

Determinants of Human Development Index in Indonesia

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Abstract

The quality of society in a country can be measured by Human Development Index (HDI), an index of human development achievements based on a number of basic components of quality of life. Indonesian HDI components are life expectancy at birth for the health dimension, the expected years of schooling and the mean years of schooling for the educational dimension, and GNI per capita indicator for the decent life dimension. This study was aimed to analyze empirically the effect local own-source revenue (LOR), general allocation fund (GAF), special allocation fund (SAF), revenue sharing fund (RSF), excess fund balance budget calculation (EFBBC), the level of population (LP), gross regional domestic product (GRDP), and capital expenditure (CE) as the determinants of HDI. This research was conducted in South Sumatera, Indonesia. Data were analyzed by using multiple linear regression. The result showed that LOR, GAF, RSF and CE affected HDI. The government should prioritize the allocation of funds, especially those related to the HDI indicators. It is necessary for local governments to manage the management of central government transfer funds wisely according to government regulations as well as better supervision through equitable distribution of public welfare.

Keywords

Human Development Index, Financial Factors, Nonfinancial Factors

1. Introduction

Development is defined as a process that is carried out continuously for the improvement of the standard of living in the wider community to achieve a better life. It aims to create an environment that enables people to enjoy a long life and lead a productive life as well as economic and social expansion for each individual and for the nation as a whole.

One of the components that plays a vital role in the development of a country is human beings because development is not merely defined as an activity that emphasizes the physical aspects, but development in an area must be beneficial for the people who live in it. Increasing the quality of the community due to the ability of a region to explore regional financial potential and manage regional financial sources to meet local government needs must be done. It does not depend on funding from the central government, which is one of the benchmarks for the financial performance of local governments (Verawaty et al., 2017). The increasing of the quality of society in a country can affect the economy by elevating capability, creativity and productivity so as to increase welfare.

Community welfare must be realized through all components of society, be it the government or all the people. In government accounting (Verawaty, et al., 2014), regional financial management has a significant impact on regional development because if the area can maximize the targeted budget, it will greatly help economic growth in the area which will further reduce the number of unemployed and ultimately will help reduce poverty levels. Regional management not only requires human resources, but also economic resources in the form of finance in a regional government budget. Verawaty et al. (2020) stated that economic growth is not only based on macro figures, such as a controlled inflation rate, a stable rupiah exchange rate, a strengthening Composite Stock Price Index and others. While in the real sector, especially Micro Enterprises Small and Medium Enterprises (MSMEs) are less developed and empowered so that they do not absorb the number of unemployed. The increase in social welfare can be measured through a parameter that can assess the achievement of human development, namely the Human Development Index, hereinafter referred to as the HDI.

According to Damayanti (2014), HDI is a composite index to measure the achievement of human development based on a number of basic components of quality of life. According to the HDI report (UNDP, 2016), the components of Indonesia HDI include three dimensions. They are life expectancy at birth in the health dimension, the educational dimension through the indicators of expected years of schooling and the mean years of schooling, and the dimensions of decent living through the indicator of gross national income per capita (GNI per capita).

To increase human development that has an impact on the welfare of the people in an area, a special development budget is needed for that area which is related to economic decentralization (regional autonomy). In this study, the increase in HDI was associated with eight determinants. They are local own-source revenue (LOR), general allocation fund (GAF), special allocation fund (SAF), revenue sharing fund (RSF), and excess fund balance budget calculation (EFBBC) as the financial factors, while the level of population (LP), gross regional domestic product (GRDP), and capital expenditure (CE) as the nonfinancial factors.

This study aims were to determine and analyze the effect of all determinants on HDI in districts and cities in South Sumatra Province in 2014-2016. The results of this study were expected to be input and consideration in determining better regional financial management strategies through the available resources by looking at the determinants that affect HDI to be able to allocate income for spending for the welfare of the community.

2. Literature Review

2.1 Agency Theory

The agency theory is put forward by Michael C. Jensen and William H. Meckling (1976) in Verawaty (2017) which describes agency relationship as an agreement contract under one or more (principal) who delegates decision-making authority to the agent to achieve organizational goals. There are divergent interests between the principal and the agent, so that the agent does not always follow the principal's wishes.

Verawaty (2017) believes that agency theory can be applied in public organizations. The principal agent model is an analytical framework that is very useful in explaining the problem of incentives in public institutions with two possible conditions. They are several principals with their respective goals and interests that are incoherent and the principal can also act inconsistent with the public interest, but prioritize the interests of the narrower in nature. Agency relations in government are run based on local government regulations and not solely to fulfill the interests of the principal. To reduce conflict, it is necessary to monitor by principals what the agent is doing.

Yudhaningsih (2010) states that agency theory can be applied to the public sector where there is fiscal decentralization, meaning that there is a delegation from the central government to local governments. This means that the delegation

in this case is a situation where the local government acts as an agent of the central government in executing central government functions that have been delegated to local governments.

If it is related to the human development index, the agency theory emphasizes that with the decentralization policy of the central government as an agent to its principals, it is hoped that the regional government, which is given the authority to make decisions, can use it for the lives of many people in its region. Local governments can improve the economy in their regions and have an impact on the human development index figure which will increase.

2.2 Fiscal Federalism

According to Prasetya (2013) in the Public Economy Module, the theory of fiscal federalism states that for certain public goods or services such as regional public goods, decentralization can increase the efficiency and accountability of resource allocation. Fiscal federalism is applied by a country that tries to apply fiscal decentralization in its government.

According to Law No. 32 of 2004 on Regional Government, decentralization is the handover of governmental authority by the government to autonomous regions to regulate and manage government affairs in the system of the Unitary State of the Republic of Indonesia. Basically, the concept of fiscal federalism that is meant to be related to decentralization is that district/city government is an extension of the central government or in other words, in several countries in the form of a federal state where the state government is not an autonomous actor (Prasetya, 2013).

Tiebout (1956) expressed in Khusaini (2006), there is a competitive dimension in local government and he thought that competition between local governments regarding the allocation of public spending allows people to choose various public goods and services according to their tastes and desires. This will not happen in a centralized government if the central government provides public goods and services uniformly.

If it is related to the human development index, the fiscal federalism theory emphasizes that with the decentralization policy. It is hoped that local governments that allocate budgets from the central government for public welfare are better so that they gain a better reputation for reliability between local governments and create reliable human resources in all in order to become a productive society so that the community will prosper. Local governments that allocate revenue and expenditure budgets for the welfare of the community in regional government provide evidence that local governments play an active role in increasing economic growth in their regions so that the human development index figure will increase.

2.3 Human Development Index (HDI)

The concept of Human Development (HDI) was first developed by Indian Nobel laureates Mahbub ul Haq and Amartya Sen, who found an alternative measure of GDP per capita, as a measure of poverty from a multidimensional aspect that affects the quality of human life. The concept which later became a calculation in the form of this index was then used and published by the United National Development Program (UNDP).

UNDP defines human development in the Human Development Index Catalog by the Central Bureau of Statistics (2016), as a process by which society can expand its various choices. According to Harahap (2017), HDI is used to classify whether a country is a developed country, a developing country or an underdeveloped country and also to measure the effect of economic policies on quality of life.

According to the Central Bureau of Statistics (2017) in the 2016, South Sumatra Province Human Development Index Catalog, HDI is built through a three-dimensional approach, namely the health dimension, the knowledge dimension and the decent living dimension. The explanation of the three dimensions is as follows.

1. The Health Dimension

The health dimension uses life expectancy at birth. Life expectancy at birth is defined as the estimated average number of years that a person can take from birth. It reflects the degree of health of a community. It is calculated from the results of the census and population survey.

2. The Knowledge Dimension

The dimension of population knowledge is measured through two indicators. They are the mean years of schooling and the expected years of schooling. The mean length of schooling is defined as the number of years the population

has spent formal education. The expected number of years of schooling is defined as the length of schooling (in years) that the child is expected to experience at a certain age in the future.

3. The Dimension of Decent Life

The dimensions of decent living are used as indicators of people's purchasing power for a number of basic needs. The needs are measured by the average amount of per capita expenditure as an income approach that represents development achievements for a decent life.

2.4 Research Hypothesis

The following are the formulation of the research hypothesis:

H1: Local own-source revenue (LOR) has a positive effect Human Development Index (HDI)

H2: General allocation fund (GAF) has a positive effect Human Development Index (HDI)

H3: Special allocation fund (SAF) has a positive effect Human Development Index (HDI)

H4: Revenue sharing fund (RSF) has a positive effect Human Development Index (HDI)

H5: Excess fund balance budget calculation (EFBBC) has a positive effect Human Development Index (HDI)

H6: Level of population (LP) has a positive effect Human Development Index (HDI)

H7: Gross regional domestic product (GRDP) has a positive effect Human Development Index (HDI)

H8: Capital expenditure (CE) has a positive effect Human Development Index (HDI)

3. Methods

3.1 Analysis Technique

The choice of quantitative analysis technique is to measure the strength of the relationship between the dependent variable and the independent variable in this study. Quantitative analysis technique is a form of research based on those collected during research systematically regarding the facts and properties of the object under study by combining the relationships between the variables involved. Then it is interpreted based on theories and literatures related to the index human development. This method aims to provide a fairly clear picture of the problem under study.

3.2 Descriptive Statistics

Descriptive statistics are statistics used to analyze data by describing or describing the collected data as it is without intending to make applicable conclusions or generalizations (Sugiyono, 2017). The minimum is the smallest value of a series of observations. The maximum is the largest value of a series of observations. The mean is the average calculated from the sum of the values of all data divided by the number of data. The standard deviation is the root of the sum of squares of the difference between the data values and the mean divided by the number of data. Descriptive statistics used in this study are the average value (mean), maximum value, minimum value, and standard deviation. The SPSS program will be used in this study to process hypotheses so that it can provide an overview of the research results that can be used to answer problems, namely the regression equation.

3.3 Regression Analysis

According to Ghozali (2016), multiple linear regression analysis is used to test the effect of two or more independent variables on one dependent variable. A variable is called intervening if the variable affects the relationship between the predictor variable (independent) and the criterion (dependent) variable (Ghozali, 2016). The multiple linear regression model equation is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + e$$

Note:

Y : Human Development Index (HDI)

X1 : Local own-source revenue (LOR)

X2 : General allocation fund (GAF)

X3 : Special allocation fund (SAF)

X4 : Revenue sharing fund (RSF)

X5 : Excess fund balance budget calculation (EFBBC)

X6 : Level of population (LP)

X7 : Gross regional domestic product (GRDP)

X8 : Capital expenditure (CE)

e : Error term

This study used the confidence interval with 0.95%. The significance level is 0.05 ($\alpha = 5\%$). The conditions for rejection or acceptance of a hypothesis are if the significant value is not in the range, then H_0 is accepted and rejects H_1 (regression coefficient is not significant). This means that partially the independent variable does not have a significant effect on the dependent variable. If the significant value is in the range, then H_0 is rejected and accepts H_1 (significant regression coefficient). This means that partially the independent variable has a significant effect on the dependent variable.

4. Data Collection

4.1 Population and Sample

The objects used in this research are all districts/cities in South Sumatra Province from 2014 to 2016. The data used are secondary data in the form of a 2014-2016 budget realization report published by the South Sumatra Province Audit Board. The Human Development Index (HDI) data are the website of the Central Bureau of Statistics (CBS), data on population and per capita gross regional domestic product data from 2014 to 2016 are contained in the CBS catalog. Sampling was carried out using a saturated/census sampling method of determining the sample when all populations were used as the sample. The sample in this study were 17 districts/cities in South Sumatra Province in 2014-2016 with a total sample of 51 units of analysis (17 x 3 years).

Table 1 Research Sample

No	District/City of Sumatera Selatan	No	District/City of Sumatera Selatan
1	Banyuasin	9	Ogan Komering Ilir
2	Empat Lawang	10	Ogan Komering Ulu
3	Lahat	11	Ogan Komering Ulu Selatan
4	Muara Enim	12	Ogan Komering Ulu Timur
5	Musi Banyuasin	13	Penukal Abab Lematang Ilir
6	Musi Rawas	14	Lubuklinggau
7	Musi Rawas Utara	15	Pagar Alam
8	Ogan Ilir	16	Palembang
		17	Prabumulih

4.2 Data Types and Sources

The data used in this study are secondary data. They are the sources that do not directly provide data to data collectors, for example through other people or through documents (Sugiyono, 2017). Sources of research data obtained from:

1. Data on budget realization reports obtained from the Supreme Audit Board of South Sumatra Province
2. District/city of Human Development Index (HDI) data used as a measure of human development indicators are obtained from the website of the Central Bureau of Statistics (www.ipm.bps.go.id).
3. Various articles, journals, catalogs and some previous research from various sources.

5. Results and Discussion

5.1 Descriptive Statistics Results

Descriptive analysis of the data taken for this study is secondary data in the form of a 2014-2016 budget realization report published by the Supreme Audit Board of South Sumatra Province, Human Development Index (HDI) data available on the Central Bureau of Statistics website, data on the number of population and per capita gross regional domestic product data from 2014 to 2016 contained in the catalog of the Central Bureau of Statistics. The following is a descriptive statistical table for each research variable:

Table 2 Descriptive Statistics
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
HDI	51	59.89	76.59	66.22	4.11
LOR	51	8.90	7.81	1.23	1.66
GAF	51	1.10	1.29	5.74	2.62
SAF	51	.00	3.87	1.10	9.46
RSF	51	9.13	2.42	3.43	4.34
EFBBC	51	9.55	1.56	4.36	4.23
LP	51	132498.00	1602071.00	473621.7843	3.51
GRDP	51	12074753.00	64803332.00	2.61	1.51
CE	51	1.68	1.38	3.91	1.93
Valid N (listwise)	51				

Based on Table 2, it can be seen that from 51 research samples from 17 districts/cities that:

1. The LOR variable has an average (mean) value of 1.23 with a standard deviation of 1.66 where the standard deviation value is greater than the average value. The minimum value is 8.90 which is smaller than the average value, and the maximum value is 7.81 which is bigger than the average value.
2. The GAF variable has an average (mean) value of 5.74 with a standard deviation of 2.62 where the standard deviation value is smaller than the average value. The minimum value is 1.10 which is smaller than the average value, different from the maximum value of 1.29 which is bigger than the average value.
3. The SAF variable has an average (mean) value of 1.10 with a standard deviation of 9.46 where the standard deviation value is smaller than the average value. The minimum value is 0.00 which is smaller than the average value, different from the maximum value of 3.87 which is bigger than the average value.
4. The RSF variable has an average (mean) value of 3.43 with a standard deviation of 4.34 where the standard deviation value is greater than the average value. The minimum value is 9.13 which is smaller than the average value, different from the maximum value of 2.42 which is bigger than the average value.
5. The EFBBC variable has an average value (mean) of 4.36 with a standard deviation of 4.23 where the standard deviation value is smaller than the average value. The minimum value of 9.55 which is smaller than the average value, different from the maximum value of 1.56 which is bigger than the average value.
6. The LP variable has an average value (mean) of 473621.7843 with a standard deviation of 3.51 where the standard deviation value is smaller than the average value. The minimum value is 132498.00 which is smaller than the average value, different from the maximum value of 1602071.00 which is bigger than the average.
7. The GRDP variable has an average (mean) value of 2.61 with a standard deviation of 1.51 where the standard deviation value is smaller than the average value. The minimum value is 12074753.00 which is smaller than the average value, different from the maximum value of 64803332.00 which is greater than the average value.
8. The CE variable has an average value (mean) of 3.91 with a standard deviation of 1.93 where the standard deviation value is smaller than the average value. The minimum value is 1.68 which is smaller than the average value, different from the maximum value of 1.38 which is bigger than the average value.
9. The HDI variable has an average value (mean) of 66.22 with a standard deviation of 4.11 where the standard deviation value is smaller than the average value. The minimum value of 59.89 which is smaller than the average value, different from the maximum value of 76.59 which is greater than the average value.

5.2 Regression Analysis Results

All research variables have passed the classical assumption test. The results of the normality test are the Kolmogorov-Smirnov (K-S) value and the Asymp. Sig. (2-tailed) with all variables above $\alpha = 0.05$, which means the data tested is normally distributed. The multicollinearity test result states that the tolerance value for all variables is greater than 10% and VIF is less than 10, which means that the data of this study does not occur multicollinearity. The results of the heteroscedasticity test state that the significant value for each independent variable on the absolute residual value is greater than 0.05, which means that there are no symptoms of heteroscedasticity in this study. In the results of this research run test, the value of Asymp. Sig. (2-tailed) is greater than 0.05, it can be concluded that there is no autocorrelation. Thus, all research variables can be tested at a later stage.

Table 3 Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	65.938	1.937		34.042	.000
	LOR	3.326	.000	1.343	4.546	.000
	GAF	1.148	.000	.732	2.180	.035
	SAF	-2.382	.000	-.055	-.393	.696
	RSF	6.072	.000	.641	2.050	.047
	EFBBC	-2.007	.000	-.206	-1.642	.108
	LP	-1.141	.000	-.973	-2.587	.013
	GRDP	-6.163	.000	-.226	-.789	.435
	CE	1.109	.000	.521	2.527	.015

a. Dependent Variable: HDI

After conducting a regression analysis from Table 3, the regression coefficient values can be entered into the following regression equation:

$$Y = 65,938 + 3,326X_1 + 1,148X_2 - 2,382X_3 + 6,072X_4 - 2,007X_5 - 1,141X_6 - 6,163X_7 + 1,109X_8$$

The following is an explanation of the coefficient of each variable:

1. The LOR variable has a positive coefficient of 3.326. This shows that for every increase in LOR of 1, the HDI will increase by 3.326 with the assumption that the other independent variables are constant.
2. The GAF variable has a positive coefficient of 1,148. This shows that for every increase in GAF of 1, the HDI will increase by 3.326 with the assumption that the other independent variables are constant.
3. The SAF variable has a positive coefficient of -2,382. This shows that for every increase in SAF of 1, the HDI will increase by -2,382 with the assumption that the other independent variables are constant.
4. The RSF variable has a positive coefficient of 6,072. This shows that for every increase in RSF of 1, the HDI will increase by 6,072 with the assumption that the other independent variables are constant.
5. The EFBBC variable has a positive coefficient of -2,007. This shows that for every increase in EFBBC of 1, the HDI will increase by -2,007 with the assumption that the other independent variables are constant.
6. The LP variable has a positive coefficient of -1,141. This shows that for every increase in LP of 1, the HDI will increase by -1,141 with the assumption that the other independent variables are constant.
7. The GRDP variable has a positive coefficient of -6,163. This shows that for every increase in GRDP of 1, the HDI will increase by -6,163 with the assumption that the other independent variables are constant.
8. The CE variable has a positive coefficient of 1,109. This shows that for every increase in CE of 1, the HDI will increase by 1,109 with the assumption that the other independent variables are constant.

Based on the test results in Table 3, the effect of each independent variable partially on the dependent variable is as follows:

1. The significant value of LOR (X1) to HDI (Y)
Based on the results of data processing, the LOR variable obtained a significant value = 0.000 < level of significance (α) = 0.01. Because the significant value is smaller than 0.01, the conclusion is that partially the LOR variable (X1) has a significant effect on HDI (Y).
2. The significant value of GAF (X2) to HDI (Y)
Based on the results of data processing, the GAF variable (X2) obtained a significant value = 0.035 < level of significance (α) = 0.05. Because the significant value is less than 0.05, it can be concluded that partially the GAF variable (X2) has a significant effect on HDI (Y).
3. The significant value of SAF (X3) to HDI (Y)

Based on the results of data processing, the SAF variable (X3) obtained a significant value = 0.696 > level of significance (α) = 0.05. Because the significant value is greater than 0.05, the conclusion that can be drawn is that partially the SAF variable (X3) has no significant effect on HDI (Y).

4. The significant value of RSF (X4) to HDI (Y)

Based on the results of data processing, the RSF variable (X4) obtained a significant value = 0.047 < level of significance (α) = 0.05. Because the significant value is less than 0.05, the conclusion that can be drawn is that partially the RSF variable (X4) has a significant effect on HDI (Y).

5. The significant value of EFBBC (X5) to HDI (Y)

Based on the results of data processing, the EFBBC variable (X5) obtained a significant value = 0.108 > level of significance (α) = 0.05. Because the significant value is greater than 0.05, the conclusion that can be drawn is that partially the EFBBC variable (X5) has no significant effect on HDI (Y).

6. The significant value of LP (X6) to HDI (Y)

Based on the results of data processing, the LP variable (X6) obtained a significant value = 0.013 < level of significance (α) = 0.05. Because the significant value is less than 0.05, the conclusion that can be drawn is that partially the LP variable (X6) has a significant effect on HDI (Y).

7. The significant value of GRDP (X7) to HDI (Y)

Based on the results of data processing, the GRDP variable (X7) obtained a significant value = 0.435 > level of significance (α) = 0.05. Because the significant value is greater than 0.05, the conclusion that can be drawn is that partially the GRDP variable (X7) has no significant effect on capital expenditure (Y).

8. The significant value of CE (X8) to HDI (Y)

Based on the results of data processing, the CE variable (X8) obtained a significant value = 0.015 < level of significance (α) = 0.05. Because the significant value is greater than 0.05, the conclusion that can be drawn is that partially the CE variable (X8) has a significant effect on HDI (Y).

5.3 Discussion

5.3.1 The Effect of Local Own Revenue (LOR) on the Human Development Index (HDI)

In the t test results, it is known that the significant value of the LOR variable is 0.000, which is smaller than the significance level of 0.05 (α = 5%), which means that LOR has a significant effect on HDI. This is in line with research conducted by Adiputra et al. (2015), Putra and Ulupui (2015), and Dithisari (2017) showing that there is a significant positive effect between LOR and HDI. However, it is different from the research of Marbun (2011) and Damayanti (2014). Evidence that supports the results of this study can be seen in the 2016 Budget Realization Report data, the City of Palembang has the largest LOR when compared to other districts/cities in South Sumatra Province, amounting to IDR 781.413.947.765,14 with HDI figures. The largest was also 76.59, while the lowest LOR value was IDR 8,903,213,895.13 in Penukal Abab Lematang Ilir (PALI) Regency with the lowest HDI figure of 59.89. LOR will increase the capacity of the region to finance its development so that the creation of a prosperous society will have an impact on increasing the HDI. Thus, hypothesis 1 which states that LOR has a positive effect on HDI is accepted.

5.3.2 The Effect of General Allocation Funds (GAF) on the Human Development Index (HDI)

In the t test results, it is known that the significant value of the GAF variable is 0.035 which is smaller than the significance level of 0.05 (α = 5%), which means that GAF has a significant effect on HDI. Research by Harahap (2017), Damayanti (2014) and Putra and Ulupui (2015) is in line with this study which found positive and significant results of GAF on HDI. However, it is different from Marbun (2011) which found that there was no significant effect between GAF and HDI. Evidence that supports the results of this study. It can be seen in the data from the Budget Realization Report of South Sumatra Province in 2016 that the maximum GAF value of IDR 1,292,124,896,000. It is found in Palembang City with the highest HDI figure, which is 76.59. These results prove the statement that the HDI as one of the GAF allocators to address financial disparities between regions (Central Bureau of Statistics, 2016), regions with low HDI can increase HDI to obtain an excessive allocation of funds. Thus, hypothesis 2 which states that GAF has a positive effect on HDI is accepted.

5.3.3 The Effect of Special Allocation Funds (SAF) on the Human Development Index (HDI)

In the t test results, it is known that the significant value of the SAF variable is 0.696, which is greater than the significance level of 0.05 (α = 5%), which means that SAF has no significant effect on HDI. Damayanti (2014) also found that there was no significant and negative influence between SAF and HDI, in contrast to the results of research by Harahap (2017) and Putra and Ulupui (2015). This result is evidenced by the data from the Budget Realization Report of South Sumatra Province in 2016. Banyuasin Regency has a high SAF of IDR 377,545,536,695 with an HDI

of 65.01. Musi Rawas Regency has SAF of IDR 339,913,733,853 with HDI of 64.75. So it can be concluded that a high SAF allocation does not automatically increase the HDI. Thus, hypothesis 3 which states that SAF has a positive effect on HDI is rejected.

5.3.4 The Effect of Revenue Sharing Funds (RSF) on the Human Development Index (HDI)

In the t test results, it is known that the significant value of the RSF variable is 0.047 which is smaller than the significance level of 0.05 ($\alpha = 5\%$), which means that SAF has a significant effect on HDI. This result is in accordance with Harahap (2017) which found that RSF has an influence on HDI. However, it is different from Marbun (2011) and Damayanti (2014) who found that there was no significant and negative effect between RSF on HDI. According to Verawaty (2017), RSF is a fund that is block grants, namely the use of the source of funds is determined by regional decisions based on regional priorities, which causes the management of RSF to be right on target and in accordance with the needs needed for regional development. So it can be concluded that the allocation of the RSF used to finance development will increase the HDI. Thus, hypothesis 4 which states that RSF has a positive effect on HDI is accepted.

5.3.5 Effect of Excess Fund Balance Budget Calculation (EFBBC) on the Human Development Index (HDI)

In the t test results, it is known that the significant value of the EFBBC variable is 0.108, which is greater than the significance level of 0.05 ($\alpha = 5\%$), which means that EFBBC has no significant effect on HDI. This study is inconsistent with the majority of previous research results that prove the influence of EFBBC on HDI, such as research by Wahyu and Dwirandra (2015) and Indrawati (2016). From these results, it can be shown that the EFBBC district/city government in South Sumatra Province is not a source of financing revenue in supporting regional development because it has other funding sources such as LOR, GAF, and RSF. This statement can be seen through the data from the District/City Budget Realization Report of South Sumatra Province in 2016. Ogan Komering Ulu Selatan Regency has the highest EFBBC of IDR 155,557,110,807.10 which is not matched by an increase in HDI with a value of 61.94. So it can be concluded that a high EFBBC does not mean that human development in an area has also increased. Thus, hypothesis 5 which states that EFBBC has a positive effect on HDI is rejected.

5.3.6 The Effect of Level of Population (LP) on Human Development Index (HDI)

In the t test results, it is known that the significant value of the Population Level (LP) variable is 0.013 which is smaller than the significance level of 0.05 ($\alpha = 5\%$). However, it has a negative regression coefficient of -2,587, so the conclusion that can be drawn is that partially the LP variable has no significant effect on HDI. The results of this study are not able to show the positive effect of LP on HDI as in the research of Melliana and Zain (2013) and Zakaria (2018), and are in line with the results of Astuti and Astika (2016). According to Astuti and Astika (2016) population has a negative effect on the welfare of an area because a large increase in population has broad implications for development programs, because a large population growth with low quality will become a burden for development (Arjoso, 2006 in Astuti and Astika, 2016). Thus, hypothesis 6 which states that LP has a positive effect on HDI is rejected.

5.3.7 The Effect of Gross Regional Domestic Product (GRDP) Per Capita on Human Development Index (HDI)

In the t test results, it is known that the significant value of the per capita GRDP variable is 0.435, which is greater than the significance level of 0.05 ($\alpha = 5\%$). The conclusion is that partially the per capita GRDP variable does not have a significant effect on HDI. This study is not in line with research by Bhakti et al. (2014) and Zamharir (2016) which found a positive and significant effect of GDP per capita on increasing HDI, but consistent with the results of Sasana (2012). According to Sasana (2012), these results indicate that the GRDP per capita of the community in the region has not been able to increase the HDI in the area, partly due to the relatively small income owned by the community. This results in lower people's purchasing power, such as limited spending on education and health, which slows down the increase in human development. Thus, hypothesis 7 which states that GRDP has a positive effect on HDI is rejected.

5.3.8 The Effect of Capital Expenditure on Human Development Index (HDI)

In the t test results, it is known that the significant value of the capital expenditure variable is 0.015 which is smaller than the significance level of 0.05 ($\alpha = 5\%$). The conclusion is that partially the per capita GRDP variable has a significant effect on HDI. This research is in line with the research of Setyowati et al. (2012) and Zakaria (2018) which found a positive and significant effect of GDP per capita on increasing HDI. Routine expenditures made by the

government in building infrastructure, especially to build or improve the quality of human resources (HR), so when capital spending increases, the human development index will also increase. Thus, hypothesis 8 which states that capital expenditure has a positive effect on HDI is accepted.

5. Conclusion

Based on the discussion on the analysis of the determinants of increasing the Human Development Index (HDI) in the districts/cities of South Sumatra Province, it is concluded that the allocation of LOR, GAF, RSF and capital expenditure had positive and significant effects on HDI. SAF, EFBBC, LP and GRDP did not have a positive effect on HDI rejected because large SAF is not allocated for increasing the HDI dimensions such as education and health. EFBBC is not a source of financing revenue for regional development which has an impact on increasing HDI. A large population becomes a burden for development so that hampered the increase in HDI. The relatively small per capita income of the community which resulted in a lower purchasing power thus inhibiting the increase in HDI. The research implication is that there is a need for the management of central government transfer funds wisely by local governments. They are according to their respective functions according to government regulations or laws as well as better supervision through equal distribution of community welfare in all districts/cities in South Sumatra Province, especially those related to with HDI indicators such as health, education and income programs, South Sumatra Province will be able to increase the provincial HDI which continues to be in a moderate status from year to year to a high category.

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