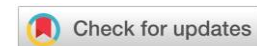


Analysis of the Impact of Value Added in the Manufacturing Industry on Economic Growth in Indonesia

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ABSTRACT

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This study investigates the impact of specific factors on Indonesia's economic growth across different time frames using the ARDL analysis model in Eviews 10 software. The research reveals that in the long term, increases in value added from the manufacturing sector and foreign direct investment are associated with positive and notable effects on economic growth. In the short term, enhancements in manufacturing value-added, government expenditure, population growth, and foreign direct investment contribute positively and significantly to economic growth. Conversely, inflation negatively influences economic growth in the short term. These findings are instrumental in comprehending Indonesia's economic growth drivers and provide valuable insights for policymakers and stakeholders aiming to devise effective strategies to foster economic development.

INTRODUCTION

Economic growth serves as an indicator to monitor the fluctuations in a country's economy over a one-year or quarterly period, which can experience both declines and increases. When a country undergoes economic growth, it generally fosters stability in commodity prices and approaches full employment conditions. This trend has been noted in numerous countries worldwide, including Indonesia. Economic growth is typically assessed using Gross Domestic Product (GDP), quantifying the total value of goods and services produced. Based on Indonesia's GDP, the economy has grown in recent years. However, from 2019 to 2020, there was an economic contraction due to the Covid-19 pandemic affecting several countries, including Indonesia.

Indonesia's GDP (Gross domestic product) development from 1961 to 2021 has displayed vacillations that reflect financial shakiness. The pinnacle Gross domestic product development happened in 1968 at 10.92%, while the absolute bottom was kept in 1998 with a constriction of 13.13%. The year 2020 denoted an introductory period as

Indonesia's Gross domestic product shrunk by 2.7% because of the effect of the Coronavirus pandemic. Nonetheless, the following year, 2021, saw a positive development pattern of 3.69% in Gross domestic product. To accomplish and support long-haul financial development, it is essential to comprehend the affecting variables and relieve hindrances to development. The Indonesian government has carried out different approaches to help with monetary recuperation post-Coronavirus, including procedures to improve esteem, including the assembly area through downstreaming, import replacement, and coordinating the modern area into worldwide stock chains.

Indonesia's economic transformation from the post-independence recovery period to the current era of globalization, including the development of the manufacturing sector, has been a major driver of economic growth. Besides significantly contributing to GDP, the manufacturing sector also holds substantial potential to enhance national economic competitiveness and reduce dependence on the primary industry. Overall, Indonesia's manufacturing sector has undergone a significant transformation from its early stages of industrialization to adapting to global challenges and technological advancements in recent years.

Based on research by Behun et al. (2018), there is a significant and positive correlation between the added value of the manufacturing industry and economic growth. This positive influence arises due to increased productivity in the manufacturing industry, which multiplies the Indonesian economy by increasing exports of foreign exchange, employment, taxes, and excise. In their research, Su and Yao (2017) stated that the manufacturing industrial sector is vital in increasing technology accumulation, followed by increased utilization of human resources and economic institutions.

Moreover, the advancement of economic conditions heavily relies on developing production factors such as capital (through investments and government expenditure), labor, and technology (Hellen et al., 2018). Therefore, economic growth, as reflected in the expansion of Gross Domestic Product (GDP), is closely associated with government spending on public goods, domestic investment, foreign direct investment (FDI), and other factors. During the Covid-19 pandemic, Indonesia experienced a decline in economic growth. As stated by the Coordinating Minister for Economic Affairs, Airlangga Hartarto, on February 8, 2022, specific sectors and factors played a beneficial role in supporting Indonesia's economic recovery in 2021 (Limanseto, 2022). Hence, this study aims to examine the impact of manufacturing value added, government expenditure, population growth, inflation, and foreign direct investment (FDI) on Indonesia's economic growth from 1961 to 2021. The research methodology used in this study is the Autoregressive Distributed Lag (ARDL) approach, which evaluates both short-term dynamics and long-term cointegration and causal relationships among these variables.

LITERATURE REVIEW

The ascent in GDP (Gross domestic product) as a proportion of monetary development, whether at a neighborhood or public level, doesn't solely depend on the general populace size and doesn't require a change in the financial system (Athallah et al., 2013). Because GDP calculates the value of products produced within a specific period using a flow concept, GDP growth is a measure used to evaluate economic growth, where the value of products from previous periods is not included in the calculation (Soleh, 2014).

According to the definition provided by the Central Bureau of Statistics (2017), an industry is a business entity that transforms raw materials into products with economic value through mechanical and chemical processes or human labor. On the other hand, manufacturing is a series of processes aimed at converting raw materials into physical products using energy and various other resources such as human labor, machinery, and supporting equipment. This process includes stages like product design, raw material selection, production planning, manufacturing processes, product quality assurance, as well as product management and marketing.

Hellen et al. (2018). As indicated by the State Spending Plan of the Republic of Indonesia, government expenditures are arranged into two essential classes. The first is routine spending, which covers annual expenditures. The second category is development spending, which comprises government expenditures supporting physical and non-physical development to enhance community economic welfare. According to research by Pratama and Utama (2019), expenditures on administration and venture capital impact economic growth.

Rochaida (2016). Populace growth is portrayed as the peculiarity of expanding the number of people inside a characterized period and topographical region, impacted by variables like ripeness (births), mortality (passings), and relocation (development of individuals). According to Adam Smith in Rochaida (2016), population growth can positively contribute to economic growth in a region. Inflation is a condition where prices of goods generally increase over a specific period (Yuniarti & Khoirudin, 2023). Inflation increases when domestic commodity prices rise, followed by a decrease in exporter interest in domestic goods, ultimately reducing trade surplus (Faudzi & Asmara, 2023). During inflationary periods, national income tends to be higher than the goods and services produced.

Foreign direct investment (FDI) involves the transfer of financial resources from one country to another to achieve profit for investors (Rizky et al., 2016). A rise in FDI is anticipated to boost job opportunities. Kurniawan and A'yun (2022) underscore that Indonesia considers export-oriented FDI pivotal for economic growth.

A country's success in economic development is determined by its ability to grow its economy, as evidenced by its gross domestic product and gross regional product. To achieve high economic growth requires the involvement of various financial sectors that influence this development. However, it cannot be denied that every country faces economic challenges from within and outside, which can hurt its economic growth. From several previous studies, it is possible that the added value of the manufacturing industry, government spending, and foreign investment positively influence economic growth in Indonesia.

METHOD

This study examines Indonesia's economic growth using time-series data from 1961 to 2021 from the official World Bank website. Table 1 details the specific variables used in this analysis

Table 1. Variable Descriptions

Proxy Variables	Description	Symbol	Source
Economic Growth	Economic growth denotes the yearly expansion rate of Indonesia's Gross Domestic Product (GDP) from 1961 to 2021, expressed as a percentage (%).	GDP	World Bank
Manufacturing value added	Net output after summing all outputs and subtracting inputs in the manufacturing sector in Indonesia from 1961 to 2021, measured in percentage (%).	M	World Bank
Government Expenditure	Government Expenditure refers to the total final expenditure by the government in Indonesia from 1961 to 2021, measured in percentage (%).	PP	World Bank
Population Growth	Population Growth refers to the growth rate of Indonesia's population from 1961 to 2021, measured in percentage (%).	PO	World Bank
Inflation	Measured inflation based on the Consumer Price Index to obtain a basket of goods in Indonesia from 1961 to 2021, measured in percentage (%).	I	World Bank
Foreign Investment	Additional fixed asset costs and net inventory percentage in Indonesia from 1961 to 2021, measured in percentage (%).	PMA	World Bank

In this study, the Auto Regressive Distributed Lag Model (ARDL) analysis is conducted using the EViews application. The ARDL model is an econometric approach used to estimate a linear regression model, specifically designed for assessing long-term relationships through cointegration tests among time series variables (A'yun et al., 2023).

Additionally, this model includes lags for both dependent and independent variables simultaneously. The ARDL estimator produces consistent long-term coefficients and is constructed using standard normal asymptotic theory (Rahmasari et al., 2019). The standard equation format for the ARDL model is as follows:

$$\begin{aligned} \Delta \ln \text{GDP}_t = & \alpha_0 + \sum_{i=1}^{n1} \alpha_1 \Delta \ln \text{GDP}_{t-1} + \sum_{i=1}^{n1} \alpha_2 \Delta \ln \text{M}_{t-1} + \sum_{i=1}^{n1} \alpha_3 \Delta \ln \text{PP}_{t-1} \\ & + \sum_{i=1}^{n1} \alpha_4 \Delta \ln \text{PO}_{t-1} + \sum_{t=1}^{n1} \alpha_5 \Delta \ln \text{I}_{t-1} + \sum_{t=1}^{n1} \alpha_6 \Delta \text{PMA}_{t-1} \\ & + \delta_7 \ln \text{GDP}_{i,t-1} + \delta_1 \ln \text{GDP}_{t-1} + \delta_2 \ln \text{M}_{t-1} + \delta_3 \ln \text{PP}_{t-1} + \delta_4 \Delta \ln \text{PO}_{t-1} \\ & + \delta_5 \Delta \ln \text{I}_{t-1} + \delta_6 \Delta \ln \text{PMA}_{t-1} + \mu_t \end{aligned}$$

Employing the Auto Regressive Distributed Lag (ARDL) model in econometric analysis provides several benefits. It can effectively manage a combination of variables that show stationary patterns at the level of first differences and those that are non-stationary. This flexibility allows for a comprehensive analysis of relationships over time. Secondly, the ARDL model accommodates different lag structures for independent variables, providing insights into their varying impacts over time. Thirdly, compared to other econometric models, ARDL is relatively straightforward, making it easier to interpret and communicate findings.

Concentrates on utilizing the ARDL model regularly follow an organized cycle. At first, unit root tests are performed to decide the stationarity of factors in both their unique and differenced structures. Subsequently, the ARDL model is assessed, and slack lengths are chosen for standards like the Akaike Data Rule (AIC). Consequently, center movements to examining the Blunder Revision Term (ECT), where a measurably critical negative coefficient, ordinarily underneath 0.05, shows the speed at which factors change towards long haul balance.

Subsequent phases involve checking for autocorrelation through methods like the Lagrange Multiplier (LM) Test to ensure the independence of error terms. Cointegration tests using the Bound Test approach are then employed to confirm the presence of long-term relationships among variables (Kurniawan et al., 2023). Further stages involve testing for autocorrelation using methods such as the Lagrange Multiplier (LM) Test, ensuring that error terms are independent. Cointegration tests using the Bound Test approach are then performed to validate the existence of long-term relationships among the variables.

In the Autoregressive Distributed Lag (ARDL) model, the terms short-term and long-term refer to the relationship between variables in the context of time. Short-term describes the direct relationship or temporary impact between dependent and independent variables in a relatively short time. In the long run, it describes the equilibrium

relationship or stable impact between the dependent and independent variables after all adjustments are completed.

RESULT AND DISCUSSION

Result

Descriptive data analysis involves calculating fundamental statistics for the variables being studied, including measures like mean, minimum, maximum, skewness, and standard deviation. The study utilizes secondary data spanning from 1961 to 2021 on economic growth, manufacturing value added, government expenditure, population growth, inflation, and foreign investment in Indonesia. These data are subsequently analyzed using the Auto Regressive Distributed Lag (ARDL) model.

Table 2. Descriptive Statistics

Var	N	Minimum	Maximum	Mean	Skewness	Std. Deviation
GDP	61	-13.12673	10.91518	5.107776	-2.798254	3.401332
M	61	-11.43651	22.16728	7.023346	0.089748	5.844212
PP	61	-27.50000	38.96552	5.476689	0.253389	10.70582
PO	61	0.694718	2.787447	1.853358	0.033894	0.619122
I	61	-164.5094	627.7439	43.27369	6.52.1907	105.3928
PMA	61	1.560130	1136.254	21.71037	4.027025	150.5657

Source: Data processed, 2024

Based on statistical analysis, economic growth, manufacturing value-added, and population growth exhibit high variability in this model, with means higher than their standard deviations. On the other hand, government expenditure, inflation, and foreign investment show lower variability, with means below their standard deviations. The skewness of economic growth data tends towards the left, while the skewness of other variables tends towards the right. Economic growth, manufacturing value-added, government expenditure, inflation, and foreign investment have kurtosis values above 3, indicating more extreme data distributions, whereas population growth is below 3.

Table 3. Result of ADF and PP Unit Root Test

Variable	ADF t-Statistic	Note	Phillips-Perron t-Statistic	Note
GDP	-6.559519***	Stasioner	-20.85664***	Stasioner
M	-6.928796***	Stasioner	-19.89270***	Stasioner
PP	-12.78307***	Stasioner	-31.14787***	Stasioner
PO	-2.815319***	Stasioner	-4.215423***	Stasioner
I	-8.165662***	Stasioner	-23.47029***	Stasioner
PMA	-7.117019***	Stasioner	-31.18027***	Stasioner

Source: Data processed, 2024

Table 3 displays the outcomes from unit root tests conducted using the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) techniques. According to the results, variables such as economic growth, manufacturing value-added, government expenditure, population, inflation, and foreign investment exhibit stationarity after undergoing the first differencing. This is indicated by significant t-statistics at the 1%, 5%, and 10% confidence levels, with probabilities below 0.05. Hence, these variables are integrated over time.

Furthermore, additional cointegration tests were carried out to assess the appropriateness of the model utilized and determine whether a long-term relationship exists among the variables. The adequacy of the model was evaluated by analyzing the F-statistic, which needs to surpass both the lower and upper critical values or exceed the 5% critical threshold.

Table 4. Cointegration Bound Tests Analysis

Test Statistic	Value	K
F-Statistic	7.280969	5
Critical Value Bounds		
Significance	I (0)	I (1)
10%	2.08	3
5%	2.39	3.38
2.5%	2.7	3.73
1%	3.06	4.15

Source: Data processed, 2024.

The outcomes from the Limits Test cointegration examination in the table demonstrate that the F-measurement worth of 7.280969 outperforms the essential upsides of I(0) and I(1) at importance levels of 10%, 5%, 2.5%, and 1%. This proposes a drawn-out relationship or harmony among the factors being scrutinized, including financial development, fabricating esteem added, government consumption, populace development, expansion, and unfamiliar venture development. These factors are supposed to change over the long run, reflecting associations between momentary vacillations and long-haul harmony. Blunders in the model are rectified to reestablish long haul balance, as confirmed by the Mistake Revision Term (ECT) worth of -0.565193, demonstrating a rectification time of roughly 5.7 quarters.

Table 5. Long-term Coefficient

Variable	Coefficient	T-Label	T-Statistic	Prob.	Note
M	0.784520	2.0049	2.488548	0.0235	Significant
PP	-0.147650	2.0049	-0.663677	0.5158	Not significant
PO	-3.042154	2.0049	-1.069226	0.2999	Not significant
I	-0.101648	2.0049	-0.785618	0.4429	Not significant
PMA	0.022155	2.0049	2.102484	0.0507	Significant

Source: Data processed, 2024.

The table presents the discoveries of the variable assessments. The coefficient for assembling esteem added is 0.784520, demonstrating that assuming assembling esteem added increments by 1%, financial development will ascend by 0.785% in the long haul. This proposes a positive and measurably huge effect on monetary development, upheld by a t-measurement of 2.4885 and a likelihood of 0.0235, which is under 0.05.

Interestingly, the coefficient for government consumption is—0.147650. Nonetheless, its likelihood is 0.5158, surpassing 0.05, and the t-measurement is—0.6638, underneath the basic t-worth of 2.0049. Consequently, government use doesn't affect financial development in the long haul.

The coefficient for populace development is—3.042154, with a likelihood of 0.2999 and a t-measurement of—1.0692, higher than the basic t-esteem. This demonstrates that populace development doesn't adversely affect monetary development in the long haul.

Essentially, expansion has a coefficient of—0.101648, with a likelihood of 0.4429 and a t-measurement of—0.7856, both exceeding the basic t-esteem. Likewise, expansion doesn't fundamentally block monetary development in the long haul.

Finally, unfamiliar direct venture (FDI) has a coefficient of 0.022155, a likelihood of 0.0507, and a t-measurement of 2.1025, outperforming the basic t-esteem. This shows that FDI emphatically and altogether impacts financial development in the long haul.

Table 6. Short-term Coefficient

Variabel	Coefficient	T-Tabel	T-Statistic	Prob.	Keterangan
GDP (-1)*	-0.565193	2.0049	-2.540138	0.0211	Significant
M (-1)	0.443405	2.0049	2.390738	0.0287	Significant
D (GDP (-5))	0.471723	2.0049	4.019771	0.0009	Significant
D (M (-3))	0.292788	2.0049	2.469072	0.0244	Significant
D (PP (-1))	0.372935	2.0049	4.273545	0.0005	Significant
D (PP (-2))	0.278772	2.0049	2.822112	0.0117	Significant
D (PO (-2))	67.00070	2.0049	3.195907	0.0007	Significant
D (PO (-3))	-73.29487	2.0049	-4.143390	0.0040	Significant
D (PO (-4))	42.65660	2.0049	3.329315	0.0300	Significant
D (I (-4))	0.009484	2.0049	3.306362	0.0042	Significant
PMA	0.012522	2.0049	4.884851	0.0001	Significant
D (M)	0.526075	2.0049	7.394237	0.0000	Significant
D (PP)	0.162492	2.0049	3.314201	0.0041	Significant
D (PO)	37.33059	2.0049	2.593087	0.0189	Significant
D (I)	-0.082568	2.0049	-2.368847	0.0300	Significant
CoinEq(-1)*	-0.565193	2.0049	-8.303918	0.0000	Significant

Source: Data processed, 2024.

The table summarizes the findings of short-term assessments for each variable. The coefficient for economic growth is 0.0009, indicating that economic growth from a year ago positively affects current economic growth, with a coefficient of 0.471723. The foreign direct investment variable has a coefficient of 0.012522, suggesting that a 1% increase in foreign direct investment leads to a 0.0125% increase in economic growth. This variable shows significant positive short-term effects as the t-statistic of 4.884851 exceeds the critical t-value of 2.0049, with a probability of 0.0001, less than 0.05.

Meanwhile, the coefficient for manufacturing value added is 0.526075, indicating that a 1% increase in manufacturing value added results in a 0.526% increase in economic growth. This variable demonstrates a significant positive short-term impact as the t-statistic of 7.394237 exceeds the critical t-value of 2.0049, with a probability of 0.0000, less than 0.05. Three years ago, the added manufacturing value also positively impacted economic growth, with a probability of 0.0244, below 0.05.

The government expenditure variable has a coefficient of 0.162492, indicating that a 1% increase in government expenditure boosts economic growth by 0.162%. This variable shows positive and significant effects in the short term as the t-statistic of 3.314201 exceeds the critical t-value of 2.0049, with a probability of 0.0041, less than 0.05. In the previous year, government expenditure also positively and significantly affected economic growth with probabilities of 0.005 and 0.0117, below 0.05.

The population growth variable has a coefficient of 37.33059, indicating that a 1% increase in population growth leads to a 37.33% increase in economic development. This variable demonstrates significant positive effects in the short term as the t-statistic of 2.593087 exceeds the critical t-value of 2.0049, with a probability of 0.0189, less than 0.05. Three years ago, it showed negative impacts, while one year ago, it showed positive effects on economic growth.

The inflation variable has a coefficient of -0.082568, indicating that a 1% increase in inflation reduces economic growth by -0.08%. This variable has adverse and significant effects in the short term as the t-statistic of -2.368847 is smaller than the critical t-value of -2.0049, with a probability of 0.0300, less than 0.05. Four years ago, inflation positively affected economic growth with a probability of 0.0042, below 0.05.

The Error Correction Term (CoinEq (-1)) in the table shows a coefficient of -0.565193 and a probability of 0.0000. This indicates that if there is an imbalance in the short term, the model will correct toward long-term equilibrium within approximately 5.7 quarters or around 6 years.

Discussion

The ARDL examination confirms that both assembling esteem added and monetary development display eminent beneficial outcomes over both short and extensive stretches despite challenges presented by the Coronavirus pandemic in 2021.

Indonesia's assembly area supported positive development by acclimating to advertise requests, taking on cutting-edge creation advancements, growing clinical and food commodities, and profiting from government support through financial boost measures and foundation improvement drives. These findings align with research by Behun et al. (2018), Su & Yao (2017), and Agustin & Nahar (2020) demonstrating that manufacturing value added contributes to economic growth through increased job opportunities, infrastructure investment, and more efficient human resource management in developing countries.

Examination utilizing the Auto Backward Conveyed Slack (ARDL) technique uncovers that administration consumption has a positive and genuinely massive impact on monetary development for the time being. In 2021, the public authority allotted improvement assets for obtaining Coronavirus immunizations, medical services hardware, and framework advancement. Expanded government spending straightforwardly animates the economy by assembling yields from these activities and upgrading interest for labor and products. In any case, over the long haul, the effect of government spending on financial development might be obliged by dependence on unstable incomes and difficulties like regulatory failures or defilement in reserve the board. These discoveries align with past examinations by Ichvani & Sasana (2019) and Anitasari & Soleh (2015), which correspondingly reasoned that administration use decidedly and altogether impacts financial development.

Examination utilizing the Auto Regressive Distributed Lag (ARDL) strategy shows that populace development temporarily affects financial development. An ascent in the populace reinforces the workforce and lifts interest in labor and products, invigorating utilization and improving the modern ability to address market issues. While urgent in the short run, the supported effect of populace development on financial extension depends on progressions in labor force quality, accomplished through interests in schooling, preparing, and human asset advancement.

According to the Auto Regressive Distributed Lag (ARDL) analysis, inflation does not negatively influence economic growth. Nevertheless, in the short term, inflation significantly hampers economic growth. Increased production costs, such as wages and raw materials, contribute to inflationary pressures, prompting consumers to allocate more of their budgets to goods and services. This situation could lead to uncontrollable inflationary cycles, which may diminish aggregate demand and erode confidence among consumers and investors in the market. Ardiansyah (2017) similarly argues that inflation negatively impacts economic growth.

Based on the Auto Regressive Distributed Lag (ARDL) analysis, foreign direct investment (FDI) positively and significantly influences short-term economic growth. FDI enhances corporate investments, introduces advanced technologies, and implements new management systems. The influx of foreign capital also increases labor productivity,

creates new job opportunities, and stimulates overall economic growth. Previous research aligns with these findings, highlighting FDI's substantial economic contribution through technology transfers and infrastructure enhancements. Ultimately, FDI's positive impact on economic growth stems from advancing knowledge and technological innovation driven by research and development activities across public and private sectors (Nasir et al., 2021).

Based on findings showing that the growth in the added value of the manufacturing industry has a significant effect on economic growth in Indonesia in both the long and short term, it is hoped that the government can encourage the progress of this sector. Based on the findings which show that government spending has a significant effect on economic growth in Indonesia in the short term, it is hoped that the government can use this spending wisely, on target, transparently, and manageably by ensuring that this spending does not result in an uncontrolled budget deficit and can provide long-term benefits that the entire community can enjoy. Based on findings showing that population growth significantly influences economic growth in Indonesia in the short term, the government should prioritize efforts to create jobs and increase ease of access to education and skills training to ensure that population growth can contribute effectively to economic development.

Based on the findings, which state that inflation significantly affects economic growth in Indonesia in the short term, the government should determine and implement monetary and fiscal policies appropriately and wisely so that inflation can be controlled and economic growth can be maintained. Monetary policy can be implemented through interest rate adjustments by the central bank to control the money supply and overcome inflation. Based on the findings, which state that foreign investment significantly affects economic growth in Indonesia in the long and short term, the government should be able to strengthen policies that support foreign investment, including providing tax incentives by reducing tax rates in specific sectors and improving infrastructure.

CONCLUSION

The findings from the analysis conducted using the Auto Regressive Distributed Lag (ARDL) method are as follows:

1. The growth of manufacturing value added significantly and positively influences Indonesia's economic growth over both short and long periods. This underscores the manufacturing sector's role in expanding markets, enhancing productivity, diversifying the economy, and fostering innovation and technological advancements, which are crucial for sustainable economic development.

2. Increased government expenditure in the short term positively and substantially impacts economic growth. The government can stimulate economic activities that bolster economic growth by allocating funds for infrastructure, stimulus packages, and public services.
3. Population growth positively affects economic growth in the short term. An expanding population stimulates demand for goods and services, enlarges markets, and promotes economic development through heightened consumption, workforce expansion, and increased investment.
4. Inflation exerts a negative and significant influence on short-term economic growth. Escalating inflation rates may curtail investment and consumption, introduce economic uncertainty, and impede economic expansion.
5. Foreign direct investment (FDI) has a positive and significant impact on economic growth across short and long timeframes. Substantial FDI inflows can inject capital, generate employment opportunities, and fortify infrastructure and technology, all contributing to sustainable economic growth.

Therefore, the findings from the ARDL analysis indicate that these variables exert significant and varied impacts on Indonesia's economic growth, spanning short and long time horizons. This research's limitation is that it only uses variables from within the country and does not include variables from abroad. However, economic and industrial growth is closely related to external factors.

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