

## **Regional Original Revenue, Regional Expenditure, Economic Growth and Human Development Index (City/Regency Government in North Sumatra Province)**

**Oktarini Khamilah Siregar**

Master of Economics Study Program, Postgraduate Program,  
Universitas Pembangunan Pancabudi, Indonesia

### **Abstract**

*The Human Development Index is an indicator of the success of local governments in improving the welfare of their people. The HDI in the city/district government of North Sumatra Province is only the Medan City government which has a very high category of 80 percent based on the UNDP assessment. The study wanted to test Regional Original Income, Regional Expenditures and Economic Growth the effect on HDI in City and Regency Governments in North Sumatra using a research method with a causal associative approach. The research sample uses panel data from 32 City and Regency Governments during 2019 to 2020. The results show that Regional Original Income and Economic Growth have not been able to increase HDI, while Regional Expenditures can increase HDI in City and Regency Governments in North Sumatra. However, regional spending has not been fully utilized properly in increasing the HDI. It is necessary to increase regional original income by opening up investment in the region and by stimulating regional original income and increasing economic growth so that the quality of human resources increases.*

**Keywords:** Regional Original Revenue; Regional Spending; PDRB; Human Development Index.

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\*E-mail: [oktarinikhamilah@dosen.pancabudi.ac.id](mailto:oktarinikhamilah@dosen.pancabudi.ac.id)

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## INTRODUCTION

Regional autonomy gives authority to regions to manage and regulate their respective regions in accordance with regional capabilities. The independence of regional financial management is the goal of regional autonomy. Based on these considerations, the implementation of regional autonomy is expected to be able to develop the region optimally and spur economic growth and increase community welfare. HDI is an important indicator to measure success in efforts to build the quality of human life (community/population). Efforts to increase HDI cannot be separated from the role of local governments in allocating sources of regional income in regional expenditures for sectors that can increase HDI, such as education, health and infrastructure. Low productivity results in low income.

The HDI condition in North Sumatra Province in 2020 was 71.77 and in 2019 it was 71.74. The highest HDI value is found in the Medan City Government of 80.96 (in 2020 and 2019) which is above the HDI of North Sumatra Province and as many as 18 city and district governments the HDI value is below the average HDI of North Sumatra Province. The low human development index in North Sumatra shows areas that are still lagging in terms of access to education, health so that life expectancy indicators are not balanced among several city and district governments. This is a problem for local governments that can hinder the process of growth and economic development evenly in accordance with the mandate of the Regional Autonomy Law. Stagnant growth occurred in 2019–2020 which indicates no significant growth in the Human Development Index. The phenomenon is that regional development has not been evenly distributed in terms of the quality of human life, such as the Human Development Index in several areas in North Sumatra. One indicator of the increase in HDI can be seen in terms of regional finances such as regional original income, regional expenditure and GRDP at constant prices. If regional finance is something that hinders the development of HDI, then the regional government must be able to improve the percentage components of each regional finance such as regional expenditure, regional income, regional financing, GRDP at constant prices. Meanwhile, from a non-financial perspective, it can be seen in Oktarini's research (2014) explaining that an increasing population but not proportional to the employment rate will hinder the increase in HDI. To inhibit the rate of population growth, every family must implement a Family Planning program with the aim of maintaining the quality of children's education. Thus avoiding the increasing unemployment rate so that poverty will decrease in the Province of West Sumatra.

In general, the regencies/cities of North Sumatra Province generate revenue from the APBD, so that the existing development in the Regency/City of North Sumatra Province is funded from Original Regional Revenue for the long term, which is expected to be a source of regional financing so that it is able to finance its own development in the Regency/City. North Sumatra Province. Law Number 33 of 2004 concerning the government can regulate and manage finances and achieve independence targets for managing regional autonomy. The central government hopes that regional autonomy will be able to reduce dependence on the central government, and become more independent in managing its own regional finances so that it becomes a measure used to measure success in maximizing financial management and financing economic development.

Regional financial management and accountability has been stipulated in Government Regulation Article 4 Number 105 of 2000 which emphasizes that regional financial management must be carried out in an orderly manner, complying with applicable laws and regulations, efficient, effective, transparent, and responsible with due regard for justice. and compliance. If regional financial management is carried out properly in accordance with established regulations, it will certainly improve the performance of the government itself (Julianti, et al 2012). This research is important to do as one of the analyzes of Regional Original Income, Economic Growth, Regional Expenditures in increasing the Human Development Index in the City and Regency Government of North Sumatra. So the researcher wants to know how the increase in regional spending will have an impact on increasing community productivity and increasing the number of investors who invest so that they can increase regional original income and spur economic growth and ultimately improve the quality of human resources, namely the Human Development Index.



This study examines Regional Original Income, Economic Growth, Regional Expenditures and the Human Development Index from the point of view of Public Sector Accounting and Macroeconomics in the non-economic field. So that the purpose of this study is to examine local revenue, economic growth, regional spending partially and simultaneously effecting the Human Development Index in the City/Regency Government of North Sumatra.

## **RESEARCH METHODS**

Human development is the task of the relevant local government in accordance with the budget they have and making development plans that are in accordance with the needs in the required development priorities. HDI includes three components that are considered fundamental to humans and are operationally easy to calculate to produce a measure that reflects human development efforts. The three components are life opportunities (longevity), knowledge (knowledge) and living standards. Life expectancy is calculated based on life expectancy at birth; knowledge is measured based on the average length of schooling and the literacy rate of the population aged 15 years and over; and decent living is measured by per capita expenditure which is based on purchasing power parity. HDI is a composite index which is calculated as a simple average of 3 (three) indices that describe the basic human ability to expand choices, namely: Life Expectancy Index, Education Index and Decent Living Standard Index. To increase the HDI, financial indicators are needed, namely local revenue, regional spending and economic growth.

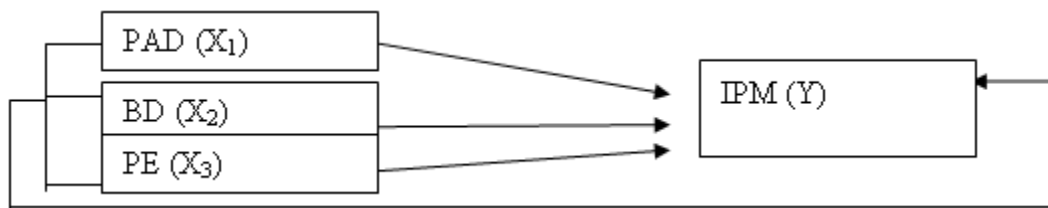
Regional Original Revenue is revenue obtained from sources of income within certain regions, which is collected based on the applicable law with the aim of providing flexibility to regions in exploring funding in the implementation of regional autonomy as a manifestation of the ability to carry out their own economy. This Regional Original Revenue itself needs to be increased in order to increase the independence of regional autonomy that is broad and responsible by bearing part of the expenditure burden required from the regional revenue. Law Number 33 of 2004 contains about "Regional Original Income is Regional Revenue derived from Regional Taxes, Regional Retribution proceeds, Separated Regional Assets Management Results, and Other Regional Original Revenues in exploring funding in the implementation of regional autonomy as a manifestation of regional autonomy. the principle of decentralization". The ability of regions in managing Regional Original Income is very close related to increasing regional independence. "The higher the regional ability to generate PAD, the greater the regional discretion to use the PAD in accordance with the aspirations, needs, and priorities of regional development". According to (Mahmudi, 2010). Regarding the financial balance between the Central Government and the Regional Government, the sources of funding for the implementation of government have been determined consists of Regional Original Income, Regional Loan Balancing Fund, and Other Legitimate Income. Regional Original Income consists of Regional Taxes, Regional Levies, BUMD/N Profits and other legitimate income.

Regional expenditure is a budget regarding planned activities, both routine and development activities. To carry out government and development tasks, which consist of various types of activities, it is necessary to have a financial plan that will be carried out in the future (usually one year). This financial plan is called the state budget (APBN). The revenue and expenditure budget is prepared annually and is used as a guideline for the use limit as well as a government work program in carrying out general government and development tasks in all fields. Regional expenditures are all regional cash expenditures in the year period certain budgets that are the burden of the region (Darise, 2011). The development of government functions in the regions proves that the role of the Provincial Government to encourage development is increasingly real, so to support its activities the Provincial Government needs to foster capital formation, especially from taxes, levies and other revenues by planning its development systematically according to its needs. According to economists, the budget can be interpreted as a detailed list or statement of expected state revenues and expenditures within a certain period of time which is usually one year. The budget becomes a spending plan which is a basis for making expenditure decisions and subsequent monitoring of expenditures. From the above opinion, it can be concluded that the



budget is a plan that has been systematically arranged in the form of numbers from money and is the basis for making decisions on revenues, expenditures and supervision from time to time.

Economic growth is one of the most important indicators in analyzing the economic development that occurs in a country. There are several definitions of economic growth put forward by economists using various points of view, but basically all of them have the same meaning. To determine the existence of a country's economic growth, an indicator is needed. Sadono (2008) states that indicators that can be used to measure economic growth are: a. Gross Domestic Product (GDP/GDP), b. Gross Domestic Product/Per capita Gross Domestic Product/Per capita Income. and c. Earnings Per Hours Worked. Economic development has a broader meaning and includes changes in the overall economic structure of society. Economic development is generally defined as a process that causes an increase in the real income per capita of the population of a country in the long term accompanied by improvements to the institutional system. improvement of the institutional system in all fields (eg economic, political, legal, social, and cultural). This system can be viewed from two aspects, namely: aspects of improvement in the field of organization (institutions) and improvements in the field of regulation, both formal and informal legal. In this case, it means that economic development is an active action effort that must be carried out by a country in order to increase per capita income. Thus, the participation of the community, government, and all elements contained in a country is very much needed to actively participate in the development process. An illustration of the relationship that occurs from local revenue, regional expenditure and economic growth to the human development index. Based on the theoretical basis and the results of previous research, the conceptual framework in this study is as follows:



**Figure 1 Conceptual Framework**

Approach The research is carried out using quantitative associative research. The scope of the research was carried out at the City and Regency Governments in North Sumatra with the aim of knowing Regional Original Income, Regional Expenditures and Economic Growth in increasing the Human Development Index. The research was carried out in 32 City and Regency Governments in North Sumatra during the research period from 2019 to 2020. The following is a multiple linear regression equation model as follows:

$$IPM = \beta_0 + \beta_1 PAD + \beta_2 BD + \beta_3 PDRB + e.....$$

Where is IPM is Variable Y,  $\beta_0$  is constanta and  $\beta_{(1,.....n)}$  and regression coefficient variable  $X_{(1,.....n)}$ . PAD is variable  $X_1$ , BD is variable  $X_2$ , PDRB is variable  $X_3$ , e is error.

## RESULTS AND DISCUSSION

### Discussion

In panel data analysis, the first step is to select the best model from the three models, namely the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) using the Chow test and Hausman test to strengthen the test results that the model selected is the best model. Testing the quality of the data in this study are as follows 1. Test Chow Chow test was conducted to choose the best model between FEM or PLS. The results of the Chow test are as follows:

**Table 1. Panel Data Regression Results with Chow Test in Regency and City Governments**

IPM	
Uji Chow Statistik	Probability cross-section chi-square
31	0,0000

Source: Data processed, 2022

From the results of table 1 that the Chow statistic test value is 31 with a chi-square cross-sectional probability value of  $0.0000 < 0.05$  so that it can be concluded that FEM is more appropriate than CEM. 2. Hausman test Hausman test was conducted to choose the best model between FEM or REM. Hausman test results are as follows.

**Table 2. Panel Data Regression Results with Hausman Test in District Governments**

IPM	
Uji Hausman	Probabilitas cross-section chi-square
3	0,3111

Source: Data processed, 2022

From the results of table 4.2, the statistical value of the Hausman test is 3 with a random cross-section prob value of  $0.3111 > 0.05$ , so it can be concluded that FEM is more appropriate than REM, and does not need to be continued with the Lagrange Multiplier (LM) test. Thus the data from this study using panel data regression with Fixed Effect Model (FEM). After knowing that this research uses a fixed effect (FEM) model, the following panel data regression equation can be obtained.

**Table 3. Estimation Results of Panel Data Regression Fixed Effect Model on Regency and City Governments, North Sumatra with HDI as the dependent variable.**

Variable	Coefisien	T	Probability
Constanta	67,60616	29,68 (2,2774)	0,000
PAD (X <sub>1</sub> )	0,012273	1,29* (0,0095)	0,2070
BD (X <sub>2</sub> )	-0,007308	-2,46** (0,0029)	0,0198
PDRB (X <sub>3</sub> )	0,084534	1,63* (0,0518)	0,1138

Source: Data processed, 2022

The number in brackets is the standard error, \*\*\* p < 1%, \*\* p < 5% and \* p < 10%

Then the panel data regression results with the Fixed Effect Model will be obtained, the regression equation is as follows:  $HDI = 67.60661 + 0.012273PAD - 0.007308BD + 0.084534PDRB$  The panel data regression equation can be interpreted that local revenue, regional expenditure and Gross Regional Domestic Product are constant or unchanged so that the HDI value is 67.60616 quality of human life per year. If regional original income and Gross Regional Domestic Product are constant, then regional expenditures will increase by 1% so that the HDI value will experience a decrease in the coefficient value of regional original income by 0.012273

Quality of human life per year and the coefficient value of Gross Regional Domestic Product by 0,084534 quality of human life per year. Then the regional expenditure has a constant value, then the regional original income and Gross Regional Domestic Product increase by 1% so that the HDI value will experience a decrease in the coefficient value of regional expenditure by 0.007308 the quality of human life per year. Then the results of the simultaneous test in this study aims to determine whether local revenue, regional expenditure, gross regional domestic product have a simultaneous effect on the human development index in the City/Regency Government in North Sumatra. The following simultaneous test results can be seen in the table.

**Table 4. Simultaneous Test (F Test)**

F-Statistic	Probability (F-Statistic)
1705.978	0,0000





Source: Data processed, 2022

From the results of Eviews with Fixed Effect Model (FEM), the F-count is 1705.978, with a probability level of 0.0000. Thus, it is concluded,  $p = 0.000 < 0.05$ , that local revenue, regional expenditure and gross regional domestic product have a simultaneous effect on the human development index of the City/Regency Government in North Sumatra. Furthermore, the results of the partial test in this study aim to test local revenue, regional expenditure, and gross regional domestic product that affect the human development index in the City/Regency Government in North Sumatra. The following partial test results can be seen in the table are:

**Table 4.5. Partial Test (t Test)**

Variabel	T	Probability
Constanta	29,68 (2,2774)	0,000
PAD (X <sub>1</sub> )	1,29* (0,0095)	0,2070
BD (X <sub>2</sub> )	-2,46** (0,0029)	0,0198
PDRB (X <sub>3</sub> )	1,63* (0,0518)	0,1138

Source: Data processed, 2022

The number in brackets is the standard error, \*\*\*  $p < 1\%$ , \*\*  $p < 5\%$  and \*  $p < 10\%$

The results of the partial test in this study are

1. Regional Original Income Variable (X<sub>1</sub>) with a t-count of 1.29 with a probability level of 0.2070. So Local Original Income does not have a positive effect on the Human Development Index in Regency and City Governments in North Sumatra.
2. Regional Expenditure Variable (X<sub>2</sub>) with a t-count of -2.46 with a probability level of 0.0198. Then the Regional Expenditure has a negative effect on the Human Development Index in Regency and City Governments in North Sumatra.
3. Variable Gross Regional Domestic Product (X<sub>3</sub>) with a t-count of 1.63 with a probability level of 0.1138. So the Gross Regional Domestic Product does not have a positive effect on the Human Development Index in Regency and City Governments in North Sumatra.

So that the results of the coefficient of determination test aim to see how much the model's ability to explain the dependent variable is.

**Table 4.6 Coefficient of Determination Test**

R Squared	Adjusted R Squared
0.9995	0.9989

Source: Data processed, 2022

From the results of the output table 4.6, it is obtained that the R Squared value is 0.9995 and the Adjusted R Squared value is 0.9989. This shows that 99.89% of the variables of local revenue, regional expenditure and gross regional domestic product affect HDI while the remaining 11% is explained by other factors not explained in this study such as regional finance variables, namely balancing funds, regional financing and non-financial variables. which have not been included in this study.

## Results

The Human Development Index is an important indicator in the success of community welfare. A high HDI indicates that the quality of the region's human resources has improved. Several factors that influence the increase in HDI are regional financial and non-regional financial indicators. The Human Development Index seen from regional financial indicators obtains research results using panel data consisting of several city and district governments in North Sumatra. The model used after testing the data quality is the Fixed Effect Model (FEM). Then the results show that local revenue does not have a positive effect on the Human Development Index in the City and Regency Governments in North Sumatra. This research is not consistent with Nidya (2018), Setyowati and Suparwati (2012), Lugastoro (2013), Sari & Supadmi (2016), Yustina, I Gusti



& I.G.A.M (2021) showing that local revenue has an effect on the human development index. Judging from the Development of Local Government Revenues, City and Regency Governments in North Sumatra are still relatively low. It is necessary to increase local revenue by bringing in investors so that investment in the local government will grow. Regional spending has a negative effect on the Human Development Index in the City and Regency Governments in North Sumatra. This research is consistent with research by Ristiyanti (2017) which explains that regional spending divided into health spending and education spending has a positive effect on HDI, while economic spending does not have a positive effect on HDI, stated that capital expenditure has a positive effect on the human development index. Regional spending in the city and district governments of North Sumatra Province is still very low. (Setyowati and Suparwati, 2012; Lugastoro, 2013; Sari & Supadmi, 2016; Yustina, I.G & I.G.A.M, 2021; Sadono, 2008),

In this study, using the total of all expenditures used by local governments, it is not clear which types of expenditures affect the human development index. Economic growth or Gross Regional Domestic Product at constant prices does not have a positive effect on the Human Development Index in the City and District Governments of North Sumatra Province. This study is consistent with the results of Ristiyanti's research (2017) explaining that economic growth has no effect on HDI. The development of the Gross Regional Domestic Product in constant prices for the City and Regency governments in North Sumatra has not increased evenly. So that local governments still have to further increase GRDP at constant prices so that the quality of human resources (IPM) increases. Regional Original Income, Regional Expenditures and GRDP in Constant Prices simultaneously affect the HDI in City and Regency Governments in North Sumatra with 99.89% of the variables of Regional Original Income, Regional Expenditures and Gross Regional Domestic Product affecting HDI.

## **CONCLUSION**

Indicators that affect the development of the Human Development Index can be seen from two aspects, namely financial and non-financial aspects. Regional finance is something that hinders the development of HDI, so local governments must be able to improve the percentage components of each regional finance such as regional spending, regional income, regional financing, and economic growth. While the non-financial aspect can be seen in Oktarini's research (2014) explaining that an increasing population but not proportional to the employment rate will hinder the increase in HDI. To inhibit the rate of population growth, every family must implement a Family Planning program with the aim of maintaining the quality of children's education. Thus avoiding the increasing unemployment rate so that poverty will decrease in the Province of West Sumatra. The existing development in the Regency/City Government of North Sumatra Province, the funds come from Regional Original Income for the long term, are expected to be a source of regional financing so that they are able to finance their own development in the Regency/City of North Sumatra Province. to the Human Development Index. Regional expenditure has a negative effect on the Human Development Index in City and District Governments in North Sumatra by using the Fixed Effect Model (FEM). Regional Original Income, Regional Expenditures and GRDP in Constant Prices have a simultaneous effect on the Human Development Index in City and Regency Governments in North Sumatra with 99.89% coefficient of determination test.

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City and Regency Governments in North Sumatra must further increase Regional Original Income and Economic Growth in order to increase the Human Development Index by growing new investors in the regional government. Regional spending is more optimal in increasing the percentage composition of education spending and health spending aimed at increasing the Human Development Index in the Regional Government of North Sumatra Province. Future researchers will be more detailed on regional expenditures so that they can be clearer on the types of spending that can increase HDI. Subsequently, additional samples were added in all City and Regency Governments on the Island of North Sumatra.



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