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Government Expenditure and Human Development in Indonesia

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Abstract

Backgrounds: Indonesia experiences economic and human resource inequality. This inequality is caused by several factors, one of which is development that focuses on the island of Java. Apart from that, the Indonesian government has designated 62 disadvantaged areas, all of which are outside the island of Java. **Objectives:** This research aims to examine and analyze the direct and indirect influence of capital expenditure and operational expenditure on human development in underdeveloped regions in Indonesia through the regional economy as an intervening variable. Therefore, this research focuses on underdeveloped areas in Indonesia from 2011 to 2021. **Method:** This research is quantitative using the panel regression method with path analysis. The variables used in this research are government spending as an exogenous variable, and human development as an endogenous variable. **Results:** The results of this research show that capital expenditure has a negative effect on human development, while operational and regional economic expenditure has a positive effect on human development in underdeveloped areas. On the other hand, operational spending has a positive effect on the regional economy, but capital spending has a negative effect on the regional economy of underdeveloped regions. Capital expenditure has a negative impact on the regional economy because government spending so far has not met the needs of regional communities, and its value is still relatively low, inefficiency, and development is still focused on urban areas on the island of Java, so there is a need for more inclusive infrastructure investment.

Keywords: Capital Expenditures; Human Development; Operational Expenditures; Regional Economy
JEL Classification: M40; M48

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INTRODUCTION

This research aims to examine and analyze the direct and indirect influence of regional finance in the form of capital expenditure and operational expenditure on human development in underdeveloped regions in Indonesia through the regional economy as an intervening variable. Many aspects are always linked to human development, such as demography, tourism, information and communication technology (ICT), government intervention, and others (Aksentijević et al., 2021; Croes et al., 2020; Haque & Khan, 2019; Teoldo & Cardoso, 2021).

This is because a person has a big impact on his own well-being and plays a role in the productive sector and society if he fulfills the important elements of development

(Mensah, 2019). The main reason to consider the impact of development strategies on specific goals is to prevent unsustainable situations that hinder economic and social progress (Barbier & Burgess, 2020). Of course, there are still several countries in the world that still have human development problems.

In Table 1 you can see the human development index for countries in Southeast Asia. There are 4 countries that are in the very high group, 2 countries are in the high group, and 5 countries are in the medium group. Indonesia itself is included in the high group, but is located in the second position from the bottom in the high group. This position is actually only very slightly different from the Philippines which is in first position in the medium group. So it is very possible for it to decline due to the negative impact of the post-Covid-19 pandemic. This is also in accordance with the explanation of several studies (United Nations Development Programme, 2020).

Table 1 Human Development Index in Southeast Asian Countries

Country	2018	2019	2020	2021	World HDI Rank
Very High					
Singapore	0.940	0.943	0.939	0.939	19
Brunei Darussalam	0.830	0.830	0.830	0.829	51
Malaysia	0.807	0.810	0.806	0.803	62
Thailand	0.795	0.804	0.802	0.800	66
High					
Indoensia	0.710	0.716	0.709	0.705	114
Vietnam	0.697	0.703	0.710	0.703	115
Medium					
Philipine	0.710	0.718	0.710	0.699	116
Timor-Leste	0.605	0.614	0.614	0.607	140
Lao People's Democratic Republic	0.607	0.610	0.608	0.607	140
Cambodia	0.591	0.598	0.596	0.593	146
Myanmar	0.590	0.598	0.60	0.585	149

Source: UNDP, 2022 (1)

One of the reasons why it is difficult to eradicate human development problems is because the population in a country is too large, this is what makes Indonesia the fourth most populous country in the world with a population of more than 260 million people, making it quite difficult to overcome this problem (Ozdemir et al., 2017). Added to this is the fact that Indonesia is the largest archipelagic country in the world which shows enormous ecological, demographic, ecological and social diversity (Hill, 2021). So in implementing development,

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one of the Indonesian Government's efforts to overcome this is by adopting a regional autonomy policy to give regions more freedom in managing their own affairs (Sartika, 2020). With regional autonomy, this allows regions to regulate their own expenditure, especially capital expenditure which is used to acquire fixed assets and operational expenditure which is used to fulfill basic needs and internal services (Susiani & Rusianti, 2022).

Another impact of Indonesia being an archipelagic country is inequality, inequality is caused by unequal development in a region. The Indonesian Central Bureau of Statistics reports that one of the causes of economic and human resource inequality in Indonesia is the economic center which is dominantly located on the island of Java, and is exacerbated by the geographical condition of Indonesia which consists of many separate islands with difficult access (Badan Pusat Statistik, 2023). This BPS report is also strengthened by several previous findings which stated the same thing (Salim & Faoziyah, 2019), where development in the eastern part of Indonesia is still lagging behind and poorer compared to the western region, resulting in an increasingly large growth gap (Suranta et al., 2020). Despite this, eastern Indonesia can still outperform in terms of the best growth rate (Hill, 2021).

To overcome the problem of existing inequality, the Indonesian government has taken action in the form of implementing sound fiscal policies through the *Anggaran Pendapatan dan Belanja Negara* (APBN / State Revenue and Expenditure Budget) in the form of capital expenditure and operational expenditure (Erizal et al., 2022). The use of different capital and operational expenditure budgets in each region is influenced by regional needs and potential (Sutopo & Siddi, 2018). However, with the gap between regions that currently still exists, this has resulted in the existence of districts that are classified as underdeveloped areas spread across various regions of Indonesia, where in 2020 there will still be 62 underdeveloped regions as stipulated in Presidential Regulation (Perpres) No. 63 of 2020 concerning Determination of Underdeveloped Regions for 2020-2024 (Nasution, 2020). From the 62 underdeveloped regions that have been determined, all are outside Java. This also reinforces that in Indonesia there is inequality in the economy and human resources.

Taking into account these thoughts and conditions, and in line with the endogenous growth theory which explains that one of the inputs for economic growth is human development (Bado et al., 2018), Human roles can include knowledge, skills, competencies and other attributes possessed by individuals. And one very important role is when they carry out economic activities as an effort to increase economic growth in the form of human capital (Cvetanović et al., 2015). Many studies assume that human capital only focuses on health and education, but actually human capital can be proxied by the Human Development Index (HDI) (Bosi et al., 2020). HDI is used to measure the level of human development and represents human welfare at the national and regional levels (Ari et al., 2021).

Community welfare will increase if the human development index increases, which is always linked to government expenditure in public spending, both capital expenditure and operational expenditure. Several studies related to capital expenditure and operational expenditure have an indirect influence on human development through the economy. Research that has been conducted shows that capital expenditure for education has a positive impact on tertiary enrollment in Nigeria (Ogbuagu, 2019). In addition, routine government spending on human resource development, such as education and health, has been proven to

have a positive relationship with economic growth in India (Mathews, 2022). Other findings show that investment in education and health through capital and operational spending can contribute to human development and economic growth. However, it is important to ensure proper implementation, accountability and allocation of funds to maximize the impact of such spending on human development (Oluwatobi & Ogunrinola, 2011; Oukhallou, 2020). However, until now there has been no research related to capital and operational expenditure that focuses on underdeveloped areas as material for research studies.

This research aims to examine and analyze the direct and indirect influence of regional capital and operational expenditure on human development through the economy as an intervening variable in underdeveloped regions in Indonesia. This research focuses on capital and operational expenditure and its relationship to economic inequality between regions in Indonesia, especially in underdeveloped areas. Based on the previous background and explanation, a research hypothesis can be formed, namely that capital and operational expenditures have an indirect effect on human development through the economy.

In this section we examine and analyze the relationship between each variable according to the path in the research model, namely the influence of capital expenditure and operational expenditure on human development as well as capital expenditure, operational expenditure, economic growth on human development, although this study still has various limitations.

One of the studies conducted in several countries in South Asia found that the economic growth of the sample countries had a positive impact on the development of financial innovation and increased investment for human resource development in the future (Qamruzzaman et al., 2020). Other research shows that human resource development has proven to be significant and contributes to economic growth and job opportunities in developing countries (Khan & Chaudhry, 2019). Similar research found that economic growth has a clear influence on human development indicators in several Arab countries (Omar, 2020).

Other research conducted in Nigeria found findings that explained that government spending on rural development had a positive marginal impact on human development (Edeme & Nkalu, 2019). Meanwhile, research conducted in Indragiri Hulu district, Indonesia, found that partial capital expenditure did not have a significant effect on the human development index (Heriasman, 2020). In the operational expenditure variable, there is research conducted in Nigeria which found that routine expenditure in the health sector has a weak and insignificant influence on human development, while routine expenditure on education has a significant positive influence. (Auwalu et al., 2023). Research in Nigeria found that routine spending in general (in the health and education sectors) has no influence on human development (Muhammed et al., 2023). Research conducted in Nigeria examined capital expenditure on economic growth using the ARDL model. These findings show that capital expenditure has a positive and significant impact on economic growth in both the short and long term (Aluthge et al., 2021). Further research conducted in Nepal with the same model and variables had different findings. The findings obtained show that capital expenditure does not contribute to economic growth (Paudel, 2023). Other research conducted in East African countries using the OLS method found that capital expenditure had a positive and significant effect on economic growth (Waweru, 2021).

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Regarding the operational expenditure variable, research conducted in Nigeria found that routine government expenditure had a significant negative impact on economic growth (Onifade et al., 2020), Meanwhile, research conducted in Ghana found that routine non-interest spending and interest payments were detrimental to economic growth (Nyarko-Asomani et al., 2019). The experience of research conducted in Vietnam found that routine spending has a significant positive impact on the Vietnamese economy even though there is no evidence that confirms the relationship between development investment spending and economic growth. (Nguyen, 2019).

RESEARCH METHOD

In a neoclassical context, government spending only influences a country's transition growth rate but the steady-state growth rate remains unchanged (Aluthge et al., 2021). However, recent research on endogenous growth has produced a number of models that link government capital to a country's long-term growth rate. (Devarajan et al., 1996; Gemmell et al., 2016). An innovative characteristic of the endogenous growth model of government policy is that government spending can determine the level of a country's output path and steady-state growth rate (Gemmell et al., 2016). This provides a way for the application of endogenous growth models of government policy in the analysis of the impact of government spending on economic growth. Therefore, government spending is used as a proxy for capital which is then decomposed into capital spending and operational spending using the aggregate production function (Yt) that integrates government capital expenditure. The Cobb-Douglas production function as the aggregate production function of the economy is determined within the framework of the endogenous model in the following equation:

$$Y_t = f(K_t, g_{1t}, g_{2t}) \quad (1)$$

Where Y is the level of output, K is available private capital, g1 and g2 are components of government expenditure and t is the time period. Like Gemmell et al. (2016), private capital is left behind to focus on analyzing government spending components. However, endogenous growth theory also emphasizes the importance of human development in economic growth (Gemmell et al., 2016). For this reason, human development needs to be included in the previous equation, namely:

$$Y_t = f(HD) = f(g_{1t}, g_{2t}) \quad (2)$$

Where HD is human development. To make it easier to explain this equation, it can be explained in the following diagram:

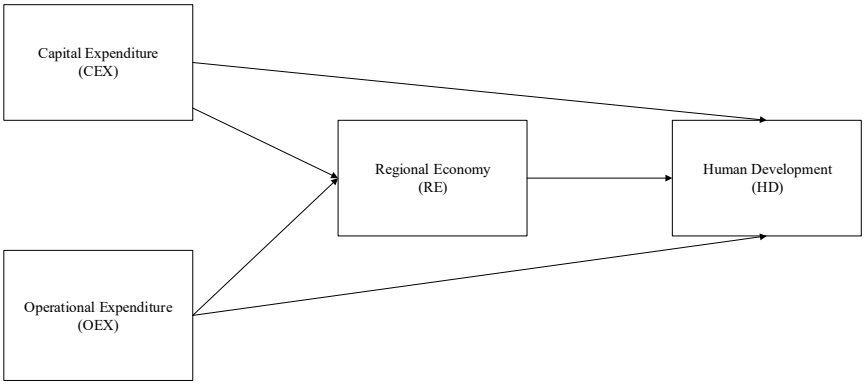

Figure 1. Research Conceptual Framework Diagram

This research focuses on all districts/cities that are classified as underdeveloped areas in Indonesia. An area is classified as a disadvantaged area based on several criteria, namely community economy, human resources, facilities and infrastructure, regional financial capacity, accessibility; as well as regional characteristics. This has been determined based on Presidential Regulation of the Indonesian Government Number 63 of 2020 concerning the Determination of Disadvantaged Regions for 2020-2024. From this presidential regulation, there are 62 districts that are classified as underdeveloped areas. This research was conducted over a 12 year period, namely from 2011 to 2022 (Presiden of Republic Indonesia, 2020).

This research uses a multiple linear regression analysis method using panel data and then path analysis will be carried out to test the hypothesis. The first step taken is to determine the estimation model by carrying out the Chow test, Hausman test, and Lagrange multiplier to determine whether the model used is a common effect model or random effect model or fixed effect model. After models

The best estimate has been determined, then the assumptions and suitability of the model are tested, namely normality, multicollinearity, heteroscedasticity and autocorrelation tests. After testing the assumptions and suitability of the model, the results are interpreted and path analysis is carried out to test the hypothesis (Putria et al., 2023; Ratnasari et al., 2023).

RESULTS AND DISCUSSION

Based on the results of this research study, the following is a table of descriptive statistical analysis results with all research variables, namely Capital Expenditures (CEX), Operational Expenditures (OEX), Human Development (HD), and Regional Economy (RE). The results of data processing attached in Table 2 obtained the following findings; The dependent variable in this research is human development. Based on the results of these descriptive statistics, the average amount of human development in Indonesia as measured by the human development index from 744 observations of underdeveloped areas in Indonesia is 56.97. The maximum value of human development is 69.91 which is human development from Nabire Regency, Central Papua Province (which is the result of the

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expansion of Papua Province) in 2021. The minimum value of human development is 21.12 which is human development from Nduga Regency, Mountain Papua Province (which is the result of the expansion of Papua Province) in 2011. Apart from that, human development has a standard deviation value of 7.7, which is smaller than the mean value, this shows that the data on the human development variable has varied data.

Table 2 Descriptive Statistics Results

	CEX	OEX	PD	HD
Mean	2.22E+11	5.43E+11	3065755	56.97519
Maximum	2.31E+11	1.61E+12	4824200	69.91000
Minimum	2.68E+10	7.43E+10	443000	21.12000
Std. Dev.	1.16E+11	1.99E+11	51.55991	7.778566
Observation	744	744	744	744

Source: Processed Secondary Data by Author, 2023 (2)

The intervening variable in this research is the regional economy. Based on the results of these descriptive statistics, the size of the regional economy in Indonesia as measured by gross regional domestic product from 744 observations of underdeveloped regions in Indonesia was found to be an average of 3.06 trillion. The maximum value of the regional economy is 4.82 trillion, which is the regional economy of Teluk Bintuni Regency, West Papua Province in 2021. The minimum value of the regional economy is 4.4 billion, which is the regional economy of Tambrauw Regency, Southwest Papua Province (which is the result of the expansion of West Papua Province) in 2011 Apart from that, the regional economy has a standard deviation value of 51.55991 trillion, which is greater than the mean value, this shows that the data on regional economic variables has uniform or invariable data.

The independent variables in this research are capital expenditure and operational expenditure. In the capital expenditure variable, based on the results of these descriptive statistics, the amount of capital expenditure from 744 observations of underdeveloped areas in Indonesia is an average of 222 billion rupiah. The maximum value of capital expenditure is 231 billion rupiah which is capital expenditure from Central Mamberanmo Regency, Papua Mountain Province (which is the result of the expansion of Papua Province) in 2016. The minimum value of capital expenditure is 26.8 million rupiah which is capital expenditure from Mappi Regency, South Papua Province (which is results of the expansion of Papua Province) in 2018. Apart from that, capital expenditure has a standard deviation value of 116 billion rupiah, which is a value greater than the mean value, this shows that the data on the capital expenditure variable has varied data.

Regarding the operational expenditure variable, based on the results of descriptive statistics, the average capital expenditure from 744 observations of underdeveloped areas in Indonesia is 543 billion rupiah. The maximum value of operational expenditure is 1.6 trillion rupiah, which is operational expenditure from Dogiyai Regency, Central Papua Province (which is the result of the expansion of Papua Province) in 2017. The minimum value of operational expenditure is 74.3 million rupiah, which is operational expenditure from Malaka Regency, East Nusa Tenggara Province in 2021 Apart from that, operational expenditure has a standard deviation value of 199 billion rupiah, which is smaller than the mean value, this shows that the data on the operational expenditure variable has varied data.

Further analysis was carried out on each model by testing the best model, classical assumption testing, path analysis and hypothesis testing. In the classical assumption test, this research did not carry out normality tests and autocorrelation tests so only multicollinearity tests and heteroscedasticity tests were carried out. This is because if the number of observations is less than thirty, the normality test is used to check whether the error term approaches a normal distribution; however, if the observations exceed thirty, a normality test is not necessary because the Central Limit Theorem states that the distribution of the error term is approximately normal (Zhang et al., 2022). Meanwhile, the autocorrelation test was not carried out because autocorrelation testing on data that is not a time series (cross section or panel) would be useless or meaningless. (Rahmawati & Yuniarti, 2020).

The Chow test is used to choose between the common effect model and the fixed effect model. To carry out the Chow test, use the test criteria if (p-value > 0.05) then the common effect model is selected but if (p-value < 0.05) then the fixed effect model and continue with the Hausman test (Han & Lee, 2022; Liu & Zhuang, 2023). The chow test results shown in Table 3 are as follows:

Table 3 First Model Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	85.963814	(61,68)	0.0000
Cross-section Chi-square	1610.491699	61	0.0000

Source: Processed Secondary Data, 2023 (3)

Based on the test results shown in Table 3, it is known that both the p-value F and chi-square for both models are smaller than α. This is in accordance with the test criteria that have been described, it can be seen that the results of the Chow test, namely the chi-square cross section of 0.000, are smaller than 0.05, so it can be concluded that it is better to use the Fixed Effect Model rather than the Common Effect Model.

The Hausman test is used to choose between the fixed effect model and the random effect model. To carry out the Hausman test, use the test criteria if (p-value > 0.05), then the random effect model is selected but if (p-value < 0.05) then the fixed effect model (Aït-Sahalia & Xiu, 2019; Kuersteiner, 2019). The results of the Hausman test shown in Table 4 are as follows:

Table 4 First Model Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	9.211327	2	0.0100

Source: Processed Secondary Data, 2023 (4)

Based on the test results shown in Table 4, it is known that the random cross-section p-value is smaller than α. This is in accordance with the test criteria that have been described, it can be seen that the results of the Hausman test, namely the random cross-section, is 0.0035, which is smaller than 0.05, so it can be concluded that it is better to use the Fixed Effect Model than the Random Effect Model. So, from the results of the Chow test and Hausman test it can be concluded that the best model for the direct path is to use the fixed effect model.

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The next step is to test the classical assumptions by carrying out multicollinearity and heteroscedasticity tests. The results of the classical assumption test are presented in the following table:

Table 5 Classical Assumption Test Results of the First Model

Variable	VIF	Chi-square	Prob.
CEX	1.20		
OEX	1.20		
Heteroscedasticity		571.55	0.0000

Source: Processed Secondary Data, 2023 (5)

Based on the test results, the Variant Inflation Factor (VIF) value for each independent variable can be determined. All VIF values for the independent variables, both direct and indirect, have no value greater than 10. So it can be concluded that the independent variables in this study are free from symptoms of multicollinearity. Based on the results of the hederoscedasticity test, the Chi-Square Probability value was 0.0000. Because the probability value is 0.0000 < 0.05 (α value), it can be concluded that this research data shows symptoms of heteroscedasticity in the first model.

Furthermore, after testing, the regression results obtained for the first model are as follows:

Table 6 First Model Regression Results

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-13.73899	1.033325	-13.29590	0.0000
Capex	-0.079197	0.037774	-2.687774	0.0074
Opex	0.698206	0.029466	18.48398	0.0000

Source: Processed Secondary Data, 2023 (6)

Based on the regression results shown in Table 6, the regression equation used in this study is as follows:

$$RE = -13.73899 + (-0.079197)Capex + 0.698206Opex + \varepsilon \quad (3)$$

The regression equation can be explained as follows: A constant value of -13.73899 means that if capital expenditure and operational expenditure are considered constant or unchanged, the value of the regional economy is decrease by 13.73899. The regression coefficient value for the capital expenditure variable is -0.079197, which means that when capital expenditure increases by 1 rupiah, the regional economy decreases by 0.079197. Assuming operational expenditure is considered constant. The regression coefficient value for the operational expenditure variable is 0.698206, which means that when operational expenditure increases by 1 rupiah, the regional economy increases by 0.698206. Assuming capital expenditure is considered constant.

The chow test results shown in Table 7 are as follows:

Table 7 Second Model Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	301.804081	(61,679)	0.0000
Cross-section Chi-square	2484.542931	61	0.0000

Source: Processed Secondary Data, 2023 (7)

Based on the test results shown in Table 7, it is known that both the p-value F and chi-square for both models are smaller than α. This is in accordance with the test criteria that have been described, it can be seen that the results of the Chow test, namely the chi square cross section of 0.000, are smaller than 0.05, so it can be concluded that it is better to use the Fixed Effect Model rather than the Common Effect Model. The results of the Hausman test are shown in Table 8 as follows:

Table 8 Second Model Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	45.964065	3	0.0000

Source: Processed Secondary Data, 2023 (8)

Based on the test results shown in Table 8, it is known that the random cross-section p-value is smaller than α. This is in accordance with the test criteria that have been described, it can be seen that the results of the Hausman test, namely the random cross-section of 0.000, are smaller than 0.05, so it can be concluded that it is better to use the Fixed Effect Model than the Random Effect Model. So, from the results of the Chow test and Hausman test it can be concluded that the best model for the direct path is to use the fixed effect model.

The next step is to test the classical assumptions by carrying out multicollinearity and heteroscedasticity tests. The results of the classical assumption test are presented in the following table:

Table 9 Second Model Classical Assumption Test Results

Variable	VIF	Chi-square	Prob.
CEX	1.30		
OEX	1.20		
RE	1.11		
Heteroscedasticity		46.00	0.0000

Source: Processed Secondary Data, 2023 (9)

Based on the test results, the Variant Inflation Factor (VIF) value for each independent variable can be determined. All VIF values for the independent variables, both direct and indirect, have no value greater than 10. So it can be concluded that the independent variables in this study are free from symptoms of multicollinearity. Based on the results of the hederoscedasticity test, the Chi-Square Probability value was 0.0000. Because the probability value is 0.0000 < 0.05 (α value), it can be concluded that this research data shows symptoms of heteroscedasticity also in the second model.

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After testing, the regression results obtained for the indirect path are as follows:

Table 10 Second Model Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-79.01537	5.895796	-13.40198	0.0000
CEX	-1.372826	0.150569	-9.117557	0.0000
OEX	6.210250	0.235348	26.38749	0.0000
RE	1.443423	0.194926	7.404968	0.0000

Source: Processed Secondary Data, 2023 (10)

Based on the regression results shown in table 10, the regression equation used in this research is as follows:

$$HD = -79.01537 + (-1.372826)\text{Capex} + 6.210250\text{Opex} + 1.443423\text{RE} + \varepsilon \quad (4)$$

The regression equation can be explained as follows: A constant value of -79.01537 means that if capital expenditure, operational expenditure and the regional economy are considered constant or unchanged, then human development has a value decrease by 79.01537. The regression coefficient value for the capital expenditure variable is -1.372826, which means that when capital expenditure increases by 1 rupiah, human development decreases by 1.372826. Assuming operational expenditure and regional economy are considered constant. The regression coefficient value for the operational expenditure variable is 6.210250, which means that when operational expenditure increases by 1 rupiah, human development increases by 6.210250. Assuming that capital expenditure and regional economy are considered constant. The regression coefficient value for the regional economic variable is 1.443423, which means that when the regional economy increases by 1 rupiah, human development increases by 1.443423. Assuming that capital expenditure and operational expenditure are considered constant.

After the regression analysis is carried out, path analysis is carried out first to support the results of hypothesis testing which will be carried out next. To simplify path analysis, the previous regression results will be combined with a conceptual framework graphic as in Figure 2, which is as follows:

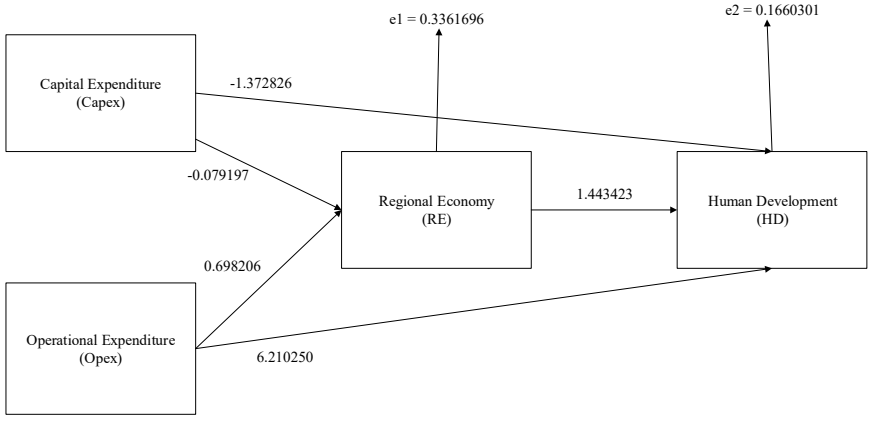

Figure 2 Path Analysis Diagram

Based on Figure 2, it is known that the direct influence that capital expenditure has on human development is -1.372826. Meanwhile, the indirect effect of capital expenditure through the regional economy on human development is -0.079197 x 1.443423 = 1.1431477. Based on the results of these calculations, it can be seen that the direct influence is greater than the indirect influence. These results show that capital expenditure has a direct or indirect influence on human development through the economy. However, the channel that has the greatest influence is capital expenditure which has a direct influence on human development.

Other results of this research show that the direct influence that operational spending has on human development is 6.210250, while the indirect influence of operational spending through the regional economy on human development is 0.698206 x 1.443423 = 1.007806. Based on the results of these calculations, it can be seen that the indirect influence is greater than the direct influence. These results show that operational spending has a direct and indirect influence on human development through the economy. However, the channel that has the greatest influence is operational spending which has an direct influence on human development.

Based on hypothesis testing using path analysis, the finding is that capital expenditure has a direct influence on human development in underdeveloped areas in Indonesia in 2011-2022. This result is based on the coefficient on the direct path being greater than via the indirect path. Capital expenditure is expenditure made by the government to purchase, build, or improve physical assets such as infrastructure and public facilities, called government capital expenditure. This includes investments in sectors such as roads, bridges, government buildings, irrigation, and energy. This investment basically aims to increase the productivity, competitiveness and economic capabilities of a country (Yuanita et al., 2023).

Regional government expenditures whose benefits exceed one budget will increase routine group expenses such as maintenance costs, fixed assets or wealth, and general administration costs. This includes spending on the development of public services and regional apparatus. With data from 2011 to 2022, this research shows that the influence of capital expenditure on the Human Development Index has a negative impact; the value of capital expenditure will decrease if the Human Development Index increases.

The phenomenon of capital expenditure having a negative impact on HDI occurs because the amount of capital expenditure allocated to improve community welfare is still relatively low and because the allocation of capital expenditure has not been carried out effectively. (Zebua & Adib, 2014). Another factor is that capital expenditure allocated is too focused on government affairs/apparatus spending, such as buying official residences and official vehicles, as well as building too many government buildings (Shenia et al., 2021). Apart from that, this phenomenon is also caused by capital expenditure with the aim of investing in a project which turns out to be stopped while the project is underway as well as capital expenditure that is not in accordance with the need to improve community welfare (Regina, 2022).

The costs allocated by the government for asset procurement and related expenditure have the potential to reduce other costs, such as community development costs. Costs in this

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area should have fallen with the government's efforts to improve people's quality of life, in the hope that people's needs would increase, and the state would improve the quality of life of its people, but this did not happen. This uneven allocation of capital expenditure funds can affect the quality of the HDI. In other words, if capital expenditures issued by regional governments cannot be allocated evenly and effectively, the human development index will decrease (Tjodi et al., 2018).

Based on hypothesis testing using path analysis, the finding was that operational spending had an indirect influence on human development through the regional economy in underdeveloped areas in Indonesia in 2011-2022. This result is based on the coefficient on the indirect path being greater than via the direct path.

In further analysis, operational expenditure is local government consumption expenditure. With increasing operational spending, local government consumption will also increase. This increase in consumption has a multiplier effect on the economy, especially the trade and services sectors. Ultimately this will encourage regional economic growth (Karlinda et al., 2015). According to the Regulation of the Minister of Finance of the Republic of Indonesia concerning Procedures for Submitting Regional Financial Information, Monthly Data Reports and Other Regional Government Reports, it explains that operational expenditure includes, among other things, personnel expenditure, goods and services expenditure, interest expenditure, subsidy expenditure, grant expenditure, and social aid expenditure (Peraturan Menteri Keuangan Republik Indonesia, 2020).

Based on these considerations, the standard of human life will actually increase if the government budget is allocated appropriately to help the performance of units in serving the community. Education and health matters receive the majority of regional government operational spending. The allocation of operational expenditures for personnel expenditures to provide sufficient and competent health personnel in health facilities managed by regional governments can reduce maternal mortality rates and infant mortality rates, thereby increasing Life Expectancy and HDI. Allocation of operational expenditures for personnel expenditures for educators and education personnel in elementary schools, junior high schools, or equivalent forms of education managed by local governments can increase school enrollment rates, expected length of schooling, and HDI (Dewi & Supadmi, 2016).

Operational expenditure (employee expenditure as well as goods and services) is the main expenditure that must be spent so that the government runs well. The character of operational spending is raw and standardized, where the use of items is difficult to change. However, it is important to remember that operational spending has short-term benefits, and this is not an ideal condition for the long-term economy (Karlinda et al., 2015). For this reason, operational expenditure must be managed well, effectively and efficiently.

CONCLUSION

This research aims to examine and analyze the direct or indirect influence of capital expenditure and regional operational expenditure on human development through the economy as an intervening variable in underdeveloped regions in Indonesia. This research found that capital expenditure has a direct influence on human development through the regional economy in underdeveloped areas in Indonesia in 2011-2022. On the other hand, operational spending has an indirect influence on human development in underdeveloped areas in Indonesia in 2011-2022.

The phenomenon of capital expenditure having a negative impact on the Human Development Index (HDI) in underdeveloped areas in Indonesia can be caused by many things. One of them is the allocation of funds that is less effective, the value of capital expenditure is still low to improve community welfare. In addition, the focus of capital expenditure on government affairs and apparatus as well as excessive construction of government buildings causes a mismatch with the real needs of the people in the regions. The increase in capital expenditure for health due to the COVID-19 pandemic is an important factor. As a result, the economic and educational sectors were disrupted. Apart from that, the unequal allocation of capital expenditure funds can have an impact on the quality of HDI and reduce the costs of community development. Increasing HDI can be done if expenditure on personnel and goods and services is allocated appropriately to the education and health sectors, because it can improve the quality of teaching staff and health workers. , maternal and infant mortality rates can decrease, and school participation and expected length of schooling. Operational spending has short-term benefits, but it is also important to consider long-term economic strategies that can help increase HDI in a sustainable manner. Therefore, it is important for local governments to be wiser in allocating capital and operational expenditure to achieve the goal of improving the quality of life of the community and the Human Development Index.

In an effort to improve the welfare of people in underdeveloped areas, local governments should optimize the allocation of capital expenditure, which is allocated effectively and on target to provide maximum benefits for the community. In addition, it is important to focus less on excessive spending on apparatus and concentrate more on projects and programs that have a direct impact on community welfare. Based on the findings of this research, it is hoped that further research can be carried out using other variables besides capital expenditure and operational expenditure, so that we can get a more comprehensive picture of all the variables that influence human development and the regional economy in underdeveloped areas.

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