

Analysis of factors affecting the level of the human development index

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ABSTRACT

Indonesia Human Development Index is included in the category of a high level of human development, but there are still disparities in human development between regions especially in Eastern Indonesia. This study uses secondary data and purposive sampling with 156 districts and cities as the number of samples that meet the criteria to determine the impact of poverty level, economic growth, education function expenditure, health function expenditure, and capital expenditure on the HDI in districts and cities in Eastern Indonesia from 2015 to 2018. Multiple linear regression is the approach of data analysis used in this study. According to the results of statistical analyses of 156 districts and cities in Eastern Indonesia, Poverty level has a negative and significant impact on HDI, economic growth has no effect on HDI, health function expenditures have a negative effect on HDI, education function expenditures have a positive effect on HDI, and capital expenditures have no effect on HDI. The results of this study can be used to provide input for regional development policy makers in the context of improving regional governance and as material for evaluating the implementation of ongoing development, as well as material for planning future strategies for decision making, especially in relation to human development. The limitation of this study is that it only uses a limited sample from 2015-2018. It is suggested for further research to add other independent variables that may influence HDI, such as the unemployment rate, minimum wage, and regional income. In addition, it is also recommended to add years of research to see the long-term effect of research results.

KEYWORDS

Human Development Index;
Poverty Level; Economic
Growth; Education and Health
Function Expenditure; Capital
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Introduction

Development is a process to achieve national goals and economic growth is an indicator to assess the success of a country's development. The Human Development Index based on the Central Statistics Agency is based on measuring human development achievements based on a number of basic components of quality of life as seen from 3 main dimensions and their indicators, namely the dimensions of longevity and healthy living whose indicators are life expectancy at birth, the knowledge dimension whose indicators are the average years of schooling and schooling expectations, and the dimensions of a decent standard of living which are adjusted per capita expenditure indicators. Then HDI is influenced by other factors such as the availability of employment opportunities, minimum wages, which in turn are determined by many factors, especially economic growth, infrastructure and government policies.

Poverty can have quite serious effects on human development because the problem of poverty is a complex problem that actually stems from the purchasing power of the people who are unable to meet basic needs so that other needs such as education and health are neglected. This makes the human development gap between the two so large that in the end the HDI target set by the government is not properly realized. (Dewi, 2017).

One of the things that affects HDI is economic growth that measures the performance of an economy's development over several periods. Economic growth can also be used as an important indicator to assess whether a region's economic performance is good or bad (Nurlina and Zurjani, 2018). Increased economic growth and a more equitable distribution of income can have an impact on improving the welfare of the people in the region.

Indonesia is a country that places education and health as important aspects of development. The 1945 Constitution clearly states "to educate the life of the nation," which is related to education. Government expenditure in the field of education is contained in Law Number 20 of 2003 which states that "education funds other than teacher salaries and official education costs are allocated a minimum of 20 percent of the National Revenue and Expenditure Budget for the education sector and a minimum of 20 percent of the Regional Budget". For government spending on the health sector, Law Number 36 of 2009 article 171 states that "the central government's health budget is allocated at least 5 percent of the state budget excluding salaries, while the provincial and district/city regional government health budget is allocated at least 10 percent of regional budget excluding salary". Through education, humans can increase their knowledge and skills, and health can increase human productivity. So, the poor quality of education and health can affect human quality and affect the high and low HDI scores.

In connection with the implementation of regional autonomy, the regions need to use the funds they have to organize their governance and regional development, one of which is by allocating them into capital expenditures. Capital expenditure has a very important role in improving people's welfare, especially in improving public facilities and infrastructure.

Literature review

Human capital theory

Human capital consists of 2 basic words namely "human" and "capital". Capital is added value in human beings. Theory of Human Capital was introduced by Theodore W. Schultz in 1961. Based on the Financial Education and Training Agency in the Ministry of Finance, Schultz (1961) in his speech on Investment in Human Capital said, "humans are a form of capital like other forms of capital, namely machines, technology, money and materials". The theory of Human Capital emphasizes that education, knowledge, health and skills are a form of capital, namely "human capital". Human capital can be quantified by education and health, according to Todaro (2000) person value can be increased by education and training. This can be described if a person has greater abilities and capabilities the more knowledge or training he has received.

Human development index (HDI)

HDI is a metric to assess the effectiveness of improving the standard of living for people, to measure the achievement of the average quality of life of a country. Based on Central Statistics Agency, The HDI measures the extent to which human progress has occurred based on several fundamental aspects of quality of life as seen through three key dimensions and indicators, namely the dimensions of longevity and healthy life, the indicator of which is life expectancy at birth, the knowledge dimension, which is the average length of life schools and long-time school expectancy, as well as the dimensions of a decent standard of living whose indicators are adjusted per capita spending. Human development is defined by UNDP (United Nations Development Program) as a process that expands a population's options. The population is viewed as the ultimate objective (ultimate end), and development efforts are seen as the primary method (main means) to accomplish that goal (M. Zahari MS, Sudirman, 2017). HDI aims to improve the quality of human life by expanding one's choices, such as living healthy, knowledgeable, and participating in society. Barriers in life must be removed so that people gain great access to education, health services, secure livelihoods, etc (Fahmi, 2018).

Poverty

The Central Statistics Agency and the Ministry of Social define poverty as a person's inability to meet even the most basic requirements for a respectable life (both food and non-food). The Central Statistics Agency defines the poverty line as the amount needed by each person to cover non-food expenses like as housing, clothes, health, education, transportation, and other products and services, which together equate to 2100 calories per person per day. Poverty is a condition of being economically unable to meet the average standard of living of the people in an area. According to Tarumingkeng (2018) this condition of inability is marked by the low ability of income to meet basic needs in the form of food, clothing, and shelter. This low income capability will also result in reduced ability to meet average living standards such as public health standards and education standards. Dewi (2017) also explain that Poverty is a complex problem that actually stems from the purchasing power of the people who are unable to meet basic needs so that other needs such as education and health are neglected (Dewi, 2017).

Economic growth

According to Sukirno (2015) economic growth is also defined as the fiscal development of the production of goods and services that apply in a country, such as the increase and amount of production of industrial goods, infrastructure development, increase in the number of schools, increase in production of the service sector and increase in production of capital goods. According to Dewi (2017) Economic Growth is one of the indicators used to measure a country's economic achievement. In actual economic activity, economic growth means physical economic development. Zakaria (2018) explain that Economic growth is defined as the ability of a country to be able to provide more types of economic goods to its population.

Education function expenditure

According to Law Number 20 of 2003 concerning the National Education System, states that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, morals noble character, as well as the skills needed by himself, the community, the nation and the state. Educational resources are everything that is used in the implementation of education which includes educational staff, community, funds, facilities and infrastructure. According to the Regulation of the Minister of Finance Number 84/PMK.07/2009 regarding Budget Allocation for the Education Function in the Regional Revenue and Expenditure Budget, expenditure for the education function is expenditure that is budgeted in the Budget for Regional Revenue and Expenditure to finance the implementation of education which is the responsibility of the government, includes teachers' salaries, but not

into the education budget. According to Mongan (2019) government spending on education is a very basic government expenditure in human development. Education is an important part in achieving human capabilities, which are also essential for people's lives. Education has an important role in increasing a country's ability to absorb modern technology and in developing capacity in order to achieve sustainable growth and development.

Health function expenditure

According to Mongan (2019) government investment in the health sector can be in the form of budget allocations to finance the procurement and maintenance of physical and non-physical facilities for the health sector. The government builds public facilities and infrastructure so that people get easy access to services in the health sector. Based on Article 171 of Law Number 36 Year 2009 make the allocation of spending in the health sector absolutely fulfilled. "The federal government allots funds for health that are at least 5% of the Budget for Regional Revenue and Expenditures, excluding wages, and at least 10% of the Provincial and Local Revenue and Expenditure Budget, excluding wages," according to the article. The goal of development in the health sector is to improve health status. It is hoped that the funding for the health sector can be utilized as efficiently as possible to achieve that goal. According to Palayukan (2019), the government budget for health is an important aspect in efforts to increase HDI. The amount of this expenditure is an indication of the government's high commitment to human development to show commitment to improving the quality of human resources as reflected in the HDI.

Capital expenditure

According to Government Accounting Standards state that capital expenditure is a budgetary outlay for the purchase of fixed assets and other assets that can be used for more than one accounting period. One illustration of a capital expenditure is capital expenditure for the acquisition of land, structures and buildings, equipment, and intangible assets (Government Regulation of the Republic of Indonesia Number 24 of 2005). According to Tarumingkeng (2018) the government's role in increasing the Human Development Index can also influence through the realization of state spending in public services, in the policy of implementing regional autonomy and fiscal decentralization based on the consideration that it is the regions that know better the needs and service standards for the people in their regions, so that the granting of regional autonomy is expected to spur increasing the welfare of the people in the regions through increased economic growth.

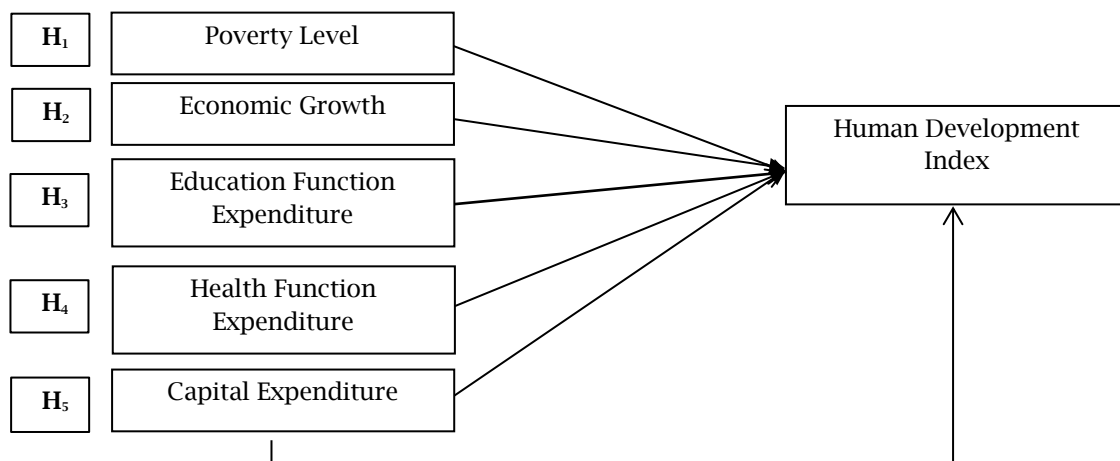


Figure 1. Research Framework

Methods

Human development index (HDI)

According to Central Statistics Agency, HDI is an important indicator to measure success in efforts to build the quality of human life (community/population). According to Andiny (2018) In measuring the HDI, health and education indicators are one of the main components besides income, because health and education are investments to support economic development and have an important role in efforts to reduce poverty. The measurement of the HDI variable is carried out by looking at the HDI achievement figures for each District in Eastern Indonesia which are obtained from the Central Statistics Agency website.

Independent variable

Poverty level

According to Central Statistics Agency and UNDP poverty is a condition of lack of income and economic difficulties Agency. According to Tarumingkeng (2018) Poverty is a condition of being economically unable to meet the average standard of living of the people in an area, this condition of inability is marked by the low ability of income to meet basic needs in the form of food, clothing, and shelter. The Head Count Index formula is used in this study to calculate the poverty variable, which is the proportion of the population that lives in poverty, as follows:

$$P_a = \frac{1}{n} \sum_{i=1}^q \left[\frac{z - y_i}{z} \right]^a$$

(Central Statistics Agency)

Description:

a = 1

z = Poverty Line

y_i = average monthly per capita expenditure of people who are below the poverty line (i=1,2,3,...q), y_i < z

q = number of people living below the poverty line

n = total population

Economic growth

According to Rakhmawati (2017) Measurement of regional economic growth can be done by calculating the increase in the GRDP value in a certain year to the following year. Normatively, when economic growth is high, human development will increase. According to Syofya (2018) Economic growth can show the extent to which economic activity will produce products in a country. Regional economic growth uses the Gross Regional Domestic Product, the nation's economic growth rate can be measured using the GRDP growth rate at constant prices, with the formula:

$$\text{Economic Growth} = \frac{GRDP_y - GRDP_{y-1}}{GRDP_{y-1}} \times 100\%$$

(Sukirno, 2010)

Description:

GRDP = Gross Regional Domestic Product

y = Year

y-1 = Year-1 (Example 2018-1 is 2017)

In this study the economic growth rate of a region uses the GRDP growth rate at constant 2010 prices.

Education function expenditure

According to Pake (2018) the budget allocation for government spending on education is a concrete manifestation of investment to increase community productivity. According to Fajar (2020) Education expenditure is a type of regional expenditure that is used in order to fund the implementation of government affairs which are the authority of the province or district/city in the field of education. Government expenditure on education is represented by the amount of expenditure in the "education" sector in the The Realization of Budget for Regional Revenue and Expenditure in Eastern Indonesia for 2015-2018 obtained from the website of the Directorate General of Fiscal Balance, measured in rupiah.

Health function expenditure

According to Pake (2018) Government spending on the health sector is an effort to fulfill one of the people's basic rights, namely the right to obtain health services, so as to increase people's productivity. According to Mongan (2019) Based on the indicators that form the basis for measuring HDI, the education and health sectors have an important role to play in creating human resources and development. The amount of development spending for the health sector in the district/city government budgets in Eastern Indonesia for the years 2015-2018, as found on the website of the Directorate General of Fiscal Balance, is used to represent government health expenditures in rupiah units.

Capital expenditure

According to Banga (2017) states that capital expenditures are expenditures used for the purchase/procurement or construction of tangible fixed assets whose benefit value is more than a year, and or the use of services in implementing local government programs and activities. According to Syam et al. (2018) the quality and quantity of regional productivity and community income can increase if capital expenditure is allocated appropriately for improving regional infrastructure and adequate public facilities. In the research, capital expenditure uses capital expenditure realization data in the Budget Realization Report for Regency/City governments in Eastern Indonesia for 2015-2018, measured in rupiah units.

Results

The sampling method is purposive sampling, where samples are taken based on requirements made as criteria and certain considerations that must be met as samples (Sugiyono, 2016). Purposive sampling aims for researchers to apply or propose certain conditions so that a sample can be selected (Gumanti et al., 2018). The object of this study is the Eastern Region of Indonesia covering 13 provinces which covering 185 district and city governments with the research period used is 2015-2018. Table 1 illustrates the selection process for a sample:

Table 1. Result of Sampling

No.	Criteria	Total
1.	Number of Regencies & Cities in Eastern Indonesia	185
2.	Districts with incomplete Poverty Rate data for 2015-2018	(3)
3.	Cities & districts with incomplete data on Education Function Expenditure and Health Function Expenditure during 2015-2018.	(26)
	The number of samples that meet the criteria	156
	Total of research samples (156 x 4 years)	624
	Outlier	(76)
	The amount of data processed	548

Based on Table 1, 548 data were obtained that were used as research samples in this study and there were 76 outlier data samples because the population had extreme values and was not normally distributed.

Descriptive statistics

The table shows descriptive statistical findings for the variable poverty rate, economic growth, spending on the health function, spending on education, and capital spending.

Table 2. Descriptive Statistic Results

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev
IPM* ¹	548	44.22	83.30	65.68	6.65
TK* ¹	548	1.98	45.74	16.10	9.35
PE* ¹	548	.89	15.38	6.08	1.41
BFP* ²	548	3983	1640160	192979	180166
BFK* ²	548	5501	646898	126973	91446
BM* ²	548	80247	1241111	257019	116675

*¹ in decimal. *²in millions of rupiah.

Source: Data processed by researchers, 2021.

Normality test (p-plot)

The visual representation of the study's P-Plot normalcy test results:

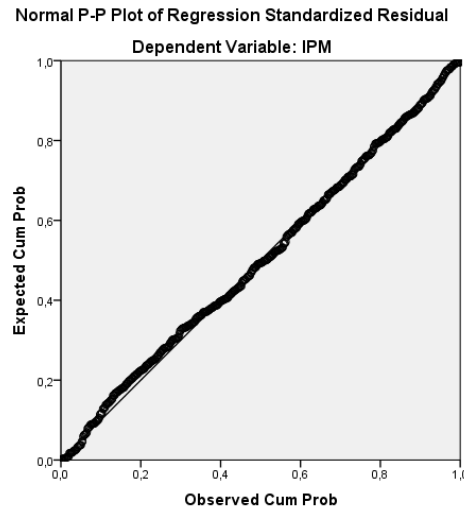


Figure 2. Normality Test (P-Plot)

Figure above shows that the pattern created by the dots in the image approaches the diagonal line that already exists and moves in the same direction as the diagonal line. The regression model employed in this investigation appears to be regularly distributed in light of this. The study's regression model therefore satisfied the criteria for the normalcy test.

Multicollinearity test

The outcomes of this study's multicollinearity test is:

Table 3. Multicollinearity Test Results

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
TK	0.873	1.145
PE	0.896	1.116
BFP	0.202	4.940
BFK	0.198	5.053
BM	0.894	1.119

Source: Data processed by researchers, 2021.

According to Table above, the variable Poverty Level has a tolerance value of 0.873 and a VIF value of 1.145, the Economic Growth variable has a tolerance value of 0.896 and a VIF value of 1.116, the Education Function Expenditure variable has a tolerance value of 0.202 and a VIF value of 4.940, the Health Function Expenditure variable has a tolerance value of 0.198 and the VIF value is 5.053, and the Capital Expenditure variable has a tolerance value of 0.894 and the VIF value is 1.119. Of all the variables, the tolerance value exceeds 0.1 and the VIF value is < 10, so the conclusion in this regression model does not experience multicollinearity.

Heteroscedasticity test

The findings of this study's Spearman's Rho heteroscedasticity test were as follows:

Table 4. Heteroscedasticity Test

Correlations			Unstandardized Residual
Spearman's Rho	Unstandardized Residual	Correlation Coefficient	
		Sig. (2-tailed)	.
		N	548
	TK	Correlation Coefficient	0.066

		Sig. (2-tailed)	0.124
		N	548
	PE	Correlation Coefficient	0.021
		Sig. (2-tailed)	0.617
		N	548
	BFP	Correlation Coefficient	0.017
		Sig. (2-tailed)	0.694
		N	548
	BFK	Correlation Coefficient	-0.013
		Sig. (2-tailed)	0.757
		N	548
	BM	Correlation Coefficient	-0.053
		Sig. (2-tailed)	0.213
		N	548

Source: Data processed by researchers, 2021.

According to Table above, given that all of the independent variables had significance values greater than 0.05 in the heteroscedasticity test performed using the Spearman's rho test, it can be said that this regression model doesn't somehow show heteroscedasticity.

Autocorrelation test

The outcomes of this study's autocorrelation test were as follows:

Table 5. Autocorrelation Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.738	.545	.541	4.50198	.499
a. Predictors: (Constant), BM, TK, PE, BFP, BFK					
b. Dependent Variable: IPM					

Source: Data processed by researchers, 2021.

It can be seen in Table above, the Durbin-Watson value in the table shows the number 0.499. This shows that this study is free from autocorrelation. In accordance with the criteria presented by Sunyoto (2013), that is, if the panel data's Durbin-Watson value is between -2 and +2, it means that there is no autocorrelation.

Multiple linear regression model

Table 6. Multiple Linear Regression Model Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	45.999	14.185		3.243	0.001
	TK	-3.991	0.183	-0.675	-21.762	0.000
	PE	1.668	0.736	0.069	2.266	0.024
	BFP	1.128	0.394	0.184	2.863	0.004
	BFK	-0.449	0.531	-0.055	-0.847	0.398
	BM	0.520	0.562	0.028	0.925	0.355

Source: Data processed by researchers, 2021.

Statistical test f

Table 7. Statistical Test F Results

F	Sig.
129.977	0.000

Source: Data processed by researchers, 2021.

The regression model used in this study is appropriate and workable for future investigation, as shown by Table above, where it can be observed that the significant value is 0.000 smaller than the limit of the chosen significance level, which is 5% (0.05).

Coefficient of determination (r^2)

This is the result of the coefficient of determination test (R2):

Table 8. Coefficient of Determination Test Results

Model	Model Summary ^b				
	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.738	.545	.541	4.50198	.499
a.	Predictors: (Constant), BM, TK, PE, BFP, BFK				
c.	Dependent Variable: IPM				

Source: Data processed by researchers, 2021.

According to the finding results, the coefficient of determination that shows in the Adjusted R Square table is 0.541 or 54%. These results show the ability of the independent variables, namely Poverty Level, Economic Growth, Education Function Expenditure, Health Function Expenditure, and Capital Expenditure in explaining the dependent variable, namely the Human Development Index, which has a 54% ability. The remaining 46% are then influenced by other factors that this study's independent variables are unable to account for.

Discussion

Effect of poverty level on HDI

It can be seen that the Poverty Level variable in Table 4.6 has a t-count of -21.762 and a significance level of 0.000. The results of the significance value possessed by the poverty level variable is 0.000 smaller than 0.05. Based on the results of the tests conducted, it showed that the Poverty Level variable has a regression coefficient value of -3.991, meaning that if the other independent variables have a fixed value and the Poverty Level increases by one unit, the HDI value will decrease by 3.991.

The first hypothesis, that the poverty rate has a negative influence on the HDI, is supported by these results, which demonstrate that the poverty rate has a negative and significant impact on the HDI. This means that every increase in the percentage of the poverty rate will reduce the HDI value, the highest poverty rate in Indonesia from 2015 to 2018 was in Papua Province in Deiyai Regency with an average value of 44.49% and West Papua Province in Arfak Mountains Regency with a value of 44.49%. an average of 38.24%. This results in the people's purchasing power not being able to meet their basic needs, namely clothing, food and shelter, so other needs, namely health and education, will also be neglected which will have an impact on the Human Development Index's value.. The result of this study are consistent with Adelfina and Jember (2016) investigations, which demonstrate a negative correlation between the HDI and Poverty Level. Also in line with Tarumingkeng (2018) who explained that poverty has a negative correlation with HDI. Zakaria (2018) said that poverty has a negative effect to HDI, means if poverty rate increase that will reduce HDI value.

The effect of economic growth on HDI

Table 4.6 Economic Growth variable has a t-count of 2.266 and a significance level of 0.024, as can be observed. The results of the significance value of the variable economic growth 0.024 smaller than 0.05. According to the outcomes of the performed tests, the variable Economic Growth has a regression coefficient value of 1.668; Consequently, if economic growth has increased by 1 unit while the other independent variables have fixed values, then the HDI value has increased by 1.668.

The second hypothesis, economic growth has positive impact on HDI, is supported by these findings, which demonstrate economic expansion has positive impact on HDI. According to Zakaria (2018) explain that Economic growth is defined as the ability of a country to be able to provide more types of economic goods to its population. This can be seen from the open unemployment rate which is decreasing every year, on the islands of Bali and Nusa Tenggara in 2015, namely 3.16 and in 2018, namely 2.33; on the island of Sulawesi in 2015 it was 4.33 and in 2018 it was 3.75; as well as the islands of Papua and Maluku in 2015 namely 5.20 and in 2018 namely 5.20. The results of this research confirm those of Adelfina and Jember's (2016) research, which found that economic growth has a favorable effect on the HDI. In line with research of Fretes (2017) who said that economic growth has a positive impact on HDI. Also, Komariah (2019) which found that economic growth positively and significantly impact HDI.

The effect of education function expenditure on HDI

Table 4.6 Education Function Expenditure variable has t-count of 2.863 and significance level of 0.004 as can be seen. The education function spending variable's significance value is 0.004 smaller than 0.05. Based on result of the tests, it is possible to draw a conclusion that the Education Function Expenditure variable has regression coefficient of 1.128, which indicates that if the other independent variables are fixed and the Education Function Expenditure increases by 1 unit, the HDI value along with growing by 1.128.

The third hypothesis, that expenditure on education functions has a positive impact on HDI, is supported by these results, which demonstrate that it does. The average length of schooling in Eastern Indonesia, which rises every year, demonstrates the rising quality of education, on the islands of Bali and Nusa Tenggara in 2015 which was 7.90 and in 2018 it was 8.13; on the island of Sulawesi in 2015 which was 8.26 and in 2018 it was 8.58; and on the islands of Papua and Maluku in 2015 which was 8.50 and in 2018 it was 8.80. With the increase in the quality of education, the community can increase their knowledge and skills which will increase the opportunity to get a decent job to provide for fundamental necessities as well as other needs, like those for health and education, so as to increase the human growth index value. The findings of this study are consistent with Kahang (2016) which found that HDI was positively and significantly impacted by changing government spends in the education sector. The result in line with Tjodi (2018) and Fajar (2020) who explained that education expenditure has a positive effect on HDI.

The effect of health function expenditure on HDI

The Health Function Expenditure variable in Table 4.6 has a t-count of -0.847 with significance level of 0.398. The findings of the health function expense variable's significant value were 0.398 greater than 0.05 with a negative regression coefficient direction. According to the outcomes of the tests, the Health Function Expenditure variable has regression coefficient of -0.449, which suggests that if the other independent variables are fixed and the Health Function Expenditure variable increases by 1 unit, the HDI value will fall by 0.449.

These results show that expenditure on health functions has negative and insignificant impact on HDI, so the fourth hypothesis, namely expenditure on health functions, has a positive impact on HDI, is not supported. This is because government spending on health is not based on Law no. 36 of 2009 where the regional government health budget is allocated a minimum of 10% of the Regional Revenue and Expenditure Budget excluding salaries, in fact many districts and cities in Eastern Indonesia whose realization of government spends in the health sector is less than the budget that has been set, such as Badung Regency in the Province of Bali and Morowali Regency in Central Sulawesi Province in 2015 only realized the health budget, which was 1% of what the local government should have budgeted, which was 10%. Until 2018, the lack of health facilities in Eastern Indonesia such as health centers and hospitals, the presence of general practitioners and the difficulty of accessing health also made it difficult for people to get good and maximum health services, these limitations caused the quality of public health in border areas to be relatively low (ayobandung, 2019). Due to these factors, the Human Development Index in Eastern Indonesia is less able to be raised by government spends in the health sector. The findings of this study are consistent with the research of Kahang (2017), which found that health spending has a negative effect on the HDI. In line with Mongan (2018) research's result that health expenditure also has a negative effect on HDI.

The effect of capital expenditures on HDI

The Capital Expenditure has a the significance value that is 0.355 greater than 0.05. Based on the test results, the capital expenditure variable has a regression coefficient value of 0.520, which suggests that if the other independent variables' values are fixed in value or constant and capital expenditures increase by one unit, the HDI value will also increase by 0.520.

These results show that capital expenditure has no impact on HDI, so the fifth hypothesis, namely capital expenditure has a positive impact on HDI, is not supported. This is because infrastructure development in Eastern Indonesia is still ongoing, the capital expenditures allocated for public services will only be felt in the next few years by the community, which cannot directly affect the HDI in the year when the capital expenditure budget was issued. In addition, development is still uneven and too centered in Sulawesi, especially South Sulawesi and Makassar, and there are national strategic development projects that are allocated 27 projects in Sulawesi, 24 in Kalimantan, and 13 in Papua and Maluku (tempo.co, 2019). This will result in economic disparities between other regions in Eastern Indonesia so that they are less able to increase the value of the Human Development Index. The findings of this analysis support those of Tjodi (2018) who explained that capital expenditure has no effect on HDI because the budget is not enough to drive growth human development index in North Sulawesi. Based on Sasti & Latrini's (2019) study, which found that the capital expenditure also has no impact on the HDI.

Conclusion

Based on this research, the Poverty Level has a significant negative impact on the Human Development Index in Regencies/Cities in Eastern Indonesia in 2015-2018, due to people's purchasing power in Eastern Indonesia not being able to meet their basic needs, namely clothing, food and shelter, so other needs, namely health and education, will also be neglected which will affect the value of the HDI.

Economic growth has a significant positive impact on the Human Development Index in Regencies/Cities in Eastern Indonesia in 2015-2018, this is because the open unemployment rate is decreasing every year this makes the economy in eastern Indonesia grow higher which will affect the value of the HDI. Education Function Expenditure has a significant positive impact on the Human Development Index in Regencies/Cities in Eastern Indonesia in 2015-2018. The increasing quality of education can be seen from the average length of schooling in Eastern Indonesia which is increasing every year, with the increase in the quality of education, the community can increase their knowledge and skills which will increase the opportunity to get a decent job to meet basic needs and other needs such as health and education, thereby increasing the value of the HDI.

Health Function Expenditures have a negative impact on the Human Development Index in Regencies/Cities in Eastern Indonesia in 2015-2018. This is because until 2018 the lack of health facilities in Eastern Indonesia such as health centers and hospitals, the presence of general practitioners and the difficulty of accessing health also made it difficult for people to get good and maximum health services, these limitations caused the quality of public health in border areas to be relatively low. Capital Expenditures have no impact on the Human Development Index in Regencies/Cities in Eastern Indonesia in 2015-2018. This is because development is still uneven in the eastern parts of Indonesia, and also because development is too focused only on big cities so that small areas are increasingly left behind in development.

The limitation of this study is that it only uses a limited sample from 2015-2018. It is suggested for further research to add other independent variables that may influence HDI, such as the unemployment rate, minimum wage, and regional income. In addition, it is also recommended to add years of research to see the long-term effect of research results. The suggestions of this paper, It is suggested that the next research can expand the research sample and add the research population to districts/cities in western Indonesia such as on Sumatra Island, Java Island, and Kalimantan Island, so that research results with better results can be obtained. Subsequent research is suggested to add other independent variables that if it affects HDI such as unemployment rate, minimum wage, and regional income. In addition, it is also recommended to add years of research to see the long-term effect of research results.

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