

The Impact of the Russia and Ukraine War on Indonesian Economic and Trade Performance

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Abstract

The Russian military invasion of Ukraine surprisingly impacted the world's geopolitical situation. The conflict that started at the end of February is ongoing and potentially disrupts economic and trade performance in the global sector, including Indonesia. The battle has the opportunity to increase some food commodity prices, thus hampering the total imports carried out. In addition, other leading commodities (non-oil and gas) such as gold, oil, and coal will also experience significant turmoil due to the conflict that has continued to heat up recently. The study provides an overview of the systemic impact on Indonesia's economic conditions by predicting the short-term possibilities. This study investigates the Russia-Ukraine conflict's initial estimate of the net import value of the two countries and other trading partners. This study uses independent variables, namely oil and gas commodities and gold prices over eleven years (2000-2021). Error Correction Model (ECM) is an analytical method used in this study. This research expects to give an overview to academia, business, industry, and the government in anticipating Indonesia's economic and trade performance to the crisis in Russia and Ukraine. Thus, it is hoped that this research can be used as an illustration of the government to make decisions in allocating import values amid the polemic between Russia and Ukraine so that trade values can be optimal.

Keywords: *Bilateral Relations; Exports; Foreign Investment; Russia-Ukraine Conflict; Trade Volume*

JEL Classification: *B17; B22; B27*

INTRODUCTION

The Russia-Ukrainian conflict can be seen as an internal problem for both countries. However, the existence of Ukraine as a reasonably powerful entity on the border with Russia has strategic value for Russia and Western European countries. Hence, the Ukraine crisis also invites the interests of many countries, including the US, a member of NATO, with other countries. European Union. The Russia-Ukrainian turmoil, which has not yet been resolved until February 2022, raises international concern considering that war or open conflict can occur if the warring parties can no longer control themselves.

Economic relations between countries worldwide have the same influence on the Russo-Ukrainian war and one of the countries in the Southeast Asia region. In absolute terms, the war increased world oil prices, affecting the world economy. It is known that there have been several increases in commodity prices, such as oil, natural gas, and mining products, that have been imposed on the rest of the world. The Southeast Asia region is a region that is dependent on Russia for petroleum commodities in addition to its geographical location, which is not too far away when compared to the United States. Russia has a role in the Southeast Asian region. In addition, Russia's economic and military relations have ties with several Southeast Asian countries, such as Vietnam, Indonesia, and Thailand.

Based on the economic relationship between Vietnam and Russia, the real economy is more than 2% of the GDP. In addition, Indonesia and Thailand have a total trade of around 1% of the GDP. However, the three countries have relatively close economic relations. In addition, Vietnam, Indonesia, and Thailand are countries with close military ties, such as purchasing defence equipment. In addition, international trade also allows a country to gain a broader market. Still, on the other hand, it also provides an excellent opportunity to enter cheaper and quality foreign products into the domestic market.

Tensions due to the conflict between Russia and Ukraine are expected to have a propagation impact on Indonesia's macro economy. Russia and Ukraine are not Indonesia's main trading partners on the trade route, but Ukraine is the world's leading wheat exporter, including Indonesia.



Figure 1. The Timeline of Russia vs. Ukraine War, Threat of a World Economic Slowdown
Source: ECNS, 2022

Domestic inflation may be under additional pressure from the supply side, particularly the food sector. As a result, this product needs its imports to be more diverse. Indonesia's economy is very dependent on free trade and imports of auxiliary materials, so conflicts and war resolutions have a significant impact. Therefore, this study examines the effects of the Russo-Ukrainian war by using several essential indicators, such as gold, wheat, and oil prices, which are experiencing quite deep fluctuations. This influences the government to maintain and not maintain subsidies, and the private sector must see the dynamics for future investment interests. This can also affect the performance of the economy and trade globally.

International Trade

International trade is essential in encouraging a country's economic development. Ardiyanti (2015) show that international trade can benefit a nation by producing products that have comparative advantages and encourage foreign

investment. In obtaining these benefits, government intervention in carrying out international trade policies is a form of support for trade liberalization policies that can enable a country to specialize in producing goods based on the availability of a country's superior resources. Trade liberalization is an economic concept to reduce trade barriers to goods, services, and investment (Dheeraj Vaidya, CFA, n.d.). Liberalization acts as intensive use of price mechanisms to lessen the anti-export bias of trade regimes (Haouas et al., 2005).

On the other hand, Widodo (2008), in Nurrahma (2013), explained that trade liberalization is likened to a two-edged sword containing opportunities and challenges that can positively or negatively impact the economy, depending on the readiness of the country's domestic economic actors. Chu & Kalirajan (2011) explain that trade liberalization's influence can positively impact companies' technical efficiency to encourage a competitive climate through export-import competition. Therefore, international trade protects developing countries' new industries (infant industries) from competing with imported goods. Protections can be utilized by implementing various global trade policy tools such as tariffs and non-tariff trade barriers.

Trade agreements between countries are also considered an effort to reduce trade barriers such as through tariffs, import quotas, and export restrictions, thereby encouraging consumer surpluses and increasing innovation and trade volume. However, agreements between countries are closely related to global political stability, the existence of military conflicts are among related problems that cause disturbances in the economy of both countries directly involved in the war and countries that are not interested, one of which is as depicted by the World Bank (2022) where the global economy continues to be weakened by war due to significant trade disruptions and price shocks for food and fuel, all of which contribute to high inflation and a subsequent tightening of global financing conditions. The imposition of a partial or complete trade embargo on exchanging goods often accompanies military conflicts between countries. Competition can also reduce trade flows by raising the cost for private agents to engage in international business (Glick & Taylor, 2011).

Economic Impact of the Russian Invasion of Ukraine

Russia's invasion of Ukraine made crude oil prices soar past 100 dollars per barrel. This situation has directly impacted several state-owned energy enterprises in Indonesia. The spike in world oil prices has forced state-owned companies to charge various price increases to the public, such as non-subsidized LPG, whose prices have been adjusted twice, and non-subsidized fuel. This increase will drain cash flow and put SOEs under debt pressure. Due to a rise in global crude oil prices, debt pressure will be intense. If this continues, it could lead to an increase in fuel prices. In addition, the crisis in Ukraine resulted in exchange rate fluctuations which made the burden of foreign debt rise. As a result, loan interest will be more expensive. The trend of rising interest rates will be faster because the loan's interest also increases. The Ukrainian crisis poses a concern for Indonesian SOEs because it may result in increased debt ratios and a significant capital debt burden.

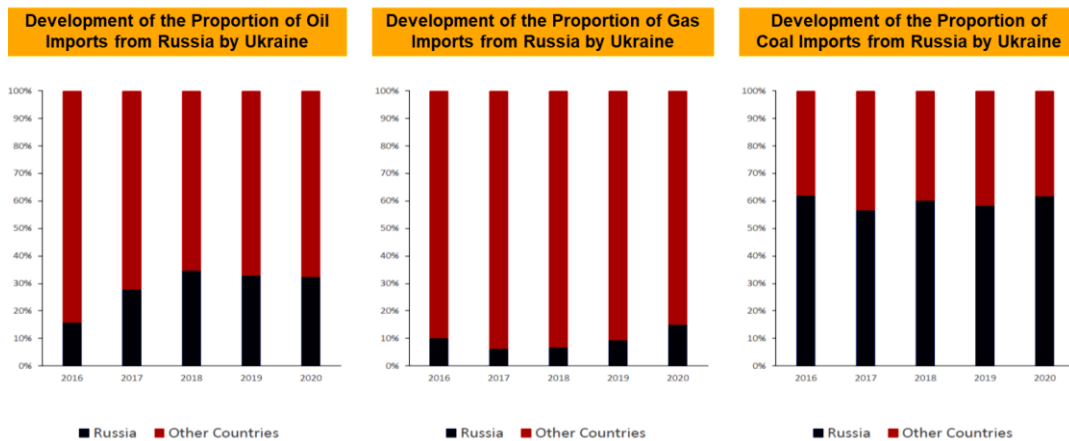


Figure 2. Indicator of Export-Import Proportions of Russia and Ukraine
Source: Ministry of Trade (2022)

Finally, the increase in wheat prices will eventually affect consumers in Indonesia because wheat is a raw material for food products such as instant noodles and flour. A shortage of wheat or rising prices due to the conflict in Ukraine could increase the cost of derivative products in Indonesia, including instant noodles. Several previous studies have examined related to the impact of the Russian invasion of Ukraine, including the following:

In absolute terms, the war increased world oil prices, affecting the world economy. This is related to the contribution of growing energy and food prices, causing a crisis because governments from various countries reduced support or interfered in connection with the Russian and Ukrainian wars. It is known that several increases in the prices of commodities such as petroleum, natural gas, and mining products are imposed on the whole world. The Southeast Asian region is a region that depends on Russia in petroleum commodities (Bakrie et al., 2022).

The ongoing conflict between Russia and Ukraine can potentially disrupt Indonesia's trade performance with the two countries. The competition could reduce Indonesia's non-oil and gas exports and hamper wheat imports, potentially increasing the prices of several foodstuffs in the country. On the one hand, as the world is the largest exporter of thermal coal, the increase in coal prices will significantly increase Indonesia's exports. But on the other hand, the rise in oil prices will be a problem because currently, Indonesia is a net importer of crude oil (Permana, 2022).

METHOD

The quantitative descriptive research method is used in this study, using secondary data sourced from The Atlas of Economic Complexity - Harvard University, Trading Economics, and Investing. The scope of this study is Indonesia, using a time frame of from 2000 to 2021, year by year. This study aims to determine the influence of gold prices, oil prices, wheat prices, and military wars between Ukraine and Russia on Indonesian imports from Ukraine and Indonesian imports from Russia. Through literature review and theoretical foundations, the hypotheses in this study can be compiled as follows:

- H₁ : Indonesian imports from Ukraine and Russia may suffer due to the price of gold.
- H₂ : Indonesian imports from Russia and Ukraine may suffer due to the rising cost of oil.
- H₃ : Indonesian imports from both Ukraine and Russia may suffer as a result of the price of wheat.
- H₄ : The war may be detrimental to Indonesian imports from both Ukraine and Russia.
- H₅ : War, wheat prices, and the cost of oil are all thought to have an impact on Indonesian imports from Ukraine and Russia simultaneously.

This study used multiple regression analysis models with the Error Correction Model (ECM). Based on the objectives and methods used, the form of the model equation in this study is as follows:

$$D(IMP_{i-u_t}) = \beta_0 - \beta_1 D(GOLD_t) - \beta_2 D(OIL_t) - \beta_3 D(WHEAT_t) - \beta_4 D(WAR_t) + \beta_5 ECT_t \quad (1)$$

$$D(IMP_{i-r_t}) = \beta_0 - \beta_1 D(GOLD_t) - \beta_2 D(OIL_t) - \beta_3 D(WHEAT_t) - \beta_4 D(WAR_t) + \beta_5 ECT_t \quad (2)$$

Where IMP_{i-u_t} and IMP_{i-r_t} are dependent variables, respectively, namely Indonesian imports from Ukraine (\$Million) and Indonesian imports from Russia (\$Million) Organization for Economic Co-operation and Development (OECD, 2001) defines imports as goods that add to the stock of material resources of a country by entering its economic territory; while the independent variable consists of GOLD, namely the price of gold with real-time gold futures (USD/t.oz) indicator, the gold futures price is price agreements made by related parties, taking into account the amount of gold purchased and future shipments.

In other words, gold futures can be described as a contract in which a person agrees to take gold on a specific date by making an initial payment, with an agreement established to complete the payment (Pistilli, 2022); OIL is the crude oil price indication (USD/barrel) for the price of oil, Amadeo (2012) natural oil prices measure the spot price of various barrels of oil; WHEAT, i.e., wheat price (USD/Bushel), is defined as the historical price of wheat; WAR, i.e., the dummy variable of the military war between Ukraine and Russia in 2021 (1 = exists and 0 = none); meanwhile, β_0 is a constant; β_1, \dots is the coefficient of each independent variable; β_5 is a speed of adjustment; ECT is a residual/error in long-term equations; and e_t is an residual/error in short-term equations.

RESULTS AND DISCUSSION

Estimation Model

Stationary Test

This study's initial stage is to examine the stationaries of the data, which are separated into three categories: stationary at the level, stationary at the first difference, and stationary at the second difference levels. At a significance level of 5% for this investigation, the results of the stationary test were applied as follows:

Table 1. Unit Root Test Result

	Level		First Difference		Second Difference	
	ADF	Prob.	ADF	Prob.	ADF	Prob.
IMPOR_R	0.05	0.3791	0.05	0.0096	0.05	0.0001
IMPOR_U	0.05	0.0772	0.05	0.0493	0.05	0.0022
GOLD	0.05	0.6285	0.05	0.0684	0.05	0.0060
OIL	0.05	0.3046	0.05	0.0029	0.05	0.0007
WHEAT	0.05	0.3962	0.05	0.0088	0.05	0.0005

Source: Processed using *Eviews* 10, 2023

Based on the findings of root unit testing, it is known that the variables imports from Indonesia to Russia, imports from Indonesia to Ukraine, oil prices, and wheat prices have been stationary at the first level (the first difference) with a lower probability value than the significance level of 0.05. On the second level, the price of gold is unchanged (second difference). In the meantime, (Giles, 2011) clarified that since all dummy variables are stationary by design, stationary testing is not necessary for dummy variables.

Cointegration Test

The cointegration test seeks to establish the stationarity of the data in residual regressions carried out with ordinary least squares. The results of cointegration testing in this study are as follows:

Table 2. Cointegration Test Results

Import Indonesia-Ukraine					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	Result.
ECT(-1)	-0.39275	0.180299	-2.178325	0.0422	Cointegrated
Import Indonesia-Rusia					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	Result.
ECT02(-1)	-0.604375	0.209719	-2.881834	0.0096	Cointegrated

Source: Processed using *Eviews* 10, 2023

According to the results of the cointegration test, if each of the imported Indonesian-Ukrainian and Indonesian-Russian ECT variables has a probability value of less than 0.05, 0.0422, or 0.0096, against the significance level of 5%, then the residual or ECT of the estimated regression equation has been stationary at the level. It concludes that there is a long-term and short-term relationship between free variables and that equations have been cointegrated.

Error Correction Model (ECM)

The cointegration test demonstrates that the equations used in this investigation have been cointegrated, concluding that the error correction model can be used in this study (ECM). Also, the estimation outcomes test was conducted, which employed bound variables such as gold, oil, and wheat prices, the presence of wars between Russia and Ukraine, and the ECM model with ECT adjustments.

Table 3. Error Correction Model Estimation Results (Indonesia-Ukraine Import)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.662727	22.86383	-0.116460	0.9088
D(GOLD)	0.319367	0.165836	1.925797	0.0733
D(OIL)	0.689486	1.610885	0.428017	0.6747
D(WHEAT)	65.94570	27.92518	2.361514	0.0321
D(WAR)	-504.5423	100.7263	-5.009043	0.0002
ECT(-1)	-0.443940	0.180521	-2.459218	0.0266
R-squared	0.775838	Mean dependent var		11.51905
Adjusted R-squared	0.701117	S.D. dependent var		159.6947
S.E. of regression	87.30539	Akaike info criterion		12.01166
Sum squared resid	114333.5	Schwarz criterion		12.31009
Log likelihood	-120.1224	Hannan-Quinn criter.		12.07643
F-statistic	10.38317	Durbin-Watson stat		1.368696
Prob(F-statistic)	0.000188			

Source: Processed using *Eviews* 10, 2023

The regression results in Table [3] establish the following regression equations for the impact of gold, oil, wheat, and the military conflict between Russia and Ukraine on Indonesian imports from Ukraine:

$$\begin{aligned}
 D(IMP_{i-u_t}) = & -2.662727 + 0.319367D(GOLD_t) + 0.689486 D(OIL_t) \\
 & + 65.94570 D(WHEAT_t) - 504.5423 D(WAR_t) \\
 & + 0.443940 ECT(-1)_t
 \end{aligned} \quad (3)$$

The probability value in ECT(-1) is 0.0266, less than the significance threshold of 0.05 based on the findings of these estimates. Hence, the conditions for the short-term estimation of the ECM model are satisfied, and the model is deemed valid. Fluctuations in the long-term term's overall balance where 44.39% (as indicated by the coefficient) of the adjustment process takes place in the first month and the remaining 55.61% in the following period.

Table 4. Error Correction Model Estimation Results (Indonesia-Russia Import)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	70.96170	55.35177	1.282013	0.2193
D(GOLD)	-0.424255	0.416505	-1.018608	0.3245
D(OIL)	14.29687	3.640875	3.926767	0.0013
D(WHEAT)	-27.05556	66.75472	-0.405298	0.6910
D(WAR)	-745.4083	229.3882	-3.249550	0.0054
ECT02(-1)	-0.973551	0.295064	-3.299453	0.0049
R-squared	0.760333	Mean dependent var		25.37143
Adjusted R-squared	0.680444	S.D. dependent var		345.4682
S.E. of regression	195.2906	Akaike info criterion		13.62181
Sum squared resid	572076.1	Schwarz criterion		13.92025
Log-likelihood	-137.0290	Hannan-Quinn criteria.		13.68658
F-statistic	9.517385	Durbin-Watson stat		1.361696
Prob(F-statistic)	0.000303			

Source: Processed using *Eviews* 10, 2023

Based on the F-statistical value (10.38317), more remarkable than the F-table value (2.96), it shows that the independent variables in this study jointly significantly affect Indonesian imports from Ukraine. The R-squared value of 0.775838 illustrates that the variation of independent variables used in this study can explain Indonesia's imports from Ukraine by 77.5838 per cent while other variables outside the equation influence the rest.

According to the regression results in Table [4], Indonesian imports from Russia were impacted by the following variables: gold, oil, wheat, and the armed confrontation between Russia and Ukraine:

$$D(IMP_{i-r_t}) = 70.96170 - 0.424255 D(GOLD_t) + 14.29687 D(OIL_t) - 27.05556 D(WHEAT_t) - 745.4083 D(WAR_t) - 0.97355 ECT02(-1)_t \quad (4)$$

According to the results of these estimates, the probability value in ECT02(-1) is 0.0049 less than the significance level of 0.05. Hence it can be said that the requirements for the short-term estimation of the ECM model are met, and the model is regarded as genuine. Fluctuations in the total long-term balance, with 2.645% of the adjustment process taking place in the following period after the first month, account for 97.3551% (according to the coefficient) of the adjustment process.

The independent factors in this study have a combined substantial impact on Indonesian imports from Russia, as shown by the F-statistical value (9.517385), which is more impressive than the F-table value (2.96). The variance of the independent variables employed in this study may account for 76.0333 per cent of Indonesia's imports from Russia, as shown by the R-squared value of 0.760333, while additional factors not included in the equation have an impact on the remaining elements.

Analysis of Classic Assumption Test

The regression analysis results are feasible if the model meets classical assumptions and is free from the problems of classical assumptions, namely normality, multicollinearity, heteroskedasticity, and autocorrelation.

The normality test in this study was carried out by comparing the Jarque-Fallow value with the Chi-Square Table value at a degree of freedom of 2 and a significance level of 0.05.

Table 5. Normality Test Result

	Jarque-Bera	Probability	Chi-Square Table
IMP I-U	4.688862	0.095902	5.591
IMP I-R	1.749372	0.416993	5.591

Source: Processed using *Eviews* 10, 2023

The normality test results on the regression analysis model for the Indonesia-Ukraine import model and the Indonesia-Russia import model showed that the Jarque-Bera value for Indonesia-Ukraine imports (4.688862) and Indonesia-Russia imports (1.749372) was smaller than the Chi-Square Table value of 5,591. Furthermore, it is seen that the probability value of Indonesia-Ukraine

imports (0.095902) and Indonesia-Russia imports (0.416993) is higher than the value of α (0.05). The results illustrate that Indonesia-Ukraine import data and Indonesia-Russia imports usually are distributed.

Furthermore, this study's multicollinearity detection used the Variance Inflation Factor (VIF) method. The results of multicollinearity detection in this study are shown in the following:

Table 6. Multicollinearity Detection Results

Variable	Coefficient Variance	Uncentered VIF	Centred VIF
GOLD	0.028523	1.576338	1.266033
OIL	3.407909	2.107564	2.083601
WHEAT	1025.671	2.430015	2.334211
WAR	12640.16	1.260622	1.200592

Source: Processed using *Eviews* 10, 2023

The independent variables used by the Indonesia-Ukraine and Indonesia-Russia import models are the same. So that the results of the multicollinearity detection produced by the two models are the same. Ghazali (2016) explained one of the decision-making criteria related to the detection of multicollinearity where if the VIF value < 10 , $>$ it is stated that there is no multicollinearity. Based on these criteria, this study's results of multicollinearity detection show that the variables of gold prices, oil prices, wheat prices, and military wars between Ukraine and Russia do not have multicollinearity statistics problems.

The heteroskedasticity test in this study used the Breusch-Pagan-Godfrey method, which compared the calculated Chi-Square value ($\text{Obs} \cdot R\text{-squared}$) with the Chi-Square Table value and also by comparing the probability value with a significance level of 0.05. The results of the heteroskedasticity test in this study are:

Table 7. Heteroskedasticity Test Results

	Chi-Square Statistic	Probability	Chi-Square Table
IMP I-U	0.867097	0.9726	26.296
IMP I-R	3.959972	0.5552	26.296

Source: Processed using *Eviews* 10, 2023

The results of the heteroskedasticity test in this study resulted in calculated Chi-Square values for Indonesian-Ukrainian imports (0.867097) and Indonesia-Russia imports (3.959972) smaller than the Chi-Square Table value (28.8693). In addition, the probability value of Indonesia-Ukraine imports (0.9726) and Indonesia-Russia imports (0.5552) is higher than the value of α (0.05). This means that there is no heteroskedasticity problem in this study.

Table 8. Auto-correlation Test Results

	Chi-Square Statistic	Probability	Chi-Square Table
IMP I-U	3.779711	0.5943	14.017
IMP I-R	6.478591	0.6806	14.017

Source: Processed using *Eviews* 10, 2023

Finally, the autocorrelation test in this study was carried out using the Breusch-Godfrey Serial Correlation L.M. Test method, which compares the

calculated Chi-Square value (Obs*R-squared) with the Chi-Square Table value and by comparing the probability value with a significance level of 0.05.

The autocorrelation test results in this study resulted in the calculation of the Chi-Square values being smaller for Indonesian-Ukrainian imports (3.779711) and Indonesian-Russian imports (6.478591) than the Chi-Square Table value (14.017). Meanwhile, when viewed through the probability value of the equation of Indonesian imports from Ukraine (0.5943) and Indonesian imports from Russia (0.6806), the value is greater than the significance level of 0.05. This means that there is no autocorrelation problem in this study. Thus, it is known that the data and equations in this study are free from the problem of classical assumptions.

Impact on Indonesian Imports from Ukraine

The price of gold, oil, and wheat has a positive influence on Indonesia's imports from Ukraine; in other words, if the price of gold, oil, and wheat rises by 1 USD each, it can increase Indonesia's imports from Ukraine by \$0.319367 million, \$0.689486 million, and \$65.94570 million, respectively, *ceteris paribus*. Wheat prices have a significant influence when viewed through prob. variable of 0.0321, respectively, which is less than the significance level of 0.05, whereas gold prices and oil prices have no significant influence on Indonesia's imports from Ukraine. On the other hand, the war between Russia and Ukraine caused a significant decrease (prob. $0.0266 < 0.05$) in Indonesian imports from Ukraine, where Indonesia's imports from Ukraine were lower by \$504.5423 million compared to the absence of military war between Ukraine and Russia, *ceteris paribus*.

These findings indicate that the price of wheat has a significant impact on Indonesian imports from Ukraine. One of the leading suppliers of wheat to Indonesia is Ukraine.

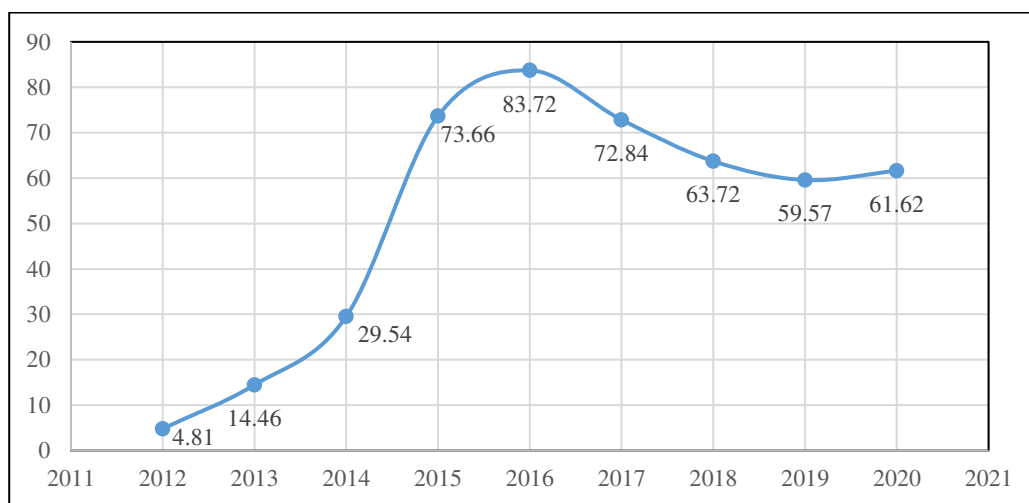


Figure 3. Share Indonesia-Ukraine Wheat Imports

Source: Atlas Economic Complexity, 2022

The percentage share of wheat Indonesia imports from Ukraine is shown in the Atlas Economic Complexity data, which Harvard University produced. Figure 4 illustrates the sharp increase in wheat imports from Ukraine as of 2015, showing that more than 50% of Indonesia's total imports from Ukraine were wheat. Yet, because Indonesia has another importer, Australia, wheat prices are susceptible.

According to Argus Media (2020), Indonesia has historically been Australia's top wheat export market, with shipments totalling 4.5 million tons in 2016–17 but falling to only about 1 million tons in 2019–20, allowing Ukraine to gain market share in Indonesia, shipping nearly 3 million tons last year, compared to just 1.6 million t in 2016–17.

Argus Media (2020) added that Australia could regain Indonesia's market share for wheat in 2021 due to its greater export potential and more affordable costs when compared to grain from other origins, such as Ukraine. Premium Australian wheat spot prices have climbed by only 5% since last year, whilst the price of Ukrainian wheat, with a protein content of 11.5 % has increased by nearly a quarter during the same period. Even if Australia may compete more fiercely with Ukraine for Indonesia's wheat export market in the medium term, Ukraine's pace of exporting wheat at the end of 2020 will still have a percentage share above 50%

Indonesia suffered from the Russian-Ukrainian war due to high wheat imports from that country. Wheat supplies around the world are running low due to the Russian-Ukrainian conflict. According to Rohmah (2022), the Ukrainian government stopped exporting wheat, oats, and other staple grains by the end of March to meet its citizens' growing food demands as the conflict escalated. Because of higher costs for raw materials and food production, there may be a connection between the price rise brought on by the military conflict between Russia and Ukraine and food scarcity. So, both on the supply and demand sides, the ongoing Russian-Ukrainian war can dramatically lower Indonesia's imports from Ukraine.

Impact on Indonesian Imports from Russia

The estimation results show that the price of gold and wheat negatively influences Indonesia's imports from Russia. If the price of gold and wheat rise by 1 USD each, Indonesia's imports from Russia will be reduced by \$0.424255 million and \$27.05556 million, respectively, *ceteris paribus*. The influence of gold and wheat prices is insignificant, as indicated through P-values. The cost of gold (0.3245) and wheat (0.6910) are smaller than 0.05. Meanwhile, the cost of oil has a positive value, which means that when the price of oil increases by 1 USD, it will increase Indonesia's imports from Russia by 14.29687 million dollars. This has a significant effect, as seen through the prob value. The price of oil (0.0013) is smaller than the significance level of 0.05. The Russian-Ukrainian war led to significantly lower imports of \$745,4083 million compared to the absence of a Russian-Ukrainian war.

According to Palmer (2022), Russia is a major exporter of refined oil products, such as gasoline and diesel, and crude oil (approximately 5 million barrels per day) (about 3 million barrels a day). Around 40% of Russia's overall export earnings come from them. Russia is now the second-largest oil exporting nation in the world as a result of the country's high crude oil production. Russia has a part in regulating global oil prices due to its significant influence over oil exports. Russia also sold its oil by offering oil importers a discount of 30% amid a rise in global crude oil prices brought on by the policies of several superpowers that forbade the purchase of Russian oil and energy products in response to Russia's invasion of Ukraine. The study from Asmarini (2022) mentioned that Indonesia, has avoided importing oil from Russia due to this policy, is now considering doing so.

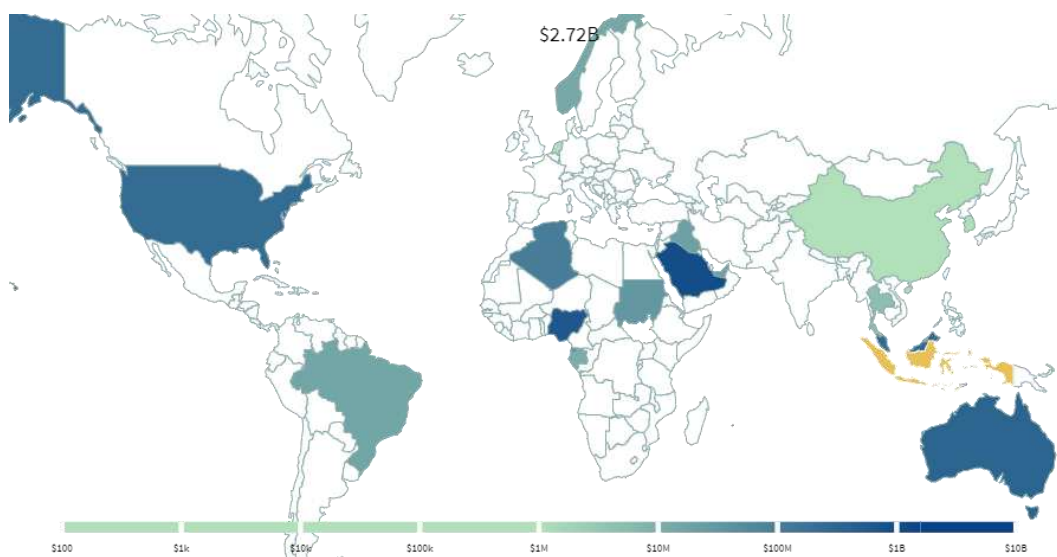


Figure 4. Oil-Importing Nations for Indonesia
Source: The Atlas of Economic Complexity, 2022

The fact that the price of oil significantly impacts Indonesia's imports from Russia, on the other hand, shows how price-sensitive Indonesian oil imports from Russia still are. This is so because Indonesia does not import oil from Russia. According to OECD data, Saudi Arabia (\$1.21B), Nigeria (\$775M), Australia (\$372M), the United States (\$248M), and Malaysia (\$210M) are the top five oil exporting nations for Indonesia.

On the other side, the Russian invasion of Ukraine at the end of 2021 substantially affected world commodity prices, particularly for nations that import wheat and oil. The International Monetary Fund (2022) explains that some governments use targeted measures to help their citizens, while others use subsidies and price controls to limit the inflationary effects of higher international prices. However, this will worsen the fiscal balance without complementary measures. Based on an article published by the International Monetary Fund (2022), energy subsidies alone could increase to \$22 billion for oil-importing countries by 2022. In addition to contributions, some countries have introduced measures to smooth the impact of higher prices, such as direct transfers and lower tariffs on food, which will add to fiscal costs.

CONCLUSION

The following can be drawn as a conclusion from the analysis of the data and the discussions that have arisen, the invasion carried out by Russia against Ukraine in 2021 affected a significant decrease in both Indonesian imports from Ukraine and Indonesian imports from Russia. The impact of the military war between Russia and Ukraine affected the two countries' economies, and the global economy felt economic vulnerability. Therefore, various policies are launched by each government to maintain economic stabilization.

Whereas gold and wheat have a negligible impact on Indonesian imports from Russia, oil prices have a considerable impact. Due to its enormous output, Russia is now the second-largest oil exporting country in the world and a significant supplier of refined and crude oil products. Due to an increase in the price of crude

oil globally, Russia also provides oil importers with a 30% discount. This demonstrates how price-sensitive Indonesian oil imports from Russia still are as Indonesia is considering doing so. Russia is not a source of oil for Indonesia, but the top five producers are Saudi Arabia, Nigeria, Australia, the United States, and Malaysia.

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