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The Effect of Structural Transformation and Labor Productivity on the Inclusivity of Economic Growth Among Provinces in Indonesia in Supporting the Achievement of Sdg 8

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ABSTRACT

High economic growth is not always accompanied by an equitable distribution of development benefits. This condition is influenced by differences in the characteristics of the economic structure and the level of labor productivity in each province, which ultimately determine the extent to which economic growth is inclusive. Based on these conditions, this study was conducted to identify the influence of structural transformation and labor productivity on inclusive economic growth in Indonesia. This study applies a quantitative method using panel data covering 34 provinces during the period 2015–2024. The level of inclusive economic growth is represented by the Poverty Equivalent Growth Rate (PEGR). Meanwhile, changes in economic structure are identified using the Structural Change Index (SCI), while labor productivity is calculated based on the natural logarithm of the ratio of GRDP at constant prices to the number of employed people. The relationship between variables is then analyzed through panel data regression. The determination of the best model is carried out by considering the results of the Chow Test, the Hausman Test, and the Lagrange Multiplier Test. Based on the estimation results, structural transformation is proven to have a negative and significant impact on inclusive economic growth. In contrast, labor productivity does not show a significant effect partially. However, when both variables are analyzed simultaneously, structural transformation and labor productivity are shown to have a significant impact on inclusive economic growth.

Keywords: Inclusive Economic Growth, Structural Transformation, Labor Productivity, PEGR, SCI, Panel Data.

INTRODUCTION

Economic growth can be used as a measure of development success, as a region's ability to increase the production of goods and services is reflected in its economic development. When the economy grows sustainably, various benefits are expected to be felt by the community

through increased income, job creation, increased productivity, and improved welfare. On the other hand, increased economic activity does not automatically ensure that development outcomes are enjoyed equally by all. Growth that focuses solely on increasing output without equalizing income distribution, reducing poverty, and expanding employment opportunities has the potential to result in exclusionary growth. Improving the quality of economic growth needs to be a primary concern, particularly in the implementation of regional development that faces differences in social, economic, and regional characteristics.

Amid global turmoil, the Indonesian economy continues to demonstrate strong resilience. The Central Statistics Agency (BPS) recorded that the Indonesian economy grew by 5.03% in 2024, relatively stable compared to the 5.05% growth in 2023. This growth was supported by household consumption, investment, exports, and manufacturing activity (BPS, 2025b). This achievement demonstrates Indonesia's ability to maintain growth momentum despite facing various global challenges. However, this national economic growth does not fully reflect the economic conditions across Indonesia, as there are significant differences in economic growth rates between provinces.

The heterogeneity of economic growth between provinces can be seen from the differences in economic achievements in 2024. North Maluku Province recorded the highest economic growth of 13.73%, while the Bangka Belitung Islands Province only grew by 0.77% (BPS, 2025c; BPS, 2025d). North Maluku's economic growth was primarily driven by the development of the nickel-based processing industry as part of the mineral downstream process, while the economic slowdown in the Bangka Belitung Islands was related to the condition of the tin mining sector and various issues affecting regional economic activity. These differences in growth rates indicate that economic development between provinces is taking place with different characteristics and speeds. The structure of the economic sectors that are the sources of growth also differs, so the impact of growth on society cannot be assumed to be the same in each region.

These differences in growth rates become even more significant when linked to indicators of social welfare. High economic growth in a region is not always accompanied by low levels of poverty and inequality. For example, North Maluku recorded the highest national economic growth in 2024, while Central Papua still had a poverty rate of 27.60% in September 2024 (BPS, 2025e). On the other hand, income inequality remains a problem in various regions. Seven provinces recorded income inequality exceeding the national average of 0.379, while the Bangka Belitung Islands demonstrated the lowest level of inequality with a Gini ratio of 0.244 (Salim, 2025). This situation demonstrates that increased economic activity does not automatically result in equitable distribution of development benefits.

The employment sector also presents similar challenges. Indonesia's Open Unemployment Rate (TPT) in February 2025 remained at 4.76% (BPS, 2025a). This condition indicates that economic expansion has not been fully accompanied by the creation of broad employment opportunities for the entire workforce. The dominance of capital-oriented sectors can drive significant increases in production, but their absorption capacity for labor tends to be

limited. The success of economic growth is not solely measured by the magnitude of output produced, but also by the extent to which such growth creates productive jobs and promotes improved public welfare.

This issue underpins the importance of the concept of inclusive economic growth. Inclusive economic growth emphasizes that the benefits of growth should be felt more broadly by society, including low-income groups. This concept is not only oriented towards increasing output but also considers the ability of growth to reduce poverty, reduce inequality, and expand opportunities for people to participate in economic activities (Irmawati & Winario, 2025). Thus, evaluating development through inclusive economic growth provides a broader perspective than using GRDP growth as an indicator alone.

One measure of the inclusiveness of economic growth introduced by Kakwani and Son (2008) is the Poverty Equivalent Growth Rate (PEGR). PEGR considers both the level of economic growth and the distribution of the benefits of growth to society, particularly the poor. This approach is important because economic growth at the same rate can have different impacts on poverty if the distribution of the benefits of growth differs. Using PEGR, economic growth can be assessed based on whether it provides relatively greater benefits to the poor or whether it is enjoyed more by high-income groups (Kakwani & Son, 2008).

The quality of economic growth is also influenced by structural transformation, a key factor in economic change. Structural transformation reflects a shift in economic activity from low-productivity sectors to sectors capable of generating greater productivity and added value. This change is generally seen in the shifting roles of the agriculture, manufacturing, and services sectors in the economy during the development process. Structural transformation is a crucial element in development because the transfer of resources to more productive sectors can boost overall productivity and strengthen economic performance.

The Indonesian economy continues to experience structural changes as a consequence of industrialization, modernization, technological development, and changing consumption patterns. In 2024, the manufacturing sector will remain a key player in Indonesia's GDP, contributing approximately 18–19%, followed by trade and the agriculture, forestry, and fisheries sectors. However, these structural changes are not uniform across provinces. Some regions, such as North Maluku and Central Sulawesi, have seen a significant increase in the contribution of the manufacturing industry due to the development of mineral-based industries and downstreaming policies, while other provinces remain relatively dependent on agriculture and the extractive sector (Nisa et al., 2025).

Andriansyah et al. (2023) showed that structural changes have occurred in various provinces in Indonesia and have influenced regional economic growth. These results indicate that changes in sectoral composition are a crucial component of regional development dynamics. However, changes in economic structure are not always synonymous with improvements in development quality. Shifting economic activity toward the industrial or service sectors, for example, may not necessarily result in inclusive growth if those sectors are capital-intensive, have low local economic linkages, or are unable to absorb a sufficient

workforce. Therefore, the magnitude of changes in economic structure needs to be viewed not only in terms of shifts in sectoral composition but also in terms of their ability to generate broader economic benefits.

In this study, structural transformation is measured using the Structural Change Index (SCI). This index is used to illustrate the magnitude of changes in economic structure based on changes in the contributions of economic sectors between periods. The use of the SCI allows for a more systematic comparison of structural transformations between provinces. However, the SCI essentially only illustrates the magnitude of changes in economic structure and does not indicate whether these changes lead to more productive sectors or provide more equitable benefits. Therefore, the influence of structural transformation on inclusive economic growth needs to be analyzed alongside productivity factors.

Labor productivity also determines the quality of economic growth through the workforce's ability to produce output. At the regional level, this indicator can be represented by the ratio of GRDP at constant prices to the number of employed people (Junaedi et al., 2026). Higher productivity allows output to be increased without a commensurate increase in the workforce, thereby strengthening regional competitiveness and economic capacity.

However, labor productivity in Indonesia still shows disparities between provinces. According to data from the Ministry of Manpower of the Republic of Indonesia, national labor productivity increased from IDR 87.96 million per worker in 2023 to IDR 89.33 million in 2024. At the provincial level, there are significant differences. DKI Jakarta is one of the provinces with the highest labor productivity, while Papua Highlands has a much lower productivity level. The Riau Islands also have relatively high productivity, around IDR 200.12 million per worker per year, which is related, among other things, to the characteristics of the export-oriented manufacturing industry (Azighah et al., 2026).

Variations in labor productivity between regions can be influenced by human resource quality, education and skill levels, technological mastery, investment, infrastructure availability, and the composition of economic sectors (Fauzi et al., 2026). Regions with high-value-added economic sectors supported by a workforce with appropriate skills tend to have higher productivity. Conversely, the dominance of low-productivity sectors can limit aggregate productivity gains even if those sectors are capable of absorbing a large workforce.

Theoretically, increased labor productivity can support inclusive economic growth by increasing income and creating productive employment opportunities. However, this relationship is not always automatic. Productivity increases that primarily stem from capital intensification, automation, or the use of labor-saving technologies can increase output without generating a commensurate increase in employment opportunities. Conversely, productivity increases accompanied by improvements in labor quality and a reallocation of labor toward high-value-added sectors have the potential to have broader impacts on income and welfare (Zahra & Prabowo, 2026). Therefore, labor productivity is a relevant factor in explaining variations in the inclusiveness of economic growth across provinces.

The link between structural transformation, labor productivity, and inclusive economic growth is also relevant to Sustainable Development Goal (SDG) 8, particularly Target 8.2, which emphasizes increasing economic productivity through diversification, technological advancement, innovation, and the development of high-value-added sectors (Ponto, 2023). High-quality structural transformation is expected to shift resources toward more productive sectors, while increased labor productivity is expected to enhance the workforce's capacity to generate added value. If both processes occur inclusively, increased economic output can be accompanied by increased income and employment opportunities.

Although studies on structural transformation, labor productivity, and economic growth in Indonesia have progressed, there are still limitations in research that integrates these three aspects within an inclusive economic growth framework. Previous research on structural transformation generally treats economic growth as the outcome variable, while research on inclusive economic growth has focused more on factors such as per capita income, investment, education spending, health spending, and other socioeconomic indicators. Therefore, there is still room for research to examine whether changes in economic structure and labor productivity can explain variations in the inclusiveness of economic growth across provinces in Indonesia.

This research gap is increasingly relevant because structural transformation and labor productivity are interrelated processes. Structural transformation reflects changes in the composition of economic sectors, while labor productivity reflects the ability of labor to generate added value. Transformation toward more productive sectors should increase aggregate productivity if the workforce is able to move and adapt to the needs of those sectors. Conversely, structural transformation that is not accompanied by improvements in labor productivity and quality can result in less inclusive growth. Therefore, analyzing these two variables simultaneously can provide a more comprehensive understanding of the determinants of inclusive economic growth.

The diversity of economic characteristics across Indonesian provinces provides a strong empirical context for testing this relationship. Each province has a different composition of economic sectors, level of industrialization, labor productivity, poverty levels, and inequality. These differences allow research to identify whether provinces with greater economic structural change and higher labor productivity also have more inclusive economic growth rates. The use of interprovincial panel data also allows for simultaneous analysis of interregional variation and changes over time, allowing for a more comprehensive examination of the relationships between variables.

Based on this description, this study examines the influence of structural transformation and labor productivity on inclusive economic growth in 34 Indonesian provinces. Structural transformation is represented by the Structural Change Index (SCI), labor productivity by the ability to generate added value, and growth inclusiveness is measured by the Poverty Equivalent Growth Rate (PEGR). The research findings are expected to enrich empirical evidence on the role of changes in economic structure and productivity in achieving growth that is not only high but also more equitable.

RESEARCH METHODS

This study employs a quantitative approach with an explanatory design to examine the relationship between structural transformation and labor productivity and inclusive economic growth. Panel data regression was chosen because the observations encompass both inter-provincial and inter-temporal dimensions. The study sample comprised 34 provinces during 2015–2024. This coverage was maintained to maintain data consistency throughout the study period, given that regional expansion in Papua occurred after the observation period.

Research data was obtained from secondary sources, primarily the Central Statistics Agency (BPS), which includes the ADHK GRDP by province and industry, the number of employed people, and poverty data to measure inclusive economic growth. The conceptual basis for SDG 8, particularly Target 8.2, refers to the Indonesian SDGs document published by Bappenas. All data was collected through documentation, then processed and compiled as panel data for analysis.

This study involves one dependent variable and two independent variables. Inclusive economic growth (Y) is placed as the dependent variable and is represented by the Poverty Equivalent Growth Rate (PEGR). Meanwhile, structural transformation (X_1) and labor productivity (X_2) act as independent variables, which are measured using the Structural Change Index (SCI) and the natural logarithm of GRDP ADHK per working population, respectively.

Table 1. Operationalization of Research Variables

Variables	Proxy	Measurement
Inclusiveness of Economic Growth (Y)	PEGR	*Poverty Equivalent Growth Rate*
Structural Transformation (X1)	SCI	$\frac{1}{2} \Sigma\|Sjt - Sj(t-1)\|$
Labor Productivity (X2)	LnPTK	Ln(ADHK GRDP/Working Population)

Panel data estimation was analyzed using the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The most appropriate model was determined based on the Chow, Hausman, and Lagrange Multiplier (LM) tests. Model feasibility was then examined through multicollinearity, heteroscedasticity, and autocorrelation tests. Partial effects were tested using the t-test, while joint effects were tested using the F-test. The model's apparent power on variations in inclusive economic growth was determined using the Adjusted R^2. All processing and testing processes were performed using EViews.

RESULTS AND DISCUSSION

A. Classical Assumption Test

1. Multicollinearity Test

Multicollinearity is tested to determine whether there is a strong linear relationship between the independent variables in the regression model.

Table 2. Multicollinearity Test Results

Variance Inflation Factors
Date: 08/08/26 Time: 12:40
Sample: 2013 2420
Included observations: 369

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.027312	1070.414	NA
X1	0.034503	1.388042	1.002095
X2	8.32E-05	1071.889	1.002095

Sumber: Hasil Output Eviews 12 (2026)

Referring to Table 2, the Centered VIF value for structural transformation (X1) and labor productivity (X2) is recorded as the same, namely 1.002095. Because the value is well below the threshold of 10, the model does not show any indication of multicollinearity. This means that the two independent variables have a low linear relationship and can be analyzed together to explain inclusive economic growth.

2. Heteroscedasticity Test

Heteroscedasticity testing is performed to determine whether residual variance differs between observations in a regression model. In this study, this condition was examined using the Glejser method .

Table 3. Heteroscedasticity Test Results

Heteroskedasticity Test: Glejser			
F-statistic	79.06301	Prob. F(2,366)	0.0000
Obs*R-squared	111.3253	Chi-Square Prob.(2)	0.0000
Scaled explained SS	202.2441	Chi-Square Prob.(2)	0.0000

Source: Eviews 12 Output Results (2026)

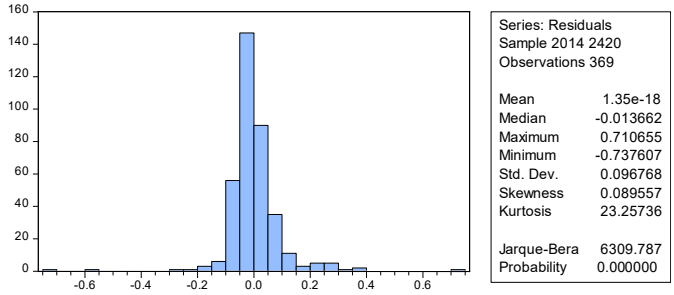
Referring to Table 3, the Glejser method obtained an Obs*R-squared probability value of 0.0000, which is below 0.05. This result indicates heteroscedasticity, so the residual variance does not show stability between

observations. Therefore, adjustments are needed to ensure more reliable estimation results and standard errors.

3. Normality Test

The distribution of residuals in the regression model was examined using a normality test to ensure its conformity to the normality assumption. In this study, this test was performed using the Jarque-Bera test using EViews 12.

Table 4. Normality Test Results



Source: EViews 12 Output Results (2026)

Referring to Table 4, the probability value of 0.000000 is recorded as lower than 0.05. This condition indicates that H_0 is rejected and H_a is accepted, so the model residuals can be stated as not following a normal distribution.

4. Autocorrelation Test

Autocorrelation is tested to determine whether there is a relationship between residuals from one period to the next. A good model should be free of this pattern to ensure accurate estimation results. The test was performed using the Breusch-Godfrey Serial Correlation LM Test in EViews 12 .

Table 5. Autocorrelation Test Results

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	6.226471	Prob. F(2,364)	0.0022
Obs*R-squared	12.20640	Chi-Square Prob.(2)	0.0022

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 08/08/26 Time: 12:41
Sample: 2014 2420
Included observations: 369
Presample and interior missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.018779	0.163518	-0.114841	0.9086
X1	0.013522	0.185122	0.073045	0.9418
X2	0.000965	0.009024	0.106988	0.9149
RESID(-1)	0.124561	0.062894	1.980488	0.0484
RESID(-2)	-0.117489	0.053080	-2.213428	0.0275

R-squared	0.033080	Mean dependent var	1.35E-18
Adjusted R-squared	0.022454	S.D. dependent var	0.096768
S.E. of regression	0.095675	Akaike info criterion	-1.842255
Sum squared resid	3.331970	Schwarz criterion	-1.789264
Log likelihood	344.8961	Hannan-Quinn criter.	-1.821205
F-statistic	3.113235	Durbin-Watson stat	1.858115
Prob(F-statistic)	0.015398		

Source: EViews 12 Output Results (2026)

Based on Table 5, testing using the Breusch-Godfrey Serial Correlation LM Test produces a probability value of Obs*R-squared of 0.0022, which is below 0.05. These results indicate that H_0 is rejected and H_a is accepted, so it can be stated that the regression model experiences autocorrelation.

This finding indicates a residual relationship between observation periods. This condition can arise due to the use of time-based panel data, where economic conditions in one year are still influenced by developments in the previous year. Changes in economic structure, labor productivity, and the level of growth inclusiveness can also show continuous patterns from one period to the next.

The estimation results show that the probability of RESID(-1) is 0.0484 and RESID(-2) is 0.0275, both of which are below 0.05. This finding strengthens the indication of a residual relationship in the first and second lags. The Durbin-Watson value of 1.858115 also indicates the presence of autocorrelation symptoms. However, the final determination still refers to the results of the Breusch-Godfrey LM Test as the basis for testing autocorrelation in this study.

The research model is indicated to experience autocorrelation. This condition requires careful interpretation of the estimation results. To improve the reliability of hypothesis testing, estimation methods or standard error corrections that can address the effects of autocorrelation can be applied.

B. Panel Data Regression Model Selection

This study uses panel data regression to examine the relationship between variables by combining cross -*sectional* and *time series data* . Furthermore, the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) are compared to determine the most appropriate approach based on the data characteristics.

1. Chow Test

The Chow test is applied to determine the more appropriate model between the Fixed Effect Model (FEM) and the Common Effect Model (CEM). Model selection refers to the Cross-Section Chi-Square probability value resulting from the test.

Table 6. Chow Test Results

Redundant Fixed Effects Tests
Equation: MODEL_FEM
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.143956	(63,253)	0.0000
Cross-section Chi-square	136.894175	63	0.0000

Source: Eviews 12 Output Results (2026)

The cross-section chi-square yielded a probability of 0.0000, less than 0.05. These results indicate that the Fixed Effect Model (FEM) is more appropriate than the Common Effect Model (CEM) in this study.

2. Hausman test

The choice between the Fixed Effect Model (FEM) and the Random Effect Model (REM) is determined through the Hausman Test, with the final decision referring to the Random Cross-Section probability value.

Table 7. Hausman Test Results

Correlated Random Effects - Hausman Test
Equation: MODEL_REM
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.887274	3	0.4093

Source: Eviews 12 Output Results (2026)

Referring to Table 7, the Hausman Test yields a Random Cross-Section probability value of 0.4093, which exceeds the 0.05 significance level. Thus, the Random Effects Model (REM) was chosen because it was deemed more appropriate to the characteristics of the research data.

3. Lagrange Multiplier (LM) Test

The suitability of the Random Effects Model (REM) compared to the Common Effects Model (CEM) can be determined using the Lagrange Multiplier (LM) test. The decision-making benchmark is the Breusch-Pagan (BP) probability, with values above 0.05 favoring the CEM, while values below 0.05 favor the use of the REM.

Table 8. Lagrange Multiplier Test Results

Lagrange Multiplier Tests for Random Effects
Null hypotheses: No effects
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	20.58747 (0.0000)	37.91392 (0.0000)	58.50139 (0.0000)
Honda	4.537341 (0.0000)	6.157428 (0.0000)	7.562344 (0.0000)
King-Wu	4.537341 (0.0000)	6.157428 (0.0000)	7.079445 (0.0000)
Standardized Honda	4.753170 (0.0000)	7.269922 (0.0000)	2.518828 (0.0059)
Standardized King-Wu	4.753170 (0.0000)	7.269922 (0.0000)	4.907028 (0.0000)
Gourieroux, et al.	--	--	58.50139 (0.0000)

Source: Eviews 12 Output Results (2026)

Referring to Table 4.8, the Lagrange Multiplier (LM) test yields a Breusch-Pagan probability of 0.0000, which is below 0.05. This finding leads to the selection of the Random Effects Model (REM) as the most appropriate model for use in this study.

5.3.3 Panel Data Regression Analysis

Panel data regression is used by combining time series and cross-section dimensions. Based on a series of Chow, Hausman, and Lagrange Multiplier tests, the Random Effects Model (REM) was determined to be the most appropriate estimation model for this study.

Table 9. Panel Data Regression Results

Dependent Variable: Y
Method: Least Squares
Date: 08/08/26 Time: 12:39
Sample (adjusted): 2014 2420
Included observations: 369 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.

C	0.046974	0.165264	0.284237	0.7764
X1	-2.929461	0.185749	-15.77104	0.0000
X2	-0.001392	0.009121	-0.152574	0.8788

Sumber: Hasil Output Eviews 12 (2026)

Table 9 presents the results of regression estimates regarding the relationship between structural transformation (X1) and labor productivity (X2) on inclusive economic growth (Y) in provinces in Indonesia during 2013–2024. Using 369 observations, the Least Squares estimation results produce the following regression equation:

$$\mathbf{Y = 0.046974 - 2.929461X1 - 0.001392X2 + \varepsilon}$$

Information:

Y: Inclusiveness of economic growth (*Poverty Equivalent Growth Rate* / PEGR)
C: Constant
X1: Structural *Change Index* (SCI)
X2 : Labor productivity
i : Province i
t : Period t
ε : *Error term*

The estimation results can be explained through the following interpretation:

1. The constant (C) of 0.046974 is positive. This means that when structural transformation (X1) and labor productivity (X2) remain unchanged, the inclusive economic growth rate (Y) is estimated to be 0.046974 .
2. The structural transformation coefficient (X1) of -2.929461 indicates a negative relationship with inclusive economic growth. This means that every one-unit increase in structural transformation, when labor productivity is assumed to be constant, will be followed by a decrease in the inclusiveness of economic growth of 2.929461 units. Conversely, a decrease in structural transformation with other factors remaining constant is estimated to increase inclusiveness by 2.929461 units .
3. The labor productivity coefficient (X2) of -0.001392 indicates a negative relationship with inclusive economic growth. Assuming structural transformation remains constant, each unit increase in labor productivity is estimated to decrease the inclusiveness of economic growth by 0.001392 units. Conversely, a one-unit decrease in labor productivity is estimated to increase inclusiveness by 0.001392 units, with other variables held constant.

5.3.4 Hypothesis Testing

1. Results of the Determination Coefficient Test (R^2)

According to Ghozali (2018), the coefficient of determination (R^2) is used to measure the ability of an independent variable to explain changes in a dependent variable. Its value ranges from 0 to 1. A low R^2 value indicates limited model explanatory power, while a value approaching 1 indicates that more variation in the dependent variable can be explained by the independent variable.

Table 4.10. Results of the Determination Coefficient (R^2)

R-squared	0.405352	Mean dependent var	-0.027738
Adjusted R-squared	0.402103	SD dependent var	0.125488
SE of regression	0.097032	Akaike info criterion	-1.819456
Sum squared residual	3.445962	Schwarz criterion	-1.787661
Log likelihood	338.6897	Hannan-Quinn criter.	-1.806826
F-statistic	124.7452	Durbin-Watson stat	1.667172
Prob(F-statistic)	0.000000		

Sumber: Hasil Output Eviews 12 (2026)

Based on Table 4.10, the Adjusted R-squared value of 0.402103 or 40.21% indicates that structural transformation (X1) and labor productivity (X2) together are able to explain 40.21% of the variation in inclusive economic growth (Y). The remaining 59.79% is influenced by other factors outside the model. Referring to Wooldridge (2002), there is no minimum R-squared value that is an absolute requirement for the feasibility of a regression model. Thus, the Adjusted R-squared value indicates that the model has sufficient explanatory power, although there are still other factors that determine the inclusiveness of economic growth.

2. Simultaneous Test Results (F Test)

According to Ghozali (2018), the simultaneous test (F test) is used to see whether all independent variables together have a linear influence on the dependent variable.

Table 4.11. Simultaneous Test Results (F)

R-squared	0.405352	Mean dependent var	-0.027738
Adjusted R-squared	0.402103	S.D. dependent var	0.125488
S.E. of regression	0.097032	Akaike info criterion	-1.819456
Sum squared resid	3.445962	Schwarz criterion	-1.787661
Log likelihood	338.6897	Hannan-Quinn criter.	-1.806826
F-statistic	124.7452	Durbin-Watson stat	1.667172

Prob(F-statistic)	0.000000

Source: Eviews 12 Output Results (2026)

The F-statistic has a probability value of 0.000000, lower than 0.05. Thus, H_0 is rejected and H_a is accepted, which means that structural transformation (X1) and labor productivity (X2) together have a significant effect on inclusive economic growth (Y).

3. Partial Test Results (T-Test)

According to Ghozali (2018), the t-test is used to identify the influence of each independent variable on the dependent variable. A probability value <0.05 indicates a partial influence, while a value >0.05 indicates the influence is insignificant.

Table 4.12. Partial Test Results (T)

Dependent Variable: Y
Method: Least Squares
Date: 08/08/26 Time: 12:39
Sample (adjusted): 2014 2420
Included observations: 369 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.046974	0.165264	0.284237	0.7764
X1	-2.929461	0.185749	-15.77104	0.0000
X2	-0.001392	0.009121	-0.152574	0.8788

Source: Eviews 12 Output Results (2026)

Based on Table 4.12, the partial test results can be explained as follows:

1. Structural transformation (X1) has a probability of 0.0000 < 0.05, so H_{01} is rejected and H_{a1} is accepted. This means that structural transformation has a significant negative effect on inclusive economic growth. The coefficient of -2.929461 indicates that an increase in structural transformation tends to be followed by a decrease in the level of inclusiveness of economic growth .
2. Labor productivity (X2) has a probability of 0.8788 > 0.05, so H_{02} is accepted and H_{a2} is rejected. Thus, labor productivity is not proven to have a significant effect on inclusive economic growth. The coefficient of -0.001392 indicates a negative relationship, but the effect is not statistically significant.

CONCLUSION AND SUGGESTIONS

1. Structural transformation has been shown to have a negative and significant impact, indicating that the shift in economic structure has not been able to distribute the benefits of growth evenly.
2. Labor productivity does not show a significant impact, so that productivity increases have not directly encouraged equitable distribution of economic benefits.
3. Simultaneously, structural transformation and labor productivity influence inclusive economic growth, although this influence is also influenced by other factors outside the model.

The government needs to encourage structural transformation toward labor-intensive, high-value-added sectors that can expand the distribution of economic benefits. Improving workforce quality can be achieved through education, training, and skills development aligned with the needs of each region. Future research can expand the variables and apply alternative indicators and methods to achieve a more comprehensive understanding of the determinants of inclusive economic growth.

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