War in Ukraine: Global Update

BCG Global Advantage Practice Area

Prepared: 26 May 2022
Introduction to this document

The war continues to be first and foremost a humanitarian crisis, and the top priority for all continues to be the safety and security of people.

Moreover, the continuity of the war has resulted in profound economic impact, not only within Ukraine but globally—as supply chains face disruption, commodity prices rise, and unprecedented levels of sanctions take hold.

We continue to lean into the most pressing issues and questions on the minds of our clients and teams.

This edition shares the latest update on the global economic impact as well as implications for business leaders.
War in Ukraine continues to evolve along several dimensions

Interrelated dimensions

Narrower impact

Duration

- Days
- Weeks
- Months
- Years
- Decades

Geographic scope & materiality

- Russia & Ukraine
- Central & Eastern Europe
- EU
- Global

Sectoral scope & materiality

- Energy, Metals, Agrifoods
- E.g., Automotive, machinery
- Whole economy

Last defenders of Mariupol surrender. Russia gains control of the Azov sea coast

Australia granted 6,000+ temporary humanitarian visas to refugees. 1,700+ have arrived

EU’s 6th sanction package awaits approval. Other nations continue to take punitive action – e.g., CA sanctions more oligarchs, bans import/export of luxury goods


14 Apr. 26 Apr. 12 May 25 May

1: Reuters and Foreign Policy 2: Al-Jazeera and Australia Home Affairs 3: Source: BCG analysis Note: BCG does not provide legal or regulatory advice
6.5M Ukrainians have crossed borders | Current capacity constraints in Central Eastern Europe, future flows could add pressure on Western Europe

Movement from border to European countries
Indicative view on refugees flows until May 23rd, 2022

- ~54% entered the Schengen Area through Poland and ~16% through Hungary
- All other bordering countries also facing capacity constraints
- ~50% settling down in Central Eastern Europe
- ~50% moving to other countries (including non-EU countries)
- Limited flows to rest of the world, with potential to increase long-term intake
- An estimated 1-1.5M refugees have returned to Ukraine, mostly from CEE countries; however, uncertainty remains over permanence

Note: Actual number of “unique” refugees might be slightly lower as the crossing are not counted as per “unique” person; however at this point it is uncertain whether the return is permanent or temporary. Note: Indicative view; recent analyses indicate that onward travel from directly neighboring countries (particularly Poland, Hungary, Slovakia) and hence also inflow to not directly neighboring countries (particularly Germany, Italy, France) might be higher than stated. Note: These analyses represent only potential scenarios based on discrete data from one point in time. They are not intended as a prediction or forecast, and the situation is changing daily. Source: UNHCR; interviews with NGOs; survey among refugees, BCG calculation & analysis
1. GDP forecasts from World Bank and Leading FIs per Bloomberg database (13-60 FIs per forecast period)
2. Deep Sea Cargo: oil tankers MR & up, bulk carriers Panamax & up, containerships 3,000+ TEU, VLGCs, LNG carriers 60,000+ cbm & PCTCs 6,000+
3. Baltic Dry Index (BDI) is index of avg price paid for transport of dry bulk mat'ls across 20+ routes
4. Commodity prices (actual, $)
5. Sanctions & Policy Actions
6. Corporate Actions in Russia Market

### GDP Forecasts

<table>
<thead>
<tr>
<th>Region</th>
<th>World Bank 2021 Actual</th>
<th>2022 Jan'22 Forecast</th>
<th>2022 Leading FIs Pre-War</th>
<th>12 May - 20 May '22 Forecasts Pre-War</th>
<th>12 May - 20 May '22 Pre-War</th>
<th>Median</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>4.7%</td>
<td>2.4%</td>
<td>-10.1%</td>
<td>2.7%</td>
<td>1.8%</td>
<td>4.1%</td>
<td>-15.0%</td>
</tr>
<tr>
<td>Euro Zone</td>
<td>5.3%</td>
<td>4.2%</td>
<td>2.7%</td>
<td>2.7%</td>
<td>1.8%</td>
<td>4.1%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Global</td>
<td>3.9%</td>
<td>4.1%</td>
<td>2.7%</td>
<td>2.7%</td>
<td>1.8%</td>
<td>4.1%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

### Commodity Prices

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Jan 3 '22</th>
<th>May 23 '22</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil ($/bbl)</td>
<td>79.0</td>
<td>110.0</td>
<td>+39%</td>
</tr>
<tr>
<td>Gas ($/MWh)</td>
<td>80.4</td>
<td>87.9</td>
<td>+9%</td>
</tr>
<tr>
<td>Coal ($/t)</td>
<td>157.5</td>
<td>392.9</td>
<td>+149%</td>
</tr>
<tr>
<td>Wheat ($/bu)</td>
<td>274.0</td>
<td>414.0</td>
<td>+51%</td>
</tr>
<tr>
<td>Rapeseed ($/t)</td>
<td>728.5</td>
<td>830.0</td>
<td>+14%</td>
</tr>
<tr>
<td>Nickel ($/t)</td>
<td>20,430.0</td>
<td>28,215.0</td>
<td>+38%</td>
</tr>
<tr>
<td>Palladium ($/oz)</td>
<td>1,826.0</td>
<td>1,939.7</td>
<td>+6%</td>
</tr>
</tbody>
</table>

### Supply Chain Metrics

<table>
<thead>
<tr>
<th>Region</th>
<th>Pre-War</th>
<th>Prev. Wk</th>
<th>Curr. Wk</th>
<th>CW</th>
<th>CW - PreWar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northbound</td>
<td>8.9</td>
<td>6.1</td>
<td>4.9</td>
<td>-45%</td>
<td>-42%</td>
</tr>
<tr>
<td>Southbound</td>
<td>9.6</td>
<td>5.9</td>
<td>5.6</td>
<td>-100%</td>
<td>-6%</td>
</tr>
</tbody>
</table>

### Baltic Dry Index (Daily Avg)

<table>
<thead>
<tr>
<th></th>
<th>Pre-War</th>
<th>Prev. Wk</th>
<th>Curr. Wk</th>
<th>CW</th>
<th>CW - PreWar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>4.5</td>
<td>0.0</td>
<td>0.0</td>
<td>-100%</td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td>21.6</td>
<td>20.3</td>
<td>20.4</td>
<td>-6%</td>
<td></td>
</tr>
</tbody>
</table>

### Sanctions & Policy Actions

- UK sanctions Putin's close family and friends
- UK prohibits Russian airlines from selling UK airports landing slots
- CA sanctions more oligarchs, bans import/export of luxury goods
- NZ sanctions 27 Belarusian leaders including Pres Lukashenko
- RU cuts gas supply to Finland, prohibits business with 31 companies

### Corporate Actions in Russia Market

- Exit: 106
- Suspend operations: 21
- Curtail Access to Capital: 614
- Exit + Suspend operations + Curtail Access to Capital: 591

### Global Growth Outlook

<table>
<thead>
<tr>
<th>Region</th>
<th>Actual</th>
<th>2021</th>
<th>2022</th>
<th>Jan'22 Forecast</th>
<th>Leading FIs Pre-War</th>
<th>CW &amp; Pre-War</th>
<th>CW - PreWar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>4.7%</td>
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<td></td>
<td>4.1%</td>
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<td>2.0%</td>
<td></td>
</tr>
</tbody>
</table>

### Summary snapshot | War in Ukraine global economic impact

- Updates since 11 May:
  - UK sanctions Putin’s close family and friends
  - UK prohibits Russian airlines from selling UK airports landing slots
  - CA sanctions more oligarchs, bans import/export of luxury goods
  - NZ sanctions 27 Belarusian leaders including Pres Lukashenko
  - RU cuts gas supply to Finland, prohibits business with 31 companies

- Commodity price (actual, $)
- Global Growth Outlook
- Supply Chain Metrics
- Baltic Dry Index (Daily Avg)
- Sanctions & Policy Actions
- Corporate Actions in Russia Market

Prepared: 26 May 2022
Leading Financial Institutions predicting major decline in Russia GDP vs. World Bank Jan forecast

### GDP Growth (%), Selected Regions, 2021A – 2023F

<table>
<thead>
<tr>
<th>Region</th>
<th>Actual 2021</th>
<th>Jan 2022F</th>
<th>20 May 2022F</th>
<th>20 May 2023F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>4.7</td>
<td>-11.8</td>
<td>-15.0</td>
<td></td>
</tr>
<tr>
<td>Eurozone</td>
<td>5.3</td>
<td>-1.5</td>
<td>-10.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Global</td>
<td>3.9</td>
<td>0.0</td>
<td></td>
<td>3.3</td>
</tr>
</tbody>
</table>

Recent median GDP growth projections remain around -10%
Evolution of key commodity prices, wheat prices at new high

- Crude oil (Brent, $/bbl.)
- Natural gas – (TTF, €/MWH)
- Coal (Newcastle, $/Ton)
- Rapeseed (MATIF, €/Ton)
- Wheat (MATIF, €/bu.)
- Palladium (NYMEX, $/troy oz.)
- Nickel (LME, $/Ton)

Source: S&P Capital IQ, 23 May 22; BCG Analysis

India bans wheat export
Key sanctions and policy actions currently in place

Current sanctions & policy actions (Key examples)

- **Coordinated policy/sanctions programs**
  - Limiting SWIFT access, removing "MFN" status, sanctioning gold
  - Enforcing sanctions and export controls via global task force
  - Expelling diplomats, closing embassies/consulates, sanctioning govt officials
  - Limiting or banning energy/coal, key parts, alcohol, luxury goods, steel, etc.
  - Closing EU border crossings and ports

- **US & UK ban professional services exports, some media outlets**
- **UK sanctions Putin’s close family and friends**
- **UK prohibits Russian airlines from selling UK airports landing slots**
- **CA sanctions more oligarchs, bans import/export of luxury goods**
- **NZ sanctions 27 Belarusian leaders including President Lukashenko**

- **Bans “unfriendly” officials, Facebook and Instagram**
- **Seeks new buyers for oil and gas, demands payment in rubles rather than USD**
- **Seizes assets and luxury items, declares bankruptcy moratorium**
- **Breaks trademark compliance rules on imports**
- **Cuts gas supplies to Poland & Bulgaria**
- **Cuts gas supply to Finland, prohibits business with 31 companies**

- **China to maintain normal economic and trade relations with RU**
- **China (& RU) voted against order to halt the invasion at ICJ** in The Hague
- **China & India abstained at 25 Feb UN Security Council vote against invasion**
- **Indonesia in difficult position, as 2022 G20 host**

New

Current sanction actions by country and target

Sanction actions\(^5\) in-place

<table>
<thead>
<tr>
<th>Region</th>
<th>Sanction actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>748</td>
</tr>
<tr>
<td>US</td>
<td>1138</td>
</tr>
<tr>
<td>UK</td>
<td>963</td>
</tr>
<tr>
<td>Russia</td>
<td>0</td>
</tr>
</tbody>
</table>

Sanction targets\(^5\) / \(\Delta\) since last update

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals</td>
<td>4,801</td>
</tr>
<tr>
<td>Companies</td>
<td>435</td>
</tr>
<tr>
<td>Other entities</td>
<td>614</td>
</tr>
</tbody>
</table>

\(\Delta\) Total sanction actions, includes duplication.

Source: Government websites; Media reports; BCG analysis. Note: BCG does not provide legal or regulatory advice.
Recent developments beyond imposed sanctions

"Western" Allies

- US Secretary of State Blinken accused Russia of using food as a weapon by holding global supplies "hostage"\(^1\)
- The G-7 financial leaders agreed to provide $18.4B aid package to help Ukraine make int'l payments\(^2\)
- EU developing proposals to confiscate frozen Russian assets to pay for the reconstruction of Ukraine\(^3\)
- EU announced an action plan to speed up the transition to renewable energy and reduce dependence on Russian gas and coal\(^4\)
- US re-opens embassy in Kyiv\(^5\)
- President Biden: US to respond "militarily" to potential China military actions\(^6\)

Russia

- Russian Ministry of Foreign Affairs has proposed Parliament to discuss the potential withdrawal of Russia from WTO and WHO\(^7\)
- Russia condemns the West for triggering a global food crisis by imposing severest sanctions in modern history on Russia\(^8\)
- Russia president Putin sacks eight generals in anger at slow progress in Ukraine invasion\(^9\)
- After a long siege, Russia takes control of remaining areas of Mariupol; continues slow advance in the east of Ukraine\(^10\)

Large emerging markets

- India, second-largest global wheat producer, banned wheat exports as heat waves have damaged crops and the Ukraine conflict exacerbated global food shortages\(^11\)
- India is in talks with Russia over a deal to buy oil at discounted rates\(^12\)
- China is ramping up purchases of oil from Russia at low prices, filling the vacuum left by Western buyers\(^13\)

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Note: BCG does not provide legal or regulatory advice.
Overview of corporate actions

Company Announcements re: Russia Market per Yale School of Management tracking (24 May 2022)

<table>
<thead>
<tr>
<th></th>
<th>Consumer</th>
<th>Energy</th>
<th>Financial Institutions¹</th>
<th>Healthcare</th>
<th>Industrial Goods²</th>
<th>Tech, Media, Telecomm</th>
<th>Professional Services</th>
<th>Others³</th>
</tr>
</thead>
<tbody>
<tr>
<td># Companies</td>
<td>252</td>
<td>50</td>
<td>57</td>
<td>47</td>
<td>226</td>
<td>148</td>
<td>50</td>
<td>23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Exit</th>
<th>Suspend Operations</th>
<th>Halt Shipments/ Supply</th>
<th>Curtail access to capital</th>
<th>Suspend new investments/partnerships</th>
<th>Remain in Russia with significant exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer</td>
<td>8%</td>
<td>16%</td>
<td>9%</td>
<td>19%</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>Energy</td>
<td>52%</td>
<td>26%</td>
<td>37%</td>
<td>9%</td>
<td>30%</td>
<td>51%</td>
</tr>
<tr>
<td>Financial Institutions¹</td>
<td>8%</td>
<td>30%</td>
<td>33%</td>
<td>43%</td>
<td>12%</td>
<td>18%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>8%</td>
<td>37%</td>
<td>9%</td>
<td>20%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Industrial Goods²</td>
<td>11%</td>
<td>49%</td>
<td>4%</td>
<td>13%</td>
<td>8%</td>
<td>2%</td>
</tr>
<tr>
<td>Tech, Media, Telecomm</td>
<td>34%</td>
<td>40%</td>
<td>6%</td>
<td>10%</td>
<td>2%</td>
<td>17%</td>
</tr>
<tr>
<td>Professional Services</td>
<td>22%</td>
<td>39%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Others³</td>
<td>22%</td>
<td>39%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
</tr>
</tbody>
</table>

1. Incl. Banks, Insurance & Investment companies; 2. Incl. IG, Infrastructure, Manufacturing; 3. Inc. Private Equity & Principal Investors, Insurance, Public Sector, and others. 4. Definitions: Exit (Includes Complete / Partial: Cease operations, divestment, discontinue, leave and withdraw business from Russia). Suspend Operations (Includes Complete / Partial: Suspension: Activities, JV, sale points, manufacture in Russia). Halt Shipments/Supply (Temporarily stop / freeze sales and transportation of goods/ services in, to and from Russia). Curtail access to capital (Financial Institutions(FI) restrict, reduce, cut, suspend, Russian access to capital provided by FIs). Suspend New Investments or Partnerships (Stop any new investments in Russia and suspend current sponsorships for Russian Athletes). Source: Yale School of Management; Press search; BCG analysis.
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