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The Effect of Natural Resources Exports on Indonesia's Foreign Exchange Reserves

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A B S T R A C T

This study aims to analyze the influence of natural resource (SDA) exports, exchange rates, inflation, and Export Proceeds (DHE) policies on Indonesia's foreign exchange reserves during the period 2001–2024. This study uses annual time series data and is processed using the Ordinary Least Squares (OLS) method. The results of the study show that natural resources exports and DHE policies have a positive and significant effect on foreign exchange reserves, while inflation has a negative and significant effect. Meanwhile, the exchange rate has no significant effect on foreign exchange reserves. This research model explains 95% of the variation in foreign exchange reserves. These findings affirm the importance of the natural resources export sector and government policies in strengthening Indonesia's foreign exchange reserves. Further research is recommended to add other macroeconomic variables as well as analyze the impact of the latest DHE policy in 2025.

INTRODUCTION

Indonesia is a developing country that has abundant natural resources. This condition makes Indonesia quite active in international trade, especially through the export of natural resources-based commodities. In 2024, the value of Indonesia's exports will be recorded at USD 264.7 billion, and around 62.7% of it comes from natural resources commodities that are required to report Foreign Exchange Export Proceeds (DHE) (Coordinating Ministry for the Economy of the Republic of Indonesia, 2023). The large role of natural resource exports shows that this commodity has great potential as a source of foreign exchange for Indonesia. However, some previous research, as presented by (Widiyanto & Suryono, 2020), found that the increase in exports did not always coincide with rising foreign exchange reserves. This shows that there is an interesting dynamic in the relationship between natural resource exports and foreign exchange reserves.

Foreign exchange reserves have an important role for the Indonesian economy. Foreign exchange reserves are used to maintain exchange rate stability, pay foreign obligations, and provide a buffer during global economic turmoil. The strength or weakness of a country's economy can be seen from the amount of foreign exchange reserves it has (Maharani, 2024). However, although Indonesia's exports, especially from the natural resource sectors such as mining, plantations, forestry, and fisheries, continue to increase, foreign exchange reserves do not always increase. One of the reasons that the government often discusses is that not all DHEs return to the country. There are some foreign exchange stored abroad so that it cannot directly strengthen Indonesia's foreign exchange reserves (Coordinating Ministry for the Economy of the Republic of Indonesia, 2023).

Furthermore, various other macroeconomic elements impact foreign exchange reserves, including exchange rates and inflation. Exchange rates are crucial in shaping the competitiveness of exported goods and the volume of foreign currency inflows into the nation. For instance, a study by (Pamungkas et al., 2020) revealed that the rupiah's exchange rate exerts a notable effect on Indonesia's foreign exchange reserves. Conversely, inflation has demonstrated a key role in certain investigations. As per (Safitri et al., 2023), inflation had a partial impact on Indonesia's foreign exchange reserves from 2016 to 2021. Moreover, research by (Sukarniati et al., 2025) indicated that inflation exerts a positive long-term influence on Indonesia's foreign exchange reserves. Thus, fluctuations in exchange rates and inflation levels must be factored into the examination of Indonesia's foreign exchange reserve dynamics.

Seeing these conditions, the government has issued Government Regulation Number 36 of 2023 concerning Foreign Exchange Export Proceeds (DHE) from the business, management, and/or processing of natural resources (mining, plantations, forestry, and fisheries). Previously, the DHE regulation began with the issuance of PBI No. 13/20/PBI/2011 which required the receipt of DHE through foreign exchange banks in Indonesia, then strengthened by Government Regulation No. 1 of 2019 and tightened again in Government Regulation No. 36 of 2023 which required natural resources exporters with an

export value of more than USD 250,000.00 to place at least 30% of the total foreign exchange obtained into the DHE SDA placement instrument for at least 3 months (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2023). Based on this background, this study aims to analyze the influence of natural resources exports and DHE policies since 2011, along with macroeconomic variables such as inflation and exchange rates, on Indonesia's foreign exchange reserves during the period 2001–2024.

LITERATURE REVIEW

Foreign Exchange Reserves

Foreign exchange reserves are a collection of foreign assets owned by monetary authorities and can be used to maintain the external stability of the economy. In addition to serving as a tool to meet international payment obligations, foreign exchange reserves also support investor confidence in a country's ability to deal with external shocks (Sinaga et al., 2025). High foreign exchange reserves reflect a strong level of economic resilience, especially when there is exchange rate volatility or pressure on the international trade sector.

To understand the factors that affect foreign exchange reserves, classical macroeconomic approaches such as Keynes' theory provide a relevant framework. In Keynes' view, export activity was seen as an important component that could increase national income through the mechanism of inward foreign exchange flows. The greater the income from exports, the higher the potential for an increase in a country's foreign exchange reserves (Juliansyah et al., 2020). Thus, the condition of an open economy that relies on exports as a source of foreign exchange is closely related to the movement of foreign exchange reserves.

Foreign exchange reserves are ultimately not only influenced by a single variable, but are the result of the interaction between exports, exchange rates, inflation, and other dynamics of international transactions. Therefore, external variables such as natural resource exports, exchange rate movements, and price stability are relevant to be analyzed in the context of this study, considering that all three have direct and indirect potential to affect the position of a country's foreign exchange reserves (Permana & Faridatussalam, 2022).

Natural Resources Exports

In the context of international trade, exports have a central role as the main source of foreign exchange receipts for countries. Based on the theory of comparative advantage introduced by David Ricardo, a country will focus on exporting commodities that have higher production efficiency relative to other countries. The development of this theory can be seen in the Heckscher-Ohlin Theory which underlines that the export structure of a country is greatly influenced by the availability and abundance of domestic production factors. Countries that have a wealth of natural resources or adequate labor availability will have a competitive advantage in exporting products that take advantage of these superior production factors (Maesyaroh & Kundhani, 2021).

In the context of countries with rich natural resources, exports of primary commodities such as mining and agriculture are one of the main contributors to

foreign exchange receipts. Exports from this sector not only have an impact on increasing national income, but also become a source of foreign exchange reserve inflows through international trade transactions (Sinaga et al., 2025). Therefore, export movements, especially from strategic sectors such as mining and agriculture, have direct implications for the resilience of a country's foreign exchange reserves.

Exchange Rate (Exchange) and Foreign Exchange Reserves

The exchange rate, or rate of exchange, represents the value of a nation's currency when measured against foreign currencies. It serves as a crucial external metric that profoundly influences economic stability and global commerce. Fluctuations in this rate shape the competitiveness of local goods on the international stage; a decline in the domestic currency's value makes exports more affordable for overseas purchasers, potentially driving up demand. Conversely, an increase in the currency's value can diminish export appeal by raising prices for foreign buyers. This perspective aligns with Maesyaroh and Kundhani (2021), who highlight the strategic importance of exchange rates in preserving a country's external equilibrium.

In the perspective of the Marshall–Lerner Condition, exchange rate depreciation will only increase exports if the elasticity of export and import demand is large enough. This theory of export-import elasticity explains that the effect of exchange rates on foreign exchange flows is highly dependent on how responsive international traders are to price changes. Research by (Permana & Faridatussalam, 2022) suggests that exchange rate depreciation can boost exports, which further drives inflows of foreign exchange and strengthens the position of foreign exchange reserves as a pillar of the country's external stability.

Inflation and Foreign Exchange Reserves

Inflation is a continuous increase in the overall price of goods and services, which can reduce people's purchasing power and affect competition in global trade. According to (Maesyaroh & Kundhani, 2021), uncontrolled inflation can damage economic stability and weaken export competitiveness, because the price of domestic products becomes higher relative to other countries. If export competitiveness decreases, foreign exchange inflows are likely to shrink, which can ultimately cause a country's foreign exchange reserve position to be weakened.

From the perspective of Purchasing Power Parity (PPP), the difference in the inflation rate between countries will affect the exchange rate as a form of international price adjustment. If domestic inflation is higher than that of trading partner countries, then the domestic currency exchange rate tends to weaken (Sinaga et al., 2025) mentioned that macroeconomic stability is greatly influenced by the linkages between inflation, exchange rates, and export flows, all three of which have direct implications for foreign exchange reserves as a support for external resilience.

Empirical research also shows that inflation has a significant impact on foreign exchange reserves through international trade routes. (Ullah et al., 2024) found that rising inflation could lower the position of foreign exchange reserves

as it weakens macroeconomic stability and reduces trade competitiveness. The study also shows that exchange rates are an important factor that affects fluctuations in foreign exchange reserves in the long term.

Export Proceeds Foreign Exchange Dummy (PP No. 36 of 2023)

Academic research on foreign exchange policies for export goods, particularly the application of Government Regulation Number 36 of 2023, remains scarce. Anggrasari (2023) examines this regulation, which addresses foreign exchange earnings from the business, management, and/or processing of natural resources, viewing it as a mechanism for national resilience. Employing a normative juridical method, the study determines that the policy serves as a strategic public initiative to bolster overall national strength. Meanwhile, (Maharani, 2024) represents one of the initial studies empirically examining its impact on Indonesia's foreign exchange reserves, concluding that the mandatory placement policy of 30% of foreign currency from natural resource exports into the domestic financial system exerts a positive and significant influence on foreign exchange reserves in both the short and long term. Overall, Government Regulation No. 36 of 2023 aims to enhance domestic foreign currency liquidity and maintain economic resilience, with the expectation of promoting development financing, boosting investment and the performance of natural resource exports, as well as supporting macroeconomic stability and the domestic financial market (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2023).

From a more critical perspective, (Zhang et al., 2023) reminded that policies that focus too much on increasing exports to acquire foreign exchange reserves can have negligible negative consequences. Their research shows that behind the impressive growth in foreign exchange reserves lies the continued loss of real wealth, the degradation of the regional environment, and the widening of the regional development gap. Therefore, a more balanced approach is needed in international trade policy that not only focuses on foreign exchange accumulation but also considers environmental sustainability and equitable development.

Based on the literature review that has been conducted, several gaps can be identified in previous research. First, although many studies have analyzed the effect of exports in general on foreign exchange reserves (Astuty, 2020; Mahmudah, 2019), a study that specifically examines the influence of natural resource exports (agriculture (plantations, forestry, fisheries) and mining) on foreign exchange reserves is still limited. Second, research on the impact of foreign exchange policies on export products, especially Government Regulation Number 36 of 2023, is still very minimal and has only begun by (Anggrasari, 2023; Maharani, 2024).

Third, most of the previous research used the analysis period before the implementation of Government Regulation No. 36 of 2023, so it has not been able to capture the latest dynamics in the management of foreign exchange from natural resource exports in Indonesia. Fourth, research that integrates empirical analysis of the influence of natural resource exports on foreign exchange reserves

with the evaluation of foreign exchange policy on export results is still not available.

Fifth, there are inconsistencies in the results of the study related to the effect of the exchange rate on foreign exchange reserves (Astuty, 2020) and (Sinaga et al., 2025) found a significant positive influence, while (Yanuar & Akbar, 2022) found significant negative influences. Sixth, the results of research on the influence of mining sector exports show mixed results, where (Maharani, 2024) found negative or ineffectual influences, which are contrary to theoretical expectations.

Based on the results of previous research, it can be seen that the influence of natural resource exports on Indonesia's foreign exchange reserves has not shown consistent conclusions, especially after the enactment of the Government Regulation No. 36 of 2023 policy. This shows that there is still a need for further analysis focusing on the latest period to see whether natural resource exports, especially from the mining and agricultural sectors, remain a factor that plays a role in the movement of Indonesia's foreign exchange reserves. Therefore, this study was conducted to re-examine the relationship using the latest data and relevant analytical approaches.

RESEARCH METHODOLOGY

Research Design

This study uses a quantitative approach with the type of associative research, which is research that aims to analyze the relationship and influence between variables. The quantitative approach was chosen because this study focuses on numerical measurement as well as hypothesis testing using statistical tools.

Data Types and Sources

This study uses secondary data in the form of annual time series data for the period 2001–2024. Data is obtained from official publications such as the Central Statistics Agency (BPS), Bank Indonesia, economic reports, and policy data related to Foreign Exchange Export Proceeds (DHE).

Research Variables and Operational Definitions

1. Foreign Exchange Reserves (Y)
   It is Indonesia's total foreign exchange reserves obtained from international transactions and measured in USD units, then transformed into the form of natural logarithms (Ln).
2. Natural Resources Exports (X1)
   The export value of Indonesia's natural resources commodities that contribute to foreign exchange receipts. The data is measured in million USD and converted to natural logarithms (Ln).
3. Exchange Rate (X2)
   It is the exchange rate of the rupiah against the US dollar. The data is measured in annual mean values and converted to logarithmic form (Ln).
4. Inflation (X3)

Annual inflation calculated based on changes in the Consumer Price Index (CPI). The data is transformed into a natural logarithmic form.

5. AND – Hasil Ekspor Currency (X4)
   Dummy variables that are valued:
   0 = before the DHE policy takes effect
   1 = after the DHE policy is implemented

Data Analysis Methods

The analysis was carried out using multiple linear regression to determine the influence of natural resources exports, exchange rates, inflation, and DHE policies on Foreign Exchange Reserves.

The regression model is formulated as follows:

$$Yt=\beta_0+\beta_1X_1t+\beta_2X_2t+\beta_3X_3t+\beta_4Dt+ et$$

Where:

- Y = LN_CADANGANDEVISA
- X_1 = LN_EKSPORSDA
- X_2 = LN_NILAITUKAR
- X_3 = LN_INFLASI
- D = Dummy DHE (0 = period before the determination of Government Regulation Number 36 of 2023, 1 = period after the determination of Government Regulation Number 36 of 2023)
- β_0 = constant
- β_1–β_4 = the regression coefficient of each independent variable
- t = time series
- ε = error term.

The analysis was carried out using the EViews 10 econometric software.

Stages of Analysis

1. Statistics Descriptive
   It is used to describe the average, minimum, maximum, and variation values of each of the research variables. Descriptive statistics help provide a preliminary picture before further testing.
2. Stationarity Test
   The root unit test using ADF–Fisher is performed to ensure that the variable is stationary. Non-stationary data can cause spurious regression, so this testing is especially important before model estimation.
3. Estimasi Regresi Linier Berganda
   The model is estimated using the Ordinary Least Squares (OLS) method to see the simultaneous or partial influence of free variables on foreign exchange reserves.
4. Classic Assumption Test
   To ensure that the model meets the criteria of the Best Linear Unbiased Estimator (BLUE), the following tests are performed:
   a. Normality Test
      Using the Jarque–Bera test to ensure residual is distributed normally.

b. Multicollinearity Test
   Using the Variance Inflation Factor (VIF) value and correlation between variables. VIF < 10 shows the absence of multicollinearity.
c. Heteroscedasticity Test
   It is done with the Breusch–Pagan–Godfrey Test to see if the residue has a homogeneous variance.
d. Autocorrelation Test
   Using the Breusch–Godfrey LM Test to ensure that there is no residual correlation between times in the model.

5. Uji Hypothesis
   a. Test F (Simultaneous)
      To find out whether all independent variables together have an effect on foreign exchange reserves.
   b. T test (Partial)
      To see the influence of each variable individually.
   c. Coefficient of Determination (R^2)
      To measure how much an independent variable contributes in explaining the dependent variable.

RESULTS AND DISCUSSION

Statistics Descriptive

The analysis begins with the presentation of descriptive statistics to describe the basic characteristics of the research variables. Descriptive statistics provide information about the average, minimum, maximum, and movement patterns of variables during the study period. A concise presentation through the table allows the reader to understand the overview of the data before entering the econometric analysis stage.

Table 1. Descriptive Statistics Summary

Variabel	Mean	Minimum	Maximum	Information
Foreign Exchange Reserves (Ln)	9.323.304	2.810.363	15.571.938	Tends to increase
Export of natural resources (Ln)	27.393	6.008	69.831	Volatile
Exchange Rate	11.788	8.465	16.162	Moderate variation
Inflation (Ln)	0.058	0.015	0.171	Stable
AND (Dummy)	0.58	0	1	Policy variables

The data show that all variables have sufficient variation, making them suitable for use in regression analysis.

Stationarity Test

Stationarity tests need to be performed to ensure that all variables used in the model have stable statistical properties over time. The ADF-Fisher test is used because it is suitable for multivariate panel or time series data. A significant probability value indicates that the data is stationary so it is safe to use in modeling.

Table 2. Stationarity Test Results (ADF–Fisher)

Test Type	Statistics	Prob.	Conclusion
ADF–Fisher Chi-square	75.55	0.0000	Stasions
Choi Z-stat	–7.19	0.0000	Stasions

Based on these results, all variables are stationary at the first level (first difference), so that the regression model can be continued.

Multiple Linear Regression Results

The next stage is to estimate a multiple linear regression model to see the effect of Natural Resources Exports, Exchange Rate, Inflation, and DHE on Foreign Exchange Reserves.

Table 3. Regression Estimation Results

Variabel	Coeficient	t-stat	prob	Interpretasi
Konstanta	989.286	5.38	0.000	Signifikan
Export of natural resources (Ln)	40.503	6.781	0.000	Significant positives
Exchange Rate (Ln)	20.382	1.016	0.322	Insignificant
Inflation	–2.94722	–3.346	0.003	Significant negatives
AND (Dummy)	38.632	3.695	0.001	Significant positives

These results show that three variables (Natural Resources Exports, Inflation, and DHE) have a significant influence on foreign exchange reserves. Meanwhile, the exchange rate does not have a significant effect.

Classic Assumption Test

Classical assumption tests are required to ensure that the regression model meets the criteria of the Best Linear Unbiased Estimator (BLUE). The tests included normality, multicollinearity, heteroscedasticity, and autocorrelation

Table 4. Summary of the Classical Assumption Test

Test	Result	Conclusion
Normality	JB = 5.54; p = 0.063	Residual normal
Multikolinearitas	VIVID < 10	No multicollinearity
Heteroskedastisitas	p = 0.215	Heteroscedasticity does not occur
Autocorrelates	p = 0.757	No autocorrelation occurs

Overall, all tests showed that the model met classical assumptions, so the estimated results were valid for use in analysis and conclusion drawn.

F Test (Simultaneous)

The F test is performed to see if all independent variables have an influence together on the dependent variables.

Table 5. F Test Results

Statistics	Value
F-statistic	111.245
Prob(F)	0.0000

A probability value smaller than 0.05 indicates that the model is simultaneously significant. This means that all independent variables together affect foreign exchange reserves.

T test (Partial)

The t-test is used to see the influence of each independent variable individually.

Table 6. Stationarity Test Results (ADF–Fisher)

Variabel	t-stat	Sig.	Conclusion
Natural Resources Exports	6.781	0.0000	Significant effect
Exchange rate	1.016	0.322	Insignificant
Inflation	–3.346	0.003	Significant effect
DHE	3.695	0.001	Significant effect

Based on the t-test, three variables were proven to be partially significant. The exchange rate is not significant, indicating that exchange rate fluctuations do not have a strong effect on foreign exchange reserves in the study period.

Coefficient of Determination

The R^2 test is used to determine the ability of free variables to explain the variation of bound variables.

Table 7. R^2 Test Results

Size	**Value**
R-squared	0.959
Adjusted R-squared	0.950

This means that 95% of the variation in foreign exchange reserves is explained by the variables of Natural Resources Export, Exchange Rate, Inflation, and DHE. This very high value indicates that the model has strong clear power.

DISCUSSION

The regression analysis reveals that three independent variables—Natural Resources Exports, Inflation, and Dummy DHE—have a significant impact on Indonesia's Foreign Exchange Reserves from 2001 to 2024. Conversely, the Exchange Rate does not significantly affect the dependent variable.

The Effect of Natural Resources (SDA) Exports on Foreign Exchange Reserves

The Natural Resources Export variable has a positive and significant influence on foreign exchange reserves with a coefficient value of 40.503 and a significance level of 0.000. These findings support the classic theory of international trade, in which exports are the main source of foreign exchange receipts for countries (Heckscher-Ohlin Theory). The results of this study are also in line with the research (Sinaga et al., 2025) which states that the mining and agricultural sectors are the main sources of foreign exchange inflows which play an important role in the resilience of national foreign exchange reserves. On the other hand, these findings also confirm that despite the dynamics of global

commodity prices, natural resource exports remained the backbone of Indonesia's foreign exchange during the study period.

The Effect of Exchange Rates on Foreign Exchange Reserves

The variable of the Rupiah Exchange Rate against the US Dollar in this study did not show a significant effect on foreign exchange reserves, with a coefficient value of 20.382 and a significance of 0.322 (> 0.05). These findings are in line with the study of (Zahra et al., 2024) which found that unstable fluctuations in Indonesia's exchange rate and sustained depreciation cause the exchange rate to have no significant effect on foreign exchange reserves. Similar results were also stated by (Herliani & Sukarniati, 2024) in the ASEAN-6 countries for the period 2011-2022, where the value of the country's currency is too low making the currency ineffective for international economic transactions so that it does not have a significant impact on increasing foreign exchange reserves. (Mahendra et al., 2022) also confirmed that although in general the exchange rate and foreign exchange reserves have a relationship in the economic system, when the value of the currency of the country of origin is too low to be used in economic transactions with other countries, this will not have a significant impact on the increase in foreign exchange reserves in that country. The insignificance of the exchange rate in this study is suspected to be related to the presence of foreign exchange flows that did not fully return to the country before the strict implementation of the DHE policy. In addition, exchange rate fluctuations during the study period were more influenced by global factors and domestic macro policies, so the impact on foreign exchange reserves was not always linear, especially when most exports were channeled through automated trading schemes or hedging by large exporters.

The Effect of Inflation on Foreign Exchange Reserves

Inflation exerts a negative and statistically significant impact on foreign exchange reserves, evidenced by a coefficient of -2.94722 and a p-value of 0.003. This adverse effect can be attributed to Purchasing Power Parity (PPP) theory, which posits that rising domestic inflation raises the relative cost of local goods, diminishing export competitiveness and reducing inflows of foreign currency. These results align with findings from Fitria et al. (2021), who found that inflation negatively affects foreign exchange reserves in Indonesia, though the effect was not statistically significant. Consequently, inflation warrants close monitoring as a key factor, even if its empirical influence proves limited in both short- and long-term contexts. Additionally, research by Zhang et al. (2023) indicates that elevated domestic inflation prompts foreign investors to pull out their capital, leading to currency depreciation and a decline in foreign exchange reserves.

The Effect of DHE Policy (Dummy DHE) on Foreign Exchange Reserves

The DHE Dummy variable, which represents the implementation of Government Regulation No. 36 of 2023, shows a positive and significant influence on foreign exchange reserves, with a coefficient of 38.632 and a probability of 0.001. This proves that the government's policy of requiring natural

resources exporters to keep at least 30% of the foreign exchange proceeds from exports in national banking accounts has succeeded in increasing foreign exchange reserves. These findings support the analysis (Anggrasari, 2023) which states that this policy is an important strategy to strengthen national economic resilience through controlling foreign exchange flows. Furthermore, research (Maharani, 2024) also found that the DHE policy has a positive effect both in the short and long term, although it still needs to be strengthened in its implementation.

Simultaneously, this regression model has an Adjusted R^2 of 0.950, which indicates that 95% of the variation in foreign exchange reserves can be explained by the variables of Natural Resources Exports, Exchange Rates, Inflation, and DHE policies. These results show that the dynamics of foreign exchange reserves are determined not only by the size of the natural resources sector's exports, but also by macroeconomic stability and the effectiveness of foreign exchange policies.

CONCLUSIONS AND RECOMMENDATIONS

This study found that natural resource exports have a positive and significant effect on Indonesia's foreign exchange reserves. This means that the higher the value of natural resource exports, the larger the foreign exchange reserves that Indonesia has. On the contrary, inflation turns out to have a negative and significant effect, which means that if inflation rises, foreign exchange reserves tend to fall. Meanwhile, the exchange rate of the rupiah against the dollar in this study did not show a significant influence, so the change in the exchange rate in the 2001-2024 period did not have much effect on foreign exchange reserves. In addition, the existence of the Export Proceeds Foreign Exchange (DHE) policy through Government Regulation No. 36 of 2023 has proven to have a positive and significant impact, which shows that this policy is quite effective in encouraging foreign exchange from exports back to the country. Overall, the results of the study show that the natural resources export factor and government policies through DHE are more influential than the exchange rate factor in explaining the dynamics of Indonesia's foreign exchange reserves.

Based on the results of this study, the government is advised to maintain and strengthen the implementation of the DHE policy, for example by increasing supervision and providing incentives to natural resources exporters so that they are more orderly in placing foreign exchange from exports in the country. In addition, the government needs to expand the downstream program so that the natural resources commodities exported are not only in the form of raw materials, but also in processed forms that have higher added value, so that they have a more positive impact on foreign exchange reserves. The government also needs to continue to maintain inflation stability so as not to have a negative impact on Indonesia's ability to collect foreign exchange. For further research, it is recommended to add other variables such as interest rates, external debt, or government spending, as well as use other analytical methods such as VAR or ECM to look at long-term effects.

ADVANCED RESEARCH

This research still has some limitations, so further research is recommended to add other variables that also affect foreign exchange reserves, such as interest rates, foreign direct investment (FDI), government spending, and external debt. The use of more dynamic analysis methods, such as Vector Autoregression (VAR) or Error Correction Model (ECM), can also be considered to look at long-term and short-term relationships between variables. In addition, expanding the scope of data, either in terms of time period or research object (e.g. cross-country), can provide more robust and representative results.

This research uses the DHE policy represented through Government Regulation No. 36 of 2023, while currently the government has updated the regulation through Government Regulation No. 8 of 2025 which requires all foreign exchange from natural resources exports to be placed in domestic banks for a certain period of time. Therefore, further research is recommended to examine the effectiveness of Government Regulation No. 8 of 2025 in increasing foreign exchange reserves, so as to provide an up-to-date picture of the impact of foreign exchange policy on national economic stability.

REFERENCES

Anggrasari, D. (2023). Analisis PP Nomor 36 Tahun 2023 Tentang Devisa. *Souvereignty: Demokrasi Dan Ketahanan Nasional*, *2*(4), 369–377.

Astuty, F. (2020). Pengaruh Produk Domestik Bruto, Ekspor Dan Kurs Terhadap Cadangan Devisa Di Indonesia. *JPEK (Jurnal Pendidikan Ekonomi Dan Kewirausahaan)*, *4*(2), 301–313. https://doi.org/10.29408/jpek.v4i2.2998

Herliani, & Sukarniati, L. (2024). *Analisis Pengaruh Ekspor , Foreign Direct Investment (FDI), Nilai Tukar , dan Inflasi Terhadap Cadangan Devisa di Negara Asean-6 Tahun 2011-2022*. *1*(June), 217–225.

Juliansyah, H., Apridar, & Moulida, P. (2020). *Analisis Faktor-faktor Yang Mempengaruhui Cadangan Devisa Indonesia Bukti (Kointegrasi dan Kausalitas)*. *3*, 32–46.

Maesyaroh, W. U., & Kundhani, E. Y. (2021). *Jurnal Ilmu Ekonomi (JIE) Jurnal Ilmu Ekonomi (JIE)*. *5*(2), 247–261.

Maharani, D. A. (2024). *DETERMINAN CADANGAN DEVISA PASCA PENETAPAN PERATURAN PEMERINTAH NOMOR 36 TAHUN 2023*.

Mahendra, W., Rahmah, F., & Jasmin, Z. R. (2022). *Determinan cadangan devisa di negara organisasi kerjasama islam (oki)*. *5*(3), 245–257.

Mahmudah, B. K. (2019). Pengaruh ekspor impor terhadap cadangan devisa di Indonesia. *Jurnal Ilmiah Akuntansi Dan Keuangan*, *8*(1), 59–65. https://doi.org/10.32639/jiak.v8i1.205

Permana, D. A., & Faridatussalam, S. R. (2022). *Analisis Pengaruh Ekspor , Impor , Nilai Tukar , dan Inflasi terhadap Cadangan Devisa Indonesia Tahun 1996-2020 Analyze of The Effect of Exports , Imports , Exchange Rates , and Inflation on Indonesia ' s Foreign Exchange Reserves in 1996-2020*. *22*(1), 146–158.

Sinaga, M. A., Syapsyan, S., & Sidabalok, S. (2025). Pengaruh Net Ekspor Dan Nilai Tukar terhadap Cadangan Devisa Indonesia Periode 2010 - 2023. *Jurnal Sosial Ekonomi Dan Humaniora*, *11*(2), 163–169.

https://doi.org/10.29303/jseh.v11i2.806

Ullah, A., Shahzad, M. A., Raza, K., Bari, S., & Muqeet, A. (2024). *The Major Determinants Of Foreign Exchange Reserve : The Promise And Perils Of Pakistan Economic Crises*. *12*, 198–209.

Widiyanto, S., & Suryono, A. (2020). *Analisa dampak ekspor , impor , nilai tukar dan inflasi terhadap cadangan devisa indonesia 1990-2019 Analysis of the effects of exports , imports , exchange rates and inflation on indonesia ' s foreign exchange reserves 1990-2019*. *12*(2), 317–333.

Yanuar, E., & Akbar, A. (2022). Pengaruh Ekspor Dan Impor Migas Terhadap Cadangan Devisa Indonesia. *Klassen*, *2*(2), 108–125.

Zahra, R. A., Mutiah, N., Arfah, T., Ekonomi, F., Syekh, U. I. N., Hasan, A., & Addary, A. (2024). *Analisis pengaruh nilai tukar rupiah, inflasi dan suku bunga terhadap cadangan devisa indonesia periode 2017-2023*. *9*(2), 121–129.

Zhang, S., Yang, L., & Cao, S. (2023). Neglected negative consequences of using exports to earn foreign exchange. *Research in Globalization*, *7*(July), 100148. https://doi.org/10.1016/j.resglo.2023.100148