



An Analysis of the Influence of Income Inequality, Unemployment, and Poverty against Economic Growth in Indonesia

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Abstract

The study aims to figure out the economics characteristic in the western, central, and eastern parts of Indonesia and determine to what extent the influence of income inequality, unemployment, and poverty against economic growth. It employs a quantitative method using panel data that combines time-series data and cross-sectional data. At the same time, the data sources are secondary data in the form of income inequality data, i.e., Gini ratio (Gini coefficients), unemployment rate, and poverty rate of 34 provinces in Indonesia from 2015 to 2019 and are collected from Statistics Indonesia and journal as the supporting sources. Moreover, the analysis method applies multiple linear regression analysis using E-views 2021. The value of the f statistic is 17.89970, while the probability value or p-value is 0.0000, which is lower than all significant levels used in the model. Thus, it can be stated that income inequality, unemployment, and poverty simultaneously influence economic growth. In the meanwhile, the results of partial testing (t-test) that has been carried out obtains that the p-value for the Gini ratio variable is 0.2082. if the p-value is compared with of levels of used in the study, the Gini ratio is insignificant. Thus, Ho is accepted, and H₁ is rejected. In addition, the p-value for the open unemployment rate variable is 0.0494. If the p-value is compared with the level of, namely 5%, the open unemployment rate is significant. Therefore, Ho has been rejected, and H₁ accepted. At the same time, the p-value for the poverty variable is 0.106801. If the p-value is compared with all levels focused in the study, the province is insignificant. Thus, Ho is accepted and H₁ is rejected.

Keywords: Economic Growth, Income Inequality, Unemployment, Poverty

1. Introduction

To measure the success of a country, one of them can be seen from the country's economic growth rate. Economic growth is a picture of the state of the economy that can be measured by the magnitude of the increase in national income based on the production approach in a certain period. So it can be interpreted that the value of national income in a certain period is a description of the national and overall economic conditions or conditions in a certain period. The increase in the value of goods

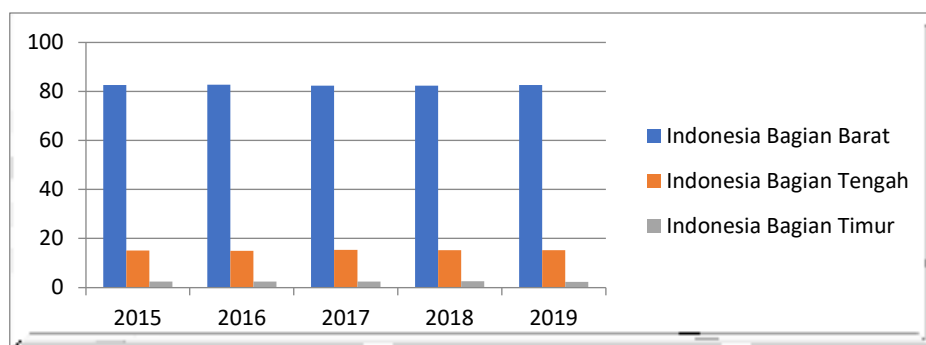
and services produced in a certain period of year means that there is also an increase in economic growth in a certain period of time.

Income disparity is still an important problem for economic development in every country, income disparity is the difference in economic conditions, welfare and income between communities which can cause economic instability and reduce poverty if it is not used as an important indicator in the goal of equitable economic development.

Income disparity is an economic condition between regions in Indonesia which is the main indicator of regional equity which involves the extent to which equity occurs between regions of Indonesia. The strongest thing that drives the high level of income disparity between regions is the difference in potential economic potential both in the tourism sector and in the tourism sector industrial sector which can be a driving factor for the economy in these parts of the region. The indicator of income distribution disparity measurement is the total income per capita and population to measure how deep the level of income distribution disparity is.

In addition to income disparity, unemployment is also one of the macroeconomic problems because with unemployment the productivity and income of the community will decrease and result in poverty and social problems and other economic problems as well as employment opportunities that can absorb labor.

Poverty is a structural economic problem that is often faced by developing countries, including developed countries. Poverty is a condition of the inability of a society to meet all basic needs of life such as food, clothing, and shelter. Poverty is a global problem that continues to be suppressed to a low number. World Bank describes "very poor" as people living on less than PPP\$1 per day, and "poor" with income less than PPP\$2 per day. By this standard, 21% of the world's population is in a state of "very poor", and more than half of the world's population is still called "poor", as of 2001 (The World Bank, 2007, Understanding Poverty).



Source: BPS, 2021

Figure 1. Graph of Indonesia's GRDP distribution by region in 2015-2019.

From the data in the table and graph above, it can be seen that the distribution of the highest GRDP for the economy in Indonesia in the last five years is the distribution based on the western part of Indonesia with the distribution of GRDP in 2015 which is equal to 82.63%, then in 2016 the distribution of GRDP increased to 82.70% in 2017 decreased to 82.30% then in 2018 the distribution of GRDP became 82.32% and in 2019 the distribution of GRDP again increased to 82.57 %, the western part of Indonesia is the supporter of economic development in Indonesia with distribution details based on the provinces on the island of Sumatra, Java, West Kalimantan and Central Kalimantan.

For details, the highest distribution of GRDP on the island of Java comes from DKI Jakarta Province, namely in 2015 the distribution of GRDP in DKI Jakarta was at the level of 17.07%, then increased to 17.11% in 2016, in 2017 it also increased to 17.21%. and in 2018 and also in 2019 it increased again to 17.35% in 2018 and 17.67% in 2019.

Economic conditions in the western part of Indonesia still dominate the distribution of the economy that can encourage Indonesia's economic growth, in this western part of Indonesia there are

many manufacturing industrial sectors and tourism sectors that can attract the attention of investors to invest their assets. The poverty and unemployment rates in the western part of Indonesia are still quite high.

Based on the graph above, it can be seen that although almost the entire distribution of GRDP is dominated by the western part of Indonesia, the unemployment rate in that region is also quite high and is the highest unemployment rate among the three parts of Indonesia, namely western Indonesia, central Indonesia, and part of Indonesia. East.

The income disparity between provinces in Indonesia must be one of the indicators of consideration in equitable economic development planning in order to reduce the level of income disparity to a lower value. Economic disparities and differences in the level of income distribution between provinces are related to alleviating the level of the number of poor people and unemployment as well as increasing stable economic growth. With differences in the distribution of certain income levels, increasing disparities will always have an impact on increasing levels of poverty and unemployment as well as low levels of economic growth.

Based on the background of the research above, the purpose of this study is to determine the characteristics of the western, central, and eastern parts of Indonesia as well as to determine the effect of income disparity, unemployment and poverty on economic growth in Indonesia.

2. Literature Review and Hypotheses

Economic Growth

According to Untoro (2010:39) economic growth is a description of the stage of increasing the development of an activity in the economy which is characterized by a condition in which the production of goods increases and the services produced increase and the level of public welfare increases in the long term. Meanwhile, according to Kuznets (in Sukirno, 2006:132), economic growth is a description of the state of the capacity to provide various economic goods to the population in a country experiencing an increase in the long term. In classical economic civilization, economists such as Adam Smith analysed the factors that determine the occurrence of increased economic growth

According to Schumpeter's opinion, it is explained that a condition that does not experience development occurs when economic growth is at a high level. But in the understanding of classical theory explained, the level of people's income is very low, which is a condition where economic growth is no longer growing (Septian, 2019).

According to Todaro (2003), there are several factors that can affect economic growth, namely:

Population and labor force growth

Population growth has a very influential relationship to the number of levels of the labor force who work or have a job. Population growth is a factor that can also affect the state of economic growth. This increase in population growth can affect how the conditions of improving the economy can create jobs that can reduce the number of unemployed people so that they can give birth to productive workers.

Capital accumulation

Capital accumulation is a new investment action that is carried out and includes assets (land) or natural wealth, fiscal measurements, labor and income in order to increase the output of production of goods and services in the future.

Technology advances

Technological progress according to economists is the most important factor in supporting an increase in economic growth in a country. This is because technological advances have a great impact because they can provide new ways or methods and improve old ways of doing a job.

Income Disparity

Income disparity or income inequality is the difference in the level of distribution of a country's national income caused by different natural resources between regions in the country, unemployment and lack of productivity of human resources, as well as uneven development aspects in terms of supporting the economy (Kuncoro, 2010). Income disparities with relatively high levels are most common in countries that are just starting or starting the development of a particular country. As an example of a country that just became independent from colonialism or colonialism, the impact of the colony left a fairly high level of poverty and also.

Lack of knowledge of managing natural resources exists to support economic growth, this aspect is the basis for countries that are just starting development, tend to experience a very high level of income disparity (Kuncoro, 2010).

The neoclassical hypothesis also explains that income disparities at the beginning of the economic process tend to increase. This will continue to happen until the disparity level then reaches its peak or has reached the peak of the existing level. After that, if the development process of a country continues, the level of development disparity between regions will gradually decrease. In other words, the state of the level of disparity or disparity in countries whose economic level is still developing experiences a relatively higher level of disparity, and vice versa in developed countries the level of disparity or disparity is relatively lower.

Unemployment

Unemployed means not the same as not working or not wanting to work. People who don't want to work cannot be said to be unemployed. According to BPS (Central Bureau of Statistics) in terms of employment aspects, unemployment is an economic condition where the number of people who are not working but are trying to find work and are preparing for a new business or the number of people who are not trying to find work because they have been accepted to work but have not started work. (According to BPS, 2016)

Poverty

Bradshaw (2005) explains that poverty is a condition that lacks various needs to ensure survival such as staple food, shelter, health facilities, namely basic needs that must exist and be met in a dignified community life (Ratriadi, 2009).

Living in poverty is not only living in conditions of lack of money and low income levels, but also many other things, such as low levels of health and education, unfair treatment in law, vulnerability to threats of criminal action, powerlessness in determining a way of life or choices own life (Suryawati, 2005).

3. Methods

Based on the background of the research previously stated, the research target is to determine the characteristics of the western, central and eastern parts of Indonesia as well as to determine the effect of income disparity, unemployment and poverty on economic growth in Indonesia.

In this study the approach method used is a quantitative approach method to examine a particular population or sample with the aim of testing the hypothesis. The independent variable (X) in this study is income disparity, unemployment, and poverty. Meanwhile, the dependent variable (Y) is economic growth.

The data collection technique used in this study is to collect data related to the object of research obtained from the Central Statistics Agency for indicators of inequality and poverty, unemployment, and economic growth as well as literature related to this research.

4. Results

Based on the estimation results using the Fixed Effect Model, the empirical model obtained is as follows on Table 1.

Table 2. Panel Data Estimation Results

Dependent Variable: EG?					
Method: Pooled EGLS (Cross-section weights)					
Total pool (balanced) observations: 170					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
C	6.211203	0.952788	6.518978	0.0000***	
GR?	-3.904480	3.087253	-1.264710	0.2082NS	
TPT?	-0.151570	0.076426	-1.983226	0.0494**	
POV?	0.106801	0.070068	1.524253	0.1298NS	
R-squared	0.828915	Mean dependent variable		20.13138	
Adjusted R-squared	0.782606	SD dependent variable		15,74645	
SE of regression	1.746399	Sum squared residual		405.6379	
F-statistics	17.89970	Durbin-Watson stat		2.012806	
Prob (F-statistic)	0.00000***				

Note: ***) significant at 1% and **) significant at 5% *) Significant at 10% NS (Not Significant)

In accordance with the empirical results above, the model of this study becomes:

$$EG = 6.211203 - 3.904480 GRit - 0.151570 TPTit + 0.106801POVit$$

The interpretation of the output of the regression model above can be described as follows:

1. Economic growth without being influenced by any independent variables (Income Disparity, Unemployment and Poverty) in the research model will be valuable 6.211203 percent.
2. Income disparity has a negative effect on economic growth. This means that every 1 percent increase in income disparity will reduce economic growth by 3.904480 percent.
3. The Open Unemployment Rate has a negative effect on Economic Growth. Thus, every 1 percent increase in the Open Unemployment Rate will reduce Economic Growth by 0.151570 percent
4. Poverty has a positive effect on Economic Growth. So it can be explained that an increase in Poverty by 1 percent will increase Economic Growth by 0.106801 percent.

Based on the fixed effect mode estimation, from 34 provinces in Indonesia, the regions that experienced positive growth were West Sumatra, Riau Islands, East Java, DI Yogyakarta, North Kalimantan, North Sumatra, Gorontalo, West Sulawesi, Bali, West Java, Southeast Sulawesi, North Sulawesi, Central Kalimantan, Banten, North Maluku, DKI Jakarta, South Sulawesi, Central Sulawesi. While the provinces that have a negative influence on economic growth are Papua, West Nusa Tenggara, East Kalimantan, Riau, Aceh, West Papua, East Nusa Tenggara, Bangka Belitung Islands, Bengkulu, Jambi, Lampung, South Sumatra, South Kalimantan, Central Java, Maluku, West Kalimantan.

Statistical Hypothesis Testing

Coefficient of Determination (R-Square)

In the previous estimate, Table 4.17 explains that the value of the coefficient of determination or the R-square value is 0.828915 and the adjusted coefficient of determination (Adjusted R-square) is 0.782606. Due to the number of confounding variables more than one, the value used in testing the coefficient of determination is the value of Adj r-Square.

It is known that the value of the adjusted coefficient of determination is 0.782606 if the percentage is 78.26 percent, meaning that changes in the Economic Growth variable observed during the 2015-2019 period are influenced by the variables of Income Disparity, Open Unemployment Rate and Poverty of 78.26%. While the rest (21.74%) is influenced by other variables outside the estimation model.

Simultaneous Test (F-Statistics)

In addition, the next test is intended to analyze the suitability of the model, the f-test statistic is designed to draw conclusions whether the exogenous variables included in the model can describe a linear relationship with endogenous variables. In the previous test, it is known that the value of the f-statistic is 17.89970 while the value of the statistical probability $f P = (0.0000)$ is smaller than all significant levels used in the model. Thus it can be stated that the exogenous variables together can describe the variables in the study, then H_0 is rejected and H_1 is accepted

$$H_0 = 0 \text{ rejected } \beta_0 = \beta_1 = \beta_2 = \beta_3$$
$$H_1 = 0 \text{ accepted } \beta_0 = \beta_1 = \beta_2 = \beta_3$$

Partial Test (t-Statistic)

The last test in this study was designed to determine the effect given by the independent variable on the non-dependent variable and how much it can be stated by the variable. The value of the t-test is in Table 4.5 and focuses more on comparing the coefficient of the independent variable and the value of the probability. Based on Table 4.17 previously explained that.

From the results of the analysis that has been carried out, it is known that the p-value for the Gini Ratio variable is 0.2082. If the p-value is compared with all levels of used in the study, the Gini Ratio is not significant so that H_0 is accepted and H_1 is rejected. Thus, the decision taken by the Gini Ratio has no significant effect on Economic Growth in Indonesia during 2015-2019.

From the results of the analysis that has been carried out, it is known that the p-value for the Open Unemployment Rate variable is 0.0494. If the p-value is compared to the level of 5%, the Open Unemployment Rate is significant so that H_0 is rejected and H_1 is accepted. Thus, the decisions taken by the Open Unemployment Rate have a significant effect on Economic Growth in Indonesia during 2015-2019.

From the results of the analysis that has been carried out, it is known that the p-value for the Poverty variable is 0.106801. If the p-value is compared with all levels of used in the study, poverty is not significant so that H_0 is accepted and H_1 is rejected. Thus, the decisions taken by poverty have no significant effect on Economic Growth in Indonesia during 2015-2019

5. Discussion

The Effect of Income Disparity on Indonesia's Economic Growth

From the results of the analysis that has been carried out, it is known that the p-value for the Income Disparity variable is 0.2082. If the p-value is compared with all levels of used in the study, the income disparity is not significant so that H_0 is accepted and H_1 is rejected. Thus, the decision taken by Income Disparity has no significant effect on Economic Growth in Indonesia during 2015-2019.

Income disparity has a negative effect on economic growth, meaning that every increase in income disparity will reduce economic growth. However, the change in the increase in Income Disparity is not significant to the decline in economic growth in Indonesia. The Gini ratio is a measuring tool in calculating income disparities and is able to show an increase or decrease in income inequality in a country or region (Todaro and Smith, 2006).

Kuznets said that in the early stages of economic growth, income distribution tends to deteriorate, and the later stages of income distribution will improve, but at some point the disparity will increase again and eventually decline again.

In the future, the distribution of income will improve, but at one time the disparity will increase again and eventually decrease again (Norma, 2013).

The Effect of Unemployment on Economic Growth

From the results of the analysis that has been carried out, it is known that the p-value for the Open Unemployment Rate variable is 0.0494. If the p-value is compared to the level of 5%, unemployment is significant so that H_0 is rejected and H_1 is accepted. Thus the decisions taken by Unemployment have a significant effect on Economic Growth in Indonesia during 2015-2019.

Unemployment has a negative and significant effect on economic growth. This means that every one percent increase in unemployment can actually explain a one percent decrease in economic growth. According to BPS, unemployment is representative of the number of unemployed people divided by the total workforce. Open unemployment includes: first, those who do not have a job and are looking for work, second, those who are preparing for a business, third, not looking for work, those who already have a job, but have not started working (BPS, 2021).

The results of this study are supported with the theory presented by Murni (2006:202) in Pramesthi et al (2013), namely increasing unemployment can make economic growth decline because people's purchasing power decreases, resulting in lethargy for entrepreneurs to invest. Based on this opinion that there is an influence between unemployment and economic growth. In order to maintain economic growth, policies are needed that are not only oriented towards economic growth, but also reduce unemployment by creating new jobs.

The Effect of Poverty on Economic Growth

From the results of the analysis that has been carried out, it is known that the p-value for the Poverty variable is 0.106801. If the p-value is compared with all levels of used in the study, poverty is not significant so that H0 is accepted and H1 is rejected. Thus, the decisions taken by poverty have no significant effect on Economic Growth in Indonesia during 2015-2019.

Poverty has a positive and insignificant effect on economic growth. This means that every one percent increase in poverty will increase economic growth.

According to Tambunan and Kuznezt (2001) in Wahyudi (2013) stated that there is a close relationship between growth and poverty, because poverty tends to increase at the beginning of the development process and decrease gradually when the economic growth process reaches the final stages of development. Sukirno (2008) in Pramesti (2014) an important aspect that must be considered in the economic development of a region or region is to improve the standard of living of the community towards a better.

However, the results of this study explain that poverty has a positive and insignificant effect on economic growth. This is because there are still many families living in poverty in Indonesia. According Retno (2013) many people who are not classified as poor (Middle Population) are still at risk of becoming poor. Poverty in Indonesia also depends on the economic capacity of the community to meet basic food and non-food needs which are measured in terms of costs, thus ignoring the actual poverty line.

The results of this study are in line with Wadana and Prijanto (2021) who state that poverty has a positive and insignificant effect on economic growth. Babasanya et al. (2019) Poverty has a positive effect on economic growth in a case study country in Nigeria.

6. Conclusion and Suggestions

Conclusion

Income disparity has a negative effect on economic growth, meaning that every increase in income disparity will reduce economic growth. However, changes in the increase in Income Disparity are not able to explain significantly (not significant) to the decline in economic growth in Indonesia. The open unemployment rate has a negative and significant effect on economic growth. This means that each increase in the open unemployment rate by one unit can clearly explain a decrease in economic growth by one unit. Poverty has a positive and insignificant effect on economic growth. This means that every one unit increase in poverty will increase economic growth. However, changes in the increase in poverty are not able to explain significantly (not significant) to the increase in economic growth in Indonesia.

Suggestions

The regional and central governments should reduce income inequality by implementing equitable development in all aspects, especially in the economic and social aspects, so that it can be felt by the lower class population/community. The central government is more selective in taking policies to meet the quality of the welfare of its population, in this case employing domestic workers so that the number of unemployed can be overcome. To reduce poverty at the provincial and provincial levels in Indonesia, government should work closely with local governments to focus more on poverty reduction, education, income generation and health.

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