

Efficiency Analysis of Zakat Institutions Based on The Organizational Cluster in Indonesia: Free Disposal Hull (FDH) Approach

Muhamad Nafik Hadi Ryandono*¹, Tika Widiastuti², A. Syifaul Qulub³, Eko Fajar Cahyono⁴, Denizar Abdurrahman Mi'raj⁵, Taqiyah Dinda Insani⁶

¹⁻⁶Department of Islamic Economics, Faculty of Economics and Business, Universitas Airlangga

Abstract: *This study aims to analyse the level of efficiency of zakat institutions in Indonesia between 2014 and 2018. Zakat institutions are divided into three clusters based on the organisation's nomenclature: the government, public, and private groups. The division of these clusters aims to see differences in the management of zakat funds between each group. This study uses a quantitative research approach through the Free Disposal Hull (FDH) method to produce a more comprehensive average efficiency estimation than the Data Envelopment Analysis (DEA). The sampling technique is purposive, and there are fourteen research objects observed. The government cluster is the cluster with the highest efficiency value. The private set comes in second, and the public group comes in third ranking. The high score that the government cluster earns is due to their primary business purpose, which focuses on managing zakat funds. The results of this study can be used as references for the policy establishment of zakat institutions in Indonesia.*

Keywords: *Efficiency, Free Disposal Hull, Zakat, Zakat institution, Good Governance*

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***Corresponding author:** muhammadnafik@feb.unair.ac.id

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Abstrak: Penelitian ini bertujuan untuk menganalisis tingkat efisiensi Lembaga Zakat di Indonesia selama periode 2014-2018. Lembaga Zakat dibagi menjadi tiga klaster berdasarkan nomenklatur organisasinya, yaitu klaster pemerintah, klaster publik dan klaster swasta. Pembagian klaster ini bertujuan untuk melihat apakah ada perbedaan pengelolaan dana zakat antar masing-masing klaster. Penelitian ini menggunakan pendekatan penelitian kuantitatif melalui metode Free Disposal Hull (FDH) yang akan menghasilkan estimasi efisiensi rata-rata yang lebih luas dibandingkan dengan Data Envelopment Analysis (DEA). Dengan menggunakan teknik purposive sampling, ada 14 objek penelitian yang diamati. Klaster pemerintah merupakan klaster lembaga zakat yang memiliki nilai efisiensi tertinggi. Kemudian, klaster swasta berada di urutan kedua dan klaster publik berada di urutan ketiga. Tingginya nilai yang diperoleh klaster pemerintah karena tujuan utama mereka, yang lebih fokus pada pengelolaan dana zakat. Hasil penelitian ini dapat dijadikan acuan bagi kebijakan pembentukan lembaga zakat di Indonesia.

Kata kunci: Efisiensi, Free Disposal Hull, Lembaga Zakat

INTRODUCTION

Since the Novel Coronavirus Disease pandemic or Covid-19 was declared, many countries have been required to create and take strategic and tactical policies related to the Covid-19 outbreak resolve and efforts to protect the nation's economy, including Indonesia. The Indonesian government is facing a dilemma of choices between taking the lockdown policy as an effort to reduce the spread of the Covid-19 virus, which resulted in paralysing the nation's economy during the lockdown period and taking the policy by maintaining economic activities which resulted in putting people's health vulnerability at risk (Setiati & Azwar, 2020; Ahamed et al., 2020). Therefore, economists, including Islamic economists, have begun to look for a formula to sustain the economy during lockdown by compiling a social safety net that accommodates communities, especially the most affected substances of the neighbourhood (Faturrohman et al., 2021).

One Islamic social safety net form that has the potential for direct benefit is maximising the zakat instruments (Kahf & Yafai, 2015; Ridlwan & Sukmana, 2017). Zakat is a part of social security in Islam, including social insurance and social responsibility (Qardawi, 2006). Zakat has two dimensions of benefits: an effort to worship Allah SWT and care for society and fellow humans (Dewi & Setyorini, 2018; Widiastuti et al., 2020). The willingness and sincerity of the *muzakki* on giving off some of their assets for the *mustahiq*, provides an atmosphere of friendly social interaction, maintaining a calm and harmonious environment between *muzakki* and *mustahiq* (Ali, 2007; Fikriyah & Ridlwan, 2018).

Furthermore, the analysis of zakat institutions' efficiency in Indonesia has its urgency. Even though Indonesia is a country with a majority population of Muslims, the zakat management system is still not centralized. In other words, the zakat fund management system in Indonesia is not directly managed by the Indonesian government. The management of zakat funds in Indonesia, which is still decentralized, requires a relatively more complex arrangement of zakat institutions than centralized management because *mustahiq* and *muzzaki* are more likely to receive double treatment (Muttaqin et al., 2020; Arif, 2017; Halimatusa'diyah,

2015). Therefore, an evaluation study related to the efficiency assessment of decentralized zakat fund management is needed.

Most of the previous studies related to the efficiency of zakat institutions used the Data Envelopment Analysis (DEA) method. Meanwhile, this study explores the use of Free Disposal Hull (FDH) to analyse zakat institutions. The Free Disposal Hull is a non-parametric test used to determine the efficiency value of each observed unit. The FDH method will provide a more comprehensive average efficiency value than the DEA method (Tulkens, 1993). Kurnia (2006) found that the Public Sector Efficiency (PSE) method is limited only to present efficiency scores and cannot be generated to make policies by conducting managerial simulations to increase efficiency values. Therefore, the measurement of efficiency scores is carried out using the Free Disposal Hull (FDH) method.

Previous discussions on the efficiency level of zakat institutions had been focusing on the level of efficiency of each institution. A study was done by Wahyuni (2016), which proposed only to find out the status of efficiency of zakat institutions within one the year of 2013 using the DEA method and intermediate production approach. Wahyuni (2016) tested the efficiency of four Zakat institutions by mentioning their characteristics only, such as BAZNAS as a government institution, Dompot Dhuafa as management which has the largest fund, PKPU as a zakat and humanity institution and LazisNU as an institution managed by the organisation with the largest community. According to the measurement of efficiency of zakat institutions in Malaysia during 2003-2007 using the Data Envelopment Analysis (DEA) technique, the results show that zakat institutions have shown technical efficiency an average of 80.6%. The results also show that pure technical inefficiency dominates the effect of inefficiency scale in determining the technical efficiency of zakat institutions in Malaysia (Wahab & Rahman, 2012).

Meanwhile, this study focuses on the level of efficiency of each cluster by using the FDH method. However, the previous study did not mention the classification of the organisations. Hence, comparing zakat institutions' efficiency between the three-sector economies will complement the efficiency analysis of zakat institutions in Indonesia. The study divides zakat institutions in Indonesia into three clusters representing each cluster's philanthropic activities within the framework of the three-sector economy, including the government, public and private sectors.

This study aims to analyse the efficiency level of zakat institutions in Indonesia based on government, public, and private clusters in Indonesia during 2014-2018. This study uses several input and output variables related to zakat management as a benchmark for efficiency analysis. The input variables used are human resource costs, socialisation costs, and operational costs. While the output variables used are the amount of zakat collection and the amount of zakat distribution. The selection of these variables is based on the efficiency approach used. This study uses a production approach that assumes that zakat institutions collect and distribute zakat at a particular cost. The analysis of this study will guide into: (1) the position of the efficiency level of the Zakat institution clusters in Indonesia; (2) the condition of the return to scale for each zakat institution and the development potentials for the under-developed institutions; (3) which institutions

become the benchmark for other DMU; (4) the level of efficiency of each zakat institution in the period of 2014-2018. This study is expected to be used as a reference for policies and developing regulations on zakat institutions in Indonesia to be more efficient in collecting and channelling zakat funds to *mustahiq*.

The Efficiency in Zakat Institutions

Efficiency is the ability to complete a job correctly or through a mathematical view, defined as the calculation of input ratio on output ratio or the amount of output produced based on the input used. Thus, efficiency is achieved by using the information to produce results (Wahab & Rahman, 2012). Then, by looking at the benefits perceived by the public as a form of impact from a good efficiency ratio, the higher the efficiency of the zakat institution, the greater the benefits *mustahiq* receive in Indonesia. Zakat institutions must be effective, efficient, socialised, and contribute to poverty reduction (Al-Ayubi et al., 2018). The distribution of zakat to *mustahiq* strengthens equitable distribution of assets, increases income, increases consumption and demand for goods and services, develops production, boosts job vacancies, and increases full employment (Rohmati et al., 2018). Measuring the efficiency level as the development of zakat fund management by zakat institutions in Indonesia has been brought to a high level of urgency.

H1: Zakat institutions achieve efficiency through the optimal use of inputs in producing outputs.

The Cluster of Zakat Institutions in Indonesia

The income circulation of the three-sector economy refers to economic activities carried out by three financial contributors, namely the government cluster, the public cluster, and the Private cluster. According to the Islamic economy, actual economic activity is initiated by business activities and philanthropic activities, such as zakat institutions. The zakat institutions function as organisations that collect, manage and distribute zakat whose operations must practice the principles of *siddiq*, *amanah*, *tabligh*, and *fatanah* (Ryandono & Wijayanti, 2019). In addition to their responsibility in collecting and distributing zakat, zakat institutions play a role in distributing productive zakat, which emphasises the participation of *mustahiq* in empowerment programs (Sain et al., 2016). Everyone should involve philanthropic activities in the income circulation of these three economic sectors.

The zakat institutions are chosen based on their organisational nomenclature, divided into three different but interconnected sectors: the State or government, private institutions, and civil society organisations (Ryandono et al., 2021; Minister of Religion, 2015). The government cluster consists of the National Zakat Agency (BAZNAS). Then, Baitul Maal Muamalat (BMM), the National Amil Zakat Institute of Bank Syariah Mandiri (LAZNAS BSM), Majelis Taklim Telkomsel (MTT) and the Baitul Maal Foundation of the State Electricity (YBM PLN) are included in the private cluster (Ryandono et al., 2021). While the public cluster consists of Global Zakat, Al-Azhar Indonesia Amil Zakat Institute, Dompot Dhuafa Republika, Da'wah Council Amil Zakat Institution and LAZIS NU, Indonesian

Zakat Initiative (IZI), Madani Welfare Foundation (Yakesma), Mizan Amanah Amil Zakat Institute, and Rumah Zakat (RZ) (Ryandono et al., 2021).

H2: Institutions based on their clusters can achieve management efficiency.

RESEARCH METHODS

A quantitative research approach with the Free Disposal Hull (FDH) research method is used to achieve the research objectives of this study. Free Disposal Hull is a unique framework as a continuation of the DEA efficiency measurement model. The points on the line combining the DEA conclusion are not included in the frontier (Rusyadiana, 2018). The Free Disposal Hull (FDH) produces a broader average efficiency estimation than DEA (Tulkens, 1993). The efficiency score can be measured within the range of 0-1 or 0-100%. An estimated value of less than one can be considered inefficient compared with others (Avkiran, 2004).

This research used secondary data obtained from financial reports of zakat institutions operating in Indonesia. The sampling technique is purposive sampling. The zakat institutions selected are the ones that published their financial statements on the official websites of each institution from 2014 to 2018.

The fourteen samples of this study are divided into three clusters based on the nomenclature of the respective zakat organisations, namely the government cluster, private cluster, and public cluster. Zakat institutions included in the government cluster include BAZNAS. Zakat institutions included in the company cluster consist of BMM, Laznas BSM, MTT, and YBM PLN. Meanwhile, Zakat Institutions included in the public group have Dompot Dhuafa, Global Zakat, IZI, LAZ Al-Azhar, LAZ Da'wah Council, Mizan Amanah, LAZISNU, RZ, and Yakesma. These cluster divisions aim to analyse further the efficiency of the zakat institution cluster.

The efficiency measurement analysis using the FDH method includes input and output variables adjusted to the production approach. The input variable in this study is operational, socialisation, and salary expense. Operating expense is all distribution of Amil funds: personnel costs, socialisation, and the purchase of fixed assets. The output variables are the collection and the distribution of zakat funds.

Analysis of data by FDH method in this study is assessed by MAXDEA software. After mapping the efficiency levels of each zakat institution, the next stage is analysing the efficiency levels based on the cluster divisions of the zakat institutions.

RESULTS AND DISCUSSION

The Efficiency Result of Zakat Institution

Based on the data that has been obtained, a descriptive analysis will be carried out. Input variables and output variable data are utilised to measure the efficiency score of each zakat institution. Operational expense, Socialisation expense, and Salary expense are the input variables in this study. At the same time, collected and distributed zakat funds contribute as the output variables. The following table is the descriptive statistics of each input and output variable examined in this study.

Table 1. Descriptive statistics of inputs and outputs of the Zakat Institutions In Indonesia, 2014-2018 (Nominal in IDR)

Variables	Average	Minimum	Maximum
Input:			
Operational Expense	10,548,547,014	12,804,807	70,001,294,079
Socialization Expense	3,865,212,674	5,121,923	23,367,138,542
Salary Expense	7,988,847,137	11,604,300	51,895,788,070
Output:			
Zakat Fund	70,956,023,712	707,004,019	229,788,106,390
Zakat Distribution	69,003,513,102	233,800,403	288,670,038,833

Source: Compiled by Authors (2020)

According to Table 1, it can be seen from input variables that operational costs have the highest average expenditure of IDR 10.5 billion, while the lowest average spending is from socialisation costs. In addition, from the output variables, the average value of zakat collected by the Zakat institutions during the research period is Rp. 70.9 billion, in which the minimum value is Rp. 707 million and the maximum value is Rp. 229 billion. Another output variable used is distributed zakat funds that reached Rp. 69 billion on average. Meanwhile, the minimum amount of zakat distributed is Rp. 233 million and Rp. 288 billion in maximum.

FDH method analysis is also a non-parametric method other than used to measure the efficiency of an entity. The relationship between input and output variables is represented through Constant return to scale (CRS) or variable return to scale (VRS) as an essential aspect in non-parametric techniques (Yuningrum, 2012). Table 2 describes the conditions of return to scale (RTS) through the production approach. Each zakat management institution analysed has decreasing returns to scale, constant returns to scale, or increasing returns to scale. The decreasing condition indicates that every additional 1% of input will increase the output by less than 1%. On the other hand, the increasing requirement is where every extra 1% of information will increase the production by more than 1%. The stable condition is that every additional 1% of input will produce a different output of 1% (Al-Ayubi et al., 2018).

Table 2. Return to Scale of Zakat Institutions in Indonesia according to FDH Analysis

Cluster	Zakat Institutions	Return to Scale				
		2014	2015	2016	2017	2018
Government	BAZNAS	increasing	increasing	increasing	constant	constant
	BMM	-	-	increasing	constant	constant
Private	LAZNAS BSM	-	-	increasing	increasing	-
	MTT	constant	increasing	increasing	increasing	increasing
	YBN PLN	-	-	constant	constant	constant
Public	Global Zakat	increasing	increasing	increasing	increasing	increasing

Cluster	Zakat Institutions	Return to Scale				
		2014	2015	2016	2017	2018
	AL-Azhar Indonesia	-	increasing	increasing	increasing	increasing
	Dompot Dhuafa	increasing	increasing	increasing	increasing	increasing
	LAZ Dewan Da'wah	increasing	increasing	increasing	increasing	increasing
	IZI	-	-	increasing	increasing	increasing
	Mizan Amanah	increasing	increasing	increasing	increasing	increasing
	RZ	increasing	constant	constant	constant	constant
	LAZIS NU	-	-	constant	increasing	increasing
	Yakesma	-	constant	increasing	increasing	-

Source: Compiled by Authors (2020)

Based on Table 2, each zakat institution tends to experience an increasing return to scale. However, Rumah Zakat and YBM PLN experienced stable conditions for three consecutive years from 2016-2018. Zakat institution MTT initially experienced a persistent condition but decreased during the following years. The same case happened to the LAZIZ NU zakat institution.

Meanwhile, based on the calculation results of benchmarking, which analysed how many efficient DMU can be used as a reference (reference frequency) by the inefficient DMU, 5 DMU have the highest benchmarks. Table 3 presents the information regarding the times as a benchmark for zakat institutions that are not yet efficient.

Table 3. Times as Benchmark of Zakat Institution

No	DMU	Times as Benchmark
1	YBM PLN 2016	29
2	LAZIS NU 2016	23
3	BAZNAS 2018	15
4	YBM PLN 2018	12
5	YBM PLN 2017	8

Source: Output by MAXDEA Software, Compiled by Authors (2020)

The required source of inefficiency can be examined through the total potential improvement included in the information from the overall zakat institution, both from the input and output used. By looking at the average efficiency value, it can be identified that the inefficiencies found in zakat institutions in Indonesia can be eradicated by reducing salary expenses by 27.28%, reducing operational expenses by 28.08% and reducing socialisation expenses by 27.4%. Meanwhile, from the output used, it is emphasised that the amount of zakat distribution must be increased by 12.66% and zakat funds by 4.58%.

This study measures the level of efficiency of FDH based on the nomenclature of the Zakat institution, which is divided into the government cluster, private cluster, and public cluster. Evaluation of the efficiency score of the fourteen zakat

institutions using the FDH method is shown in appendix 1. The table contains information related to the efficiency value per year by applying the FDH technique.

This study measures the average value of efficiency during the period of the study. The results showed that YBM PLN from the private cluster with an average score of 1 has the highest value among other institutions. However, the efficiency measurement at YBM PLN was carried out only from 2016 to 2018. Meanwhile, the highest average score of the public cluster in this study is 0.976, which Rumah Zakat obtains between 2014 and 2018. BAZNAS occupies the third position as the zakat institution from the government cluster with a score of 0.885.

In addition, appendix 1 also illustrates that the performance of the Zakat institutions in this study is still insufficient with their operations. Out of fourteen zakat institutions analysed, only YBM PLN has an efficient value of 1. It can be seen that 60% of the zakat institutions included in the study have an efficient value of 0.5 and below.

The comparison between the average efficiency of zakat institutions based on their organisational nomenclature shows that the zakat institutions managed by the government cluster are the highest among other clusters, by a value of 0.848. Then, the second position was obtained by the zakat institutions controlled by the private cluster, with a value of 0.601. Meanwhile, the amount of zakat institutions managed by the public cluster is higher than the other two clusters. Ten zakat institutions are governed by social organisations and the public and obtain an average efficiency score of 0.382.

Efficiency Analysis of Zakat Institution using FDH Approach

Based on the efficiency measurement results using the FDH method, the government's zakat cluster institution became the zakat institution with the highest efficiency value, followed by private cluster clusters and public clusters. The explanation behind the government cluster is that the zakat institution with the highest efficiency value may refer to [Kadir \(2010\)](#) who examines zakat institutions at the regional level. The result is that the Amil Zakat Board (BAZ) has managerial problems at the regional level. In addition, the quality standard of BAZ organisations is also relatively below the average of zakat institutions, which has become another problem as proved by other studies ([Hamidi & Suwardi, 2013](#)). [Retnowati \(2018\)](#) tries to analyse the performance and efficiency of zakat institutions in the Province of Jambi and finds that the efficiency value of BAZDA as a regional institution in Jambi is below the zakat institution Rumah Sosial Insan Madani (RSIM) achieved. BAZ, as a government institution, several managerial problems may arise within the management, including the issues of supervision and accountability.

The philanthropy of the revenue stream within government clusters has an urgent role because the responsibility for poverty reduction and ensuring social safety nets belongs to the government. The government has broader work plans and schemes to promote, accelerate zakat development, and ensure the community's ambition to realise a fully developed zakat system ([Ismail, 2019](#)). The efficiency of the zakat institution from cluster government needs to be improved further by

implementing more professional management and greater involvement from the government itself. The FDH method's study indicates that the DMU with a value of less than one has not optimised its input variables to produce maximum output.

In the three-sector economy, corporations are supplying goods and services to perform their business income stream function. Some of these companies are engaged in finance, telecommunications, and energy supply. Some corporations in Indonesia have shown their attention to Islamic philanthropy to perform a social role in the community. The philanthropy is demonstrated by the establishment of zakat institutions under the management of corporate companies. Therefore, a study on the efficiency level of zakat institutions in the company cluster will focus on results and discussions that refer to financial and social efficiency to see economic behaviour that represents a balance between the mortal world and the afterlife matters.

The results of this study indicate that the FDH average value of zakat institutions in private clusters is the second most efficient out of other clusters. The value is calculated based on the distribution of total individual efficiency values among zakat institutions in the cluster, which have striking differences. The YBM PLN zakat institution ranks first during the study period and is considered an efficient private zakat institution cluster. In other words, by assuming the zakat institution operates at an optimal scale, the YBM PLN zakat institution is relatively efficient in distributing zakat funds. Zakat fund distribution matters because, as an intermediary institution, the task or objective of zakat institutions is to optimise the distribution of zakat funds (Retnowati, 2018). The results show that the YBM PLN zakat institution has reached maximum efficiency, even though the research period was only from 2016 to 2018. The result becomes supporting evidence that the YBM PLM zakat institution's quality of management is relatively more efficient than the Amil Zakat Board (BAZ).

Then Baitul Maal Muamalat (BMM), the zakat institution managed by Bank Muamalat Indonesia, took second place. Even though it has not reached the maximum efficiency level yet, BMM is included as one of the two research objects that experienced an IRS (increasing return to scale) condition during the two years of the study period. The production performance of BMM has experienced a significant increase in efficiency in the last two years of the study period. It is supported by the fact that Bank Muamalat is admitted to the third quadrant cluster throughout a study done by Rusydiana (2018). Even though Bank Muamalat has a low value of financial efficiency, it scores high on social efficiency value. The results of a study conducted by Rusydiana & Marlina (2019) show that the level of economic efficiency of Islamic banks in Indonesia from 2013 to 2018 tends to decline. On the other hand, the level of social efficiency of Islamic banks in Indonesia tends to increase. A recent study shows that BMM in 2016 brought the third-highest score based on the super efficiency method in the research of Ruysdiana & Hasib (2020).

In the third and fourth ranks of private clusters, zakat institutions are still at an inefficient level of performance because their FDH average efficiency score is low. Zakat institutions from private clusters include: Majelis Taklim Telkomsel (MTT) and Laznas BSM. The portrayal of an increase in MTT production capacity

had been constant in 2014 before it was finally experiencing a continuous decline until the last year of the study period. Meanwhile, Laznas BSM experienced a decrease in production capacity (DRS) throughout the study period, especially the management playing its social role at the optimal state. Rusydiana (2018) explained that, in general, the social efficiency value of Islamic banks in Indonesia is relatively lower compared to the value of their financial efficiency. The result could become the reference for zakat institutions under the management of sharia financial institutions to formulate policies proposed to increase the social efficiency of their institutions.

The public cluster in the economy (also known as the domestic cluster) generally supplies labour and funds in financial markets. However, the same as other clusters, the public group in the general economy has not included social variables in determining their income flow chart. So, from an Islamic perspective, the three-cluster economic theory should pay attention and consider planting the concept of philanthropy on the income flow chart of each cluster. Public clusters are represented by zakat institutions established by social and community organisations. In the past, the collection and distribution of zakat were primarily done in conventional ways. They were managed by certain local amil, but the current trend shows that many people have started entrusting the collection and distribution of zakat through official state institutions or social institutions that have received legitimacy from the government and the public.

According to the analysis result of each cluster, the average efficiency value of the eight zakat institutions included in the zakat classification of the public cluster reach ranks third among the zakat institution clusters formed in the three economic groups. However, one of the zakat institutions within the scope of the shared cluster, Rumah Zakat, is placed at second rank with a reasonably high FDH average close to optimal efficiency value. Rustyani & Rosyidi (2018) show that Rumah Zakat is the zakat institution that has reached an optimal efficiency level in 2016. The results show that the value of LAZ Dewan Dawah, Mizan Amanah, and Global Zakat has an inefficiency score. The inefficiency score that the Global Zakat institution earned can be caused by the low amount of fund collection and distribution achieved. Global Zakat fund collection was most lacking in 2015 and became the zakat institution with the most insufficient distribution in 2018.

The National Amil Zakat Board (BAZNAS) role as the government's representative institution in managing zakat has the specific authority or certain rights in managing zakat funds. In addition, the National Amil Zakat Board's primary business is only to pay attention to zakat funds management so that the institution's focus is fixated on specific issues. However, as seen from the analysis result on efficiency values, the performance of BAZNAS has not yet reached an optimal point, and there is still room for development to optimise the maximum capability of the institution. Zakat institutions are established from private and public clusters, usually formed by organisations with various goals. Zakat institutions in small groups are generally institutions that certain companies deliberately establish to make their stakeholders manage their zakat.

Meanwhile, the public cluster has a poor efficiency score due to a lack of public trust in zakat institutions and public knowledge about the institution's

professionalism and management report (Hafidhuddin, 2007). Each zakat institution has not maximised the zakat funds utilisation. It results in problems such as *mustahiq* not receiving zakat funds due to a complicated bureaucracy or *muzakki* have failed to serve and manage zakat properly. The zakat institute (Huda et al., 2015).

Knowing the efficiency of zakat management is vital because its contribution is essential to national economic management. It reflects Abu Bakr Ash-Siddiq's supremacy, where Abu Bakr declared war on Muslims who had no intention to pay their zakat (Saad et al., 2016). As an illustration, Zakat fitrah is zakat in the form of staple food or food at the amount of one *sha'*. The scholars agreed that this staple food zakat could be replaced with cash or money during its development. Zakat fitrah itself does not have the calculation rule of *nishab*. Rasulullah SAW mentioned why zakat fitrah is important. He said, "... so that you can provide for those who are not able to go around all day." The spirit that the Messenger of Allah wanted to convey is that those who go around all day (or the daily labour) must enjoy Eid with all other Muslims (Dhar, 2013). Daily labour is workers who cannot work that day and cannot afford to eat that day, so Muslims should share the happiness of celebrating Eid with them. Even though they do not work or cannot celebrate Eid, they would have something to eat on that day because of the good deeds of Muslims who can give zakat fitrah (*muzakki*) to those who are less fortunate (*mustahiq*).

Islamic economic system that builds philanthropic institutions has guaranteed the fulfilled minimum necessities of life along with the enactment of the banking system, which prohibits usury. Likewise, more optimal and efficient use and development of zakat funds during the Covid-19 pandemic will impact the economy. Daily workers are affected as the national economy weakened during the pandemic. The regional quarantine policy prevents daily workers from earning daily wages, and some cannot even work anymore. Therefore, zakat has an essential role as a social safety net in difficult times such as this pandemic, as the wisdom of zakat fitrah in the hadith of the Prophet Muhammad mentioned earlier (Murtagho, 2016).

The management of philanthropic institutions in the Islamic Economic system must be carried out as efficiently as possible. Efficiency itself is the ability to complete a job correctly. In a mathematical view, it is defined as the calculation of the ratio of input to output or the number of works produced from the number of inputs employed (Wahab & Rahman, 2012). Therefore, zakat institutions must be more effective, efficient, socialising, and ultimately impact poverty reduction (Al-Ayubi et al., 2018). If the benefits perceived by the public are part of a result from a good efficiency ratio, the more efficient zakat institutions in their management, the greater the benefits that the *mustahiq* community in Indonesia can receive and experience.

CONCLUSION

It is concluded that the zakat institution managed by the government cluster is the most productive. Then it is followed by the private cluster and the last, the public cluster. The high-value score of the government cluster is due to their primary business purpose, which is more focused on managing zakat funds. YBM is the

zakat institution that scored the highest efficient value during 2016-2018. Meanwhile, Global zakat is the zakat institution that has the lowest efficiency value.

Each zakat institution tends to experience increasing returns to scale. MTT zakat institutions initially had a persistent condition but decreased during the following years. However, Rumah Zakat, and YBM PLN had a stable condition for three consecutive years from 2016 until 2018. The same case happened to the LAZIZ NU zakat institution.

There are five DMU that reached the highest benchmarks: YBM PLN 2016 (benchmarked in 27 times), BAZNAS 2018 (23 times), LazisNU 2016 (23 times), and Rumah Zakat 2018 (10 times). The level of efficiency of each zakat institution during the period of 2014-2018 can be used as the reference for establishing policies and rules for zakat institutions in Indonesia to be more efficient in collecting, managing, and distributing zakat funds to *mustahiq*.

Another suggestion for zakat institutions is to optimise their management in managing the zakah fund and distribution. Private and public clusters can be more focused on managing zakat funds and distribute zakat. Cooperation between governments, the public sector, and the private sector will better empower managing zakat. Subsequent research can continue the similar research with different periods of more than two years. In addition, further analysis can examine efficiency with other variables such as the number of donors and recipients as one of the benchmarks in the efficiency of zakat management.

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Appendix 1.

Average Efficiency of Zakat Institution in Indonesia according to FDH Analysis Method

Cluster	Zakat Institution	2014		2015		2016		2017		2018		\bar{X}	Rank
		Eff	Rank	Eff	Rank	Eff	Rank	Eff	Rank	Eff	Rank		
Gov	BAZNAS	0.787	3	0.868	3	0.772	4	1.000	1.000	1.000	1	0.885	3
Average		0.787	2	0.868	1	0.772	1	1.000	1	1.000	1	0.885	3
Private	YBM					1.000	1	1.000	2	1.000	2	1.000	1
	BMM					0.346	6	1.000	3	1.000	3	0.782	4
	MTT	1.000	1	0.216	6	0.191	11	0.201	9	0.191	8	0.360	8
	BSM					0.228	10	0.299	6			0.264	10
Average		1.000	1	0.216	3	0.441	2	0.625	2	0.730	2	0.601	2
Public	RZ	0.878	2	1.000	1	1.000	2	1.000	4	1.000	4	0.976	2
	DDR	0.617	4	0.694	1	0.689	5	0.658	5	0.703	5	0.672	5
	Yakesma			1.000	2	0.230	8	0.241	8			0.490	6
	NU					1.000	3	0.181	10	0.198	7	0.460	7
	IZI					0.305	7	0.269	7	0.306	6	0.293	9
	Al-Azhar			0.218	5	0.229	9	0.163	12	0.172	9	0.196	11
	DD	0,179	5	0,185	8	0,150	12	0,171	11	0,125	10	0,162	12
	Mizan	0,137	6	0,197	7	0,139	13	0,088	13	0,093	11	0,131	13
Global	0,049	7	0,044	9	0,046	14	0,088	14	0,053	12	0,056	14	
Average		0,372		0,477		0,421		0,318		0,331	3	0,382	3

Source: Compiled by Authors (2020)