Analysis of the Effect of Economic Development Variables on Tax Revenue in Indonesia

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Abstract:
This study aims to determine the effect of economic development's variables (economic growth, human development index, inflation, and labor) on Indonesia's tax revenue. Multiple linear regression is used as the analytical tool with Ordinary Least Square (OLS) method. The data used are economic growth's pace, HDI, inflation rate, the rate of labor force participation, and total of Indonesia's tax revenue during 1986-2020. The results of this study shows that partially the economic growth, HDI, and inflation has positive and significant effect on Indonesia's tax revenue, while labor has negative and insignificant effect on Indonesia's tax revenue. Then simultaneously economic growth, HDI, inflation and labor have significant effect on Indonesia's tax revenue.
Key Word*: Economic Growth, HDI, Inflation, Labor, Tax Revenue.*

I.   Introduction

Research on the effect of economic development variables on tax revenues has not been done much. Several studies that can be found, generally analyze the effect of economic growth variables on tax revenues - both regionally and nationally- than the influence of economic development variables on tax revenues or vice versa. Research conducted by Dian Purnama Sari and Fitrawati Ilyas (2016), aims to analyze the effect of gross regional domestic income, population, and inflation on local tax revenues in Bengkulu Province. The results show that gross regional domestic income has a positive effect, population does not have a positive effect, while inflation does not have a negative effect on local tax revenues in Bengkulu Province.

However, this study has a local tax scope with the research area in the Regency and City in Bengkulu Province, where there can be differences in results if the research is carried out in other regions even with the same research variables, because the nature and characteristics of local taxes are different from one area with others. Differences in results can also occur if the research is carried out on a national scale (central tax), because the types, nature and characteristics of local taxes are different from central taxes.

This study will analyze the effect of economic development variables on tax revenue in Indonesia, because according to Todaro & Smith (2003), the definition of economic development can be seen from the improvement in the economic welfare of the community, and taxes as the main source of state income have one goal of increasing welfare (economy) of society with the various instruments it has. This study uses economic development variables because of the nature of sustainable economic development and cannot be carried out in a short period of time, as well as the results that cannot be known in a short period of time. In addition, tax revenues are the main pillar in economic development activities carried out by the Government of the Republic of Indonesia. Without tax revenue, economic development will not be carried out optimally. However, can the economic development carried out by the Government encourage tax revenues to be used in the next period's economic development cycle?

Todaro & Smith (2003) stated that the definition of economic development is very broad, not just how to increase GNP per year (economic aspect), but is multidimensional which covers various aspects of people's lives. Economic development can be defined as any activity carried out by a country in order to develop economic activities and the standard of living of its people. With this limitation, economic development in general can be defined as a process that causes an increase in the income per capita of the population of a country in the long term accompanied by improvements in the institutional system.

Economic development is a process or economic activity carried out by a country in order to build its economy to become a strong country. This process, of course, requires no small amount of money, which must be fulfilled independently as a form of sovereignty in the economic field. This form of independence can be seen from tax revenues, because taxes are state income (revenues) originating from citizens of that country that do not involve or depend on other parties or countries.

In order to fulfill the tax revenue target, the Government has taken several strategic steps. These strategic steps, as described on the website of the Directorate General of Taxes (2020), include: improving services to taxpayers in the form of easy registration, reporting, payment and access to tax information, increasing the effectiveness of counseling and public relations, increasing tax extensification and intensification, increasing the effectiveness of audits and collections, and increasing the effectiveness of law enforcement.

The strategic steps and programs carried out by the Government in an effort to meet the tax revenue target are closely related to the economic conditions that occur in Indonesia. The economic condition of a country itself can be seen from several indicators or variables of economic development. Indicators of a country's economic development (Lincolin Arsyad, 2015) include:

a. Economic growth, is the process of building an economy that is increasing from goods or products in a country (Michael P. Todaro, 2011).

b. Human Development Index (HDI), is an index of achieving human development capabilities formed by three components, namely: a long and healthy life, knowledge, and (standard) a decent life (Central Bureau of Statistics, 2020).

c. Inflation, the decline in the value of money (paper) due to the amount and speed of money (paper) circulating, causing the price of goods to rise (Kamus Besar Bahasa Indonesia, 2020).

d. Labor.According to neoclassical economic growth theory (Sukirno, 2014), economic growth depends on the development of production factors, one of which is labor.

Based on the description above, it is quite interesting to examine the effect of economic development variables (economic growth, HDI, inflation, and labor) on tax revenues in Indonesia.

II. Literature Review

Tax

According to Article 1 paragraph 1 of Law Number 6 of 1983 concerning General Provisions and Tax Procedures as last amended by Law no.16 of 2009, taxes are mandatory contributions to the state owed by individuals or entities that are coercive in nature based on the law, with no direct compensation and are used for the needs of the state for the greatest prosperity of the people.

Tax Overview From Various Aspects

According to Soemitro (2011), the problem of taxation is not as simple as simply handing over part of the income (from the people) to the state, but must be viewed from various aspects:

a. Economic Aspects; economic activities will not run smoothly if it is not supported by the government in providing public facilities and infrastructure, for that the government requires funds from the public, which are called taxes.

b. Legal Aspects; The basis used by the government in regulating state financial matters is Article 23A of the 1945 Amendment to the 1945 Constitution which reads "Taxes and other levies that are coercive for the purposes of the state are regulated by law".

c. Financial aspect; The state's financial condition is no longer solely from revenues in the form of oil and gas, as well as foreign debts and grants, but makes taxation as one of the main state revenues.

d. Sociological Aspects; Taxes as a source of state revenue that is used to finance routine expenditures and economic development, so that later it will provide welfare and prosperity to the community.

Tax Function

According to Mardiasmo (2016) taxes have four functions, namely:

a. Budget function (budgeter); Taxes function to pay state expenditures. To carry out routine state tasks and development, the state needs funds, that can be obtained from tax revenues.

b. Regulating function (regulation); Taxes function to regulate the economic growth of a country. With government policies, taxes will indirectly help the economy of the country and its people. For example, to protect domestic production, the government sets high import duty rates for products from abroad. Thus, the public does not have to worry about fierce price competition with foreign products.

c. Stability function; With taxes, the government can implement policies related to the stability of the country's economy. For example, to control inflation, the Government can regulate the amount of money in circulation by collecting taxes or using taxes that are effective and efficient. With an increase in taxes, the amount of money in circulation will decrease, so that inflation can be controlled.

d. Income redistribution (equity) function; Taxes function as an equal distribution of people's income with the aim of community happiness and welfare. Taxes can be used to finance all public interests, including to finance development so as to open new jobs that will increase people's income.

Theories that Support Tax Collection

Theories that explain or justify granting the right for the state to collect taxes, as put forward by Mardiasmo (2016) include:

a.   Theory of Insurance; the state protects the safety of life, property, and the rights of its people, therefore the people must pay taxes which are likened to an insurance premium because they get guaranteed protection.

b.   Theory of Interest; The state has the right to collect taxes from its residents, because residents of that country have an interest in the state. The distribution of the tax burden to the people is based on the interests (eg: protection) of each person. The greater a person's interest in the state, the higher the tax to be paid.

c.   Theory of Bearing Power; the tax burden for everyone must be equal, meaning that taxes must be paid according to the capacity (bearing power) of each person.

d.   Theory of Devotion; teaches that residents are part of a country, residents are bound to the existence of the state, therefore residents are obliged to pay taxes as a form of service (devotion) to the state.

e.   Theory of Purchasing Power Principle; Collecting taxes means attracting purchasing power from public households for state households. Furthermore, the state will channel it back to the community in the form of procurement and/or maintenance of facilities and infrastructure for the welfare of the community.

f.   Theory of Development; taxes are levied for development. The word development contains the notion of a just, and prosperous society, which if further detailed will cover all fields and aspects of life such as economics, law, education, social, culture, and so on.

Tax Revenue

a.   According to the Regulation of the Minister of Finance Number 37/PMK.05/2007 concerning the Second Amendment to the Regulation of the Minister of Finance Number 99/PMK.06/2006 concerning the State Revenue Module, Tax Revenues are all revenues consisting of domestic taxes and international trade taxes (Article 1 number 8).

b.   According to Siti Kurnia Rahayu (2017), tax revenues are taxes collected which are grouped into central taxes, customs and excise, regional taxes, or regional levies and other non-tax revenues.

c.   According to Mardiasmo (2016), tax revenue is a source of revenue that can be obtained continuously and can be developed optimally according to the needs of the Government and community conditions.

d.   According to Suharno (2012), tax revenue is income earned by the government from people's taxes, the funds received in the state treasury will be used for government spending for the greatest benefit of the state.

Target and Realization of Tax Revenue

Based on the Financial Note of the 2020 RAPBN, tax revenue for 2020 is targeted at Rp. 1,861.8 trillion, or a growth of 4.2% from the 2019 State Budget of Rp. 1,786 trillion. In line with the Covid-19 pandemic that hit the world, the Government amended the tax revenue target by issuing Presidential Regulation Number 72 of 2020 concerning Changes in the Posture of the 2020 State Revenue and Expenditure Budget (APBN) which states that tax revenue for 2020 is targeted at Rp. 1,198.82 trillion with a tax ratio of 11.5% of Gross Domestic Product (GDP).

The Ministry of Finance noted that the realization of tax revenues for 2020 only reached Rp. 1,070 trillion or around 89.3% of the target (amended) in the 2020 State Budget (APBN) of Rp. 1,198.82 trillion. The realization of tax revenues in 2020, of course, also decreased by 19.71% from the realization of tax revenues in 2019 of Rp. 1,332.2 trillion.

Economic Development

Economic Development and Economic Growth

a.   According to Adam Smith (Suryana, 2019), economic development is a process of a combination or combination of population growth, income per capita, and technological advances carried out by the Government.

b.   According to Sadono Sukirno (2014), economic development is a process that causes the income per capita of a country's population to increase sustainably over a long period of time.

c.   According to Schumpeter (Suryana, 2019), economic development is a change in the industrial and trade fields related to income per capita and national income where the process occurs spontaneously and uninterruptedly.

d.   According to Todaro & Smith (2014), economic development also needs to be seen as a process of increasing income per capita, because the increase reflects additional income and an improvement in people's economic welfare. However, an increase in income per capita alone is not sufficient to define economic development. Improvements in social structures, institutional systems (both organizational and rules of the game), changes in people's attitudes and behavior are also important components of economic development, apart from issues of economic growth and poverty alleviation.

The author draws conclusions regarding the differences between economic development and economic growth, namely:

a.   Economic growth is only defined as an increase in income per capita regardless of whether the increase is greater or less than the rate of population growth, and whether there is a change in the economic structure or an improvement in the institutional system or not.

b.   The purpose of economic development, in addition to increasing income per capita, is also to accelerate economic growth.

c.   Economic development depends on economic growth, where economic development encourages economic growth, and vice versa, economic growth will facilitate the process of economic development.

Elements and Nature of Economic Development

According to Lincolin Arsyad (2010), the elements and nature of economic development are:

a.   Development as a process, meaning a stage that every society or nation must go through.

b.   Development as social change.

c.   Development as an effort to increase income per capita.

d.   The increase in income per capita must occur in the long term.

Economic Development Indicator

To measure the level of progress of a country's economic development, indicators that are physical, economic, social, and political are needed (Lincolin Arsyad, 2015).

a.   Monetary indicators, related to money (economy), in the form of the level of income or income received by the community. Included in this indicator are: income per capita, and net economic welfare.

b.   Non-monetary indicators, taken from several main things related to people's lives, which are not related to money. Included in this indicator are: social indicators (amount of steel consumption in one year, amount of meat consumption in one year, etc.), and quality of life index.

c.   Mixed indicators consist of social and economic elements. Included in this indicator are: Core Susenas indicators (level of education, sources of clean water and electricity, labor participation, crime rate per year, etc.), and human development index.

Previous Research

Wahyu Sigit Sanyoto (2018) with the title "*The Effect of Macroeconomic Variables on Tax Revenue in Indonesia for the 1972-2017 period*", identifies the effect of macroeconomic variables including GDP, inflation rate, exchange rate, state spending, and the trade balance on tax revenue in Indonesia. The results of the study indicate that the inflation variable has a negative effect on tax revenue. Exchange rate and trade balance variables have a positive effect on tax revenue. The variables of GDP and state expenditure were excluded from the regression equation model due to multicollinearity. The research period cannot be justified, because in 1983 Indonesia had carried out tax reform by issuing legislation that was independent of the old legal system that adopted the colonial government's tax law. Therefore, tax revenues before and after 1983 cannot be equated.

Aan Widia Astuti Praningrum and Rifki Khoirudin (2019) with the title "*Determinants of Regency/City Tax Revenue in Bali Province*", analyze the influence of GRDP, HDI, population and large and medium industries on local tax revenues in Bali Province. The results showed that the GRDP variable had a positive and significant effect on local taxes, the HDI variable had no positive and significant effect on local taxes, the population variable had a positive and significant effect on local taxes, and the variable number of large and medium industries had a negative and insignificant effect on Bali Provincial Tax. The dependent variable in this study is the local tax revenue of the Province of Bali, where different results can occur when applied to central tax revenues.

Nurul Izzaty Anuar (2019) with the title "The Macroeconomic Determinants of Tax Revenue: The Case of Malaysia", aims to determine the main factors that affect tax revenue in Malaysia. The results show that the exchange rate is associated as the main factor influencing tax revenue in Malaysia. It is also known that the inflation rate, trade openness and exchange rates have a significant effect on tax revenues. Furthermore, inflation rates and exchange rates are positively related to tax revenues, while trade openness is negatively related. However, the added value of the agricultural sector is an insignificant factor but can affect tax revenue, because it has a negative relationship to tax revenue.

III.   Material And Methods

The Scope of Research

The scope of this research discusses the analysis of the effect of economic development variables (economic growth, HDI, inflation, and labor) on tax revenue in Indonesia.

Data Types and Sources

The data used in this study is secondary data obtained from the Ministry of Finance of the Republic of Indonesia, the Directorate General of Taxes, Bank Indonesia, the World Bank, the Central Bureau of Statistics, journals, websites, research results, and other reading sources relevant to the variables used for the purposes of

this study. The data used in the analysis is in the form of annual time series data for the period 1986-2020, so that most of the observed data are 35 years.

Variable Identification

No	Variable	Data	Unit
Independent			
1	Economic Growth	Annual economic growth rate (YoY) in Indonesia	percent
2	Human Development Index (HDI)	annual HDI rate in Indonesia	index
3	Inflation	Indonesia's annual inflation rate based on the Consumer Price Index	percent
4	Labor	Annual labor force participation rate in Indonesia	percent
Dependent			
1	Tax revenue in Indonesia	the amount (realization) of annual tax revenue in Indonesia	rupiah

Analysis Method

The method used to analyze the effect of economic growth, HDI, inflation and labor on tax revenue in Indonesia is a quantitative analysis method, namely an analysis that uses models, such as mathematical models (eg multivariate functions), statistical models, and econometrics. The results of the analysis are presented in the form of numbers which are then explained and interpreted in a description.

The research analysis was conducted using multiple regression analysis using the Ordinary Least Square (OLS) method or Ordinary Least Square which uses time series data to see the relationship between the independent variable and the dependent variable. According to Gujarati (2015), the OLS method is most often used not only because it is easy, but also because it has some solid theoretical properties, which are summarized from the Gauss-Markov theorem. The Gauss-Markov theorem (in Gujarati, 2015) states, based on the assumptions of the classical linear regression model, the OLS estimator has the lowest variance among other linear estimators; In this case, the OLS estimator is called the best linear unbiased estimator.

According to Gujarati (2015), OLS is used to find a straight line that passes through a set of observation points, using the criterion of minimizing the number of residual squares. To obtain a regression model that is BLUE (Best Linear Unbiased Estimator), multiple linear regression as measured by OLS must meet the Gauss-Markov assumption, i.e the data is normally distributed and free from heteroscedasticity.

Hypothesis Testing

1. Coefficient of determination (R-square or R^2)

Conducted to measure how far the ability of all independent variables in explaining the variance of the dependent variable (Ghozali, 2011). The coefficient of determination is calculated by squaring the Correlation Coefficient (R).

The R-square value is a positive value, located between zero and one, or $0 < R^2 < 1$. The R-square value is close to 1, meaning that the independent variables are able to provide almost all the information needed to explain the variation of the dependent variable.

According to Ekananda (2019), the interpretation of R^2 is more appropriate for a simple linear regression consisting of one independent variable. In multiple linear regression with more than one independent variable, it will cause a tendency for the value of R^2 to always increase if more independent variables are added. This needs adjustments so that the addition of the number of independent variables does not necessarily increase R^2, this adjustment is referred to as adjusted R^2 (Adj. R^2).

2. F statistic test

This test is used to show whether all the independent variables included in the model have a joint or simultaneous effect on the dependent variable. It is also used to test whether the regression model is significant or not significant (Ghozali, 2011).

Test criteria: if the significance value $< \alpha = 0.05$, it means that the model is significant, and the independent variables simultaneously affect the dependent variable.

3. t statistic test

This test, also known as the partial test, is carried out to show how much influence one independent variable has on the dependent variable by assuming the other independent variables are constant (Ghozali, 2011).

Test criteria: if the significance value $< \alpha = 0.05$, it means that there is a significant effect of the independent variable on the dependent variable partially.

4. Normality test

Done to show whether the data distribution is symmetrical or not. The normality test aims to test whether in the regression model, the independent variable, dependent variable, confounding or residual has a normal distribution or not (Ghozali, 2011).

Using the Jerque Bera test method (JB-test) with test criteria if the probability value on Jerque-Bera is greater than α = 0.05, it means that the residual data is normally distributed.

5.   Multicollinearity test

Aims to test whether in the regression model there is a linear relationship between independent variables (Ekananda, 2019). To detect the presence or absence of multicollinearity in the regression model, this study will use the Variance Inflation Factor (VIF) value.

Test criteria: if the VIF value is less than 10.00, it means that there is no multicollinearity in the regression model.

6.   Heteroscedasticity test

Heteroscedasticity is a condition/symptom where the residue of a regression equation varies in a certain data range (Ekananda, 2019). To test for heteroscedasticity, the White Test will be carried out.

Testing is done by regressing and comparing the values of Prob.F-statistic and Prob. Obs*R-squared with α = 0.05. If the value of Prob.F-statistic and Prob. Obs*R-squared < α = 0.05, it means that heteroscedasticity occurs.

7.   Autocorrelation test

Autocorrelation is a condition where there is a relationship between the error of one period and the error of another period, and is common in time series data. Autocorrelation assumption problem can be detected by using the Breusch-Godfrey LM Test. Autocorrelation test decision making focused on Prob. F-statistics or Prob. Obs*R-square, where the value must be greater than the value of α.
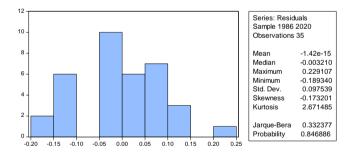
IV.   Result

Description of Research Object

The object used in this study is tax revenue data in Indonesia during the years 1986-2020. The study used secondary data with a time series type, so that the number of data analyzed was 35 observations.

This study uses four independent variables and one dependent variable which has different units, as shown in the variable identification table. Therefore, a logarithmic transformation must be carried out on the tax revenue data in Indonesia which has the largest data value. According to Ghozali (2011), logarithmic transformation can reduce differences in the measurement scale of variables.

Test of Instrument and Data Quality

1.   Normality test

Normality test was carried out using the Jerque Bera test method (JB-test). The results obtained are as follows:

It can be seen that the JB-Test results show a probability value of 0.846886, greater than α = 0.05. This shows that in the regression model, the independent variables, dependent variables, confounders or residuals are normally distributed.

2.   Multicollinearity test

Aims to test whether in the regression model there is a linear relationship between independent variables (Ekananda, 2019). Results obtained:

Variance Inflation Factors
Date: 07/27/21   Time: 22:42
Sample: 1986 2020
Included observations: 35

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
IPM	0.212059	264.5688	2.765212

INF	7.09E-06	5.308821	3.445059
PE	8.20E-05	9.734088	3.432579
TK	0.001244	18281.78	2.682593
C	4.815678	15631.78	NA

From the table above, it is known that the Centered VIF value of all independent variables is less than 10, which indicates that in the model there is no multicollinearity symptom, the four independent variables are not correlated with each other.

3.   Heteroscedasticity test

This is done to ensure that there is a homoscedastic naturein the regression model, namely a condition where there is no change in residuals for all data ranges in the regression model. Testing is done by using the White test. The results obtained are as follows:

Heteroskedasticity Test: White

F-statistic	2.220263	Prob. F(13,21)	0.0502
Obs*R-squared	20.25973	Prob. Chi-Square(13)	0.0889
Scaled explained SS	12.43978	Prob. Chi-Square(13)	0.4920

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 07/27/21   Time: 22:45
Sample: 1986 2020
Included observations: 35
Collinear test regressors dropped from specification

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.170305	3.241538	0.361034	0.7217
IPM^2	0.171590	1.238529	0.138543	0.8911
IPM*INF	-0.017388	0.021889	-0.794362	0.4359
IPM*PE	0.113964	0.064430	1.768793	0.0915
IPM*TK	0.049092	0.125979	0.389685	0.7007
IPM	-4.093236	7.133464	-0.573808	0.5722
INF^2	-5.18E-06	0.000110	-0.047135	0.9629
INF*PE	0.000299	0.000304	0.981997	0.3373
INF*TK	0.000304	0.001874	0.162334	0.8726
INF	-0.011607	0.116117	-0.099956	0.9213
PE^2	0.000987	0.000633	1.558742	0.1340
PE*TK	-0.001929	0.005494	-0.351167	0.7290
PE	0.045448	0.339259	0.133964	0.8947
TK^2	-0.000153	0.000830	-0.184464	0.8554

R-squared	0.578850	Mean dependent var	0.009242
Adjusted R-squared	0.318137	S.D. dependent var	0.012123
S.E. of regression	0.010011	Akaike info criterion	-6.081149
Sum squared resid	0.002104	Schwarz criterion	-5.459010
Log likelihood	120.4201	Hannan-Quinn criter.	-5.866387
F-statistic	2.220263	Durbin-Watson stat	1.662627
Prob(F-statistic)	0.050178		

It is known that the smallest value between Prob.F-statistic and Prob. Chi-Square is 0.0502, not smaller than α = 0.05, so it can be concluded that there is no heteroscedasticity symptom in the model.

4.   Autocorrelation Test

It is carried out with the aim of knowing if there is a relationship between the error of one period and the error of another period in the model. The test was carried out using the Breusch-Godfrey LM Test. The test results are as follows:

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	3.720380	Prob. F(2,28)	0.0369
Obs*R-squared	7.348223	Prob. Chi-Square(2)	0.0254

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 07/27/21   Time: 22:48
Sample: 1986 2020
Included observations: 35
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IPM	-0.336057	0.441238	-0.761623	0.4527
INF	-0.002624	0.002669	-0.982916	0.3341
PE	-0.015241	0.010221	-1.491146	0.1471
TPAK	-0.005988	0.033273	-0.179955	0.8585
C	0.702743	2.091474	0.336004	0.7394
RESID(-1)	0.419597	0.195888	2.142027	0.0410
RESID(-2)	0.352805	0.225384	1.565353	0.1287

R-squared	0.209949	Mean dependent var	-1.42E-15
Adjusted R-squared	0.040653	S.D. dependent var	0.097539
S.E. of regression	0.095536	Akaike info criterion	-1.681768
Sum squared resid	0.255560	Schwarz criterion	-1.370698
Log likelihood	36.43094	Hannan-Quinn criter.	-1.574387
F-statistic	1.240127	Durbin-Watson stat	1.807349
Prob(F-statistic)	0.316247		

From the table above, it is known that the value of Prob. F-statistic (0.0369) and the value of Prob. Obs*R-squared (0.0254), is smaller than $\alpha = 0.05$, so it is concluded that there is an autocorrelation symptom in the model. Then the test was continued by using the Durbin Watson test (DW-Test). The test criteria are as follows:
a.   Positive Autocorrelation Detection:
If $d < dL$ then there is a positive autocorrelation,
If $d > dU$ then there is no positive autocorrelation,
If $dL < d < dU$ then the test is inconclusive or can't be concluded.
b.   Negative Autocorrelation Detection:
If $(4 - d) < dL$ then there is a negative autocorrelation,
If $(4 - d) > dU$ then there is no negative autocorrelation,
If $dL < (4 - d) < dU$ then the test is inconclusive or can't be concluded.
This study uses 4 independent variables and 1 dependent variable, so k = 5. The number of observations is 35 years, so the sample (n) = 35. Durbin Watson (d) value obtained from the regression results is 1.807349. From the Durbin Watson table, for t = 35, k = 5 and $\alpha = 0.05$, we get the value of dL = 1.1601 and the value of dU = 1.8029.
Based on the detection of positive autocorrelation, d (1.8074) > dU (1.8029), then there is no positive autocorrelation. Based on the detection of negative autocorrelation, it is known that 4-d (2.1926) > dU (1.8076), then there is no negative autocorrelation.
Based on the results of the Durbin Watson test, in the regression analysis there is no positive autocorrelation and no negative autocorrelation, so it can be concluded that the research model has absolutely no autocorrelation.
Based on the results of the classical assumption test above, it can be concluded that the regression model in this study is BLUE, because the multiple linear regression measured by OLS has met the Gauss-Markov assumption, namely the data is normally distributed and free from heteroscedasticity.

Multiple Linear Regression Analysis
The results of the regression equation in this study (processed using the Eviews program) are as follows:

Dependent Variable: LOGPJK
Method: Least Squares
Date: 07/28/21   Time: 06:50
Sample: 1986 2020
Included observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PE	0.031831	0.009057	3.514567	0.0014
IPM	12.23997	0.460499	26.57981	0.0000
INF	0.009241	0.002663	3.470284	0.0016
TK	-0.034022	0.035275	-0.964474	0.3425
C	8.770332	2.194465	3.996569	0.0004

R-squared	0.982418	Mean dependent var	14.26818
Adjusted R-squared	0.980074	S.D. dependent var	0.735613
S.E. of regression	0.103839	Akaike info criterion	-1.560396
Sum squared resid	0.323473	Schwarz criterion	-1.338203
Log likelihood	32.30692	Hannan-Quinn criter.	-1.483695
F-statistic	419.0804	Durbin-Watson stat	1.176244
Prob(F-statistic)	0.000000		

The regression equation in this study can be arranged as follows:
LogPJK = 8,7703 + 0,0318 PE + 12,2399 IPM + 0,0092 INF – 0,0340 TK
From the results of the regression equation above, it can be seen that:
a.   The value of a or constant is 8.7703, meaning that if the value of Economic Growth, HDI, Inflation, and Labor is equal to zero, Tax Revenue in Indonesia will increase by an average of 8.77 percent per year (ceteris paribus).
b.   The regression coefficient of Economic Growth is positive at 0.0318, meaning that if Economic Growth increases by an average of 1 percent per year, then Tax Revenue in Indonesia will increase by an average of 0.03 percent per year (ceteris paribus).
c.   The regression coefficient of the Human Development Index is positive at 12.2399, meaning that if the HDI increases by an average of 1 index per year, then Tax Revenue in Indonesia will increase by an average of 12.24 percent per year (ceteris paribus).
d.   The inflation regression coefficient is positive at 0.0092, meaning that if inflation increases by an average of 1 percent per year, then Tax Revenue in Indonesia will increase by an average of 0.01 percent per year (ceteris paribus).
e.   The workforce regression coefficient is negative at 0.034, meaning that if the workforce increases by an average of 1 percent per year, then Tax Revenue in Indonesia will decrease by an average of 0.034 percent per year (ceteris paribus).

Coefficient of Determination (R-square)
Based on the results of the multiple linear regression above, it is known that the Adjusted R-square is worth 0.980074, meaning that the variable of Tax Revenue in Indonesia can be explained by the variables of Economic Growth, HDI, Inflation and Labor of 98.01%, while the rest of 1.99% can be explained by other variables not included in the model.

F. Statistic Test
Based on the results of multiple linear regression above, it is known that the F-Statistic value is 419.0804 with a Prob (F-statistic) value of 0.0000, which means the F-Statistic significance value $< \alpha = 0.05$, so it can be concluded that the model is significant, and independent variables simultaneously affect the dependent variable.

t Statistics Test
Based on the value of Prob. from the results of multiple linear regression above, it is known that:

a.   The PE variable has a value of 0.0014, which means $< \alpha = 0.05$, so it can be concluded that the economic growth variable has a significant effect on tax revenue in Indonesia.

b.   The IPM variable is worth 0.0000 which means $< \alpha = 0.05$, so it can be concluded that partially the HDI variable has a significant effect on tax revenue in Indonesia.

c.   The INF variable has a value of 0.0016 which means $< \alpha = 0.05$, so it can be concluded that partially the INF variable has a significant effect on Tax Revenue in Indonesia.

d.   The TK variable has a value of 0.3425, which means $> \alpha = 0.05$, so it can be concluded that partially the TK variable has no significant effect on Tax Revenue in Indonesia.

V.   Discussion

The Effect of Economic Growth on Tax Revenue in Indonesia

The results show that economic growth has a positive and significant effect on tax revenue in Indonesia. The effect of economic growth on tax revenue in Indonesia is that increased economic growth will create conducive economic conditions for every business actor (and economic activity) in developing the potential to carry out economic activities that can increase income, people's welfare and in the end will be able to increase country's revenue in terms of tax.

The Effect of Human Development Index on Tax Revenue in Indonesia

The results show that the human development index has a positive effect on tax revenue in Indonesia. The influence of the human development index on tax revenue in Indonesia is because during the study period, the human development index in Indonesia continues to increase every year. This shows that the development carried out by the Government of Indonesia has paid great attention to the development of the quality of Indonesian people which can improve and encourage economic development carried out by the Government in a better direction. Good economic development will be enjoyed by all Indonesian people, which will provide awareness and/or confidence regarding the important role of taxes in economic development, which in the end will be able to increase the active role of the community in terms of tax revenue in Indonesia.

The Effect of Inflation on Tax Revenue in Indonesia

The results show that inflation has a positive effect on tax revenue in Indonesia. The (positive) effect of inflation on tax revenues can be explained if the inflation situation is not controlled, it will reduce economic conditions. This situation will reduce the level of income received by both business entities and individuals so that in the end it will reduce tax revenues. In addition, in accordance with the Introduction section of this study, the Government always carries out strategic steps and different programs each year that are adapted to the prevailing economic conditions. The situation or condition of inflation has been projected at the beginning of the year, as well as how to overcome it so that it does not interfere and even (attempts) to support the performance of tax revenue. Therefore, if in the course of the year there is an inflation situation that is different from the inflation projection at the beginning of the year, the Government (especially the Ministry of Finance and the Directorate General of Taxes) will respond by implementing different programs or policies so that the tax revenue target can be realized properly.

The Effect of Labor on Tax Revenue in Indonesia

The results of the study indicate that labor has a negative effect on tax revenue in Indonesia. The negative influence of labor on tax revenue in Indonesia can be explained from the Provincial Minimum Wage (UMP) in Indonesia for 2020, which is in Jakarta (the highest) at Rp. 4,276,349 and Papua at Rp. 3,516,700, and other provinces that lower than those two provinces.The 2020 UMP is smaller than the Non-Taxable Income for 2020 of IDR 4,500,000, which means a high level of labor force participation, which means the large number of workers who work (as employees or laborers with income following the UMP) in Indonesia during the research period has no effect on tax revenue, because the monthly income received is less than the non-taxable income determined by the Government and therefore the income is not subject to tax (income).

In addition, based on data on the Ministry of Finance website (2021), it is known that for 2020 the largest tax contributor sector is the processing industry (27.5%). Meanwhile, based on BPS data as of May 31, 2021, it is known that for 2020 the percentage of the working population by main occupation in the manufacturing sector is only 13.83%. This means that the high level of labor force participation and the number of workers are not able to encourage the increasing in tax revenues because in general the working population according to the main occupation (according to BPS data as of May 31, 2021) is engaged in the agricultural sector (29.49%) which is not the largest tax contributor in Indonesia.

VI.   Conclusion

Based on the results of research and analysis during the research period (1986-2019), the following conclusions can be drawn:

a.   Economic growth has a positive and significant impact on tax revenue in Indonesia.

b.   HDI has a positive and significant effect on tax revenue in Indonesia.

c.   Inflation has a positive and significant effect on tax revenue in Indonesia.

d.   Labor has a negative but insignificant effect on tax revenue in Indonesia.

Some suggestions that researchers can put forward for several parties are as follows:

a.   The results showed that the variable economic growth had a significant effect on tax revenue in Indonesia. This can be used as a core policy by the Government and related parties in an effort to be able to maintain Indonesia's economic growth in a positive direction so as to improve people's welfare and increase tax revenues.The policy is to continue to build and maintain infrastructure (which has been built) in order to attract investors to Indonesia which will increase economic growth in Indonesia. In addition, it can also make rules or provisions that make it easier for businesses, maintain the business climate, and cut bureaucracy to facilitate investment both from within and outside Indonesia.

To the Directorate General of Taxes, so that the tax collection carried out can better reflect the nature of justice and the ongoing function of income redistribution, so that high economic growth can be felt and enjoyed by every level of Indonesian society.

b.   The HDI variable has a positive and significant effect on tax revenue in Indonesia. This can be used as an evaluation material and a motivator by the Government so that the development carried out can improve the quality of Indonesia's human resources on an ongoing basis, in addition to the purpose of tax revenue as shown in this study, also so that the public can understand more about the importance of taxes for the country's development, and to improve the competitiveness of Indonesian people in the international world.

The government can take a policy not to constantly change the curriculum and implement the education curriculum in Indonesia in accordance with current world conditions. In addition, ensuring the availability of internet networks in all corners of Indonesia for access to public information that can be used to increase the capacity and capability of the community to face the digital world, of course, is accompanied by the blocking of negative accesses on the internet.

c.   Labor variables that have a negative effect on tax revenue in Indonesia can be used as a core policy or strategic step by the Government and related parties to instill an entrepreneurial spirit in the younger generation so that they can give birth to new entrepreneurs who are business owners (not employees whose income is below or equal to the UMP), which can increase economic activity in the community more effectively so as to improve the welfare of the community as well as increase tax revenues, for example by increasing entrepreneurial material (and competition) both at the school and college level.

d.   For the Directorate General of Taxes, it can be considered to explore the tax potential of the agricultural sector more intensively, considering that this sector is the sector with the largest number of working population according to the main occupations in Indonesia apart from the trade and manufacturing sectors.

e.   For further researchers, it can be considered to increase the research period or change the annual period to semiannual, to increase the quantity of research samples. In addition, it can also be considered to use other non-economic variables, because the purpose of tax revenue in Indonesia is not only for economic purposes but to fulfill all aspects of the lives of Indonesian citizens.

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