Impact of Regional Revenue and Expenditure Budgets and Economic Growth on the Human Development Index

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ABSTRACT

This study aims to examine and analyze the Influence of Expenditure Budget and Economic Growth on the Human Development Index in Makassar City. The data sources for this research were taken from the Regional Financial and Asset Management Agency (BPKAD) and the Central Bureau of Statistics (BPS) for Makassar City. The data collection technique uses documentation in the form of Budget Realization Reports and Gross Domestic Product based on Current Prices according to Expenditures from 2010-2019. The data that has been collected will be analyzed with several stages of testing, including descriptive statistical tests, classic assumption tests consisting of (normality test, multicollinearity test, heteroscedasticity test, autocorrelation test), and testing of all hypotheses which will be proven through a coefficient of determination test, test partial (t test) and simultaneous test (f test). The results of the research that has been done state that the APBD variable has a very weak effect because it has no real effect and is not significant to the Human Development Index in Makassar City. While the variable Economic Growth has a positive and significant effect on the Human Development Index, which means that if Economic Growth is increased it will increase the value of the Human Development index in Makassar City.

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1. Introduction

Development of Human Resources (HR) physically and mentally implies an increase in the basic capacity of the population. The basic capacity referred to by Baeti (2013) is the three main values of successful economic development, namely sustance, identity (selfsteem), and freedom. Development is a tool used to achieve National Goals and Economic Growth. The human development paradigm is seen by the level of quality of human life in each country (Mirza, 2012). Meier and Stiglitz also argue that in the second generation, development theory places a lot of emphasis on the accumulation of human resource capital by creating more productive development agents through knowledge, better nutrition, and increased skills (Winarti & Purwanti, 2014).

Human development is one indicator for the progress of a country. A country is said to be developed not only calculated from gross domestic income but also includes aspects of life expectancy and education of its people, human development is an effort made to expand the opportunities of the population to achieve a decent life (Darnawaty & Purnamasari, 2019). In general, human development can be carried out through increasing basic capacity and purchasing power. At the practical level, basic capacity is an effort to increase population productivity through increased knowledge and health status (Suparno, 2014).
In terms of spending priorities, increasing human development will also increase the level of community welfare (Baeti, 2013; Khan et al., 2018). The increase in human development can be observed from the size of the Human Development Index (IPM). If the Human Development Index (IPM) increases, it can be assumed that the level of social welfare will also increase. If the level of social welfare increases, in turn the poor population will decrease both in terms of quantity and quality (Wang et al., 2018; Widodo et al., 2011).

Based on data from the Central Statistics Agency (BPS) in general, the Makassar City Human Development Index (IPM) figures during the 2010-2019 period show an increasing trend. The Development Expenditure Budget Fund in the APBD of Makassar City has increased every year. Supporting human development sectors, such as the education and health sectors, have also experienced an increase in their budgets. *Sumber: Data BPS Kota Makassar tahun 2019*

In 2010 the HDI for Makassar City was 78.00 percent and continued to increase until 2019 it reached 82.25 percent. If seen based on the achievements of the HDI in Makassar City during the 2010-2019 period, it continues to increase, but the figure is still relatively lower than the National HDI figure. According to BPS (2017) UNDP differentiates HDI levels based on three classifications namely: Low (IPM less than 50), Lower-Medium (IPM between 50 and 65.99), Upper-Medium (IPM between 66 and 79.99) and High (IPM 80 to the top). Based on the classification from the UNDP, the HDI value for Makassar City during the period 2010-2015 is still in the Upper-Medium category (HDI between 66 and 79.99).

However, along with the increase in government spending on the Regional Expenditure Budget (APBD) and the implementation of regional autonomy for several years, it turns out that there has not been a significant change in people's welfare. This is clearly seen in the APBD policy which is the main instrument for carrying out the allocation and distribution functions, where budget allocation and realization are more often dominated by the interests of routine bureaucratic expenditure, especially for paying the salaries of local government employees, office expenses and official travel expenses. In addition, most of the budget is also used for developments that are more physical in nature (construction of buildings). So that budget allocations related to improving the quality and quality of human development are less effective (Paramita, 2020).

In planning for human development carried out by a region, it certainly requires support, especially from the government. This support can be realized through budget allocations in sectors that support human development, including the education, health and economic sectors. At present the regional government has the authority to regulate its own finances, one of which is the authority to regulate the APBD (Regional Revenue Expenditure Budget) (Amiludin, 2019).

APBD is one of the regional government policy instruments which includes not only regional income sources but also various government expenditures including spending on education, health and the economic sector. APBD is prepared by a region to improve the area and the welfare of its people. With the APBD, an area can maximize regional revenue sources, then spend these funds according to programs and activities that have been determined in local regional regulations (Qodariyah et al., 2013). Regional revenue sources consist of regional original income, balancing funds and other legal regional income, while spending is carried out by the regions in the form of regional spending (Nurdiwaty et al., 2017).

The results of previous studies such as Arifin (2015) entitled The Influence of Health Sector Expenditures, Education Sector Government Expenditure and Economic Growth on HDI in East Java 2006-2013, show that Health and Education Sector Public Expenditures have a positive and significant effect on HDI in East Java in 2006-2013. 2006-2013, meaning that every time the government increases budget spending, especially in the health sector, the HDI will
increase. As well as Komariah’s research (2019), entitled Effects of Capital Expenditure and Economic Growth on the Human Development Index, shows the results that partially capital expenditure does not have a positive and significant effect on HDI, while economic growth has a positive and significant effect on HDI in Kotawaringin Timur Regency in the period 2009-2017.

To find out how much the APBD realization policies especially for the education sector, the health sector and the economic sector influence the development of human development, the researcher is interested in analyzing the problem to find out the relationship between APBD Realization (Capital Expenditures and Maintenance Operational Costs) and DAK especially for the education sector and the health with the Human Development Index in Makassar City in 2010-2019.

2. Literature Review

Regional Revenue Expenditure Budget (APBD)

The Regional Income and Expenditure Budget (APBD) is the regional government's annual financial plan that is discussed and agreed upon jointly by the local government and the DPRD and stipulated by regional regulations. The APBD is an annual work plan to realize the activities of the Regional Government, both routine and development, which are regulated and calculated in money. The APBD contains elements of income and expenditure, where the income referred to is the sources of revenue for the region known as Regional Original Income (PAD), while expenditures are expenditures issued by the regional government in carrying out their duties and functions (Pratiwi, 2018).

Types of Regional Expenditures

Regional expenditures are broadly grouped into two (Lidya, 2016), namely: 1. Indirect Expenditures, are budgeted expenditures that are not directly related to the implementation of programs and activities, which consist of: a) Personnel Expenditures, b) Interest Expenditures, c) Subsidy Expenditure, d) Grant Expenditure, e) Social Assistance Expenditure, f) Financial Assistance Expenditure, g) Unexpected Expenditures. 2. Direct Expenditures are budgeted expenditures directly related to the implementation of programs and activities, which consist of: a) Personnel Expenditure, b) Goods and services Expenditure, c) Official Travel Expenditure, d) Maintenance Expenditure and e) Capital Expenditure.

Human Development Index (IPM)

In 1990 UNDP (United Nations Development Programme) in its report "Global Human Development Report" introduced the concept of "Human Development" as a new paradigm of development models. The definition of Human Development according to UNDP (United Nation Development Program) is a process to broaden choices for the population. Referring to this understanding, the population is the ultimate goal of development, while development efforts are the principal means for that purpose (Sukirno, 2015).

Human development has two sides: first, the function of human empowerment and second, the use of empowerment. of development goals. 2) Development is meant to increase choices for the population, not just to increase their income. Therefore, the concept of human development must be comprehensively centered on the population and not only on the economic aspect alone. 3) Human development pays attention not only to efforts to improve human capabilities/capacity, but also to efforts to optimally utilize said human capabilities/capacities. 4) Human development is supported by four main pillars, namely:
productivity, equity, sustainability and empowerment. 5) Human development is the basis for setting development goals in a country and in analyzing options to achieve them (Sukirno, 2015).

**Key Elements of IPM**

According to UNDP in the Human Development Report (HDR) 1995 which emphasizes that in order to expand human choices, the concept of human development must be built from four inseparable dimensions. Based on this concept, to ensure the achievement of human development goals there are four main elements that need attention (Winarti & Purwanti, 2014), namely: 1. Productivity; Communities must be able to increase their productivity and participate fully in the process of earning income and employment. Therefore, economic development is part of the human development model. 2. Equity; Communities must have access to a fair opportunity. All barriers to economic and political opportunities must be removed so that people can participate in and benefit from the opportunities that exist. 3. Sustainability; Access to opportunity must be ensured that it is not only for future generations. All types of capital, be it physical, human and environmental, must be equipped. 4. Empowerment; Development must be carried out by people, and not just for them. Communities must participate fully in making decisions and processes that affect their lives.

**HDI components**

The HDI components according to UNDP (Yektiningsih, 2018), consist of: 1) Life Expectancy (AHH) is the average estimate of the number of years that a person can take during his life. Life expectancy is calculated using an indirect approach (Indirect Estimation). There are two types of data used in calculating life expectancy, namely Children Born Alive (ALH) and Children Still Alive (AMH). 2) Level of Education, two indicators are used to measure the dimension of knowledge, namely the average length of schooling (Mean Years Schooling) and literacy rate. The average length of schooling describes the number of years used by residents aged 15 years and over who can read and write Latin letters and/or other letters. 3) Decent Standard of Living, in a broader scope a decent standard of living describes the level of welfare enjoyed by the population as a result of improving the economy. UNDP measures a decent standard of living using the adjusted real Gross Domestic Product, while BPS in calculating a decent standard of living uses the average real per capita expenditure. 4) Index Compilation. 5) HDI Calculation Method and Its Components.

**Government Spending Theory**

One of the theories of government spending that will be discussed is the theory of Rostow and Musgrave. This model was introduced and developed by Rostow and Musgrave which links government spending with the stages of economic development which are distinguished between the initial, intermediate and advanced stages (Resha & Toto Gunarto, 2015). In the early stages of economic development, the percentage of government investment to total investment is large because the government must provide facilities and services such as education, health, transportation. Then at the intermediate stage of economic development, government investment is still needed to increase economic growth so that it can increase at this stage the role of the private sector is also getting bigger.

The next theory is the theory of Adolf Wagner. This theory states that government spending and government activities are increasing over time. This tendency, according to Wagner, is called law, always increasing the role of government (Putri, 2016). The core of his theory is the increasing role of government in the activities and economic life of society as a
whole. Wagner stated that in an economy when per capita income increases, government spending will also increase relatively, mainly because the government has to regulate relations that arise in society, law, education, cultural recreation and so on. In connection with Wagner's law, it can be seen that there are several causes for the increase in government spending, namely the increase in the defense function of security and order, the increase in the development function.

**Government Spending Concept**

In the APBD, government spending is broadly grouped into two groups (Rizal, 2019), namely: 1) Routine Expenditures, are expenditures that are routinely carried out by the government every year in the framework of implementing and maintaining the wheels of government. Routine expenditures consist of personnel expenditures, goods expenditures, subsidies for installment payments and are expenditures made by the government for physical and non-physical development in order to increase community capital.

**Government Expenditure Classification**

According to Usmaliadanti (2011) government spending can be assessed from various aspects, namely: 1) Government spending is an investment to increase economic strength and resilience in the future. 2) Government spending directly provides welfare for the community. 3) Government expenditure is expenditure that will come. 4) Government expenditure is a means of providing more employment opportunities and wider distribution of purchasing power.

**Economic Growth Theory**

Economic growth is defined as an increase in GDP (Gross Domestic Product) or an increase in the amount of goods and services produced in a country in a certain year by using the factors of production belonging to its citizens and those belonging to residents in other countries within a country. Several theories of economic growth include: 1) Classical Economic Growth Theory. According to Adam Smith as a classical economist, he stated that economic growth is a process of combining population growth and technological progress (Akhmadhian, 2016). Then according to David Ricardo, that economic growth is a process of attraction between the two forces, namely "The Law of Diminishing Return" and technological advances (Shopia, 2018). Meanwhile, according to Mill, that economic development depends on two types of improvements, namely improvements in the level of public knowledge and improvements in the form of efforts to remove obstacles to development such as customs and beliefs. 2) Neo-Classical Economic Growth Theory. In the mid-1950s, the Neo-Classical growth theory developed, which is an analysis of economic growth based on the views of classical economists (Lestari, 2019).

**3. Research Method and Materials**

This type of research is quantitative research. The type of data used in this study is secondary data, which describes the time series data for the 2010-2019 period in Makassar City. The data referred to are the Regional Revenue and Expenditure Budget and Economic Growth obtained from the Makassar City APBD and Economic Growth, as well as Makassar City HDI data obtained from BPS. Data collection techniques in this study used the documentation method. The data that has been collected will be tested with several stages of testing. The first stage is a descriptive statistical test. The second stage is the classical assumption test which consists of (normality test, multicollinearity test, autocorrelation test,
heteroscedasticity test). The third stage is to test all the hypotheses proposed in this study and will be proven through the coefficient of determination test, partial test (t test) and simultaneous test (f test).

4. Results and Discussion

The first stage in analyzing the research data is descriptive statistical analysis. Descriptive statistics are used to find the average (mean) and standard deviation, maximum and minimum values of the Regional Expenditure Budget (X1), Economic Growth (X2) and Human Development Index (Y) variables. There are 10 samples (n), out of 10 samples This means the Regional Expenditure Revenue Budget is 12.4172, Economic Growth is 8.0211 and for the Human Development Index is 1.9020.

The second stage is the classic assumption test which consists of a normality test aimed at seeing whether the data that has been collected is normally distributed or not. Measurement criteria to find out whether the data is normally distributed or does not see the significance value (Asymp.sig). if the significance value is > 0.05, the residual data is normally distributed, whereas if the significance value is <0.05, the residual data is not normally distributed.

The significant value of Asymp, Sig (2-tailed) is 0.200 > 0.005. So according to the basis for decision making in the Kolmogorov-Smirnov normality test, it can be concluded that the data is normally distributed. Thus the assumptions or requirements of normality in the regression model are fulfilled.

Next is the multicollinearity test used to determine whether one independent variable with other independent variables has a linear relationship or not. Good research, there is no linear relationship between the independent variables or in other words, there are no symptoms of multicollinearity. The test method used in this study was to look at the inflation factor (VIF) value in the regression model.

The VIF value for the Regional Revenue Expenditure Budget variable and Economic Growth is 18.409 > 10.00 and Tolerance for the variable Regional Revenue Expenditure Budget and Economic Growth is 0.054 <0.10. These two measures indicate that the Regional Expenditure Budget and Economic Growth have a correlation between the two (multicollinearity symptoms).

Then an autocorrelation test was performed to see whether or not there was a correlation between t and the previous t. This research requires an autocorrelation test because there is data used in the form of a time series of the Regional Expenditure Budget and Economic Growth for the last 9 years from 2011-2019. Durbin-Watson value (d) of 1.856. Furthermore, this value will be compared with the value of the Durbin Watson Table at a significance of 5% with the formula (k: N). The number of independent variables "k" = 2, while the number of samples "N" = 10, then \( (k: N) = (2:10) \). We then look at this figure in the distribution of values in the Durbin Watson table. Then found a dL value of 0.6972 and a dU of 1.6413. The value of du < dw < 4-du is 1.6413 < 1.856 > 2.3587, based on the Durbin-Watson autocorrelation test criteria which results in no effect of autocorrelation.

Next is the heteroscedasticity test used to determine whether or not there is a deviation from the classical assumption of heteroscedasticity, that is, there is an inequality of the variance of the residuals for all observations in the regression model. The measurement criterion for knowing that the data has heteroscedasticity problems or does not look at the significance value (Asymp.sig). If the significance value is > 0.05 then there is no heteroscedasticity problem, whereas if the significance value is <0.05 then there is a heteroscedasticity problem.
The significant value (sig) for the Regional Expenditure Budget variable (X1) is 0.863 and Economic Growth (X2) is 0.412. Because the sig values of the two variables above are > 0.05, according to the basis for decision making in the Heteroscedasticity test (Glejser), it can be concluded that there are no symptoms of heteroscedasticity.

From the results of multiple regression tests between APBD (X1) of (-0.028) and Economic Growth (X2) of 0.074 on the Human Development Index. While the constant value is 1,649. Then it is transformed into a multiple linear equation model with the following model specifications:

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Y = a + b_1 X_1 + b_2 X_2 + ... + b_n X_n.
\]

\[
Y = 1.649 + (-0.028) x_1 + 0.074 x_2
\]

From this equation it can be interpreted that a constant value of 1.649 indicates that if the Regional Budget (X1) and Economic Growth (X2) have a value of 0, then the Human Development Index (Y) is 1.649. The APBD coefficient value (X1) is (-0.028) indicating that if the other independent variables are fixed and the Regional Expenditure Budget increases by 1 unit, the Human Development Index (Y) will decrease by 0.028. The coefficient is negative, meaning that there is a negative relationship between the Regional Expenditure Budget and the Human Development Index, the higher the Regional Expenditure Budget, the lower the Human Development Index. And the value of the Economic Growth coefficient (X2) of 0.074 indicates that the other independent variables have a fixed value and Economic Growth has increased by 1 unit, so the Human Development Index (Y) will increase by 0.074. The coefficient is positive, meaning that there is a positive relationship between Economic Growth and the Human Development Index, the higher the Economic Growth, the higher the Human Development Index.

The third stage is testing all hypotheses with a partial test (t test), simultaneous test (f test) and test the coefficient of determination. The coefficient of determination is used to measure how far the model's ability to explain the variation in the dependent variable. The coefficient of determination or R square is 0.983. The R Square value comes from squaring the correlation coefficient or "R" value, which is 0.996 x 0.996. The magnitude of the determination number (R Square) is 0.983 or equal to 98.3% While the rest (100% - 98.3% = 17%) is influenced by other variables outside the regression equation or variables not examined.

The magnitude of the influence of other variables is also known as error € to calculate the error value we can use the formula e = 1 - R2, the magnitude of the coefficient of determination or R Square is generally in the range of 0-1. If in a study R Square is found to be minus or negative (-), then it can be said that there is no effect of variable X on variable Y. Furthermore, the smaller the value of the coefficient of determination (R Square), this means that the effect of the independent variable (X) on the variable bound (Y) is getting weaker. Conversely, if the R Square value gets closer to 1, then the influence will be stronger. Based on the basis of decision making in the analysis of the determinant coefficient, it can be concluded that the value (0.983) is close to (1) so it can be said that the stronger the model explains the relationship between variable X and variable Y.

The sig value is 0.000 because the Sig value is 0.000 <0.05, so according to the basis, decision making in the F test can be concluded that the hypothesis is accepted, in other words the Regional Revenue Budget (X1), Economic Growth (X2) simultaneously (simultaneously) has a positive effect and significant to the Human Development Index (Y). The Fcount value is 206.125 because the Fcount value is 206.125 > F table 4.74, so as the basis for making decisions on the F Test it can be concluded that the hypothesis is accepted or in other words...
the Regional Expenditure Opinion Budget (X1) and Economic Growth (X2) simultaneously (simultaneously) influence positive on the Human Development Index.

The calculated value of the variable (Regional Revenue Expenditure Budget) is 0.067. Because the t count value (-2.163) < t table is 2.365, then the significance is 0.067 > 0.05, according to the basis for decision making in the t test, it can be concluded that H1 is accepted, which means X1 has an effect to Y. and the calculated value of the variable (Economic Growth) is 6,809 and the significant value is 0,000 because the t count value is 6,809 > t table 2,365 then the the significance is 0.000 <0.05 so it can be concluded that H2 is accepted, which means X2 has an effect on Y.

Discussion

Based on the results of hypothesis testing, it shows that the Regional Revenue Expenditure Budget has no effect on HDI in Makassar City. The APBD is not significant for the Human Development Index because the APBD Makassar allocates more funds to infrastructure such as public roads and bridges as investment. And many private parties have also provided facilities and infrastructure in the health and education sectors which have made it an investment field. The Human Development Index (IPM) in an area can be used as a benchmark for how far the attention and commitment of the Regional Government is to human development. The low HDI of Makassar City compared to other provinces in Indonesia, which is at level 11, shows that attention to human development in the city is still far from what was expected. One of the factors that can affect the development of the HDI is the expenditure of the Regional Government which is reflected in the APBD, especially expenditure on sectors related to human development.

APBD is one of the regional government policy instruments which includes sources of Regional Tax Revenue, Regional Retribution Revenue, general service fees, business service fees, certain licensing fees and PAD. Government spending has several functions, namely the allocation function and the redistribution function, one of which is allocation to meet public demand for the availability of public service facilities and infrastructure that cannot be met by the private sector. Funding for public facilities that will be used by the community is directly related to how much government spending is allocated to improve the required public facilities. So the greater the amount of government spending, the greater the development funds and the better the existing public service facilities and infrastructure. Baeti (2013) states that in the era of autonomy, local governments must get closer to various basic community services. Therefore, the allocation of capital expenditure plays an important role in order to improve this service. In line with this increase in service (as indicated by an increase in capital expenditure) it is hoped that it will increase the expected quality of human development. The results of this study are not in line with research (Larassita, 2016) entitled The Influence of the Regional Revenue and Expenditure Budget (APBD) on the Human Development Index in Jember Regency for the 1990-2014 period, where the research results show that the variables of government budget realization in the fields of education, health and infrastructure has a positive and significant effect on the human development index in Jember Regency. Overall the multiple linear regression model used explains the effect of government budget realization on increasing the human development index in Jember District. This explains that the realization of the government budget tends to increase every year with the aim of increasing the human development index in Jember Regency.

The results of hypothesis testing show that Economic Growth has a positive and significant effect on the Human Development Index. Economic growth is an increase in GRDP or an increase in the amount of goods and services produced by the City of Makassar in a
projected percent value on the basis of constant prices according to the year of study. Because the role of the government and the private sector in increasing investment for economic growth plays a very good role. The results of this study are also in line with the theoretical basis put forward by Professor Kuznet where one of the characteristics of modern economic growth is the high per capita output growth (Miskin, 2016). The intended output growth is GRDP per capita, the high output growth causes changes in consumption patterns to meet needs. This means that the more economic growth increases, the higher output per capita growth will be and changes in consumption patterns, in this case the level of people's purchasing power will also be higher. The high purchasing power of the people will increase the Human Development Index because people's purchasing power is one of the composite indicators in the HDI which is called the income indicator. It can be concluded that the higher the economic growth, the higher the Human Development Index.

Dewi (2014) states that human growth and development (IPM) has a two-way relationship which, although not automatically related, can be strengthened with the right policies from the government. Economic development that refers to economic growth that ignores human development will not last long. The results of this study are in line with research (Mirza, 2012) which found that economic growth has a positive and significant effect on HDI and capital expenditure has a positive and significant effect on HDI. High growth will increase the income of the population and so on the standard of living, ultimately guaranteeing people's prosperity, increasing the level of health, harmony and sustainable prosperity which will be able to sustain economic growth.

5. Conclusion

Based on testing and analysis of data from this study, it can be concluded that the Regional Expenditure Budget variable is very weak and has no real effect on the Human Development Index in Makassar City. This is proven in the SPSS.22 test where the test shows that the tcount value is smaller than the ttable value, which means that the amount of government spending in the APBD has not significantly affected the increase in the Human Development Index in Makassar City. While the variable Economic Growth has a positive and significant effect on the Human Development Index, which means that if Economic Growth is increased it will increase the value of the Human Development index in Makassar City.

This research has limitations, including: 1. In this research only took samples in Makassar City, so the results of the study only apply to the places that are used as research objects. 2. The research was carried out using only secondary data from the Makassar City financial realization report for 2010 - 2019, without confirmation in the form of interviews or questionnaires to find out the obstacles in achieving good performance. 3. At the time this research was still in a pandemic situation due to Covid - 19 which was highly contagious, making it difficult to interact directly with BPKAD employees so that the secondary data I needed was sent online.

With the limitations in this study, the researchers provide suggestions, namely, for further research it is better to expand the object of research, so that the results of the research can better represent the area simultaneously. And by knowing the Regional Expenditure Budget, Economic Growth that influences or does not affect the Human Development Index, this research serves as input to the Makassar City government to optimize all sources of the Regional Expenditure Budget that are owned, optimize existing funds to realize Expenditures Regions and take advantage of existing economic growth to further increase welfare.
6. References


