

# The Effect of Economic Growth, Government Expenditures and Poverty Levels on the Human Development Index in South Minahasa Regency

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**Abstract:** The purpose of this study was to analyze the effect of economic growth, government spending and poverty levels on the human development index in South Minahasa Regency. This research is a quantitative research especially in the field of planning economics. This study uses secondary data with the type of time series data. Time series data was taken during the period 2009-2019. This research is an explanatory research that highlights the relationship between research variables and tests the formulated hypothesis. This study uses data taken from 2009 to 2019 from publications from the Central Statistics Agency (BPS) of South Minahasa. The data collection method used in this study is the method of documentation, namely a method that aims to obtain data related to research variables through various literary sources and institutions. The analytical method used to analyze the relationship between human capital and economic growth is the multiple regression equation model using panel data, which combines time series and cross-section data. The results showed that partially economic growth had a positive and significant effect on the human development index in the southern Minahasa district.

**Keywords:** Economic Growth, Government Expenditure, Poverty Rate, Human Development Index

## Introduction

The development that is currently being carried out continuously by the government in various fields can certainly be one of the references for the development of a country, or a region. In addition to infrastructure development which is being actively carried out, it is also necessary to pay attention to that human development cannot be underestimated, well-organized human development will be able to support the economy of a country or region.

To be able to assess the human development carried out, of course, requires an index to be able to describe the extent to which development progress has been successfully carried out. For this reason, the role of the human development index becomes very important in seeing this phenomenon. The human development index is an important indicator to measure success in efforts to build the quality of human life (community/population). For Indonesia, the human development index is strategic data because apart from being a measure of government performance, the human development index is also used as one of the allocators for determining the General Allocation Fund (DAU). The HDI

explains how the population can access development outcomes in terms of income, health, education, and so on (BPS, 2020).

The Human Development Index (HDI) is a comparative measure of life expectancy, literacy, education and living standards for all countries around the world. The human development index is used to classify whether a country is a developed country, a developing country or an underdeveloped country and also to measure the effect of economic policies on the quality of life. The human development index was introduced by the United Nations Development Program (UNDP) in 1990 and is published regularly in the annual Human Development Report (HDR) (BPS, 2020).

The human development index has three basic dimensions which include health, education and expenditure. Indonesia has succeeded in becoming a country with a fairly high Human Development Index (HDI) in the Asia Pacific. According to the 2019 Human Development Index report from the United Nations Development Program (UNDP). While other Asian countries such as the Philippines have an HDI of 0.712 and China with an HDI of 0.758. Unfortunately 17.4 percent of Indonesia's HDI is lost due to the problem of greater inequality. This shows that inequality is still a challenge for the government to increase Indonesia's HDI.

The problem of inequality is a very important obstacle to overcome and plays an important role for human growth throughout the world, especially Indonesia. Indonesia could rise again on the Human Development Index, but for big gains, inequality must be reduced. President Joko Widodo has outlined the priorities that will be worked on in his second term of government.

One of the focuses is human resource development. Because for successful development, quality human resources are also needed. Human Development in Indonesia, Especially in South Minahasa Regency is increasing from year to year. This is not a homework for the South Minahasa Regency government, but all parties must participate fairly to reduce the gap in human development between regions by building infrastructure. Infrastructure will provide ease of access, health and education facilities with adequate infrastructure will also boost economic activity in the region.

The Human Development Index (HDI) is an important indicator to measure success in human development efforts. These two things must go hand in hand with one another so that there is no inequality between infrastructure development carried out and human development carried out, thus economic development can occur more quickly and be well controlled by adequate human resources if these two things are not running in tandem with one another, the economic development process that occurs will not run smoothly because good infrastructure development but not supported by adequate human management will result in economic development that runs slower than expected.

The following is the Human Development Index Data, Economic Growth, Government Expenditures and Poverty Levels in South Minahasa Regency. An important indicator to be able to know the economic conditions of an area within a certain period of time is to use data on Gross Regional Domestic Product (GRDP), which can be used on the basis of current prices or on the basis of constant prices. According to Sukirno (2000), economic growth is an increase in output per capita in the long term, the emphasis is on three aspects, namely process, output per capita, and the long term. Bakhti's research (2012) shows that GRDP has an effect on the human development index. Economic growth in South Minahasa Regency continues to increase from year to year and the increase that occurs tends to be stable from year to year. But in 2020 where economic growth experienced a significant decline where economic growth decreased to -0.77% it was due to the Covid pandemic - 19 so as to make the economy of Indonesia, the Province and the Regency, especially the South Minahasa Regency.

Government Expenditures Reflecting government policies in South Minahasa Regency, it can be seen that from 2010 to 2019 it has increased from year to year. But in 2020 government spending has decreased. If the government has set a policy to purchase goods and services, government spending reflects the costs that must be issued by the government to implement the policy. Poverty Level data can be seen that during 2010 to 2020 the poverty rate in South Minahasa Regency experienced ups and downs or was unstable, it can be seen in the table above that in 2010 the poverty rate rose by 10.74% and in 2011-2012 the poverty rate decreased to 8.61% but in 2013 it increased to 10.08% and decreased and increased again, it can be seen that the poverty rate is indeed unstable every year.

Based on the data in the available table, it can be seen that every year since the initial year of the study, both economic growth and government spending have continued to increase consistently every year, of course, with better economic growth, it is also expected that the poverty rate will decrease, especially with the number of people living in poverty. government spending which also continues to increase every year but this does not have much effect on the level of poverty that occurs. Although in the early years of the study the poverty rate decreased, but within a few years the poverty rate again increased. This raises the question of whether the economic growth that has occurred has covered or touched the poor or only increased the economy of some people and even created inequality. Likewise, the existing government spending has not really had an effect on the poor so that government spending does not cause a domino effect on the economy. For this reason, the author is interested in examining the human development index that occurs in South Minahasa Regency and what factors are the cause, for that the author chooses the title: Likewise, the existing government spending has not really had an effect on the poor so that government spending does not cause a domino effect on the economy. For this reason, the author is interested in examining the human development index that occurs in South Minahasa Regency and what factors are the cause, for that the author chooses the title: Likewise, the existing government spending has not really had an effect on the poor so that government spending does not cause a domino effect on the economy. For this reason, the author is interested in examining the human development index that occurs in South Minahasa Regency and what factors are the cause, for that the author chooses the title:

### **"The Influence of Economic Growth, Government Expenditures and Poverty Levels on the Human Development Index in South Minahasa Regency in 2010-2020"**

According to Todaro (2006: 187) human development there are three universal components as the main goals include: (1) Sufficiency, which is a basic human need physically. Basic needs are needs which if not fulfilled will stop a person's life, including food, clothing, shelter, health and safety. If only one is not met will cause absolute retardation. (2) Identity, which is a component of a better life, is an encouragement from oneself to move forward, to respect oneself, to feel worthy and worthy of pursuing something, and so on. Everything is summarized in self-esteem (identity). (3) Freedom from Slavery, which is the ability to have universal values that are listed in human development, namely human freedom. Independence and freedom are here defined as the ability to stand upright so that they are not enslaved by the pursuit of the material aspects of life. With freedom, we are not only chosen but we are the ones who choose.

#### **2.1.2 Economic Growth**

Economic growth is a condition of an increase in income that occurs due to an increase in production of goods and services. This increase in income is not related to an increase in population, and can be judged from an increase in output, increasingly developing technology, and innovation in the social sector.

#### **Research Method**

The data used in this study is secondary data with the type of time series data. The data are in the form of Human Development Index data in South Minahasa Regency in 2009-2019, South Minahasa

Regency GRDP in 2009-2019, South Minahasa Regency Government Expenditures in 2009-2019, and Poverty Levels in South Minahasa Regency in 2009-2019. sourced from the Central Statistics Agency (BPS) of South Minahasa Regency

Data collection methods are techniques or methods used by researchers to collect data in the form of company records or documentation, government publications, industry analysis by the media, websites, internet and so on.

In multiple regression analysis, the dependent variable is influenced by two or more independent variables so that the functional relationship between the dependent variable (Y) and the independent variable (Suliyanto, 2011). Multiple linear regression analysis is used to estimate how the condition (up and down) of the dependent variable is. Mathematically the equation form of multiple linear regression is as follows:

$$Y = f(X_1, X_2, X_3)$$

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + e$$

The regression equation becomes:

$$Y = b_0 + b_1X_1 + b_2\ln X_2 + b_3X_3 + e$$

Where:

Y	=	Human Development Index
b <sub>0</sub>	=	Constant
b	=	Regression Coefficient X <sub>1</sub> , X <sub>2</sub> , X <sub>3</sub>
X <sub>1</sub>	=	Economic growth
LnX <sub>2</sub>	=	Government Expenditure
X <sub>3</sub>	=	LevelPoverty
e	=	Error

### Result And Discussion

South Minahasa Regency was formed based on Law Number 10 of 2003 concerning the Establishment of South Minahasa Regency and Tomohon City in North Sulawesi Province by the Indonesian Parliament. However, these two new divisions were inaugurated on February 25, 2003. The center of government and the capital of the South Minahasa district is located in Amurang. The population of South Minahasa in 2020 is 236,463 people, with a density of 162 people/km<sup>2</sup>

Astronomically, South Minahasa is located between 0°47'-1°24' North Latitude and between 124°18'-124°45' East Longitude and is traversed by the equator or the equator which lies at latitude 00. geographically, South Minahasa Regency has boundaries: North – Minahasa Regency; South – BolaangMongondow and East Bolaang Mongondow Regencies; West – Sulawesi Sea; East – Southeast Minahasa Regency.

According to the 2010 Population Census, the majority of the population of South Minahasa Regency is Christian, namely 90.79%, of which Protestantism is 87.83% and Catholic is 2.96%. Meanwhile, followers of Islam are also quite significant, namely 9.07% of which almost 30% of them are in the Sinonsayang sub-district. There are 0.02% Confucians, 0.02% Buddhists, and 0.01% Hindus who are generally in the city of Amurang.

The Central Statistics Agency (BPS) has been collecting Village Potential data (Podes) since 1980. Since then, Podes have been routinely carried out 3 times in a ten year period to support the Population Census, Agricultural Census, or Economic Census activities. Thus, important facts related to the availability of infrastructure and the potential possessed by each region can be monitored regularly and continuously. Since 2008, Podes data collection has changed with the addition of sub-district and sub-district supplementary questionnaires. The addition of the questionnaire aims to increase the benefits of Podes data for data consumers and local governments in regional development planning. Podes data is the only source of regional data with various contents and provides an overview of the development situation of a region (regional). This is different from the data from the household approach, which emphasizes the sectoral activity dimension. Both are equally important and become the wealth of BPS.

**Area Coverage** Podes enumeration is carried out by means of a census of all areas of the lowest government administration at the village level (namely villages, wards, nagari, Transmigration Settlement Units (UPT)) which are still being fostered by the relevant ministries. Based on the results of the 2015 Podes, there are 82,190 village-level areas spread over 511 sub-districts.

**Data Collection Methods** The 2015 Podes data collection was carried out through direct interviews by trained officers with relevant sources. The officers are the apparatus or work partners of the BPS Sub-district, while the resource persons are the village head/lurah or other resource persons who have knowledge of the target area of the enumeration.

**Seaside Village/Kelurahan** is a village/kelurahan whose territory is partly or entirely in direct contact with the sea, either in the form of beaches or cliffs. A non-seaside village/kelurahan is a village/kelurahan whose territory is not in direct contact with the sea.

**Slope/Puncak Village/Sub-District** is a village/kelurahan whose area is mostly located on the top of a mountain/mountain or located between the peaks and valleys. Valley/Valley Villages are villages/kelurahan whose territory is mostly low-lying areas located between two mountains/mountains. or an area that has a lower position than the surrounding area.

**Dataran Village/Kelurahan** is a village/kelurahan where most of the area looks flat, flat, and stretched. Based on Government Regulation Number 82 of 2001 concerning Water Quality Treatment and Water Pollution Control, the classification of water quality is set into four classes, namely: Class I, Class II, Class III, and Class IV.

Class IV, water that can be used for planting and or other uses that require the same water quality as that use. Determination of river water quality status is done by Pollution Index Method (IP). IP method: Water quality status is calculated based on instantaneous data using the Pollution Index Method, Decree of the Minister of the Environment No. 115 of 2003 compared to water quality criteria for class I and water quality criteria for class II, Government Regulation No. 82 of 2001. The quality status obtained is an instantaneous quality status. and only based on certain parameters monitored in each river with different amounts and types.

## 4.2 Results Study

From the results of research on the analysis of the factors that affect the effectiveness of the implementation of performance-based budgeting in the regional financial and asset management agencies of North Sulawesi province, they are as follows:

### 4.2.1 Classical Assumption Testing,

#### 4.2.1.1 Multikolerasi

**Coefficientsa**

Model		Collinearity Statistics
		LIVELY
1	(Constant)	
	X1	1,159
	X2	1,024
	X3	1,136

a. Dependent Variable: Y

Data source: Data Processing 2021

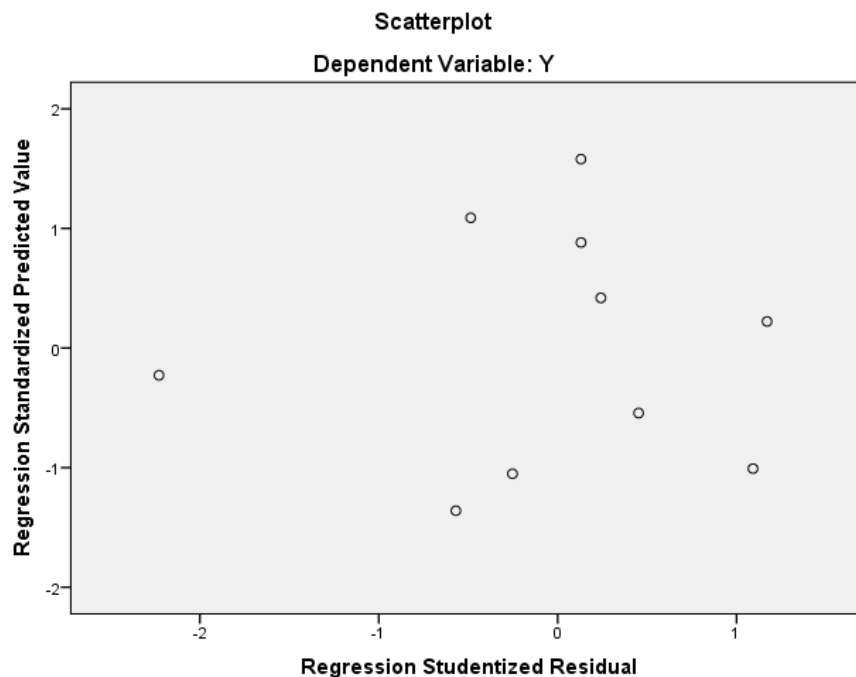
Seen from table 4.2.1 Coefficients VIF value on the output does not show symptoms of multicollinearity.

If the  $VIF < 10.00$  then there are no symptoms of multicorrelation

If the  $VIF > 10.00$  then there are symptoms of multicorrelation

With result :

Tolerance Value	: X1Economic growth	=0,863
	: X2Government spending	=0,976
	: X3 Poverty Rate	=0,880
Nilai VIF	: X1Economic growth	=1,159
	: X2Government spending	=1,024
	: X3 Poverty Rate	=1.136

**4.2.1.2 Heterocholedasity Test Diagram**

**Figure 4.1 Heteroscedasticity Test Curve Research Model Results**



From the diagram above, it can be seen that the distribution of residuals is irregular. This can be seen in the plot that radiates and does not form a certain pattern. With these results, the conclusion that is usually drawn is that there is no symptom of homoscedasticity or that the regression equation fulfills the assumption of heteroscedasticity.

#### 4.2.2 TestAutocorrelation

**Tabel 4.2 Durbin Watson**

**Model Summary<sup>b</sup>**

Model	Change Statistics			Durbin-Watson
	df1	df2	Sig. F Change	
1	3a	6	,000	2,725

*Data source: Data Processing 2021*

In the regression analysis, it can be seen that the DW value is 2.725 where < from the dw table, it can be concluded that the Durbin Watson point of this study is in accordance with the theory and can be used.

#### 4.2.2.1 Direct Effects of Exogenous Independent Variables Economic growth, government spending and poverty levels on the dependent variable Endogenous human development index

**Tabel 4.3 R-Square**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	,989a	,978	,968	,33114	,978	90,904

*Data source: Data Processing 2021*

In looking at the effect of the Exogenous Independent Variables of Economic Growth, Government Expenditures and Poverty Levels on the Endogenous Dependent Variables, the Human Development Index can be seen in Table 4.3 Model Summary above, at the value of R square. The amount of R square (R<sup>2</sup>) in the table above is 0.978. This figure has the meaning of the magnitude of the influence of the exogenous independent variables of Economic Growth, Government Expenditures and Poverty Levels on the combined endogenous dependent variable of the Human Development Index. In calculating the Coefficient of Determination (KD) can be known by the formula:

$$KD = R^2 \times 100\%$$

$$KD = 0,978 \times 100\%$$

$$KD = 97\%$$

The magnitude of the influence of Exogenous Independent Variables exogenous economic growth, government spending and poverty levels on the Endogenous Dependent Variables the combined human development index is 97%. And the influence outside the model can be calculated by:

$$e = 1 - R^2$$

$$e = 1 - 0,978$$

$$e = 0,302 \times 100\%$$

$$e = 3\%$$

Which means 3% means the magnitude of other factors that influence outside the model under study. This means that the magnitude of the influence of the exogenous independent variables of economic growth, government spending and poverty levels on the endogenous dependent variable of the human development index is 97%, while the effect of 3% is caused by variables outside the model studied.

#### **4.2.2.2 The Effect of Exogenous Independent Variables on Economic Growth and Endogenous Dependent Variables on Human Development Index**

To see if there is a Linear Effect of the Exogenous Independent Variable of Regional Finance on the Endogenous Dependent Variable of the Human Development Index. It can be seen in the Coefficients table (a) Determines the significance level of 0.05 and Degree of Freedom  $DF = n - (K+1)$  or  $DF = 10 - (3+1) = 6$ . From these provisions, a t table of 1,928 (for a two-way test) is obtained. In the SPSS calculation listed in the Coefficients table above where the t table is to show that there is a linear influence between the Exogenous Independent Variables of economic growth on the Endogenous Dependent Variables, the human development index is 0.014

1. Hypothesis :  $H_0$  : There is no linear effect between the Independent Variable Exogenous economic growth on the Dependent Variable Endogenous human development index
2.  $H_1$ : There is a linear influence between the Independent Variables of Exogenous economic growth on the Dependent Variable of human development.

Hypothesis Testing t criteria as follows:

1. If  $t_{count} > t_{table}$ , then  $H_0$  is rejected, and  $H_1$  is accepted

If  $t_{count} < t_{table}$ , then  $H_0$  is accepted, and  $H_1$  is rejected

Where to see whether the influence is significant or not, the criteria are as follows:

1. If Significant  $< 0.05$  then it has a significant effect
2. If Significant  $> 0.05$  then there is no significant effect

The results of calculations with SPSS show the t count of 3,436  $>$  t table of 1,928. Thus the decision is that  $H_0$  is rejected and  $H_1$  is accepted. This means that there is a linear influence between the Independent Variable of economic growth on the Dependent Variable Endogenous human development index. Then the Exogenous Independent Variable of economic growth has no effect on the Endogenous Dependent Variable of the human development index.

The magnitude of the influence of the Independent Variable Exogenous economic growth on the Dependent Variable Endogenous human development index is known from the sig value is 0.14 Significant because the significance value / probability of the results listed in the column Sig 0.14  $<$  0.05.

Based on the results of data processing that the variable economic growth has a significant effect on the human development index. because the significant value of economic growth is 0.14 or 0.1 and for the two-way test it falls at negative -3.436 so even though economic growth in South Minahasa Regency in 2020 has decreased due to the covid 19 pandemic, the rate of economic growth in 2010 to 2019 has experienced a decline. increasing and stable, so even though the decline in economic growth in 2020 will still have a significant effect on the human development index.

#### **5.1 Conclusion**

1. Economic growth in South Minahasa Regency has a positive and significant effect on the human development index. Although in 2020 economic growth has decreased significantly, it still has an effect on the human development index.



2. Government spending in the South Minahasa district has a positive and significant effect because government spending has an important role in the human development index because the human development index discusses life expectancy, so it can be concluded that if the human development index increases, government spending must increase even though in 2020 government spending will decrease. little but still does not affect the positive impact on the human development index in South Minahasa Regency.
3. The Poverty Level in South Minahasa Regency has no positive and insignificant effect. That's because the poverty level in South Minahasa Regency has fluctuated or is unstable, so it can be concluded that the poverty level and human development index in South Minahasa Regency have no positive effect because where the human development index is increases and the poverty rate also increases.
4. Economic growth, government spending and the poverty rate have a positive effect on economic growth and government spending only and the poverty rate does not have a positive effect where economic growth and government spending increase, while the poverty rate decreases, so it can be concluded that an increase or decrease in the poverty rate in South Minahasa Regency will not influence the positive impact of economic growth and government spending on the human development index in South Minahasa Regency.

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