

War in Ukraine: Perspective on Refugee Crisis and Global Update

BCG Global Advantage & Social Impact Practice Areas

Prepared: 27 April 2022

The war in Ukraine is above all a political and humanitarian crisis...

Russia's invasion of Ukraine has led to a serious **humanitarian crisis** on many dimensions, from refugees to global food risks. BCG condemns this war and the violence that is killing, wounding, and disrupting the lives of so many people.

It is the duty of political, societal, and business leaders to navigate through this crisis. **The intent of this** document is to inform discussions and decisions on the <u>global refugee impact</u> of the war in Ukraine.

The top priority in moments like these remains the **safety and security of people**. Corporates have already taken decisive action to respond to the short-term crisis. However, **on-going attention is needed to support displaced Ukrainians and others affected**, as well to address long-term structural challenges.

The situation surrounding Ukraine is dynamic and rapidly evolving - this document also shares the **global economic impact** and reflects information and analysis as of **27 April 2022.** It is not intended as a prediction of future events and is shared only as a resource for BCG and client conversations.



REFUGEE CRISIS

Russia's invasion of Ukraine is causing one of the largest humanitarian crises since World War II, triggering a mass mobilization of 5 million refugees. Neighboring European countries are straining to provide for this population. Depending on the war's duration, intensity, and geographic scope, the total number of refugees could surpass 8 million.

The majority of Ukrainian refugees are women traveling with children and elders. Many are highly educated, can work and study remotely, have access to Ukrainian banks, and share a cultural and linguistic affinity with Slavic nations. Most refugees are also officially registered.

So far, the humanitarian response is effectively addressing refugees' most pressing needs. But in the coming months, host nations will be challenged to meet refugees' longer-term, structural needs, such as employment, financial assistance, health care and childcare, housing, schooling, and language training.

Companies face a moment of truth in terms of authentically fulfilling their societal purposes. Companies should begin moving decisively to work with governments and NGOs to address refugees' structural needs. Indeed, employees, investors, regulators, and stakeholders are increasingly counting on this corporate engagement.

Perspective on Refugee Crisis

- > Refugee crisis & journey
- > Detail on corporate action
- > Implications for leaders

Global economic impact of the war in Ukraine

Summary | Large-scale refugee crisis requires coordinated corporate action

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Flows

~5M Ukrainian refugees already entered Europe, end state uncertain

Characteristics

The crisis is characterized by five factors: (1) unique demographics; (2) connected through social media & remote work; (3) culturally close to neighboring countries; (4) traveling short distances; (5) minimum immigration constraints

Refugee groups affected differently; **55-70**% are most vulnerable **mothers with children, large families & elders**

Needs

As refugees move along their journey, they face **structural needs that pose a significant challenge in the medium- and long-term**

Corporate action

Corporates face another moment of truth with an opportunity to play a role in humanitarian crisis support, actioning their purpose in support of stakeholders and society

Corporates have taken decisive action to respond to the short-term crisis, now can shift focus to making a difference in **addressing long-term structural challenges**

Deep-dives on Healthcare, Housing, Employment and Childcare & Education provide a **blueprint for corporate leaders** to identify areas of short- and long-term action that align with pressing refugee needs

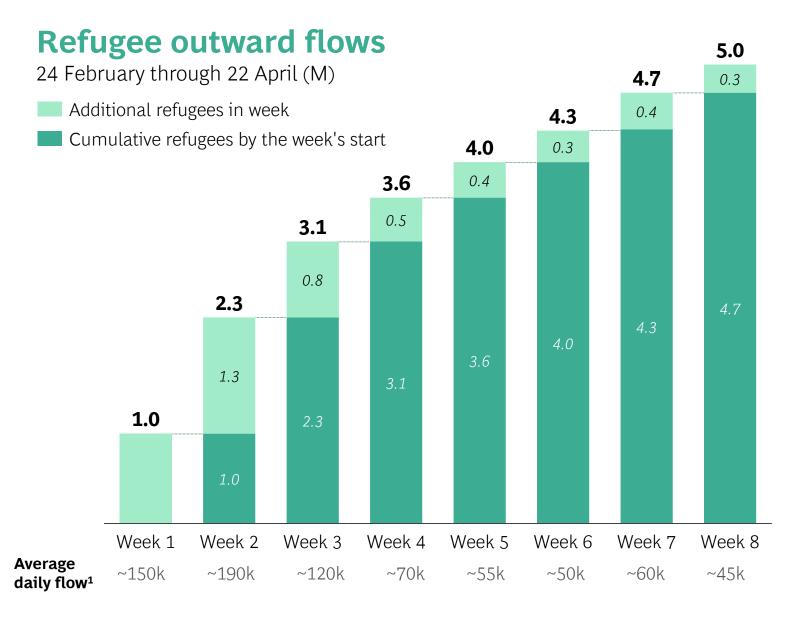
Implications

Opportunities for corporate leaders to **maximize support effectiveness** through short-term response; structural, long-term action; and communication

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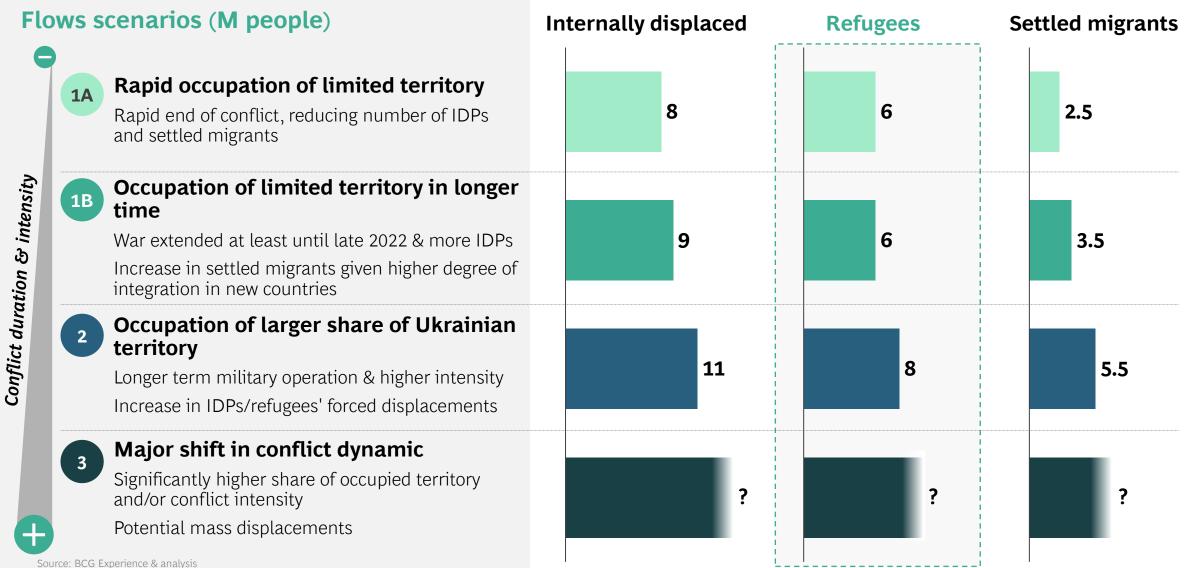
^{1.} Average number of people leaving Ukraine per day in that week. Source: BCG experience & analysis.

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.

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

- > ~56% entered the Schengen Area through Poland and 18% through Hungary
- > All other bordering countries also facing capacity constraints
- > ~65% settling down in Central Eastern Europe
- > ~35% already flowing to other European countries
- > Long-term flows could add significant pressure on Western European countries
- > Limited flows to rest of the world, with potential to increase long-term intake
- > Backward flows taking place, but uncertainty over permanent returns

Flows | Crisis could worsen to +6-8M refugees or even more, depending on conflict escalation, geographic reach, and duration



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

Characteristics | The Ukrainian refugee crisis is characterized by five factors



Demographics

Predominantly women with kids

Majority of **men left at home** and might join later

Proportion of urban population with high education

Details in next slide



Connectivity

Broad use of **social media**, especially Telegram

Remote education and working possible

Remote access to Ukrainian **banking** system



Culture

Ukraine's close socio-linguistics and cultural ties to Europe

Minimum language differences with Slavic countries



Distance

Short **physical** journey

Temporary nature still dominant due to close distance

Expectation to return



Immigration

Minimal irregular immigration, most refugees controlled and registered

Low number of unaccompanied minors so far

Low human**traffic-**related risks

Characteristics reflect the current situation, but may evolve as crisis unfolds further

Characteristics | Refugee groups affected differently; 55-70% are most vulnerable mothers with children, large families, and elders

Five major refugee 'personas' identified on the ground







First refugee wave leveraging family network

Urban, educated & foreign language speaking

Financial buffer available



Families joining members working in host country

Financial buffer available

Strong local network and better language knowledge

Accommodation likely organized in advance

High probability of **staying** longer



Urban families in the later waves, **men staying** in UA

Groups of 2-3 mothers with kids & extended family

Looking to work if **childcare** needs resolved

Require schooling, medical care & assistance

Depending on war evolution, partners might join



Larger families with 4-5 or more kids

Weaker economic position before the war, reliant on aid

No clear plan, staying longer in transit & in governmental shelters

Might return to UA if situation is not significantly better in host country



Elders, often with special conditions, last to leave

Couples or singles travel in groups of 2-3

Might leave due to required medical assistance

Less stable financial buffer. housing and financial aid required in short term

Limited self-sufficiency. care often required

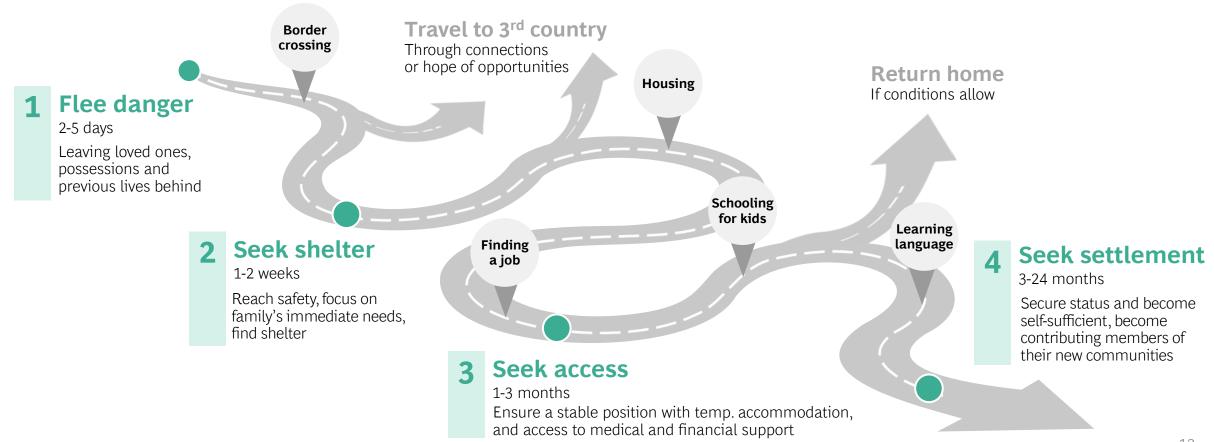
Est. share ~5-10% ~5-10% ~25-30% ~40-45% ~10-15%

Needs | As refugees move along their journey, they face structural needs that pose a significant challenge in the medium- and long-term

So far, effective mobilization & response to **shorter-term** needs

>

Challenge to address more **structural**, **longer-term needs** (e.g., integration in job market, health & education systems)



Needs | Nature & priority of support evolve along the refugee journey

		Shorter-term	needs	Structural, longer-term needs				
Priority High	of support Mid Low	1 Flee danger	2 Seek shelter	3 Seek access	4 Seek settlement			
	Humanitarian assistance & info	Humanitarian basics, flee information & security	Shelter information, food, monitoring & protection					
(4)	Administration & legal status	Border crossing support	Travel docs. & registration	Seeking protection or asylum	Immigration			
(\$)	Financial aid & funding	Funds for free humanitarian aid and needs coverage	Funds for free humanitarian aid and needs coverage	Cash support or relief	Access to financial system			
*	Healthcare	Emergency assistance	Emergency assistance	Access to health system	Social security & insurance			
	Cultural integration		Minimizing language barriers & translation	Language & ensuring community support	Community integration and perception management			
	Housing		Shelters	Temporary accommodation search	Long-term housing search			
	Employment			Short term or temporary employment	Upskilling & long-term employment matching			
<u></u>	Childcare & education			Daycare and continuity of home system education	Education system access & integration			

By now, most refugees seeking mid-term access and settlement, newcomers will require short-term assistance

Perspective on Refugee Crisis

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Global economic impact of the war in Ukraine





Many impacted stakeholders will remember your actions for decades



Companies have an **ability and opportunity to lead**, contributing authentically as part of **strategic ESG agendas**



Talent pool, investors, regulators & other stakeholders have increasing expectations of corporate engagement



Leaders should **create stability and tap into opportunity** for positive business impact
where relevant across markets and needs

Five main areas for corporate support identified along the refugee journey

Evolution of medium and high priority needs along refugee journey

Shorter-term needs				Structural,		Corporates' capacity					
1	Flee danger	2 Seek shelter			3 Seek access 4 Seek settlement				to support alongside NGOs & governments		
	Į.	Humanitari & information	an assistance on						Low		
	(4)	Administrat	ion & legal status						Low		
	(9)	Financial a	aid & funding						High		
	*	Healthcare							High		
					Cultural integration			0	Medium		
					Housing				High		
					‡ <u>@</u> *	Employ	ment		High		
	Priority areas fo	r corporate su	pport		<u> </u>	Childca	re & education		High		

Corporates have taken immediate action and can make a difference tackling structural, longer-term challenges through strategic, scalable efforts

EXAMPLES – NON-EXHAUSTIVE



Financial aid & funding



Healthcare



Housing



Employment



Childcare & education

Numerous
international
companies such
as Ikea donated
to cover critical
humanitarian
relief

Pharmaceutical companies such as Pfizer, Merck, Roche and others donated free medicines

PepsiCo transformed offices and warehouses into **shelters**

Vodafone offered flexible working models & relocation support

Polish education company Polylino offers free **digital schoolbooks** in Ukrainian

Medical providers
Medicover and Luxmed
offered free medical
assistance

Hilton secured free **short-term housing** for 1M hotel nights

Marks & Spencer and Aldi made specific commitments to hire thousands of Ukrainians Ukrainian media company
MEGOGO supported the
launch of **a digital kindergarten** for
refugee children

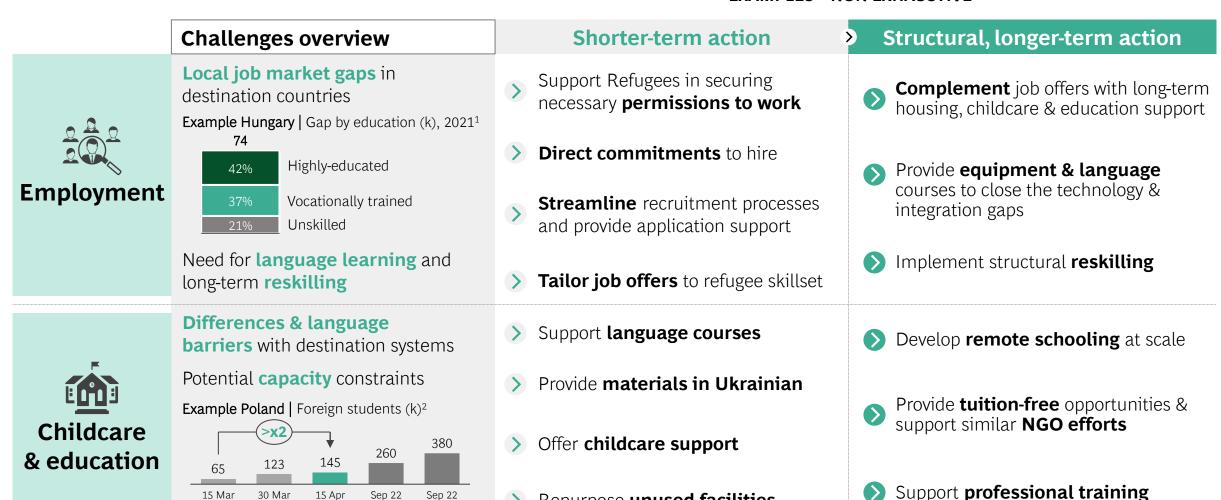
Potential areas for action identified as a blueprint for corporate leaders (I/II)

EXAMPLES – NON-EXHAUSTIVE

		Challenges overview	Shorter-term action	Structural, longer-term action		
		Language & admin barriers Potential HC capacity constraints	Finance and support emergency medical services	Support mental health for employees		
		Mental health & immunization challenges	> Provide information in Ukrainian	Establish digital health platforms and support telemedicine		
	Healthcare	1/3 Refugees experience mental health issues ¹	Facilitate access to free medical	Support HC professionals training		
		of Ukrainians fully COVID vaccinated ²	services, medicines & devices	Support vaccination campaigns		
		Information asymmetry and housing market capacity constraints	Convert spare corporate or office spaces	Offer subsidized long-term housing for employees		
	Housing	Potential bias against refugees in the housing market	Include free or subsidized temporary housing with jobs	Promote innovative construction to expand capacity (e.g., modular		
		Potential concentration in disconnected/rural areas	> Join & consolidate marketplaces	housing)		

Potential areas for action identified as a blueprint for corporate leaders (II/II)

EXAMPLES – NON-EXHAUSTIVE



Repurpose unused facilities

Sep 22

stretch

Sep 22

30 Mar

2022

2022

15 Apr

2022

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Key opportunities for corporate leaders to maximize support effectiveness

Short-term response

- Care for your employees by ensuring workplace safety, restructuring for longevity as needed, and reskilling and accelerating hiring where feasible
- **Support your broader network**, including customers & suppliers as possible & appropriate
- Prioritize & allocate resources to immediate response and humanitarian needs relief

Structural, long-term action

- Seek authentic ways to contribute that are aligned with your purpose & capabilities
- **Join existing support ecosystems**, partner with relevant NGOs and team with governments in your location(s)
 - Support refugee structural needs in Healthcare, Housing, Employment, Childcare & education; broader humanitarian implications; or eventual need to rebuild
- Where possible, **seek & scale solutions that create value** for refugees & your business

Communicate

- **Communicate actions aligned with your purpose** to engage your people and strengthen positioning as a social impact leader
- **Incorporate your approach into your ESG narrative** to demonstrate action on material ESG issues, including "S" or humanitarian components, as part of integrated ESG reporting

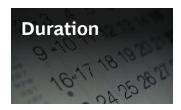
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War in Ukraine evolves along several dimensions – various scenarios possible

Interrelated dimensions



Geographic scope & materiality

Sectoral scope & materiality

Narrower impact







Russia intensifies siege of Mariupol and bombs Odessa

~100K refugees are in process to resettle in USA & Canada

Breadth & depth of punitive actions on Russia continue to increase – e.g., Alcohol, Wood, Iron or Steel banned by UK, Japan, etc.

Global Growth Outlook GDP Forecasts¹ World Bank Leading FIs 2021 2022 2022 13 Apr – 22 Apr '22 Jan'22 Actual **Forecasts Forecast** Median Minimum Russia 4.7% 2.4% -9.85% -15.0% 4.2% 2.8% 2.4% Euro Zone 5.3% 4.1% 3.5% 3.3% Global 3.9%

Commodity Prices ⁴									
Commodity price (actual, \$)									
Commodity	Jan 3 '22	Apr 21 '22	Change						
Crude Oil (\$/bbl)	79.0	108.0	+37%						
Gas (\$/MWh)	80.4	100.1	+24%						
Coal (\$/t)	157.5	331.1	+110%						
Wheat (€/bu)	240.0	351.8	+47%						
Rapeseed (€ /t)	728.5	855.3	+17%						
Nickel (\$/t)	20,430.0	33,765.0	+65%						
Palladium (\$/oz)	1,826.0	2,420.2	+33%						

Supply Chain Metrics														
Deep Sea Cargo Bosporus Straits Transits (Avg. #/day) ²						Deep Sea Cargo Port Calls (Avg. #/day) ²			Baltic Dry Index (Daily Avg) ³					
30//		Prev. Wk (4/6-4/12)	Curr. Wk (4/13- 4/19)	ΔCW- PreWar		Pre-War (Nov '21)	Prev. Wk (4/7-4/13)	Curr. Wk (4/14- 4/20)	ΔCW- PreWar	N		Prev. Wk (4/8-4/14)	(4/15	∆CW- PreWar
Northbound Southbound	8.9 9.6	5.4 7.0	5.6 5.6	-37% -42%	Ukraine Russia	4.5 21.6	0.0 19.1	0.4 20.4	-91% -6%	BDI ³	2780	2065	2165	-22%

Sanctions & Policy Actions

Updates since 14 April

- · CA sanctions Russian Central Bank Governor
- JP bans imports of alcohol, wood, key machine parts
- UK bans imports of iron and steel
- Russia declares bankruptcy moratorium to protect companies

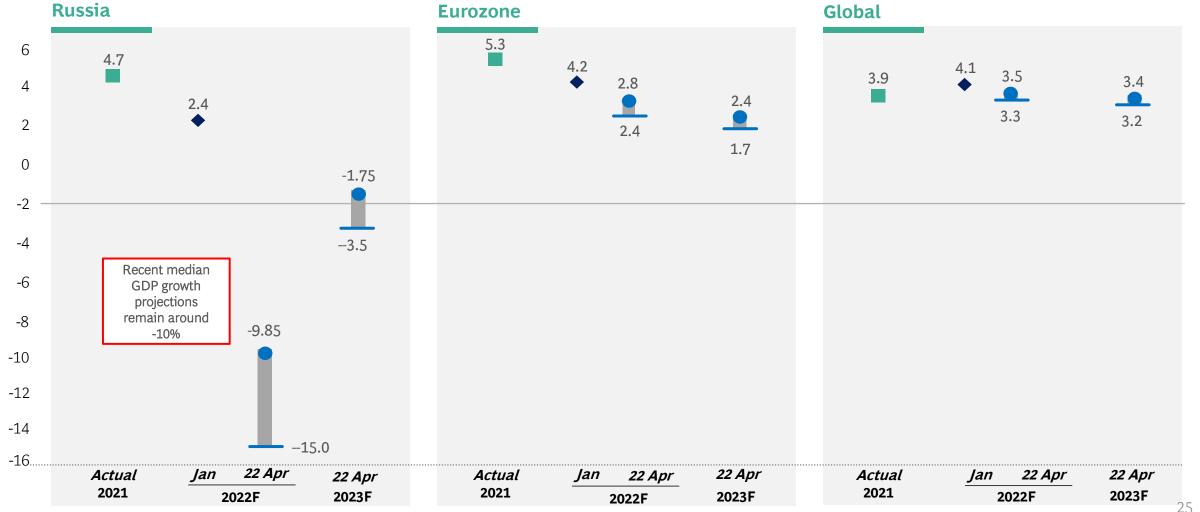
Cumulative # WW Sanctions in-place⁵ (Δ since previous) (+553) (+84) 3,748 Individuals Companies Other entities

Corporate Actions in Russia Market										
Based on sample of	+830 companies ⁶									
	(+122)				The Later of the L					
(+10)	386	(+6)	(+5)	(+21)	(+80)					
72	300	80	21	103	174					
Exit	Suspend operations	Halt Shippment /Supply	Curtail Access to Capital	Suspend New Investment / Partnership	Remain in Russia with significant exposure					

^{1.} GDP forecasts from World Bank and FIs per Bloomberg database (5-16 FIs per forecast period) 2. Deep Sea Cargo: oil tankers MR & up, bulkcarriers Panamax & up, containerships 3,000+ TEU, VLGCs, LNG carriers 60,000+ cbm & PCTCs 6,000+ ceu. Clarksons Research have retrospectively adjusted the raw data for Deep Sea Cargo Port Calls. Clarksons Research (https://www.clarksons.com/) Clarksons Research Services Limited ("Clarksons Research 2021. All rights in and to Clarksons Research services, information and data ("Information") are reserved to and owned by Clarksons Research. Clarksons Research, its group companies and licensors accept no liability for any errors or omissions in any Information or for any loss or damage howsoever arising. No party may rely on any Information contained in this communication. Please also see the disclaimer at https://www.clarksons.net/Portal/disclaimer, which also applies. No further distribution of any Information is permitted without Clarksons Research 2021. All rights in and to Clarksons Res

Leading Financial Institutions predicting major decline in Russia GDP vs. World Bank Jan forecast

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

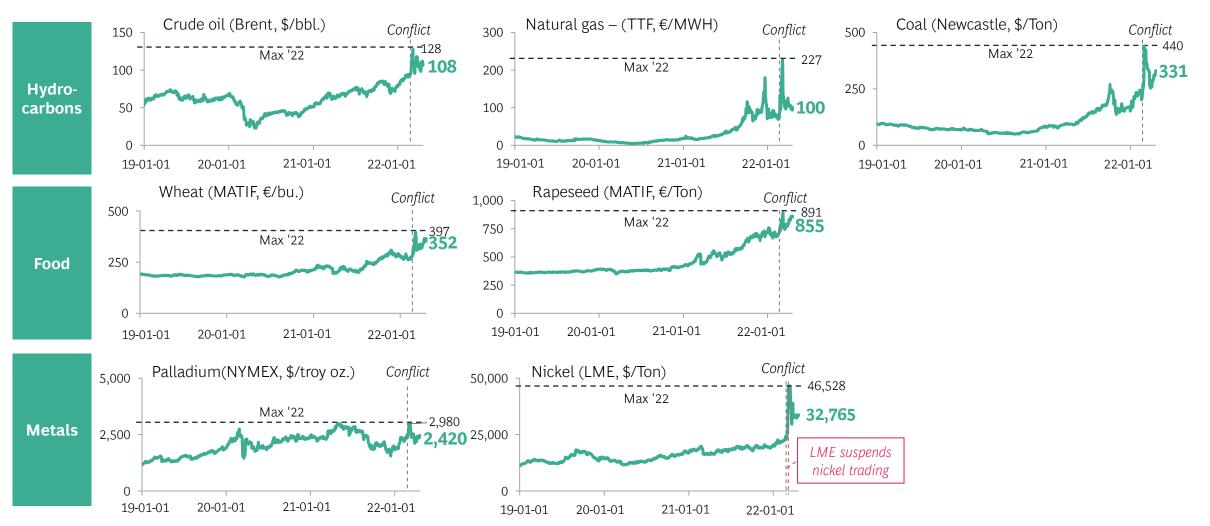


Note: 13 April - 22 April forecast of 11 FIs for Russia, 16 FIs for Eurozone, 5 FIs for Global Sources: World Bank; Bloomberg; BCG Analysis

◆ World Bank (Jan 2022) 2021 Actual

Median/Min, Leading FIs (Apr 2022)

Inflation of key commodities, with recent price correction

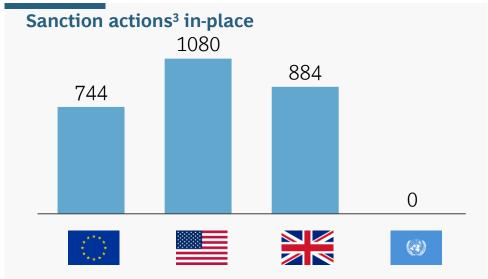


Key sanctions and policy actions currently in place

Current sanctions & policy actions (Key examples)

- Coordinated policy/sanctions programs
 - Limiting SWIFT access, removing "MFN" status, sanctioning gold¹
 - Imposing/enforcing sanctions and export controls via global task force
 - Expelling diplomats, closing embassies/consulates
 - Limiting or banning energy and coal imports
 - Closing EU border crossings and ports
 - CA sanctions Russian Central Bank Governor
- JP bans imports of alcohol, wood, key machine parts
- UK bans imports of iron and steel
- 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
- Breaks trademark compliance rules on imports
- Declares bankruptcy moratorium to protect companies
- Have asked for hostilities to cease
 - China government statements focus on peacemaking, mediation
 - China (& RU) voted against motion to condemn at ICJ² in The Hague
 - China & India abstained at 25 Feb UN Security Council vote against invasion
 - Indonesia in difficult position, as 2022 G20 host

Current sanction actions by country and target







"Western" Allies

Russia

1. Intended to prevent selling gold reserves to finance war 2. International Court of Justice; Source: Government websites; Media reports; BCG analysis. Note: BCG does not provide legal or regulatory advice 3. Total sanction actions, includes duplication. Source: www.correctiv.org

Recent developments beyond imposed sanctions



Germany allows **heavy weaponry exports** to Ukraine¹

US president announced a new program to welcome **up to 100,000 Ukrainian refugees**²

Finland's parliament has started the debate on **NATO** membership application³

EU is considering the use of frozen Russian assets **to finance the reconstruction of Ukraine**⁴

EU is working to secure oil supply from 3rd countries **as** it considers a ban on Russian oil⁵

US/UK/Canada finance ministers walk out of G20 and World Bank-IMF meetings in condemnation of Russia⁶

G7 in partnership with international community pledged an additional \$24B in aid to Ukraine⁷



Russia's foreign minister claims NATO engaged in the "essence of a proxy war"⁸

Russia warns Poland of **potential gas supply cuts**⁹

The Russian army is **closing in on Mariupol** as Ukrainian forces are holding out¹⁰

Russia begins **bombing of Odessa**¹¹

Russia **refuses ceasefire for Orthodox Easter** holydays¹²

Russia's Black **Sea flagship sunk after sustaining heavy damage**, a first in Europe since WWII¹³

Russia asked for Brazil's support to **prevent its expulsion from IMF and World Bank**¹⁴



Large emerging markets

South-African president **urged for an end to the war, citing concerns over food security** since Ukraine is a major food exporter to Africa¹⁵

India **scaled up wheat exports** to make up for war related shortages and avert a global food crisis¹⁶

China state-run media criticizes US and NATO for **cheering Ukraine up to fight a 10-year** war¹⁷

Brazil's Economy Minister condemns war in Ukraine **but refuses to take economic** sanctions on Russia¹⁸

Teams across BCG are monitoring impact

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