

## IMPACT OF RUSSIA-UKRAINE WAR ON MACROECONOMIC VARIABLES IN INDIA

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### Abstract:

*Father of the Nation Mahatma Gandhi always said “Ahinsa Parmo Dharma” and violence never solves any problem because violence brings destruction and harms people and the nation therefore war should be avoided as far as possible. This has once again been proved by the attack of Russia on Ukraine on 24th February 2022. This war has a manifold effect and impacted many countries of the world. The present study focuses on the impact of the Russia-Ukraine war on a few macroeconomic variables in India. This is analytical research based on secondary data. The variables selected for the study are inflation, foreign trade, exchange rate, foreign exchange reserve, and GDP growth rate for the period from January 2022 to December 2022. The data is collected from various sources like the RBI bulletin, Ministry of Statistics and Programme, DGCI&S and Ministry of Commerce and Industry, National Statics Office. The study's objective is to find out the post-war impact of the Russia-Ukraine war on these macroeconomic variables in India. The data are analyzed with the help of percentages & averages and are interpreted with the help of the magnitude of change in percentages and averages. The study found that as India is the world's third-biggest importer of crude oil and crude oil accounts for 60% of India's total imports and this war escalate India's crude oil bill to the next level as a result current account deficit enlarged and foreign exchange reserves started depleting, resulting fluctuation in the exchange rate, falling the value Indian rupee.*

**Keywords:** Russia-Ukraine war, Inflation, Foreign Trade, Exchange Rate, Foreign Exchange Reserves, GDP Growth Rate.

### Introduction

The war between Russia and Ukraine started on 24th February 2022 with a Russian attack on Ukraine. Wars have always been acts of destruction. No country in the world can remain untouched by the effects of war. This war took place between two countries but its effects are spiralling to the whole world. Due to this war, Ukraine's GDP growth rate has gone in a negative direction, thousands of civilian casualties during this war, and neighbouring countries of Ukraine are facing the problem of refugees, etc. Various sanctions are imposed on Russia by European and other countries along with this number of foreign companies completely withdrawing from Russia resulting in losses for Russian global companies and it badly affects the Russian stock market as well as its economy. Both countries are large producers of wheat, edible oil, crude oil, palladium, nickel, and other commodities and fulfil 30 % of global demand but this war discontinued the supply chain as a result prices of these commodities rises to the next level. This war affects the global economy very critically especially developing economies and the Indian economy is one of them. Prices of energy products are the central area of worry for the Indian economy because India mainly depends on imports for energy products and increasing prices of these are one of the main reasons for the devaluation of Indian currency, increasing inflation, budget deficit, and slower economic growth rate. This paper aims to analyze the impact of this war on macroeconomic variables such as inflation, foreign trade, foreign exchange reserve, exchange rate, and GDP growth rate in India.

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### **Review of Literature**

(Dole, 2022) studied on Russia-Ukraine war: Impact on Indian Economy. She concluded that this war severely affected world trade as both countries are important producers of palladium (37%), natural gas (17%), wheat (13%), oil (12%), and nickel (9%). This war placed restrictions on Russia therefore supply chain got interrupted as a result prices of these commodities rises to the next level. Prices of energy products are the main area of worry for the Indian economy because India mainly depends on imports for energy production and increasing prices of it is one of the main reasons for the devaluation of the Indian currency, increasing inflation, budget deficit, and slower growth rate of GDP.

(Bose and Garge, 2022) studied Russia -Ukraine Crisis: Impact on Indian Economy. According to their study, Russia and Ukraine war is a catastrophe for the world economy and creates an environment of insecurity in international trade. Both countries are large producers of wheat, edible oil, crude oil, and other commodities and fulfill the 30 % of global demand which has been stopped after the war began. Consequently, it hits the supply chain of these commodities badly, especially wheat and crude oil. As a result, the whole world is facing the problem of a rise in prices of oil, gas, and other commodities and declining in the GDP growth rate. Indian economy is also get affected negatively because India is the third largest buyer of oil in the world. To overcome this problem India should pay attention to the solution to decrease its oil dependence. The World's 30% demand for wheat had been fulfilled by Russia and Ukraine but this war very badly hit the wheat supply to the world. But it can be an opportunity for India as India is a big producer of wheat therefore able to fulfill the world's wheat demand to some extent and it may help India to improve its balance of trade situation.

(Goel, 2022) carried out a study on the Impact of Russia - Ukraine War on the Indian Economy. In her study, she found that this war has both positive as well as negative consequences on the Indian economy. China is dependent on Russia for crude oil and this war interrupted the supply of crude oil that negatively affect China's industrial sector and its export this turned into an opportunity for India because after china India is the next less expensive industrial base hence India can increase its exports and increasing exports is always good for nation's economic health. This war is caused for a speedy increase in prices of crude oil, and other commodities and India depends on imports for the fulfilment of its crude oil requirements as a result increase in inflation and inflation affects GDP growth negatively. It leads to a devaluation of the Indian currency and expand the budget deficit and Sensex and Nifty both lost 2.7 and 2.5 percent, respectively. All this will be injurious to corporate profitability and to the nation's economic health. But this depressing environment of war brought an opportunity for investors to invest in prime stocks at attractive rates and it will be beneficial for investors to stay with long-term investment plans mutual fund investors should continue their SIP plans without breaking them.

(Paul, 2022) researched on Russia-Ukraine war and its effects on the Indian Economy. According to her study, Russia is the world's third leading oil producer and coal exporter and second topmost natural gas producer and Ukraine is the third topmost maize exporter and fourth-largest wheat exporter. The war between Russia and Ukraine interrupted the supply chain of the above commodities very acutely as a result prices of energy products, wheat, maize, and edible oil shoots up to the next level and negatively affect the economy of those countries that are the importer of above commodities and India is one of them. This war rises India's import bills which expand the current account deficit and decrease the value of Indian currency at the national (inflation) and international level.

(Nazeeruddin, 2022) carried out a study on The Russia- Ukraine War crisis - Its Impact on the Indian Economy. He concluded that due to this war whole world is facing the problem of a slower growth rate, rapid increase in price level especially diesel, petrol and vegetable oils become inaccessible and people are forced to reduce their demand of fried food, vegetable oil, and fuel.

### The objective of Study

- i. To analyze the impact of the Russia-Ukraine war on inflation in India.
- ii. To analyze the impact of the Russia-Ukraine war on foreign trade in India.
- iii. To analyze the impact of the Russia-Ukraine war on the exchange rate in India.
- iv. To analyze the impact of the Russia-Ukraine war on foreign exchange reserves in India.
- v. To analyze the impact of the Russia-Ukraine war on the GDP growth rate in India.

### Collection of Data and Methodology

This study is based on secondary data, collected from genuine websites of the Reserve Bank of India (RBI), the Central Statistical Organization (CSO), the Directorate General of Commercial Intelligence and Statistics (DGCI & S), the Ministry of Commerce & Industry and Ministry of Statistics & Programme Implementation. The monthly data are collected from January 2022 to Dec 2022 to analyze the post-war impact on macroeconomic variables in India. A total of five macro-economic variables are analyzed namely Inflation, Foreign Trade, Exchange Rate, Foreign Exchange Reserve, and GDP Growth Rate. The study is an analytical and literature-based investigation of the current problem. We utilized Microsoft Excel 2019 to analyze our data. The data are analyzed with the help of percentages & averages and are interpreted with the help of the magnitude of change in percentages and averages.

### Impact of Russia-Ukraine on Macro-Economic Variables

#### Inflation

Inflation implies increases in prices. It mitigates the purchasing power of money and people are not able to continue their consumption level as they are used to consuming before increasing the price level hence inflation reduces not only their real income but also their satisfaction level. Both countries are large producers of wheat, edible oil, crude oil, and other commodities and fulfil the 30 % of global demand which has been stopped after the war began. Consequently, it hits the supply chain of these commodities badly especially wheat and crude oil as a result speedy increase in prices of crude oil and other commodities. India depends on imports for the fulfilment of its crude oil requirements as a result inflation increases. Table 1 and figure 1 show that there is only a 0.1% increase in inflation from January 22 to Feb. 22. But due to this war inflation is increasing unexpectedly from Feb 22 onwards.

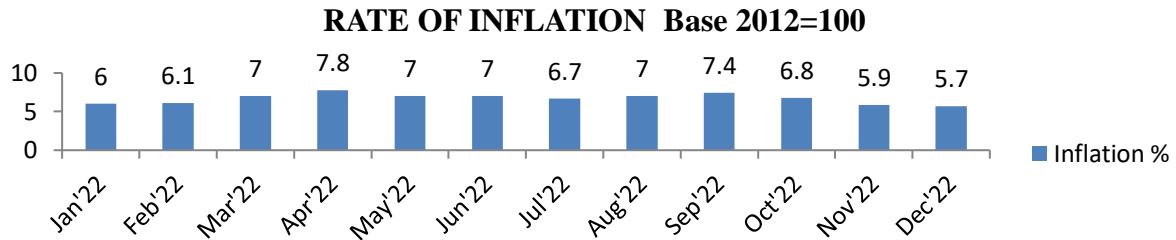
TABLE 1

RATE OF INFLATION Base 2012=100

Months	Inflation %
Jan'22	6
Feb'22	6.1
Mar'22	7
Apr'22	7.8
May'22	7
Jun'22	7
Jul'22	6.7
Aug'22	7
Sep'22	7.4
Oct'22	6.8
Nov'22	5.9
Dec'22	5.7

Source: RBI Bulletin & Ministry of Statistics & Programme Implementation

**Figure 1**



**Foreign Trade**

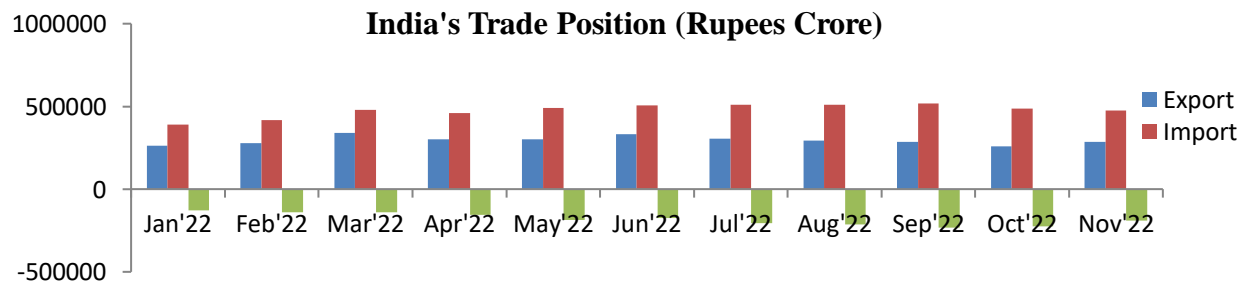
It is the process of buying (importing) and selling (exporting) goods outside the territorial boundary. It includes export and import. Table 2 and figure 2 show that the balance of trade was always negative means imports always exceed exports. As 30% of India’s import bill consists of oil and energy products hence this war suddenly increases India’s import bill from 418745 Crore Rupee (Feb.22) to 51883010 Crore Rupee (Sep. 22), as a result, rapid increase in the negative trade balance.

**Table 2 : India's Trade Position (Rupees Crore)**

Months	Export	Import	BOT
Jan'22	262178	390724	-128546
Feb'22	278585	418745	-140160
Mar'22	339207	480163	-140956
Apr'22	302975	458435	-155460
May'22	301058	488833	-187775
Jun'22	330205	504325	-174120
Jul'22	305486	509323	-203837
Aug'22	294599	508184	-213585
Sep'22	284262	518830	-234568
Oct'22	260168	485910	-225742
Nov'22	285099	476305	-191206

Source: DGCI&S and Ministry of Commerce & Industry

**Figure 2**



### Exchange Rate (Value of Rupee)

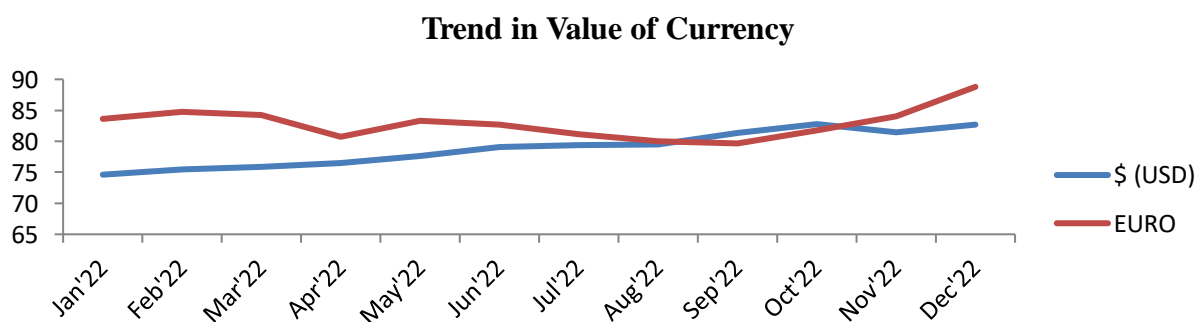
The rate at which currencies of two countries are exchanged is called the exchange rate. When the exchange rate is expressed in terms of national currency then a higher rate of exchange is unfavourable to that country e.g. 1\$ = 72 rupee and if the exchange rate increases to 1\$ = 78 rupee. This new rate is unfavourable to India as the value of the Indian currency is diminishing. Table 3 and figure 3 show that the value of the Indian currency (rupee) continues weakening from Feb.22 onwards because this war raises India’s import bills which expand the current account deficit and decreases the value of the Indian currency.

Table 3: Trend in Value of Currency		
Months	\$ (USD)	EURO
Jan'22	74.62	83.63
Feb'22	75.48	84.71
Mar'22	75.9	84.22
Apr'22	76.53	80.69
May'22	77.63	83.31
Jun'22	79.03	82.71
Jul'22	79.34	81.12
Aug'22	79.47	80
Sep'22	81.38	79.66
Oct'22	82.78	81.8
Nov'22	81.43	84.04
Dec'22	82.73	88.79

Source: Xe.com

<https://www.xe.com/currency/vnd-vietnamese-dong/>

Figure 3



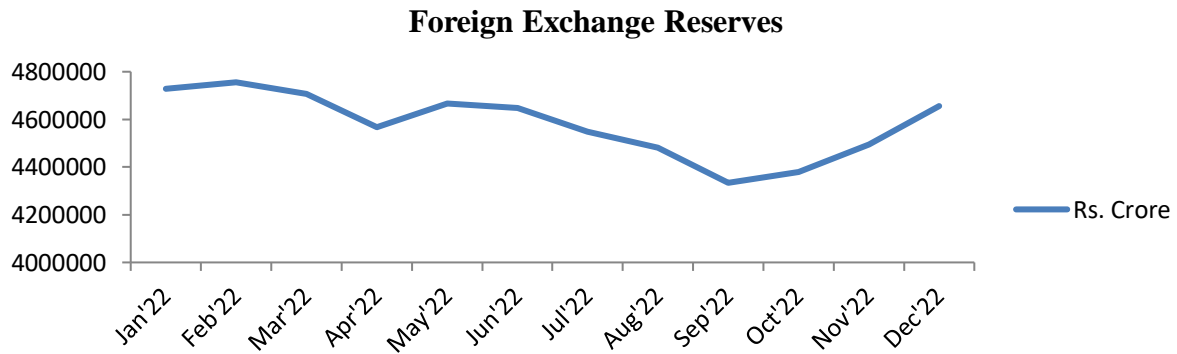
### Foreign Exchange Reserve

Foreign Exchange Reserve implies the reserve held by the central banks of countries in the form of foreign assets. The central bank of India (RBI) holds Foreign Exchange reserves in the form of foreign currency assets (FCA), gold, special drawing rights (SDRs), and reserve trench position (RTP). Maintaining an adequate amount of foreign exchange reserve is essential for every country to avoid fluctuation in the exchange rate. A country having sufficient foreign exchange reserves are able to encounter any economic and non-economic crisis and are also capable to meets their foreign obligation and liabilities. Insufficient foreign exchange reserves may cause fluctuation in the exchange rate and weaken the domestic currency which indicates poor health of the nation’s economy. Table 4 & figure 4 shows that from Jan.22 to Feb.22 there is an increasing trend in foreign exchange reserve but from Feb. 22 onwards Foreign Exchange Reserve was depleted very abruptly because this war increased our import bills and to settle these bills Foreign Exchange Reserve consumed excessively.

Table 4 : Foreign Exchange Reserves	
Months	Rs. Crore
Jan'22	4727298
Feb'22	4755726
Mar'22	4707396
Apr'22	4568295
May'22	4665848
Jun'22	4647773
Jul'22	4549652
Aug'22	4480681
Sep'22	4333987
Oct'22	4379715
Nov'22	4494373
Dec'22	4656002

Source: RBI Bulletin

Figure 4



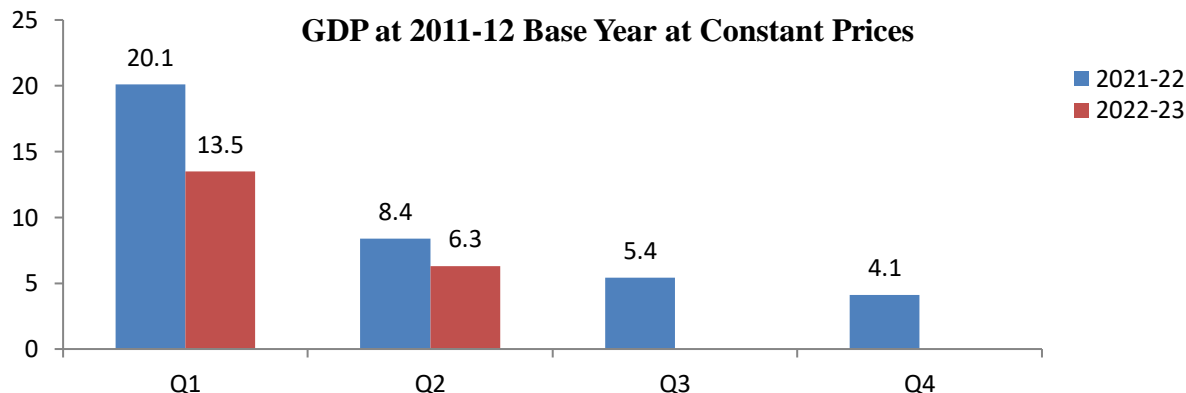
### GDP Growth Rate

A nation’s economic health can be estimated with the help of its GDP. It is the outcome of all economic activities of a nation. Decreasing GDP rate indicates that per capita income and the nation’s economy are contracting resulting weakened the fiscal position of the country. Due to this war growth rate of the first quarter (2022-23) declined from 20.1% to 13.5% and this decreasing trend continues to the second quarter (2022-23) also.

<b>Quarters/ Years</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>2021-22</b>	20.1	8.4	5.4	4.1
<b>2022-23</b>	13.5	6.3		

Source: National Statistics Office (NSO)

**Figure 5**



### Suggestions and Conclusion

Father of Nation Mahatma Gandhi always say “Ahinsa Parmo Dharma” and violence never solves any problem because violence brings destruction and harms people and the nation, therefore, war should be avoided as far as possible. Today the whole world is facing the devastating effects of this war. The impact of this war on the macroeconomic variable in India indicates that the Indian economy is affected severely. As India is the world’s third-biggest importer of crude oil and crude oil accounts for 60% of India’s total imports, this war escalates India’s crude oil bill to the next level as a result current account deficit enlarged and the foreign exchange reserves started depleting, resulting in fluctuation in the exchange rate, and falling the value Indian rupee. To bring the Indian economy back on the growth track India should pay attention to the solution to decrease its oil dependence. This war affects the supply of wheat very badly but India should exploit this opportunity by increasing its wheat export because India is also one of the large producers of wheat and can improve its balance of payment situation. This war negatively affects China’s industrial sector and its export but this turned into an opportunity for India because after china India is the next less expensive industrial base hence India can increase its exports.

### References

- Dr. Manjushree Sanjay Dole. (2022, April 4). “Russia-Ukraine war: Impact on Indian Economy”. International Journal of Novel Research and Development, Vol 7(4),303-309.
- Bose, S. & Garge, V. (2022). “Russia -Ukraine Crisis: Impact On Indian Economy”. International Journal of Creative Research Thoughts, Vol 10(7), 662-669.
- Dr. Manjusha Goel. (2022). “A Study of Impact of Russia - Ukraine War on the Indian Economy”. International Journal of Scientific Engineering and Research, Vol 10(5), 12-15.
- Dr. Babita Das Paul. (2022). “Russia-Ukraine war and its effects on Indian Economy”. Journal of Emerging Technologies and Innovative Research, Vol 9(4), 322-324.
- Dr. M. Nazeeruddin. (2022). “The Russia- Ukraine War crisis - It's Impact on Indian Economy”. International Journal of Research and Analytical Reviews, Vol 9(2), 346-347.

### Websites

- [www.rbi.org.in](http://www.rbi.org.in)
- [www.xe.com](http://www.xe.com)