



Effect of Inflation, Economic Growth, and Tax Rates on Tax Ratios in Asian Countries in the Period 2015-2020

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ABSTRACT: This research was conducted to analyze the Effect of Inflation, Economic Growth, and Tax Rates on Tax Ratios in ASEAN Countries either partially or simultaneously. The sampling method is purposive sampling. This study used 7 ASEAN countries with a sample number of 42 data. This type of data is secondary data sourced from World Bank and OECD data. The data analysis method used is multiple linear regression analysis. The findings of this study are based on the results of the t-test, it can be concluded that partial inflation has a negative effect on the tax ratio in ASEAN countries in the period 2015-2020. Partial economic growth and tax rates have no effect on the tax ratio in ASEAN Countries in the period 2015-2020. Based on the results of the F test it was concluded that Inflation, Economic Growth, and Tax Rates simultaneously have a significant effect on the tax ratio in ASEAN Countries in the period 2015-2020.

KEYWORDS: Economic Growth Rate; Inflation; Tax Rates; Tax Ratio.

INTRODUCTION

The tax ratio of ASEAN countries from 2015 to 2020 ranges from 10%-15%. As part of the developing country group, several ASEAN Member countries have a ratio that is still low from the World Bank Standard, which is around 12% (Milla, 2020). On Report OECD 2021, Indonesia's Tax Ratio scorecard is far from the lower standard compared to touse standard Asian Tax Ratio & Pacific. OECD already take notes standard tax Ratio for OECD members is 21%. ([OECD: Third Lowest RI Tax Ratio in 24 Asian and Pacific Countries \(ddtc.co.id\)](https://ddtc.co.id)).

Efforts to increase the Tax Ratio need to be carried out comprehensively, including improvemeimproving policies and administration, as is the direction of tax reform underway. Indonesia's low tax ratio can be reflected in the low level of tax compliance and the wide potential of taxes that have not been implemented into real revenue. Tax compliance is influenced by several things, namely audit probability, tax rate, income level, and tax penalty rate. As well as factors that can affect the economy, such as inflation, economic openness, per capita income also have an impact on the Tax Ratio (Kropienė., 2010).

Inflation and economic growth are macroeconomic constraints that are always faced by each country. The problem that researchers are often interested in studying continuously is inflation (Diamonds, 2019). Inflation is an increase in the general price level based on goods or commodities & services during a certain period. In research by Muibi et al (2013), Inflation affects tax revenue (percentage of tax revenue to GDP). High inflation will lead to a decrease in people's spending ability. The decrease in people's spending ability will have an impact on the decline in the company's output, so as a result, the taxable income will also decrease. Of course, this has an impact on the Tax Ratio (Hartono, 2019).

According to Muttaqin (2020), Economic growth reflects the development of increasing the total amount of goods and services produced by companies. Economic growth is a measure of the level of prosperity, the economy of the population so that people's incomes tend to rise. If people's incomes increase, it can change their consumption habits, thus affecting tax revenues. Understanding economic growth is an important task for developing countries (Sofyan, JF, and Ghani, G. M, 2018). This research supports the research conducted by Zeng Li et al (2013) and Gebreegziabher (2018) that economic growth will have a positive impact on the Tax Ratio.

According to the latest OECD report with the theme Tax Policy Reform 2018, the standard corporate tax rate worldwide is 23.9%, a significant decrease compared to 2000, which was 32.5%. The corporate tax rate in Indonesia since 2010 has decreased by



25% from the previous 28% and 30%. At the end of 2017, the United States lowered its corporate income tax rate from 35% to 21%. Corporate tax rates in Indonesia are moderate, both globally and regionally. Among ASEAN countries, Indonesia's corporate tax rate is balanced at 25%, lower than the Philippines (30%) and equivalent to Myanmar (25%). Tax rates in Indonesia are higher than in Malaysia (24%), Vietnam (20%), Thailand (20%), and Singapore (17%).

A small tax rate will reduce the tax burden which has an impact on encouraging employment, production, investment, and savings, which will then lead to an increase in GDP, and a large tax rate will result in a heavier tax burden and encourage taxpayers to avoid taxes. Suarez and Zidar (2016) and Elok et al (2020) in their research stated that the tax rate has a negative effect on the tax ratio.

Research conducted related to tax ratios uses a lot of macroeconomic independent variables as in the research Elok et al (2020) using the variables of Per capita Income, Economic Structure, and Corruption in a research study in low-middle-income countries. In research Muibi and Sinbo (2013) using the variables GDP, open trade, foreign exchange rates, debt to GDP ratio of research studies in Nigeria (1970-2011), as well as research Suarez et al (2018) using the corporate tax structure variable in America. However, no previous research has raised the topic of one of the macroeconomic variables, namely the percentage of economic growth and tax rates tested using corporate tax rates and research samples were carried out in ASEAN countries for the 2015-2020 period.

Based on the research gap above, the focus of achievement in this research is to examine the Effect of Inflation, Economic Growth, and Tax Rates on Tax Ratios in Asian Countries for the period 2015-2020, so that this test will provide benefits that can be used by the government to pay more attention to what dimensions will increase and decrease the tax ratio.

THEORY AND HYPOTHESES DEVELOPMENT

Quantity Theory

The quantity theory is the oldest theory that studies inflation, Irving Fisher was the originator of this theory. In its development, this theory faced improvements by economic scientists from the University of Chicago, so this theory was known to be a monetarist model (Fisher, 1911). Budi et al (2020) The quantity theory of money explains that the growth of money is the main constraint on the rate of inflation. So that controlling the amount of money in circulation becomes an important part for a country's bank to do because of the large impact on other macro variables. Inflation can influence the state of the economy of a country.

Structural Theory

The structural theory of inflation in developing countries proves that inflation is not just an economic phenomenon, but can be a structural condition. This happens due to economic conditions in the most developing country still agrarian. This causes shocks to economic conditions that come from the country itself, for example, harvest losses (natural factors due to changing seasons, natural disasters, etc.), or for example external factors from abroad, for example, foreign debt, and the value of foreign currencies. which can lead to high prices in the domestic market. This theory implies that inflation can slow or hinder the process of economic growth which will have an impact on a country's tax ratio (Hartono, 2019).

Solow's Neo-Classical Growth Theory

Neoclassical economic growth was developed by Robert M. Solow (1956) and TW Swan (1956), who stated that one of the elements that can be used as the basis for economic growth is the element of population growth. This theory is based on the structure of economic growth based on the classical economic view. Robert Solow and Trevor Swan are scientists who are the originators in developing this theory which says that economic growth depends on the existence of several factors of production, for example, the cost of labor, capital, population, and technological progress. The function of technological progress on economic growth is very prominent. Economic growth depends on the availability of additional factors of production (Serly, 2018). This theory implies that population growth becomes a positive resource which will also have a good impact on a country's revenue while maintaining economic stability. And through this research, information will be obtained on whether economic growth is considered effective or not from the point of view of a country's tax revenues (Saragih AH, 2018).



Tax

The definition of tax according to Prof. Dr. Rochmat Soemitro, SH Tax is a people's contribution to the state following the provisions of the law (coercive) can be determined and used in general financing (Mardiasmo, 2016). Taxes in Law No. 11 of 2020 in conjunction with Law No. 16 of 2009 in article 1 paragraph 1 reads that taxes are mandatory contributions of individuals or entities to the state that have an imposing nature and do not receive direct rewards and are used for the welfare of the people.

Tax Ratio

Sakti P (2014) examines that the Tax Ratio is the comparison between tax revenue and gross domestic product. The tax ratio shows the government's ability to collect income from taxes and withdraw GDP from the public. Widagdo et al, (2020) said that the higher the tax ratio in the country, the better the tax collection performance of the country. Tax Ratio in a narrow sense according to Government Finance Statistics/GFS 2001, the reference to the Tax Ratio is the total tax revenue from the central, regional, Customs and Excise, as well as natural resource taxes. When the growth of tax revenue is lower than the growth of a country's gross domestic product, the tax ratio will increase. The largest proportion in State Tax is what is required for Personal and Corporate Taxes (Wulandari, 2020). In meeting the needs of fiscal analysis and fiscal conditions, management and comparative analysis between Indonesian countries refer to Law No. 1 of 2004 informing that public financial reports can produce financial statistics that refer to Government Finance Statistics ([b9f86aa0-2af2-4372-a696-9b2ded50eb6f](https://doi.org/10.24127/ijcsrr.v5i3.23) (kemenkeu.go.id)).

Inflation

Seasonal price increases, such as during the Idul Fitri, Christmas, and New Year celebrations, and do not have a continuous impact, cannot be recognized as an economic disease (Abdullah, 2017). Bank of Indonesia (2020) reveals that Inflation is an increase in overall prices and occurs without stopping if the increase in the price of some goods cannot be recognized as inflation, but if the increase is wider or can have an impact on the increase in the price of other goods. For the economy as a whole, inflation that is too frequent and high will have a big impact, namely losses on the entire economic sector, that is, the impact will result in the bankruptcy of companies in the country (Putong, 2013.). In international websites, inflation measurement uses the consumer price index which provides an overview of the percentage transformation of data a year in the average price of consumers to obtain goods and services and has a constant estimate or changes over a significant period, such as yearly data on World Bank data (Damayanti, 2016).

Economic growth

Economic growth is an important indicator, this is because almost all countries will carry out import and foreign trade activities always try to be able to provide an increase in their country's economic growth. The standard in measuring a country's economic growth so far is using a gross domestic product (Williams, 2014). The higher the contribution of the industrial sector, the impact on the development of a country. To assess how much a country's income can be known by GDP. The number of goods and services produced by the unit within the boundaries of a country in one year is the definition of Gross Domestic Product (Ikhsan, 2016). Bertuah E dan Sakti I (2019) states that when economic growth increases, domestic consumption and government spending on infrastructure will increase. Jumono et al (2021) said that the rate of economic growth (GDP) is a general metric used to assess how effectively economic development policies and initiatives have been implemented. Saha, AK, & Mishra, V(2020) states that the growth of a country is influenced by the growth of others, provided they are connected through international trade and other exchanges.

Tax Rate

Simanjuntak (2012) said that if the tax rate increases, the multiplier effect will be negative on economic activity. On the other hand, if the rate reduction is carried out, the multiplier effect will have a positive value on economic activity. The tax rate is a mandatory contribution paid after calculating the tax credit or tax deduction. Aristanti (2013) states that the tax rate is used to find out how much tax must be issued based on justice and the provisions of the applicable law.



Relationship between Inflation, Economic Growth, and Tax Rates with Tax Ratio

According to Richard and Toly (2013), an obstacle that is often felt by various countries, especially for developing countries in the economy, namely inflation, will be even worse if there is high inflation. Inflation has an impact on the entire macroeconomy, such as economic growth, investment, income distribution, imports and exports, interest rates, and tax revenues. About high and low tax rates will determine the level of taxpayer compliance so that it affects tax revenue. According to Demarani (2018), The government's good economic performance can be seen in the high rate of economic growth. The governance of a country and economic growth can affect the tax ratio in a country. In research Damayanti (2016) states that the rate of inflation, economic growth, and tax rates have a joint effect on the tax ratio.

Relationship between Inflation and Tax Ratio

According to Damayanti (2016), The calculation of the target of state tax revenue shows that there is an impact caused by inflation. The higher the inflation, the impact on the decrease in people's spending ability. The decrease in the public's spending ability will result in a decrease in the amount of production of a company, which will have an impact on decreasing the company's taxable income. The higher inflation rate can have a negative impact on the tax ratio through changes in economic conditions. Ramdoni et al (2019) also stated that inflation is closely related to the decline in purchasing power, both individually and in companies, if inflation is higher it will reduce company profitability. A declining company profit gives a negative sign and will later have an impact on a country's tax revenues. As well as in research Bakshi (2001) In the United States, it was found that reducing inflation by 2 percentage points could provide prosperity by 1% of GDP per year forever. In the UK, by contrast, a similar benefit was found to be smaller but still substantial at 0.2% of GDP per year. This research is in line with Muibi and Sinbo (2013) and Almira et al (2016) stated that inflation has a negative effect on the tax ratio.

Relationship between Economic Growth and Tax Ratio

Richard and Toly (2013) said positive economic growth occurs when the number of goods and services produced by a country increases. Thus, changes in the value of money reflected in GDP are used to measure economic growth. The high value of Gross Domestic Product will have an impact on increasing per capita income so that through income tax and other taxes it will be high. According to Triastuti & Pratomo (2016) If the Gross Domestic Product in a certain area is high, then the ability of that region to spend money on taxes (ability to pay) will have a good impact. This research is in line with research Saragih (2018), Hartono (2019), and research by Zeng Li et al (2013) which states that Economic Growth affects the tax ratio.

Relationship between Tax Rates and Tax Ratio

The relationship between tax rates and state revenues originating in the tax sector is due to changing tax rates, tax rates have two impacts on state revenues, namely arithmetic effects, and economic effects (Richard, 2013). Suarez and Zidar (2016) Show that changes in corporate tax rates affect business and worker location decisions. As a result, government tax revenues from corporate and sales taxes may also be affected by changes in corporate tax rates. Economic effects can result in changes in economic activity caused by changes in tax rates. If the tax rate is high, then the multiplier effect will be negative on economic activity. Likewise, if the tax rate is lowered, the multiplier effect will be positive on economic activity. Kenny argues that low tax rates encourage taxpayers to declare more taxable income. Thus, tax policy affects a country's efforts to maximize its tax revenue potential (Damayanti, 2016). This is in line with research by Rudianti (2021) as well as Suarez and Zidar (2016) that the Tax Rate has a negative effect on the Tax Ratio.

Hypothesis Development

Based on the literature review and the results of previous studies, the hypotheses are formulated as follows:

H1: Inflation, Economic Growth, and Tax Rates have a simultaneous positive effect on the Tax Ratio

Relationship between Inflation and Tax Ratio

H2: Inflation has a negative effect on the Tax Ratio

H3: Economic Growth has a positive effect on the Tax Ratio

H4: Tax Rates have a negative effect on the Tax Ratio



RESEARCH METHODS

A good research model will describe the relationship between all the variables to be studied, aiming to make it easier to gain an understanding of the direction of the research. In this research, 3 independent variables are used, namely Inflation, Economic Growth, and Tax Rates. Causality is the research design used in this study. Causal research to obtain a causal relationship, to be able to detect variables that influence and are influenced (Pambagyo et al, 2020). The variables determined in this study are the independent variables, namely Inflation, Economic Growth, and Tax Rates with the dependent variable being the Tax Ratio. The data in the research used is secondary data in the form of data from the official accounts of the World Bank and OECD in the 2015-2020 period. The population in this study uses annual data on inflation rates, economic growth, and tax rates for the 2015-2020 period from 10 ASEAN countries. The sample in this study was 7 countries. This research uses a purposive sampling technique, namely the researcher determines the sample to be based on the criteria that have been decided. These criteria are, Countries that are included in the ASEAN region, countries in the ASEAN region that include variable data needed on the website, ASEAN countries that include full variable data needed in the 2015-2020 study period. This research was conducted by applying the method of quantitative analysis. Data analysis applies multiple linear regression analysis; classical assumption test consisting of normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test; goodness of fit test which consists of the simultaneous test (F test), partial test (t-test), and coefficient of determination test (R²). And the data is processed using statistical data processing software.

Variable Operational Definition

Muibi (2013) mentions that the measurement of inflation uses the consumer price index which provides an overview of the one-year percentage change in the standard price of consumers to obtain goods and services and has constant or moving estimates over a certain period, such as annually using data from the World Bank. Measurement of Economic Growth is measured by the amount of GDP this year minus last year's GDP then divided last year multiplied by 100% in a study conducted by Mutaqqin et al (2020). Measurement of Tax Rates is measured using the corporate tax rate of each country taken from the OECD data in the study (Chen, 2016). Tax Ratio is measured using the total revenue of tax and DJBC with GDP as the divisor (Damayanti, 2016).

RESULTS AND DISCUSSION

Research result

Descriptive Statistics

The statistical descriptive results show the tendency of individual taxpayers as shown in table 4.1

Table 4.1 Descriptive Statistics

Descriptive Statistics							
	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Tax Ratio	42	2.63	23.46	531.32	12.6505	3.95489	15.641
Inflation	42	-1.14	9.45	103.60	2.4667	2.57010	6.605
Economic Growth	42	-9.99	7.47	136.51	3.2502	4.58681	21.039
Tax Rate	42	17.00	30.00	963.00	22.9286	4.03879	16.312
Valid N (listwise)	42						

Based on descriptive analysis inform that from 42 samples, the average tax ratio is 12,65 with a maximum value of 23,46 owned by the Cambodian State, the higher the tax ratio indicates that the tax awareness in that country is high and indicates the ability of the country's tax authorities to tax sectors. Has been implemented optimally and the minimum value of 2,63 is owned by the State of Myanmar, the low tax ratio indicates that the government's efforts to collect taxes are still not optimal. Meanwhile, the average inflation



value of 2,466 with a maximum value of 9,45 is owned by the State of Myanmar, meaning that the higher inflation of a country will reduce the enthusiasm of investors and decrease the country's production activities and a minimum of -1,14 owned by Malaysia it means that there is a decrease in overall prices within a certain period. Cambodia's economic growth averaged 3,25 and a maximum of 7,47, meaning that economic activity during that period experienced an increase from the production of industrial goods, goods, and services. The minimum value of -9,99 is owned by Myanmar, meaning that economic growth has decreased and has not been optimal in implementing the country's economic development programs. Tax Rate has an average of 22,92 with a maximum value of 30 owned by Singapore and a minimum value of 17 owned by the Philippines.

Normality test

The use of the normality test is used to process data from research results using the KolmogorovSmirnov test method, as explained in the previous chapter that the normality test can be used to see the residual model in research with a normally distributed.

Table 4.2. Normality

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		42
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	3.01065336
Most Extreme Differences	Absolute	.109
	Positive	.109
	Negative	-.102
Test Statistic		.109
Asymp. Sig. (2-tailed)		.200 ^{c,d}

- a. Test distribution is Normal.
- b. Calculated from data.

The Kolmogorov-Smirnov test above shows residual data which has a normal distribution. The results of this normality test explain that the Kolmogorov-Smirnov value is significant at $0.200 > 0.05$, which is by the assumption of normality.

Data Multicollinearity Test

The multicollinearity test is to see the results of the tests contained in the regression model found, namely the independent variables of the regression model by analyzing at the VIF level (Variant Inflation Factors). Then the VIF value of <10 is higher than 0.10 i.e. there is no sign of multicollinearity and vice versa.



Table 4.3 Multicollinearity

	Coefficients ^a						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	16.722	2.963		5.644	.000		
Inflation	-.947	.217	-.615	-4.361	.000	.766	1.305
Economic Growth	.072	.109	.084	.666	.509	.959	1.043
Tax Rate	-.086	.136	-.088	-.631	.532	.788	1.269

a. Dependent Variable: Tax Ratio

The multicollinearity test based on table 4.3 shows the calculation results of the tolerance value that all independent variables each have a tolerance value greater than 0.10 and a VIF value less than 10. So, it can be concluded that in this regression model no multicollinearity occurs between independent variables.

Autocorrelation Test

Autocorrelation can be detected by the statistical nonparametric run test. The criteria used are the probability value > 0.05 then there will be no auto-correlation and if the probability value is <0.05, it is declared that it is auto-correlation.

Table 4.4. Autocorrelation

Runs Test	
	Unstandardized Residual
Test Value ^a	-.11823
Cases < Test Value	20
Cases >= Test Value	21
Total Cases	41
Number of Runs	18
Z	-.946
Asymp. Sig. (2-tailed)	.344

a. Median

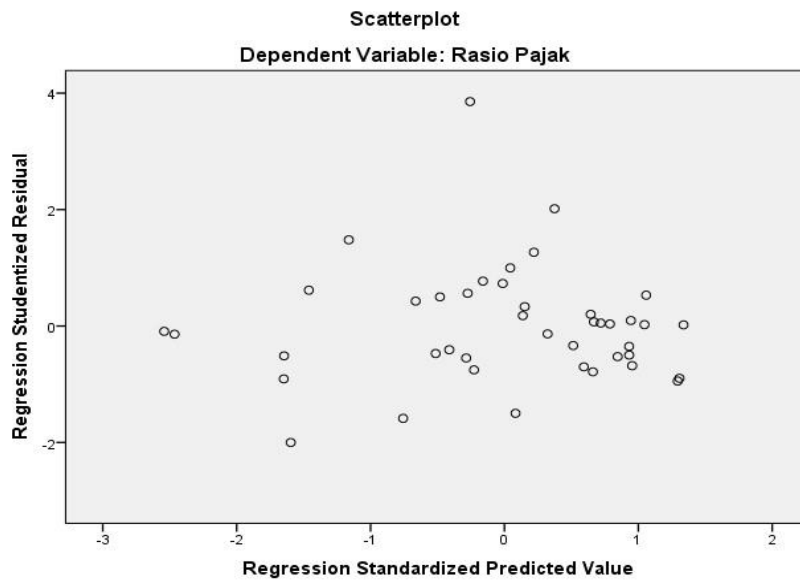
Based on the autocorrelation test conducted used the Run Test. Where these values the Asymp value is known Sig. (2-tailed) of 0.344 is greater than 0.05. Therefore, it can be defined that the regression model does not have auto-correlation.



Heteroscedasticity Test

Heteroscedasticity test is a test of whether there is a similarity of variance from one study to another in the regression model. If the residual variance from one control to another has the same value, that is, we talk about homoscedasticity, and if it is different, we will talk about heterogeneous variance.

Gambar 4.1



The test was used using the scatterplot technique. This explains whether the regression model shows non-uniform variance. if there is a certain shape on the graph, this indicates that there has been a non-uniform variance. From Figure 4.1, you can see that the distribution points are randomly up and down i.e. 0 and on the Y-axis. Therefore, it can be said, the regression model does not have non-uniform variance.

Hypothesis Testing before Moderation

Hypothesis testing is done either simultaneously or partially. The calculation results are in table 4.5 below.

Table 4.5. Coefficient of Determination Test Table (R2)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	,648 ^a	,421	,375	3,12724

a. Predictors: (Constant), Inflation, Economic Growth, Tax Rates

Based on table 4.5, the Adjusted R Square value is 0.375, from this figure it can be concluded that 37.5% of the tax ratio in ASEAN countries can be explained by inflation, economic growth, and tax rates. While the remaining 62.5% is not explained by this study.



Table 4.6. Uji F Table (Simultan)

ANOVA ^a					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	269,661	3	89,887	9,191	,000 ^b
Residual	371,625	38	9,780		
Total	641,287	41			

- a. Dependent Variable: Tax Ratio
- b. Predictors: (Constant), Inflation, Economic Growth, Tax Rates

Based on the F test table 4.6, the F-count is 9,191 with a significance (0.000 < 0.05). The results of the Simultaneous Effect Test of F show that the p-value is lower than the significance value (0.05) so that the conclusion from Ha1 is accepted, namely that there is Inflation, Economic Growth, and Tax Rates have a positive effect together on the Tax Ratio.

Table 4.7. T-Test Results (Partial)

	Coefficients ^a					Result
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	16.722	2.963		5.644	.000	
Inflation	-.947	.217	-.615	-4.361	.000	Accepted
Economic Growth	.072	.109	.084	.666	.509	Rejected
Tax Rate	-.086	.136	-.088	-.631	.532	Rejected

- a. Dependent Variable: Tax Ratio

Based on the results contained in table 4.7 above, it can be made an equation of multiple regression, namely:
 Tax Ratio = 16,722 - 0.947 (INF) + 0.072 (PE) - 0.086 (TP) + 2.963

DISCUSSION

Relationship between Inflation, Economic Growth, and Tax Rates with Tax Ratio

Based on the results of the research on the effect of inflation, economic growth, and tax rates on the tax ratio, it was found that the independent variables of inflation, economic growth, and tax rates simultaneously had a positive and significant effect on the dependent variable of the tax ratio in ASEAN countries for the period 2015 to 2020.

The first hypothesis, which explains that the relationship between inflation, economic growth, and tax rates simultaneously has a positive effect on the tax ratio is accepted. According to Richard and Toly (2013), an obstacle that is often felt by various countries, especially for developing countries in the economy, namely inflation, will be even worse if there is high inflation. Inflation has an impact on the entire macroeconomy, such as economic growth, investment, income distribution, imports and exports, interest rates, and tax revenues. High and low tax rates will determine the level of taxpayer compliance so that it affects tax revenue. This is in line with



and supported by research Damayanti (2016) states that the rate of inflation, economic growth, and tax rates have a joint effect on the tax ratio.

Relationship between Inflation and Tax Ratio

The second hypothesis is that there is a partial negative effect of inflation on the tax ratio. Based on the results of calculations in this study, it was found that an inflation negative effect on tax ratio in ASEAN Countries for the period 2015 to 2020. According to Damayanti (2016) The higher the inflation rate, the lower the public's spending ability. The decrease in the public's spending ability will have an impact on the decrease in the amount of production of a company so that it will have an impact on the decrease in the amount of taxes owed by a company. This certainly has an impact on the tax ratio of ASEAN countries. The higher inflation rate can have a negative impact on the tax ratio through changes in economic conditions.

The effects of inflation are also felt by entrepreneurs and investors which leads them to go bankrupt. These problems also led to a reduction in the workforce and layoffs as a direct result of the effects of inflation. Inflation that continues in the long term and tends to be at a high level will have an adverse effect on economic stability. This is the reason the workforce is laid off by many companies so that it can increase the number of unemployed and its impact on the tax ratio of a country (Arrendamento, 2019). This shows that rising inflation will cause a significant reduction in the tax ratio. The results of this study are in line with research from Muibi et al (2013) and Almira et al (2016) stated that inflation has a negative effect on the tax ratio.

Relationship between Economic Growth and Tax Ratio

The third hypothesis is that there is a partially positive influence between economic growth with Tax Ratio. Based on the results of calculations in this study it was found that economic growth had no effect on the tax ratio in ASEAN countries for the period 2015 to 2020. Thus, based on the results of this study, the third hypothesis was rejected. The results of this study contradict the research conducted with research Saragih (2018), Hartono (2019), and research Zeng, Li, and Li (2013) which states that Economic Growth affects the tax ratio.

The Directorate General of Taxes stated that the economy of the condition has an impact on the realization of tax revenues, but not on the tax ratio. When tax revenues are high due to economic growth, this does not necessarily mean an increase in the tax ratio. The tax ratio reflects public compliance with taxation which can be seen from the tax ratio formula itself, namely tax revenue divided by GDP. Public awareness of taxes greatly affects tax compliance. Lack of knowledge, tax education is one of the causes. In this regard, DJP has carried out various kinds of taxation lessons, starting from tax socialization to other programs. The learning program does not necessarily increase public awareness of taxes. Raising awareness of taxes means improving people's mentality. In other words, it takes a lot of time, even years, to produce tax-aware successors in ASEAN countries. (<https://pajak.go.id/id/article/komplekitaspajak-tax-ratio-perekonomian-dan-keadaran-pajak>). This is by the results of the study Mdanat (2018), Ikhsan et al (2016) and Triastuti et al (2016) which says that there is no significant effect between economic growth and the tax ratio.

Relationship between Tax Rates and Tax Ratio

The fourth hypothesis is that there is partially the negative effect of tax rates on the tax ratio. Based on the results of statistical analysis in this study it was found that the tax rate had no effect on the company's tax ratio in ASEAN countries for the period 2015 to 2020. Thus, based on the results of this study, the fourth hypothesis was rejected. The results of this study are contradictory with research Rudianti (2021) as well as Suarez and Zidar (2016) which states that the Tax Rate has a negative effect on the Tax Ratio.

According to Machmudah (2020), This is related to the Reasoned Action Theory (TRA) which was first introduced by Fishbein and Ajzen (1975) which stated that essentially humans do things based on conscious beliefs, attitudes, wills, and behavior. If the fact is that the taxpayer is a taxpayer who is aware and obedient to taxes, then no matter how much the tax rate is imposed by the government, the taxpayer will automatically pay taxes according to the income earned. However, if basically, the taxpayer is someone who does not comply with the regulations, then the reduction in tax rates will not affect his compliance with the ASEAN Countries.

The impact of changing tax rates can be seen on two sides, namely on tax revenues and tax ratios. On the tax revenue side, a decrease in tax rates will result in greater tax revenue growth from the years before the tax rate reduction. However, in terms of the tax



ratio, there was a decline. This is due to the insignificant increase in tax revenue so that it is unable to replace lost tax revenues due to the impact of the reduced tax rate. And with the changes in tax rates that have been implemented, it turns out that it does not affect taxpayers to be more obedient in paying taxes (Machmudah, 2020). With the government providing various facilities to the community, such as reducing tax rates, this is still considered a burden, especially in developing countries such as ASEAN countries. This is by each Machmudah (2020) and Branimir Kalas et al (2017) which states that the tax rate does not affect the tax ratio.

RESEARCH FINDINGS

Based on the analysis that has been done, several important implications are obtained for the government, where the government must be able to control the exchange rate, especially from the trade sector (export-import), because it has a major contribution to inflation. And where the government must pay attention to several factors that must be considered to increase the tax rate, such as determining the economic growth forecast for the year in which the new tax rate is enacted. This should be done taking into account that tax revenue is linear with GDP. Using trends in tax collection relative to GDP (tax elasticity) and based on precise economic growth forecasts, it is possible to calculate the estimated tax revenue for the year in which the new tax rate will take effect.

CONCLUSION

Based on the research that has been conducted regarding the effect of inflation, economic growth, and tax rates on the tax ratio in ASEAN countries for the period 2015 to 2020, it can be concluded that inflation, economic growth, and tax rates simultaneously have a positive effect on the tax ratio, and partially there is a negative effect between inflation on the tax ratio, then for economic growth and tax rates show that partially does not affect the tax ratio. This study has several limitations as follows, the researcher only implements several independent variables, namely inflation, economic growth, and tax rates, and the researcher only uses a sample of 7 countries, and the research is used only in 6 years, namely from 2015-2020.

RECOMMENDATION

Further researchers must be able to research more widely, by examining other developed countries or adding other independent variables, such as per capita income level, Non-Taxable Income (PTKP), agreement and coordination with state institutions regarding taxes, as well as understanding the conformity of views on taxes, adding the number of research samples and adding more years, because this study can only explain 37.5% of the tax ratio in ASEAN Countries while the remaining 62.5% is explained by other factors not examined in this study.

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