

2 **Repercussions of Russia-Ukraine Conflict: Indian response to attain Trade and**  
3 **Industrial Sustainability**

4  
5  
6 **1. Abstract**

7  
8 The Russia-Ukraine conflict has created caused great “uncertainty” and has  
9 challenged many assumptions about the existence of the nation and bilateral relations.  
10 It has given rise to geopolitical tensions influencing international trade. Given the  
11 significant contribution of petroleum-based products in India’s import basket, this  
12 study examines the changing international trade pattern for India. It ultimately seeks  
13 to highlight key opportunities, challenges, and suggestions for India’s aim to become  
14 ‘Atmanirbhar’ or ‘self-reliant’. We reviewed trade and economic data (for imports  
15 and exports, inflation) in the context of India. Data from sources like the International  
16 Monetary Fund and government sources such as the Reserve Bank of India, and the  
17 Ministry of Commerce, is reviewed. The analysis highlights an increasing trade  
18 deficit (i.e., imports higher than exports).Our focus in this paper is on the lessons for  
19 India from this conflict so that it can take some future steps to become “Atmanirbhar”  
20 in the real sense. We take an evidence-based approach to describe the important  
21 implications of the said conflict concerning and impacting various aspects like the  
22 economy, trade, bilateral relations, and manufacturing capabilities. The present  
23 research (study) only provides a viewpoint; more sector-specific research with an  
24 empirical approach is recommended to explore the segments in the manufacturing  
25 sector (in the Indian context), that have good potential to make India ‘Atmanirbhar’.

26  
27 **Keywords:** Atmanirbhar and Self-reliant India, Lessons for India from the Russia-Ukraine  
28 conflict, Enhancing local manufacturing base, Participation in Alliances, Taking advantage of  
29 China-plus-one, Green economy, Make in India.

30  
31  
32  
33

34 **2. Introduction**

35

36 A surprising event that occurred in Feb. 2022 is the Russian invasion of Ukrainian  
37 territory. With the world going through development and cooperation phases in the  
38 context of global trade, it was an unexpected happening. In 2022, it was almost  
39 unimaginable that two sovereign nations are standing face-to-face against each other.  
40 This is made the world more horrified and pessimistic. The global political scenario is  
41 completely disturbed by this war-like situation. The leaders are holding conferences,  
42 and peace talks to find ways to resolve this issue amicably.

43

44 The authors believe that this war has opened up some bitter truths about life, and  
45 humanity for the entire world. The following are some of these lessons (as visualized  
46 from the prevailing circumstances):

47

48 • Strong domestic manufacturing capabilities are a plus point. It doesn't matter  
49 how moral or how ethical you are in these situations. Russia with immense  
50 defence power and capabilities is tumbling Ukraine as the war is progressing.  
51 Think of strong capabilities rather than sympathy and compassion (from  
52 others) to handle adverse situations(Sagar, 2022) [1], (Thomas, 2022) [2],  
53 (Baru1, 2022) [3].

54

55 • Trust no one, you have to fight alone. Ukraine had nuclear weapons earlier.  
56 Under the pressure from the West, it discontinued nuclear activities. They fall  
57 to the promises of the West and now are on the verge of losing their  
58 sovereignty because nobody is firmly standing with Ukraine. If they have  
59 nuclear weapons, they could have avoided this situation or handled it much  
60 better (Sibal, 2022) [4].

61

62 • The most heartless is the most powerful. This sound ridiculous but is true. The  
63 recent speech during the party conference by the Chinese supremo has  
64 indicated that he will not hesitate to use military force in the Taiwan matter.  
65 Another stark example is the US. With its unmatched technology, latest  
66 weapons, and superior defence forces it is one of the tough nuts to crack.

67 Russia is a very similar type too. With dictatorship in the genes, it will not  
68 care for others and their lives. Ongoing threats of nuclear attacks are looming  
69 all over the world due to such kind of heartless, unempathetic, and brutal  
70 leaders because they are the most powerful better (Menon, 2022) [5].  
71

- 72 • The fragile world riding on social media. Social media is not good in this  
73 situation as it is driven by extreme emotions and hyper mentality. It is required  
74 to have conscious use of such social media. This is because just supporting  
75 pots for Ukraine on Twitter and videos on Instagram, and protesting Russia on  
76 Facebook won't result in anything(Sibal, 2022) [4], (Bhagat, 2022) [6].  
77

### 78 **3. Literature Review**

79

80 This section elaborates on what are the diverse impacts of the present Russia-Ukraine  
81 conflict on the world including India. This ranges from disruptions in the global  
82 economy to disruptions in supply chains. Excerpts from some of the literature are  
83 presented herewith.  
84

#### 85 *3.1 Disruption in the Global Economy*

86

87 Covid has disrupted the world economy significantly. In the post-Covid period, the  
88 growth of the world economy is stagnant. Developed countries are facing the heat due  
89 to their country-specific issues. Each country has its (own) problems. For example,  
90 even if the US dollar is getting stronger, the US economy is in bad shape. The  
91 eurozone has growth problems with high inflation. Italy was the first to blink followed  
92 by Britain now. All these developed countries are impacted by inflation, a decrease in  
93 life expectancy, and the negative or slow growth of (their) economies. The world is  
94 now staring down the barrel and looking at the recession. Even the International  
95 Monetary Fund (IMF) is not optimistic. The hope is resting on India, oil-rich gulf  
96 countries, and the (developing) African countries fighting all the adversities. India is  
97 the only bright spot says IMF, in its January 2023 World Economic Outlook (IMF1,  
98 2022) [7], (IMF2, 2023) [8]. It has been predicted that the Indian economy will grow  
99 at 6.8% in 2022. (See Table 3) amidst the gloomy outlook, IMF's forecast for India

100 remains robust. For India, the values are for the financial year – FY 2022-23 and FY  
101 2023-24.

102

103 The effect of war on both these countries is going to be adverse cites IMF. IMF warns  
104 that Ukraine’s economy will shrink up to 35% in 2022, but this estimate comes with a  
105 high degree of uncertainty. Russia, as shown in Table 1, will also have a negative  
106 correction in its gross domestic product - GDP in the year 2023. (See Table 1)

107

108

Table 1

109

*Real GDP Annual Percentage Change for 2022 and 2023 (IMF1, 2022) [7], (IMF2,  
110 2023) [8]*

110

Country	Estimate for 2022 - GDP Growth (In %)	Projections for 2023 - GDP Growth (In %)
India	6.8%	6.1%
China	3.0%	5.2%
Saudi Arabia	8.7%	2.6%
Nigeria	3.0%	3.2%
World Output	3.4%	2.9%
Euro Area	3.5%	0.7%
South Africa	2.6%	1.2%
United States	2.0%	1.4%
Brazil	3.1%	1.2%
Russia	-2.2%	0.3%

111

Source: IMF, World Economic Outlook, January 2023.

112

### 113 3.2 Disruption in Supply Chains

114

115 “We are rightly worried about what comes from there, and what will happen to our  
116 exporters who are doing well, especially those in the farm sector. We are assessing  
117 the situation as it is going to have an impact on the essentials like edible oils and  
118 fertilizers, among others.” (TNN1, 2022) [9]

119

120

The above quotes from our Finance Minister Nirmala Sitaraman indicate the  
implications of the recent Ukraine-Russia tussle for the Indian business sector. When  
121 one reads between the lines, one will understand and have more clarity.

122

123

It is no wonder that the outcome of this war-like situation is now felt by the entire world. This is appearing in the form of rising inflation and disruptions in the supply chains. The industries or sectors depending on both these countries will bear the most of the impact. With the firms in both countries not in operation, their supply (of raw materials) and (their) finished products to the other countries has been discontinued.

128

129

Here, the problem is not about the availability of the product but is more about the extended supply chain – due to the interconnected world today (Shortage, 2022) [10]. Over the past few months, some food items or commodities have become extremely expensive or are not available. For example, onions and salami in Japan; lettuce in Australia; and even bottled beer in Germany. This is an unexpected scenario for businesses, especially the manufacturing industry, which is struggling to find alternatives (and sources of supply) to cater to the demand (and feed their customers). This is an outcome of a combination of factors, from climate change (weather) to the pandemic to geopolitical tensions, and rebounding demand. When the manufacturers are not able to produce any raw material (say, glass bottles and aluminium cans); it seeps down to the people's ability to buy the finished goods (such as packaged drinks - soda and beer). A shipping container shortage and a tight labour market are adding to supply chain challenges. Russia's invasion of Ukraine aggravated those, cutting off supplies of natural gas, grains, and cooking oils. In turn, this has caused food and energy prices to increase gradually.

144

145

There are diverse ways this conflict could impact global supply chains. The following are some of the generic-level effects:

146

147

- A rise in prices of energy products such as crude oil, and natural gas.

148

- Additional worries about the transportation costs.

149

- A rise in electricity costs.

150

- Chances of food inflation.

151

- Increase in the prices of some industrial/essential metals.

152

- Uncertainty looming over semiconductor supply.

153

154

155 3.3 *Governments taking steps to tame the rising inflation*

156

157 Soumya Kanti Ghosh believes that the global economy has not faced such uncertainty  
158 since World War II. This uncertainty begin with the arrival of the pandemic in 2020  
159 and further intensified with the Russia-Ukraine war (Ghosh, 2022) [11].Central banks  
160 across the major developing and developed countries have decided to increase key  
161 interest rates. It may be noted that India is having one of the lowest inflation. (See  
162 Table 2)

163

164 Table 2

165

*Inflation rates for select countries (Ghosh, 2022) [11]*

166

Country	Inflation (In %)
Russia	15.9%
Egypt	12.2%
Brazil	11.9%
Spain	10.2%
Eurozone	9.6%
UK	9.4%
United States	9.1%
Canada	8.1%
Italy	7.9%
Bangladesh	7.6%
India	7.0%
France	6.1%
Indonesia	4.9%

167

168 3.4 *International Trade evolving with protectionism practices*

169

170 Over the years international trade is growing due to many factors and regional trading  
171 allies and agreements with them are one of the aspects driving the same. The presence  
172 of regional trading allies in global trade is an indication of protectionism. Some of the  
173 major trading allies (or trading blocs) with India are:

- 174 • Gulf Cooperation Council (GCC) covering West Asia
- 175 • European Union (EU)
- 176 • Southern African Customs Union (SACU)
- 177 • European Free Trade Association (EFTU)
- 178 • Association of East Asian Nations (ASEAN)

179

#### 180 **4. Objectives**

181

182 Some of the objectives of this research paper are to present:

- 183 • Different effects that the conflict has made on the world economy.
- 184 • Reasons for India to be ready with achieving sustainability.
- 185 • The learnings for India about how to make itself sustainable in terms of trade
- 186 and industry/manufacturing activity).

187

#### 188 **5. Analysis: India needs to prepare for achieving sustainability**

189

190 This section provides an analytical overview of the importance of achieving  
191 sustainability for India. The authors have elaborated this considering some parameters  
192 such as (its importance to) government/economy, international trade, trading partners  
193 and bilateral relations, and strengthening of the domestic manufacturing sector. This  
194 is presented herewith.

195

##### 196 *5.1 Implications for the Government/Economy*

197

198 In terms of the size of the economy, India could be the fifth largest economy,  
199 according to the reports from SBI Research and data provided by International  
200 Monetary Fund (IMF). (See Table 3). The IMF forecast showed that India will be one  
201 of the economies with growth momentum.

202

203

204

205

206

207  
208  
209

Table 3

*Super Ten (Thakur, 2022) [12]*

<b>Country</b>	<b>Nominal GDP (In \$ Trillion) by 2022-end</b>
United States	25.35
China	19.91
Japan	4.91
Germany	4.26
India	3.53
UK	3.38
France	2.94
Canada	2.22
Italy	2.06
Brazil	1.83

210  
211  
212  
213  
214  
215  
216  
217  
218  
219

The Indian economy has grown by 13.5% in the quarter that ended June 2022, shows data. “The path taken by India since 2014 indicates that it is going to be the third-largest economy by 2029. India should surpass Germany by 2027 and most likely Japan by 2029 at the current rate of growth”, says Souma Kanti Ghosh, Group Chief Economic Advisor SBI in their research note (SKG, 2022) [13].(See Table 4).

Table 4

*Indian Economy Position over the years (SKG, 2022) [13]*

<b>Year</b>	<b>Rank</b>
2014	10 <sup>th</sup>
2015	7 <sup>th</sup>
2019	6 <sup>th</sup>
2022	5 <sup>th</sup>
2027	4 <sup>th</sup>
2029	3 <sup>rd</sup>

220

221 It is, therefore, essential for India to become (economically) sustainable so that it can  
222 pursue the dream of becoming “Atmanirbhar”.

223

224 To summarize, it is said that scenarios of recession in the US and Europe have led  
225 some to speculate that the Indian economy will not grow. It will have to bear the  
226 consequences of this global turmoil (Pangaria, 2022) [14]. Even then, the data  
227 available is an indication of progressive India. It is bound to become the third-largest  
228 economy by end of 2027-28, if not sooner. Now, to make this happen India must keep  
229 in mind the fact that it has to face disturbances from the US like all other economies  
230 are experiencing today. The outcomes from the rising interest rates in the US in the  
231 immediate future are the warning signs. But, with judicious management of the  
232 exchange rate mechanisms here, RBI is turning this challenge into an opportunity.

233

## 234 5.2 *Implications for the International Trade*

235

236 Another aspect here in the context of sustainability is the vulnerability of the country  
237 to the global recession. Despite being the largest economy in the world, the US has a  
238 trade-to-GDP ratio of just 23.4% (Thakur, 2022) [12]. (See Table 5). This is because  
239 of the large domestic market. It is seen that most of the US’s goods, including oil, are  
240 consumed within the country. This aspect is much valid for India too and accordingly,  
241 the authorities must take steps to increase the domestic consumption of goods. Even  
242 though currently India has a higher ratio (43.7%), it can achieve trade-related  
243 sustainability by achieving a reduction in the same. In the case of China, the reduction  
244 in its trade-to-GDP ratio is attributed to the size of the economy, and large population.  
245 But, things are not good for Western European countries, as it remains vulnerable to  
246 the global recession due to their higher trade-to-GDP ratios.

247

248  
249  
250

Table 5

*Trade-to-GDP ratio for select countries (Thakur, 2022) [12]*

<b>Country</b>	<b>Nominal GDP (\$ Trillion)</b>	<b>Trade (As % of GDP)</b>
United States	25.35	23.4%
China	19.91	37.4%
Japan	4.91	31.4%
Germany	4.26	89.4%
India	3.53	43.7%
UK	3.38	55.2%
France	2.94	62.0%
Canada	2.22	61.2%
Italy	2.06	63.1%
Brazil	1.83	39.2%

251

252 5.3 *Implications for maintaining the International Trade and Bilateral Relations*

253

254 **India's Trading Partners in International Trade**

255

256 International trade is characterized by imports and exports between countries. At  
257 present India's top five trading partners are the US, China, UAE, Saudi Arabia, and  
258 Iraq. (Trade1, 2022) [15]. (See Table 6a)

259

Table 6a

260

*India's top five Trade Partners (Trade1, 2022) [15]*

<b>Country</b>	<b>Total Merchandise Trade (In US \$ Billion)</b>				
	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>
United States	74.5	88.0	88.9	80.5	119.4
China	89.7	87.1	81.8	86.4	115.5
UAE	49.9	59.9	59.1	43.3	72.9
Saudi Arabia	27.5	34.0	33.1	22.0	42.9
Iraq	19.1	24.2	25.6	15.4	34.3

261

Source: Government/Commerce Department

262

263

It was observed that during 2017-18 to 2021-22, India's merchandise trade partners remained the same. The US has beaten China to emerge as India's largest trading partner in 2021-22. This is the position that the US has occupied during three of the last five years.

264

265

266

267

268

It will be interesting to note that after the war, India's imports from Russia increased substantially. Driven largely by a surge in oil imports, Russia has emerged as India's fifth largest trading partner, jumping from the 25<sup>th</sup> place at the end of last financial year, (Trade2, 2022) [16] as indicated by the official data. (See Table 6b) This aspect is elaborated subsequently.

269

270

271

272

273

274

Table 6b

275

*India's top five Trade Partners (April -Sept.) (Trade2, 2022) [16]*

April-Sept.	Total Merchandise Trade (In US \$ Billion)		
	2021	2022	% Change
United States	56.4	67.7	20%
China	54.7	60.2	10.1%
UAE	33.4	44.5	33.2%
Saudi Arabia	17.2	28.7	66.9%
Russia	5.8	22.6	289.7%

276

Source: Government/Commerce Department

277

Also, as stated above in Section 3.2, India has different trading allies. All of these allies are important to India given the quantum of trade and mutual benefits arising from this trade. Accordingly, India needs to formulate strategies for its trade allies. Judicious use of FTAs- foreign trade agreements will be the key to success for India in making it sustainable in international trade.

278

279

280

281

282

283

#### 5.4 Implications for the Domestic Manufacturing Industry

284

285

As stated above in Section 1, the manufacturing industry forms the base of any country in making it strong in terms of economic activity generation. According to Dipankar Gupta, the policy to encourage the manufacturing sector today is being criticized by some experts. This may be based on the growth of the service sector and

286

287

288

289 its growing contribution to the Indian economy (Gupta, 2022) [17]. The message is  
290 clear – strengthen your manufacturing base because it is in this sector that product  
291 innovation and differentiation begin. Later, it will be carried out in the services sector.  
292 Internationally, past happenings and experiences have shown that without a strong,  
293 pulsating manufacturing sector, there is no meaning to the service sector as it will not  
294 get the required impetus/inspiration to move up the value chain. It is a proven fact that  
295 only after the manufacturing sector takes off and achieves a certain level of saturation  
296 level (with acceptable skills and quality), then these parameters begin to shape up the  
297 service sector. This is what happened in the West, in the US, and this is what is  
298 happening in the East, also. Other countries experiencing this are Japan and South  
299 Korea. Gupta believes that unless we spend much more than 0.6% of our GDP on  
300 R&D efforts – manufacturing will not grow and will remain stagnant. Accordingly,  
301 India needs to formulate strategies for its trade allies. It is required to spend at least  
302 1% of the GDP on R & D efforts to strengthen the manufacturing capabilities.  
303 In this context, the following are the major levels or parameters and they may include  
304 certain sub-aspects.

- 305 • Economic Level
  - 306 ○ Global and Indian Economy.
- 307 • Trade Level
  - 308 ○ International Trade.
- 309 • Diplomatic Level
  - 310 ○ International Relations/Diplomacy/Geo-Political Scenario.
- 311 • Manufacturing/Firm Level
  - 312 ○ Supporting Domestic Manufacturing Base.

313

314 This is elaborated subsequently.

315

## 316 6.1 *Global and Indian Economy*

317

### 318 6.1.1 Central banks are raising interest rates to tackle inflation.

319

320 As of September 22, 2022, RBI – Reserve Bank of India has increased the repo rate  
321 by 90 basis points (100bps = 1 percentage point). This was done in two steps – In

322 May 2022 40 bps and in June 2022 by 50 bps. Many banks (or other countries) have  
323 also increased their rates on similar lines (Sinha, 2022) [18]. (See Table 7a)

324

325 In this context, US Federal Reserve raised the interest rates by 75 basis points for the  
326 third consecutive time. It is forecasted that it will reach 4.6% in 2023. This is a  
327 measure taken to fight inflation that is maintained at higher levels. In a statement on  
328 Wednesday (Sept. 21, 2022) after a two-day meeting in Washington, the Federal  
329 Open Market Committee repeat that it is highly attentive to inflation-related risks. It  
330 may be noted that central banks in some key economies like China, and Japan have  
331 not increased the rates yet (as of August 5, 2022).

332

333 Table 7a

334 *Where India stands – Rate hikes this year (As of August 5, 2022) (Sinha, 2022) [18]*

335

Country	Rate hike in Basis Points
Brazil	450
US	300
Canada	300
Australia	225
Sweden	175
South Korea	150
UK	150
India	140
ECB – Eurozone	125

336

337 As of October 1, 2022, RBI – Reserve Bank of India has increased the repo rate by 50  
338 basis points (100bps = 1 percentage point). This was the fourth rise in the last five  
339 months. The latest repo rate hike is aimed at controlling inflation and will make all  
340 borrowings (including home loans) more expensive. Thus, from May 2022, it  
341 increased by 190 basis points (Sinha and Shetty, 2022) [19].

342

343 This rate-increasing process is ongoing depending on the inflation scenario in that  
344 particular country. See the situation as of Nov. 3, 2022. In this context, US Federal

345 Reserve has climbed from near-zero rates to 4% this year. Now, US Fed has raised the  
346 interest rates by another 75 basis points for the fourth consecutive time. (See Table  
347 7b).

348

349 Table 7b:

350 *Where India stands – Rate hikes this year (As of Nov. 3, 2022) (Rate Hike, 2022) [20]*

351

Country	Rate hike in Basis Points
Brazil	450
US	375
Canada	350
Australia	275
South Korea	200
UK	200
India	190
ECB – Eurozone	150

352

353 6.1.2 Decrease in Foreign Exchange

354

355 With the free fall of the Rupee against the American Dollar (due to disruption in  
356 supply chains), RBI has to watch out for the current account deficit and a decrease in  
357 foreign exchange. As stated earlier, all currencies have gone down against the  
358 American Dollar in the past twelve months. According to RBI, rate hikes by advanced  
359 economies were the third shock after Covid and Russia-Ukraine war. This has caused  
360 a decrease in foreign exchange reserves, even though RBI has managed to control the  
361 current account deficit. The Indian Rupee has lost relatively little against the  
362 American Dollar as compared to other major currencies, according to IMF Data. RBI  
363 said that most of the foreign exchange reduction is due to the devaluation of  
364 currencies. As of September 3, 2021, India's foreign exchange stood at U\$ 642.5  
365 Billion and saw a reduction of U\$ 105 Billion, as of September 22, 2022 (Forex1,  
366 2022) [21]. Also, it may be noted that in the global freefall of currencies against the  
367 American Dollar, central banks across the world are selling dollars from their forex  
368 reserves. This is done mainly to increase its supply in the forex markets and hence

369 reduce the price vis-a-vis their (own) currencies (Forex2, 2022) [22]. In this context,  
370 the IMF blog suggested that emerging economies must learn from the lessons learned  
371 in the past. They should note that their forex reserves are limited and are acting as  
372 buffers to handle any adverse economic situations. They should be used judiciously  
373 with policy responses aimed at addressing market disruptions, and drivers of the  
374 exchange rate changes (Forex3, 2022) [23].

375

376 6.1.3 RBI Policy measures to tame the inflation caused by rising food prices.

377

378 As stated and discussed above, RBI has taken measures to regulate the inflation  
379 caused by rising food prices. It is also because the inflation was above the stipulated  
380 limits. (See Table 8) It is seen that wholesale inflation is eased but it is in still double  
381 digits.

382

383 Table 8

384 *Growing inflation (CPI\_WPI, 2022) [24], (CPI\_WPI1, 2022) [25], (CPI\_WPI2,*  
385 *2022) [26]*

386

	CPI-based Inflation (Retail Inflation) (In %)	WPI-based Inflation (Wholesale Inflation) (In %)
Jan. 2021	2.5%	4.1%
April 2021	4.2%	10.7%
Jan. 2022	6.0%	16.6%
Sept. 2022	7.4%	10.7%
Oct. 2022	6.8%	8.4%

387

388 6.2 *International Trade*

389

390 6.2.1 Increase in Imports

391

392 Here first we are talking about the international trade pattern of India. Oil prices are  
393 one of the key factors that affect imports and exports in the last few months. (See

394 Table 9) it is observed that exports increased to US\$38.2 billion in April 2022, driven  
 395 by a surge in international oil prices. This has also impacted imports which have  
 396 grown to US\$ 58.3 billion in April 2022. It may be noted that oil is the main  
 397 commodity of India's import basket followed by gold. In Oct. 2022, exports contracted  
 398 and imports grew at their slowest pace in the last 21 months, widening the trade  
 399 deficit.

400

401 Table 9

402 *Import-Export – Indian Scenario in the last few months (IX1, 2022) [27], (IX1a,*  
 403 *2022) [28]*

404

Description	In US\$ Billion		
	Imports	Exports	Trade Deficit
Oct. 2021	53.6	35.7	-17.9
Nov. 2021	52.9	30.0	-22.9
Dec. 2021	59.3	37.3	-22.0
Jan. 2022	52.0	34.1	-17.9
Feb. 2022	55.5	34.6	-20.9
Mar. 2022	60.7	42.2	-18.5
Apr. 2022	58.3	38.2	-20.1
May 2022	60.6	37.3	-23.3
Oct. 2022	56.7	29.8	-26.9

405

Source: Government/ Commerce Dept.

406

407 In this context, government sources said that an increasing trade deficit is expected in  
 408 the coming months of FY 2023 unless the commodity prices are reduced to  
 409 reasonable levels.

410

411 Now, take the scenario of Indian imports from Russia. Government sources said that  
 412 sanctions by the West have helped India get a better deal from Russian companies and  
 413 it is in the country's economic interest to pursue what is best for it.

414

415 Driven by a strong increase in crude oil shipments, India's imports from Russia have  
 416 grown considerably. Since February 2022, when Russia attacked Ukraine, imports  
 417 have grown close to three-and-half times to US\$8.6 billion. (See Table 10a) apart  
 418 from petroleum products, some of the other product categories showing an increase  
 419 are fertilizer and edible oil. This is according to the disaggregated data available from  
 420 the Commerce Department.

421

422 Table 10a

423 *India's Imports from Russia Feb.-May (IX2, 2022) [29]*

424

Feb.-May	In US\$ Million		
	2021	2022	% Change
Mineral Fuel (largely crude petroleum)	1137	5344	370
Fertilizer	74	608	722
Edible Oil	52.0	34.1	-17.9
Diamonds, etc.	471	267	-43
Project Goods	349	192	-45
<b>Total</b>	<b>2547</b>	<b>8566</b>	<b>236</b>

425

Source: Government/ Commerce Dept.

426

427 As stated in earlier Section 3, India's trade with Russia increased substantially in the  
 428 last six months of the year 2022 after the conflict started. Now, India has a US\$20  
 429 Billion trade deficit that is mainly driven by a surge in oil imports. (See Table 10b)  
 430 apart from petroleum products, some of the other product categories showing an  
 431 increase are fertilizer and edible oil. This is according to the disaggregated data  
 432 available from the Commerce Department.

433

434 Table 10b

435 *India's Imports from Russia April – Sept. (IX2a, 2022) [30]*

436

April – Sept.	In US\$ Million		
	2021	2022	% Change
Mineral Fuel (largely crude petroleum)	2145	17848	732.1

Fertilizer	186	1609	765.1
Edible Oil	226	493	118.1

Source: Government/ Commerce Dept.

437

438

439

In this context, it is evident what kind of product categories (w.r.t. India) are impacted by this conflict. Accordingly, India needs to find alternative sources of supply for the same or make arrangements to produce here to be self-reliant (or Atmanirbhar).

440

441

442

443

6.2.2 Exploring opportunities in international exports by catering to the needs of other countries.

444

445

In this context, India should not ban the exports of commodities unnecessarily. If after satisfying domestic needs, it is possible to cater to the needs of other countries, let the Indian exporters do it for their as well as the country's benefits. This will also help in maintaining easy and smooth bilateral relations in the context of increased geopolitical tensions.

446

447

448

449

450

451

6.2.3 Making Indian Payments work abroad

452

453

With the sanctions on the Russian payment systems, establishing partnerships with world payment networks is inevitable. This will enable the use of Indian payment systems such as UPI and BHIM. This will enable Rupee-based international trade. In this context, NPCI - National Payment Corporation of India has signed an agreement with Worldline to accept Rupay-card-based and QR Code-enabled payment in select countries in Europe. This will be available in 'Benelux' group countries in Europe (viz. Belgium, Netherlands, and Luxemburg). It is expected that this UPI service will start in Switzerland shortly (UPI, 2022) [31].

454

455

456

457

458

459

460

461

462

463

In this context, in yet another development, nine banks have been permitted to open special Vostro accounts for rupee trade with Russia with some Indian banks. Amongst them, one is IndusInd Bank. Other arrangements are going on. To list some of them are - Russia's Sberbank and VTB, and Gazprom bank with UCO Bank - which have opened accounts. These Russian banks have opened special accounts with their Indian branches. The RBI has allowed the special Vostro accounts to invest the surplus

464

465

466

467

468

469 balance in the Indian government securities. The decision to open a special Vostro  
470 account clears the desk for the settlement of payments in rupees for trade between  
471 India and Russia. This will enable cross-border trade in the Indian currency, which the  
472 RBI is keen to promote (Vostro, 2022) [32].

473

#### 474 6.2.4 Making FTAs work in the interest of the nation

475

476 Careful and judicious use of FTAs – Foreign Trade Agreements with other countries.  
477 Maintaining international relations with clear national goals and interests that are  
478 unambiguous - while doing any bilateral agreements. It will be beneficial to sign  
479 FTAs with countries that will share a common interest and encourage the local  
480 manufacturing industry. For example, exploring an alliance with Taiwan for  
481 establishing a chip-making facility in India. Avoiding FTA with the UK because it is  
482 a double-dealer. It seems that the arrogance of the UK is still there. Regarding the  
483 bilateral agreement with India, the UK is double-dealing with India. It seems from  
484 comments of the UK home minister that they want the Indian market for their  
485 products but will not easily provide access to the UK market for Indian products. This  
486 will not be tolerated. Just because it is Diwali, does not mean that we (India) should  
487 sign FTA with the UK. Even it does not depend upon who is the prime minister of  
488 that country. Another example in this context is the UK government is providing only  
489 three months visa o Indian students who are willing to study in the UK. It is seen that  
490 other countries provide student visas to Indian students with some time window. The  
491 situation is exactly the opposite in the case of the UK (Hingmire, 2022) [33].

492

### 493 6.3 *International Relations/ Diplomacy/Geo-Political Scenario*

494

#### 495 6.3.1 Participation in Alliances

496

497 Participation in alliances like QUAD (Australia, India, Japan, and the US) as well as  
498 AUKUS (Australia, UK, US) to promote international cooperation for trade. The  
499 recently started conference of the CPC – Communist Party of China indicated very  
500 strong opposition to QUAD and AUKUS consortiums (SK1, 2022) [34]. The present  
501 Russia-Ukraine conflict has indicated that there is growing dissatisfaction with the  
502 functioning of the UN (and even NATO) system, due to their inability in protecting

503 the interests of the developing nations. Likewise, even though there is ongoing  
504 COP27 at Sharm-El-Sheikh under the Egyptian Presidency, it appears to be  
505 unexciting and dull. The outcomes of COP27 will likely be way below expectations,  
506 mainly due to the clear divide between the developed and the developing world. In  
507 this context, India can take the initiative to have cordial relationships among the  
508 nations (Trigunayat, 2022) [35], and G20 can be the appropriate platform for the  
509 same. India will likely find G20 (presently held at Bali in Indonesia) and similar  
510 organizations, a better-suited stage to deliver her politico-economic objectives and  
511 deal with other strategic challenges more effectively than the UN, etc. Apart from the  
512 Bali Declaration, India has a strong leadership ability to tackle various global  
513 challenges holistically under the spirited mantra of '*VasudhaivKutumbakam*' or One  
514 World, One Family, One Future.

#### 515 516 6.3.2 Taking advantage of China-plus-One

517  
518 India should take the advantage of China's reducing influence to highlight its  
519 presence globally. It may be noted that China has very few coteries of friend nations  
520 such as Russia, Pakistan, and North Korea. Corona pandemic, the Russia-Ukraine  
521 conflict, oil shortages, and growing inflation are the pain points for all the countries  
522 across the globe. China is also no exception to this. Other factors putting limitations  
523 are the zero-Covid policy and the continued dictatorship in the country. This is  
524 certainly reducing the extent of China's power and influence on the world. It is also  
525 because China needs to address its economic growth in the post-Covid period on  
526 priority. This is an opportunity for India and accordingly, there is a need to develop,  
527 formulate, and implement the policies that will establish India's presence on the  
528 global stage (Palsokar, 2022) [36].

#### 529 530 6.3.3 Diplomacy without unnecessary bending

531  
532 "No means No." It is BigB's dialogue from the Bollywood flick 'Pink'. The authors  
533 believe that though it sounds harsh, this must be the intent that India needs to maintain  
534 regarding international relations. It is now important to tell the world that India is no  
535 more submissive now. It is time to tell the countries that we live, trade, and sustain on  
536 our (own) terms (without harming the existence of other countries, their boundaries,

537 and the interests of their people). For example, the world should take a similar stand  
538 on certain issues like invasions, trade protectionism, and similar ones harming the  
539 interest of any country. There should not be double-dealing behaviour like the world  
540 is okay with Pakistan's invasion of Indian territory and at the same time, it is not okay  
541 with the Russian invasion of the Ukrainian provinces. This view was expressed by  
542 SanjayaBaruin the context of ongoing international efforts to bring peace to these two  
543 war-torn countries (Baru2, 2022) [37]. According to Mr. Baru, the solution for the  
544 Russia-Ukraine conflict is no different from the solution that the world asked India to  
545 accept after Pakistan invaded the erstwhile state of Jammu & Kashmir. If the world  
546 and the Big Powers constantly ask India to get used to ground reality, (then) why  
547 cannot they and Ukraine also get used to the of a Russia Occupied Ukraine?  
548

548

549 6.3.4 Taking and using criticism constructively

550

551 India needs to address hatred against itself on the world stage. There is news saying  
552 that India is falling into Global Hunger Index (MT1, 2022) [38]. In the Global Hunger  
553 Index India has a 107 rank in 2022 as compared to 101 in 2021. In 2020, India was in  
554 94<sup>th</sup> place. In reality, India has been providing food and medicines to Sri Lanka  
555 (ranked 64 on the list) for the last six months. In addition to this India is also  
556 providing food to Bangladesh (ranked 84 on the list). India has sent approx. 4 Lakh  
557 metric tons of wheat to Bangladesh according to the sources. On the domestic front,  
558 since Covid, nearly 800 million people have been provided with free ration. Of  
559 course, this will call for the policy for more enhancement in producing crops and food  
560 production to meet the needs of the domestic market and other markets.  
561

561

562 6.3.5 Understand the intentions of big powers

563

564 Though the US is a strong ally, India should wary of the same. We should not forget  
565 that the US interfered in the Ukrainian elections to install its puppet joker at the helm  
566 to further its agenda of controlling the Arctic region and the mineral wealth that lies  
567 beneath. The so- superpowers and the West are always looking at low-profile and  
568 weak leaders in developing countries (including India). For them, it has to be political  
569 – with no authority and morally less strong. The center becomes weak due to a bunch  
570 of regional parties with conflicting interests joining hands to form the government in

571 the center. We know how morally corrupt parties and their persons (who are the  
572 leaders of India in the past) compromise on national interests to benefit foreign  
573 powers. The authors would not like to mention their names here. Readers are shrewd  
574 enough to identify the same. Unfortunately, the present leadership is neither morally  
575 nor politically weak nor compromised. This is exactly what is hurting the US. The  
576 truth - a growing India is not good for America. Even then India has to maintain  
577 relationships with the US and continue to grow simultaneously.

578

#### 579 6.3.6 Other related matters

580

- 581 • Not to give value to trivial institutions like the UN, and WTO because of their  
582 old nature.
- 583 • Some decisions such as Withdrawal from WTO may be thought of if we  
584 (India) are not contributing significantly to global trade in this context.

585

### 586 6.4 *Supporting Domestic Manufacturing Base*

587

#### 588 6.4.1 Enhancing the Manufacturing Capabilities

589

590 It is essential to enhance domestic manufacturing capability (for India). Certainly, this  
591 situation is an indication of - cannot depend on Russia for the import of defence  
592 equipment/supplies. Need to become Atmanirbhar in the defence sector. Make In  
593 India policy to encourage local manufacturing and startups in the defence sector  
594 (Manchi and Kotasthane, 2022) [39]. With the present crisis, Russia's ability as a  
595 quality defence equipment supplier is in doubt. There could be a reduction and  
596 interest in Russia's ability to deliver on defence purchase orders. Their technology  
597 may become dated, and the chips may be sourced from the black market or China.  
598 With the financial systems not working, Russian manufacturers are forced to stop  
599 their manufacturing operations. This would also result in cost overruns and delays, as  
600 the supply chains are disturbed. Therefore, in this context, it is required to increase the  
601 capital outlay for the sector by supporting research and development (R&D) efforts.  
602 Investment in defence products/sensors, electronic warfare, satellite communications,

603 and unmanned systems supported with relevant personnel training and skill  
604 development.

605

#### 606 6.4.2 Support to Agriculture Sector and its Capabilities

607

608 As stated above, a decline in India's ranking in Global Hunger Index can be a good  
609 pointer towards formulating policies for the agriculture sector. This is primarily aimed  
610 at land development and cultivation of millet. It is interesting to note that the United  
611 Nations (UN) has declared the year 2023 as the International Year of Millet (2023)  
612 (UN, 2022) [40]. A statement issued by the UN in this regard says "*Millets are*  
613 *packed with high nutritional content and are 'Nutri-cereals'. However, their*  
614 *cultivation is declining in many countries (including India). The potential of millets to*  
615 *address climate change and food security is not realized fully. This is even though*  
616 *millets can grow on relatively poor soils and under adverse and arid conditions, with*  
617 *comparatively fewer inputs than other crops* (UN, 2022)." In India, it is required to  
618 encourage the cultivation of millet so that nutritious food is available to the people.  
619 With the growing population, we have concentrated only on the production of wheat  
620 and rice and ignored the millet. This needs to be changed with the coordinated efforts  
621 of the central and state governments (Chhoriya, 2022) [41]. It is the need of the hour  
622 to promote and consume millet for having health benefits and better nutrition as  
623 compared to traditional foods like wheat and rice. Let us hope that all the stakeholders  
624 (government, farmers, crop scientists, agriculture universities, industries, etc.) will  
625 start working in this direction.

626

#### 627 6.4.3 A Step toward Green Economy

628

629 As reported by Reuters, the reduction in fossil fuel exports from Russia after its  
630 Ukraine invasion this year (in Feb. 2022) will change the global energy landscape  
631 altogether. This will certainly give a big push toward energy transition, the  
632 International Energy Agency (IEA) recently (Browning, 2022) [41]. In this context,  
633 Russia's supply of internationally traded energy will fall to 13% by 2030 from about  
634 20% in 2021, according to the IEA estimates.

635

636 In achieving the transition to green energy India may take a cue from Kazakhstan.  
637 The oil-rich country is planning to become a green hydrogen exporter in near future  
638 (Lillis, 2022) [43]. Western Kazakhstan would like to become a leading global  
639 exporter of clean energy. The region is famous for its oil and natural gas resources. In  
640 this context, the government has signed a US\$50 billion deal with European  
641 renewables group Svevind to build one of the world's five largest green hydrogen  
642 production facilities in the Mangystau Region, as announced by the President's office  
643 on October 27, 2022.

644  
645 As UN climate talks started in the Egyptian resort city of Sharm-El-Sheikh, the  
646 European Union is moving forward to secure partnerships with developing countries  
647 on hydrogen and clean technologies, starting with Kazakhstan (Romano, 2022) [44].

648  
649 In this context, India needs policies to drive its transition from a fuel-based economy  
650 to a greener economy. More emphasis on the circular economy by allocating special  
651 regions or zone to greener enterprises. "India can lead the way in accelerating the  
652 progress towards a less-competitive, healthier, and prosperous world", says Bill  
653 Gates. Gates believes in India's commitment to reducing carbon emissions (Gates,  
654 2022) [45]. While it is required (for the world) to have ground-breaking technologies  
655 to prevent any climate disaster, (at the same time) (some countries) individuals must  
656 step forward to show that climate change is important. Policies should encourage the  
657 manufacturing industry as it has a contribution to the GDP besides employment  
658 generation. This is already discussed above.

659

#### 660 6.4.4 Emphasis on 'Make in India'

661

662 Emphasis on local manufacturing aimed at providing products to global markets. This  
663 will generate jobs and it will add to the gross domestic product -GDP and thereby  
664 growth of the economy. Social and financial inclusion are the other goals to meet with  
665 the help of this local manufacturing – Make in India campaign. With China losing its  
666 trust in the West and other countries, India must look to become the 'Production hub  
667 of the World'. Soumya Kanti Ghosh believes that the news is good for India. With the  
668 GDP levels reaching the pre-Covid stage, the economy is set to grow and will enter a  
669 good phase in the medium term (Manufacturing, 2022) [46]. The pandemic has

670 changed the plans and expectations (of some countries) and one of the beneficiaries of  
671 that could be India. Just have a look at this – the latest iPhone 14 manufacturing plant  
672 is at Chennai – Foxconn facility. The large quantity of orders that it has got is a clear  
673 indication that India finally making its presence felt. It is included in the China-plus-  
674 one manufacturing plans of the MNCs. There is no dearth of opportunities here if it is  
675 nurtured, boosted, and supported systematically. India’s status as a preferred supplier  
676 to the world in the global supply chain can range across commodities – from chips to  
677 coal.

678

## 679 **7. Implications**

680

681 In terms of global trade, attaining sustainability is one step move toward achieving a  
682 trade surplus. With a trade surplus (i.e., exports more than imports) visible, this will  
683 provide a boost to the local/domestic manufacturing sector in terms of increasing its  
684 capability to serve global markets.

685

686 In terms of domestic industry trade, attaining sustainability is one step move toward  
687 the creation of jobs. With the creation of jobs, the industrial sector can produce more,  
688 for the domestic as well as export market needs. This, in turn, will increase the output  
689 from the manufacturing sector and its (sectoral) contribution to the gross domestic  
690 product (GDP) of the country.

691

692 India should constructively use the platform of G-20 (G20, 2022) [47]

693

694 On December 1, 2022, India formally took over from Indonesia as the G20  
695 Presidency. The G20, often known as the Group of Twenty, is an intergovernmental  
696 organization made up of the 20 largest developed and developing economies in the  
697 world, making it the most important platform for global economic cooperation. India  
698 can use this opportunity to strengthen its international trade network and explore  
699 global trade opportunities.

700

701

## 701 **8. Conclusion**

702

703 In this section, the authors would like to present a conclusion in the form of a level-  
704 based discussion. This is because India needs to be sustainable by having suitable  
705 policy changes at various levels. This paper focuses on how India may become more  
706 robust considering the ongoing crisis between Russia and Ukraine. We gave examples  
707 of these approaches and how each of them may be investigated by India at various  
708 levels of the economy and foreign commerce to show these strategies and their impact  
709 on research. Our opinion is presented to draw attention to significant developments  
710 and inspire further study. These ideas are only as good as our capacity to turn them  
711 into actual studies that can instruct and motivate audiences around the world. There is  
712 still a lot of work to do. Our influence as academics depends on our capacity to  
713 persuasively provide the most recent bits of information in this context, which can  
714 demonstrate, forecast, and direct future judgments. In a time when the world is  
715 experiencing much uncertainty and changing quickly, this is a crucial mandate.  
716 International and political experts, in our opinion, have a lot of room and opportunity  
717 to show their work. We hope that our work takes a small start toward inspiring  
718 research on related, significant topics.

## 719 **References**

720  
721  
722 [1] Sagar Pradeep. (2022). Lessons for India from the Russia-Ukraine conflict. Article  
723 published in The Week, June 3, 2022.

724 [https://www.theweek.in/news/india/2022/06/03/lessons-for-india-from-russia-ukraine-](https://www.theweek.in/news/india/2022/06/03/lessons-for-india-from-russia-ukraine-conflict.html)  
725 [conflict.html](https://www.theweek.in/news/india/2022/06/03/lessons-for-india-from-russia-ukraine-conflict.html)

726  
727 [2] Thomas Anil. (2022). What lessons can be drawn from the Russia-Ukraine war to  
728 realign India's conventional capability? Institute of Defence Studies and Analyses.  
729 August 22, 2022.

730 [https://www.idsa.in/askanexpert/What-lessons-can-be-drawn-from-the-](https://www.idsa.in/askanexpert/What-lessons-can-be-drawn-from-the-Russia%E2%80%93Ukraine-war)  
731 [Russia%E2%80%93Ukraine-war.](https://www.idsa.in/askanexpert/What-lessons-can-be-drawn-from-the-Russia%E2%80%93Ukraine-war)

732  
733 [3] Baru1. (2022). (There are) several lessons to learn from the Ukraine war:  
734 SanjayaBaru. Article published in The Hindu, May 21, 2022.

735 [https://www.thehindu.com/news/national/telangana/several-lessons-to-learn-from-](https://www.thehindu.com/news/national/telangana/several-lessons-to-learn-from-ukraine-war/article65442531.ece)  
736 [ukraine-war/article65442531.ece.](https://www.thehindu.com/news/national/telangana/several-lessons-to-learn-from-ukraine-war/article65442531.ece)

737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770

[4] SibalKanwal. (2022). Lessons for India from the Russia-Ukraine crisis. Indian Defence Review, March 19, 2022.

<http://www.indiandefencereview.com/spotlights/lessons-for-india-from-the-russia-ukraine-crisis/>.

[5] Menon Raja. (2022). Russia-Ukraine” Lessons from a seven-month war. Article published in The Indian Express, October 7, 2022.

<https://indianexpress.com/article/opinion/columns/russia-ukraine-lessons-from-a-seven-month-war-8194360/>.

[6] Bhagat Chetan. (2022). Five lessons from Ukraine we and India should never forget. Article published in the Times of India, March 13, 2022.

<https://timesofindia.indiatimes.com/india/war-as-realitytv/articleshow/90187270.cms>.

[7] IMF1. (2022). International Monetary Fund, World Economic Outlook, October 2022.

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

[8] IMF2. (2023). International Monetary Fund, World Economic Outlook, January 2023.

<https://www.imf.org/en/Publications/WEO/Issues/2023/01/31/world-economic-outlook-update-january-2023>

[9] TNN1. (2022). Government is worried about the impact of the Ukraine conflict on trade. Article published by Times News Network in the Times of India, Pune edition dated March 1, 2022.

<https://timesofindia.indiatimes.com/business/india-business/govt-worried-about-impact-of-ukraine-conflict-on-trade/articleshow/89908338.cms>.

[10] Shortage. (2022). Shoppers face a shortage of beer and popcorn globally. Article in the Times of India, Pune edition dated June 20,

771 2022.[https://timesofindia.indiatimes.com/business/india-business/shoppers-face-](https://timesofindia.indiatimes.com/business/india-business/shoppers-face-shortage-of-beer-popcorn-globally/articleshow/92325222.cms)  
772 [shortage-of-beer-popcorn-globally/articleshow/92325222.cms](https://timesofindia.indiatimes.com/business/india-business/shoppers-face-shortage-of-beer-popcorn-globally/articleshow/92325222.cms).

773

774 [11] Ghosh Soumya Kanti. (2022). Battling the crisis well. Article in the Times of  
775 India, Pune edition dated August 3, 2022.

776 [https://timesofindia.indiatimes.com/blogs/toi-edit-page/battling-the-crisis-well-from-](https://timesofindia.indiatimes.com/blogs/toi-edit-page/battling-the-crisis-well-from-rupee-to-inflation-to-deficit-the-india-story-is-much-better-than-pessimists-suggest/)  
777 [rupee-to-inflation-to-deficit-the-india-story-is-much-better-than-pessimists-suggest/](https://timesofindia.indiatimes.com/blogs/toi-edit-page/battling-the-crisis-well-from-rupee-to-inflation-to-deficit-the-india-story-is-much-better-than-pessimists-suggest/).

778

779 [12] Thakur Atul. (2022). Why the US economy's jitters should worry India? Article  
780 in the Times of India, Pune edition dated August 6, 2022.

781 [https://timesofindia.indiatimes.com/times-special/why-the-us-economys-jitters-](https://timesofindia.indiatimes.com/times-special/why-the-us-economys-jitters-should-worry-india/articleshow/93382978.cms)  
782 [should-worry-india/articleshow/93382978.cms](https://timesofindia.indiatimes.com/times-special/why-the-us-economys-jitters-should-worry-india/articleshow/93382978.cms).

783

784 [13] SKG. (2022). In the 75th year of freedom, India overtakes the UK as the fifth-  
785 largest economy. Article published by Times News Network in the Times of India,  
786 Pune edition dated September 9, 2022.

787 [https://timesofindia.indiatimes.com/business/india-business/in-75th-year-of-freedom-](https://timesofindia.indiatimes.com/business/india-business/in-75th-year-of-freedom-india-overtakes-uk-as-5th-largest-economy/articleshow/93975687.cms)  
788 [india-overtakes-uk-as-5th-largest-economy/articleshow/93975687.cms](https://timesofindia.indiatimes.com/business/india-business/in-75th-year-of-freedom-india-overtakes-uk-as-5th-largest-economy/articleshow/93975687.cms).

789

790 [14] Pangaria Arvind. (2022). On the way to World No. 3. Article in the Times of  
791 India, Pune edition dated October 4, 2022.

792 [https://timesofindia.indiatimes.com/blogs/toi-edit-page/on-the-way-to-world-no-3-](https://timesofindia.indiatimes.com/blogs/toi-edit-page/on-the-way-to-world-no-3-data-suggests-india-will-become-the-third-largest-economy-by-end-of-2027-28-if-not-sooner/)  
793 [data-suggests-india-will-become-the-third-largest-economy-by-end-of-2027-28-if-](https://timesofindia.indiatimes.com/blogs/toi-edit-page/on-the-way-to-world-no-3-data-suggests-india-will-become-the-third-largest-economy-by-end-of-2027-28-if-not-sooner/)  
794 [not-sooner/](https://timesofindia.indiatimes.com/blogs/toi-edit-page/on-the-way-to-world-no-3-data-suggests-india-will-become-the-third-largest-economy-by-end-of-2027-28-if-not-sooner/).

795

796 [15] Trade1. (2022), India's Trade Partners. As provided by the Ministry of  
797 Commerce, Govt. of India. Article published in Times of India, Pune edition dated  
798 May 30, 2022.

799 [https://timesofindia.indiatimes.com/business/india-business/us-surpasses-china-as-](https://timesofindia.indiatimes.com/business/india-business/us-surpasses-china-as-indias-biggest-trading-partner-in-fy22-at-119-42-bn/articleshow/91865410.cms)  
800 [indias-biggest-trading-partner-in-fy22-at-119-42-bn/articleshow/91865410.cms](https://timesofindia.indiatimes.com/business/india-business/us-surpasses-china-as-indias-biggest-trading-partner-in-fy22-at-119-42-bn/articleshow/91865410.cms)

801

802 [16] Trade2. (2022), Russia 5th largest trade partner, jumps from 25th. Article  
803 published in Times of India, Pune edition dated November 17, 2022.

804 [https://timesofindia.indiatimes.com/business/india-business/russia-fifth-largest-trade-](https://timesofindia.indiatimes.com/business/india-business/russia-fifth-largest-trade-partner-jumps-from-25th/articleshow/95568292.cms)  
805 [partner-jumps-from-25th/articleshow/95568292.cms](https://timesofindia.indiatimes.com/business/india-business/russia-fifth-largest-trade-partner-jumps-from-25th/articleshow/95568292.cms).

806

807 [17] Gupta Dipankar (2022). Make machines in India. Article in the Times of India,  
808 Pune edition dated October 8, 2022.

809 [https://timesofindia.indiatimes.com/blogs/toi-edit-page/make-machines-in-india-why-](https://timesofindia.indiatimes.com/blogs/toi-edit-page/make-machines-in-india-why-economists-arguing-against-policy-emphasis-on-manufacturing-are-completely-wrong/)  
810 [economists-arguing-against-policy-emphasis-on-manufacturing-are-completely-](https://timesofindia.indiatimes.com/blogs/toi-edit-page/make-machines-in-india-why-economists-arguing-against-policy-emphasis-on-manufacturing-are-completely-wrong/)  
811 [wrong/](https://timesofindia.indiatimes.com/blogs/toi-edit-page/make-machines-in-india-why-economists-arguing-against-policy-emphasis-on-manufacturing-are-completely-wrong/).

812

813 [18] Sinha Prabhakar. (2022). Third time in a row, Fed hikes rates by 75 bps. Article  
814 in the Times of India, Pune edition dated September 22, 2022.

815

816 [19] Sinha Prabhakar and Shetty Mayur. (2022). Home loan EMIs rise as RBI ups  
817 key rate 50 bps' fourth hike in five months. Article in the Times of India, Pune edition  
818 dated October 1, 2022.

819 [https://timesofindia.indiatimes.com/business/india-business/emis-start-rising-as-rbi-](https://timesofindia.indiatimes.com/business/india-business/emis-start-rising-as-rbi-ups-key-rate-50bps-4th-hike-in-5-mths/articleshow/94572475.cms)  
820 [ups-key-rate-50bps-4th-hike-in-5-mths/articleshow/94572475.cms](https://timesofindia.indiatimes.com/business/india-business/emis-start-rising-as-rbi-ups-key-rate-50bps-4th-hike-in-5-mths/articleshow/94572475.cms).

821

822 [20] Rate Hike. (2022). Four in a row: US Fed hikes rates by 75 bps. Article in the  
823 Times of India, Pune edition dated November 3, 2022.

824 [https://timesofindia.indiatimes.com/business/international-business/four-in-row-us-](https://timesofindia.indiatimes.com/business/international-business/four-in-row-us-fed-hikes-rates-by-75bps/articleshow/95265018.cms)  
825 [fed-hikes-rates-by-75bps/articleshow/95265018.cms](https://timesofindia.indiatimes.com/business/international-business/four-in-row-us-fed-hikes-rates-by-75bps/articleshow/95265018.cms).

826

827 [21] Forex1. (2022). Forex dipped due to a fall in the valuations of the currencies.  
828 Article published in the Times of India, Pune edition dated October 1, 2022.

829 [https://timesofindia.indiatimes.com/business/india-business/67-of-forex-dip-due-to-](https://timesofindia.indiatimes.com/business/india-business/67-of-forex-dip-due-to-fall-in-valuations-of-currencies/articleshow/94573982.cms)  
830 [fall-in-valuations-of-currencies/articleshow/94573982.cms](https://timesofindia.indiatimes.com/business/india-business/67-of-forex-dip-due-to-fall-in-valuations-of-currencies/articleshow/94573982.cms).

831

832 [22] Forex2. (2022). The rupee's strength against the dollar comes at a forex cost.  
833 Article published in the Times of India, Pune edition dated October 10, 2022.

834 [https://timesofindia.indiatimes.com/business/india-business/rupees-strong-stand-](https://timesofindia.indiatimes.com/business/india-business/rupees-strong-stand-against-dollar-comes-at-forex-cost/articleshow/94747521.cms)  
835 [against-dollar-comes-at-forex-cost/articleshow/94747521.cms](https://timesofindia.indiatimes.com/business/india-business/rupees-strong-stand-against-dollar-comes-at-forex-cost/articleshow/94747521.cms).

836

837 [23] Forex3. (2022). Use Dollar kitty prudently: IMF to emerging markets. Article  
838 published in the Times of India, Pune edition dated October 16, 2022.  
839 [https://timesofindia.indiatimes.com/business/india-business/use-kitty-prudently-imf-](https://timesofindia.indiatimes.com/business/india-business/use-kitty-prudently-imf-to-emerging-markets/articleshow/94889038.cms)  
840 [to-emerging-markets/articleshow/94889038.cms](https://timesofindia.indiatimes.com/business/india-business/use-kitty-prudently-imf-to-emerging-markets/articleshow/94889038.cms).  
841

842 [24] CPI\_WPI. (2022). Wholesale inflation eases in September to an 18-month low.  
843 Article published by Times News Network in the Times of India, Pune edition dated  
844 October 15, 2022.  
845

846 [25] CPI\_WPI1. (2022). Wholesale inflation eases in October to a 19-month low.  
847 Article published in Maharashtra Times, Pune edition dated November 15, 2022.  
848

849 [26] CPI\_WPI2. (2022). Retail inflation below 7% in October. Article published in  
850 the Times of India, Pune edition dated November 15, 2022.  
851

852 [27] IX1. (2022). Record trade deficit due to import surge in May. Article published  
853 by Times News Network in the Times of India, Pune edition dated June 3, 2022.  
854 [https://timesofindia.indiatimes.com/business/india-business/record-trade-deficit-due-](https://timesofindia.indiatimes.com/business/india-business/record-trade-deficit-due-to-import-surge-in-may/articleshow/91973089.cms)  
855 [to-import-surge-in-may/articleshow/91973089.cms](https://timesofindia.indiatimes.com/business/india-business/record-trade-deficit-due-to-import-surge-in-may/articleshow/91973089.cms).  
856

857 [28] IX1a. (2022). Exports shrink as the trade deficit expands to US\$27Bn in October  
858 2022. Article published by Times News Network in the Times of India, Pune edition  
859 dated November 16, 2022.  
860 [https://www.indiaonline.com/article/general-blog/october-trade-deficit-widens-to-](https://www.indiaonline.com/article/general-blog/october-trade-deficit-widens-to-26-91-as-trade-shrinks-sharply-122111600277_1.html)  
861 [26-91-as-trade-shrinks-sharply-122111600277\\_1.html](https://www.indiaonline.com/article/general-blog/october-trade-deficit-widens-to-26-91-as-trade-shrinks-sharply-122111600277_1.html).  
862

863 [29] IX2. (2022). Imports from Russia have grown 3.5x since the war began. Article  
864 published by Sidhartha in the Times of India, Pune edition dated July 25, 2022.  
865 [https://timesofindia.indiatimes.com/business/india-business/driven-by-oil-imports-](https://timesofindia.indiatimes.com/business/india-business/driven-by-oil-imports-from-russia-up-3-5-times/articleshow/93096447.cms)  
866 [from-russia-up-3-5-times/articleshow/93096447.cms](https://timesofindia.indiatimes.com/business/india-business/driven-by-oil-imports-from-russia-up-3-5-times/articleshow/93096447.cms).  
867

868

869 [30] IX2a. (2022), Russia 5th largest trade partner, jumps from 25th. Article  
870 published in Times of India, Pune edition dated November 17, 2022.

871 [https://timesofindia.indiatimes.com/business/india-business/russia-fifth-largest-trade-](https://timesofindia.indiatimes.com/business/india-business/russia-fifth-largest-trade-partner-jumps-from-25th/articleshow/95568292.cms)  
872 [partner-jumps-from-25th/articleshow/95568292.cms.](https://timesofindia.indiatimes.com/business/india-business/russia-fifth-largest-trade-partner-jumps-from-25th/articleshow/95568292.cms)

873

874 [31] UPI. (2022). Now you can use UPI in Europe. Article published in Maharashtra  
875 Times, Pune edition dated Oct. 14, 2022.

876

877 [32] Vostro. (2022). Nine banks can trade in rupee with Russia. in Europe. Article  
878 published by Times News Network in the Times of India, Pune edition dated  
879 November 16, 2022.

880 [https://timesofindia.indiatimes.com/business/india-business/nine-banks-can-trade-in-](https://timesofindia.indiatimes.com/business/india-business/nine-banks-can-trade-in-rupee-with-)  
881 [rupee-with-](https://timesofindia.indiatimes.com/business/india-business/nine-banks-can-trade-in-rupee-with-)

882 [russia/articleshow/95545098.cms#:~:text=Nine%20banks%20have%20been%20give](https://timesofindia.indiatimes.com/business/india-business/nine-banks-can-trade-in-rupee-with-russia/articleshow/95545098.cms#:~:text=Nine%20banks%20have%20been%20give)  
883 [n,accounts%20with%20their%20Indian%20branches.](https://timesofindia.indiatimes.com/business/india-business/nine-banks-can-trade-in-rupee-with-russia/articleshow/95545098.cms#:~:text=Nine%20banks%20have%20been%20give)

884

885 [33] Hingmire Ganesh. (2022). (We need) the Indian market, (and not) the Indians  
886 (here in the UK). Article published in Sakal, Pune edition dated Oct. 16, 2022.

887

888 [34] SK1. (2022). There is strong opposition to unilateral leadership by establishing  
889 groups or consortiums. Article published in Sakal, Pune edition dated Oct. 17, 2022.

890

891 [35] Trigunayat Anil. (2022). India is ready to help reconstruct international order and  
892 has started the work with G20. Article published on CNBC TV website. November  
893 22, 2022.

894 [https://www.cnbctv18.com/views/g20-india-pm-narendra-modi-UNSC-fair-](https://www.cnbctv18.com/views/g20-india-pm-narendra-modi-UNSC-fair-international-order-presidency-bali-declaration-15214741.htm)  
895 [international-order-presidency-bali-declaration-15214741.htm.](https://www.cnbctv18.com/views/g20-india-pm-narendra-modi-UNSC-fair-international-order-presidency-bali-declaration-15214741.htm)

896

897 [36] Palsokar R. R. Brig. (Retd.) (2022). (Now there are) Limitations to the power and  
898 Influence of China. Article published in Maharashtra Times, Pune edition dated  
899 October 16, 2022.

900

901 [37] Baru2. (2022). An idea for peace in Ukraine – SanjayaBaru. Article published in  
902 the Times of India, Pune edition dated October 7, 2022.

903

904 [https://timesofindia.indiatimes.com/blogs/toi-edit-page/an-idea-for-peace-in-ukraine-](https://timesofindia.indiatimes.com/blogs/toi-edit-page/an-idea-for-peace-in-ukraine-us-led-west-should-accept-russian-occupation-of-some-parts-of-the-country-across-a-ceasefire-line/)  
905 [us-led-west-should-accept-russian-occupation-of-some-parts-of-the-country-across-a-](https://timesofindia.indiatimes.com/blogs/toi-edit-page/an-idea-for-peace-in-ukraine-us-led-west-should-accept-russian-occupation-of-some-parts-of-the-country-across-a-ceasefire-line/)  
906 [ceasefire-line/](https://timesofindia.indiatimes.com/blogs/toi-edit-page/an-idea-for-peace-in-ukraine-us-led-west-should-accept-russian-occupation-of-some-parts-of-the-country-across-a-ceasefire-line/).  
907  
908 [38] MT1. (2022). India not performing well in Global Hunger Index. Article  
909 published in Maharashtra Times, Pune edition dated October 16, 2022.  
910  
911 [39] ManchiAbhiram and Kotasthane Pranay. (2022). India’s Russia problem will  
912 grow. Article published in the Times of India, Pune edition dated September 23, 2022.  
913 [https://timesofindia.indiatimes.com/blogs/toi-edit-page/indias-russia-problem-will-](https://timesofindia.indiatimes.com/blogs/toi-edit-page/indias-russia-problem-will-grow-locked-out-of-semiconductor-supply-moscow-will-be-hard-pressed-to-fulfil-new-delhis-military-needs/)  
914 [grow-locked-out-of-semiconductor-supply-moscow-will-be-hard-pressed-to-fulfil-](https://timesofindia.indiatimes.com/blogs/toi-edit-page/indias-russia-problem-will-grow-locked-out-of-semiconductor-supply-moscow-will-be-hard-pressed-to-fulfil-new-delhis-military-needs/)  
915 [new-delhis-military-needs/](https://timesofindia.indiatimes.com/blogs/toi-edit-page/indias-russia-problem-will-grow-locked-out-of-semiconductor-supply-moscow-will-be-hard-pressed-to-fulfil-new-delhis-military-needs/).  
916  
917 [40] UN. (2022). International Year of the Millets 2023 – Building Momentum for the  
918 year. March 22, 2022. Available from <https://media.un.org/>. [Last accessed on  
919 October 17, 2022].  
920 <https://media.un.org/en/asset/k1h/k1h0tqi7qq>.  
921  
922 [41] ChhoriyaMahendra. (2022). It is essential to save the millet. Article published in  
923 Maharashtra Times, Pune edition dated October 17, 2022.  
924  
925 [42] Browning Noha. (2022). Energy crisis sparked by Ukraine war to speed up green  
926 energy transition – IEA. Reuters. October 27, 2022.  
927 [https://www.reuters.com/news/picture/energy-crisis-sparked-by-ukraine-war-to-](https://www.reuters.com/news/picture/energy-crisis-sparked-by-ukraine-war-to-idUSKBN2RM061)  
928 [idUSKBN2RM061](https://www.reuters.com/news/picture/energy-crisis-sparked-by-ukraine-war-to-idUSKBN2RM061).  
929  
930 [43] Lillis Joanna. (2022). Kazakhstan: Oil-rich west to become green hydrogen hub.  
931 EurasiaNet. October 28, 2022.  
932 <https://eurasianet.org/kazakhstan-oil-rich-west-to-become-green-hydrogen-hub>.  
933  
934 [44] Romano Valentina. (2022). EU signs ‘strategic partnership’ with Kazakhstan on  
935 green hydrogen, raw materials. EURACTIV.com. November 8, 2022.  
936 [https://www.euractiv.com/section/energy/news/eu-signs-strategic-partnership-with-](https://www.euractiv.com/section/energy/news/eu-signs-strategic-partnership-with-kazakhstan-on-green-hydrogen-raw-materials/)  
937 [kazakhstan-on-green-hydrogen-raw-materials/](https://www.euractiv.com/section/energy/news/eu-signs-strategic-partnership-with-kazakhstan-on-green-hydrogen-raw-materials/).

938

939 [45] Gates Bill. (2022). At G20, India can show the way. Article published in the  
940 Times of India, Pune edition dated October 7, 2022.

941

942 [46] Manufacturing. (2022). We are back to the future. Article by Soumya Kanti  
943 Ghosh published in the Times of India, Pune edition dated September 2, 2022.

944 [https://timesofindia.indiatimes.com/blogs/toi-edit-page/we-are-back-to-the-future-  
945 with-gdp-crossing-pre-covid-level-economy-is-set-to-enter-a-good-phase-in-medium-  
946 term/](https://timesofindia.indiatimes.com/blogs/toi-edit-page/we-are-back-to-the-future-with-gdp-crossing-pre-covid-level-economy-is-set-to-enter-a-good-phase-in-medium-term/).

947

948 [47] G-20. (2022, December 1). India assumes G20 Presidency. Press Release.

949 [https://www.g20.org/en/media-resources/press-releases/december-2022/presidency-  
950 g20/](https://www.g20.org/en/media-resources/press-releases/december-2022/presidency-g20/).

951

UNDER PEER REVIEW