ZAKAT, INFAQ, SADAQAH ON MUSTAHIK INCOME
TO REALIZE NO POVERTY IN INDOONESIAN ZAKAT INSTITUTION

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\begin{abstract}
The issue of poverty has become a part of Sustainable Development Goals (SDGs). Islam believes poverty must be sought and given concrete solutions through philanthropic instruments such as zakat, infaq, and sadaqah (ZIS). However, ZIS management will be more optimal if implemented by the Amil Zakat Institution or Lembaga Amil Zakat (LAZ). Thus, this research aims to determine the role of ZIS on mustahik's income for realizing SDGs at the Indonesian zakat institution. The research uses a quantitative method with a comparative approach. The Wilcoxon test will test the data using a different test between mustahik's income before and after being given ZIS funds. In addition, this study also uses several SDGs' indicator metadata, measured through the mustahik's income. Respondents from this research study were mustahik of the ZIS funds provided by Lembaga Manajemen Infaq (LMI), a zakat institution, with a total of 355 respondents spread across the provinces of East Java, South Sumatra, Riau Islands, and South Kalimantan. The results show a difference in the income of LMI mustahik before and after being given ZIS funds. If viewed from the SDGs' indicator metadata perspective, the distribution and utilization of ZIS become essential in realizing no poverty. The existence of LAZ has an essential role in supporting the SDGs, especially in the equitable distribution of income, and can be an instrument in alleviating poverty. However, suggestions for future research are the need for an approach other than income and also need to be measured using metadata other than the SDGs indicator no poverty.
\end{abstract}

INTRODUCTION

Poverty is one of the problems that occur in Indonesia. Poverty also affects civilization's quality, economic, social, education, and health. Even though the government budget for programs provided for yearly poverty is getting bigger, the poverty reduction occurs in less significant amounts. For example, it was recorded that in March 2020, the percentage of poor people in Indonesia reached 9.78%. This number increased by 0.56% compared to September 2019 (Badan Pusat Statistik, 2020).

The phenomenon of poverty in Indonesia has become a common problem, not just an individual problem or only from certain groups. Islam views poverty must be sought and given concrete solutions. Fair income distribution is one of the ways to
reduce poverty levels, especially extreme poverty in Indonesia (Herianingrum et al., 2020).

Poverty has been mentioned in Quran, and there are no less than 82 verses that contain the command to pay zakat and the command to establish prayer, whether there are commands that use the pronunciation of sadaqah or zakat. Of these verses, among them are makkiyyah verses. That is marked by Islam's attention to poverty alleviation and social problems of poverty reduction (Arif, 2010).

According to Mardiantari (2019), one of the instruments used in Islam to overcome the problem of poverty in Indonesia is the collection of ZIS from people who have excess assets. Then, ZIS funds will be allocated to people in need. Management of zakat in Indonesia has two ways: consumptively and productively. Consumptive giving means distribution given to mustahik to meet basic needs. While giving productive zakat means that the distribution of ZIS is not directly consumed by mustahik but in the form of business capital, which aims to empower, and the business results can be consumed by mustahik.

The productive ZIS concept has deep planning and implementation concepts, such as examining the causes of the absence of working capital and mustahik poverty. According to this problem, careful planning is needed because all mustahik also can not necessarily be given productive zakat. With professional management, Amil Zakat Institution or Lembaga Amil Zakat (LAZ) has standards and procedures related to the criteria for mustahik who can receive this productive zakat (Mardiantari, 2019).

Suratno (2017) revealed that the empowerment activity, zakat funds for productive activities, will be more optimal if implemented by LAZ because have focuses on the allocation, utilization, and distribution of zakat funds. Zakat institution not only provides then abandons it but also provides assistance, guidance, and training by experts so that the ZIS funds can be distributed as working capital, impacting a decent and independent life.

The National Zakat Statistics Book issued by Amil Zakat National Agency or Badan Zakat Nasional (BAZNAS) and law number 23 of 2011 explains that the contribution of zakat is to support the Sustainable Development Goals (SDGs). It states that zakat is an Islamic philanthropy instrument aiming to improve justice and community welfare. Furthermore, it explained that the management of zakat aims to improve the effectiveness and efficiency of services in the management of zakat and increase the benefits of zakat for realizing community welfare and poverty alleviation (BAZNAS, 2016).

Maksum et al. (2018) saw the development, especially in Indonesia. The parties saw each other's potential resources, including funding for achieving SDGs from many sectors, including zakat. Judging from the types of programs carried out by zakat work, it is inevitable that there will be a clear cut towards the goals of achieving the SDGs. For example, poverty, hunger eradication, quality education, water, and sanitation.
Therefore, zakat is an instrument with a strategic role and contribution to achieving the SDGs. In addition, zakat also aims to alleviate poverty and promote the economy as an instrument of economic distribution.

Meanwhile, the SDGs are included in an agreement by the world community to create a world free from poverty and live in dignity, justice, prosperity, and cooperation. Therefore, LAZ needs to have poverty standards based on the regions in which they operate. In addition, because the purpose of zakat is to alleviate poverty among the people, zakat institutions must capture and reach the community (Ahmed et al., 2017).

Several previous studies have explained the relationship between zakat and SDGs. Suprayitno et al. (2017) found that zakat has a positive and significant effect on SDGs in five Malaysian states. Aziz et al. (2020) found that zakat was able to reduce multidimensional poverty and made a significant contribution to several SDGs in Pakistan. That means there is no direct data collection for each mustahik of the zakat funds. In addition, several studies discuss the role of the Islamic social fund and zakat in realizing the SDGs in general (Amalia et al., 2020; Dembele & Bulut, 2021) and specifically on SDGs number 2 which focused on zero hunger (Abduh, 2019).

However, some empirical studies above have not discussed the role of zakat fund management carried out by LAZ in realizing SDGs number 1 (no poverty). In addition, the data used are still macroeconomic, such as the human development index in Malaysia (Suprayitno et al., 2017) and the multidimensional poverty index in Pakistan (Aziz et al., 2020). Moreover, research conducted by Abduh (2019); Amalia et al. (2020); Dembele and Bulut (2021) is still at the conceptual level about the role of zakat and the Islamic social fund. Therefore, this study tries to fill the gap by focusing on the role of ZIS, managed directly by the LAZ. It also looks at changes before and after funds are given to mustahik, using the SDGs no poverty indicator metadata. In addition, this study also conducts a different test related to the mustahik's income index to prove the hypothesis that had been proposed.

The object of this research is one of zakat institutions, namely Lembaga Manajemen Infaq (LMI). The institution has been a national amil zakat institution since 2016 and has received an extension permitted by the Religion Ministry of Republic Indonesia with the number 672 of 2021. LMI has eight representative offices spread across thirteen provinces. In addition, several LMI was national zakat institutions with the best national utilization in 2017. Besides that, LMI has two approaches to fulfilling the needs of mustahik, namely charity and empowerment. Both of these approaches aim to transform toward a better standard of living.

Thus, this research aims to determine the role of ZIS on mustahik's income for realizing SDGs at the Indonesian zakat institution, specifically LMI. The reason for choosing income is because it is one of the indicators to determine someone in the
poor category and how it impacts the SDGs indicators: no poverty. In addition, it can enrich the literature on ZIS and SDGs. The practical implications of this research for LMI can be a reference for evaluating programs that have been carried out to continue improving performance in utilizing ZIS funds. Implications for mustahik, especially those who have not been eradicated from poverty, will be the information for LMI to immediately carry out further interventions. In addition, the implication for policymakers is to provide an overview of the important role of ZIS in realizing the SDGs. Thus, the policies taken can increase public awareness to pay ZIS through zakat institutions and not be distributed directly to mustahik.

LITERATURE REVIEW
Zakat, Infaq, Sadaqah (ZIS)

In Islam, sadaqah has material and non-material forms. The first includes infaq (charity), zakat, and waqf, while the second includes smiles and actions that can make others happy. The first category is defined based on several verses in the Quran, including Surah Al-Baqarah verse 264 and Al-Mujādilah verse 12 for infaq, Surah Al-Baqarah verse 276 for waqf, and Surah At-Taubah verse 58 for zakat. The second category is based on the hadith of the Prophet Muhammad, narrated by Imam Al-Bukhari, who said that all good deeds are sadaqah (Abduh, 2019).

Infaq is a personal charity that can be given as money or tangible goods. There is no minimum and maximum amount for infaq. The purpose of infaq can vary, and the recipients are general and not limited to specific groups of people. There is no limit to the use of infaq funds. The funds can be used immediately for consumption or invested in productive projects or certain economic activities for future income. Munfiq, or people who give infaq, must complete their financial obligations such as debts, zakat, or oaths before giving infaq to others (Abduh, 2019).

Zakat is one of the five pillars of Islam, obligatory for wealthy Muslims as prescribed by sharia. Zakat has various goals: spiritual, economic, and social zakat, community welfare, reducing economic inequality, empowering those who need it, and eliminating poverty (Tahir & Oziev, 2018). Zakat is a practice contained in Islamic principles, which is obligatory. In comparison, infaq and sadaqah are sadaqah that is not mandatory practices (sunnah) by Allah SWT (Herianingrum et al., 2020). Zakat is one of the instruments that can reduce poverty and contribute to the overall economy by increasing the distribution of wealth in the economy, providing income for various economic activities, and improving infrastructure for economic development (Ayuniyyah et al., 2018).

Furthermore, ZIS provides resources that reduce poverty by providing basic needs for all people (Yaumidin, 2008). Kahf (1997) stated that the primary purpose of zakat, in particular, is to achieve socio-economic justice. Zakat is simple to transfer a specific portion of the wealth of rich people to be allocated to the poor. Zakat can also
have a macro effect: on consumption behavior, government spending, and investment. Karim (2002) states that zakat also positively correlates with economic growth.

Ali (1988); Zaman (1993) explain that the purpose of zakat is: 1) elevating the status of the poor; 2) helping solve the problems of the gharimin (a person who owes a debt but is unable to pay it), ibn sabil (a traveler who cannot return to his hometown because they run out of supplies or money), and other mustahik; 3) spreading and fostering brotherhood among Muslims and humans in general; 4) eliminating the miserliness and greed of property owners; 5) remove the nature of envy and envy (social jealousy) from the hearts of the poor; 6) bridging the gap between the rich and the poor in society; 7) develop a sense of social responsibility in one's self, especially for those who have property; 8) educating people to be disciplined in fulfilling their obligations and surrendering the rights of others to them; 9) means of distributing income to achieve social justice.

Poverty

According to the United Nations Development Program (UNDP), poverty is categorized as poor if they have expenditures below US$2 per day. According to the Hanafi in Amalia (2010), poor people are people who have permanent jobs but cannot fulfill their daily needs. Lister's (2014) opinion that poverty is a multidimensional factor that can be identified with other contexts, namely cultural, social, and historical. Poverty is a relative term that can only be defined with other relative subjects, namely the materials and resources available to a particular community in a certain period (Townsend, 2010). That is a condition where one or more people do not have sufficient resources to achieve a level of economic well-being to achieve the minimum standard of living of the community.

Qaradhawi (2005) shows that Islam views poverty as something that endangers faith, morals, common sense, family, and society because a person entangled in economic hardship envies rich people. In solving the problem of poverty, Islam has brought a method called zakat. Through this method, Muslims are required to pay a specific tax called zakat on the accumulated wealth of the rich. The collected money from zakat will be distributed to mustahik. One of the essential principles of Islam is that everything belongs to Allah. Therefore, wealth held by humans must be done with trust (Ali et al., 2013).

ZIS and Sustainable Development Goals

The Sustainable Development Goals (SDGs), an agreement of 193 member countries of the United Nations set in 2015, are to improve the welfare of the global community. Sustainable development's definition focuses on integrating social,
economic, and environmental issues. It answers the challenges of sustainable development at the global level. It creates a better life and lifestyle for people in this world regardless of their origin, race, and religion (Abduh, 2019). Based on UNDP in Abduh (2019), the seventeen SDGs which are set to be achieved by 2030 are explained in Table 1:

| Number | Aim |
|--------|-----|
| 1 | No poverty in all its forms everywhere. |
| 2 | End hunger, achieve food security and improve nutrition and promote sustainable agriculture. |
| 3 | Ensure healthy lives and promote well-being for all at all ages. |
| 4 | Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. |
| 5 | Achieve gender equality and empower all women and girls. |
| 6 | Ensure availability and sustainable management of clean water and sanitation for all. |
| 7 | Ensure access to affordable, reliable, sustainable, modern, and clean energy for all. |
| 8 | Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. |
| 9 | Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation. |
| 10 | Reduce inequalities within and among countries. |
| 11 | Make cities and human settlements inclusive, safe, resilient, and sustainable. |
| 12 | Ensure sustainable consumption and production patterns. |
| 13 | Take urgent action to combat climate change and its impacts. |
| 14 | Conserve and sustainably use the oceans, seas, and marine resources for sustainable development. |
| 15 | Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. |
| 16 | Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels. |
| 17 | Strengthen the means of implementation and revitalize the global partnership for sustainable development. |

Source: UNDP in (Abduh, 2019)

Zakat, infaq, and sadaqah aim to alleviate poverty and advance the economy as an economic distribution instrument. Meanwhile, the SDGs are an agreement by the world community to create a world free from poverty, living with dignity and justice, prosper, and cooperate. The relationship in question is two-way; zakat is an instrument that supports the SDGs and the application of the SDGs paradigm in zakat management (Maksum, 2018).
SDGs: No Poverty

Currently, poverty is still a problem for all countries in the world. Therefore, the SDG's main agenda targets that by 2030 rural poverty will reach 0 percent. That means that by 2030, there should be no poor people in the village. However, in order to achieve the goal, many policies must be taken and implemented together either by the central government, regional governments, or village governments, such as increasing the income of the poor, ensuring access to essential services, and protecting the entire community from all forms of disaster (SDGs Bappenas, 2020).

United Nations General Assembly (2015) stated that the primary goal of development is to end poverty in all its forms everywhere. Of the eight groups of mustahik who are entitled to receive zakat, the needy and poor groups are the most identical to welfare issues. Therefore, these two groups are mentioned earlier than the others as a sign of the importance of paying attention to them (Qaradhawi, 2005).

Ministry of National Development Planning/National Development Planning Agency (KPPN/BAPPENAS, 2017) has created some the targets to end poverty, which are:
1. eradicating extreme poverty (people below the poverty line) with a purchasing power of less than $1.25 PPP (Purchasing Power Parity) or around IDR 7,800 daily;
2. reducing by at least half the number of poor people (men, women, and children of all ages), based on national definitions;
3. implementing appropriate social protection systems and measuring for all levels of society at the national level. As a result, 2030 has provided substantial protection for the poor and vulnerable groups;
4. ensuring that all residents, especially the poor and vulnerable, have equal rights to access economic resources (such as rights to essential services), ownership, and access to land. In addition, ensure they have access to technology; and
5. building needed financial services, including microfinance, and increase resilience and readiness of the poor and vulnerable groups to face climate change, environmental, economic, social, and disaster crises.

ZIS, Income, and Poverty Alleviation

Income is all the money that goes into a household or smallest unit in a certain period (Rahman, 2008). The welfare of a business can be measured by its income. Therefore the factors that affect business income must be considered so that income is stable and welfare increases. The emergence of an increase in demand can be proven when zakat assets are distributed to those entitled to receive them. The increase in purchases will not occur unless there is an increase in income, one of which is zakat. With the capital, the mustahik are expected to increase their income through productive businesses with the funds from the zakat they receive.
In Islamic economics, zakat can increase mustahik’s income and reduce inequality in economic income in society. According to Agung Arif in Yusnar (2017), zakat is a deduction from the average income of the poor as a percentage of the poverty line. With the alternative zakat policy, it is hoped that there will be a mechanism for income transfer between the poor who initially experienced a deficit.

Human development is inversely related to poverty and income disparity (Hayakawa & Venieris, 2019). The poverty that arises from wealth disparities among groups of individuals in society is, to some extent, a natural phenomenon ordered by Allah. As a result, Islam makes no mention of how the problem of poverty can be eradicated. On the other hand, Islam is concerned with minimizing and reducing poverty to achieve spiritual and temporal success. Islam also urges people to develop a sense of belonging through assisting, caring for, completing, and collaborating (Hafiduddin, 2013).

**Previous Study and Hypothesis**

Aziz et al. (2020) found that zakat reduces multidimensional poverty and contributes significantly to achieving several SDGs in Pakistan. Previous research on zakat and poverty alleviation explains how zakat has, one way or another, helped improve people's welfare and bridged the gap between the rich and the poor in society. Moreover, it is an instrument for equality among people in society (Johari et al., 2013).

Ali et al. (2013) stated that the distribution of zakat has a significant and positive effect on increasing income distribution for the poor. Jaenudin and Hamdan (2022) found that ZIS can increase material welfare as measured by increasing income to get out of poverty. Nurhasanah (2020) showed that the utilization of productive zakat funds has a significant influence on the level of income of mustahik at BAZNAS Palopo City. Then, Arif (2016) found differences in income before and after mustahik received productive zakat from the zakat institution, El-Zawa.

Productive zakat does increase mustahik’s income. Lina (2019) explained that the utilization of zakat significantly affects income levels, education allocation, and health costs. Therefore, the previous study shows that ZIS has an essential role in achieving the goal of SDGs and increasing mustahik's income. Hence, the hypotheses in this study are:

\[ H_0 = \text{Income before being assisted is the same as after being assisted} \]
\[ H_1 = \text{There is a difference in income between after and before being assisted} \]

In addition, when viewed from the SDGs aspect, research conducted by the Puskas BAZNAS (2017) showed that based on the priority of achievement, it will be grouped into three goals, namely: 1) no poverty, 2) good health, and 3) no hunger. Meanwhile, the lowest priority is gender equality. So, in this study, the priority is
number 1, no poverty. Then, in determining the indicator metadata, it limits indicators that relate to income.

Several studies discuss the effect of ZIS on poverty, such as Akram et al. (2014) explaining the long-term and short-term effects of zakat on poverty in Pakistan. Athoilah (2018) explained that zakat increases economic growth and reduces poverty in developing countries. Saputro and Sidiq (2020) showed that ZIS contributed to reducing poverty in Aceh indirectly.

**RESEARCH METHODS**

This study uses a quantitative method with a comparative approach. According to Sugiyono (2015), the comparative method aims to compare the existence of a variable or more in two or more different samples or at different times. The reason for choosing a comparative quantitative approach is to determine the difference in income and SDGs indicators between LMI recipients before and after being assisted by ZIS funds.

The data collection procedure used a questionnaire distributed directly to the mustahik. The questionnaire used was an assessment research questionnaire published by Puskas BAZNAS, which had been modified based on research needs. Furthermore, the techniques and analytical procedures used are mustahik's income and metadata approach of the SDGs indicator of no poverty.

The sampling technique uses the Isaac and Michael table. For example, the population of LMI national routine mustahiks in 2021 is 4,400. Therefore, with a significance level of 5% or 0.05 and a total population of 4,400, the minimum sample required is 323 mustahiks. Thus, this study took a sample of 355 mustahiks located in East Java, South Kalimantan, Riau Islands, and South Sumatra. The average length of assistance is two years. The reason for taking samples in several provinces is that the region’s LMI office is more than five years old. Therefore, they have experience in intervening with the mustahik. The data collection period is six months, from September 2020 to July 2021, for data collection surveyor socialization, distributing questionnaires, and data processing.

After the income data of the mustahik has been obtained, a normality test will be carried out using the Kolmogorov-Smirnov normality test. If the probability value is below 0.05, the data is not normally distributed. It will use the Wilcoxon, a nonparametric test, because this study aims to compare the averages of two groups, a sample with the same subject but undergoes different (before and after intervention). Therefore, this study uses the Wilcoxon dependent sample t-test method. This statistical test measures the difference between two observations without meeting the normal distribution. The general formula for the Wilcoxon test is as follows:
Based on the calculation method used in the Wilcoxon Signed Rank test formula, the values obtained are the mean rank and sum of ranks from the negative ranks, positive ranks, and ties groups.

1. Negative ranks mean that the sample with income after being assisted is lower than before.
2. Positive ranks is a sample whose income after being assisted is higher than the income before being assisted.
3. While ties, the income after being assisted equals the income before being assisted.

The symbol N represents the number of samples, and the Mean Rank is the average. After that, a hypothesis test was carried out. If the p-value (asymptotic significance two-tailed) was less than 0.05, then the hypothesis was to accept H0, or there was a significant difference between the before and after assisted. A descriptive analysis will also be conducted to explain the diversity of respondent data based on location, gender, and type of assistance.

In addition, this study only looks at it from the perspective of no poverty because this goal is the highest priority in the SDGs (Puskas BAZNAS, 2017). Poverty is when a person cannot meet the minimum basic needs to live a decent and dignified life. It is not easy to define poverty because it is multidimensional. Therefore, the government agreed to measure poverty from an economic point of view with a money approach (KPPN/BAPPENAS, 2017). So that of all the indicators in the SDGs' goal number 1 (no poverty) with a money approach measured through mustahik’s income is shown in Table 2.

| Number | Indicator | Definition |
|--------|-----------|------------|
| 1.1.1* | Extreme poverty rate | Below the poverty line with a purchasing power of less than $1.25 PPP (Purchasing Power Parity) or around IDR 7,800 per day |
| 1.2.1* | Percentage of population living below the national poverty line, by gender and age group | Poverty is an economic inability to meet basic food and non-food needs. |

Source: SDGs Indicator Metadata (KPPN/BAPPENAS, 2020)

So, the SDGs measurement in this study only focuses on the extreme poverty level and the percentage of mustahik who live below the national poverty line by gender and age group.
RESULT AND ANALYSIS

Description Analysis

Respondents in this study amounted to 355 mustahik. As for the general condition of the respondents, most mustahik are male with a percentage of 44% and female with 56%. Sequentially, mustahik from East Java, South Kalimantan, Riau Islands, and South Sumatra is 96%, 2.3%, 0.6%, and 1.1%. Based on the assistance provided, consumptive assistance is 29%, and productive assistance is 71%.

Table 3
Mustahik's Income Descriptive Statistics

|                      | Before      | After       |
|----------------------|-------------|-------------|
| Mean                 | 1,125,507   | 1,775,466   |
| Median               | 800,000     | 1,500,000   |
| Minimum              | 0           | 0           |
| Maximum              | 9,000,000   | 7,600,000   |
| Count                | 355         | 355         |

Source: SPSS processed data

Table 3 shows that the average value of mustahik’s income increased from before to after being assisted by LMI. The average income before being assisted was Rp1,125,507 to Rp1,775,466. It means that there is an increase in the average income of 58%. The median value moved higher, from the original Rp800,000 to Rp1,500,000. The maximum value there is a decrease from Rp9,000,000 to Rp7,600,000. It is in line with research by Ali et al. (2013); Lina (2019); Nurhasanah (2020) that ZIS has a significant and positive effect on increasing mustahik's income. In addition, it is in line with Allah’s command in Surah Al Baqarah verse 276, which reads: "Allah destroys interest and gives increase for charities. And Allah does not like every sinning disbeliever."

It means that ZIS is interpreted as growth because by giving the rights of the poor and others contained in our property, there will be a circulation of money in society which results in the development of the function of money in economic life in society (Anik & Prastiwi, 2019; Kahf, 1997; Yaumidin, 2008).

Normality Test (Kolmogrov-Smirnov)

The results of Kolmogorov-Smirnov Normality test shown in Table 4:

Table 4
Income Descriptive Statistics Mustahik

|                      | Kolmogorov- Smirnov |
|----------------------|---------------------|
| Shapiro-Wilk         | Statistics df Sig.  |
| Prior Income         | 0.196 355 0.000     |
| Income After         | -124 355 0.000      |
| a. Lilliefors Significance Correction | 0.914 355 .000 |

Source: SPSS processed data
The significance value (p) in the Kolmogorov-Smirnov test is 0.000 (p > 0.05), which means the data is not normally distributed. Likewise, the significance value (p) in the Shapiro-Wilk test is 0.000 (p > 0.05), so the data are not normally distributed.

![Histograms](image)

Source: SPSS processed data

The data is usually distributed if the histogram curve is bell shape. However, as seen in Figure 2 above, the histogram curve is not bell-shaped. Therefore, it can be concluded that the data is not normally distributed, and it is necessary to use the Wilcoxon test.

**Wilcoxon Signed Rank Test and Hypothesis Testing**

After the data is known to be not normally distributed, it has met the requirements for a differential test using the Wilcoxon Signed Rank test. Test results that were processed using SPSS 16 in Table 5:

| Ranks               | N  | Mean Rank | Sum of Ranks |
|---------------------|----|-----------|--------------|
| Income After - Income Before |    |           |              |
| Negative Ranks      | 37 | 122.47    | 4531.5       |
| Positive Ranks      | 241| 142.11    | 34249.5      |
| Ties                | 77 | 142.11    |              |
| Total               | 355|           |              |

a. Income After < Income Before
b. Income After > Income Before
c. Income After = Income Before

Source: Data Processed through SPSS

Table 5 shows negative ranks of 37 mustahik (10%). So, out of 355, only 37 mustahik whose income has decreased. On the other hand, positive ranks indicate that 241 mustahik (68%) whose income has increased from before to after being assisted. Meanwhile, the test indicates that those whose income was fixed before and after being assisted amounted to 77 mustahik (22%). An increase of 68% means mustahik has additional income from the distribution of wealth given by donors (Ali, 1988; Anik...
On the other hand, the income of the *mustahik* that decreases or remains should be the focus of the zakat institution in determining its empowerment programs. Furthermore, Table 6 shows the hypothesis testing in this study:

| Earnings After - Earnings Before |  |
|----------------------------------|--|
| Z                                | -11.078<sup>b</sup> |
| Asymp. Sig. (2-tailed)           | 0 |

Table 6 is the output of the SPSS 22 application for the Wilcoxon test. This test statistic is the value of asymptotic significance (Asymp. Sig.), which is the significant value of the Wilcoxon test. The significance value is 0.00, which is less than 0.05. So the decision is to reject H<sub>0</sub>. It can be concluded that there is a difference between the results after and before being assisted. The results align with the studies conducted by Efendi and Fathurrohman (2021); Jaenudin and Hamdan (2022). They found differences in material welfare conditions before and after being assisted by ZIS funds. The results indicate that LMI programs can intervene in *mustahik*’s income through business capital programs and consumptive programs through scholarships and charity for basic needs (Ayuniyyah et al., 2018; Tahir & Oziev, 2018; Yaumidin, 2008). Zakat can also function as working capital for the poor to create jobs to earn and fulfill their daily needs (Rozalinda, 2014).

### SDGs Measurement Results of No Poverty Indicator 1.1.1: Extreme Poverty Levels before and after ZIS Distribution

The indicator 1.1.1 is measured by extreme poverty levels. KPPN/BAPPENAS (2017) explains that extreme poverty is people below the extreme poverty line with a purchasing power of less than $1.25 PPP (Purchasing Power Parity) or around Rp7,800 per day. So the extreme poverty line used is: Rp7,800 x 30 days x 1.25 PPP = Rp449,280 per month per capita. The final poverty line will be multiplied by the number of household members from each *mustahik*. So ZIS programs must be able to intervene in purchasing power parity above the extreme poverty line. Thus, *mustahik* can be eradicated from extreme poverty

| Indicator Calculation Results 1.1.1 on SDGs | |
|-------------------------------------------|--|
| Total *mustahik* living below the international poverty line | 56.30% | 33.21% | -23.10% |

Source: Data Processed through SPSS
Table 7 shows that the percentage of *mustahik* who lived below the extreme poverty line before the ZIS intervention was 56.3%. However, after the ZIS intervention, it became 33.21%. It means that there is a decrease in the poverty rate by 23.10%.

The results of this study are in line with the previous studies on the effect of zakat on poverty reduction in several countries, for example, Sudan (Abdelhady, 2012), Pakistan (Akram et al., 2014), developing countries (Athoilah, 2018), and Aceh in Indonesia (Saputro & Sidiq, 2020). Furthermore, in the economic field, zakat can prevent wealth accumulation in only a few people and oblige the rich to distribute their wealth to a group of poor and needy people. Thus, zakat also acts as a potential source of funds to alleviate poverty. So that with the provision of ZIS, *mustahik* has additional income to consume basic needs so they can get out of poverty (Kahf, 1997; Yaumidin, 2008).

### SDGs Measurement Results of No Poverty Indicator 1.2.1: Percentage of Mustahik Living below the National Poverty Line, by Sex and Age Group before and after the ZIS Distribution

The national poverty line obtained through the Central Statistics Agency in March 2021 is Rp472,525 month/capita (Badan Pusat Statistik, 2020). The poverty line will be adjusted according to the number of household members of each *mustahik*. Thus, the percentage of *mustahik*, who live below the national poverty line by gender, can be explained in Table 8.

| Gender | Before | After | Change |
|--------|--------|-------|--------|
| Woman  | 31.30% | 17.20%| -14.10%|
| Man    | 25.10% | 16.10%| -9.00% |

Source: Processed Data

From Table 8, the percentage of women living below the national poverty line before the ZIS intervention was 31.3%. However, after the intervention, it became 17.2%, meaning there is a decrease in the woman's poverty rate by 14.1%. On the other hand, the percentage of men living below the national poverty line before the ZIS intervention was 25.1%, and after the ZIS intervention was 16.10%. Therefore, it means a 9.0% reduction in the man poverty rate. Thus, ZIS affects the reduction of poverty rates for all genders. Although, the decrease was more significant in women's poverty rates because women usually have more different needs.

Therefore, it is important to consider the gender of the head of the household for the *mustahik* (Ali et al., 2013). Ayuniyyah et al. (2022) also explain that gender is a
significant factor in poverty and economic disparity. Furthermore, Abdullah and Sapiei (2018) also conclude that gender and religiosity are significantly related to the effectiveness of the zakat program. Then, Table 9 shows the results of metadata indicator 1.2.1 by age group.

| Age Group    | Before  | After  | Change |
|--------------|---------|--------|--------|
| Under 17 years old | 29.00%  | 20.00% | -9%    |
| 18-36        | 11.50%  | 4.50%  | -7.00% |
| 37-54        | 7.90%   | 4.20%  | -3.70% |
| Over 67 Years | 7.90%   | 4.50%  | -3.40% |

Source: Processed Data

From Table 9, the percentage of the age group under 17 years old living below the national poverty line before the ZIS intervention was 29.0%. However, after being assisted by ZIS, it became 20.0%. It means that there is a 9.0% reduction in the poverty rate. The percentage of the 18-36 year age group living below the national poverty line before the ZIS intervention was 11.50%, but after the ZIS intervention became 4.5%. It means that there is a 7.0% reduction in the poverty rate. The percentage of the 37-54 years age group living below the poverty line is 7.9%, but after being assisted, it becomes 4.2%. Therefore, there is a decrease in the poverty rate by 3.7%. For the age group above 67 years, before the ZIS intervention, it was 7.9%. However, after the ZIS intervention, it became 4.5%. It means that there is a decrease of 3.4%.

This finding is in line with Ali and Ibrahim (2018), concluding that a significant effect on the distribution of zakat is not only gender but also education level, status, income, and the amount of zakat received. The older the age, the more effort is in empowering ZIS due to several health factors, speed, and lack of ability. Hence, mustahik's age determines the program provided. In addition, Maksum (2018) also argues that zakat is an instrument supporting the SDGs.

CONCLUSION

This study found that the role of ZIS managed by LAZ positively supports the goal of SDGs to end poverty from changes in mustahik’s income and metadata indicators of SDGs 1.1.1 and 1.2.1. So the first implication of this research becomes a reference and evaluation report for LMI to improve performance in utilizing ZIS funds. Second, this research can identify how many mustahik has not been eradicated from poverty, so the zakat institution can focus on adjusting the program provided.

Third, the government needs to create a policy of compulsory paying zakat within the government environment and distributing to zakat institutions which will indirectly assist the government in realizing the SDGs. Fourth, the LAZ and government
must integrate data so that the programs implemented by zakat institutions can be recorded in the government database to support the SDGs.

Fifth, the public will know the role of ZIS given by the zakat Institution, so it is hoped that the payment of ZIS can be distributed through zakat institutions. Six, this study adds a different test for the mustahik's income so that it becomes a scientific reference to validate the difference in income before and after the distribution of ZIS.

However, this study has limitations by not considering other factors that affect income, such as the impact of the COVID-19 pandemic, the type of guidance, supervision, monitoring, and evaluation carried out by the LMI zakat institution. Then the object of research is only limited to the specific zakat institution.

Suggestions for further research are the need to examine factors and approaches other than income and also need to be measured using metadata other than the SDGs indicator, no poverty. Further research can also add respondents to other LAZ so that it becomes a national and even international strategic issue to discover their role in realizing the SDGs empirically.

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