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DOI : 10.32734/lwsa.v9i1.2716  
Electronic ISSN : 2654-7066  
Print ISSN : 2654-7058

*Volume 9 Issue 1 – 2026 TALENTA Conference Series: Local Wisdom, Social, and Arts (LWSA)*



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# The Effects of Exports, Inflation, and the Labor Force Participation Rate (LFPR) on Economic Growth with Investment as a Moderating Variable in Indonesia

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## Abstract

Indonesia's economic growth faces challenges in maintaining long-term stability amid global macroeconomic pressures. Export activity, inflation, and labor force participation are key variables that influence growth dynamics, although their effects are not always linear. On one hand, exports have strong potential to drive national output, while inflation and the labor force participation rate (LFPR) often exert distinct pressures on economic performance. Investment is believed to strengthen or alter the direction of these variables' influence on economic growth. This study aims to analyze the influence of exports, inflation, and LFPR on Indonesia's economic growth, with investment as a moderating variable, using time series data from 1993 to 2024. This research employs a descriptive quantitative approach. The data used are secondary data, and the methods applied include Multiple Linear Regression and Moderated Regression Analysis using the residual method, processed with SPSS version 27. The results of the study show that: (1) exports have a positive and significant effect on economic growth in Indonesia, (2) inflation has a negative and significant effect on economic growth, (3) LFPR has a negative and significant effect on economic growth, (4) exports, inflation, and LFPR simultaneously have a significant effect on economic growth, (5) investment moderates the relationship between exports and economic growth by strengthening the effect, (6) investment does not moderate the relationship between inflation and economic growth, and (7) investment does not moderate the relationship between LFPR and economic growth.

Keywords: Economic Growth; Export; Inflation; Labor Force Participation Rate (LFPR); and Investment.

## 1. Introduction

Economic growth serves as a fundamental indicator in assessing a country's development success. According to Todaro and Smith, economic growth is defined as the long-term increase in a country's capacity to provide goods and services to its population, reflecting a rise in national productivity as measured by Gross Domestic Product (GDP) [1]. In line with this view, Sukirno states that economic growth occurs when there is a continuous increase in output over the long term [2].

The relationship between exports, inflation, and labor force participation rate (LFPR) and economic growth is complex and not always linear. In this context, investment is believed to act as a moderating variable that can either strengthen or alter the direction of these relationships. Investment does not merely contribute to capital formation but also plays a key role in improving production efficiency, fostering technological innovation, and generating employment opportunities. As emphasized by Mankiw, investment is crucial in expanding productive capacity and adopting new technologies that drive long-term growth [3].

For instance, an increase in exports accompanied by strong investment can create a greater multiplier effect through production diversification and value-added enhancement. Similarly, during periods of high inflation, investment in productive sectors may help lower production costs, improve efficiency, and stabilize prices through innovation and import substitution. Regarding LFPR, investment contributes significantly to job creation and human capital development by providing quality employment and skill enhancement.

Harrod and Domar underscore the importance of investment as a driver of national production capacity and as a determinant of sustained economic growth [4]. While numerous studies have examined the individual effects of exports, inflation, and LFPR on economic growth, findings remain inconclusive and vary across contexts. Moreover, limited research has explored the role of investment as a moderating variable in these relationships.

Therefore, this study aims to fill that gap by empirically analyzing the influence of exports, inflation, and LFPR on economic growth in Indonesia, with investment as a moderating variable. By adopting this approach, the study intends to offer a more

comprehensive understanding of the dynamics that shape national economic growth. The findings are expected to provide valuable insights for policymakers, economists, and stakeholders in formulating strategies that promote sustainable economic development. Literature Review

### 1.1. Economic Growth Theories

The Harrod-Domar model explains that long-term economic growth can be achieved when there is equilibrium between national savings and investment levels. Investment plays a dual role: increasing production capacity and generating aggregate demand through the multiplier effect [5]. The growth rate is determined by the ratio between savings and the Incremental Capital Output Ratio (ICOR). In developing countries, exports serve as a key source of foreign exchange to finance capital goods investment, while high inflation can disrupt investment incentives. Therefore, a combination of increased exports, effective investment, and price stability is essential to achieve sustainable economic growth [6]. Unlike Harrod-Domar, the Solow-Swan model emphasizes the role of factor inputs capital, labor, and technological progress—as the primary drivers of long-term economic growth [7]. Investment contributes to capital accumulation, which in turn expands production capacity. However, this growth is only optimal if accompanied by a sufficient and productive labor force. The Labor Force Participation Rate (LFPR) serves as a key indicator of labor utilization. Without high LFPR, investment alone is insufficient to generate optimal output growth [8].

### 1.2. Exports and the Export-Led Growth (ELG) Theory

The Export-Led Growth theory posits that exports are a major driver of long-term economic growth, particularly in developing countries. Export expansion creates external demand for domestic output, increases production efficiency, and encourages technological innovation [9]. Moreover, strong and stable export performance can attract both domestic and foreign investment, thereby enhancing fixed capital formation and boosting national productive capacity [10]. Thus, exports play a dual role as part of aggregate demand and as a catalyst for investment-led growth.

### 1.3. Inflation

Inflation is a sustained general increase in prices that can undermine macroeconomic stability. In the context of growth, uncontrolled inflation creates uncertainty, discourages savings and investment, and hampers long-term output expansion [11]. According to Keynesian theory, inflation may stimulate growth under underemployment conditions, but when aggregate demand surpasses productive capacity, it becomes detrimental. High inflation erodes purchasing power, discourages savings, and creates distortions in economic decision-making, particularly in consumption and investment [12]. Therefore, maintaining price stability is critical to sustaining an investment-friendly environment.

### 1.4. Labor Force Participation Rate (LFPR)

LFPR reflects the extent to which the working-age population is active in the labor market. According to the Demographic Dividend theory, increasing LFPR during the demographic bonus period offers a window of opportunity for accelerated economic growth [13]. However, based on Lewis's Dual Sector Model, increases in the labor force must be accompanied by expansion in modern, productive sectors. Otherwise, labor surpluses may emerge in traditional sectors, reducing overall productivity [14]. Thus, the role of LFPR in growth is highly dependent on adequate investment and job creation to absorb the workforce effectively.

### 1.5. Investment as a Moderating Variable

In endogenous growth theory, investment functions not only as capital accumulation but also as a key driver of innovation, technological advancement, and long-term productivity [15]. Sufficient investment enhances the positive impacts of exports, mitigates the negative effects of inflation, and strengthens the economic role of LFPR. Empirical research by Dufrénot et al. (2016) confirms that sustainable investment has a moderating effect on the relationship between macroeconomic variables and growth [16]. Furthermore, investment in human capital through education and training plays a critical role in achieving inclusive and sustainable growth.

## 2. Research Method

This study employs a quantitative descriptive approach, utilizing secondary numerical time-series data to empirically examine the influence of macroeconomic variables on economic growth and to assess the moderating effect of investment. The study covers Indonesia over the period 1993–2024 using time series data. The secondary data were obtained from credible sources including the World Bank, Bank Indonesia, Badan Pusat Statistik (BPS), and BKPM. The variables in this study are: exports, inflation, labor force participation rate (LFPR/TPAK), investment, and economic growth. For analytical purposes, all variables were transformed into natural logarithmic forms to improve data distribution and ensure linearity in the regression model. To analyze the data, the study utilizes Multiple Linear Regression Analysis to assess the direct effects of the independent variables (exports, inflation, and LFPR) on economic growth and Moderated Regression Analysis using the Residual Method to evaluate the role of investment as

a moderating variable, the residual moderation method is employed. In this method, residual values are generated from a regression between the independent variable and the moderator variable. These residuals are then included in a separate regression model to test the moderating effect. All statistical analyses were conducted using IBM SPSS Statistics version 27. and classical assumption tests (normality, multicollinearity, heteroscedasticity, and autocorrelation) were also performed to ensure model validity.

### 2.1. Multiple Linear Regression Analysis

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

### 2.2. Moderated Regression Analysis using the Residual Method.

$$Z : \alpha + \beta_i + X_i + e_i \quad (1)$$

$$|e| : \alpha + \beta_i Y \dots \quad (2)$$

Description:

Y = Economic Growth (%)

X1 = Export (USD)

X2 = Inflation (%)

X3 = Labour Force Participation Rate (%)

Z = Investation

Xi = Independent Variable (Export, Inflation, and Labour Force Participation Rate)

e = Total of Residual

$\alpha$  = Constanta

$\beta_i$  = Regression Coefficient

$\varepsilon$  = Error

## 3. Results and Discussion

### 3.1. Normality Test

The normality test is used to determine whether the residuals of the regression model are normally distributed. In this study, the normality test was carried out using the Kolmogorov-Smirnov Test. Decision-making criteria are determined based on the value of Asymp. Sig. (2-tailed), where if the value is greater than 0.05, the residuals are said to be normally distributed. Conversely, if the value of Asymp. Sig. <0.05, then the residuals are not normally distributed.

Table 1. Normality Test

	Unstandardized	Residual
N	32	
Asymp. Sig. (2-tailed) <sup>a</sup>	200 <sup>d</sup>	

Source: Data Processing Results, 2025

The normality test is conducted to determine whether the residuals from the regression model are normally distributed. In this study, the Kolmogorov-Smirnov test is employed to assess normality. The decision criterion is based on the Asymp. Sig. (2-tailed) value. If the significance value is greater than 0.05, the residuals are considered to be normally distributed. Conversely, if the Asymp. Sig. value is less than 0.05, the residuals are deemed to deviate from normality.

### 3.2. Multicollinearity Test

The multicollinearity test is used to examine whether there are correlations among the independent variables in the regression model. A well-specified regression model should not exhibit multicollinearity among the independent variables. To detect the presence or absence of multicollinearity, this study refers to the tolerance and Variance Inflation Factor (VIF) values. If the VIF value is less than 10 and the tolerance value is greater than 0.1, it indicates that multicollinearity is not present in the model.

Table 2. Multicollinearity Test

Model	Tolerance	VIF
Export	0.191	5.236
Inflation	0.775	1.290
LFPR	0.678	1.474
Investastion	0.190	5.261

Source: Data Processing Results, 2025

The results of the multicollinearity test presented in Table 4.2 indicate that there is no indication of multicollinearity among the independent variables used in the regression model. The Export variable has a tolerance value of  $0.191 > 0.1$  and a VIF of  $5.236 < 10$ . The Inflation variable has a tolerance of  $0.775 > 0.1$  and a VIF of  $1.290 < 10$ . The Labor Force Participation Rate (LFPR) variable shows a tolerance of  $0.678 > 0.1$  and a VIF of  $1.474 < 10$ . Lastly, the Investment variable has a tolerance of  $0.190 > 0.1$  and a VIF of  $5.261 < 10$ . These results confirm that the variables Economic Growth, Export, Inflation, LFPR, and Investment do not exhibit multicollinearity, as all tolerance and VIF values fall within acceptable thresholds.

### 3.3. Autocorrelation Test

The autocorrelation test aims to determine whether there is a correlation between the error terms in period  $t$  and those in period  $t-1$  in a linear regression model. The initial test for autocorrelation was conducted using the Durbin- Watson (DW) method. The results of the autocorrelation test are presented as follows:

Table 3. Autocorrelation Test

Model	Durbin-Watson
1	1.194

Source: Data Processing Results, 2025

Based on Table 3, the Durbin-Watson test yielded a DW value of 1.194. Referring to the Durbin-Watson critical value table at a 0.05 significance level, with a sample size ( $n$ ) of 32 and four independent variables ( $k = 4$ ), the upper critical value ( $dU$ ) is 1.7323 and the lower critical value ( $dL$ ) is 1.1769. Since the DW value falls within the range  $dL < DW < dU$  ( $1.1769 < 1.194 < 1.7323$ ), the result lies in the inconclusive zone, meaning that the test does not provide a definitive conclusion regarding the presence or absence of autocorrelation. To clarify the result, an additional test was conducted using the Run Test, which aims to determine whether the residuals are random or follow a specific pattern. The results of the Run Test are as follows:

Table 4. Normality Test

	Unstandardized Residual
Asymp. Sig. (2-tailed)	0.208

Source: Data Processing Results, 2025

Based on Table 4, the Run Test produced a significance value of 0.208, which is greater than the 0.05 threshold. Therefore, it can be concluded that the residuals are randomly distributed, indicating that there is no autocorrelation problem in the regression model.

### 3.4. Heteroscedasticity Test

The Spearman's rho test is one of the methods used to detect heteroscedasticity, which is conducted by correlating the independent variables with the residuals. The presence of a significant correlation may indicate heteroscedasticity in the model. The results of the heteroscedasticity test are presented in the following table:

Table 5. Heteroscedasticity Test

		Unstandardized Residual
		Sig. (2-tailed)
Spearman	Export	0.951
	Inflation	0.314
	TPAK	0.128
	investment	0.662

Source: Data Processing Results, 2025

Based on the results presented in Table 5, the significance values for all independent variables exceed 0.05. Therefore, it can be concluded that no signs of heteroscedasticity are present in the model.

### 3.5. Multiple Linear Regression Analysis

This study employs multiple linear regression analysis to test the research hypotheses. The purpose of this analysis is to examine the effect of exports, inflation, and the labor force participation rate (LFPR) on economic growth in Indonesia. The results of the multiple linear regression analysis are presented as follows:

Table 6. Multiple Linear Regression Result Test

Model	Unstandardized Coefficients			
	B	Std.Error	t	Sig.
(Constant)	81.917	8,644	9.477	<0.001
LnX1	0.005	0,002	2.098	0.045
LnX2	-0.110	0,007	-14.738	<0.001
LnX3	-1.122	0,127	-8.806	<0.001

Source: Data Processing Results, 2025

$$nY = 81,917 + 0,005LnX1 - 0,110LnX2 - 1,122LnX3 + e$$

Based on Table 6, the results of the t-test can be summarized as follows:

1. The t-test for the Export variable (X1) yielded a t-statistic of 2.098 with a significance level of 0.045. Since the t- statistic is greater than the t-table value ( $2.098 > 1.701$ ) and the significance level is less than 5% ( $0.045 < 0.05$ ), it can be concluded that the Export variable (X1) has a positive and statistically significant effect on the Economic Growth variable (Y).
2. The t-test for the Inflation variable (X2) resulted in a t-statistic of -14.738 with a significance level of 0.001. In absolute terms,  $|-14.738| = 14.738 > 1.701$ , and the significance level is  $0.001 < 0.05$ . Therefore, it can be concluded that the Inflation variable (X2) has a negative and statistically significant effect on the Economic Growth variable (Y).

The t-test for the Labor Force Participation Rate (TPAK) variable (X3) yielded a t-statistic of -8.806 with a significance level of 0.001. In absolute terms,  $|8.806| = 8.806 > 1.701$ , and the significance level is  $0.001 < 0.05$ . Thus, it can be concluded that the TPAK variable (X3) has a negative and statistically significant effect on the Economic Growth variable (Y).

### 3.6. Simultaneous Test

This test was conducted to examine the simultaneous significance using the F-test. In this study, the significance level used was  $\alpha = 0.05$ . The basis for decision-making was by comparing the significance value with the probability (p- value).

Table 7. Simultaneous Test

F	Sig.
85.906	0.001 <sup>b</sup>

Source: Data Processing Results, 2025

Based on Table 7 above, it can be observed that the calculated F-statistic is 85.906, which is greater than the F- table value of 2.947, with a significance level of 0.001 ( $0.001 < 0.05$ ). Therefore, it can be concluded that the variables Export, Inflation, and Labor Force Participation Rate (TPAK) have a simultaneous and statistically significant effect on Economic Growth.

### 3.7. Coefficient of Determination ( $R^2$ ) Test

The Coefficient of Determination ( $R^2$ ) represents the proportion of the variance in the dependent variable that can be explained by the independent variables. The R-Square value is used for prediction purposes and to determine the extent to which the independent variables, collectively, contribute to explaining the variability of the dependent variable.

Table 8. Simultaneous Test

Model	R Square
1	0,902

Source: Data Processing Results, 2025

The R-Square value presented in Table 8. indicates the extent to which the independent variables influence Economic Growth, with a value of 0.902 or 90.2%. This means that the variables Export, Inflation, and Labor Force Participation Rate (TPAK) collectively explain 90.2% of the variation in Economic Growth. The remaining 9.8% is influenced by other variables not included in this study.

### 3.8. Moderation Test Using the Residual Method

This moderation test is conducted to determine whether the Investment variable hypothesized as a moderating variable can affect the relationship between the independent variable (Export, Inflation, and TPAK) and the dependent variable (Economic Growth). The moderation test was carried out using the residual method.

#### 3.8.1. Moderation Test of the Relationship Between Export and Economic Growth Using the Residual Method

##### 1. Step One

The results of the moderation test with the residual method can be seen from the results of data processing in the table below.

Table 9. Moderation Test Results – Step One for X1 (Export)

Model	Unstandardized Coefficients	
	B	Sig.
(Constant)	5.687	<0.001
Pertumbuhan Ekonomi	-0.528	0.007

Source: Data Processing Results, 2025

Based on the results of the data processing above in table 9, it is known that the Investment variable is accepted as a moderating variable. Based on the requirements set that it is called a moderating variable if the coefficient value is negative and significant. The results of data processing with the residual method obtained a variable coefficient value of -0.528 and a sig. value of 0.007. Since both requirements are met, it can be concluded that investment acts as a moderating variable that can affect the relationship between Export and Economic Growth variables.

##### 2. Step Two

Furthermore, to determine whether the moderating effect of investment strengthens or weakens the relationship between Export and Economic Growth, the standard Beta coefficient is used. The results of the moderation test with the residual method can be seen in the table below.

Table 10. Moderation Test Results – Step Two for X1 (Export)

Model	Standardized Coefficients	
	Beta	Sig.
(Constant)		<0.001
Ekspor	0.895	<0.001

Source: Data Processing Results, 2025

Based on the results of the data processing above in table 10, it is known that the Standardized Coefficients Beta is 0.895 and positive. This indicates that Investment strengthens the effect of Exports on Economic Growth. In other words, the higher the level of Investment, the stronger the positive relationship between Exports and Economic Growth.

#### 3.8.2. Moderation Test of the Relationship Between Inflation and Economic Growth Using the Residual Method

##### 1. Step One

The results of the moderation test with the residual method can be seen from the results of data processing in the table below

Table 11. Moderation Test Results – Step One for X1 (Inflation)

Model	Unstandardized Coefficients	
	B	Sig.
(Constant)	8.318	<0.001
Pertumbuhan Ekonomi	-0.156	0.660

Source: Data Processing Results, 2025

Based on the results of the data processing above in table 11. moderation testing using the residual method, the coefficient value is 0.081 and the significance value is 0.660 in the relationship between the Inflation variable and Economic Growth with Investment as the moderating variable. Referring to the criteria set, a variable can be declared as a moderator if it has a negative and significant regression coefficient ( $p < 0.05$ ). However, in this result, it is known that the coefficient value is actually positive, and the significance level is far above the specified threshold. Thus, it can be concluded that the Investment variable does not act as a moderator in the relationship between Inflation and Economic Growth. That is, the presence of Investment neither strengthens nor weakens the effect of Inflation on economic growth during the study period.

### 3.8.3. Moderation Test of the Relationship Between LFPR and Economic Growth Using the Residual Method

#### 1. Step One

The results of the moderation test with the residual method can be seen from the results of data processing in the table below

Table 12. Moderation Test Results – Step One for X1 (Inflation)

Model	Unstandardized Coefficients	
	B	Sig.
(Constant)	8.318	<0.001
Pertumbuhan Ekonomi	-0.156	0.660

Source: Data Processing Results, 2025

Based on the results of the data processing above in table 12. moderation testing using the residual method, the coefficient value is 0.081 and the significance value is 0.660 in the relationship between the Inflation variable and Economic Growth with Investment as the moderating variable. Referring to the criteria set, a variable can be declared as a moderator if it has a negative and significant regression coefficient ( $p < 0.05$ ). However, in this result, it is known that the coefficient value is actually positive, and the significance level is far above the specified threshold. Thus, it can be concluded that the Investment variable does not act as a moderator in the relationship between Inflation and Economic Growth. That is, the presence of Investment neither strengthens nor weakens the effect of Inflation on economic growth during the study period.

### 3.9. Discussion

1. Export has a positive regression coefficient of 0.005 with a significance level of 0.045. Since the significance value (0.045) is smaller than the alpha level (0.05), hypothesis H1 is accepted. This finding statistically proves that exports have a positive and significant effect on economic growth. In other words, any increase in export activity significantly contributes to boosting national economic growth. This result directly supports the Export-Led Growth (ELG) hypothesis. This theory states that exports are one of the main engines of a country's economic growth. An increase in exports not only increases aggregate demand directly, but also triggers a series of positive multiplier effects. First, exports generate foreign exchange that is crucial to finance the import of capital goods and technology, which are essential for industrial modernization. Second, orientation to global markets encourages domestic industries to achieve economies of scale, improve efficiency, and adopt best production practices to be competitive.
2. Inflation has a regression coefficient of -0.110 with a negative direction and a significance value of 0.001 which is smaller than 0.05. So it can be concluded that H2 is accepted. This means that inflation has a negative and significant effect on economic growth. This result indicates that high inflation can hamper overall economic activity. Inflation increases price uncertainty, reduces people's purchasing power, and drives up production costs for businesses. As a result, household consumption weakens, private investment decreases, and the production process is disrupted, this negatively affecting the rate of national economic growth. This result is in line with the Keynesian theory proposed by John Maynard Keynes. In the Keynesian framework, high inflation, especially the demand-pull inflation type, can lead to imbalances in aggregate demand and supply. When inflation is too high, people's purchasing power decreases, consumption weakens, and businesses become reluctant to expand due to price uncertainty. In addition, Keynes also emphasized the importance of price control to maintain the stability of aggregate demand. In the medium to long term, price instability will undermine the confidence of economic agents and slow down the recovery and growth process.

3. LFPR has a regression coefficient value of -1.122 with a negative direction and a significance value of 0.001 which is smaller than 0.05. It can be concluded that H3 is rejected, meaning that TPAK has a negative and significant effect on economic growth in Indonesia. This result indicates that an increase in labor participation does not necessarily support an increase in national output directly. This phenomenon may occur because an increase in TPAK does not always reflect a real contribution to the economy, especially when the increase is not accompanied by an increase in labor productivity or quality.
4. Simultaneous F test results, the significance value is 0.000 which is smaller than 0.05. So it can be concluded that H4 is accepted., Exports, Inflation, and TPAK have a significant effect simultaneously on economic growth. Exports, inflation, and TPAK are three important indicators that collectively affect the dynamics of a country's economic growth. Exports reflect the competitiveness of domestic products in the international market and are one of the main sources of foreign exchange. When exports increase, so does national income, which in turn can boost economic growth through increased investment and consumption. Inflation, on the other hand, has a complex relationship with economic growth.
5. Investment variable meets the criteria as a moderating variable in the relationship between the independent variable (Export) and the dependent variable (Economic Growth). This is indicated by the regression coefficient value of - 0.528, which is negative, and the significance level of 0.007, which is smaller than the significance limit of 0.05. In accordance with the criteria in the residual method, a variable is said to be valid as a moderator if the coefficient value is negative and the significance is <0.05. So, from this result, it can be concluded that Investment statistically acts as a moderating variable in the model used. Furthermore, to see the direction and strength of the moderating effect, further analysis is carried out which is displayed in Table 4.11. From the table, it is known that the Standardized Coefficients Beta value is 0.895 and is positive. This shows that Investment as a moderating variable strengthens the relationship between Export and Economic Growth. This means that the higher the level of investment, the stronger the positive effect of exports on economic growth.
6. Moderation Test results with the Residual Test method, it is known that the coefficient value is negative -0.156 and the significance level is 0.660, which is greater than the significance limit of 0.05. Therefore, this result does not qualify as statistically significant moderation. Thus, it can be concluded that the Investment variable does not moderate the relationship between Inflation and Economic Growth. Theoretically, this result is in line with the Keynesian view and the theory of investment uncertainty. In the Keynesian framework, high inflation creates price uncertainty and undermines business confidence, which in turn restrains consumption and investment decisions. When input costs are unstable and purchasing power declines, firms will tend to delay expansion and capital expenditure, so investment fails to play its role as a counterweight to inflationary pressures. Furthermore, the theory of investment under uncertainty also explains that in a situation of high inflation, uncertainty over future prices and the real value of investment returns will increase. According to this theory, firms will delay investment until there is greater certainty about the macroeconomic outlook. This is exacerbated if inflation pushes the central bank to raise interest rates, increasing the cost of capital and decreasing investment activity.
7. Moderation Test results with the Residual Test method, it is known that the coefficient value is negative -0.008 and the significance level is 0.983, which is greater than the significance limit of 0.05. Therefore, this result does not qualify as statistically significant moderation. Thus, it can be concluded that the Investment variable does not moderate the relationship between TPAK and Economic Growth. Theoretically, this result can be explained through the Lewis Dual Sector Model approach, which states that an increase in the labor force will not have a significant impact on output if there is no transition from the traditional sector to the modern sector. In the Indonesian context, the majority of the increase in TPAK still occurs in the informal sector or sectors with low productivity. Without the support of investment directed at labor-intensive sectors and human capital development, the surplus of labor will only increase the number of unproductive workers, and not optimally encourage economic growth. Economically, this can be explained by the fact that although TPAK reflects the availability of labor in a country, investment does not always play a direct role in optimizing this labor to encourage economic growth, especially in the context of the Indonesian economy. This can occur due to a mismatch between the type of investment and the quality and skills of the available workforce

#### 4. Conclusions

Based on the research findings on the influence of Export, Inflation, and Labor Force Participation Rate (LFPR) with Investment as a moderating variable in Indonesia, several conclusions can be drawn. The study reveals that exports have a positive and significant effect on economic growth at a 5% significance level ( $\alpha = 0.05$ ) or with a 95% confidence level. Conversely, inflation has a negative and significant effect on economic growth at the same significance level. Similarly, the Labor Force Participation Rate (LFPR) also shows a negative and significant effect on economic growth. Furthermore, exports, inflation, and LFPR simultaneously have a significant effect on economic growth. Regarding the moderating role of investment, the results indicate that investment strengthens the relationship between exports and economic growth. However, investment does not moderate the relationship between inflation and economic growth, nor does it moderate the relationship between LFPR and economic growth.

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