

An Analysis of the Effectiveness of Local Government Expenditure Allocations in Education, Health, Social Assistance, and Per Capita Income on The Human Development Index in The Pati Residency

Anindya Putri Kusuma¹, Muhammad Arif^{2*}

¹ Faculty of Economics and Business, Universitas Muhammadiyah Surakarta

² Faculty of Economics and Business, Universitas Muhammadiyah Surakarta

*Corresponding author: Email: arif@ums.ac.id

ABSTRACT

This study aims to determine the development of human resources in the Pati Ex-Residency and its influencing factor during the 2014-2020 period. This study utilized secondary data in panel data (combined time series data with cross-section data), observations in five regencies of Pati Residency from 2014 to 2020 on Human Development Index (HDI) data, Local Government Expenditure in the fields of Education, Health, Social Assistance Expenditure, and Per Capita Income. Data were obtained from the Statistics Indonesia and the Directorate General of Fiscal Balance (DJPK). The analytical method used in this study was panel data regression. The analysis results indicate that the most appropriate assessment approach to determine HDI variation in the Pati Residency is the Fixed Effect Model (FEM) regression model. This analysis shows that the effect validity test (t-test) explains that local government expenditure in education (EDUC) had a negative effect on the HDI of the people in Pati Residency. Meanwhile, local government expenditure in health (HEALTH) and per capita income (PPK) positively affected HDI in Pati Residency. Meanwhile, the social assistance expenditure variable (BANSOS) had no impact on developing the human development index in the Pati Residency, Central Java. This research concluded that spending on health and increasing income per capita are the most effective policies in improving the human development index in the Pati Residency.

Keywords: Human Development Index, local government expenditure in education, local government expenditure in health, social assistance expenditure, per capita income

1. INTRODUCTION

The implementation of development cannot be separated from the improvement and the formation of human resources. Development is a process of change that will not stop because development shows choices of goals and realizes human potential [1]. The acquisition process increases the number of people who have the skills from education and experience crucial to developing a country's political economy. The United Nations Development Program (UNDP) defines human development as a process of increasing people's choices and abilities to live healthy lives with primary education

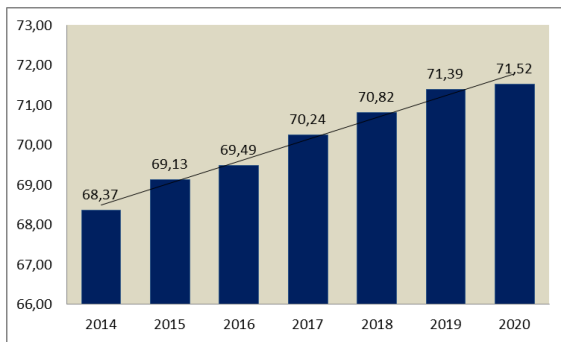
and a decent standard of living and to enjoy political freedom and human rights [2].

The success of human development can be seen from how immense the underlying social problems can be solved. These problems include poverty, unemployment, and lack of access to education and health facilities. The success of human development must also be measured. One of the measures used to measure and perceive the success of the effect is to use the Human Development Index (HDI). Although it cannot measure all dimensions of development, HDI is considered qualified of measuring the basic dimensions of human development, which can be realized from the three

essential aspects of HDI, namely long and healthy life, knowledge, and decent standard of living [3]. An increase in the value of HDI indicates an increase in the quality of human resources in an area. If the value of HDI increases, the welfare of the people in an area will also increase, and in reverse, if the value of HDI decreases, the prosperity of the people in the area will also decrease accordingly [4].

Pati Residency is an area located on the north coast of Java Island with a low HDI value compared to other locations in Central Java Province. HDI values in the Pati Ex-Residency area with regency/cities in Central Java cover Kudus Regency with 10th rank, Jepara Regency with 17th rank, the Pati Regency with 19th rank, and Rembang Regency with 21st rank. Blora Regency was ranked 29th, the lowest in the Pati Residency Area, and became the sixth-lowest rank of HDI value of 35 regencies/cities in Central Java Province. The comparison of HDI ratings among regions in Central Java Province from 2014 to 2020 showed that the Pati Residency still needs attention to improve the quality of its human resources.

Figure 1. Average Human Development Index in the Pati Ex-Residency Area



Source: Statistics Indonesia, processed

Based on Figure 1, the HDI value in Pati Residency increased, but the increase was relatively minor every year. The highest HDI in Pati Residency was 71.52 index points in 2020, while the lowest HDI was 68.37 index points in 2014. Increasing the HDI in Pati Residency Area means that the quality of human resources has grown to improve the quality of life and society welfare.

According to [5], as the implementer of development, local governments certainly need superior Human Resources (HR) as capital to carry out the regional development process. The better the quality of human resources in an area, the higher the value of regional development.

Based on [5] statement, to gain successful development by improving the quality of human resources, investment is demanded to form quality resources, such as investment in education or the health sector. Education and health are the rudimentary goals of development in an area. To help in these two areas, education and health, a budget is needed. So, it requires

support from the government in the implementation of education and health through government spending. Government spending can be used as a reflection of the effectiveness of government policies taken by a local government. Government spending is used to fund priority public sectors, including the education and health sectors [4].

According to [6], UNDP highlights the critical role of the government in human development investments in health, education, and other social services. With the precise targets of the government spending in the fields of health, education, and social services, it will encourage the value of HDI. Based on research from [7], government spending or spending in the fields of education and health has a positive and significant effect on increasing the Human Development Index.

According to [8], the government's role in increasing economic growth and social welfare is through distribution. The government formulates policies to allocate regional expenditures to improve people's interests. The impact of social assistance spending on local and urban communities is relatively significant because the budget uses social service to provide service to society in the form of money and commodities to improve people's welfare. It will also increase the value of the Human Development Index.

In the research of [9], one must also pay attention to the increase in per capita income to improve the value of the Human Development Index. The increase in the income per capita of a country's population reflects economic development [10]. High per capita income will achieve prosperity or increase the standard of living of the increasing number of people [11]. The higher income per capita, the higher the purchasing power of the people will be. With the increase in people's purchasing power, which means it will also improve social welfare, it will increase the value of the Human Development Index. Therefore, in his research, per capita income positively affects the Human Development Index.

2. LITERATURE REVIEW

The Human Development Index (HDI) is an indicator of society's life quality development to measure a person's quality of life. The quality of the population in health, education, and average public expenditure can be viewed from the level of income. The human development index relies on indicators that can be observed and compared in a meaningful way. The longevity and education components of the HDI have substantial theoretical foundations in Amartya Sen's ideas about essential functions and abilities and have been underpinned in more recent theories of human needs [12].

According to [13] believed that the development of human resources could be achieved by improving the quality of human resources. In this case, human capital can lead to education. Education is the basic goal of regional development. According to Meier and Rauch (in

[14]), education, or more generally human capital, can encourage and contribute to development. It is because education is essentially a form of saving. If human capital is an input to the total production function, it will lead to the accumulation of human capital and growth in total output.

According to [15] stated that public spending on health and education is the main constituent of human capital development that actively increases human knowledge and reduces mortality. Government investment in the health sector can be in the budget allocations to provide funds for the procurement and maintenance of tangible and nonphysical facilities in the health sector. The government builds public facilities and infrastructure to easily access services in the health sector. The ease of public access to health services can meet the basic needs of public health, one of which is by improving society's quality of life.

Social assistance is one type of government expenditure included in the economic classification. In the Technical Bulletin and Government Regulations of the Government Accounting Standards Committee, it is declared that social assistance spending is expenditure comprising money, goods, or services provided by the central/regional government to the society to protect the society from possible social risks as well as improve economic capacity and social welfare [16]. Michael von Hauf concluded the World Summit for Social Development in Copenhagen in 1995 that social assistance spending is a fundamental component in increasing human development and reducing poverty [17].

Per capita income is the average income of a country's residents over a certain period, normally one year. Per capita income can also be interpreted as the average value of goods and services available to residents of a country in a certain period-standard in comparing people's welfare through per capita income. If there is an increase in per capita income, it will also increase people's welfare [18].

3. METHOD

The analytical tool in this study was panel data regression analysis to determine the effect of Local Government Expenditures in Education, Local Government Expenditures in Health, Social Assistance Expenditures, and Per Capita Income on the Human Development Index in the Pati Residency Region in 2014-2020. The econometric model used is as follow:

$$HDI_{it} = \beta_0 + \beta_1 \log(EDUC_{it}) + \beta_2 \log(HEALTH_{it}) + \beta_3 \log(BANSOS_{it}) + \beta_4 \log(PPK_{it}) + \varepsilon_{it}$$

Explanation:

HDI = Human Development Index
EDUC = Local Government Expenditure on Education (Rupiah)

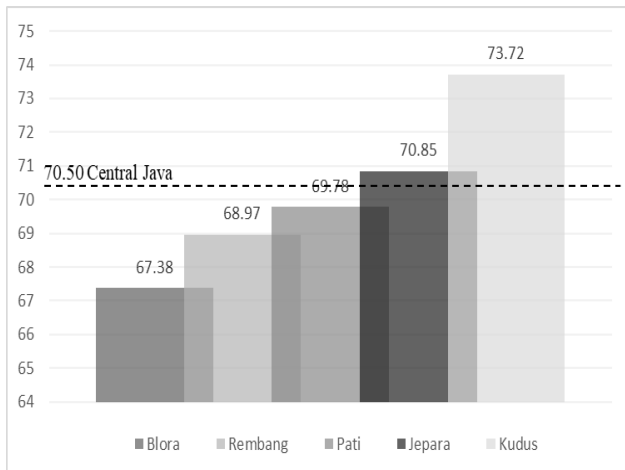
HEALTH = Local Government Expenditure on Health (Rupiah)
BANSOS = Local Government Expenditures on Social Assistance (Rupiah)
PPK = Per Capita Income (Rupiah)
log = logarithm operators
ε = Error term
 β_0 = constant
 β_1, \dots, β_4 = Independent variable regression coefficient
i = cross section to i
t = time series to t

The data used in this study were secondary data in the form of panel data (a combination of time series data with cross-section data), which are observations from five regencies in Pati Residency Region, from 2014 to 2020, on HDI, Local Government Expenditures in the Sector of Education, Health, Social Assistance Expenditures, and Per Capita Income. The data were obtained from Statistics Indonesia's publications and the Directorate General of Fiscal Balance (DJPK).

4. RESULT AND DISCUSSION

Based on Figure 2, the development of HDI in Pati Ex-Residency from 2014 to 2020 shows that the average HDI in Pati Ex-Residency had the highest average HDI indicated by Kudus Regency with an index number of 73.72. For comparison, the lowest HDI average was shown by Blora Regency, with an index number of 67.38.

Figure 2. The Development of Human Development Index for Pati Ex-Residency 2014-2020



Source: Statistics Indonesia, processed

Based on Figure 2, it is known that Kudus Regency had the highest HDI value compared to other regencies in Pati Residency. Compared to Central Java, Kudus even exceeded the value of HDI component, namely the average length of schooling, life expectancy at birth, and expenditure per capita was superior to other regencies. It illustrates that Kudus Regency had maximized programs to improve the quality of human resources both from education and health facilities that were more fulfilled than other regencies. Meanwhile, Blora Regency with a low HDI value gained a value from the components of HDI, namely the expected length of schooling, the average length of schooling, life expectancy at birth, and lower per capita expenditure compared to other regencies, and this illustrates that Blora Regency had not maximized the program in improving the quality of human resources both from education and health facilities compared to other regencies; moreover, the poverty rate in Blora Regency, was lower than that in others.

4.1. Panel Data Analysis Results

The method used in this study was the panel data method by combining cross-sectional data representing the residency region in Pati. The time-series data is represented by observations from 2014 to 2020. The results of panel data analysis using three approaches are referred to in the table. 3.1.

Table 1. PLS, FEM, and REM Panel Data Regression Results

Variable	Regression Coefficient		
	CEM	FEM	REM
C	-11.51612	-69.10352	-11.51612
Log(Educ)	-1.960386	-0.875167	-1.960386
Log(Health)	2.896628	1.511150	2.896628
Log(Bansos)	0.680963	0.114229	0.680963
Log(Ppk)	2.508641	7.071079	2.508641
R ²	0.896343	0.957060	0.896343
Adj.R ²	0.882522	0.943848	0.882522

F-Statistic	64.85410	72.43720	64.85410
Prob.F-Statistic	0.000000	0.000000	0.000000

Table 2. HDI Determinants Dimensions

Variable Name	Symbol	Dimension and Indicator
Local Government Expenditures in Education	Educ	Expenditures made by local governments in the education sector improve the fulfillment of education services. The data used in this study were the realizations of local government spending in the education sector.
Local Government Expenditures in Health	Health	Expenditures made by the local government in the health sector so that the society obtains proper health, which aims to improve the welfare of the society. The data used in this study were the realizations of local government spending on the health sector.
Local Government Expenditures in Social Assistance	Bansos	Expenditures provided by the local government in the Pati Ex-Residency for the society was in the form of money transfers as well as goods and services whose purpose is to increase the economic capacity and welfare of the society and also provide protection from socio-economic problems.
Per capita Income	PPK	The average income of a resident of a country over a period of time was normally one year. Per capita income is obtained from the national income of a certain year and the total population of a country in that year.

Source: E-Views 10, Processed

In determining the best model, the analysis was continued by selecting the appropriate panel data regression model to explain the research data variance. Based on the Chow test approach and Hausman test approach, it is known that the Fixed Effect is the best analytical model that can explain the data in this panel data regression analysis (see Appendix).

Table 3. Fixed Effect Model Regression Analysis Results

Source: E-Views 10, Processed

4.2. Effect of Local Government Expenditures in Education on the Human Development Index

The local government expenditure variable in education had a regression coefficient of -0.87517. The pattern of the relationship between local government spending on education and the human development index was linear-logarithmic so that if per capita income increased by 1%, the human development index would decrease by $0.87517/100 = 0.0087517$ index number. On the other hand, if local government spending on education reduced by 1%, HDI would increase by $0.87517/100 = 0.0087517$ index number. Local Government Expenditures in the Education Sector had a negative effect on HDI in Pati Residency in 2014-2020, which means that any increase in the local government expenditure variable in the health sector would reduce HDI.

This case is supported by research by [19] that the negative impact of government spending on education takes longer, namely 15 years in developing human resources in Africa. According to [20] stated that the negative effect of government spending on education on HDI is that education is not entirely used to improve the quality of education but is used for other purposes, namely employee salaries and other education budgets. The inefficiency of government spending in the education sector will also emphasize the increase in APBN and APBD. In theory, Rostow and Musgrave argued that the government should provide a budget for education in the early stages of economic development. [21] also elucidated that government spending on education will determine the number of development achievements to be achieved. Concerning inequality in the distribution of government spending in the education sector in the Pati Residency Region during the 2014-2020 period, each regency had local government spending that fluctuates annually and is uneven. It led to a negative influence on local government spending in the education sector on the human development index, that is, the ineffectiveness and inequity of local government spending in education because of the unfocused use of local government spending in education in improving and increasing quality of human development.

4.3. Effect of Local Government Expenditures in Health on the Human Development Index

The local government expenditure variable in the health sector had a regression coefficient of 1.51115. The pattern of the relationship between local government spending on health and the human development index was linear-logarithmic so that if per capita income increased by 1%, the human development index would increase by $1.51115/100 = 0.0151115$ index number. On the other hand, if local government spending in the health sector decreased by 1%, the human development index would decrease by $1.51115/100 = 0.0151115$ index

number. Local Government Expenditures in the Health Sector had a positive effect on the Human Development

$\text{HDI}_{it} = -69.10352 - 0.875167 \text{ Educ}_{it} + 1.511150 \text{ Health}_{it} + 0.114229 \text{ Bansos}_{it} + 2.508641 \text{ PPK}_{it}$				
P value	Educ (0,0227)	Health (0,0034)	Bansos (0.5163)	PPK (0,0002)
$R^2 = 0,957060$; Adj. $R^2 = 0.943848$; F-Stat = 72.43720; Sig. F-Stat = 0.000000				

Index in the Pati Ex-Residency Area in 2014-2020, which means that every increase in the regional government expenditure variable in the health sector had an influence and also increased the human development index in the Pati Ex-Resident Area in 2014-2020.

Following the hypothesis, local government spending on health positively affects the human development index. Every local government activity reflected in government spending must positively impact regional and state development, economic development, and human development. The allocation of local government spending in the health sector for human development by improving and increasing essential services will enhance the quality of human resources in the future. The results of this study correspond to the research conducted by [22], the variable of government expenditure in the health sector during the 2010-2019 period in Kalimantan Province has a positive and significant influence on the human development index. It means that increasing the quality of human development used for health programs is appropriate by using the high budget for local government spending in the health sector. Following the human capital theory put forward by Selma J. Mushkin, the United States experienced a significant reduction in mortality in 1900-1917 by taking forms of prevention and treatment through programs made by the government or private sector that could reduce the risk of the death rate.

Improving health will also enhance the welfare of local communities because the main factor of social welfare is health. The development of the Average Life Expectancy at Birth in the Pati Ex-Residency Area from 2014 to 2017 had increased every year. In 2014, the average life expectancy at birth in the Pati Ex-Residency Area was 75.10 years, and in 2020 it increased to 76.22 years. It means that the government in each district had optimized the allocation of local government spending in the health sector to be effective. Local governments are obliged to guarantee and protect by providing and improving essential services such as health facilities that are easy to access both hospitals and health centers, and medical personnel. Increased ease in accessing health services will meet the basic health needs of local society, improving the quality of people's lives. By utilizing and being right on target in allocating local government spending in the health sector, the local society will have a better quality of human development and social welfare.

4.4. Effect of Social Assistance Expenditure on Human Development Index

Social Assistance Expenditure had no effect on the Human Development Index in the Pati Ex-Residency Area in 2014-2020, which means that every increase in the regional government expenditure variable in the health sector influenced and increased the human development index.

According to [23] research, the variable of social assistance spending during the 2014-2018 period in Indonesia did not affect the human development index. Government spending on social assistance was low, and social assistance spending was not evenly distributed, which had an impact on slowing social assistance spending to increase the human development index. Social assistance spending cannot improve people's welfare due to the low distribution of the budget for social assistance spending, mainly related to the components of the human development index, namely education, health, and people's purchasing power. The government has provided a budget for assistance programs to improve the society's welfare, which will enhance the quality of human development; this has not been effective in the Pati Ex-Residency Area due to the uneven allocation of government spending in each district. Rostow and Musgrave pointed out that the government should emphasize the budget for government spending in the field of social assistance and others because the government's budget should be based on expenditures that are preventive and curative.

4.5. Effect of Per Capita Income on Human Development Index

The income per capita variable had a regression coefficient of 8.9122. The pattern of the relationship between per capita income and the human development index was linear-logarithmic, so that if per capita income increased by 1%, the human development index would increase by $8.9122/100 = 0.089122$ index number. On the other hand, if per capita income decreased by 1%, the human development index would decrease by $8.9122/100 = 0.089122$ index number. Income Per capita had a positive effect on the Human Development Index in the Pati Residency Region in 2014-2020, which means that every increase in the per capita income variable had an influence and also increased the human development index in the Pati Ex Residency Region in 2014-2020.

Following the hypothesis, per capita income positively affects the human development index. With the increase in the income per capita of the society, it means that the people's welfare and quality of life are increasing. It is congruent with the theory put forward by Kuznets in [24], which explains that one of the reflections of modern economic growth is the increase in per capita output, which is per capita income. People's consumption patterns and purchasing power will increase along with the rise in per capita income. People's purchasing power is an indicator of the human development index component. Improving people's purchasing power will increase human development. In line with research [9],

income per capita had a positive and significant effect on the human development index in Riau Province during 2004-2013. The impact of per capita income is because the increase in per capita income will change consumption patterns to meet the needs of daily life. It means that if the income per capita of the society is higher, it will change the practice of public consumption, which is reflected in the purchasing power of the people, which will increase, which will affect the increase in the human development index. Rising per capita income also means that people have proper jobs, which will impact people's quality of life.

5. CONCLUSION

The main goal of human development is to expand people's choices. Recognizing that society can extend its options and increase the quality of its human resources, government policies are needed. In achieving human development goals, there are still obstacles. Various factors to attain the success of human development can be seen from the magnitude of the social problems that form the basis for solving them. These include issues in improving human development, namely poverty, unemployment, and lack of access to education and facilities for health. Local governments need superior human resources (HR) as capital to perform the regional development process by implementing development. With the better quality of human resources in an area, the higher the value, the regional development will also increase. Based on this, this study aims to observe the direction and magnitude of the effect of the effectiveness of local government expenditure allocations in the fields of education, health, social assistance, and per capita income on the human development index during the period 2014-2020.

Based on the results of the selection of the best estimator model, the Chow test and the Hausman test prove that the Fixed Effect Model (FEM) is the chosen model. The results of the effect validity test (t-test) of panel data regression analysis can explain that local government spending on education had a negative and significant effect, Local government spending on health had a positive and significant impact, Social assistance spending had no significant, and income per capita had a positive and significant impact on the human development index. The results of the model existence test (F test) show that these variables had a simultaneous effect.

Thus, there are policy suggestions for each region in the Pati Residency Region. The is first regarding the negative influence of local government spending in the field of education. It is necessary to evaluate and pay attention to problems in government spending in the education sector by allocating a more equitable budget because local government spending in the education sector in the Pati Ex-Residency Region was still not effective in increasing the human development index. Hence, it is expected that allocating local government budgets in the field of education that are more optimal and equitable will improve the fulfillment of education services and enhance the quality of human development.

There needs to be a consideration in the preparation of social assistance programs that are used to guarantee and protect bare essentials that will achieve prosperity. Therefore, local governments can maximize in conducting programs from social assistance spending that are evenly distributed and more effective in making maximum use and directed at the suitable target targets that will reduce poverty levels and improve the economic conditions of local communities, which will have an impact on increasing human development.

REFERENCES

- [1] Utomo, Yuni Prihadi. (2001). Pemikiran-pemikiran Alternatif Terhadap Pembangunan. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi dan Pembangunan*, 2(2), 134-147.
- [2] Das, N. J. (2021). Contribution Of Social Infrastructure On Human Development: A Cross Section Study Of Indian States. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(13), 173-176.
- [3] Human Development Report. (2010). In Population and Development Review (Vol. 21, Issue 4). <https://doi.org/10.2307/2137795>.
- [4] Muliza, M., Zulham, T., & Seftarita, C. (2017). Analisis pengaruh belanja pendidikan, belanja kesehatan, tingkat kemiskinan dan PDRB terhadap IPM di provinsi Aceh. *Jurnal Perspektif Ekonomi Darussalam*, 3(1), 51-69.
- [5] Rosyadah, J. A. (2020). Determinan Indeks Pembangunan Manusia (IPM) Provinsi Nusa Tenggara Timur (NTT). *EFFICIENT: Indonesian Journal of Development Economics*, 4(1), 1080-1092.
- [6] Maharda, J. B., & Aulia, B. Z. (2020). Government Expenditure and Human Development in Indonesia. *Jambura Equilibrium Journal*, 2(2).
- [7] Okafor, C. N., Ogonna, K. S., & Okeke, C. I. (2017). Effect of Government Expenditure on Human Capital Development in Nigeria. *International Journal of Banking and Finance Research*, 3(2).
- [8] Muthahar, L.O., Tenge, E., & Sading, Y. Pengaruh Belanja Daerah Kabupaten/Kota Terhadap Pertumbuhan Ekonomi Dan Kesejahteraan Masyarakat Di Provinsi Sulawesi Tengah Tahun 2013–2017. *Katalogis*, 9(3), 303-317.
- [9] Maidoni, D. A., Kadir, H., & Indrawati, T. (2015). Pengaruh Investasi Sumber Daya Manusia Dan Pendapatan Perkapita Terhadap Indeks Pembangunan Manusia (IPM) Di Provinsi Riau (Doctoral dissertation, Riau University).
- [10] Arif, Muhammad, & Wicaksana, Rossy Agustin. (2017). Ketimpangan Pendapatan Propinsi Jawa Timur dan Faktor-faktor yang Mempengaruhinya. *URECOL*, 323-328.
- [11] Soebagiyo, Daryono. (2000). Disparitas Pembangunan Dan Faktor-faktor Yang Mempengaruhinya (Studi Kasus Di Daerah Sumbagsel). *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi dan Pembangunan*, 1(1), 21-34.
- [12] Anand, S., & Sen, A. (2000). The income component of the human development index. *Journal of human development*, 1(1), 83-106.
- [13] Mankiw, N. Gregory. 2008. Teori Makro Ekonom. Edisi Keempat. Jakarta: Erlangga.
- [14] Brata, A. G. (2002). Pembangunan Manusia dan Kinerja ekonomi regional di Indonesia. *Economic Journal of Emerging Markets*, 7(2).
- [15] Todaro, Michael P. 2006. Economic Development. Seventh Edition, New York, Addition Wesley Longman, Inc.
- [16] Dharmakarja, I. G. M. A. (2018). Rekonstruksi Belanja Bantuan Sosial. *Substansi: Sumber Artikel Akuntansi Auditing dan Keuangan Vokasi*, 1(2), 373-389.
- [17] Akhmadi, Muhammad Heru. (2017). Tinjauan Pelaksanaan Pembayaran Non Tunai pada Belanja Bantuan Sosial: Studi Kasus Program Keluarga Harapan. *Indonesia Treasury Review: Jurnal Perbendaharaan, Keuangan Negara dan Kebijakan Publik*, 2(1), 99-114.
- [18] Sukirno, Sadono. 2004. Pengantar Teori Makroekonomi. Jakarta: PT Raja Grafindo Persada.
- [19] Shuaibu, M., & Oladayo, P. T. (2016). Determinants of Human Capital Development in Africa: A Panel Data Analysis. *Oeconomia Copernicana*, 7(4), 523-549. DOI: <https://dx.doi.org/10.12775/OeC.2016.030>.
- [20] Winarti, A. 2014. Analisis Pengaruh Pengeluaran Pemerintah Bidang Pendidikan, Kemiskinan dan PDB terhadap Indeks Pembangunan Manusia di Indonesia Periode 1992-2012. Semarang: Fakultas Ekonomika dan Bisnis Universitas Diponegoro.
- [21] Todaro, Michael P. dan Smith, Stephen C. 2011. "Pembangunan Ekonomi". Edisi Kesembilan. Jakarta: Erlangga.
- [22] Susanti, E dan Hidayat, N (2020). Analisis Pengaruh Pengeluaran Pemerintah Sektor Pendidikan, Kesehatan, Dan Infrastruktur Terhadap Indeks Pembangunan Manusia Di Provinsi Kalimantan Timur. *ECO-BUILD; Economy Bring Ultimate Information All About Development Journal*, 4(2), 25-34.
- [23] Tamara, Y., & Yeniwati, Y. (2020). Pengaruh Pengeluaran Pemerintah Bidang Bantuan Sosial dan Kesehatan, Konsumsi Rumah Tangga dan Pendidikan terhadap Indeks Pembangunan Manusia

di Indonesia. *Jurnal Kajian Ekonomi dan Pembangunan*, 2(3).

- [24] Todaro, Michael P. 2000. *Economic Development*, Seventh Edition. New York: University Addison Mesley.

APPENDIX

CHOW TEST

Effect Test	Statistic	d.f	Prob
Cross-Section F	9.190996	(4,26)	0.0001
Cross-Section Chi-square	30.84497	4	0.0000

Source: E-Views 10, Processed

It can be concluded that H_0 is rejected because of the p-value (p-value), probability, or the empirical significance of the F statistic, which is 0.0001 (≤ 0.01). So the best model used is the Fixed Effect Model (FEM).

HAUSMAN TEST

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob
Cross-Section Random	36.763984	4	0.0000

Source: E-Views 10, Processed

It can be concluded that H_0 is rejected because of the p-value (p-value), probability, or the empirical significance of the chi-square statistic, which is 0.0000 (≤ 0.01). So the best model used is the Fixed Effect Model (FEM).