

# The Effect of Genuine Revenue, General Allocation Funds And Special Allocation Funds on the Human Development Index

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**Abstract:** The Human development index (IPM) was popularized by the United Nations Development Program (UNDP) through the Human Development Report in 1996, which then continues every year. This study aims to identify and analyze the effect of regional original income, special allocation funds, and general allocation funds on the regional development index (IPM). The population of this study is all regencies/cities resulting from division throughout Indonesia which expanded after May 1999 in accordance with Law No. 22 of 1999, data obtained from [www.bps.go.id](http://www.bps.go.id). And <https://e-ppid.bpk.go.id/> during 2018-2019. The sampling technique used in this study was a purposive sampling technique. Based on the results of data analysis and discussion, it can be concluded that Regional Original Income has an effect on the Human Development Index. This result can be proven by a significance value of  $0.00 < 0.05$  so that H1 is accepted. the result that the General Allocation Fund has no effect on the Human Development Index, this can be proven by the significance value that is owned by the general allocation fund of  $0.796 > 0.05$  so that H2 is rejected. the result that the Special Allocation Fund has an effect on the Human Development Index, this can be proven by the significance value that is owned by the Special Allocation Fund of  $0.00 < 0.05$  so that H3 is accepted.

**Keywords:** Regional Income, Allocation Fund, Human Development Index (IPM)

## I. INTRODUCTION

The Human development index (IPM) was popularized by the United Nations Development Program (UNDP) through the Human Development Report in 1996, which then continues every year. In this publication, human development is defined as "a process of enlarging people's choices" or a process that improves aspects of life. HDI is a comparative measure of people's life expectancy, quality of education and people's living standards for all countries. According to the United Nation Development Program (UNDP) human development is an effort to create/provide expanded choices for the population.

Apart from an income or economic perspective, education and health are seen as necessary as an investment in enhancing human resource development. In measuring the Human Development Index (IPM), health and education are one of the main components besides income, because health and education are also investments to support economic development and have an important role in efforts to reduce poverty.

The Human Development Index (IPM) is an alternative indicator besides per capita national income to assess the success of development carried out by a country. Based on the HDI that has been compiled, it can be determined into three levels of a country's HDI group. The first is a country with a low level of human development if the HDI ranges from 0-50. Second, a country with a moderate level of human development if its HDI ranges from 51-79, and thirdly, a country with an advanced level of human development if its HDI ranges from 80-100. Government policies are needed to realize the development of the quality of life of human resources (HR)[1].

The fact of Mesuji's inability as a new autonomous region to increase economic growth certainly refutes the opinion of Abimanyu and Megantara in that fiscal decentralization will be able to increase economic growth and people's welfare, because local governments will be more efficient in the production and provision of public goods[2]. As for the increase in economic growth that has occurred in Tulang Bawang and Tulang Bawang Barat districts, it also confirms the argument made by the World Bank (1997), that fiscal decentralization can directly encourage economic growth.

Labor Force Participation Rate (TPAK) data for 2015-2017 from the three districts resulting from the division (Bona Bawang Regency, West Tuba Regency, Mesuji Regency) show that Mesuji district has the lowest TPAK rate (average Tuba district is 65.35%, district West Tuba 67.95%, Mesuji Regency 44.0%), between the other 2 regencies this has caused quite a wide gap between the regencies resulting from the division.

This is very disproportionate to the high HDI that is owned by Tulang Bawang Regency. The position of Mesuji Regency, in terms of the number of poor people, is relatively the lowest compared to the other two districts, even though the economic growth of Mesuji Regency is the lowest compared to the other two districts. If you calculate the average for the period 2015-2017, the Tulang Bawang district was 10.20%, the Tulang Bawang Barat district was 8.40% and the Mesuji district was 8.00%. This shows that the implementation of fiscal decentralization in the regencies of Tulang Bawang, Tulang Bawang Barat and Mesuji for ten years after the division has not had positive implications for achieving the ideal goals of fiscal decentralization policies in realizing regional independence.

Since the issuance of Law No. 22 of 1999, Indonesia has carried out regional expansion of 218 regencies/cities with a composition of 183 regencies and 35 cities from 1999-2014. From the data for the last 3 years obtained from the Central Bureau of Statistics, provinces in Indonesia which adopted the policy of regional expansion in order to carry out equitable development have experienced an increase in terms of the human development index.

Increases and decreases in HDI in provinces that adopt regional expansion policies in the context of implementing equitable development are caused by the allocation of PAD, General Allocation Funds and Special Allocation Funds that are right on target, but that is not used as the main benchmark for the increase in HDI in Provinces that carry out expansion districts/cities in Indonesia.

## 1.1 Hypothesis Development

### a. Effect of Regional Original Income (PAD) on the Human Development Index (IPM)

PAD is an important source of income for a region in meeting its spending needs. PAD can also at the same time show the level of independence of a region, the more PAD it gets the more it enables the region to meet its own spending needs without having to depend on the central government. The purpose of PAD is to provide flexibility to regional governments to finance the implementation of regional autonomy based on the potential of the region they have. The ability of regional financing to come from PAD is an indicator of regional independence. PAD is used to improve services to the community, PAD can be allocated in the form of building education, health and other infrastructure that can support the Human Development Index (IPM).

Research that is in line with the hypothesis above is research conducted by. Based on this description, the hypothesis is as follows:

H1: Regional Original Income (PAD) has an effect on the human development index (IPM)

### b. The influence of the General Allocation Fund (DAU) on the Human Development Index (IPM).

DAU is allocated to provincial or regency/municipal areas. The purpose of granting this DAU is equity by taking into account regional potential, area size, geographical conditions, population, and income level. Because of this DAU is a source of funds that can improve services to the community. The local government in its implementation should allocate these funds for direct spending, namely spending that provides better service to the community to improve people's welfare. As demands of regional autonomy.

Research that is in line with the hypothesis above is research conducted by. Based on the explanation above, it provides evidence that the General Allocation Fund (DAU) has an effect on the Human Development Index (IPM). Therefore, the hypothesis is made as follows:

H2: The General Allocation Fund (DAU) has an effect on the Human Development Index (IPM)

### c. The influence of the Special Allocation Fund (DAK) on the Human Development Index (IPM)

In relation to balancing funds between the central and regional governments, the function of DAK is actually only as an addition to or a complement to other types of funds. However, in its development, the existence of DAK has become increasingly important for regional development. This is due to the main component of the balancing fund in the form of DAU which is generally only sufficient to meet

bureaucratic expenditure needs [3].

Research that is in line with the hypothesis above is research conducted by Juliana, and Heru Satria Rukmana[4].Based on the explanation above, it provides evidence that the Special Allocation Fund (DAK) has an effect on the Human Development Index (IPM), therefore a hypothesis can be made that:

H3: Special Allocation Funds affect the Human Development Index (IPM)

## II. RESEARCH METHODOLOGY

This research design is a type of quantitative research by conducting hypothesis testing using the F test, t test, and R2 test, which are processed using the SPSS program. The population of this study were all regencies/cities resulting from division throughout Indonesia which were split after May 1999 in accordance with Law No. 22 of 1999. Data were obtained from [www.bps.go.id](http://www.bps.go.id). And <https://e-ppid.bpk.go.id/> during 2018-2019. The sampling technique used in this study was a purposive sampling technique, with the aim of obtaining a sample that complies with predetermined criteria.in this study the method of data analysis using the Classical Assumption Test and Hypothesis Test

Table 1 Determining the Number of Samples

Number of districts/cities resulting from division that were split after the issuance of Law No. 22 of 1999	Jumlah
	$208 \times 4 = 832$
In 2018 1 district was incomplete regarding PAD, DAU, DAK	1
In 2019 1 district was incomplete regarding PAD, DAU, DAK data	1
In 2020 1 district does not have complete data related to PAD, DAU, DAK	1
In 2021 4 Regencies and 2 cities in Riau Archipelago Province, 1 Regency in DKI Jakarta Province, 1 Regency in Papua Province incomplete data related to PAD, DAU, DAK, 8 Regencies/cities in Central Sulawesi Province incomplete data related to HDI	$15 \times (4 \text{ Year}) + 1 = 61$
Number of districts/cities that do not meet the criteria	64 districts/cities
The number of districts/cities that were sampled was total	748 districts/cities

Based on predetermined criteria, the number of samples from the research was as many as Pemekran districts/cities. with the criteria that have been set, the amount of data obtained as many as 748 data.

## III. RESEARCH OUTCOMES AND ANALYSIS

### 3.1 Classic assumption test

Before carrying out the regression test, the researcher must ensure that the regression test is free from the classical assumption test seen from the table as a condition for the regression test. Before carrying out the regression test, researchers must perform the classic assumption test in the form of a normality test, heteroscedasticity test, multicollinearity test, and autocorrelation test.

#### a. Normality test

Table 2 Normality Test Results

Information		Unstandardized Residuals
N		678
Normal Parameters <sup>a,b</sup>	Means	0.0000000
	std. Deviation	3.71362331
Most Extreme Differences	absolute	0.0 30
	Positive	0.0 20
	Negative	-0.0 30

Kolmogorov SmirnovZ		0.030 _
asymp. Sig. (2-tailed)		.200 _

Data source: processed by researchers, 2023

b. Multicollinearity Test

Table 3 Multicollinearity Test Results

Variable	tolerance	VIF	Information
( constant )			
X1 PADS	0.922	1.0 85	No MulticollinearityOccurs
X2 DAUs	0.804 _	1, 244	No MulticollinearityOccurs
X3 DAK	.830 _	1, 205	No MulticollinearityOccurs

Data source: processed by researchers, 2023

Based on the calculation above, it shows that all independent variables have a tolerance value  $\leq 0.10$  and all independent variables have a VIF value  $\geq 10$ . Thus it can be concluded that the data above does not occur multicollinearity.

c. Auto correlation test

Table 4 Autocorrelation Test Results

R	R Square	Adjusted R Square	Std. Error of the Estimates	Durbin-Watson	conclusion
0.593 <sup>a</sup>	0.352	0.349	3.72188	1,552	Autocorrelation does not occur

Source: data processed by researchers, 2023

Based on the results of the data output above, the Autocorrelation Test above obtained a DW value of 1.552, this value will be compared with the lower limit value of -2 and the upper limit value of 2, the DW value lies between ( $> -2$  DW  $< 2$ ) so it can be concluded that in this regression there is no autocorrelation problem.

d. Heteroscedasticity test

Table 5 Heteroscedasticity Test Results

Variable	t	sig.	Information
(constant)	5,417	0.000	No Heteroscedasticity
X1 PADS	0.937	0.349	No Heteroscedasticity
X2 DAUs	0.958	0.339	No Heteroscedasticity
X3 DAK	-1.335	0.182	No Heteroscedasticity

source: Data processed by researchers, 2023

Based on the test results above it can be concluded that the value of each independent variable is above 0.05, then the data is free from heteroscedasticity.

### 3.2 Hypothesis testing

a. Multiple linear regression test

Table 6Multiple linear regression test results

Model	Unstandardized Coefficients		Standardized Coefficients	Q	Sig.
	B	std. Error	Betas		
(Constant)	65,496	0.821		79,809	0.00 0

X1 PADS	59,343	3,477	0.551	17,069	0.0 00
X2 DAUs	0.383	1,479	0.009 _	0.259	0.796 _
X3 DAK	- 13.209	3,148	-0, 143	- 4,197	0.000 _

Data source: processed by researchers, 2023

The results of testing the hypothesis above show the multiple linear regression equation as follows:

$$IPM = 65.496 + 59.343PAD + 0.383DAU - 13.209DAK + \epsilon$$

b. F test

Table 7 F test results

Model		F	Sig.
1	Regression	121,854	0.000b -
	residual		
	Total		

Based on the test results above, it shows that the calculated f value is 121.854 with a probability value of 0.00 < 0.05 so it can be concluded that overall the variable local original income, general allocation funds, special allocation funds affect the human development index

c. T test

Table 8 T test results

Variable	Sig.	Information
X1 PADS	0.000	H1 Accepted _
X2 DAUs	0.796 _	H 2 Rejected _
X3 DAK	0.000 _	H 3 Accepted

The local original income variable is known from the significance value, which is equal to 0.00 <  $\alpha = 0.05$ , therefore H1 is accepted, meaning that regional original income has an effect on the human development index.

The general allocation funds variable is known from the significance value, which is equal to 0.796 >  $\alpha = 0.05$ , therefore H2 is rejected, meaning that the general allocation funds have no effect on the human development index.

The special allocation fund variable is known from the significance value, which is equal to 0.00 <  $\alpha = 0.05$ , therefore H3 is accepted, meaning that the special allocation fund has an effect on the human development index.

d. Determination coefficient test

Table 9 Results of the coefficient of determination test

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	0.593a _ -	0.3 52	0.349 _	3.72188

The result of the calculation of the adjusted R square is 0.349. This shows that 34.9% of the variation in the human development index of a region can be explained by the large variable regional original income, general allocation funds and special allocation funds, while the remaining 65.1% can be explained through other variables outside the model used in this study.

### 3.3 Discussion

a. Effect of Regional Original Income (PAD) on the Human Development Index (IPM)

The first hypothesis states that local revenue has an effect on the human development index in districts/cities resulting from division in Indonesia for the 2018-2021 period. The results of the t-test variable for the human development index have a significance value of  $0.00 < 0.05$ , this indicates that H1 is accepted, meaning that PAD has an effect on the human development index. From the results that have been explained that regional original income is income that has a contribution to support regional capabilities in the framework of decentralization. (Irianto, Baiq Kisnawati, Istiarto, 2021) stated in his research that the Human Development Index (IPM) in the districts/cities of the NTB province will continue to increase if the Regional Original Income (PAD) increases. (Megiana et al, 2020) in his research states that in an effort to improve people's welfare, collaboration between the central government is needed (allocating balance funds so that they are effective and on target), local governments (can optimize regional wealth resources, and balancing funds) and public awareness. [6] in his research stated that PAD and Capital Expenditures in the districts/cities of Central Sulawesi Province in the period 4 years 2011-2015 showed that PAD and capital expenditures had an effect in efforts to increase the human development index in terms of aspects of Health, Education, and public spending or purchasing power. Sari & Supadmi [8] states that local revenue has a significant effect on the human development index in the province of Bali, the increase is caused by the allocation of PAD that has been utilized properly so that planned activities can run well. Through Yuli Devi Restianti's [9] explanation with regional autonomy that has been established by the central government, it is hoped that local governments will be able to develop the regional economy in accordance with the potential possessed in each region. Regional economic potential that has been utilized optimally can become regional income and can be used for the welfare of people's lives.

The results of this study are in line with research conducted by Irianto, Kisnawati, Istiarto (2021), Megiana et al (2020), Yanto Edi, Ridwan, Vittayanti F (2018), Sarkoro, Zulfikar (2018) show that Regional Original Income (PAD) significantly influence the Human Development Index (IPM)

b. Effect of the General Allocation Fund (DAU) on the Human Development Index (IPM)

The second hypothesis states that the General Allocation Fund (DAU) has no effect on the human development index (IPM) in newly created districts/cities in Indonesia for the period 2018-2021. The results of the t test on the general allocation fund variable have a significance value of  $0.796 > 0.05$  things this shows H2 is rejected. (Sarkoro & Zulfikar, 2018) states that there is no effect of the General Allocation Fund (DAU) on the Human Development Index (IPM) because the allocation of DAU is more focused on other objectives such as improving the quality of the economy of each region. In addition, the DAU is mostly used for personnel spending. This can be seen in the formulation of the DAU which includes the basic allocation component as the main component and dominates the overall DAU received by the regions. According to ardiansyah and widyaningsih (2014) basic allocation is the budget allocation used for employees. The results of this study are in line with research conducted by Sarkoro, & Zulfikar [10] and Megiana, Rupa & Riasning [12] which show that DAU has no effect on HDI but is not in line with research conducted by irianto, kisnawarti, istiarto (2021), Rukmana (2020), Yanto, Ridwan, & Fattah (2018) which shows that DAU has an effect on HDI.

c. The Effect of Special Allocation Funds (DAK) on the Human Development Index (IPM)

The third hypothesis states that the Special Allocation Fund (DAK) has an effect on the Human Development Index (IPM) in the newly expanded districts/cities in Indonesia for the 2018-2021 period. In the t test results the Special Allocation Fund (DAK) variable has a significance value of  $0.00 < 0.05$ , this indicates that H3 is accepted. This means that special allocation funds affect the human development index. Rukmana [13] stated that the effect of special allocation funds on the human development index in the Bogor district government for the 2010-2016 period was due to the fact that the local government was able to properly maximize the DAK budget according to national priorities which was able to support the development of the quality of human life, namely in the education sector public health and economy.

The results of this study are in line with research conducted by Rukmana, Heru S & Juliana [13] will but study This No in line with Yanto, Ridwan, & Fattah [14], Sarkoro, & Zulfikar [10], Megiana, Rupa, & Riasning [12].

#### IV. CONCLUSIONS

Based on the results of data analysis and discussion that has been described in the previous chapter, it can be

concluded, Based on the results of data analysis that has been carried out that Regional Original Income has an effect on the Human Development Index, this result can be proven by a significance value of  $0.00 < 0.05$  so that H1 is accepted .

Based on the results of the analysis that has been carried out, it is found that the General Allocation Fund has no effect on Human Development, this can be proven by the significance value possessed by the general allocation fund of  $0.796 > 0.05$  so that H2 is rejected.

Based on the results of the analysis that has been carried out, it is found that the Special Allocation Fund has an effect on the Human Development Index, this can be proven by the significance value possessed by the Special Allocation Fund of  $0.00 < 0.05$  so that H3 is accepted.

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