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## MACRO DETERMINANTS OF EXPORT-BASED MSMEs IN INDONESIA AND MALAYSIA

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### Abstract

The primary objective of this study is to examine the key factors influencing the export performance of micro- and small-sector enterprises (MSMEs), aiming to identify critical elements that can enhance MSME growth and assess their implications for the Indonesian economy in comparison to Malaysia. The study aims to provide insights into the export of MSMEs, the simultaneous and partial effects of exchange rates, inflation, interest rates, GNI per capita, and labor on MSME exports in Indonesia and Malaysia, the identification of the most dominant factors among these variables affecting MSMEs exports for Indonesia, and a comparative analysis of MSME exported performance in both countries.

Keywords: Exchange Rate, Inflation, Interest Rate, GNI per capita, MSMEs Labor, MSMEs Export

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### INTRODUCTION

Indonesia and Malaysia are neighboring countries with the Malay ethnic group. GDP year to year that both Indonesia and Malaysia have increased, for Indonesia it is between 5%-6% while Malaysia is 4%-7% but during the 2020 pandemic it has decreased, for Indonesia it is 2% while Malaysia is 5%. This GDP value is also accompanied by an increase in Indonesia's population in 2020 reaching 273 million while Malaysia's 32 million (World Bank, 2021). With an increase in GDP, it means that development in both countries is very good, of course this development must still pay attention to environmental elements to be sustainable.

Developing countries are categorized based on the criteria of per capita income, and economic development is considered to emerge when per capita income increases. A country's per capita income can be interpreted as the best available measure of the value of goods and services, per person, to the people of that country each year. Indonesia and Malaysia are developing countries located in Southeast Asia. The growth of both countries cannot be separated from the role of MSMEs. The potential possessed by MSMEs is statistically recorded to be very large for a country with a GDP that continues to grow. Data released by the ASEAN Investment Report in 2022 states that Indonesia and Malaysia are two countries in Southeast Asia with a high number of MSMEs.

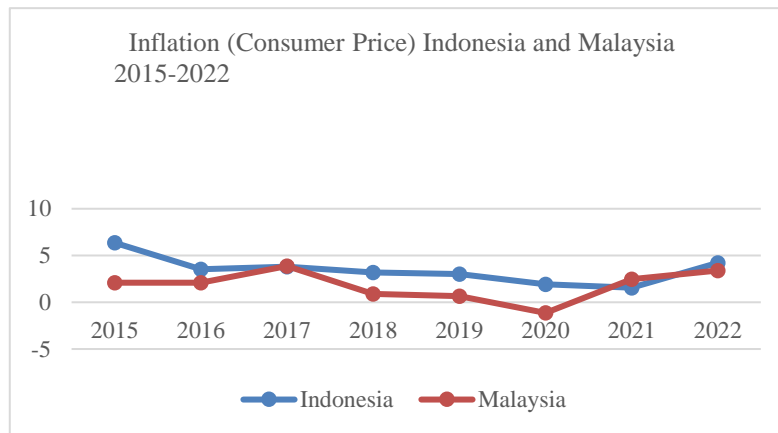
In Indonesia, Micro, Small and Medium Enterprises (MSMEs) are regulated in Law of the Republic of Indonesia No. 20 of 2008 concerning Micro, Small and Medium Enterprises. Article 1 of the Law states that micro businesses are productive businesses owned by individuals and/or individual business entities that have the criteria for micro businesses as regulated in the Law. A small business is a productive economic business that stands alone, carried out by an individual or a business entity that is open, is a subsidiary or non-subsidiary company that is owned, controlled or is part, either directly or indirectly, of a medium or large business that meets the criteria small businesses as intended in the Law (GoUKM, 2016). MSMEs are independent productive business units, carried out by individuals or business entities in all economic sectors. In principle, the distinction between Micro Enterprises (UMI),

Small Enterprises (UK), Medium Enterprises (UM), and Large Enterprises (UB) is generally based on the initial asset value (excluding land and buildings), average turnover per year, or the number of permanent workers. However, the definition of MSMEs based on these three measuring tools varies by country. Therefore, it is difficult to compare the importance or role of MSMEs between countries (Tambunan, 2021).

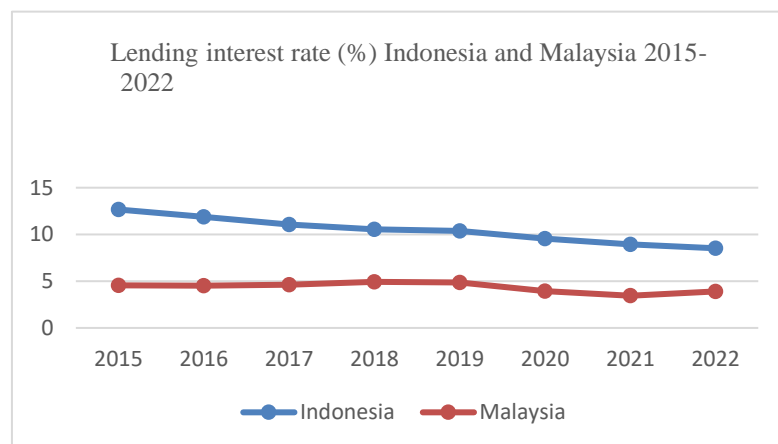
There are fundamental differences in the development of MSMEs between Indonesia and Malaysia. Although the forms of policy are relatively the same, but visions are different. In Malaysia, the vision of developing MSMEs is to increase competitiveness and ability to face foreign MSMEs products. In Indonesia, the vision of developing MSMEs is to increase productivity to enter overseas markets. From the objective side, all policies are based (ADB, 2020; Bank Indonesia, 2016; Mongid & Notodihardjo, 2011). MSMEs are proven to have high resilience to economic shocks or crises and even play an important role in saving the national economy in times of crisis (Salim et al., 2020). In addition, the growth of Micro, Small and Medium Enterprises (MSMEs) in Indonesia is considered important because it can absorb labor and increase economic growth (Pusparisa, 2020a, 2020b). The establishment of cooperatives, technology, investment, credit provision are some of the conditions for success in the development of MSMEs so that they can produce highly competitive products (Rudianto & Susilastuti, 2021; Simatupang & Subawa, 2018; Tange, 2015; Untari et al., 2019). Most of the Indonesian population is Micro, Small and Medium Enterprises, it needs to be taken seriously and continuously has a great opportunity to develop highly competitive products.

The ASEAN Investment Report in September 2022 reported that Indonesia has the most MSMEs in ASEAN. In 2021, Indonesia will have MSME of 65.46 million units, number two Thailand with 3.1 million and Malaysia with 1.2 million. In 2021, Indonesian MSMEs were recorded as being able to absorb 97% of the workforce, contribute 60.3% to Gross Domestic Product (GDP), and contribute 14.4% to national exports. The proportion of Indonesian MSME labor absorption is the largest in ASEAN. In neighboring countries, MSMEs only absorb labor in the range of 35% -85%. However, if we look at its performance, Indonesia is still behind Myanmar, whose MSMEs are able to contribute up to 69.3% of local GDP. Indonesian MSMEs are also lagging behind Singapore MSMEs whose export contribution reached 38.3%, Thailand 28.7%, Myanmar 23.7%, Vietnam 18.7% and Malaysia 16.3%. Currently, the Indonesian government is trying to encourage improvements in the performance of national MSMEs, one of which is through a digitalization strategy (Ahdiat, 2022). For both countries, both Indonesia and Malaysia, there has been a decline in investment value growth. For Indonesia in 2016 from 15.8% to 6.3% in 2019. Meanwhile for Malaysia in 2016 from 9.2% to -6.5% in 2019 (Jayani, 2021). The investment value of MSMEs, for both countries, both Indonesia and Malaysia, there has been a decline in investment value growth. For Indonesia in 2016 from 15.8% to 6.3% in 2019. Meanwhile for Malaysia in 2016 from 9.2% to -6.5% in 2019 (World Bank, 2021).

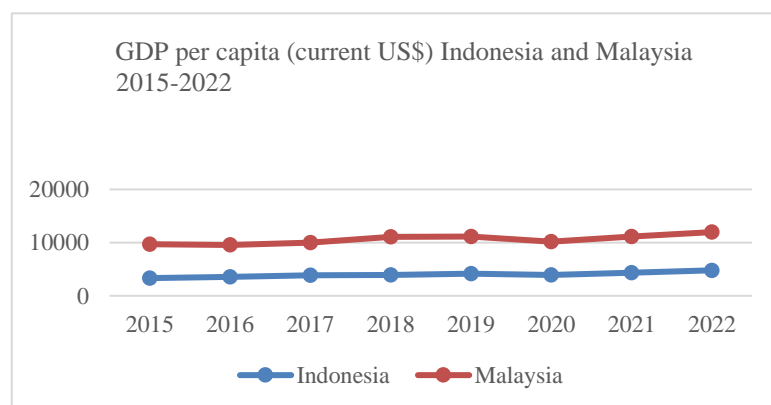
From the World Bank (2023a) inflation, interest rate and consumption data assessed through GDP per capita between Indonesia and Malaysia is shown in the following figures:



**Figure 1.** Inflation (Consumer Price) Indonesia and Malaysia 2015-2022  
 Source: Data processed



**Figure 2.** Lending interest rate (%) Indonesia and Malaysia 2015-2022  
 Source: Data processed



**Figure 3.** GDP per capita (current US\$) Indonesia and Malaysia 2015-2022  
 Source: Data processed

Figures 1, 2 and 3 show the macroeconomic indicators of Indonesia and Malaysia. Indonesia's average inflation rate is higher compared to Malaysia. In 2022, Indonesian inflation will reach 4.21%, while in Malaysia it will reach 3.37%. The average interest rate in Indonesia is 8.5% higher compared to Malaysia's 3.9%. Per capita consumption as indicated by GDP per capita in Indonesia is lower than Malaysia. In 2022 Malaysia's GDP per capita will reach 11971

\$US, while in Indonesia it will still be 4787.9 \$US. The condition of macroeconomic indicators influences MSME exports (Ginting, 2017; Hasan et al., 2016).

MSME export performance is influenced by many factors, both internal and external factors (Salim, Eri, et al., 2022; Salim et al., 2020, 2021, 2023, 2024; Salim, Rahman, et al., 2022). External factors that influence include macro-economic factors. There have been many studies that reveal micro-economic factors on the export performance of MSMEs. This research is limited to examining macroeconomic factors, namely exchange rate, inflation, interest rate, GNI per capita and labor on export of MSMEs in Indonesia and Malaysia.

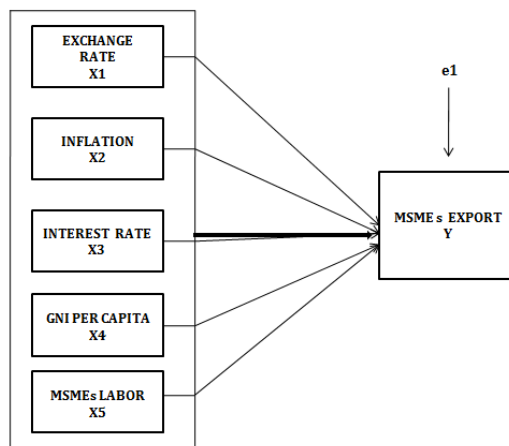
Based on the limitation of the problem and the objectives of the research, the research formula is put forward as follows: (1). How are the simultaneous and partial effects of exchange rate, inflation, interest rate, GNI per capita and Labor on export of MSMEs in Indonesia and Malaysia? (2). What are the dominant factors among exchange rate, inflation, interest rate, and GNI per capita and labor on export of MSMEs in Indonesia and Malaysia? (4). How does the export performance of MSMEs in Indonesia and Malaysia?

The primary objective of this study is to examine the key factors influencing the export performance of MSMEs, aiming to identify critical elements that can enhance MSME growth and assess their implications for the Indonesian economy in comparison to Malaysia. The research also seeks to evaluate and compare the export performance of MSMEs in both countries. The study aims to provide insights into the export performance of MSMEs, the simultaneous and partial effects of exchange rates, inflation, interest rates, GNI per capita, and labor on MSME exports in Indonesia and Malaysia, the identification of the most dominant factors among these variables affecting MSME exports in both countries, and a comparative analysis of MSME export performance in Indonesia and Malaysia.

**RESEARCH METHOD**

The method of determining research areas and respondents was carried out purposively, namely performance export of MSMEs in Indonesia and Malaysia. The study was conducted from January to August 2024. The population in this study is all variable data studied in Indonesia and Malaysia. Determination of the sample in this study using purposive sampling technique, namely in accordance with the required amount. The number of samples was determined by annual data between 1990 and 2022 or a total of 33 samples, both in Indonesia and in Malaysia.

In this study, the independent variables are Exchange Rate (X1), Inflation (X2), Interest Rate (X3), GNI per capita (X4), Labor of MSMEs (X5), Export of MSME's (Y) is treated as an intermediate variable. The following is a schematic framework for the relationship between variables in the study as shown below (Figure 4).



**Figure 4.** Logical Framework

The model is used to determine the effect of exchange rate, inflation, interest rate, GNI per capita and labor of MSMEs on the export of MSMEs for Indonesia nor Malaysia. Model 1a for Indonesia and Model 1b for Malaysian data.

$$Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + e \dots\dots\dots [1]$$

Remarks:

- Y = Export of MSME's
- x1 = Exchange rate
- x2 = Inflation
- x3 = Interest Rate
- x4 = GNI Per capita
- x5 = Labor MSMEs
- x1...x5 = Variable independent
- b1...b5= Parameter
- b0 = Constanta
- E = error

The data analysis method in this study uses OLS multiple linear regression to determine the effect of the dependent variable on the independent variable in each model for both Indonesian and Malaysian MSMEs export data with the analysis stages: Stationarity Test carried out using the Augmented Dicky Fuller (ADF) method (Gujarati & Porter, 2012). Classic Assumption with Multicollinearity Test, Heteroscedasticity Test and Autocorrelation Test.

Hypothesis testing used to Determination Test (R<sup>2</sup>), F test and t test. Different test independent sample t-test is to test two groups that have the same variant (Lavene test). This test is used to test the differences in the export of MSMEs Indonesian and export of MSMEs Malaysian (Pramana & Mawardi, 2012; Resmi et al., 2020).

**RESULT AND DISCUSSION**

**Stationary Test Results**

To find out whether the data is stationary or not, it can see the probability value of the ADF, where when the probability value of the ADF is < α 0.05 or 5% then the data is considered stationary but if the ADF value is > α 0.05 or 5% then the data is considered not stationary.

**Table 1.** Indonesian Stationary Test Results

Variables	Level		1st Difference	
	ADF Prob	Information	ADF Prob	Information
MSMEs Export	0,0004	Stationary	-	-
Exchange Rate	0,0169	Stationary	-	-
Inflation	0,8081	Not Stationary	0,0005	Stationary
Interest Rate	0,7227	Not Stationary	0,0000	Stationary
GNI per Capita	0,7144	Not Stationary	0,0000	Stationary
MSMEs Labor	0,0001	Stationary	-	-

Source : Data processed

The results of the ADF statistical test on the first difference above show that the null hypothesis is rejected, in other words the data for all variables after being reduced once the data becomes stationary. With a probability value smaller than 0.05. This means that all these variables no longer contain unit root problems and have stationary data conditions at the first difference.

**Table 2.** Malaysian Stationary Test Results

Variables	Level		1st Difference	
	ADF Prob	Information	ADF Prob	Information
MSMEs Export	0,0431	Stationary	-	-
Exchange Rate	0,5790	Not Stationary	0,0001	Stationary
Inflation	0,0014	Stationary	-	-
Interest Rate	0,8697	Not Stationary	0,0008	Stationary
GNI per Capita	0,7253	Not Stationary	0,0460	Stationary
MSMEs Labor	0,1659	Not Stationary	0,0000	Stationary

Source : Data processed

The results of the ADF statistical test on the first difference above show that the null hypothesis is rejected, in other words the data for all variables after being reduced once the data becomes stationary. With a probability value smaller than 0.05. This means that all these variables no longer contain unit root problems and have stationary data conditions at the first difference.

**Classic Assumption Test Results**

**Data Normality Test**

In this study, the normality test used the Jarque-Bera test (JB Test). To test more accurately, to find out whether the data is normally distributed or not, the Jarque–Bera test with Histogram is used. Based on the results of the Jarque Bera test, the probability value equation model of Indonesia data is 0.354580. Thus, it can be concluded that the probability of the regression disturbance is normally distributed because the Jarque Bera probability value is greater than 0.05. Whereas the probability value equation model Malaysian data is 0.615029. Thus, it can be concluded that the probability of the regression disturbance is normally distributed because the Jarque Bera probability value is greater than 0.05.

**Multicollinearity Test**

**Table 3.** Indonesian Multicollinearity Correlation Matrix

Variables	Exchange Rate	Inflation	Interest Rate	GNI per Capita	MSMEs Labor
Exchange Rate	1.000000	-	-0.683152	0.650322	0.469541
Inflation	-0.368653	1.000000	0.788187	-0.652887	-0.598645
Interest Rate	-0.683152	0.788187	1.000000	-0.385752	-0.593539
GNI per Capita	0.650322	-	-0.385752	1.000000	0.608524

MSMEs Labor	0.469541	-	-0.593539	0.608524	1.000000
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Source : Data processed

Based on the correlation test results in Table 3, it can be seen that there are no variables that have a correlation value above 0.80 (Gujarati & Porter, 2012). These results state that this regression model does not contain multicollinearity problems, so these variables are free from multicollinearity problems.

**Table 4.** Malaysian Correlation Matrix Multicollinearity

Variables	Exchange Rate	Inflation	Interest Rate	GNI per Capita	MSMEs Labor
Exchange Rate	1.000000	-0.352170	-0.645364	0.533453	0.453075
Inflation	-0.352170	1.000000	0.471875	-0.312163	-0.248794
Interest Rate	-0.645364	0.471875	1.000000	-0.787345	-0.541884
GNI per Capita	0.533453	-0.312163	-0.787345	1.000000	0.604774
MSMEs Labor	0.453075	-0.248794	-0.541884	0.604774	1.000000

Based on the correlation test results in Table 4, it can be seen that there are no variables that have a correlation value above 0.80 (Gujarati & Porter, 2012). These results state that this regression model does not contain multicollinearity problems, so these variables are free from multicollinearity problems.

**Heteroscedasticity Test**

**Table 5.** Indonesian Heteroscedasticity Test (White Method)

Heteroskedasticity Test: White			
<b>F-statistic</b>	0.924299	<b>Prob. F(5,27)</b>	0.4805
<b>Obs*R-squared</b>	4.822965	<b>Prob. Chi-Square(5)</b>	0.4379
<b>Scaled explained SS</b>	1.943533	<b>Prob. Chi-Square(5)</b>	0.8569

Based on the test results from Table 5, the Probability Chi-squared value of 0.4379 is greater than 0.05. Thus, it can be concluded that the regression model is free from symptoms of heteroscedasticity.

**Table 6.** Malaysian Heteroscedasticity Test (White Method)

Heteroskedasticity Test: White			
<b>F-statistic</b>	0.221681	<b>Prob. F(5,27)</b>	0.9245
<b>Obs*R-squared</b>	0.988359	<b>Prob. Chi-Square(5)</b>	0.9116
<b>Scaled explained SS</b>	0.379124	<b>Prob. Chi-Square(5)</b>	0.9842

**Autocorrelation Test**

**Table 7.** Indonesia Autocorrelation Test (Lanrange-Multiplier Method)

Breusch-Godfrey Serial Correlation LM Test:			
<b>F-statistic</b>	2.459111	<b>Prob. F(2,25)</b>	0.1059
<b>Obs*R-squared</b>	5.424831	<b>Prob. Chi-Square(2)</b>	0.0664

Based on the test results from Table 7, the Probability Chi-squared value of 0.0664 is greater than 0.05. Thus it can be concluded that the regression model is free from autocorrelation problems.

**Table 8.** Malaysian Autocorrelation Test (Langrange-Multiplier Method)

<b>Breusch-Godfrey Serial Correlation LM Test:</b>			
<b>F-statistic</b>	0.687521	<b>Prob. F(2,25)</b>	0.5114
<b>Obs*R-squared</b>	1.550706	<b>Prob. Chi-Square(2)</b>	0.4605

Based on the test results from Table 8, the Probability Chi-squared value of 0.4605 is greater than 0.05. Thus it can be concluded that the regression model is free from autocorrelation problems

**Multiple Linear Regression Test**

**Table 9.** Indonesian Multiple Linear Regression

Dependent Variable: ln_EXPORT				
Method: Least Squares				
Date: 03/22/24 Time: 13:14				
Sample: 1990 2022				
Included observations: 33				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
C	26,21640	9,645685	2,717941	0,0113
ln_EXCHANGE	0,482659	0,117750	4,099021	0,0003
INFLATION	-0,287155	0,104089	-2,758746	0,0089
INTEREST	-0,338769	0,143193	-2,365823	0,0232
ln_GNI	2,863026	0,149217	19,18702	0,0000
ln_LABOR	1,843865	0,592809	3,110385	0,0044
R-squared	0,872727	Mean dependent var		11,53146
Adjusted R-squared	0,867676	S.D. dependent var		0,918683
S.E. of regression	0,165169	Akaike info criterion		0,600732
Sum squared resid	0,736580	Schwarz criterion		0,328640
Log likelihood	15,91208	Hannan-Quinn criter.		0,509181
F-statistic	192,5954	Durbin-Watson stat		1,736042
Prob(F-statistic)	0,000000			

Source : Data processed

The calculation results in Table 9 can be shown by the multiple linear regression equation as follows:

$$\ln\_Y = 26,21640 + 0,482659 X1 - 0,287155 X2 - 0,338769 X3 + 2,863026X4 + 1,843865 X5$$

The interpretation of the regression equation is as follows:

- 1) Constant value = 26.21640, meaning that in statistical calculations if all ceteris paribus variables have constant values, then the export value of MSME products is 26.21640 units



- 2) Regression coefficient value  $b_1 = 0.482659$ , meaning that the exchange rate elasticity value for exports of MSME products is  $E = 0.482659$ . A value of  $E < 1$  indicates that the increase in the exchange rate is inelastic for exports of MSME products.
- 3) Regression coefficient value  $b_2 = -0.287155$ , meaning that the broad elasticity value of inflation on exports of MSME products is  $E = -0.287155$ . An  $E$  value  $< 1$  indicates that the increase in inflation is inelastic towards exports of MSME products.
- 4) Regression coefficient value  $b_3 = 0.338769$ , meaning that the interest rate elasticity value for exports of MSME products is  $E = 0.338769$ . An  $E$  value  $< 1$  indicates that an increase in the interest rate is inelastic towards exports of MSME products.
- 5) Regression coefficient value  $b_4 = 2.863026$ , meaning that the elasticity value of GNI per capita towards exports of MSME products is  $E = 2.863026$ . An  $E$  value  $> 1$  indicates that the increase in GNI per capita is elastic to exports of MSME products.
- 6) Regression coefficient value  $b_5 = 1.843865$ , meaning that the elasticity value of MSME labor towards exports of MSME products is  $E = 1.843865$ . An  $E$  value  $> 1$  indicates that the increase in MSME labor is elastic to exports of MSME products.

**Table 10.** Malaysian Multiple Linear Regression

Dependent Variable: ln_EXPORT				
Method: Least Squares				
Date: 03/22/24 Time: 13:24				
Sample: 1990 2022				
Included observations: 33				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10,33289	5,552866	1,860821	0,0737
ln_EXCHANGE	0,022345	0,010893	2,051290	0,0488
INFLATION	-1,654829	0,395913	-4,179777	0,0002
INTEREST	-0,166372	0,079486	-2,093089	0,0431
ln_GNI	1,012574	0,168277	6,017318	0,0000
ln_LABOR	0,334903	0,101243	3,307926	0,0024
R-squared	0,820165	Mean dependent var	23,85910	
Adjusted R-squared	0,805381	S.D. dependent var	0,648968	
S.E. of regression	0,199623	Akaike info criterion	0,221802	
Sum squared resid	1,075937	Schwarz criterion	0,050290	
Log likelihood	9,659733	Hannan-Quinn criter.	0,130251	
F-statistic	62,23992	Durbin-Watson stat	1,793143	
Prob(F-statistic)	0,000000			

Source : Data processed

The calculation results in Table 10 can be shown by the multiple linear regression equation as follows:

$$\ln\_Y = 10,33289 + 0,022345 X_1 - 1,654829 X_2 - 0,166372 X_3 + 1,012574 X_4 + 0,334903 X_5$$

The interpretation of the regression equation is as follows:

- 1) Constant value = 10.33289, meaning that in statistical calculations if all ceteris paribus variables have constant values, then the export value of MSME products is 10.33289 units

- 2) Regression coefficient value  $b_1 = 0.022345$ , meaning that the exchange rate elasticity value for exports of MSME products is  $E = 0.022345$ . An  $E$  value  $< 1$  indicates that the increase in the exchange rate is inelastic towards exports of MSME products.
- 3) Regression coefficient value  $b_2 = - 1.654829$ , meaning that the broad elasticity value of inflation on exports of MSME products is  $E = - 1.654829$ . An  $E$  value  $< 1$  indicates that the increase in inflation is inelastic towards exports of MSME products.
- 4) Regression coefficient value  $b_3 = - 0.166372$ , meaning that the interest rate elasticity value for exports of MSME products is  $E = 0.166372$ . An  $E$  value  $< 1$  indicates that an increase in the interest rate is inelastic towards exports of MSME products.
- 5) Regression coefficient value  $b_4 = 1.012574$ , meaning that the elasticity value of GNI per capita towards exports of MSME products is  $E = 1.012574$ . An  $E$  value  $> 1$  indicates that the increase in GNI per capita is elastic to exports of MSME products.
- 6) Regression coefficient value  $b_5 = 0.334903$ , meaning that the elasticity value of MSME labor towards exports of MSME products is  $E = 0.334903$ . An  $E$  value  $< 1$  indicates that the increase in MSME labor is inelastic to exports of MSME products.

### **Hypothesis Testing**

#### ***Simultaneous Parameter Significance Test (F Test)***

Based on the results of the multiple linear regression test in Table 9 Regression for Indonesia shows that the exchange rate, inflation, interest rate, GNI per capita and labor simultaneously have a significant effect on exports of MSME products, this is indicated by the F-Statistic value of  $0.00000 < 0.05$ .

Based on the results of the multiple linear regression test in Table 10 Regression for Malaysia shows that the exchange rate, inflation, interest rate, GNI per capita and labor simultaneously have a significant effect on exports of MSME products, this is indicated by the F-Statistic value of  $0.00000 < 0.05$ .

Based on the statistical t values in Table 9 and Table 10, the dominant factors influencing MSMEs exports for Indonesia are GNI per capita and exchange rate and the smallest is the interest rate. Meanwhile, for Malaysia, the dominant factors are GNI per capita and inflation, while the variable with the smallest influence is the exchange rate.

#### ***Individual Parameter Significance Test (t Test)***

Based on the results of the multiple linear regression test in Table 9, the regression for Indonesia shows that the exchange rate, GNI per capita and labor partially have a significant and positive effect on exports of MSME products. Meanwhile, inflation and interest rates partially have a significant and negative effect on exports of MSME products.

Based on the results of the multiple linear regression test in Table 10, the regression for Malaysia shows that the exchange rate, GNI per capita and labor partially have a significant and positive effect on exports of MSME products. Meanwhile, inflation and interest rates partially have a significant and negative effect on exports of MSME products.

#### ***Analysis of the Coefficient of Determination / Goodness of fit (R<sup>2</sup>)***

Based on the results of the multiple linear regression test in Table 9 Regression for Indonesia shows that the magnitude of the influence of the exchange rate, inflation, interest rate, GNI per capita and labor on exports of MSME products, the Adjusted R Squared value is 0.867676 or 86.76 percent, the remaining 13.24 percent is influenced by other factors outside the model studied.

Based on the results of the multiple linear regression test in Table 10 Regression for Malaysia shows that the magnitude of the influence of the exchange rate, inflation, interest rate, GNI per capita and labor on exports of MSME products, the Adjusted R Squared value is

0.805381 or 80.53 percent, the remaining 19.47 percent is influenced by other factors outside the model studied.

**Independent Sample t Test**

**Test Results for Indonesian and Malaysian MSMEs Exports**

**Table 11.** Independent Sample t Test of MSMEs Exports from Indonesia to Malaysia

	Country	N	Mean	Std. Deviation	Std. Error Mean
<b>Export</b>	Indonesia	33	11.5318	.91837	.15987
	Malaysia	33	23.8606	.64913	.11300

**Table 12.** Results of the Independent Levene Sample t Test for Indonesian - Malaysian MSMEs Exports

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
<b>Export</b>	Equal variances assumed	4.691	.034	-.62975	64	.000	-12.32879	.19577	-12.71989	-11.93769
	Equal variances not assumed			-.62975	57.568	.000	-12.32879	.19577	-12.72073	-11.93685

From the Levene Test Results above it can be concluded that:

- 1) If the significance value of MSME exports is  $> 0.05$  then use Equal Variances Assumed (assumed to be the same variance), whereas if the significance value is  $< 0.05$  then use Equal Variances not Assumed (assumed to be different variants). The test results show that the significance value for MSME exports is  $0.034 < 0.05$ , thus using Equal Variances Not Assumed (assuming different variants). To see the Independent Samples t test with the condition that if the significance value for Equal Variances Assumed is  $> 0.05$  then there is an equality of averages, whereas if Equal Variances Not Assumed  $< 0.05$  there is a difference in averages.
- 2) From the Levene test results, it shows that the significance value shows a value of  $0.000 < 0.05$ , thus it can be concluded that there is a difference in the average MSME exports between Indonesia and Malaysia, where the mean value for Indonesia = 11.5318, while the mean value for Malaysia = 23,8606. Thus, it can be concluded that Malaysian MSME exports have a higher average value than Indonesia.

**Test Results for Indonesia and Malaysia Exchange Rates**

**Table 13.** Independent Sample t Test Exchange Rate Indonesia - Malaysia

	Country	N	Mean	Std. Deviation	Std. Error Mean
<b>Exchange Rate</b>	Indonesia	33	8.9055	.70430	.12260
	Malaysia	33	3.4830	.61779	.10754

**Table 14.** Independent Levene Test Results Sample t Test Exchange Rate Indonesia - Malaysia

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	<i>Sig.</i> (2-tailed)	<i>Mean Difference</i>	<i>Std. Error Difference</i>	95% Confidence Interval of the Difference		
								<i>Lower</i>	<i>Upper</i>	
<b>Export</b>	Equal variances assumed	.200	.656	33.249	64	.000	5.2242	.16309	5.09662	5.74823
	Equal variances not assumed			33.249	62.931	.000	5.2242	.16309	5.09652	5.74833

From the Levene Test Results above it can be concluded that the significance value shows a value of  $0.000 < 0.05$ , thus it can be concluded that there is a difference in the average Exchange Rate between Indonesia and Malaysia, where the Mean value of Indonesia = 8.9055, while the Mean Value of Malaysia = 3,4830. Thus it can be concluded that Indonesia's Exchange Rate has a higher average value than Malaysia.

**Test Results for Indonesian and Malaysian Inflation**

**Table 15.** Independent Sample t Test for Indonesia - Malaysia Inflation

	Country	N	Mean	Std. Deviation	Std. Error Mean
<b>Inflation</b>	Indonesia	33	1.8858	.67492	.11749
	Malaysia	33	2.6312	1.29118	.22477

**Table 16.** Independent Levene Test Results Sample t Test for Indonesia - Malaysia Inflation

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	<i>Sig.</i> (2-tailed)	<i>Mean Difference</i>	<i>Std. Error Difference</i>	95% Confidence Interval of the Difference		
								<i>Lower</i>	<i>Upper</i>	
<b>Export</b>	Equal variances assumed	15.280	.000	2.939	64	.005	-.74545	.25362	-1.25212	-.23879
	Equal variances not assumed			2.939	48.272	.005	-.74545	.25362	-1.25532	-.23559

From the Levene Test Results above it can be concluded that the significance value shows a value of  $0.005 < 0.05$ , thus it can be concluded that there is a difference in average inflation between Indonesia and Malaysia, where the mean value for Indonesia = 1.8858 while the mean value for Malaysia = 2.6312. Thus it can be concluded that Malaysia's inflation has a higher average value than Indonesia.

**Test Results for Indonesian and Malaysian Interest Rates**

**Table 17.** Independent Sample t Test Interest Rate Indonesia - Malaysia

Interest Rate	Country	N	Mean	Std. Deviation	Std. Error Mean
	Indonesia	33	2.7264	.33364	.05808
Malaysia	33	1.8394	.33929	.05906	

**Table 18.** Independent Levene Test Results Sample 3 Test Interest Rate Indonesia – Malaysia

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Export	Equal variances assumed	.018	.894	10.708	64	.000	.88697	.08284	.72149	1.05245
	Equal variances not assumed			10.708	63.982	.000	.88697	.08284	.72149	1.05245

From the Levene Test Results above it can be concluded that the significance value shows a value of  $0.000 < 0.05$ , thus it can be concluded that there is a difference in the average Interest Rate between Indonesia and Malaysia, where the Mean value for Indonesia = 2.7264 while the Mean Value for Malaysia = 1, 8394. Thus it can be concluded that Indonesia's Interest Rate has a higher average value than Malaysia.

**Test Results for GNI Per Capita Indonesia and Malaysia**

**Table 19.** Independent Sample t Test GNI Per Capita Indonesia - Malaysia

GNI Per capita	Group Statistics				
	Country	N	Mean	Std. Deviation	Std. Error Mean
Indonesia	33	7.3933	.80151	.13952	
Malaysia	33	8.6870	.50623	.08812	

**Table 20.** Independent Levene Test Results Sample t Test GNI Per capita Indonesia – Malaysia

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Export	Equal variances assumed	13.648	.000	7.839	64	.000	-1.29364	.16502	-1.62331	-.96396
	Equal variances not assumed			7.839	54.025	.000	-1.29364	.16502	-1.62448	-.96279

not  
assumed

From the Levene Test Results above it can be concluded that the significance value shows a value of  $0.000 < 0.05$ , thus it can be concluded that there is a difference in the average GNI Per capita between Indonesia and Malaysia, where the Indonesian Mean value = 7.3933 while the Malaysian Mean Value = 8, 6870. Thus, it can be concluded that Malaysia's GNI Per capita has a higher average value than Indonesia.

**Test Results for Indonesian and Malaysian MSME Labors**

**Table 21.** Independent Sample t Test of Indonesian - Malaysian MSME Labor

	Country	N	Mean	Std. Deviation	Std. Error Mean
Labor MSMEs	Indonesia	33	18.2627	.27194	.04734
	Malaysia	33	15.4021	.11979	.02085

**Table 22.** Results of the Independent Levene Sample t Test for Indonesian - Malaysian MSME Labors

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference		
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
Export	Equal variances assumed	32.825	.000	55.301	64	.000	2.86061	.05173	2.75727	2.96394
	Equal variances not assumed			55.301	43.967	.000	2.86061	.05173	2.75635	2.96486

From the Levene Test Results above it can be concluded that the significance value shows a value of  $0.000 < 0.05$ , thus it can be concluded that there is a difference in the average MSME workforce between Indonesia and Malaysia, where the Indonesian mean value = 18.2627, while the Malaysian mean value = 15.4021. Thus, it can be concluded that Indonesian MSME workers have a higher average score than Malaysia.

**Simultaneous Influence of Exchange Rate, Inflation, Interest rate, GNI per capita and Labor on Exports of MSMEs products**

Based on research results, exports of MSME products to both Indonesia and Malaysia are influenced simultaneously by the variables Exchange Rate, Inflation, Interest Rate, GNI per capita, and Labor. This is in accordance with research conducted by previous researchers (Dincer & Kandil, 2011; Rudianto & Susilastuti, 2021; Salim, Eri, et al., 2022; Salim et al., 2020, 2021, 2023, 2024; Simatupang & Subawa, 2018). By knowing the variables that influence MSME exports, empowering them will increase their competence and competitiveness (Altun, 2017; Ghouse, 2014; Rajput et al., 2012; Salim, Eri, et al., 2022; Salim et al., 2023, 2024). Empowering MSMEs is very important because it has been proven that MSMEs are the basis of economic resilience both in Indonesia and Malaysia (Mongid & Notodihardjo, 2011; Pusparisa, 2020a; Salim et al., 2023, 2024; Tambunan, 2021). The

Adjusted R Squared value is 0.867676 or 86.76 percent for Indonesia, while for Malaysia it is 0.805381 or 80.53 percent.

The dominant factors influencing MSMEs exports for Indonesia are GNI per capita and exchange rate and the smallest is the interest rate. Meanwhile, for Malaysia, the dominant factors are GNI per capita and inflation, while the variable with the smallest influence is the exchange rate. GNI per capita is a country's gross income divided by its population. Although GNI per capita does not directly measure a country's level of development or the well-being of its population, it has proven to be a useful and readily available indicator and is often closely correlated with other non-monetary measures of quality of life. such as life expectancy at birth, child mortality rates, and school enrollment rates. The GNI measure is preferred to Gross Domestic Product (GDP) because it represents national income, compared to the value of domestic production. Therefore, GNI includes the income earned by residents of a country, whether originating from production within the country, or from assets held abroad (ADB, 2020; World Bank, 2021). Export is the process of transporting goods or commodities from one country to another legally. Obstacles faced in commodity exports include: a). Low competitiveness in price and delivery time. b). Competitiveness is often considered an internal problem for exporters, even though it is actually a national problem that cannot be overcome by entrepreneurs themselves. c). Marketing channels do not develop abroad (Mankiw & Reis, 2018).

#### **Partially Influence Exchange Rate on Exports of MSMEs Products**

The exchange rate partially has a significant and positive effect on exports of MSME products in Indonesia and Malaysia. According to Sugiharti et al. (2020), exchange rate volatility has a significant influence on commodity exports, this also applies to MSMEs export products. MSMEs' exports influence their growth (Altun, 2017; Jayani, 2021; Rudianto & Susilastuti, 2021; Salim et al., 2021).

#### **Partially Influence Inflation on Exports of MSMEs Products**

Inflation partially has a significant and negative effect on exports of MSME products in Indonesia and Malaysia. This is in line with research by Rudianto & Susilastuti (2021) and Salim et al. (2021) and has implications for the growth of MSMEs. Inflation can increase prices and this can reduce the productivity of MSMEs.

#### **Partially Interest Interest Rate on Exports of MSMEs Products**

Interest Rate partially has a significant and negative effect on exports of MSME products in Indonesia and Malaysia. The role of financial institutions, especially in providing credit or capital for the growth of MSMEs, is very important. When providing credit, there is an interest rate on financial services. High interest rates discourage credit taking by MSMEs (Anokwuru, 2017; Rudianto & Susilastuti, 2021; Salim, Eri, et al., 2022; Salim et al., 2021, 2023, 2024; Salim, Rahman, et al., 2022; Simatupang & Subawa, 2018). Interest rate influences investment (Mujahid et al., 2019; Rudianto & Susilastuti, 2021; Untari et al., 2019).

#### **Partially Influence GNI per capita on Exports of MSMEs Products**

GNI per capita partially has a significant and positive effect on exports of MSME products in Indonesia and Malaysia. GNI includes the income earned by residents of a country, whether originating from production within the country, or from assets held abroad (ADB, 2020; World Bank, 2021). Income creates expenditure or consumption.

Per capita expenditure provides an illustration of the level of purchasing power PPP (Purchasing Power Parity) of society, and is one of the components used to see the status of human development in a region (Yusdja, 2016). Community welfare influences increased

consumption or demand for a product and encourages company (MSMEs) productivity. The welfare of the people of a country will increase demand for goods which, if it cannot be met by domestic products, will increase imports or exports from other countries (Hasan et al., 2016; Rudianto & Susilastuti, 2021; Salim, Eri, et al., 2022; Salim et al., 2021). Community welfare can also have an impact on increasing domestic investment. Large investments can create advantages for MSMEs to be involved in the supply chain or become suppliers for large companies (Rezky et al., 2024).

### **Partially Influence Labor on Exports of MSMEs Products**

Labor partially has a significant and positive effect on exports of MSME products in Indonesia and Malaysia. MSMEs are businesses that rely on a large number of workers. The absorption of labor by MSMEs has reduced unemployment (Hasan et al., 2016; Rudianto & Susilastuti, 2021; Salim, Eri, et al., 2022; Salim et al., 2021). One of the determinants of the sustainability of MSMEs is the availability of labor (Salim et al., 2023, 2024). Although mechanization can reduce labor requirements, creative economy products at the MSME level require a fairly highly trained workforce (Ghouse, 2014; Resmi et al., 2020).

However, several export obstacles that need to be considered are that exports can weaken due to the global economic slowdown, which can hamper the performance of export-oriented MSMEs, inflationary pressures and food prices can reduce people's purchasing power, geopolitical conflicts and financial market volatility can affect the investment climate (World Bank, 2023b). To take advantage of opportunities and mitigate challenges, appropriate government policies are needed as well as increasing the capacity and competitiveness of MSMEs themselves (Rezky et al., 2024; Salim, Eri, et al., 2022; World Bank, 2023b), both in Indonesia and Malaysia.

### **Comparison of Average Variables on MSMEs Indonesia and Malaysia**

The Independent Levene Sample t Test results indicated that Malaysian MSME exports, GNI per capita, and inflation rates are higher than those of Indonesia, while Indonesia shows higher average values in exchange rate, interest rate, and labor. Specifically, Malaysian MSMEs demonstrate greater export competitiveness, whereas Indonesia excels in labor absorption, highlighting its comparative competitiveness. These findings suggest that both countries possess unique strengths that contribute to their economic resilience, with Malaysia leading in export performance and Indonesia in labor utilization.

## **CONCLUSION**

The research concluded that the exchange rate, inflation, interest rate, GNI per capita, and labor significantly affect the exports of MSME products in Indonesia and Malaysia, with GNI per capita and exchange rate being the dominant factors for Indonesia and GNI per capita and inflation for Malaysia. While Indonesian MSMEs exhibit higher scores in exchange rate, interest rate, and labor, Malaysian MSMEs demonstrate greater export competitiveness, indicating different strengths in economic resilience. Future research could focus on comparative strategies employed by MSMEs in both countries to counteract the negative impacts of inflation and interest rates on exports, as well as the role of government policies and support systems in shaping MSME performance. This could uncover best practices and enhance understanding of how these businesses can adapt to economic changes for improved global competitiveness.

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