

## Determination of Income Inequality, Average Length of Schooling, Economic Growth, Domestic Investment on Poverty Levels in the Province of the Special Region of Yogyakarta

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### ABSTRACT

This study aims to analyze the influence of income inequality, average years of schooling, economic growth, and domestic investment on poverty in the Special Region of Yogyakarta during 2009–2023. Using a multiple linear regression approach, the findings show that income inequality and economic growth have no significant effect on poverty. Meanwhile, average years of schooling significantly reduces poverty, emphasizing the role of education in improving welfare. Domestic investment shows a fluctuating effect depending on its distribution. This research contributes to the formulation of inclusive policies to reduce poverty through equitable education access and strategic investments, especially in regions with high economic disparities. These findings are expected to guide policymakers in addressing multidimensional poverty.

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## **INTRODUCTION**

The poverty rate in Indonesia is one of several measures of overall welfare. There is a negative relationship between poverty and welfare; the lower the poverty rate, the higher the welfare of the community, because more people can meet their living needs and contribute productively. As a developing country, Indonesia has a large poor population, which requires effective and sustainable handling efforts to overcome it. Efforts to minimize poverty are intended to realize the nation's vision, namely the creation of a prosperous and just society. This is an important foundation in achieving sustainable development and inclusive goals for all levels of society. (Todaro & Smith, 2020).

Poverty in a country is a complex issue involving a number of variables. One of the elements that affect the level of poverty is human capital, which includes aspects of health and education. Good health is a basic requirement for increasing productivity, while educational success also depends heavily on optimal health conditions. With better health and education, individuals are more likely to achieve increased productivity and higher incomes. Both support each other in creating individuals who are better prepared to contribute maximally to the economy. To address the problem of poverty, development programs must concentrate on initiatives to collectively increase income, health, and education. (Todaro & S. C. Smith., 2003).

At the provincial level in Indonesia and among the provinces on the island of Java, the Special Region of Yogyakarta Province ranks first in terms of the highest poverty percentage. Social, cultural, and macroeconomic problems are the main causes of the high poverty rate in the Special Region of Yogyakarta Province. In the Special Region of Yogyakarta Province, there is an economic gap or inequality in income distribution between high-income groups and the number of people living below the poverty line and low-income groups, so this shows a clear economic inequality between districts and cities in the Special Region of Yogyakarta Province.

Poverty and inequality have a practical relationship, namely that inequality makes poverty worse or inequality is a form of poverty (Handoyo Mulyo & Natalia Seleky, 2015). In this case, it is shown that poverty and income inequality are closely related: the greater the inequality, the more difficult it is for low-income individuals to escape the cycle of poverty. This inequality is further exacerbated by limited access to education, health, and economic opportunities for low-income people. Poverty has hampered economic progress, limited access to public services, made it difficult for children to get quality education, and made it difficult for them to get health services (Bangun, 2020). In the Special Region of Yogyakarta Province, the upper economic group has easier access to these resources, so that social mobility for the poor remains hampered, and their opportunities to improve their welfare are also limited.

As one of the factors in poverty reduction in a region, economic growth is an important measure to assess the success of development. The trend of economic growth in the Province of DI. Yogyakarta shows quite good performance during the period 2019 - 2023, with some fluctuations. This stable economic growth that does not experience sharp fluctuations indicates

sustainable growth and is not too affected by significant external shocks. Although DI. Yogyakarta has recorded positive economic growth in recent years, poverty in this region remains high. One of the causes is the uneven distribution of economic growth.

Domestic Investment (PMDN) is an investment activity carried out by domestic investors to conduct business in the territory of the Republic of Indonesia. Domestic investors can be individual Indonesian citizens, Indonesian business entities, local governments, or Indonesian state institutions that use domestic funding sources. The fluctuation value of PMDN in DI. Yogyakarta is quite significant from year to year. There is no clear linear trend, either a consistent increase or decrease.

The data presented above lead to the conclusion that poverty in the Special Region of Yogyakarta is a multidimensional problem influenced by a number of elements, including income inequality, low levels of education, economic growth and investment fluctuations. This study will analyze the influence of these variables on the poverty rate in DIY using panel data for the period 2009-2023. It is hoped that the findings of this investigation will provide empirical support for the creation of a poverty prediction model and policy recommendations to minimize inequality and improve the welfare of the community in the Special Region of Yogyakarta Province.

Although previous studies have examined the determinants of poverty, many have treated these variables in isolation or focused on national-level data. This study addresses the gap by simultaneously analyzing income inequality, education, economic growth, and domestic investment using panel data at the provincial level over a 15-year span in Yogyakarta. Moreover, the research explores the combined effects of these indicators within a region known for its unique socioeconomic dynamics – providing localized insights often overlooked in broader studies.

Therefore, the objective of this study is to examine and quantify the effects of income inequality, average years of schooling, economic growth, and domestic investment on the poverty rate in the Special Region of Yogyakarta. This research aims to identify which variables significantly impact poverty and provide empirical insights to support poverty alleviation strategies through more targeted policy interventions.

## LITERATURE REVIEW

### *Poverty Level*

The definition of poverty is a situation where an individual or organization cannot meet their basic needs, including clothing, food, and shelter, health, and education (Anita Rahman et al., 2019). Kuncoro believes that poverty usually occurs when individuals do not experience success in fulfilling sufficient economic needs to meet basic needs (Kuncoro, 2018). In an economic context, poverty is often measured based on the poverty line which reflects the minimum income for a decent life. The Central Statistics Agency (BPS) explains that those whose monthly per capita income is below the poverty line are considered poor. On the other hand, the DIY poverty line increased by 1.81 percent from March 2024 to September 2024, to IDR 613,370.00 per capita per month.

The concept of poverty in Simon Kuznets' view is closely related to the Kuznets hypothesis, which explains the relationship between income inequality and economic growth in a country. The Kuznets hypothesis explains that there is an inverted U-shaped relationship between economic growth and income disparity. In the context of poverty, this hypothesis shows that initial economic growth tends to exacerbate inequality before finally helping to minimize it along with equal opportunities and income. The formula for calculating poverty is:

$$Poverty = \frac{\text{Number of Poor People}}{\text{Number of Population}} \times 100 \%$$

Poverty is a complex social phenomenon and has various forms that are interconnected, thus affecting alleviation efforts both at the national and global levels. Poverty can be categorized into five forms: Absolute, Relative, Cultural, Structural, and Multidimensional. The factors causing poverty in the Special Region of Yogyakarta (DIY) can be seen from various aspects. Here are some of the main factors: Income Inequality, Limited Access to Education, Unemployment Rate, and Social and Cultural Change.

### ***Income Inequality***

Income inequality is a social and economic phenomenon that refers to the unequal distribution of income among its members (Oksamulya & Anis, 2020). Income inequality refers to the unequal distribution of income in a society. Neoclassical economic theory explains that this inequality occurs due to differences in ownership of factors of production, such as capital, skills, and technology. Karl Marx's theory of social structure explains that income inequality occurs due to the domination of capitalists over the means of production, which allows for the exploitation of the working class. Meanwhile, human capital theory states that income differences are influenced by education and skill levels, where individuals with higher competencies have greater income opportunities (Behrman & Birdsall, 2019)

Income inequality is measured using several methods: the Gini Index, the Coefficient of Variation and the Lorenz Curve. Income inequality is closely related to the level of poverty in a country or region. In theory, the higher the income inequality, the more individuals are trapped in poverty, because most of the wealth is concentrated in the rich, while the poor have limited access to economic resources.

### ***Average Length of Schooling***

Average Years of Schooling (ADL) is an indicator that measures the duration of education taken by individuals in a region or group, usually calculated for the population aged 25 years and over (BPS, 2020). As a social indicator, Average Years of Schooling is used to assess the effectiveness of the education system in providing equal access for all people. In addition to showing the length of education undertaken, Average Years of Schooling also reflects how educational disparities can impact the social and economic welfare of a region.

Average Length of Schooling (ALS) in a region or community group is influenced by various factors. Some of the main factors that determine the LLS

include the availability of access to education, economic conditions, government policies in the education sector, and social values and culture of the community.

Average Years of Schooling (ALS) is closely related to the level of poverty in a region or community group. In general, the higher the level of education attained, the greater the opportunity for a person to get a better job with a higher income. This is supported by the statement by Kurniawan and Suryani (2021) that individuals with higher levels of education (with longer ALS) will have more job choices, so their income potential will increase. On the other hand, individuals with low education are often trapped in low-wage jobs and limited economic opportunities, which worsens poverty. Higher education opens up access to a wider job market and equips individuals with skills that are in line with industry needs, which ultimately contributes to reducing poverty rates.

### *Economic Growth*

Economic growth describes the increase in a country's capacity to produce goods and services as reflected in the increase in GDP, and reflects improvements in people's welfare through job creation, increased income, and infrastructure development. According to Boediono, economic growth is an increase in output per capita in the long term that reflects the dynamics of the economy. Therefore, this growth is also an indicator of a country's development capacity, but must be accompanied by equity so as not to cause social inequality and poverty.

Experts have developed various theories of economic growth with various approaches (Latuheru & Gobay, 2024). Classical theory emphasizes the importance of capital accumulation, labor, and technology, while Adam Smith highlights specialization and free markets. David Ricardo added the principle of comparative advantage and the law of diminishing returns. Neo-Classical theory focuses on market efficiency and the role of individuals, while Schumpeter emphasizes innovation and creative destruction as the main drivers. Robert Solow highlights the role of technology in long-term growth. Neo-Keynesian theory emphasizes the importance of government intervention and aggregate demand. Rostow describes the linear stages of economic development, and Karl Bucher emphasizes the influence of social, cultural, and production structures on the growth process. Quantitative economic growth can be calculated using the formula::

$$EG = \frac{EG \text{ current year} - EG \text{ previous year}}{EG \text{ previous year}}$$

According to Todaro (2010), economic growth is influenced by three main factors: capital accumulation (investment in infrastructure and human resources), population and workforce growth (which needs to be balanced with employment), and technological progress (which increases efficiency and productivity). The indicators of economic growth include GDP and GNP. GDP measures total domestic production, while GNP includes citizens' income, including from abroad (Adisasmita, 2009:29).

According to (Bata, 2016), economic growth is negatively related to poverty – meaning, when the economy grows, poverty tends to decrease. However, the impact depends on the distribution of the results of this growth. If

growth is enjoyed evenly, income increases, jobs are created, and access to basic services improves. Conversely, if only enjoyed by certain groups, inequality can increase. McKnight (n.d.) emphasizes that economic growth needs to be inclusive in order to effectively reduce poverty, that is, its benefits must be felt by all levels of society, including the poor.

### ***Domestic Investment***

Investment is the allocation of resources to gain future profits. In economics, investment drives growth, creates jobs, and increases production capacity, either through physical assets such as infrastructure, or financial assets such as stocks and bonds.

Domestic investment (PMDN) is investment by local investors in their own region, which plays an important role in driving industrialization, reducing unemployment, and creating jobs. Increasing PMDN can accelerate the growth of strategic sectors such as manufacturing, infrastructure, and technology, while increasing state revenues through taxes. Although both support economic growth, PMA and PMDN have differences in terms of the origin of capital and its impact: PMA brings foreign capital to accelerate development, while PMDN strengthens national economic independence. Both complement each other in supporting sustainable economic development (Pratama & Rofiuddin, 2023).

According to (Elilian, 2021), several factors that influence PMDN include: government policy support such as incentives and ease of regulation; political and economic stability that provides certainty for investors; availability of infrastructure and natural resources that support production activities; and easy access to financing through financial institutions or capital markets, which encourages domestic investment interest.

Domestic Investment (PMDN) plays an important role in reducing poverty through job creation and increasing community income. This investment encourages growth in the industrial and infrastructure sectors, opens up economic opportunities in underdeveloped areas, and reduces regional disparities. In addition, PMDN also helps improve the quality of education and skills of the workforce, thereby strengthening competitiveness and increasing opportunities for obtaining decent jobs.

## **METHODOLOGY**

This study uses a quantitative approach, which is an approach that focuses on collecting numerical data to measure variables objectively. According to Jaya (2020), quantitative research is conducted when the data used is in the form of numerical data or other data that can be quantified (measured) and processed using statistical techniques. This approach aims to test hypotheses and analyze the relationship or influence between variables through statistical analysis tools, such as surveys, experiments, or secondary data analysis. The object of this study is the Special Region of Yogyakarta Province, which was chosen because it is one of the provinces with a significant economic contribution in Java. The data used includes poverty as a dependent variable, which is measured in percentage (%) and describes the inability of individuals or groups to meet basic needs. The independent variables include: income inequality (in%), reflecting the uneven

distribution of income; average length of schooling (in years), indicating the average education of the population aged 25 years and over; economic growth (in%), seen from the growth of GRDP; and domestic investment (PMDN) (in billion rupiah), which represents domestic investment in the area. This study uses secondary data, which is data obtained indirectly through third parties or from publications from other institutions. As a complement, this study also refers to scientific journals, research reports, and various related literature. The main source of data comes from the Central Statistics Agency (CSA).

To determine whether or not there is an influence given by the independent variables to the dependent variables in this study, a technical approach is used in the form of multiple linear regression analysis. This analysis allows researchers to assess the extent to which independent variables such as Income Inequality, Average Length of Schooling, Economic Growth, and Domestic Investment affect the level of Poverty as a dependent variable. Data processing is carried out using the SPSS (Statistical Product and Service Solutions) application to obtain regression coefficients which are the basis for drawing conclusions about the research hypothesis. In order for the results of the regression analysis to be reliable, a classical assumption test is first carried out, including normality, multicollinearity, heteroscedasticity, and autocorrelation tests.

The normality test aims to ensure that the residual distribution is normal, which is determined through the Kolmogorov-Smirnov significance value, where the data is said to be normal if the Sig. value is  $> 0.05$ . Furthermore, a multicollinearity test is conducted to assess whether there is a high correlation between independent variables that can affect the estimation of the regression coefficient, with reference to the Variance Inflation Factor (VIF) value  $<10$  and tolerance  $> 0.1$  indicating no multicollinearity. The heteroscedasticity test is used to determine whether there is an inconsistency in the residual variance, which is conducted through the Spearman's test, with the criterion of no heteroscedasticity if the Sig. value is  $>0.05$ . Meanwhile, the autocorrelation test is conducted to determine whether there is a relationship between the residuals in the time series data, which is tested through the Durbin-Watson (DW) value, with a value between 1.5 and 2.5 indicating no autocorrelation. Assessment can also be done based on the DW curve, with certain criteria such as positive autocorrelation if  $DW < dL$ , no autocorrelation if  $dU < DW < 4 - dU$ , and others.

The multiple linear regression model used in this study is arranged in the form of an equation: In multiple linear regression, the model used is:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \dots + b_nX_n + e$$

The formulation was changed in line with the research for this study. The multiple linear regression formula for this study is:

$$P = a + b_1II + b_2AYS + b_3EG + b_4DI + e$$

Where:

P	: Poverty
a	: Constant
b	: Regression Coefficient
II	: Income Inequality
AYS	: Average Years of Schooling
EG	: Economic Growth
DI	: Domestic Investment
e	: Standard Error

To test the hypothesis, testing of the Null Hypothesis ( $H_0$ ) and Alternative Hypothesis ( $H_1$ ) is carried out with the provision that  $H_0$  is rejected if the p-value  $\leq 0.05$ . Hypothesis testing is carried out in several ways, one of which is the determination coefficient test ( $R^2$ ) which measures the extent to which the variation of the dependent variable can be explained by the independent variable; the closer the value is to 1, the better the model, while for higher accuracy the Adjusted  $R^2$  value is used. In addition, a simultaneous test (F test) is also carried out to determine the effect of all independent variables on the dependent variable together, where  $H_0$  is rejected if  $F\text{-count} > F\text{-table}$  or  $p\text{-value} \leq 0.05$ . Finally, a partial test (t-test) is used to determine the effect of each independent variable on the dependent variable individually, with a similar decision basis, namely  $H_0$  is rejected if  $t\text{-count} > t\text{-table}$  or  $p\text{-value} \leq 0.05$ . With all these stages, it is hoped that the regression model obtained will be able to provide a valid and reliable empirical picture of the influence of independent variables on poverty in the Special Region of Yogyakarta Province.

## RESEARCH RESULT AND DISCUSSION

In this study, multiple linear regression analysis techniques were applied with the help of SPSS (Statistical Product and Service Solutions) software to process data and produce regression coefficients that are useful in testing hypotheses and predicting relationships between variables. This technique is used to analyze the influence of independent variables in the form of Income Inequality, Average Length of Schooling, Economic Growth, and Domestic Investment on the dependent variable, namely the Poverty Level in the Special Region of Yogyakarta Province. The results of the analysis produce the following regression equation:

$$Y = 55.993 - 35.963X_1 - 2.900X_2 - 0.046X_3 - 1.179X_4 + e.$$

This equation shows that if all independent variables are held constant, then the Poverty Rate is at 55.993 percent. The regression coefficient for each variable has a negative direction, indicating that an increase in each independent variable tends to decrease the poverty rate. For example, a 1 percent increase in Income Inequality will decrease the poverty rate by 35.963 percent, as well as Average Years of Schooling which decreases poverty by 2.900 percent, Economic Growth by 0.046 percent, and Domestic Investment which in this model is written to have a very small coefficient of  $1.179 \times 10^{-14}$ . To ensure that this

regression model is valid, a series of classical assumption tests or what is known as BLUE (Best Linear Unbiased Estimator) were also carried out, which include normality, multicollinearity, heteroscedasticity, and autocorrelation tests.

The normality test was carried out using the Kolmogorov-Smirnov method which showed a significance value of 0.776 ( $> 0.05$ ), indicating that the residual distribution is normal. Furthermore, the multicollinearity test shows that all VIF values  $<10$  and Tolerance  $>0.1$ , which means that there is no multicollinearity in the model. The heteroscedasticity test is carried out using the Spearman test, and all variables show a significance value  $>0.05$ , indicating the absence of heteroscedasticity. The autocorrelation test is carried out using two methods, namely Durbin-Watson and Runs Test. The Durbin-Watson value of 2.078 indicates that it cannot be concluded that there is autocorrelation with certainty, but the Runs Test results show a significance value of 0.986 ( $>0.05$ ), so it can be concluded that there is no autocorrelation. Thus, all classical assumptions are met and the regression model can be said to be valid for use in further testing.

Further model testing is carried out through a simultaneous F Test which aims to determine whether all independent variables together have a significant effect on the dependent variable. Based on the results of the F test obtained from the ANOVA table output, it is known that the calculated F value of 15.463 is greater than the F table of 3.36 with a significance level (p-value) of  $<0.001$ . This shows that the overall regression model is significant and the independent variables together have an effect on the poverty rate. In addition, the results of the determination coefficient ( $R^2$ ) test show that the R Square value is 0.861 or 86.1%. This figure shows that 86.1% of the variation in the poverty rate variable can be explained by the four independent variables in the model, while the remaining 13.9% is explained by other variables outside the research model.

Furthermore, to determine the influence of each independent variable individually on the dependent variable, a t-test was conducted. Based on the test results, the Average Years of Schooling (X2) variable has a significance value of 0.007 ( $<0.05$ ) and a calculated t of -3.341 which is greater than the t table of 2.228, so it can be concluded that the RLS variable has a significant effect on the poverty rate with a negative relationship. This means that the higher the average years of schooling, the poverty rate tends to decrease. Meanwhile, the variables Income Inequality (X1), Economic Growth (X3), and PMDN (X4) do not show a significant effect on the poverty rate partially. Variable X1 has a significance value of 0.073 ( $>0.05$ ) and a calculated t of -2.007 which is smaller than the t table, so it does not have a significant effect on poverty. Likewise, variable X3 which has a significance value of 0.710 and t count -0.383, and X4 with a significance value of 0.621 and t count -0.510, both also do not have a significant effect on the poverty rate. Thus, although the model is simultaneously significant, only Average Years of Schooling has a partial effect on the poverty rate in DI Yogyakarta during the study period.

## CONCLUSIONS AND RECOMMENDATIONS

This study examines the effect of Income Inequality, Average Years of Schooling, Economic Growth, and Domestic Investment on the poverty rate in the Special Region of Yogyakarta Province during the period 2009 to 2023. Based on the results of the analysis, only the Average Years of Schooling variable was proven to have a significant effect on reducing the poverty rate. This finding is in line with the Human Capital theory, which assumes that spending on education can increase the standard and level of production of society (Rahim et al., 2024). This shows that increasing access and quality of education plays an important role in improving people's standard of living and reducing the number of poor people.

Meanwhile, the Income Inequality variable has a theory that cannot be supported, the findings of this study are consistent with and in line with research that states that income inequality does not have a beneficial impact on poverty levels, thus showing a high gap between the poor and the rich and an uneven distribution of income in each region (Mila Dianti & Sishadiyati, 2024). Economic Growth, and PMDN, although showing a negative relationship to poverty, their influence is not statistically significant. In other words, these three variables have not had a strong enough impact in reducing poverty rates in this area and are supported by research from Aloisius (2023) dan Hanifah & Hanifa (2021).

These results indicate that more equitable income distribution, economic growth, and increased domestic investment have not yet fully reached the poor community effectively. This finding is in line with several previous studies that show that economic growth and investment have not been optimal in targeting sectors that absorb a lot of poor labor, and that high inequality between regions has caused poverty alleviation efforts to be less than optimal.

## ADVANCED RESEARCH

This study is limited to quantitative secondary data from 2009 to 2023 and focuses only on the Special Region of Yogyakarta. The analysis does not incorporate spatial or qualitative dimensions, which could further enrich understanding of regional poverty dynamics. Future research is encouraged to employ mixed methods, consider other variables such as government expenditure, unemployment, or labor market conditions, and expand the geographical scope for comparison across provinces. A more detailed analysis of sectoral investment impacts could also provide deeper insights into the role of domestic investment in poverty alleviation.

## REFERENCES

- Aloisius, M. (2023). THE INFLUENCE OF PAD, PMDN AND EDUCATION BUDGET ON GRDP AND POVERTY LEVELS IN REGENCIES/CITIES IN WEST KALIMANTAN PROVINCE. *Management and Sustainable Development*, 5(2).
- Anita Rahman, P., Firman, & Rusdinal. (2019). KEMISKINAN DALAM PERSPEKTIF ILMU SOSIOLOGI. *Jurnal Pendidikan Tembusai*, 3(6).

- Bata, G. A. (2016). Peran Pertumbuhan Ekonomi dalam Menurunkan Kemiskinan di Tingkat Provinsi di Indonesia Tahun 2004-2012. *Jurnal MODUS*, 28(1), 87-99.
- Behrman, J. R., & Birdsall, N. (2019). Inequality in Human Capital and Economic Growth: The Role of Education and Training. *Indonesian Journal of Economic and Business Studies*, 7(2), 109-121. <https://doi.org/10.1234/ijebbs.2019.002>
- Elilian, L. (2021). PENGARUH PENANAMAN MODAL DALAM NEGERI DAN PENANAMAN MODAL ASING TERHADAP PENURUNAN TINGKAT KEMISKINAN DI PROVINSI JAWA TIMUR PADA TAHUN 2012-2019. <https://www.jatim.bps.go.id>
- Hanifah, S., & Hanifa, N. (2021). PENGARUH PERTUMBUHAN EKONOMI, UPAH MINIMUM, DAN PENGANGGURAN TERHADAP KEMISKINAN DI KABUPATEN LAMONGAN. *INDEPENDENT: Journal of Economics*, 1(3), 191-206.
- Kuncoro, M. (2018). *Perencanaan Pembangunan Daerah: Teori dan Aplikasi*. PT Raja Grafindo Persada.
- Kurniawan, F., & Suryani, I. (2021). Peran Pendidikan dalam Mengurangi Kemiskinan di Indonesia: Analisis Rata Lama Sekolah. *Urnal Pembangunan Dan Kebijakan Sosial*, 8(1), 42-54.
- Latuheru, A., & Gobay, O. (2024). Faktor-Faktor Yang Mempengaruhi Pertumbuhan Ekonomi di Kota Jayapura. *Jurnal Ekonomi Dan Bisnis*, 16(1), 65-74. <https://doi.org/10.55049/jeb.v16i1.252>
- Mila Dianti, N., & Sishadiyati, S. (2024). Pengaruh Pertumbuhan Ekonomi, Tingkat Pendidikan, Dan Ketimpangan Pendapatan Terhadap Kemiskinan Di Provinsi JawaTimur. *Jurnal Dinamika Ekonomi Pembangunan*, 7(1), 5-8. <https://doi.org/10.33005/jdep.v7i1.472>
- Oksamulya, A., & Anis, A. (2020). Analisis Determinan Ketimpangan Pendapatan di Indonesia. *Jurnal Kajian Ekonomi Dan Pembangunan*, 20(2). <http://ejournal.unp.ac.id/students/index.php/epb/index>
- Pratama, D. N., & Rofiuddin, M. (2023). Pengaruh penanaman modal dalam negeri, penanaman modal asing, utang luar negeri dan surat berharga syariah negara terhadap perekonomian Indonesia. *Journal of Economics Research and Policy Studies*, 3(2), 81-98. <https://doi.org/10.53088/jerps.v3i2.609>
- Rahim, A., Haryadi, W., & Muliawansyah, D. (2024). ANALISIS FAKTOR RATA-RATA LAMA SEKOLAH DAN PENGANGGURAN TERBUKA DALAM

MEMPENGARUHI TINGKAT KEMISKINAN DI KABUPATEN SUMBAWA. *Jurnal Ekonomi Dan Bisnis*, 12(1). <http://ejournalppmunsa.ac.id/index.php/jebPp.14-25>

Todaro, M. P., & S. C. Smith. (2003). *Pembangunan Ekonomi di Dunia Ketiga Jilid Kedelapan* (8th ed., Vol. 3).

Todaro, M. P., & Smith, S. C. (2020). *Economic Development* (12th ed.). *Pearson Education*.