

## **Determinants of Government Spending on Regional Development Inequality in the East Indonesia Area**

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### **ABSTRAK**

Penelitian ini bertujuan menganalisis kondisi ekonomi yang secara khusus pada Kawasan Timur Indonesia (KTI) yang merupakan kawasan ekonomi yang berbasis kemaritiman. Penelitian ini menggunakan variabel pengeluaran pemerintah dengan tiga aspek yaitu pendidikan, kesehatan dan infrastruktur terhadap variabel ketimpangan pembangunan. Pendekatan metode penelitian yang digunakan yaitu analisis regresi data panel mulai tahun 2015 hingga 2020. Hasil penelitian ini menunjukkan bahwa terdapat empat variabel dalam penelitian ini yang berpengaruh terhadap ketimpangan pembangunan wilayah variabel tersebut yaitu pengeluaran pemerintah daerah pendidikan, kesehatan dan infrastruktur, dan indeks pembangunan manusia. Variabel pengeluaran pemerintah daerah bidang infrastruktur tidak berpengaruh terhadap variabel pertumbuhan ekonomi dan variabel pertumbuhan ekonomi tidak berpengaruh terhadap ketimpangan pembangunan. Analisis pada tiga variabel yang berpengaruh tidak langsung terhadap ketimpangan pembangunan, yaitu pengeluaran pemerintah daerah bidang pendidikan dan kesehatan melalui indeks pembangunan manusia dan pertumbuhan ekonomi, serta variabel indeks pembangunan manusia berpengaruh tidak langsung terhadap ketimpangan pembangunan wilayah melalui pertumbuhan ekonomi. Sementara itu, variabel pengeluaran pemerintah daerah bidang infrastruktur tidak berpengaruh secara tidak langsung terhadap ketimpangan pembangunan wilayah melalui indeks pembangunan.

**Kata kunci** : Indonesia timur; pengeluaran pemerintah; ketimpangan pembangunan daerah.

### **ABSTRACT**

*This research aims to analyze the economic conditions specifically in Eastern Indonesia (KTI), which is a maritime-based economic area. The research uses government spending variables with three area, namely education, health and infrastructure on development inequality variables. The research method approach used is panel data regression analysis from 2015 to 2020. The results of this study indicating that there are four variables in this study that influence regional development inequality, these variables are local government spending on education, health and infrastructure, and the human development index. The regional government spending variable in the infrastructure sector has no effect on economic growth variables and the economic growth variable has no effect on development inequality. Analysis of the three variables that have an indirect effect on development inequality, namely local government spending on education and health through the human development index and economic growth, and the human development index variable has an indirect effect on regional development inequality through economic growth. Meanwhile, the variable local government spending on infrastructure does not have an indirect effect on regional development inequality through the human development index and economic growth in Eastern Indonesia.*

**Keywords** : eastern Indonesia; government spending; regional development inequality.

### **INTRODUCTION**

The development process in each region or area generally has problems, namely inequality in economic development. The problem of an imbalance in development between regions is actually not something new, especially in Indonesia, there is often an imbalance with the center or between one region and another. This is a normal thing to happen because of differences in resources and processes in implementing the development of a region (Hasan et al., 2020). The occurrence of an imbalance is caused by the Indonesian government system, namely centralization where all authority lies with the central government (Manduca, 2019).

As a strategy to reduce this inequality, a system was formed in such a way that the government system was changed to a decentralized system or what is commonly known as a regional autonomy system. The presence of a system With the existence of a regional autonomy system, it is hoped that it will be able to bring up an authority for regional governments to regulate their own

regions. However, since the implementation of regional autonomy in 2021 there are still many regions that have failed to realize this authority, one of the indicators of success is being able to increase regional growth accompanied by equal distribution of income between regions. Implementation in fiscal decentralization besides spurring growth is also accompanied by income disparities between regions (Martines et al., 2019).

Eastern Indonesia (KTI) is a maritime-based economic area. Based on Presidential Decree No. 2 of 2015 concerning the 2015-2019 National Medium-Term Development Plan (RPJMN) and the Eastern Indonesia Knowledge Exchange (BaKTI), which is included in the Eastern Region of Indonesia, there are 12 provinces, namely South Sulawesi, Central Sulawesi, Southeast Sulawesi, North Sulawesi, West Sulawesi, Gorontalo, Maluku, North Maluku, East Nusa Tenggara, West Nusa Tenggara, Papua and West Papua. During the New Order era, the results of development were more concentrated on the island of Java, so that the island of Java became more advanced compared to other regions in Indonesia, in the end there was a striking imbalance in the economic structure between Java and the island of Java. In the National Development Planning, The Eastern Region of Indonesia (KTI) always gets attention and priority. The West Indonesia Region contributes around 75% of the total national GDP, while the Eastern Indonesia Region only contributes approximately 25%. In addition, the backwardness of the Eastern Region of Indonesia (KTI) can also be seen in the 2017 Human Development Index (IPM) data from the Central Statistics Agency (BPS), only two provinces in the Eastern Region of Indonesia have high category HDI, namely South Sulawesi and North Sulawesi and until now this is only North Sulawesi which is included in the top ten highest HDI in Indonesia.

**Table 1**  
**Human Development Index (IPM) by Provinces in Indonesia 2015-2020**

Province	Year					
	2015	2016	2017	2018	2019	2020
Aceh	69.45	70.00	70.60	71.19	71.90	71.99
North Sumatra	69.51	70.00	70.57	71.18	71.74	71.77
West Sumatra	69.98	70.73	71.24	71.73	72.39	72.38
Riau	70.84	71.20	71.79	72.44	73.00	72.71
Jambi	68.89	69.62	69.99	70.65	71.26	71.29
South Sumatra	67.46	68.24	68.86	69.39	70.02	70.01
Bengkulu	68.59	69.33	69.95	70.64	71.21	71.40
Lampung	66.95	67.65	68.25	69.02	69.57	69.69
Kep. Bangka Belitung	69.05	69.55	69.99	70.67	71.30	71.47
Kep. Riau	73.75	73.99	74.45	74.84	75.48	75.59
DKI Jakarta	78.99	79.60	80.06	80.47	80.76	80.77
West Java	69.50	70.05	70.69	71.30	72.03	72.09
Central Java	69.49	69.98	70.52	71.12	71.73	71.87
In Yogyakarta	77.59	78.38	78.89	79.53	79.99	79.97
East Java	68.95	69.74	70.27	70.77	71.50	71.71
Banten	70.27	70.96	71.42	71.95	72.44	72.45
Bali	73.27	73.65	74.30	74.77	75.38	75.50
West Kalimantan	65.59	65.88	66.26	66.98	67.65	67.66
Central Kalimantan	68.53	69.13	69.79	70.42	70.91	71.05
South Kalimantan	68.38	69.05	69.65	70.17	70.72	70.91
East Kalimantan	74.17	74.59	75.12	75.83	76.61	76.24
North Kalimantan	68.76	69.20	69.84	70.56	71.15	70.63
West Nusa Tenggara	65.19	65.81	66.58	67.30	68.14	68.25
East Nusa Tenggara	62.67	63.13	63.73	64.39	65.23	65.19
North Sulawesi	70.39	71.05	71.66	72.20	72.99	72.93
Central Sulawesi	66.76	67.47	68.11	68.88	69.50	69.55
South Sulawesi	69.15	69.76	70.34	70.90	71.66	71.93
Southeast Sulawesi	68.75	69.31	69.86	70.61	71.20	71.45
Gorontalo	65.86	66.29	67.01	67.71	68.49	68.68
West Sulawesi	62.96	63.60	64.30	65.10	65.73	66.11
Maluku	67.05	67.60	68.19	68.87	69.45	69.49
North Maluku	65.91	66.63	67.20	67.76	68.70	68.49
West Papua	61.73	62.21	62.99	63.74	64.70	65.09
Papuan	57.25	58.05	59.09	60.06	60.84	60.44

Source data BPS Indonesia 2015-2020

Based on table 1, it can be seen that the Human Development Index (IPM) in Indonesia during 2015-2020 shows that the Provincial Human Development Index in Indonesia continues to increase. However, the Human Development Index is still lagging behind compared to western Indonesia. In 2020 only North Sulawesi Province is included in the top ten highest HDI in Indonesia. In addition, in 2015-2017 only the Provinces of North Sulawesi and South Sulawesi were included in the high category HDI, until 2018 until now in 2020 Southeast Sulawesi Province is included in the high category HDI. So, until now there are only three provinces in Eastern Indonesia with high HDI, namely South Sulawesi, North Sulawesi and Southeast Sulawesi. Meanwhile, areas on the islands of Maluku and Papua are still in the moderate category of HDI and are in the lowest position compared to other provinces in Indonesia. Therefore, the government's attention is needed in terms of carrying out development in Eastern Indonesia which is expected to be an important step and have a major influence on increasing the HDI in Eastern Indonesia.

To find out the level of development inequality between provinces that occurred between provinces in Eastern Indonesia for the 2015-2020 period, it can be analyzed using the regional inequality index, namely the Williamson inequality index. The Williamson index ranges from  $0 < IW < 1$ , where getting closer to zero means that the region is at a low level of development inequality. Meanwhile, if it is close to one, the higher the level of regional development inequality (Ferreira et al., 2022).

**Table 2**  
**Williamson Indonesia Index and 12 Provinces in Eastern Indonesia in 2015-2020**

Province	Year					
	2015	2016	2017	2018	2019	2020
Indonesia	0.70	0.70	0.70	0.71	0.73	0.72
West Nusa Tenggara	0.85	0.82	0.86	0.67	0.65	0.77
East Nusa Tenggara	0.64	0.47	0.46	0.46	0.46	0.45
North Sulawesi	0.48	0.49	0.49	0.50	0.50	0.48
Central Sulawesi	0.49	0.52	0.55	0.58	0.61	0.65
South Sulawesi	0.67	0.67	0.68	0.69	0.70	0.69
Southeast Sulawesi	0.40	0.40	0.42	0.42	0.42	0.39
Gorontalo	0.15	0.15	0.14	0.14	0.14	0.19
West Sulawesi	0.37	0.36	0.35	0.35	0.34	0.33
Maluku	0.18	0.18	0.17	0.17	0.17	0.17
North Maluku	0.27	0.28	0.27	0.27	0.28	0.28
West Papua	0.62	0.60	0.67	0.67	0.66	0.69
Papuan	0.81	0.82	0.82	0.83	0.85	0.87

Source: Author Processed Data

Based on the Williamson Index table, it is known that the level of regional development inequality in Indonesia is still quite high ( $> 0.5$ ) with an average development inequality of 0.71 during the 2015-2020 period. Meanwhile, the high level of development inequality ( $> 0.5$ ) in Eastern Indonesia is seen in the provinces of Papua, West Papua, West Nusa Tenggara, East Nusa Tenggara, North Sulawesi, Central Sulawesi and South Sulawesi with an average development inequality of 0.64. Meanwhile, the provinces of Gorontalo, West Sulawesi, Southeast Sulawesi, Maluku and North Maluku show low levels of inequality ( $< 0.5$ ) during the 2015-2020 period with an average development inequality of 0.275. According to Nijman et al., (2020) There are several factors that influence regional development inequality, namely differences in natural resources, differences in demographic conditions, lack of smooth mobility of goods and services, and concentration of regional economic activities that affect the level of economic growth and human development in an area, as well as the allocation of regional development funds such as in education, health and infrastructure. The backwardness of Indonesia's eastern region continues to receive government attention. This is evidenced by the focus of the 2020-2024 Medium Term Development Plan, namely equitable development, especially accelerating development in Eastern Indonesia and reducing disparities between regions in Indonesia (Talitha et al., 2019).

Based on several viewpoints that build this research, which is supported by several economic theories, one of them, theoretically, regional development inequality was raised by Douglas C North in his analysis of the theory of neoclassical economic growth. In this theory, a prediction appears

about the relationship between the level of national economic development of a country and development inequality between regions. This theory explains that at the beginning of a country's development, development inequality tends to increase. Sourced from a study by Ollivaud and Haxton (2019) This process will occur until the inequality reaches a peak, after that, if the development process continues and gradually the development inequality will decrease. The theory of the development model regarding the development of government expenditure developed by Rostow and Musgrave which links the development of government expenditure with the stages of economic development which are distinguished between the initial, intermediate and advanced stages. In the early stages of economic development, the percentage of government investment to total investment is large because the government must provide facilities and services such as education, health and infrastructure (Iammarino et al., 2019)

Based on the analysis of the article Nugraha et al., (2020) inequality in the development of each region always has differences, therefore it needs serious attention from the government to realise it, as well as what strategies are being implemented so that regional development equity in Eastern Indonesia can be realized. Research conducted by Iek and Blesia (2018) where the results of their research show that increasing government spending will further reduce the value of the Williamson Index, which means more evenly distributed development in East Java in 2007-2011. Research conducted by Mandej, et al (2021) which states that increasing the human development index can affect the level of development inequality in Bitung City in 2020. The results of research findings by Hasibuan et al. (2021). Based on the description above, it can be concluded that it is necessary to see the extent of the government's role through regional government spending, in this case the realization of the regional budget for regional development inequality in 12 provinces in Eastern Indonesia. Based on these conditions, an interest was made to observe its effects by raising this phenomenon into a study entitled determinants of government spending on regional development inequality in the East Indonesia Area.

## METHOD

The data analysis method used in this study is panel data regression analysis using the help of Eviews software. The cross section data in this study is data obtained from 12 provinces in Eastern Indonesia, while the time series data in this study are data taken from 2015-2020 which resulted in 72 observations. The equation model used in this study is structured based on how to determine the relationship between variables that can be stated and then explicitly converted into the form of the Cobb-Douglas equation and finally transformed into linear in natural logarithmic form which has been reduced in form, as follows:  $Y_3 = (\pi_0 + \pi_1 \ln X_{1it} + \pi_2 \ln X_{2it} + \pi_3 \ln X_{3it} + \gamma_4 Y_{1it} + \gamma_5 Y_{2it} + \mu_{it} \dots \dots \dots$

Where:  $\pi_0 = \gamma_0 + \gamma_4 \alpha_0 + \gamma_5 \beta_0 + \gamma_5 \beta_2 \alpha_0$

$\pi_1 = \gamma_1 + \gamma_4 \alpha_1 + \gamma_5 \beta_2 \alpha_1$

$\pi_2 = \gamma_2 + \gamma_4 \alpha_2 + \gamma_5 \beta_2 \alpha_2$

$\pi_3 = \gamma_3 + \gamma_4 \alpha_3 + \gamma_5 \beta_1 + \gamma_5 \beta_2 \alpha_3$

$\mu = \gamma_4 \mu_1 + \gamma_5 \beta_2 \mu_1 + \gamma_5 \mu_2 + \mu_3$

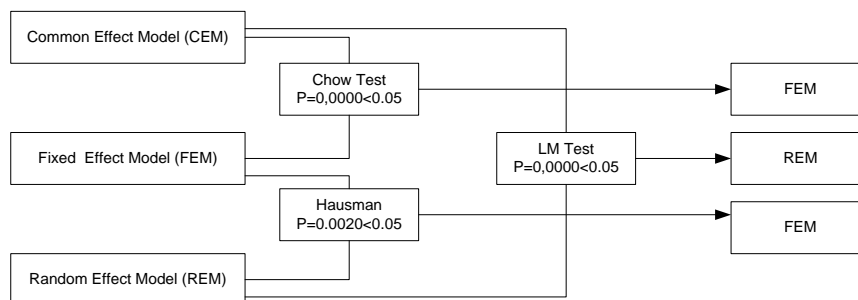
Information:  $\gamma_0, \gamma_4 \alpha_0, \gamma_5 \beta_0 \alpha_0, \gamma_5 \beta_2 \alpha_0 =$  Constant;  $\gamma_4 \mu_1, \gamma_5 \beta_2 \mu_1, \gamma_5 \mu_2, \mu_2 =$  composite error term;  $X_1 =$  local government spending on education;  $X_2 =$  local government spending on health;  $X_3 =$  local government spending on infrastructure;  $\gamma_1 =$  human development index;  $\gamma_2 =$  economic growth;  $\gamma_3 =$  regional development inequality

Panel data regression analysis is not like ordinary regression, panel data regression must go through the stages of determining the appropriate estimation model. The panel data regression model estimation method can be carried out through three approaches, namely Common Effect Model/Pooled Least Square (PLS), Fixed Effect Model (FEM), Random Effect Model (REM) To choose the right model to use in managing panel data, you can carried out through several tests, namely, Chow Test, Hausman Test, Langrange Multiplier Test.

## RESULT

The test results show that a significant probability value, which is below 0.05, using the Fixed Effect Model method is better than the Random Effect Model. From the three tests, it can be

concluded that the results of the model selection test show that the best model is the Fixed Effect Model or abbreviated as FEM. FEM proved to be the best model based on the results of the CHOW test and strengthened by the Hausman test.



Source: processed data

**Figure 1**  
**Results of Panel Data Regression Analysis Model Selection**

**Table 3**  
**Estimating the Direct Effect of the Independent Variable to Dependent Variable**

Direct Influence	Coefficient	t count	p-values	Information
$X_1 \rightarrow Y_1$	8.68063	3.63	0.000	Significant
$X_2 \rightarrow Y_1$	-7.06769	-2.94	0.003	Significant
$X_3 \rightarrow Y_1$	-0.80625	-1.28	0.200	Not significant
$X_3 \rightarrow Y_2$	-0.46854	-1.39	0.165	Not significant
$Y_1 \rightarrow Y_2$	0.51196	7.46	0.000	Significant
$X_1 \rightarrow Y_3$	0.09440	0.91	0.362	Not significant
$X_2 \rightarrow Y_3$	0.08617	0.85	0.393	Not significant
$X_3 \rightarrow Y_3$	0.04403	1.75	0.080	Not significant
$Y_1 \rightarrow Y_3$	-0.01387	-2.08	0.037	Significant
$Y_2 \rightarrow Y_3$	-0.01973	-2.51	0.012	Significant

Remarks: Significant  $\alpha = 0.05\%$

Source: processed data

**Table 4**  
**Estimating the Indirect Effect of Independent Variables on Dependent Variables**

Indirect Influence	Coefficient	t count	p-values	Information
$X_1 \rightarrow Y_1 Y_2 Y_3$	0.466	2,578	0.010	Significant
$X_2 \rightarrow Y_1 Y_2 Y_3$	0.394	2,267	0.024	Significant
$X_3 \rightarrow Y_1 Y_2 Y_3$	0.056	0914	0.361	Not significant
$X_1 \rightarrow Y_1 Y_2$	0.855	3,296	0.001	Significant
$X_2 \rightarrow Y_1 Y_2$	0.722	2,658	0.008	Significant
$X_3 \rightarrow Y_1 Y_2$	-0.102	0931	0.352	Not significant
$Y_1 \rightarrow Y_2 Y_3$	-0.375	3,901	0.000	Significant

Remarks: Significant  $\alpha = 0.05\%$

Source: processed data

The effect of local government spending on education on the human development index in 2015-2020 is shown by the coefficient of 3.8476 with a significance of  $0.0388 < 0.05$  and was stated to have a positive effect. This means that government spending in the field of education has an effect of 84.76% on the human development index in Eastern Indonesia during the 2015-2020 research period. Based on data sources from researchers from the realization of local government expenditure in the field of education in Eastern Indonesia from 2015 to 2020, it tends to increase every year so that it can influence the increase in human development in Eastern Indonesia which is marked by the 2015-2020 human development index of 12 provinces in Eastern Indonesia are in the high and medium category. The results of this study have similarities with the analysis conducted by Fadhillah et al., (2018). This research uses a quantitative approach using the Fixed Effect Model and Random Effect Model as panel data analysis methods. There are 38 cities and regencies used as the unit of analysis during 2010-2015 in East Java, Indonesia. The results of the study show that government spending on

education, health, and the economy has a significant positive effect on each component of the human development index. In addition, government spending on infrastructure has a significant effect on the education index and income index, but does not have a significant effect on the health index.

The effect of government spendingfield areahealth directly on the human development index in Eastern Indonesia in 2015-2020 is shown with a coefficient of 3.0180 with a significance of 0.0000  $<0.05$  and is stated to have a positive effect. This means that health spending has a positive effect on the human development index in Eastern Indonesia during the study period, namely 2015-2020. This can be seen from the realization of regional government spending on provincial health in Eastern Indonesia during 2015 to 2020, which tends to increase every year so that it can influence the increase in human development in Eastern Indonesia which is marked by the 2015-2020 human development index of 12 provinces in Eastern Indonesia are in the high and medium category.

The effect of government spendingfield areaInfrastructure directly to the human development index in Eastern Indonesiain 2015-2020indicated by a coefficient of -0.3332 with a significance of 0.0252  $<0.05$  and is stated to have an effect on the direction of a negative relationship. The results of this study indicate that there is a direction of negative relationship between government spendingfield areainfrastructure to the human development index where the human development index data for 12 provinces in Eastern Indonesia in 2015-2020 were in the high and medium category of human development indexes, while in the infrastructure sector government spending data in Eastern Indonesia in 2015-2019 it fluctuated even in 2020 the average tends to decrease. This is due to the impact of the Covid-19 pandemic. The Covid-19 pandemic has had a significant impact on the infrastructure sector, namely reducing the budget. This policy was taken by the Indonesian government on the basis that these funds would be reallocated for the health budget to tackle the Covid-19 problem. Research conducted byPanggarti et al., (2022) and Wardhana et al., (2022) found that the results of the analysis in 2020 indeed had a negative relationship to the development of the human index due to the economic crisis that was being experienced during the Covid-19 virus pandemic.The effect of local government spending on infrastructure on economic growth in 2015-2020with a significance of 0.0589  $<0.05$  and declared no effect. The results of this study indicate that local government spending on infrastructure in 12 provinces in Eastern Indonesia during the 2015-2020 period has not been able to influence economic growth in Eastern Indonesia in 2015-2020. The results of this study are in accordance with research by Sinaga (2021) which found that local government spending on infrastructure has no effect on economic growth, the realization of local government spending on infrastructure has increased but uneven development has created development inequality which can slow down economic growth. The delay in construction activities resulted in non-absorption of domestic raw materials, reduced imports of capital goods,

The effect of the human development index on economic growth in 2015-2020 is shown by the coefficientof 0.4252 with a significance of 0.0008  $<0.05$  and was stated to have a positive effect. This means that an increase in the human development index can affect economic growth in Indonesia. This can be seen in the inter-provincial human development index data in Eastern Indonesia in 2015-2020 which shows that the human development index has been in the high and medium categories and is expected to continue to influence economic growth in Indonesia. This research also has similarities in analysis withWardhana et al., (2022) who studied the human development index in the Eastern Indonesia region as well as a study by Yolanda (2017). The effect of regional government spending on education on regional development inequality in 2015-2020 is shown by the coefficientof 0.1847 with a significance of 0.000  $<0.05$  and was stated to have a positive effect. The results of this study indicate that the amount of government spending on education in 2015-2020 which continues to increase every year directly affects regional development inequality in Eastern Indonesia.The results of this research also have similarities with research entitled the effect of government spending on education and health on the human development index in Indonesia which is the result of an analysis from Mongan (2019).Based on the theory of human capital which states that education has an influence on economic growth and will reduce inequality in regional development. Education has an important role in advancing the economic development of a region

Government spendingfield area health directly to regional development inequalityin Eastern Indonesiain 2015-2020indicated by a coefficient of 0.3231 with a significance of 0.0364  $> 0.05$  and stated to have a positive effect. This means that government spendingfield areahealth has a positive effect on regional development inequality in Eastern Indonesia in the 2015-2020 research period.

Research conducted by Taruno (2019) where the results of his research show that local government spending has an effect on regional development inequality. Government spending on the health sector is an effort to fulfill one of the basic rights of the people, namely the right to obtain health services.

The effect of government spending on infrastructure directly to regional development inequality in Eastern Indonesia 2015-2020 indicated by a coefficient of -0.0314 with a significance of  $0.0031 < 0.05$  and is stated to have an effect on the direction of a negative relationship. This means that government spending on infrastructure influences the direction of a negative relationship to regional development inequality in Eastern Indonesia in the 2015-2020 research period. There are several factors causing this to occur, one of which in this study can be seen in data on the realization of government spending on the infrastructure sector in Eastern Indonesia which tends to fluctuate in each region, even in 2020 it has decreased due to the impact of the Covid-19 pandemic. Influence of human development index directly to regional development inequality in the Eastern Region of Indonesia in 2015-2020 it is indicated by a coefficient of -0.0327 with a significance of  $0.000 < 0.05$  and is stated to have an effect with a negative relationship. This means that the human development index shows influence in a negative direction towards regional development inequality so that an increase in the human development index is able to reduce regional development inequality. This can be seen in the human development index data for 12 provinces in Eastern Indonesia which shows that 12 provinces in Eastern Indonesia have achieved the moderate category of human development index.

Influence of economic growth (Y2) directly on regional development inequality (Y3) in Eastern Indonesia in 2015-2020 with a significance of  $0.7797 > 0.05$  and declared no effect. This means that if the economic growth in the Eastern Region of Indonesia increases, but it has not been able to balance regional development in the Eastern Region of Indonesia. Based on the Neoclassical hypothesis put forward by Douglas C North, it raises a prediction about the relationship between the level of national economic development of a country and regional development inequality between regions. Indirect effect of government spending on education on regional development inequality through the human development index and economic growth in 2015-2020 was 0.466 with a p-value of  $0.010 < 0.05$  which means a positive effect. The results of this analysis are also supported by Mongan (2019) The budget allocation for education sector spending can be allocated to provide educational infrastructure and provide educational services to all Indonesians equally so as to create equity in regional development.

The indirect effect of local government spending on health on regional development inequality through the human development index and economic growth in 2015-2020 was 0.394 with a p-value of  $0.024 < 0.05$ , which means a positive effect. When an area has healthy and highly educated human resources, this will have an impact on people's productivity in carrying out economic activities. Then, the level of people's income will increase, and will affect the reduction of development disparities between regions (Lewis, 2017). The indirect effect of local government spending on infrastructure on economic growth through the human development index in 2015-2020 with a p-value of  $0.352 > 0.05$ , which means it has no effect. The results of this study indicate that the amount of local government spending on infrastructure in 2015-2019 and 2015-2020 does not directly affect regional development inequality in Eastern Indonesia through the human development index and economic growth. Based on previous research references sourced from Tadjoeuddin (2019) who found that government spending in infrastructure did not affect regional development inequality, the realization of government spending in the infrastructure sector increased but uneven development resulted in development inequality which could slow down economic growth.

The indirect effect of the human development index on regional development inequality through economic growth in 2015-2020 is -0.375 with a p-value of  $0.000 < 0.05$ , which means it has a negative relationship. Febriyani and Anis (2021) provide that analysis. If wage rates can reflect productivity, the more people who have tertiary education, the higher productivity and the economy will be better. Thus, an increase in the Human Development Index in a region can illustrate that labor productivity has also increased. Then, this will cause income to increase, especially per capita income. When the per capita income of a region increases, it can reduce development disparities between regions. The indirect effect of local government spending on education on economic growth through the human development index in 2015-2020 was 0.855 with a p-value of  $0.001 < 0.05$ , which means a positive effect. The amount of local government spending in the education sector in each province in Eastern Indonesia tends to increase as can be seen from the 2019 realization data, Central Sulawesi

province amounting to Rp. 5.2 trillion, East Nusa Tenggara province amounting to 8.3 trillion, Maluku province amounting to Rp. 3 .4 trillion, Gorontalo province Rp.2.1 trillion, West Papua province Rp.3 trillion, West Sulawesi Rp. 2 Trillion. In 2020, the realization of the Central Sulawesi provincial budget is IDR 5.5 trillion, the East Nusa Tenggara province is IDR 8.5 trillion, the Maluku province is IDR 3.8 trillion, Gorontalo province Rp.4.3 trillion, West Papua province Rp.3.2 trillion, West Sulawesi Rp. 2.4 Trillion.

The indirect effect of local government spending on health on economic growth through the human development index in 2015-2020 was 0.722 with a p-value of  $0.008 < 0.05$ , which means a positive effect. This is in line with research conducted by Nasution et al., (2021) where the results of his research show that government expenditure in the health sector has an effect on economic growth. The government spending on the health budget issued to fulfill one of the basic rights to obtain health services in the form of health facilities and services is a prerequisite for increasing community productivity. The indirect effect of government spending on infrastructure on economic growth through the human development index in 2015-2020 with a p-value of  $0.352 > 0.05$ , which means it has no effect. The results of this research have the same analysis by Panggarti et al., (2022) and Khan et al., (2020) the government infrastructure sector has no effect on economic growth, the realization of regional government spending on infrastructure has increased but uneven development has created development inequality that can slow down economic growth.

## CONCLUSION

Based on the data processed and analyzed, it can be concluded, the results of this study indicate that there are four variables in this study that influence regional development inequality in Eastern Indonesia, these variables are local government expenditures in the education sector, local government expenditures in the health sector, regional government expenditures in the infrastructure sector, and the human development index. Meanwhile, the variable local government spending on infrastructure has no effect on economic growth variables and economic growth variables have no effect on regional development inequality in Eastern Indonesia in 2015-2020. The results of this study indicate that there are three variables that have an indirect effect on regional development inequality in Eastern Indonesia, these variables are local government spending on education and local government spending on health through the human development index and economic growth, as well as the variable human development index indirect effect on regional development inequality through economic growth. Meanwhile, the variable local government spending on infrastructure does not have an indirect effect on regional development inequality through the human development index and economic growth. The government is expected to continue to pay attention and carry out evaluations as a determinant of fiscal policy to pay more attention to infrastructure development in Eastern Indonesia through a review of budgeting and realization of whether it is in accordance with needs so that it is hoped that it will have a better impact directly or indirectly through human development and growth. economy towards equitable distribution of regional development in Eastern Indonesia. The increase in spending on health education and infrastructure needs to be accompanied by an efficient allocation pattern to support equitable development in Eastern Indonesia.

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