



# Scenario planning for geopolitical risks

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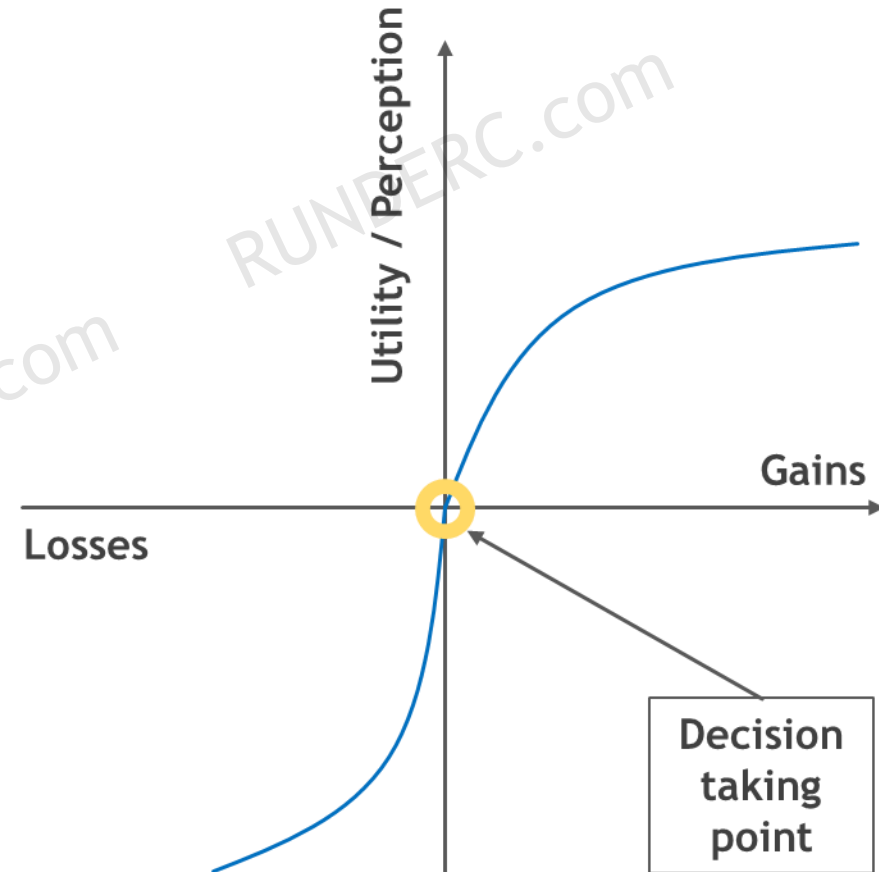
# Prospect Theory & Loss Aversion trap

Prospect theory or loss aversion states that real or potential loss is perceived by individuals more severe than a gain

The psychological effects of experiencing a loss or even facing the possibility of a loss might even induce risk-taking behavior that could make **realized losses even more likely or more severe**

During 2023 business planning process it is important to consider different macroeconomic and geopolitical factors. The most common risk management tools for the task shall be:

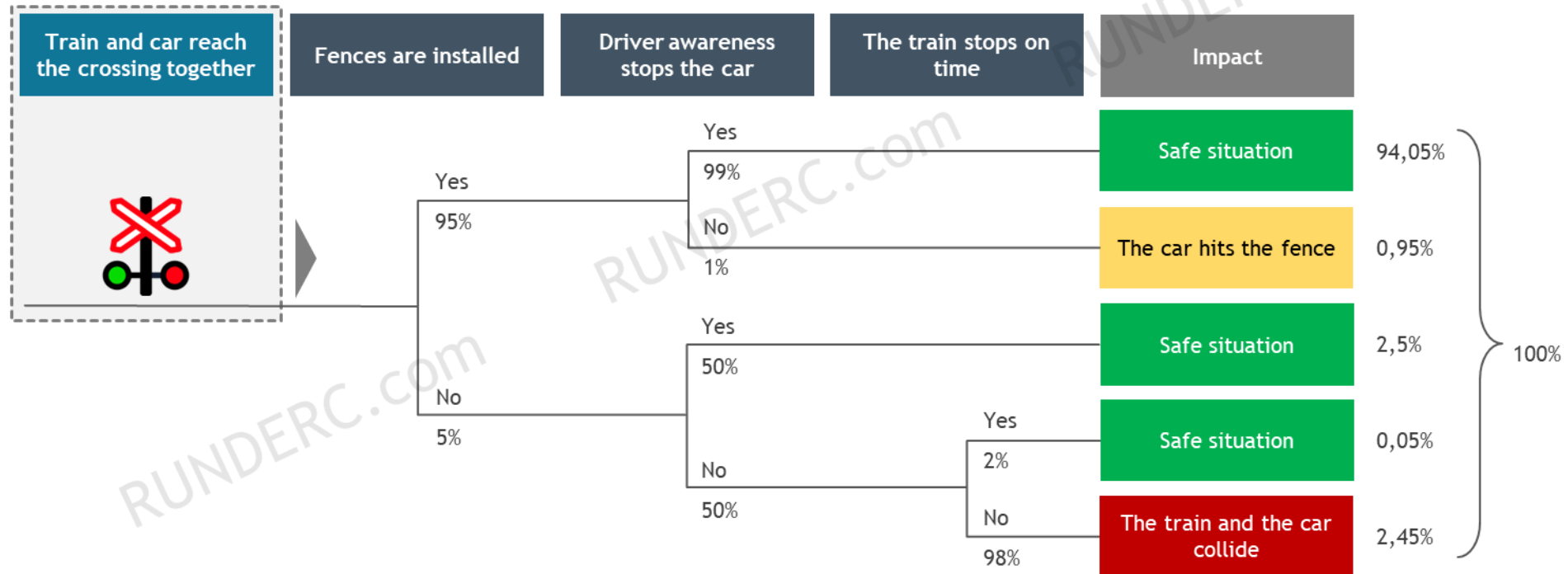
- *Event tree analysis*
- *Scenario analysis*



# Event tree analysis

**Event tree analysis** is a graphical technique that represents mutually exclusive sequences of events that can occur after an initial event, depending on whether or not various systems designed to modify the consequences are in place

An event tree can be **quantified** to provide probabilities of different possible outcomes



# Scenario analysis

**Scenario analysis** involves identifying one or more risk scenarios, detailing the key assumptions (conditions or drivers) that determine the magnitude of the impact, and assessing the impact on the key target

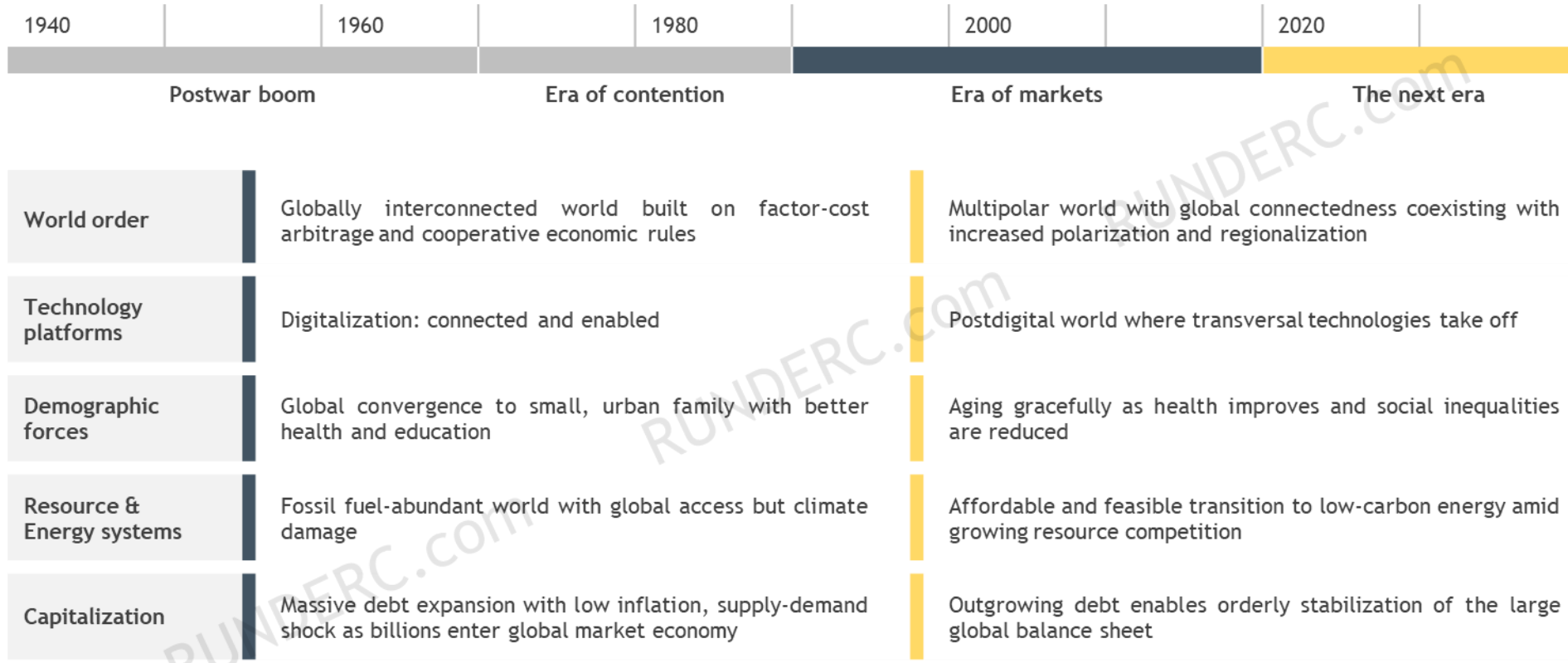
In the table below, a **scenario analysis** of the impact of various risks on the financial indicator of earnings before interest and taxes (EBIT) of an energy sector company is carried out

No	Scenario description	Assumption details	Impact on EBIT, mUSD
1	Rising inflation and the impact on the competitive environment	<ul style="list-style-type: none"> <li>Reduction of sales volume by 15% and increase of purchase prices by 20% within 9m</li> <li>Recovery takes another 9m</li> </ul>	(-) 500
2	Falling prices for natural gas	<ul style="list-style-type: none"> <li>Price decrease of USD 5,0 per million BTU over 12m</li> </ul>	(-) 150
3	Crude oil price drop	<ul style="list-style-type: none"> <li>50% price drop within 3m</li> </ul>	(-) 15
4	Substantial technological changes	<ul style="list-style-type: none"> <li>Reduction of sales volume by 15%</li> <li>15% sale price reduction</li> <li>Reduction of R&amp;D costs by mUSD 2,0</li> </ul>	(-) 275
5	Competitive pressure increase	<ul style="list-style-type: none"> <li>10% sale price reduction within 24m</li> </ul>	(-) 200
6	Supply chain disruption	<ul style="list-style-type: none"> <li>Reduction of sales volume by 10% within 6m</li> </ul>	(-) 175

Scenarios can be developed jointly by risk owners and risk managers. During the assessment of the impact of the scenarios, the driving factors are determined, followed by the calibration of the assumptions and the assessment of the **impact on the key performance indicators of the company**



# The new era changing domains



Source: McKinsey Global Institute analysis



# Example of open-source indicators & scenario input

Turner and Rogers Urges President Biden to Take Action at the Russia-Ukraine Border –  
<https://turner.house.gov/press-releases?ID=D6ACFF16-4172-4E0A-A083-D9BE0A764126>

Congress of the United States  
 Washington, DC 20515  
 November 5, 2021

President Joseph R. Biden, Jr.  
 The White House  
 1600 Pennsylvania Avenue, N.W.  
 Washington, D.C. 20500

Dear President Biden,

With the recent massing of Russian forces on the Ukrainian border, we urge your administration to take immediate and swift action to provide support to Ukraine in the form of intelligence and weapons. We also urge your administration to deploy a U.S. military presence in the Black Sea to deter a Russian invasion.

According to open-source reporting, Russia is once again massing a sizeable military force of ground troops, armored vehicles, tanks, and artillery on Ukraine's doorstep. Russia's behavior is becoming more aggressive, and it has intensified rhetoric critical of Ukraine on topics ranging from Ukraine's military modernization and military partnerships to Ukraine's admission into NATO. Although Russia's intentions are uncertain, the presence of Russia's elite 1st Guard Tanks Army lends credibility to concerns that Russia is planning additional incursions into Ukraine territory.

Your administration cannot ignore Russia's continued threat to international law and Ukraine's territorial sovereignty.

In September, your administration committed \$60 million in military aid to Ukraine due to a "major increase in Russian military activity along its border." Since then, Russia's apparent military activity has continued to increase in intensity. Therefore, it is imperative that the U.S. fulfill its commitment to a key partner by increasing lethal aid to Ukraine in order to deter and repel a renewed Russian incursion. Additionally, we urge you to immediately consider an appropriate U.S. military presence and posture in the region and to initiate appropriate intelligence sharing activities between the U.S. and Ukraine to prevent the situation from escalating further.

Thank you for your attention to this matter of crucial importance.

## Fitch Ratings

Russia Issuer Default Rating update on 03 Dec, 2021:

...The reported build-up of Russian troops along the Ukrainian border **underscores geopolitical and sanctions risk.**

While such a move may be designed to increase international policy leverage, the strategic calculation for an actual invasion remains unclear, and our base case remains **this does not escalate into an outright war with Ukraine.**



Article on 03 Dec, 2021:

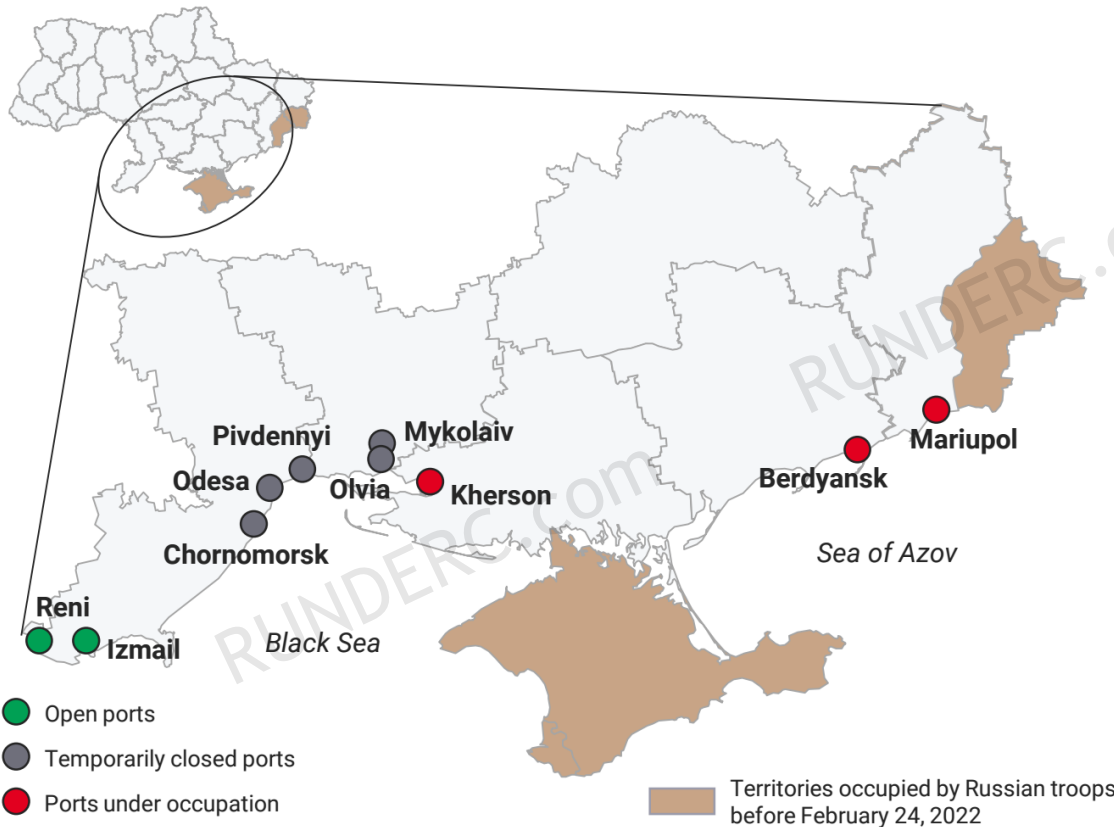
**"Possible attack in January or February 2022"**



# Agriculture export case (1/2)



Ukraine is the breadbasket of Europe, providing more than 40% of world exports of sunflower oil, 16% of corn exports, almost 10% of wheat and barley exports



### Main risks for shipping:

- Naval blockade established by the Russian navy in Q1-Q2 2022:
  - inability to enter the ports and load the vessels (mining of the sea area, etc.)
  - risk of shelling of merchant vessels
  - risk of pirate attacks
- Damage to logistics infrastructure
- Limited alternative ways for export (e.g. railroad, trucks)



More details in the article:  
<https://runderc.com/home/f/why-russias-military-invasion-could-lead-to-social-unrest>

# Agriculture export case (2/2)



Europe's 2022 drought is the worst in 500 years as two-thirds of the continent is under distress  
In France, for instance, the share of crops in excellent and good condition is now 50% (91% in August 2021)



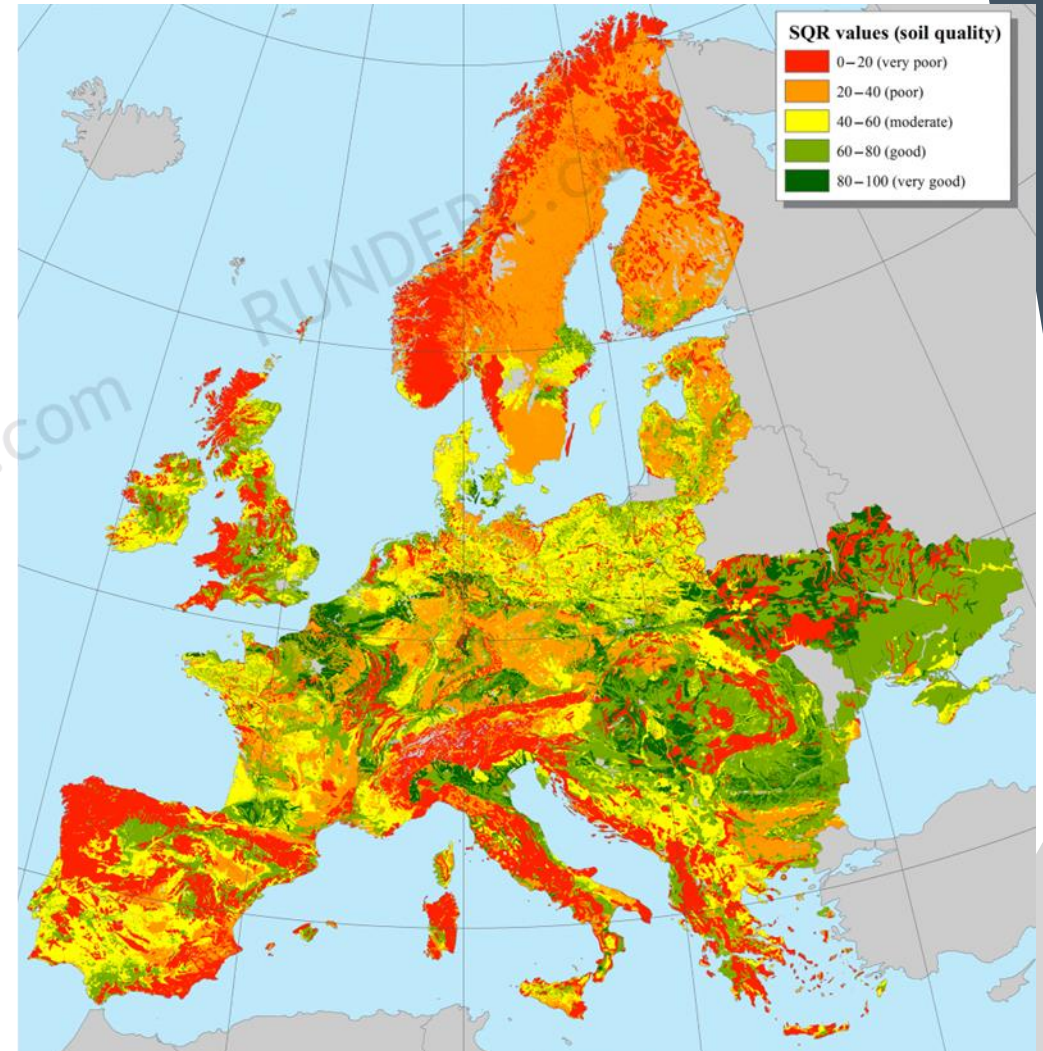
The countries of sub-Saharan Africa, the Middle East, Bangladesh, and Pakistan buy the major share of wheat in Ukraine. Rising prices for wheat and bread, respectively, were considered one of the main drivers of the Arab Spring



In July 2022, Ukraine and Russia signed two separate UN-backed deals with Turkey to allow the export of grain from Ukraine's Black Sea ports - Odesa, Chornomorsk and Pivdennyi under the supervision of Ukraine, the UN and Turkey



In July 2022, Ukrainian companies started export of grain, corn and sunflower oil by the means of railways. In July, Ukrainian Railways transported 917k tons of agricultural products, in the first half of August - 808k tons already

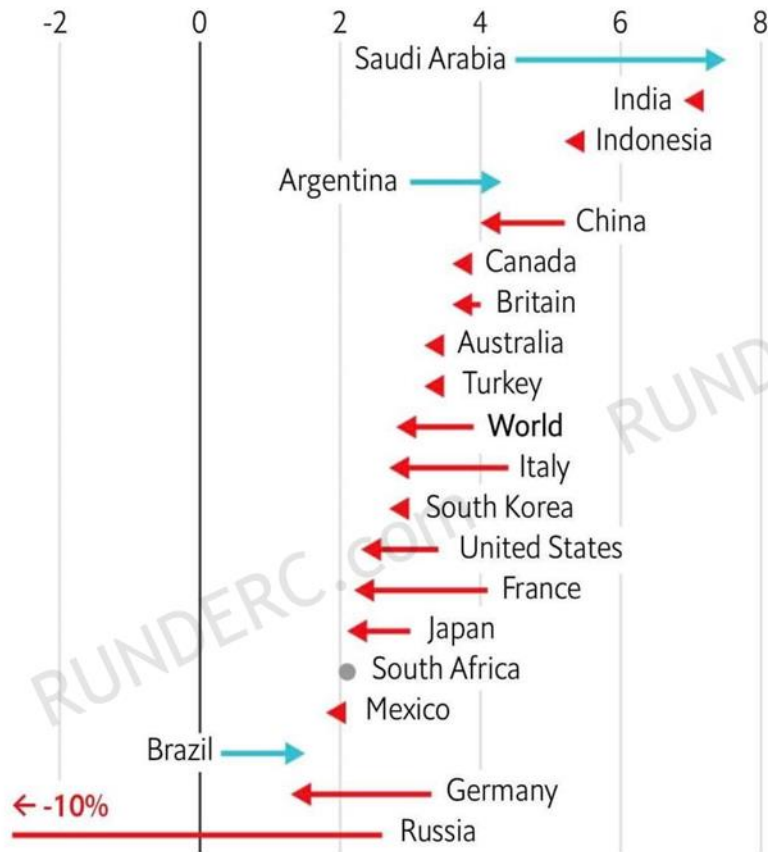




# GDP forecasts 2022, G20 economies

Forecast made in: Feb 2022 → Jul 2022

Decrease ← Increase →



Source: Economist Intelligence Unit

