

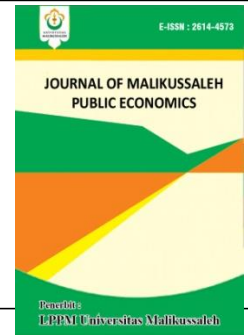
AN ANALYSIS OF PEPPER EXPORTS AND IMPORTS ON ECONOMIC GROWTH IN INDONESIA

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ARTICLE INFORMATION ABSTRACT

Keywords:

Pepper, Exports, Imports, Economic Growth.

This study examines the effect of pepper exports and imports on economic growth in Indonesia during the period of 1990-2019. This study uses secondary data from 1990 to 2019 accessed on www.bps.go.id. The data analysis method used is Multiple Linear Regression Analysis using Software Eviews 9. The results shows that pepper exports have no significant effect on economic growth in Indonesia, and pepper imports have a negative and significant effect on economic growth in Indonesia. This study suggests that government pay full attention and support to Indonesian pepper farmers so that the production and quality of pepper will increase in the future and can reduce pepper imports.

1. INTRODUCTION

The current economic development of a country cannot be separated from the condition of the global economy. The existence of state cooperation in economic terms becomes the most important factor in economic progress in each country. This situation makes competition a factor where every country wants to take advantage of the open world economy.

According to Bank of Indonesia, the balance of payments is a record of economic transactions between Indonesians and non-residents at a certain period. (Astuti & Ayuningtyas, 2018). The state of the balance of payments that is surplus or deficit affects Indonesia's economic growth.

The linkage of international trade and economic growth is a much discussed topic in the economic field but is still controversial. The existence of references to economic growth leads to a greater role of external openness of countries in the process of technological development compared to the traditional Solow growth model.

(Astuti & Ayuningtyas, 2018) states that technological change is emerging as an act supporting economic development where the institutional environment, law, openness and economic integration affect the speed and direction of technological change. On the other hand, many empirical references suggest that

international trade and more open trade policies are major factors for explaining economic development.

The relationship between exports, imports and economic growth has long been the subject of much interest and controversy in trade references. The reason is simple, the main goal of almost every country is to increase GDP and improve the quality of life of its people. Countries with a more modern trade attitude allow to enjoy a larger amount of liberal input at a smaller cost resulting in better growth.

International trade will affect the components of the balance of payments. Nowadays, with the increasingly advanced flow of trade, the trade relationship is not only carried out between entrepreneurs in one country, but also with traders from other countries.

So far, there have been many studies analyzing the effect of exports and imports on economic growth in Indonesia (Asbiantari et al, 2016; Astuti & Ayuningtyas, 2018; Cahyani, 2020; Kusuma, 2019; Pridayanti, 2014; Suhendro & Siregar, 2012). Specifically, research has also been conducted on the effect of black pepper exports and white pepper exports on economic growth in Indonesia (Hamidiyah, 2016).

This study is intended to examine the effect of pepper exports and imports on economic growth in Indonesia in the period of 1990-2019. Whereas previous research focused on black and white

pepper, this study explores the effect of exports and imports of all types of pepper on economic growth in Indonesia. Data on pepper imports and economic growth in Indonesia can be seen in the table below.

Table 1.1
Data on Exports & Imports of Pepper and Indonesia's Economic Growth 2010 – 2019

Years	Pepper Export (Ton)	Pepper Import (Ton)	Economic Growth (%)
2010	62.599	3.312	6,1%
2011	36.487	4.096	6,5%
2012	62.605	4.254	6,2%
2013	47.908	417	5,8%
2014	34.733	6.029	5,2%
2015	58.075	1.360	4,9%
2016	53.100	2.759	5,3%
2017	42.691	762	5,07%
2018	47.616	1.312	5,17%
2019	39.691	4.127	5,02%
Avr Growth/year	1,42%	169,21%	-1,97%

Sources: The Indonesian Ministry of Agriculture and BPS-Statistics Indonesia (2021)

Table 1.1 shows that pepper exports, pepper imports and economic growth during the period of 2010-2019 were volatile. The largest pepper exports occurred in 2012, while the largest pepper imports occurred in 2014. The highest economic growth occurred in 2011 at 6.5 percent. In 2010, pepper exports amounted to 62,599 tons, pepper imports were 3,312 tons and while for economic growth of 6.1 percent. In 2011, pepper exports decreased by 36,487 tons and pepper imports increased by 4,096 tons and subsequently economic growth increased by 6.5 percent. In 2012, pepper exports again increased by 62,605 tons and pepper imports also increased by 4,254 tons, while economic growth decreased by 6.2 percent.

Seen the average growth of each variable per year over the last ten years, the average average growth of pepper exports was 1.42 percent, pepper imports was 169,21 percent and economic growth was -1.97 percent.

From 2011 to 2013 Indonesia exported black pepper, white pepper and powdered pepper (dried seed shape) to several countries such as Vietnam, Singapore and Malaysia. Import of white pepper came from Vietnam while the import of black pepper mainly came from Malaysia and Vietnam. In 2017 the destination countries for Indonesian pepper exports were Vietnam, America, India,

Singapore and Germany. As for imports in 2017 Vietnam, Germany, India, Singapore and China.

White pepper is usually exported to Japan, Vietnam to the United States, while for imports from Thailand, Singapore to Germany. Although Indonesia is the second largest producer of pepper in the world and supplies 20 percent of global pepper needs, the rate of Indonesian pepper production is not as fast as the growth in world pepper demand which touches between 5 percent to 7 percent per year.

2. THEORETICAL FOUNDATION

Economic Growth

Economic growth as a process of increasing output over time becomes an important indicator to measure the success of a country's development (Todaro, 2005). According to Sukirno (2010) economic growth is the development of activities in an economy that cause goods and services produced in society to increase. Aggregate economic growth is measured by the capacity of gross national product (GNP) or gross domestic product (GDP). Economic growth provides an overview and information of the extent to which economic activities will generate income for the community in a given period. A country whose economy is developing well is a clue to the increasingly peaceful lives of people.

Economic growth is another factor that can also affect the exchange rate and purchasing power. According to (Prasetyo, 2009), economic growth is interpreted as increasing the production capacity of goods and services within a certain period of time. The economic condition of a weak country causes the amount of domestic production to decrease so that there is a decrease in demand for domestic goods abroad. then the demand for domestic currency will decrease therefore the exchange rate will weaken.

Advanced economic conditions cause demand for foreign goods to grow faster than the demand for domestic goods. Then the demand for domestic currency will decrease as a result of which the exchange rate will strengthen.

Based on the above statement, economic growth is a process of changing economic conditions that occur in a country in a sustainable manner to lead to a situation that is considered better over a period of time.

Export

Trade is one of the alternatives to achieve a better development, especially if it reaches an international scale, namely international trade. In

international trade, buying and selling activities are called export-import transactions. Import and export transactions are transactions to buy and sell products between entrepreneurs residing in different countries. In the context of Indonesia, exports are selling goods from within the foreign circulation of the Republic of Indonesia and the goods sold must be reported to the Director General of Customs and Excise of the Ministry of Finance, while imports are buying goods from abroad into the circulation of the Republic of Indonesia and the goods purchased must be reported to the Directorate General of Customs and Excise of the Ministry of Finance (Hamdani, 2018).

Export can be interpreted as the delivery and sale of goods from within the country to abroad. Export is an economic activity selling domestic products to markets abroad. According to Sukirno (2010), the advantage of exporting is that it can expand the market, increase the country's foreign exchange, and expand employment.

Cross-border trade is intensified as a result of the benefits of international trade which is significant to a growing country. Exports allow poor and developing countries to enlarge their markets by benefiting from economies of scale, i.e. generating state foreign exchange, absorbing labor, and increasing productivity, that will have an impact on the country's economic growth. This is in line with stating that a country's exports contribute more in the GDP of developing countries compared to developed countries.

Higher demand generated by exports tends to extend throughout the economy. A country's exports can provide stimulus for sustainable development and are an important resource to developing countries such as Indonesia. Export growth and trade openness are essential to explain the difference in a country's income growth.

Import

Import is the purchase and entry of goods from outside into the country. (Asfia, 2009) states that imports are the activity of purchasing products from abroad such as for purposes or marketed in the country. Import activities are not bad for a country because imports will stimulate investment indicators, if the imported goods are capital, unfinished goods, semi-finished goods for corporate purposes. The development of domestic industrial imports must run with exports.

Based on the above thought, it can be concluded that import is one of the buying processes that bring a good or service of another

country into the country. In general, imports that are very large scale are usually subject to customs in every country that sends and receives. In addition, import activities are also carried out to be able to increase the strength of the balance of payments.

Pepper

According to (Permadi, 2008) pepper is also called *sahang*, which has the Latin name *Piper Albi Linn*. Pepper is a plant rich in chemicals, such as pepper oil, fatty oil, also starch, pepper is slightly bitter, spicy, warm, and antipyretic. This plant was discovered and known since decades ago. In general, people only know white pepper and black pepper which is often used as a kitchen spice. Pepper was the first product to be traded between West and East.

In the middle ages of 1100-1500 AD, the pepper trade had a very important position. At that time pepper was used as a medium of exchange and dowry, in addition to spice purposes (Syakir, 2008), Pepper belongs to the family Piperaceae. The family consists of 10-12 genera and 1,400 species, whose forms vary, such as herbs, shrubs, creeping plants, to trees.

Pepper of the genus *Piper* is a plant species native to the Ghats, Malabar of India. Morphological characteristics of pepper plants include rooted mounts, the root consists of two types and has one tree trunk with two kinds of branches.

Conceptual Framework

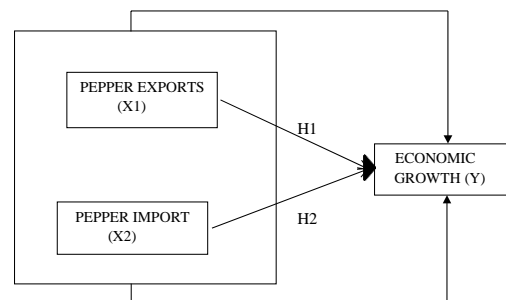


Figure 2.1 Conceptual Framework

In this study there are two types of variables, namely a dependent variable and independent variables. Dependent variables are variables that are influenced by other variables. The dependent variable in this study is economic growth (Y). Independent variables are free variables that are not affected by other variables. The independent variables of this study are pepper exports (X1) and pepper imports (X2).

Research Hypotheses

Hypotheses are formulated on the basis of a frame of mind that is a temporary answer to the

problem formulated. Based on the formulation of the problem and the purpose of the study, the hypotheses of the study are as follows:

H1: Pepper exports have a positive and significant effect on economic growth in Indonesia

H2: Pepper imports have a negative and significant effect on economic growth in Indonesia

3. RESEARCH METHODS

Types and Sources of Data

This study uses secondary data which is time series data and is sourced from the Indonesia Central Statistics Agency (BPS) and the Indonesian Ministry of Agriculture. Data on exported and imported Pepper in the period of 1990-2019 are from the Indonesian Ministry of Agriculture and data on economic growth in the period of 1990-2019 are from the Indonesian Central Statistics Agency (BPS).

Operational Variable Definitions

According to Sugiyono (2015), the operational definition of a variable is a trait or value of an object or activity that has certain variations that have been determined by the researcher to be studied and then draw conclusions.

The operational definition is a clue to how the variables in the study are measured. To clarify and to facilitate the understanding of the variables to be analyzed in this study, it is necessary to formulate the operationalization of the following variables:

1. Economic Growth (Y)

The economic growth used in this study is data on the economic growth rate of gross domestic product (GDP) on the basis of constant prices in the period of 1990-2019, measured in percentages (%).

2. Pepper Exports (X1)

Pepper exports are the exit of pepper from Indonesia to the international market in the period of 1990-2019, measured in tons.

3. Pepper Import (X2)

Pepper imports are the entry of pepper into an Indonesian market either for consumption purposes or as capital goods or raw materials of domestic production in the period of 1990-2019, measured in tons.

Data Analysis Methods

After the data is collected, then the authors determine data analysis techniques that are a method that will be used to process data aiming to obtain a conclusion in this study. This study uses one research model, i.e. Ordinary Least Square (OLS).

Multiple Linear Analysis

The Ordinary Least Square (OLS) model was first introduced by a German mathematician, Carl Friedrich Gauss. OLS is an econometric method in which there are independent variables that are explanatory and varied dependent variables that are variables described in a linear equation. In OLS, there is only one dependent variable, while for independent variables the number can be more than one. If the independent variable used is only one called simple linear regression, whereas if the independent variable used more than one is referred to as multiple linear regression. To meet the regression analysis, it is necessary to test classical assumptions and hypothesis tests so that the estimation results avoid the problem of presumptuous regression.

To find out the effect of pepper exports and pepper imports on economic growth, the method used in this study is a multiple linear regression test both simultaneously and partially. The multiple linear regression formula is:

$$Y = \beta_0 + \beta_1 \text{EXP} + \beta_2 \text{IMP} + e$$

Where:

Y	: Economic Growth
β	: Regression Coefficient
EXP	: Pepper Exports
IMP	: Pepper Imports
e	: Error term

After paying attention to the units of all variables, in this case the researchers used a log on regression with the following equation:

$$Y = \beta_0 + \beta_1 \text{LogEX} + \beta_2 \text{LogIM} + e$$

Classic Assumption Test

The classical assumption test is an analysis performed to assess whether in a Linear Ordinary Least Square (OLS) regression model there are problems with classical assumptions. The classic assumption test in this study consists of:

- **Normality Test**

The normality test is to find out whether the residual is normally distributed or not. The normality test can be done using the Jarque-Bera (J-B) (Widarjono, 2013) method. If the probability of the J-B statistic is greater than the 5% (0.05) confidence

level, it means that residual data is normally distributed. Conversely, if the probability of J-B statistics is smaller than the trust level of 5% (0.05) it means that residual data is not normally distributed (Widarjono, 2013).

- **Autocorrelation Test**

According to (Ghozali, 2011), the autocorrelation test aims to test whether in a linear regression model there is a correlation between the bully error in the t period and the bully error in the (previous) $t-1$ period. If there is autocorrelation, it is called an autocorrelation problem. The impact arising from the presence of autocorrelation, variable variants become inefficient when compared to the absence of autocorrelation. The variant of the disturbance variable may be overvalued, so that as a result the statistical test used against the regression coefficient decreases its meaning, and may become not brave at all.

In this study autocorrelation testing will be detected through the Breusch-Godfrey Serial Correlation LM Test method, another name of this test is the Lagrange-Multiplier Test. The Breusch-Godfrey test is conducted by looking for probability values from Obs*R-squared and comparing them to error rates ($\alpha=5\%$), with criteria:

When probability value $> \alpha=5\%$ means no autocorrelation

When probability value $< \alpha=5\%$ means there is autocorrelation

The absence of autocorrelation can also be seen from the probability value of Chi-Square (x). If the probability value is greater than the α value chosen then we receive H_0 which means there is no autocorrelation. Conversely if the probability value is less than the α value chosen then we reject H_0 which means there is an autocorrelation problem.

- **Heteroscedasticity Test**

The heteroscedasticity test aims to test whether in regression models there is variance inequality from residual one observation to another. If the assumption cannot be fulfilled, there will be a problem of heteroscedasticity, which is a state where the variance of the disruptive error is not the same for all independent variable values.

A testing method that can be used is the Arch method where the heteroscedasticity hypothesis is used:

- H_0 : no heteroscedasticity (> 0.05)
- H_a : there is heteroscedasticity (< 0.05)

The basis of decision making, if the probability value of Obs*R-Squared < 0.05 , then H_0 is rejected; if the probability value of Obs*R-Squared > 0.05 , then H_0 is accepted.

- **Multicollinearity Test**

The Multicollinearity test is a significant linear relationship between some or all of the independent variables in a regression model. To see the presence and absence of multicollinearity can be seen from the coefficient value of each independent variable. If it is greater than 0.80 meaning the occurrence of multicollinearity (Gujarati, 2008).

- **t-Test**

The t-test is used to determine the effect of each independent variable on the dependent variable. (Widarjono, 2010). The t-test criteria are as follows:

1. If t-statistic $>$ t-table then reject H_0 and accept H_a , which means the independent variable (X) partially has a significant effect on the dependent variable (Y).
2. If t-statistics $<$ t-table then accept H_0 and reject H_a , which means the independent variable (X) partially has no significant effect the dependent variable (Y).

- **F-Test**

F-test is a test of independent variables simultaneously intended to find out whether all independent variables together can affect the dependent variable (Santoso, 2006). The test criteria used are as follows:

1. If F-statistic $>$ F-table then reject H_0 and accept H_a , which means the independent variables (X_s) simultaneously have a significant effect on the dependent variable (Y).
2. If F-statistic $<$ F-table then accept H_0 and reject H_a , which means that the independent variables (X_s) simultaneously have no significant effect on the dependent variable (Y).

- **Coefficient of Determination**

According to (Ghozali, 2016) the coefficient of determination (R^2) essentially measures how far the model's ability to explain the dependent variable. An adjusted value of R^2 that is small or near zero means that the ability of independent variables to explain the dependent variable is very limited. The higher the adjusted value R^2 , the higher the independent variable can explain the variation of the dependent variable.

- **Correlation Coefficient**

The Correlation Coefficient aims to find out how much the level of activity or strength of the

relationship between independent variables and dependent variables ranges from -1 to +1 whose utilization criteria are described as follows:

1. If the value of $R > 0$, it means that there has been a positive relationship, i.e. the larger the value of variable X then the larger the value of variable Y.
2. If the value of $R < 0$, it means that there has been a negative relationship, that is, the smaller the value of variable X, the larger the value of variable Y or vice versa.
3. If the value of $R = 0$, it means that there is no relationship at all between variable X and variable Y.
4. If the value of $R = 1$ or $R = -1$, it means that there has been a perfect relationship, which is a straight line, while for R that leads to the number 0 then the less straight.

4. RESEARCH RESULTS AND DISCUSSION

Research Results

Normality Test Results

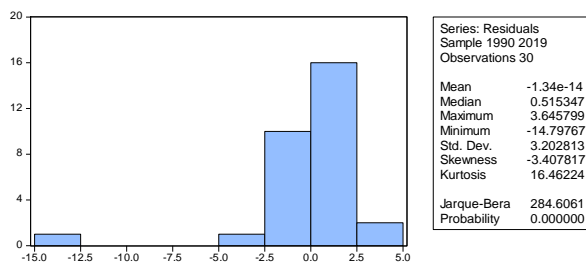


Figure 4.1

Normality Test Results

Source: Secondary data, processed (2021)

Figure 4.1 shows that the results to detect whether the residual is normal or not by looking at probability values:

- a. If the Value of Prob JB $< 5\%$, then the residual distribution is not normal.
- b. If the value of Prob JB $> 5\%$, then the residual is normal distribution.

The results of the normality test show that the value of Prob JB > 0.05 which is $284.60 > 0.05$ then it can be concluded that residual distribution is normal.

Autocorrelation Test Results

Table 4.1

Autocorrelation Test Results (LM Test)

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.139431	Prob. F(2,25)	0.3361
Obs*R-squared	2.506185	Prob. Chi-Square(2)	0.2856

Source: Secondary data, processed (2021)

Table 4.1 shows the autocorrelation test is conducted using the Breusch-Godfrey test. The results is analyzed by looking at the probability value of Obs*R-squared with a significant rate of 0.05. If the Probability Obs*R-squared value is greater than 0.05 then it can be concluded that the data is free from autocorrelation. Based on the test results shown by table 4.1 it is known that the probability value of Obs*R-squared is 0.2856 which is greater than 0.05, so it can be concluded that this study is free from autocorrelation.

Heteroscedasticity Test Results

Table 4.2

Heteroscedasticity Test Results

Heteroskedasticity Test: ARCH

F-statistic	0.004091	Prob. F(1,27)	0.9495
Obs*R-squared	0.004394	Prob. Chi-Square(1)	0.9472

Source: Secondary data, processed (2021)

Based on Table 4.2, the probability value of Obs*R-squared is greater than alpha 5% ($0.9472 > 0.05$), it means data are free from heteroscedasticity disorders.

Multicollinearity Test Results

Table 4.3

Multicollinearity Test Results

	ECONOMIC_GROWTH	LOGEXPORT	LOGIMPORT
ECONOMIC_GROWTH	1.000000	0.122274	-0.465483
LOGEXPORT	0.122274	1.000000	0.068379
LOGIMPORT	-0.465483	0.068379	1.000000

Source: Secondary data, processed (2021)

Based on Table 4.3, it can be concluded that the results of this study show no correlation between variables or no multicollinearity. This is evidenced by the correlation value of each variable is below 0.80. The results of the study are in line with Gujarati's opinion (2008) which states that multicollinearity tests are analyzed through a correlation matrix with a value limit of 0.80. Correlations between variables are as follows:

1. Correlation between pepper export variable to economic growth of 0.12 is smaller than 0.80.

2. Correlation between pepper import variable to economic growth of 0.46 is smaller than 0.80.
3. Correlation between pepper export variable to pepper imports by 0.06 is smaller than 0.80.

Multiple Linear Regression Analysis

Table 4.4

Multiple Linear Regression Analysis Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-14.91287	27.62220	-0.539887	0.5937
LOGEKSPOR	2.378302	2.582311	0.920997	0.3652
LOGIMPOR	-0.867577	0.306356	-2.831920	0.0086

Source: Secondary data, processed (2021)

$$Y = \beta_0 + \beta_1 \text{LogEXP} + \beta_2 \text{LogIMP} + e$$

$$Y = -14.91287 + 2.378302 \text{EXP} - 0.867577 \text{IMP} + e$$

The regression equation above shows the regression coefficient of β_1 and β_2 are positive. This indicates that if the independent variables increase, it will cause an increase in the dependent variable.

- The constant value of -14.91287 indicates that if exports and imports are constant, then the economic growth rate is -14.91287 percent.

- The value of the export variable coefficient of 2.378 indicates that if there is an increase in exports by one percent then economic growth will increase by 2.378 percent.

- The value of the import variable coefficient of -0.8675 indicates that if there is an increase in imports by one percent then economic growth will decrease by 0.8675 percent.

t-Test

Table 4.5

Partial Test Results (t-Test)

Indep. Var.	t-statistic	t-table	Prob.	Remarks	Hypotheses
Pepper exports	0.0920997	2.05183	0.3652	Not significant	Reject Ha
Pepper imports	-2.831920		0.0086	significant	Accept Ha

Source: Secondary data, processed (2021)

Based on Table 4.5, it can be seen that the pepper export variable has a value of t-statistic = 0.0920997 < t-table = 2.05183 obtained from α 0.05. In addition, the probability of pepper export variable is greater than α 0.05 (0.3652 > 0.05). Thus, accept H_0 and reject H_a which means that the pepper export variable has no significant effect on economic growth in Indonesia. Then the pepper import variable has a value of t-statistic = -2.831920 > t-table = 2.05183 obtained from α 0.05. In addition, the probability value of pepper

import variable is smaller than α 0.05 (0.0086 < 0.05). Thus, accept H_a and reject H_0 which means that the variable of pepper imports has a negative and significant effect on economic growth in Indonesia.

F-Test

Table 4.6

Simultaneous Test Results (F-Test)

F-statistic	F-table	Probability	Remarks	Hypothesis
4.275650	3.35	0.024370	Significant	Accept H_a

Source: Secondary data, processed (2021)

Based on Table 4.6, it can be seen the value of F-statistic of 4.275650, while the value of the F-table of 3.35 out of alpha 5%. Therefore F-statistic > F-table (4.275650 > 3.35). Thus, it means that simultaneously export and import variables have a positive and significant effect on economic growth in Indonesia. It can also be seen from the probability value of 0.024370 < 0.05.

Results of Coefficient of Determination (R^2) and Correlation Coefficient (R)

Table 4.7

Results of Coefficient of Determination (R^2) and Correlation Coefficient (R)

Dependent Variable: PERTUMBUHAN_EKONOMI				
Method: Least Squares				
Date: 06/22/21 Time: 17:44				
Sample: 1990 2019				
Included observations: 30				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-14.91287	27.62220	-0.539887	0.5937
LOGEKSPOR	2.378302	2.582311	0.920997	0.3652
LOGIMPOR	-0.867577	0.306356	-2.831920	0.0086
R-squared	0.240534	Mean dependent var		4.979000
Adjusted R-squared	0.184277	S.D. dependent var		3.675170
S.E. of regression	3.319316	Akaike info criterion		5.332034
Sum squared resid	297.4822	Schwarz criterion		5.472154
Log likelihood	-76.98051	Hannan-Quinn criter.		5.376860
F-statistic	4.275650	Durbin-Watson stat		1.428505
Prob(F-statistic)	0.024370			

Source: Secondary data, processed (2021)

Based on Table 4.7, the determination coefficient of the Adjusted R-Squared value is 0.184277. This shows that the relationship between independent variables and the dependent variable in this study is very weak at 18.4% while the other 81.6% is influenced by variables outside of this study.

Correlation coefficient (R) can be obtained from value of $\sqrt{R^2} = \sqrt{0.240534}$ which is 0.490442. Thus, the relationship between exports and imports to economic growth amounted to 0.490442. The value of 0.490442 is close to positive one (+1), so the relationship between exports and imports to economic growth is positive and very strong.

Discussions

The Effect of Pepper Exports on Economic Growth

The results of this study show that pepper exports have no significant effect on economic growth in Indonesia. This can be seen from the probability value of pepper exports which is greater than alpha 0.05 ($0.3625 > 0.05$) and also pepper exports have a value of t-statistic = $0.0920997 < t\text{-table} = 2.05183$.

This can be caused by the export value of pepper is relatively small compared to the total value of other export commodities.

The results of this study are supported by research conducted by Asbiantari et al (2016) with the research title "Export Influence on Economic Growth in Indonesia". The study shows that mining exports do not have a significant effect on economic growth in Indonesia.

This study is also in line with research conducted by Suhendro and Siregar (2019) with the title of "The Effect of Investment and Exports on Indonesia's Economic Growth (Period of 2012 to 2016)". The study shows that exports do not have a significant effect on economic growth in Indonesia.

The results of this study are also not different from those of research conducted by Cahyani (2020) with the title of "Analysis of The Influence of Exports, Imports, Inflation and Exchange Rates on Economic Growth Rates in Indonesia in the Period 2002-2019". The study shows that exports have no significant effect on economic growth in Indonesia.

The Effect of Pepper Imports on Economic Growth

The results of this study show that pepper imports have a negative and significant effect on economic growth in Indonesia. This can be seen from the probability value of pepper import variable which is smaller than alpha 0.05 ($0.0086 < 0.05$) and also pepper import variables have a value of t-statistic = $-2.831920 > t\text{-table} = 2.05183$. It means that the greater the value of imports, the lower the economic growth in Indonesia, and vice versa, the smaller the number of imports, the higher the economic growth in Indonesia.

The results of this study are supported by research conducted by Pridayanti (2014) with the title "Export, Import, and Exchange Rate Influence on Economic Growth in Indonesia Period 2002-2012". The study indicates that exports have a positive and significant effect on economic growth

in Indonesia. While imports have a negative and significant effect on economic growth in Indonesia.

This study is also in line with research conducted by Kusuma (2019) with the title "Analysis of the Influence of Exports and Imports on Economic Growth (Comparative Study of Indonesia and Thailand)". The study concludes that imports have a positive and significant effect on economic growth in Indonesia.

5. CONCLUSIONS AND SUGGESTIONS

Conclusions

Based on the results of the analysis of research data on the influence of pepper imports and exports on economic growth in Indonesia in 1990-2019, it can be concluded that:

- Pepper exports have no significant effect on economic growth in Indonesia, meaning that the increase or decrease in pepper exports will not affect economic growth in Indonesia.
- Pepper imports have a negative and significant effect on economic growth in Indonesia, meaning that the increase in pepper imports will lower economic growth in Indonesia, and vice versa, the decline in pepper imports will increase economic growth in Indonesia.

Suggestions

The authors suggest that the Government of Indonesia pay special attention to pepper farmers. by providing the necessary facilities and training. With the government's attention to pepper farmers, it is expected to increase pepper production so that it will eventually be able to reduce pepper imports in the future.

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