

The Efficiency of Zakat Collection and Distribution In Indonesia

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Abstract

This study aims to compare the level of efficiency of zakat collection and distribution by Zakat Institution in Indonesia. It is hoped that this research can find out what factors affect inefficiencies in the process of collecting and distributing zakat by National Zakat Institution. This study is quantitative research using Data Envelopment Analysis (DEA) with output orientation. Financial statements of 8 zakat institutions during 2012-2018 were analyzed. In zakat collection the input variables are administrative and general expenses, amil fee, number of branches, and socialization cost while the output variable is zakat collected. In terms of zakat distribution process, the input variables are administrative and general expenses, amil fee and zakat collected against the output variable, zakat distributed. This study found that zakat collection has a higher efficiency score (72.32%) compared with zakat distribution (61.45%). Using potential improvement analysis, zakat institutions are advocated to do more in zakat collection while handling inefficient socialization cost. In the same time, they should distribute more zakat funds while optimizing their staff/amil in zakat distribution.

Keywords: Zakat, Efficiency, DEA

Abstrak

Penelitian ini bertujuan untuk membandingkan nilai efisiensi dari proses pengumpulan zakat dan distribusi zakat oleh organisasi pengelola zakat di Indonesia. Harapannya, penelitian ini dapat menganalisis faktor-faktor apa saja yang menjadi penyebab inefisiensi pada organisasi pengelola zakat. Penelitian ini merupakan penelitian kuantitatif menggunakan Data Envelopment Analysis (DEA) dengan pendekatan output. DEA akan digunakan untuk menganalisis nilai efisiensi baik pada proses pengumpulan zakat maupun pada proses distribusi zakat pada 8 organisasi pengelola zakat berskala nasional di Indonesia. Menggunakan data laporan keuangan dari tahun 2012 hingga tahun 2018. Variabel input yang digunakan pada perhitungan efisiensi diantaranya adalah beban administrasi dan operasi umum (administrative and general expenses), beban/gaji amil (amil expenses), jumlah cabang (number of branches), dan beban sosialisasi (socialization expenses). Serta dana zakat terkumpul dan dana zakat terdistribusi menjadi variable output. Penelitian ini menyimpulkan bahwa pada proses pengumpulan zakat, nilai efisiensinya lebih tinggi yaitu sebesar 72.32% dibandingkan dengan nilai efisiensi pada proses pendistribusian zakat yaitu sebesar 61.45%. Kemudian, menggunakan analisis *potential improvement*, dapat disimpulkan bahwa Organisasi Pengelola Zakat diharapkan dapat meningkatkan penghimpun zakat dengan biaya sosialisasi harus dioptimalkan untuk dapat mengumpulkan dana zakat yang lebih besar. Selain itu, peran amil perlu dimaksimalkan dalam mendistribusikan dana zakat secara efisien.

Keywords: Zakat, Efisiensi, DEA

INTRODUCTION

Zakat is one of the most important instruments in the Islamic Economy that has a function as the instrument to distribute wealth. Zakat is one of the five pillars of Islam, which should be implemented and has a very wide scope dimension, such as represent the faith, economics, and social.

Yusoff (2011) explained that the zakat system in Islamic Economics is able to encourage income equality and wealth distribution by eliminating the accumulation of assets in some people. It is expected that the distribution of wealth through zakat can reduce the level of inequality and economic inequality in society. Furthermore, it is expected that reducing economic inequality can reduce the level of criminalization and improvement of the socio-cultural community. By distributing zakat to *mustahiq* (zakat recipients), it is expected to be able to raise the standard of living of *mustahiq* to become better and be able to spread goodness.

Djaghballou et al. (2018) explained that zakat is a symbol of prosperity in Islamic economics that guarantees equality and can be trusted to distribute property. With the existence of a sustainable zakat fund, it is expected to be able to help the poor and the needy to become economically productive *mustahiq* to free from poverty. Therefore, the effectiveness of the use of zakat funds can represent how zakat can be catalyst that can help improve the standard of living for those who are poor and needy.

According to Firdaus (2012), the potential for zakat in Indonesia reaches around 217 trillion rupiah that calculated from various sources, including from personal and corporate income. This great potential is equivalent to 3.4% of Indonesia's GDP in 2010. Besides, according to Sudibyo (2018) the potential for collecting zakat can reach 3.4% of total GDP if zakat is applied as a tax deduction.

In fact, based on the study conducted by PUSKAS BAZNAS in 2019, the potential for zakat in Indonesia reaches 233.8 trillion rupiah. With zakat of income being the sector with the highest zakat potential, reaching 139.07 trillion rupiah, and then followed by money zakat, agricultural zakat and zakat of farms. The figure below explains the potential of zakat

in Indonesia based on these sectors.

The amount of potential zakat should be very helpful in tackling the various problems of poverty in Indonesia. In addition, explained in the outlook zakat Indonesia year 2019 published by the National Agency of *Amil Zakat* (BAZNAS) that the trend of public awareness of the importance of paying zakat primarily through the zakat institutions continuous to increase. Of course, this is a good news that should be responded well also by zakat institution, so that the potential acceptance of zakat funds can be maximized, as well as in the distribution of zakat funds.

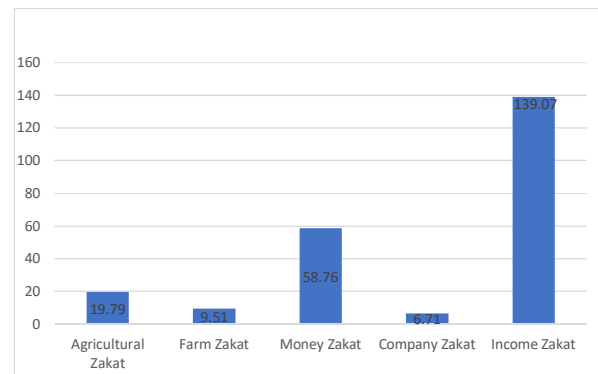


Figure 1 Zakat Potential in Indonesia Based on Income Sector (in Million Rupiah)

Source: PUSKAS BAZNAS, 2020

Various zakat institution that are widespread throughout Indonesia carries out the collection and management of zakat funds in Indonesia. It is because Indonesia is the world's number one largest Muslim-majority country. All zakat institution must carry out evaluation and improvement so that the accumulated zakat funds can be utilized to the fullest. This needs to be considered wisely by all stakeholders of the manager and the recipient of zakat, that the management of zakat and distribution is necessary for good and equitable. Thus, the distribution of wealth - as described previously can be well accommodated.

The efficiency of zakat management is very important, not only to ensure that zakat funds are utilized to the fullest, but also to keep the good name of Islam from things that can cause defamatory. Therefore, measurement of the efficiency of zakat management, either in

receipt until the distribution of zakat funds must continue to be done so that all stakeholders who play a role in the management of zakat can continue to be evaluated properly (Ahmad & Ma'in, 2014).

Saifudin (2013) zakat institutions that are increasingly rising in Indonesia have created an element of competition between other social institutions. Then, it led to negative perspectives from various parties. Not to mention, the operational costs of activities that are considered too large and do not become a point of serious attention are considered a negative boomerang for zakat institutions. The human resource involved is deemed not following the appropriate competence and is considered to have spent too much social funds from *muzakki* who want their zakat funds to be channeled maximally to those in need. From the various negative narratives, while zakat is a highly dignified culture in Islam, it is deemed necessary to measure the efficiency value, especially zakat institutions, to avoid negative narratives regarding zakat institutions in Indonesia.

Various parties have researched zakat efficiency such as Akbar (2009); Ahmad and Ma'in (2014); Wahab and Rahman (2011); Wahab and Rahman (2012), Wahab and Rahman (2012b); Saad and Farouk (2019) like in many Muslim-majority countries, are striving to have a functional Zakat system in search of solutions to the perennial problem of poverty and its damning consequences. Nevertheless, there are still unsettled concerns arising from the current and widespread implementation of dissimilar (diverse; Mohamad Soleh Nurzaman (2010); Zahra et.al (2019) socialization costs, and other operational costs. The results of this study show that the efficiency of Zakat Management Organization in the year 2013 is still better than in 2012 and 2014, both technically (93,50%; Djaghballou et al. (2018) and Parisi (2017). Some of them do the research in various countries such as Malaysia, Nigeria, and Algeria. This research is aimed to analyze the efficiency in collection and distribution process of zakat institutions in Indonesia by the time 2012-2018. Then, by this measured the zakat institution will know what are the factors affect the efficiency. So far, research on the

efficiency of Indonesian Zakat Institutions do not segregate collection model and distribution model. Especially in compare the efficiency score from those processes.

This study aims to compare the level of efficiency of zakat collection and distribution by the zakat institution. In addition, it is hoped that this research can find out what factors affect inefficiencies in the process of collecting and distributing zakat by National Zakat Institution. This research begins with the background on zakat and development in Indonesia. Then proceed with the foundation of theory, previous research, and explanation of the methodology to be used. The next section will explain the results and conclusions of the study.

RESEARCH METHODOLOGY

One of the main problems in the economy is the limited resources that exist to fulfill the relatively infinite desires. So, one of the focus of the discussion in economics is how to be able to allocate this limited resource to fulfill the desire or output in a very as efficiently as possible.

In general, efficiency can be attributed to how output is compared to inputs in a system. According to Ahmad and Ma'in (2014), in the context of economic efficiency explained the ability of a system in general in generating maximum output from the limitation of inputs owned by technology or the right way. Therefore, efficiency occurs when the output rises even with the same input or even if the input is reduced. The economic system can be said to be efficient, if the system can produce more goods or services without adding resources.

The concept of efficiency first discussed by Lovell et al. (1957) consists of two components, namely Technical efficiency and allocative efficiency. Technical efficiency shows how companies can produce maximum output from multiple inputs. Whereas in allocative efficiency shows how the company is able to use the inputs in the maximum proportion despite only the capital and technology that has been available. According to Leibenstein (1996), efficiency in the operational context is when workers or workers and the company as a whole work harder and more effectively than

they usually do.

In conventional management theory, organizational performance is assessed by how well an organization is able to minimize costs and create the maximum profit. Efficiency can be formulated with,

$$Efficiency = \frac{output}{input}$$

Ascarya & Yumanita (2007) explaining the concept of efficiency derived from the concept of microeconomics namely manufacturer theory and consumer theory. Manufacturer theory tries to maximize profits or minimize costs from a manufacturer’s point of view. While the theory of consumer tends to be maximized utility. In the manufacturer’s theory, a production Frontier curve illustrates the connection between the input and the output of the production process. Frontier production curve is described as follows:

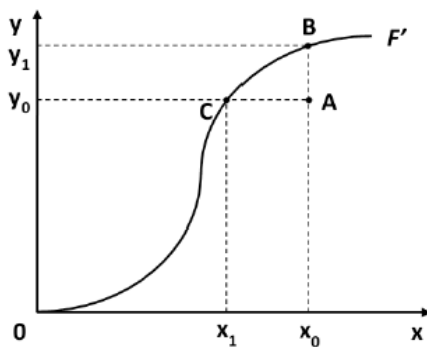


Figure 2 Production Frontier Curve
Source: Ascarya & Yumanita (2007)

In his research, Bauer et al. (1998) explained that the last few years of financial institutions performance calculations focus more on frontier efficiency which measures the deviation of financial institutions by “Best practice” or generally applied to the efficiency frontier. Thus, the frontier efficiency of a financial institution is measured through how the financial institution’s performance is relative to the estimate of the “best” financial institution performance of the industry, with the records of all financial institutions facing the same market conditions.

Yumanita and Ascarya (2006) also explained that frontier efficiency is superior to the standard financial ratios of financial statements. This is because frontier efficiency

uses programming techniques or statistic that eliminates the influence of differences in input prices and other market factors. Frontier efficiency is widely used in regulatory analysis to measure the influence of acquisition and merger, capital regulation, geographical restriction on branches and holding of the Acquisition Company, and deregulation of deposit rates. The indicator measures quantitative objectively by eliminating the influence of market prices and other factors affecting performance.

According to Wahab and Rahman (2012) the economic system will only be efficient if it can produce more products, both goods and services for people with the same resources or even less than they should. Since the 1990s, research on the measurement of efficiency in the public sector or the financial sector in both developing and developed countries using Data Envelopment Analysis (DEA) is constantly evolving. For example, in research conducted by Vitaliano et al. (1999) which calculates the cost efficiency of 520 schools in New York using DEA, Tobit analysis and Frontier Regression (SFR). Similarly, research conducted by (Drake 2001) who investigated technical efficiency and analyzed bank productivity in the UK during the period from 1984 to 1995 using DEA and Malmquist index. From social institution, Berber et al. (2011) calculates the efficiency of social profit enterprise (SPEs) with a two-stage DEA methodology for assessing efficiency in both charitable function and cause delivery.

This research analyzed financial report of zakat institution verified by BAZNAS Indonesia from 2012 to 2018. Based on UU number 23 year 2011 about zakat in Indonesia, it is confirmed by the President of Republic Indonesia in November 25th 2011. So that the assumption is the financial statement of zakat institution followed the new rules in 2012.

This study is a quantitative research with non-parametric approach. The non-parametric approach used is the *Data Envelopment Analysis* (DEA) method to measure the level of efficiency of the Decision-Making Unit (DMU). The basic assumption is that if one DMU can produce Y output of X input, other similar DMUs is expected to perform at the same level, if they are efficient. However, since there are many

DMUs, there will be varying levels of outputs, using varying level of inputs. DEA attempts to identify which of the DMUs are most efficient and point out specific inefficiencies in the other DMUs. The DEA function will be used to analyze the efficiency of the zakat institution, and the data used is the data from the zakat institution financial statements that are the object of research.

Data collection method in this research is through documentation or literature study. Data obtained from documents that have been collected and compiled by other parties. The study was conducted by gathering information

through deepening of literature-literature related to the object of study. Based on the type of data used in the study, this study uses a non-parametric approach. The choice of a combination of input-output variables are based on indicators that affect zakat institution. In this study, the data used came from zakat institution financial statements in the 2012-2018 range. Zakat institution that is the object of this research is the national scale zakat institution with the legalization of institutions as evidenced by a permit from the Minister of Religion.

Table 1 Data Availability

Zakat Institution	Data Availability						
	2012	2013	2014	2015	2016	2017	2018
LAZ Al-Azhar	X	X	X	✓	✓	X	X
BAZNAS	✓	✓	✓	✓	✓	✓	✓
Baitul Maal Muamalat	X	X	X	X	✓	✓	✓
Dompot Dhuafa	X	✓	✓	✓	✓	✓	X
LAZ Daarut Tauhid (DPU DT)	X	X	X	X	X	✓	✓
LAZISNU	X	X	X	X	✓	✓	✓
Rumah Zakat	✓	✓	✓	✓	✓	✓	✓
Yayasan Dana Sosial Al-Falah	X	X	X	✓	✓	X	X

Definition of Variable Operations

The variables in this study consists of a variable *input-output* to be processed by the non-parametric DEA approach. There are various conceptual definitions in defining *inputs* and *outputs* in forming an appropriate efficiency model. (Hadad et al. 2003) explain the concepts used in defining the *input* and *output* relationships in the banking industry, namely the production, intermediation and asset / modern approaches.

In this study, the authors chose to use production and intermediation approaches as did which measures the efficiency of banks in Croatia with these two approaches. The reason,

the production approach sees zakat institution as a producer. The production approach that views from the perspective of cost management with income is in line with level 1 of this study that measures the efficiency of zakat fund collection by zakat institution.

Then the intermediation approach was chosen because this approach sees financial institutions as intermediaries who change and transfer financial assets from units that are overfunded to units that are underfunded. In this case, it is in line with level two of the study that measures the efficiency of zakat distribution by zakat institution.

Table 2 Proxy of Input and Output Variables

Variable	Proxy	Data source
<i>Input Variable</i>		
Administrative and General Expenses	Operating expenses, Office expenses, Administrative and general expenses, Transportation expenses	Funds change report (amil funds)
Amil Fee	Amil expenses, Amil salaries, Amil benefits, Amil pension funds	Funds change report (amil funds)
Socialization Cost	Socialization expenses, Advertising expenses	Funds change report (amil funds)
Number of branches	Number of branches	zakat institution data
Zakat Funds Collected	Amount of Receipt of Zakat Funds	Fund change report (Dana Zakat)
<i>Output Variable</i>		
Zakat Collected	Amount of Receipt of Zakat Funds	Fund change report (Dana Zakat)
Zakat Distributed	Amount of Zakat Fund Distribution	Fund change report (Dana Zakat)

Data Analysis Techniques

The DEA function will be used to analyze the efficiency of the zakat institution. Thanassoulis and Silva (2018) stated that DEA is a method that compares several units that are not comparable (input) with *output* that is not comparable anyway. Charnes et al. (1978) first introduced DEA, this method does not require a production function and the results of calculations are called relative efficiency values. So, according to Prasetyo (2008) it can be said that DEA is a method and not a model.

In applying DEA, the basic assumption is that if one DMU can produce Y output of X input, other similar DMUs is expected to perform at the same level, if they are efficient. However, since there are many DMUs, there will be varying levels of outputs, using varying level of inputs. DEA attempts to identify which of the DMUs are most efficient and point out specific inefficiencies in the other DMUs (Ahmad and Ma'in, 2014).

When data is a panel data, we can assess efficiency and productivity changes over time. However, it is important to understand that measures of efficiency across time may not be comparable. This is because DEA efficiency measures are relative to a frontier specific to a time period and that frontier may move over time. It is possible to measure productivity change over time reflecting the combined effect of the change in a unit's efficiency over

time and the movement of the frontiers against which those efficiencies have been measured (Thanassoulis and Silva, 2018).

There are two DEA models that are often used, namely Charnes, Chooper and Roodes (CCR) models and Banker, Charnes and Cooper (BCC) model (Yumanita and Ascarya, 2006). In this study, the DEA model used is the CCR model that consist of a ratio of weighted multiple inputs and outputs.

Banker, Charnes and Cooper developed the BCC model in 1984. This model states that competition and financial constraints can cause a company not operate at its optimal scale. They propose the assumption of VRS (*Variable Return to Scale*) which means that each addition of n inputs will not cause an increase in n output (can be greater or smaller) as a solution.

The condition when producing greater output called as Increasing Return to Scale (IRS). Moreover, if it produces less and times called as Decreasing Return to Scale (DRS) condition. Efficiency that is calculated by assuming VRS is what is called pure technical efficiency, or can be called Pure Technical Efficiency. An efficient Decision Making Unit (DMU) based on this model is often called technically efficient.

A benefit of DEA for determining efficiency is that DEA additionally yields information concerning the source of identified inefficiencies, and the changes in input

values necessary to bring the examined zakat institution up to efficiency (Berber Philip et al. 2011).

RESULT AND DISCUSSION

The Comparison of Efficiency Score in Zakat Collection and Distribution

The Zakat Institution is an institution that serves to collect and distribute zakat funds. In this case, zakat institution can be interpreted as *amil*. *Amil* itself is an officer who does all activities related to zakat, ranging from the process of gathering, maintenance, to the distribution process, and the task of logging in and out of the zakat fund.

Obviously, zakat institution as *amil* requires funds for operation that do not take less. Thus, Islam gives rights to the *amil* (which in this study is interpreted as zakat institution) to receive part of the property of zakat as a form of reward for their work. There are two opinions on the rate of zakat that can be used by *amil* (Akbar 2009).

The first opinion come from Imam Syafii. According to Imam Syafii, *amil* was given zakat by part of another group of 1/8 or 12.5%. He argued if the wages of *amil* is greater than the other part should be taken from other property outside zakat such infaq, shadaqah, and so forth. (Akbar, 2009).

The performance management of zakat institution is the most important aspect in the national development effort. The achievement of zakat fund goals depends on the aspect of *amil*. Regardless of where the source of *amil* or zakat management funds, zakat institution is expected to maximize all resources, either human resource or others. Zakat institution is expected to be able to improve the quality and quantity of zakat fund collection and distribution.

From table 3, some zakat institution got the optimal efficiency score in zakat collection as if BAZNAS, Baitul Maal Muamalat (BMM), LAZIS NU and Rumah Zakat. The optimal efficiency has been achieved by Rumah Zakat from 2016 to 2018.

In 2016, zakat institutions that have succeeded in achieving optimal efficiency values are BMM, LAZIS NU and Rumah Zakat.

Then in 2017, BAZNAS became one of the zakat institutions that was able to achieve optimal efficiency values following the three previous zakat institutions whose efficiency values were still stable. Then in 2018, only Rumah Zakat and BAZNAS were able to survive at the maximum efficiency value. It can also be noted from table 3 that the lowest efficiency value in the zakat collection process was experienced by the Al-Falah Social Fund Foundation (YDSF) in 2015 with a value of 1% and in 2016 with a value of 24%.

Table 3 Zakat Collected Efficiency Score

Zakat Institution	2012	2013	2014	2015	2016	2017	2018
Al Azhar				0.77	0.88		
BAZNAS	0.55	0.52	0.74	0.8	0.88	1	1
BMM					1	1	0.65
DD		0.73	0.77	0.72	0.55	0.52	
DPU DT						0.94	0.69
LAZIS NU					1	1	0.91
Rumah Zakat	0.37	0.39	0.32	0.69	1	1	1
YDSF				0.01	0.02		

Source: Processed Data from MaxDEA 6.1

Meanwhile, in distribution process (table 4) there are only 2 zakat institutions that are able to achieve optimal efficiency. Namely Baitul Maal Muamalat in 2018 and LAZIS NU in 2017. In contrast to the zakat collection which reached optimal efficiency values earlier, zakat distribution started its optimal efficiency values in 2017. In zakat distribution, the lowest efficiency value in 2012 and 2013 was achieved by Rumah Zakat with efficiency values of 8% and 9%, respectively.

Table 4 Zakat Distribution Efficiency Score

Zakat Institution	2012	2013	2014	2015	2016	2017	2018
Al Azhar				0.75	0.69		
BAZNAS	0.54	0.51	0.52	0.46	0.41	0.55	0.69
BMM					0.66	0.56	1
DD		0.61	0.68	0.61	0.65	0.51	
DPU DT						0.73	0.69
LAZIS NU					0.99	1	0.92
Rumah Zakat	0.08	0.09	0.41	0.56	0.74	0.73	0.68
YDSF				0.53	0.5		

Source: Processed Data from MaxDEA 6.1

Rusydia (2017) classified the efficiency value based on the efficiency scale, namely Fully Efficient (100%), High Efficient (80-99%), Medium Efficient (50-80%) and Low Efficient (<50%). Of the total 31 DMUs analyzed, in the zakat collection process, 9 DMUs were included in the fully efficient group, and 5 DMUs were included in the High Efficient group. 12 DMUs are categorized as Medium Efficient and 5 other DMUs are classified as Low Efficient in the 2012-2018 period. And if it is on average, the average efficiency value in the process of collecting zakat funds is 72.32%, which means it is included in the medium efficiency group.

The same thing happened to the zakat distribution, which achieved an average efficiency value of 61.45%. The difference achieved between the two processes is also not too large, namely 13.03%. Meanwhile, if classified the distribution efficiency values based on the efficiency scale, 2 DMUs are fully efficient, 2 DMUs are high efficient, 22 are middle efficient and 5 are low efficient.

When compared with the average efficiency per year in the year range 2012-2018 Zakat collection has a higher efficiency value compared with zakat distribution. With a trend that is quite volatile. As in figure 3, the biggest difference between collection and distribution happened as amount as 21% in 2017. And for the smallest difference happened in 2018 with 5% score difference. The difference average of zakat collection and distribution's score has a fluctuative trend. It were increasing in 2013, 2016 and 2017. Then it were decreasing in 2014 dan 2018.

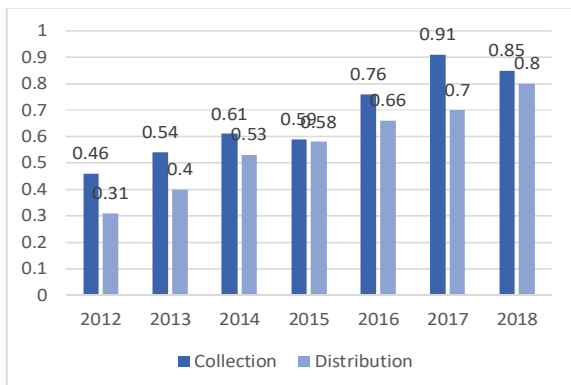
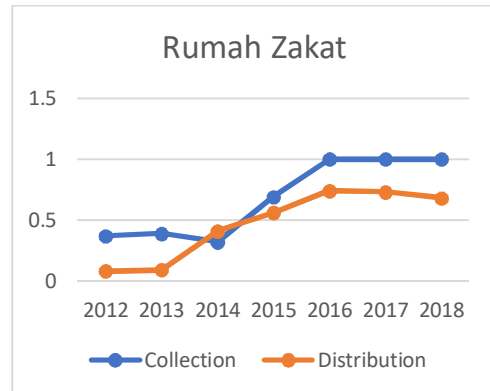
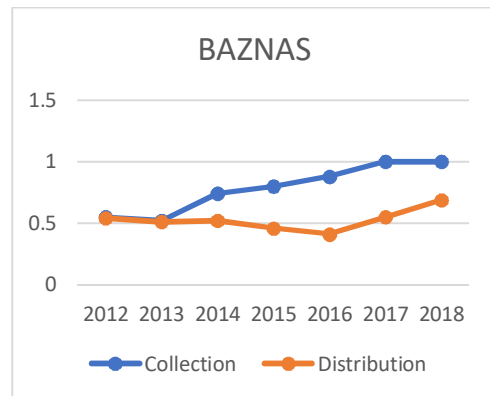


Figure 3 The Comparison of Average Score of Zakat Collection and Distribution

Source: Processed Data from MaxDEA 6.1

In detail, some unique occurrences happened when comparing the efficiency score of both process; collection and distribution. For example, Yayasan Dana Sosial Al-Falah (YDSF) that has a unique trend compared than other zakat institutions. While other zakat institution has the higher score in collection process or fluctuative between the collection and distribution process, YDSF consistently got the higher score in distribution process. YDSF start the period in 2015 and got 1% for zakat collection efficiency score. The opposite happened in zakat distribution. The efficiency score in zakat distribution of YDSF in 2015 is 53% (middle efficient group). The similar pattern happened in 2016. In zakat collection, the efficiency score is 2% and in zakat distribution the efficiency score is 50%.

Another example comes from DPU DT (LAZ Daarut Tauhid). DPU DT has the stagnant score in distribution process (69%) and decrease in collection process. Then in 2018, DPU DT has the actual same score in zakat collection and distribution (69%).



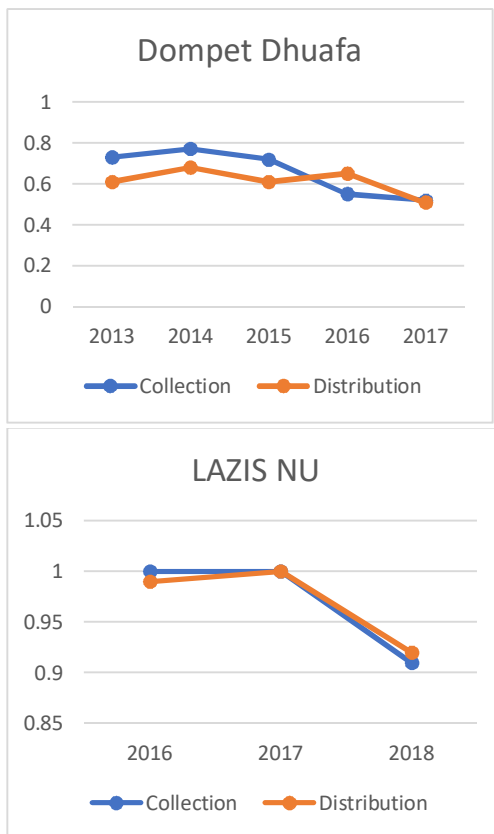


Figure 4 The Comparison of Efficiency Value Between Zakat Institutions

Source: Processed Data from MaxDEA 6.1

The interesting happened in several zakat institution for example BAZNAS, Dompot Dhuafa, Rumah Zakat and LAZIS NU. BAZNAS, as one of the zakat institutions that has complete data, starts the period with a high zakat efficiency value (55%) in collection, and then able to constantly increase its efficiency performance year by year till reach the optimum score of efficiency in 2018. In the zakat distribution, BAZNAS started the period with an efficiency rate that was not much different (54%) and tended to fluctuate from year to year. The highest efficiency value of zakat distribution was 69% in 2018 and the lowest efficiency value occurred in 2016 at 41%. It is quite interesting considering the difference in efficiency values in zakat collection increased by 45% and in zakat distribution only increased by less than half, namely by 15%.

The similar trend happened to Rumah Zakat Indonesia. Rumah Zakat Started the beginning of the period with an efficiency value

of 37% and ended the period very well, optimal efficiency values for 3 consecutive years starting from 2017. The difference in increase from the beginning of the period to the end of the period is 63% with the lowest efficiency value occurs in 2014 with an efficiency value of 32%. With an efficiency trend that is almost similar in the two-zakat management processes, the distribution process for Rumah Zakat started the period with a fairly low efficiency value of 8%. Then it continues to increase over time until at the end of the period it increases by around 60% to 65%. The highest zakat distribution efficiency value occurred in 2016 at 74%.

The next zakat institution is LAZIS NU which is the only zakat institution whose efficiency is perfect in both processes since 2016. LAZIS NU started the period with an optimal zakat collection efficiency value of 100% in 2016, and remained stable until 2017. Then in the zakat distribution process there was an increase from 2016 to 2017 by 1%, from 99% to zakat institutions with optimal efficiency. Both the process ended with a decrease in the efficiency value by 8% to 92% in 2018.

According to Al-Ayubi et al (2018) zakat institutions that have a background of affiliation with certain community groups tend to have a higher efficiency value compared to zakat institutions that do not have any social affiliation. As we know, LAZIS NU is a subsidiary of an Islamic organization in Indonesia, namely Nahdhatul Ulama (NU) which was founded in 1962. As one of the oldest Islamic organizations in Indonesia, it is no wonder that LAZIS NU is able to achieve the most stable efficiency value. and optimally from year to year.

Likewise, LAZ Al-Azhar whose efficiency values tend to be classified as 'middle efficient' to 'high efficient'. This is because LAZ Al-Azhar was founded by the Islamic Boarding School Foundation which was founded in 1952 by well-known national figures. LAZ Al-Azhar itself has been established since 2004. No wonder LAZ Al-Azhar has a high efficiency value.

The same thing happened to Baitul Maal Muamalat. Akbar (2009) in his research also found that zakat institutions that are in a bank environment tend to have higher efficiency compared to zakat institutions that are not in

a bank environment. Baitul Maal Muamalat is a zakat institution founded by Bank Muamalat in 2000. This is reinforced by Al-Ayubi et al (2018) who in their research also classifies zakat institutions within the bank as zakat institutions affiliated with certain organizations. Baitul Maal Muamalat, Al-Azhar and LAZIS NU has the similar trend in efficiency score. The trend is fluctuating and it has the different result between the beginning and final period. For example, Al-Azhar and LAZIS NU has the higher score in zakat collection at the beginning score, and vice versa, the distribution score is higher in final period. Baitul Maal Muamalat has the reverse trend. It higher in zakat distribution at the beginning and zakat collection is higher at the ending of the period.

Dompot Dhuafa has a trend that tends to decreasing in both processes. The difference between the increase and decrease in the value of efficiency each year is not as significant as that of several other zakat institutions. The difference in the efficiency value of Dompot Dhuafa's zakat collection from the beginning to the end of the period is -21%, which means that the efficiency value has decreased. Dompot Dhuafa started the period with an efficiency value of 73% and ended the period in 2017 with an efficiency value of 52%. In the zakat distribution process, the difference that occurs is -10% with the end of the period the efficiency value is reduced to 51% after starting the period by 61%.

Time as Benchmark

Table 5 Time as Benchmark

Collection		Distribution	
DMU	TAB	DMU	TAB
2016-BMM	12	2017-LAZIS NU	20
2016-LAZIS NU	11	2018-BMM	29
2016-Rumah Zakat	5		
2017-BAZNAS	2		
2017-BMM	15		
2017-LAZIS NU	0		
2017-Rumah Zakat	0		
2018-BAZNAS	4		
2018-Rumah Zakat	6		

Source: Processed Data from MaxDEA 6.1

Not only measured the efficiency score, MaxDEA version 6.1 know time as benchmark from another DMU that has been optimally the efficiency score. The function of time as benchmark is to know how many times optimal efficiency score of zakat institutions has been used as a benchmark for another inefficient zakat institution. From table 5, showed that Baitul Maal Muamalat is known as the benchmarks for another DMU in both sides.

Showed that in zakat collection, 2017 Baitul Maal Muamalat (BMM) is one of the best zakat institution that could manage their fund. 2017 Baitul Maal Muamalat (BMM) is used as reference or benchmark for other zakat institution or DMU 12 times. And as if in collection sides, in distribution process Baitul Maal Muamalat being the benchmarks for another 29 DMU in distribution process.

Potential Improvement Analysis

To increase the performance of inefficient zakat institutions in Indonesia, the analysis of potential improvement is using the latest years of available data of each zakat institution. The purpose of potential improvement analysis is to explain how much the actual value that must be achieved by zakat institution in the future to maximize their efficiency score. Potential improvement for output variables are based on output orientation approach, while potential improvement for input variables are based on input orientation approach. The potential improvement result is revealed in table 6.

As shown in the table 6, for the DMU whose efficiency score is optimal (has achieved perfect efficiency, 100%) then the potential improvement's value is 0 or there is no potential improvement. In other words, the actual value and the projection value are the same amount. Meanwhile, for DMU that has not achieved the optimal score there is a gap between actual and the projection in the MaxDEA results. Negative values for input variables require zakat institutions to minimize their inputs for certain percentages. On the other hand, positive values for output variables advocate zakat institutions to increase their performance in achieving their potential output.

Table 6 Potential Improvement

Zakat Institution	Collection (%)				Distribution (%)				
	Administrative and General Expenses	Amil Fee	Number of Branches	Socialization Cost	Zakat Collected	Administrative and General Expenses	Amil Fee	Zakat Collected	Zakat Distributed
2016 Al-Azhar	0	0	0	-68	13	0	-21	0	43
2016-YDSF	0	-44	0	-24	3799	-93	-98	0	97
2017-DD	-11	0	0	-90	92	-24	-5	0	94
2018 DPU DT	0	0	0	0	43	0	-30	0	44
2018-BAZNAS	0	0	0	0	0	0	-70	0	44
2018-BMM	-11	-11	-4	0	52	0	0	0	0
2018-LAZIS NU	0	-10	0	-90	9	0	0	0	9
2018-Rumah Zakat	0	0	0	0	0	-42	0	0	46
Average	-2.75	-8.125	-0.5	-34	501	-19.875	-28	0	47.125

Source: Processed Data from MaxDEA 6.1

On average, zakat institutions should improve their performance in zakat collection. Baznas and Rumah zakat are examples how to optimize their collection. In the same time, they may reduce other costs, especially their socialization cost. It is similar to Wulandari (2014) that found the socialization cost and total assets contribute the most in inefficiency of zakat institutions.

In zakat collection, YDSF (Yayasan Dana Sosial Al-Falah) is zakat institution with the lowest efficiency score. In table 3, the efficiency score of YDSF in 2015 is 1%. According to potential improvement analysis, YDSF must increase their zakat collection for almost four thousand percents than what they achieved in 2016.

CONCLUSION

There are 4 zakat institutions that achieve optimum efficiency score in collection. With the details, in the year 2016 Baitul Maal Muamalat, LAZIS NU and Rumah Zakat achieved the optimum score, while in 2018, only BAZNAS and Rumah Zakat that could reach to optimum score. Zakat collection achieved an average efficiency value of 72.32%. And the most widely benchmark of zakat institution is Baitul Maal Muamalat (2017) which is 15 times.

In the distributed zakat funds, there are two institution that could reach the optimal efficiency score they are LAZIS NU (2017) and Baitul Maal Muamalat. Zakat distribution achieved an average value of 61.45%. Then,

LAZIS NU became the benchmark of 20 DMUs and BMM became the benchmark of 29 DMUs. When compared the efficiency score of zakat collection and distribution, zakat collection has a higher efficiency value compared with zakat distribution with a quite volatile trends. The biggest difference happened in 2017 and the smallest happened in 2018.

Based on potential improvement analysis, in the process of zakat collection, zakat institutions are advocated to do more in zakat collection while handling inefficient socialization cost. In the same time, they should distribute more zakat funds while optimizing their staff/amil in zakat distribution.

For future research, it is recommended to add more national zakat institutions in the study. Due to Covid 19 Pandemic, we are only able to get 8 zakat institutions. Moreover, the potential improvement analysis will be better if the measurement is based on the same latest year of financial statements.

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