



# The Role of Indonesia Magnificence of Zakat and Waqf in Reducing Proverty

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**Abstract.** Indonesia faces major challenges in its poverty alleviation efforts, especially with the significant gap between urban and rural areas. The poverty rate reaching 9.36% in March 2023 shows the need for innovative approaches to address structural problems in wealth redistribution. Zakat and waqf as Islamic economic instruments have great potential in poverty reduction, but their effectiveness is still not optimised. This study aims to analyse the role of zakat and waqf in poverty reduction in Indonesia using poverty headcount ratio as the main indicator. Using quantitative Robust Least Square regression approach, this study evaluates the impact of zakat and waqf management on poverty level during the period of 2018-2023. The analysis results show that zakat management significantly reduces poverty headcount ratio with a coefficient of -0.002418, which means that every one unit increase in zakat can reduce poverty by 0.24%. Waqf also shows a significant negative effect on poverty headcount ratio with a coefficient of -0.002437, which indicates that a one unit increase in waqf management can reduce poverty by 0.24%. Zakat has a significant role as a direct redistribution mechanism in reducing poverty, while waqf contributes through productive asset management that provides long-term benefits. This research confirms the importance of technological innovation, such as blockchain-based systems, to improve the transparency of zakat and waqf management and strengthen public trust in management institutions. The resulting policy implications include improving zakat and waqf literacy, regulatory reforms to support more professional management, and collaboration between the government, private sector, and Islamic institutions. The findings make a significant contribution to the literature on Islamic economics and support efforts to achieve inclusive and sustainable economic development in Indonesia.

**Keywords:** Islamic Economics, Poverty Alleviation, Poverty Headcount Ratio, Robust Least Square, Waqf, Zakat.

**JEL Classifications:** D63; I32; H53; Q56.

## 1. INTRODUCTION

Poverty is one of the main problems that continues to be a global concern, especially in developing countries such as Indonesia. Data released by the Central Statistics Agency (BPS) shows that as of March 2023, 9.36% of Indonesia's population or around 25.9 million people live below the poverty line. The poverty rate in rural areas, which reached 12.22%, is much higher than that in urban areas at 7.29%. This inequality indicates a structural problem in redistribution efforts (Ramadhan & Putri, 2023).

In the Islamic context, zakat and waqf are two economic instruments that have historically proven effective in reducing poverty and social inequality (Hasan & Abdullah, 2023). Zakat, as one of the pillars of Islam, serves as a wealth redistribution mechanism that is obligatory for Muslims to help the underprivileged. Meanwhile, waqf is an instrument that provides long-term benefits through productive asset management to support the development of social facilities, education, health, and public infrastructure (Ali & Ahmad, 2023). According to data from the Indonesian Ministry of Religious Affairs in 2023, the potential of zakat in Indonesia is estimated to reach IDR 327 trillion per year, but the realisation of its collection is only IDR 34.2 trillion. The same thing happens with waqf, where the potential of cash waqf reaches hundreds of trillions of rupiah every year, but the management is still far from optimal. This gap shows that there are significant challenges in optimising the management of zakat and waqf, including aspects of public literacy, public trust in management institutions, and the effectiveness of fund distribution to target groups (Ramli & Yusuf, 2023).

A number of previous studies have revealed the potential of zakat and waqf as instruments to reduce poverty. (Khalida and Ghozali, 2023) showed that zakat has a significant impact on people's economic welfare if managed with transparency and accountability. (Rahman, 2019) highlighted that zakat and waqf can be important instruments in the Islamic fiscal system to reduce social inequality. However, these studies are more conceptual and normative, without measuring the empirical impact in an integrated manner using comprehensive indicators such as poverty headcount ratio.

Another phenomenon in Islamic economics is the increasing global awareness of the importance of Islamic financial inclusion, which is driving innovation in the management of zakat and waqf. For example, the use of digital technology and blockchain-based platforms to support the transparency and efficiency of zakat and waqf fund collection has been implemented in several Islamic countries, including Indonesia (Fadilah & Huda, 2023). However, the real impact of these measures on poverty reduction still needs to be empirically evaluated. Thus, there is a literature gap in evaluating the effectiveness of zakat and waqf based on quantitative approach that is based on empirical data.

This study is designed to answer that challenge by investigating the role of zakat and waqf in poverty alleviation in Indonesia using poverty headcount ratio as the main indicator. This study is important because it not only contributes significantly to the development of academic literature related to Islamic economics, but also offers evidence-based recommendations for public policy (Sari & Prasetyo, 2024). This study integrates the theory of wealth distribution from an Islamic perspective with a modern quantitative approach to evaluate the real impact of zakat and waqf management on poverty reduction. With a comprehensive approach, it is expected

that this research can fill the gap in the existing literature as well as provide practical contributions to the optimisation of zakat and waqf as instruments of sustainable economic development in Indonesia (Haryanto & Suryani, 2023).

## 2. LITERATURE REVIEW

### 2.1. Contribution of Zakat and Waqf in Islamic Economic System

Zakat and waqf are two main instruments in Islamic economics that aim to create social justice and equitable distribution of wealth. Zakat has an immediate redistribution function by transferring a portion of wealth from wealthy individuals to the needy, while waqf offers a long-term approach through the development of productive assets (Qardhawi, 1991). These two instruments are not only spiritual in nature, but also practical solutions to reduce social disparities and improve economic welfare (Ibrahim et al., 2022).

In Maqashid al-Shariah theory, zakat and waqf reflect efforts to protect basic human needs, including life (nafs), wealth (maal), and offspring (nasl). This makes zakat and waqf a key element in achieving sustainable Islamic-based development (Ali & Haneef, 2021).

### 2.2. Potential and Challenges of Zakat in Indonesia

As a country with the largest Muslim population in the world, Indonesia has enormous zakat potential, reaching IDR 327 trillion per year. However, the realisation of zakat collection only reached IDR 34.2 trillion in 2023. The main challenges in optimising zakat include low public literacy, weak transparency of zakat institutions, and lack of innovation in the distribution of funds to beneficiaries (Ismail et al., 2023).

Empirical research shows that zakat has a significant impact in reducing poverty. The study by (Syed and Rahmatullah, 2022) revealed that zakat funds are able to narrow the income gap through providing assistance to the poor. However, previous studies have not used international standard indicators such as poverty headcount ratio to measure the impact of zakat more comprehensively.

### 2.3. The Role of Waqf in Sustainable Economic Empowerment

Waqf has great potential to support sustainable economic development through productive asset management. Waqf has been used to fund social infrastructure such as schools, hospitals, and other public facilities, which provide direct benefits to the poor (Ahmad & Zain, 2023).

However, waqf management in Indonesia faces a number of challenges, including a lack of public understanding of waqf, a weak regulatory framework, and a lack of innovation in the management of waqf assets (Nasution et al., 2022). Initiatives such as cash waqf linked sukuk (CWLS) are an innovative step towards optimising the potential of waqf.

### 2.4. The Use of Poverty Headcount Ratio in Measuring the Impact of Zakat and Waqf on Poverty

Poverty Headcount Ratio is an indicator used to measure the proportion of the population living below the poverty line. Poverty Headcount Ratio is calculated based on the percentage of individuals whose consumption level or per capita income is below the poverty threshold (UNDP, 2022). In the context of zakat and waqf, the application of the Poverty Headcount Ratio provides a clearer picture of the effectiveness of both instruments in reducing poverty, as well as enabling an objective evaluation of their impact (Hassan et al., 2023).

The study by (Ibrahim and Noor, 2023) shows that zakat can contribute significantly to the reduction of Poverty Headcount Ratio, by transferring resources from better-off individuals to the needy groups of society. The process of wealth redistribution through zakat is expected to improve the economic welfare of beneficiaries, which in turn can reduce the percentage of the population living below the poverty line. This research also highlights the importance of transparency and accountability in the management of zakat to ensure that the distribution of funds can reach the right target and provide maximum impact on poverty reduction.

Like zakat, waqf also has the potential to reduce the Poverty Headcount Ratio, especially through productive asset management that can increase long-term income for the poor. (Hasan and Salleh, 2022) assert that investment in productive waqf, such as funding for education and health sectors, can have a sustainable impact on improving people's quality of life. With better access to education and healthcare, individuals from poor families have a greater chance of improving their economic capacity in the long run which can lead to an overall reduction in poverty levels.

However, both zakat and waqf, if not managed optimally, can have limited impact in reducing the Poverty Headcount Ratio. The main challenges faced in the management of zakat include the lack of public literacy about zakat, the weak transparency of zakat management institutions, and the low effectiveness of fund distribution (Rahim et al., 2023). Meanwhile, in terms of waqf, the main challenges are the lack of understanding of productive waqf mechanisms and inadequate regulations to support its efficient management (Yusof & Kasim, 2022). Therefore, better management and the use of more measurable indicators such as the Poverty Headcount Ratio are crucial to ensure that these two instruments can have a significant impact in reducing poverty.

Overall, the application of Poverty Headcount Ratio as an indicator to measure the impact of zakat and waqf in poverty alleviation provides a more measurable and systematic understanding of the effectiveness of both instruments. A more in-depth evaluation of zakat and waqf management is needed to identify gaps that can be optimised, in order to increase their contribution in poverty reduction (Ali & Khan, 2023). Using Poverty Headcount Ratio as the standard of measurement will provide a stronger foundation to formulate more effective

policies and programmes in order to achieve inclusive and sustainable development goals (Farooq et al., 2022).

### 3. RESEARCH METHOD

#### 3.1. Classical Assumptions

The classical assumption test is a series of tests conducted to ensure that the regression model used meets the basic assumptions to obtain an unbiased, consistent, and efficient estimate of the model parameters by going through tests of normality, multicollinearity, heteroscedasticity, and autocorrelation (Khan et al., 2023).

#### 3.2. Robust Least Square

Robust regression is a method used to overcome the outlier problem (Delaunay & Yurova, 2024). In this study, the Robust Least Squares (RLS) method is applied as an alternative to overcome the limitations inherent in conventional linear regression models, especially regarding sensitivity to outliers. The Ordinary Least Squares (OLS) method tends to produce inaccurate and biased parameter estimates when facing data containing extreme observations. Robust Least Squares (RLS) offers a more robust approach by introducing a weighting mechanism on the observations, which allows the model to give lower weights to observations with large residuals, thus reducing the impact of outliers on the resulting parameter estimates (Mohamad & Chang, 2023). To evaluate the effectiveness of the resulting model, statistical criteria including Adjusted R-squared, Akaike Information Criterion (AIC), and Bayesian Information Criterion (BIC) are used, which aim to ensure that the model is not only robust to outliers, but also able to provide valid and accurate estimates (Zhang et al., 2024). By implementing the Robust Least Squares approach, this study aims to produce a more reliable regression model, which is able to produce consistent and valid parameter estimates, even in the context of data affected by outliers.

#### 3.3. Statistical Test t (Partial Test)

In research, the significance of the effect of the independent variable on the dependent variable is seen through the t statistical test (Widarjono, 2018). In its use, if  $t\text{-count} > t\text{-table}$  or significance is less than ( $\alpha$ ) 5%, this indicates that there is a partially significant effect between the independent variable and the dependent variable (Gujarati, 2006).

The hypothesis in this test is:

$H_0: \beta_i < 0$  There is no significant effect between the independent variable and the dependent variable partially

$H_a: \beta_i > 0$  There is a significant influence between the independent variables on the dependent variable partially

The test criteria are as follows:

1. If  $t\text{-statistic} > t\text{-table}$  then  $H_0$  is rejected. The independent variable has a significant effect on the dependent variable.
2. If  $t\text{-statistic} < t\text{-table}$  then  $H_0$  is accepted. The independent variable has no significant effect on the dependent variable.

#### 3.4. F Statistical Test

The F-statistic test is used to show how the independent variables interact with each other and have an impact on the dependent variable (Wooldridge, 2013). If the F-count exceeds the F-table in the test, then simultaneously the independent variables have a considerable influence on the dependent variable, or the data is consistent with the research hypothesis.

$H_0: \beta_i < 0$  There is no significant influence between the independent variables on the dependent variable together

$H_a: \beta_i > 0$  There is a significant influence between the independent variables on the dependent variable together

The test criteria are as follows:

1. If  $F\text{-statistic} > F\text{-table}$  then  $H_0$  is rejected. The independent variable on the dependent variable has a statistically significant effect together.
2. If  $F\text{-statistic} < F\text{-table}$  then  $H_0$  is accepted. The independent variable on the dependent variable does not have a statistically significant effect together.

#### 3.5. Test Coefficient of Determination ( $R^2$ )

According to Widarjono (2018), the coefficient of determination ( $R^2$ ) is used to measure the proportion of the contribution of the independent variable in explaining the dependent variable. An  $R^2$  value close to one indicates that the regression model has a good ability to explain data variability, while an  $R^2$  value close to zero indicates limited ability. However,  $R^2$  has the disadvantage that it tends to increase with the addition of independent variables, even though these variables do not necessarily increase the predictive power of the model. Therefore, adjusted R-square is used which corrects for the addition of irrelevant independent variables, so that the adjusted R-square value will not exceed R-square and may decrease or become negative if the addition of independent variables does not improve the quality of the model or if the model shows a low level of fit.

## 4. RESULTS

### 4.1. Classical Assumptions

**Table 1:** Normality Test.

Jarque-Bera	1.360071
Probability	0.531741

Based on Table 1. normality test results, the Jarque-Bera value is 1.360071 with a probability value (p-value) of 0.531741. This probability value is greater than the significance level  $\alpha = 0.05$ , so the residuals show normal distribution characteristics and indicate that the normality assumption is met.

**Table 2:** Multicollinearity Test.

Correlation Coefficient Variable	(X1)	(X2)
(X1)	1.000000	-0.462262
(X2)	-0.462262	1.000000

Based on the multicollinearity test results, it is found that there are no variables with a relationship that exceeds the correlation value of 0.9. Therefore, it can be concluded that there is no significant multicollinearity between the independent variables used in this study. This means that the variables do not show a strong linear relationship or lack of meaningful interrelationships among others, so there is no significant interdependence.

**Table 3:** Heteroscedasticity Test.

F-statistic	0.372458	Prob. F(1,3)	0.5848
Obs*R-squared	0.552205	Prob. Chi-Square(1)	0.4574

Based on table 3, the results of heteroscedasticity testing obtained an F-statistic probability value of 0.5848 and a Chi-square probability of 0.4574. Both values are greater than the 5% significance level (0.05), so it can be concluded that there is no heteroscedasticity problem in the estimated model. This indicates that the residual variance is constant (homoscedasticity), so the classical assumptions on regression analysis are met. With the fulfillment of this assumption, the regression model estimation results can be considered valid and robust, which allows the interpretation of the relationship between the independent variable and the dependent variable to be done accurately without bias due to inhomogeneous error variability.

### 4.2. Robust Least Square

**Table 4:** Robust least square.

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	2.231799	0.000285	7835.986	0.0000
X1	-0.002418	0.000458	-5.282672	0.0000
X2	-0.002437	0.000455	-5.358172	0.0000
Robust Statistics				
R-squared	0.683008	Adjusted R-squared		0.471680
Rw-squared	0.990734	Adjust Rw-squared		0.990734
Akaike info criterion	-4.777400	Schwarz criterion		-4.985641
Deviance	20.33220	Scale		-5.611004
Rn-squared statistic	1.496132	Prob(Rn-squared stat.)		0.000000
Non-robust Statistics				
Mean dependent var	2.268335	S.D. dependent var		0.028862
S.E. of regression	0.020979	Sum squared resid		0.001320

Based on Table 4. shows the results of the regression calculation between the confidence level at 0.5% and then transformed into mathematical form as follows:

$$Y = 2.23179891969 - 0.00241762962761 * X1 - 0.00243690054146 * X2$$

### 4.3. Statistical Test t (Partial Test)

The coefficient of Indonesia Magnificence of Zakat (X1) of -0.002418 indicates that every 1 unit increase in Indonesia Magnificence of Zakat will reduce Poverty (Y) by 0.002418 assuming other variables remain constant. The z-statistic value is -5.282672 at the 5% significance level, and the probability value (0.0000) is smaller than 0.05. Therefore, it can be concluded that Indonesia Magnificence of Zakat (IMZ) has a negative and significant effect on Poverty partially.

The coefficient of Waqf (X2) of -0.002437 indicates that every 1 unit increase in Waqf will reduce Poverty (Y) by 0.002437 assuming other variables remain constant. The z-statistic value is -5.358172 at the 5% significance level, and the probability value (0.0000) is smaller than 0.05. Therefore, it can be concluded that Waqf has a negative and significant effect on Poverty partially.

### 4.4. F Statistical Test

The F test is a public test conducted to determine how much influence the public variables together have on



the dependent variable. In the Robust Least Square (M-estimation) estimation results, the probability value is 0.0000 and significant at the 5% degree. So it can be concluded that Indonesia Magnificence of Zakat (X1) and Waqf (X2) together or simultaneously have a significant effect on Poverty (Y).

#### 4.5. Result of the Coefficient of Determination ( $R^2$ )

The coefficient of determination is used to measure how much variation in the dependent variable can be explained by variations in the independent variables. In this study, the coefficient of determination is carried out to determine how much the percentage of Indonesian Magnificence of Zakat (X1) and Waqf (X2) variables together or simultaneously has a significant effect on Poverty (Y). Based on the results of the analysis, the value of the coefficient of determination ( $R^2$ ) is 0.683008. This means that the influence of the variation of the independent variable on the variation of the dependent variable is 68.3% while the remaining 31.7% is explained by variables outside the model.

## 5. DISCUSSION

### 5.1. Indonesia Magnificence of Zakat (IMZ) and its Contribution to Poverty Reduction in Indonesia

Indonesia Magnificence of Zakat (IMZ) significantly contributes to poverty reduction efforts in Indonesia. The findings of this study show that zakat has a negative and significant influence on poverty rate, with a regression coefficient of -0.002418. This figure confirms that every increase in zakat management by one unit can reduce the poverty rate. This result supports the initial hypothesis which states that when zakat is managed optimally, it can be an effective wealth redistribution instrument in reducing poverty (Huda et al., 2023). To strengthen the analysis related to the role of Indonesia Magnificence of Zakat (IMZ) and Waqf in reducing poverty, the following graph presents the trend of both compared to the Poverty Headcount Ratio during the period 2018-2023.

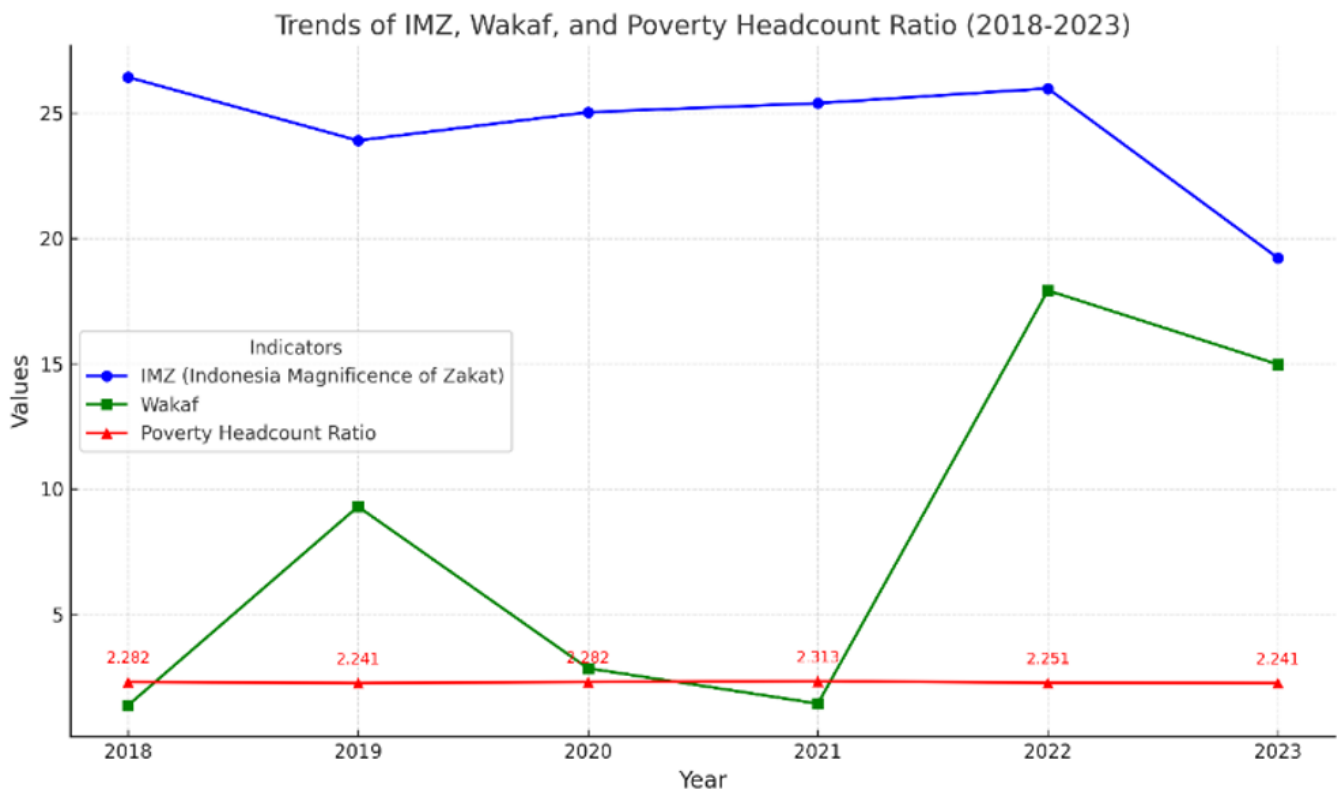


Figure 1:

The graph above shows that there is an increase and decrease in the management of Indonesia Magnificence of Zakat (IMZ) and Waqf during the period 2018 - 2023, the Poverty Headcount Ratio shows a small downward trend in 2019 and 2022 indicating the potential contribution of zakat and waqf in reducing poverty. Fluctuations in the graph also indicate that other factors, such as effective distribution, transparency, and synergy with economic development policies, strongly influence the effectiveness of poverty reduction. As shown by (Purnamawati & Hatane, 2024), a collaborative governance approach involving the government, local communities, and related institutions can be an effective model to strengthen these synergies in the management of zakat and waqf. Theoretically, zakat reflects the implementation of the principle of social justice in Maqashid al-Shariah, which emphasises the importance of wealth distribution to meet the basic needs of society, including life (nafs) and wealth (maal). This finding enriches previous literature, such as research by (Syafi'i and Hakim, 2021), by providing empirical evidence that zakat can serve as an instrument that is not only conceptual, but also practical in the context of poverty reduction. By integrating the poverty headcount ratio indicator, this study

provides a new and more measurable perspective in analysing the impact of zakat on poverty reduction.

Poverty headcount ratio is an indicator used to measure the proportion of population living below the poverty line. In the context of zakat, the application of this indicator provides a deeper understanding of the effectiveness of wealth redistribution. For example, zakat funds distributed with the right target to the poor directly affect the reduction of the number of households below the poverty line (Ali & Khan, 2023). These results show that zakat is not only a spiritual mechanism but also a socio-economic instrument that can be measured objectively.

In the socio-economic context of Indonesia in the 2018-2023 period, there are a number of phenomena that are relevant to assess the effectiveness of zakat. The COVID-19 pandemic has increased the poverty rate, especially in rural areas where the poverty rate is much higher compared to urban areas (Suryani & Fitriani, 2022). Nonetheless, data shows that zakat collection through digital platforms increased during the pandemic. This reflects the progress in technology adoption and zakat literacy among the public (Hidayat & Yusof, 2023). However, the unequal distribution of zakat to rural areas and the lack of transparency and effectiveness of zakat distribution are major challenges that hinder the optimisation of zakat in reducing poverty in the most needy areas (Rahman, 2021).

The results of this study confirm the validity of the wealth distribution theory in Maqashid al-Shariah, through the poverty headcount ratio indicator which emphasises that zakat is the main instrument in reducing social inequality and promoting economic justice. Zakat, as a religious obligation, serves to distribute wealth directly to the poor, confirming the relevance of a sharia-based economic approach in addressing persistent inequality in developing countries such as Indonesia (Rahman, 2022). This study confirms the importance of zakat as an integral part of the modern Islamic economic system.

Within the framework of wealth redistribution, zakat acts as an effective mechanism to narrow the income gap. This finding is consistent with research (Rahman, 2019), which states that zakat can improve the economic welfare of the poor. However, this study provides added value by adopting international indicators such as poverty headcount ratio, which allows a more integrated and comprehensive evaluation of the impact of zakat.

The implementation of digital technology, such as blockchain, has increased transparency in zakat management. This supports the empirical findings which show that modernisation of the management system is able to increase community participation. However, challenges such as lack of public trust in management institutions remain a major issue. Thus, the integration between traditional approach and technological innovation is the key to the success of zakat in reducing poverty. A mismatch was found in the context of zakat literacy in rural areas, which contradicts the previous study which stated that zakat literacy increased equally in all regions. This suggests that although technological innovation can increase community participation, its success depends on local cultural and educational factors (Syafi'i & Hakim, 2021).

The practical implications of this research include the need for policy reforms that support technology-based zakat management to improve transparency and accountability. The application of blockchain technology can ensure that zakat distribution reaches the right target groups. In addition, zakat literacy education programme, especially in rural areas, is needed to increase public participation in zakat payment (Wahab & Othman, 2022). The government also needs to encourage collaboration between zakat management institutions and the private sector to increase the capacity to distribute zakat funds more effectively. By integrating technological approaches and policy reforms, zakat can become one of the main pillars in inclusive and sustainable economic development. The huge potential of zakat, if managed optimally, can not only reduce poverty but also improve overall social welfare in Indonesia.

## 5.2. Waqf and its Contribution to Poverty Reduction in Indonesia

As an Islamic economic instrument, waqf has great potential to support a sustainable economy and poverty reduction. This study shows that waqf has a negative and significant effect on the poverty rate, with a regression coefficient of  $-0.002437$ . This indicates that every one unit increase in waqf management can significantly reduce the poverty rate. This finding supports the hypothesis that productive waqf, when managed optimally, can be a long-term instrument in improving the welfare of the poor and reducing socio-economic inequality (Latifah, 2021).

Cash waqf linked sukuk (CWLS) is one of the main innovations in waqf management in Indonesia. Waqf investment in instruments such as CWLS also has the potential to drive sustainable economic growth, especially through strategic sectors such as health and education facilities (Wahyudi & Palupi, 2023). In the context of poverty reduction, CWLS offers an efficient mechanism to manage waqf assets productively. Thus, waqf becomes not only a charitable instrument but also a sustainable investment tool.

Within the theoretical framework, waqf reflects efforts to achieve economic and social sustainability, as described in the Maqashid al-Shariah principle. The findings confirm that waqf has an important role in protecting people's access to education, health, and public infrastructure. Optimal waqf management should consider the long-term impact on the environment and economic sustainability, especially in developing countries with high energy intensity (Wahyudi & Palupi, 2023). This study enriches previous literature, such as the research by (Ismail & Jabar, 2020), by providing in-depth empirical evidence on how productive waqf management can have a direct impact on poverty reduction.

Socio-economic phenomena during the period 2018-2023, such as rising social inequality due to the pandemic, highlight the importance of innovation in waqf management. Initiatives such as cash waqf linked

sukuk (CWLS) have opened up new opportunities in the optimization of waqf potential. However, the lack of public understanding of productive waqf mechanisms and regulatory limitations are major obstacles. In addition, challenges in the management of productive waqf assets, such as land and estate, point to the need for a more efficient and transparent management system (Suryani & Fitriani, 2022).

The results also confirm Islamic wealth distribution theory by asserting that waqf is an important instrument for achieving social justice. Waqf provides a long-term impact through productive asset management that increases the long-term income of the poor. The use of poverty headcount ratio in this study provides a new perspective that is more measurable and applicable to public policy. The findings related to waqf support previous research, such as that conducted by (Nasr et al., 2023), which shows that productive waqf management can provide sustainable benefits. However, this study deepens the discussion by highlighting the role of regulation and innovation in waqf management.

In the socio-economic context, the implementation of digital technology has also helped to increase transparency in waqf management. However, the lack of public trust in management institutions remains a major challenge. The discrepancy in waqf literacy between regions and rural areas suggests that the success of technological innovation also depends on the local cultural and educational context (Zain & Salim, 2022).

The practical implications of these findings include the need to strengthen regulations and incentives for productive waqf management. The government needs to support the development of technology-based waqf management institutions to ensure accountability and efficiency. In addition, public education programs on the importance of productive waqf should be promoted to increase public participation. Collaboration between waqf management institutions, the government, and the private sector is also crucial to maximize the impact of waqf on poverty reduction (Maharani & Suryani, 2021).

## 6. CONCLUSIONS

This study makes a significant contribution in understanding the role of zakat and waqf as Islamic economic instruments in poverty alleviation in Indonesia. Using poverty headcount ratio as an indicator shows that zakat is significantly able to reduce poverty level through direct redistribution mechanism, while waqf contributes to sustainable poverty reduction through productive asset management that supports education, health, and social infrastructure sectors.

The study also identifies several key challenges, including low public literacy, inefficiency in fund management, and unequal distribution. In addition, regulations and innovations in zakat and waqf management still need to be improved in order to support more effective implementation. The use of technology, such as blockchain-based systems, is proposed as a solution to improve the transparency and efficiency of zakat and waqf management. Moreover, the adoption of instruments such as cash waqf linked sukuk (CWLS) shows great potential in optimizing cash waqf to support social projects that have a long-term impact on poverty reduction.

This study emphasizes the importance of integrated policies that include improving zakat and waqf literacy, regulatory reforms, and strengthening collaboration between the government, private sector, and Islamic institutions. These measures are needed to maximize the potential of zakat and waqf as strategic instruments in supporting poverty alleviation and sustainable economic development.

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