



**THE EFFECT OF LOCAL GOVERNMENT EXPENDITURES IN THE EDUCATION  
SECTOR AND GDP REGIONAL ON HDI IN INDONESIA IN 2015-2018**

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**Abstract:**

Human resource-based economic development is one of the priorities implemented in Indonesia because Indonesia has a large population potential. Indonesia ranks in the position of the five lowest countries in its human development index in ASEAN. This study aims to determine the influence of government spending in the education sector and GDP Regional in increasing HDI in Indonesia in 2015-2018. This study used the method of multiple regression analysis panel data with a total sample of 26 provinces in Indonesia with 104 observation units. In this study, it was found that local government spending in the education sector had a positive and significant effect on HDI and GDP Regional also had a positive and significant influence in increasing HDI in Indonesia in 2015-2018.

**Keywords: HDI, Government Expenditure, Education, GDP Regional**

**Background**

Human resource-based economic development is one of the priorities implemented in Indonesia because Indonesia has a large population potential. According to BPS (2020), Indonesia is 269 million people and by 2030 Indonesia is expected to reach the peak point of demographic bonuses. Economic development initially only viewed high economic growth as a successful development in a country without paying attention to other aspects such as human resources, income inequality, poverty, and others. Human resources are still seen as factors of production only, just like land, capital and technology even though human resources have human values and potentials that can be actualized to support the development of a country (Mongan, 2019). Therefore, the Human Development Index (HDI) is one of the important indicators to see the other side of the success of economic development. Research on the Human Development Index (HDI) is not the first to be carried out. Based on research conducted by Dasic et al. (2020) that the Human Development Index (HDI) is influenced by socioeconomic indicators and economic development policy orientation prevailing in a country either in the form of regional policies or national policies. Furthermore, according to research conducted by Çağlayan-akay & Van (2017) that success in the formation of the Human Development Index (HDI) is not only represented through economic growth but also through the quality of human resources and their skills which are the main criteria in the assessment of development success in a country.

Another research that also discusses the Human Development Index (HDI) was conducted by Danu & Zuhdi (2013) which stated that government spending, especially in the education and health sectors, did make a positive contribution to public goals, these results were also supported by previous research



conducted by Gupta et. al. (1998) which stated that government spending on the health and education sectors could have an effect positive on human resources which, in the end, increases economic growth to an increase in the Human Development Index (HDI). In addition to government spending, another important thing that plays a role in increasing the Human Development Index is the value of GDP Regional as a representation of economic growth. GDP Regional is one of the things that determines the prosperity of a community from the success of the development of a region in terms of its economy, the economic growth represented by GDP Regional is one of the indicators to assess the level of development progress and is one of the real impacts on the success of several economic policies implemented in the past. This is supported by research conducted by Ariwuni & Kartika (2018) that GDP Regional has an influence on the human development index.

Indonesia is currently ranked sixth out of ten countries in the Southeast Asia region until 2018 data and has an index value of 0.712 below other Southeast Asian countries such as Singapore, Brunei Darussalam, Malaysia, Thailand, and the Philippines. Indonesia's ranking, which is at the lowest position in its human development index, is an irony that must be given special attention by the government. Therefore, it takes the contribution of the government, both the central and local governments, to increase competitive human capital and be able to become a country with an HDI category with a better level while increasing economic development (Arfiyansyah, 2018).

Perbandingan indikator IPM Indonesia dan Filipina 2015-2018

Country	Indicators	2015	2016	2017	2018	Country	Indicators	2015	2016	2017	2018
Filipina	ARE (years)	0.779	0.782	0.784	0.786	Indonesia	ARE (years)	0.781	0.785	0.789	0.792
	SRE (years)	12.8	12.7	12.7	12.7		SRE (years)	12.9	13.3	13.4	13.5
	MSE (years)	9.3	9.3	9.4	9.4		MSE (years)	7.9	7.9	8	8.17
	PPP (US\$)	8144	8564	9017	9414		PPP (US\$)	9815	10197	10589	11042
	HDI	0.701	0.704	0.708	0.711		HDI	0.695	0.703	0.707	0.712

Source : UNDP, 2022

Based on data released by UNDP with data updates reaching 2020, if you compare Indonesia with the Philippines which is ranked fifth and sixth in the Southeast Asian region and is in the same rank in the world rankings, namely 107, it will be found that Indonesia has an Indonesia's RLS is still lower than the Philippines. The Philippines' RLS in 2018 was 9.4 years while Indonesia had an RLS of 8.17 years (UNDP,2020). The Indonesian Mean Years School (MYS) figure indicates that the majority of Indonesians still have not completed their schooling period in accordance with the expectations of compulsory education launched by the government, which is 12 years. So that the problem space of the Human Development Index (HDI) in Indonesia is in the quality of human resources which is still below other countries in Southeast Asia. The low quality of human resources will multiplier have an impact on the success of development through the Human Development Index (HDI), because in addition to economic growth, the quality of human resources and their skills is part of assisting HDI which is the main criterion in assessing the success of development in a country (Çağlayan-akay & Van, 2017).

In addition to government spending on the education sector, economic growth represented by GDP Regional on the basis of constant prices also has a relationship with human development. According to Putra and Ulupui (2015:864) in A. O. F. Diba et al. (2018) states that increasing the Human Development Index does not only rely on improving the economy but also needs development in all



aspects. This is done so that economic growth is in line with human development accompanied by equitable development. Based on the table above, from 34 provinces in Indonesia until 2018, they have different HDI values. The three provinces with the largest HDI are occupied by DKI Jakarta, DIY and East Kalimantan. Meanwhile, the three provinces with the smallest HDI are occupied by Papua, West Papua and East Nusa Tenggara. On the other hand, the three provinces with the largest GDP Regional are occupied by DKI Jakarta, East Java and West Java. Meanwhile, the four provinces with the smallest GDP Regional are occupied by North Maluku, Gorontalo, Maluku and West Sulawesi. This different HDI value is partly due to the difference in each Provincial GDP Regional value. The GDP Regional obtained by each of these provinces will make a difference in the results of its development. Provinces with relatively lower GDP Regional will make the province lag behind when compared to other regions A. O. F. Diba et al. (2018). Based on GDP Regional data released by BPS 2022, it is found that indications that GRDP accumulated nationally has a greater percentage of value increase than the percentage of increase in the human development index, which is  $\pm 0.05\%$  to  $1\%$  for an increase in GRDP every year and  $\pm 0.009\%$  for an increase in HDI. This is in line with previous research conducted by (A. Fahmi & Dalimunthe, 2018; Mahendra, 2020). A low HDI will have an impact on the low work productivity of the population (Danu & Zuhdi, 2013). Therefore, this research is important to conduct which aims to determine the influence of government spending in the education sector in increasing the human development index in Indonesia in 2015-2018 and to know the influence of GRDP in increasing the human development index in Indonesia in 2015-2018.

## **THEORETICAL FRAMEWORK**

### **Human Development Index Theory**

Human Development Theory is a theory initiated by UNDP (1990) to improve the concept of human resource analysis which was previously only based on gross domestic product into a broader analysis concept from the socio-economic side with the formation of three main indicators as a measuring tool, namely the health index, education index, and decent life index. Then another theory that supports the Human Development Theory is the Theory of Public Welfare. The Theory of Public Welfare according to Pigou is the aggregate satisfaction of all individuals in society. According to Skousen (2005) The welfare of the community is shown by the satisfaction obtained by the community for the consumption of goods and services both public and non-public sectors and also the regional income earned. As an index that represents well-being, the Human Development Index (HDI) was formed to emphasize that human resources and their skills should be a key criterion included in a country's development assessment. The Human Development Index (HDI) is an index that measures long-term progress on the scope of the three basic dimensions of human development, namely a long and healthy life, access to information, and decent living conditions (Çağlayan-akay & Van, 2017).

### **Theory of Government Spending**

Adolf Wagner's Theory of Government Spending which states that government spending will increase due to an increase in the function of public welfare and the function of development (Sholekhah, 2018). Another theory that also supports government spending, especially in the education sector, is the Human Capital Theory which emphasizes that education can increase the productivity and efficiency of workers by increasing the level of cognitive stock of the ability of human workers to be economically productive which is a product of the innate ability of investment in humans. The provision of formal education is seen as an investment in human capital that is considered equal to or even more valuable than physical capital, thus increasing not only aspects of productivity economically, but also aspects of human development (Nurkholis, 2018). Based on the theory above, if the optimization of the role of local government spending in the education sector, the quality of Indonesian education has improved, then the quality of human resources produced has also increased. Government spending on the education, health, and job development sectors is very important for the economic development of a nation,



because it can and increase the quality capacity of human resources which has an effect in increasing the human development index (Omodero, 2019).

### **Gross Domestic Product Regional (GDPR) Theory**

The Theory of Kuznet Growth popularized by Simon Kuznet shows the existence of a long-term ability of a country's economic growth to provide economic goods to its people. Kuznet's theory of growth in its analysis adds the characteristics of the economic growth of a country, namely:

- 1) High level of per capita income
- 2) High labor productivity
- 3) High factors of transformation of the structure of the economy
- 4) High factors of social transformation of ideology
- 5) The ability of the economy to expand the Market
- 6) There is an awareness that economic growth is limited in nature

In his theory, Professor Kuznet stated that one of the characteristics of economic growth in modern economic growth is the high output. The economic growth in question is GRDP, the high growth of output makes consumption changes in terms of the level of purchasing power of the people (Ariwuni & Kartika, 2018). The high purchasing power of the people will increase the Human Development Index because people's purchasing power is one of the composite indices in the decent living indicator.

### **METHOD**

In this study, it used secondary data as the main data with data retrieval techniques in the form of data panel techniques. This data was obtained from the publication of statistics released by the Central Statistics Agency and the Directorate General of Financial Balance of the Ministry of Finance of the Republic of Indonesia with the period of data used from 2015 to 2018. Data management analysis in this study uses Microsoft Excel and Eviews 10 software for calculations in determining methods, models, classical assumption tests, and hypothesis tests. The use of Eviews 10 can help researchers in the process of processing research data available from BPS and Directorate general of balance and finance from the Ministry of Finance of the Republic of Indonesia. The model used is a panel data regression model. Multiple regression models are models that are commonly used in studies that use more than one dependent variable. In this study, two independent variables were used, namely local government expenditure on the education function and GRDP. There are several methods that can be used in estimating the multiple regression model of panel data, namely the Common Effect, Fixed Effect and Random Effect methods (Widarjono, 2018). The regression model can be written as follows:

$$\ln Y_{IPM} = \beta_0 + \beta_1 \ln X_{1PP} + \beta_2 \ln X_{2GDPR} + e$$

Information:

- Y : Human Development Index (HDI)  
X<sub>1</sub> : Local Government Expenditures for Education Function (PP)  
X<sub>2</sub> : GDP Regional  
 $\beta_0$  : Constants  
 $\beta_1 \beta_2$  : Regression coefficient  
e : error term

### **RESULT**

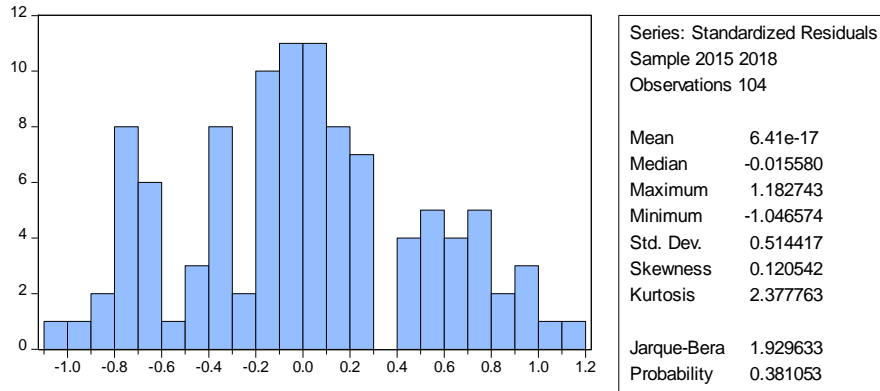
#### **Test of Classical Assumptions**

##### **1. Normality Test**

The Normality Test is used to determine whether residual digestion is normal or not. Decision-making criteria are determined by normally distributed data. If the Jarque-Fallow probability



value  $> 0.05$  then it means that the data is normally distributed. The following are the results of the Normality Test in this study.



**Source : Output Eviews 10**

The decision of the Normality Test results can be seen from the comparison of the Jarque-Fallow probability value with the alpha level ( $\alpha$ ) used, which is 0.05 (5%). The decision-making hypothesis on this normality test is:

$H_0$  : If the Jarque-Fallow probability value is greater than 0.05 means that the residual is normally distributed

$H_1$  : If the Jarque-Fallow probability value is greater than 0.05 that the residual is abnormally distributed

Based on the results of the Normality Test in this study, the Jarque-Bera probability value calculated was 0.381058, the result was greater than 0.05 which means that  $H_0$  was received. So the conclusion is that residual is normally distributed.

## 2. Uji Multikolinearitas

The Multicholinerity Test aims to determine whether in the regression model there is a high or perfect correlation between independent variables (Ghozali, 2018). The following are the results of the Multicholinerity Test in this study:

Variance Inflation Factors  
 Date: 07/11/22 Time: 16:03  
 Sample: 1 104  
 Included observations: 104

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.177274	1.633695	NA
X1	5.13E-26	2.232511	1.507184
X2	1.77E-18	2.289509	1.507184

**Source : Output Eviews 10**

Based on the results of the Multicholinerity Test in this study, the variance inflation factor (VIF) value in the two variables used is worth  $< 10$ , which is worth 1.507184. Thus, it can be concluded that there is no multicholinerity.



### 3. Heteroskedasticity Test

The Heteroskedasticity test is aimed at determining whether in the regression model there is an inequality of variations from the residual value of one observation to another. A good testing criterion is that there are no symptoms of heteroskedasticity (Ghozali, 2018). The criteria for the results of the Heteroskedasticity Test are that if the variation from the residual of an observation to another is fixed, then it is called homoskedasticity and if the variation from the residual value of one observation to another is different then it is called heteroskedasticity. The following are the results of the Heteroskedasticity Test from this study:

Dependent Variable: RESABS  
Method: Panel Least Squares  
Date: 07/11/22 Time: 16:07  
Sample: 2015 2018  
Periods included: 4  
Cross-sections included: 26  
Total panel (balanced) observations: 104

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.310101	5.351382	-1.366021	0.1760
X1	-0.019531	0.012614	-1.548382	0.1257
X2	0.427596	0.300617	1.422393	0.1590

Source : *Output Eviews 10*

The decision criterion of the Heteroskedasticity Test is to look at the *probability value of t-Statistics* (t-count) of an independent variable. If the probability value  $> 0.05$  then  $H_0$  is accepted which means that there are no symptoms of heteroskedasticity. Conversely, if the Probability value  $< 0.05$  then  $H_0$  rejected which means that there are symptoms of heteroskedasticity. Based on the test results produced in this study, the probability value of independent variables  $>$  from 0.05, namely 0.1257 and 0.1590 which means that  $H_0$  is accepted. So it can be concluded that there are no symptoms of heteroskedasticity.

### 4. Autocorrelation Test

The Autocorrelation Test is a test carried out to test the assumption of one observational disorder variable with another observation. The following is a table of autocorrelation test results in this study:

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	55.25513	Prob. F(2,99)	0.0000
Obs*R-squared	54.85682	Prob. Chi-Square(2)	0.2901

Source : *Output Eviews 10*

The autocorrelation test used using the Breusch Godfrey Test. The selection of the Breusch Godfrey Test was chosen because it is more appropriate to use it for observation of data above 100. Based on the results of the autocorrelation test above, it was found that the prob value. Chi-Square 0.2901  $>$  0.05 which means there are no autocorrelation problems.



## Hypothesis Test

### 1. Panel Data Regression Equation

The Panel Data Regression Equation used in this study aims to estimate the dependent variables against each independent variable if it is increased or decreased. The following are the regression results of *the Fixed Effect Model* (FEM) panel data in this study:

Sample: 2015 2018

Periods included: 4

Cross-sections included: 26

Total panel (balanced) observations: 104

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	85.27409	10.19578	8.363663	0.0000
X1	0.104505	0.024032	4.348504	0.0000
X2	0.813379	0.572754	14.20121	0.0000

Source :*Output Eviews 10*

Based on the results of data processing, the following results were obtained:

$$Y = 85.27409 + 0.104505 (\text{PPDSP}) + 8.133799 (\text{GDP Regional})$$

Based on the regression equation, it can be concluded that:

1. If the Expenditure of local governments in the education sector and GDP Regional is of a fixed (constant) value, then the constant having a value of 0 will cause Y (Human Development Index) to be 85.27409
2. If X1 (Local Government Expenditure in the Education Sector increases by 1% then Y (Human Development Index) will increase by 10.45%
3. If X2 (GDP Regional) the value increases by 1% then the value of Y (Human Development Index) will increase by 81.33%

### 2. T Test

The t-test aims to show how significant one independent variable is to the dependent variable by considering the other independent variables to be constant (Ghozali, 2018). The test was performed by comparing the prob t-count with the alpha error rate (0.05). If the value of the prob t- calculate  $< \alpha 0.05$  then it can be concluded that the independent variable has a significant effect on the dependent variable, while if the prob value of the t-count  $> \alpha 0.05$  then it can be concluded that the independent variable has an insignificant effect on the dependent variable. The following are the results of the T Test from this study:



Sample: 2015 2018

Periods included: 4

Cross-sections included: 26

Total panel (balanced) observations: 104

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	85.27409	10.19578	8.363663	0.0000
X1	0.104505	0.024032	4.348504	0.0000
X2	0.813379	0.572754	14.20121	0.0000

**Source : Output Eviews 10**

Based on the results of the data processing above, the probability value of the variables of The Education Sector Local Government Expenditure (X1) and GRDP (X2) is worth  $< 0.05$  which shows that the independent variables in this study, namely Education Sector Local Government Expenditure and GRDP have a significant effect on the dependent variables of the Human Development Index (HDI).

**3. Uji F**

The F test is performed to test that all independent variables present in the model have a joint or simultaneous influence on the dependent variables (Ghozali, 2018). The calculation of test F is seen from the comparison of the value of prob F count with the alpha error rate (0.05). If the Fnumeracy prob value  $<$  from 0.05 then the regression model is estimated to be feasible, while if the Fhitung prob value  $>$  from 0.05 then the regression model is estimated to be indefeable. Here are the results of the f test:

R-squared	0.996495	Mean dependent var	69.25288
Adjusted R-squared	0.995249	S.D. dependent var	3.401937
S.E. of regression	0.234483	Akaike info criterion	0.161940
Sum squared resid	4.178665	Schwarz criterion	0.873891
Log likelihood	19.57914	Hannan-Quinn criter.	0.450372
F-statistic	800.1603	Durbin-Watson stat	1.989704
Prob(F-statistic)	0.000000		

**Source : Output Eviews 10**

Based on the test results, it can be seen that the calculated probability value f is 0.000000. calculated with a confidence level of 95% and  $\alpha = 0.05$ , then the probability value  $< 0.05$  so that the two independent variables simultaneously affect the dependent variable. As a comparison for Fhitung, the F value of the table in this study is known through *the value of degrees of freedom* (df) 1 and 2. df 1 with the formula  $k-1$ , k is the number of variables. Then df1 is obtained, which is  $3-1 = 2$ . While df2 with the formula  $n-k$ , n is the number of observation samples obtained df 2 results, namely  $104-3 = 101$ . Based on the known degree of freedom, the result obtained for F table is 3,086. It can be concluded that the Fcount (800.1603) is greater than the F table (3.086) so it can be concluded that this model test is suitable for use in research.





#### 4. Uji Koefisien Determinasi ( $R^2$ )

The coefficient of determination ( $R^2$ ) is a test used to measure the model's ability to explain variation on dependent variables. The value of the coefficient of determination ( $R^2$ ) is in the range between zero and one. If the value of the coefficient of determination is small, the ability to vary independent variables is very limited in explaining dependent variables. However, if the value of the coefficient of determination is close to one, it means that the independent variable provides almost all the information needed in estimating the variation of the dependent variable (Ghozali, 2018). The following are the test results on the coefficient of determination:

R-squared	0.996495	Mean dependent var	69.25288
Adjusted R-squared	0.995249	S.D. dependent var	3.401937
S.E. of regression	0.234483	Akaike info criterion	0.161940
Sum squared resid	4.178665	Schwarz criterion	0.873891
Log likelihood	19.57914	Hannan-Quinn criter.	0.450372
F-statistic	800.1603	Durbin-Watson stat	1.989704
Prob(F-statistic)	0.000000		

**Source : Output Eviews 10**

Based on the value of R-square is 0.996495 which means that the independent variable can explain the dependent variable of 99.64 while 0.36% is influenced by other factors. Meanwhile, the adjusted R-square value is 0.995249 which means that the dependent variable, namely the Human Development Index, can be explained by the independent variable of local government expenditure in the education sector and GRDP of 99.52% while the other 0.48% is influenced by factors outside the model.

## DISCUSSION

### 1. Effect of Local Government Expenditure in the Education Sector on the Human Development Index in Indonesia in 2015-2018

The test results using the panel data method found that local government expenditures in the education sector have a positive influence on the Human Development Index (HDI). Based on the results of the t test on Government Expenditures in the Education Sector, it produced a t count of 4.348504 > from the t table of 1.66008. Probability values of 0.0000 < 0.05 are used as the limit of significance. The positive value seen in the t-count means that there is a positive relationship between the variables of this study. positive intervariable relationships. Therefore, it is implied that partially the Expenditure of Local Governments in the Education Sector has a positive and significant influence on the Human Development Index in Indonesia in 2015 – 2018. Then, based on the processing of t-test data, the hypothesis that states that local government expenditures in the education sector have an influence on the Human Development Index (HDI) are acceptable. Local government spending in the education sector can increase the human development index (HDI), this is in accordance with Adolf Wagner's Theory of Government Expenditure which states that government spending will increase due to an increase due to an increase in the function of public welfare and the function of development. According to the neoclassical tradition, the provision of public goods will be better and more efficient if it is carried out by the state because if it is done by private parties, the public goods will not be available efficiently (Sholekhah, 2018).

The same thing is also said in the results of research conducted by (Tjodi et al., 2019) Government spending on the education sector in each province in Indonesia is used to provide basic education aimed at the community because basic education is the most important level of education which



is the beginning of the formation of the character of superior human resources applied. In line with the research conducted by (Mongan, 2019) The allocation of the government's expenditure budget to education is an investment to increase community productivity. Investment in the education sector is a means to improve human development so that the goal is to achieve an increase in people's welfare. Then from the results of research conducted by (S. P. S. Diba et al., 2018) The allocation of funds from local governments in the education sector can increase the capabilities of every individual in society both capabilities in terms of ability to understand science and also skills. The increase in capability is formed by the existence of a more free opportunity to access free and quality education for at least 12 years in accordance with the compulsory education recommendations set by the government. With this between the Average Length of School (RLS) and Old School Expectations (HLS) figures can meet at the same number. The higher the number of people who complete their education at least in accordance with the expectations of compulsory education, it will create a society that has the ability both intellectually and skillfully. This ability will later be able to create creativity and various innovations.

## **2. The Effect of Gross Domestic Product Regional (GDP Regional) on the Human Development Index in Indonesia in 2015-2018**

The test results using the panel data method found that gross regional domestic product (GRDP) has a positive influence on the Human Development Index (HDI). Based on the results of the t test of Gross Domestic Product Regional (GDP Regional) resulted in a t count of  $14.20121 >$  from t table of 1.66008. Probability values of  $0.0000 < 0.05$  are used as the limit of significance. The positive value seen in the t-count means that there is a positive relationship between the variables of this study. positive intervariable relationships. Therefore, it is implied that partially the Gross Domestic Product (GDP Regional) has a positive and significant influence on the Human Development Index in Indonesia in 2015 – 2018. Then, based on the processing of t test data, the hypothesis stating that Gross Domestic Product (GDP Regional) has an influence on the Human Development Index (HDI) is acceptable.

Gross Domestic Product (GDP Regional) affects the Human Development Index (HDI) in accordance with the Kuznet Growth Theory popularized by Simon Kuznet shows the long-term ability of a country's economic growth to provide economic goods to its people. In his theory, Professor Kuznet stated that one of the characteristics of economic growth in modern economic growth is high output. Similar to research conducted by (Ariwuni & Kartika, 2018) which states that GDP Regional has a positive and significant effect on HDI in Bali Province in accordance with the theoretical foundation proposed by Professor Kuznet in (Todaro, 1997) that one characteristic of economic growth is high output. The economic growth in question is GRDP, the high growth of output makes consumption change in terms of the level of purchasing power of the people which will increase the Human Development Index because people's purchasing power is one of the composite indices in the decent living indicator.

Related to the positive and significant influence of GDP Regional on the Human Development Index (HDI) whose cause is similar to causing changes in people's consumption patterns and increasing people's purchasing power so that HDI in East Java has increased, said in research conducted by (A. O. F. Diba et al., 2018) . In this study, the GRDP used was GRDP with an expenditure approach. GRDP with an expenditure approach is the overall value of the goods or services of the final domestic production consumed by the community, consisting of household economic units, non-profit companies, governments, business sectors and abroad (Sutomo, 2009, p. 17). Therefore, when the GRDP increases, it is certain that the value of consumption of goods/services carried out by the community is also in an increasing condition. When people have the ability to increase consumption at that time, the purchasing power of the community has increased and there is an influence on increasing the Human Development Index (HDI).



**3. Effect of Local Government Expenditure in education sector and Gross Domestic Product Regional (GDP Regional) on Human Development Index in Indonesia in 2015-2018**

Based on the test results, it can be seen that the calculated probability value  $f$  is 0.000000. calculated with a confidence level of 95% and  $\alpha = 0.05$ , then the probability value  $< 0.05$  so that local government expenditures in the education sector and GRDP simultaneously affect the Human Development Index in Indonesia in 2015-2018. These results are aligned with the Theory of Public Welfare. The Theory of Public Welfare says that the aggregate satisfaction of all individuals in society is shown by the satisfaction that people get for the consumption of goods and services both public and non-public sectors and also the regional income earned.

**CONCLUSION**

Based on the results of research conducted by researchers on the influence of local government spending in the education sector and GDP Regional on the Human Development Index in Indonesia in 2015-2018 based on the results of the  $t$  test, it can be concluded, namely:

1. Partially, local government spending on the education sector had a positive and significant effect on the human development index in Indonesia in 2015 - 2018.
2. Partially gross regional domestic product had a positive and significant effect on the human development index in Indonesia in 2015 - 2018.
3. Simultaneously, local government spending on the education sector and gross regional domestic product had a positive and significant effect on the human development index in Indonesia in 2015 - 2018.

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