively unlimited needs. So, one focus of the discussion of economics is how to allocate these limited resources to meet wants and needs in the most efficient way possible. It is known that there are many

references both from books, journals, or scientific papers that discuss the notion of efficiency and productivity. Budi (2010) in his research explains that efficiency is usually always associated with the performance of a particular agency or organization, because efficiency describes a parable between output and input where efficiency is output divided by input.

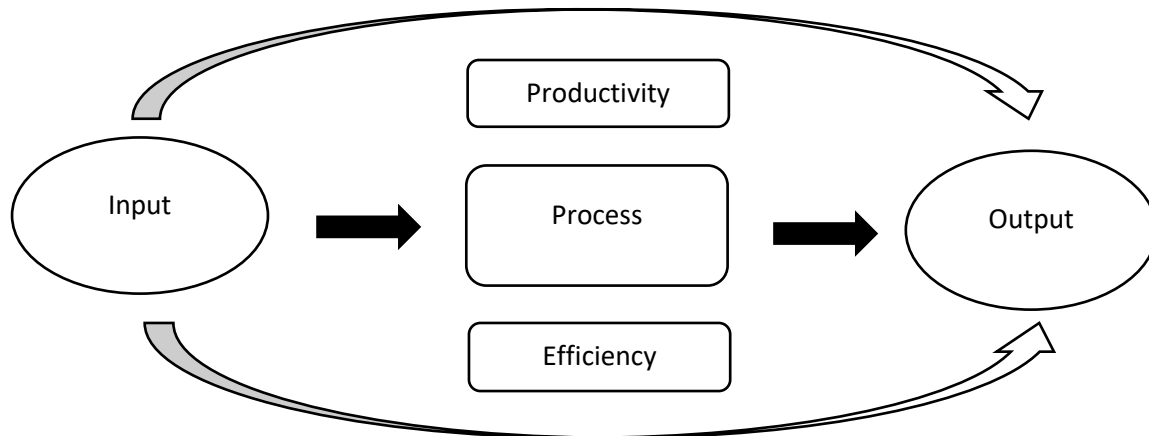


Figure 1. Concept of efficiency and productivity

Source: Mulyadi, 2007

Understanding efficiency in general can also be related to how the output is compared to the input in a system. According to Ahmad & Ma'in (2014), in the context of economic efficiency, it is explained as the ability of a system in general to produce maximum output with limited inputs. Therefore, efficiency occurs when output increases even with the same input or even with less input. An economic system can be said to be efficient if the system can produce more goods or services without adding resources.

Meanwhile, the word productivity first appeared in 1766 quoted from (Physiocrat Economics) in an article entitled "The school of physiocraft" by a French economist named Francois Quesnay. David Ricardo also explained that productivity is a concept that uses inputs and outputs as the main components. The point is to explain how the output will change if the amount of input also changes.

Productivity is the ratio of output divided by input.

In his research, Rusydiana (2018) also explains that basically the concept of productivity is the relationship between output and input in a production activity. Renowned economists such as Peter F Drucker also argue that productivity is a balance between all the factors that produce a lot of output with a more efficient way of spending inputs. In order to achieve the greatest possible yield in productivity, minimal resources are used. Therefore, the use of efficiency and productivity is very important to measure the performance of an institution or economic management unit (Rusydiana, 2018).

From the explanations related to efficiency and productivity that the researchers tried to elaborate above, the researchers concluded that efficiency explains how to optimize and utilize existing resources to get maximum results

with minimal expenditure. Meanwhile, productivity explains how to measure the

Efficiency and Productivity of OPZ

Research on efficiency in OPZ has been carried out by previous researchers, such as research conducted by Akbar (2009) and Parisi (2017). Zakat institution (OPZ) is an intermediary organization in the form of a non-profit. All operational costs are taken from the collected infaq and Zakat funds. The management of the OPZ itself is an amil Zakat which is included in 8 groups of people who are entitled to receive Zakat assets. These activities are used for operational activities and the salaries of the amilin (Akbar, 2009). The efficiency of Zakat management is very important, not only to ensure that Zakat funds are used optimally, but also to protect the good name of Islam from things that can cause defamation. Therefore, the measurement of the efficiency of Zakat management, both in the receipt and distribution of Zakat funds, must be so that all stakeholders who play a role in the management of Zakat can continue to be evaluated properly (Ahmad & Ma'in, 2014). According to Parisi (2017) in measuring the performance of a company, efficiency is an approach that is generally used. When a company can minimize costs in producing a certain output or can maximize profits by using a combination of existing inputs, the company can be judged to be efficient in its management. This also applies to Zakat institutions.

The research on productivity at OPZ has been carried out by Pratama & Cahyono (2019) which examined the productivity of

amount of output needed with the number of existing inputs.

Indonesian Zakat houses using the Malmquist index method. The result shows that, Indonesian Zakat houses experienced an increase in productivity from 2010 to 2017 when viewed from the TFP Change score which was marked by a score of more than 1,000 in 2014 and 2015. Wahab & Abdul Rahman (2012) also conducted research related to the productivity growth of Zakat institutions in Malaysia, which aims to measure the increase in efficiency and the contribution of technological advances to productivity growth in the Malaysian Zakat industry. The relationship between output and input in the production process is the basis of the concept of productivity.

Efficiency and productivity are concepts that describe the ratio between input and output to measure the performance of a unit of economic activity. Unlike research related to efficiency, research related to the productivity of Zakat institutions in Indonesia is relatively rare. A Zakat institution can be said to be efficient if the Zakat institution can manage its output (collected funds and channeled funds) optimally, while a Zakat institution is said to be productive if it is effective in achieving goals and efficient in utilizing existing resources (Al Parisi, 2017). Previous studies have discussed the dynamics of productivity and the relevance of productivity components requiring further analysis. In addition, technological change is beyond the direct control of an institution, especially Zakat institutions. Due to technological change, institutions need to constantly evolve and innovate.

RESEARCH METHODOLOGY

Sample

To measure the level of efficiency and productivity of Zakat institutions in Indonesia on a national scale, the research

object of this research is National Zakat institutions which have published financial reports and which can be accessed by the general public. This study uses data obtained from financial reports from the

period 2016 to 2019, with a total of 11 OPZ institutions to be studied as follows:

Table 2. List of the OPZ to be Researched

No	List of OPZ
1	BAZNAS RI
2	Dompot Dhuafa
3	Inisiatif Zakat Indonesia
4	Rumah Zakat
5	BMM
6	LDD
7	Yayasan Rumah Yatim Arrohman Indonesia
8	LAZIZNU
9	LAZIZMU
10	LAZNAS BSMU
11	MIZAN AMANAH

The discussion of this research focuses on measuring the productivity level of the eleven national Zakat institutions above. These eleven OPZs are considered quite successful in collecting large Zakat funds from the public and are always consistent in publishing their annual financial reports, compared to other OPZs. The eleven selected OPZs have also contributed 17.32 percent to national Zakat collection in 2019 and 22.26 percent to national Zakat distribution in 2019.

Type of Research

This research uses quantitative research methodology. The main method used in this research is Malmquist Index Analysis (Malmquist Productivity Index). Rusydiana (2018) in his research explains that MPI is a special method used to see the productivity level of each business unit, so that it can see changes in efficiency levels and changes in technology used based on predetermined input and output variables. Malmquist can also be used to measure changes in performance over time. The objective is to analyze the data using the Malmquist Index to examine the level of productivity (TFP) in OPZ. The Malmquist index was first introduced in 1953 by Stan Malmquist. Over time, the Malmquist index continued to be studied and further developed in a non-parametric framework by several researchers such as: Caves,

Christensen & Diewert (1982) and Thrall (2000).

Data

The author uses secondary data in the form of annual data from various OPZ Zakat institutions, namely data from the financial statements of each OPZ in Indonesia in 2016-2019. Secondary data is a source of research data obtained by researchers indirectly through intermediary media (obtained and recorded by other parties) Indriantoro and Supomo (2002). Secondary data are generally in the form of evidence, notes, or historical reports that have been compiled in archives (documentary data), including both published and unpublished material. This data is obtained from the published directories of the financial reports of the Amil Zakat institutions in Indonesia. The source of data used in this study comes from OPZ as a Zakat management institution which publishes its financial reports for ensuring transparency and accountability in managing the Zakat funds it receives.

To estimate OPZ's efficiency and productivity, we use following variables: The input variable is the resources owned by the OPZ in supporting the OPZ's performance, while the output variable is an indicator of the success or income of OPZ.

Table 3. List of Variable Used to Estimate OPZ Efficiency and Productivity

Input Variable	Definition	Sources
Operational Costs (X1)	Costs incurred for the benefit of OPZ	OPZ Amil Fund Change Report
Total Asset (X2)	All assets owned by OPZ	OPZ Financial Report
Output Variable	Definition	Sources
Collection Funds (Y1)	Bounded and unbound fundraising amount	OPZ General Fund Change Report

Allocation Funds (Y2)	The amount of disbursement of bounded and	OPZ General Fund Change Report
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unbounded funds

Data Analysis Technique

This study uses a quantitative method with the Malmquist Productivity Index (MPI) analysis approach which aims to measure the productivity level of the Indonesian Zakat institutions (OPZ) using DEAP 2.1 software. The Malmquist TFP change index in this study is formed from the value of efficiency change and technological change. Changes in efficiency is examined to find out whether there is a change in the level of efficiency from year to year, while the change in technology is evaluated to find out whether there is a change in technical efficiency from year to year.

The concept of the Malmquist Index or Malmquist Productivity Index was first introduced in 1953 by Sten Malmquist, which aims to measure productivity. However, along with its development, the Malmquist Index was re-introduced by Caves et al. (1982) who argued that in calculating the Malmquist Index, there were two things that were calculated, namely the catch-up effect and the frontier shift effect. The catchup effect aims to calculate the rate of change in relative efficiency from one period to another. On the other hand, frontier shift aims to calculate the rate of technological change which is a combination of input and output from one period to another.

Malmquist Productivity Index (MPI) is also a part of DEA which is equally used to process non-parametric data. It serves to measure changes in the level of productivity of a DMU, where the index value can be elaborated from changes in efficiency and changes in technology (Thrall, 2000). The MPI itself consists of

several results: Efficiency Scale (EFFCH), Technological Change (TECH), Pure Efficiency Change (PECH), Economic Scale Change (SECH), and Total Factor Productivity Change (TFPCH).

The Malmquist Index has several advantages including:

- MPI is a non-parametric method that does not require the specification of the form of the production function.
- PI does not require assumptions about the economic behavior of the production unit: profit maximization or cost minimization.
- The calculation does not require prices which are sometimes not available.
- And MPI can also be divided into two components: efficiency changes and technological changes.

The disadvantage of MPI is that this method must use balanced panel data, so it is not intended for time series data.

$$\begin{aligned}
 MTFP_k &= \frac{M0_k(\gamma_t, \gamma_{t+1}, x_k)}{M1_k(\gamma_t, \gamma_{t+1}, x_k)} \\
 &= \frac{E_k^0 \frac{\gamma_{t+1}, x_k}{E_k^0}(\gamma_t, x_k)}{E_k^1 \frac{\gamma_{t+1}, x_k}{E_k^1}(\gamma_k, x_{t+1})}, k \\
 &= t, t + 1
 \end{aligned}$$

The equation between the Malmquist input and output index above explains that if the MPI value exceeds 1, it means that there is an increase in productivity. If the MPI value is less than 1, then there is a decrease in productivity and if the value is equal to 1, then the productivity level is the same or has not changed (Rusydia, 2018).

RESULT AND DISCUSSION

Analysis of the Efficiency of Zakat institutions (OPZ)

A Zakat institution can be said to be efficient if the Zakat institution can manage its output (collected funds and disbursed funds) optimally. The technique of measuring the efficiency of the Zakat institution with the Malmquist analysis uses a production approach to determine the input and output variables. This study uses input variables in the form of operational costs and total assets, while the output

variables include collected funds and disbursed funds.

An OPZ is said to be efficient if its value reaches number 1. The further the value is away from the number 1 or closer to the number 0, the more inefficient it will be. An institution can be called efficient if:

- a. Similar inputs can produce larger outputs
- b. Small input can produce the same output
- c. Large input can produce even greater output

Table 4. Average Efficiency Score

NO	List of OPZ	2016	2017	2018	2019	Mean
1	BAZNAS RI	0,469	0,632	0,896	1,000	0,749
2	Dompot Dhuafa	0,778	0,699	0,723	0,970	0,792
3	Inisiatif Zakat Indonesia	0,233	0,205	0,256	0,380	0,268
4	Rumah Zakat	0,623	0,749	0,732	1,000	0,776
5	BMM	0,564	1,000	1,000	1,000	0,891
6	LDD	0,294	0,282	1,000	1,000	0,644
7	YRY Arrahman Indonesia	0,233	0,101	0,148	0,194	0,169
8	LAZIZNU	1,000	0,253	0,225	0,747	0,556
9	LAZIZMU	0,180	0,184	0,203	0,378	0,236
10	LAZNAS BSMU	0,391	0,537	0,534	0,339	0,450
11	MIZAN AMANAH	0,128	0,096	0,104	0,142	0,118
Mean		0,445	0,431	0,529	0,650	

Table 4 explains the value of each Zakat institution in Indonesia during the 2016-2019 period. The efficiency values in OPZ fluctuates, as shown by the average value of OPZ efficiency from year to year. In 2016, the average value of OPZ efficiency was 0,445 and then, it decreased to 0,431 in 2017. Then it increased in 2018 to 0,529. The average value of OPZ efficiency increased again and even reached its peak value in 2019 to 0,650 at the same level.

Meanwhile, in terms of the Zakat institutions, BMM had the highest average efficiency value during the 2016-2019 period of 0,891. Then, the results of the

order of OPZ based on the acquisition of efficiency values are as follows: Dompot Dhuafa, Rumah Zakat, BAZNAS RI, LDD, LAZIZNU, LAZNAS BSMU, Inisiatif Zakat Indonesia, LAZIZMU, YRY Arrahman Indonesia, and then MIZAN AMANAH.

BMM gets the highest average efficiency value because BMM has special strategies that distinguish it from other OPZ. One of the distinguishing feature is that BMM uses a fundraising strategy through a power of attorney which has several privileges. For instance, ZIS funds can be collected quickly because charity payments are deducted from the salaries of

BMM employees. Hence, it does not require a lot of human resources to collect ZIS funds. That is why, operational expenses for fundraising activities can be minimized. By using this strategy, BMM has minimized the input, namely operational costs and maximized the output, namely the collection of Zakat funds. All of this is evidenced by the success of BMM in collecting and distributing Zakat funds, which is increasing from year to year (Alwiyanasyah, 2021).

Meanwhile, the cause of MIZAN AMANAH's low level of efficiency is the increase in operating costs from year to year. For example, the increase that occurred in the use of amil salaries and also

the burden of socialization and publication which increased significantly from 2016 to 2019.

Productivity Analysis of Zakat Institutions

A Zakat institution is said to be productive if it is effective in achieving its goals and efficient in utilizing existing resources. In this study, the Malmquist Index is used to determine the level of productivity of each OPZ, either based on changes in efficiency or changes in technology.

Productivity Level of Zakat Institutions in Indonesia

- *Comparison Between OPZ*

Table 5. OPZ Productivity Level in Indonesia 2016-2019

OPZ	EFFCH	TECH	PECH	SECH	TFPCH
BAZNAS RI	0.689	0.962	0.964	0.724	0.671
Dompot Dhuafa	1.000	0.589	1.000	1.000	0.589
IZI	1.169	0.940	1.306	0.895	1.099
Rumah Zakat	1.108	0.799	0.951	1.166	0.886
BMM	1.134	0.749	1.150	0.986	0.849
LDD	2.375	1.594	1.982	1.200	3.793
YRY Arrahman Indonesia	2.040	0.781	1.739	1.173	1.594
LAZIZNU	1.269	0.861	1.000	1.000	1.092
LAZIZMU	0.795	0.869	1.000	1.000	0.690
LAZNAS BSMU	2.041	1.260	1.531	1.333	2.571
MIZAN AMANAH	0.905	0.719	0.910	0.995	0.650
Mean	1.224	0.887	1.187	1.031	1.087

Table 5 above shows a comparison of productivity levels between OPZs during the 2016-2019 period. The results obtained from the Malmquist Index (TFP Change) value explained that 5 OPZ out of a total of 11 OPZ experienced an increase in productivity levels, or about 45% of the total OPZ studied. It is indicated by a change in TFP value of more than 1. Based on the results of the table above, it is known that the OPZ with the highest productivity level is LDD with a TFPCH value of 3,793 and the OPZ with the lowest productivity level is Dompot Dhuafa with a TFPCH value of 0,589. It can also be seen that in general, the OPZ productivity value is not

that low, which is indicated by the change in TFP value of 1,087. The main source affecting the increase in TFPCH productivity in the OPZ is the change in efficiency (EFFCH of 1,224) and the source that affected the decrease of TFPCH is technological change (TECH of 0,887) due to the lack of optimal use of technology.

The results of this study are not in line with Parisi (2017) who found that the increase in OPZ productivity is influenced by technological changes, which is indicated by the change in TFPCH value of more than 1. Because research related to measuring productivity levels carried out by the author is relative and not absolute,

so, when the sample of Zakat institutions or the range of observation periods is expanded, it is very much possible to get different results.

- *Comparison Between Years*

Table 6. Total OPZ Productivity Factors Yearly

Year	EFFC H	TEC H	PEC H	SEC H	TFPC H
2016-2017	1.528	0.772	1.323	1.155	1.179
2017-2018	0.772	1.115	0.702	1.099	0.861
2018-2019	1.556	0.812	1.801	0.864	1.263
Mean	1.224	0.887	1.187	1.031	1.087

Table 6 describes the results of productivity levels overtime from year to year. TFP value above 1 indicates an increase in productivity, while TFP value below 1 indicates a decrease. In the table above, the productivity of all OPZs experienced a fluctuating trend every year.

1. In 2016-2017, OPZ in Indonesia experienced an increase in productivity with the TFPCH value of (1,179). Then the main source that influenced the increase in productivity during that period was the high change in the EFFCH efficiency value of (1,528).
2. In 2017-2018, OPZ in Indonesia experienced a decline in productivity with the TFPCH value of (0,861). The main source that affected the decline in productivity in that period was the high change in the value of TECH technology of (1,115).
3. Then in 2018-2019, OPZ in Indonesia experienced an increase in productivity with TFPCH value of (1,556). The main source that influenced the increase in productivity in that period was the high change in the EFFCH efficiency value of (1,556).

It can be seen that during the 2016-2019 period, OPZ in Indonesia experienced an increase in productivity with the acquisition of a TFPCH value of 1.087, which means that on average, OPZ increased its performance in the field of Zakat management. It is evidenced by the increase in EFFCH above 1 (1,224), PECH (1,187) and SECH (1,031). On the other hand, technology change or TECH decreased below 1 (0,887). Hence, the main sources influencing the increase in OPZ productivity during the 2016-2019 period are the high change in efficiency value (EFFCH) and the stagnation of technological innovation change (TECH). Then, the table above also shows that there was an increase in productivity in certain periods. The highest productivity increase occurred in the 2018-2019 period with a TFP value of 1,263, while the lowest productivity value occurred in the 2017-2018 period with a TFP value of 0,861.

The results of this study are not in line with Rusydiana (2018) who found that the main source that affects the increase in the productivity of OPZ during 2011-2016 is the high value of technological change (TECH). Because the research related to the measurement of productivity levels carried out by the author is relative and not absolute, so, when the sample of Zakat institutions or the range of observation periods is expanded, it is very much possible to get different results. Overall, however, all OPZs experienced an increase in productivity.

- *Comparison by Cluster OPZ*

Furthermore, this study tries to measure the level of productivity between each OPZ which is grouped into 3 (three) clusters based on the categories of OPZ owned by the government (government), OPZ on corporate model and private OPZ (community based). This classification is based on the research conducted by Nafik Hadi et al. (2021).

The following table shows the total factors of production for each OPZ based on three clusters:

Table 7. Total OPZ Productivity Factors Per Cluster

Cluster	OPZ	EFFCH	TECHCH	PECH	SECH	TFPCH
Gov	BAZNAS RI	0.689	0.962	0.964	0.724	0.671
Average		0.689	0.962	0.964	0.724	0.671
Private	BMM	1.134	0.749	1.150	0.986	0.849
Average		1.134	0.749	1.150	0.986	0.849
Public	Dompot Dhuafa	1.000	0.589	1.000	1.000	0.589
	Inisiatif Zakat Indonesia	1.169	0.940	1.306	0.895	1.099
	Rumah Zakat	1.108	0.799	0.951	1.166	0.886
	LDD	2.375	1.594	1.982	1.200	3.793
	YRY Arrahman	2.040	0.781	1.739	1.173	1.594
	LAZIZNU	1.269	0.861	1.000	1.000	1.092
	LAZIZMU	0.795	0.869	1.000	1.000	0.69
	LAZNAS BSMU	2.041	1.260	1.531	1.333	2.571
	MIZAN AMANAH	0.905	0.719	0.910	0.995	0.650
Average		1.411	0.935	1.269	1.085	1.440

Table 7 shows a comparison of productivity levels between the three OPZ clusters: government, corporate, and private. In the government-owned OPZ cluster, the average TFPCH value was below 1 (0,671), indicating a decline in productivity levels. Furthermore, there is 1 OPZ working on private model which experienced a decrease in productivity level, with an average TFPCH value of 0,849. Furthermore, there are 5 out of a total of 9 OPZ in public model which experienced an increase in productivity level, with an average TFPCH value of 1,440. So, based on the table above, it can be concluded that the OPZ group with the highest productivity level is the public OPZ cluster that managed to get a TFPCH value of 1,440. Secondly, OPZ cluster based on private model fetched a TFPCH value of 0,849. The government-owned OPZ cluster is in third place with a TFPCH value of 0,671.

CONCLUSION AND RECOMMENDATION

Conclusion

This study tried to examine efficiency and productivity using the BCC model approach as the basis for DEA to determine the value of OPZ efficiency in Indonesia for the 2016-2019 period. The results show that the efficiency of OPZ reached its peak value in 2019 at 0.650.

Furthermore, the Malmquist index aimed to measure the productivity level of OPZ. Comparisons between OPZs and overtime and among clusters was carried out. The overall results obtained from the Malmquist Index value show that all observed Zakat institutions (11 OPZ) experienced an increase in productivity values with TFPCH above 1 (1,087) during the 2016-2019 period, which means that all OPZs increased their achievements in the field of Zakat management. It can be ascertained from the increase in the value of EFFCH (1,224), PECH (1,187), and SECH (1,031) that are above 1. On the other hand, technological change or TECH decreased

below 1 (0,887). This means that the main source that influenced the increase in OPZ productivity during the 2016-2019 period was the change in efficiency value (EFFCH) and the stagnation of technological innovation change (TECH).

Based on the conclusions above, it is recommended for OPZ to be more innovative and optimum in the use of technology in order to increase the productivity value of Zakat institutions. In addition, it is expected that all Zakat institutions must publish their annual financial reports in order to increase accountability and transparency in the management of Zakat funds.

REFERENCES

- A. Charnes, W. C. (1978). Measuring The Efficiency of Decision Making Units. *European Journal of Operational Research* 2, 429-444.
- Afida, A. (2017). Analisis Efisiensi Badan Amil Zakat Nasional (BAZNAS) dalam Mengelola Dana Zakat dengan Metode Data Envelopment Analysis (DEA). *Skripsi Fakultas Ekonomi dan Bisnis*, 1-106.
- Ahmad, I. H., & Ma'in, M. (2014). The Efficiency of Zakat Collection and Distribution: Evidence from Two Stage Analysis. *Journal of Economic operation and Development*, 133-170.
- Akbar, N. (2009). Analisis Efisiensi Organisasi Pengelola Zakat Nasional Dengan Pendekatan Data Envelopment Analysis. *Tazkia islamic finance & business review*, 760-784.
- Al Parisi, S. (2017). Tingkat Efisiensi dan Produktivitas Lembaga Zakat di Indonesia. *Jurnal Bisnis dan Manajemen*, 63-72.
- Alam, A. (2018). Analisis Efisiensi Pengelolaan Dana Zakat Infak Sedekah (ZIS) Di Baznas Kabupaten/Kota Se- Karesidenan Surakarta Dengan Menggunakan Metode Data Envelopment Analysis DEA. *Iqtishoduna*, 268-290.
- Al-faizin, A. W., & Akbar, N. (2018). *Tafsir Ekonomi Kontemporer*. Jakarta: Gema Insani.
- An-Nawawi, I. (2006). *Hadits Arbain*. Jakarta: Daarul Haq.
- Aulia Zahra, P. P. (2016). Pengukuran Efisiensi Organisasi Pengelola Zakat Dengan Metode Data Envelopment Analysis. *Jurnal Akuntansi dan Keuangan Islam*, 25-44.
- BAZNAS, P. (2019). *Outlook Zakat Indonesia 2019*. Jakarta: Puskas Baznas.
- Beik, I. S. (2009). Analisis Peran Zakat dalam Mengurangi Kemiskinan : Studi Kasus Dompet Dhuafa Republika. *jurnal pemikiran dan gagasan-vol II 2009*, 45-53.
- BPS. (2018). *Persentase Penduduk Miskin 2018*. Badan Pusat Statistik. Retrieved from www.bps.go.id
- BPS. (2020). *persentase penduduk miskin 2020*. Badan Pusat Statistik.
- Budi, D. S. (2010). Efisiensi Relatif Puskesmas-Puskesmas Di Kabupaten Pati. *Universitas Indonesia*, 14-33.
- Caves, D., Christensen, L., & Diewert, W. (1982). The Economic Theory of Index Numbers and The Measurement of Input, Output, and Productivity. *The Econometric Society*, 1393-1414.
- Clarashinta Canggih, K. F. (2017). Potensi Dan Realisasi Dana Zakat Indonesia. *al-Uqud Journal of Islamic Economics*, 14-26.
- Departemen Agama RI. (2009). *Al-Qur'an Dan Terjemahannya*. Bandung: PT. Sygma.
- Derus, M. B. (2013). Measurement Model of Corporate Zakat Collection in

- Malaysia: A test of diffusion of innovation theory. *Humanomics*, 61-74.
- Djaghballou, C. E. (2018). Efficiency and Productivity Performance of Zakat Funds in Algeria. *International Journal of Islamic and Middle Eastern Finance and Management* 11(3), 94-474.
- Dr. Hj. Rahmawati Muin, S. M. (2020). *Manajemen Pengelolaan Zakat*. Gowa - Sulawesi Selatan: Pusaka Almada.
- Fadhil Muhammad Naufal, A. F. (2017). Analisis Efisiensi Bank Pembiayaan Rakyat Syariah (BPRS) Wilayah Jabodetabek dengan Pendekatan Two Stage Data Envelopment Analysis (DEA). journal.stainkudus.ac.id/index.php/equilibrium, 196-220.
- Khasanah, U. (2010). *Manajemen Zakat Modern*. Malang: UIN Maliki Press.
- Lestari, A. (2015). Efisiensi Kinerja Keuangan Badan Amil Zakat Daerah (BAZDA): Pendekatan Data Envelopment Analysis (DEA). *Jurnal Ekonomi dan Studi Pembangunan*, 177-187.
- M. Mahbubi Ali, A. (2010). Analisis Efisiensi Baitul Maal Wat Tamwil Dengan Pendekatan Two Stage Data Envelopment Analysis (Studi Kasus Kantor Cabang BMT MMU dan BMT UGT Sidogiri). *TAZKIA Islamic Finance & Business Review*, 110-125.
- Mas'ud, M. Y. (2005). *Instrumen Pemberdayaan Ekonomi*. Yogyakarta: UII Press.
- Muhammad Khafidh Abdillah Bil Haq, R. R. (2015). Analisis Efisiensi Lembaga Amil Zakat terhadap Pengentasan Kemiskinan (Studi Kasus di LAZ USP 2008-2013). ejournal.unida.gontor.ac.id, 171-189.
- Nafik Hadi, M. R., Widiastuti, T., Qulub, A., Cahyono, E. F., Mi'raj, D. A., & Insani, T. D. (2021). Efficiency Analysis of Zakat institutions Based on The Organizational Cluster in Indonesia: Free Disposal Hull (FDH) Approach. *Al-Uqud: Journal of Islamic Economics*, 218-233.
- Owoyemi, M. Y. (2020). Zakat management The crisis of confidence in Zakat agencies and the legality of giving Zakat directly to the poor. *Journal of Islamic Accounting and Business Research*, 498-510.
- Parisi, S. A. (2017). Tingkat Efisiensi dan Produktivitas Lembaga Zakat di Indonesia. *Jurnal Bisnis Dan Manajemen*, 63-72.
- Physiocrat Economics. (n.d.). The school of physiocraft. *Britannica*.
- Pratama, F. R., & Cahyono, E. F. (2019). Pengukuran Efisiensi Dan Produktivitas Rumah Zakat Indonesia Dengan Metode Indeks Malmquist. *Jurnal ekonomi syaroah dan Terapan*, Vol.6 No.4 Hal: 774-786.
- Pratama, F. R., & Cahyono, E. F. (2019). Pengukuran Efisiensi Dan Produktivitas Rumah Zakat Indonesia Dengan Metode Indeks Malmquist. *Jurnal Ekonomi Syaroah Teori dan Terapan*, 774-786.
- Puskas BAZNAS. (2019). *Indikator Pemerataan Potensi Zakat (IPPZ)*. Jakarta: Pusat Kajian Strategis - Badan Amil Zakat Nasional (PUSKAS BAZNAS).
- Puskas BAZNAS. (2019). *Outlook Zakat Indonesia 2019*. Jakarta: Pusat Kajian Strategis - Badan Amil Zakat Nasional (PUSKAS BAZNAS).
- Royyan Ramdhani Dyayusman, M. A. (2017). Analisis Strategi Penghimpunan Dana Zakat, Infak dan Sedekah (Studi Kasus di LAZ Ummat Sejahtera Ponorogo). *Journal Unida*

- Gontor, 53-74.
- Rusydia, A. S. (2018). Indeks Malmquist unrtuk Pengukuran Efisiensi dan Produktivitas Bank Syariah di Indonesia. *Jurnal ekonomi dan pembangunan*, Vol 26, No.1, 47-58.
- Rusydia, A. S. (2018). Perubahan Teknologi Dan Efisiensi Pada Organisasi Pengelola Zakat Di Indonesia. *Jurnal Liquidity*, 124-136.
- Solahuddin Al-Ayubi, A. B. (2018). Efficiency Of Zakat Management: Indonesian Zakat institutions Experiences. *International Journal of Zakat*, 37-55.
- Thrall, R. (2000). Measures in DEA with an Applocation to the Malmquist Index. *Journal of Productivity Analysis*, 125-137.
- Uqaily, A. (2010). *Praktis dan Mudah Menghitung Zakat*. Solo: AQWAM Press.
- Wahab, N. A., & Abdul Rahman, A. (2012). Productivity Growth of Zakat institutions in Malaysia. *Emerald*, 197-210.
- Wibisono, Y. (2015). *Mengelola Zakat Indonesia: diskursus pengelolaan Zakat nasional dari rezim undang-undang No. 38 tahun1999 ke rezim undang-undang No. 23 tahun 2011*. Jakarta: Prenadamedia Group.

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