

# International Journal for Advanced Research

Journal homepage: <https://journal.outlinepublisher.com/index.php/ijar>

Research Article

## The Effect of Minimum Wages and Tax Revenues on Poverty in Indonesia

Tamaria Br. Sidebang<sup>1</sup>, Vivi Safira<sup>2</sup>, Mentari Rezeki Ramadhani<sup>3</sup>, M. Abdan Syakura<sup>4</sup>, Azman<sup>5</sup>

<sup>1234</sup>Faculty of Economics, Medan State University, Indonesia

<sup>5</sup>University Teknologi Mara, Malaysia

\*Correspondence: [tamariasidebang120@gmail.com](mailto:tamariasidebang120@gmail.com)

Keywords:

Minimum Wage  
Tax Revenue  
Poverty

**Abstract**

This research aims to determine the effect of minimum wages and tax revenues on poverty in Indonesia. This research uses quantitative research which is centered on testing theory through measuring research variables based on numbers and analyzing data using statistical methods. This research data uses secondary data taken from the Central Statistics Agency in the form of data on Minimum Wages, Tax Revenues and Poverty in Indonesia. The results of the research show that the minimum wage has a significant negative effect on poverty, with every 1% increase in the minimum wage reducing poverty by 12.26378 %. Meanwhile, tax revenue has a significant positive influence on poverty, with every 1% increase in tax revenue increasing poverty by 19.89796%. These results show that minimum wage and tax revenue policies have an important role in reducing poverty in Indonesia.

### Introduction

Etymologically, "poverty" comes from the word "poor" which means lacking and having no possessions. Based on Law no. 24 of 2004, "poverty is the socio-economic condition of a person or group of people where their basic rights are not fulfilled to maintain and develop a dignified life". Basic needs that are the right of a person or group of people include the needs for food, health, education, employment, housing, clean water, land, natural resources, the environment, a sense of security from treatment or threats of violence, and the right to participate in social life and politics.

According to BPS (2020), based on the concept of the ability to meet basic needs (basic needs approach) poverty is a condition of inability to fulfill basic needs which include food and non-food needs as measured in terms of expenditure. Meanwhile, according to the National Development Planning Agency (BAPPENAS) in Muzakir (2009, p. 11) "poverty is a situation of deprivation that occurs not because the poor want it, but because it cannot be avoided with the power that exists."

The condition of poverty in Indonesia is still a complex and ongoing problem. Poverty data in Indonesia is

considered inaccurate because it still refers to poverty line standards that are outdated and too low. Poverty in Indonesia has various impacts, starting from increasing crime rates, unemployment, impaired health, and others. The government and society have made efforts to reduce poverty.

According to Matitaputty et al. (2020) shows that tax revenues by the state affect the number of poor people negatively and significantly. Saragih's research results (2018) also show that provincial tax revenues influence provincial economic growth in Indonesia positively and significantly, so that provincial tax funds can be allocated to fund productive projects. Meanwhile, the results of Prasetyo's research (2012) are that regional taxes do not significantly influence poverty levels, because the policies or programs implemented by the government are inappropriate and pay less attention to regional spatial dimensions, and tend to generalize the problem of poverty.

Minimum wage policies also affect poverty levels. The idea of a minimum wage, which was started and developed since the early 1970s, aims to ensure that in the long term the minimum wage can at least meet the minimum living needs (KHM), so that it is hoped that it can guarantee that the workforce can meet the living needs of the family and at the same time be able to encourage increased work productivity and worker welfare (Sumarsono, 2009b) (Sumarsono, 2009a). The main objective of establishing a minimum wage is to meet minimum living standards such as for the health, efficiency and welfare of workers. The minimum wage is an effort to raise the status of low-income people, especially poor workers. Increasing the minimum wage level will increase people's income so that welfare will also increase and thus be free from poverty Kaufman (2000) in (Alviannor & Fahrati, 2021).

### **Hypotheses Development**

The hypotheses that can be developed based on this introduction to determine the effect of minimum wages and tax revenues on poverty in Indonesia are as follows:

**Hypothesis 1 (H1):** There is a negative relationship between the minimum wage and poverty in Indonesia, meaning that increasing the minimum wage will reduce the level of poverty. This hypothesis is assumed because it is expected to use quantitative research methods which are centered on testing theory through measuring research variables based on numbers and analyzing data using statistical methods to see the existence of a relationship between the minimum wage (independent variable or x) and poverty in Indonesia (dependent variable or y). This means that from the research model carried out there was an increase in the minimum wage which reduced the level of poverty in Indonesia.

**Hypothesis 2 (H2):** There is a positive relationship between tax revenue and poverty in Indonesia, meaning that an increase in tax revenue will cause an increase in poverty. This hypothesis is assumed because it is expected to use quantitative research methods which are centered on testing theory through measuring research variables based on numbers and analyzing data using statistical methods to see the existence of a positive relationship between tax revenue (independent variable or x) and poverty in Indonesia (dependent variable or y). This means that from the research model carried out there is an increase in tax revenue which causes high levels of poverty in Indonesia.

### **Method**

#### **Data and Data Sources**

This research data uses secondary data taken from the Central Statistics Agency regarding Minimum Wages, Tax Revenue and Poverty in Indonesia.

#### **Operational Definition and Variable Measurement**

- a) Poverty (Y) is the number of poor people in Indonesia measured in thousand people.
- b) Minimum Wage (X1) is the Wage imposed by the Indonesian government in accordance with applicable laws and regulations which is measured in rupiah value.
- c) Tax revenue (X2) is tax revenue collected by the government in rupiah units.

#### **Analysis Method**

The analytical method that will be used in this research is Multiple Regression Analysis, namely to determine the effect of the independent variables minimum wage and tax revenue on the dependent variable

poverty. This research was conducted using the multiple linear regression analysis method. Data processing in this research used Microsoft Excel 2013 and Eviews 12 programs.

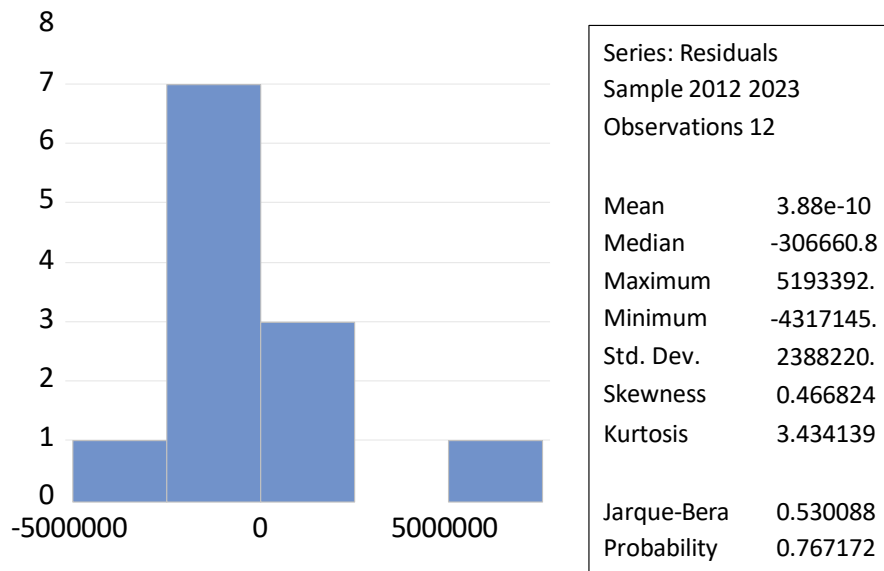
## Results And Discussion

### Results

#### Classic assumption test

##### 1. Normality test

*Table 1. Normality Test*



Based on the normality test output above, the probability value obtained is greater than the alpha level, namely  $0.767172 > 0.05$ , which means that the data in this study is normally distributed.

##### 2. Heteroscedasticity Test

*Table. 2 Heteroscedasticity Test*

Heteroskedasticity Test: White			
Null hypothesis: Homoskedasticity			
F-statistic	7.226538	Prob. F(5,6)	0.0160
Obs*R-squared	10.29111	Prob. Chi-Square(5)	0.0674
Scaled explained SS	7.045312	Prob. Chi-Square(5)	0.2173

Based on the output of the heteroscedasticity test above, the value of Prob. Chi-Square in Obs\*R-squared is greater than the alpha level, namely  $0.0674 > 0.05$ , which means that the data in this study do not have symptoms of heteroscedasticity and are declared to have passed the heteroscedasticity test.

### 3. Multicollinearity Test

**Table 3. Multicollinearity Test**

Variance Inflation Factors  
 Date: 05/13/24 Time: 17:44  
 Sample: 2012 2023  
 Included observations: 12

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	1.14E+13	19.69702	NA
X1	7.387444	66.09115	5.235530
X2	26.70874	98.86337	5.235530

The multicollinearity test is used to show whether or not there is a linear relationship between variables. From the results of the multicollinearity test, the VIF value for minimum wage is  $5.235530 < 10$ , and tax revenue is  $5.235530 < 10$ , so it can be concluded that there are no symptoms of multicollinearity.

### 4. Autocorrelation Test

**Table 4. Autocorrelation Test**

Breusch-Godfrey Serial Correlation LM Test:  
 Null hypothesis: No serial correlation at up to 2 lags

F-statistic	0.604150	Prob. F(2,7)	0.5727
Obs*R-squared	1.766456	Prob. Chi-Square(2)	0.4134

Based on the autocorrelation test, the value of Prob. Chi-Square in Obs\*R-square is greater than the alpha level, namely  $0.4134 > 0.05$ , so it can be concluded that the data in this study does not have residual correlation between variables and is declared to have passed the autocorrelation test.

### 5. Multiple Linear Regression Test

**Table 5. Multiple Linear Regression Test**

Dependent Variable: Y  
 Method: Least Squares  
 Date: 05/13/24 Time: 17:38  
 Sample: 2012 2023  
 Included observations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	24091329	3382666.	7.121995	0.0001
X1	-12.60675	2.717985	-4.638270	0.0012
X2	20.16885	5.168050	3.902604	0.0036
R-squared	0.708673	Mean dependent var		25294833
Adjusted R-squared	0.643934	S.D. dependent var		4424701.
S.E. of regression	2640277.	Akaike info criterion		32.62298
Sum squared resid	6.27E+13	Schwarz criterion		32.74421
Log likelihood	-192.7379	Hannan-Quinn criter.		32.57810
F-statistic	10.94655	Durbin-Watson stat		2.433359
Prob(F-statistic)	0.003888			

This research examines the effect of minimum changes and tax revenues on poverty in Indonesia. From the results of the eview 10 test, it can be seen how the independent variable influences the dependent variable. So from the relationship between these variables the following regression equation can be obtained:

$$Y=24.091329 - 12.60675X_1 + 20.16885X_2$$

Based on the research results, the equation shows that the minimum wage (X1) has a negative effect on poverty (Y) in Indonesia with a regression coefficient of -12.60675. When the minimum wage increases by 1%, poverty will decrease by 12.60675%. This result is also in line with the theory of Rafi and Mohammad (2023) which states that the regression coefficient for the UM or Minimum Wage variable which has a negative value of 0.278748 explains that if there is an increase in the Minimum Wage variable by 1 unit then the value of the variable will increase. Poverty will decrease by 0.278748 thousand people. This significant result is in line with research conducted by Wardhana (2019), in research which stated that the Minimum Wage also had a negative and significant effect on the number of poor people in Indonesia.

And based on the research results, the equation shows that tax revenue (X2) has a positive effect on poverty (Y) in Indonesia with a regression coefficient of 20.16885. When tax revenues increase by 1%, poverty will increase by 20.16885% assuming *cateris paribus*. The results of this research are in line with research by Prasetyo (2012), where local taxes influence poverty, which is possibly due to inappropriate program implementation by the government. Apart from that, government policy has not paid attention to broad regional spatial dimensions and tends to flatten the problem of poverty. The results of this research are in line with research by Murobbi and Usman (2021) which shows that local taxes influence poverty. If the APBD is used optimally, regional income, including regional tax revenue, can increase and have a positive impact on community welfare.

## Statistical Test Results

Based on table 5 above regarding the Multiple Linear Regression Test, the following results are obtained:

### 1. Partial Significance Test (T Test)

#### a) The Effect of Minimum Wages on Poverty in Indonesia

Variable X (Minimum Wage) has a P-value of  $0.0012 < 0.05$  with a coefficient value of -12.60675. Then we get a calculated t value of  $(-4.638270) < t$  table of  $(1.85955)$  which means that  $H_0$  is accepted and  $H_a$  is rejected. This means that there is no significant influence between the Minimum Wage and Poverty in Indonesia in 2013-2023.

#### b) The Effect of Tax Revenue on Poverty in Indonesia

The Tax Revenue variable has a P-value of  $0.0036 < 0.05$  with a coefficient value of 20.16885. Then the calculated t value is  $(3.902604) > t$  table  $(1.85955)$  which means that  $H_0$  is rejected and  $H_a$  is accepted. This means that there is a significant influence between Tax Revenue and Poverty in Indonesia in 2013-2023.

### 2. Simultaneous Significance Test (F Test)

Based on the test results in table 3, it shows an F-statistic value of 10.94655 with a probability of  $0.003888 < 0.05$  and also a calculated f value of  $(10.94655) > f$  table of  $(4.46)$  which means that  $H_0$  is rejected and  $H_a$  is accepted. Thus, it can be concluded that simultaneously variable X (Minimum Wage and Tax Revenue) has a significant influence on variable Y (Poverty) in Indonesia in 2013-2023.

### 3. Coefficient of Determination Test (R<sup>2</sup>)

**Table 6. Determination Coefficient Test**

Dependent Variable: Indonesian Poverty	
Method: Least Squares	
R-Squared	0.708673
Adjusted R-squared	0.643934
F-Statistics	10.94655
Prob (F-Statistics)	0.003888

The R-squared value is 0,708673 shows that 68% of poverty in Indonesia can be explained by the independent variables, namely minimum wages and tax revenues. Meanwhile, the remaining 32% is explained by other variables outside the model or not included in this research.

#### **Discussion**

##### **The Effect of Minimum Wages on Poverty in Indonesia**

The minimum wage level variable applied has a negative effect on poverty. This result is in accordance with the hypothesis which states that the minimum wage has a negative and significant effect on poverty in the 2013-2023 time period. For this variable, partial research results show that the minimum wage variable does not have a significant effect on poverty in Indonesia as shown by the probability value equal to  $0.0012 < 0.05$ . Based on the research results, the equation shows that the minimum wage (X1) has a negative effect on poverty (Y) in Indonesia with a regression coefficient of -12.60675. When the minimum wage increases by 1%, poverty will decrease by 12.60675%. This result is also in line with the theory of Rafi and Mohammad (2023) which states that the regression coefficient for the UM or Minimum Wage variable which has a negative value of 0.278748 explains that if there is an increase in the Minimum Wage variable by 1 unit then the value of the variable will increase. Poverty will decrease by 0.278748 thousand people.

This significant result is in line with research conducted by Wardhana (2019), in research it is stated that Minimum Wages also have a negative and significant effect on the number of poor people in Indonesia. Minimum wages can improve the economic conditions of workers and also contribute to efforts to reduce poverty among working people affected by this regulation. Minimum wages shift employment to high-wage jobs. This labor market regulation can increase average productivity and also improve welfare (Octasari, 2016). These results are in accordance with research by Hapsoro and Yeti (2013), Yanti and Marhaeni (2015) which states that minimum wages have a negative influence on poverty. Therefore, developments in economic growth, inflation and minimum wages should be considered in overcoming the problem of poverty in Indonesia in the 2013-2023 period.

##### **The Effect of Tax Revenue on Poverty in Indonesia**

The results of the regression analysis of the data above in this research are that regional taxes influence poverty levels in Indonesia positively and significantly. And based on the research results, the equation shows that tax revenue (X2) has a positive effect on poverty (Y) in Indonesia with a regression coefficient of 20.16885. When tax revenues increase by 1%, poverty will increase by 20.16885% assuming ceteris paribus. The results of this research are in line with research by Prasetyo (2012), where tax revenues influence poverty, which is possibly due to inappropriate program implementation by the government. Apart from that, government policy has not paid attention to broad regional spatial dimensions and tends to flatten the problem of poverty.

The results of this research are in line with research by Murobbi and Usman (2021) which shows that local taxes influence poverty. If the APBD is used optimally, regional income, including regional tax revenue, can

increase and have a positive impact on community welfare. Stewardship theory prioritizes the role of the DJPK (steward) as a tax manager to reduce poverty levels through various policies, including increasing the digitalization of tax services to increase compliance, satisfaction and ease of tax administration for taxpayers, so it is hoped that this program can have an impact on increasing the realization of regional tax revenues. In this way, it can create new jobs in order to achieve equal distribution of income and the poor have a fixed income (in line with Milton Friedman's Income Theory) and can increase their consumption expenditure. Thus, proper management of local taxes by the government accompanied by community compliance in paying taxes can have an impact on reducing poverty levels in Indonesia.

## Conclusion

Based on the research results, the equation shows that the minimum wage (X1) has a negative effect on poverty (Y) in Indonesia with a regression coefficient of -12.26378. When the minimum wage increases by 1%, poverty will decrease by 12.26378%. And based on the research results, the equation shows that tax revenue (X2) has a positive effect on poverty (Y) in Indonesia with a regression coefficient of 19.89796. When tax revenues increase by 1%, poverty will increase by 19.89796% assuming ceteris paribus. With an R-squared value of 0.686606, it shows that 68% of poverty in Indonesia can be explained by the independent variables, namely minimum wages and tax revenues. Meanwhile, the remaining 32% is explained by other variables outside the model or not included in this research.

## Reference

- Dhafarani, Y., Djatnika, D., Mauluddin, HA, et al. (2023). The Influence of Regional Tax Revenue and Zakat on Poverty Levels in Indonesia for the 2014-2022 Period. *Journal of Applied Islamic Economics and Finance*, 4 (1): 158-172.
- Sarjono, N. Anwar, C. Darmansyah. (2018). ANALYSIS OF THE INFLUENCE OF ECONOMIC GROWTH ON REGIONAL TAX REVENUE WITH POVERTY LEVEL AS A MODERATION VARIABLE IN REGENCY/CITY REGIONAL GOVERNMENTS IN WEST JAVA. *Journal of economic science*, 6 (12): 113-127.
- Firmansyah, R. Fauzy, Q. Moh. (2017) DISTRICT MINIMUM WAGE SYSTEM IN AN ISLAMIC PERSPECTIVE (Case Study of the Sidoarjo Regency Minimum Wage). *Journal of Theoretical and Applied Sharia Economics*, 4 (6): 434-448.
- Islamic and Anis. (2019). The Influence of Provincial Minimum Wages, Education and Health on Poverty in Indonesia. *\_Journal of Economic and Development Studies\_*, 1 (3): 939-948
- Akhadi, Imam. (2022). The Influence of Tax Revenue on Per Capita Income Variables and Poverty Rates as Indicators of People's Prosperity. *\_Indonesian Tax Journal\_*, 6 (1): 60-72  
<https://e-journal.uajy.ac.id/25469/3/16%2011%2022675%202.pdf>  
[https://repository.uma.ac.id/bitstream/123456789/1012/5/111801068\\_file%205.pdf](https://repository.uma.ac.id/bitstream/123456789/1012/5/111801068_file%205.pdf)  
<https://repository.uir.ac.id/4614/5/G.%20BAB%20II.pdf>  
[https://repository.uksw.edu/bitstream/123456789/19730/5/BOOK\\_Tritjahjo%20Danny\\_Ragam%20dan%20Procedure%20Research%20Action\\_Bab%205.pdf](https://repository.uksw.edu/bitstream/123456789/19730/5/BOOK_Tritjahjo%20Danny_Ragam%20dan%20Procedure%20Research%20Action_Bab%205.pdf)