

Research Article

The Impact of Regional Expenditures on the Quality of Human Development in South Sumatra

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The quality of human development depends on the level of fulfillment of their needs in the fields of health, education, and per capita spending. The government as a driver of development activities has a vital role in human development, especially after the pandemic era which previously had a negative impact on people's quality of life. Through an effective regional budget allocation, the government can continue to improve the quality of human development toward the expected goals of prosperity. This study seeks to describe the effect of regional spending on the quality of human development in South Sumatra Province. The data used is time series data for 2006–2022. The analysis used is simple linear regression. The results obtained are that regional spending has a positive and significant effect on the Human Development Index (HDI). This means that the quality of human development in South Sumatra depends on regional expenditure activities in sectors that support the HDI component.

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1. Introduction

Development is a process that must be carried out for a country or region to achieve a goal, namely a change for the better. Development is carried out gradually and continuously in all areas of a nation's life. There are two types of development success indicators, namely: monetary indicators and non-monetary indicators. Non-monetary indicators are indicators related to improving social welfare, for example the amount of consumption of electricity, energy, purchasing power, and so on, as well as indicators related to education and health, for example the number of education and health facilities, life expectancy, literacy rate letters, school enrollment rates, and so on. All of these indicators are related to human development indicators [1].

The government as the party that plays the main role in driving the development process must of course be responsible for managing the expenditure budget so that

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development activities can run. Effective budget management accompanied by the implementation of “Good and Clean Government” will support the success of development both in the economic sector and in the quality of human life sector.

The United Nations (UN) agency has established a standard measure of human development, namely The Human Development Index (HDI). The calculation of the Human Development Index in Indonesia is carried out by the Central Bureau of Statistics (BPS). Since 2014, HDI has been calculated using a new method based on four improved indicators, namely: life expectancy, average length of schooling, expected length of schooling and purchasing power through adjusted per capita spending.

HDI is composed of two main elements: health and education. According to [2], these two important elements are basic human needs that need to be possessed in order to be able to increase their potential. Generally, the higher the basic capabilities of a nation, the higher the opportunity to increase the potential of that nation. In the midst of escalating global competition, the demand for these basic capabilities is felt to be getting higher. If not, then the nation will be unable to compete.

The breadth of HDI coverage in describing the quality of human development that has been achieved makes HDI widely used as an index to assess human development in a region. Therefore, budget management, especially spending on development, is closely related to the increase in HDI. Better and more effective spending allocations to support the development of the education and health sectors are expected to give impetus to an increase in the HDI.

South Sumatra Province is one of the regions in Indonesia that is able to continue to increase its HDI value from year to year. It can be said that South Sumatra is able to continue to improve the quality of its human development through development policies that support the improvement of sectors, education, health and per capita income. The following figure illustrates the development of the South Sumatra HDI 2010-2022.



Figure 1: Development of the South Sumatra Human Development Index 2010-2022. *Source: South Sumatra Central Bureau of Statistics, 2023.*

HDI development in South Sumatra is quite good. The average annual HDI growth in South Sumatra is 0.8 percent. HDI has continued to increase since 2010. There was a decline in HDI at the start of the Covid-19 pandemic, namely in 2020. However, the decline was only 0.01 points. HDI has increased again after 2020 which indicates the government's efforts to recover after the pandemic.

Since the Covid-19 pandemic broke out in mid-2020 in Indonesia, all development sectors have been affected and have experienced a decline in activity and quality. The central and local governments were forced to change the development strategy that had been planned previously. Development has entered a state of contraction and even stagnation due to restrictions on social activities and an increase in the budget to tackle the spread of the virus.

This pandemic has also caused changes in people's lifestyles and living conditions. Restrictions on movement, social isolation, and limited access to public facilities can affect people's quality of life and psychological well-being. This health crisis has an impact on life expectancy and the quality of public health, which are important components of the Human Development Index (HDI).

The Covid-19 pandemic has also led to the closure of schools and colleges in many countries in an effort to control the spread of the virus. These restrictions have a negative impact on access to and quality of education for students and students, which can affect their ability to obtain high-quality education and impact the education index in the HDI.

Covid-19 has had a significant impact on regional budgets. The pandemic has caused profound shifts in the needs and priorities of local governments, as well as shifts in their revenues and expenditures. After the Covid pandemic subsides, regional governments must focus more on allocating spending on activities that can increase the capacity of the health system, secure supplies of medical devices and vaccines, and strengthen public health services. In addition, the importance of digital adaptation and innovation in providing public services and community services. Funds should be allocated to strengthen information and communication technology infrastructure, support distance education, online public services, and facilitate digital transformation in various sectors.

Local governments need to conduct a thorough evaluation of their spending and identify potential efficiencies. Savings in non-priority sectors can help overcome the budget deficit caused by the pandemic. The entire post-Covid regional spending allocation process must be transparent, accountable, and involve the active participation of various stakeholders to ensure the sustainability and success of the programs being implemented.

In 2021, the impact of the Covid-19 Pandemic in the Province of South Sumatra which has hit since 2020 is starting to show improvement. The economy of South Sumatra Province returned to positive growth by 5.12 percent (YoY) from the previous contraction of -0.11 percent (YoY). The Policy for Enforcing Restrictions on Community Activities (PPKM) implemented by the Government since the beginning of 2021 and the implementation of Vaccinations have suppressed active cases which until the end of 2021 only amounted to 4,292, from previously reaching 111,005 active cases at the end of 2020 [3].

Even though recovery is starting to be felt, there are several challenges that must be faced by the Province of South Sumatra as a result of Covid-19, including in the employment sector which has been affected due to the large number of business actors who have had to go out of business due to limited community mobility. This resulted in many people of South Sumatra Province having to lose their jobs and income.

Post Covid 19, South Sumatra Regional Expenditure is focused on improving the health system in the context of handling Covid-19, strengthening the national health system to strengthen promotive and preventive efforts (increasing health security/health security) as well as fulfilling health resources (facilities and infrastructure, pharmacy, and medical devices) and health workers. In addition, regional spending is also prioritized for the education sector, for example the development of digital infrastructure to prepare schools based on the use of internet networks, developing the quality of other educational facilities, and spending on educational aids for students.

The effectiveness of allocating local spending by the regional government of South Sumatra on the main components forming the HDI will improve the quality of human development in South Sumatra. Research conducted by the [3] shows that the components of regional spending, namely spending on the government's health and education functions, have a positive and significant influence on HDI in the South Sumatra Province region. These results indicate that health and education spending allocated by the Government have been effective in improving the quality of human resources in the South Sumatra Province.

Theory, Literature Review, and Hypothesis

1.1. Regional Finance Theory

In the era of autonomy in Indonesia, the implementation of the development process was left to the local government, including the management of regional finances. According to [4], Regional Financial Management is the whole activity which includes planning,

budgeting, implementation, administration, reporting, accountability, and regional financial supervision. The APBD is the basis for the Regional Government to carry out Revenue and Expenditure in the management of Regional Finances.

Regional finance in the narrow sense is limited to matters relating to the Regional Revenue and Expenditure Budget. Therefore, regional finance is synonymous with the APBD [5].

The main principles underlying regional financial management include: transparency, accountability, and value for money [6].

Regional financial policies are always directed at achieving development goals, creating an independent regional economy as a joint effort on the principle of kinship in accordance with the mandate of the 1945 Constitution. As the main driving force for regional development, the government is obliged to carry out appropriate financial management and support the desired development goals achieved.

According to the Keynesian version of the Theory of Economic Growth pioneered by John Maynard Keynes that in the short-term national output and employment opportunities are mainly determined by aggregate demand. The Keynesians believe that monetary policy as well as fiscal policy must be used to overcome unemployment and reduce the rate of inflation. Keynesian concepts show that the role of the government through monetary and fiscal policies is very large in creating economic growth which is one of the indicators in assessing development.

Fiscal policy consists of two types, namely taxes and government spending. Regional government spending is manifested in the form of regional expenditure allocations. Therefore, regional spending is the main focus in discussing regional financial theory because it involves the course of regional development activities.

1.2. Regional Revenue and Expenditure Budget (APBD)

According to the Regulation of the Minister of Home Affairs No. 13 of 2006, the Regional Revenue and Expenditure Budget (APBD) is the regional government's annual financial plan that is discussed and agreed upon jointly by the regional government and the DPRD, and is stipulated by regional regulations.

APBD structure consists of regional income, regional spending, and regional financing. APBD contains all revenues that become rights and also all expenditures that become obligations of a region. The APBD is an instrument used to improve public services and also the welfare of the people in the regions.

1.3. Definition of Regional Expenditures

Regional Expenditure is an important component in regional financial management. Some concepts of Regional Expenditures according to Laws and Government Regulations:

Regional expenditures are all regional obligations that are recognized as a deduction from the value of net assets in the relevant fiscal year period (Law 33 of 2004).

Regional expenditures includes all expenditures from the Regional General Cash Account which reduce the equity of current funds, which are regional obligations in one fiscal year for which the Region will not receive repayment (Regulation of Minister No. 58 of 2005 concerning Financial Management).

1.4. The Concept of Human Development and The Human Development Index (HDI)

Human development is the development of society through the development of human capabilities, so that people are able to improve their lives through active participation in the processes that shape their lives. This concept is a broader approach than other approaches, such as for example the human resources approach, the basic needs approach or the human welfare approach [7].

According to [8], HDI is used to measure human development achievements based on a number of basic components of quality of life. HDI explains how residents can access development outcomes in obtaining income, health, education, and so on.

HDI is formed by 3 (three) basic dimensions:

- i. Longevity and healthy life (a long and healthy life)
- ii. Knowledge
- iii. Decent standard of living

Variables in HDI with the New Calculation Method are as follows:

- i. Life Expectancy at Birth

Life Expectancy at Birth is defined as the estimated average number of years that a person can live from birth. Life Expectancy at Birth reflects the degree of health of a community. Life Expectancy at Birth is calculated from the results of the census and population survey.

- ii. Average Years of Schooling (Mean Years of Schooling)

The average length of schooling is defined as the number of years spent by the population in undergoing formal education. It is assumed that under normal conditions the average length of schooling in a region will not decrease. The population coverage calculated in calculating the average length of schooling is the population aged 25 years and over.

iii. Expected Years of Schooling

Expected Years of Schooling is defined as the length of schooling (in years) that is expected to be experienced by children at a certain age in the future. It is assumed that the probability that the child will remain in school at the following ages is equal to the probability of the population attending school per population for the same age at this time.

iv. Expenditure per Capita Adjusted

Adjusted per capita expenditure is determined from the value of per capita expenditure and purchasing power parity (PPP). The average expenditure per capita per year is obtained from SUSENAS (National Economic Census), calculated from the provincial level to the district/city level. The average expenditure per capita is kept constant/real with a base year of 2012 = 100. The calculation of purchasing power parity in the new method uses 96 commodities of which 66 are food commodities and the rest are non-food commodities. The method for calculating purchasing power parity uses the Rao Method [9].

1.5. Literature Review

Several studies have been conducted discussing the effect of regional expenditures on the human development index, for example those done by [10], [11], [12], and [13] also discuss how regional expenditures, especially the allocation of spending on the health, education and community welfare sectors can affect the level of quality of human development through HDI indicators outside the South Sumatra area. The results of this study are relatively consistent, stating that regional spending has a positive and significant effect on HDI.

1.6. Hypothesis

Based on the line of thought above, the hypotheses that can be formulated in this study are as follows:

- i. It is suspected that Regional Expenditure has a positive and significant effect on the increase in HDI.
- ii. Allegedly Regional Expenditure has no positive and significant effect on the increase in HDI.

2. Research Methods

2.1. Research Design

In general, the research design that the authors use is a causality research design with the nature of Gab Phenomenon-based Science Exploration as the focus of the problem. A causal research design is a research design that is structured to examine the possibility of influence between variables. In this research design, the effect can generally be predicted by the researcher so that the researcher can state the classification of causative variables, intermediate variables, and dependent variables (Sanusi, 2011).

2.2. Operational Variables

1. Regional Expenditures (X)

Regional expenditures are all regional obligations that are recognized as a reduction in the value of net assets in the relevant fiscal year period.

2. Human Development Index (Y)

HDI is used to measure human development achievements based on a number of basic components of quality of life.

2.3. Data Analysis Technique

The data in this study used secondary data, namely data collected from various agency publications such as BPS and the Ministry of Finance. The data used is time series data from 2006-2022, namely regional expenditure realization data and HDI.

2.4. Data Analysis Technique

The analysis technique in this research used is simple linear regression using SPSS version 26.

3. Results and Discussion

3.1. Classic Assumption Test

Based on the calculations of the Kolmogorov-Smirnov Normality Test, Glejser Heteroscedasticity Test, and Autocorrelation Test, the conclusion is that the regression model meets the classical assumption requirements for estimating linear regression. Here's the description table:

TABLE 1: Classical Assumpstion Test.

No.	Classical Assumpstion Test	Methode	Hasil Uji	Kriteria	Kesimpulan
1.	Normality	One Sample Kolmogorov-Smirnov	Significance Asymptotic = 0,200	Sig Asymp > 0,05 (0,200 > 0,05)	Normal Data
2.	Heterokedasticity	Glejser Test	T test Absolute Residual variable	T test < 0,05	No Heterokedasticity
3	Autocorrelation	Uji Durbin Watson	Durbin Watson (DW) = 0,698 dl = 1,1330 du = 1,3812	dl < 4-DW > du	No Autocorrelation

3.2. Simple Linear Regression Analysis

Based on the results of simple linear regression with the OLS (Ordinary Least Square) method, the estimated results of the regression model are as follows:

TABLE 2: Simple Linear Regression Outputs.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Standardized Coefficients
		B	Std. Error			
1 a Dependent Variable: HDI	(Constant)	61.720	.485		127.303	.000
	Realisasi Belanja	.001	.000	.950	11.832	.000
Regression Model						
(Y = a + bX + e)						
Y = 61,720 + 0,01X + e						
Independent Variable	t-value	t-table	Result			
Regional Expenditure	11,832	2,13145	Eligible			

Based on the calculations in the table above, it can be concluded that regional spending has a positive and significant effect on the human development index. The role of regional spending in the formation of the human development index can be seen from the R Square value in the regression results, which is 0.90, which means that 90 percent is influenced by regional spending.

4. Finding and Conclusion

The regression results show that the quality of human development in the province of South Sumatra is highly dependent on the effective allocation of regional spending, especially on development programs related to the health, education and social welfare sectors of the community. This shows that if the spending allocation is increased there will be an increase in the HDI which is a reflection of the improvement in the quality of human development in South Sumatra.

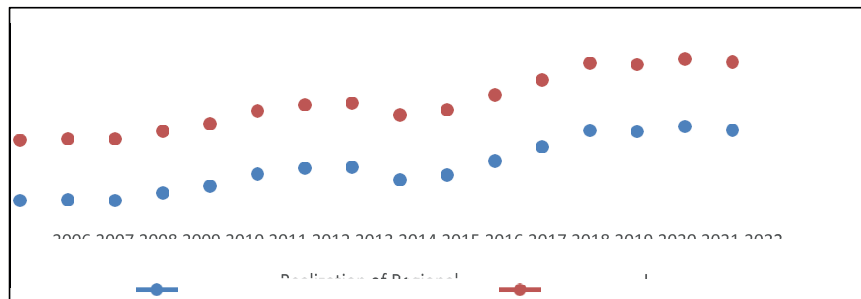


Figure 2: Realization of Regional Expenditures and Human Development Index (HDI) in South Sumatera 2006-2022.

The government’s commitment to increasing the HDI is reflected in the amount of spending allocated. There are 3 (three) types of spending according to functions that are specifically related to the government’s efforts to increase the HDI in Indonesia, namely spending on education, health and economic functions. The three expenditure functions are then set forth in the APBD for regional government authority.

Government expenditure according to education, health and economic functions in South Sumatra Province is not evenly allocated in each district/city each year. In 2021, for central government spending, all Regencies/Cities receive education spending allocations, but only 7 Regencies/Cities receive spending allocations for the economic function, and 4 Regencies/Cities for spending on health functions. Meanwhile, for local government spending, only 12 Regencies/Cities received spending allocations for education, health and economic functions.

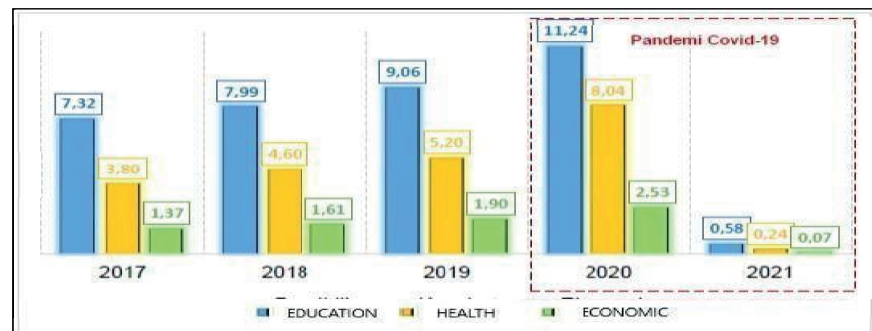


Figure 3: Realization of Regional Expenditures for Education, Health and Economic Functions 2017 s.d. 2021 Prov. South Sumatra (Rp trillion).

The figure above shows that the Covid-19 pandemic has caused a drastic reduction in the realization of regional spending in the Province of South Sumatra in 2021, which is more than 90% in each expenditure (education, health, economic functions) compared to 2020. The Covid-19 pandemic has influenced local government efforts to improve human quality, which since 2017 s.d. 2020 continues to show an increasing trend from year to year. However, according to data from Bank Indonesia as of quarter 1 2022, the realization of regional spending has slowly started to increase as the economy of South Sumatra has started to improve after Covid-19.

5. Implications, Limitations, and Suggestions

Here are some limitations and suggestions that we can describe, among others:

1. This research was built with a simple model. It cannot be denied that there are many other independent variables outside the model that are very likely to be added to measure their influence on the formation of the South Sumatra HDI. Therefore, it is very good if this research is developed further by adding independent variables or by using even better methodological modifications.
2. To be able to increase the allocation of regional spending, it is necessary to have the capacity of an independent region. Regional independence is very dependent on the ability of a region to increase their own regional income (PAD). By increasing PAD, a region will be able to increase the allocation of regional spending for development purposes including human development.

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