

The Effect of Macroeconomic Variables and The Russia-Ukrainian War on Exports in Indonesia

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Abstract

Indonesia is one of the countries that are active in international trade activities. This study examines the effect of macroeconomic variables consisting of natural resources rent, foreign direct investment, and government spending on Indonesian exports. In addition to macroeconomic variables, this study examines the effect of the Russia-Ukraine war on Indonesian exports. This study uses time series data from 1991-2021. The method used in this research is Ordinary Least Square (OLS). The results of this study show that natural resource rents have a positive effect on exports. In contrast, foreign direct investment, government spending, and the Russia-Ukraine war negatively and significantly impact Indonesian exports from 1991-2021. Simultaneously, natural resource rents, foreign direct investment, government spending, and the Russia-Ukraine war substantially affect Indonesian exports. This paper examines how macroeconomic factors, particularly the influence of the Russia-Ukraine war on exports, affect Indonesian exports, which are currently quite restricted. As a result, this study helps to understand the variables that influence exports in Indonesia.

Abstrak

Indonesia merupakan salah satu negara yang aktif dalam kegiatan perdagangan internasional. Penelitian ini menguji pengaruh variabel makroekonomi yang terdiri dari sewa sumber daya alam, investasi asing langsung, dan pengeluaran pemerintah terhadap ekspor Indonesia. Selain variabel makroekonomi, penelitian ini mengkaji pengaruh perang Rusia-Ukraina terhadap ekspor Indonesia. Penelitian ini menggunakan data time series dari tahun 1991-2021. Metode yang digunakan dalam penelitian ini adalah Ordinary Least Square (OLS). Hasil penelitian ini menunjukkan bahwa sewa sumber daya alam berpengaruh positif terhadap ekspor. Sebaliknya, investasi asing langsung, pengeluaran pemerintah, dan perang Rusia-Ukraina berdampak negatif dan signifikan terhadap ekspor Indonesia dari tahun 1991-2021. Secara bersamaan, sewa sumber daya alam, investasi asing langsung, pengeluaran pemerintah, dan perang Rusia-Ukraina secara substansial mempengaruhi ekspor Indonesia. Tulisan ini mengkaji bagaimana faktor makroekonomi, khususnya pengaruh perang Rusia-Ukraina terhadap ekspor, mempengaruhi ekspor Indonesia yang saat ini cukup dibatasi. Oleh karena itu, penelitian ini membantu untuk memahami variabel-variabel yang mempengaruhi ekspor di Indonesia.

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INTRODUCTION

Indonesia is one of the lower middle-income nations in Asia, according to the World Bank's classification. Developing nations are those with lower middle incomes. Exports are a critical component of economic growth for developing nations like Indonesia since they can raise national income by building up foreign exchange reserves (Nopeline, 2018). One way to gauge a nation's international trade activity and economic fundamentals is by looking at its foreign exchange reserves (Fortuna et al., 2021).

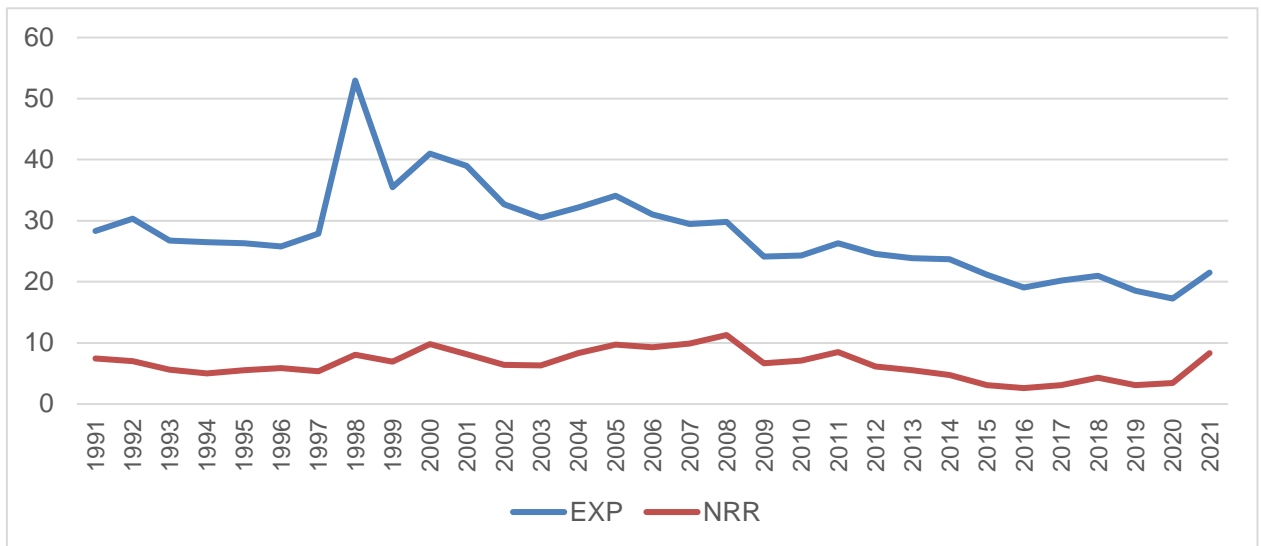
International trade, including export-import transactions, is simpler and quicker to conduct between nations in the current period of globalization. Rapid changes can be seen in commercial operations, such as the exchange of goods without borders between nations, as a result of technological advancements used to ease international trade in the economic sphere (Dewi, 2019). According to research by Sulistyorini (2022) exports actually assist other nations in providing for the necessities of their inhabitants in order to maximize survival.

A description of "contemporary international trade theory" can be found in an article written by the Swedish economist Eli Hecksher in 1919 titled "The Effect of Foreign Trade on the Distribution of Income " (Salvatore 2017). The paper was then revised by Bertil Ohlin in 1933 using material from his well-known book *Interregional and International Trade*. According to the Hecksher-Ohlin theory, a country will export goods whose production needs extensive use of its relatively cheap and abundant production and import goods whose production requires intensive use of its relatively expensive and scarce production components. For instance, a nation with a high level of capital factors will export goods that require a lot of capital and import goods that require a lot of labor. According to the HO theory, the difference in relative commodity prices between two countries prior to the start of trade is caused by the relative disparity in the abundance and cost of the factors of production.

According to research by Nuri Aslami (2022), there are three things that lead to trade between nations: (a) differences in production outcomes, which are brought on by the fact that each nation has different natural resources, capital, technology, and cultural traditions; (b) price differences among nations; and (c) a desire to boost productivity. Natural resource wealth is one of the variables that support export-import operations.

The idea behind the "natural resource curse" is that nations with plentiful natural resources, such oil and gas, actually do worse than nations with fewer natural resources in terms of economic development and governance. One of the main justifications for a nation's involvement in international trade is the availability of natural resources; due to geographic variances, different regions have varied natural resources. Export and import operations are conducted to suit the needs of the populace.

According to Gündüz And Kuştepelı (2020), the notion of a natural resource curse is true in that nation if natural resources in this study use natural resource rents to have a bad impact on exports. However, a nation is exempt from the "natural resource curse" if rents from its natural resources have a positive impact on its exports. The natural resource rents variable, which represents the total income that may be produced from the extraction of natural resources less the costs of doing so, can be used to calculate a country's natural resource riches (including the normal return on investment to extractive companies). The connection between exports and rents from natural resources is as follows.



Source: World Bank (2022)

Figure 1. Natural Resources Rents and Indonesian Exports 1991-2021

Figure 1 illustrates the variation in Indonesia's exports. As can be shown, Indonesia tends to have a positive link between exports and natural resource rents. The phenomena in Indonesia contradicts studies by Bappenas RI (2021), GÜNDÜZ and KUŞTEPELİ (2020) that revealed that natural resource rents had a detrimental impact on exports, suggesting that the natural resource curse hypothesis may be true. The author's perspective on the impact of natural resource rents on Indonesian exports is informed by variations in research findings and current realities.

International commerce can offer chances for foreign investors to make investments in a nation. According to Najih (2019), exports and foreign direct investment are crucial in the open economy of today. Of course, the currency rate comes up when discussing foreign direct investment. Waqas, Hashmi, and Nazir (2015) found that the exchange rate has a significant impact on foreign direct investment. The rise in foreign direct investment affects how much the rupiah appreciates against other currencies, increasing the price of export goods.

The supply and demand sides can be used to explain the high export price. According to demand theory, consumer demand and product pricing are inversely correlated (Andajani, 2013). According to the Law of Supply, the more commodities a seller offers, the higher the price will be Basuki and Prawoto (2014), hence the Law of Supply and the Theory of Demand are inversely related. According to Basuki and Prawoto (2014), the term "demand" refers to the quantity of items that are bought or requested at a specific price and time. Alfred Marshall created the law of demand after reviewing the facts relating to the relationship between price level and demand. According to the law of demand, there is greater demand for a product when its price is lower; on the other hand, there is less desire for products with higher prices (STPN 2020). Demand theory is employed in this study to determine how foreign direct investment affects exports. Exports and foreign direct investment are both tightly correlated with exchange rates, and this has an impact on the country's gross domestic product (GDP) (GDP). The parts of GDP in an open economy are as follows.

$$\text{GDP} = \text{C} + \text{I} + \text{G} + (\text{XM}) \quad (1)$$

$$-\text{X} = -\text{GDP} + \text{C} + \text{I} + \text{G} - \text{M} \quad (2)$$

Based on equations (1) and (2), where GDP, or gross domestic product, is defined as consumption (C), investment (I), government spending (G), government spending (G), exports (X), and imports (M). The idea of a negative impact of investment on exports can be observed in equation (2). According to Basuki and Prawoto (2014) supply in economics refers to the quantity

of goods or services that producers are able to provide to customers at any price point for a specific duration of time. According to the law of demand, the more an item costs, the more things are provided; on the other hand, the less an item costs, the fewer goods are offered (STPN 2020). The supply theory is applied in this study to examine how government spending affects exports.

Naturally, the government's responsibility in providing the appropriate laws and policies is necessary in the midst of global trade. Government spending, often known as costs, are unavoidably necessary for the government to carry out rules. Fiscal policy, which is a government activity to control the direction of the economy by establishing the amount of government revenues and expenditures each year, includes government spending as a component (Nahumuri, 2019). Spending by the government can directly boost output, but it can also have a negative impact on commerce. Because the expected real rate of return increases and the benefits of trade becomes less clear, an increase in government spending generally results in a worsening of the trade balance.

In the midst of various macroeconomic conditions that affect exports, in 2021 a phenomenon that affects the economy will occur, namely the Russia-Ukraine war. The war that occurred between Russia and Ukraine had an impact on the economic sector and eventually led to the restructuring of international trade and countries that have relations with Russia and Ukraine will have a great influence on their country's national interests (Bakrie, Delanova and Yani, 2022) . The invasion carried out by Russia against Ukraine at the end of 2021 had an impact on global commodity prices, especially for countries that import oil and wheat.

Indonesia is one of the countries that imports wheat from Ukraine, based on the Observatory of Economic Complexity (2022) the fastest growing import markets in 2019 and 2020 are Argentina at 19.3 million US\$, Australia 7.15 million US\$, and Ukraine 6.15 million US\$. Based on this, it can be seen that Ukraine is the third largest wheat exporter for Indonesia. Meanwhile, Russia exports a lot of semi-finished products of iron or non-alloy steel by 24 percent, coal 17 percent, and potassic fertilizer 12.30 percent to Indonesia; Over the past 25 years, Russian exports to Indonesia have increased at an annual rate of 2.22%, from \$387 million in 1995 to \$671 million in 2020 (Observatory of Economic Complexity, 2022b) . The existence of import-export dependence between Indonesia and Russia as well as Indonesia and Ukraine is the background for the author to look at the influence of the Russia-Ukraine war on Indonesian exports.

METHODS

This research is descriptive and quantitative research. This study uses the dependent variable, namely exports in Indonesia in 1991-2021. While the independent variables are natural resource rent, foreign direct investment, government spending, and the Russia-Ukraine War dummy. The following is the multiple regression equation used in this study.

$$EXP_t = \beta_0 + \beta_1 NRR_t - \beta_2 FDI_t - \beta_3 G_t - \beta_4 WAR_t + \varepsilon_t \quad (3)$$

According to equation (3), EXP stands for exports as a percentage of GDP, NRR for natural resource rents, FDI for foreign direct investment, G for government spending, WAR for the fictitious Russia-Ukraine War (0 before (1991-2020); 1 after (2021), β_0 for constant, $\beta_1, 2, 3, 4$ and for residual (error term), and t for time series (1991-2021). Multiple linear regression, which is conducted using the EViews 10 application, is the type of regression analysis used in this study.

In this study, the type of data needed is secondary data, in the form of time series data sourced from the World Bank. The following table presents the operational definition of variables.

Table 1.
Definition of Operational Variables

Variable	Source	Definition
Export	World Bank	A measure of the worth of all additional market products and services offered to the rest of the world.
Natural Resources Rents	World Bank	The total of the rents for minerals, natural gas, coal (both hard and soft), oil, and forests.
Foreign Direct Investment	World Bank	the total amount of capital invested to get a long-term management stake (10% or more of the voting stock) in a business that is active in a market other than the investor's.
Government Expenditure	World Bank	The majority of current government expenditure on national defense and security is included in the budget for the acquisition of goods and services; however, government military spending, which is a component of capital formation, is excluded.
Russia-Ukraine War Dummy	-	0 before the war (1990-2020) 1 after war (2021)

RESULT AND DISCUSSION

Descriptive Statistical Analysis

As markers that describe the distribution of data in the study, descriptive statistics include the average value (mean), the lowest value (minimum), and the greatest value (maximum). The following is a summary of the descriptive statistics from the research data:

Table 1.
Descriptive Statistical Analysis

	EXP	NRR	FDI	G	WAR
mean	27.93429	6.548037	1.281540	4.250916	0.032258
Maximum	52.96813	11.30165	2.916115	15.67494	1.000000
Minimum	17.27142	2.612890	-2.757440	-15.37154	0.000000
Observations	31	31	31	31	31

Source: *EViews 10 (2022)*

Based on the Table of Descriptive Statistical Analysis, it is known that the number of data observations used was 31 with the object of research being the state of Indonesia during the period 1991-2021. The discussion of the descriptive results for each is explained as follows: Average export value (EXP) in Indonesia is 27.93429 percent. The highest export value during the period 1991-2021 was 52,96813 percent in 1998 while Indonesia's lowest export was 17,27142 percent in 2020.

The average value of natural resources rents (NRR) in Indonesia is 6.548037 percent. The highest value of natural resources rents during the period 1991-2021 was 11.30165 percent in 2008 while Indonesia's lowest natural resource rents was 2.612890 percent in 2016. The average value of foreign direct investment (FDI) in Indonesia is 1.281540 percent. The highest value of FDI during the period 1991-2021 was 2.916115 percent in 2005 while Indonesia's lowest FDI was -2.757440 percent in 2000.

Average value of government spending (G) in Indonesia is 4.250916 percent. The highest government expenditure during the period 1991-2021 was 15,67494 percent in 2009 while the lowest government expenditure for Indonesia was -15,37154 percent in 1998. For the Russia-Ukraine war (WAR) variable using a dummy where 1991-2020 was 0 (before the war broke out) while 2021 is 1 (after the war).

Time Series Data Regression Results

By using the time series data regression estimation method, to see the effect of natural resource rent, foreign direct investment, government spending, and the Russian-Ukrainian war

dummy on exports in Indonesia in 1991-2021, the regression output is as follows.

Table 32.
Time Series Regression Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.33694	2.164723	9.394711	0.0000
NRR	2.045272	0.290150	7.049027	0.0000
FDI	-2.470969	0.463809	-5.327555	0.0000
G	-0.552061	0.117647	-4.692533	0.0001
WAR	-8.734495	3.462345	-2.522711	0.0181
R-squared	0.823924	Mean dependent var		27.93429
Adjusted R-squared	0.796835	SD dependent var		7.401784
SE of regression	3.336268	Akaike info criterion		5.394272
Sum squared resid	289.3977	Schwarz criterion		5.625561
Likelihood logs	-78.61122	Hannan Quinn Criter.		5.469667
F-statistics	30.41580	Durbin-Watson stat		1.756160
Prob(F-statistic)	0.000000			

Source: *EViews (2022)*

Based on Table 2. Regression Estimation Results, the results of the regression equation estimation are as follows.

$$EXP_t = 20.33694 + 2.045272NRR_t^* - 2.470969FDI_t^* - 0.552061G_t^* - 8.734495WAR_t^* \quad (4)$$

Note: * Significant at = 5%

Based on equation (4), it is known that the constant value is 20.33694, which means that if rents from natural resources, FDI, government spending, and the Russian-Ukrainian war are all zero, Indonesia's exports will be 20.33694 percent of total exports. Natural resource rents (NRR) have a regression coefficient value of 2.045272, which indicates that, *ceteris paribus*, if NRR increases by 1% from 1991 to 2021, Indonesian exports will rise by 2.045272%. The regression coefficient for foreign direct investment (FDI) is -2.470969, which indicates that, *ceteris paribus*, if FDI rises by 1 percent from 1991 to 2021, exports in Indonesia will fall by 2.470969 percent. In other words, if government spending rises by 1 percent from 1991 to 2021, Indonesian exports will fall by 0.552061 percent, *ceteris paribus*, according to the regression coefficient of government expenditure (G), which is - 0.552061. The regression coefficient for the Russian-Ukrainian war dummy (WAR) is -8.734495, which indicates that, *ceteris paribus*, when the Russia-Ukrainian war breaks out, exports from Indonesia will fall by 8.734495 percent in the period from 1991 to 2021.

Classical Assumption Test Normality Test

Normality test was conducted to see whether the variables were normally distributed or not. To test the independent variables are normally distributed or cannot perform the Jarque-Bera test, the hypothesis is as follows:

H_0 : Normal distribution

H_a : Distributed abnormally

The test criteria are that H_0 is accepted and H_a is rejected, if the probability of Jarque-fallows > from = 5% while H_0 is rejected and H_a is accepted, if the probability of Jarque-fallows is < than = 5% (Winarno, 2017) . Here are the results of the normality test.

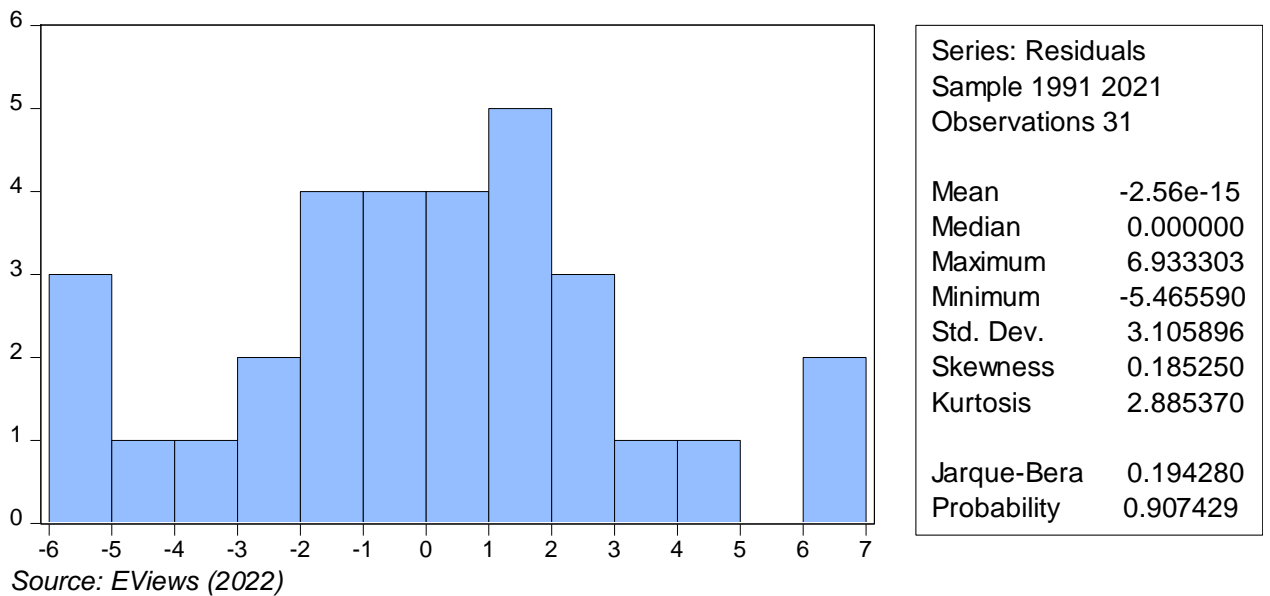


Figure 2. Normality Test Results

Figure 2's results for the normality test demonstrate that the Jarque-Bera P-value is 0.907429, which is higher than $(\alpha) 0.05$. Therefore, it may be said that the data in this research model is regularly distributed.

Detection of Multicollinearity

To determine whether there is a connection between the independent variables in a regression, multicollinearity detection is used. Due to inaccurate variable estimate, models with multicollinearity in the data have a tendency to be deceptive. As a result, forecasting cannot be done using the model. The test for variance inflation factors was used in this investigation to identify multicollinearity. The assumption is that the model has multicollinearity the higher the VIF value. The following circumstances are used to gauge a model's degree of multicollinearity issues: If $VIF > 10$ denotes strong collinearity, $VIF 5 - 10$ indicates moderate collinearity, and $VIF 1 - 5$ indicates low collinearity, the condition (a) applies. The result of the multicollinearity detection is shown here.

Table 3.
Multicollinearity Test Results

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
NRR	0.084187	11.23290	1.179660
FDI	0.215119	2.086609	1.102636
G	0.013841	1.754723	1.058153
WAR	11.98783	1.077008	1.042266

Source: EViews (2022)

It is evident from the VIF calculation results that the equation does not exhibit multicollinearity. It is evident that each independent variable's VIF value is less than 5, indicating low inter-variable collinearity.

Heteroscedasticity Test

To determine whether the study's residuals were constant, a heteroscedasticity test was run. If the variance of each residual is constant, a model is said to be heteroscedasticity-problem-

free. employing the Glejser approach in this investigation. Regarding the following supposition: Both H_0 and H_a indicate the presence of heteroscedasticity. H_0 is accepted and H_a is rejected if the likelihood of Obs*R squared is higher than the 5% confidence level, and vice versa (Winarno, 2017). The estimated heteroscedasticity test yielded the following results:

Table 5.
Heteroscedasticity Test Results

Heteroskedasticity Test: Glejser			
F-statistics	1.508865	Prob. F(4,26)	0.2286
Obs*R-squared	5.840379	Prob. Chi-Square(4)	0.2114
Scaled explained SS	5.439229	Prob. Chi-Square(4)	0.2451

Source: EViews (2022)

Given that 0.2114 is higher than the value of $\alpha = 5\%$, it can be said that this study model has no heteroscedasticity issues.

Autocorrelation Test

The purpose of the autocorrelation test is to determine whether the correlation between the disturbance variables of one observation and another observation deviates from the traditional assumption of autocorrelation (Widarjono, 2018). In this study, the Breusch-Godfrey Serial Correlation (LM Test) test was utilized to identify autocorrelation. The suppositions are H_0 : If the probability value of Obs*R-Squared (Chi-Squared) is less than the value of $\alpha = 5\%$, then there is no autocorrelation; if it is more than the value of $\alpha = 5\%$, then there is autocorrelation. On the other hand, an autocorrelation exists if the probability value of Obs*R-Squared (Chi-Squared) is less than the value of $\alpha = 5\%$.

Table 4.
Autocorrelation Test Results

Breusch-Godfrey Serial Correlation LM Test:			
F-statistics	0.489145	Prob. F(2,24)	0.6191
Obs*R-squared	1.214133	Prob. Chi-Square(2)	0.5449

Source: EViews (2022)

Table 5 allows for the conclusion that there is no autocorrelation in this study because the probability value of Obs*R-squared 0.5449 is more than or equal to $\alpha = 5\%$.

Statistical Test

Partial Test (t Test)

The degree of freedom (26;0.05) has a t-table value of 1.70814, which is higher than the t-statistic value of 7.049027, indicating that natural resource rents have a sizable positive impact on exports in Indonesia. Foreign direct investment has a considerable negative impact on Indonesian exports since its t-statistic value, which is bigger than its t-table value, is -5.327555. The significance of an effect is unaffected by a negative t-count result, which denotes a change in the direction of the effect (Gillespie, 2018). Government expenditure has a t-statistic value of -4.692533, which is higher than the t-table value of 1.70814, indicating that it significantly reduces Indonesian exports. Given that the t-statistic value of the Russian-Ukrainian conflict dummy is bigger than the t-table value of 1.70814 (-2.522711), the war has a strong detrimental impact on Indonesian exports.

Simultaneous Test (F Test)

To ascertain whether the independent factors collectively had a substantial impact on the dependent variable, the F statistic test was used. Following are the outcomes of the F-statistical test:

Table 7.
Simultaneous Test (F Test)

DF	α	Prob	F-table	F-Statistics	Conclusion
(4;26)	0.05	0.0000	2.74	30.41580	Significant

Source: *Eviews 10 (2022)*

Table 6 shows the F-statistic test results, which were 30,41580. This value exceeds the t-table value, which is 2.74 with a degree of freedom and a significance level of 5% (4:26). Thus, it can be said that the dependent variable, or the economic growth in Indonesia between 1991 and 2021, is simultaneously influenced by the independent

Coefficient of Determination (R^2)

One technique to gauge how much the independent variable impacts the dependent variable is to look at the coefficient of determination. The coefficient of determination is 0.823924 according to the outcomes of the regression calculations shown in Table 1. In other words, 82.3924 percent of the independent variables may account for Indonesian exports. While 17.6076% of the difference is explained by factors not covered in the research.

Discussion

The Effect of Natural Resources Rents on Exports in Indonesia

In that nation, there is a Natural Resource Curse (GÜNDÜZ & KUŞTEPELİ, 2020). On the other hand, there won't be a natural resource curse in a country if an increase in natural resource rents can also raise total exports. According to the study's findings, Indonesian exports between 1991 and 2021 were positively and significantly impacted by rents from natural resources. Indonesia did not encounter the Natural Resource Curse Hypothesis, it can be said.

Natural resources, according to Torvik (2002), enable higher productivity and income since rising consumer demand will lead to more domestic manufacturing. Since resource-rich nations may easily enhance their own economic structures and human capital, resource richness in this context has a favorable impact on economic growth (Sachs & Warner, 1999). The study's findings are in line with the theory of international trade, which holds that the relative disparity in the quantity and costs of production inputs accounts for the variation in relative commodity prices between two countries prior to trade. The fact that natural resources differ throughout nations is one element that is prevalent. According to the setnas-asean.id website, the ASEAN area is in charge of four major hubs for biodiversity. Three of the top seventeen most diverse nations in the world—Indonesia, Malaysia, and the Philippines—are ASEAN members. This demonstrates that one of the nations with abundant natural resources is Indonesia.

The Effect of Foreign Direct Investment on Exports in Indonesia

According to the study's findings, Indonesian exports suffered a considerable and unfavorable impact from foreign direct investment between 1991 and 2021. This study is consistent with work of (Haryani & Asrida, 2021). When foreign investors come to Indonesia, they allocate their funds to industries that create commodities that were previously imported from their home country. According to the eclectic paradigm, one of the reasons that attracts foreign investors to a nation is the desire to defend and expand existing markets while also promoting

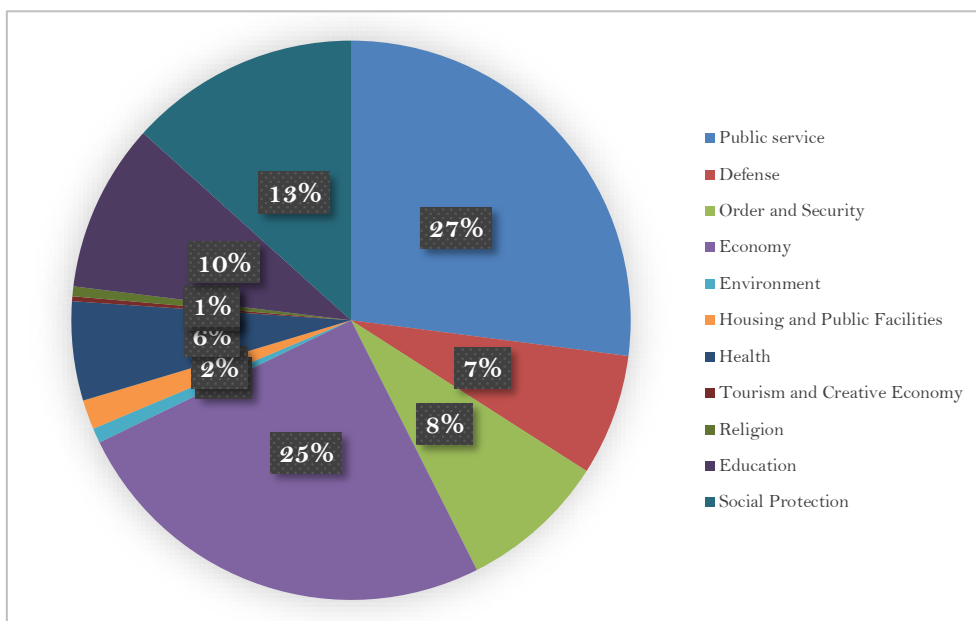
new ones (Dunning & Lundan, 2008). This situation shifts from export-import to opening production facilities in order to reduce trade costs between countries (trade costs) and/or improve efficiency, so that foreign investment tends to pursue the large potential of the domestic market rather than making the destination country an export base (Najih, 2019).

The impact of capital inflows into the real sector, which typically happens through changes in the real exchange rate of the home currency, is another reason that makes foreign investment have a negative impact on exports. Increased foreign direct investment into Indonesia has the potential to boost demand for the rupiah, which in turn affects how much the currency appreciates against other currencies. Exports and the currency rate are both tightly correlated, as are foreign direct investment and exports. The value of the rupiah increases the price in the country of importation, and when the price is higher, demand declines. This is consistent with the demand theory, which contends that consumer demand has a discordant relationship with product prices (Andajani, 2013).

The Effect of Government Expenditure on Exports in Indonesia

According to the study's findings, from 1991 to 2021, Indonesian exports were negatively and significantly impacted by government spending. An expansionary fiscal policy is one that increases government spending. According to Amin (2012) Bank Indonesia's 2009 analysis demonstrates that Indonesia's fiscal policy is often acyclical. Fiscal policy is said to be acyclical if it tends not to follow the actual business cycle Aini (2016) and so has no behavior. Such traits could put pressure on the economy to become unstable, leading to things like inflation.

Inflation causes the money supply to increase and results in currency depreciation. The increase in the amount of money in circulation will have an impact on the lower exchange rate of the rupiah against foreign currencies (the rupiah depreciates). When the rupiah depreciates, in terms of supply, output will fall, which will have an impact on prices going down. When the output produced decreases, it will have an impact on the decline in export goods, in addition to falling prices, the amount of profits derived from exports will also decrease. This is in accordance with the supply theory, when the price falls, the supply will fall. The sound of the law of supply is that the more the number of goods to be offered by the seller, the higher the price (Basuki and Prawoto, 2014) .The following is a diagram of the government's expenditure allocation for 2021.



Source: Ministry of Finance (2022)

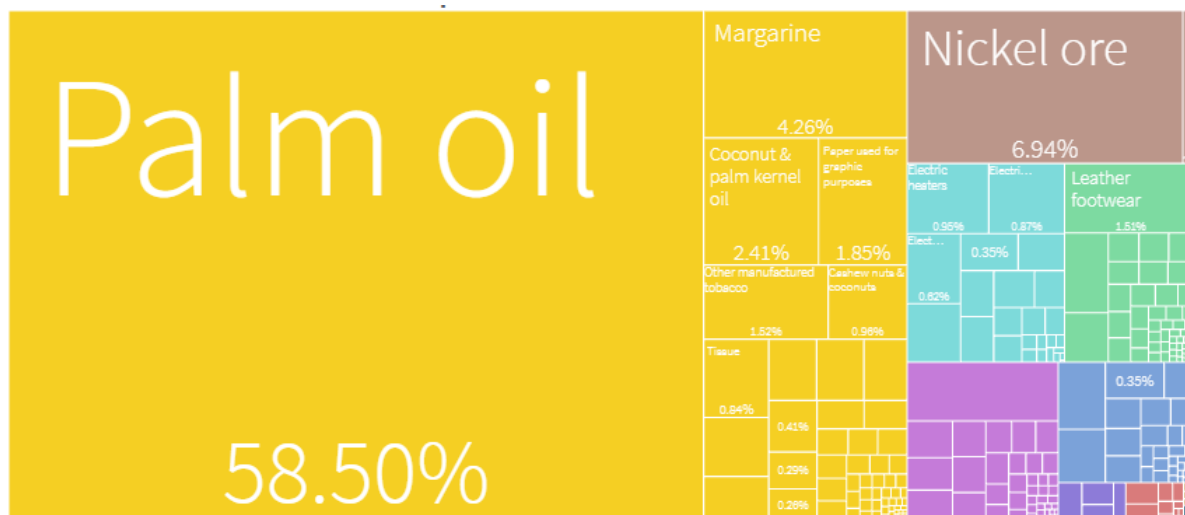
Figure 2. Indonesian Government Expenditure 2021

It can be seen that the components of Indonesian government spending in 2021, the largest government expenditure will be for public services, while tourism and creative industries receive the least budget. Whereas the tourism sector and the creative economy can increase added value and have the opportunity to become a basic sector in Indonesia. Increasing the added value of the tourism sector and the creative economy is very likely to increase Indonesia's export output.

The Effect of the Russia-Ukrainian War on Exports in Indonesia

According to the study's findings, Indonesian exports were significantly harmed by the Russia-Ukraine conflict. This study is in line with research done by Permana (2022) which found that this war may diminish Indonesia's non-oil and gas exports and impede wheat imports, thereby raising the price of a variety of foodstuffs in the nation or, to put it another way, contributing to inflation.

According to studies by Pioh, Kumaat, and Mandej (2021) inflation significantly and negatively affects exports. Domestic prices rise above foreign prices as a result of inflation. Increased local pricing typically result in more imports and more foreign exchange. This is consistent with research by BR Silitonga, Ishak, and Mukhlis (2019) which found that rising domestic inflation will raise the cost of domestic goods. As a result, people will be more inclined to look for cheaper alternatives abroad or to conserve their money, which will increase imports and decrease exports and drive up demand for foreign currency.



Source: *The Atlas Complexity (2022)*

Figure 3. Indonesian Exports to Ukraine in 2020

According to Figure 4, the top three exports from Indonesia to Ukraine are margarine (4.26%), nicel ore (69.4%), and palm oil (58.50%). Due to the fact that Ukraine was one of the importers of Indonesia's largest export of palm oil in 2020—totaling 58.50%—the conflict between Russia and Ukraine had an effect on the Indonesian economy. The distribution of raw resources around the world has also been impeded by the Russia-Ukraine conflict. In addition, the rise in energy costs, particularly for oil and gas, has a significant influence on Indonesia because Russia exports 10% of the world's oil (Permana, 2022).

CONCLUSION AND SUGGESTION

Conclusin

The results of this study show that, in Indonesia between 1991 and 2021, natural resource

rents have a positive and large impact on exports, whereas foreign direct investment, public spending, and the Russia-Ukraine war have a negative and significant impact. Natural resource rent, foreign direct investment, public spending, and the Russia-Ukraine war all simultaneously had a substantial impact on Indonesian exports. The Natural Resources Curse Hypothesis does not hold true in Indonesia, according to the findings of this study, which show that natural resource rent has a beneficial impact on exports in that country. To make the output more viable for Indonesia, nonetheless, Indonesia should begin to raise the added value of the sector of natural resources. Human needs are not finite, however natural resources are, thus it is important to use them carefully. To increase Indonesia's human resource capability for managing high added value natural resources, the government of Indonesia might collaborate with the business sector.

Exports are negatively impacted by foreign direct investment, which indicates that foreign investors that enter Indonesia engage in industries that make commodities that were once imported from their home countries. As a result, Indonesia's exports cannot expand. The Indonesian government should develop strategies that can entice and focus foreign investors' attention on Indonesia's export industry. Additionally, Indonesia should be able to foster an environment that encourages investment (beginning with legal clarity, political stability, and economic stability) to encourage foreign investors to make investments there.

Exports are negatively and significantly impacted by government spending, demonstrating the acyclical nature of Indonesian government spending. Indonesia's acyclical nature may lead to inflation, resulting in imports that are more expensive than exports. Additionally, the Indonesian government still makes relatively little investment in the travel and tourist sector and the creative economy. The tourism industry should be improved by the government in order to boost the value of export goods. It is anticipated that raising the caliber of travel services, raising the caliber of human resources, and increasing the effectiveness and efficiency of government spending will boost Indonesia's exports.

The Covid-19 outbreak, which was made worse by the presence of Russia-Ukraine machetes, had an effect on Indonesian exports during the country's economic crisis. From 1991 until 2021, the Russia-Ukraine war significantly and negatively impacted Indonesian exports. Indonesia should take advantage of the chance to decrease wheat imports and increase domestic wheat production since Indonesia depends on wheat imports from Ukraine. To be able to produce wheat in big amounts and of superior quality, the government can offer subsidies to wheat growers.

Suggestion

Other factors that influence exports, such as inflation, exchange rates, and the role of the government, can be employed in future research (can be seen from the effectiveness of the government, political stability, and the rule of law). The strategy of influencing other variables on exports throughout the short and long terms, as well as the addition of years of research, should be used in future studies to provide results that are more complex.

DAFTAR PUSTAKA

- Aini, R. F. (2016). *Pengaruh Kebijakan Fiskal di Negara Maju dan Negara Berkembang Kontraksiklikal atau Prosoklikal*. 1–23.
- Amin, N. (2012). Dampak Kebijakan Fiskal terhadap Output dan Inflasi. *EJournal STIE Syariah Bengkulu*, 69–98.
- Andajani, T. K. (2013). Teori Permintaan. *Suplemen Modul Ekonomi Mikro*, 53(9), 10–15.
- Bakrie, C. R., Delanova, M. O., & Yani, Y. M. (2022). Perekonomian Negara Kawasan Asia Tenggara. *Jurnal Caraka Prabu*, 6(1), 65–86.
- Bappenas RI. (2021). *Indonesia Dan Dunia*. 5(2).
- Basuki, A. T., & Prawoto, N. (2014). *Pengantar Teori Ekonomi*. 2. 12.

- [http://repository.ums.ac.id/bitstream/handle/123456789/2055/BUKU PENGANTAR TEORI EKONOMI new.pdf?sequence=2&isAllowed=y](http://repository.ums.ac.id/bitstream/handle/123456789/2055/BUKU_PENGANTAR_TEORI_EKONOMI_new.pdf?sequence=2&isAllowed=y)
- BR Silitonga, R., Ishak, Z., & Mukhlis, M. (2019). Pengaruh ekspor, impor, dan inflasi terhadap nilai tukar rupiah di Indonesia. *Jurnal Ekonomi Pembangunan*, 15(1), 53–59. <https://doi.org/10.29259/jep.v15i1.8821>
- Dewi, M. H. H. (2019). Analisa dampak globalisasi terhadap perdagangan internasional. *Jurnal Ekonomia*, 9(1), 48–57. <https://www.ejournal.lembahdempo.ac.id/index.php/STIE-JE/article/view/24/16>
- Dunning, J. H., & Lundan, S. M. (2008). *Multinational Enterprises and the Global Economy, Second Edition*.
- Fortuna, A. M., Muljaningsih, S., & Asmara, K. (2021). Analisis Pengaruh Eskpor, Nilai Tukar Rupiah, Dan Utang Luar Negeri Terhadap Cadangan Devisa Indonesia. *Equilibrium: Jurnal Ilmiah Ekonomi, Manajemen Dan Akuntansi*, 10(2), 113–120. <https://doi.org/10.35906/je001.v10i2.779>
- Gillespie, C. (2018). *What Does a Negative T-Value Mean?* SCIENCING. <https://sciencing.com/negative-tvalue-mean-6921215.html>
- GÜNDÜZ, Ş., & KUŞTEPELİ, Y. R. (2020). The Impact of Natural Resource Abundance on Manufacturing Exports from a Technology Intensity Perspective. *Ege Akademik Bakis (Ege Academic Review)*, 2008, 221–230. <https://doi.org/10.21121/eab.795981>
- Haryani, & Asrida. (2021). PENGARUH INVESTASI ASING LANGSUNG DAN NILAI TUKAR TERHADAP EKSPOR DI INDONESIA Haryani dan Asrida. *Sains, Jurnal Ilmiah Ekonomi, Fakultas Almuslim, Universitas Almuslim*, 5(5), 25–28.
- Nahumuri, L. L. (2019). Esensi Dan Urgensi Pengeluaran Pemerintah Untuk Pembangunan Daerah. *Jurnal Ilmu Pemerintahan Suara Khatulistiwa*, 4(1), 1–12. <https://doi.org/10.33701/jipks.v4i1.597>
- Najih, M. W. F. (2019). Hubungan Foreign Direct Investment (FDI) dan Ekspor: Studi Kasus Peran Indeks Ease of Doing Business (EODB) di Asean-5. *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya*, 8, No. 1.
- Nopeline, N. (2018). Determinan Perdagangan Ekspor Indonesia Ke Negara Tujuan Utama Ekspor 2000–2015. *Jurnal Mitra Manajemen*, 2(4), 329–339. <https://doi.org/10.52160/ejmm.v2i4.108>
- Nuri Aslami, N. S. A. (2022). Analisis Kebijakan Perdagangan Internasional. *Journal Economy and Currency Study (JECS)*, 4(1), 14–23. <https://doi.org/10.51178/jecs.v4i1.358>
- Observatory of Economic Complexity. (2022a). *Indonesia*. <https://oec.world/en/profile/bilateral-product/wheat/reporter/idn>
- Observatory of Economic Complexity. (2022b). *Russia/Indonesia*. OEC. <https://oec.world/en/profile/bilateral-country/rus/partner/idn>
- Permana, S. H. (2022). The Impact of the Russia-Ukraine War on the Indonesian Economy. *Journal of Social Commerce*, 2(2), 71–81. <https://doi.org/10.56209/jommerce.v2i2.29>
- Pioh, M. A. G., Kumaat, R. J., & Mandeiij, D. (2021). PENGARUH PDB AMERIKA SERIKAT, KURS DAN INFLASI TERHADAP EKSPOR NON MIGAS DI SULAWESI UTARA PERIODE 2001-2020 Melisa A. G Pioh *Jurnal Berkala Ilmiah Efisiensi Melisa A. G Pioh*. 21(04), 13–21.
- Sachs, J. D., & Warner, A. M. (1999). The big push, natural resource booms and growth. *Journal of Development Economics*, 59(1), 43–76. [https://doi.org/10.1016/S0304-3878\(99\)00005-X](https://doi.org/10.1016/S0304-3878(99)00005-X)
- Sulistiyorini. (2022). Pengaruh Inflasi Dan Nilai Tukar Terhadap Ekspor Jawa Timur (The Effects of Inflation and Exchange Rates on Exports of East Jawa). *JIKOSTIK - Jurnal Ilmiah Komputasi Dan Statistika*, 1(2 Februari 2022), 37–46. <https://jikostik.org/index.php/jikostik/article/view/12/12>
- Torvik, R. (2002). Natural resources, rent seeking and welfare. *Journal of Development Economics*, 67(2), 455–470. [https://doi.org/10.1016/S0304-3878\(01\)00195-X](https://doi.org/10.1016/S0304-3878(01)00195-X)
- Waqas, Y., Hashmi, S. H., & Nazir, M. I. (2015). Macroeconomic factors and foreign portfolio investment volatility: A case of South Asian countries. *Future Business Journal*, 1(1–2), 65–74. <https://doi.org/10.1016/j.fbj.2015.11.002>
- Widarjono, A. (2018). *Ekonometrika Pengantar dan Aplikasinya Disertasi Panduan EViews* (5th ed.). UPP STIM YKPN.
- Winarno, W. W. (2017). *Analisis Ekonometrika dan Statistika dengan EViews* (5th ed.). UPP STIM YKPN.