The Effect of Zakat Fund Distribution and Economic Growth on Poverty in East Java Province

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ABSTRACT: The goal of this study is to examine the relationship between zakat, economic growth, and poverty in East Java Province from 2003 to 2022, utilizing variables such as zakat money distribution, economic growth, and the number of poor people. The research approaches employed are the quantitative research approach and multiple regression analysis. Data on the distribution of zakat funds from financial statements published by BAZNAS East Java Province, economic growth percentage data from the Central Statistics Agency (BPS) website, and data on the number of poor people in East Java Province compiled from the Central Statistics Agency (BPS) website are the secondary data used. The study's findings revealed that the distribution of zakat monies influenced the direction of the negative coefficient on poverty. However, economic growth had no effect on poverty with a negative coefficient. The independent variable influences the dependent variable at the same time.


Keywords: Distribution Zakat, Zakat Funds, Economic Growth.
I. INTRODUCTION

Indonesia is included in the list of countries with the largest number of people who embrace Islam globally. According to The Royal Islamic Strategic Studies Center (RISSC, 2022), it is recorded that there are 231.06 million Indonesians who embrace Islam or around 87% of the total population of Indonesia. As it is well known that Muslims are obligated to pay zakat, this is following the fourth pillar of Islam that zakat is the obligation of Muslims who have excess property to set aside their property, given to those entitled to receive (Yuliana et al., 2019); (Syakir et al., 2021). Zakat is also a maliyah ijtimaiyah worship, which has a very important, strategic, decisive role and can be seen both from an Islamic point of view and from the point of view of developing the welfare of the people in the community (Widiastuti et al., 2022).

![Poverty Rate in East Java Province](https://ejournal.staim-tulungagung.ac.id/index.php/eksyar)

**Figure 1. Poverty Rate in East Java Province.** Source: KOMINFO East Java (2022)

The graph above depicts statistics on poor people in East Java; it can be seen that there has been a significant decrease in the last ten years, but there has also been an increase at certain times, such as 2020 and 2021, caused by the pandemic that is sweeping the entire world, including Indonesia, causing crises in various sectors, including the economy, increasing the number of poor people. Poverty is a social problem that will persist in the community's living environment. This dilemma spans a long time, as well as the age of man himself (Pratama, 2015); (Vašát, 2023); (Mahalik et al., 2023).

One of the government's efforts to reduce poverty levels is to optimize the allocation of zakat funds (Canggih et al., 2017). BAZNAS is the government's only autonomous zakat institution, formed in response to Presidential Decree Number 8 of 2001. BAZNAS has a duties, responsibilities, and function in collecting, managing, and distributing ZIS (Zakat, Infaq, Sadaqah) at the national level. The introduction of Zakat Management Law Number 23 of 2011 reinforces BAZNAS's position as an institution with complete authority and authority in administering zakat monies (Laallam et al., 2020).

Zakat is used as a fiscal policy instrument in Islamic economics as one of the metrics to stimulate economic growth (Athoillah, 2018). Some specialists, such as Ryandono (2008) and Anggraini et al. (2018), have undertaken empirical studies on zakat, claiming that it affects productive revenue and rotates continuously (Khasandy & Badrudin, 2019).
According to Agustina et al., 2018, economists agree that improving the quality of a country's economy, beginning with increasing the rate of economic growth that must exceed population growth, will increase per capita income, which will have an impact on various sectors, people's welfare will increase, and poverty will be reduced. Economic growth in a decent region affects the unemployment rate, and the unemployment rate affects the poverty rate (Andhykha et al., 2018);(Mohamed et al., 2019).

According to (Nabawi's, 2020) research, a high economic growth rate in a region is necessary to correlate Gross Regional Domestic Product (GRDP) and poverty (I. S. Beik, 2010). For equitable and widespread economic development, national income needs to be increased. Successful development leading to a good economic growth rate is crucial for reducing poverty (Lapopo, 2017). (Safuridar & Damayanti, 2018) explained that GRDP is an important factor in assessing the economic growth of a region. The GDP value should be correspondingly high to ensure balanced and inclusive development in high-population areas. If the GDP per capita is high, it can generate more employment opportunities, increasing the population's income. This, in turn, can provide more tax revenue for the government, which can be allocated for poverty alleviation programs (Kareem & Bankole, 2016).

(Suharto, 2009) defined them as four types of poverty causes. First, individual factors included diseased features of society, such as poor physical and psychological health. Second, societal elements influencing how people behave remain impoverished. To elaborate further, Suharto's classification includes instances such as wastefulness in social situations as the first cause of poverty (I. Beik, 2009). The second cause is related to social factors, specifically the behaviour of individuals who are still living in poverty. The third cause is culture, which is linked to the negative habits and mindsets of those in poverty. The fourth and final cause is structural, which pertains to the presence of systems of injustice and incentives that all social layers cannot access.

As stated by the Indonesian Ministry of Religious Affairs, zakat refers to a specific portion of an individual's or institution's property that must be reserved according to Islamic law by Muslims and subsequently distributed to those who are eligible to receive it. Based on its etymology, zakat holds several meanings, including "sacred". The Quranic verse "Behold, successful indeed is the one who purifies it (the soul)" (QS. Ash-Shams: 9) implies that purification involves being free from sins and immoral acts. In Islamic law, zakat refers to the obligatory alms-giving that Muslims must pay to those who are eligible to receive it. As previously mentioned, this study aims to investigate the impact of both zakat and economic growth on poverty within the East Java Province.

II. METHOD

This study employs quantitative research as its methodology. According to (Sugiyono, 2017), quantitative research typically involves analyzing specific populations or samples and is based on the ideology of positivist schools of thought. The researchers' hypothesis is tested using quantitative or statistical data analysis during the data collection process. The researchers utilized secondary data as the source of their research information. Specifically, they collected data from BAZNAS (National Board of Zakat) East Java Province and BPS East Java Province, covering a time series from 2003 to 2022. Additionally, the
researchers obtained various theories and ideas related to their thesis topic through literature studies, including books, scientific journals, papers, and other related literature.

This study's data analysis methodology is multiple linear regression analysis. This approach aims to assess the strength of relationships between variables by conducting calculations, which the following formula can represent:

\[ \ln Y = \alpha + \beta_1 \ln X_1 + \beta_2 \ln X_2 + e \]

Information:

- \( \ln Y \) = Logarithm neutral poverty rate in East Java Province
- \( \alpha \) = Constant
- \( \beta \) = Regression coefficient of independent variable
- \( \ln X_1 \) = Natural Logarithm Realization of Zakat Fund Distribution
- \( \ln X_2 \) = Natural Logarithm of Economic Growth
- \( e \) = standard error

(Ghozali, 2007) suggests that the regression equation model is transformed into a natural logarithm model to address differences in units and nominal quantities between independent and dependent variables. This is necessary for several reasons, including:

1. Understanding the coefficients that indicate elasticity is one of the reasons for using the natural logarithm model.
2. One of the reasons for transforming the regression equation model into a natural logarithm model is to address heteroscedasticity.
3. Transforming the regression equation model into a natural logarithm model can also be done to reduce the distance between the scales of the data.

(Gujarati, 1991) suggests that using natural logarithm equations can be advantageous for reducing the units of variables to be measured. This is because logarithmic equations can address one of the deviations in the OLS (Ordinary Least Square) assumption, specifically heteroscedasticity.

### III. RESULT AND DISCUSSION

This study analyzes the impact of zakat (X1) and economic growth (X2) on poverty (Y) in East Java Province. The use of ZIS funds for people's welfare through government spending has a negative effect, and GRDP also shows a negative coefficient, indicating a decrease in the number of poor people. The main focus of this study is to investigate how the distribution of zakat funds and the growth of the economy impact poverty in East Java Province. The sample data used in this study are the distribution of zakat funds, economic growth, and the number of poor people in East Java Province from 2003 to 2022, comprising 60 samples.

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount of Zakat Fund Distribution</th>
<th>Simplified Data (Ln)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Rp 92.100.000</td>
<td>18.22</td>
</tr>
</tbody>
</table>
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Table 2. Economic Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of Economic Growth</th>
<th>Percentage of Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>4.11</td>
<td>20.93</td>
</tr>
<tr>
<td>2004</td>
<td>5.83</td>
<td>19.10</td>
</tr>
<tr>
<td>2005</td>
<td>5.84</td>
<td>22.51</td>
</tr>
<tr>
<td>2006</td>
<td>5.80</td>
<td>19.94</td>
</tr>
<tr>
<td>2007</td>
<td>6.11</td>
<td>18.93</td>
</tr>
<tr>
<td>2008</td>
<td>5.90</td>
<td>18.51</td>
</tr>
<tr>
<td>2009</td>
<td>5.01</td>
<td>16.68</td>
</tr>
<tr>
<td>2010</td>
<td>6.68</td>
<td>15.26</td>
</tr>
<tr>
<td>2011</td>
<td>7.22</td>
<td>13.85</td>
</tr>
<tr>
<td>2012</td>
<td>7.27</td>
<td>13.08</td>
</tr>
<tr>
<td>2013</td>
<td>6.54</td>
<td>12.73</td>
</tr>
<tr>
<td>2014</td>
<td>5.86</td>
<td>12.28</td>
</tr>
<tr>
<td>2015</td>
<td>5.44</td>
<td>12.34</td>
</tr>
<tr>
<td>2016</td>
<td>5.57</td>
<td>11.85</td>
</tr>
<tr>
<td>2017</td>
<td>5.46</td>
<td>11.20</td>
</tr>
<tr>
<td>2018</td>
<td>5.50</td>
<td>10.85</td>
</tr>
<tr>
<td>2019</td>
<td>5.52</td>
<td>10.20</td>
</tr>
<tr>
<td>2020</td>
<td>3.41</td>
<td>11.46</td>
</tr>
<tr>
<td>2021</td>
<td>4.76</td>
<td>10.59</td>
</tr>
</tbody>
</table>

Secondary data is collected from the Central Statistics Agency (BPS) to determine the annual level of Economic Growth that represented by GDRP. BPS defines GRDP as the added value gained from all business sectors in a region or the total value of goods and services produced by all regional economic sectors. GRDP can provide insight into the region's ability to manage its diverse resources. (Mustika, 2019) states that GRDP plays a crucial role in assessing the effectiveness of the government's resource management efforts. It is an important indicator for planning and decision-making in poverty reduction programs.

Source: BAZNAS's Financial Statements (modified by author)
The number of poor people in East Java province is determined using secondary data obtained from the Central Statistics Agency (BPS). BPS employs the concept of basic needs capability as a measure of poverty levels. In this study, the number of poor people in East Java province is determined using the basic needs capability method, which defines poverty as the economic inability to meet basic needs (including food and non-food items) as determined by expenditures. The data on the number of poor people used in this study covers the period from 2003 to 2022.

### Classical Assumption Test

#### Normality Test

The goal of this test is to discover whether or not residual values are distributed in a regular manner. The Jarque Bera Test results can be used to calculate probability values of 0.355113 > 0.05, suggesting that the residual values are normally distributed.

#### Heteroskedasticity Test

This test aims to determine whether the variances of the regression model differ from those of the residue. Based on the results of the heteroscedasticity testing, which revealed that the Probability Chi-Squared value of 0.0907 > 0.05, the regression model is homoscedastic or there is no heteroscedasticity problem.

#### Autocorrelation Test

Autocorrelation tests are used to assess whether there is a disruptive or residual correlation between period t and mistakes in the prior period t-1 in the linear regression model. The probability chi-square value of 0.4479, which is greater than the significance value, can be concluded that there is no autocorrelation problem in the regression model.
Figure 4. Autocorrelation Test

The Autocorrelation Test is designed to assess the characteristics of the model used in this study and whether the variable model utilized is acceptable. Based on the findings of the Autocorrelation Test, which found a probability of 0.4287 > 0.05, it may be concluded that there is a link between the two variables.

Figure 5. Linearity Test

Hypothesis Test Results

T-test

In this research, independent factors, namely the distribution of zakat funds (X1) and economic growth (X2), were investigated to determine their impact on the dependent variable, the number of poor individuals (Y). A t-test was employed for this purpose. The results of the t-test revealed that the probability value associated with X1 was 0.0000, which is less than the significance level of 0.05. This indicates that H1 is accepted, meaning that X1 significantly influences Y. On the other hand, the probability value for X2 was calculated as 0.1362, exceeding the significance level of 0.05. As a result, H2 is rejected, suggesting that X2 does not significantly affect Y.

F test

The F test is used to assess if the independent variable influences the dependent variable concurrently or not. The rate employed is 0.05. If F 0.05 is significant, it can be concluded that the independent variable impacts the dependent variable simultaneously. With an F-statistic value of 27.44793 and a probability value of 0.000005 0.05, it is possible to...
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conclude that H1 was received. Receiving H1 in the F test indicates that the independent variable influences the dependent variable at the same time.

<table>
<thead>
<tr>
<th>R-squared</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-squared</td>
<td>0.735729</td>
<td>S.D. dependent var</td>
<td>3.989511</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>2.050900</td>
<td>Akaike info criterion</td>
<td>4.411916</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>71.50525</td>
<td>Schwarz criterion</td>
<td>4.561276</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-41.11916</td>
<td>Hannan-Quinn criter.</td>
<td>4.441072</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>27.44793</td>
<td>Durbin-Watson stat</td>
<td>1.562773</td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000005</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 7. F test**

**R² Test (Coefficient of Determination)**

The coefficient of determination (R²) is used to compute the percentage of the independent variable's contribution to the influence of the dependent variable at the same time. R² values vary from 0 to 1. According to the R² test results, the model's capacity to describe the dependent variable is 76%, showing that the determinants of zakat money distribution and economic growth considerably impact poverty.

| R-squared | Mean dependent var | 14.63900 |

**Figure 8. R² Test**

**OLS Method Multiple Linear Regression Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>59.58625</td>
<td>6.928445</td>
<td>8.600234</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1_ZAKAT</td>
<td>-1.950740</td>
<td>0.263923</td>
<td>-7.391331</td>
<td>0.0000</td>
</tr>
<tr>
<td>X2_PERTUMBUHAN_EKONOMI</td>
<td>-0.830708</td>
<td>0.531128</td>
<td>-1.564046</td>
<td>0.1362</td>
</tr>
</tbody>
</table>

| R-squared | Mean dependent var | 14.63900 |

**Figure 9. Test Results**

From the table above, multiple linear regression can be formulated as follows:

\[
\ln(Y) = \alpha + \beta_1 \ln(X1) + \beta_2 \ln(X2) + e
\]

\[
\ln(Y) = 59.58625 - 1.950740 - 0.830708
\]

Description: \(\ln(Y) = \text{Poverty} \times \ln(X1) = \text{Zakat Fund Distribution} \times \ln(X2) = \text{Economic Growth}.

If the regression model's constant has a value of 59.58625 and a positive coefficient direction, as explained by the multiple linear regression above. Poverty (Y) is worth 59.58625 if the Zakat Fund Distribution (X1) and Economic Growth (X2) are both zero. A
The value of -1.950740 for the X1 coefficient with a negative coefficient direction implies that increasing X1 by one can lower poverty by 1.950740. With an X2 coefficient of -0.852142 and a negative coefficient direction, a one-time boost against X2 can reduce poverty by 0.830708. It is 27.44793 with a probability value (Prob) of 0.000005 0.06 according to the F-statistic test. This indicates that zakat fund distribution and economic growth factors have a certainty level of 0.763547 (76%) impact on poverty in East Java Province. While variations in the ups and downs of poverty can be described by inflation and poverty by 76%, the remaining 24% is explained by other factors. R2 adjusts the value to 735729, suggesting that the model's prediction of poverty in East Java is 73%, including all.

IV. CONCLUSION

The study found that increasing zakat funds from BAZNAS East Java Province to Mustahiq has the potential to reduce poverty. This is consistent with research by Murobbi and Usman (2021). The bureaucracy supports the increase in zakat funds. However, the growth rate of GDP in East Java Province has decreased, suggesting that the government's performance in regulating the economy is less optimal. The majority of high-value GDP sectors are comprised of industrial sectors primarily led by large companies rather than individuals. East Java is viewed as a province with a high industrial turnover sector. However, economic growth does not impact poverty, as most poor people make a living as farmers and fishermen.

V. REFERENCES


