

Analysis Of Factors Affecting Economic Growth in Sumbawa

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ABSTRACT

Economic growth is an important indicator in assessing the performance of an economy that reflects the success of economic development in a region. This study aims to determine and analyze the effect of the Human Development Index and Labor Force Participation Rate on Economic Growth in Sumbawa. The research method used is descriptive quantitative research with multiple linear regression models. The results of the study indicate that the Human Development Index has a significant negative effect on Economic Growth in Sumbawa, and the Labor Force Participation Rate also has a significant negative effect on economic growth in Sumbawa. Simultaneously, the Human Development Index and Labor Force Participation Rate have a significant effect.

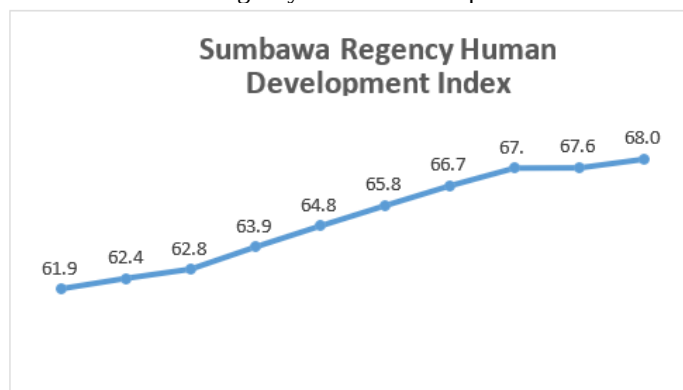
Keywords: Human Development Index, Labor Force Participation Rate, Economic Growth.

1. INTRODUCTION

One important indicator to assess economic performance is economic growth, which shows the success of economic development in a region. Economic growth occurs when the production of goods and services continues to increase from the previous year. Economic growth shows the extent to which economic activity will generate additional public income in a certain period. In general, economic growth is the process of increasing output in a country in the long term with the aim of improving the welfare of its population (Tadaro, 2003). The indicator to measure economic growth is the growth rate of Gross Regional Domestic Product.

There are several factors driving economic growth. The first is the Human Development Index. The United Nations Development Program (UNDP) defines the Human Development Index as a multidimensional index as a measure of human development performance. The new method of calculating the Human Development Index introduced by UNDP in 2010 consists of several components of the basic dimensional approach, namely, the long and healthy life dimension represented by life expectancy, the knowledge dimension measured by expected years of schooling and average years of schooling, and the dimension of decent living standards measured by per capita expenditure indicators (BPS, 2020). The Human Development Index has a contribution to economic growth in a region or country and is an indicator to observe how human capital grows in the long term. If the human development index is high, it will contribute through increased community productivity in generating income, including the ability of the population to absorb and manage sources of economic growth.

Chart 1.1 Sumbawa Regency Human Development Index 2012-2021



Source: Central Bureau of Statistics of Sumbawa Regency

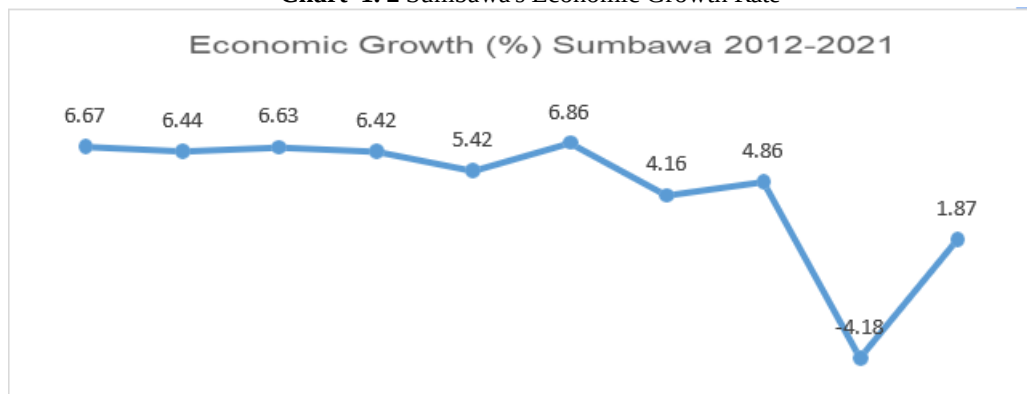
From graph 1.1, it can be seen that the Human Development Index in Sumbawa from 2011-2021 continued to increase and was highest in 2021 at 68.01%. However, the increase in the Human Development Index in Sumbawa district is not in line with the rate of economic growth. In Figure

1.2 the economic growth rate of Sumbawa Regency is still low and experienced a significant decline in 2020 of -4.18. based on research conducted by (Putri et al., 2020) states that the Human Development Index has a significant negative effect on economic growth in Aceh Province. However, research conducted by (Susanto, A. B., 2013) states that the Human Development Index has a significant positive effect on economic growth in Lamongan Regency.

Another factor is the labor force participation rate. The higher the labor force participation rate, of course, will require extensive employment. Economic growth will increase if it is balanced with the availability of broad employment opportunities. So that the labor force can be more productive in obtaining income and will ultimately contribute to increasing economic growth. Labor is also human capital. The World Bank (2018) states that countries will not be able to maintain their economic growth, have a workforce ready for more skilled jobs in the future, and compete effectively in the global market if they lack human capital. Based on the results of research (Indra Permatasari et al., 2022) which states that the Labor Force Participation Rate has a significant positive effect on economic growth in East Java. However, research conducted by (Syafitri & Ariusni, 2019) states that the labor force participation rate has a significant negative effect on economic growth in West Sumatra.

Sumbawa has abundant natural resources, from the agriculture, fisheries, mining and tourism sectors. However, abundant natural resources must be supported by quality human resources, so as to realize sustainable economic growth.

Chart 1.2 Sumbawa's Economic Growth Rate



Source: Central Bureau of Statistics of Sumbawa Regency

Based on the graph above, the rate of economic growth in Sumbawa is quite fluctuating, until in 2020 it experienced a significant decline. One of the causes is the covid-19 pandemic which is severe enough to paralyze economic movement not only in Sumbawa Regency but its impact covers the whole world. The economic growth rate in Sumbawa is quite low compared to other districts in West Nusa Tenggara, not proportional to its potential. Sumbawa has a high average Human Development Index and Labor Force Participation Rate. Therefore, it needs to be studied in depth to determine and analyze the influence of these two factors on economic growth in Sumbawa Regency.

2. LITERATURE REVIEW

2.1 Economic Growth

According to Kuznets, economic growth is an increase in a country's ability over the long term to provide a greater quantity of economic goods to its population (Todaro, 2011). An increase in the production of goods and services from the previous year indicates economic growth. The welfare of the community will increase along with the increase in goods and services produced by the community.

Based on macroeconomic understanding, economic growth is an increase in the value of real gross domestic product, which means an increase in national income. There are two types of

economic growth, namely, extensive, which means using more resources; or intensive, which means using more resources in a more efficient, or more productive way (Yuniarti et al., 2020). According to neoclassical theory, economic growth consists of three components: capital accumulation, labor, and technological progress. Neoclassical theory also emphasizes that a good development transformation does not only depend on the efficiency of factor allocation and accumulation. In this model, education and skills are of utmost importance.

2.2 Human Development Index

The United Nations Development Programme (UNDP) defines the human development index as a multidimensional index as a measure of human development performance. The new method of calculating the human development index introduced by UNDP in 2010 consists of several components of the basic dimensional approach, namely, the long and healthy life dimension represented by life expectancy, the knowledge dimension measured by expected years of schooling and average years of schooling, and the dimension of decent living standards measured by per capita expenditure indicators (BPS, 2021). The human development index is an important tool for measuring success in improving the quality of human life. In addition, it can determine the ranking or level of development of a country or region.

2.3 Labor Force Participation Rate

The labor force participation rate is the presentation of the labor force to the total working-age population of 15 years and over. Labor force participation can describe the number of labor force in an age group as a percentage of the total population of that age group (Hartono et al., 2023). One of the drivers of economic growth, namely, labor which is balanced by the availability of extensive employment. so that the number of workers will increase production which will have an impact on increasing economic growth.

3. METHODS

This research uses a descriptive quantitative research approach method. The data used is secondary data sourced from the Sumbawa Regency Central Statistics Agency (BPS). The descriptive approach is used to describe or explain the data from the influence of the independent variable on the dependent variable. The dependent variable in this study, namely economic growth as measured by the economic growth rate and the independent variable, namely the human development index and the labor force participation rate variable. The object of research is Sumbawa Regency. The data processed is time series data with a time period of 2012-2021. The analysis model used is multiple linear regression analysis.

4. RESULTS AND DISCUSSION

4.1 Classical Assumption Test

4.1.1 Normality Test

Table 4.1 Normality Test

Skewness and kurtosis tests for normality

Variable	Obs	Pr(skewness)	Pr(kurtosis)	Joint test	
				Adj chi2(2)	Prob>chi2
res	10	0.6749	0.3682	1.10	0.5777

Source: Secondary Data, processed

Based on table 4.1, the prob>chi2 value, which is 0.5777 greater than 0.05, it can be concluded that the data is normally distributed.

4.1.2 Multicollinearity Test

Table 4.2 Multicollinearity Test

Variable	VIF	1/VIF
hdi	4.02	0.248923
lfpr	4.02	0.248923
Mean VIF	4.02	

Source: Secondary Data, processed

Based on the test results in table 4.3, it can be concluded that the Human Development Index and Labor Force participation rate variables have a tolerance value greater than 0.10 and a VIF value smaller than 10, so the data is free from multicollinearity problems.

4.1.3 Heteroscedasticity Test

Table 4.3 Heteroscedasticity Test

abs_res	Coefficient	Std. err.	t	P> t	Beta
hdi	.3924056	.2270931	1.73	0.128	1.043074
lfpr	.2451729	.247903	0.99	0.356	.5970001
_cons	-41.60746	30.83982	-1.35	0.219	.

Source: Primary Data, processed (2023)

Based on the test results in table 4.3, showing a probability value greater than 0.05, it can be concluded that the data avoids heteroscedasticity problems.

4.2 Multiple Linear Regression Test and Partial Test (t test)

Table 4.4 Partial Test

Source	SS	df	MS	Number of obs	=	10
Model	90.8422763	2	45.4211382	F(2, 7)	=	21.52
Residual	14.771773	7	2.11025328	Prob > F	=	0.0010
Total	105.614049	9	11.7348944	R-squared	=	0.8601
				Adj R-squared	=	0.8202
				Root MSE	=	1.4527

eg	Coefficient	Std. err.	t	P> t	Beta
hdi	-2.672848	.4220376	-6.33	0.000	-1.794309
lfpr	-2.13465	.4607115	-4.63	0.002	-1.312719
_cons	326.1006	57.31378	5.69	0.001	.

Source: Primary Data, processed (2023)

Based on the table above, the formulation of multiple linear regression equation can be obtained as follows:

$$\text{Economic Growth} = 326.1006 - 2.672848 (\text{HDI}) - 2.13465 (\text{LFPR}) + e$$

1. The constant value of 326.1006 means that if the Human Development Index and Labor Force participation rate variables are 0, then economic growth is 326.1006.
2. The coefficient value of the Human Development Index variable is -2.672848 and the significance value of 0.000 is smaller than 0.05. This means that the Human Development Index variable has a significant negative effect on economic growth in Sumbawa

Regency. If there is an increase in the Human Development Index by 1%, it will reduce economic growth by 2.672848%.

3. The coefficient value of the Labor Force Participation Rate variable is - 2.13465 and the significance value of 0.002 is smaller than 0.05. This means that the Labor Force Participation Rate variable has a significant negative effect on economic growth. If there is an increase in the Labor Force Participation Rate by 1%, it will reduce economic growth by 2.13465%.

4.3 Simultaneous Test (F Test)

Based on the test results in table 4.4, it shows that the prob> F value of 0.0010 is smaller than 0.05, it can be concluded that the Human Development Index and Labor Force Participation Rate variables jointly affect the economic growth variable.

4.4 R- Square

Based on the test results in table 4.4, the R-Square value is 0.8601 or 86%. This means that the independent variables, namely the Human Development Index and the Labor Force Participation Rate, are able to explain the dependent variable, namely economic growth by 86%. the remaining 14% is explained by other variables outside the study.

4.5 The Effect of Human Development Index on Economic Growth

Based on the test results in table 4.4, the Human Development Index coefficient value is - 2.672848 and the significance value of 0.000 is smaller than 0.05. This means that the Human Development Index variable has a significant negative effect on economic growth in Sumbawa Regency in 2012-2021. If the human development index increases by 1%, it will reduce economic growth in Sumbawa Regency by 2.672848%. The results of this study are supported by research (Muqorrobin & Soejoto, 2017), which states that the Human Development Index has a negative effect on economic growth in East Java Province.

The Human Development Index in Sumbawa Regency continued to increase from 2012-2021. However, the increase in the Human Development Index has not been able to increase economic growth in Sumbawa Regency. However, simultaneously the Human Development Index has a significant effect on economic growth in Sumbawa Regency. This means that the Human Development Index has a contribution or influence on economic growth.

The Human Development Index consists of several components, namely, life expectancy, expected years of schooling, average years of schooling, and capita expenditure per year. This component is the calculation of the new Human Development Index method made by the United Development Programme (UNDP) in 2010 (Central Bureau of Statistics, 2020).

Table 4.5 Human Development Index of Sumbawa Regency by Component in 2012-2021

Component	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Life Expectancy at Birth (LEB)	Years	65.25	65.58	65.72	66.02	66.30	66.58	66.90	67.31	67.54	67.73
Expected Years of Schooling (EYS)	Years	11.76	11.86	11.94	12.27	12.68	12.85	12.90	12.97	13.06	13.07
Mean Years of Schooling (MYS)	Years	7.14	7.19	7.31	7.52	7.53	7.54	7.72	7.91	7.92	8.15
Expenditure per Capita	Rp 000	7,299	7,422	7,519	7,743	8,070	8,584	9,028	9,336	9,146	9,167
Human Development Index (HDI)		61.96	62.44	62.88	63.91	64.89	65.84	66.77	67.60	67.61	68.01
HDI Growth	%		0.77	0.69	1.64	1.54	1.46	1.41	1.24	0.01	0.59

Source: Central Bureau of Statistics of Sumbawa Regency

Based on Table 4.5, when viewed from the Education component from 2012-2021, the expected

years of schooling and average years of schooling continued to increase. The expected length of schooling is on average up to 12 years, meaning that the population in Sumbawa is expected to complete education until senior high school. However, the average years of schooling of the population of Sumbawa is only 7 years, namely, up to grade 1 of junior high school and the average does not meet the expected years of schooling, which is 12 years up to senior high school. There is an imbalance between the education level of the population and the world of work. This is due to the low average length of schooling, which is only up to junior secondary education. So that many graduates do not have sufficient competence in absorbing the world of work, while to enter the world of work we are required to have high enough competence in order to compete. In addition, the increase in the number of education graduates if not matched by the availability of jobs will lead to an increase in educated unemployment, in the end the population's productivity level is not effective in obtaining income so that it will have an impact on reducing economic growth.

4.6 The Effect of Labor Force Participation Rate on Economic Growth

Based on the test results in table 4.4, the coefficient value of the Labor Force Participation Rate is - 2.13465 and the significance value of 0.002 is smaller than 0.05. This means that the Labor Force Participation Rate variable has a significant negative effect on economic growth in Sumbawa. If there is an increase in the Labor Force Participation Rate by 1%, it will reduce economic growth in Sumbawa Regency by 2.13465%.

The labor force participation rate in Sumbawa district has a high average labor force participation rate of 69.30, ranking 4th out of 10 districts or cities in West Nusa Tenggara province from 2012-2021. However, the high level of labor force participation in Sumbawa has not been balanced by the availability of employment opportunities and the quality of the workforce which is not in line with the needs of the world of work, so that labor productivity is still quite low.

This will certainly have an impact on reducing per capita income so that there is an increase in the number of unemployed, the impact will reduce economic growth in Sumbawa district. The results of this study are supported by research (Shari & Abuakbar, 2022) which states that the Labor Force Participation Rate has a significant negative effect on economic growth in 5 provinces in Indonesia.

5. CONCLUSIONS

Based on the results of this study, it can be concluded as follows:

1. The Human Development Index (HDI) variable, the coefficient value is -2.672848 and the significance value of 0.000 is smaller than 0.05. This means that the Human Development Index variable has a significant negative effect on economic growth in Sumbawa Regency. If there is an increase in the human development index by 1%, it will reduce economic growth by 2.672848%. The high human development index has not been able to increase economic growth in Sumbawa Regency. This is because the quality of human resources is still relatively low when viewed from the quality of education based on the average length of schooling.
2. The variable Labor Force Participation Rate (TPAK), the coefficient value is -2.13465 and the significance value of 0.002 is smaller than 0.05. This means that the Labor Force Participation Rate variable has a significant negative effect on economic growth in Sumbawa Regency. If there is an increase in the labor force participation rate by 1%, it will reduce economic growth by 2.13465%. The high level of labor force participation can reduce economic growth because the number of labor forces is not proportional to the availability of jobs in Sumbawa Regency so that the level of productivity in obtaining income is still low.

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