

ANALYSIS OF EXCHANGE RATES AND INTEREST RATES ON INDONESIA'S NON-OIL AND GAS EXPORT VALUE

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This study evaluates the impact of exchange rates and interest rates on Indonesia's non-oil and gas exports from 2006 to 2022, recognizing the sector's importance in the Indonesian economy. Data reveal a significant increase in non-oil and gas exports from USD 155.9 billion in 2019 to USD 275.9 billion in 2022, driven by strong global demand from major economies such as China, the United States, and India. The analysis indicates that exchange rates have a positive effect on non-oil and gas exports, though the impact is statistically insignificant with a p-value exceeding 0.05. In contrast, interest rates exhibit a significant negative impact on export values, with a p-value of 0.022, suggesting that higher interest rates may reduce export volumes. Assumption testing reveals no issues with multicollinearity, autocorrelation, or heteroscedasticity, ensuring the validity of the results. In conclusion, while exchange rates positively affect exports, the impact is not significant; interest rates, however, have a significant negative effect, indicating the need for lower interest rate policies to support the growth of Indonesia's non-oil and gas exports.

Keywords: Exchange Rate, Interest Rate, Non-Oil and Gas Export Value

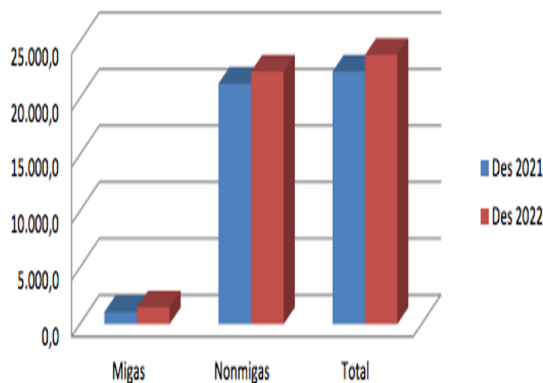
INTRODUCTION

Economic growth in a country can be gauged by examining the contribution of export volumes. International trade serves as a key driver for increasing national income by leveraging the comparative advantages of other countries and acknowledging the wealth and scarcity of resources globally. As global economic conditions evolve, uncertainties in financial markets have made it imperative for nations to formulate strategies that ensure their sustained performance and competitiveness. A significant area of focus has been the growth of non-oil and gas exports, which are in high demand across many countries. This growth, driven by international demand, must be supported by infrastructure development to

enhance export performance, particularly in the non-oil and gas sector.

Indonesia has been proactive in its efforts to advance various sectors, especially the economy, to improve its citizens' living standards. Over the past five years, Indonesia has experienced positive economic growth, averaging 12.85% from 2018 to 2022. However, this growth was interrupted by the COVID-19 pandemic, which led to a negative growth rate of 2.1%, primarily due to restrictions on cross-border trade, especially in exports. For Indonesia's economic development to continue smoothly, the country requires substantial funding to accelerate national progress. As Mahendra (2015) highlights, Indonesia's abundant natural resources offer significant advantages

in economic exchanges with other nations through international trade. Exports are a vital source of national income and



contribute significantly to foreign exchange reserves, with the non-oil and gas sector being the largest contributor, as depicted in the figure below.

Figure 1: Data on Indonesia's Oil and Gas vs. Non-Oil and Gas Export Transactions

Source: PEB and Non-PEB, in terms of FOB Value

The figure above illustrates a comparison of export values from December 2021 to December 2022. In 2021, the oil and gas sector's export value was US\$ 1,068 million, which included crude oil, refined oil products, and gas, valued at US\$ 115.7 million, US\$ 185.5 million, and US\$ 766.8 million, respectively. By December 2022, these values had changed, with crude oil exports reaching US\$ 149.4 million, refined oil products at US\$ 318.8 million, and gas exports at US\$ 1,004.7 million. For the non-oil and gas sector, which encompasses agricultural products, processed industrial products, and mining products, the export values in December 2021 were US\$ 402.2 million, US\$ 17,087.6 million, and US\$ 3,799.9 million, respectively. These values

shifted to US\$ 370.3 million, US\$ 16,481.3 million, and US\$ 5,503.4 million by December 2022.

Over time, international trade has experienced significant transformations. Historically, Indonesia's revenue heavily relied on oil and gas exports. However, as Krisna (2012) noted, international trade is crucial for a country's economic development, though it made Indonesia's economy vulnerable to fluctuations in global oil prices. Indonesia's economy, closely tied to the global oil market, needed diversification to mitigate risks associated with such dependencies. As a result, the government has increasingly emphasized the importance of boosting non-oil and gas exports, aiming to decrease reliance on the oil and gas sector and strengthen the overall economy (Pramana, 2013). International trade is fundamental to a nation's economic growth, not only by enhancing the productivity of goods and services but also by meeting national needs efficiently through exports and imports. A country's trade balance reflects the benefits of international trade. When export values exceed imports, it signals economic advancement. Conversely, a decline in export values relative to imports suggests economic difficulties. Thus, international trade is essential for fostering economic growth and maintaining a balanced trade surplus.

The exchange rate represents the value of one currency relative to another and plays a critical role in international transactions. In an open economy, foreign currencies are used when residents purchase goods or services from abroad. The exchange rate is crucial as it affects a country's competitiveness in the global market. Mahyus (2014) found that exchange rate

fluctuations significantly impact international trade: currency appreciation can decrease exports, while depreciation can boost them. Exchange rates provide a measure for comparing the value of one nation's currency against another's. Sukirno (2002) defines the exchange rate as the amount of domestic currency required to purchase one unit of foreign currency. According to the Bank Indonesia dictionary, an exchange rate is the value of one currency relative to another. Exchange rates fluctuate due to currency supply and demand dynamics and are categorized based on the exchange rate system, indicating the degree of government control over the currency's value.

Interest rates, set by Bank Indonesia (BI), reflect the central bank's monetary policy stance and serve as a benchmark in monetary operations aimed at aligning the average monthly interest rate from Open Market Operations (OMO) auctions with the target rate. Interest rate adjustments signal Bank Indonesia's inflation outlook and whether the inflation target will be achieved. Higher interest rates typically curb consumer demand and investment, helping to control inflation, while lower rates stimulate demand and economic growth but may increase inflationary pressures.

Relationship Between Variables

Exchange Rate Variable and Exports

Exports in a country have a significant impact on the exchange rate of its currency. The exchange rate itself refers to the comparison between a country's currency and that of another country. Increased export growth affects the exchange rate, so the trade relationship between Indonesia and other

countries, both directly and indirectly, can impact changes in a country's macroeconomic indicators. Since the implementation of the free-floating exchange rate system in August 1997, the position of the rupiah against foreign currencies has been determined by market mechanisms.

Changes in the exchange rate can affect the relative price of a product, making it more expensive or cheaper. Therefore, the exchange rate is often used as a tool to enhance the competitiveness of domestic products, particularly to encourage exports. These changes in exports can then help improve the trade balance position. A deep understanding of the relationship between exchange rates, trade balances, and economic output is crucial for economic policymakers. In brief, a country's real exchange rate plays a role in determining macroeconomic conditions, especially concerning net exports or the trade balance.

Interest Rate Variable and Exports

Interest rates are the rates set by Bank Indonesia and serve as a reference for banks in Indonesia to determine deposit and loan interest rates. These interest rates have a significant influence on investment decisions. In the context of this study, the focus is on interest rates. Interest rates themselves are the agreed-upon price between the user of funds and the lender for a specific period.

Differences in interest rates often affect the amount of investment in a country, whether from domestic or foreign investors. This increase in investment has the potential to drive domestic production growth, particularly due to the increase in exports. Bank Indonesia sets interest rates with considerations for balancing the investment

market. Interest rates also reflect the central bank's response to projected inflationary pressures, aiming to keep inflation in line with the established target.

RESEARCH METHODS

This study focuses on the primary destination countries using time series data from 2006 to 2022. The objective of this research is to evaluate the impact of exchange rates and interest rates on the value of non-oil and gas exports in Indonesia. The study employs quantitative data, which consists of numerical values that can be analyzed. The data used in this research is secondary data, including time series data over the period from 2006 to 2022, with a population of 10 (ten) major non-oil and gas export destination countries. The research includes data on non-oil and gas export values, exchange rates, and the BI Rate, sourced from reports and publications by the Central Statistics Agency (BPS), Bank Indonesia (BI), CEIC, and The Fed.

H1: Exchange Rate (Currency Exchange) – The Exchange Rate Positively and Significantly Affects Indonesia's Non-Oil and Gas Export Value.

The exchange rate represents the relative value of one currency against another and plays a crucial role in spending decisions by allowing prices from various countries to be translated into a common currency (Ekananda, 2014). Fluctuations in the exchange rate significantly impact the value of non-oil and gas exports in Indonesia, as they influence the pricing of goods to be exported. The exchange rate also serves as a price reference for the goods exported by the country. Given that each country has a different currency value, the exchange rate is a factor that positively affects non-oil and gas exports.

The price of a product is essential in export or import activities. If the price of goods domestically is lower, it will increase exports; conversely, if the price rises, the level of exports will decrease.

H2: Interest Rate – Interest Rates Negatively and Significantly Affect Indonesia's Non-Oil and Gas Export Value.

An increase in interest rates leads to a reduction in available working capital, which in turn reduces production and results in a decline in export volume, thereby lowering the overall export value. This indicates a negative relationship between credit interest rates and export volume (Bank Indonesia, 2005). Interest rates have a negative impact on non-oil and gas exports because they can hinder export growth in a country. High interest rates can cause a decline in production, which affects the quantity of goods available for export. Non-oil and gas exports are essential for every country; however, if interest rates become a barrier to export activities, it is important for each country to set the lowest possible interest rates to minimize the negative impact on exports.

RESULT AND DISCUSSION

The development of Indonesia's non-oil and gas exports

The development of Indonesia's non-oil and gas exports has shown fluctuations over time, influenced by changes in the country's economic conditions. High export values indicate an increase in domestic production activities, which positively impacts strong and stable economic growth. An increase in exports can reflect good global demand for domestic products, as well as the efficiency and competitiveness of the

domestic industrial sector. Conversely, a decline in export values may indicate challenges in the production sector or the negative effects of changes in global economic conditions. Consistently stable and increasing export performance usually

contributes to strengthening the currency's exchange rate and improving the trade balance, thereby supporting sustainable economic growth.

Description	2,019	2,020	2,021	2,022
Non Migas	155,893.7	154,940.8	219,362.1	275,906.1
Cina	25,894.3	29,936.4	51,088.9	63,461.7
USA	17,806.1	18,622.4	25,792.8	28,182.7
India	11,700.6	10,179.0	13,112.6	23,285.7
Japan	13,814.4	12,885.3	16,894.3	23,199.4
Philippines				12,900.9
	6,754.5	5,858.5	8,601.9	
Malaysia	7,669.3	6,970.2	10,634.6	13,574.2
South Korea	6,100.1	5,609.5	7,958.0	10,651.9
Singapore	9,437.2	8,533.3	8,083.3	9,730.0
Vietnam	5,140.8	4,927.2	6,740.3	8,445.8
Taiwan	3,779.9	3,726.4	6,360.7	7,854.2

Table 1. Indonesian Non-Oil and Gas Exports According to Main Destination Countries
Source : Kemendag

During the period from 2019 to 2022, Indonesia's non-oil and gas exports showed significant growth. In 2019, the total value of non-oil and gas exports was recorded at USD 155,893.7 million. Although there was a slight decline in 2020 to USD 154,940.8 million, Indonesia's non-oil and gas exports rebounded sharply in 2021 to USD 219,362.1 million, reaching a peak of USD 275,906.1 million in 2022. Throughout this period, the People's Republic of China remained Indonesia's largest trading partner in the non-oil and gas sector. The value of non-oil and gas exports to China consistently increased from USD 25,894.3 million in 2019 to USD 29,936.4 million in 2020, then surged to USD 51,088.9 million in 2021. By 2022, exports to

China had reached USD 63,461.7 million, reflecting strong growth.

The United States also showed an upward trend, though at a more moderate pace compared to China. Exports to the U.S. grew from USD 17,806.1 million in 2019 to USD 18,622.4 million in 2020. A significant

increase was observed in 2021, with exports reaching USD 25,792.8 million, and continued growth brought the total to USD 28,182.7 million in 2022. India experienced fluctuations, with exports recorded at USD 11,700.6 million in 2019, dropping to USD 10,179.0 million in 2020. However, there was a significant recovery in 2021 with exports valued at USD 13,112.6 million, which then surged to USD 23,285.7 million in 2022. Japan, as one of Indonesia's traditional

trading partners, also saw an increase in non-oil and gas export value. From USD 13,814.4 million in 2019, there was a slight decline in 2020 to USD 12,885.3 million. In 2021, export values rebounded to USD 16,894.3 million, and continued to rise, reaching USD 23,199.4 million in 2022.

Several other countries, including the Philippines, Malaysia, South Korea, Singapore, Vietnam, and Taiwan, also exhibited an upward trend in non-oil and gas exports, albeit at varying rates. Among these, the most significant increase was seen in

exports to the Philippines, which grew from USD 6,754.5 million in 2019 to USD 12,900.9 million in 2022. Malaysia also recorded a similar increase, from USD 7,669.3 million in 2019 to USD 13,574.2 million in 2022. Overall, despite some countries experiencing declines at the onset of the COVID-19 pandemic in 2020, Indonesia's non-oil and gas exports managed to recover and even achieve higher growth in the following years, with significant contributions from key trading partners.

CNYIDR	USDIDR	INRIDR	JPYIDR	PHPIDR	MYRIDR	KRWIDR	SGDIDR	VNDIDR	TWIDR
1151.1	8986	203.72	75.51	183.39	2547.8	9.6676	5859.0	0.55984	275.81
1285.6	9390	238.47	84.34	228.02	2841.2	10.035	6515.0	0.58622	289.64
1590.3	10850	223.34	119.76	228.21	3144.9	8.5975	7585.8	0.62071	331.25
1380.0	9420	203.02	101.40	202.80	2752.8	8.0952	6703.2	0.51004	294.65
1370.6	9005	201.45	110.97	206.40	2921.8	8.0366	7021.4	0.46191	308.76
1428.3	9060	170.91	117.75	206.90	2858.9	7.8205	6986.4	0.43079	299.31
1547.5	9630	175.87	111.96	234.76	3147.6	9.0241	7871.5	0.46265	331.84
2007.9	12160	196.76	115.48	274.06	3710.7	11.586	9628.3	0.57699	407.85
1991.7	12380	196.41	103.44	276.65	3542.2	11.328	9418.8	0.57932	391.52
2098.8	13785	208.24	114.59	293.92	3213.3	11.732	9745.4	0.61321	420.08
1931.8	13470	198.25	115.26	271.80	3003.7	11.167	9303.8	0.59157	415.24
2082.9	13565	212.52	120.40	271.43	3354.3	12.721	10144.0	0.59758	457.32
2092.6	14375	206.66	131.21	273.97	3480.6	12.912	10549.0	0.61988	470.34
1994.5	13880	194.53	127.75	274.04	3394.5	12.027	10320.0	0.59902	464.07
2159.4	14040	192.23	135.98	292.44	3492.5	12.946	10620.0	0.60858	500.09
2249.7	14250	191.36	123.83	279.47	3422.2	11.995	10574.0	0.62432	514.22
2248.3	15565	188.17	118.72	279.59	3537.5	12.344	11617.0	0.65925	509.04

Table 2: Exchange Rate Data

Source: Bank Indonesia (processed)

Table 3: Descriptive Exchange Rate Data

X1 Nilai Tukar				
	Percentiles	Smallest		
1%	.46191	.43079		
5%	.59157	.46191		
10%	4.239875	.46265	Obs	170
25%	115.48	.51004	Sum of wgt.	170
50%	291.04		Mean	2680.776
		Largest	Std. dev.	4162.483
75%	3213.3	14040		
90%	9944.7	14250	Variance	1.73e+07
95%	12380	14375	Skewness	1.591482
99%	14375	15565	Kurtosis	4.206413

Table 3: Descriptive Exchange Rate Data

Source: Stata 17 Output

	CINA	USA	INDIA	JAPAN	PHILIPPINES	MALAYSIA	SOUTH KOREA	SINGAPORE	VIETNAM	TAIWAN
2006	5.73	5.25	7.00	0.25	7.50	3.50	4.50	3.12	6.50	2.75
2007	5.73	4.25	7.00	0.50	5.50	3.50	5.00	0.63	6.50	3.38
2008	5.73	0.25	6.00	0.30	6.00	3.25	2.50	0.29	9.50	2.00
2009	5.73	0.25	4.25	0.10	4.00	2.00	2.00	0.08	8.00	1.25
2010	5.73	0.25	6.25	-	4.00	2.75	2.50	0.04	9.00	1.63
2011	5.73	0.25	8.50	-	4.50	3.00	3.25	0.03	15.00	1.88
2012	5.73	0.25	8.00	-	3.50	3.00	2.75	0.10	9.00	1.88
2013	5.73	0.25	7.75	-	3.50	3.00	2.50	0.07	7.00	1.88
2014	5.51	0.25	8.00	-	4.00	3.25	2.00	0.09	6.50	1.88
2015	4.30	0.50	6.75	-	4.00	3.25	1.50	0.19	6.50	1.63
2016	4.30	0.75	6.75	-0.10	3.00	3.00	1.25	0.11	6.25	1.38
2017	4.30	1.50	6.00	-0.10	3.00	3.00	1.50	0.92	6.25	1.38
2018	4.31	2.50	6.50	-0.10	4.75	3.25	1.75	1.46	6.25	1.38
2019	4.15	1.75	5.15	-0.10	4.00	3.00	1.25	1.43	6.00	1.38
2020	3.85	0.25	4.00	-0.10	2.00	1.75	0.50	0.10	4.00	1.13
2021	3.80	0.25	4.00	-0.10	2.00	1.75	1.00	0.16	4.00	1.13
2022	3.65	4.50	6.25	-0.10	5.50	2.75	3.25	2.05	6.00	1.75

Table 4: Interest Rate

Source: CEIC and The Fed (processed)

In Tables 2 and 3, there are 170 observations in this dataset. The average value for the Exchange Rate variable is 2680.776. The standard deviation of the exchange rate is 4162.483, indicating significant variation around the mean. The variance of the data is 1.73e+07, reflecting a substantial spread in the data, with the Chinese Yuan experiencing a significant

increase from 1,151.1 in 2006 to 2,248.3 in 2022. This increase is primarily due to China's strong economic growth and government policies aimed at strengthening the currency to reduce reliance on exports.

The US Dollar showed fluctuations, with an exchange rate of 8,986 in 2006, rising to 15,565 in 2022. These fluctuations reflect responses to various global economic crises

and US monetary policies. The Indian Rupee increased from 203.72 in 2006 to 188.17 in 2022, influenced by trade deficits, domestic inflation, and foreign capital outflows. The Japanese Yen strengthened from 75.51 in 2006 to 118.72 in 2022, driven by its status as a safe haven amidst global uncertainty.

The Philippine Peso rose from 183.39 in 2006 to 279.59 in 2022, supported by domestic economic stability and strong remittance inflows. The Malaysian Ringgit fluctuated, with an exchange rate of 2,547.8 in 2006 rising to 3,537.5 in 2022, influenced by global oil prices, given Malaysia's status as an oil exporter. The South Korean Won

In Tables 4, there are 170 observations in this dataset. The average value for the Interest Rate variable is 3.161128. The standard deviation for the Interest Rate is 2.62851, indicating significant variation around the mean. The data variance is 6.909062, which suggests a considerable spread in the data. In China, interest rates decreased from 5.73% in 2006 to 3.65% in 2022, reflecting the government's efforts to stimulate economic growth through cheaper borrowing, especially following the global financial crisis. The US interest rate sharply declined from 5.25% in 2006 to 0.25% in 2020 to boost the economy after the 2008 crisis, before rising again to 4.50% in 2022 in response to inflation.

India's interest rate fluctuated from 7.00% in 2006, peaking at 8.50% in 2011 to combat inflation, then dropping to 4.00% in 2021 before rising again to 6.25% in 2022. In Japan, interest rates remained very low or negative, starting at 0.25% in 2006 and falling to -0.10% in 2022 as part of loose monetary policies to stimulate the stagnant economy. Malaysia's interest rates fell from 7.50% in 2006 to 2.00% in 2021, before

increased from 9,6676 in 2006 to 12,344 in 2022, driven by South Korea's strong economy and political stability. The Singapore Dollar rose from 5,859.0 in 2006 to 11,617.0 in 2022, reflecting Singapore's strength as a stable global financial hub. The Vietnamese Dong increased from 0.55984 in 2006 to 0.65925 in 2022, owing to successful economic reforms and export growth. Lastly, the Taiwanese Dollar increased from 275.81 in 2006 to 509.04 in 2022, reflecting economic stability and the growth of high-tech exports.

increasing to 5.50% in 2022 to address inflation. South Korea's interest rates were relatively stable, ranging from 3.00% to 3.25%, before being lowered to 1.75% in 2020 to support economic growth during the pandemic, and then rising to 2.75% in 2022. In Singapore, interest rates remained low, starting at 3.12% in 2006 and dropping to 0.03% in 2011 to maintain economic competitiveness, later rising to 2.05% in 2022. Vietnam's interest rates were initially high, at 6.50% in 2006, then decreased to 4.00% in 2021 to encourage investment, before increasing again to 6.00% in 2022. In Taiwan, interest rates were reduced from 2.75% in 2006 to 1.13% in 2020 to boost investment, before rising to 1.75% in 2022.

a. Assumption Test

. estat vif		
Variable	VIF	1/VIF
X1NilaiTukar	1.17	0.852518
X2SukuBunga	1.17	0.852518
Mean VIF	1.17	

Table 5 : Multicollinearity Test Results

Source: Stata 17 Output

A Variance Inflation Factor (VIF) value exceeding 10 (or a 1/VIF value of 0.1 or lower) indicates the presence of multicollinearity. In this analysis, all VIF values are below 10, and the 1/VIF values are above 0.1, suggesting that the independent variables are not interrelated. Therefore, the multicollinearity test concludes that there is no multicollinearity between the exchange rate and interest rate variables and the value of non-oil and gas exports.

b. Autocorrelation Test

. regress EksporNonMigas X1NilaiTukar X2SukuBunga						
Source	SS	df	MS	Number of obs	=	170
Model	10191.3938	2	5095.69691	F(2, 167)	=	3.57
Residual	238137.918	167	1425.97556	Prob > F	=	0.0302
				R-squared	=	0.0410
				Adj R-squared	=	0.0296
Total	248329.312	169	1469.40421	Root MSE	=	37.762
EksporNonM~s	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
X1NilaiTukar	-.0002625	.0007558	-0.35	0.729	-.0017546	.0012297
X2SukuBunga	2.769706	1.196882	2.31	0.022	.4067367	5.132676
_cons	65.10678	5.71805	11.39	0.000	53.8178	76.39577

Tabel 6 : Hasil Pengujian Autokorelasi

Source: Stata 17 Output

Based on the data in the table above, it can be observed that the Prob F value is less than 0.05, indicating that H0 is accepted and H1 is rejected. This suggests that there are no issues with the autocorrelation test. Therefore, it can be concluded that the autocorrelation test shows no problems

between the exchange rate and interest rate variables concerning non-oil and gas exports.

c. Heteroscedasticity Test

```
. estat hettest
```

```
Breusch-Pagan/Cook-Weisberg test for heter  
Assumption: Normal error terms
```

```
Variable: Fitted values of EksporNonMigas
```

```
H0: Constant variance
```

```
chi2(1) = 2.45
```

```
Prob > chi2 = 0.1174
```

Table 6: Heteroscedasticity Test Results

Source: Stata 17 Output

Based on the Stata 17 output, the criteria for rejecting H0 is if the Prob F value is less than Alpha, with the null hypothesis (H0) indicating the presence of homoskedasticity and the alternative hypothesis (H1) suggesting the presence of heteroskedasticity. From the data, we can see

that the Prob F value is greater than 0.5, meaning H0 is accepted and H1 is rejected. This indicates that there is no issue of heteroskedasticity. Heteroskedasticity itself refers to a condition where the variance of the residuals is not consistent across all observations.

Model Testing

a. F-Test

The F-Test is used to assess the joint (simultaneous) impact of independent variables on the dependent variable. A significant result indicates that the relationship observed is likely to be applicable to the population.

Source	SS	df	MS	Number of obs	=	170
Model	10191.3938	2	5095.69691	F(2, 167)	=	3.57
Residual	238137.918	167	1425.97556	Prob > F	=	0.0302
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EksporNonM~s	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
X1NilaiTukar	-.0002625	.0007558	-0.35	0.729	-.0017546	.0012297
X2SukuBunga	2.769706	1.196882	2.31	0.022	.4067367	5.132676
_cons	65.10678	5.71805	11.39	0.000	53.8178	76.39577

Table 7 : F Test

Source: Stata 17 Output

Based on the table for the Fixed Effects (FE) method, the result for Prob > F is 0.0000. This indicates that the value is less than the alpha level of 0.05, suggesting that the regression method using FE is not suitable.

b. T-Statistic Test

EksporNonM~s	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
X1NilaiTukar	-.0002625	.0007558	-0.35	0.729	-.0017546	.0012297
X2SukuBunga	2.769706	1.196882	2.31	0.022	.4067367	5.132676
_cons	65.10678	5.71805	11.39	0.000	53.8178	76.39577

Table 8: T-Test

Source: Stata 17 Output

The T-test results in the table indicate the influence of the exchange rate and interest rate on non-oil and gas exports. According to these results, the interest rate is found to be significant, while the exchange rate does not show a significant impact on non-oil and gas exports. This is because the p-value for the exchange rate is 0.729, which is greater than 0.05. Although the exchange rate has a positive effect (a higher exchange rate can impact the value of the Rupiah positively), it does not significantly influence non-oil and gas exports. In contrast, the p-value for the interest rate is 0.022, which is less than 0.05, indicating a significant impact.

Interest rates have a negative effect on non-oil and gas exports, as higher interest rates can hinder export growth in a country. An increase in interest rates may lead to a decrease in domestic production, which in turn affects the volume of goods available for export. While non-oil and gas exports are often crucial for many countries, high interest rates can pose a barrier to export activities. Therefore, it is ideal for countries to keep interest rates low to minimize negative impacts on exports.

CONCLUSION

The exchange rate variable has a positive impact on non-oil and gas exports.

Changes in the exchange rate can affect the value of non-oil and gas exports, with the coefficient for the exchange rate indicating that as the value of non-oil and gas exports increases, so does the coefficient of the exchange rate. This implies that an increase in the exchange rate contributes to a rise in the value of non-oil and gas exports. In other words, a higher US\$ exchange rate is associated with greater non-oil and gas export values, as fluctuations in the exchange rate can affect the Rupiah (Rp) exchange rate, thereby supporting the growth of non-oil and gas exports to key destination countries.

On the other hand, the interest rate variable shows no significant impact on non-oil and gas exports. This indicates that a decrease in interest rates could potentially boost non-oil and gas export values, while an increase in interest rates could reduce export volumes. High interest rates can hinder non-oil and gas exports by slowing domestic production, which in turn decreases the quantity of goods available for export.

Thus, high interest rates act as a barrier for exporters, leading to reduced production and negatively affecting non-oil and gas exports.

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