Review South Sulawesi Human Development Index Using Methodology New

Iwan Harsono[1*], Syamsu Rijal[2], Andi Zakinah Juniarti[3], Samsuardi Said[4], Rezki Fitriani[5]
[1]Fakultas Ekonomi dan Bisnis Universitas Mataram
[2,3,5]Fakultas Ekonomi Karya Dharma
[4]Fakultas Ekonomi Universitas Sulawesi Barat

Article Info

ABSTRACT

This study for review returns How quality source Power man especially in South Sulawesi Province using perspective number new where measurements Human Development Index according to UNDP reviewed with track and analyze Health and Education expenditure data using panel data, namely cross-sections and time series for see influence in a way statistics. The results obtained writer that is Health shopping has influence negative and not significant to Human Development Index, Education Expenditure has influence negative and not significant to Human Development Index in South Sulawesi Province. Attention to variables social need improved, okay from facet utility budget and whether distribution of Education and Health funds already appropriate target or No

Corresponding Author:

Iwan Harsono
Fakultas Ekonomi dan Bisnis Universitas Mataram
Email: iwanharsono@unram.ac.id

1.   INTRODUCTION

As the goal of human development is to create an environment for humans to enjoy a long, healthy and creative life (UNDP, 2003). For the success of development and human welfare, UNDP has set a benchmark, namely the Human Development Index. The Human Development Index (HDI) is a measure used to measure development success.

To see the extent of success in development and human welfare, UNDP has published an indicator, namely the Human Development Index (HDI) to measure the success of development and welfare of a country. HDI is a benchmark for the welfare of a region or country which is seen based on three dimensions, namely: life expectancy at birth, literacy rate and average years of schooling, and purchasing power parity.

The Central Statistics Agency has recently used the latest method to calculate HDI. According to Sunarni (2017), the Human Development Index (HDI) is a variable that reflects the level of achievement of population welfare in terms of basic services in the fields of education, health and community welfare. Increasing quality human resources is a very important element of development. Creating quality human resources requires various facilities and infrastructure. Therefore, investment is needed to be able to create quality human resources. According to Sunarni (2017), it is a variable that reflects the level of achievement of population welfare in terms of basic services in the fields of education, health and community welfare. The Human Development Index was formed based on four indicators, namely life expectancy, literacy rate, average years of schooling and purchasing power. The life expectancy indicator measures health, the literacy rate indicator for

the adult population and the average number of years of schooling measures education. Meanwhile, the purchasing power indicator measures living standards (BPS, 2017).

The HDI calculation method has been used by the United Nations Development Program (UNDP) in preparing the annual human development report (Human Development Report). The current Human Development Index figures according to Bappenas/BPS basic data have adopted the latest method. Reasons why the HDI methodology has been changed (BPS, 2023) First, some indicators are no longer suitable for use in calculating HDI. Literacy rates are no longer relevant in measuring education as a whole because they cannot describe the quality of education. In addition, because the literacy rate in most regions is already high, it is not possible to differentiate education levels between regions well. GDP/GRDP per capita cannot describe the income of the people in a region. Second, the use of the arithmetic average formula in calculating HDI illustrates that low achievement in one dimension can be covered by high achievement in another dimension. By using the geometric average in compiling the HDI, it can be interpreted that the achievements in one dimension cannot be covered by achievements in other dimensions. This means that to realize good human development, the three dimensions must receive equal attention because they are equally important.

Government spending can be used as a reflection of the policies taken by the government in a region. Government policy in each purchase of goods and services to implement a program reflects the amount of costs that the government will incur to implement the program. Government expenditure is used to finance important public sectors, among all public sectors currently the government's priority in achieving quality development of human resources in relation to what is reflected in the human development index is investment in the education and health sectors. It is hoped that investment in this sector will has an effect on improving the quality of human resources and reducing poverty, Firmansyah (2018).

Perspective of government expenditure in responding to the need for progress in the Human Development Index in the government area by paying attention to expenditure on logical elements, namely government expenditure in the health and education sectors as well as growth economy. Based on method calculation new, that data based on publication of the Central Statistics Agency through System Bappenas Regional Basic Data Information and Management as presented in the table Human Development Index in South Sulawesi Province based on Regency.

Table 1. South Sulawesi Human Development Index Per- District 2014-2023

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
South Sulawesi Province	68.49	69.15	69.76	70.34	70.9	71.66	71.93	72.24	72.82	73.46
Selayar	63.66	64.32	64.95	65.39	66.04	66.91	67.38	67.76	68.35	69.20
Bulukurnba	65.24	65.58	66.46	67.08	67.7	68.28	68.99	69.62	70.34	71.21
Bantaeng	65.77	66.2	66.59	67.27	67.76	68.3	68.73	68.99	69.69	70.57
Jeneponto	61.45	61.61	61.81	62.67	63.33	64.0	64.26	64.56	65.13	65.90
Takalar	63.53	64.07	64.96	65.48	66.07	66.94	67.31	67.72	68.31	68.90
Gowa	66.12	66.87	67.7	68.33	68.87	69.66	70.14	70.29	70.99	71.57
Sinjai	63.83	64.48	65.36	65.8	66.24	67.05	67.6	67.75	68.33	68.92
Maros	66.65	67.13	67.76	68.42	68.94	69.5	69.86	70.41	71.0	71.63
Pangkajene Island	66.16	66.65	66.86	67.25	67.71	68.29	68.72	69.21	69.79	70.59
Barru	67.94	68.64	69.07	69.56	70.05	70.6	71.0	71.13	71.53	72.36
Bone	62.09	63.11	63.86	64.16	65.04	65.67	66.06	66.4	67.01	67.81
Soppeng	64.74	65.33	65.95	66.67	67.6	68.26	68.67	68.99	69.7	70.58
Wajo	66.49	66.9	67.52	68.18	68.57	69.05	69.15	69.62	70.26	71.10
Sidenreng Rappang	68.14	69.0	69.39	69.84	70.6	71.05	71.21	71.54	72.06	72.71
Pinrang	68.92	69.24	69.42	69.9	70.62	71.12	71.26	71.45	71.97	72.84
Enrekang	69.37	70.03	70.79	71.44	72.15	72.66	72.76	72.91	73.39	73.89
Luwu	67.34	68.11	68.71	69.02	69.6	70.39	70.51	70.85	71.36	72.16
Tana Toraja	65.08	65.75	66.25	66.82	67.66	68.25	68.75	69.49	69.88	70.73
North Luwu	66.9	67.44	67.81	68.35	68.79	69.46	69.57	70.02	70.51	71.34
East Luwu	69.75	70.43	70.95	71.46	72.16	72.8	73.22	73.34	73.92	74.35
North Toraja	66.15	66.76	67.49	67.9	68.49	69.23	69.33	69.75	70.36	71.23
Makassar city	79.35	79.94	80.53	81.13	81.73	82.25	82.25	82.66	83.12	83.52

| Pare City | 75.66 | 76.31 | 76.48 | 76.68 | 77.19 | 77.62 | 77.86 | 78.21 | 78.54 | 79.03 |
| Palopo City | 75.65 | 76.27 | 76.45 | 76.71 | 77.3 | 77.98 | 78.06 | 78.38 | 78.91 | 79.45 |

Source: BPS & Simreg Bappenas

Based on the Human Development Index data above We can conclude that the trend of numbers the show enhancement from year to years and almost comprehensively on each Regency /City. Through this data so writer formulate problem.

2. Base Theory

2.1 Human Development Index

The Human Development Index (HDI) is a summary measure of average achievement in the main dimensions of human development, living a long and healthy life, being knowledgeable and having a decent standard of living. HDI is the geometric mean of the normalized indices for each of the three dimensions. Humans are the true wealth of the nation. The main goal of development is to create an environment that allows people to enjoy long, healthy lives and lead productive lives. This seems simple. But it is often forgotten by short-term preoccupations with accumulating wealth and money. (UNDP: Human Development Report, 2000).

The term human capital was first proposed by Gary S. Becker. Ace Suryadi (1994) (In Boediono 1999). who studied in more depth the role of formal education in supporting economic growth stated that, the higher the formal education obtained, the higher the labor productivity will be. This is in accordance with Human Capital theory, namely that education has an influence on economic growth because education plays a role in increasing labor productivity. This theory assumes that population growth is determined by individual productivity. If everyone has a higher income because of higher education, then population economic growth can be supported. Since 1999, the United Nations Development Program (UNDP) introduced the concept of measuring the quality of human capital called the Human Development Index or also known as IPM (Human Development Index). An increase in the human development index (HDI) can enable increased output and income in the future, thereby increasing economic growth.

2.2 Expenditure Government Education and Health Sector

This model was developed by Rostow and Musgrave which links the development of government spending with the stages of economic development, namely the initial stage, middle stage and advanced stage. In the early stages of economic development, the percentage of government investment in total investment is large because at this stage the government must provide infrastructure such as education, health, transportation infrastructure and so on. (Dumairy, 1997). In the middle stages of economic development, government investment is still needed to increase economic growth so that it can take off, However, at this stage the role of private investment is getting bigger. The role of the government remains large in the middle stage, because the private sector's role is getting bigger, it will cause many market failures and also cause the government to have to provide public goods and services in greater quantities.

2.3 Study Previous

Results of research by Firmansah (2018) The influence of government spending in the education sector on the human development index. From the results of the regression analysis between government expenditure in the education sector and the human development index, a value of ρvalue = 0.038 is obtained, so it can be said that there is a significant influence between government expenditure in the education sector and the human development index. Ranis (2004), if poor people earn higher incomes or in other words there is a reduction in poverty levels, this will have an effect on increasing human development through increasing the share of household expenditure spent on more nutritious food and higher education.

Firmansah (2018) The influence of government spending in the education sector on the human development index. From the results of the regression analysis between government expenditure in the education sector and the human development index, a value of ρvalue = 0.038 is obtained, so it can be said that there is a significant influence between government expenditure in the education sector and the human development index. Research by Meier and Rauch (2000) shows that education or more broadly human capital can contribute to development. This is because education is essentially a form of saving, leading to the accumulation of human capital and growth in aggregate output if human capital is an input in the aggregate production function.

3. RESEARCH METHODS

The data collection technique used is library research, where library research is a research method for obtaining information from literature related to this research, such as research journals, theses, dissertations

and other published books related to this research. The data collection technique used is direct recording in the form of panel data, namely a combination of cross section data and time series data, consisting of 24 regencies/cities and a time interval of 10 years (2014 - 2023) and the number of samples from the series c r The OSS section consisted of 240 samples. Cross-section data is data that consists of one or more variables collected at the same time. Meanwhile, time series data is data consisting of one or more variables collected over time (Gujarati, 2003).

3.1 Data analysis technique

Approach study This use method descriptive quantitative with analyze quantitative data and describe it Then use statistical test tools. Multiple linear regression analysis is part of a regression model that can be used to analyze cause and effect relationships between one variable and another variable. Multiple linear regression analysis is used using regression correlation so that it can be seen to arrive at the final dependent variable with the formula that can be seen below:

$Y_1 = f + (X_{1it}, X_{2it},)$ ....(3.1)
$Y_2 = f (X_{1it}, X_{2itt,} Y_{1it})$ .... (3.2)

Where:
X1 = Health Expenditures
X2 = Education Expenditure
Y = HDI

3.2 Test Parameters

3.2.1   Coefficient of Determination Test (R_2)

The coefficient of determination is a measure to determine the suitability or accuracy of the relationship between the independent variable and the dependent variable in a regression equation. The greater the coefficient of determination, the better the ability of the independent variable to explain and explain the dependent variable. In SPSS output. The coefficient of determination is located in the model summary table and is written R square. The R square value is said to be good if it is above 0.5 because the R square value ranges from 0 to 1.

3.2.2 Hypothesis testing

   a.   Partial testing (t test)

      According to Kuncoro (2012), the t statistical test shows how far an individual explanatory variable is in explaining variations in the dependent variable. The hypothesis to be tested is as follows:

      1) $H_0 : b_i = 0$. then X_1, X_2, have no effect on Y.

      2) $Ha : b_i = 0$. then X_1, $X_{2.,}$ have an effect on Y.

      Test criteria:
      -   If the significance value is > 0.05. means there is no influence between the independent variable and the dependent variable.
      -   If the significance value is <0.05. This means that there is an influence between the independent variable and the dependent variable.

   b.   Simultaneously testing (F test)

      According to Kuncoro (2012), the F statistical test shows whether all the independent variables included in the analysis model have a joint influence on the dependent variable. The hypothesis to be tested is as follows:

      1) $Ho: b_i = 0$. then the independent variable (i) simultaneously has no effect on Y.

      2) $Ha : bi = 0$. then the independent variable (i) simultaneously influences Y.

      According to Ghozali (2014) the testing criteria:
      -   If the $_{calculated \ F \ significance \ value}$ is > 0.05. which means that the independent variable does not simultaneously influence the dependent variable.
      -   $_{calculated}$ F significance value is <0.05. which means that the independent variables together have an influence on the dependent variable.

4.   RESULTS

Research variable	Regression Coefficients	t-statistics	Sig.
Health (X$_1$)	-4 ,790	-1 . 365	0 . 174
Education (X$_2$)	-418,705	-1 . 4 5 6	0.147 _
C	29213	2,987	0.00 4

F-statistic   = 2 . 884
(F-Sig) = 0.060
*) Significant at α = 5%; R2 = 0.230 ⁻
N = 240

4.1 Coefficient Test Determination R^2

Coefficient value determination from table above _ show the number 0.230 which means the total value the contribution of the Health and Education variables is 23.00% towards index development humans in South Sulawesi Province, figures that is also meaningful that other variables still influential big against HDI where the amount the driver of these other variables is at 77 %.

4.2 t test

Significance value health in the table above show figure 0.147, t- statistic value of -1,456 and value coefficient regression of -4,790 which means that in a way Partial variable Health spending has a negative effect or not significant to Human Development Index in South Sulawesi Province.

Significance value education in the table above show figure 0.174, t- statistic value of -1,365 and value coefficient regression amounting to -418,705 which means that in a way Partial variable Education spending has a negative and negative effect significant to Human Development Index in South Sulawesi Province.

4.3 F test

F significance value in the table above show the number 0.060 is significant that in a way simultaneously variable Health spending and Education spending are not have influence significant to Human Development Index in South Sulawesi Province.

5.   DISCUSSION

5.1 Health

Health   is an important factor for resource development Power humans, one of the conditions for an individual to be able to work and have high productivity is that the individual is healthy, with an adequate level of health and nutrition. Size healthy as it should be must influence Power remember and power stand strong body, results obtained on this research related influence expenditure Health sector towards Human Development Index in South Sulawesi Province with use method new is something form concern to condition source Power humans experience in a way aware nor No. Health is one of the dimensions of well-being, poor health can directly affect an individual's opportunities such as his capacity to perform various type activity, especially on activity economy . From the results research obtained, then We can review extent of effectiveness Health spending is implemented and how distribution health shopping, what? Already evenly throughout layer society, perhaps just No.

Factor environment being one reject measuring development man now need Pay attention, it's widespread exploitation source Power nature, level fertility land, reduced Arable land is polluted sea and air need given attention specifically for the sake of future continuity communities in South Sulawesi Province in each Regency /City. Data from results resulting research needs to be reflected by agencies government and also academics as well as public especially in the South Sulawesi region.

5.2 Education

The government plays an important role in preparing strategic programs to produce quality human resources ready to enter the job market. *Finally,* there is community guidance and development, especially the younger generation. As the main support in the wheel of development, empowering the younger generation is expected to create a generation that is creative, innovative and highly competitive. It is these characteristics of the young generation that are expected to be able to contribute and win global competition. Proficiency man in climb his life can seen from the extent of the education level achieved, though success

somebody nor should it formal schooling, becoming the polemic that Indonesia itself is experiencing in a way generally and specifically in South Sulawesi Province which is approximately need notice system and quality Education services are applied throughout remote areas of this country. Negative numbers and not significant hinted that need exists attention more on this vital element.

Current allocation of education funds This need reviewed by the government local area so that the education funds in question appropriate target, poor society capable in fulfillment his needs for study at a higher level tall must be the main thing. By social, various problem agency government can related in matter this, no regardless from problem conflict, culture and factors there are other causes barrier for some people who should enjoy Education to be not Empower as a result. According to ICW itself the amount of aid funds, especially PIP, is very large. In 2022, the government will allocate funds amounting to Rp . 9.6 trillion or around 12 percent of the total budget managed by the Ministry of Education, Culture, Research and Technology. PIP funds are intended for 17.9 million students at all levels of education. That figure along with How number separated schools are also increasing.

6.   CONCLUSION

Research result this is what gets it negative numbers and not significant is something concern in development humans in South Sulawesi Province , reviewing the variables that can become size certain in analyze Human Development Index need developed and implemented throughout _ layer public especially the government Provinces / Regencies / Cities in South Sulawesi

7. REFERENCES

Boediono, 1999, Economic Growth Theory, Yogyakarta: BPFE UGM

Brata, Aloysius Gunadi, 2005. Local Public Sector Investment, Human Development and Poverty. Yogyakarta: Research Institute – Atma Jaya University.

Darwin, Dirmansyah. "The Influence of Government Expenditure in the Health Sector, Education Sector, Capital Expenditures on the Human Development Index in South Sulawesi Province." Enrichment: Journal of Management 12.5 (2022): 3758-3767.

Gujarati, Damodar, 2003, Basic Econometrics. Translation: Sumarno Zain, Jakarta: Erlangga

Handika , Firmansah , 2018. Analysis of Factors That Influence the Human Development Index in Malang Regency . Journal Department of Economics, Faculty of Economics and Business, Brawijaya University, Malang .

https://antikoburu.org/id/korus-dana-bangunan-pendidikan

https://www.bps.go.id/id

Meier & Rauch. 2000. Pioneer of Economic Development. www.googlebooks.co.id. accessed April 2017.

Midgley. 1995. Social Development. www.books.google.com .

Sunarni. 2017. The Influence of Regional Expenditures on the Human Development Index in Districts/Cities throughout Indonesia."

UNDP. 2000. Human Development Report. www.undp.com .