Examining the Rupiah Exchange Rate as a Mediator Between Export-Import and Economic Growth in Indonesia During the 2017-2024 Period

Violieta Wicaksono Putri*

Master of Accounting, Widyatama University, Indonesia
**Corresponding author. Email: putri.violieta@widyatama.ac.id*

ABSTRACT

This study uses the Rupiah exchange rate as a mediating variable to examine how imports and exports affect Indonesia's economic growth. Using secondary data from 2017 to 2024, multiple linear regression and path analysis were the methodologies employed in this study. The findings demonstrated that imports had a positive but negligible impact on economic growth, whereas exports had a negative but negligible effect. Furthermore, there is no discernible impact of the rupiah exchange rate on economic growth, suggesting that exchange rate swings are not powerful enough to have a direct impact on the expansion of the national economy. Furthermore, as neither imports nor exports significantly affect the exchange rate, the path analysis's findings demonstrate that the rupiah exchange rate cannot mediate the relationship between imports and exports to economic growth. This result suggests that Indonesia's economic growth may be more significantly influenced by other variables, such as investment, monetary policy, and international economic stability. Therefore, to improve the efficiency of international commerce in fostering national economic growth, a more all-encompassing economic strategy is required.

Keywords: *Export, Import, Exchange Rate, Economic Growth.*

1. INTRODUCTION

A nation's economic situation is reflected in its per capita income. It shows the population's purchasing power, whereas economic growth is a measure of the effectiveness of economic development. A rise in GDP is a sign of economic growth, and economic growth may be measured by looking at the Gross Domestic Product (GDP). In a society, economic growth is the development of economic activities that result in an increase in the production of goods and services. Long-term macroeconomic difficulties are those that have to do with economic growth. The ability of a nation to generate commodities and services from its production components keeps getting better, noth in terms of quantity and quality (S. Hodijah et al., 2021).

One of the most important metrics for evaluating a nation's economic performance is economic growth. The international trade sector, which includes both imports and exports, is one of the many elements that affect Indonesia's economic growth. Exports boost foreign exchange profits, provide jobs, and open up new markets for homegrown goods, all of which contribute to economic growth. On the other hand, imports allow a nation to obtain products and services that are not effectively produced at home, such as consumer goods, industrial raw materials, and cutting-edge technology (Todaro, 2015).

According to Todaro and Smith (Todaro, 2015), economic growth might be used to assess development implementation incorrectly. Economic growth is reflected in GDP, and better economic activity is indicated by a higher rate of economic growth. The Gross Regional Domestic Product (GRDP) growth rate at constant prices can be used to gauge economic growth. This growth rate is intimately related to the process of economic development. Economic development is significantly influenced by human resources. The workforce, sometimes referred to as human resources, is a key factor in a nation's economic development(Yasa et al., 2014).

One of the main topics in economic discussions is the state of a nation's economic development. Improving and encouraging the export of goods and services is one way for a country to boost its economic growth. Import volume fluctuates positively with aggregate demand (real GDP growth) and negatively with relative pricing. Import substitution may result from higher relative pricing, which inevitably lowers the dollar worth of imports as volume declines. The import of capital goods and raw materials for industrial expansion has been financed by remittances(Safira Amanda Novianingrum et al., 2024).

Mankiw (2016) asserts that comparative advantage is the foundation of international trade, which is advantageous since it encourages speculative activity in every nation. A long-term rise in total production is referred to as economic growth, regardless of whether the economy's basic characteristics have changed or if the increase is less or more than the rate of population growth.(Afandi, 2015).

Importing and exporting drive economic growth by expanding market access and stabilizing economies. Exports generate foreign exchange and boost production, while imports meet domestic demand for unavailable goods, often lowering prices(Mandelkern, 2020).

Indonesia's export-import industry faces challenges from global commodity prices, trade regulations, import taxes, and currency fluctuations. Reliance on imported goods risks deficits and economic instability, impacting long-term growth(Krugman, 2018).

Through exports, Indonesia may raise its national income, grow its market share, and market its main products internationally. In the meanwhile, imports help the industrial sector by supplying raw materials and cutting-edge technology, as well as satisfying domestic demand for goods and services that cannot be produced locally(Iriani et al., 2021).

However, the rupiah's exchange rate has a significant impact on the link between imports, exports, and economic growth. The exchange rate has a significant impact on import prices and determines how competitive export goods are in global marketplaces. Depending on the state of the economy and the monetary policies in place, changes in the exchange rate can have either beneficial or negative effects. While rupiah depreciation can increase import costs while decreasing export competitiveness, rupiah appreciation may decrease export competitiveness while lowering import costs. (Afandi, 2015)

Based on statistics from the 2017-2024 timeframe, Indonesia's exports exhibited a considerable increase tendency after 2020, peaking in 2022. Meanwhile, imports were more erratic, witnessing a dramatic fall during the COVID-19 pandemic, notably in the second quarter of 2020. Before progressively recovering in the ensuing years, the rupiah's exchange rate had a sharp decline in 2020, hitting its lowest point in Q2 at IDR 15,072.

Further investigation shows that as the global economy recovered from the epidemic, growing worldwide demand was a major factor in the post-2020 export rise. The higher export value was also largely caused by the rise in the prices of important commodities including metals, coal, and palm oil. Conversely, government interventions intended to maintain exchange rate stability and limit the trade balance deficit had an impact on import variations.

The cost of importing capital goods and raw materials was impacted by the rupiah's severe depreciation during the epidemic, which in turn had an effect on the domestic manufacturing sector. But because local goods were now more competitive on the international market, the export industry also profited from the weakened rupiah. This demonstrates the intricate connection between economic growth, exchange rates, imports, and exports.

The pandemic's effects caused Indonesia's economic growth to decline sharply in Q2 2020, by -4.19%. However, although volatility continued until 2024, indications of an economic rebound surfaced in the ensuing quarters. This link suggests that the exchange rate is a strategic intervening variable that affects the relationship between economic growth, imports, and exports.

The connection between imports, exports, exchange rates, and economic growth has been the subject of numerous earlier studies. Intan Sari Arfiani (2019) demonstrated that whereas imports have no long-term impact on economic growth, exports and currency rates do. However, while the currency rate has little short-term impact on economic development, imports and exports do. While imports have a major negative impact on economic growth, exports and investment have a considerable positive impact, according to (Deluma, 2019). The findings of these research, however, are not totally consistent, particularly when considering the most recent era and the increasingly intricate dynamics of the global economy.

A thorough examination of the exchange rate as an intervening variable in recent periods (2017–2024) is still lacking in the literature, despite the fact that many research have examined the connection between exports, imports, and economic growth. Without carefully taking mediation effects into account, the majority of earlier research has relied on direct analysis (Fauziah & Khoerulloh, 2020) In order to close this gap, this study uses a quantitative methodology to investigate how the exchange rate influences the relationship between Indonesia's exports, imports, and economic growth between 2017 and 2024.

The research hypotheses were developed as follows:

H_1 : From 2017 to 2024, Indonesia's economic growth is directly impacted by exports.

H_2 : From 2017 to 2024, imports directly affect Indonesia's economic growth.

H_3 : From 2017 to 2024, the relationship between Indonesia's exports and economic growth is mediated by the Rupiah exchange rate.

H_4 : From 2017 to 2024, the relationship between imports and Indonesia's economic development is mediated by the Rupiah exchange rate.

2. RESEARCH METHODS

This study employs a quantitative approach and an associative research method to examine the causal relationship between exports, imports, the Rupiah exchange rate as an intervening variable, and Indonesia's economic growth during the 2017–2024 period comprise two or more variables—is explained by the associative research approach (Sugiyono, 2016). The research uses secondary time-series data collected from official sources, including export, import, exchange rate, and GDP data obtained from the Central Bureau of Statistics (BPS, 2025) and Bank Indonesia (2025). The population consists of all relevant economic indicators during this period, with a purposive sampling technique applied to select quarterly data that is complete and credible (Sekaran & Bougie, 2016). Based on these criteria, the study analyzes a total of 32 units of data (8 years × 4 quarters) through statistical processing to identify and evaluate the relationships among the variables.

3. RESULTS AND DISCUSSIONS

Table 1. Hypothesis Testing Results

Path	Coefficient (β)	p-value	Significance	Conclusion
X1 (Exports) → Y (Economic Growth)	0.000232	0.46217	Not Significant	No Effect
X2 (Imports) → Y (Economic Growth)	-0.00017	0.70657	Not Significant	No Effect
X1 (Exports) → Z (Exchange Rate)	0.05231	0.4249	Not Significant	No Effect
X2 (Imports) →Z (Exchange Rate)	0.06018	0.5151	Not Significant	No Effect
Z (Exchange Rate) → Y (Economic Growth)	-0.00083	0.35713	Not Significant	No Effect
X1 → Z → Y (Mediation Test)		0.5412	Not Significant	No Mediation Effect
X2 → Z → Y (Mediation Test)		0.5905	Not Significant	No Mediation Effect

3.1. Results

Based on the path analysis results, this study revealed that exports and imports do not have a statistically significant impact on the rupiah exchange rate, as indicated by p-values greater than the 5% significance level. Similarly, the direct effects of exports, imports, and the exchange rate on economic growth were found to be insignificant, with all regression paths showing p-values exceeding 0.05. Although the overall model for the rupiah exchange rate was statistically significant at the 95% confidence level, individual predictors (exports and imports) did not independently influence the exchange rate, and the overall model explaining economic growth was weak, with an R^2 value of only 4.41%. This suggests that exports, imports, and currency fluctuations were not the primary contributors to economic growth during the observation period.

Furthermore, the mediation analysis using the Sobel Test demonstrated that the rupiah exchange rate does not serve as a mediating variable between exports and economic growth or between imports and economic growth. The low Sobel test statistics and high probability values (> 0.05) confirm that the indirect effects are not statistically significant. These findings imply that while international trade activities and exchange rate movements are important macroeconomic variables, other factors such as domestic investment, fiscal policies, technological innovation, political stability, and global economic conditions may exert a stronger influence on national economic growth.

Overall, this study highlights the complexity of economic growth dynamics, especially in emerging markets, and suggests that policymakers should adopt a more comprehensive approach that not only focuses on promoting exports or managing exchange rates but also strengthens internal economic fundamentals. Future research should consider including additional variables such as foreign direct investment, government spending, human capital development, and global economic indices to better understand the broader determinants of economic growth.

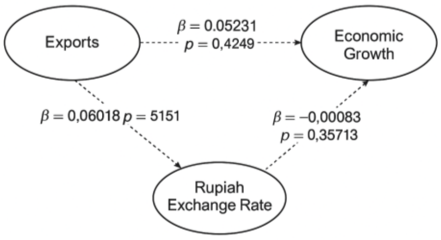

Figure 1 Path Analysis Research Model

The mediation test is conducted to determine whether the rupiah exchange rate (Z) can be a mediating variable in the relationship between exports (X_1) and imports (X_2) on economic growth (Y). The test uses the Sobel Test, which evaluates whether the indirect effect of the independent variable on the dependent variable through the mediating variable is statistically significant. Since the Sobel test value (0.6110) < t table value (2.045) and probability > 0.05, it can be concluded that the rupiah exchange rate does not mediate the relationship between exports and economic growth. In other words, exports do not affect economic growth through the rupiah exchange rate significantly.

Similar to the previous result, the Sobel test value (0.5380) < t table value (2.045) and probability > 0.05, so it can be concluded that the rupiah exchange rate does not mediate the relationship between imports and economic growth. This means that although imports can affect economic growth, the effect does not occur through the rupiah exchange rate mechanism significantly.

The Sobel test results show that the rupiah exchange rate does not act as a mediating variable in the relationship between exports and imports on economic growth. This indicates that other factors, such as trade policy, foreign investment, and global economic conditions, may be more influential in determining the relationship between exports, imports, and economic growth. Therefore, exchange rate stabilization policies alone may not be sufficient to increase the impact of international trade on national economic growth.

3.2. Discussion

The results of this study show that exports and imports do not have a significant effect on Indonesia's economic growth. The export variable has a positive but insignificant coefficient (β = 0.000232; p = 0.46217 > 0.05), indicating that an increase in exports by 1% only slightly increases economic growth without statistical significance. Similarly, imports also show a positive but insignificant relationship (β = 8.99E-05; p = 0.2102 > 0.05), suggesting that the import of capital goods and raw materials, although supportive of domestic production, does not substantially contribute to economic growth. These findings are consistent with prior studies, such as those by (Firmansyah et al., 2018) and Sritrisniawati & Evi Gravitiani (2021),which argue that Indonesia's economic growth is more driven by domestic consumption and investment rather than external trade, and that the dominance of low value-added primary commodities in exports reduces their impact on the economy.

Additionally, the rupiah exchange rate does not play a mediating role between exports and imports on economic growth. Path analysis results demonstrate that neither exports and imports significantly affect the exchange rate, nor does the exchange rate significantly influence economic growth (all p-values > 0.05). This suggests that fluctuations in the exchange rate are insufficient to link trade activities with national economic performance. This finding aligns with the studies by Sritrisniawati & Evi Gravitiani (2021) and (Aika Putra Hakim & Sulfitri, 2023) who emphasized that the effect of exchange rates on growth is often mediated by broader factors such as global financial stability, monetary policy, and investment flows rather than direct trade mechanisms. Thus, while maintaining exchange rate stability remains important, it alone cannot drive the positive impacts of exports and imports on economic growth without strengthening domestic industrial capacity and broader economic policies.

In conclusion, this study reinforces the notion that enhancing economic growth in Indonesia requires a more integrated strategy that not only focuses on promoting exports and managing imports but also strengthens domestic industrialization, investment, and the development of high value-added sectors to achieve sustainable and resilient economic progress.

4. CONCLUSION

Based on the analysis, it can be concluded that exports have a negative but insignificant effect on economic growth in Indonesia, with a probability value of 0.46217 > α (0.05), which indicates that exports have not been the main factor in driving economic growth. Imports have a positive but insignificant effect, with a probability value of 0.2102 > α (0.05), indicating that although imports of raw materials and capital goods can support the industrial sector, their impact on economic growth is still limited. The rupiah exchange rate also has no significant effect on economic growth, with a probability value of 0.35713 > α (0.05), which means that exchange rate fluctuations are not strong enough to directly affect economic growth. In addition, the rupiah exchange rate cannot be a mediating variable in the relationship between exports and imports on economic growth, because exports and imports have no significant effect on the rupiah exchange rate, and the rupiah exchange rate also has no significant effect on economic growth. Therefore, more comprehensive economic policies are needed to increase the effectiveness of international trade in promoting national economic growth.

This study investigated the effects of exports, imports, and the rupiah exchange rate on Indonesia's economic growth. The results showed that exports and imports, although positively related, do not have a statistically significant impact on economic growth, and the rupiah exchange rate does not mediate these relationships. These findings imply that Indonesia's economic growth is influenced more by internal factors such as domestic consumption and investment rather than external trade activities alone. Furthermore, the predominance of low value-added commodities in exports limits the potential impact of trade on economic advancement. Consequently, policy measures should focus on increasing the added value of export products, strengthening industrial capacity, promoting innovation, and ensuring macroeconomic stability to effectively support long-term economic growth.

REFERENCES

Afandi, M. A. (2015). DETERMINAN INFLASI DARI SISI SUPPLY (COST-PUSH INFLATION) DI INDONESIA. *Jurnal Ekonomi Dan Studi Pembangunan*, *16*, 132–145. https://doi.org/10.18196/jesp.2015.0047.132-145

Aika Putra Hakim, M. D., & Sulfitri, V. (2023). PENGARUH INFLASI, SUKU BUNGA, NILAI TUKAR, DAN PERTUMBUHAN EKONOMI TERHADAP IHSG. *EBID:Ekonomi Bisnis Digital*, *1*(2), 85–92. https://doi.org/10.37365/ebid.v1i2.180

Badan Pusat Statistika. (2025). *Data Ekspor, Impor, dan Pertumbuhan Ekonomi*.

Bank Indonesia. (2025). *Kurs Rupiah*.

Deluma. (2019). Analisis Pengaruh Ekspor, Impor dan Investasi Terhadap Pertumbuhan Ekonomi Indonesia. *Jurnal Ekonomi Pembangunan*.

Fauziah, E. S., & Khoerulloh, A. K. (2020). PENGARUH EKSPOR DAN IMPOR TERHADAP PERTUMBUHAN EKONOMI DENGAN KURS SEBAGAI VARIABEL INTERVENING. *Khazanah Sosial*, *2*(1), 15–24. https://doi.org/10.15575/ks.v1i1.15

Firmansyah, Ekonomi, I., & Riau, M. (2018). *SBI, Jumlah Uang Beredar, dan Ekspor terhadap Inflasi dan Cadangan Devisa di Indonesia*. *9*.

Ghozali. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25*. Badan Penerbit Universitas Diponegoro.

Herdiansyah, H. (2010). *Metodologi Penelitian Kualitatif untuk Ilmu-Ilmu Sosial.* . Salemba Humanika.

Hodijah, S. , & A. G. P. (2021). Pertumbuhan ekonomi di Indonesia. *Jurnal Ekonomi Dan Bisnis*, *10*(1), 53–62.

Hodijah, S., Patricia Angelina, G., Ekonomi dan Bisnis, F., & Jambi, U. (2021). ANALISIS PENGARUH EKSPOR DAN IMPOR TERHADAP PERTUMBUHAN EKONOMI DI INDONESIA. *Jurnal Manajemen Terapan Dan Keuangan (Mankeu)*, *10*(01).

Intan Sari Arfiani. (2019). Analisis Empiris Hubungan antara Ekspor, Impor, Nilai Tukar dan Pertumbuhan Ekonomi di Indonesia. *Jurnal Ekonomi Pembangunan*.

Irawan, F. (2019). *Perekonomian Indonesia 2019. Kementerian Koordinator Bidang Perekonomian Republik Indonesia*.

Iriani, R., Setiawati, S., Islamudin, A., Ekonomi, F., Bisnis, D., Pembangunan, U., Veteran, N. ", & Jakarta, ". (2021). *Ekspor-Impor dan Dampaknya terhadap Pertumbuhan Ekonomi di Indonesia*.

Krugman, P. R. , O. M. , & M. M. J. (2018). *International Economics: Theory and Policy* (11th ed.). Pearson.

Mandelkern, M. (2020). Import-Export and 'And.' *Philosophy and Phenomenological Research*, *100*(1), 118–135. https://doi.org/10.1111/phpr.12513

N. Gregory Mankiw. (2016). *Principles of Economics* (7th ed.). Cengage Learning.

Rinaldi, M. , P. M. N. , & Syaiful. (2021). Persepsi masyarakat terhadap tingkat kepuasan pelayanan bus Transjabodetabek dengan metode uji asumsi klasik dan uji regresi linear berganda. *Seminar Nasional Ketekniksipilan, 1*(1).

Safira Amanda Novianingrum, Sellya Nara Kartika, Uswatun Khasanah, & Muhammad Kurniawan. (2024). Pengaruh Ekspor, Impor, dan Nilai Tukar terhadap Pertumbuhan Ekonomi di Indonesia Periode 2014-2023. *Ekonomi Keuangan Syariah Dan Akuntansi Pajak*, *1*(3), 58–73. https://doi.org/10.61132/eksap.v1i3.180

Sekaran, U. , & B. R. (2016). *Research Methods for Business: A Skill-Building Approach* (7th ed.). John Wiley & Sons.

Sritrisniawati, S. E., & Evi Gravitiani. (2021). Kinerja Ekspor Komoditas Primer terhadap Inflasi dan Nilai Tukar Pada Era Pandemi Di Indonesia : Pendekatan Prebisch Singer Hypothesis. *JURNAL EKONOMI DAN KEBIJAKAN PEMBANGUNAN*, *10*(2), 101–113. https://doi.org/10.29244/jekp.10.2.2021.101-113

Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.

Todaro, M. P. , & S. S. C. (2015). Economic Development. *Pearson*.

Wahyudi, D. , I. J. , & A. Z. (2023). Tren dan isu penelitian uji-t dan chi kuadrat dalam bidang pendidikan. *Journal of Mathematics Education*, *4*(2), 182–196.

Yasa, M., Sri Budhi, M. K., & Wardana, B. S. (2014). Faktor-faktor yang Mempengaruhi Pertumbuhan Ekonomi dan Dampaknya terhadap Kesempatan Kerja di Provinsi Bali. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*.