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THE EFFECT OF INFLATION, GOVERNMENT SPENDING AND EXPORTS ON ECONOMIC GROWTH IN INDONESIA

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ABSTRACT

This study examines the effect of inflation, government spending, and exports on Indonesia's economic growth in the period 1990–2023. The data used are time series data from the Central Bureau of Statistics (BPS) and the International Monetary Fund (IMF). The analysis method used is Vector Autoregression (VAR) with estimation through Eviews 13 software. The results of the analysis show that inflation has a negative but insignificant effect on economic growth. Government spending shows a significant positive effect, while exports have an insignificant negative impact. Overall, the dynamics of the three variables do not have a significant impact simultaneously on economic growth. However, the finding that government spending has a significant positive effect indicates the importance of optimizing state spending, especially if it is directed to strategic sectors that can increase national productivity. Negative inflation indicates the need for policies to maintain price stability. Although exports have not shown a strong influence, efforts to increase the competitiveness of export products remain relevant within the framework of long-term development. The originality of this study lies in the integration of three main macroeconomic variables in one VAR model to analyze their dynamic relationships. This approach provides a new contribution to the study of Indonesian macroeconomics and provides empirical evidence that can be used by policymakers in formulating sustainable economic growth strategies.

Keywords: *Economic Growth, Inflation, Government Spending, Exports.*

INTRODUCTION

Economic growth is considered the most appropriate indicator in viewing economic development with its ability to describe the level of welfare through increasing the capacity of output productivity which is manifested in a country's ability to provide various kinds of economic goods, the amount of consumption and increasing income (Arsyad, 2016). Rapid progress in economic growth has triggered the provision of various facilities and infrastructure needed to accelerate the process of economic development, economic growth is one indicator of the success of economic development. Economic growth means the development of economic activities that cause goods and services produced in society to increase and the welfare of society to increase (Sukirno, 2000).

During President Soeharto's reign, economic and political conditions were not good. BPS noted that in 1965 the Indonesian economy only grew by 1.08 percent. The Indonesian economy in the period 1960-1965 only grew by an average of two percent. The period 1966-1973 can be said to be a year of economic transition. Where Soeharto took policies to improve the economic conditions that were in decline. Efforts to improve the economy were seen in 1968 where economic growth jumped to 10.91 percent.

The era of President Susilo Bambang Yudhoyono (SBY) was quite good in maintaining economic growth. During his 10 years of leadership, economic growth was

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in the range of five to six percent. The lowest achievement in 2009 was 4.63 percent which was influenced by global economic pressures which had an impact on the weakening of the rupiah exchange rate.

The economy in the Jokowi era is around five percent. Economic growth was recorded at 4.90 percent in 2015. In the following years, the figure did not experience a significant increase. recorded economic growth in 2015 of 5.03 percent and in 2017 of 5.07 percent. The decline in inflation rates can also cause economic growth to increase, namely in 2016. While declining government spending resulted in declining economic growth also decreasing, but different from 2016, namely economic growth increased by 5.02 percent. Likewise with the increase in exports which was also followed by an increase in economic development.

According to this theory, economic development is influenced by several factors such as inflation, government spending/expenditure and exports. More clearly the variable conditions are as follows. The increase in inflation in 2014 was caused by the increasing consumption of imported finished goods such as electronics and clothing by the public and imported raw materials by companies in Indonesia. However, the use of imported raw materials can boost domestic production, so that national income or Gross Domestic Product (GDP) which is a benchmark for Indonesia's economic growth increases. While in 2015, where the inflation rate was low and economic growth was also low because domestically produced goods could not be sold due to low community income caused by the income of some residents such as those working in the agricultural sector experiencing crop failure and low selling prices for farmers' products.

In government spending data from 2014 to 2016, there has been an increase every year. Increasing government spending will increase economic growth, and vice versa if spending decreases then economic growth will also decrease, but what happened in Indonesia is not in accordance with the theory, where when government spending was high, namely 259.647 billion in 2016, but economic growth was higher, namely 5.02% compared to 2014 where government spending was higher, namely 176.622 billion but economic growth was lower, reaching 5.02%.

The increase in Indonesian government spending, especially capital goods, has not been able to drive economic growth, this is because the capital goods spent do not have a direct impact on the community's economy and are less productive assets. This is different from capital goods spending in 2015, namely that most of the old and new capital goods were diverted to increase the production of State-Owned Enterprises (BUMN) and Regional-Owned Enterprises (BUMD), so that there was an increase in domestic production and direct community income as workers or as producers for domestic goods needs.

Based on the data above, it can be seen that when Indonesia's export value in 2015 was 150,336.3 million US$ but its economic growth was lower than in 2016, which was 4.79%, in contrast to 2016 where the export value was only 145,186.2 million US$ but its economic growth was higher, reaching 5.02%. In theory, when exports increase, economic growth also increases, but this is actually the opposite of the theory where in 2014 exports increased, economic growth actually decreased.

The decline in export value in 2016 was caused by the decline in demand for goods and services from abroad, as well as the export ban on certain commodities that have not been able to meet domestic needs and high import duties in the destination country. When export volume decreases, the business world will reduce its production because it only focuses on meeting domestic demand and the income obtained is also

relatively the same because when the price of goods sold is expensive, purchasing power will decrease, when the price of goods is low the income of the business world will decrease.

Research on economic growth and fundamental factors that determine Indonesia's economic growth needs to be studied, this is because economic growth is one of the indicators of the success of economic development in Indonesia. Performance in improving people's welfare, where developing countries such as Indonesia often experience problems with rising prices of goods (inflation), government spending or expenditure that is not on target for economic development and unstable export values will cause the Indonesian economy to be vulnerable to crisis.

High inflation will hamper economic development and economic activity in society, thus slowing down economic activity and ultimately reducing economic growth. The effect of inflation on economic growth in Indonesia was studied by Indriyani (2016) who found that inflation had a significant effect on economic growth in Indonesia in 2005-2015, while Ahmad's research (2017) found that inflation had no effect on economic growth. The results of research on government spending on economic growth have been studied by Islamiah (2015) who found that development/capital has a significant negative effect on economic growth, meaning that when capital spending increases, economic growth tends to decrease. This is different from research conducted by (Safari, 2016) who found that government spending has a positive effect on economic growth.

Exports affect Indonesia's economic growth, research results (Kristiawati, 2013) found that exports have a negative and significant influence on economic growth in Indonesia, if the export volume increases then economic growth will slow down. This is different from research conducted by Ginting (2014) which found that exports have a significant positive influence on economic growth.Research on the influence of inflation, exports, labor, and the impact of exchange rates on economic development in Indonesia has been conducted by several researchers, such as Kristiawati (2013), Larasati & Sulastmiyati (2018), and Dewi (2013). Meanwhile, research that highlights investment, inflation, labor, government spending, and population in relation to economic growth has been discussed by Islamiah (2015), Safari (2016), Chtami (2014), Salhab & Soedjono (2012), and Lebang et.al (2018). The focus of research on exports, capital formation, and government spending on Indonesia's economic growth has been conducted by (Safari, 2016).

So far, research related to research focus is still rarely found in publications, this can be seen in previous studies and there are still few that combine inflation variables, government spending and exports on economic growth. Therefore, researchers are interested in conducting research. This study aims to analyze how inflation, government spending, and exports affect economic growth in Indonesia. Furthermore, the second part of this study discusses the theoretical review of related variables. The analysis technique is presented in the third part, to see the results and discussion are explained in the fourth part then in the fifth part which is the final part of the study will be given conclusions and suggestions.

LITERATURE REVIEW

Economic Growth

Economic growth is a process of increasing production capacity in the economy in a sustainable manner that has an impact on increasing national output and community income (Antasari & Soleh, 2012). In addition, economic growth also reflects

an increase in the production of goods and services and the welfare of a country, where high growth encourages increased production which will ultimately improve people's standard of living (Ardiansyah, 2017).

From these various views, it can be concluded that economic growth is a process of increasing the production of goods and services in the economic activities of society which has an impact on increasing output and national income so that the goals of economic growth can be achieved optimally. Classical economic growth theory views the process of economic development from a supply-side perspective. However, Keynesian economic growth theory emphasizes from the demand side that effective demand determines the level of equilibrium and national income. Spending by households, businesses, governments, and foreigners can drive increased aggregate demand and income (Jhingan, 2000).

Inflation

Inflation According to Ardiansyah (2017) inflation is an economic event that often occurs even though we never want it. Milton Friedman said that inflation is everywhere and is always a monetary phenomenon that reflects excessive and unstable monetary growth. Ningsih (2010) explains that inflation occurs when there is an imbalance between the demand and supply of a good, where demand exceeds supply. The greater the difference between the two, the greater the negative impact of inflation on economic stability.

Based on the explanation of the theories above, it can be concluded that inflation is an increase in the prices of goods and services in general, not for one particular item, and occurs continuously over a certain period of time. Crismanto (2007) stated that high inflation can have a negative impact on the economy of a region. Continuous price increases cause people's purchasing power to decrease, thus encouraging companies to reduce their production levels. This condition makes investors tend to withdraw their investments, which ultimately inhibits the rate of economic growth. Thus, there is a negative relationship between inflation and economic growth.

If this author's research is compared with previous research, such as that written by Kasidi & Mwakanemela (2011), "Assessing the impact of inflation on economic growth: a case study in Tanzania", the variables used in this study are inflation and economic growth. This study uses correlation coefficient and cointegration analysis techniques to establish the relationship between inflation and economic growth and the elasticity coefficient. Inflation and economic growth in Tanzania do not have a long-term correlation.

Government Expenditure

Every year the government sets revenues and expenditures in the APBN and APBD. This is known as government expenditure (Sukirno, 2000). Government spending reflects government policy. For example, if the government sets a policy to purchase goods and services, then government spending reflects the costs that the government must incur to implement the policy (Mangkoesubroto, 2008). Government spending consists of the purchase of inputs, which are factors of production, and outputs, which are goods or services produced. Susanti (in Salhab & Soedjono, 2012) stated that an increase in a country's economic activity is positively correlated with an increase in government spending. It is possible that government spending, also known as "state spending", is state spending. Government spending that is investment in

nature and is intended to carry out certain government functions is called development spending.

Export

Exports are the amount of goods and services sold by a country to other countries, including goods, insurance, and services in a certain year legally (Purwanggono, 2015). Exports are trading activities that provide a stimulus to grow domestic demand which causes the emergence of large factory industries, accompanied by a stable political structure and efficient social institutions (Todaro, 2006). Exports will have a positive impact on a country's economic activities, because exports are the expenditure of other countries' residents on goods produced domestically. The implementation of export payments is carried out in cash credit, which can be done in the following ways: advance payment, payment with a promissory note (L/C), promissory note with payment terms and receipt documents, calculations. Furthermore, the open account method, consignment, and other forms of payment that are common in international trade are adjusted to the agreement between the seller and the buyer (Sukirno, 2013).

Based on the definition of export, every country carries out export activities with the aim of increasing national income. This is because the role of exports as one component of aggregate expenditure has a significant influence on the level of national income which can ultimately drive economic growth. Adrian Sutawijaya (2010) stated that increasing exports can trigger dynamics in the financial market, where the export value produces foreign currency which automatically becomes foreign exchange. This foreign exchange then contributes to economic growth, making exports a positive factor in supporting economic development. When comparing the author's research with previous research, namely according to Seraphin & Yinguo (2015) who studied the influence of exports on economic growth in Madagascar, the variables used in this study were exports and economic growth, the analysis techniques used were VAR and IRF, the results of the study showed that most of the relationships were positive and significant between exports and growth, introducing results for other independent variables, such as investment and population.

RESEARCH METHODS

Quantitative data is data that can be measured and presented in the form of numbers. The secondary data used is annual time series data covering a period of 33 years, from 1990 to 2023. The World Bank provides data on inflation, exports, and economic growth, while the International Monetary Fund provides data on government spending. This study uses the VAR model, which is one of the time series analysis methods often used in economic research. This non-structural or non-theoretical VAR model is designed to represent economic phenomena based on the principle of error minimization. This model is linear and can be easily estimated using the OLS (Ordinary Least Squares) method (Widarjono, 2018).

VAR Model Testing Stages

According to Widarjono (2017), the testing steps in VAR analysis include:

1. Stationarity Test

   Stationary test or unit root test is conducted to ensure whether the variable data is stationary. Data is considered stationary if its value approaches the average in a

certain period. The test is conducted using the Augmented Dickey-Fuller (ADF) method.

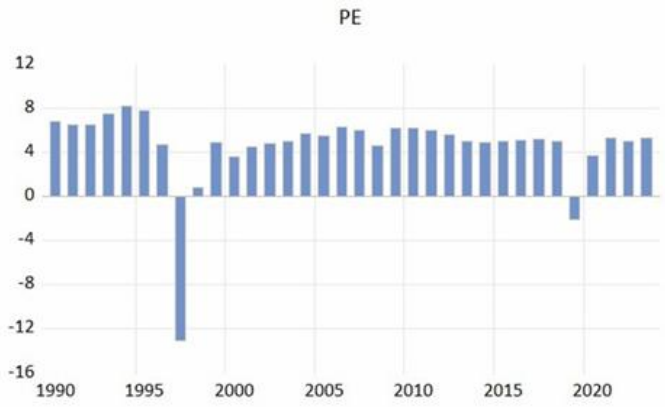
2. Optimal Lag Determination
   The purpose of this step is to find the ideal number of lags for the VAR model. This is done using information criteria such as final forecast error (FPE), Akaike information criterion (AIC), Schwarz criterion (SC), and Hannan-Quinn criterion (HQ). Based on the smallest value of the criteria, the EViews program helps to mark the ideal lags.
3. Granger Causality Test
   The causal relationship between variables is examined in this test. To make a decision, the t-statistic value or F probability value is compared with the t-table value. If the F probability value is less than 0.05 or if the t-statistic value is greater than the t-table, then there is a causal relationship between the variables.
4. Cointegration Test
   This testing process is carried out to determine whether there is a long-term relationship between the independent variables and the dependent variables. To evaluate cointegration, this study uses the Johansen approach. Cointegration does not occur if the maximum eigenvalue or trace statistic is smaller than its critical value.
5. Impulse Response Function (IRF)
   The IRF describes how each endogenous variable responds to shocks from other variables or itself over a period of time.
6. Forecast Error Variance Decomposition (FEVD)
   This analysis provides insight into the dynamic relationships between the studied variables by outlining the variance of prediction errors for each variable.

RESULTS AND DISCUSSION

Results

Economic Growth Development

Economic growth continues to be used as one of the main indicators to assess the progress of a country's development. This growth reflects how much economic activity contributes to improving people's welfare, which is reflected in the increase in national income over a certain period of time (Mankiw, 2021). Based on the data collected, the trend of economic growth shows dynamics that are influenced by various domestic and global factors. Figure 1 shows the movement of economic growth from 1990 to 2023 based on collected data:



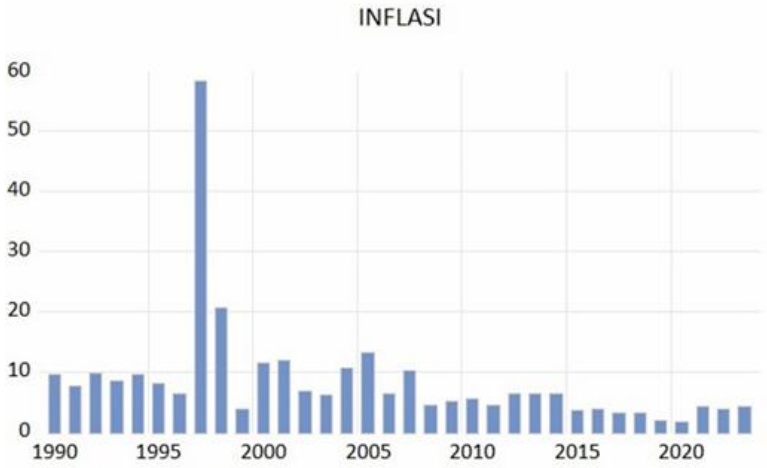
Source: Central Bureau of Statistics (2023)

Figure 1. Economic growth (%)

Economic Growth Development Economic growth in the last 10 years has experienced many fluctuations where in 2006 economic growth decreased from the previous year 6.28% to 6.06% then the highest economic growth in 2011 with economic growth of 6.49%. After 2011 economic growth continued to decline until 2015 by 4.79% which then in 2016 by 5.02%. Indonesia's economic growth in 2015 decreased due to consumption and production. From the consumption side there was a decrease in the supply of goods due to the delay in the harvest season. While from the production side due to the decrease in crude oil and coal production so that the oil refinery industry experienced a contraction. In 2016 it increased from 4.79% to 5.02% due to the increase in the household consumption sector. The household sector contributed 56.5% to GDP.

Inflation

Inflation is a general increase in prices continuously over a certain period of time. The increase in the price of new goods is said to be inflation if not only one or two other goods prices also increase. For example, the increase in the price of rice, the price of fuel oil, the price of cars, wages, land prices, and the rental of capital goods. Indonesia is a country with diverse ethnic groups which causes its culture to be diverse. Muslims are the majority of the population in Indonesia, in Islamic culture there is a culture of fasting and Eid, so that during the fasting month the price of basic necessities and Eid tends to experience a very drastic increase. can be seen in Figure 2 as follows:



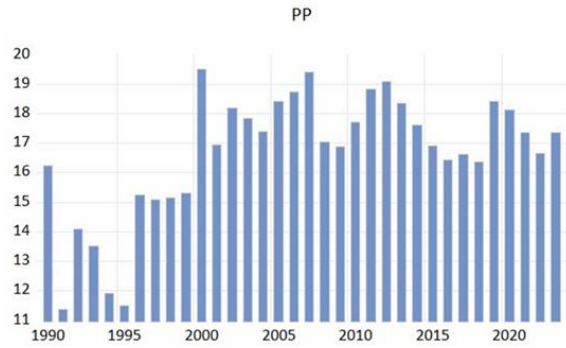
Source: Central Bureau of Statistics (2023)

Figure 2. Inflation (%)

Inflation Development From the image above, we can see that inflation in the last 10 years has continued to fluctuate, where the highest inflation occurred in 2008 at 11.06% due to the global economic crisis which then had an impact on the Indonesian economy. The worsening economy in America has weakened the economies of Asian countries. The lowest inflation occurred in 2009 at 2.78%. Then in 2010 inflation increased again from the previous year by 6.96% due to Indonesia's uncertain climate which caused the harvest season to be delayed and also increased international commodity prices which caused commodity prices in Indonesia to increase. Then in 2 years inflation decreased and increased again in 2022, namely decreasing by 4.38% due to the ongoing post-pandemic economic recovery which increased and continued to increase until 2023 by 5.51%.

Government Expenditure

According to Rostow and Musgrave, the development of government spending is in line with the stage of economic development of a country. This is also experienced by Indonesia where both the nominal and real values of total government spending continue to increase throughout the year. This can be seen in Figure 3 as follows:



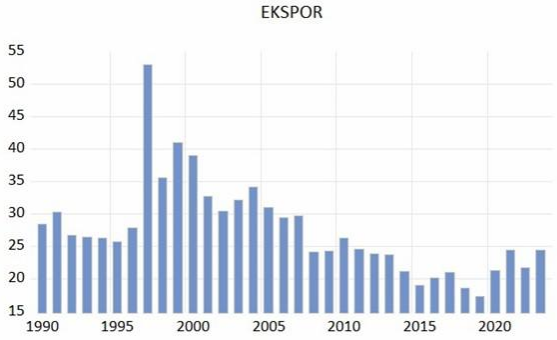
Source: IMF (2023)

Figure 3. Government Expenditure (%)

Based on Figure 3 above, government spending fluctuates every year, where government spending in 2008 was 19,394%, the increase in government spending, especially capital goods, has not been able to boost economic growth, this is because the capital goods spent do not have a direct impact on the community's economy and are less productive assets. Government spending decreased in 2016 by 16.92%. Then in 2019 government spending increased again from the previous year by 18,427% where most of the old and new capital goods were diverted to increase the production of State-Owned Enterprises (BUMN) and Regional-Owned Enterprises (BUMD), so that there was a direct increase in domestic production and community income as workers or as producers for domestic goods needs.

Export

Export is an important activity in international trade, where export is the activity of selling goods abroad using payment methods, quantity, quality, and other terms of sale that have been agreed upon between exporters and importers. In order to export, a country must be able to produce goods and services that are able to compete in the international market. Based on the data obtained, the movement of Exports from 1990 to 2023 can be seen in Figure 4 as follows.



Source: IMF (2023)

Figure 4. Exports (%)

Rupiah Exchange Rate Development Based on Figure 4 above, exports in Indonesia fluctuated from the lowest to the highest, in the period 2010-2019 showing a decreasing contribution. Where in 2010 the export value increased very rapidly, namely by 17,027%, then decreased until 2019, namely by 17.3%. The decline in export value in 2019 was caused by the decline in demand for goods and services from abroad, as well as the export ban for certain commodities that have not been able to meet domestic needs and high import duties in the destination country. When the export volume decreases, the business world will reduce its production because it only focuses on meeting domestic demand and the income obtained is also relatively the same because when the price of goods sold is expensive, purchasing power will decrease, when the price of goods is low, business income will decrease. And in 2023 the export value increased by 24.5%.

Stationary Test

The results of the unit root test with augmented dickey fuller (ADF) for each variable are shown below for the stationarity/unit root test.

Table 1. Stationarity Test (Unit Root Test) with Augmented Dickey Fuller (ADF)

Variables	Method	ADF Probability	Information
Economic growth	Level	0.0021	Stationary (p < 0.05)
Inflation	Level	0.0010	Stationary (p < 0.05)
Government Expenditure	Level	0.1669	Not Stationary (p > 0.05)
Government Expenditure	First Difference	0.0000	Stationary (p < 0.05)
Export	Level	0.4758	Not Stationary (p > 0.05)
Export	First Difference	0.0000	Stationary (p < 0.05)

Source: Eviews 13

Based on the results of the stationarity test using the Augmented Dickey Fuller (ADF) method, it is known that the economic growth variable has a probability value of 0.0021. This value is smaller than the significance level of 0.05, so it can be concluded that the data on this variable is stationary at the level. The same thing also happens to the inflation variable, which shows an ADF probability value of 0.0010. With this value which is also smaller than 0.05, the inflation variable is declared stationary at the level. In contrast to the government expenditure variable, which in the stationarity test at the level produces an ADF probability value of 0.1669. Because this value is greater than 0.05, the data is considered non-stationary. To overcome this, a transformation is carried out using the first difference method, and the results show a probability value of 0.0000. Thus, the government expenditure data becomes stationary after the first differentiation.

Likewise with the export variable, which at the level produces an ADF probability value of 0.4758, which is also greater than 0.05, indicating that the data is not stationary. After the first difference, the probability value drops to 0.0000, so that the export variable becomes stationary after the first differentiation. Overall, the economic growth and inflation variables have met the stationarity criteria at the level, while the government expenditure and export variables only become stationary after the first differential transformation.

Optimal Lag Determinant

Table 2. Lag Length Based on Several Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-345.5021	NA	36042.54	21.84388	22.02710	21.90461
1	-305.5794	67.36958	8164.317	20.34871	21.26480	20.65237
2	-272.4629	47.60494*	2950.517*	19.27893*	20.92789*	19.82551*

Source: Eviews 13

Based on Table 2, Based on statistical criteria such as Sequential Modified LR Test (LR), Final Prediction Error (FPE), Akaike Information Criterion (AIC), Schwarz Information Criterion (SC), and Hannan-Quinn Information Criterion (HQ), the optimal lag is determined at lag 2. This is indicated by the accumulation of the largest number of asterisks which also indicates lag 2 as the optimal lag length in this study.

Cointegration Test

The results of the cointegration test using the Johansen method are presented in Table 3 below:

Table 3. Cointegration Test Results

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistics	0.05 Critical Value	Prob.**
None *	0.817782	78.14198	47.85613	0.0000
At most 1	0.319027	23.66035	29.79707	0.2152
At most 2	0.203663	11.36493	15.49471	0.1900
At most 3 *	0.119638	4.077491	3.841466	0.0434

Unrestricted Cointegration Rank Test (Max-eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistics	0.05 Critical Value	Prob.**
None *	0.817782	54.48163	27.58434	0.0000
At most 1	0.319027	12.29542	21.13162	0.5188
At most 2	0.203663	7.287440	14.26460	0.4557
At most 3 *	0.119638	4.077491	3.841466	0.0434

Source: Eviews 13

Table 3 shows that the results of the cointegration test using the Johansen method show that the trece statistic value and the maximum eigen statistic value at r = 0 are smaller than the critical value. This indicates that there is no cointegration. These results indicate that there is no cointegration between the four research variables. Therefore, the results of the cointegration test show that in the long term, the variables PE, INFLATION, PP, and EXPORT have no correlation between stability/equilibrium and similarity of movement.

VAR Stability Testing

Table 4. VAR Stability Condition Check

Root	Modulus
0.798145 - 0.129633i	0.808604
0.798145 + 0.129633i	0.808604
-0.233244 - 0.704718i	0.742314
-0.233244 + 0.704718i	0.742314
0.571653 - 0.319344i	0.654804
0.571653 + 0.319344i	0.654804
-0.582424	0.582424
-0.072562	0.072562

Source: Eviews 13

The results of the Vector Autoregression stability test shown in table 4 show that the VAR equation has a modulus value of less than one at lag 1, indicating that the formed VAR model is stable. All inverse roots of the AR polynomial are points inside the circle, as shown in the graph.

Granger Causality Test

Table 5. Granger Causality Test Lag 2

Null Hypothesis	Obs	F-Statistic	Prob
INFLATION does not Granger Cause PE	32	1.09962	0.3475
PE does not Granger Cause INFLATION	32	1.72567	0.1971
PP does not Granger Cause PE	32	2.84072	0.0759
PE does not Granger Cause PP	32	0.07251	0.9302
EXPORT does not Granger Cause PE	32	0.03518	0.9655
PE does not Granger Cause EXPORT	32	0.12936	0.8792
PP does not Granger Cause INFLATION	32	4.75580	0.0170
INFLATION does not Granger Cause PP	32	0.56959	0.5724
EXPORT does not Granger Cause INFLATION	32	1.69051	0.2034
INFLATION does not Granger Cause EXPORTS	32	2.46432	0.1040
EXPORT does not Granger Cause PP	32	0.14410	0.8665
PP does not Granger Cause EXPORT	32	4.73600	0.0173

Source: Eviews 13

Table 5 shows that the null hypothesis is accepted because the economic growth (PE) variable does not show a statistically significant effect on inflation (INF), with a probability value of 0.3475 which is greater than 0.05. In addition, the probability value of 0.1971 indicates that economic growth (PE) does not have a significant effect on itself. Therefore, it can be concluded that there is no unidirectional causal relationship between the PE and INF variables. In addition, the economic growth (PE) variable does not have a significant effect on government spending (PP), and vice versa. The probability values of each variable are 0.0759 and 0.9302, each greater than 0.05, indicating that the null hypothesis is still accepted. Therefore, there is no causal

relationship between the PE and PP variables. Finally, the economic growth variable is the last variable.

Vector Autoregression Estimation Analysis

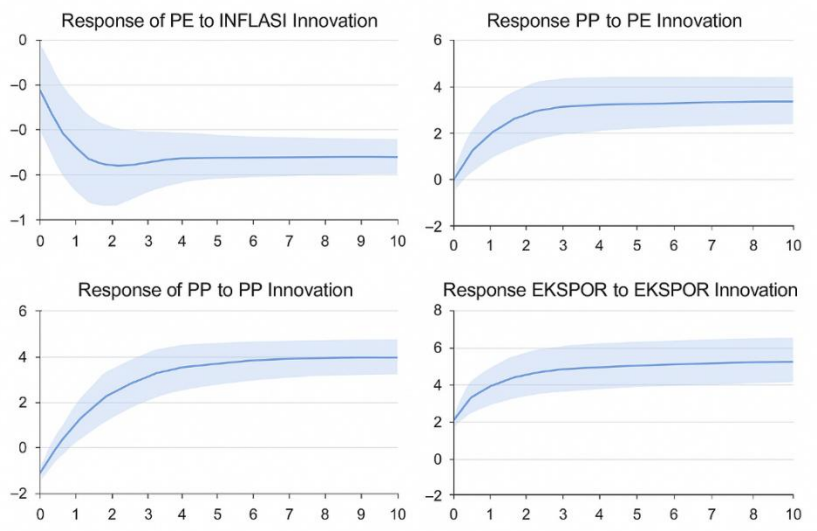
Table 6. VAR Estimation

Independent Variable	PE	INFLATION	PP	EXPORT
PE(-1)	0.532869 (0.39151) [1.36105]	-0.404059 (0.96120) [-0.42037]	-0.158114 (0.13798) [-1.14596]	-0.386435 (0.51260) [-0.75388]
PE(-2)	-0.372701 (0.36064) [-1.03343]	1.267569 (0.88541) [1.43162]	0.128610 (0.12710) [1.01190]	0.414185 (0.47218) [0.87717]
INFLATION(-1)	0.187748 (0.16921) [1.10955]	-0.359596 (0.41543) [-0.86561]	-0.149507 (0.05963) [-2.50713]	-0.431644 (0.22154) [-1.94835]
INFLATION(-2)	-0.196648 (0.19332) [-1.01721]	0.530060 (0.47462) [1.11681]	0.087111 (0.06813) [1.27862]	0.414983 (0.25311) [1.63954]
PP(-1)	-0.657167 (0.49284) [-1.33343]	1.565391 (1.20996) [1.29376]	0.523867 (0.17368) [3.01621]	0.853510 (0.64526) [1.32274]
PP(-2)	0.912280 (0.42007) [2.17711]	-2.566976 (1.03132) [-2.48903]	0.245982 (0.14804) [1.66158]	-1.543791 (0.54999) [-2.80606]
EXPORT(-1)	-0.158444 (0.20781) [-0.76246]	0.940310 (0.51018) [1.84309]	0.164585 (0.07323) [2.24738]	0.920982 (0.27208) [3.38502]
EXPORT(-2)	0.217342 (0.24441) [0.88925]	-0.638402 (0.60005) [-1.06392]	-0.090710 (0.08613) [-1.05312]	-0.186072 (0.32000) [-0.58148]
C (constant)	-1.978045 (8.28267) [-0.23822]	11.25217 (20.3346) [0.55335]	2.636836 (2.91984) [0.90335]	18.55209 (10.8443) [1.71077]

Source: Eviews 13

Based on the table above, with a t-table value of 1.71387 and a t-statistic value of 1.36105 smaller than the t-table, it can be concluded that the PE variable has a positive effect on PE but is not significant to itself. In addition, the INFLATION variable also has a positive effect on PE but is not significant to PE, because the t-statistic value of 1.10955 is smaller than the t-table. The PP variable also has a negative effect on PE.

Impulse Response Analysis



Source: Eviews 13

Figure 5. Impulse Response Function

At the beginning of the period, namely the first year to the third year, the response of economic growth is very fluctuating. Because the shock to the inflation variable from the first year to the third year experienced a significant and negative decline and in the fourth year reached its equilibrium point. This means that it took four years for economic growth to stabilize after the shock to inflation. The response of government spending to economic growth at the beginning of the period experienced positive fluctuations until the fourth year and reached equilibrium in the fifth year. Then the response of government spending fluctuated from the fourth year increasing until the eighth year and positive from the fifth year to the tenth year against the variable itself. This means that it took six years for government spending to stabilize again. The response of exports to economic growth at the beginning of the period experienced fluctuations until the eighth year and reached equilibrium in the ninth year. Then the response of exports fluctuated from the first year increasing until the third year and positive from the fourth year to the tenth year against the variable itself. This means that it took eight years for exports to stabilize again.

Variance Decomposition Analysis

Table 7. Variance Decomposition

Variance Decomposition of PE

Period	SE	PE	INFLATION	PP	EXPORT
1	3.548292	100.0000	0.000000	0.000000	0.000000
2	3.947217	89.85315	5.506321	4.136436	0.504090
3	3.982118	88.73204	5.448914	5.263275	0.555776
4	4.091787	84.09551	8.208831	6.419598	1.276063
5	4.102701	83.69683	8.455710	6.564756	1.283246
6	4.167937	83.75655	8.194278	6.765726	1.283444
7	4.206091	82.87834	8.226659	7.370005	1.424992

Period	SE	PE	INFLATION	PP	EXPORT
8	4.208015	82.82722	8.211884	7.405272	1.448414
9	4.214995	82.74727	8.429904	7.382918	1.440714
10	4.217668	82.71597	8.438876	7.393348	1.451087
11	4.212204	82.70713	8.445724	7.394832	1.452313
12	4.219996	82.63713	8.501764	7.407795	1.453913
13	4.220691	82.61300	8.524683	7.408353	1.453969
14	4.220955	82.60681	8.527300	7.411553	1.454336
15	4.221083	82.58962	8.532103	7.424926	1.454158
16	4.221757	82.57864	8.541566	7.425713	1.454077
17	4.221834	82.57598	8.542292	7.427692	1.454031
18	4.221963	82.57232	8.542392	7.430734	1.454018
19	4.222054	82.56884	8.544149	7.432902	1.454113
20	4.222083	82.56780	8.544336	7.433745	1.454117
21	4.222135	82.56709	8.544308	7.433596	1.454200
22	4.222146	82.56633	8.544369	7.435095	1.454187
23	4.222146	82.56607	8.544393	7.435329	1.454208
24	4.222152	82.56597	8.544370	7.435445	1.454217
25	4.222157	82.56584	8.544408	7.435518	1.454231
26	4.222158	82.56584	8.544348	7.435571	1.454222
27	4.222159	82.56583	8.544353	7.435577	1.454235
28	4.222159	82.56583	8.544357	7.435580	1.454247
29	4.222159	82.56582	8.544360	7.435580	1.454248
30	4.222160	82.56580	8.544366	7.435579	1.454249
31	4.222160	82.56580	8.544372	7.435579	1.454249
32	4.222160	82.56580	8.544376	7.435578	1.454250
33	4.222160	82.56579	8.544378	7.435578	1.454250
34	4.222160	82.56579	8.544380	7.435582	1.454249
35	4.222160	82.56579	8.544381	7.435581	1.454249
36	4.222160	82.56578	8.544382	7.435584	1.454249

Source: Eviews 13

Based on the variance decomposition test above, in the first period, the PE variability is 100 percent explained by the variable itself, while INFLATION, PP and EXPORT are 0 percent. Likewise, the INFLATION, PP and EXPORT variables are 100 percent explained by the variable itself, while PE is 0 percent. In the second period, the PE variability is explained by the average PE itself of 89.853%, while the INFLATION variable is 5.506%, while the PP variable is 4.136% and the EXPORT variable is 0.504%. In the third period, the PE variability is explained by the average PE variable itself of 88.732%, while the INFLATION variable is 5.448%. While the PP variable is 5.263% and the EXPORT variable is 0.555%. Then in the fourth period, the PE variability is explained by the average PE itself of 84.095%, while it is explained by the INFLATION variable of 8.208%, while it is explained by the PP variable of 6.419% and the EXPORT variable of 1.276%. Then in the fifth period, the PE variability is explained by the average PE itself of 83.696%, while it is explained by the INFLATION variable of

8.455%, while it is explained by the PP variable of 6.564% and the EXPORT variable of 1.283%. Continuing in the sixth period, the PE variability is explained by the average PE itself of 83.756%, while it is explained by the INFLATION variable of 8.194%, while it is explained by the PP variable of 6.765% and the EXPORT variable of 1.283%. In the next period up to period 36, the variability of PE is explained by the average PE itself which is stable with a value of 82.565%, while the variables INFLATION, PP and EXPORT also experience stability in each period. From this explanation, it can be concluded that inflation, government spending and exports contribute to economic growth.

Discussion

The Relationship between Inflation and Economic Growth

The results of the analysis show that inflation has a negative and insignificant correlation with economic growth. These results are in accordance with the research of Amir Salim and Fadilla (2020), Analysis of the Effect of Inflation on Economic Growth in Indonesia. They stated that inflation can affect the economy in a good or bad way, depending on the economic conditions at that time. Bank Indonesia can use monetary policy to maintain inflation stability if the economy weakens. Nuriyah (2024) conducted a similar study on the Impact of Inflation on Economic Growth in Indonesia, and found that high inflation tends to inhibit economic growth. The fact that inflation does not have a significant effect on economic growth is also supported by research conducted by Siregar et al. (2023) entitled Analysis of the Effect of Inflation and Interest Rates on Economic Growth in Indonesia.

The Relationship between Government Spending and Economic Growth

Based on the results of the VAR analysis that has been conducted, it was found that government spending has a positive and significant effect on economic growth. This finding shows that the increase in government spending, especially in the 2nd lag, provides a boost to the rate of economic growth, as reflected in the positive coefficient value and statistical significance. This indicates that fiscal stimulus in the form of government spending takes time before its effects are felt in the economy, but in the end it is able to strengthen national economic activity.

This result is in line with Suryani's (2015) research entitled *"The Influence of Government Spending in the Economic Sector and Public Services on Economic Growth of Districts/Cities in Bengkulu Province".* In her research, Suryani found that government spending in the economic sector and public services has a positive influence on regional economic growth, especially because the spending encourages the provision of basic infrastructure and social services that support community productivity.

In addition, these results are also supported by a study entitled *"State Expenditure and Indonesia's Economic Growth",* which shows that state operational expenditure contributes to national economic growth, especially through financing government functions that support stability and public services. Furthermore, Hutama (2013) in his study entitled *"Analysis of the Impact of Government Expenditure on Indonesia's Economic Growth",* also stated that government spending in education, health, and infrastructure has a positive and significant influence on Gross Regional Domestic Product (GRDP). This shows that spending components that are productive and oriented towards long-term development play an important role in driving overall economic growth.

Thus, the results of this study strengthen empirical evidence that fiscal policy through increasing government spending, especially those directed at the productive

sector, has a significant contribution in driving economic growth. However, the effectiveness of government spending is highly dependent on targeted allocation, implementation efficiency, and synergy with other economic policies.

The Relationship between Exports and Economic Growth

The results of the study show that exports have a negative and insignificant effect on economic growth. This indicates that the increase in exports during the observation period does not necessarily drive economic growth directly. Although in theory exports should be the driving force of growth through increasing national income and a trade balance surplus, in the context of Indonesia, the impact does not appear to be optimal. Possible causes include dependence on exports of raw materials with low added value, fluctuations in global commodity prices, and weak linkages between the export sector and the domestic sector.

This finding is in line with the research results of Putri and Wahyudi (2022) in their study entitled *"Analysis of the Influence of Exports and Imports on Economic Growth in Indonesia"*, which found that exports actually have a negative and significant influence on economic growth. The study explains that Indonesia's export structure, which is still dominated by primary commodities, makes its contribution to growth unstable and vulnerable to external shocks, such as changes in global demand and international market prices. In addition, research by Sabirin et al. (2021) entitled *"The Influence of Exports, Expenditures, and Economic Growth"* also shows a similar tendency. They found that exports do not always contribute positively to economic growth, especially if exports are not balanced by increased domestic production efficiency and added value from these export products. This reflects the existence of structural problems in the export sector that need to be fixed so that exports can act as a motor of sustainable growth.

Thus, although exports are generally considered an important component in driving economic growth, in the Indonesian context, their negative and insignificant impacts indicate the need for structural reforms in the export sector. The government needs to encourage diversification of export products, increase added value through industrialization, and strengthen the linkages between the export sector and the domestic economy so that exports can truly become a strong and sustainable driver of growth.

CONCLUSION

Based on the results of the research that has been conducted, several conclusions can be drawn as follows:

1. There is an insignificant negative correlation between inflation and economic growth. The results of the Vector Auto Regression (VAR) test show that the t-value of inflation is -1.01721 lower than the t-value of the research table of 1.71387. Thus, Indonesia's inflation will fall by -1.01721 percent if economic growth increases by 1%.
2. During the period studied, government spending has a positive and significant correlation with Indonesia's economic growth. The results of the VAR test show that the calculated t value of government spending of 2.17171 is greater than the t table value of 1.71387, which means that government spending will increase by 2.17171 percent if economic growth increases by 1%.
3. The results of the VAR test show a negative and insignificant relationship between exports and economic growth, the calculated t value of exports of 0.88925 is smaller than the t table value of 1.71387, this means that exports only contribute to a decrease in growth of 0.88925 percent if economic growth increases by 1%.

4. Based on Impulse Response analysis, it takes about 3 to 4 years for economic growth to stabilize again due to shocks caused by inflation, government spending, and exports.
5. The results of the Impulse Response analysis show that the inflation variable on economic growth experienced a significant decline from the first year to the third year, with an equilibrium point in the fifth year. This shows that economic growth takes four years to stabilize after being previously affected by inflation.
6. The response of government spending to economic growth shows positive fluctuations at the beginning of the period until the fourth year, with the equilibrium point reached in the fifth year. After that, the response of government spending fluctuates until it increases significantly from the fourth to the tenth year. This shows that government spending takes about six years to reach stability.
7. From the first year to the eighth year, the export response to economic growth varies. In the ninth year, the equilibrium point is reached. From the fourth year to the tenth year, the export response experiences a positive increase. This shows that exports will take about eight years to return to normal.

REFERENCE

Antasari, & Soleh. (2012). The Influence of Government Expenditure on Economic Growth in Bengkulu Province. Ekombis Review, 117– 127.

Ardiansyah, H. (2017). The Effect of Inflation on Economic Growth in Indonesia. *Journal of Economic Education (JUPE), 5(3).*

Bank, I. (2018). Strengthening Resilience, Spurring the Momentum of National Economic Recovery, Bank Indonesia Annual Report. Indonesian Economic and Financial Statistics. Jakarta: Bank Indonesia.

Chtami, FD (2014). Analysis of the Influence of Population, Inflation and Government Expenditure on Economic Growth of Surakarta City 1991-2012. *British Journal Of Psychiatry, 205(1).*

Dewi, SL (2013). The Influence of PAD, PMA, and Inflation on the Economic Growth of Bali Province. *E-Journal of Development Economics, Udayana University, 2(11),* 502–512.

Indriyani, SN (2016). Analysis of the Influence of Inflation and Interest Rates on Economic Growth in Indonesia 2005-2015. *Journal Management Business Krisnadwipayana, 4(2).*

Islamiah, N. (2015). Analysis of the Influence of Development/Capital Expenditure and Inflation Rate on Economic Growth and Tax Revenue in Indonesia. *Journal of Economics, 3(1), 46–57.*

Kristiawati. (2013). The Effect of Exports, Exchange Rates, and Inflation on Economic Growth in Indonesia 1995-2011. *Journal of Economics, 1(4).*

Larasati, IS, & Sulastmiyati. (2018). The Effect of Inflation, Exports, and Labor on GDP. *Journal of Business Administration (JAB), 63(1).*

Lebang, Rotinsulu, & Kawung. (2018). Analysis of the Influence of Government Expenditure and Private Investment on Economic Growth in Bitung City City. *Journal of Regional Economic and Financial Development, 19(1), 1–10.*

Mankiw, NG (2006). Macroeconomic Theory 3rd Edition. Sixth. *In Jakarta: Erlangga.*

Mankiw, N.G. (2021). *Principles of Economics* (9th ed.). Cengage Learning.

Pujoalwanto, B. (2014). Indonesian Economy: *Historical, Theoretical, and Empirical Review. Yogyakarta: Graha Knowledge.*

Sabtiadi, K., & Kartikasari, D. (2018). Analysis of the Impact of Export Import on the USD and SGD Exchange Rates. *Journal of Accounting, Economics and Business Management, 6(2),* 135– 141.

Safari, MF (2016). Analysis of the Impact of Foreign Debt and Government Spending on Indonesia's Economic Growth. *Journal of Economics, 1(4).*

Salhab, A., & Soedjono, L. (2012). The Effect of Inflation, Number of Workers, and Government Expenditure on Bali's Economic Growth. *E-Journal of Development Economics, Udayana University, 2(1),* 20–28.

Sukirno, S. (2000). Introduction to Macroeconomic Theory. In Jakarta: PT Raja Grafindo Tanah. Sukirno, S. (2013). Introductory Macroeconomic Theory. In Introductory Macroeconomic Theory. Jakarta: PT. Raja Grafindo The land.

Tambunan. (2009). SMEs in Indonesia. Bogor: Ghalia Indonesia.

Todaro, M. (2003). Economic Development in the Third World. Volume 1. Jakarta: Erlangga.

Todaro, MP and SCS (2006). Economic Development 9th edition. Jakarta: Erlangga.

Utomo, FW (2013). The Effect of Inflation and Wages on Unemployment in Indonesia 1980-2010 Period. Scientific Journal, 1(2).

Widarjono, A. (2018). Econometrics fourth edition. Yogyakarta: UPP STIM YKPN