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THE INFLUENCE OF INFRASTRUCTURE INEQUALITY AND CAPITAL ON HUMAN DEVELOPMENT COMPONENTS IN DISTRICTS/CITIES OF WEST NUSA TENGGARA PROVINCE 2017-2021

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Abstract

The inequality in education and health infrastructure has resulted in human development indicators not being achieved optimally. Infrastructure and spending in the education and health sectors have increased but the average length of schooling and life expectancy are low, while GRDP per capita tends to decrease from 2017 to 2021. The purpose of this study is to determine and analyze the effect of infrastructure inequality and government spending on education and health on human development. The results of the analysis show that the panel data regression estimation. In equation I, infrastructure inequality and education spending partially affect the average years of schooling. In equation II, health spending and health infrastructure inequality partially affect life expectancy. In equation III, education infrastructure inequality and life expectancy partially negatively affect GRDP per capita. Education and health expenditure, average years of schooling, and health infrastructure inequality partially have no effect on GRDP per capita. Suggestions that researchers provide based on the results of the study are to build equitable education and health infrastructure according to community needs. Effective and efficient use of education and health expenditure budgets according to community needs.

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INTRODUCTION

The government as the executor of development requires quality human resources as the basic capital of development. Human development is the main goal of a country's development. Human development is referred to as the process of choice for the population to be knowledgeable and educated, live long and healthy, and have a decent life (Asmawani & Pangidoan, 2021). Humans have the knowledge and education skills needed in life as measured by the average years of schooling achieved (Mahulae, 2024). Humans have a healthy and long life measured by life expectancy (Aningtyas et al., 2015). Humans have a decent life and an established economy seen from the per capita income received at a certain period of time (Panorama et al., 2021).

Quality human development requires the role of government through spending on the education and health sectors. Expenditures in the education and health sectors are physical capital issued by the government in producing productive human resources so as to increase human development (Maryozi et al., 2022). Education spending plays an important role in influencing average years of schooling (Noviansyah et al., 2019). Health spending helps develop the quality and quantity of public health, especially life. A good level of health has the potential to be more productive in working so as to increase income (Miranda-Lescano et al., 2023). Quality human development requires efforts to improve the quality of human resources such as adequate infrastructure in an area.

Social infrastructure such as basic education and health services play an important role in improving human development and determining productivity in a region (Das & Dutta, 2021). Educational infrastructure can improve the quality of human development through improving skills and knowledge (Sinaga, 2020). Health infrastructure can improve the quality of human development health so that per capita income will also increase (Parulian & Mahendra, 2022).

Provinces in Eastern Indonesia (KTI) have lower per capita income than regions or provinces in Western Indonesia (KBI). The low per capita income in the eastern part of Indonesia compared to the western part is due to the low quality of human resources, limited infrastructure, weak government and public institutional capacity, low community participation in development, and the geomorphology of the region which is mountainous and hilly.

Table 1. GRDP Per Capita (Thousand Rupiah) of Indonesia and Provinces in Eastern Indonesia (KTI) 2017-2021

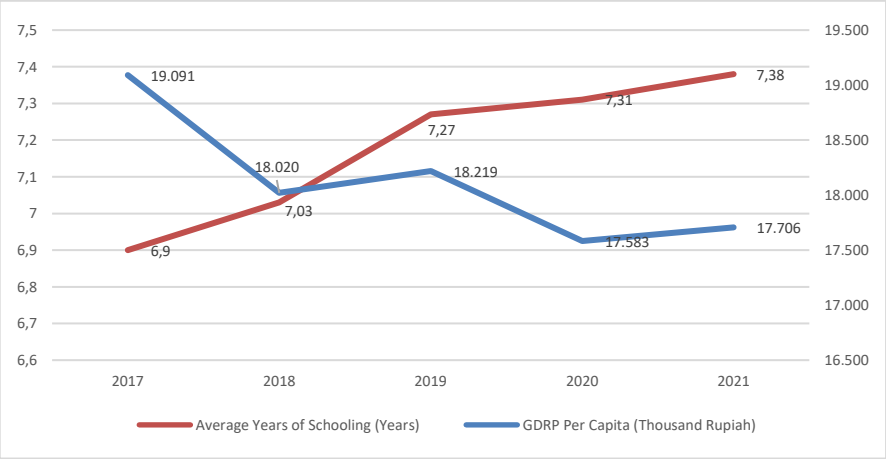
Provinsi	2017	2018	2019	2020	2021
Bali	34,129	35,896	37,297	34,216	32,975
NTB	19,091	18,020	18,219	17,583	17,716
NTT	11,863	12,273	12,761	12,960	13,092
Sulawesi Utara	32,297	33,911	35,687	33,670	34,787
Sulawesi Tengah	32,860	39,049	42,054	45,052	49,587
Sulawesi Selatan	33,234	35,243	37,474	36,246	37,572
Sulawesi Tenggara	31,894	33,278	35,309	35,708	36,581
Gorontalo	21,477	22,538	24,167	24,313	24,649
Sulawesi Barat	22,001	22,953	24,163	22,666	22,896
Maluku	15,942	16,607	17,556	16,688	17,020
Maluku Utara	19,192	20,309	21,524	21,915	25,199
Papua Barat	62,169	64,499	64,418	54,487	52,980
Papua	45,577	48,069	40,203	32,108	36,431
Indonesia	**37,851**	**39,340**	**41,021**	**39,778**	**40,780**

Source: Central Bureau of Statistics, 2021

Table 1.1 shows that GRDP per capita in the provinces in Eastern Indonesia (KTI) has fluctuated from 2017-2021. West Papua Province is the province with the highest average GRDP per capita, which is IDR 52,980. Meanwhile, East Nusa Tenggara Province is the province with the lowest average GRDP per capita in Eastern Indonesia (KTI), which is IDR 12,590. Meanwhile, based on data from 2017-2021, GRDP per capita of West Nusa Tenggara Province fluctuates and is still far behind the average national economic growth. The highest GRDP fluctuation occurred in 2017 at IDR 19,091 and the lowest and contracted in 2020 at IDR 17,583.

Human capital is very important in determining the productivity of an economy through education, health and income. Human capital is very important in determining the productivity of an economy through education, health and income (Kustanto, 2020). Educational achievement seen from community education graduates based on education levels is a measure of the government's success in improving the quality of human resources (Wardhana et al., 2019)

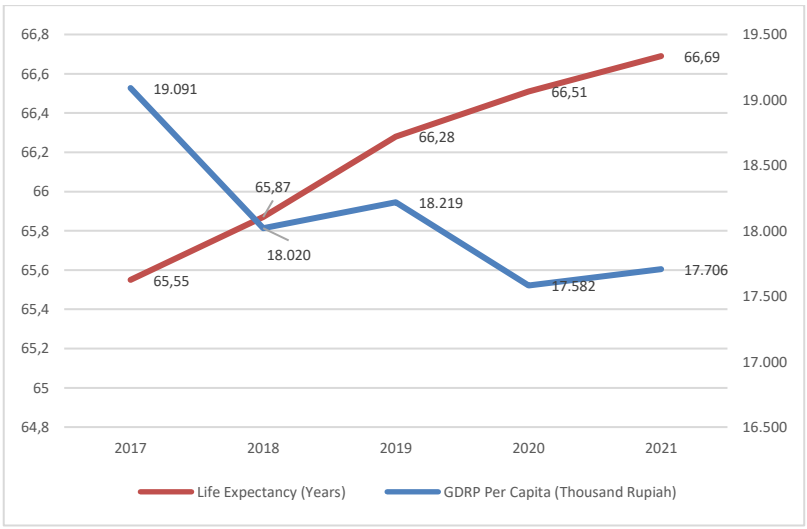
Figure 1. Average Years of Schooling (Years) and GRDP Per Capita (Thousand Rupiah) of West Nusa Tenggara Province 2017-2021



Source: Central Bureau of Statistics of West Nusa Tenggara, 2021

The average length of schooling in West Nusa Tenggara Province has increased from 6.9 in 2017 to 7.38 in 2021 or equivalent to the first grade of junior high school (SMP). The average number of years of schooling that has increased every year indicates that the quality of education is getting better every year. The increase in the average number of years of schooling each year also shows that public awareness of the importance of education is getting better (Swastika & Arifin, 2023).

Figure 2. Life Expectancy (Years) and GRDP Per Capita (Thousand Rupiah) of West Nusa Tenggara Province in 2017-2021



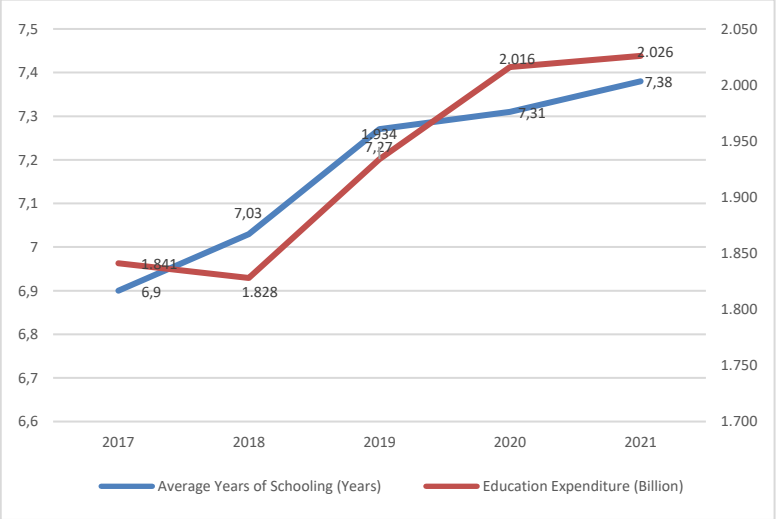
Source: Central Bureau of Statistics of West Nusa Tenggara, 2021

Life expectancy is an important indicator that reflects the level of public health in a region as a result of the implementation of development results in the health sector (Hepi & Zakiah, 2018).

Life expectancy in West Nusa Tenggara Province has increased, from 65.55 in 2017 to 66.69 in 2021. The increasing life expectancy rate provides an interpretation that the level of health has increased. An increase in life expectancy illustrates improvements in nutrition and public awareness of health and the environment so that it will have an impact on increasing population productivity which will have a positive impact on income earned. Increased life expectancy can increase productivity and lead to increased per capita income (Putri et al., 2022).

Improving the quality of human development cannot be separated from the role of the government in allocating budgets to the education and health sectors. Education expenditure is one of the budgets used to improve the quality of human resources. Education function expenditure in West Nusa Tenggara Province fluctuates and tends to increase, from 1,841 billion (36% of the APBD) in 2017 to 2,026 billion (37% of APDB) in 2021. A large percentage of the education budget is allocated to provide educational infrastructure and provide education services evenly along with the increasing population (Maryozi et al., 2022).

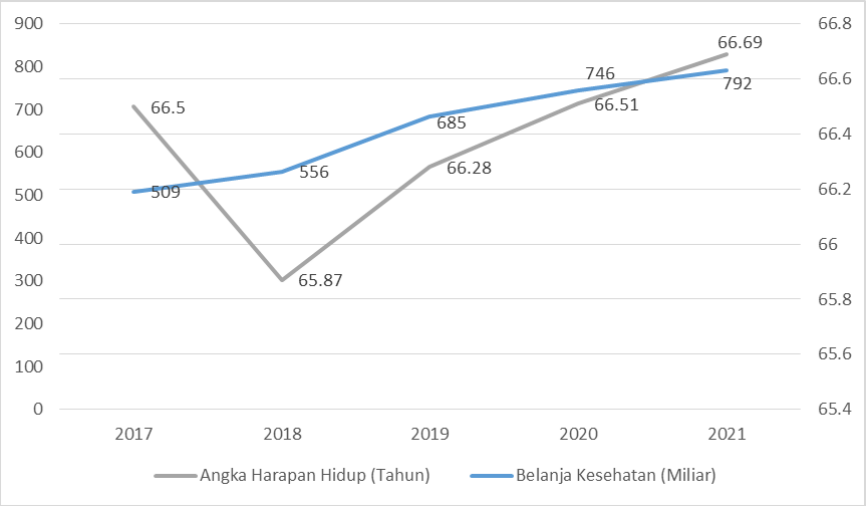
Figure 3. Education Expenditure (Billion) and Average Years of Schooling (Years) of West Nusa Tenggara Province 2017-2021



Source: Direktorat Jenderal Perimbangan Keuangan, 2021

Health expenditure is one of the government budgets used to improve the standard of living and quality of human resources in addition to education expenditure. Based on Law of the Republic of Indonesia Number 36 of 2019, health funds are allocated at least 10% of the APBD.

Figure 4. Health Expenditure (Billion) and Life Expectancy (Years) of West Nusa Tenggara Province in 2017-2021

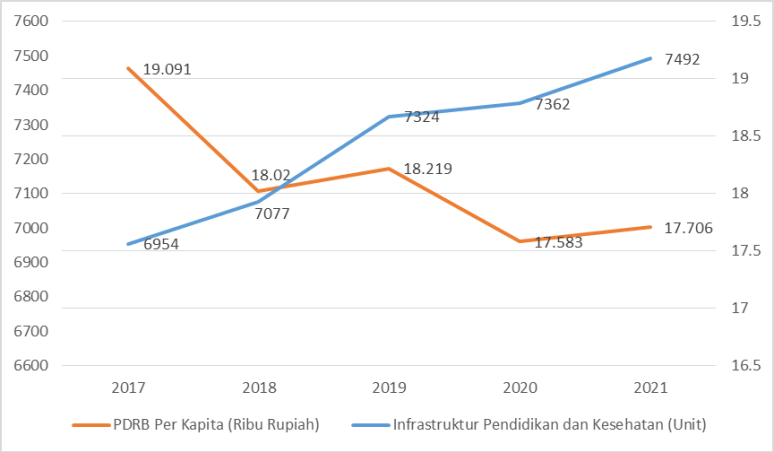


Source: Direktorat Jenderal Perimbangan Keuangan, 2021

Health function expenditure in West Nusa Tenggara Province has increased, from 509 billion (10% of the APBD) in 2017 to 792 billion (14% of APDB) in 2021. The allocation of health funds from the APBD is used for the physical development of health facilities which will become physical capital. Health expenditure is one type of local government budget that is used to buy facilities such as hospitals, subsidize drugs or pay hospital or posyandu workers or anything in the health sector in the district or city area (Amru & Sihaloho, 2020).

The quality of human resources is also highly dependent on the availability of facilities and infrastructure such as the availability of education, health, and other infrastructure services (Huda & Indahsari, 2021). Social infrastructure is one of the important factors that determine per capita income. Social infrastructure includes schools and hospitals (Olaoye et al., 2020). According to Munawaroh & Haryanto (2020), increasing the quality and quantity of equitable education and health infrastructure can achieve high economic growth. Research conducted by Sarifah et al., (2020) and Amalia (2019) shows that education and health infrastructure affect GRDP. Conditions that occur in West Nusa Tenggara Province show that the availability of education and health infrastructure has always increased, but per capita income has fluctuated with a downward trend from 2017 to 2021. The fluctuating Gross Regional Domestic Product (GRDP) per capita with a downward trend causes uncertainty for development and community welfare.

Figure 5. GRDP Per Capita (Thousand Rupiah) and Education & Health Infrastructure (Unit) of West Nusa Tenggara Province (2017-2021).



Source: Central Bureau of Statistics of West Nusa Tenggara, 2017-2021

Education infrastructure during 2017-2021 has increased every year. The highest increase in education infrastructure occurred in 2019 with 7,126 units or an increase of 339 units from the previous year. The availability of quality educational facilities can ultimately improve the quality of human resources. Research conducted by Das & Dutta (2021) shows that educational infrastructure can improve human development. The educational infrastructure used in this study is the number of schools covering elementary and senior high schools both public and private in 2017-2021 in the city districts of West Nusa Tenggara Province. This is in accordance with the government program, namely compulsory twelve-year education, which means that every resident who enters school age is required to take education up to high school level or equivalent. The government is obliged to finance and provide facilities so that the school-age population can pursue education up to senior high school (Iranisa & Nasution, 2022).

According to Zamzami (2014) health infrastructure is very important because it can keep people always in a healthy condition so that it is easy and smooth to carry out economic activities. Research conducted by Aningtyas et al., (2015) shows that health infrastructure has a positive and significant effect on the quality of human resources. Health infrastructure in this study uses the number of health units of public hospitals and health centers in 2017-2021 in the city districts of West Nusa Tenggara Province. Public hospitals have complete health facilities, provide services in all fields and types of diseases and are a reference for overcoming various diseases. Puskesmas is a health service with cheaper check-up and medicine costs and its existence spreads throughout the region so that it is easily accessible to the community.

Health infrastructure during 2017-2021 fluctuates with an increasing trend. From the data, it is known that the availability of the least health infrastructure is in 2017 with 196 units, while the most is in 2021 with 207 units. The

reduction in the number of health infrastructure units in 2019 in West Nusa Tenggara was caused by the earthquake in 2018 which caused heavy damage in North Lombok and East Lombok districts. However, the number of health infrastructure units showed an increase in 2020. This is because the government rehabilitated and reconstructed health infrastructure affected by the earthquake. This improvement in health infrastructure shows the government's seriousness towards the level of public health.

In reality, not all regions in a country can meet the needs of their people because not all regions have a high level of income, in addition to the different geographical conditions of each region triggering inequality or infrastructure inequality. Inequality indicates a difference in the speed of development between one region and another. According to Todaro & Smit (2006) defines that capital investment in public services such as education and health is an important factor in economic development. According to Bambang & Setiarso (2020) infrastructure inequality shows inequality in the availability of facilities between regions. In the education sector, education equity is still experiencing various obstacles such as the development of educational facilities in rural and remote areas is still very minimal and inadequate. In the health sector, the development of health facilities, especially the development of hospital facilities, is centralized in Mataram City. It is important to monitor changes in infrastructure over time to illustrate the extent of successful development by the government. It is necessary to identify the infrastructure inequality that occurs in a region.

This identification can be done by modifying the Williamson index formula. The existence of infrastructure inequality is reviewed first by identifying the availability of infrastructure, namely education and health infrastructure in West Nusa Tenggara Province. In this study, the Williamson Index formula is modified by replacing GRDP per capita with the number of education or health infrastructure units. The use of Williamson Index aims to determine the inequality of education and health infrastructure in West Nusa Tenggara Province.

RESEARCH METHODS

The data used in this study uses secondary data sourced from the Central Statistics Agency (BPS) and the Directorate General of Fiscal Balance (DJPK). This study uses panel data, namely cross section data from 10 districts / cities in West Nusa Tenggara Province, while time series data in the form of data on research variables for five years, from 2017 to 2021. Based on data analysis and previous studies, there is a direct relationship between education and health infrastructure inequality, education and health expenditure, average schooling, and life expectancy to GRDP per capita. There is a direct relationship between education infrastructure inequality and education expenditure on average years of schooling. Direct relationship between inequality in health infrastructure and health expenditure on life expectancy. Therefore, the appropriate analysis technique to see the direction of the relationship is panel data analysis. The research data obtained will be analyzed using E-Views 12 statistical tools to

support the results and accuracy of the research. The equation model is obtained as follows.

$$RLS_{it} = \alpha - \beta_1 KIP_{it} + \beta_2 LogBP_{it} + \varepsilon_1 \quad (1)$$

$$AHH_{it} = \alpha + \beta_1 LogBK_{it} - \beta_2 KIK_{it} + \varepsilon_2 \quad (2)$$

$$LogPDRBKPT_{it} = \alpha - \beta_1 KIP_{it} + \beta_2 LogBP_{it} + \beta_3 RLS_{it} + \beta_4 LogBK_{it} - \beta_4 KIK_{it} + \beta_5 AHH_{it} + \varepsilon_3 \quad (3)$$

Description :

PDRBKPT : GRDP per capita

α	: Alpha
$\beta_{1,2,3,4,5}$	: Koefisien regresi
KIP	: Education infrastructure inequality
BP	: Education expenditure
RLS	: Average years of schooling
BK	: Health expenditure
KIK	: Health infrastructure inequality
AHH	: Life expectancy
i	: Cross section of districts/cities in West Nusa Tenggara Province
t	: Time series in 2017-2021
ε	: error term

In this study, a classical assumption test was carried out to determine whether the data met the classical assumptions. The tests carried out in this study are normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. According to Gujarati & Porter (2013), equations that meet classical assumptions are only equations that use the Generalized Least Square (GLS) method. In eviews, the estimation model that uses the GLS method is only the Random Effect Model, while the Common Effect Model and Fixed Effect Model use Ordinary Least Square (OLS). Hypothesis testing is done with the statistical t test and statistical f test. The statistical t test aims to determine the significance level of each independent variable whether it has an influence on the dependent variable. The statistical f test is used to determine whether the independent variables together (simultaneously) have an influence on the dependent variable.

RESULTS AND DISCUSSION

Regression Analysis

In panel data analysis, there are three types of approaches that can be used, namely the common effect model, fixed effect approach, and random effect to determine the most appropriate model to use in panel data regression analysis. Equation I of the selected model is the Fixed Effect Model (FEM). Equation II and III of the selected model is the Random Effect Model (REM).

Classical Assumption Test

Normality Test

Based on the normality test results of equation I, the Jarque Bera probability value is 0.652 (greater than the α value of 0.05) so that H0 is accepted. Therefore, based on the results of the normality test, it can be concluded that in equation I the data used are normally distributed.

Multicollinearity Test

Based on the multicollinearity test results of equation I, the education infrastructure inequality variable is 0.9543 and education expenditure is 0.3983 which has a probability value > 0.05. This indicates that the independent

variables used do not experience heteroscedasticity problems.

Autocorrelation Test

Based on the results of the autocorrelation test, equation I is known to show that the data used is free from autocorrelation problems because it meets the assumptions Du < Dw < 4-Du. The dl value is 1.462 and the du value is 1.628, meaning Du < Dw < 4-Du is 1.628 < 1.852 < 2.372.

Discussion

Equation I

Based on Fixed Effect Model results, all independent variables are significant at α (5%). The Fixed Effect Model estimation results as follows:

$$RLS_{it} = -15.19438 - 3.435862KIP_{it} + 0.881745LOG(BP)_{it} + \varepsilon_{it} \quad (1)$$

Effect of education infrastructure inequality (KIP) on Average Years of Schooling (RLS)

Based on the panel data regression results, the coefficient value is -3.436 (negative) with a probability value of 0.002 (smaller than 5% significance level). These results indicate that H0 is rejected and Ha is accepted, so it can be concluded that the KIP (Educational Infrastructure Inequality) variable has a negative effect on the RLS (Average Years of Schooling) variable. This means that every increase in KIP by 1 index will reduce RLS by 3.436 years with the assumption of cateris paribus.

The results of this study support the human capital theory, where educational infrastructure such as school buildings, libraries, laboratories, and other facilities are considered part of physical capital because they are physical assets needed to provide educational services. Investment in education infrastructure is very important because it can improve the capacity and quality of human capital. Inadequate infrastructure results in problems of low education due to limited school infrastructure and inadequate learning (L. Sinaga et al., 2024). According to Wardhana et al., (2019), the limited availability of the number of schools also has an impact on the fulfillment of the decreasing number of school interests. Declining interest in schooling will reduce the average length of schooling in an area. The higher the inequality in education infrastructure, the lower the average years of schooling.

Effect of education expenditure (BP) on average years of schooling (RLS)

Based on the panel data regression results, the coefficient value is 0.882 (positive) with a probability value of 0.017 (smaller than the 5% significance level). These results indicate that H0 is rejected and Ha is accepted, so it can be concluded that the BP (Education Expenditure) variable has a positive effect on the RLS (Average Years of Schooling) variable. This means that every 1 percent increase in BP will increase RLS by 0.882 years with the assumption of cateris paribus.

The results of this study support the human capital theory where education sector spending can develop human capital. The results of this study are also consistent with the results of research from Rahmadi (2021) which states that education spending has a positive effect on the average years of schooling. Increasing education spending will make it easier for people to access science, educational facilities and infrastructure

so that it will increase the average length of schooling (Harjunadhi & Rahmawati, 2020).

Equation II

Based on the Random Effect Model results, all independent variables are significant at α (5%). The estimation results of the Random Effect Model as follows:

$$AHH_{it} = 23.515647 + 1.693313LOG(BK)_{it} - 1.38196LOG(KIK)_{it} + \varepsilon_{it} \quad (2)$$

The Effect of Health Expenditure (BK) on Life Expectancy (AHH)

Based on the panel data regression results, the coefficient value is 1.693 (positive) with a probability value of 0.000 (smaller than the 5% significance level). These results show that H0 is rejected and Ha is accepted, so it can be concluded that the BK (Health Expenditure) variable has a positive effect on the AHH (Life Expectancy) variable. This means that every 1 percent increase in BK will increase AHH by 1.693 years with the assumption of cateris paribus.

The results of this study support the human capital theory where health sector spending can develop human capital. Government spending on health is a form of health investment in human capital. The results of this study are also consistent with the results of research from (Paramita et al., 2020), Amru & Sihaloho (2020), and Sirait & Christianingrum (2016) which state that health spending has a positive effect on increasing life expectancy. The allocated government budget will have an impact on increasing participation in assisting health workers, subsidizing medicines for the community, subsidizing salary increases for health workers, increasing the number of health facilities to be able to provide good health services, and the number of beds provided through the health budget (Reza et al., 2022). The Ministry of Health has budgeted 5% to reduce health problems every year.

Effect of Health Infrastructure Inequality (KIK) on Life Expectancy (AHH)

Based on the panel data regression results, the coefficient value is -1.381 (negative) with a probability value of 0.018 (smaller than the 5% significance level). These results indicate that H0 is rejected and Ha is accepted, so it can be concluded that the KIK (Health Infrastructure Inequality) variable negatively affects the AHH (Life Expectancy) variable. This means that every increase in KIK by 1 index will reduce AHH by 1.381 years with the assumption of cateris paribus.

The results of this study support human capital theory, where health infrastructure such as hospitals, health centers, and other facilities are considered part of physical capital because they are physical assets needed to provide health services. Poor access to infrastructure in rural areas is a major factor in the persistence and difficulty of reducing health problems in West Nusa Tenggara. The unevenness of available health infrastructure will make it difficult for people to access health facilities for treatment when sick. A high morbidity rate will affect the mortality rate. A high mortality rate will reduce the life expectancy of a region.

Equation III

Based on the Random Effect Model results, there are four independent variables that are not significant at α (5%). The estimation

results of the Random Effect Model basedbv as follows:

$$LOG(PDRBKPT)_{it} = 15.90156 - 1.64543KIP_{it} + 0.02873LOG(BP)_{it} + 0.13354RLS_{it} + 0.10645LOG(BK)_{it} - 0.00773KIK_{it} - 0.15248AHH_{it} + \varepsilon_{it} \quad (3)$$

Effect of Education Infrastructure Inequality (KIP) on GRDP Per Capita

Based on the panel data regression results, the coefficient value is -1.645 (negative) with a probability value of 0.004 (smaller than the 5% significance level). These results indicate that H0 is rejected and Ha is accepted, so it can be concluded that the KIP variable (Educational Infrastructure Inequality) has a negative effect on the PDRBKPT variable (GRDP Per Capita). This means that every increase in KIP by 1 index will reduce GRDPKPT by 1.645 percent with the assumption of cateris paribus.

The results of this study are in line with endogenous growth theory, where education infrastructure is physical capital. Educational infrastructure such as school buildings, libraries, laboratories, and other facilities are considered part of physical capital because they are physical assets needed to provide educational services. This study is also consistent with the results of research from Saputra et al., (2015) and Bustomi (2012) which states that education inequality affects the decline in GRDP per capita. Unequal education infrastructure between regions is an obstacle for every child to enjoy the same education. The more infrastructure available between regions can provide opportunities for children to achieve the same and highest education. With higher education, it will help a person utilize knowledge and experience to get a decent income or job so that it can increase the per capita income of a region.

Effect of Education Expenditure (BP) on GRDP Per Capita

Based on the panel data regression results, the coefficient value is 0.029 (positive) with a probability value of 0.868 (greater than the 5% significance level). These results indicate that Ha is rejected and H0 is accepted, so it can be concluded that the BP variable (Education Expenditure) has no effect on the PDRBKPT variable (PDRB Per Capita) with the assumption of cateris paribus.

The results of this study are not in line with the endogenous growth theory that GRDP per capita can increase through an increase in factors of production such as capital. Education expenditure is included in human capital investment. Education spending is a government investment because it can increase the productivity and potential income of individuals in the future. The results of this study are also not in line with the research of Rifa'i & Moddilani (2021) which states that education spending affects GRDP per capita. The lack of effect of education expenditure on per capita income is due to the non-optimal role of government expenditure in the education sector on per capita income due to three factors, namely population distribution, ethnic diversity, and social structure. This is also supported by the fact that West Nusa Tenggara Province has unique

geographical, regional and cultural characteristics.

Effect of Average Years of Schooling (RLS) on GRDP Per Capita

Based on the panel data regression results, the coefficient value is 0.134 (positive) with a probability value of 0.346 (greater than the 5% significance level). These results indicate that Ha is rejected and H0 is accepted, so it can be concluded that the RLS variable (Average Years of Schooling) has no effect on the PDRBKPT variable (GRDP Per Capita).

Where the results of this study do not support endogenous growth, namely through the quality of human resources (human capital) which is indicated by the increasing knowledge and skills of a person can be a driver of increased productivity. Humans with a high level of education as measured by the average length of schooling. Although not in line with the theory, this study is consistent with research conducted by Putri et al., (2022) which states that the average length of schooling has no effect on GRDP per capita. The impact of increasing the level of education on GRDP per capita is long-term and indirect. The process of improving the quality of human resources requires time and the right infrastructure and policy support. In August 2021, West Nusa Tenggara Province, the working population was still dominated by workers with primary school education and below, namely 42.93 percent. Meanwhile, workers with higher education, namely Diploma and University, amounted to 12.96 percent (BPS NTB, 2021).

The Effect of Health Expenditure (BK) on GRDP Per Capita

Based on the panel data regression results, the coefficient value is 0.106 (positive) with a probability value of 0.249 (greater than the 5% significance level). These results indicate that Ha is rejected and H0 is accepted, so it can be concluded that the BK (Health Expenditure) variable has no effect on the PDRBKPT (PDRB Per Capita) variable with the assumption of cateris paribus.

The results of this study are not in line with the endogenous growth theory that GRDP per capita can increase through an increase in factors of production such as capital. Health expenditure includes human capital. However, this study is consistent with research conducted by Sirait & Christianingrum (2016) and Aidar & Muhajir (2014) that health expenditure has no effect on GRDP per capita. The insignificant effect of health expenditure on GRDP per capita is because health expenditure is less effective in its use.

Effect of Health Infrastructure Imbalance (KIK) on GRDP per capita

Based on the panel data regression results, the coefficient value is -0.007 (negative) with a probability value of 0.962 (greater than the 5% significance level). These results indicate that Ha is rejected and H0 is accepted, so it can be concluded that the KIK variable (Health Infrastructure Inequality) has no effect on the PDRBKPT variable (GRDP Per Capita) with the assumption of cateris paribus.

Health infrastructure inequality has no effect on GRDP per capita due to several factors, including areas that have health infrastructure inequality but have abundant natural resources. This causes GRDP per capita to remain high

despite inequality in health infrastructure. Furthermore, health infrastructure inequality has a greater long-term impact than the short-term impact on GRDP per capita. Regions with unequal health infrastructure will face future economic and social burdens due to reduced productivity or increased health care costs paid by the public.

Effect of Life Expectancy Rate (AHH) on GRDP Per Capita

Based on the panel data regression results, the coefficient value is -0.153 (negative) with a probability value of 0.021 (smaller than the 5% significance level). These results indicate that Ha is rejected and H0 is accepted, so it can be concluded that the AHH (Life Expectancy) variable has no effect on the GDP per capita variable with the assumption of cateris paribus.

In developing countries it is found that a population with a high life expectancy will decrease its productivity. Where the population aged over 65 years is considered no longer productive or after passing the retirement period. The higher the life expectancy of the unproductive population (> 65 years), the heavier the burden that must be borne by the productive population to support the unproductive population. Or someone who previously worked and after retirement will be unemployed and enjoy his old age with retirement savings without working or doing other productivity that can generate income to support his life.

CONCLUSION

Based on the results of previous research and discussion regarding the effect of infrastructure and capital inequality on human development in West Nusa Tenggara Province in 2017-2021, it can be concluded that : In Equation I, Educational infrastructure inequality has a negative effect on the average length of schooling. Education expenditure has a positive effect on average years of schooling. In Equation II, Health expenditure has a positive effect on life expectancy. Health infrastructure inequality has a negative effect on life expectancy. In Equation III, Education infrastructure inequality has a negative effect on GRDP per capita. Education expenditure, Life expectancy, Average years of schooling, Health expenditure, and Health infrastructure inequality has no effect on GRDP per capita.

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