

# THE EFFECT OF VAT AND PAYROLL TAX (PPH21) ON THE GROWTH OF COMMUNITY CONSUMPTION, GROSS DOMESTIC PRODUCT, AND ECONOMIC GROWTH IN INDONESIA

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**Abstract.** Taxes play an important role in the existence of the state, especially in implementing improvements, considering that income from the expenditure sector can fund the development of national consumption. This study aims to determine the effect of VAT (VAT) and PPH (payroll tax) on the growth rate of public consumption, gross domestic product and the rate of economic growth in Indonesia as a moderating variable in country data in the statistical center and databox starting from 2002 - 2021. This sample uses country data for 20 years, This study uses multiple linear regression assisted by SPSS version 24 program. The results of this study shows that PPN and PPH affect the level of public consumption, while PPN and PPH have no effect on Gross Domestic Product and also Indonesia's Economic Growth Rate. That is, it can be concluded that VAT has no effect on the level of economic development in Indonesia which is registered in the Central Statistics Agency and the database for the period 2002 – 2021. Thus, the hypothesis is rejected.

**Keywords:** community consumption rate; gross domestic product; economic.

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## INTRODUCTION

Taxes play an important role in the existence of a country, especially in the implementation of improvements considering that income in the expenditure area can finance the consumption progress of a country ([Aghamohamadi & Amjady](#), 2017). In the Indonesian economy, cost is one of the areas needed to finance increased consumption ([Basri](#), 2013); ([Liebman et al.](#), 2019). With expense income, we can understand a sustainable improvement program, where expenditure is one of the sources of state revenue that has the largest commitment in funding the repair cycle in a country. Thus, tax collection areas must be increased so that they can support the progress of society in Indonesia ([Dufrénot & Jawadi](#), 2013); ([Santika et al.](#), 2019).

Fully determined to support alleviating the impact of COVID-19 ([Lin et al.](#), 2021), the government provides a strategy for the driving force of the burden to anticipate the monetary impact of COVID-19, one of which is the motivator for Article 21 PPh. Based on PMK 23/PMK.03/2020, Article 21 PPh is borne by the Government (DTP) for a sufficiently long period of time for workers with a gross wage of not more than 200 million rupiah for a certain assembly area (440 KLU), WP for Ease of Import for Export Purposes (KITE) and WP for Ease of Import for Small and Medium Industry Exports (KITE IKM) entirely aimed at generating additional income for workers in the assembly area to offset purchasing power ([Conesa &](#)

[Kehoe](#), 2018).

As a non-industrialized country, the Unitary State of the Republic of Indonesia has advanced in all fields to provide benefits ([Usman](#), 2021), especially in the field of tax collection. The greater the costs claimed by the company, the less net profit and vice versa. In this way, organizations often limit fees in a way that is contained in the responsible person's guidelines in a way that ignores the law in its implementation. There are differences in interests between citizens and public authorities. Citizens try to pay as few fees as possible considering the fact that paying duty means reducing the monetary capacity of citizens ([Conesa & Kehoe](#), 2018). After all, public authorities need assets to support government organizations, most of which comes from levy revenues.

Article 21 income tax installments are made in the current year through deductions by means of a certain collection. Associations that are obliged to keep, keep and report Income Tax Article 21 are management, government investors, benefit reserves, elements, organization, and coordination. Article 21 Personal expenses detailing through the annual assessment form (SPT). This Annual SPT is used as a way to report estimates and installments of obligations that must be paid in accordance with regulatory arrangements and expenditure guidelines. And furthermore to report installments or through storage of expenses or various other expenses in a fiscal year or part of a fiscal year. In

addition to the SPT, attach a Tax Payment Letter (SSP) ([Lind et al.](#), 2017). SSP is a letter used by citizens to make installments or pay off fees owed to the state depository. Financial development is an issue that is drawn to the economy of a country towards a superior condition for a certain period and can also be linked as a condition of expanding the boundaries of the creation of an economy that appears as an expansion in public income ([Samargandi et al.](#), 2015); ([Guru & Yadav](#), 2019); ([Sobiech](#), 2019).

The development of their finances means that the progress of the monetary turnover of events. In a large-scale test, the financial development achieved by one country is estimated by the original public income balance achieved by one country. The worldwide financial emergency that has hit most countries on the planet, including Indonesia, shows that a country's economic balance cannot depend entirely on a secret area. The commitment of the public authority area is also very solid. In particular, the expenditure factor of public authorities, government speculation that can create jobs and net commodities that can increase public salaries ([Du & Peiser](#), 2014).

The factors impacting VAT, import duties, development of open utilization, GDP and the pace of financial development in Indonesia have a close relationship with this, these factors are fluctuating information. I need to know how the factors above are very persuasive. Based on the background that has been explained, it

encourages researchers to encourage further research by formulating a number of objectives, including: 1. To find out whether VAT (VAT) has an effect on the growth rate of public consumption. 2. To find out whether the *Payroll tax* (PPH21) has an effect on the growth rate of public consumption. 3. To find out whether VAT (VAT) has an effect on Gross Domestic Product. 4. To find out whether *Payroll tax* (PPH21) has an effect on Gross Domestic Product?

## **METHODS**

This study uses a quantitative approach in which the object of the study is VAT (VAT) (X1), Payroll Tax (PPH21) (X2), consumption growth rate in the community (Y1), gross domestic product (Y2) and economic growth rate (Y3). This research method uses descriptive methods, namely collecting, compiling, processing, and analyzing data in order to provide a situation so that conclusions can be drawn. The type of data used is quantitative data because the researcher will calculate how big the influence of VAT, payroll tax, growth in public consumption, gross domestic product, and the rate of economic growth.

By using Partial Least Square (PLS-SEM), and taking data from the official website of the Central Statistics Agency and the database in 2002 – 2021 (research sample). In this study, researchers identified research problems, then continued with a study of research literature related to problems and variables which was adopted in this study, then developed into a research framework related to the problem to be studied, identifying each variable,

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hypotheses and research design development, determining the technique to be used, data collection to data management and producing discussions

and conclusions from this research.

**RESULTS AND DISCUSSION**

**Table 1.** Autocorrelation test results Autocorrelation

<b>Model Summary<sup>b</sup></b>					
Model	R	R Square	Adjusted R Square	Std.Error of the Estimate	Durbin-Watson
1	.518 <sup>a</sup>	.268	.182	2.62410	1.431

- a. Predictors; (Constant), PPH, PPN
- b. Dependent Variable: TPKM

The test results obtained a Durbin-Watson value of 1.431 with n of 20 and k (independent variable) of 2, the Durbin-Watson table value of dL 1.100 and dU 1.536. If the Durbin value - Watson earned is between nil ai  $4-dL < dW < 4-dU$  then, there is no symptom

of multicollinearity.  $4-dL = 4-1,100 = 2.9$  and  $4-dU = 4-1,536 = 2,464$ . Based on these results, the Durbin-Watson value obtained is  $2.9 < 1.431 < 2.464$  which is between the 4-dL and 4-dU values, so it can be concluded that there is no autocorrelation symptom.

**Table 2.** Multicollinearity Test Results Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		b	std. error	Beta	t	sig	Tolerance	VIF
1	(constant)	4.987	1.080		4.619	.000		
	PPN	-7.426E-7	.000	-.510	-2.374	.030	.931	1.074
	PPH	4.645E-11	.000	.026	.122	.904	.931	1.074

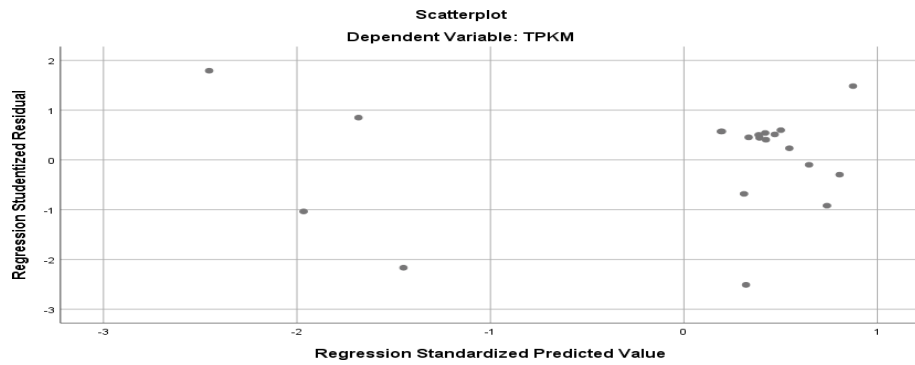
- a. Dependent Variable : TPKM

Statistical test results, for the VAT variable, the tolerance value is 0.931 and the VIF value is 1.074. Furthermore, for the PPH variable, the tolerance value is 0.931 and the VIF value is 1.074. From the multicollinearity test, it can be seen that the influential variable has a *Tolerance* > 0.10 and a VIF value < 10.

Based on the results obtained, the tolerance value for the VAT and PPH variables is greater than 0.10 and the VIF value obtained is smaller than 10. So , it can be concluded that there is no

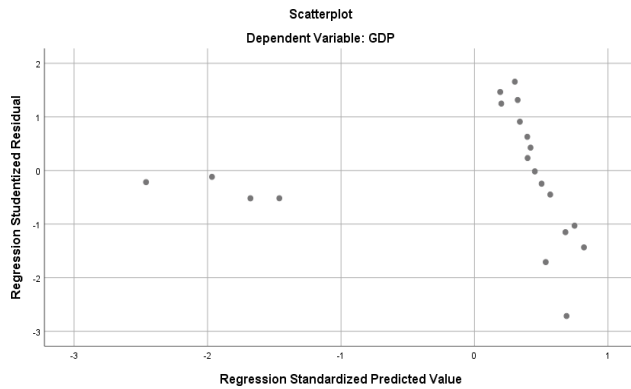
multicollinearity symptom in the regression model.

### Heteroscedasticity Test



**Figure 1.** Heteroscedasticity Test Results

It can be seen that the points spread randomly and are spread both above and below zero on the Y axis, it can be concluded that there is no heteroscedasticity.

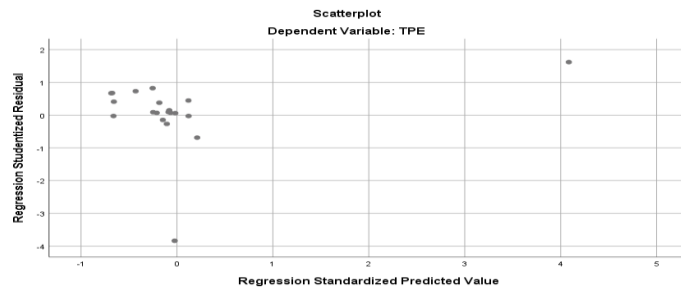


**Figure 2.** Heteroscedasticity Test Results

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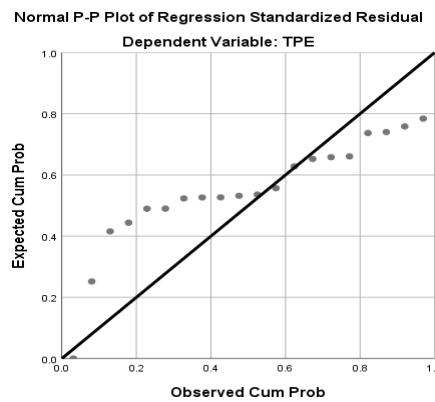
**Figure 3.** Heteroscedasticity Test Results

It can be seen that the points spread randomly and are spread both above and below zero on the Y axis.

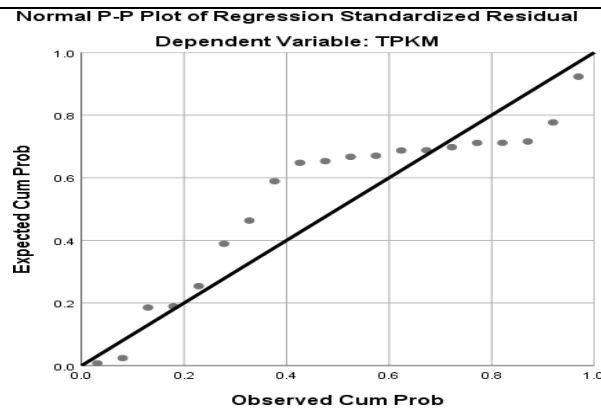
each variable to find out which variables meet and do not meet the assumption of normality (the variables are normally distributed). In this normality test carried out using the *Normal Probability Plot*

**Normality**

This normality test is carried out on



**Figure 4.** Normality Test Results



**Figure 5.** Normality Test Results

It can be seen that the results of the normality test show that the points spread around the line and follow the diagonal line on the *Normal P-Plot of Regression*, so the residual value is normally distributed. So that the regression meets the assumption of normality.

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**Hypothesis**

Esting The F test was conducted in this study to test whether all independent variables simultaneously affect the dependent variable. Criteria in decision making by comparing Sig-F with = 0.05. If Sig-F < 0.05 then the regression coefficient is significant and If Sig-F 0.05 then the regression coefficient is not significant

**Table 3.** Simultaneous testing (F Test)  
ANOVA<sup>a</sup>

Model		Sum Of Squares	df	Mean Square	f	sig
1	Regression	42.913	2	21.456	3.116	.070 <sup>b</sup>
	Residual	117.060	17	6.886		
	Total	115.973	19			

- a. Dependent Variable : TPKM
- b. Predictors : (constant),PPH,PPN

From the results shown, it can be concluded that VAT (VAT) (X1), Payroll Tax (PPH21) (X2), ) together – the same affects the variable The level of consumption growth in the community (Y1), gross domestic product (Y2) and the level of economic growth (Y3). with a significance level of 0.000. In making this decision on the hypothesis, it can be seen by comparing the probability value of  $p$  with the level of significance, namely . which if the value of the probability  $p$  (column sig) the level of significance that is used (5%) then it can be concluded that the value of probability (column Sig.)  $p <$  the level of significance (5%), this indicates that the independent variables affect simultaneously to the dependent variable.

#### **Partial hypothesis testing (t test)**

The t test was conducted to test the effect of the independent variable partially on the dependent variable. This t test was performed to determine the significance of the regression coefficient. Decision criteria are taken by comparing Sig-t with  $= 0.05$ . If Sig-t  $< 0.05$  then the regression coefficient is significant, and If Sig-t  $> 0.05$  then the regression coefficient is not significant the decision taken in the partial

hypothesis test (t test) is seen from the sig column. Namely VAT is 0.030, PPH is 0.904 in TPKM, VAT is 0.051, PPH is 0.995 is in GDP, VAT is 0.956, PPH is 0.766 This is in TPE which if a model can be said to be significant or the independent variable affects the dependent variable

partially if the value from sig. less than the specified level of significance. In this study, the significant value used is 5% so that it can be taken a decision that VAT and PPH are very influential on TPKM , this can be seen from the significance value below 0.05 while VAT and PPH on GDP and TPE are not significant because it can be seen from the value is above 0.05.

#### **The effect of VAT (VAT) on the growth rate of public consumption**

The independent variable can be said to have a significant effect on the dependent variable if the significance value of the dependent variable is less than 0.05. and vice versa if the value of significance is greater than 0.05 then the independent variable has no significant effect on the dependent variable (Ghozali, 2006). It can be seen from the results of SPSS testing, the results of the study show that the value of VAT on the growth rate of public consumption is  $0.030 > 0.05$  so that VAT has an effect on TPKM.

#### **The influence of PPH21 on the growth rate of public consumption**

The independent variable can be said to have a significant effect on the dependent variable if the significance value of the dependent variable is less than 0.05. and vice versa if the value of significance is greater than 0.05 then the independent variable has no significant effect on the dependent variable (Ghozali, 2006). It can be seen from the SPSS test results, the research results show that the PPH value on the growth



rate of public consumption is 0.904 <0.05 so that PPH has no effect on TPKM.

### **Effect of VAT on Gross domestic product**

The independent variable can be said to have a significant effect on the dependent variable if the significance value of the dependent variable is less than 0.05. and vice versa if the value of significance is greater than 0.05 then the independent variable has no significant effect on the dependent variable (Ghozali, 2006). It can be seen from the results of the SPSS test, the results of the study show that the value of VAT on gross domestic product is 0.051 > 0.05 so that VAT has an effect on GDP.

### **The effect of PPH on Gross Domestic**

Product Gross Domestic Product (GDP) is the sum of all value added goods or services produced by the region within a certain period of time (one year). The increase in Gross Domestic Product (GDP) occurs as a result of increased economic activity in a region. Increased economic activity affects people's income. The higher the income, the number of assets/wealth and the amount of public expenditure, the higher the ability to pay taxes, especially income taxes. GDP per capita is influenced by population, the number of residents can have a positive and negative impact, GDP per capita itself is the average income generated by each resident for one year in an area/region. This is also in accordance with research conducted by Muhammad Ikhsan Nasution (2017) which found that GRDP has a positive and significant effect on tax overall tax compared to other types of taxes. The estimation results show that

income tax has a positive and significant effect on government revenues and Indonesia's economic growth. That the growth rate of government revenue has a positive impact on increasing the ratio of income tax to Indonesia's total tax revenue, the ratio of value added tax to Indonesia's total tax revenue, and Indonesia's economic growth. Economic growth is an economic activity that causes goods and services produced in society to increase (Sukirno, 2010). Good economic growth and continues to increase will contribute to VAT receipts because good economic growth will ensure that it continues to occur.

### **The influence of PPH on the level of economic growth in Indonesia**

Economic growth is a process of changing economic conditions that occur in a country on an ongoing basis to lead to a situation that is considered better over a certain period of time. The theory of economic growth explains the factors that influence or determine economic growth and its long-term process, an explanation of how these factors interact with one another, so that it can lead to a growth process. Economic growth is directly proportional to income tax revenue where if economic growth increases every year, income tax revenue will also increase. Encouraged by research by Wenni Rismawati (2013), a positive coefficient indicates that if economic growth increases, it will cause an increase in income tax revenues. Increased economic growth in Indonesia can increase per capita income, where an increase in people's per capita income will always be followed by an

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increase in paying taxes, so that in the end it will increase the number of tax receipts for the state, especially income taxes.

## CONCLUSIONS

This research was conducted with the aim of testing the effect of VAT (vat) and Payroll Tax (pph21) on the growth rate of public consumption, Gross Domestic Product, and the level of economic growth in Indonesia. as a moderating variable in State Data from 2002 – 2021. 1) In the VAT variable on the level of development of public consumption, it can be concluded that VAT has an effect on the level of consumption development of Indonesian people who are registered in the Central Statistics Agency and databox for the period 2002 – 2021. These results can be seen from the Sig value obtained, where the Sig value obtained is smaller than 0.05. 2) In the PPH variable on the level of development of Indonesian people's consumption, it is concluded that PPH has no effect on the level of development of Indonesian people's consumption which is registered in the Central Statistics Agency and the database for the period 2002 – 2021. The results are seen based on the Sig value obtained, because the Sig value obtained is greater than 0.05. So there is a rejection of the hypothesis where VAT has no effect on the level of development. 3) In the VAT variable on Gross Domestic Product, the Sig value obtained is smaller than 0.05. Thus, the research hypothesis is accepted. That is, it can be concluded that VAT has an effect on Gross Domestic Product registered in the Central Statistics Agency and databox for the

period 2002 – 2021. 4) In the PPH variable on Gross Domestic Product, the Sig value is greater than 0.05. Thus, the hypothesis is rejected. This means that it can be concluded that PPH has no effect on Gross Domestic Product registered in the Central Statistics Agency and the Databox for the Period 2002 – 2021. 5) In the VAT variable on the level of economic growth, the Sig value obtained is greater than 0.05. Thus, the research hypothesis was rejected. That is, it can be concluded that VAT has no effect on the level of economic development in Indonesia which is registered in the Central Statistics Agency and the database for the period 2002 – 2021.

In the PPH variable on economic development in Indonesia, the Sig value obtained is greater than 0.05. Thus, the hypothesis is rejected. This means that PPH has no effect on economic development in Indonesia which is registered in the Central Statistics Agency and the database for the period 2002 – 2021.

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