



# Impact of the Russo-Ukrainian War on Unemployment and Poverty in Pakistan

Sajid Amin Javed and Abdullah Dayo



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**Abstract:**

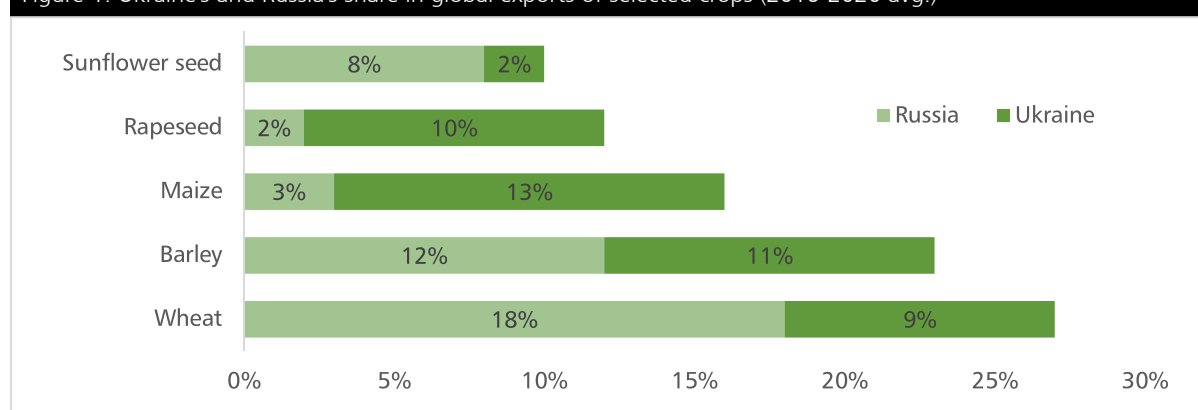
*This paper assesses the immediate impact of the Russo-Ukrainian War on the major macroeconomic and social indicators of Pakistan. We use desk review and data on the changed economic outlook of Pakistan before and after the war began to trace the impact of the war on poverty and unemployment. Estimates show that the war has left around half (0.4) million people unemployed. This increase in unemployment pushed another 2.25 million people below the poverty line as measured at \$1.90 a day—that is extreme poverty. Most importantly, the war in Ukraine added to already high consumer price inflation in Pakistan, which is expected to push millions more below the poverty line in 2023. Worryingly, the adverse impacts of the Russo-Ukrainian war on Pakistan's economy, while gradually becoming less, are likely to prevail for the next 3 to 5 years. We maintain that Pakistan's socioeconomic and political fault lines have catalyzed—and continue to catalyze—as a result of the Russo-Ukrainian War.*

## 1. Background

Russia's invasion of Ukraine in February 2022 has created headwinds for the global economy, which was already recovering from the worst impacts of the COVID-19 pandemic. Immediately after the war started, shock waves were sent to the global oil and food market, impacting the global economy adversely. Global oil prices increased sharply. The supply chain disruptions in the food market caused a steep rise in food prices. The world is witnessing economic slowdown on the one hand while unprecedented inflationary pressures on the other hand—a situation like the 1970's stagflation.

Russia is the world's second-largest natural gas producer, its third-largest oil producer, fifth-largest steel, nickel and aluminium producer, and largest wheat exporter—with exports previously comprising 20 per cent of global trade. Ukraine, on the other hand, is the largest sunflower seeds producer, the sixth largest corn producer, and the seventh largest wheat producer and is among the top ten countries producing sugar beet, barley, soybean and rapeseed (Coface Economic Research Team 2022). Figure 1 below depicts Ukraine's and Russia's share in global exports of selected crops. A war between the two, therefore, disrupted the global oil and food supply chains.

Figure 1: Ukraine's and Russia's share in global exports of selected crops (2016-2020 avg.)



Source: Food and Agriculture Organization United Nations (FAO)<sup>1</sup>

The first and foremost impact of the war was on -- already inflated -- oil and gas prices. The crude oil prices increased from \$90 on 24 February, crossed \$100 for the first time after 2014 and reached their highest level of \$119 on 8 March 2022<sup>2</sup>. Natural gas prices increased from \$4.4/MMBtu to \$9.7/MMBtu in August 2022. Similarly, the prices of coal and other energy items also increased sharply. Overall, the war has led to an energy crisis in the form of energy unavailability, price hikes and an increase in the import bills of oil/gas importing economies<sup>3</sup>.

The war has not only disrupted the energy sector but has also impacted the global food supply chains, which have impeded the flow of commodities, created food shortages and resulted in a dramatic increase in food and energy prices around the globe (Hassen & Bilal, 2022). Until

1. <https://www.fao.org/3/cb9013en/cb9013en.pdf>

2. From March to July 2022, the oil prices remained above \$100 per barrel for most of the period.

3. The European region, the major importer of Russian gas, suffered supply-chain disruptions after the EU countries put a ban on almost 90% of all Russian imports on 30 May 2022. On 26 July, EU energy ministers agreed on a voluntary reduction of natural gas demand from Russia [?] by 15% in the winter months. On 20-21 October, the EU Council agreed on a deal to adopt new measures to deal with the energy crisis. The global energy industry is particularly vulnerable to this crisis. Other regions of the world are unfortunately facing similar challenges.

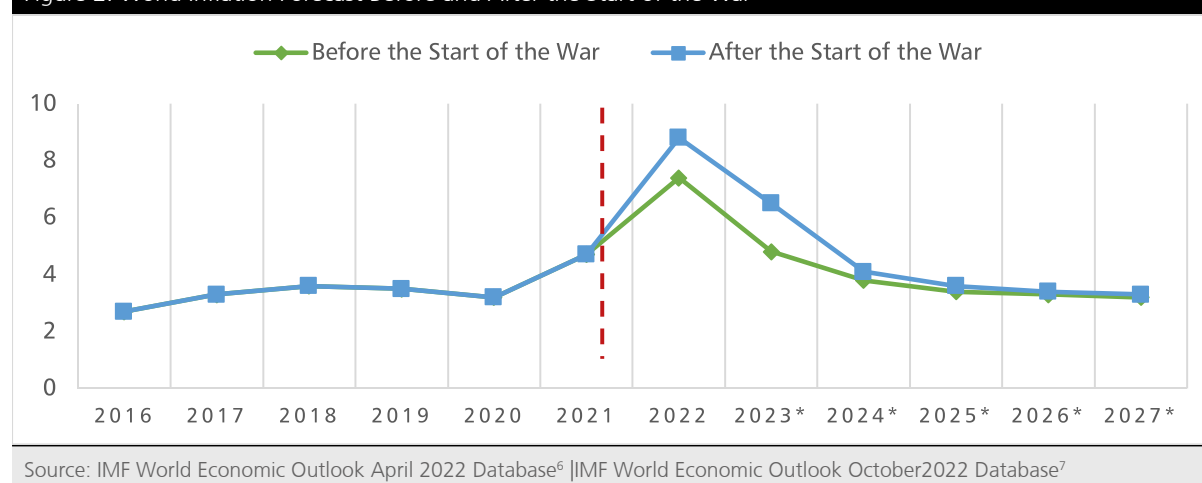
recently, Russia had an 18%-20% share in global wheat exports, whereas Ukraine exported 9% of the total wheat exports globally (Duggal & Haddad, 2022). Together, Russia and Ukraine were known as the breadbasket of the world, supplying around one-third of global wheat (Trtworld, 2022).

The war led to supply-chain disruptions, preventing the export of 20 million tons of grains from Ukraine to the Middle East, Africa, and Asia (Brezar, 2022). This continues to affect the countries heavily relying on the import of food commodities. These trends have caused global export halts. Many other food export countries, such as India, also put bans on food exports. This has increased the risk of hunger<sup>4</sup>. Pakistan was the third largest consumer of wheat imported from Russia and Ukraine (Baber, 2022).

Worldwide, around 400 million people indirectly rely on Ukrainian grains. According to the World Food Program (WFP), the war in Ukraine has created a global food crisis, and millions of people are at risk of hunger (WFP)<sup>5</sup>. The Food and Agriculture Organization of the United Nations (FAO) projected that 181 million people in 41 countries are at risk of hunger due to supply disruptions of Ukrainian grain (Food and Agriculture Organization of the United Nations, 2022).

The food shortage has created inflationary pressures, and a historically high level of inflation has taken away the purchasing power of households, creating serious food insecurity. Evidence shows that the global inflation forecast for the year 2022 increased to 8.8 per cent after the conflict began, from prewar estimates of 7.4 per cent (Figure 2). The inflationary pressure is forecasted to persist till 2025 before dropping down to the prewar level (Figure 2).

Figure 2: World Inflation Forecast Before and After the Start of the War



The increasing prices of energy and food have had the worst effect on the net importer countries, including those in Europe, the Middle East, Africa, Asia and the Pacific. The rising energy and food import bills, higher input costs in domestic markets tight monetary policy, and policy rate hikes have increased the costs of production in these countries, depressing economic activities. A global economic slowdown has already set in.

4. Although Ukraine has started to export grain through rail and road links throughout Europe, the amount is roughly only 15-20% of pre-war exports (Strubenhoff, 2022). These exports amount to only 1-2 million tonnes per month against the pre-war 6 million tonnes .

5. [https://docs.wfp.org/api/documents/WFP-0000140700/download/?\\_ga=2.118765386.235758615.1675751078896380246.1675751078](https://docs.wfp.org/api/documents/WFP-0000140700/download/?_ga=2.118765386.235758615.1675751078896380246.1675751078)

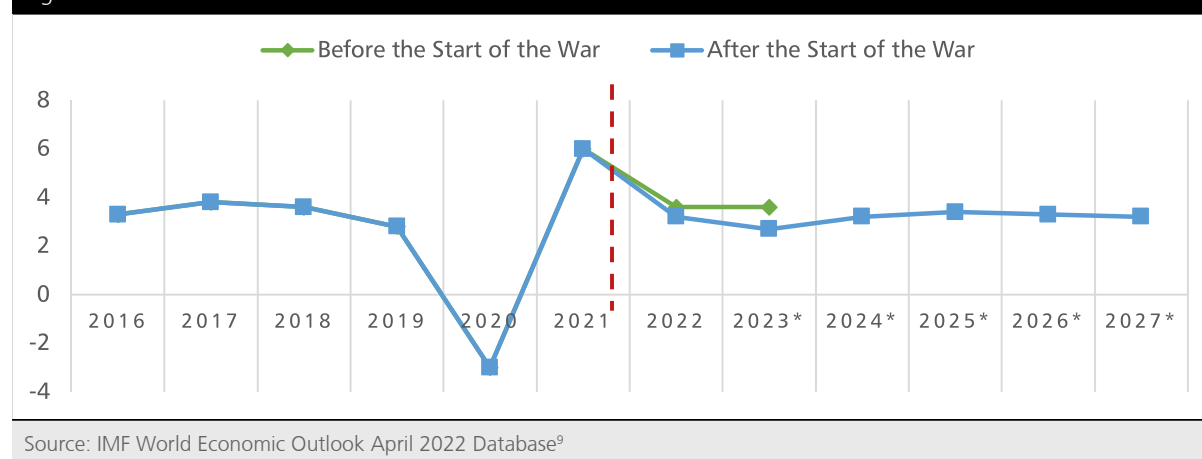
6. <https://www.imf.org/en/Publications/WEO/weo-database/2022/April>

7. <https://www.imf.org/external/datamapper/datasets/WEO>



The IMF downgraded the global economic outlook<sup>8</sup> four times in 2022. Revised estimates after the start of the war show that the global GDP growth is forecast to slow down by 2.7% in 2023, compared to a prewar forecast of 3.6%. The low growth forecast is expected to persist until 2027 (Figure 3). In other words, the war has led to global stagflation—a period of high inflation and lower economic growth. The three largest economies, China, the USA and the European Union, are likely to fall into recession (World Bank, 2022).

Figure 3: Global Real GDP Forecast Before and After the Start of the War



This has implications for employment and income growth. The war has deteriorated labour market conditions. Low- and middle-income nations are particularly affected because many of them have struggled to fully recover from the COVID-19 crisis. According to ILO estimates, around 40 million people have lost their jobs globally, and there has been a 1 per cent rise in the global unemployment rate due to the Russo-Ukrainian war (Caldara et al., 2022).

The poor are paying a hefty price for the war as they spend a major portion of their income on food and energy. The transmission mechanism of the impact of the war on an increase in poverty can potentially be explained by rising food prices, rising energy prices, and tightening financial conditions. These transmission channels not only have their own implications, but they are also impacting each other. Rising energy prices increase the commodity prices. The soaring energy and food inflations have put 71 million people into poverty globally after the Russia-Ukraine conflict began<sup>10</sup>. Increasing inflation has brought 4 million children into poverty in Central Asia and Eastern Europe, according to UNICEF<sup>11</sup>.

8. <https://www.imf.org/en/Publications/WEO/Issues/2022/10/11/world-economic-outlook-october-2022>

9. <https://www.imf.org/en/Publications/WEO/weo-database/2022/April>

10. <https://www.aljazeera.com/news/2022/7/7/inflation-pushed-71m-people-into-poverty-since-ukraine-war-undp>

11. <https://reliefweb.int/report/ukraine/impact-war-ukraine-and-subsequent-economic-downturn-child-poverty-eastern-europe-and-central-asia>



## 2. The impact of the Russo-Ukrainian War on Pakistan's economy and people

### 2.1. Pakistan's economy immediately before the start of the war, a quick refresher.

Pakistan was already going through two crises when the war began—a balance of payment crisis and political instability. The country was implementing a tough IMF program to control its balance of payment crisis. The economy was slowing down. The currency exchange rate and energy price adjustments under the IMF's Extended Fund Facility (EFF) were pushing the economy towards inflation, and the country's documented year-on-year inflation rate was 12.4 per cent for February 2022. This was the highest in the region<sup>12</sup>. Inflation for perishable food items stood at 34.87 per cent in the same month.

February 2022 also saw rising political instability during and after the Vote of No-confidence against the then-government of Pakistan, Tehreek Insaaf (PTI). Political uncertainty led to myopic economic decision-making. While the world was expecting a higher oil/gas prices and food crisis after the war started in Ukraine, the PTI government made a populist decision<sup>13</sup> of slashing the petroleum prices and power tariff on 28 February and decided to freeze the prices until the new budget was presented in June 2022.

The government slashed petrol prices by Rs. 10 and the power tariff by Rs. 5 as part of its relief package for the people. The decision derailed the talks on the seventh review of the IMF program, as the government had agreed to end the subsidies and increase the petroleum development levy gradually. On 8 March, a combined opposition in Parliament moved a "no-confidence" motion against the government, and the country entered a new political crisis with policy uncertainty at its peak. The new government took office on 11 April and decided to continue the oil and energy subsidies of the outgoing government. The petroleum prices, which are revised twice a month, remained unchanged from March 2022 until May 2022, irrespective of the global increase in oil prices after the Russo-Ukrainian War began (Figure 4).

Figure 4: Petrol Prices (in PKR) After the Start of the War



Source: Independent News Coverage Pakistan (INCPAK)<sup>14</sup>

12. [https://www.pbs.gov.pk/sites/default/files/press\\_releases/2022/cpi\\_press\\_release\\_february\\_2022.pdf](https://www.pbs.gov.pk/sites/default/files/press_releases/2022/cpi_press_release_february_2022.pdf)

13. The decision was made to mitigate the mounting pressure by the opposition.

14. <https://www.incpak.com/>

This decision sent shock waves to the IMF's seventh review, and the oil market went into a state of panic. This continuation of subsidies not only delayed the IMF program but also caused an increased fiscal deficit. After a delay of 2-3 months, the coalition government took tough economic decisions and eliminated the subsidies and increased energy and petroleum prices under the IMF program on 27 May 2022, which resulted in a historically high level of inflation, sharp currency devaluation, forex depletion and an increase in the current account deficit at large.

## 2.2. The war added to Pakistan's problems further:

The Russo-Ukrainian War adversely affected Pakistan's struggling economy. Due to the increases in global oil, gas and food prices, Pakistan suffered a serious setback in its current account balance, particularly the trading account part of it. In February 2022, the total import bill was \$5907 million. However, the overall petroleum group import bill was \$1245 million. In June 2022, the import bill reached \$7880 million, while the overall petroleum group import bill reached \$3639 million (PBS, 2022). From February 2022 to June 2022, the petroleum product and petroleum crude bills increased by 133 per cent and 293 per cent, respectively (figure 6).

Figure 5: Increase in Petroleum Import Value After the Start of the War

	February 2022		June 2022	
	Quantity (in metric tonnes)	Dollar Value (in Millions)	Quantity (in metric tonnes)	Dollar Value (in Millions)
Petroleum Products	799374	520	2191642	2046
Petroleum Crude	599578	359	1120667	838

Source: Pakistan Bureau of Statistics

In June 2022, Pakistan's exports were \$2.918 billion, and imports were \$7.881 billion (Amin, August 2022). The monthly trade deficit increased from \$3.08 billion to \$4.963 billion from February 2022 to June 2022. The exports and imports during the July 2021-May 2022 period were \$29.3 billion and \$65.5 billion respectively. Thus, the July 2021-May 2022 trade deficit reached \$36.1 billion against the \$31.946 billion from July 2021 to February 2022 (Anon., 2022).

The closure of the Black Sea trade route further imposed a risk, as 80 per cent of Pakistan's wheat imports came through the Black Sea route. The domestic wheat crop production was estimated to remain at 26.87 million tonnes against the target of 28.89 million tonnes. In April 2022, food market importers claimed that Pakistan needed to import 3 million tonnes of wheat. At the then price of \$380-400 per ton,<sup>15</sup> It cost \$1.2 billion. (ANI, 2022).

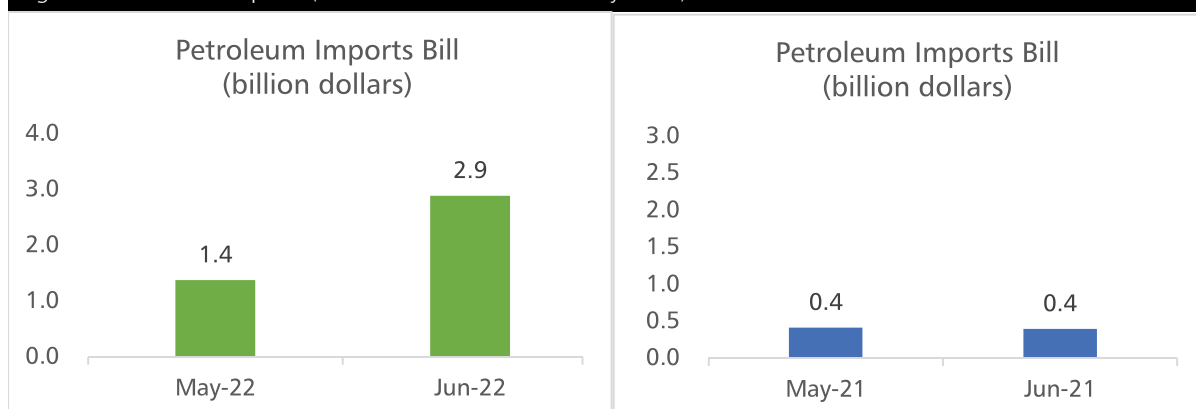
Another major setback to Pakistan was in the energy sector, particularly in LNG<sup>16</sup>. Oil prices increased above \$100 per barrel immediately after the war. The import bill of petroleum products, crude oil, and liquified natural gas increased steeply. The petroleum import bill of Pakistan in June 2022 was \$3.639 billion, and petroleum imports increased by 37.57% on a month-on-month basis from May to June 2022 (Daily Times, 2022)<sup>17</sup>. This was the direct result of the war. Data from 2021 shows that in May and June, oil imports did not have any seasonal variation (Figure 7, RHS).

15. <https://www.aninews.in/news/world/asia/pakistan-faces-severe-wheat-crisis-due-to-russia-ukraine-war20220425170120/>

16. Pakistan imports LNG, oil and coal from Ukraine.

17. <https://dailytimes.com.pk/970453/pol-import-bill-surges-105pc-to-23-3b-in-fy2022/>

Figure 6: Petroleum Imports (June 2022 vs. June 2021/May 2022)

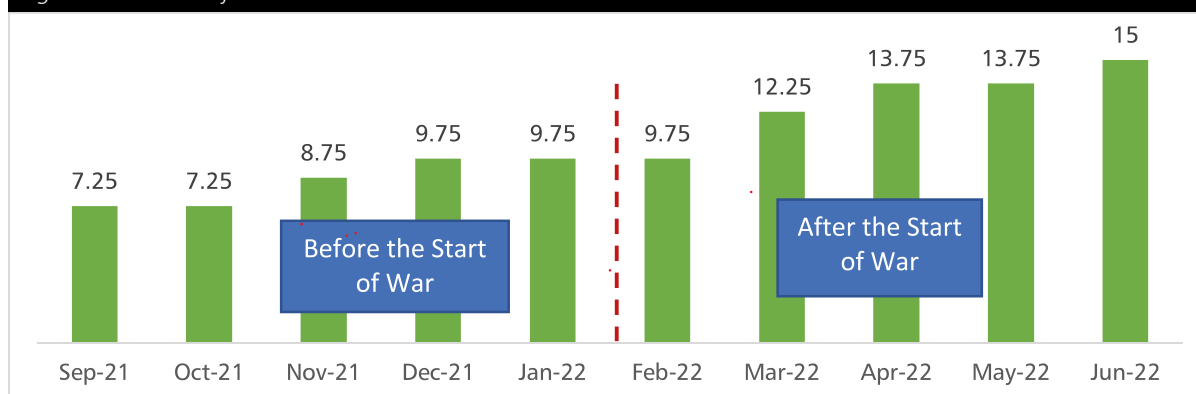


Source: Monthly Economic Outlook, State Bank of Pakistan<sup>18</sup>

The Ukraine-Russia War has added to Pakistan's stagflation, falling GDP, high inflation, an increasing trade deficit and high oil prices. Pakistan is currently facing severe depletion in its foreign exchange reserves due to an increase in its import bill and trade deficit. By the end of February 22, 2022, the total liquid foreign exchange reserves of Pakistan were \$22.637 billion, which declined to \$14.678 billion on 28 October 2022<sup>19</sup>.

High-interest rates and currency depreciation lead to inequality and poverty (Javed, 2021). Currency crises most significantly exacerbate both the incidence and depth of poverty in the short run (Nikoloski, 2011). The State Bank of Pakistan increased its interest rates to arrest the inflationary pressures after the war began. Its policy rate reached an all-time high value of 15 per cent in June 2022 as compared to 9.75 per cent in February 2022 (Qureshi, 2022) (figure 8).

Figure 7: SBP's Policy Rate Before and After the Start of the War



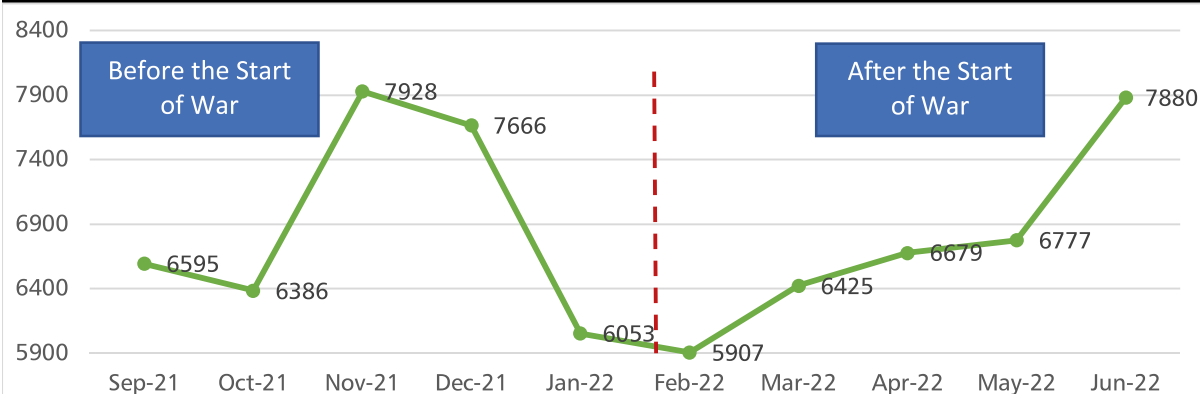
Source: Monthly Economic Outlook/Monthly Monetary Policy Statement, SBP

The global economic slowdown and higher costs of production in the country led to a decline in exports. The total exports for the month of February 2022 were 2.8 billion dollars, but by the end of October 2022, exports declined to \$2.3 billion. Similarly, after the war started, there was a high FDI outflow of \$229 Million in March as compared to \$62 million in February. Due to higher import prices, the import bill in June 2022 recorded \$7,880 million, an increase of around \$5,907 million from February 2022 (Anon., 2022) (Anon., 2022) (figure 9). The increase in the import bill was mainly due to the import of expensive LNG (Liquified Natural Gas) as LNG rates surged after the war began.

18. <https://www.sbp.org.pk/ecodata/index2.asp>

19. <https://www.sbp.org.pk/ecodata/forex.pdf>

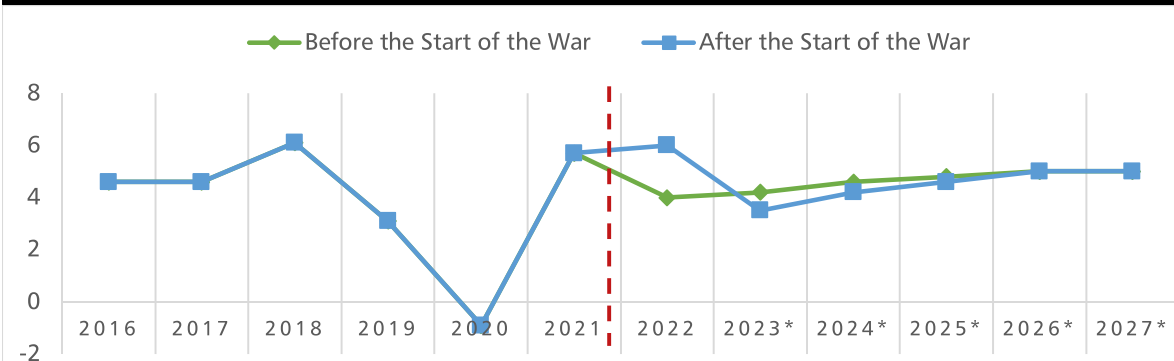
Figure 8: Import Bill of Pakistan Before and After the Start of the War (USD million)



Source: Pakistan Bureau of Statistics

Like other developing countries, Pakistan also suffered a decline in its GDP growth. The pre-war estimates for GDP growth in Pakistan were 4.2 per cent for the year 2023, which, according to the estimates for after the war began, dropped to 3.5 per cent<sup>20</sup>. The growth-slashing impact of the war is likely to continue till 2025.

Figure 9: Pakistan Real GDP Forecast Before and After the Start of the War

Source: IMF World Economic Outlook April 2022 Database<sup>21</sup> | IMF World Economic Outlook October 2022 Database<sup>22</sup>

Most importantly, the Russo-Ukrainian War added to Pakistan's already high imported inflation as there was a surge in the energy prices in the international market and a continuous depreciation in the rupee's value due to falling reserves owing to larger payments. The inflation forecast for Pakistan suffered a sharp rise after the war.

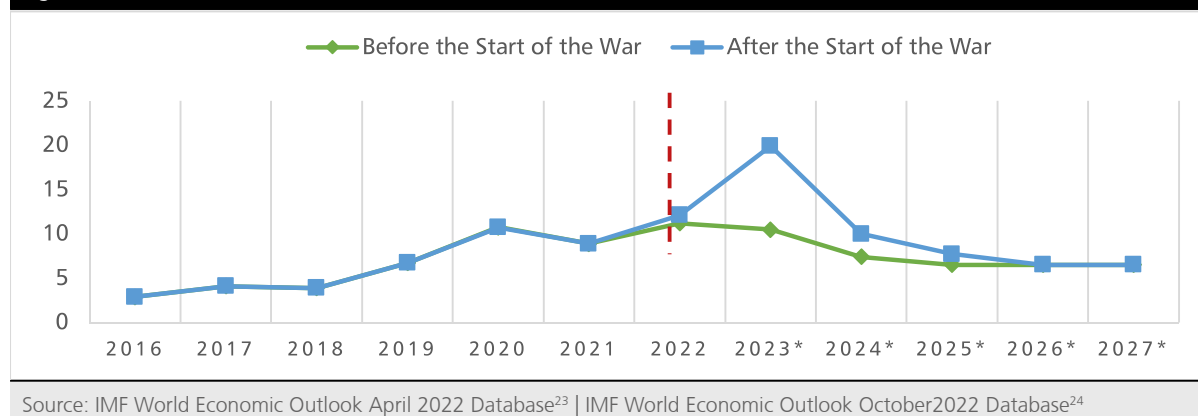
The initial forecast of inflation was around 10.5 per cent for the year 2023, but the forecast for after the war had begun shows a sudden shift to a 19.9 per cent inflation rate in the year 2023 (figure 11). It will take approximately four more years for the new forecast to reach the level of the pre-war forecasts, which implies that a high level of commodity prices will remain and will further push the people down into the poverty trap.

20. Recent political instability, the delay of the ninth IMF review and floods have further downgraded this forecast, and experts believe that the economy may pose a GDP growth rate of less than 1% in [DATE?].

21. <https://www.imf.org/en/Publications/WEO/weo-database/2022/April>

22. <https://www.imf.org/external/datamapper/datasets/WEO>

Figure 10: Pakistan Inflation Forecast Before and After the Start of the War



Just like COVID-19, the Russo-Ukrainian war affected the poorest people the most. High inflation is pushing people further below the poverty line. People's real incomes have been reduced, and so has their purchasing power. Food and energy price hikes are the major drivers of inflation. The poor spend almost 70 per cent of their incomes<sup>25</sup> on food commodities (Anon., 2011), and with falling real incomes, it is becoming harder for them to purchase those commodities.

The unemployment rate is rising. The poor are the most vulnerable to losing their jobs since most of them are employed in the informal sector. However, people working in the formal sectors have been laid off as well. For example, the ones working in the industries that heavily depend on energy or raw materials have also suffered. The rising inflation has led to higher costs of production and a high rate of employees being laid off due to lower aggregate labour demand.

23. <https://www.imf.org/en/Publications/WEO/weo-database/2022/April>

24. <https://www.imf.org/external/datamapper/datasets/WEO>

25. <https://www.fao.org/3/i2330e/i2330e.pdf>





### 3. Impact of the Russo-Ukrainian war on Pakistan's labour market and poverty<sup>26</sup>

By the end of 2021, COVID-19-related restrictive measures were lifted in most parts of the world. Workplace closures were phased out, and global labour markets started to recover positively. Employment levels returned to pre-COVID-19 levels in most countries and even exceeded the pre-crisis levels in many high-income countries (ILO, 2022). In 2021, global labour income increased by 0.9 per cent from the pre-COVID-19 level (ILO, 2022). According to the International Labour Organization (ILO) estimates, informal sector employment exceeded formal employment by the end of 2021.

In January 2022, the ILO projected that the number of hours worked would remain at 2.4 per cent below the pre-COVID19 level<sup>27</sup>, equivalent to the loss of 70 million full-time jobs (ILO, 2022). The Russo-Ukrainian War caused a major setback to the recovery of global labour markets from the impact of COVID-19. In the first quarter of 2022, the number of hours worked that were lost increased globally, reaching 3.8 per cent (against the projected 2.4 per cent), which is equivalent to the loss of 112 million full-time jobs (ILO, 2022).

In the third quarter of 2022, the number of working hours was still 1.5 per cent below the pre-pandemic level, equivalent to 40 million full-time jobs. In Ukraine alone, employment was reduced to 15 per cent lower than the 2021 figure, and around 2.4 million jobs were lost in 2022 after the war had begun. In Bangladesh, the number of working hours by 2021 was 6.2 per cent (4.1 million jobs) below the pre-COVID19 level<sup>28</sup>.

The disrupted trade and commodity markets, together with supply chain distortions, created spillover effects for global labour markets, particularly through increases in food and energy prices. The increasing inflation reduced the real income of workers globally and is increasing the cost of living, which will lead to the risk of greater food insecurity and poverty.

The Russo-Ukrainian War has not only affected labour markets but has also increased poverty and the number of poor in the world. Since 24 February 2022, around 71 million people have faced poverty, and the number of people defined as poor has increased by 9 per cent globally (Batra, 2022). Soaring inflation is creating the risk of recession-induced poverty in the world.

Many governments have increased cash support to poor households to prevent households from falling into poverty. Developing countries are at more risk of an increase in poverty because of high levels of family debt, lower reserves, high interest rates, and currency depreciation, among many other reasons. These countries need more urgent support from the global community to protect low-income households from falling into poverty.

In Pakistan, the increasing food and energy prices have led to an increase in poverty. The International Food Policy Research Institute (IFPRI) estimates<sup>29</sup> show that the fall in real income increased the national poverty (less than Rs. 3776 per adult equivalent per month) by 1.1 per cent and pushed 1.62 million households below the poverty line. The major causes include rises

26. Soaring prices for oil and wheat alone will be enough to severely hamper growth in many developing countries unless the war ends quickly (Financial Times) [ft.com/content/f09f4864-fc81-4dbd-8086-25e70ed01019](https://www.ft.com/content/f09f4864-fc81-4dbd-8086-25e70ed01019)

27. The 4th quarter of 2019 was set as the benchmark for the pre-COVID-19 level.

28. <https://apparelresources.com/business-news/sustainability/ilo-says-russia-ukraine-war-disaster-labour-market-recovery/>

29. <https://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/136406/filename/136615.pdf>

in petroleum prices, fertilizer prices, and wheat prices. The estimates further show that from February 2022 to August 2022, domestic crude oil prices increased by 25 per cent, wheat prices increased by 14 per cent and fertilizer (Diammonium Phosphate (DAP)) prices increased by 31 per cent.

### 3.1 Some crude estimates for Pakistan

With all these factors combined, such as lost GDP growth, higher inflation and higher costs of production, the Russo-Ukrainian war has had a strong impact on unemployment and poverty in Pakistan. While there are no direct estimates available in this regard, this paper attempts to quantify these impacts.

Admittedly, it is a daunting task to separate the impact of the war from the confluence of multiple factors, such as tight fiscal and monetary policy under the IMF program, political instability and floods. Using historical data -- such as time series -- to estimate these numbers could possibly have led to association biases. We, therefore, adopt a unique approach. A brief description is provided here.

First, we assess the loss of GDP due to the war. For this, we use the difference in economic outlook before and after the start of the war using data from the World Bank, the IMF and other international reports. Importantly, we use economic outlook reports published after the start of the war in Ukraine but before the floods in Pakistan in order to separate the impact of the floods on GDP. Also, we use a desk review to consolidate and cross-validate the available information in this regard where available.

Then, we estimate the impact on poverty and unemployment using the job elasticity of GDP in Pakistan. A range of job elasticity of growth in Pakistan is identified from the available literature. A similar exercise is repeated for poverty using information on GDP and inflation. The estimates are provided below.

#### **a. The loss of GDP leads to unemployment and poverty.**

This scenario is based on the (estimated) loss of GDP growth in Pakistan due to the war and the impact of loss of GDP growth on unemployment and poverty. The impact of GDP growth on unemployment is based on elasticities -- to what extent a loss of 1 per cent of GDP growth increases unemployment and, consequently, poverty.

##### *a1. Pakistan's loss of GDP growth due to war.*

According to the World Bank forecast, Pakistan is expected to lose—and has already lost -- around 1 per cent of its GDP in 2022 from the pre-war forecast. So,

The loss in GDP due to the war = 1 per cent

The Unemployment Coefficient of GDP Growth (Latif et al., 2021) = 0.53<sup>30</sup>

This implies that a one per cent drop in GDP will add more than half a percentage point (0.53) to the unemployment rate. Therefore, an increase in the unemployment rate due to a decrease in GDP of 1 per cent because of the war in Ukraine is as follows:

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30. Latif, Nazia, et al. "UNEMPLOYMENT AND OUTPUT NEXUS: VALIDATION OF OKUN'S LAW IN PAKISTAN." *International Journal of Management (IJM)* 12.5 (2021): 208-220.

Unemployment before the war, according to the Pakistan Economic Survey (Anon., 2022) = 6.30 per cent.

Unemployment after the start of the war = 6.30 percent 0.53 percent = 6.88%

New additions to the unemployed workforce (in millions) =  $4.90 - 4.52 = 0.38$  million

Figure 11: People (in millions) unemployed before and after the start of the War



Source: Author's Preliminary Calculations

The results show that the war led to an increase in the number of people unemployed by 0.4 million.

## a2. Impact on Poverty

The Russo-Ukrainian war is likely to affect poverty by way of two main channels, namely, unemployment and the financial impact of rising fuel and commodity prices and inflation. We provide estimates for the combined impact of both.

### a2.1. Impact of unemployment on poverty

Unemployment causes poverty. Evidence for Pakistan shows that a one per cent rise in unemployment leads to a 1.85 percentage point rise in poverty. So, according to the above estimates, if unemployment increases by 0.53 per cent, the poverty headcount rate will increase by 1.1% ( $0.53 \times 1.85$ ), and an additional 12.3 million people can be pushed into poverty.

Poverty headcount rate in 2021 (\$1.90) = 4.4 per cent (9.90 million)<sup>31</sup>

After the start of the war = 4.4 percent + 1.1% = 5.5 percent = (12.3 million)<sup>32</sup>

Additional new poor =  $12.3 - 9.9 = 2.4$  million.

Figure 12: People Below Poverty Line (\$1.9) (in millions) before and after the War



Source: Author's Preliminary Calculations

Overall, 2.4 million people fell into poverty due to unemployment caused by the war in Ukraine.

31.  $224.78 \times 4.4\%$

32.  $224.78 \times 5.5\%$

## a2.2. Impact of inflation on poverty

A rise in consumer price inflation, particularly food inflation, is likely to push millions below the poverty line. A recent study by the International Food Policy Research Institute (IFPRI) (Rana, 2022) estimates that change in household consumption due to food and fuel price shocks has pushed another 1.6 million people into poverty. However, we maintain that the increase in poverty due to inflation may be much higher than these estimates. Evidence suggests that a one percentage point increase in inflation can increase the poverty rate by 0.79 per cent.

It is forecast that this war will add more than 9 per cent to Pakistan's inflation in FY2023. In other words, many more million people are likely to fall below the poverty line due to inflation. It is important to note here that it is more likely that the income level of households is expected to decrease further as Pakistan agrees to adopt tight monetary and fiscal policies to implement the IMF program.

## 3.2 Impact on food security

The Russo-Ukrainian War has brought what is called the third global food crisis in the last fifteen years (ConcernWorldwide, 2022). The war has prevented 20 million tonnes of grains from being exported to the Middle East, North Africa, and Asia (Brezar, 2022). This has triggered the increase in food prices in these regions. The UN's Food and Agriculture Organization (FAO) stated that global food prices increased by 159.3 points in March 2022 compared to 17.9 points in February 2022<sup>33</sup>.

In the first three months of the war, wheat prices in Pakistan [?] increased by 45 per cent, while vegetable oil prices jumped by 41 per cent (Naharnet Newsdesk, 2022). Households had to spend a larger share of their incomes on food and energy. This adversely hit poor households in particular, as they spend a larger share of their income on food.

The rising inflation has reduced the real income of households and has brought many near-to-poor households into the food poverty trap. A report by the World Food Programme (WFP) in 2022 mentioned that around 345 million people in 82 countries are at risk of food insecurity<sup>34</sup>. The report further states that 62 million children are acutely malnourished. The war has had disproportionate effects on different regions of the world.

Asia is one of the most vulnerable regions regarding food insecurity, and 67 per cent of the world's hungry people live in Asia<sup>35</sup>. The Ukraine conflict accelerated the already worsening situation in Asian countries. As in other countries, the Russo-Ukrainian war has also affected food prices in Asia. Corn prices increased by 19 per cent (Donley, 2022). The sunflower oil prices have almost doubled in many Asian countries<sup>36</sup>.

The World Bank revised the growth predictions for South Asian countries in [DATE] and predicted that GDP growth will be slower. The World Bank also mentioned concerns about food insecurity in South Asian countries due to increases in food and energy prices<sup>37</sup>. The Global Hunger Index

33. [https://www.economicsobservatory.com/how-is-the-war-in-ukraine-affecting-global-food-prices#:~:text=Several%20of%20these%20countries%20have,12.6%25\)%20over%20this%20period.](https://www.economicsobservatory.com/how-is-the-war-in-ukraine-affecting-global-food-prices#:~:text=Several%20of%20these%20countries%20have,12.6%25)%20over%20this%20period.)

34. [https://docs.wfp.org/api/documents/WFP-0000140700/download/?\\_ga=2.18384688.860850905.1671519393-1865701012.1671519393](https://docs.wfp.org/api/documents/WFP-0000140700/download/?_ga=2.18384688.860850905.1671519393-1865701012.1671519393)

35. <https://thediplomat.com/2022/03/ukraine-crisis-and-food-security-in-south-asia/#:~:text=According%20to%20the%20economic%20adviser,crisis'%20impact%20could%20be%20catastrophic.>

36. <https://asia.nikkei.com/Spotlight/The-Big-Story/Asia-s-food-crisis-Ukraine-war-triggers-chain-reaction-of-shortages>

37. <https://www.worldbank.org/en/news/press-release/2022/04/12/south-asia-sees-slower-growth-as-war-in-ukraine-impedes-recovery-worsens-existing-challenges>

for 2022 put South Asia along with Africa as regions facing “serious” hunger in the future with scores of 24.7 and 43 respectively<sup>38</sup>.

The war has affected the already struggling economy of Pakistan. Pakistan’s food import bill accounted for 16 per cent of its total import bill in the same period. After the war, the food import bill increased to 20 per cent. Food prices increased by 30 per cent in Pakistan<sup>39</sup>.

The Consumer Price Inflation (CPI) in October 2022 reached 26.6 per cent against 16.6 per cent in September 2021 (year-on-year basis). Due to a shortage of fertilizer and high fertilizer prices, high fuel prices, and the devastating floods of 2022, Pakistan will face a gap of 3 megatons of wheat<sup>40</sup>. Flood-affected areas of Balochistan, Sindh, and KPK will face food insecurity. Food insecurity will reach 38 per cent of the population in the next ten years in Pakistan<sup>41</sup>. According to a World Bank’s report on food security [in 2022?], It is estimated that 4.6 million people in Pakistan will face a food crisis<sup>42</sup>.

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38. <https://www.dawn.com/news/1691252/food-insecurity-and-war>

39. <https://tribune.com.pk/story/2370003/food-prices-soared-by-up-to-30-in-pakistan-wb>

40. <https://ukragroconsult.com/en/news/pakistan-is-3-m-t-wheat-crop-shortfall-for-2021-22/>

41. <https://www.dawn.com/news/1691252/food-insecurity-and-war>

42. <https://www.globalvillagespace.com/pakistan-faces-high-levels-of-food-insecurity-world-bank/#:~:text=According%20to%20the%20World%20Bank,to%20March%20and%20April%202022.>



## 4. Conclusions

The Russo-Ukrainian war impacted the COVID-19-affected global economy mainly through energy prices and food grains supply disruptions. After the war started, the natural gas price reached \$9.7/MMBtu from \$4.4/MMBtu, while global oil prices reached their highest level of \$119 for the first time since 2014. The war has affected both developed and developing countries. The European energy sector was hit hard as Europe was importing 45 per cent of its natural gas from Russia.

The war prevented 20 million tonnes of grains from Ukraine being exported to the Middle East, Africa and Asia. The supply chain disruptions and food shortages have caused global Inflation to reach 8.8 per cent against the pre-conflict prediction of 7.4 per cent. This is associated with high risks of hunger, unemployment, and poverty. The IMF predicted that global GDP growth would be slowed down by 2.7 per cent in 2022. The ILO estimated that around 40 million people had lost their jobs globally because of the war, and global unemployment has increased by one per cent.

Due to food supply disruptions, around 181 million people in 41 countries are at risk of hunger, according to FAO predictions. War has increased the risk of a third global food crisis and global food insecurity. Around 345 million people are at risk of food insecurity, and 62 million children are acutely malnourished. The food and energy inflation, globally, has put 71 million people below the poverty line and has brought 4 million children into poverty.

Economic and political instability in Pakistan catalyzed the adverse impact of the war in Ukraine further. Pakistan was impacted by the closure of the Black Sea route for grain exports, as well as a shortage of fertilizer and the resultant decline in domestic wheat production, as a result of which Pakistan needs to import an additional 3 million tonnes of wheat, which accumulatively will cost \$1.2 billion. Food prices have increased by 30 per cent in Pakistan. The inflation forecast for Pakistan suffered a sharp rise after the start of the war, and the inflationary pressures are likely to stay till 2024 at least.

Increasing food and energy prices have hit the poor most as they spent 60-70 per cent of their incomes on these commodities. The inflationary pressure has caused real incomes to fall, and estimates show that the fall in real income has increased those below the national poverty line (Rs. 3776 per adult equivalent per month) by 1.1 per cent and pushed 1.62 million households below the poverty line.

To separate the effects of the Ukraine war from other factors such as the IMF program, political instability, and floods, the paper used economic outlook reports of the period before the start of the war and after the start of the war. The evidence shows that Pakistan's GDP was slashed by 1 percentage point, which increased the unemployment rate by 0.53 percentage points, pushing an additional 3.81 million people into poverty.

To protect the marginalized segments of society from the continued adverse effects of the crisis, the government must continue its social protection schemes like BISP (The Benazir Income Support Program). Cash assistance to vulnerable people in society can be an immediate solution to protect the people. The shortage of the food commodities must be catered which might play a significant role in controlling the food inflation.

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