INFLUENCE OF GROSS REGIONAL DOMESTIC PRODUCT AND OPEN UNEMPLOYMENT RATE ON THE HUMAN DEVELOPMENT INDEKS IN LAMPUNG PROVINCE FOR THE YEARS 2017-2021

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ABSTRACT

Keywords: Gross Regional Domestic Product, Open Unemployment Rate, and Human Development Index.

This research aims to determine the influence of Gross Regional Domestic Product (GRDP) and Open Unemployment Rate (OUR) on the Human Development Index (HDI) in Lampung Province for the years 2017-2021. The data used is secondary data obtained from the Central Statistics Agency (BPS), which includes data from each of the 15 districts/cities in Lampung Province. The research method employed is quantitative. The data was analyzed using panel data regression method by combining the data of the 15 districts/cities in Lampung Province along with GRDP, OUR, and HDI data from 2017 to 2021. The t-test results indicate that Gross Regional Domestic Product has a positive and significant impact on the Human Development Index in Lampung Province for the years 2017-2021. The Open Unemployment Rate has a positive and significant impact on the Human Development Index in Lampung Province for the years 2017-2021. The f-test results show that both Gross Regional Domestic Product and Open Unemployment Rate have an impact on the Human Development Index in Lampung Province for the years 2017-2021. The panel data regression results indicate that the city of Mesuji has the highest constant at -57.34%. Additionally, the coefficient of determination ($R^2$) in this study is 97%, meaning that the variables of Gross Regional Domestic Product and Open Unemployment Rate collectively explain 97% of the variation in the Human Development Index, while the remaining 3% is influenced by other variables.

1. INTRODUCTION

The Human Development Index (HDI) indicates that even though human progress is occurring, it must continue to coincide with developmental progress. This is easily understood because advancing human standards is challenging, especially in countries with significant populations and diverse cultural backgrounds. Poverty significantly hinders people with disabilities from pursuing the education they desire and contributes significantly to issues with the Human Development Index. Improving human resource standards is best achieved through education. Without individuals with high levels of knowledge, social factors such as economics, good health, and balanced diets will not be sustained in the long run.

The Human Development Index (HDI) issues vary across the Sumatra island, and a low Human Development Index has adverse effects on the population and the region.
The above Figure 1.1 contains a graph illustrating that each province in Sumatra Island has a different Human Development Index (HDI). This indicates the unevenness of human development in Sumatra Island. The achievement of the Human Development Index in Lampung Province over the past three years, from 2019 to 2021, has been at the lowest level with figures of 69.57%, 69.69%, and 69.90%. This indicates that compared to other provinces in Sumatra Island, the human development index achievement in Lampung Province is still lagging behind, never exceeding 70.00%. Even compared to the Kepulauan Riau (Riau Islands), which consistently ranks first with the highest human development index, above 75.00%, followed by Riau Province in second place, and West Sumatra in third place, and so on.

Table 1.1 Gross Regional Domestic Product (PDRB), Open Unemployment Rate (OUR), and Human Development Index (HDI) in Lampung Province for the Years 2017-2021

<table>
<thead>
<tr>
<th>Year</th>
<th>PDRB (Rp)</th>
<th>TPT (%)</th>
<th>IPM (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>26,614,816</td>
<td>4.33</td>
<td>68.25</td>
</tr>
<tr>
<td>2018</td>
<td>27,736,245</td>
<td>4.04</td>
<td>69.02</td>
</tr>
<tr>
<td>2019</td>
<td>28,894,502</td>
<td>4.03</td>
<td>69.57</td>
</tr>
<tr>
<td>2020</td>
<td>26,743,751</td>
<td>4.67</td>
<td>69.69</td>
</tr>
<tr>
<td>2021</td>
<td>27,197,459</td>
<td>4.69</td>
<td>69.90</td>
</tr>
</tbody>
</table>

The Gross Regional Domestic Product (PDRB) based on constant prices per industry in Lampung Province for the year 2020-2021, as indicated in Table 1.1 above, has decreased. Meanwhile, in the same year, the Human Development Index (HDI) has actually increased, which theoretically should have seen a decrease in the Human Development Index. Berdasarkan tabel 1.1 di atas, The Open Unemployment Rate in Lampung Province decreased from 2017 to 2019, concurrent with an increase in the Human Development Index (HDI). However, conversely, the Human Development Index should have decreased in 2020-2021 as a result of the increased Open Unemployment Rate during the same period. This indicates that there are still many workers in Lampung Province who have not been effectively absorbed into the labor market. The high or low unemployment rate in a region is often due to the availability or limitation of job opportunities.

The decrease in the Gross Regional Domestic Product and the increase in Open Unemployment may indeed be attributed to the COVID-19 pandemic, which began in Wuhan, China, in 2019 and spread to other countries, including Indonesia, in March 2020. This led to restrictions on people's activities, including work, which in turn caused many companies to incur losses and lay off employees, thereby affecting the Human Development Index. This aligns with the findings of the research conducted by Sudana & Sudarsani (2021).

The Human Development Index (HDI) is closely related to and can be influenced by the Gross Regional Domestic Product (PDRB). According to Muliza et al. (2017), GRDP is an important metric for tracking the regional economic development over time, both at current prices and constant prices. In general, GRDP is used to assess the value added by all economic entities in a region. The cost of raw materials should match the cost of finished goods and services. Gross Regional Domestic Product at constant prices is the value added calculated using prices from a specific year as the base year. Gross Regional Domestic Product at current prices refers to the value added of products and services evaluated using current prices as the base year. Since it is one of several criteria, a high purchasing power of the population will collectively contribute to the Human Development Index. Rapid production expansion, or Gross Regional Domestic Product, can change consumer spending habits and increase purchasing power. According to a study by Sania et al. (2021), the Gross Regional Domestic Product variable has an impact on the Human Development Index in districts and cities in East Java Province.

Unemployment, as one of the causes of poverty, is a major issue faced by every country. It significantly affects the Human Development Index (HDI) and hinders the per capita income of a nation, which also reflects the economy and the quality of human development in a country. According to the research by Runtunuwu (2020),
the unemployment rate and per capita income negatively impact the Human Development Index in the city of Ternate. The Open Unemployment Rate, often provided as a percentage, compares the number of people in the labor force to the number of those actively seeking employment. The Human Development Index (HDI) of a region is poor or negative when the open unemployment rate is high. This aligns with the research by Mariana & Nabila (2021), which found that the open unemployment rate in Langkat Regency has a negative impact on the Human Development Index.

2. Theoretical Review

**Human Development Index**

According to Sania et al. (2021), the Human Development Index is a crucial metric for assessing the effectiveness of initiatives aimed at improving the living conditions of the population. Countries are categorized as advanced, developing, or underdeveloped based on the Human Development Index, and it is used to evaluate how individuals' quality of life is influenced by economic policies. This aligns with the findings of Prihastuti (2018).

The Human Development Index is a measure of how easily the population of a region can benefit from development as part of their legal entitlement to things like income, health, and education. The human development approach, as stated by Kiha et al. (2021), places a greater emphasis on increasing freedom and the dignity of choice for communities. All social issues, including political freedom, economic growth, trade, employment, gender, and cultural values, are examined together in the context of human development.

Tumewu et al. (2022) explains that poverty is not only related to problems of low income and consumption, but also low levels of education, health, inability to participate in development and many other problems related to human development. These aspects of poverty manifest in the form of malnutrition, lack of clean water, inadequate housing, poor health services, and low levels of education.

**Gross Regional Domestic Product**

The Gross Regional Domestic Product, or GRDP, as explained by Romhadhoni et al. (2019), is the total value added generated by all businesses in a region or the total value of products and services provided by all economic units in a region. On the other hand, Gross Regional Domestic Product (GRDP), as defined by Kuncoro (2017:229), regardless of whether the means of production are owned locally or by the residents of a country, they are all the end products of regional economic activities, including the respective commodities and services. Similarly, according to Mariana & Nabila (2021), Gross Regional Domestic Product (GRDP), which is the total gross value added produced by all economic sectors in a region, is a term used in economics. The GRDP figure can indicate how further improvements can be achieved, as mentioned by Maharani (2016).

According to Sanusi & Yusuf (2018), there are three methods to calculate Gross Regional Domestic Product (GRDP), namely:

**Production Approach**

Because the production strategy emphasizes activities that add value, the calculation only considers the value-added in the production sector from various factories at a specific location. These industrial units are divided into nine different industries (sectors), including agriculture, zoology, forestry, fisheries, electricity, gas, and clean water processed by mining and excavation industries, restaurants, hotels, and construction industries. Real estate, business services, financial communication, and transportation. Government services are also included among these services.

**Income Approach**

The income approach states that it is determined by summing up the income earned by individuals (owners of production factors) as compensation for their labor, including wages/salaries (compensation for labor owners), rent (compensation for landowners), interest (compensation for capital owners), and profits (compensation for entrepreneurs).

**Expenditure Approach**

According to this method, the sector that most reflects the overall demand from economic agents (consumers, producers, and the government) is the total household consumption, real estate investment, government consumption, clean water, and clean oil, or simply the difference between oil and gas consumption.

**Open Unemployment**

According to Putri et al. (2021), it is possible to define unemployment as the difference between the labor force and participation in it. Open unemployment refers to those who are in the labor force and actively seeking employment at a certain income level but have not been successful in
securing the desired position (Sukirno, 2008:351). According to Setya (2017), the number of individuals in each province who do not have a source of income and are actively seeking employment is referred to as the open unemployment rate.

The main issue in the labor market is the high unemployment rate. This is due to the fact that there are fewer job openings than the number of workers, indicating that the labor force has grown much faster than the number of available jobs, leading to a high level of unemployment.

Conceptual Framework

The intended thought framework is as follows:

![Figure 2.1 Conceptual Framework](image)

The framework diagram above will be analyzed using a panel data model, which can answer the issues presented in the problem statement in Chapter One.

Hypothesis

According to Sugiyono (2013:64), the research problem formulation provides temporary solutions in the form of hypotheses, which are considered provisional because they are based solely on theory. Here are the research hypotheses:

H01: Gross Regional Domestic Product does not have an impact on the Human Development Index in Lampung Province.
Ha1: Gross Regional Domestic Product has a positive impact on the Human Development Index in Lampung Province.
H02: Open Unemployment Rate does not have an impact on the Human Development Index in Lampung Province.
Ha2: Open Unemployment Rate has a negative impact on the Human Development Index in Lampung Province.
H03: Gross Regional Domestic Product and the Open Unemployment Rate do not have an impact on the Human Development Index in Lampung Province.
Ha3: Gross Regional Domestic Product and the Open Unemployment Rate have a positive impact on the Human Development Index in Lampung Province.

3. Research Methods

"Research Object and Location"

The main metrics of this study are Gross Regional Domestic Product, Open Unemployment Rate, and the Human Development Index.

The location of the research, known as the research site, is selected based on the title of the research. In this case, the author chose Lampung Province as the research site for the years 2017-2021.

Type and Source of Data

The type of data used in this research is panel data, which consists of a combination of cross-sectional data and time series data. The cross-sectional data in this study pertain to 15 districts/cities in Lampung Province, while the time series data cover the years from 2017 to 2021.

This research sources its data from the Central Statistics Agency of Indonesia (Badan Pusat Statistik Indonesia or BPS), as well as the respective Provincial BPS offices in each region..

Operational Definition

The explanation for each variable are described as follows:

1. The Human Development Index (HDI) is a measurement tool that consists of education, health, and the ability to meet basic life needs. The Human Development Index can also be used to assess the status of a nation, whether it is an advanced country, a developing country, or even a country categorized as underdeveloped (poor). It is also used as a tool to evaluate the government's success in formulating policies.
2. The Gross Regional Domestic Product (GRDP) is the total value added of all commodities and services produced in a region by all economic units, known as the GRDP of that region. It is calculated in constant prices (Rp) metrics for regional gross domestic product are calculated.
3. The Open Unemployment Rate refers to those individuals who are considered to be in the labor force and are actively seeking employment but are unable to secure the positions they desire as a result.
Data Analysis Method
The data analysis steps in the research process involve processing the collected data to address current issues. The analytical approach involves quantitative analysis, which is expressed in numerical data processed statistically using a program called Econometric Views (EViews). The researcher combines time series and cross-sectional data in the panel data regression analysis for this research.

Determination of Panel Data Model

Chow Test

Certainly, here's the translation into English:

According to Widarjono (2007:285), the Chow test is used to determine whether the model used should be a fixed-effects model or a random-effects model in panel data analysis. The choice between fixed-effects and random-effects models can be made by considering several criteria when conducting the Chow test:
a. Panel data regression with fixed effects is the best model if the F probability value is 0.05.
b. Panel data regression with a common effect is the best model if the F probability value is > 0.05."

Hausman Test

According to Widarjono (2007:258), the Hausman test is used to determine whether a fixed effects model or a random effects model should be used. After completing the previous test, the decision making strategy used in the Hausman test is as follows::
a. Panel data regression with fixed effects is the best model if the probability value of the random cross-section is less than 0.05.
b. Panel data regression with random effects is the best model if the probability value of the random cross-section is greater than 0.05.

Lagrange Multiplier Test

According to Rifkhan (2023:175), when deciding between the common effect and pooled least square models using the random effect model technique, the Lagrange Multiplier test is the appropriate test to conduct. Regarding the standard evaluation that may be applied to draw conclusions from the Lagrange Multiplier test. A Breusch-Pagan test statistic greater than 0.05 indicates that the common effect model (CEM) should be used.
The random effects model (REM) is used if the Breusch-Pagan test statistic is less than 0.05.

Classic assumption test

Normalitas Test

To determine whether independent variables, dependent variables, or both are normally distributed or not, a normality test is used. Ghozali (2016:154). If the residuals are distributed regularly or nearly evenly, it indicates that the regression model is very good.

Using the EViews application, normally distributed data can be identified or excluded by comparing the Jarque-Bera (JB) statistic with the Chi-Square table value. Widarjono (2007:54) This indicates that someone can base their decision on the significance of asymptotic results, specifically:
a. Data is normally distributed if the probability value is > 0.05
b. Data is not normally distributed if the probability value is less than 0.05.

Multikolinieritas Test

According to Ghozali (2016), Multicollinearity tests are conducted to determine if there is a relationship between independent variables in a regression model. Partial correlation tests between independent variables are used to detect multicollinearity; the correlation coefficients among independent variables are then tested to see if multicollinearity has an impact on the data. The independent variables in a regression model should not be correlated with each other. If they are correlated, the independent variables are not orthogonal (meaning the independent variables have correlation coefficients that are not equal to zero). To determine whether a regression model exhibits multicollinearity, follow these steps:
a. Multicollinearity problems occur in the data if the correlation coefficient value is more than 0.80.
b. If the correlation coefficient is less than 0.80, there is no issue of multicollinearity in the data.

Heteroskedastisitas Test

Heteroscedasticity test according Ghozali (2016) Trying to determine whether many residual observations in a regression model have the same variance. Homoskedasticity is a condition where the variance among residuals of two observations is constant. Heteroskedasticity is a condition where the variance varies. A valid regression model can exist with or without heteroskedasticity.

Using the Glejser test to assess whether this study experiences heteroskedasticity. There is no heteroskedasticity problem with the regression
model if the probability value is greater than 0.05. Conversely, a heteroskedasticity problem occurs if the probability value is less than 0.05.

**Autokorelasi Test**

According to Riyanto & Hatmawan, (2020:2014), To determine if there is autocorrelation in linear regression, an autocorrelation test is used to compare the errors at time period $t$ with the errors at time period $t-1$ ($t=1$). The Durbin-Watson test (DW test) is used to determine whether there is autocorrelation.

**Panel Data Regression Analysis**

Panel data regression analysis is conducted to understand and test the influence of two or more independent variables on a dependent variable. Cross-sectional and time series data are often analyzed using panel data regression. EViews is a program that researchers use to handle data using panel data regression techniques. Using the following panel data regression formula:

$$IPM = \alpha + \beta_1PDRB_{it} + \beta_2TPT_{it} + \epsilon_{it}$$

Explanation:
- HDI = Human Development Index
- $\alpha$ = Konstanta
- $\beta_1, \beta_4$ = Koefisienregresi
- GRDP = Gross Regional Domestic Product
- OUR = Open Unemployment Rate
- $e_i = i… n$ (crosssection)
- $t_i = i… t$ (timeseries)

**Hypothesis Testing**

To be able to decide whether to accept or reject the hypothesis proposed by the independent variable on the dependent variable, hypothesis testing is a process used in research. Kurniawan & Puspitaningtyas, (2016:103). In this research, partial hypothesis testing (t-test) and coefficient of determination testing ($R^2$) are used to evaluate the hypotheses.

**Partial Test (t-test)**

According to Ghozali (2016), The partial hypothesis test (t-test) is a test used to determine the extent of the influence of the independent variable on the dependent variable. With the open unemployment rate ($X_2$), regional gross domestic product ($X_1$), and the Human Development Index ($Y$), this test aims to determine the impact of each variable. To conduct this test, you would compare the calculated t-value (t-hitung) with the critical t-value (t-tabel) under the following conditions:

1) $H$ is accepted if the calculated t-value > the t-table value at a significance level of 0.05. This indicates that the dependent variable is somewhat influenced by the independent factor.
2) $H$ is rejected if the calculated t-value < the t-table value, and the significance level is greater than 0.05. This indicates that the independent variable does not fully determine the dependent variable.

**Simultan Test (F-test)**

The F test checks to determine whether the independent and dependent variables impact the dependent variable simultaneously. The threshold is 5%. If the F-significance value is less than 0.05, the dependent variable is influenced collectively by the independent variables, or vice versa. Ghozali (2016).

**Koefisien Determinasi ($R^2$)**

To determine the influence of each independent variable on the dependent variable, the specified test coefficient is used. According to Ghozali, (2016:171). The coefficient of determination ranges between 0 and 1. The ability of the independent variable to explain the dependent variable is greatly limited by a low coefficient of determination. The dependent variable is highly influenced when the value of the independent variable approaches 1. To determine the extent of the influence of the independent variable on the dependent variable, you can examine the modified R-squared value.

**Research Results**

**Results Chow Test**

The Chow test is conducted to determine the selected model between CEM (Common Effects Model) and FEM (Fixed Effects Model). The obtained results in this research are as follows.

**Table 4.1 Chow Test Results**

<table>
<thead>
<tr>
<th>RedundanFixed Effets Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation: Untitled</td>
</tr>
<tr>
<td>Testcrossectionfixed effects</td>
</tr>
<tr>
<td>EffectsTest Statistic d.f. Prob.</td>
</tr>
<tr>
<td>Cross-section F 114.443181 (14,58) 0.0000</td>
</tr>
<tr>
<td>Cross-section Chi-square 251.568981 14 0.0000</td>
</tr>
</tbody>
</table>

Source : Results Eviews 12

Based on the findings of the Chow test in Table 4.4, the probability value for Cross-section F is 0.000. Based on the Chow test results, the Fixed Effect
Model (FEM) is the optimal model for this research because this value is less than the research error tolerance criterion, which is 0.05. Further testing is conducted using the Hausman test because the selected model in the Chow test is the Fixed Effect Model (FEM).

**Results Hausman Test**

The Hausman test is conducted to determine which model is selected between the Fixed Effect Model (FEM) and the Random Effects Model (REM) by examining the Chi-Square probability value. The obtained results in this research are as follows:

**Table 4.2 Hausman Test Results**

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>9.025981</td>
<td>20.0110</td>
<td></td>
</tr>
</tbody>
</table>

Source: Eviews 12

The probability value for the random effects model (REM) is 0.0190, as seen in the Hausman test results in Table 4.5 above. This value is less than the research error tolerance standard of 0.05. Therefore, the Fixed Effect Model (FEM) is the most effective panel data regression model for this research.

**Results LM Test**

Because in the previous testing, the common effect method was not selected, the Lagrange Multiplier test is no longer needed for this research.

**Results Normalitas Test**

The results of this research are as follows:

![Normality Test Results](image)

Source: Eviews, 12 (2023)

**Figure 4.1 Normality Test Results**

These findings indicate that the research data is normally distributed because the normality test resulted in a probability value of 0.4042, which is higher than the significance level of 0.05.

**Results Multikolinieritas Test**

The results of the multicollinearity test can be seen in Table 4.4 below:

**Table 4.4 Multikolinieritas Test Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRDP</td>
<td>1.000000</td>
<td>0.319683</td>
<td>3.146928</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Source: Results Eviews 12

Based on Table 4.4 above, there is no indication of multicollinearity for any of the independent variables in the study, as shown in Table 4.2 above. Since all independent variables in this research have correlation coefficients below 0.80, it can be said that there is no multicollinearity issue with the data from these variables.

**Results Heteroskedastisitas Test**

**Table 4.5 Heteroskedastisitas Test Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>3.332873</td>
<td>2.528628</td>
<td>1.318056</td>
<td>0.058973</td>
</tr>
<tr>
<td>GRDP</td>
<td>-0.173880</td>
<td>0.150203</td>
<td>-1.157634</td>
<td>0.2508</td>
</tr>
<tr>
<td>OUR</td>
<td>0.021679</td>
<td>0.024253</td>
<td>0.893852</td>
<td>0.3744</td>
</tr>
</tbody>
</table>

Source: Results Eviews 12

The significance values for the variables PDRB and TPT are > 0.05, as indicated by the results of the heteroskedasticity test in Table 4.3 above, using the Glejser test. This suggests that the regression model for these two independent variables is free from heteroskedasticity.

**Results of Selected Panel Data Estimation**

Based on the results of the Chow test and the Hausman test, it can be concluded that the best-selected panel data model is the Random Effects Model (REM). The results of the REM model in this research can be seen in the table below.

**Results of Panel Data Regression Analysis**

Dependent Variable: IPM

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>50.693</td>
<td>34.5022</td>
<td>1.46928</td>
<td>0.1647</td>
</tr>
<tr>
<td>D</td>
<td>56</td>
<td>4</td>
<td>30.1472</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Eviews 12
The regression equation for this research can be constructed as follows based on Table 4.6 above:

\[ \text{HDI} = -50.69356 + 6.941911 \text{ GDRP} + 0.182455 \text{ OUR} \]

This can be explained in the equation above as follows:

1. The constant value (\( \alpha \)) of -50.69 represents the intercept or the state when the Human Development Index (Y) is not influenced by other variables. The value of the Human Development Index variable (Y) is -50.69 when the independent variables are constant or remain constant (equal to 0).

2. \( \beta_1 \) (the regression coefficient of X1) of 6.94 indicates that the regional gross domestic product variable (GDRP) has a positive (direct) effect on the Human Development Index (HDI). This means that for every 1% increase in the regional gross domestic product, assuming all other variables remain constant, the Human Development Index is expected to increase by 6.94.

3. \( \beta_2 \) (the regression coefficient of X2) of 0.18 indicates that the variable Open Unemployment Rate has a positive (direct) impact on the Human Development Index. This suggests that assuming all other factors remain constant, every 1% increase in the Open Unemployment Rate will result in an increase in the Human Development Index by 0.18.

4. Intercept in the city/district of Bandar Lampung of 5.68, meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by 5.68.

5. Intercept in the city/district of Lampung Barat of 2.36 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by 2.36.

6. Intercept in the city/district of Lampung Selatan of -1.09 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by -1.09.

7. Intercept in the city/district of Lampung Tengah of -0.55 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by -0.55.

8. Intercept in the city/district of Lampung Timur of 0.45 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by 0.45.

9. Intercept in the city/district of Mesuji of -6.65 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by -6.65.

10. Intercept in the city/district of Metro of 8.21 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by 8.21.

11. Intercept in the city/district of Pesawaran of -2.76 meaning that if the GRDP and TPT in the
district/city are constant, the HDI will increase by -53.45.
13. intercept in the city/district of Pesisir Barat of -2.70 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by -53.39.
14. intercept in the city/district of Pringsewu of 3.33 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by 47.36.
15. intercept in the city/district of Tanggamus of 0.49 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by -50.02.
16. intercept in the city/district of Tulang Bawang Barat of -2.52 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by -53.21.
17. intercept in the city/district of Tulang Bawang Barat of -3.13 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by -53.82.
18. intercept in the city/district of Way Kanan of 0.19 meaning that if the GRDP and TPT in the district/city are constant, the HDI will increase by -50.05.

Results of Partial Testing
Table 4.8 Partial Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-0.5069356</td>
<td>3.450224</td>
<td>-1.469283</td>
<td>0.1472</td>
</tr>
<tr>
<td>GRDP</td>
<td>6.941911</td>
<td>2.025003</td>
<td>3.428100</td>
<td>0.0011</td>
</tr>
<tr>
<td>OUR</td>
<td>0.182455</td>
<td>0.104644</td>
<td>1.743589</td>
<td>0.0865</td>
</tr>
</tbody>
</table>

Source: Results Eviews 12, Data Processed (2023)

\[ T_{table} = (\alpha/2; n-k-1) = (0.05/2;75-2-1 = (0.025;72) = 1.666 \]

To compare the t-table value with the t-count value and ensure that the t-table value of 1.666 indicates that the independent variable affects the dependent variable.

Because the significance value of the PDRB effect is 0.001, which is less than 0.05, and the t-count value of 3.428 is greater than the t-table value of 1.666 in hypothesis testing 1 in Table 4.7 above, it can be said that PDRB has a positive and significant impact on the Human Development Index.

In hypothesis testing 2, it is found that the significance value for the effect of the open unemployment rate is 0.086, which is greater than 0.05, and the t-count value of 1.7435 is greater than the t-table value of 1.1666. Therefore, it can be concluded that the open unemployment rate does not have a statistically significant impact on the Human Development Index.

Results of Simultaneous Testing
Table 4.9 Simultaneous Test Results

<table>
<thead>
<tr>
<th>R-squared</th>
<th>Adjusted R-squared</th>
<th>S.E. of regression</th>
<th>Sum squared resid</th>
<th>Logliklihood</th>
<th>F-statistic</th>
<th>Prob(F-statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.980070</td>
<td>0.974572</td>
<td>0.630457</td>
<td>23.05358</td>
<td>-62.18287</td>
<td>178.2606</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Source: Results Eviews 12, Data Processed (2023)

In Table 4.8 above, the precision value (F-statistic) for the interaction between regional GDP (PDRB) and the open unemployment rate with the Human Development Index is 0.000, which is less than 0.05.

Koefisien Determinasi

The adjusted R-squared value for this research is 0.9745, or 97%, as seen from the coefficient test results above. This indicates that the open unemployment rate and regional GDP variables can explain 97% of the Human Development Index, while other factors can explain the remaining 3%.

Discussion

The Impact of Gross Regional Domestic Product on the Human Development Index

According to the findings of the study, the Gross Regional Domestic Product (GRDP) significantly and positively affects the Human Development Index. This indicates that if indeed so, the GRDP can boost the Human Development Index (HDI).

This study is consistent with the research that has been conducted Sania et al., (2021). This is likely due to the fact that Lampung Province is one of the provinces with a lot of agricultural and fisheries produce, which can contribute to the income of the population or per capita income, which is an indicator capable of improving the Human Development Index.

The Impact of Open Unemployment Rate on the Human Development Index

The results of this study indicate that the open unemployment rate does not have a negative impact on the Human Development Index. This suggests that in Lampung Province, an increase in the open unemployment rate does not affect the increase in the Human Development Index.
The research is in line with what has been done Nadila & Muctholifah, (2018). This could possibly be influenced by the significant income obtained from other variables, which may explain why the open unemployment rate does not have an impact on the Human Development Index.

REFERENCES


Rifkhan. (2023). *pedoman metodologi penelitian data panel dan kuesioner*.


