Research Article

Analysis of the Impact of Exports And Imports on Indonesia's Economic Growth: A Study For the Period 2014–2023

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Abstract This research aims to examine the influence of exports, imports, and exchange rates on Indonesia's economic growth during the 2014–2023 period. The study employs a multiple linear regression approach using SPSS version 26 for data analysis. The findings reveal that exports, imports, and exchange rates collectively exert a significant impact on economic growth. Individually, exports contribute positively and significantly, while both imports and exchange rates show a significant negative effect on Indonesia's GDP. These outcomes align with Keynesian economic theory, which emphasizes exports as a critical component in boosting aggregate demand and stimulating growth. Meanwhile, the negative influence of imports and exchange rates supports the Heckscher-Ohlin model and the Purchasing Power Parity (PPP) theory, indicating that excessive reliance on imports and currency depreciation can undermine domestic economic performance. This study, therefore, highlights the importance of robust trade policies and stable exchange rates to foster sustainable national economic growth.

Keywords: Export, Import, Economic Growth, GDP, Multiple Linear Regression.

1. Introduction

Economic growth is a key indicator for evaluating a country's development performance. It reflects a nation's capability to enhance the production of goods and services over a specific period. In an open economy like Indonesia, economic growth is influenced not only by domestic factors such as consumption and investment but also by international trade activities, especially exports and imports (Hanifah, 2022).

Indonesia's economic growth during 2014–2023 has experienced fluctuations. The lowest growth was recorded in 2019 at 3.2%, while the highest growth occurred in 2023 at 4.9%. Despite the impact of the COVID-19 pandemic in 2020, the country still posted a 4.6% growth, indicating a recovery trend. Overall, GDP figures reflect signs of economic stabilization and a return to positive growth.

Export values also fluctuated significantly during this period. In 2020, exports dropped to 15.6% due to global disruptions but surged to 24.5% in 2023 alongside global economic recovery. This underscores the crucial role of exports in supporting national growth.

Imports, meanwhile, declined during the pandemic, hitting a low of 14% in 2020 but rising again to 20.9% in 2023. While imports are essential for meeting domestic needs, particularly for goods not produced efficiently within the country, high import levels—especially of consumer goods—may adversely affect local industries.

Given the significant role of both exports and imports in shaping Indonesia's economic trajectory, and in consideration of global events such as the COVID-19 pandemic, trade wars, and geopolitical tensions, this study is titled: "An Analysis of the Impact of Exports and Imports on Indonesia's Economic Growth: A Study of the 2014–2023 Period."

2. Literature Review
Economic Growth
Economic growth refers to the increase in a nation's output of goods and services over a specific period. One of the key indicators used to measure economic growth is Gross Domestic Product (GDP). According to Hanifah (2022), economic growth represents a country's ability to increase national income, reduce unemployment, and improve public welfare.

Various economic growth theories explain how a country can sustainably enhance output and societal welfare. The Harrod-Domar model highlights the critical role of investment as the primary driver of growth, as it expands production capacity and income. Classical theories developed by Adam Smith and David Ricardo emphasize the role of capital, labor, and technology under the assumption that natural and human resources are utilized efficiently (Risnitia, 2020). Meanwhile, neoclassical growth theory, as introduced by Robert Solow, identifies technological progress as the main determinant of long-term growth, along with capital and labor inputs. Schumpeter, on the other hand, argues that innovation and entrepreneurship are central to economic development through the introduction of new products and markets. These theoretical frameworks provide a solid basis for understanding the factors influencing Indonesia's economic growth in the context of international trade, particularly exports and imports (Utomo, 2020).

Exports
Exports involve selling goods and services to foreign markets. According to Amir (2001), exports positively contribute to economic growth by generating foreign exchange, creating employment opportunities, and boosting national productivity. The Heckscher-Ohlin theory explains that countries export goods that intensively use their abundant production factors to gain comparative advantage (Pridayanti, 2013).

Imports
Imports are the acquisition of goods and services from other countries. Sukirno (2006) states that imports fulfill domestic needs, especially for products that cannot yet be produced efficiently at home. However, excessive reliance on imports may harm local industries and reduce national income.

Exchange Rates
The exchange rate refers to the value of a country's currency expressed in another country's currency. According to Sadono (2015), the exchange rate influences the competitiveness of exports and the price of imported goods. The Purchasing Power Parity (PPP) theory suggests that exchange rates reflect relative purchasing power between countries. A stable exchange rate is essential for supporting international trade and sustaining economic growth. This study focuses on the exchange rate of the Indonesian Rupiah against the US Dollar (USD/IDR).

3. Research Methodology
This study employs a quantitative approach using multiple linear regression to analyze the influence of exports and imports on Indonesia's economic growth during the 2014–2023 period. This method is chosen for its ability to explain the relationship between two independent variables—exports and imports—and one dependent variable, namely Gross Domestic Product (GDP), both individually and jointly.

Prior to estimating the regression model, classical assumption tests were conducted, including tests for normality, multicollinearity, heteroscedasticity, and autocorrelation. If all test results indicate that the model satisfies the standard assumptions, further analysis proceeds.

Hypothesis testing is conducted using the t-test to measure the partial effect of each independent variable and the F-test to evaluate their simultaneous impact on the dependent variable. Additionally, the adjusted coefficient of determination (Adjusted R^2) is used to determine the proportion of variation in the dependent variable that can be explained by the model.

The data used in this study are secondary data obtained from Indonesia's Central Bureau of Statistics (Badan Pusat Statistik/BPS) and other relevant agencies, covering annual data on exports, imports, and GDP from 2014 to 2023.

4. Results And Discussion

Results of Multiple Linear Regression Analysis

The regression analysis aims to determine the impact of exports, imports, and exchange rates on Indonesia's economic growth (GDP) from 2014 to 2023. The estimated regression model is as follows:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

$$Y = 6.037 + 0.15X_1 - 0.87X_2 - 0.19X_3$$

From the regression equation:

The constant value of 6.037 indicates that if exports, imports, and exchange rates remain constant or equal to zero, the predicted GDP would be 6.037 units.

An increase of one unit in exports (X_1) will increase GDP (Y) by 0.15 units, holding other variables constant. This supports Keynesian theory, which posits that exports stimulate economic growth.

Conversely, a one-unit increase in imports (X_2) will reduce GDP by 0.87 units, indicating that excessive imports may suppress national income.

Similarly, a one-unit increase in the exchange rate (X_3), indicating Rupiah depreciation, will decrease GDP by 0.19 units, as depreciation raises import costs and hampers domestic economic activity :

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5. Discussion

The regression results demonstrate that the variables of exports (X_1), imports (X_2), and exchange rate (X_3) simultaneously exert a significant influence on Indonesia's economic growth (GDP) throughout the 2014–2023 period. This suggests that, collectively, these three independent variables can explain the variations in economic growth, reinforcing the relevance of the open economy growth model. This model asserts that a nation's economic performance is significantly affected by its engagement in international trade and exchange rate dynamics.

These findings are consistent with Hanifah (2022), who concluded that exports and imports significantly affect Indonesia's economic growth when examined simultaneously.

Exports (X_1)

On a partial basis, exports show a significant positive relationship with GDP. This confirms that increased exports promote economic growth in Indonesia. These findings are consistent with Keynesian theory, which classifies exports as a component of aggregate demand. Higher exports lead to rising national income and production capacity, thus fostering sustainable growth. Moreover, exports contribute to foreign exchange reserves, reduce dependency on foreign loans, and strengthen the balance of payments. These results are in line with the findings of Kusuma, Sheilla, and Malik (2020), who also concluded that exports have a significant impact on economic growth in Indonesia. The findings also support Ricardo's theory of comparative advantage, which posits that countries benefit most from international trade when they export goods produced most efficiently.

Imports (X_2)

Imports also display a significant partial effect on GDP, though in the original regression model the coefficient is negative. The discussion, however, points out that imports—especially those involving capital goods and raw materials—can positively influence domestic production. This supports the Heckscher-Ohlin theory, which explains that countries import goods that utilize production factors they lack. If imports are used productively, they can contribute to economic growth. Kusuma, Sheilla, and Malik (2020) also found that imports positively affect

Indonesia's economic performance. In developing economies like Indonesia, importing capital goods can facilitate industrialization and technology transfer, which aligns with the endogenous growth theory.

Exchange Rate (X₃)

The Rupiah's exchange rate against the US Dollar also shows a significant influence on GDP, with the regression indicating a negative effect but the interpretation highlighting its critical role in macroeconomic stability. A strong and stable exchange rate lowers the cost of imported raw materials, increasing industrial efficiency. This finding aligns with the Purchasing Power Parity (PPP) theory, which states that exchange rate fluctuations reflect differences in inflation levels between countries, ultimately affecting trade and consumption patterns. A stable exchange rate also supports investor confidence and overall economic stability. Pridayanti (2013) also found that exchange rate volatility significantly impacts Indonesia's economic growth.

6. Conclusion and Recommendations

Conclusion

Based on the data analysis and discussion, it can be concluded that exports, imports, and exchange rates collectively have a significant effect on Indonesia's economic growth (GDP) during the 2014–2023 period. Partially, exports exhibit a significant positive impact on GDP, indicating that export growth directly contributes to national economic expansion. This finding is consistent with Keynesian theory, which highlights the critical role of exports in boosting aggregate demand and national output.

Meanwhile, imports also demonstrate a significant partial effect on GDP. Although imports may pose a challenge when dominated by consumer goods, they can play a supportive role in economic development if they involve raw materials and capital goods that enhance domestic production. This outcome supports the Heckscher-Ohlin theory, which posits that imports serve to complement local production factors.

Exchange rates also show a significant relationship with GDP. A stable and appreciated Rupiah supports economic growth by lowering input costs for domestic industries and strengthening purchasing power. This confirms the Purchasing Power Parity (PPP) theory, which links exchange rate stability to macroeconomic efficiency and international trade performance.

In general, this research affirms the critical role of external economic variables—exports, imports, and exchange rate—in driving Indonesia's economic growth. Thus, effective trade strategies and exchange rate management are crucial in ensuring long-term, sustainable, and globally competitive economic development.

Recommendations

Based on the findings and conclusions, the following recommendations are proposed:

- Enhance Export Strategies : The government should intensify export promotion through product diversification, expansion into new international markets, and improvement in the quality and competitiveness of domestic products. Strengthening exports will help solidify their role as a key driver of sustainable economic growth.
- Selective Import Management : Import policies should be geared toward reducing non-essential consumer imports while encouraging the importation of capital goods and raw materials essential for industrial development. Efficient import management will support domestic productivity.
- Maintain Exchange Rate Stability : Exchange rate stability should be achieved through coordinated monetary and fiscal policies. A stable currency enhances investor confidence, reduces uncertainty, and supports Indonesia's international trade competitiveness. Coordination among government institutions is also needed to respond proactively to global economic shocks that may impact trade and exchange rate dynamics.
- Future Research Directions : Subsequent research is encouraged to incorporate additional variables such as foreign direct investment (FDI), government spending, interest rates, or inflation to create a more comprehensive model. Applying advanced time-series methods is also recommended to explore long-term relationships more deeply.
- Academic Contribution : This study can serve as a reference in development economics and international trade research, particularly within the context of developing countries undergoing structural economic transformation.

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