



Executive
Perspectives

War in Ukraine: Perspective on Future Scenarios

**BCG Global Advantage and Corporate Finance & Strategy
Practice Areas**

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Introduction to this document

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

Russia's invasion of Ukraine has led to a serious **humanitarian crisis**. BCG condemns this attack and the violence that is killing, wounding, and displacing so many people.

The top priority in moments like these must be the **safety and security of people**. Corporations, governments, and not-for-profit organizations should focus on supporting the people in Ukraine, Russia, Europe, and globally affected (physically and mentally).

It is the duty of political, societal, and business leaders to navigate through this crisis. **The objective of this document is to provide an update about the global economic impact of the War in Ukraine; and to enable thoughtful and expansive strategic discussions about the medium term, using potential future scenarios to help build resilience and strengthen plans, beyond the near-term crisis.**

The situation surrounding Ukraine is dynamic and rapidly evolving - this document reflects information and analysis as of **16 May 2022**. It is not intended as a prediction of future events and is shared only as a resource for BCG and client conversations.

BCG Executive Perspectives

IN THIS DOCUMENT

FUTURE SCENARIOS

Navigating the global business landscape was already extremely challenging before Russia invaded Ukraine. Now, business leaders must cope with new supply shocks, deepening economic uncertainty, complex sanctions, and shifting geopolitics. The war's duration, scope, and outcome are all unknown.

How can organizations remain resilient in such a volatile environment? One key is to consider a range of scenarios on how the future could unfold. Here are four plausible scenarios that can help companies prepare for what comes next:

- **Back to the Future.** Major powers see the benefits of global cooperation and minimizing military conflict.
- **Tripolar Competition.** Three blocs coexist, each with its own norms and institutions. North America and the EU lead a Western bloc and China and Russia an Eastern bloc. A “nonaligned” bloc consists of nations seeking a third path.
- **Limited Stalemate.** Conflict in Ukraine and other non-NATO former Soviet republics is chronic. China keeps its distance from Russia. Western-inspired global institutions struggle to remain relevant.
- **Global Escalation.** Economic and military confrontations erupt in multiple locations, redefining trade flows. Economic and military power supplants global institutions.

Organizations should consider these scenarios when pressure testing business plans. They should be ready to respond, whatever the outcome.

War in Ukraine: Global Update and Future Scenarios

AGENDA

Perspective on Future Scenarios

- Uncertainties & 2030 scenarios
- Implications for businesses
- Key takeaways for leaders

Summary | Scenarios help build strategic resilience amidst global uncertainties

The Ukraine conflict is a **crisis that builds upon a range of other challenges**, forcing leaders to build resilience in the face of many **geopolitical & societal uncertainties**

Leaders should challenge themselves to **look beyond potential Ukraine war evolutions**, exploring the way other uncertainties may unfold including geopolitical relations, trade & supply chains, financial stability, energy & climate, technology, and more

This document details a set of **four contrasting stretched-yet-plausible scenarios for 2030** that can help with that exercise:

- **Back to the future** | Major powers see benefits in global cooperation and minimized military conflicts
- **Tripolar competition** | Western (primarily North America and EU) and Eastern (primarily China & Russia) blocs co-exist in new balance, while "non-aligned" nations seek 3rd path; norms and institutions differ within and among blocs
- **Limited stalemate** | Chronic conflict in Ukraine & elsewhere in non-NATO former Soviet republics; China keeps distance from Russia; economies survive sanction shock; West-inspired institutions struggle for relevance
- **Global escalation** | Economic & military confrontations erupt in multiple locations, disrupting trade patterns; economic & military power supplants institutional system

The objective of these scenarios is **not to "predict" the future**, as there are multiple possible outcomes – but rather to **pressure-test business plans against different potential futures** and to **inspire strategies and actions** that **strengthen preparedness, agility and resilience**, regardless of what the future holds

How to use the scenarios described in this document

What scenarios ARE



Representative of a range of possible futures



Stretched-but-plausible pictures of different potential worlds



A set of **permutations** of uncertainties; worlds in which we might have to operate

What scenarios ARE NOT

Comprehensive or exhaustive

Predictions of what the future will be

A linear **extrapolation** of current trends and uncertainties

How to use them

- ✓ Use the set of scenarios as a **basis for further reflection**, and build them into your organization's **decision making**
- ✓ Imagine what **no-regret, contingent, or other reactions** may be most appropriate for your business to **build resilience and strengthen strategy**
- ✓ Determine how your actions can best **exemplify your values**, and determine how your organization's capabilities can **positively influence the future**

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Global economic impact of the war in Ukraine

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Multiple possible evolutions exist for Ukraine war, with direct potential impacts for the business environment

Main factors driving conflict



Balance of **military power**, and choice of tactics and weapons



Sanctions & policy actions by "West," and Russia's response



Military **aid & support** from third countries ("West" & other)



Peacemaking (bilateral, multi-lateral or third-country brokering)



Domestic **political & economic conditions** in Russia

Potential conflict evolutions

Military conflict ceases

Fall of Ukraine

Russian forces control full country

David defeats Goliath

Ukraine repels Russian forces

Freeze in-place (Korea 2.0)

Negotiated peace / *de facto* partition

Military conflict persists

No end in sight (Afghanistan 3.0)

Protracted stalemate

Global spillover

Further conflicts in other theatres



= Momentum scenarios (early May 2022)

Key impacts for business

- Sanctions remain indefinitely
- Sustained isolation of Russia
- Major re-build by Russia

- Sanctions remain indefinitely
- Major re-build required

- Certain sanctions lifted
- Major re-build required

- Sanctions remain indefinitely
- Significant socioeconomic impact
- Sustained isolation of Russia

- Sanctions expand to other nations engaged in aggression

Global scenarios required to go beyond war evolutions and navigate an uncertain medium term

Thinking holistically about the medium term means exploring dynamics associated with seven key drivers of uncertainty

Drivers of uncertainty

Example dynamics



Geopolitical relations

Dynamics among key countries, interplay of geopolitical and trade blocs (e.g., "decoupling"), military implications



Strength of institutions

Changing role of institutions and rule-of-law vs. use of power; role of private vs. public sector in society



Trade & supply chains

Shifting trade relations, interconnectedness, supply chain re-shoring, creation of multi-local industrial hubs



Financial stability

Capital market dynamics and flows, private lending & investment, resilience of financial system



Energy & climate

Energy mix, renewables, energy flows & security, potential embargos and alternatives (e.g., new LNG import capacity)



Technology & innovation

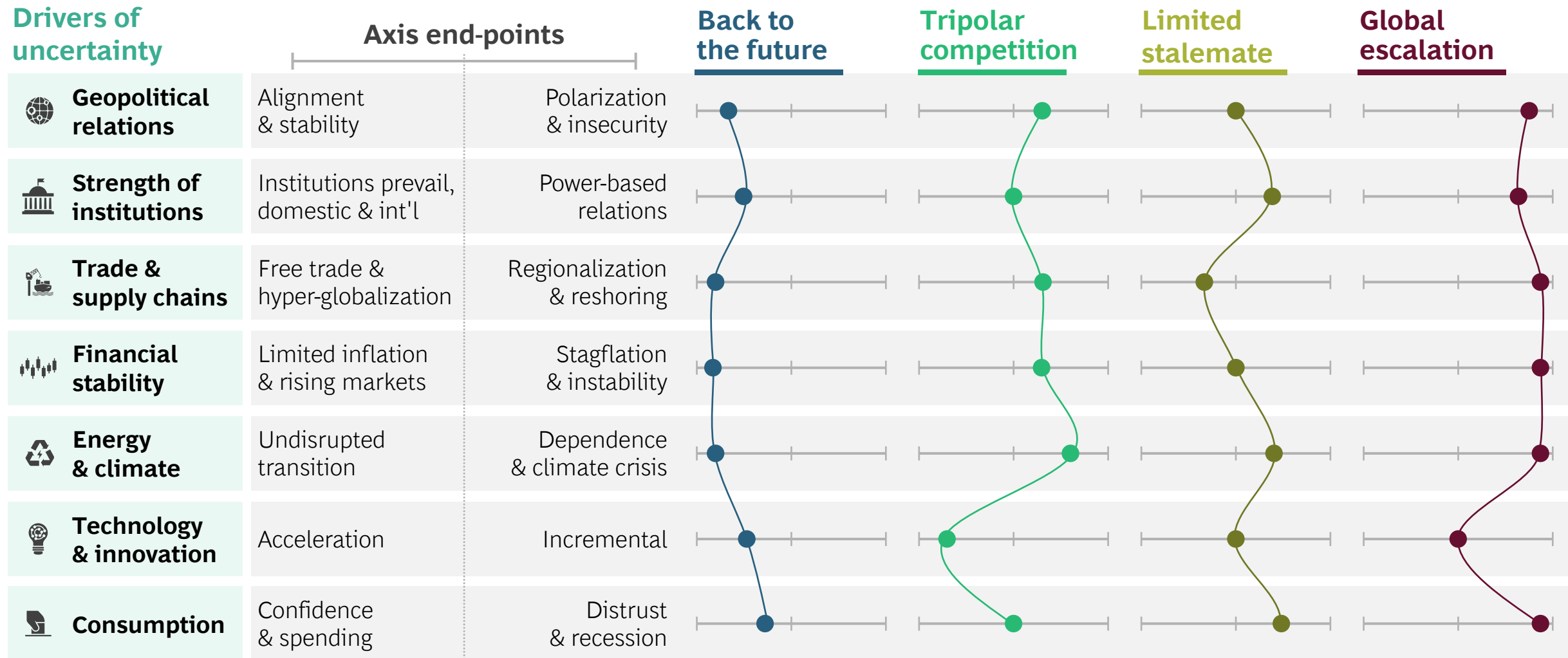
Role of technology, "splinternet," creation of parallel social & payment networks, artificial intelligence, automation



Consumption

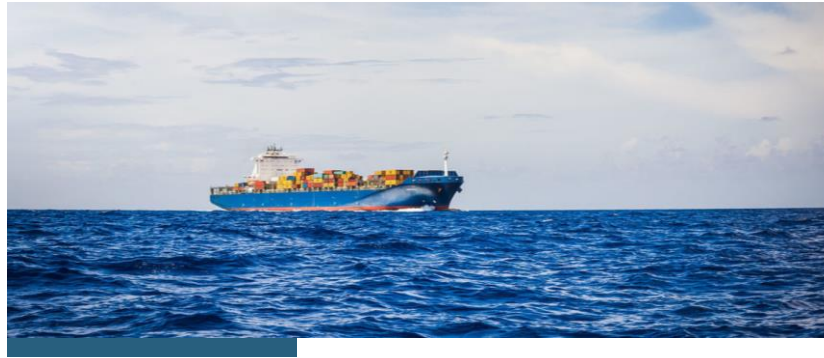
Recession or recovery, potential food security crises, change in consumer habits

We have developed scenarios for ~2030 by exploring contrasting permutations of these seven key drivers of uncertainty



Focus on stretched-yet-plausible worlds for 2030

Four potential scenarios for 2030 can support strategic thinking and help build uncertainty advantage



Back to the future

Major powers see benefits in global cooperation and minimized military conflicts



Limited stalemate

Chronic conflict in Ukraine & elsewhere in non-NATO former Soviet republics; China keeps distance from Russia; economies survive sanction shock; West-inspired institutions struggle for relevance



Tripolar competition

Western & Eastern blocs coexist in new balance, while "non-aligned" nations seek 3rd path; norms and institutions differ within and among blocs



Global escalation

Economic & military confrontations erupt in multiple locations, disrupting trade patterns; economic & military power supplants institutional system


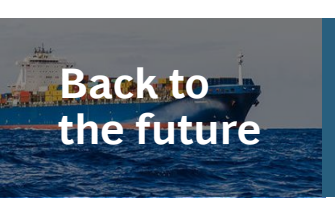
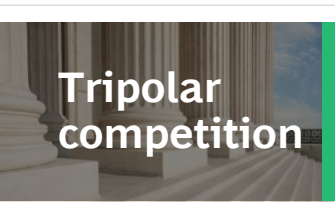
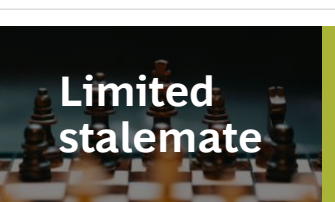
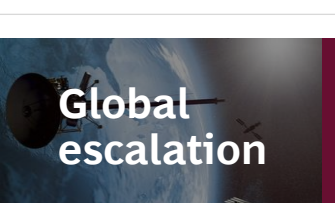
Think of a world where... 2030 scenarios overview

ILLUSTRATIVE & NON-EXHAUSTIVE; TO PROMOTE DISCUSSION

	 Back to the future	 Tripolar competition	 Limited stalemate	 Global escalation
 Geopolitical relations	Domestic conditions drive leadership of global powers to pull back from confrontational stance	Eastern and Western poles coexist , while "non-aligned" countries seek a third path in global affairs	Chronic conflict limited to Ukraine & elsewhere in non-NATO former Soviet republics; major powers maintain confrontational stance	Major powers clash & military escalation spreads to other theatres (e.g., Central Asia, Middle East, Indo-Pacific)
 Strength of institutions	Eastern powers pivot to a balance with global Western-inspired institutions	In Africa and Asia , institutions sponsored by major powers coexist	Western institutions try but fail to align other powers; business tries to shape global cooperation	State-led protectionism & nationalist policies shape socio-economic and political dynamics
 Trade & supply chains	Global trade grows to historical highs; Africa increases share of global supply chains	Total global trade stable, but trade corridor mix-shift occurs as supply chains near-shore	Total global trade stable but regionalization shifts flows, and intermittent supply shocks continue to disrupt costs/prices	Global trade plunges; chains localize; resource-endowed countries continue to provide essential supplies
 Financial stability	Monetary policy alignment & markets integration support stocks & long-term investments	Global financial markets decouple limiting access to capital	Sanctions & counter sanctions limit capital flows, hindering lending, valuations and long-term investment	Capital shifts to private investments , more opaque than public markets; state investments gain relevance
 Energy & climate	Global policy coordination and Chinese Greentech accelerate energy transition	Politicization along bloc lines disrupts the global consensus on climate action , only partially offset by Greentech developments	Insecurity pushes US/ME LNG imports & renewables in EU , but EMs sustain high emissions	Fossil fuels & coal prevail in war economy & intensify no-return point in climate crisis
 Technology & innovation	Innovation in AI & automation push productivity but drive higher inequality ; Western networks & platforms concentrate activity	Innovation in decoupled networks ("splinternet"), payment systems & strategic sectors as defense & space	Cybersecurity is top priority; insecurity pushes metaverse as alternative to physical experiences; parallel networks keep growing	Innovation focuses on hybrid warfare capabilities & cybersecurity ; local networks develop to ensure independence
 Consumption	Expansion of global markets & integration of Eastern players supports demand growth	Intra-pole demand increases but policy-driven barriers lead to shortages and inflation pressure	Stagflation reinforces negative demand cycle & food crises persist in developing world	Local consumption shifts to basic goods & cryptocurrencies enable e-commerce continuity

Source: BCG analysis. Note: These analyses represent only potential scenarios and are not intended as a prediction or forecast.

Each scenario would suggest different outcomes for key macroeconomic KPIs that shape the business environment

 indicates direction vs. 2019 baseline ¹	GDP Growth	Global Trade Trade % of GDP (physical goods)	Inflation	Oil Price Price/barrel	Global temperature increase (°C)	Business environment impact
 Back to the future	↙	↗	➤	↘	↙	Strengthened East-West joint markets highlight importance of global networks / ability to work across borders and of investments in long-term innovation
 Tripolar competition	➤	➤ <i>Major corridor mix shift</i>	↙	↙	↙	Tripolar world requires focus on regional ecosystems (e.g., through governments partnerships) and investment on digital to ensure operability across poles
 Limited stalemate	↙	➤ <i>Regionalization</i>	↗	↙	↙	Uncertainty requires focus on stagflation, supply shocks and addressing humanitarian crises leveraging corporate capabilities
 Global escalation	↘	↘	↗	↗	↗	War economy takes center stage, requiring collaboration with local networks & governments to face supply shocks & cost inflation
Reference (2019):	~3% ²	56% ²	~2% ²	\$64 ³	-	

1. 2019 selected as pre-Covid baseline. Directions indicate temporary changes over the medium term; not static/permanent views; 2. World Bank; 3. Average Brent crude oil price, Statista.
 Source: BCG analysis. Note: These analyses represent only potential scenarios and are not intended as a prediction or forecast.

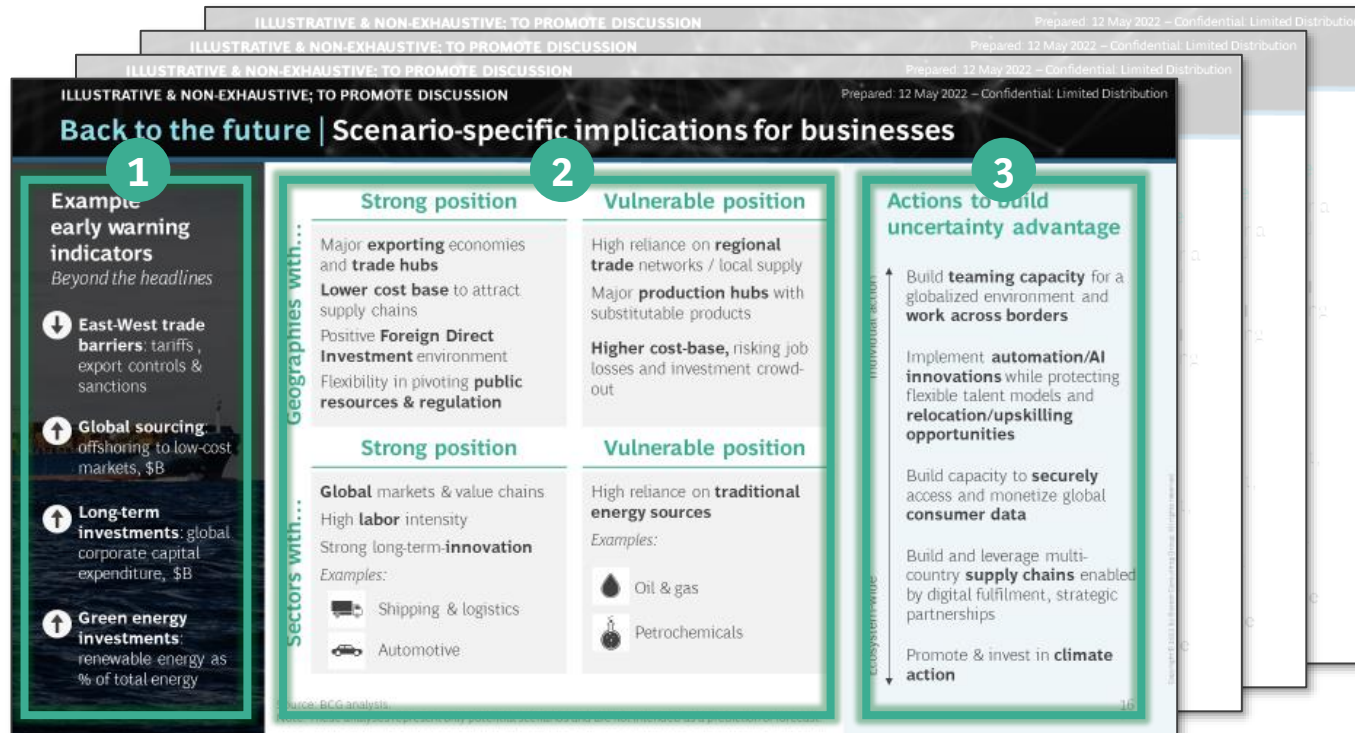
War in Ukraine: Global Update and Future Scenarios

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Perspective on Future Scenarios

- Uncertainties & 2030 scenarios
- **Implications for businesses**
- Key takeaways for leaders

Scenario-specific implications detailed through early warning indicators, geographic & sector considerations, and potential actions for leaders



- 1 Example **early warning indicators** to signal scenario emergence
- 2 **Implications** on strength / vulnerability for **specific geographies** and **sectors**
- 3 Potential actions for leaders to **build uncertainty advantage**

On top of scenario-specific actions, **several 'no regret moves' emerge across scenarios**

Back to the future | Scenario-specific implications for businesses

Example early warning indicators

Beyond the headlines

-  **East-West trade barriers:** tariffs, export controls & sanctions
-  **Global sourcing:** offshoring to low-cost markets, \$B
-  **Long-term investments:** global corporate capital expenditure, \$B
-  **Green energy development:** renewable energy as % of total energy

Geographies with...

Strong position

Major **exporting** economies and **trade hubs**
Lower cost base to attract supply chains
 Positive **Foreign Direct Investment** environment
 Flexibility in pivoting **public resources & regulation**

Vulnerable position

High reliance on **regional trade** networks / local supply
 Major **production hubs** with substitutable products
Higher cost-base, risking job losses & investment crowd-out
Low agility in pivoting public resources & regulation

Sectors with...



Strong position

Global markets & value chains
 High **labor** intensity
 Strong long-term **innovation**
Examples:

-  Shipping & logistics
-  Automotive

Vulnerable position

High reliance on **traditional energy sources**
Examples:

-  Oil & gas
-  Petrochemicals

Actions to build uncertainty advantage

Individual action

Build **teaming & cybersecurity capabilities** for a globalized environment and **work across borders**

Implement **automation/AI innovations** while protecting flexible talent models and **relocation/upskilling opportunities**

Build capacity to **securely** access and monetize global **consumer data**

Build and leverage multi-country **supply chains** enabled by digital fulfilment & strategic partnerships

Ecosystem-wide

Promote & invest in **climate action**

Source: BCG analysis.

Note: These analyses represent only potential scenarios and are not intended as a prediction or forecast.

Tripolar competition | Scenario-specific implications for businesses

Example early warning indicators

Beyond the headlines

- ↑ **East-West trade barriers:** tariffs, export controls & sanctions
- ↑ **Regional super apps:** # of super apps downloads
- ↓ **Cross-pole business exposure:** Revenues outside of home pole, % of total
- ↑ **Public investment in local/regional business:** total subsidies, tax reductions & direct investments, \$B

Geographies with...

Strong position

Regional business ecosystems within a single bloc

Strong **regional financial markets**

Established position and public support of **strategic industries** (e.g., semiconductors, defense)

Vulnerable position

High reliance on **global trade**, for **markets & supply chains**

No clear pole alignment

Weaker position in **regional strategic industries** (e.g., mainly exporting parts or specific software)

Sectors with...

Strong position

Regional markets, near-shore supply chains

High **capital & tech** investments, innovation opportunities

Examples:



Aerospace & defense



Semiconductors & electronics

Vulnerable position

Global markets/ supply chains and exposure to **global capital flows**

Limited **state involvement**

Examples:



Fashion & retail



Global MedTech

Actions to build uncertainty advantage

Individual action

Adapt **digital infrastructure & cybersecurity** to regional ecosystems and ensure secure interoperability

Develop **innovation capability** targeted to closer markets

Deepen **customer & investor relationships** within closer markets

Nurture **strong government relationships** to promote joint investments

Ecosystem-wide

Work with intra-pole public & private partners to accelerate critical **climate action**

Source: BCG analysis.

Note: These analyses represent only potential scenarios and are not intended as a prediction or forecast.

Limited stalemate | Scenario-specific implications for businesses

Example early warning indicators

Beyond the headlines

↑ **Duration & reach of conflict(s):** months, # of countries in conflict

↑ **Defense/military expenditure:** % of GDP

↑ **Investment in cyber defenses:** global spending on cybersecurity, \$B

↑ **Refugees:** # of refugees worldwide

↑ **Food prices:** FAO Food Price Index

Geographies with...

Strong position

Robust food supply & **export capacity**

Nation-wide developed cyber capabilities & **digital** economies

Self-sufficient **energy sources**

Strong position

Regional & local markets

Highly **digital** models, able to **interact safely** with customers

Examples:



Social media & services



Insurance

Vulnerable position

High **dependence on food** supply chains

High exposure to **refugee flows**

Sanctions and/or **no clear trade bloc alliance**

Vulnerable position

Reliance on **global supply & vulnerability to input shocks**

Physical customer interaction

Examples:



Agriculture & food



Metals & mining

Actions to build uncertainty advantage

Individual action

Strengthen **supply chain resilience** by developing multi-sourcing alternatives, revisiting overall footprint

Strengthen **cybersecurity** capabilities

Develop **virtual offerings** and **customer networks in different countries** to adapt to consumer preferences

Redefine talent models to respond to **humanitarian crises** (e.g., protect from food insecurity, accommodate refugees)

Accelerate climate action to achieve **energy resilience**

Nurture government partnerships to respond to crises & build resilience

Ecosystem-wide

Source: BCG analysis.

Note: These analyses represent only potential scenarios and are not intended as a prediction or forecast.

Global escalation | Scenario-specific implications for businesses

Example early warning indicators

Beyond the headlines

↑ **Duration & reach of conflict(s):** months, # of countries in conflict

↑ **Defense/military expenditure:** % of GDP

↑ **Election of nationalist/populist leaders:** # of leaders; % of GDP controlled

↓ **Global investment:** Foreign Direct Investment flows, \$B

Geographies with...

Strong position

Strong **local markets & supply**
Developed cyber capabilities
 Strong **production ecosystems** with strategic capabilities (e.g., semiconductors, defense)
 Self-sufficient supplies of **energy, food & water**

Strong position

Localized supply & markets
 Flexible **talent models** to accommodate insecurity
 High **national importance**
Examples:



Oil & Gas



Aerospace & defense

Vulnerable position

High reliance on **global supply chains or trade**
 Focus on **services sector**, especially with **international client base**
 Directly impacted by **potential conflicts**

Vulnerable position

Reliance on **global markets & vulnerability to input shocks**
 Strong **consumer orientation**
Examples:



Travel & tourism



Global investment funds & PE firms

Actions to build uncertainty advantage

Individual action

Assess possibility of **local spinoffs** for global players

Strengthen **cybersecurity** capabilities to ensure ongoing consumer trust

Accelerate **automation** to accommodate potential talent shortages

Strengthen **local supply chains**, limiting reliance on global networks

Secure **critical resource reserves** (e.g., energy, food)

Ecosystem-wide

Source: BCG analysis.

Note: These analyses represent only potential scenarios and are not intended as a prediction or forecast.

6 high-level 'no regret' moves emerge as common across scenarios to consider today and strengthen uncertainty advantage for the future



Embed geopolitics in decision-making

Actively explore **challenges & opportunities** associated with geopolitical risks; embed robust risk analysis processes organization-wide



Build supply chain resilience

Explore **diversification** and/or **re-localization of vulnerable inputs** as core risk management mechanisms



Invest in people strategy

Build **flexible talent models** to better support employees and improve ability to respond to regional talent mismatches



Innovate as a hedge

Explore where **digital / virtual innovation** can help limit geopolitical exposure & strengthen competitive positioning



Reinforce cybersecurity

Invest in cybersecurity capabilities and develop **proactive risk mitigation** mechanisms; explore **gov't collaboration** opportunities



Accelerate climate action

Double down on **climate action** and explore **strategic partnerships** to achieve targets despite disruptions

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Global economic impact of the war in Ukraine

Perspective on Future Scenarios

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- **Key takeaways for leaders**

Scenarios can help stretch perspectives, enabling stronger medium-term strategy, more resilient decision making and proactive measures



Stretch your strategic decision-making

Do not wait for an uncertain future to disrupt your strategy. Incorporate prospective (not predictive) scenarios and competitive, dynamic simulations into your strategic planning, and anticipate plausible ways your business environment may evolve.



Monitor and drive action

Identify risk-intelligent actions, big bets and no regret moves for your particular business, monitor indicators & disruptions and move to action to prepare for potential future challenges and shape opportunities, mobilizing partnerships, resources and investment



Influence positive outcomes

Understand how societal challenges may evolve, incorporate into ESG strategies and nudge the future towards desirable outcomes on topics ranging from humanitarian crises to climate change leveraging your capabilities.

Teams across BCG are actively monitoring impact

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