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THE EFFECT OF POVERTY AND ECONOMIC GROWTH ON THE HUMAN DEVELOPMENT INDEX BENGKULU PROVINCE

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ABSTRACK
This study aims to find out how economic growth and poverty impact the Human Development Index (HDI) in Bengkulu Province. For analysis, this research uses panel data. Data taken from 2018 to 2020 from all districts and cities of Bengkulu Province. Panel data regression calculations show that poverty has a negative influence on the Human Development Index (HDI) and economic growth has a negative influence on HDI. From 2018 to 2020, the variables of poverty and economic growth have a simultaneous and significant influence on the Human Development Index of Bengkulu Province
Keywords: *Economic Growth, Poverty, Human Development Index (HDI)*

1. Introduction

The human development index is a measure used to see the level of success of a country's development. An increase in HDI shows an increase in various aspects such as welfare, improved education and improved quality of health (Zulham , Seftaria , 2017). However, the COVID-19 pandemic has had an impact on various aspects of people's lives and put heavy pressure on macroeconomic indicators (Trisno *et al* , 2022).

HDI functions as a guide for determining priority scales in development . (Susanti , 2013). The government as the implementer of development certainly needs quality people (Prameswari *et* all, 2021). Therefore, economic development needs to be considered so that it leads to improving human quality (Dewi, 2017). So that it can raise people's standard of living, and expand people's choice options in terms of income, education and health (Amelinda & Rachmawati , 2022). A high level of human development also illustrates the population's ability to manage sources of economic growth (Utami, 2020).

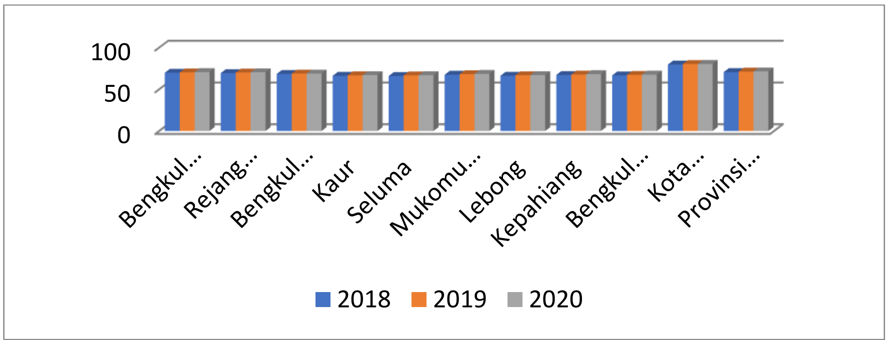

Figure 1. Human Development Index
Source: Central Statistics Agency (BPS)

Judging from Figure 1. The Human Development Index for Bengkulu Province is in the high category with an average of 70 percent, the highest HDI in 2020 was in Bengkulu City which reached 80.36 percent, while the lowest HDI was in Seluma Regency at 66.89 percent.

By increasing the HDI, it is hoped that it will be able to improve prosperity and free people from the trap of poverty (Diba *et all,* 2018). Poverty is always related to meeting basic food and non-food needs based on expenditure (Zuhdiyati , 2017) so that the big challenge faced by many countries, especially in developing countries like Indonesia, is poverty (Leonita & Sari, 2019). The problem of poverty is a very complex problem that is influenced by many factors, such as income level, health and unemployment. Poverty is not only limited to economic failure but also failure to fulfill the basic rights of life (Martini & Woyanti , 2022).

There are still gaps in the plan to achieve the poverty reduction program because it is more oriented towards sectoral programs so there is a need for a strategy to overcome the vicious circle of poverty problem that is integrated and synergized so that the problem of poverty can be overcome (Aziz *et al,* 2016).

How high and low the level of poverty is in a region will of course greatly influence many aspects of that region, the problems that exist in Indonesia such as the level of poverty, so this must be immediately addressed by the government in order to reduce poverty (Fahmi *et all.* 2018 *)* . Based on a previous study conducted by Dewi entitled "The influence of poverty and economic growth on the human development index in Riau Province", it shows that poverty has a significant and influential effect on the Human Development Index in Riau Province, and a study conducted by Ningrum *et all,* 2020. It also shows the same thing that the poverty variable has a significant influence on the Human Development Index in Indonesia.

Apart from that, one of the indicators to see the success of development is to look at the gross regional domestic product (GRDP). The impact resulting from equitable development is accompanied by an increase in income from the goods or services production sector. (Diba *et al.* 2018). An increase in GRDP is an indication of increasing economic growth in a region, therefore, the ability of the community to fulfill their needs is also influenced by GRDP (Zainudin , 2015). As a measure of the added value of a region, GRDP can also be used as a benchmark for prosperity in a region. Access to education, health and a decent standard of living will be more easily accessible in prosperous areas. Regions that have a high level of welfare will strive to improve quality in all aspects of needs, especially basic needs, based on this, the higher the GRDP value will make the HDI value higher (Sania *et all ,* 2021).

Based on the results of a previous study conducted by Trisno *et all* , (2022). Shows that poverty has a negative and significant influence on HDI in South Sumatra Province and a study conducted by Martini, (2022) also shows the results that GRDP has a significant and significant influence on poverty, a study conducted by Prasetyoningrum (2018). Shows that there is a negative and significant influence of poverty on HDI in districts/cities in Papua Province. Based on this problem, the author will conduct research in Bengkulu province which aims to find out whether poverty has a significant influence on the Human Development Index in Bengkulu Province and to find out whether Gross Regional Domestic Income has an influence on HDI in Bengkulu Province in 2018-2020.

2. Literature Review

2.1 Human Development Index (HDI)

The Human Development Index (HDI) is a single composite indicator that can measure human development, although it cannot measure all dimensions of development, but can measure three main dimensions of human development which are considered capable of reflecting the basic capabilities of the population. The three basic abilities are a long and healthy life , education , and access to resources as a way to achieve a more decent life (Setiawan & Hakim, 2013). To see categories of high or low HDI, there are 4 categories, namely low less than 60, medium 60-69, high 70-79, and very high more than 80 (Herdiansyah & Kurniati, 2020).

As one of the development parameters in an area that is negatively correlated with poverty. The higher the HDI number indicates that the quality of human life is also getting better (Alhudhori, 2017). Development is an effort by the government to build a prosperous society. The meaning of development itself is as an activity carried out by a country to improve the quality of life of its people . (Muhamad & Rahmi, 2023).

Humans are the true wealth of a nation, therefore physical and non-physical human development needs to be carried out (utami, 2020) so that the Human Development Index becomes a vital factor for success in efforts to improve the quality of human life, through government spending it can increase the number of people who able to meet the primary needs of the health, education, food and nutrition sectors (Setiawan & Ariani, 2022).

2.2 Poverty

Poverty is known in Indonesia as a problem that has occurred since the beginning of the 20th century during the Dutch Colonial Government. Therefore, we must consider poverty carefully. So that the problem of poverty can be overcome (Syahri & Gustiara, 2020) . Poverty is a complex phenomenon, so it cannot be seen from one absolute perspective because the conditions and problems of poverty in Indonesia are very diverse due to the large area and many cultures that exist in Indonesia. Poverty problems are reflected in social indicators . Poverty is also seen as a deprivation of the poor people's rights, therefore it is necessary to emphasize the State's obligation to respect, protect and fulfill the basic rights of the poor (Fahmi, 2021). In essence, poverty is a situation of deprivation that occurs not because the poor want it (Papilaya, 2020).

A situation of deprivation faced by individuals to live a normal life like the rest of society. Disadvantages faced by poor individuals are based on insufficient income to purchase basic necessities, level of education, acquisition of assets or assets that are not large enough to interfere with living normally. This situation makes it difficult for individuals to escape the vicious cycle of poverty (Gopal *et al* , 2021).

The vicious cycle of poverty is a theory stated by Nurkse as a form of oppression that keeps poor countries in a poor state (Rohima *et al* ., 2013). So we need a way to alleviate the poverty that occurs according to the interpretation of poverty (Jamil & Hadijah, 2014). The Poverty Line is a representation of the rupiah needed or the price paid so that the population can live a minimum decent life which includes meeting the minimum needs for food (equivalent to 2,100 kilocalories per capita per day) and essential non-food (BPS , 2020)

2.3 Gross Regional Domestic Product (GRDP)

GRDP or Gross Regional Domestic Product describes the overall market value of all goods and services produced at the regional and provincial levels within one year. Gross regional domestic product can be divided into 2, namely GRDP based on constant prices and GRDP based on current prices. In this research, GRDP is used at constant prices. GRDP is a permanent price base that describes the total value of goods and services performed and calculated originating from the base year (Pattikawa & Zai , 2021).

One very important indicator for knowing the economic conditions in a region in a certain period is shown by Gross Regional Domestic Product (GRDP) data. This GRDP value will see the extent of the ability to manage or utilize existing resources in the region. Apart from that, the overall economic condition in each region can also be seen from how much regional spending is in the region (Rahman & Chamelia, 2015). Based on previous studies conducted by Sania *et all (* 2021). Showing that GRDP has a significant and influential effect on the Human Development Index, the results of this research are also in line with what was stated by Kuznet who stated that one of the characteristics of modern economic growth is high per capita output.

3. Research Methods

The scope of this research is Bengkulu Province which consists of 10 districts/cities. This study uses data for the last three (3) years, namely from 2018-2020. The data used in this research is secondary data sourced from reports from the Central Statistics Agency (BPS). According to Sugiyono (2016), secondary data are data sources that do not directly provide data to data collectors, for example through other people or through documents and which are secondary data sources in the form of books, journals relating to ongoing research. The data used is poverty data, GRDP and human development index in Bengkulu Province. The type of data used is panel data, namely a combination of *time series data and cross section time series* data for the 2018-2020 period, while the *cross section data* is 10 city districts in Bengkulu province.

The method used is multiple linear regression . The data model used is panel data . The economic equation model is written as follows:

$$Y_{it} = \beta_{0it} + \beta_{1it} X_{1it} + \beta_{2it} X_{2it} + e_{it}$$

Information :
Y = HDI
X1= Poverty
X2 = P DRB
It: 10 districts/cities of Bengkulu Province, 2018-2020
e = Error Term.

The model interpretation technique uses CEM, FEM, and RE M and is selected through the best model test, namely the Chow test, Hausman test, and Lagrange Multiplier (LM). The Chow test was carried out to determine the appropriate regression method for panel data between FEM and CEM. To select a panel data regression model between FEM and SEM, the Hausman Test was carried out . Meanwhile, the LM test is used if the Chow test results show CEM and REM shows Hausman results. Apart from that , knowing the influence between variables is done using the T test . The T test is a statistical method used to determine whether there is a significant difference between the means of two groups. It is often used in comparative analyzes between two groups, for example, to compare the mean scores between a control and treatment group in an experiment (Smith & Jhonson , 2020). F test is a statistical test used to compare variances between two or more groups. This test is often used in analysis of variance (ANOVA) to determine whether there is a significant difference between the means of the groups (*Brits & Hill,* 2019) and the R-square test, the R-square test is one of the metrics used in statistics to measures how well the regression model fits the observed data. The R-square value ranges from 0 to 1, where the closer to 1, the better the model is at explaining variations in the data (Aksu *et all ,* 2019).

The classic assumption test used is multicollinearity. According to Ghozali (2017) states that the multicollinearity test aims to test whether in the regression model there is a high or perfect correlation between independent variables and the heteroscedasticity test. According to Umar (2013), the heteroscedasticity test is carried out to find out whether in a regression model There is an inequality of variance from the residual of one observation to another observation. The classical assumption test was carried out to clarify the influence of the regression analysis results obtained.

4. Research Findings and Discussion

The results of model calculations that have been tested using the Eviews 12 program to determine the selected estimation model are shown in the following assumption test.

4.1 Multicollinearity test

One of the purposes of the multicollinearity test is to evaluate the relationship that exists between independent variables. If correlation occurs between independent variables, this indicates that there is a multicollinearity problem. The existence of multicollinearity can be carried out using a correlation test. The correlation matrix can be used to determine whether there is a relationship between independent variables or multicollinearity problems. If the correlation value is more than 0.80, it indicates multicollinearity (Soemantri, 2019).

Table 1. Multicollinearity Test Results

	POVERTY	**GRDP**
POVERTY	1,000000	0.198690
GRDP	-0.198690	1,000000

Source: processed data (Eviews 12)

The correlation matrix in Table 1 shows that the correlation value is no more than 0.80, which indicates that there is no multicollinearity.

4.2 Heteroscedasticity Test

The heteroscedasticity test is used to evaluate differences in variance from the residuals of all observations in the regression model. Homoscedasticity occurs when the residual variances of two events are the same, while heteroscedasticity occurs when the residual variances of two events are different. The Glesjer test is used to test heteroscedasticity. When the number of chi-square probabilities exceeds α 0.05, model determination is determined (Soemantri, 2019).

Table 2. Mark Probability Test Glesjer

Variables	Prob
C	0.3833
Poverty	0.0144
GRDP	0.4720

Source: processed data (Eviews 12)

The results of the analysis are shown in table 1. The coefficient of determination or R-square is 0.341219, which means that 34.12% of the variation in the Human Development Index (Y) is explained by the independent variables, namely Poverty (X1) and Economic Growth (X2), while the remaining 65.88% explained by other factors not included in this study. According to the results of data processing, table 1 shows that the Prob value is 0.003 < 0.05, so this shows that the independent variables poverty (X1) and Economic Growth (X2) influence the Human Development Index (Y).

4.3 Panel Data Regression Model

To see the impact of the independent variables, poverty, and GRDP as well as the dependent variable, the human development index, a regression equation is used. To make panel data regression analysis faster and more accurate, use the Eviews 12 program. The results are as follows.

Table 3 Panel data regression results

Variables	Coefficient
Poverty level	-0.0409** (0.0213)
Economic growth	-0.1262*** (0.0000)
HDI	70,143*** (0.0000)
R-Square	0.34
F-Statistics	6,992**
Total Observation	30

Description: Significance Level 1%(<0.001)***, 5%(<0.05)**,10%(0.1)*
Source: processed data (Eviews 12)

According to table 3 the regression equation is as follows: Yit = 70.14351 – 0.040981-0.126214

Based on the results of the analysis, it can be explained that the regression constant value of 70.14351 indicates that if poverty (X1) and GRDP (X2) are zero, then the level of the human development index will be the same as the constant value, namely 70.14351%. And the regression coefficient value of the poverty variable is negative is -0.040981 , which shows that if poverty decreases by 1%, the human development index will increase by 0.040981 %, provided that other variables are considered constant or fixed. And the negative regression coefficient value of the GRDP variable is -0.126214 , which shows that if GRDP falls by 1%, then the human development index will increase by 0.126214 %, this shows that the economic growth described by GRDP is variably influenced by other factors so that there is a relationship negative correlation with HDI because in the year of this study the COVID-19 pandemic occurred.

The results of this research are in line with the results of research conducted by Trisno *et al,* 2022 which stated that The poverty variable has a negative and significant influence on the human development index, and is in line with research conducted by Nugraeni & Aji, 2021 entitled the influence of poverty, economic growth and ratios.dependence on development indices man in Java east. The results of this research conclude that there is influence negative between Poverty And Ratio Dependency toIndex Development Man in Province Java East . However, this research shows that GRDP has a negative effect on the Human Development

Index , which is influenced by other factors which cause the correlation between GRDP and HDI to be negative because in the year of this research the COVID-19 pandemic occurred.

5. Conclusion

Based on the study that has been carried out, it can be concluded that the research results show that poverty and economic growth factors have a negative and significant impact on the human development index in Bengkulu Province. This indicates that there is the influence of other factors that cause negative correlation between economic growth and the Human Development Index of Bengkulu province in the year of research. It is hoped that this research can provide an overview for policy makers.

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