



# Russian-Ukrainian War Affects Ruble and Dollar

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**Abstract.** The Russian war broke out in 2022 and the war made two countries, Russia and Ukraine, a threat to the world supply chain system. A shortage of world resources occurred. Inflation occurs in most countries. The analysis of the situation helps investors to solve the problem of excessive investment risks. Russia supplies oil and gas to countries such as Europe. Ukraine is a supplier of agricultural resources, etc. to many parts of the world. Due to war problems, these resources were cut off. The increase in oil prices leads to the increase of related products together. Due to the war between Russia and Ukraine, the Russian side has adopted the practice of using only the Ruble for trade transactions with the Russian side to solve the economic problems. Exchange rate problems affected many companies after the war started. The article helps investors to understand the market situation and *analyse* the form of investments *and avoid investment risks*.

**Keywords:** Russia-Ukraine War · Oil · Exchange Rates

## 1 Introduction

The world begins to face pandemic influenza in 2019. The global economy received a blow and people faced difficulties in shutting down their businesses. After the outbreak of in 2022, the war once again left the market economy in a depressed state. The impact of the war on the global economy has made trade between countries impossible.

The market economy environment makes investments riskier. Many investors are confused about the market. Therefore, the market environment is analyzed and forecasted to help investors understand the direction of their investments. Economic forecasts are made by analyzing all resources. By observing the currency exchange rates, it is possible to understand the direction of investment.

Dedeoğlu and Kaya studied the relationship between energy use-GDP, energy use-export-trade, and energy use-import at the aggregate level in OECD countries. The relationship between energy use and growth was studied in the literature. An investigation of causality is used to identify long-standing relationships. And the relationship is used for monetary GDP, exports, and imports [1]. Coyle and Simmons (Engineer) point out that as the world's population grows and demand increases. The burning of fossil fuels has caused a global energy crisis. The use of fossil energy can provide electricity for human beings. Major changes in the world's climate have also had an impact on society

and the economy. The first part of the book provides an overview of the global energy crisis at the historical, social and political levels [2]. Vaughan and Adam discussed Russia and the war in Ukraine. The Russian invasion of Ukraine resulted in casualties among the Ukrainian people. The war triggered a shift in the world's energy sources. Russia exports large amounts of natural gas and oil. The price of oil is rising after a shortage of natural gas. It also includes the fact that the world's energy system is shifting toward low-carbon fuels [3]. Oluwasegun et al. adopted the Russo-Ukrainian War was very influential in Europe. This war changed the economic situation in oil and other markets. Since the price of oil also affects the price of other commodities. Therefore, data from within the war is used to study the changes in oil-influenced assets. The study shows that oil has a spillover effect on other assets. The reasons for this are the sanctions imposed on Russia by some advanced countries such as the US, UK, etc. The price of crude oil has grown 8 times higher [4]. Shuster et al. discuss the political issues that have contributed to the relationship between Russia and Ukraine. Describes the politics and related events throughout the Russo-Ukrainian war. There are also some photographs used as illustrations [5]. O. Zhi-Yi et al. driving the changes in the global crude oil market in the financial and political crisis. Data from 31 crude oil markets for 2019 were studied using network models and daily data. The results show that oil-related events in the face of the post-financial crisis increase spill over effects. The dynamics of the global crude oil market need to be reconsidered. Many political events can lead to changes in crude oil prices. For example, military conflicts in the Middle East [6]. B. Gao and C. Yang researched the impact of investor trading and investor sentiment on futures markets is studied. Both investors' and futures investors' trading behaviour have an impact on the daily returns of the financial markets in China. The findings show a positive relationship between high investor trading and sentiment [7]. X. Luo et al. mention the information content of futures market trading activities in determining commodity returns. Studies have shown the impact of changes in commodity futures markets and provide the ability to predict markets. Changes in option positions are the same as for the direction of futures prices. Changes in options can have an impact on the market, and on commercial transactions [8].

This paper is to examine the general situation and resources of the Russian-Ukrainian war. The overall situation is described and analysed. It is discussed that because of the war the Ruble has been devalued and the prices of oil, gas, and corn have been affected. The paper also presents a hypothesis for the future based on the present situation. The economic market trends in the event of some scenarios. The second chapter is about the impact on the market caused by the war in terms of currency, oil, and gas. The third chapter is about energy-induced exchange rate changes. According to the market changes. Also, observing exchange rate changes for analysis. From the charts it is found that the war affected the overall market. Forecast for the future using sub-case discussion. The fourth chapter is about the prognosis of the market and the forecast according to the future situation.

## 2 Overall Form Analysis

The Russian-Ukrainian war is the largest in Europe since World War II. This war took place following the 2014 Revolution of Dignity in Ukraine. The Russian invasion of

Ukraine has had a devastating and destructive impact on Ukraine. It also posed a threat to the lives of the people there. As a result of the Western sanctions against Russia, the Central Bank of Russia was targeted and a crackdown on the Ruble was imposed. Russia's economy and the lives of its people have been devastated. The Russia-Ukrainian war turned many Ukrainian people into refugees. This war is an economic war on another level. For, the war also had a devastating effect on global finance. The increase in the price of crude oil in the U.S. led to a dramatic increase in the price of gas for cars.

As the war began, several countries imposed economic sanctions on Russia. The Deutsche Bank Currency Volatility Index climbed toward 10%. Trading in international currency markets was also affected by the war. The euro fell more than 4% against the dollar. There was also the threatened energy supply issue. Russia, as a major exporter of natural gas and oil, dominates the world's energy supply. Crude oil prices in many countries and regions have been affected by the Russian-Ukrainian war and it has had a huge impact on the market economy. From a macroeconomic point of view, the military conflict has created a great deal of uncertainty in the market. Many unknown price changes can affect the entire market economy. For example, spill over effects can affect the growth of the U.S. dollar. There may be problems such as inflation or devaluation. The Russian Ruble has already depreciated more than 64% of the dollar. This is a result of the sanctions imposed on Russia by Western markets.

The war between Russia and Ukraine will cause investors to favour a safer and more stable market environment. As a result, the dollar will rise. As the war continues to develop, investors will start to worry so they will start buying gold and lean towards the safety of the stock market. Investors will avoid high-risk investments. Since the dollar has the status of the world's reserve currency, more investors will prefer to invest in it. The dollar's recent direction is elevated. However, some investors will avoid market risks and choose to invest in gold, a stable investment that won't plunge. The price of gold has also gone up. The strength of the dollar is also not just a good thing, as it affects other currencies that will devalue other currencies. Many U.S. companies have revenues not only in U.S. dollars but also in foreign currencies. So, this will make businesses suffer a lot.

One more factor worth considering is the impact of the Russian-Ukrainian war on oil prices. Because this effect makes the market start to be unstable. Russia is the third-largest oil producer in the world. In 2022, the United States bans imports of Russian oil. This has caused a rapid increase in the price of oil in the United States. It also affects the world.

### **3 Exchange Rate Impact Due to Source Issues**

#### **3.1 Currency Fluctuations**

The factors that influence currency fluctuations are commodity trade, economic growth, inflation, and other factors. Due to global inflation demand for many commodities is greater than supply. Such a situation can lead to currency devaluation and economic instability. For example, there is already a shortage of chips. There is a shortage of electronic devices, cars, and cameras. The problems in Russia and Ukraine have left both countries in a state of political turmoil. The value of the country's currency will be

affected. The Ruble is unable to conduct currency transactions and trade transactions in many countries, which leads to the decline of the country's economy. The withdrawal of many Western companies from operating in Russia after the country's trade status was revoked led to further losses for Russia.

In 2015, the fall in global oil prices alone led to the Russian economy being at a disadvantage. There are also price issues such as gold and natural gas pour the change in the Ruble exchange rate. Russia's oil is the country's main export in terms of energy and trade revenue. After this war starts in 2022, the West is not importing Russian oil. As a result, the price of the Ruble plummeted. The market needs smooth currency fluctuations to drag the economy along. Smooth economic development will ensure social stability.

### **3.2 The Impact of Energy-Induced Exchange Rates**

Oil, natural gas, and coal are all essential components of energy. Many industrial production and living needs come from these sources. Energy exchange is also an important trade transaction between countries. Russia is one of the world's leading energy exporters. Europe and other countries need to import natural gas from Russia. But due to the war. The value of the Ruble currency and trade transactions have been affected. After some countries stopped importing oil and gas from Russia. The increase in the price of oil and gas has also had an impact on the changes in the world exchange rate prices. Investors can allocate their assets by observing the impact of oil on exchange rates. Oil supply problems have had an impact on many countries' currencies in terms of appreciation or depreciation. The impact on different countries varies from time to time. The oil shock is caused by the demand for oil. The price of Commodities will also increase. Risks arise on the investment side. Prudent investments are required, considering the international situation and market trends.

### **3.3 Effect of Exchange Rate**

The Russian-Ukrainian war has not only affected the economies of both countries but has also had an impact on the changes in the world economy. After the start of the Russian-Ukrainian war, the trend of RUB to USD started to decline. 2022.2.27 was at its lowest point when the price of USD to RUB was around 114.39 from March to May the exchange price was rising. Russia has taken to requiring other trading nations to use the Ruble for transactions to add value to the Ruble. UAH to USD drops sharply from 2022.2.20. The country is in a state of war and is unable to recover its economy, making it impossible to conduct normal trade transactions. 2022.2.27 is the time that USD to UAH is around 29.24.

When exchange rates change, import and export prices change along with them. Fluctuations in exchange rates also reduce investments, and many investors choose to avoid the dangers of safe investments. As a result, many Russian and Ukrainian industries are threatened. Many investors choose to invest in gold or in industries or companies that are growing steadily. The devaluation of the Ruble can lead to problems for Russian companies operating in other countries. Enterprises carry out internal accounting and stocking problems. The impact on business revenues also affects the country's economy.

On the other hand, foreign companies are facing an economic crisis, so they are laying off employees to ensure the safety of the company.

## 4 Exchange Rate Impact Caused by Energy Issues

### 4.1 Prognosis of Energy Prices

Natural gas is used as a raw material to produce fertilizers, chemicals, and hydrogen. The fact is that due to the outbreak of the war between Russia and Ukraine, natural gas has become one of the most significant energy sources affecting European countries. Most of the natural gas in Europe is imported from Russia. Due to the policy of sanctions against Russia, Russia has also restricted this aspect of exporting natural gas. Europe's gas reserves are not very rich, so if the war continues it could lead to a decrease in productivity and resource constraints in some countries. According to recent data, the price of natural gas has risen to 8.415E which is 5.8% higher in May 2022. If the war continues, the price of natural gas will rise again.

Oil is a necessity for the daily production and life of human beings. Moreover, oil is a non-renewable energy source, so it is one of the sources of energy that people are always worried about. At the same time, oil can also be used to produce some chemical industry products. Since the beginning of the conflict between Russia and Ukraine, the price of oil has remained above 100 USD per barrel. Many oil traders are avoiding Russian oil due to the sanctions imposed on Russia in Europe and North America, which has led to an increase in the price of oil in general. According to the data, the price of oil in May 2022 is about \$108.11 per barrel. If the war does not end, the price of oil will continue to rise.

### 4.2 Prognosis of Market Investment (Supply Chain Issues)

Russia's fertilizer industry accounts for a large part of the world's fertilizer market. Russia supplies potassium and phosphate to the fertilizer industry. If Russia were to suspend the supply of these minerals and chemicals, it would leave many countries with insufficient crop yields. This would then affect the GDP of the whole country [1].

Meanwhile, Russia and Ukraine account for 17% of the world's corn exports. Corn provides feed for livestock. When the supply of corn has affected the price of meat will increase. On the other hand, the price of bread is also affected. Before the war started, the price of subway bread was about 5 US dollars. But now, due to the war, the price of bread has risen to about \$7 on the subway. So, people's cost of living will also skyrocket. Russia: As mentioned above, Russia is the world's largest exporter of natural gas. Most of the natural gas used in Europe comes from Russia.

### 4.3 Hypothetical Situations, Analysis of the Development of Things

The Russia-Ukraine war will have an unmanageable impact on the global economy. The global supply chain will be affected by this war. If the war continues, it will directly disrupt the global supply chain. On a global scale, the income situation of Central Asian

countries will be affected. Many Central Asians working in Russia will generate income for their own countries. A large portion of the total national GDP of Central Asian countries is earned in Ruble. When the Ruble is devalued, it affects these regions and causes these Central Asians to lose their jobs.

Wars can lead to global inflation. One of the situations facing the world market is the shortage of chips. The COVID-19 virus that started in 2019 has affected productivity and economic development worldwide. The international financial form has faced a crisis in the face of the lack of international trade flows and tourism development. Many countries are experiencing inflation, and the war between Russia and Ukraine has in turn worsened these situations. A large portion of the raw materials needed to manufacture chips in the United States which come from these two countries. 90% of neon is from Ukraine and 35% of palladium is from Russia. The problem of not being able to resume the production of chips is a crisis for the whole world. Humanity will face a shortage of cars, electronic devices and other equipment needs. Many companies will choose to stock up and invest in equipment at this time of year. Competition among investors for resources can result in dramatic price fluctuations and wasted investment.

## 5 Conclusion

This article examines the exchange rate problems and economic conditions under the Russian-Ukrainian war. The prices of many products in the market are rising in the absence of resources. The exchange rates of RUB and UAH fell sharply after the beginning of the war. The market is inflationary due to a lack of resources. Oil prices also increased with the Russian-Ukrainian problem. The globalized market situation is facing problems with financing and resources. As the market is facing a big impact. Many international companies will face financial problems. Products on the transaction will also be in a state of volatility. From the investor's point of view, one needs to choose some favourable currencies to invest in or some industries that are not affected by the turmoil. It is better to make a stable investment income with the guarantee of capital. The war is no longer just a problem between two countries. The war has led to fluctuations in the international economy.

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