THE EFFECT OF FOREIGN DIRECT INVESTMENT, INFLATION, AND EXPORT ON ECONOMIC GROWTH IN INDONESIAN

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Abstract
A nation's economic health can be gauged by looking at factors like its rate of economic growth. The goal of this research was to identify both long- and short-term relationships among factors that influence economic growth in Indonesia. The period between 1988 and 2017 was used for analysis. In this case, the Error Correction Model is employed (ECM). This research shows that PMA has a positive and statistically insignificant effect both immediately and over time. Inflation is a major drag on economic growth both in the short and long term. To be sure, the export variable has a negative effect in the short term, but in the long run, it has a positive and insignificant effect.

Keywords: Economic Growth, Export, Foreign Direct Investment, Inflation

1. INTRODUCTION

One of the primary indicators of development that can increase per capita income-based welfare is economic growth. Usually expressed as the success of a region's economic development and can be used to explain other macroeconomic indices such as the unemployment rate, poverty rate, inflation rate, and so on (Tyas, 2022). Economic growth is a system of increasing the average expenditure of each person in a long time, where the higher the level of economic growth of a country (Stievany & Jalunggono, 2022), the higher the potential to meet the needs of the community in order to increase the country's development capacity. N. Gregory (2007) emphasizes that economic growth is a parameter or index to see how successful the economic development of a region or country is and is used as an instrument in deciding various further development policies.

Tadaro, Michael P (2008) explained that one of the criteria for implementing development can be seen in how the economy grows. In this case, economic growth is described as Gross Domestic Product or GDP. The growth of production and domestic income is not influenced by production growth alone, but by the growth of public consumption so that it can increase the demand for goods or services. In other words, if it increases national income and economic growth over the long term, then investment, government spending, consumption, and net exports will increase the production of goods and services.

Economic growth is the key to macroeconomic goals. There are three reasons for this purpose. First, the population continues to grow. Second, unlimited needs, then the economy continues to produce goods or services to meet these needs. Third, realizing economic balance can be more easily achieved through income levies in increasing high economic growth.

Growth in the economy can be positive or negative. Positive economic growth is characterized by an increase in economic activity during a given period. On the other hand, economic growth is negative if economic activity decreases during the period.

Indonesia is one of the countries with a robust economic expansion. The Gross Domestic Product (GDP) of Indonesia has fluctuated over the past 30 years. The data was collected by the World Bank. The following graph depicts the evolution of Indonesia's Gross Domestic Product from 1988 to 2017.

Figure 1. Development of Indonesia's Economic Growth 1988-2017
Source: Data processed, (World Bank, n.d.)

The figure above reveal that in the period 1988-2017 Indonesia's economic growth fluctuated. The increase continued during 1988 to 1996 from 5.78% in 1988 to 7.81% but during that period it did not continue to increase, there was also a decrease. However, in the following year it decreased to 4.69%. Entering 1998, it decreased drastically to -13.1%. At that time, Indonesia experienced an economic crisis for the first time. In 2001, Indonesia again experienced a crisis for the second time after the monetary crisis in 1997-1998 caused by the United States economic crisis which then spread to other countries around the world. Nevertheless, Indonesia was able to recover from the crisis. The occurrence of this crisis disrupted economic stability, especially economic growth which in the end could be hampered or experience a drastic decline. The conditions at that time resulted in the fall of the rupiah, the swelling of foreign debt, the falling money market and capital market, many companies going bankrupt and ending in the layoff of employees, as well as falling exports. This is due to household consumption and investment as the dominant factors in the contraction of Indonesia's economic growth. Then starting in 1999 the Indonesian economy slowly began to rise, indicated by inflation which increased to 0.79% and continued to fluctuate until 2017.

The rapid economic development of a country is one of the most debated issues in the economy. Where a country allows to accelerate its economic growth by adding and selling goods or services abroad.

In international trade, export activity is one of the crucial factors in increasing economic growth. This activity provides a profit for a country. One source of foreign exchange needed by a country that implements an open economic system is exports. This

is because exports are able to move in general in various countries and allow for an increase in the quantity of production which in turn will stimulate economic growth. Exports have a positive influence on economic growth because they increase the demand for goods or services (Keynes, 1936).

The contribution of the export sector to development is divided into two, namely direct contributions and indirect contributions. Direct contributions include (i) increasing the number of exports will increase imports, including the means of production that play an important role in economic development; (ii) export development funds available through sector development are aimed at the highest production sector, namely the commodity sector that is able to compete in the international market; (iii) enlarge the domestic production market and enable industrial expansion and create economies of scale; (iv) the company must reduce production costs and maintain the efficiency of its activities so that the company maintains its position in market competition.

The indirect contribution of the export sector in development is divided into 3 groups. First, exports will encourage and increase domestic and foreign investment. This is because many industries are experiencing market expansion. Second, developments in the export sector will facilitate the entry of innovation into technology, markets and business. These industries are encouraged to import new technology from abroad to face foreign competition. Third, the existence of imported goods from abroad, the greater the diversity of goods which in turn will encourage increased consumption. So when viewed from the benefits, then export growth must be encouraged.

Sources of economic growth are not only exports but also investment, consumption, and government spending. It is the same with Foreign Investment (refers to PMA) and Domestic Investment (refers to PMDN), which are important components in the financing of a country. Therefore, the government implements the basic investment strategy in order to encourage the national business climate for investors, which aims to strengthen economic competitiveness and accelerate investment growth. One of the economists, Harrord-Domar explained that in improving the country's economy, capital formation is needed to increase the capital stock in the economy. The stock of capital formation is considered to be a source of funding and the ability of the state to increase its production capacity in the face of growing public demand. Harrod-Domar considers that investment has a fairly important role in the economy, as it has two roles in the economy. The first role is as income generation which will affect the demand side. The second role, investment can play a role on the supply side because it can increase production capacity so that it will increase the capital stock (Menshikov et al., 2015).

Moreover, on economic factors including inflation. Inflation theoretically has both positive and negative effects on the economy. If the economy is in trouble, the Central Bank may pursue an expansionary monetary policy in an effort to reduce interest rates. In the meantime, high inflation reflects economic instability, resulting in an overall and continuous increase in the prices of goods and services that will lead to other issues, such as a rise in poverty. People who were initially able to meet their daily needs but became unable to do so as a result of high inflation can experience this. Indonesia's inflation rate fluctuates from year to year. An analysis of the influence of inflation on economic growth in Indonesia between 2005 and 2015 by Indriyani (2016) found that inflation had a significant impact on economic growth in Indonesia. Meanwhile, similar investigation was conducted by Mahzalena & Juliansyah (2019) that concluded there is no effect of

inflation on economic growth. In light of what has been discussed up until this point, the objective of this study is to analyze the effects of foreign direct investment (FDI), inflation, and exports on the expansion of the economy between the years 1988 and 2017.

2. LITERATURE REVIEW
2.1. Economic growth

Economic growth is the process of increasing the production of goods and services in economic activities so as to maximize national income and economic growth (Mahzalena & Juliansyah, 2019). GDP is utilized to describe economic growth. GDP is considered to serve as an economic benchmark for calculating a country's economic development. According to Sadono sukirno (2013) Gross Domestic Product is the total goods and services in a country that are processed with production owned by residents and other countries. While based on N. Gregory (2007) explained that Gross Domestic Product is cutting economic activity at a certain value of money at a certain time.

Economic growth is a process within an economy that has an effect on increasing goods or services and a nation's prosperity. Hence, when economic growth increases, the goods produced also increase. This will cause the level of people's prosperity to rise (Ardiansyah, 2017). According to Asia (2013) Economic growth can be seen from the production of goods or services as well as income per capita which increases over a certain period of time.

This theory was developed by Professor Robert Solow, in his article entitled "A Contribution of The Theory of Economic Growth". Neoclassical analysis argues that the development of technological and production factors is the main factor that determines the level of economic growth in one period and its development from one period to another. Neoclassical theory does not only focus on the role of labor in growth, but also analyzes the equitable contribution of development and technological development to economic growth (Sadono, 2005).

2.2. Foreign investment

The type of investment that is currently encouraged in developing nations is foreign investment. Foreign investment (PMA) or foreign investment in "Law no. 25 of 2007 Article 1 paragraph 3" is an investment activity with the purpose of conducting business by foreign investors, either using foreign capital in its entirety or in partnership with state investors in Indonesia. Meanwhile, PMA defined by the Investment Coordinating Board (BKPM) includes foreign direct investments registered with BKPM which have a large value and are recognized by the state. According to Asia (2013) Foreign Investment (PMA) is the process of investing in Indonesia with foreign capital or in partnership with domestic investors. The percentage of shares owned by foreign investors is a maximum of 95%, and a minimum of 5% for domestic investors.

Every investment is able to contribute to the economic growth of a country, this will encourage the development of economic activities as a whole. Investment activities create jobs for residents of the country. It is also hoped that with the existence of investment activities, both as taxes and as non-tax state revenues and other taxes, they can be well absorbed. This activity will also increase GDP and individual income,

therefore if investment growth does not increase significantly, it will affect and disrupt the overall GDP growth rate.

Numerous previous studies have demonstrated a positive correlation between foreign investment and economic growth, but this correlation is temporary. According to Agma (2015) explained that FDI had a significant positive impact on Indonesia's economic growth between 1984 and 2014, and after the crisis of 1998. However, foreign direct investment had a negligible negative impact on Indonesia's economic growth prior to the 1998 crisis. In another study conducted by Aizenman, Jinjarak, & Park (2013) shows a positive correlation with economic growth in 100 countries. In addition, in research conducted by Arianti (2013) shows that Foreign Direct Investment (FDI) in Central Java has a positive and significant impact on Central Java's short- and long-term economic growth.

In contrast to the research above, this study proves that the Pacific Island countries have very small investment opportunities, so they have not been able to encourage economic growth (Feeny et al., 2014). Other research also proves that FDI is not able to encourage economic growth (Hapsari & Prakoso, 2016; Suryani & Ika, 2019)

2.3. Inflation

Nopirin (2000) explained that there are two causes of inflation, namely monetary policy and consumer demand. Whereas cost-push inflation is caused by pressure on production costs, demand-pull inflation is the result of an item's or service's high public demand. In addition, according to monetarists, inflation is caused by a phenomenon known as the money supply or the money supply is too high or commonly called the high amount of money circulating in the community.

On the other hand, inflation can also be understood as the devaluation of a currency, also known as depreciation. If the price of goods and services on the market increases, it is inevitable that producers will reduce their output, resulting in a scarcity of goods and commodities. This can also affect export performance. The impact of inflation is so large that it is not surprising that inflation includes both developed and developed countries. The only difference is the severity of inflation.

The severity of inflation is categorized into four groups. First, inflation that is below 10% annually. Second, moderate inflation ranges between 10% and 30% annually. Third, an annual inflation rate between 30 and 100 percent. Then there ishyperinflation of more than 100% per year. If a country experiences hyperinflation, it is certain that prices will increase in all sectors. To reduce production costs, companies also reduce labor. As a result, the unemployment rate will definitely increase. Thus, the state will be further away from the goal of the welfare of its people.

Inflation itself can come from within the country or abroad. Domestic inflation is usually caused by a government budget deficit, where the government takes steps to print new money to cover the deficit. As a result, there is a lot of money circulating in the community. In addition, there is an error in the market system that causes the prices of goods in the community to soar. Meanwhile, inflation comes from abroad because the necessary resources (imported goods) are scarce in most countries and the demand for these goods increases, and consequently the prices of these goods increase.

Bank Indonesia (BI) classifies inflation into two categories. The categories are core inflation and non-core inflation (no-core inflation). Core inflation is caused by the main

aspects, namely the relationship between demand and supply, the external environment such as international commodity prices or inflation from trading partners, currency exchange rates, and inflation expectations from traders and consumers. This inflation movement tends to be persistent (persistent component). Meanwhile, No-core inflation is influenced by non-principal factors, including volatile food inflation, which means that it is more influenced by shocks in these foodstuffs, such as harvests, disturbances from natural events, or developments in international food prices. Inflation caused by government regulations (administered prices inflation) is generally influenced by shocks from price changes made by the government such as subsidized fuel rates, public transportation tariffs, electricity tariffs, and so on. This inflation movement tends to be high.

Multiple studies have demonstrated that inflation can positively affect economic growth (Lubis, 2020). According to research conducted in other nations, inflation can cause an increase in interest rates and affect economic growth (Saymeh & Orabi, 2013).

Meanwhile, other studies reveal that inflation has a positive and insignificant relationship (Mahzalena & Juliansyah, 2019). These outcomes are consistent with the research conducted by Riaz & Riaz (2018) mentions that South Asian nations' economic growth is not significantly impacted by inflation. Barro (2013) also found that in 100 countries, a 10% increase in inflation results in a 0.2%-0.3% annual decrease in GDP per capita growth and a 0.4%-0.6% annual decrease in the investment share of GDP. Despite having a negative impact on economic growth, the long-term effects are crucial to consider.

2.4. Export

Exports are essential to the modern economy because they provide people and businesses with access to additional markets for their products. Exports are the sale of goods manufactured in one country to consumers in another. Diplomacy and foreign policy serve primarily to stimulate international economic trade, to encourage exports and imports for the benefit of all trading parties. The export of goods is beneficial to the economy of a nation. This profit contributes to the expansion of the exporting nation's economy (Tadaro, Michael P, 2008). With these developments, it will be able to increase its output of goods and services to meet the demands of the community.

In a nutshell, exports are defined as the process of buying and selling commodities from one country to another. According to Mahzalena & Juliansyah (2019) export is an activity carried out by each country with the aim of increasing income because if it has an impact on the level of national income, it can increase economic growth. If there is an increase in exports, aggregate expenditure will also increase which can increase state income, but if national income does not have an effect on exports, exports will not change. Thus, exports have a similar effect to the role of investment and government spending.

In its function as a factor in increasing development, the increase in exports greatly affects the existing industries in the country. On the other hand, exports can improve the investment climate both domestically and abroad. Furthermore, exports provide an expansion of the domestic industrial market.

Countries that increase their output faster than the rate of population growth in the sense that exports and investment play an important role in economic activity, exports will generate foreign exchange which is used to finance imports needed to meet needs. In

addition to increasing a country's consumption, exports can also increase global output and provide access to scarce resources and potential international markets for a variety of export commodities, without which poor nations cannot develop their national economic activities. Here all countries regulate their business both in the availability of abundant production factors, superior labor productivity, and so on.

Export payments can be made by cash credit, including consignment, Letter of Credit (L/C), Money Order Bill (Collection Draft) with the condition of document agains payment (Collection D/P) and document against acceptance (Collection D/A). , open account, and other payment methods that are standardized in international trade in accordance with the agreement between the seller and the buyer.

To prevent a deficit in the balance of payments, a nation's exports must be greater than its imports. Consequently, the government always encourages exports through the following methods:

1) Export diversification

   The policy to increase the types or categories of goods is called horizontal diversification and improve the quality of goods exported, which is called vertical diversification.

2) Export subsidies and premiums

   Subsidies are assistance provided by the government to domestic producers to be able to sell their goods or services at lower prices so that they can compete in the international market. While the premium is the provision of capital to producers in order to achieve production targets set by the government.

3) Domestic price control

   The role of the government in maintaining price stability is very large. In this case, the government prohibits the export of certain goods to maintain the national market price.

4) Devaluation

   Devaluation is a government policy in reducing the value of the currency. This causes the price of export goods to become cheaper abroad, so that the demand for exports increases.

5) International treaties

   This agreement aims to facilitate trade between countries or commonly referred to as a bilateral agreement if it is carried out by two countries, while if it is carried out jointly it is called a multilateral agreement. This agreement is generally binding (binding agreement) so that it becomes a reference for the government in making national laws or regulations.

Research by Hodijah & Angelina (2021); Kurniasih (2019); Safari & Fikri (2016) discover a two-way, Long-term and short-term relationship between exports and economic growth. Then exports have a positive long- and short-term effect on GDP. Therefore, when exports increase, economic growth will increase as well. Other studies have demonstrated that export results have a negative impact on Indonesia's economic growth (Mahzalena & Juliansyah, 2019).

3. RESEARCH METHODS

This research is descriptive-quantitative is research that explains in general using a data that is strengthened by analysis, clarification, interpretation and results. The components used use secondary data types, namely time series data from 1988-2017 obtained from the World Bank. This study focuses on explaining the relationship between economic growth as the dependent variable in this case described by the Gross Domestic Product (GDP) variable, while FDI, inflation, and exports as independent variables.

Error Correction Model (ECM) is utilized to examine the short-term and long-term effects of the dependent variable and the independent variable using several assumption tests and the Eviews 10 software. The following is the economic model:

$$GDP_t = f(PMA_t, Inflation_t, Export_t)$$

The Error Correction Model (ECM) equation is stated as follows:

$$GDP_t = \propto_0 + \propto_1 PMA_t + \propto_2 Inflation_t + \propto_3 Export_t$$

Information:
GDP_t : Economic growth period t,
PMA_t : Foreign investment period t,
$Inflation_t$: Inflation period t, and
$Export_t$: Export period t.

This observation uses Microsoft Excel 2016 software which is then processed using E-Views 10. Before analyzing the data, several steps are needed including:

1) Stationarity Test

This test is designed to determine whether the data used is stationary or not. The ECM requirement is that the data is not stationary at the level, so it is necessary to re-test at the 1st Difference level and if it is still not stationary then proceed to 2st Difference and so on. With the hypothesis that the estimation results obtained using the Augmented Dickey-Fuller (ADF) method are then compared with the critical values of 1%, 5%, and 10% of the critical McKinnon values. If the value of the t-statistic is less than the critical McKinnon value, then H0 is accepted or the data is not stationary. In the meantime, if the t-statistic value exceeds the Mckinnon critical value, H1 is accepted or the data are stationary.

2) Cointegration Test

The next test is the cointegration test in order to identify if the variables have a long-term correlation. The method used is the Johansen test and the Eangle-Granger test. The need for long-term equation regression to get the residual as ECT. If the ECT is stationary, it is concluded that the variables are cointegrated with each other. One of the conditions for equilibrium to occur in the long run is that the equilibrium error must fluctuate around 0 or the error term must be a stationary time series data.

3) Error Correction Model (ECM)

The testing phase must begin with the unit root test, followed by the cointegration test, and conclude with the compilation of the ECM model.

Cointegration indicates a long-term relationship between the analyzed variables. While the lag value of the regression of the formation of the ECM demonstrates the validity of the relationship in the short term, the relationship holds true in the long term.

4. RESULTS AND DISCUSSION
4.1. Research Results
4.1.1. Data Stationarity Test

The Unit Root Test is used to evaluate the stationarity of the data utilized in this study. Unit Root Test is a method used to determine whether or not the data has a unit root issue. The Augmented Dickey-Fuller test is used to determine whether or not the unit root is flawed.

According to table 1 below, based on the results of the Augmented Dickey-Fuller Test:

Table 1. Augmented Dickey-Fuller (ADF) Test Results

Variable	Unit Root Test			
	Level		1st Difference	
	ADF	Prob	ADF	Prob
GDP	-3.769499	0.0080	-6.646781	0.0000
PMA	-2.105512	0.2440	-4.774164	0.0007
Inflation	-4.616864	0.0010	-8.964604	0.0000
Export	-2.558387	0.1130	-8.059182	0.0000

Source: Processed results, Eviews 10

The results of the unit root test at the GDP and inflation levels are stationary at the level level, whereas the PMA and Export variables are not stationary because the ADF statistical value is greater than the critical value, as presented in table 1 (0.05). Due to the fact that only two variables are at a stationary level, testing at the First Difference level is required.

After conducting experiments at the First Difference level, it was determined that the ADF statistic value for all stationary variables was less than the critical value (0.05), thus passing the unit root test.

4.1.2. Cointegration Test

The cointegration test in this study is the Johansen test, where this test aims to determine the existence of cointegration in a number of variables. Long-term equilibrium can also be determined through this cointegration test. The balance is identified through the comparison of estimate trace statistics where the maximum eigenvalue is 5%.

Table 2. Augmented Dickey-Fuller (ADF) test

Unrestricted Cointegration Rank Test (Trace)			
Hypothesized No. of CE(s)	*Trace Statistics*	*0.05 Critical Value*	*Prob.***
None *	126.0122	47.85613	0.0000
At most 1 *	66.47289	29.79707	0.0000
At most 2 *	17.42147	15.49471	0.0253
At most 3	0.128315	3.841466	0.7202
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)			
Hypothesized No. of CE(s)	*Max-Eigen Statistics*	*0.05 Critical Value*	*Prob.***
None *	59,53929	27.58434	0.0000
At most 1 *	49.05142	21.13162	0.0000
At most 2 *	17.29316	14.26460	0.0161
At most 3	0.128315	3.841466	0.7202

Source: Processed results, Eviews 10

Seen from table 2, it can be seen that there are three variables with probability values smaller than the level $\propto = 5\%$. This situation can be interpreted that cointegration has occurred.

4.1.3. Error Correction Model (ECM)

Error Correction Model (ECM) aims to measure whether there is an imbalance in the short term. In addition, this test can also show long-term equation relationships.

There is a deviation between the value of the dependent and independent variables can be shown by the short-term equation.

The long-term estimation model of economic growth in this study is GDP as the dependent variable (Y) and the independent variable is Foreign Investment (X1), Inflation (X2), and Exports (X3). So the estimation model is as follows:

$$Y_t = \beta_0 + \beta_1 X_t + \beta_2 X_t + \beta_3 X_t + e_t$$

The short-term export estimation model in this study is using the Engel-Granger approach. So the estimation model is as follows:

$$\Delta Y_t = \beta_0 + \beta_1 \Delta X_t + \beta_2 \Delta X_t + \beta_3 \Delta X_t + \beta_4 ECT_t + e_t$$

The following is the result of the estimation of factors that affect economic growth in Indonesia in the long term:

Table 3. Long-Term ECM Results

Dependent Variable: GDP
Method: Least Squares
Date: 06/03/22 Time: 08:18
Sample: 1988 2017
Included observations: 30

Variable	Coefficient	t-Statistic	Prob.
PMA	0.398385	1.141201	0.2642
INFLATION	-0.255555	-5.235562	0.0000
EXPORT	0.040537	0.363431	0.7192
C	6.469301	2.106999	0.0449

R-squared	0.769189	Mean dependent var	5.044991
Adjusted R-squared	0.742556	SD dependent var	3.718561
SE of regression	1.886757	Akaike info criterion	4.231162
Sum squared resid	92.55613	Schwarz criterion	4.417988
Likelihood logs	-59.46742	Hannan Quinn Criter.	4.290929
F-statistics	28.88202	Durbin-Watson stat	1.177561
Prob(F-statistic)	0.000000		

Source: Processed results, Eviews 10

Based on the table3above, the estimation results from the long-term equation are obtained, namely:

$$GDP = \beta_0 + \beta_1 PMA + \beta_2 Inflation + \beta_3 Export + e_t$$
$$GDP = 6.469301 + 0.398385X_t - 0.255555X_t + 0.040537X_t + e_t$$

The constant number is6.469301 means that if FDI, inflation, exports can be said to be constant or equal to zero percent, then the total change in GDP is 6.46% of the GDP figure. The probability value below 0.05 is the inflation variable. While the PMA and export variables are above the significance level of 0.05, the import variable is below it. Consequently, only the inflation variable has a negative and significant effect on future GDP, whereas the other variables have no effect. The PMA variable has a negative and insignificant impact on GDP, so changes in FDI do not affect GDP in the long run. The export variable has a positive and insignificant effect on GDP, so the FDI variable will have no future effect on GDP.

In accordance with the results of the ECM obtained a value of$R^2$0.769189or 77% so that in this study it indicates that together the influence of the PMA, inflation and export variables on economic growth is 77%. This situation indicates that there are still approximately 23% influenced by other factors or variables on the value of economic growth that are not included in the model.

Table 4. Short-Term ECM Results

Dependent Variable: D1_GDP
Method: Least Squares
Date: 06/03/22 Time: 08:31
Sample (adjusted): 1990 2017
Included observations: 28 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.159451	0.377417	-0.422481	0.6766
D1_EXPORT	-0.101192	0.153264	-0.660248	0.5157
D1_INFLATION	-0.195025	0.054896	-3.552617	0.0017
D1_PMA	0.335080	0.365505	0.916757	0.3688
RESID01_ECT(-1)	-0.219566	0.205673	-1.067547	0.2968

R-squared	0.833653	Mean dependent var	-0.085243
Adjusted R-squared	0.804723	SD dependent var	4.509075
SE of regression	1.992567	Akaike info criterion	4.377157
Sum squared resid	91.31743	Schwarz criterion	4.615051
Likelihood logs	-56.28020	Hannan Quinn Criter.	4.449884
F-statistics	28,81629	Durbin-Watson stat	2.188508
Prob(F-statistic)	0.000000		

Source: Processed results, Eviews 10

Based on table 4 above, the estimation results obtained from the short-term equation are:

$$\Delta GDP_t = \beta_0 + \beta_1 \Delta PMA + \beta_2 \Delta Inflation + \beta_3 \Delta Export + \beta_4 ECT(-1) + e_t$$
$$\Delta GDP = -0.159451 + 0.335080 \Delta PMA_t - 0.195025 \Delta Inflation_t$$
$$- 0.101192 \Delta Export_t - 0.219566 ECT_t + e_t$$

From the table above, it is known that RESID01_ECT(-1) is significant with a value of 0.2968 with a negative coefficient of -0.219566. According to the results of the short-term estimate. The estimation results indicate that the inflation variable has a negative and statistically significant effect with a probability value of 0.017 below the level of α = 5%. This indicates that changes in the inflation rate will have a positive impact on economic growth in the near future.

According to the results of the ECM, the R^2 value of 0.833653 or 83% is obtained, indicating that the influence of the PMA, inflation, and export variables on economic growth is 83% in this study. This situation indicates that approximately 17% of the value of economic growth is still influenced by factors or variables not included in the model. Then, because the results of the ECM obtained an F-statistical probability value of 0.00000, which is less than 0.05, it can be concluded that this ECM is usable.

4.1.4. Classic Assumption Test

Table 5. Classical Assumption Test Results

Classic Assumption Results
1) Normality test
Jarquee-Bera =1.699709; Prob = 0.427477
2) Autocorrelation Test
Prob Chi-square = 0.0700
3) Heteroscedasticity Test (*Breusch-Pagan-Godfrey*)
Prob Chi-square = 0.0432
4) Multicollinearity Test
PMA= 1.894246; inflation = 3.210040; export= 4.683333

Source: Processed results, Eviews 10

1) Normality Test

Based on the normality assumption test with the Jarquee-Bera method of 1.699709 where the probability value is 0.427477 which means it has a significance level greater than $\alpha= 5\%$. So the assumption of normality is met.

2) Autocorrelation Test

Based on the autocorrelation test where the Chi-square probability value is 0.0700 which means it has a significance level greater than $\alpha= 5\%$. So there is no autocorrelation at the 5 percent significance level.

3) Heteroscedasticity Test

The heteroscedasticity test uses the Breusch-Pagan-Godfrey Test method where the value of Chi-square probability of 0.0432 is smaller than the value of $\alpha= 5\%$. In this study, heteroscedasticity occurred at a significance level of 5 percent, so the assumption of homoscedasticity was not met. This is because there is a lower variable data value and a higher variable data value than other data values.

Table 6. Results of Variable Data Values

Score	GDP	PMA	Inflation	Export
Lowest	-13.1267	-2.7574	-0.4561	17.1683
Highest	8,2200	2.8199	75.2711	52.9681

Source: Processed results, (World Bank, n.d.)

4) Multicollinearity Test

The purpose of the multicollinearity test is to determine if the regression model identifies a relationship between the independent variables. A quality regression model should lack a correlation between the independent variables. Multicollinearity is determined based on the Variance Inflation Factor (VIF) value. Multicollinearity is absent from a regression model if the VIF value is less than 10. On the basis of the VIF value calculations, the respective variables are 1.89, 3.32, and 4.68, and it can be concluded that this regression equation is free of multicollinearity.

4.2. Discussion
4.2.1. FDI and Economic Growth

According to the results of the Error Correction Model (ECM), it is demonstrated that PMA has a positive but insignificant effect on GDP, such that changes in FDI do not affect GDP over the long term. On the other hand, the short-term impact of FDI on GDP during the 1988-2017 period is also positive and insignificant. This suggests that the PMA variable influences the economic growth of Indonesia over a period of time. This is in line with the observations made by Suryani & Ika (2019) which says that the value of PMA has a positive and insignificant impact on economic growth so that it does not affect the GDP variable. Based on the mid-year study report of the Institute for Development of Economic and Finance (IDF) in 2019, it was found that a number of factors were found that caused FDI not to have a major impact on economic growth in Indonesia, including: first, the government was judged to be only able to attract investors capital-intensive or tertiary, so that the contribution of capital-intensive investments is not significant to economic growth. Second, foreign investment entering Indonesia is not fully efficient when viewed from the Incremental Capital Output Ratio (ICOR) figures in 2016-2018 which are still at more than 6. This figure is actually much worse than the ICOR figure in 2008 which touched 3.8. As a result, investment realization has not been strong enough to stimulate growth to become the main driving force in the industrial sector.

Complex bureaucracy and a lack of coordination between related departments contribute to the difficulty of obtaining a permit, which hinders PMA's ability to influence Indonesia's economic growth. The low quality of human resources contributes to the improper implementation of technology, as well as the intense competition to attract foreign investment from both developed and developing nations.

4.2.2. Inflation and Economic Growth

According to the results of the Error Correction Model (ECM), the future effect of inflation on GDP is negative and significant in the long run. If inflation increases by 1 percent, the GDP will decrease by 0.255555 percent. This is consistent with Keynes' theory, which states that inflation and economic growth have a negative long-term relationship. Meanwhile, inflation has a negative and significant impact on GDP in the short term. This is demonstrated by the coefficient value of -0.195025 and the probability of 0.0017, which indicate that changes in inflation will reduce economic growth. This is in accordance with research conducted by (Lastri & Anis, 2020; Mohseni & Jouzaryan, 2016). Bank Indonesia also wrote that high inflation will cause the real income of the population to continue to decline so that people's living standards will also decline. This affects people's decisions to consume, invest, and produce.

4.2.3. Exports and Economic Growth

Error Correction Model (ECM) results indicate that the export variable will have a positive and insignificant effect on GDP in the future. The export contribution to economic growth is 0.040537. In the meantime, exports have a negative and insignificant effect on GDP in the short term, with an effect size of -0.101192. To prevent exports from impacting economic growth. This research is similar with the research conducted by Mahzalena & Juliansyah (2019) which concluded that exports have a negative and insignificant effect on economic growth.

However, these results contradict the international trade theory that the number of goods and services exported abroad increases, so the production of goods and services will also increase.

5. CONCLUSION

Several conclusions can be drawn from the results and discussions that have been conducted.

1) Foreign Investment (FDI) has a positive and insignificant long-term and short-term impact on the value of Indonesia's GDP and economic growth. To prevent FDI from affecting economic growth. This circumstance suggests that fluctuating FDI growth is a contributing factor.
2) Inflation has a negative and significant effect on GDP over the short and long term, so if inflation rises, GDP will fall.
3) The export variable has a negligible positive effect on GDP over the long term, so exports have no effect on GDP. In the meantime, it has no significant negative impact on GDP in the short term, so exports have no effect on GDP.

Based on the aforementioned research findings' conclusions, the authors make the following suggestions:

1) The government must take a policy to improve the permit process for foreign investment so that later it will be able to increase economic growth.
2) The need for development in potential sectors so as to encourage investment to Indonesia.
3) Export policy making must continue to be carried out, because in the long term it can affect the increase in Indonesia's economic growth.

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