

The background of the entire page is a Newton's cradle with several silver spheres. The lighting is dramatic, with a bright light source from the left creating a strong glow and casting long, soft shadows. The overall color palette is a range of blues and purples, from deep navy to light lavender. The spheres are in various positions, suggesting motion and balance.

Scenario planning in response to the Russia-Ukraine war

Even if the Russia-Ukraine war were to end today, its impact will be felt across the world for years. Corporate leaders must act now to plan for a different—and more uncertain—world. To shape your own future, resist taking a wait-and-see approach and prepare for a range of possible scenarios.

Introduction

The Russia-Ukraine war represents a geopolitical shock of historic magnitude. The outcome is highly uncertain but, make no mistake, this will have long-lasting humanitarian, geopolitical, and economic impact. Depending on when and how it ends, the range of possible outcomes is broad, the impact global, and—coming after two years of pandemic disruption—includes several worrying scenarios.

In dealing with this shock, corporate leaders have been hard at work to ensure the safety and well-being of their people. More than 750 companies have decided to suspend or cease operations in Russia,¹ and many more are making substantial financial contributions to humanitarian aid.

At this stage, a “wait-and-see” approach can seem prudent when things are in flux and outcomes are unpredictable. But that also increases risks of reacting too late and foregoing opportunities to shape your own future. As uncertainty grows, so does the value of thinking ahead and preparing for a range of possible futures.

In this paper, we urge corporate leaders to rapidly move beyond the initial shock of war to stress test your business plans for market changes that are predictable and prepare strategies for multiple future uncertainties, using an often-overlooked approach called integrated scenario-based planning.

By making every effort to do so now, you not only protect the stability of your own company and the economic livelihoods of your people, but also help combat the threat that this crisis poses to the global economy and the world for years to come.

¹ Source: Yale School of Management, “Over 750 Companies Have Curtailed Operations in Russia—But Some Remain,” April 18, 2022

Crisis management for corporates

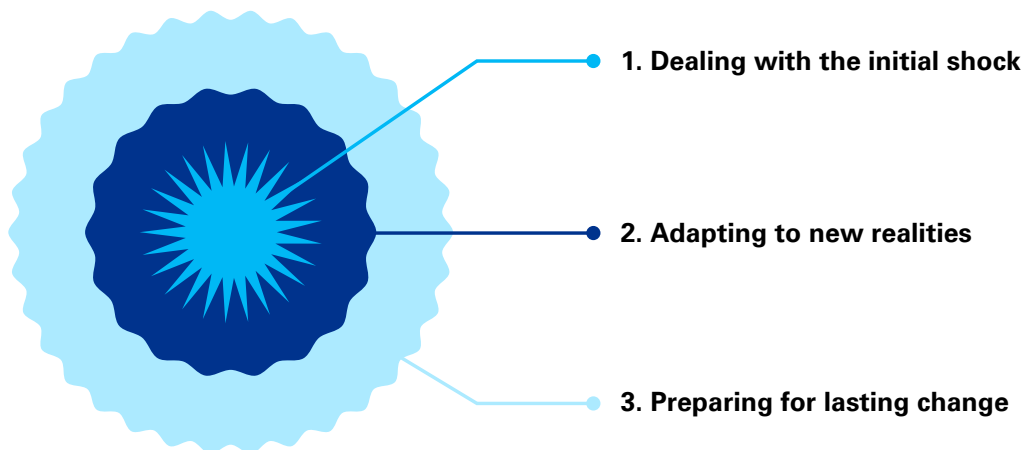
Right now, most companies are in the first of three waves of responding to the shock of war:

- 1. Dealing with the initial shock** (the first one to three months): Rapidly determine what share of global staff, revenue, operating costs, capital expenditures, and balance sheet assets resides in affected countries. Many companies are finding that it may take longer than initially expected, e.g., to relocate people and assets to another country while honoring prior contractual commitments. Companies are also scrambling to comply with sanctions.
- 2. Adapting to new realities** (the next 3 to 12 months): Start to model the second-order impact that the war will have on your business (e.g., banks with frozen Russian assets or Western airlines with stranded aircraft in Russia). This includes also looking at how you may be affected by the impact of sanctions on other companies, including your customers, suppliers, and competitors.
- 3. Preparing for lasting change** (looking 12 to 36 months ahead): Start planning for third-order impacts, such as altered expectations for gross domestic product (GDP), inflation, interest rates, and

structural changes in demand. Outcomes are very hard to forecast, because they are driven by multiple interrelated market shocks and can vary significantly between companies that have a different business mix and market position.

The COVID-19 pandemic showed how resilient many companies can be in dealing with a crisis in the near term. It also exposed weaknesses in their ability to challenge assumptions and plan for uncertain futures: how many companies included a pandemic in their enterprise risk analyses?; how many had built financial scenarios with more than a 10 percent revenue fluctuation?; and who thought about what it would mean for 100 percent of their people to work from home for even a month?

You may not feel compelled to move beyond dealing with the initial shock yet, but we recommend you consider challenging your natural reaction to wait-and-see. Be aware of your biases to rule out uncomfortable unlikely outcomes and assuming the future will look largely like the past, especially if your company has thrived in historically stable markets. Start by recalibrating your baseline for what has already changed significantly since the start of this war. Then, leverage the power of scenario planning to prepare for multiple possible futures.



Stress test economic and market assumptions

Chances are that any planning completed before the start of the war on February 24 relies on market forecasts and macroeconomic assumptions that are now obsolete. The first, no-regret move, then, is to make sure your baseline scenario is calibrated for new realities. In April, KPMG economists made the following adjustments to their forecasts based on the impact of the Russia-Ukraine war:

- **Lower GDP growth:** The Russia-Ukraine war caused KPMG to lower its forecast for annual growth in 2022 from 3.9 percent to 3.1 percent, and from 2.9 percent to 2.6 percent for 2023.
- **Higher inflation:** KPMG now expects inflation to peak at an 8.3 percent annual rate in Q2'22, up from 5.5 percent, and full-year 2022 inflation to come in at 7.5 percent, far beyond the 4.9 percent forecast in January.
- **Higher interest rates:** The outlook is for seven rate increases in 2022, including two 50-basis-point hikes in May and June, which would bring the benchmark rate to 2.5 percent by year-end, versus the 0.75 percent

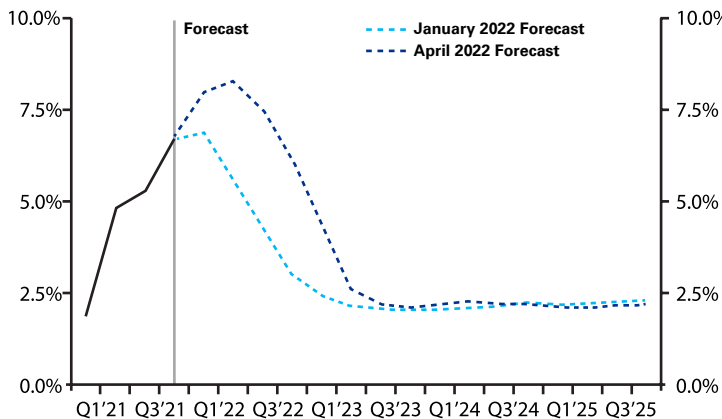
(based on two hikes) previously projected. KPMG has also raised its estimate of the year-end 2023 rate by 1.25 percentage points to 3 percent from 1.75 percent.

- **Slower growth of business investment:** Higher cost of capital will lead to a decline in the growth of business investment in the next two years. In January, KPMG economists anticipated business investment to grow by 5.2 percent in 2022 and 2023. That projection has been cut to 5.1 percent for both years.
- **Increasing chances of a recession:** We estimate that the probability of a U.S. recession in the next 12 months has increased to around 10 percent but remains well below levels seen before the last three recessions.

In addition to revisiting macroeconomic assumptions, companies should recalibrate growth and profitability assumptions based on increased supply-chain volatility. Companies that have higher reliance on cross-border revenue may want to factor in the potential for slowing globalization.

Consumer Price Index (CPI)

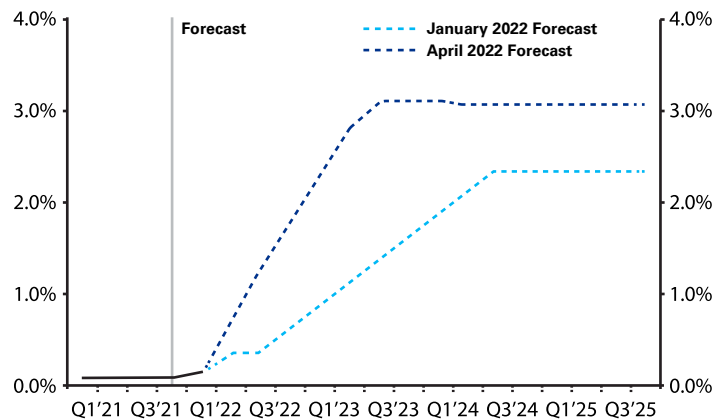
Year-over-Year % Change



Source: KPMG

Federal Funds Rate

% Quarterly Average



Source: KPMG

Start planning for multiple future scenarios

Scenario planning has a long history as a strategy tool, but it tends to be overlooked in good times and dusted off when a crisis emerges. We saw this two years ago when the pandemic lockdown disrupted the economy and leaders suddenly needed to reckon with a whole new range of uncertainties—about how and where work could be done, how people would shop and travel, how goods would flow through global supply chains.

The Russia-Ukraine war has created even more uncertainty about a greater range of possibilities—geopolitical stability, economic growth and inflation, international trade, supply-chain challenges, refugee migration, food shortages, etc.

In the chart below, we show where scenario planning is useful. Amid great uncertainty, scenario-based planning helps leadership teams organize their thinking, align on

a set of targeted responses, and confidently and swiftly swing into action as the trajectory becomes clearer. Scenario-based planning helps companies prepare for action early and avoid two common traps: becoming overly confident about a certain path by “gambling” on an uncertain position that may rapidly shift, or “procrastinating” even when the outcome is more certain.

Scenario-based planning is not about trying to predict the future: it is a strategy exercise that enables your company to act more effectively as circumstances become more certain. Scenario-based planning and execution are not mutually exclusive. You must often do both in parallel, as you respond to current circumstances but remain diligent in planning for future shifts.



Source: KPMG

Step 1: Identify key vectors of uncertainty

To build helpful scenarios, start by defining the strongest drivers of uncertainty and describe a few future states that are possible, even if unlikely. By making each option gradually more severe, this creates a vector of uncertainty that helps leaders visualize and consider a spectrum of possible outcomes for their business. Given the complexity and magnitude of this crisis, we suggest considering the following five areas of uncertainty. The relative importance of each will differ by company, e.g., depending on its exposure to different geographies and sectors, and its competitive position.

1. Military conflict: Will war be contained to Ukraine, or could it escalate to other countries in Europe? Could this trigger even further military action in Asia or even world-wide?



2. Economic conflict: Will current sanctions on Russia be effective or further escalated, e.g., to restrict export of Russian oil and gas to Europe? Will sanctions be expanded to additional countries supporting Russia (e.g., China)?² If so, will this result in counter-sanctions leading to international trade war?



3. Cyber conflict: Will civilian access to digital information and communications be manipulated or blocked? Will cyber-attacks be launched to “punish” companies exiting Russia? Can Western financial systems be brought down, or critical U.S. infrastructure affected, e.g., for healthcare or energy?



4. The civilian toll: Will the humanitarian crisis primarily affect Ukrainian civilians or spread to other parts of Europe? Will food shortages spread to at-risk populations that depend on imports from Ukraine and Russia, or even trigger a global food crisis affecting low-income households across the world?



5. Duration of war: How long will this state of high volatility and uncertainty last—e.g., few months to a year, one to three years, or more than three years?



² Source: Ian Prasad Philbrick, “The Messy Middle,” New York Times, April 18, 2022

³ Source: Nikos Tsafos, “The Energy Weapon-Revisited,” CSIS, March 18, 2022

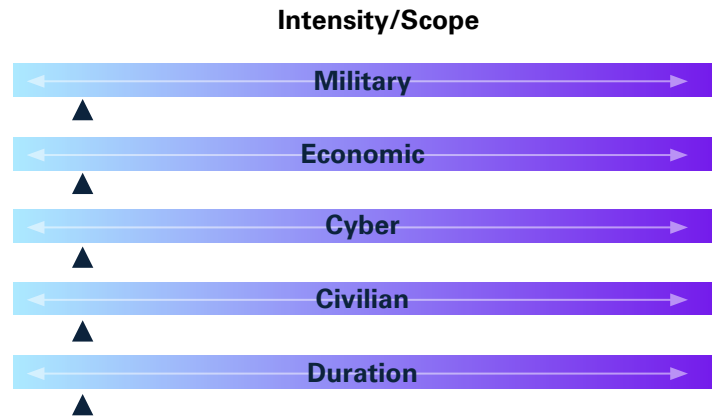
Step 2: Build integrated scenarios

How this crisis plays out and how it changes the strategic options for an organization depend on the interplay of the uncertainties we have described. We encourage businesses to define a range of integrated scenarios based on different outcomes for each uncertainty, consider potential risks for each, and prepare action plans for the most severe outcomes.

We have provided below a few examples of how shifting the degree of intensity within each vector of uncertainty creates a unique scenario that may require a different strategic response or operational contingency. Some scenarios may be highly unlikely, but exploring them can help generate new insights and identify blind spots. The below examples are outlined in that spirit and do not reflect predictions about the probability of future scenarios nor all possible outcomes.

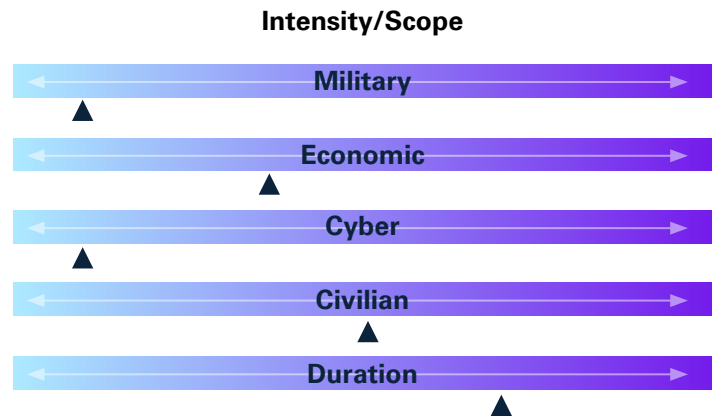
Scenario 1: Russia withdraws from Ukraine

The invasion ends with a full withdrawal or other concessions within one year after unexpectedly high losses, dwindling resources, and lack of support from friendly nations to sustain the Russian economy. Economic recovery is quick outside of Ukraine and Russia. Ukraine receives multinational support to rebuild, and refugees return. Russia likely remains under sanctions and loses access to foreign investment for several years.



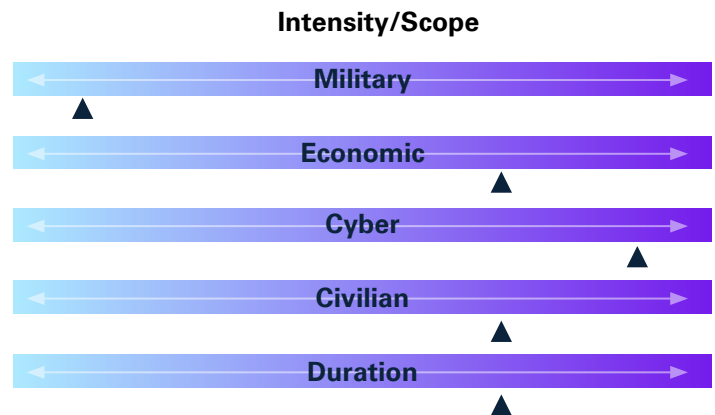
Scenario 2: Ukraine is divided

Russia sustains a protracted occupation of a significant portion of Ukraine with economic support from other countries that are sanctioned. This further constrains supply chains and fuels inflation in the rest of the world. The humanitarian crisis escalates as Europe tries to absorb an increasing number of refugees. This situation could last for years.



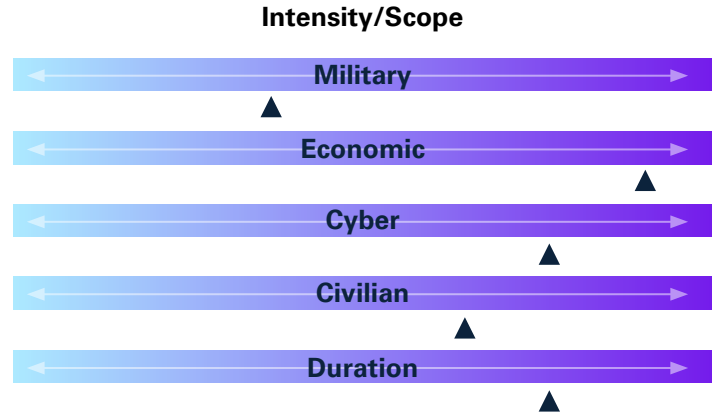
Scenario 3: Digital World War I

Russia shifts to digital attacks on Ukraine and supportive nations, as it struggles to win militarily. Financial systems, communications, and infrastructure are targeted, freezing economic activity and causing a crash in global equity markets, and recession. The humanitarian crisis escalates globally as power and water supplies become less secure in developed regions. The effects could continue for years because the full scope and persistence of cyberattacks are hard to determine.



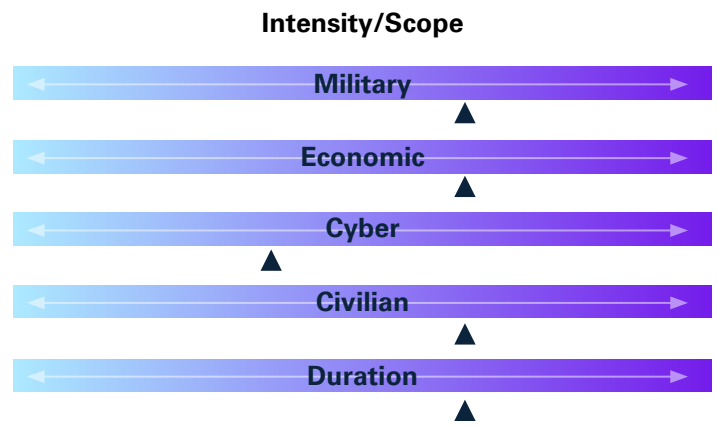
Scenario 4: Europe at war

The scope of the ground war expands, as NATO is forced to act to end the humanitarian crisis. Russia utilizes long-range weapons to engage targets across Europe, and Russia itself is attacked. Securities plunge and commodities surge, and global trade seizes up, starting a global recession. The humanitarian crisis escalates as the number of casualties and refugees surges across Europe and Russia. The conflict could become a long war of attrition, with massive damage.



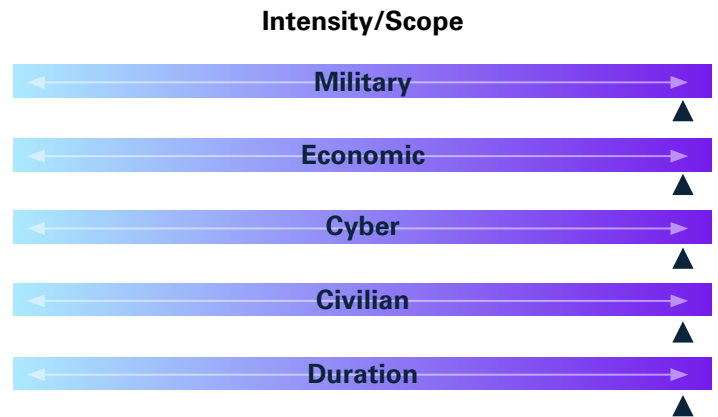
Scenario 5: Asia ignites

The war in Europe is contained to Ukraine, but China⁴ and/or North Korea seize the opportunity to act in Asia. China invades Taiwan and ends Hong Kong’s autonomy. North Korea attacks South Korea and/or Japan. U.S.-China trade is severely constrained and the U.S. struggles to balance sanctions to penalize China with the need to protect the U.S. economy. U.S. inflation spikes more aggressively as supply chains stall and shortages escalate. The humanitarian crisis scales up in Asia, where refugees find few safe havens.



Scenario 6: World War III (non-nuclear)

NATO allies are drawn into the war, but escalation does not extend to the use of nuclear weapons. China sides with Russia and takes military action in Asia. Cyber war is fully activated. Securities plunge and commodities surge, throwing the global economy into a recession. The humanitarian crisis escalates as the number of casualties and refugees rises globally and hunger spreads. Such a war could take years; it could end in Europe and continue in Asia.



⁴ Source: NPR, “Taiwan fears what’s happening in Ukraine will happen there with China,” March 27, 2022

Step 3: Draw cross-functional implications for your unique business

With a set of tailored scenarios in place, it is time to bring the leadership team together to review each of the integrated scenarios and discuss the implications by function and for the overall business. After a brief dialog about the first scenario, the facilitator goes around the room and asks probing questions to each member to help extract insights.

Repeat this process for each of the remaining integrated scenarios, which should be presented in order of increasing severity. In the final step, the facilitator plays back the identified impacts and leads the group through a prioritization exercise to rank the uncertainties and potential actions you want to invest in for further deep-dives, impact modeling, and action planning.

What different functional leaders will need to consider

The impact of this shock will not be uniform across the organization, but all parts of the organization may well be impacted. Implications by function could be:

- **Strategy and planning** should revisit the latest strategic plan to identify market assumptions that have already changed. Consider launching new market-sensing activities to reduce uncertainty and provide insight to help lead scenario-based planning efforts, including conducting follow-on deep dives to model the potential impact on different corporate actions.
- **Sales and marketing** should consider the impact of revenue loss from countries affected by the conflict, loss of major buyers impacted by economic sanctions, margin pressures from spiking energy and raw materials costs, and aggravated supply-chain issues. Also look for areas of increased demand, e.g., driven by increased defense spending or decarbonization in Europe.
- **Operations** should consider accelerating any efforts to reduce supply-chain risk that were launched during the pandemic, e.g., reducing materials usage, negotiating quantity discounts, and building “just in case” inventory. Longer term, encourage new approaches to sourcing and “right-shoring” to reduce the vulnerabilities of global supply systems that were exposed during the pandemic and now prolonged and expanded by the war.
- **Finance** should make sure that cash-flow models are refreshed with the latest economic forecasts and

flexible enough to handle larger ranges of variations in key input variables. Stress test implications on future liquidity and reassess debt facilities if needed. Financial reporting may need to be adjusted for risk disclosures, material assets, and valuation of goodwill in Russia/Ukraine. In a worst-case scenario, consider how many days operations could be sustained if revenue is disrupted, e.g., due to a cyberattack.

- **HR** will initially focus on securing any part of their operations that have people in countries that will be directly impacted. Also look for signs of increased stress in your workforce, e.g., from constant media coverage of the war, concerns for friends and family in Europe, or any tensions between people with different ethnic ties with countries in conflict.
- **Tax** will need to consider the impact of employee relocations, local operating losses from reduced economic activity, losses from ceased operations, impacts on transfer pricing, and tariff and customs implications. More broadly, forecasting for how much tax will be paid, and to what jurisdictions, will present novel challenges for finance and tax departments.
- **Enterprise risk management** should revisit its prioritization of tier-one risks, particularly if military conflict was not among them. Also consider adopting dynamic risk management (including risk interdependencies) and adding external data signals to help risk owners improve their response.
- **Corporate development** should be sure that any deal activity in flight considers the impacts that the crisis may have on the target’s attractiveness, including exposure to impacted regions, supply chains, and cost of energy and materials. Potential buyers should include exposure to the crisis in their diligence and be sure that their access to funding is not affected, e.g., by increasing inflation and interest rates. Sellers seeking to carve out assets with a footprint in affected regions need to understand potential risk, e.g., penalties to foreign entities liquidating assets, in-place contracts, and loss of employee knowhow.

Scenario-planning considerations for major industry groups

The Russia-Ukraine war is affecting different industries in different ways. Based on the insights of our sector leaders, we can identify the following issues to consider in scenario-based planning in specific industries (click on the links for further details):

- **Aerospace and defense.** Fuel prices have driven up fares and emptied seats, stalling the recovery in domestic air travel. Manufacturers of airframes and engines face shortages of titanium and nickel. On the military side, the proposed defense budget for 2023 is \$813 billion and legislators are pressing for more.
- [Automotive.](#) The war is expected to drive already battered auto consumption down by around two million vehicles. It has disrupted vehicle and parts production in Russia and Ukraine, creating aggravated supply-chain issues. Russia also supplies palladium, which is used in catalytic converters. Semiconductor supplies may also remain tight. The upshot: automakers must redouble efforts to build resilient/flexible supply chains. The good news: soaring gas prices have increased demand for electric vehicles.
- [Banking and capital markets.](#) Sanctions create compliance risks for banks, which must determine if customers or parties they do business with are covered—not a straightforward process. Financial institutions are obvious targets of cyberattacks, and major banks have already activated crisis management protocols. Rising inflation and interest rates present both challenges and opportunities for customer profitability and market-share adjustments.
- [Consumer and retail \(C&R\).](#) Inflation was already a worry and now C&R companies are seeing shifting consumer behavior (e.g., opting for less pricey brands). Preserving margins will require innovation—the easy cost cuts were made during the pandemic. Food companies are scrambling to get ahead of massive disruption and soaring input prices.
- **Energy.** The war is expected to accelerate adoption of renewables, particularly in Europe. In the U.S., oil and gas companies have an opportunity to open discussions with regulators on steps to remove constraints on new production. Deal activity is expected to increase as the current situation in Ukraine is driving pricing to unprecedented levels.
- **Healthcare and life sciences.** Companies ceasing operations will need to identify and prioritize their ability to extract investments. Companies continuing operations in Russia have largely halted or minimized investments, which will impact ongoing clinical trials. Supply chains will be increasingly challenged, and some imports and exports may be limited. Companies will need to sort out the implications for payments and financial transactions across a complex web of manufacturers, distributors, payers, group purchasing organizations, health systems, etc.
- **Insurance.** There will be some restructuring work as companies exit Russia, attempt to reclaim assets, and establish new operations, but these impacts will be felt more in Europe. Higher interest rates benefit insurance companies and will allow for greater investment in operational transformation.
- **Metals.** Many companies operating in Ukraine and Russia have suspended operations, and shipping from the region has halted. Prices for primary aluminum, nickel, steel, copper, and palladium have soared. Steel production may recover quickly, but demand for copper, nickel, and aluminum will not be easy to fill.
- [Technology, media, and telecom.](#) The war threatens the supply of neon for semiconductor manufacturing, adding to the industry's supply-chain woes—and increasing the urgency to improve supply-chain resilience. Cyber warfare represents a growing threat, which will test the capabilities of U.S. cyber software and services providers.

Call to action

In the face of a historic geopolitical shock, corporate leaders must act now to plan for an uncertain future. Rather than wait and see, prepare early for a range of possible scenarios to shape your own future. However uncomfortable, thinking well ahead of events still unfolding will ultimately be the less risky path than reacting too late:



Recalibrate your forecasts: Many market or business assumptions you had before the Russia-Ukraine war may be obsolete. Update them with revised forecasts.



Start scenario planning: Map out a range of scenarios to help your organization act more confidently and quickly as circumstances become more certain.



Engage your broader team in the dialog: Get your top corporate leadership and board involved to discuss your analysis and coordinate execution plans.



Understand your industry/function-specific implications: Draw out business implications of different scenarios for your specific industry and functions.



Develop contingency plans: These should address your most critical areas of uncertainty while taking into account the likely impact of your actions.

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