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# Enhancing Efficiency Performance Measurement of Zakat Institutions: A Proposed New Index

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## Abstract

Law number 23 of 2011 concerning the management of zakat mandates that the badan amil zakat nasional (BAZNAS) and lembaga amil zakat (LAZ) must manage zakat funds efficiently and effectively. BAZNAS currently utilises four types of ratios to measure efficiency performance separately: 1) collection expenses ratio, 2) operational expenses ratio, 3) human resource expenses ratio, and 4) amil fund ratio. However, most of studies related to efficiency performance assessment of zakat institutions use the data envelopment analysis (DEA) index. The DEA index measures efficiency by comparing the amount of output and input, but its input and output components are flexible, depending on the researcher's perspective, and it does not explicitly incorporate the 12.5% amil rights. This study aims to propose a new index to measure efficiency performance in a more appropriate and integrated manner, referring to Indonesian financial accounting standard (IFAS) 401, the DEA index, and the amil fund ratio. This proposed index is expected to be more accurately assess the efficiency performance of zakat institutions.

**Keywords:** efficiency, zakat institutions, DEA index, amil rights, IFAS 401.

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## I. INTRODUCTION

Indonesia is the country with the largest Muslim population in the world. According to the official website of the central statistics agency ([www.bps.go.id](http://www.bps.go.id)) the total Muslim population in 2024 will reach 87% of Indonesia's total population of 279.44 million. One of the obligations of Muslims is to pay zakat after fulfilling certain conditions (nishob). The national amil zakat agency (BAZNAS) publishes that the amount of zakat funds paid and distributed through BAZNAS and lembaga amil zakat (LAZ) zakat institutions is increasing from year to year. The amount of collected zakat in 2020 reached 12.4 trillion, in 2021 it was 14.2 trillion, in 2022 it was 22.5 trillion, and in 2023 it reached 32.3 trillion rupiah (PUKAS BAZNAS RI, 2024). The same period also shows an increase in the amount of zakat distributed reaching 11.5 trillion, 14 trillion, 21.6 trillion, and 31.2 trillion rupiah. The growth of collected and distributed zakat is accompanied by the growth of the number of zakat institutions in Indonesia. In 2024, the number of BAZNAS at provincial level reached 34, and 514 at district/city level, while the number of LAZ at national level reached 44, 35 LAZ at provincial level, and 74 LAZ at district/city level.

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Indonesian government Undang-Undang Republik Indonesia no. 23 tahun 2011 tentang pengelolaan zakat (BPK RI, 2011) requires the collection and distribution of zakat funds to apply the principles of Islamic law, trustworthiness, legal certainty, integration, and accountability, with the aim of increasing the effectiveness and efficiency of zakat management, therefore that community welfare and poverty reduction can be realized. (PUSKAS BAZNAS RI, 2021) as a government agency that regulates all zakat institutions in Indonesia has four instruments to assess the performance and efficiency of zakat institutions, including: 1) collection expenses ratio, 2) operational expenses ratio, 3) human resource expenses ratio, and 4) amil right ratio. Unfortunately, if we combine these four ratios, the amount of zakat funds used for the operations of zakat institutions reaches 36.25%, far exceeding the most amil funds of 12.5% of collected zakat allowed by the ministry of religious affairs (Kemenag, 2020) for operational expenses.

BAZNAS (Peraturan BAZNAS no. 4, 2018) mandates zakat institutions to periodically prepare financial reports in accordance with applicable financial accounting standards, namely Indonesian financial accounting standards (IFAS) 401 and 409. These two IFAS regulate the reporting of zakat fund financial management in detail, including: recording, presenting and disclosing zakat fund receipts, distributing zakat to eight zakat recipients, and allocating amil funds for zakat institution operations.

Furthermore, very few studies have been conducted to measure the efficiency of zakat institutions. Wahab and Rahman (2011) developed data envelopment analysis (DEA) index to assess efficiency performance of zakat institutions in Malaysia. DEA index compares total output divided by total input. The efficiency value is on a scale of 0 to 1, where if the score is close to 1, the more efficient the zakat institution manages the zakat funds. The results of several studies aimed at assessing the efficiency level of zakat institutions using DEA index were conducted by Djaghballou et al. (2018), Amalia (2020), Burhanudin and Indrarini (2020), Kartini et al. (2021), and Ryandono et al. (2021) were classified as highly efficient. The input and output components in the DEA index are flexible depending on the needs and components being assessed.

On the other hand, using DEA index, research conducted by Huda et al. (2014), Rusmini and Aji (2019), and also Hasan and Muhammad (2023), resulted that BAZNAS or LAZ, have inefficient performance. This inefficiency was caused by the excessive use of the institution's operational funds, the high operational costs incurred, and the large costs for incentives and human resource development. Republika online news (Sulistya, 2022) and Kompas online (Chaterine & Asril, 2022), stated that BAZNAS and FOZ (zakat management association) officials reminded that the total zakat funds used for the operations of zakat institutions, including employee salaries and program socialization expenses, amounted to 12.5% of collected zakat. This is because some zakat institutions use more than 12.5% of zakat funds for operations.

The input and output components of the current DEA index do not yet include amil rights in accordance with regulations. Meanwhile, BAZNAS's efficiency performance assessment instruments are not integrated, and efficiency ratios are measured separately. Thus, if each ratio is combined, the total amil rights reach 36.25% of the total zakat collected. From an accounting point of view, the DEA index and BAZNAS ratios do not yet accommodate Indonesian Financial Accounting Standards (IFAS) 401 and 409, which regulate the recognition, recording, presentation, and disclosure of operational expenses and amil rights.

Therefore, it is very important to develop an index that measures the efficiency performance of zakat institutions that is easy to use, both as a self-assessment of the zakat institution itself and for research development. Referring to the DEA index developed

by Wahab and Rahman (2011), this study proposes a new DEA index by incorporating 12.5% of amil funds and the distribution of zakat to parties other than amil as output components, and the total zakat collected as an input component, where each output component will be weighted to categorize the level of efficiency as highly efficient, efficient, fairly efficient, less efficient and inefficient. Incorporating amil funds as an input component to see the compliance of the zakat institution in following BAZNAS regulations, while including the distribution of zakat other than amil to see the extent of the zakat institution's ability to distribute zakat funds. Referring to the DEA index, the efficiency scale is from 0 to 1, where the closer to 1, the more efficient the zakat institution is in managing zakat funds. To the best of the author's knowledge, this proposed index is the first study to be conducted.

## **II. LITERATURE REVIEW**

### **2.1. Data Envelopment Analysis (DEA) Index**

According to conventional economic theory, a system's economic efficiency refers to its ability to produce the greatest amount of desired output given the inputs and available technologies. According to Farrell (1957), technical efficiency (TE) and allocative efficiency can be used to gauge economic efficiency. Allocative efficiency measures the firm's capacity to use the inputs in the best combinations possible given the pricing and production technologies available. Technical efficiency measures the firm's ability to produce the most output from a given set of inputs. After that, the two are merged to produce a measurement of overall economic efficiency. The two are then combined to create an indicator of overall economic efficiency (Wahab & Rahman, 2011).

Wahab and Rahman (2011) developed DEA index to assess efficiency performance of zakat institutions. DEA index compares total output divided by total input, where the input component consists of the number of employees and total expenditure, while the output component consists of the amount of zakat funds collected, the amount of zakat funds distributed, the number of zakat payers, and the number of zakat recipients.

### **2.2. BAZNAS Efficiency Measurement Instruments**

According to BAZNAS regulation no. 1 of 2016 (BAZNAS RI, 2016) and decree of the minister of religious affairs of the Republic of Indonesia no. 606 of 2020 (Kemenag RI, 2020) concerning the amount of amil rights, state that the amil rights from zakat funds are a maximum of 12.5% of collected zakat.

BAZNAS RI (2021) has four ratios to assess efficiency level of zakat institutions, yaitu: (1) collection expenses ratio, (2) operational expenses ratio, (3) human resource expenses ratio, and (4) amil right ratio, where each ratio has a weighting to determine the level of efficiency, namely: highly efficient, efficient, fairly efficient, less efficient, and inefficient.

#### **2.2.1. Collection expenses ratio**

Collection expenses ratio aims to assess how much funds are needed in collecting zakat, by comparing the total expenses for raising zakat collected to the total zakat collected, where the weighting of each category is as follows:

Table 1  
Criteria of Collection Expenses Ratio

Ratio (%)	Rank	Weighted Average	Score	Classification
≤ 5%	1	0.33	0.33	Highly efficient
5.1% - 7.5%	2	0.33	0.66	Efficient
7.6% - 10%	3	0.33	0.99	Fairly efficient
10.1% - 12.5%	4	0.33	1.32	Less efficient
≥ 12.5%	5	0.33	1.65	Inefficient

2.2.2. Operational expenses ratio

Operational expenses ratio reflects the efficiency in managing the proportion of expenses in carrying out its operational activities. This ratio is calculated by comparing operating expenses to the receipt of amil rights in one period. The weighting of each category is as follows:

Table 2  
Criteria of Operational Expenses Ratio

Ratio (%)	Rank	Weighted Average	Score	Classification
≤ 10%	1	0.33	0.33	Highly efficient
11% - 15%	2	0.33	0.66	Efficient
16% - 20%	3	0.33	0.99	Fairly efficient
21% - 25%	4	0.33	1.32	Less efficient
>25%	5	0.33	1.65	Inefficient

2.2.3. Human capital expenses ratio

Human capital expenses ratio is to measure the performance of human capital against total fund raising by comparing the total cost of human capital to total fund raising. The weighting of each category is as follows:

Table 3  
Criteria of Human Capital Expenses Ratio

Ratio (%)	Rank	Weighted Average	Score	Classification
≤ 10%	1	0.33	0.33	Highly efficient
11% - 15%	2	0.33	0.66	Efficient
16% - 20%	3	0.33	0.99	Fairly efficient
21% - 25%	4	0.33	1.32	Less efficient
>25%	5	0.33	1.65	Inefficient

2.2.4. Amil fund ratio

Amil fund ratio is used to measure how much of the funds raised is allocated to amil funds. The amil rights ratio in PERBAZNAS no. 1 of 2016 (BAZNAS RI, 2016) describes the amount of amil rights on funds raised is a maximum of 12.5% of zakat collected funds. This ratio is measured using amil right of zakat divided by collected zakat. The weighting of each category is as follows:

Table 4  
Criteria of Amil Fund Ratio

Ratio (%)	Rank	Weighted Average	Score	Classification
≤ 12.5%	1	0.33	0.33	Highly efficient
12.6% - 15%	2	0.33	0.66	Efficient
15.1% - 17.5%	3	0.33	0.99	Fairly efficient
17.6% - 20%	4	0.33	1.32	Less efficient
>20%	5	0.33	1.65	Inefficient

2.3. Indonesian Financial Accounting Standards (IFAS) 401

IFAS 401 appendix C regulates the financial statements of zakat institutions in Indonesia (IAI, 2022) consist of: (1) statement of financial position, (2) activity report, (3) cash flow statement, and (4) notes to the financial statements. The activity report consists of: (1) income, which includes zakat receipts from individuals and business entities; (2) expenses, namely zakat distribution to the eight zakat recipient groups; (3) opening balance of zakat funds, namely zakat funds that have not been distributed in the previous period; and (4) closing balance of zakat funds, namely zakat funds that have not been distributed in the current period.

The final balance of zakat funds and the balance of amil funds are also presented in the statement of financial position as net assets. Net assets in the financial position report of a zakat institution are equivalent to equity in the statement of financial position for a general business entity. The activity report presents in detail the amil’s share of zakat receipts, which are allocated to employee salaries, operating expenses, and zakat program socialization expenses. It is important to note that the smaller the final balance of zakat funds, the greater the institution’s ability to distribute zakat funds, and vice versa.

2.4. Previous Research

This section focuses on previous research that assesses the efficiency performance of zakat institutions that use the DEA index along with the input and output components of each study.

Table 5  
Previous Research

Author/s	Input/s	Output/s
Wahab and Rahman (2011)	<ul style="list-style-type: none"><li>• The number of employees</li><li>• Total expenditure</li></ul>	<ul style="list-style-type: none"><li>• Zakat funds collected</li><li>• Zakat funds distributed</li><li>• The number of zakat payers</li><li>• The number of zakat recipients</li></ul>
Suhail et al. (2019)	<ul style="list-style-type: none"><li>• Operational expenses</li><li>• Personnel expenses</li><li>• Socialization expenses</li></ul>	Distributed zakat
Amalia (2020)	<ul style="list-style-type: none"><li>• Operational expenses</li><li>• Personnel expenses</li><li>• Zakat collected</li></ul>	Distributed zakat
Burhanudin and Indrarini (2020)	<ul style="list-style-type: none"><li>• Operational expenses</li><li>• Collected zakat</li></ul>	Distributed zakat
Kartini et al. (2021)	<ul style="list-style-type: none"><li>• Personnel expenses</li><li>• Socialization expenses</li><li>• Other operational expenses</li></ul>	<ul style="list-style-type: none"><li>• Collected zakat</li><li>• Distributed zakat</li></ul>
Hasan and Muhammad (2023)	<ul style="list-style-type: none"><li>• Operational expenses</li><li>• Personnel expenses</li><li>• Total assets</li></ul>	<ul style="list-style-type: none"><li>• Collected zakat</li><li>• Distributed zakat</li></ul>

Based on Table 5, this study will refer to the DEA index, where the input component is the total zakat collected and the output component includes the amount of zakat funds distributed to amil and the amount of funds for non-amil, as in Amalia’s (2020) study, but will be weighted for each zakat distribution.

III. RESEARCH METHODOLOGY

Referring to the purpose of this study, which is to develop a new DEA index, in accordance with the developmental research approach (Richey & Klein, 2005). Developmental research approach focus at developing new models, procedures or theories that can be applied in various contexts (Richey & Klein., 2007). The main concept of developmental research is to develop new theories or models, as well as the implementation of research results for improvement or innovation. This is in line with the objective of developing DEA index for efficiency performance assessment of BAZNAS and LAZ. Besides using developmental research type two, this study also uses a positivism approach (Neuman, 2014) that focuses on the use of objective and quantitative scientific methods. Positivistic research involves observable measurements. DEA index is a non-parametric method used to measure the relative BAZNAS and LAZ efficiency based on total input and output.

IV. RESULTS AND DISCUSSIONS

4.1. Input

Referring to Table 5, the new DEA index uses the total collected zakat as an input component, in accordance with the input component used by Amalia (2020) and Burhanudin and Indrarini (2020). The activity report according to IFAS 401 regulates the initial balance of zakat funds, zakat receipts during the period, and the final balance of zakat, so that the total zakat collected is the initial balance of zakat funds plus zakat receipts during the period.

4.2. Outputs

This study also uses the output component in Table 5, namely distributed zakat, but the distributed zakat component is broken down into 2 things, namely allocations for amil and non-amil funds. The amil fund component will be weighted according to Table 4. The elements included in the amil fund component include: employee salaries, operational expenses of the zakat institution, and expenses for socializing the zakat program.

In contrast to the allocation of amil funds, the weighting for the allocation of zakat for non-amil uses the average percentage of funds distributed. The average percentage uses financial reports published by 15 provincial BAZNAS, 24 national LAZ, and 12 provincial LAZ. The average percentage is calculated based on the total percentage of zakat collected in the current period, which is distributed to non-amil.

Table 6  
Criteria of Non-Amil Fund Ratio

Ratio (%)	Rank	Weighted Average	Score	Classification
78.1% - 87.5%	1	0.33	0.33	Highly efficient
68.6% - 78.0%	2	0.33	0.66	Efficient
59.1% - 68.5%	3	0.33	0.99	Fairly efficient
49.6% - 59.0%	4	0.33	1.32	Less efficient
40.0% - 49.5%	5	0.33	1.65	Inefficient

4.3. Proposed New DEA Index

$$\lambda yY_j \dots\dots\dots$$

1

Where:  
λy: weight assigned to Y<sub>j</sub>, and  
Y<sub>j</sub>: distributed zakat for non-amil.

From the formulation of the output components, the new DEA index is as follows:

$$\frac{\sum_{j=1}^m \lambda_a A_j + \lambda_y Y_j}{\sum_{i=1}^n X_i} \dots\dots\dots 2$$

Where:

$\lambda_a$ : weighted average assigned to  $A_j$ ,

$A_j$ : distributed zakat for Amil,

$\lambda_y$ : weighted average assigned to  $Y_j$ ,

$Y_j$ : distributed zakat for non-Amil, and

$X_i$ : collected zakat

## V. CONCLUSION AND RECOMMENDATIONS

### 5.1. Conclusion

The proposed new DEA index is more accurate as an instrument for measuring the efficiency performance of zakat institutions which is easy to use both as a self-assessment tool for the zakat institution itself and as a research development. This index can be used by zakat institutions to measure the extent to which they comply with regulations related to amil rights. In addition, the new index uses more detailed output components, incorporating the opening balance of zakat, zakat receipts for the current period and the closing balance of zakat. The total amount of zakat revenue in the current period, which shows an increasing trend from year to year, illustrates that zakat institutions are increasingly trusted by the public to manage zakat. In addition, the increasing trend illustrates that zakat institutions are increasingly aggressive and innovative in raising zakat.

The amount of the initial balance and the final balance of zakat funds illustrates the ability of zakat institutions to distribute zakat to the eight zakat recipient groups. The smaller the number, the more efficient the management of zakat funds. However, if the percentage of the zakat fund balance is still relatively large, ranging from 50% to 60%, the manager can evaluate and analyze this weakness. Managers can re-map the needs and number of zakat recipients, by digging deeper into the needs of each of the eight zakat recipient groups to improve welfare.

### 5.2. Recommendations

The research also has certain limitations. Firstly, the new DEA index does not use more detailed operational burden components, which aim to identify inefficient burden groups that need to be trimmed. Thus, future research needs to be developed using this type of operational burden, which of course still uses the weighted average. Secondly, to test accuracy, it is necessary to make a comparison by measuring the efficiency performance between the new DEA index and the DEA index developed by Wahab and Rahman (2011) for the same BAZNAS and LAZ.

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