The war in Ukraine:

Addressing the crisis and preparing for its impact



In this POV, we survey some of the consequences of the war in Ukraine to date. We also frame the critical uncertainties that will shape scenarios about the war's economic and business impact. We close with actions that organizations may consider to strengthen their outlook, regardless of the scenario that ultimately unfolds.

Meet the Authors



Michael Brueckner
Senior Managing Director –
Growth & Strategy Lead, Europe

Michael leads Growth & Strategy for Europe, overseeing all aspects of Accenture's strategy including shaping and implementing strategy and investments, including several significant acquisitions. He also serves on Accenture's Global Leadership Committee and Europe's Management Committee.

Michael has been with Accenture for more than 22 years and held many significant roles including Head of Health & Life Sciences, Strategy & Management Consulting lead, Regional P&L for Products Industries, and Global Growth & Strategy Lead for Accenture Digital.



Kathleen O'Reilly Senior Managing Director, Lead - Strategy

Kathleen leads Accenture Strategy, serves on Accenture's Global Management Committee and as Executive Sponsor for the company's work with the World Economic Forum. She also oversees the company's private equity work.

Kathleen works with CEOs and boards to address their most critical business challenges and build value by tapping new market opportunities, applying innovative technologies, executing large-scale restructuring and transformation, achieving growth through M&A, and embedding sustainability and responsible practices in every aspect of their business.



Svenja Falk
Managing Director –
Accenture Research

Prof.Dr. Svenja Falk is Managing Director, Accenture Research and leads their Europe operations. She also heads Accenture's Berlin office and is a member of the Executive Board of the Accenture Foundation.

Svenja leads the working group on "Digital Business Models" in the Platform Industrie 4.0, is deputy chairperson of the German Council for Digital Sovereignty and serves on the Board of Trustees for Fraunhofer ISST. She has co-published and worked with the World Economic Forum, B20, The European Commission, UNIDO and the Chancellors Innovation Council. She is honorary professor at the Justus Liebig University in Giessen and a fellow at the Hertie School, Berlin.



Michael Moore
Principal Director - Thought
Leadership, Accenture Research

Mike Moore is the Global Research Lead for Strategy & Consulting. Mike's research focuses on disruptive innovation, foresight and long-term strategic planning. He is the Research Director of Accenture's Business Futures program, which identifies and tracks the Signals of business change that are most critical for enterprises to respond to.

Mike's work is regularly published in leading business journals, including Harvard Business Review, MIT Sloan Management Review, The European Business Review and the Ivey Business Journal.



The war's impact to date

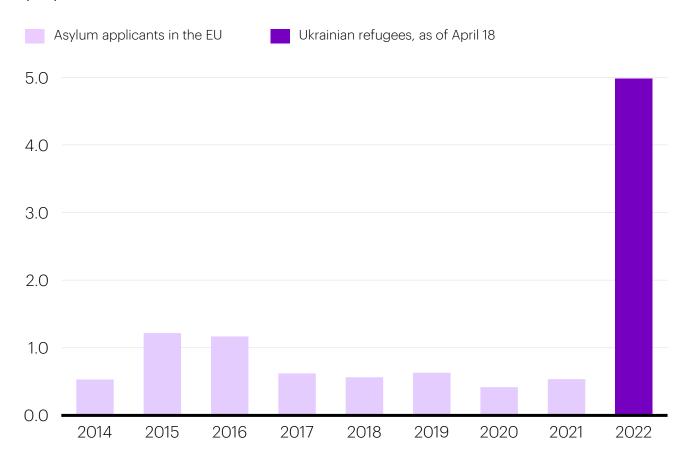
The war's impact to date

The Ukraine invasion has had a deep human, economic and business impact.

A humanitarian disaster

In only a few weeks, thousands of lives have been lost. More than 4.9 million refugees have fled Ukraine to date and at least 7.1 million people have been displaced within the country.¹ The growing humanitarian crisis has led to an influx of public and private aid. On March 10, the US Congress, for example, approved US\$13.6 billion in emergency spending for Ukraine.² The EU has announced €10 billion (US\$11 billion) in aid for Ukrainian refugees.³

The war has led to a dramatic increase of refugees in Europe Refugees (mn)



Source: Accenture Research analysis based on: Eurostat data on asylum applicants by type; UNHCR's operational data portal on the Ukraine refugee situation—numbers are from February 24 to April 18.

The war's impact to date

Unpredictable economic and cyber conflict

Within one week of the invasion, governments around the world passed a range of sanctions. Met with retaliatory countermeasures by Moscow, the sanctions have impacted the flow of some goods and services. The sanctions also could trigger retaliatory cyberattacks. Accenture Cyber Threat Intelligence has observed volunteer hacktivists and cyber criminals threaten to attack Western critical infrastructure and leak sensitive, stolen data.⁴ National governments continue to reinforce the message that organizations worldwide should remain vigilant for renewed Russian activity designed for maximum service disruption.⁵

Significant organizational challenges

The sanctions triggered actions by many businesses beyond governmental requirements. More than 750 companies have announced plans to suspend, scale back or close their operations in Russia, affecting, among others, at least 3,500 retail outlets across the country. Supply-chain disruptions could be even more substantial: More than 2,100 US companies and at least 1,200 EU companies have Tier 1 suppliers in Russia. And those numbers expand sharply for subcontractors: more than 190,000 US companies and at least 109,000 EU companies have Tier 2 and 3 suppliers n Russia.



Economic and business impact

Economic and business impact

The current view among leading forecasters is that the war will lead to a material deceleration in growth.8

Under a baseline scenario, Oxford Economics forecasts that the world will avoid recession, but global GDP will be 1.1 percentage points lower in 2022, relative to pre-war forecasts made in January.⁹

Beyond the scale and duration of the conflict itself, at least four uncertainties create risks that could lead to very different scenarios unfolding:



Supply shocks

Before the invasion, Russia supplied around 10% of the world's crude oil, as well as almost 40% of the European Union's natural gas. The country is also the top exporter of nickel (used in car batteries) and palladium (used in car-exhaust systems).¹⁰

Meanwhile, Ukraine and Russia together supply 26% of global exports of wheat, 16% of corn exports and 30% of barley exports. Supply disruptions of these key commodities have led to considerable price volatility. Over the past month, oil prices have reached as high as US\$130/barrel, while European gas prices climbed above €200/MWh (US\$220/MWh).

A prolonged supply shock could ripple across industries, driving inflationary pressures and supply chain disruptions. Energy price increases, for example, would impact most industries via direct energy costs or input cost increases (e.g., steel costs would rise due to pricier energy; costs for automotive parts would rise due to pricier steel). Inflationary pressures could also be felt in sectors affected by restricted trade in other products. For example, high wheat and grain prices may increase prices of foodstuffs. High metal and mineral prices may increase prices of electronics and industrial equipment.



^{9.} Oxford Economics' Global Economics Database. Pre-conflict refers to forecast as of December 2022.

Economic and business impact



Inflation

Even before the war, inflation had hit multidecade highs in the US and Europe, driving up costs for consumers. Accelerated inflation from soaring energy and other commodity prices can impact consumer confidence and spending.

In March, the University of Michigan's measure of US consumer sentiment dropped to its lowest reading since September 2011. Declines are also visible in the EU consumer sentiment survey.¹²

In parallel, inflationary pressure may accelerate the rise of wage inflation in some countries and industries. The industries that could be most impacted by wage inflation are those in which labor represents a large part of their overall cost structure.



Globalization

Many commentators have argued that the invasion and sanctions may contribute to greater market fragmentation and deglobalization.¹³ A decline in global integration had already been a prevailing trend prior to the war. World trade (relative to GDP) has been on the decline since 2008.¹⁴ Tariffs and other barriers to trade have been increasing.

The number of industrial policy interventions made by governments over the past five years increased by more than 200%.¹⁵

Some, though, have expressed hope for an alternative path. Ngozi Okonjo-Iweala, director general of the World Trade Organization, has urged a move for "re-globalization," saying, "Deeper, more diversified international markets remain our best bet for supply resilience." 16



Energy transition

Some have argued that the conflict could make the green-energy transition more challenging, at least in the near-term.¹⁷

The crisis has brought energy security back into conversation alongside sustainability. Some European countries and states in the US have introduced measures to cut energy taxes and compensate households for higher gas prices. But there are also signs that some countries may double down on the energy transition and amplify incentives to expand greener energy production. 19



Potential scenarios for the war's impact on the economy and business

Potential scenarios for the war's impact on the economy and business

These and other uncertainties lead to a wide range of potential scenarios for the impact of the crisis on the global economy and business in the near-term. At least three scenarios with different levels of impact over the next year can be considered:

01

Controlled impact

- Sanctions do not escalate further and may even be scaled back as part of a negotiated truce, alleviating supply disruptions.
- Commodity prices return to pre-war levels.
- Consumer and business confidence increases, and companies and people return to pre-war investment plans and spending.

02

Ongoing impact

- The supply of key commodities continues to be disrupted throughout 2022. An oil and gas embargo remains limited to a select number of countries.
- Commodity supply shocks lead to a sustained rise in prices in the near term.
- Consumers cut back on some nonessentials and businesses focus on increasing the efficiency of their operations.

03

Protracted impact

- A wider oil and gas embargo leads to significant structural supply disruption.
- Commodity prices remain elevated and volatile into 2023.
- Sustained price rises reduce consumer spending power, contributing to a significant decline in consumer and business confidence and slowdown in growth.



Economic Impact Scenarios

The economic impact of these scenarios, of course, will potentially vary widely by country and region. Compared to the US, Europe's stronger trade linkages to Russia and heavier reliance on Russian energy imports make it more vulnerable to a growth slowdown. Oxford Economics estimates that, relative to pre-war forecasts, Eurozone GDP would decline by 1.1 to 2.9 percentage points in 2022. European countries with higher dependency on Russian oil and gas would be more significantly impacted. In the event of a protracted impact scenario, Eurozone inflation could rise by 4.1 percentage points in 2022 relative to pre-war forecasts.²⁰

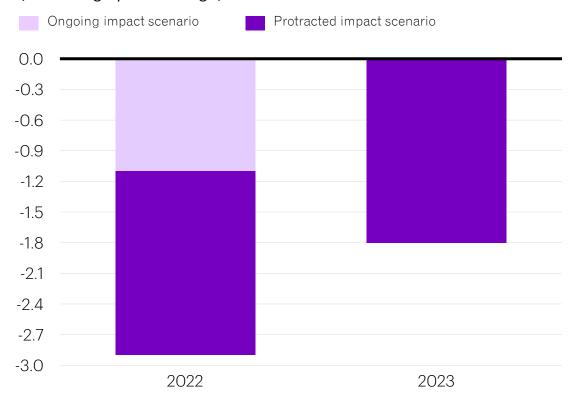
The US, meanwhile, would primarily be affected by higher oil prices and their knock-on effect on household wealth and consumer spending. In the event of a protracted impact scenario, Oxford Economics estimates that US GDP could decline relative to pre-war estimates by 1.0 percentage points in 2022 and 0.6 percentage points in 2023.²¹

Beyond Europe and the US, net oil and commodity importers like Japan and India would be affected by a sustained period of high oil and commodity prices. Emerging-market commodity importers in Asia and Africa would be particularly exposed to higher prices. These nations also would be affected more by the strain on food supply chains. At least 50 countries rely on Russia and Ukraine for 30% or more of their wheat supply—among the most reliant are emerging economies in Asia and northern Africa.²²

Potential economic impact of the war in Ukraine

The Eurozone's trade relationships make it vulnerable to a slowdown

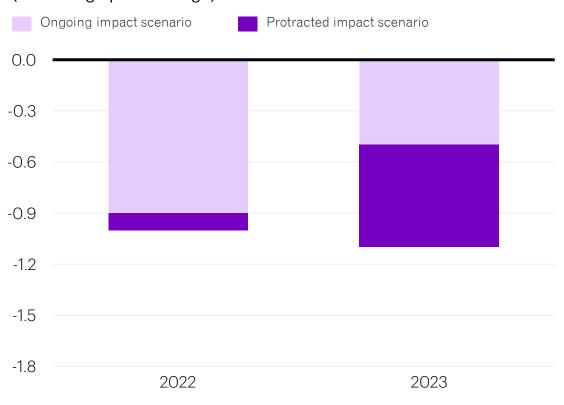
Forecasted impact on Eurozone GDP relative to pre-war forecast (Percentage point change)



Source: Based on mapping Oxford Economics' World Economic Prospects estimates to our scenarios. Data as of 8th April 2022. Pre-conflict refers forecast as of Jan 2022.

The U.S. could be impacted by the ripple effects of higher prices

Forecasted impact on US GDP relative to pre-war forecast (Percentage point change)



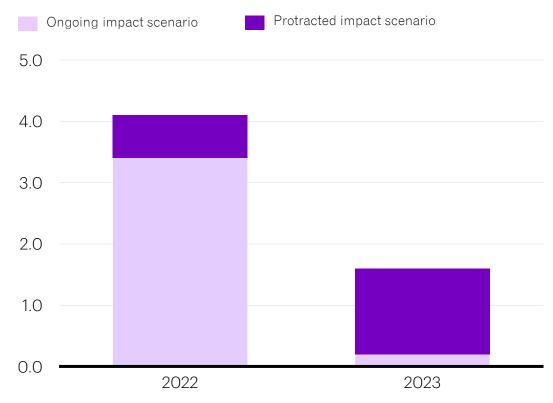
Source: Based on mapping Oxford Economics' World Economic Prospects estimates to our scenarios. Data as of 8th April 2022. Pre-conflict refers forecast as of Jan 2022.



Potential economic impact of the war in Ukraine

Inflation is forecast to rise in the Eurozone...

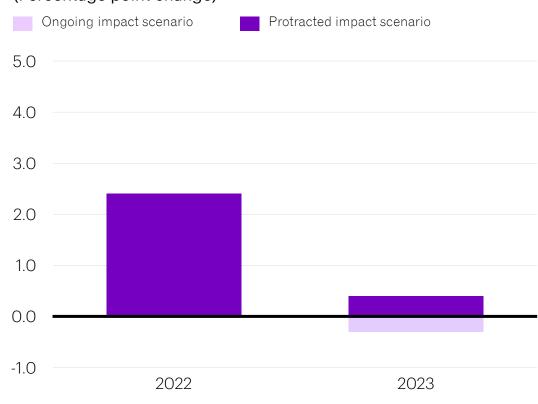
Forecasted impact on Eurozone inflation relative to pre-war forecast (Percentage point change)



Source: Based on mapping Oxford Economics' World Economic Prospects estimates to our scenarios. Data as of 8th April 2022. Pre-conflict refers forecast as of Jan 2022.

...and in the U.S.

Forecasted impact on US inflation relative to pre-war forecast (Percentage point change)



Source: Accenture Research analysis based on Oxford Economics' World Economic Prospects monthly data. Data as of 8th April 2022. Pre-conflict refers to forecast as of Jan 2022.



Industry impact

Different industries could also feel the war's impact to different extents. High oil and gas prices mean energyintensive manufacturing sectors may be most affected. In the US chemicals sector, for example, energy costs represent 35% of total input costs; in Europe, they represent 21%.²³

Shortages of wheat and other commodities could affect the consumer goods and service industry, where raw materials represent total input costs of ²⁴

25% 26% in Europe in the US

Specific pockets within supply chains may have greater exposure to the crisis, too. Some car manufacturers, for instance, have been closing assembly lines due to shortages of wiring harnesses manufactured in Ukraine.²⁵

Operating in an uncertain world

Operating in an uncertain world

As the shock of the invasion reverberates through the world economy, executives can consider how to position their businesses to minimize the impact.

Not every company may be affected in the same way. Organizations that operate in Ukraine and Russia have been most immediately affected and are focused on the welfare of their people. For organizations outside the conflict zone, the focus has been on complying with sanctions, responding to supply chain disruptions and assessing the impact on customers.

When facing such unforeseen challenges, many leaders aim to strengthen the resilience of their organizations by prioritizing adaptability. Digitizing enterprise functions at speed and in parallel, rather than sequentially, therefore seems essential for many companies. The premium on agility will intensify the focus on compressed transformation.

Regardless of how the situation evolves, companies can consider taking a series of simultaneous actions around

- Strategy
- Systems
- Supply chains
- People
- Ecosystems



Operating in an uncertain world - Strategy

Some organizations analyze and model the transmission of shocks and stress-test their strategy using scenario planning. Leaders concerned about substantial impact based on this analysis can reactivate proven tools from the pandemic and other past crises. Among them are "watchtowers," or collating data on critical uncertainties to catch risks early.

The value of flexible strategies is influenced by the quality of insights used in developing and amending such strategies. To find new patterns in data and better anticipate future decisions, organizations can capture real-time data from inside and outside the organization and across the value chain, and process it with Al-enabled analytic tools.²⁶

Operating in an uncertain world - Systems

The war has brought to the fore the potential of cyberattacks to disrupt business operations. Whether the conflict is quickly resolved or continues, securing assets now can help fortify their longer-term resilience.

In the near term, organizations can take high-priority mitigations suggested by <u>Accenture Cyber Threat Intelligence</u>, which include:

- Patch all externally facing infrastructure, such as VPN appliances, firewalls, web servers and load balancers.
- Log and monitor events for suspicious activity, back up data and isolate backups that might allow malware to spread.
- Implement security training and awareness programs that show employees how to identify and report phishing attacks. Such programs could be extended to ecosystem partners whose cybersecurity affects those they interact with.
- Maintain standard cybersecurity hygiene practices, like regularly updating software and firmware.

Longer-term resilience comes when security and business leaders align as partners in reducing risk. Actions include:²⁷

- reviewing alert-response capabilities, such as treating malware detection with the highest priority across the organization;
- segmenting IT and OT (operational technology) networks where appropriate, such as within industries responsible for critical infrastructure; and
- reviewing incident-response and business-continuity plans.

Operating in an uncertain world - Supply Chain

A pressing priority for organizations is to understand their level of supply chain exposure. This can start with a tactical review of risk by internal and external supplier-management teams. Resilience stress tests can then quantify an organization's longer-term resilience and simulate how the supply chain would respond to a range of conditions. This knowledge can help companies understand their risk exposure, how long it would take them to recover from disruption and how performance may be affected.

Accenture's approach in running such stress tests, co-developed with MIT, uses a "digital twin"—a real-time digital model—of an organization's unique supply chain to run different disruption simulations. These might include spikes/drops in demand, sudden supplier/facility shutdowns, disruption at a key transport hub, raw materials scarcity and so on.²⁸

Rising energy prices and potential shortages in key raw materials like (but not limited to) metals and agriculture mean that organizations should take steps to mitigate inflation in the cost of purchased goods. Commodity price risk management is a set of coordinated actions that includes:

- proactive monitoring of vendor disruptions;
- analysis of commodity prices; and
- aggressively seeking out alternative categories and suppliers to help contain cost pressures.

Over time, the value chain parts most affected by continuous disruptions can be made routinely adaptable. Organizations can look to move away from centralized, linear models of supply to more flexible decentralized networks.²⁹ These networks are often more global, not less. They use factories that are higher tech, smaller, more numerous, more local and closer to customers—thus more capable of quickly producing goods that reflect shifting needs.



Operating in an uncertain world - People

The pandemic had already altered the longstanding employee-employer relationship—whether it's a compressed work week, radically flexible work schedules, variable locations or the need for higher purpose. Continued uncertainty and elevated pressure on personal lives mean organizations will continue to explore how they can provide meaningful jobs.

Some organizations are beginning to implement new ways of working, moving beyond spaces and places to create omni-connected experiences. These will focus on connecting workers in differentiated ways that create a level playing field and a supportive, energizing environment.

Harnessing the entrepreneurial spirit of the workforce could be another crucial way to boost organizational flexibility, allowing companies to find new approaches to solving problems. To create a more entrepreneurial culture, organizations could encourage more employee autonomy, pushing decision-making to the "edges" of their organization.

When companies take this approach, they can better read and respond to the needs of complex, evolving markets.

Organizations can also better manage the risks associated with shifting political tides.



Operating in an uncertain world - Ecosystem

By developing more connections across companies' borders while accounting for geopolitical risk, organizations can be better positioned to strengthen their collective resilience. In the near term, the power of networks—and the knowledge and experience embedded within them can support organizations in assessing and managing risk more effectively. In a network, the vast number of information sources available today can be further amplified, creating an early-warning system of what lies around the corner.



Uncertainty: The new reality for business

For leaders and their organizations, there is no return to the relative comfort and safety of the not-so-distant past. The war in Ukraine has made clear that many of the old, comfortable certainties on which business relied are no longer with us.

Going forward, success may ultimately depend on how well leaders adapt to the demands of this new, testing environment.

More than ever, their resolve will be critical.

References

- ¹ "Ukraine Refugee Situation," UNHCR (2022) as of April 18th 2022
- ² "Ukraine Supplemental Appropriations Act, 2022," US government website (2022.); "Visualizing the \$13.6 billion in US Spending on Ukraine," The New York Times (2022).
- ³ "War in Ukraine: MEPs Unlock Emergency Funds for Refugees," European Parliament (2022).
- ⁴ "Russia Ukraine Crisis Overview," Accenture (2022); "Global Incident Report: Russia-Ukraine Crisis March 25," Accenture (2022); "Global Indirect Report: Threat Actors Divide Along Ideological Lines over the Russia-Ukraine Conflict on Underground Forums," Accenture (2022).
- ⁵ "White House tells CEOs that Russian Cyber Attack on US is 'coming'," Financial Times (2022).
- ⁶ "Over 600 companies have withdrawn from Russia—but some remain," Yale School of Management (2022); "Russia's war is creating corporate winners and losers," The Economist (2022).
- ⁷ Accenture Research analysis of Interos and FactSet. 2,100+ US companies and 1,200+ EU companies have Tier 1 suppliers in Russia. Those numbers expand sharply when considering sub-contractors: 190,000+ US companies and 109,000+ EU companies have Tier 2 and 3 suppliers in Russia.
- ⁸ Estimates from Morgan Stanley, Barclays, Goldman Sachs, BNP Paribas, Credit Suisse and J.P. Morgan 2022 GDP & Inflation Outlooks, as well as the OECD, IMF, and European Commission. Data as of 21st March 2022.
- ⁹ Oxford Economics' Global Economics Database. Pre-conflict refers to forecast as of December 2022.
- ¹⁰ "A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas," International Energy Agency (2022); "Russian supplies to global energy markets", International Energy Agency (2022). "Russia's war is creating corporate winners and losers," The Economist (2022).

- "2021/22 Grain Trade in Flux Amid Russia-Ukraine Conflict," US Department of Agriculture Foreign Agricultural Service (2022).
- ¹² Accenture Research analysis of University of Michigan Consumer Survey for US; and Consumer Sentiment Survey for EU.
- ¹³ See, for example: Adam S. Posen, "<u>The end of globalization?</u>," Foreign Affairs (2022); Martin Wolf, "<u>Russia's war will remake the world</u>," Financial Times (2022); Josh Zumbrun, "<u>Economic blacklist of Russia marks new blow for globalization</u>," The Wall Street Journal (2022).
- ¹⁴ The World Bank database
- ¹⁵ Accenture Research analysis of Global Trade Alert database, accessible at: https://www.globaltradealert.org/. Data is adjusted for reporting lags, with industrial policy interventions including: export supports, import curbs, licensing, quotas, subsidies and tariffs.
- ¹⁶ "DG Okonjo-Iweala tells sustainability conference "trade is part of the solution to challenges we face," World Trade Organization (2022).
- ¹⁷ See, for example: Vigya Sharma, "This is how the conflict between Ukraine and Russia could impact climate change," The World Economic Forum (2022); Leslie Hook and Neil Hume, "Will the Ukraine war derail the green energy transition?," Financial Times (2022); Patricia Cohen and Stanley Reed, "Will war make Europe's switch to clean energy even harder?," The New York Times (2022).
- ¹⁸ See, for example: Arne Delfs and Carolynn Look, "Germany slashes fuel tax in \$16.5 billion energy package," Bloomberg (2022). "Maryland, Georgia pause gas taxes with prices near record highs," The Wall Street Journal (2022). Chiara Albanese and Alberto Brambilla, "Italy could revive coal plants to break Russia energy dependence," Bloomberg (2022).
- ¹⁹ See, for example: "Netherlands ramps up plan for doubling offshore wind capacity by 2020," Reuters (2022); "The Med gets first offshore wind farm as Italy vows energy revolution," France 24 (2022); "Germany to speed renewables push due to Ukraine crisis," Reuters (2022).

- 20 Based on mapping Oxford Economics' World Economic Prospects estimates to our scenarios. Data as of 8th April 2022. Pre-conflict refers to forecast as of Jan 2022.
- ²¹ Based on mapping Oxford Economics' World Economic Prospects estimates to our scenarios. Data as of 8th April 2022. Pre-conflict refers to forecast as of Jan 2022.
- ²² "Ukraine Invasion May Lead to Worldwide Food Crisis, Warns UN," The Guardian (2022).
- ²³ Accenture Research analysis of OECD World Input Output tables.
- ²⁴ Accenture Research analysis of OECD World Input Output tables.
- ²⁵ "Europe's Automakers Scramble to Replace Ukrainian Auto Parts," Automotive News (2022).
- ²⁶ "Business Futures: Signals of Change," Accenture (2021).
- ²⁷ "State of Cybersecurity Resilience 2021: How aligning security and the business creates cyber resilience," Accenture (2021).
- ²⁸ "Accenture and MIT Team to Create a Supply Chain Resilience Stress Test," Accenture (2020).
- ²⁹ "Business Futures: Signals of Change," Accenture (2021).

About Accenture

Accenture is a global professional services company with leading capabilities in digital, cloud and security. Combining unmatched experience and specialized skills across more than 40 industries, we offer Strategy and Consulting, Interactive, Technology and Operations services — all powered by the world's largest network of Advanced Technology and Intelligent Operations centers. Our 674,000 people deliver on the promise of technology and human ingenuity every day, serving clients in more than 120 countries. We embrace the power of change to create value and shared success for our clients, people, shareholders, partners and communities.

Visit us at accenture.com

About Accenture Strategy

Accenture Strategy works with boards, CEOs and C-suite executives to create 360° value for all stakeholders by defining and answering their most strategic business questions—including growth, profitability, technology-driven transformation, mergers and acquisitions (M&A), operating models and sustainability—with insights from AI and data science, combined with deep industry and function expertise.

For more information visit www.accenture.com/strategy

Disclaimer

The material in this document reflects information available at the point in time at which this document was prepared as indicated by the date provided on the front page, however the global situation is rapidly evolving and the position may change. This content is provided for general information purposes only, does not take into account the reader's specific circumstances, and is not intended to be used in place of consultation with our professional advisors. Accenture disclaims, to the fullest extent permitted by applicable law, any and all liability for the accuracy and completeness of the information in this document and for any acts or omissions made based on such information. Accenture does not provide legal, regulatory, audit, or tax advice. Readers are responsible for obtaining such advice from their own legal counsel or other licensed professionals. Accenture and its logo are registered trademarks of Accenture.

This document refers to marks owned by third parties. All such third-party marks are the property of their respective owners. No sponsorship, endorsement or approval of this content by the owners of such marks is intended, expressed or implied.

Copyright © 2022 Accenture. All rights reserved.