The influence of ZIS fund distribution, social aid shopping, and subsidy shopping to poverty in Indonesia

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ABSTRACT

Indonesia has 10 percent of the poor population. Getting rid of that poverty gap, instruments that have been made are needed. One of the instruments is the distribution of ZIS funds by the National Amil Zakat Agency (BAZNAS), then spending aid social services by the central government, and subsidy spending by the central government. Then with this poverty problem, the importance of emphasizing the distribution of ZIS funds in Indonesia, spending on social assistance, spending on subsidies, and research on poverty. This study aims to analyze the effect of ZIS funds distribution, Social Aid Expenditures, and Subsidy Expenditures on poverty in Indonesia in the 2013-2017 period. The sample of this study consisted of 4, namely ZIS data obtained at the National Amil Zakat Agency (BAZNAS), then spending on social aid, expenditure on subsidies, and finally, data on poverty obtained from the Central Statistics Agency (BPS). The method used is a quantitative method by testing the classical assumptions. The results of this study are according to the results of the F test that the three independent variables (ZIS, Social Aid, and Subsidies) simultaneously influence the dependent variable (poverty).

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1. Introduction

Indonesia is a Developing Country in which has many poor areas that require more attention from the government. Poverty is also not only a problem in Indonesia but also on a global problem (Tambunan, 2014). A challenge of developing countries to improve the welfare of the people (Rofuddin et al., 2019) and the growth of economic (Erdkhadifa, 2019). Economic development can be improved with increasing and equitably distribution of community income (Rofiuuddin, 2019). According to Basri, (2002), poverty is interpreted as a result of the absence of democracy that reflects the power relations that eliminate the ability of citizens of a country to decide problems of their concern, so that the majority of the population lacks the means of production (land and technology) and resources (education, credit and market access) (Basri, 2002).

Factors that can affect poverty are social aid spending, subsidy spending, and distribution of ZIS funds by the National Amil Zakat Agency (BAZNAS). According to the Social Aid governance study, social aid expenditure is an expenditure in the form of transfers of money, goods, or services provided by the central/regional government to the community to protect the community from possible social risks, increase economic capacity, and welfare of the city. The social dangers referred to here are events or events that can cause potential social vulnerabilities. They are borne by individuals, families, groups, or communities as a result of social crises, economic crises, political crises, natural phenomena, and natural disasters, which, if not given, social aid will get worse and unable to live in reasonable conditions (Al-Arif, 2010).

According to the Indonesian Finance Minister, Sri Mulyani, there are several things currently being the focus of the government, one of which is to encourage the full procurement of social spending. The government will undoubtedly continue to strive so that each of its policies can play a role in reducing poverty and inequality. According to the head of BPS, Suhariyanto, the percentage of poor people in March 2017 was 10.64 percent. This figure slightly decreased compared to September 2016, namely to 0.06 percent from 10.70 percent. This condition is relatively slower than in previous periods.

Meanwhile, the number of inequalities in March 2017 was 0.393 or down by 0.001 points compared to September 2016, which was 0.394. Then Sri Mulyani considered that the statistics that emerged still illustrated the balanced results. If we look at the ministries of institutions that carry out social expenditures that can become more effective, we can compensate for this significant capital expenditure by striving to reduce poverty and inequality.

Thoughts economics journal vol 18.No.3 with the title “Zakah, Macroeconomic Policies and Poverty Alleviation: Lessons from simulations on Bangladesh” Policies that have been made to reduce poverty, one of which is the policies established by the IMF and the Bank The world, namely the Poverty Alleviation Strategy in 1999 to the MDG (Millennium Development Goals) program created by the United Nations in 2015 (Ahmed, 2008). Although there are many poverty alleviation programs, the results are not so significant. This causes economists to look for other ways to alleviate poverty to be more productive, namely using Islamic instruments, zakat. The effectiveness of zakat has been proven to be significant during the reign of Umar Bin Khattab and Umar bin Abdul Aziz. In this journal, the country, which is the object of research, is Bangladesh. The results of this study are that economic policies that are not accompanied by zakat cannot significantly reduce poverty. Two main conditions must be met so that zakat can reduce poverty. The first is that zakat must be included in macroeconomic policies. The second is more distribution of productive zakat than consumptive zakat.
In the journal Proceedings of Seventh International Conference the Tawawadi Epistemology: Zakat and Waqf Economy with the title “An Integrated Poverty Alleviation Model Combination of Zakat, Awqaf, and Micro Finance” presented in this scientific work, researchers combine Islamic microfinance with two traditional Islamic tools for poverty alleviation, such as Zakat and Waqf in institutional arrangements (Hasan, 2010). The innate nature of the proposed model can ensure equitable distribution and welfare among the poor. If implemented, this model will contribute to poverty alleviation by combining the three approaches: positive actions (such as increasing income growth through microenterprise development for the poor), preventive measures (through ensuring functional redistribution between factors of production), and correction steps (involving Zakat and Waqf).

In the article with the title of the management of productive zakat with an insight into social entrepreneurship in poverty alleviation in Indonesia uses a qualitative descriptive method, namely the concept of social entrepreneurship, forms of social entrepreneurship, productive zakat and social entrepreneurship, and the direction of managing productive zakat (Efendi, 2017). From the results of research above productive zakat has a strategic role in poverty efforts in Indonesia, this is indicated by the large potential of zakat in Indonesia as well as the mechanism of zakat management that allows it to be used as a poverty alleviation program.

The article with the title of the research is the zakat multiplier effect and its implications for poverty alleviation programs. This study uses a qualitative descriptive method, and the results of this study are that if zakat is well managed, it will be able to produce an effect double on the economy (Al-Arif, 2010). Zakat, both in the form of wasteful assistance and productive assistance based on existing mechanisms, has been able to provide a significant influence on the economy through its multiplying effect mechanism.

According to Pratama (2015), zakat in poverty alleviation uses a qualitative descriptive method, and the results of this study are that although the collected zakat funds are still minimal, it has a real impact in poverty alleviation efforts through the productive zakat program. And zakat is a useful financial instrument in matters of capital for the poor.

In the article with the title of the research, “our analysis of the impact of government spending on education, health, and spending subsidies on poverty in Indonesia” uses the method of estimating the Error Correction Model (ECM) and Ordinary Least Square (OLS) (Misdawati & sari A A P, 2013).

According to Sendow, Rumate, and Rotinsulu (2017) with their study is the effect of capital expenditure, social spending, and economic growth on poverty levels in Manado. In this study using the method of multiple linear regression with the classical assumption test, and the results of this study are the results of the study indicate that the value of the regression coefficient for social expenditure variables and economic growth is positive.

2. Research Method

Object of Study, The National Amil Zakat Agency (BAZNAS) in Indonesia is the location in this study. Based on the Law of the Republic of Indonesia Number 23 the Year 2011 regarding the management of zakat, zakat management is the activity of planning, implementing, organizing, distributing, and utilizing zakat. The function of the National Amil Zakat Agency (BAZNAS) is to carry out the functions of managing zakat, infaq, and sadaqah following Islamic sharia and legislation.

The National Amil Zakat Agency (BAZNAS) has quite complete data, so researchers can quickly get the data they want. The National Amil Zakat Agency (BAZNAS) also has transparent
zakat fund financial reports both in terms of distribution and revenue. BAZNAS also has programs that can help community empowerment.

This research was conducted using a quantitative approach, namely research that focuses on testing hypotheses, measuring the variables being studied and will produce conclusions, and use statistical tools. To answer the problem formulation and test the hypothesis, there are several variables used, namely three variables. The poverty level is the dependent variable or dependent variable. Whereas for independent variables or independent variables are Distribution of ZIS to BAZNAS, social aid expenditure, and subsidy aid on the realization of government expenditure.

Data collected and which will be used by researchers in research must be valid data. Therefore, the procedure in collecting data is two types—first, previous research, namely, by reviewing and understanding what problems faced by previous researchers related to this research. Second, secondary data. It is the source of data that has been collected by data collection agencies so that the data can be searched using reference books, journals, as well as from browsing internet websites.

This study used quantitative approach with many steps to analyze data (Puspita, 2019). The steps that must be done first are to use the Classical Assumption Test, then only use statistical models to test Multiple Linear Regression and Statistical Tests. In this study, using Time Series data and using the SPSS application.

3. Result and Discussion

The first test in this result is the classic assumption test. This test is carried out to detect the presence or absence of multicollinearity, autocorrelation, heteroscedasticity, and normality. Then this classic assumption test is carried out before analyzing the linear regression model, and if there is a deviation from the classical assumptions of the F test and the t-test is made to be invalid and statistically will not get a good conclusion.

The multicollinearity test has two assumptions. First, if the Tolerance value is <0.1, then the regression model experiences multicollinearity. Second, if the Variance Inflation Factor (VIF) value is > 10, then the regression model experiences multicollinearity. Table 1 presented the result of the Multicollinearity test.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Tolerance Value</th>
<th>VIF Value</th>
<th>Interpretation of Results</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZIS</td>
<td>0.891</td>
<td>1.122</td>
<td>Tolerance value &gt; 0.1</td>
<td>There is no multicollinearity</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VIF value &lt; 10</td>
<td></td>
</tr>
<tr>
<td>Social Aid</td>
<td>0.150</td>
<td>6.674</td>
<td>Tolerance value &gt; 0.1</td>
<td>There is no multicollinearity</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VIF value &lt; 10</td>
<td></td>
</tr>
<tr>
<td>Subsidy</td>
<td>0.149</td>
<td>6.731</td>
<td>Tolerance value &gt; 0.1</td>
<td>There is no multicollinearity</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VIF value &lt; 10</td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 1 above, Tolerance Values for each variable are as follows: ZIS is 0.891, Social Aid is 0.150, and subsidy is 0.149. Of all these independent variables, there is no multicollinearity because of the tolerance value > 0.1. Furthermore, by looking at the VIF value on each variable, ZIS is 1.222, Social Aid is 6.674, and the subsidy is 6.731. Of all these independent variables multicollinearity occurs, because of the VIF value <10.

This autocorrelation in this test uses the Durbin Watson method. There are criteria in making conclusions about the presence or absence of autocorrelation has three assumptions. First, If the DW value is below -2, it means a positive autocorrelation. Second, if the DW value is between -2 to +2, it means no autocorrelation. Third, If the DW value is above +2, a negative autocorrelation occurs. Table 2 presented the result of the autocorrelation test.
Based on the results of the data in the above table, autocorrelation symptoms do not occur because they have a Durbin Watson value of 0.672. After all, they are in an area that does not have autocorrelation symptoms, namely DW between -2 to +2.

The Heteroscedasticity test has the purpose of detecting the presence or absence of heteroscedasticity; graph analysis can be done by observing scatterplots where the horizontal axis represents Predicted Standardized, while the vertical axis represents the Residual Studentized value. Then if the Scatterplot spreads randomly and the points spread above and below the number 0 on the Y axis, then there is no heteroscedasticity. Figure 1 presented the result of the heteroscedasticity test.

![Scatterplot Heteroscedasticity Test](image)

**Figure 1. Scatterplot Heteroscedasticity Test**

The normality test can be detected by analyzing the histogram graph, which describes the dependent variable as the vertical axis, while the standardized residual value is defined as the horizontal axis. If the Standardized Residual Histogram forms a bell-like curve, the residual value is declared normal. Then another method used to test normality is by looking at the results of the Normal P-Plot graph with two assumptions. First, If the points approach a diagonal line, the normality assumption has been fulfilled. Second, If the points move away from the diagonal line, the assumption of normality is not fulfilled. Figure 2 presented the result of the normality test.
Based on the results of the normality test, we can see the appearance on the histogram graph, which concluded that the histogram graph tends to form a normal convex curve with a standard deviation number approaching one, which is equal to 0.974. Figure 3 presented the P-Plot Normality test.

Based on the results of the graph above, by looking at the graphical display of P-Plot, it can be concluded that the distribution pattern is obtained with the points spread narrowed around the diagonal, and both of these indicate that the residuals are normally distributed.

Regression analysis is used to estimate or predict the average value of the dependent variable based on the known independent variable values. The results of data management obtained using the SPSS program. Table 3 presented the result of multiple linear regression.
Table 3. Multiple Linear Regression Analysis Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients</th>
<th>Std. Error</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.881</td>
<td>.380</td>
<td>7.591</td>
<td>.000</td>
</tr>
<tr>
<td>ZIS</td>
<td>-0.016</td>
<td>.003</td>
<td>-4.633</td>
<td>.000</td>
</tr>
<tr>
<td>Social Aid</td>
<td>0.038</td>
<td>.015</td>
<td>2.496</td>
<td>.016</td>
</tr>
<tr>
<td>Subsidy</td>
<td>-0.011</td>
<td>.002</td>
<td>-4.573</td>
<td>.000</td>
</tr>
</tbody>
</table>

The multiple linear regression equation model for this study is as follows:

\[ Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e \]

\[ Y = 2.881 - 0.016 X_1 + 0.038 X_2 - 0.011 X_3 \]

Note:
- Y: Poverty
- a: constant
- b: Regression Coefficient
- \( X_1 \): ZIS
- \( X_2 \): Social Aid
- \( X_3 \): Subsidy
- e: Error term, assumed to be 0

From the regression equation above can be explained that constant is 2.881. This means that if the ZIS (\( X_1 \)) Social Aid (\( X_2 \)) and Subsidies (\( X_3 \)) value is 0, then poverty (Y) value is 2.881. ZIS variable regression coefficient (X1) is -0.016. This means that if the independent variable has a fixed value and ZIS has increased by 1%, then poverty (Y) will decrease by 0.016. The negative coefficient means that there is a negative relationship between ZIS and poverty, the more ZIS increases, the more poverty decreases. Social Aid variable regression coefficient (X2) is 0.038. This means that if the independent variable has a fixed value, and ZIS has increased by 1%, poverty (Y) will decrease by 0.038. The negative coefficient means that there is a negative relationship between ZIS and poverty. The more ZIS increases, the more poverty decreases. The subsidy variable regression coefficient (X3) is -0.011. This means that if the independent variable has a fixed value and subsidies have increased by 1%, then poverty (Y) will decrease by 0.011. The negative coefficient means that there is a negative relationship between subsidies and poverty, the more subsidy increases, the more poverty decreases.

The coefficient of determination (Adjusted R\(^2\)) basically measures how far the model's ability to explain the variation of the dependent variable. Adjusted R\(^2\) value of close to one means that the ability of independent variables provides almost all the information needed to predict variations of the dependent variable. Table 4 presented the result of Adjusted R\(^2\).

<table>
<thead>
<tr>
<th>Test</th>
<th>Adjusted R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>0.577</td>
</tr>
</tbody>
</table>

Based on the results of the study in the table shows that the value of the coefficient of determination (Adjusted R\(^2\)) obtained by 0.607 or 60.7%. This means that 57.7% of poverty can be influenced and explained by independent variables in the form of ZIS, Social Aid, and Subsidy. At the same time, the remaining 42.3% is explained by other variables.
The F statistical test shows whether all independent or independent variables entered in the model have a joint influence on the dependent variable. Assumptions used in making decisions on the F test based on:

Comparison between F-Calculate and F-Table, this is the assumption. First, if F-Calculate > F α (k, n-k-1), so H₀ is rejected. Second, if F-Calculate < F α (k, n-k-1), then H₀ is accepted. Probability has two assumptions too. First, If Probability (P-value) > Significance level, so H₀ is accepted. Second, if Probability (P-value) < Significance level, so H₀ is rejected. Table 5 presented the result of the F-test.

Table 5. Statistical Test Analysis F (Simultaneous Test)

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27.838</td>
<td>0.000</td>
</tr>
</tbody>
</table>

From the simultaneous significance test results above in the table, it can be seen that the independent variable has a significance F calculated at 27.838, which is greater than the F table value of 2.790. Then it can also be seen at the significance of 0.000, which means it is smaller than the significance level of 5% or 0.05. Means accepting H₁, then the regression model can be used to predict poverty, or recorded independent variables (ZIS, social aid, and subsidies) simultaneously have an influence on poverty.

T statistic test basically shows how far the influence of one independent variable individually in explaining the variation of the dependent variable. A variable will have a significant effect if the calculated T value of the variable is greater than the T table value. Assumptions used in decision making based on Comparison between T-Calculate and T-Table are two. First, if T-Count > T-Table, then H₀ is rejected. Second, if T-Count < T-Table, then H₀ is rejected. Based on probability, the T-test has two assumptions. First, if Probability (P-value) > Significance level, so H₀ is accepted. Second, if Probability (P-value) < Significance level, so H₀ is rejected.

Table 6. T Statistics Test (Partial Test)

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
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<td>-4.573</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on the results of the t-test in the table calculated using SPSS, the following decisions can be made. ZIS has a significance value of 0.000 < significance level of 0.05. This means accepting H₁, which states that the ZIS variable has a significant effect on poverty. Social aid has a significance value of 0.016 < significance level of 0.05. This means accepting H₂, which states that the Social Aid variable has a significant effect on poverty. The subsidy has a significance value of 0.000 < significance level of 0.05. This means accepting H₃, which states that the ZIS variable has a significant effect on poverty.

Discussion

Based on the data, the percentage of poor people in Indonesia experienced ups and downs from the 2007 period, which was 16.58 percent up to the 2014 period, which was 10.96 percent decreased, and then in the 2015 period, it experienced an increase of 11.13 percent. However, in the 2016 period, the percentage dropped to 10.70 percent. From this data we know that Indonesia still has 10 percent of the poor population, therefore how to get rid of that poverty gap, instruments that have
been made are needed, such as the distribution of ZIS funds by the National Amil Zakat Agency (BAZNAS), then spending social assistance by the central government, and subsidy spending by the central government. Then with this poverty problem, the importance of emphasizing the distribution of ZIS funds in Indonesia, spending on social assistance, and spending on subsidies. If we see from the percentage of poverty in 2016 decreased to 10%. Therefore this researcher wants to know whether these variables can influence poverty and whether there is a significant influence or not.

This research is in line with the study of Al-Arif (2010) the title of the review is the effect of zakat multiplier and its implications for poverty alleviation programs. Especially the poverty alleviation program at BAZNAS, where this data was obtained directly by the Baznas Center itself. So it’s not just the government that has a poverty alleviation program. This makes that BAZNAS can help the government in poverty alleviation. So what is also expected by the existence of this poverty alleviation program the community can enjoy a decent life. The significance of the results of this test is that there is indeed an influence of ZIS fund distribution, social assistance shopping, and subsidy shopping to poverty in Indonesia, 2013-2017 period.

4. Conclusions

Based on this research, conclusions can be drawn on the results of the analysis and discussion in the previous chapters. First, the distribution of ZIS (Zakat, Infaq, and Sedekah) funds to BAZNAS (National Amil Zakat Agency) has a significant effect on poverty in Indonesia. Second, social aid expenditure (social aid) is having a significant impact on poverty in Indonesia. Third, subsidy expenditure has a significant effect on poverty in Indonesia. Fourth, the distribution of ZIS funds, Social Aid Expenditures, and Subsidy Expenditures have a simultaneous effect on poverty in Indonesia.

5. Acknowledgment

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6. References


Muqtasid: Jurnal Ekonomi Dan Perbankan Syariah, 10(1), 69. https://doi.org/10.18326/muqtasid.v10i1.69-79