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Government Spending and Indonesia's Multidimensional Poverty 2018-2020

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Abstract: This research aims to analyze the effect of government spending on multidimensional poverty in Indonesia in 2018-2020. The government expenditure used is government expenditure for housing functions, public facilities and social assistance expenditure. This research uses a quantitative approach and Tobit panel regression techniques as well as secondary data for 2018-2020. The research results show that government spending, both government spending for public facilities housing functions and social assistance spending, has a positive and significant effect on multidimensional poverty in Indonesia. This research recommends to the Government that in making expenditure policies it is necessary to examine more broadly the impact on multidimensional poverty. Furthermore, the Government needs to evaluate and review the effectiveness of policies that have been implemented to reduce poverty, especially multidimensional poverty, which can be done through budget decomposition based on programs, so that the effect of spending on poverty can be seen in more detail.

Keywords: Multidimensional Poverty, Government Expenditure, Housing Public Facilities Function, Social Assistance

INTRODUCTION

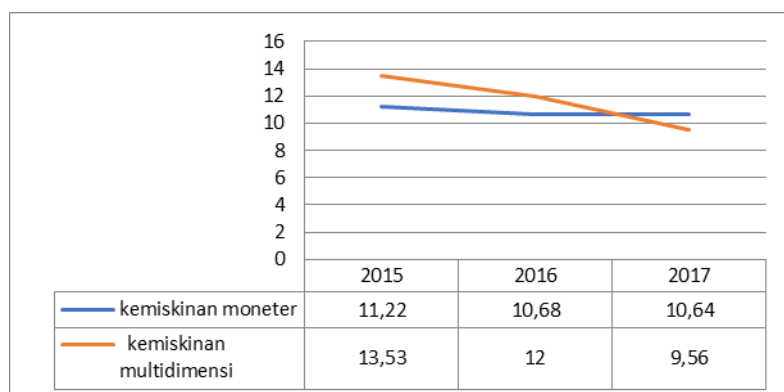
Poverty is still a problem and a development challenge in many countries, making it the first goal of the Sustainable Development Goals (SDGs), an agreement set by the United Nations. Poverty is not just about a lack of income to fulfill the necessities of life but involves many things. Poverty includes malnutrition, hunger, lack of access to education, lack of access to basic services, exclusion, social discrimination, and others (Wulandari et al., 2022).

The World Bank revealed several characteristics of the poverty phenomenon in Indonesia, among others:

- Many people are vulnerable to poverty
- There is a more crucial problem than monetary poverty, which is non-monetary poverty.
- Large poverty inequality between regions.

Based on these characteristics, it can be concluded that poverty in Indonesia does not only focus on low-income levels. Therefore, poverty rates measured using indicators other than income need to be studied. Multidimensional poverty rates in Indonesia have been conducted

by PRAKARSA until 2018. Figure 1 shows the condition of multidimensional poverty and monetary poverty in Indonesia from 2015 to 2018. This comparison is based on March of each year. In 2015-2016, the multidimensional poverty rate was higher than the monetary poverty rate. However, in 2017 the multidimensional poverty rate dropped significantly leaving the monetary poverty rate.



**Figure 1. Indonesia's multidimensional and monetary poverty rates
Year 2015-2018**

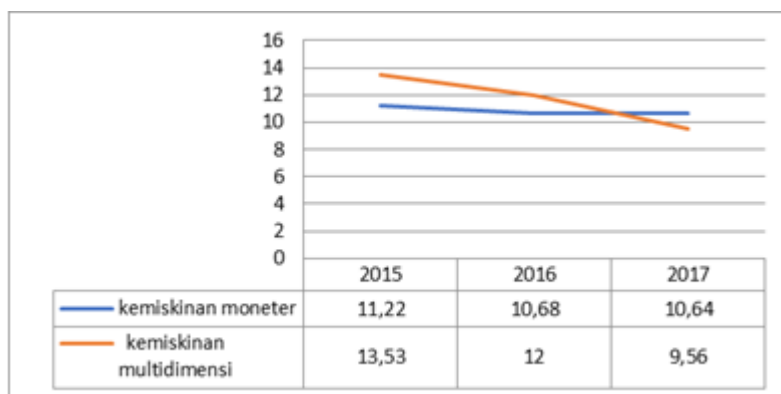
Source: Aidha et al. (2020)

The multidimensional poverty rate in Indonesia has been on a downward trend along with the monetary poverty trend. However, the decline in multidimensional poverty is greater than the decline in income-based poverty. This more progressive decline shows that the condition of the poor has been improved more effectively in terms of life capabilities than in terms of income; this shows that the poor have improved especially in terms of life capabilities. As a result, welfare has increased in terms of the basic needs of the poor rather than in terms of income.

Government spending is a tool that can be used by the government to fight poverty (Kasim et al., 2021). Government spending refers to government policies that generate costs. Government spending can be an indication of the government's commitment to improving the welfare of its people. The regional autonomy system that has been implemented by Indonesia makes each region free to regulate its own region, including determining the regional revenue and expenditure budget (APBD). This is in accordance with Law number 22 of 1999 concerning regional government. One of the objectives of regional autonomy is for each government to be closer to its people so that the policies implemented can be more effective and efficient (Nurmandi et al., 2021).

By improving human development indicators, government spending can be used to help people who are vulnerable to income and non-income poverty. According to the World Bank (2007) there are three ways governments can spend money to fight poverty: social services in health and education, investment in infrastructure, and social assistance and safety nets.

Figure 2 shows the trend of Indonesia's multidimensional poverty rate and average local government expenditure per capita on housing public facilities, health, education, and social assistance from 2018 to 2020.



**Figure 2. Multidimensional poverty rates and government spending
Year 2018-2020**

Source: DJPK MoF and SUSENAS (processed)

Figure 2 shows fluctuations in the multidimensional poverty rate in the 2018-2020 period. Meanwhile, the trend of government spending has increased every year. Therefore, the author is interested in looking further at how government spending, especially local government spending, affects the multidimensional poverty rate in Indonesia in 2018-2020 in a study entitled "Government Spending and Multidimensional Poverty in Indonesia 2018-2020."

Poverty alleviation strategies have greater value than economic growth policies. This is due to the fact that faster economic growth does not necessarily improve the lives of the poor (Todaro et al., 2000). Arsyad (1992) stated that agricultural sector development, human resource development, and the role of NGOs are some of the ways to overcome poverty.

Furthermore, increasing the productivity of the poor can be achieved through human resource development by improving access to education and health. Education can directly be done by training and improving the necessary skills, which in turn can increase the productivity of the poor and ultimately increase their income. Standardized services of clean water, waste disposal, and others provide access to health. Improved health can also increase the productivity of the poor (Fuady et al., 2021).

According to Murdiyana & Mulyana (2017) In reducing poverty, empowerment can be applied through four strategic channels: expanding employment opportunities, community empowerment, capacity building, and social protection. Where from the perspective of empowering the poor, it is hoped that the role of NGOs can help the community be more involved in the development of the concept of empowerment. The goal of the expansion of employment opportunities strategy is to create economic, political, and social conditions and environments that allow all members of the poor, both men and women, to have the widest possible opportunity to fulfill their basic needs.

Poverty alleviation can also be done through social assistance issued by the government. According to (Putri et al., 2023) social assistance is a payment in cash or in kind to members of the community or social institutions that aims to protect them from possible social risks. Based on the regulation of the Minister of Home Affairs Number 39 of 2012, social assistance is the provision of continuous and non-temporary assistance in the form of money or in kind for the community in order to improve the welfare of the community. In addition, spending on social assistance helps provide social security for all and fulfill basic needs and enable them to live a decent life.

Government Expenditure

Government spending is aimed at income distribution and poverty reduction through the provision of infrastructure such as public facilities (Yunus & Anwar, 2021). This suggests that

government fiscal policy instruments through government spending are expected to create jobs, increase people's income and welfare, and reduce poverty.

Public spending plays an important role in reducing development disparities in Indonesia, both through direct spending and by providing an inviting environment for private investment. (*Indonesia Public Expenditure Review: Spending for Better Results*, 2020). One of the public expenditures that can be used to fight poverty is government spending. Public expenditure can be distributed in three areas, namely:

- a) Through social services in the health and education sectors to improve the quality of human resources of the poor, which in turn will increase productivity;
- b) Through infrastructure investments to increase income opportunities and market access of the poor; and
- c) Through social safety net assistance to increase the income of poor people (*A New Era in Poverty Alleviation in Indonesia*, 2007).

Empirical Study

Previous research related to one of the efforts to alleviate poverty through government spending is by Sasana & Kusuma (2018). This study took a sample of 33 provinces in Indonesia during the 2008-2013 period. The results obtained from this study are that economic growth has a positive effect on poverty. Government spending has a negative effect on poverty. Per capita income has a negative effect on poverty. Labor force participation rate has a negative effect on poverty. In line with research conducted by (Rosales et al., 2020) where there is an opposite relationship between government spending and the multidimensional poverty index in Ecuador.

Séne & Cissé (2014) found that government spending on infrastructure has a positive impact on multidimensional poverty in line with research by Agus Bandiyono in 2018. This contradicts the research results found by (Azwardi, 2014) where government spending on housing and public facilities negatively affects the poor.

Furthermore, research by Putri et al. (2023) who get the results of social assistance carriers have a positive effect on poverty where the more social assistance is channeled, the poverty will increase. However, research by Sunan et al. (2022) showed different results. Increased social assistance will actually reduce the poverty level of the community because this assistance can be used and utilized to meet community needs.

METHOD

Method for Calculating the Multidimensional Poverty Rate

The calculation of multidimensional poverty in this study refers to the alkire-foster method (Alkire et al., 2015). This method uses a poverty vulnerability matrix. The matrix contains indicators of multidimensional poverty. Each indicator is given a weighted weight. Each dimension has a weight of 1/3 and each indicator is also weighted equally.

If $d \geq 2$ is the number of dimensions and $x = [x_{ij}]$ is a matrix of $n \times d$ selected events, where x_{ij} is the selected event of individual i ($i=1, \dots, n$) in dimension j ($j=1, \dots, d$). Then x is depicted in the matrix below

$$x = \begin{pmatrix} x_{11} & x_{1j} & x_{1d} \\ x_{i1} & x_{ij} & x_{id} \\ x_{n1} & x_{nj} & x_{nd} \end{pmatrix}$$

Let z be the *row* vector of a particular dimension in household z_j , x_i be the *row vector* of each selected individual i in each dimension and x_j be the *column vector* of the selected

dimension j among the analyzed individuals. So the deprivation matrix $x^0 = [x_{ij}^0]$ can be summarized as:

$$x_{ij}^0 = \begin{cases} 1 & \text{if } x_{ij} < x_{zj} \\ 0 & \text{otherwise} \end{cases}$$

$x_{ij}^0 = 1$ means that individual i is indicated as poor in dimension j and if $x_{ij}^0 = 0$ then the individual is not indicated as poor in dimension j . Next, k is the cut-off by summing each row (x_{ij}^0), a column vector c will be obtained, namely the selected incidence of poor containing c_i , which is the number of selected poor for individual i . someone is said to be poor if $c_i \geq k$

$$P_k = \begin{cases} 1 & \text{if } c_i \geq k \\ 0 & \text{if not} \end{cases}$$

Furthermore, the first calculation is to calculate the *headcount ratio*. The number of poor people in each household is denoted by q_k and the vector z at the cut-off, the *headcount ratio* (H) can be illustrated as follows:

$$H = \frac{q_k}{n}$$

Then to see the probability of a deprived individual becoming poor in each dimension can be written as follows:

$$\underline{c}_i(k) = \frac{1}{d} [c_i p_k]$$

Meanwhile, the average *deprivation* for each poor individual is:

$$A = \frac{1}{q_k d} \sum_{i=1}^n c_i p_k$$

Budiantoro et al. (2013) also calculated the multidimensional poverty index by simplifying the mathematical illustration. Budiantoro conducted the calculation by dividing it into three stages. First, weighting each indicator in each dimension in each individual to find out which individuals are underprivileged or below the limit of being poor in a dimension. The assessment of each individual for each dimension has a value range of 0 to 1. When an individual meets the criteria for assessing poverty according to the MPI indicators, they will be given 1 point. After obtaining the overall assessment, it will be calculated using the following formula:

$$C_i = w_1 I_1 + w_2 I_2 + w_3 I_3 + \dots + w_d I_d$$

I_i is 1 if the individual is deprived in indicator I and equal to 0 if not deprived. W_i is the weight of the indicator.

The next step is summing up to get the average score. A person is said to be poor when the total average assessment is greater than $1/3$. After obtaining the number of individuals who fall into the poor category, the *headcount ratio* (H) can be determined.

$$H = \frac{q}{n}$$

Where q is the number of individuals categorized as multidimensionally poor while n is the total population. Then, poverty intensity can also be calculated using the following formula:

$$A = \frac{\sum_{i=1}^n c_i(k)}{q}$$

$c_i(k)$ is the score of individual (i) and q is the number of individuals experiencing multidimensional poverty. Then, the multidimensional poverty index is obtained by multiplying the multidimensional *headcount ratio* (H) with the poverty intensity (A). This study uses a household basis in calculating multidimensional poverty. Therefore, the *headcount ratio* is at the household level, not the individual level.

Table 1. Dimensions, indicators, deprivation cutoffs and weights for multidimensional poverty calculation

Dimensions	Indicator	Deprivation Cutoff	Weights
Health	Immunization	Deprived when individuals never receive immunization	1/9
	Sanitation	Deprived if a household does not have its own defecation facilities and does not use a gooseneck toilet.	1/9
	Drinking water	Households are deprived if they do not have access to clean and safe drinking water sources.	1/9
Education	School participation	Deprived if individuals aged 7-18 are not in school.	1/6
	Years of Schooling	Deprived if individuals aged >18 completed less than senior high school or no education at all.	1/6
Standard of Living	House Condition	Deprived if the household has 2 inadequate components out of 3 housing components.	1/9
	Cooking Fuel	Deprived if households cook using other than electricity and gas.	1/9
	Lighting source	Deprived if the household has a source of lighting other than PLN electricity.	1/9

Source: PRAKARSA (modified)

Operational Definition of Variables

Hatch and Farhady in Sugiyono (2018) define variables theoretically as attributes of objects that have variations between one object and another.

1. Dependent variable

The dependent variable, also known as the dependent variable, is the variable that is the result of the independent variable. The dependent variable in this study is the Multidimensional Poverty Rate which is the value of poverty indicators that have been accumulated with proportional values through the Alkire-Foster method. This method produces a multidimensional poverty rate at the district/city level throughout Indonesia.

Data on the percentage of multidimensional poverty in districts/cities in Indonesia in 2018 uses data sourced from publications by PRAKARSA institutions in 2018. Meanwhile, the data for the percentage of Indonesia's multidimensional poverty in 2019-2020 is the result of data processing conducted by researchers using the same method, namely the Alkire-Foster method. However, the indicators in the calculation of the multidimensional poverty rate carried out by this researcher use modifications of the indicators used by the PRAKARSA institution due to data limitations.

Modifications were made to the health dimension. PRAKARSA uses three indicators: under-five nutrition, sanitation, and drinking water sources. In this study, the under-five nutrition indicator was modified with the immunization indicator. This modification refers to the research of Budiantoro et al. (2013) due to limited data on household nutrition intake.

The other two dimensions, namely the education dimension, in this study refer to the *indicators* used by the PRAKARSA organization, namely access to Early Childhood Education because children aged 3-6 years who can access pre-school education are considered to be better prepared for school at the next level. Furthermore, the school continuity indicator is used to look at individuals in the age range of 7-17 years, which is the age range of the 12-year compulsory education program.

The standard of living dimension uses three indicators, namely *indicators of* lighting sources using electricity subsidized by the government through PLN. Currently, the government continues to strive to provide affordable electricity for the community. Furthermore, the cooking fuel indicator and the condition of the house are seen from the condition of the roof, floor, and walls.

2. Independent variable

Independent variables are called independent variables which are variables that affect the dependent variable. The independent variables used in this study are:

a. Government expenditure on housing and public facilities

This variable is the total realization of goods and services expenditures and capital expenditures by local governments at the district/city level according to the housing and public facilities function divided by the population of a region. The unit used is million rupiah.

b. Social Assistance Expenditure

This variable is social assistance spending by local governments at the district/city level divided by population.

3. Control variable

Control variables are variables that are controlled so that the relationship between the independent and dependent variables is not influenced by external factors that are not studied. The control variables used in this study are as follows:

a. GRDP per capita

Gross Regional Domestic Product is the sum of the value of final goods and services produced by all economic units in a region. GRDP per capita is GRDP divided by the total population with units of thousand rupiah.

b. TPAK

TPAK is the percentage of the labor force to the total population aged ten years and over (BPS, 2023). The unit used is percent (%).

Data Analysis Technique

The tobit model was used in this study to examine the relationship between government expenditure on housing and public facilities and social assistance expenditure on multidimensional poverty. According to (Wendha & Alteza, 2020) the tobit model is a regression analysis used for dependent variables in the form of censored data. The tobit model was raised by James Tobin in 1985. This model is used because the dependent variable in the study is the percentage of multidimensionally poor people whose values range from 0 to 1. Amemiya (1984) defines the standard tobit model as follows:

$$\begin{aligned} y_i^* &= x_i' \beta + u_i, & i &= 1, 2, \dots, n \\ y_i &= y_i^*, & \text{if } RHS > 0 \\ y_i &= 0, & \text{otherwise} \end{aligned}$$

Maddala (1987) stated that the panel model that can be generalized into tobit is the *random effects model*. The equation can be written as follows:

$$\begin{aligned} y_{it}^* &= \beta' x_{it} + \epsilon_{it} & i &= 1, 2, \dots, N \\ \epsilon_{it} &= \alpha_i + u_{it} & t &= 1, 2, \dots, t \end{aligned}$$

Although Honore (1992) developed a *semiparametric estimator* for the tobit *fixed effects* model, the estimation of this model is still biased. In addition, the *random effects* approach produces a specific model that can be used to calculate *marginal effects* (Kalwij, 2004). (Kalwij, 2004).

The model used refers to the Rachmaningsih & Priyarsono (2012) which was modified. The model equation is as follows:

$$KM_{it} = \beta_0 + \beta_1 \ln_GEINF_{it} + \beta_2 \ln_BS_{it} + \beta_3 \ln_GEINF_sq_{it} + \beta_4 \ln_BS_sq_{it} + \beta_5 \ln_PDRBk_{it} + \beta_6 TPAK_{it} + \epsilon_{it}$$

where

Ln_GEINF	: natural logarithm of government expenditure on housing and public facilities per capita
Ln_BS	: natural logarithm of government spending on social assistance expenditure per capita
Ln_PDRBk	: natural logarithm of GRDP per capita
TPAK	: labor force participation rate
I	: each district and city
T	: time t (year)

RESULTS AND DISCUSSION

In this study, the *random-effects Tobit regression* method is used to determine the effect of government spending on housing and public facilities, health, education, and social assistance spending on multidimensional poverty. The use of Tobit regression is because the multidimensional poverty data ranges from 0 to 1. However, to see the comparison between the results of the random-effects tobit regression method and OLS (*Ordinary Least Square*), the OLS method is also used with the following results:

Table 2. Comparison of Tobit and OLS Regression Results

Variables	Tobit		OLS	
	Coefficient	$P > z $	Coefficient	$P > z $
Ln_GEINF	-0,031	0,000	-0,031	0,000
Ln_BS	-0,011	0,001	-0,011	0,000
Ln_GEINF_sq	0,002	0,000	0,002	0,000
Ln_BS_sq	0,001	0,000	0,001	0,000
Ln_PDRBk	-0,092	0,000	-0,092	0,000
TPAK	0,002	0,000	0,002	0,000
Constant	1,543	0,000	1,530	0,000

Source: data processed by researchers (2023)

The Tobit and OLS regression results in table 3 show no different results. The variables that significantly affect multidimensional poverty when measured using the Tobit model are ln_GEINF (government infrastructure spending), ln_BS (social assistance spending), ln_pdrbk (GRDP per capita), and TPAK. Meanwhile, when estimated using OLS, the results of variables that significantly affect multidimensional poverty remain the same at the $\alpha=5\%$ significance level. The results of the marginal effect after Tobit regression are shown as follows:

Table 3. Marginal Effect after tobit regression

Variables	dy/dx	P > z
Ln_GEINF	-0,031	0,000
Ln_BS	-0,011	0,001
Ln_GEINF_sq	0,002	0,000
Ln_BS_sq	0,001	0,000
Ln_PDRBk	-0,092	0,000
TPAK	0,002	0,000

Source: data processed by researchers (2023)

Based on the table above, the Tobit Model in this study is as follows:

$$KM_{it} = 1,543 - 0,031\ln_{it}GEINF_{it} - 0,011\ln_{it}BS_{it} + 0,002\ln_{it}GEINF_sq_{it} + 0,001\ln_{it}BS_sq_{it} - 0,092\ln_{it}PDRBk_{it} + 0,002TPAK_{it} + \epsilon_{it} \dots \dots \dots (1)$$

Description:

- Ln_GEINF : logaritma natural pengeluaran pemerintah bidang perumahan dan fasilitas umum per kapita
- Ln_BS : logaritma natural pengeluaran pemerintah pada belanja bantuan sosial per kapita
- Ln_PDRBk : logaritma natural PDRB per kapita
- TPAK : tingkat partisipasi angkatan kerja

Furthermore, to measure the impact of government spending on the housing and public facilities function, it can be seen through the calculation of the Multidimensional Poverty (KM) derivative of Ln_GEINF as follows:

$$\frac{\partial KM}{\partial \ln_{it}GEINF} = -0,031 + 0,004\ln_{it}GEINF \dots \dots \dots (2)$$

Based on the *derivative* results above, a turning point can be determined to determine the direction of the impact of government spending on this function on the multidimensional poverty rate. The results of the calculation of the turning point value of the model equation for the government expenditure variable for the housing and public facilities function are as follows:

$$titik\ balik = \frac{-b}{2a} = \frac{0,031}{0,004} = 7,75$$

If the turning point above is depicted graphically, it will look as follows:

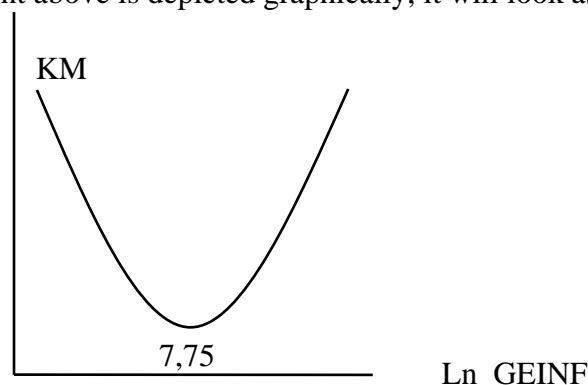


Figure 3. Interpretation of Government Expenditure on Housing and Public Facilities Functions on Multidimensional Poverty

Based on the research data used, after the calculation, the average value of Ln_GEINF is 12.92. The average value of Ln_GEINF is greater when compared to the value of the U-curve turning point formed, which is 7.75. This means that the value of 12.92 is in the area to the right of the U-curve turning point value. Thus it can be concluded that there is a positive relationship between multidimensional poverty and government spending on infrastructure.

Meanwhile, the magnitude of the impact of government spending on housing and public facilities on the multidimensional poverty rate can be determined by entering the average value of Ln_GEINF into equation (2) as follows:

$$\begin{aligned}\frac{\partial KM}{\partial \text{Ln_GEINF}} &= -0,031 + 0,004\text{Ln_GEINF} \dots\dots\dots(2) \\ \frac{\partial KM}{\partial \text{Ln_GEINF}} &= -0,031 + 0,004(12,92) \\ \frac{\partial KM}{\partial \text{Ln_GEINF}} &= -0,031 + 0,051 \\ \frac{\partial KM}{\partial \text{Ln_GEINF}} &= 0,02\end{aligned}$$

Based on the above calculation, a value of 0.02 was obtained. This value indicates that if there is a change in government spending on housing and public facilities by 1%, it will cause a change in the multidimensional poverty rate by 2% with a positive relationship. The positive relationship here indicates that the changes that occur are the opposite.

The results show that at the district/city level in Indonesia, government spending on housing and public facilities has a positive and significant effect on multidimensional poverty at 2%. The results of this study are in line with the research of Séné & Cissé (2014) which states that there is a positive influence between government spending on infrastructure and multidimensional poverty. The impact of infrastructure development on the poor can be caused by the environmental impact caused by infrastructure development carried out by the government. There are several infrastructure development projects that require the government to acquire land or property from local communities. This can lead to forced displacement and loss of livelihood. The negative effect of this infrastructure development is that residents in the area who may not have previously been categorized as poor will no longer be able to make a living. Thus, the number of poor people will increase.

The same steps were taken with the Ln_BS variable to determine the impact of social assistance expenditure on multidimensional poverty. The calculation of derivatives is as follows:

$$\frac{\partial KM}{\partial \text{Ln_BS}} = -0,011 + 0,002\text{Ln_BS} \dots\dots\dots(3)$$

The results of calculating the turning point to determine the direction of the impact of government spending on social assistance expenditure on the multidimensional poverty rate are:

$$\text{titik balik} = \frac{-b}{2a} = \frac{0,011}{0,002} = 5,5$$

Furthermore, the turning point value above can be depicted through a graph as below.

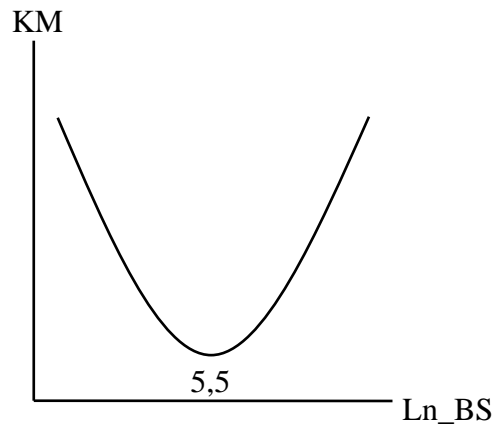


Figure 4. Interpretation of Social Assistance Expenditure on Multidimensional Poverty

As in the previous calculation, using the research data, the average value of Ln_BS is 8.62. This average value will be in the area to the right of the turning point (5.5) which also indicates a positive relationship.

The impact of government spending on social assistance expenditure on the multidimensional poverty rate can be determined by entering the average value of social assistance expenditure into equation (3).

$$\frac{\partial KM}{\partial Ln_BS} = -0,011 + 0,002Ln_BS \dots \dots \dots (3)$$

$$\frac{\partial KM}{\partial Ln_BS} = -0,011 + 0,002(8,62)$$

$$\frac{\partial KM}{\partial Ln_BS} = -0,011 + 0,017$$

$$\frac{\partial KM}{\partial Ln_BS} = 0,006$$

The results of the above calculation obtained a value of 0.006 with a positive relationship. This value can be interpreted that if there is a 1% increase in government spending on social assistance spending, it will cause an increase in the multidimensional poverty rate by 0.6% and vice versa.

The control variable, GRDP per capita, has a significant negative effect on the multidimensional poverty rate. This indicates that a 1% increase in GRDP per capita will reduce multidimensional poverty by 9.2%. Meanwhile, another control variable, namely TPAK, has a significant positive effect on multidimensional poverty in Indonesia in 2020. This is in accordance with the results of research conducted by Sasana and Kusuma (2018).

This study found that social assistance expenditure had a positive effect on the multidimensional poverty rate of 0.6%. Social assistance expenditure is a type of regional expenditure aimed at underprivileged people. Social assistance expenditure has a positive effect on the percentage of multidimensional poverty. This is in line with research by Ayu and Prabowo (2021) where social assistance increased the poverty rate in East Java in 2018. The positive relationship between social assistance expenditure and the multidimensional poverty rate can occur for various reasons. Among them is the emergence of dependence of the poor on social assistance channeled by the government.

CONCLUSION

This study aims to examine the impact of government spending on housing and public facilities and government spending on social assistance expenditure on multidimensional poverty in Indonesia. Government spending is expected to reduce the level of multidimensional poverty. However, the results of this study show the opposite. The variable of government expenditure on housing and public facilities has a positive effect on the multidimensional poverty rate, meaning that an increase in government expenditure on this function actually increases the percentage of people who are multidimensionally poor. Government expenditure on social assistance expenditure also shows the same result, which has a positive effect on multidimensional poverty. An increase in government spending on social assistance expenditure will increase the multidimensional poverty rate.

As a result of this research, the government needs to examine more broadly the impact on multidimensional poverty before making policies related to spending. In addition, the government also needs to evaluate and review the effectiveness of policies that have been carried out to reduce poverty, especially multidimensional poverty. In the context of government financial transparency, it would be nice to decompose the budget by program so that its effect on poverty can be seen in more detail.

REFERENCES

- Alkire, S., Roche, J. M., Ballon, P., Foster, J., Santos, M. E., & Seth, S. (2015). *Multidimensional Poverty Measurement and Analysis*. Oxford University Press, USA.
- Amemiya, T. (1984). Tobit Models: A Survey. *Journal of Econometrics*, 24(1–2), 3–61. [https://doi.org/10.1016/0304-4076\(84\)90074-5](https://doi.org/10.1016/0304-4076(84)90074-5)
- Arsyad, L. (1992). Ekonomi Pembangunan. In *Yogyakarta: Bagian Penerbitan Sekolah Tinggi Ilmu Ekonomi: YKPN*. Bagian Penerbitan Sekolah Tinggi Ilmu Ekonomi: YKPN.
- Azwardi, A. (2014). Pengaruh Pengeluaran Pemerintah Provinsi di Indonesia untuk Fungsi Ekonomi, Kesehatan, Pendidikan serta Perumahan dan Fasilitas Umum Terhadap Penduduk Miskin Tahun 2011-2013. *Jurnal Ekonomi Pembangunan*, 12(1), 1–11. <https://doi.org/10.29259/jep.v12i1.4862>
- Budiantoro, S., Fanggidae, V., Saputra, W., Maftuchan, A., & Artha, D. R. P. (2013). *Multidimensional Poverty Index (MPI): Konsep dan Pengukurannya di Indonesia*. Perkumpulan Prakarsa.
- Era Baru dalam Pengentasan Kemiskinan di Indonesia*. (2007). The World Bank Office Jakarta.
- Fuady, M. R. F., Fuady, M., & Aulia, F. (2021). Kemiskinan Multi Dimensi dan Indeks Pembangunan Manusia di Indonesia. *TATALOKA*, 23(4), 575–582.
- Honore, B. E. (1992). Trimmed Lad and Least Squares Estimation of Truncated and Censored Regression Models with Fixed Effects. *Econometrica*, 60(3), 533. <https://doi.org/10.2307/2951583>
- Indonesia Public Expenditure Review: Spending for Better Results*. (2020). The World Bank.
- Kalwij, A. S. (2004). *A Two-Step First Difference Estimator for a Panel Data Tobit Model Under Conditional Mean Independence Assumptions*. AIAS, Amsterdam Institute for Advances Labour Studies. <https://doi.org/10.2139/ssrn.603322>
- Kasim, R., Engka, D. S. M., & Siwu, H. Dj. (2021). Analisis Pengaruh Inflasi, Pengangguran dan Belanja Pemerintah terhadap Kemiskinan di Kota Manado. *Jurnal EMBA : Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 9(1), 953–963. <https://doi.org/10.35794/EMBA.V9I1.32645>
- Maddala, G. S. (1987). Limited Dependent Variable Models Using Panel Data. *Journal of Human Resources*, 307–338.

- Murdiyana, M., & Mulyana, M. (2017). Analisis Kebijakan Pengentasan Kemiskinan di Indonesia. *Jurnal Politik Pemerintahan Dharma Praja*, 73–96.
- Nurmandi, A., Lutfi, M., Sumardi, S., & Qodir, Z. (2021). Kualitas Pelayanan Publik Melalui Pendekatan Model Demokrasi pada Era Otonomi Daerah. *Journal of Government Insight*, 1(1), 49–61. <https://doi.org/10.47030/jgi.v1i1.253>
- Putri, N., Yeniwati, Y., & Irfan, M. (2023). Pengaruh Bantuan Sosial dan Zakat terhadap Kemiskinan di Sumatera Barat. *Ecosains: Jurnal Ilmiah Ekonomi Dan Pembangunan*, 12(2), 110–117.
- Rachmaningsih, T., & Priyarsono, D. S. (2012). Ketahanan Pangan di Kawasan Timur Indonesia. *Jurnal Ekonomi Dan Pembangunan Indonesia*, 13(1), 1.
- Rosales, V. Q., Leverone, M. B., Vargas, M. S., & Murillo, C. M. (2020). Multidimensional Poverty Index and its relationship with Ecuadorian public spending. *Universidad y Sociedad*, 12(2), 430–436.
- Sasana, H., & Kusuma, P. (2018). Government Expenditure and Poverty in Indonesia. *KnE Social Sciences*, 142–153.
- Séne, L., & Cissé, M. (2014). *Local Government Spending and Multidimensional Poverty in Senegal: Insight from The Fuzzy Approach*.
- Sunan, M., Husen, A., & Badar, M. A. (2022). Analisis Dampak Program Bantuan Sosial (Bansos) terhadap Kemiskinan di Kabupaten Taliabu Tahun 2015-2021. *POROS EKONOMI*, 1(1), 13–33. <https://ejournal.unkhair.ac.id/index.php/porosekonomi/article/view/5267>
- Todaro, M. P., Munandar, H., & Sumiharti, Y. (2000). *Pembangunan Ekonomi di Dunia Ketiga*. Erlangga.
- Wendha, D. N., & Alteza, M. (2020). Analisis Efisiensi Perbankan Hasil Merger di Indonesia dengan Metode Two-Stage Data Envelopment Analysis. *Jurnal Ilmu Manajemen*, 17(2), 85–97. <https://doi.org/10.21831/JIM.V17I2.34778>
- Wulandari, S., Dasopang, A. P., Rawani, G. A., Hasfizetty, I., Sofian, M. Y., Dwijaya, R., & Rachmalija, S. (2022). Kebijakan Anti Kemiskinan Program Pemerintah dalam Penanggulangan Kemiskinan di Indonesia. *Jurnal Inovasi Penelitian*, 2(10), 3209–3218.
- Yunus, R., & Anwar, A. I. (2021). *Ekonomi Publik*. Penerbit NEM.