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THE EFFECT OF ECONOMIC GROWTH, POVERTY AND WAGES ON TAX REVENUE

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ABSTRACT

Taxes are a source of state revenue, economic growth conditions can have an impact on the taxation sector, besides that poverty and wage factors can also affect state tax revenues. The purpose of this study was to determine the magnitude of the effect of economic growth, poverty and wages on tax revenues. The sample used in this study was 30 provinces in Indonesia. The research method used in this research is descriptive quantitative analysis method. Using secondary data during 1991-2021 and analyzed with time series data regression. The results of the research conducted can be seen that economic growth has a positive and significant effect on tax revenue, poverty has a negative and significant effect on tax revenue, positive and significant effect on tax revenue. as well as tax revenue

KEYWORDS *Economic growth, poverty, wages and taxes*

INTRODUCTION

Tax is one of the sources of state revenue that is used to finance development. Since the tax reform in Indonesia concerning General Provisions and Tax Procedures No. 6 of 1983 and the latest No. 16 of 2009 is used to create an efficient and effective taxation system so as to increase state revenue in the tax sector. Taxes are people's contributions to the state treasury based on law with no direct reciprocity that can be shown and used to pay public expenses (Mardiasmo, 2018).

Along with an increase in GDP tax revenue can be said to have increased. The government will also be able to determine tax revenue with certainty, if economic growth is marked by an increase in GDP. The 2021 tax revenue plan is IDR 1,231.87 trillion or grows 16% from the 2021 target Rp. 1,229.6 trillion (Setyawan, 2021). Meanwhile, Indonesia's economic growth in 2021 is 3.69%. To achieve this target, all levels of the Directorate General of Taxes are trying to increase tax revenues through extensification and intensification of taxes as much

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as possible. Given the growing population and economic growth that must continue, it is estimated that tax revenues can still be expected to increase.

In tax revenue there are several factors that influence it such as economic growth, inflation, wages, poverty, public consumption, the rupiah exchange rate, international oil prices, crude oil production and interest rates. However, this research is limited to only discussing economic growth, poverty and wages received by the community.

Economic growth

Economic growth is a change in the condition of the country's economy on an ongoing basis towards a better direction. According to Adam Smith, economic growth is a change in the level of a country's economy which is based on population growth, so that its output will increase. Economic growth can be interpreted as a process of increasing production capacity for every economy in the form of national income. According to Frederich List economic growth includes community economic growth from the results of natural resource management (Sukirno, 2016). Adam Smith in his book An Inquiry Into the Nature and Causes of the Wealth Nation, which analyzes the causes of economic killing and the factors that determine economic growth. The factors that become economic growth are: human resources, natural resources, science and technology progress and the inflation rate. One of the factors that can affect economic growth is GDP. GDP is the overall value of all goods and services produced within a certain period. GDP or often called GDP is a measure of income and economic expenditure, ignoring income received from or paid to non-residents. GDB is the economic statistic that gets the most attention because it is considered the best single measure of people's welfare (Mankiw N, 2018). GDP calculated on the basis of current prices can be used to see shifts and economic structure or constant prices used to determine economic growth from year to year. Economic growth can be seen from the increase in real GDP from year to year. If GDP rises, economic growth will be better . If the average economic growth from year to year increases, the per capita income of the community will be high, which means that welfare will also increase. Economic growth is characterized by an increase in GDP from year to year. Meanwhile, tax collection will be based on GDP, which will eventually be distributed to the country's development. Such as research entitled "The Impact of Economic Growth and Tax Reform on Tax Revenue and Structure: Evidence from China Experience" which states that empirical results show that economic growth is not not only has a significant effect on total tax revenue and changes in structure, but also has a long-term stability relationship with total tax revenue (Zeng & Qian li, 2013). And in the long run, there's not a tremendous growth in tax revenues. In addition, each tax reform shows a clear impact on the tax structure, while the impact of changes in total tax revenues decreases over time. In addition, research states that economic growth has a significant effect on tax revenues. (Herman, 2007). And also the results of the study entitled "Causal Relationship between Government Tax Revenue Growth and Economic Growth: A Case of Zimbabwe *(1980-2012)"* which states that economic growth has no significant effect on tax revenues (Dzingirai & Zacary, 2014). In addition, the results of a study entitled "The Effect of Economic Growth on Taxation Revenue: The Case of Newly Industrialized

Country" concluded that there was a relationship between economic growth and tax revenue of 21%. (Roshaiza Taha, Loganathan, Nanthakumar, 2011).

Poverty

Poverty is a condition in which a person or group of people is unable to fulfill their basic rights to survive. The World Bank defines poverty as "Poverty is to be hungry, to lack shelter and clothing to be sick and not cared for, to be illiterate and not schooled." "Poverty means hunger, lack of shelter and clothing, being sick and not cared for, illiterate, and not going to school. (Wibowo, 2014). In other words, poverty means a deficiency which is often measured by the level of welfare. According to Karl Mark, the cause of poverty is the exploitation of workers by capitalists. In Indonesia, in 1998, poverty reached 19.9 percent. (Investment, 2018). The study entitled "The Influence of Poverty Level and Per Capita Income on Local Tax Revenue and Audit Opinion with the Level of Public Trust as an intervening variable on Regional Tax Revenues of Provincial Governments throughout Indonesia concluded that poverty level has a significant effect on tax revenues (Alwi, 2021). In addition, the results of the study entitled "Negative Income Taxes, Inequality and Poverty," state that poverty/inequality results in a decrease in tax revenue. (Angyridis & Thompson, 2016). Likewise with the results of a study entitled "Does Poverty Matter for Tax Revenue Performance in Developing Countries", concluding that the poverty rate significantly reduces tax revenues in developing countries. (Gnangnon, 2021).

Wages

According to Article 1 number 30 of Law Number 13 of 2013 concerning Manpower (UU 13/2003), wages are workers' rights that are received and expressed in the form of money as compensation from employers or employers to workers which are determined and paid according to a work agreement, agreements, or laws and regulations, including benefits for workers and their families for a job and or service that has been performed. The theory of wages put forward by David Ricardo if the wages of laborers or workers are high enough, then the worker will also tend to consume large amounts as well. wedding parties because the wages are enough to provide a dowry and a wedding party. there are limited funds for wages. These funds are part of public funds collected from savings. Thus wages are compensation received by workers in connection with the work performed. Research related to wages such as "Effort and Wages: Evidence from the payroll tax ," which concludes that an increase in wages results in an increase in taxes on wages received (Lang, 2020). Likewise, research entitled "Taxation and Centralized Wages setting: The Case of Endegenous Labor Supply," concluded that the relationship between taxation, wages and employment in adjusting working hours, changes in wages will have an impact on changes in taxes and can even increase employment and if the profit tax used to finance public spending, higher taxes would reduce wages and increase employment (Kilponen & Sinko, 2005). And also the results of the study entitled "The Influence of Wages, Population and Economic Growth on PBB-P2 Tax Receipts in the City of Kediri" concludes that together wages, population and economic growth affect PBB-P2 tax revenues (Rohadi, 2020).

Tax revenue

Taxes are mandatory levies or fees that must be paid by the people to the state and will be used for the benefit of the government and the general public. Therefore taxes are one of the sources of state revenue used to finance development. In this case tax collection can be forced because it is carried out based on law - Indonesian state law. The definition of tax according to article 1 of Law no. 16 of 2009, namely mandatory contributions to the state owed by individuals or entities that are coercive by law by not getting compensation directly and used for the needs of the state for the greatest prosperity of the people (Directorate General of Taxation, 2009). According to Ray M. Sommerfield, Herschel M. Anderson and Horace R. Brock, taxes are the transfer of resources from the private sector to the government sector, not as a result of breaking the law, but must be carried out based on predetermined provisions, without any direct and proportionate rewards so that the government can carry out their duties to run the government (Mardiasmo, 2018). Tax revenues are influenced by external factors such as economic growth, inflation rates, the rupiah exchange rate, international oil prices, oil production and interest rates. While internal factors include high national compliance and discipline, availability of networks and access to effective information (Gunadi, 2008). While the indicator of tax revenue is the amount of tax revenue which includes central tax, local tax customs and excise and regional levies (Rahayu, 2017). Such as research that examines the effect of tax revenue is influenced by external factors such as economic growth, inflation rates, the rupiah exchange rate, international oil prices, oil production and interest rates. While internal factors include high national compliance and discipline, availability of networks and access to effective information (Gunadi, 2008). According to Adam Smith in his book Wealth of Nation that tax collection carried out by the state must be in accordance with the ability and income of the taxpayer. The state may not act discriminatory against taxpayers. The principle of certainty, all tax collections must be based on law, so those who violate will be subject to legal sanctions (Principle of Equality) (Pamungkas, 2022). Keynesian theory states that in the economic cycle, the level of consumption that is carried out becomes income for people. That is, if someone uses their money for transactions, it can directly become income for other people. Normally the economy of a country is caused by demand and supply going hand in hand. As with VAT, it occurs on public consumption. The higher the level of public consumption, the VAT revenue will increase. Research that discusses tax revenues such as "Factors affecting tax income revenues in the Visegrad countries. An empirical evidence based on regression analysis, concluded that tax revenue can be influenced by various factors such as social, cultural and political (Mihokova, 2015). In addition, research entitled "The Impact of Economic Growth and Tax Reform on Tax Revenue and Structure: Evidence from China Experience" which states that empirical results show that economic growth not only has a significant effect on total tax revenue and changes in structure, but also has long-term stability relationship with total tax revenue (Zeng & Qian li, 2013). The results of the study entitled "Effects of Inflation on Tax Revenue Performance in Kenya," which concluded that inflation has a negative effect on tax revenues in Kenya (Nalyanya, 2020). Research related to wages such as "Effort and Wages: Evidence from the payroll tax ," which concludes that an increase in wages results in an increase in taxes on wages received (Lang, 2020). Likewise with the results of a study entitled "Does Poverty Matter for Tax Revenue Performance in Developing Countries", concluding that the poverty rate significantly reduces tax revenues in developing countries (Gnangnon, 2021). research that discusses public consumption with the title "Relative Consumption Concerns and The Optimal Tax Mix", which means that tax revenue is influenced by consumption of non-positional goods and income (Eckerstorfer, 2013). It can be said that consumption can affect tax revenue. Furthermore, it can be said that there are many factors that can affect tax revenue

METHOD RESEARCH

Researchers use the correlational method to analyze research data in connection with the correlation between variables used in finding the impact that occurs between the variables used in this study (Now, 2014). In addition, there are 30 provinces in Indonesia that are sampled in this study. Using purposive sampling technique in sampling. There are four components used, such as one dependent variable and three independent variables. Tax revenue as the dependent variable (Y) and the independent variables consist of economic growth (X1), poverty (X2), and wages (X3).

Some of the methods used in data collection include:

1. Documents in the form of reports at the Central BPS from 1991 to 2021.
2. Theories and methods are taken from literature review.

Systematic research is described as follows:

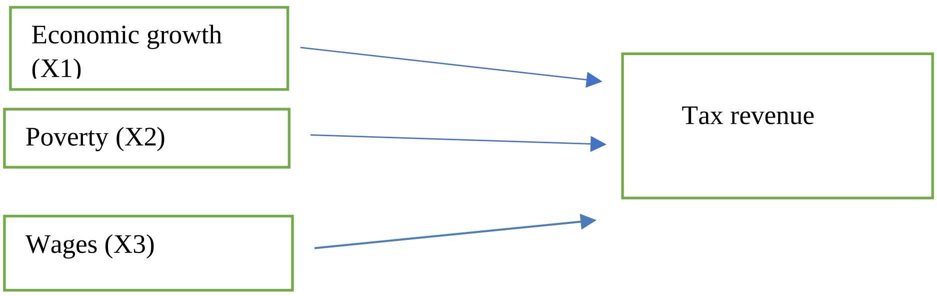

Image 1
Research scheme

The results obtained were collected and processed and analyzed using multiple linear regression analysis, with the following equation:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where:

Y : Tax revenue
X_1 : Economic growth
X_2 : Proverty
X_3 : Wages
B : Constant

ε_1 : *Erro*

RESULTS AND DISCUSSION

1. Normality Test

The residual normality test in this study aims to find out whether the data is normally distributed or not. However, beforehand it is necessary to test the normality of the data with parametric or non-parametric analysis tests. This test uses the Kolmogorof Smirnov method and the results are as follows:

Table 1

One-Sample Kolmogorov-Smirnov Test

		Pertumbuhan ekonomi	Kemiskinan	Upah	Penerimaan Pajak
N		31	31	31	31
Normal Parameters[a,b]	Mean	152.457	19.244	43.086	14.467
	Std. Deviation	156.100	.54712	.06156	.36003
Most Extreme Differences	Absolute	.283	.159	.122	.094
	Positive	.283	.094	.122	.093
	Negative	-.154	-.159	-.112	-.094
Kolmogorov-Smirnov Z		.960	.887	.679	.522
Asymp. Sig. (2-tailed)		.614	.411	.746	.948

a.Test distribution is Normal
b.Calculated from data
Source: Processed data (2022)

Based on the table above, we can see that the significance value of Asymp. Sig (2-tailed) for economic growth is 0.614, poverty is 0.411, wages are 0.747 and tax revenue is 0.948 which is greater than 0.05, so the research data is normally distributed.

2. Simultaneous Parameter Significance Test (F statistical test)

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \ \ +e$$

Conducted to test whether the independent variables together have a significant influence on the dependent variable in this study as follows:

Table 2

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.532	3	1.177	89.216	.000[a]
	Residual	.356	27	.013		

	Total	3.889	30

a. Predictors: (Constant), Pertumbuhan ekonomi, Kemiskinan, Upah
b. Dependent Variable: Penerimaan Pajak
Source: Data processed (2022)

From the output of the ANOVA test or F test in the table above, it can be seen that the sig value of the calculated F is 0.000 <0.05, so Ho is rejected at the confidence level α = 0.05. In other words, simultaneously the level of economic growth, poverty and wages significantly and simultaneously affect the tax revenue variable.

3. **Test of Determination**

The coefficient of determination (R2) essentially measures how far the model's ability to explain the variation in the dependent variable. While the Correlation Test is used to determine the relationship of the independent variables to the dependent variable.

Table 3
Uji Determinasi (R^2)

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.953[a]	.908	.898	.11488	2.398

a. Predictors: (Constant), Wages, Poverty, Economic Growth
b. Dependent Variable: Tax revenue
Source: Processed data (2022)

From the results of the determination test, the coefficient of determination is 0.898 or 89.8%. This figure means that the variables of economic growth (X1), poverty (X2) and wages (X3) have a relationship of 89.8% to tax revenue (Y).

4. **Individual Parameter Significance Test (Statistical Test t)**

A statistical t test was carried out to test whether each independent variable has a significant effect on the dependent variable. The t test in this study includes economic growth, poverty and wages as the independent variables and tax revenues as the dependent variable. To see the magnitude of the influence, the beta number or Standardize Coefficient is used which is shown in table 4 below:

Table 4
Test Results t
Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-22.386	1.530		-14.630	.000
	Economic growth	.035	.014	.150	2.399	.024
	Poverty	-.200	.041	-.304	-4.894	.000
	Wages	5.497	.346	.938	15.906	.000

a. Dependent Variable: Tax Revenue

Source: Processed data (2022)

Based on the test results above, the calculated t value for the economic growth variable is 2.399 with a significance level of 0.024 <0.05. This shows that t count is greater than t table (2.399 > 1.701), meaning that there is a significant effect of the variable economic growth on tax revenue. It can be said that Ho is rejected (economic growth has a negative effect on tax revenue) and accepts Ha (economic growth has a positive effect on tax revenues).

H2 : Poverty Level Has a Negative Effect on Tax Revenue

The calculated t value for the poverty variable is -4.894 with a significance level of 0.000 <0.05. This shows that t count is smaller than t table (-0.200 <1.701), meaning that there is a significant negative effect of the poverty variable on tax revenue or in other words Ho is accepted (poverty has a negative effect on tax revenue) and rejects Ha (poverty positive effect on tax revenue). The higher the poverty level, the less tax revenue and vice versa.

H3: Wages Have a Positive Effect on Tax Receipts

The calculated t value of the wage variable is 15.906 with a significance level of 0.000 > 0.05. This shows that t count is greater than t table (15.906 > 1.701), meaning that there is a significant effect of the wage variable on tax revenue or it can be said that the results of this study reject Ho (wages have a negative effect on tax revenue) and accept Ha (wages positive effect on tax revenue).

From the results of the t test it is stated that all independent variables have a significant influence both positively and negatively on tax revenues. This can be seen from the results of the t test in table 4. The probability of significance for the economic growth variable is 0.024, for the poverty variable is 0.000 and the wage variable is 0.000. Therefore the probability value of the significance of the economic growth variable has a positive effect on tax revenues, poverty has a negative effect on tax revenues and wages has an individually positive effect on tax revenue variables

The summary of the results of the study is described as follows:

Summary of Research Results

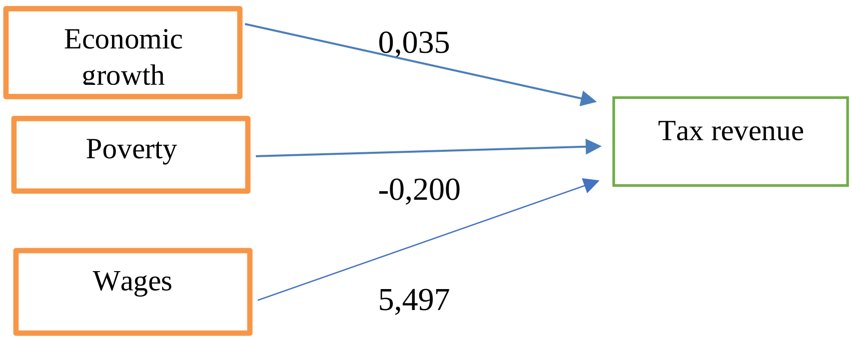

Image 2
Summary of Research Results

In the picture above you can see a summary of the results of the research that the results of the t test obtained the economic growth variable of 0.035, the poverty variable -0.200 and wages 5,497. These variables can significantly affect tax revenue both negatively and positively.

1. **The Economic Growth Rate Has a Positive Effect on Tax Revenues**

The results of the study show that the level of economic growth has a positive and significant effect on tax revenues, meaning that when the level of economic growth increases, tax revenues will increase, and vice versa. This is in accordance with previous research and existing theory.

In line with research conducted by Kanghua Zeng, Shan Li, Qian Li with the title "The Impact of Economic Growth and Tax Reform on Tax Revenue and Structure: Evidence from China Experience" which states that empirical results show that economic growth does not only have a significant effect on total tax revenue and structure changes, but also has a long-term stability relationship with total tax revenue.

Likewise with the theory according to Frederich List economic growth includes the economic growth of society from the results of natural resource management (Sukirno, 2016). Therefore economic growth which is marked by an increase in GNP will increase revenue in the tax sector which will later be used for development. An increase in GDP indicates a demand for factors of production because these factors of production are the most important thing in creating the output demanded by the product market. With economic growth increases will have an impact on tax revenues through the imposition of tax rates.

2. **Poverty Level has a negative effect on Tax Revenue**

The test results show that poverty has a negative and significant effect on tax revenue, meaning that when the poverty rate increases, tax revenue will decrease and vice versa. This is in accordance with previous research.

In line with the results of the study entitled "Negative Income Taxes, Inequality and Poverty," states that poverty/inequality results in a decrease in tax revenue (Angyridis & Thompson, 2016). Likewise with the results of a study entitled "Does Poverty Matter for Tax Revenue Performance in Developing

Countries", concluding that the poverty rate significantly reduces tax revenues in developing countries. (Gnangnon, 2021). Therefore it can be concluded that when poverty increases, it shows that people's purchasing power is weaker and this will have an impact on tax revenues.

Likewise according to the World Bank which defines poverty as "Poverty is to be hungry, to lack shelter and clothing to be sick and not cared for, to be illiterate and not schooled". sick and not cared for, illiterate, and not in school (Wibowo, 2014). In other words poverty means a deficiency which is often measured by the level of welfare. The cause of poverty arises usually because of inequality in the ownership of resources which has an impact on the distribution of income per capita. Society with the economy Low-income people only have a limited amount of resources. Therefore, poverty in Indonesia has a large role in tax revenues.

3. Wages have a positive and significant effect on tax revenues

The effect of wages on tax revenue in this study has a positive and significant effect, meaning that when there is an increase in wages, it will increase tax revenue.

This is in line with research related to wages such as "Effort and Wages: Evidence from the payroll tax," which concludes that wage increases result in increased taxes on wages received. (Lang, 2020).

The theory regarding wages was put forward by David Ricardo if the wages of laborers or workers are high enough, then these workers will also tend to make large consumptions such as weddings because their wages are enough to provide dowry and wedding parties. As a result, the higher the birth rate. This will increase. growth in the labor force who are looking for work and are willing to work even though the wages are as low as possible by employers. With the government setting a minimum wage it is intended to improve the welfare of workers and their families, so an increase in wages means that people's purchasing power for consumption can increase. This will have a direct positive impact or indirectly tax revenue will also increase.

CONCLUSION

Based on the results of the study it was found that economic growth has a positive effect on tax revenues with a significance value of $\alpha = 0.024$ ($\alpha < 0.05$) and wages can have a positive effect on tax revenues as seen from a significance value of $\alpha = 0.000$ ($\alpha < 0.05$) while poverty has an effect negative on tax revenue with a significance value of $\alpha = 0.000$ ($\alpha < 0.05$). And from the simultaneous test the effect of economic growth, poverty and wages is 89.8%, while the remaining 10.2% is influenced by other variables not used in the study This means that if there is an increase or decrease in the value of these variables it can affect tax revenue.

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