



The 2022-2023 Fluency Report: Industry Crisis

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Our Approach



Research focus

Our goal was to explore the key crises in 2022 across 21 industries. We used Fortune 100's list of most prominent US companies to identify the most significant crises for each industry. Although some industries have more companies representing them, we set the scope to Fortune 100 companies that best represent each industry. We conducted an in-depth study on the ripple effect of the Russia-Ukraine war crisis, which is the most noteworthy crisis in 2022, and the impact of this crisis on each industry.

Methodology

We used Brandwatch, a social media listening platform driven by artificial intelligence, topic analysis to study crisis-related topics at scale. We analyzed the key topics that were most often mentioned in the news media. Our methods include:

- Crisis trend analysis
- Topic analysis
- Topic clustering

* For detailed methodology, please refer to the appendix.

Definition of Organizational Crisis

The definition of crisis can be interpreted in numerous ways, but in this report, we define it as follows:

- An organizational crisis is unpredictable and involves significant changes to a company's systems or its' parts. It can threaten the organization's existence and goals and negatively impact the relations between stakeholders and the organization. Additionally, during a crisis, companies are usually given little time to make decisions.

Crisis Analysis by Industry

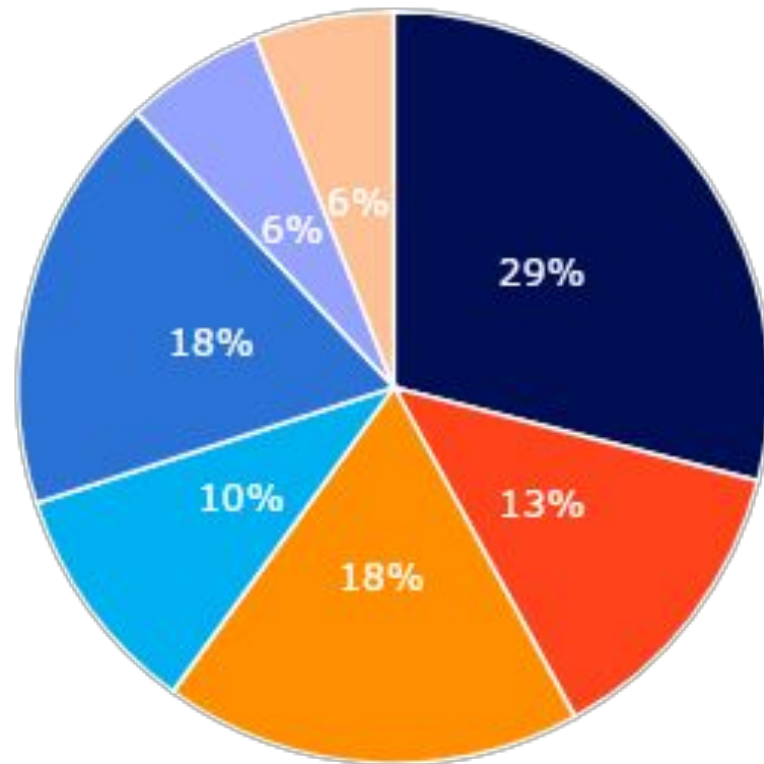


Summary



- COVID-19 has had a tremendous impact on our society since the beginning of the pandemic in 2020. Not long after the WHO announced that COVID-19 was nearing an end, our society faced a new type of crisis, the Russia-Ukraine war crisis, which again paralyzed the global economy. Thus, in 2022 and 2023, the Russian-Ukraine war was the primary cause that adversely affected the global industry landscape.
- International oil market uncertainty has been exacerbated as Russia has drastically reduced gas supplies and the Russian oil price cap. Consequently, inflation, exchange rate fluctuations, and reduced trade volume are creating stagflation.
- Following the Russia-Ukraine war crisis, disruptions in the global food supply chain and rising energy, grain, and raw material prices are expected to prolong inflationary pressures.
- Global impacts resulting from a combination of these factors identifies the Russia-Ukraine war as the most significant cause of industry crisis in 2022, with other crises occurring around it.

Types of crises in 2022



- Russia-Ukraine war crisis
- Covid-19 crisis
- Climate crisis
- Cost-of-living crisis
- Economic crisis
- Energy crisis
- Human rights crisis

Fortune 100 list of companies 2022 by industry

- While some industries only include one company on the list, the Fortune 100 ranks the highest revenue-generating companies in the United States, and is expected to provide a representative surrogate for other companies within the industries.

#	Industry	Company
1	Aerospace and Defense	Boeing, General Dynamics, Lockheed Martin, Raytheon Technologies
2	Apparel	Nike
3	Consumer Food Products (Beverages)	Coca-Cola, PepsiCo
4	Chemicals	Dow
5	Computer Software and Hardware	Apple, Dell Technologies, HP, Microsoft, Oracle
6	Construction and Farm Machinery	Caterpillar, Deere
7	Consumer Credit Card and Related Services	American Express
8	Diversified Financials	Fannie Mae, Freddie Mac, StoneX Group
9	Electric and Gas Utilities	Exelon
10	Entertainment	Comcast, Walt Disney
11	Food and Drug Stores	Albertsons, Costco Wholesale, Kroger, Publix Super Markets, Target, Walgreens Boots Alliance, Walmart
12	Health Care	Centene, Cigna, CVS Health, Elevance Health, HCA Healthcare, Humana, UnitedHealth Group
13	Industrial Machinery	General Electric

Fortune 100 list of companies 2022 by industry

#	Industry	Company
14	Insurance	Allstate, American International Group, Berkshire Hathaway, Liberty Mutual Insurance Group, Massachusetts Mutual Life Insurance, MetLife, Nationwide, New York Life Insurance, Northwestern Mutual, Progressive, Prudential Financial, State Farm Insurance, TIAA, USAA
15	Internet Services and Retailing	Alphabet, Amazon.com, Meta Platforms
16	Mail, Package, and Freight Delivery	United Parcel Service, FedEx
17	Megabanks	Bank of America, Citigroup, Goldman Sachs Group, JPMorgan Chase, Morgan Stanley, Wells Fargo
18	Motor Vehicles	Ford Motor, General Motors, Tesla
19	Petroleum Refining	Chevron, Exxon Mobil, Marathon Petroleum, Phillips 66, Valero Energy
20	Pharmaceuticals	AbbVie, Bristol-Myers Squibb, Johnson & Johnson, Merck, Pfizer
21	Soaps and Cosmetics	Procter & Gamble

Top 10 industries facing the most crisis

Industry	Climate crisis	Cost-of-living crisis	COVID-19 crisis	Economic crisis	Energy crisis	Public health crisis	Russia-Ukraine war crisis	Supply chain crisis
Computer Software and Hardware	•	•	•	•	•		•	•
Consumer Food Products (Beverages)	•	•	•	•		•	•	•
Internet Services and Retailing	•	•		•		•	•	•
Food and Drug Stores			•	•	•	•	•	•
Mail, Package, and Freight Delivery			•	•	•	•		•
Soaps and Cosmetics	•	•	•	•				•
Motor Vehicles	•	•	•				•	
Consumer Credit Card and Related Services		•		•			•	
Aerospace and Defense			•				•	
Megabanks				•			•	

1. Aerospace and Defense

- Crisis type: Russia-Ukraine war crisis
- Companies: Boeing, General Dynamics, Lockheed Martin, Raytheon Technologies



1. Aerospace and Defense

- In preparation for a prolonged conflict against Russia, the Pentagon, and the Ukraine government are urging U.S. aerospace and defense companies to accelerate the production and development of weapons.
- The Pentagon seeks to increase the pace of testing and developing hypersonic weapons as China and Russia have developed hypersonic weapons the US hasn't.
- Russia has deployed its hypersonic Kinzhal missiles in Ukraine, marking perhaps the first deployment of such weapons in war. Furthermore, China test-fired a hypersonic missile in 2021 that flew around the world before hitting its target.
- Source
 - <https://www.cnn.com/2022/04/28/investing/defense-stocks-russia-ukraine/index.html>
 - <https://www.cnn.com/2022/11/20/politics/us-hypersonic-china-russia-competition/index.html>

2. Apparel

- Crisis type: Russia-Ukraine war crisis, supply chain crisis, COVID-19 crisis
- Companies: Nike



- While some industries only include one company on the list, since the Fortune 100 ranks the highest revenue-generating companies in the United States, we expect that it represents other companies within the industries.

2. Apparel

- Lockdowns and strict quarantines have put China's economy into recession and threaten global businesses that rely heavily on Chinese factories and consumers.
- The Russian invasion of Ukraine has increased energy prices and disrupted supply chains.
- Source:
<https://www.nytimes.com/2022/07/14/business/economy/china-economy-slows.html>

3. Consumer Food Products (Beverages)

- Crisis type: Russia-Ukraine war crisis, supply chain crisis
- Companies: Coca-Cola, PepsiCo



3. Consumer Food Products (Beverages)

- Coca-Cola and PepsiCo joined the corporate exodus of Russia after Russia invaded Ukraine.
- The Coca-Cola Company announced in a brief statement that it would cease operations in Russia effective from March 2022. Furthermore, starting in September 2022, PepsiCo, which has operated in Russia for more than 60 years, has stopped selling and producing Pepsi-Cola and other global beverage brands in Russia.
- Global beverage companies are facing bottle and can shortages, rising raw material prices, material import delays, shipping and transportation disruptions, and labor challenges.
- Source
 - <https://www.npr.org/2022/03/08/1085179372/mcdonalds-russia-companies-ukraine>
 - <https://www.themoscowtimes.com/2022/09/20/pepsico-ends-production-in-russia-reuters-a78839>
 - <https://www.washingtonpost.com/business/2021/12/08/beverage-supply-chain-shortages/>

4. Chemicals

- Crisis type: COVID-19 crisis, supply chain crisis
- Companies: Dow Chemicals

projected to value USD million
pandemic is impacting USD million by 2028
COVID-19 crisis Rest million by 2028 with a CAGR
segment is altered COVID-19 pandemic finish of the crisis
analysis period Market Analysis growing at a revised % CAGR
USD million in 2022 Middle East and Africa health crisis COVID-19
review period impact of COVID-19 forecast period 2022-2028
global market in 2021 affecting the supply chain
estimated to be worth USD

4. Chemicals

- The negative economic impact of China's stringent zero-Covid policy has slashed chemical prices and demand.
- With China's increasing self-sufficiency in many key chemical products, much of China's demand will be met by local production.
- Source:
<https://www.icis.com/asian-chemical-connections/2022/07/chemicals-companies-face-an-unprecedented-demand-and-supply-crisis/>

5. Computer Software and Hardware

- Crisis type: Supply chain crisis, Russia-Ukraine war crisis
- Companies: Apple, Dell Technologies, HP, Microsoft, Oracle



5. Computer Software and Hardware

- The global pandemic has created supply chain bottlenecks that have led to semiconductor shortages. Chip prices have risen, which has increased the cost of electronic devices.
- Russian invasion has ramifications for China and Taiwan
 - China and Russia have shaken hands on an "unlimited" aid agreement that will pave the way for Russia's invasion of Ukraine. The fear is that the alliance could pave the way for Chinese reunification with Taiwan.
 - Taiwanese semiconductors account for 51% of the global chip market, producing the most chips in the world.
- Source
 - <https://www.newyorker.com/magazine/2022/11/21/a-dangerous-game-over-taiwan>
 - <https://za.investing.com/analysis/chip-supply-turmoil-builds-on-geopolitics-but-us-producers-could-benefit-200507742>

6. Construction and Farm Machinery

- Crisis type: Russia-Ukraine war crisis
- Companies: Caterpillar, Deere



6. Construction and Farm Machinery

- Following Russia's invasion of Ukraine, manufacturing operations in Russia facilities were suspended.
- Operations in Russia have become increasingly challenging due to supply chain disruptions and sanctions.
- Source:
<https://illinoisnewsroom.org/caterpillar-suspends-russian-manufacturing-operations-amid-deepening-scrutiny/>

7. Consumer Credit Card and Related Services

- Crisis type: Russia-Ukraine war crisis
- Companies: American Express



7. Consumer Credit Card and Related Services

- Global credit card companies have shut down operations in Russia after Russia invaded Ukraine to deal the latest blow to the Russian financial system.
- Russia accounted for about 4% of global credit card companies' net revenue in 2021.
- Source: <https://www.cbsnews.com/news/visa-mastercard-russia-ukraine-invasion/>

8. Diversified Financials

- Crisis type: Economic crisis
- Companies: Fannie Mae, Freddie Mac, StoneX Group



8. Diversified Financials

- As the Federal Reserve raised interest rates and the shadow of a recession lengthened, concerns about financial vulnerabilities naturally increased.
- As house prices fall and interest rates rise, financing for housing production will be frozen.
- Source
 - <https://www.forbes.com/sites/miltonezrati/2022/11/02/more-to-worry-about-in-financial-markets/?sh=bbd0bd871b5f>
 - <https://www.theamericanconservative.com/how-to-prevent-a-housing-crisis/>

9. Electric and Gas Utilities

- Crisis type: Climate crisis
- Companies: Exelon

A word cloud visualization of text related to Exelon and clean energy. The words are arranged in a roughly circular pattern. The most prominent words are 'clean energy' and 'Constellation'. Other visible words include 'Nuclear Power Plant market', 'response to the climate crisis', 'utility companies', 'Exelon will continue', 'carbon-free energy', 'STORE Capital', 'Health Crisis', and 'separation from Exelon'.

Nuclear Power Plant market
response to the climate crisis utility companies
Exelon will continue carbon-free energy
STORE Capital **clean energy**
Constellation Health Crisis
separation from Exelon

9. Electric and Gas Utilities

- Businesses are investing in the latest sustainable technologies to reduce their impact on communities, especially in resource-poor regions disproportionately affected by climate change.
- Exelon is providing clean energy solutions and technologies to combat climate change, reduce local air pollution, and promote a healthy, sustainable and equitable future.
- Source:
<https://finance.yahoo.com/news/exelon-releases-2021-corporate-sustainability-180000998.html>

10. Entertainment

- Crisis type: Russia-Ukraine war crisis
- Companies: Comcast, Walt Disney



10. Entertainment

- Entertainment industries stopped releasing theatrical films in Russia after Russia invaded Ukraine.
- The Walt Disney Company was the first major entertainment company to take a hard line against Russia after the invasion of Ukraine, announcing a suspension of all film debuts in Russia.
- Source:
<https://www.cnn.com/2022/02/28/disney-pauses-theatrical-releases-in-russia-condemns-invasion-of-ukraine.html>

11. Food and Drug Stores

- Crisis type: Russia-Ukraine war crisis, supply chain crisis, health crisis
- Companies: Albertsons, Costco Wholesale, Kroger, Publix Super Markets, Target, Walgreens Boots Alliance, Walmart



11. Food and Drug Stores

- Pharmacies and pharmaceutical companies have settled lawsuits over the US opioid crisis.
- Interest rates are being pushed up, which is causing prices to rise. Some commodities are in short supply as supply lines are still blocked.
- Moreover, the supply of goods is not smooth due to the shortage of truck drivers nationwide. Vital material is also being delayed due to the conflict in Ukraine.
- Source:
 - <https://www.reuters.com/business/healthcare-pharmaceuticals/pharmacies-drug-companies-settle-lawsuits-over-us-opioid-crisis-2022-11-22/>
 - <https://www.forbes.com/sites/walterloeb/2022/04/24/how-the-supply-chain-crisis-is-being-solved/?sh=64746c0d1db1>

12. Health Care

- Crisis type: Public health crisis, COVID-19 crisis
- Companies: Centene, Cigna, CVS Health, Elevance Health, HCA Healthcare, Humana, UnitedHealth Group



12. Health Care

- Rates of mental and behavioral health problems have increased extensively among women and children nationwide in recent years.
- The first year of the COVID-19 pandemic exacerbated several socioeconomic and environmental conditions that shape health. Women experienced record-high unemployment rates, and health indicators related to children's neighborhoods and home environments declined.
- Source:
https://www.americashealthrankings.org/learn/reports/2022-health-of-women-and-children-report?utm_source=newsroom&utm_medium=uhg&utm_campaign=hwc2022&utm_content=in-line_one&utm_term=news

13. Industrial Machinery

- Crisis type: Supply chain crisis, COVID-19 crisis
- Companies: General Electric



13. Industrial Machinery

- Logistics disruptions and supply chain crises have slowed delivery and increased transportation costs.
- The aftermath of the COVID-19 pandemic and associated inflation has created supply chain bottlenecks, making it more difficult to deliver products on time to its end customers.
- Source:
<https://www.wsj.com/articles/ge-names-board-for-ge-healthcare-spinoff-11662983653>

14. Insurance

- Crisis type: Economic crisis
- Companies: Allstate, American International Group, Berkshire Hathaway, Liberty Mutual Insurance Group, Massachusetts Mutual Life Insurance, MetLife, Nationwide, New York Life Insurance, Northwestern Mutual, Progressive, Prudential Financial, State Farm Insurance, TIAA, USAA

A word cloud visualization of insurance-related terms and company names. The most prominent words are "Buy", "Berkshire Hathaway", "President", "Chief", "Ratings", "General Insurance", "State Farm", "COVID-19 pandemic", "United States", "American International Group", "stock market", "customers in North America and internationally", "crisis management insurance products", "life insurance", "China", "Wells Fargo", "research report", "New York", "Warren Buffett", "two years", "Reading", "Daily - Enter your email address", "property insurance", "Insurance segment provides general liability", and "offers insurance products for commercial".

14. Insurance

- Buyers, sellers, and lessees are experiencing more twists and turns as soaring mortgage rates and stubborn inflation signal an economic crisis.
- Mortgage rates are skyrocketing, prices are skyrocketing, and there is no housing inventory.
- Source: <https://www.nytimes.com/2022/11/04/realestate/housing-market-interest-rates.html>

15. Internet Services and Retailing

- Crisis type: Russia-Ukraine war crisis, economic crisis, supply chain crisis
- Companies: Alphabet, Amazon.com, Meta Platforms



15. Internet Services and Retailing

- Google (now Alphabet), Apple, Facebook (now Meta), Amazon, and Microsoft—the world's five largest technology companies—have taken steps to impose significant voluntary sanctions on Russia in response to the invasion of Ukraine.
- The tech sector is undergoing massive layoffs as its digital advertising business is experiencing a downturn. Economic conditions are not promising, and a recession looks very likely.
- Source
 - <https://theconversation.com/the-power-of-tech-giants-has-made-them-as-influential-as-nations-heres-how-theyr-e-sanctioning-russia-178424>
 - <https://www.republicworld.com/technology-news/e-commerce/explainer-why-google-amazon-meta-and-now-hp-are-firing-so-many-of-their-employees-articleshow.html>

16. Mail, Package, and Freight Delivery

- Crisis type: COVID-19 crisis, economic crisis
- Companies: United Parcel Service, FedEx



16. Mail, Package, and Freight Delivery

- Demand for packages, which skyrocketed when the world was shut down due to COVID-19, is now tumbling.
- The weak global economy, particularly in Asia and Europe, has hit the mail, package, and freight delivery industry.
- The slowdown in the economy resulted in falling short of the 2022 revenue target for the mail, package, and freight delivery industry.
- Source: <https://www.cnn.com/2022/09/16/business/fedex-warning/index.html>

17. Megabanks

- Crisis type: Economic crisis, Russia-Ukraine war crisis
- Companies: Bank of America, Citigroup, Goldman Sachs Group, JPMorgan Chase, Morgan Stanley, Wells Fargo



17. Megabanks

- Global inflation has soared from past monetary surpluses to 40-year highs as governments unleash trillions of dollars in additional spending to stoke inflation.
- Banks are tightening lending standards and commercial customers are becoming warier of taking on more debt amid rising interest rates and economic uncertainty.
- Source
 - <https://www.barrons.com/articles/banks-fed-recession-51667859496>
 - <https://www.investing.com/analysis/inflation-wars-wars-and-more-wars-200632580>

18. Motor Vehicles

- Crisis type: Economic crisis, climate crisis
- Companies: Ford Motor, General Motors, Tesla



18. Motor Vehicles

- The world's dependence on oil and gas is economically unstable as unpredictable crises become frequent.
- As evidenced by the supply problems caused by the Russia-Ukraine war, the world needs to break away from reliance on fossil fuels.
- Global carbon emissions have continued to rise in 2022 and show no signs of slowing down.
- Meanwhile, electrification is progressing rapidly in the automotive industry.
- Source:
<https://www.forbes.com/sites/alanohnsman/2022/11/12/biden-at-cop27-a-tesla-bull-goes-bearish-and-carbon-emissions-keep-climbing/?sh=1db5a1b96c2a>

19. Petroleum Refining

- Crisis type: Russia-Ukraine war crisis, energy crisis, climate crisis
- Companies: Chevron, Exxon Mobil, Marathon Petroleum, Phillips 66, Valero Energy

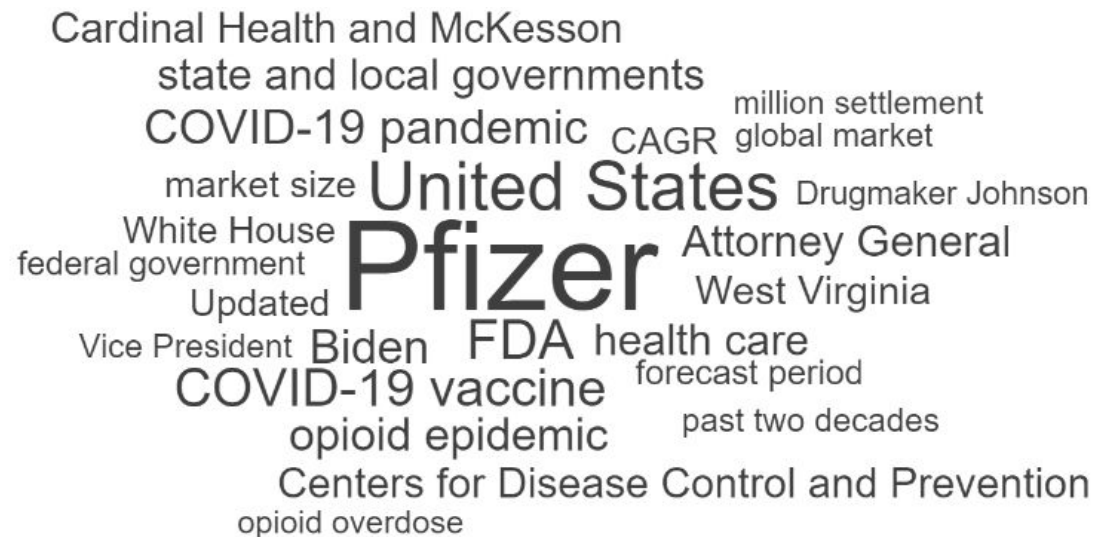


19. Petroleum Refining

- The Russia-Ukraine war left fuel in short supply, which led to electricity shortages, causing prices to skyrocket for both. This is in large part the result of a decline in Russian exports of oil, natural gas, and coal, which have been hit hard by Western sanctions and other policy efforts to curb Russian imports that finance Ukraine's atrocities.
- The House Oversight Committee said oil companies had "greenwashed" their public image by continuing to invest in fossil fuels. It said oil companies could ruin global efforts on climate change.
- Source
 - <https://time.com/6226587/energy-crisis-next-winter/>
 - <https://www.nbcnews.com/science/environment/oil-companies-doom-global-efforts-climate-change-house-committee-finds-rcna59443>

20. Pharmaceuticals

- Crisis type: Public health crisis, COVID-19 crisis
- Companies: AbbVie, Bristol-Myers Squibb, Johnson & Johnson, Merck, Pfizer



20. Pharmaceuticals

- The WHO's emergency committee first declared COVID-19 on 30 January 2020. This decision has helped accelerate research, funding, and international public health action to contain the disease.
- The United Nations agency said that while cases of COVID-19 are declining in some parts of the world, countries must remain vigilant and push to vaccinate the most vulnerable populations.
- Pharmacies and pharmaceutical companies have settled five years of litigation surrounding the US opioid crisis.
- Source
 - <https://www.reuters.com/business/healthcare-pharmaceuticals/who-says-COVID-19-is-still-global-health-emergency-2022-10-19/>
 - https://news.google.com/articles/CBMihwFodHRwczovL3d3dy5yZXV0ZXJzLmNvbS9idXNpbmVzcy9oZWZsdGhjYXJILXBoYXJtYWNIIdXRpY2Fscy9waGFybWFjaWVzLWRydWctY29tcGFuaWVzLXNIIdHRsZS1sYXdzdWI0cy1vdmVvLXVzLW9waW9pZC1jcmlzaXMtMjAyMi0xMS0yMi_SAQA?hl=en-TZ&gl=TZ&ceid=TZ%3Aen

21. Soaps and Cosmetics

- Crisis type: Economic crisis, supply chain crisis
- Companies: Procter & Gamble



21. Soaps and Cosmetics

- Transport and labor markets remain tight, material availability remains limited in some categories, and inflationary pressures in some markets are broad with little sign of easing in the near term.
- Soaring raw material prices are a problem. Across product lines, prices rose 44%, and prices for certain chemicals surged, a 60% increase over what the companies spent in 2021. These issues are all related to the supply chain crisis.
- Source:
<https://www.strategicsourceror.com/2022/02/costs-of-production-to-raise-prices-for.html>



In-depth Crisis Analysis Report

Impact of the Russia-Ukraine War on the Global Crisis

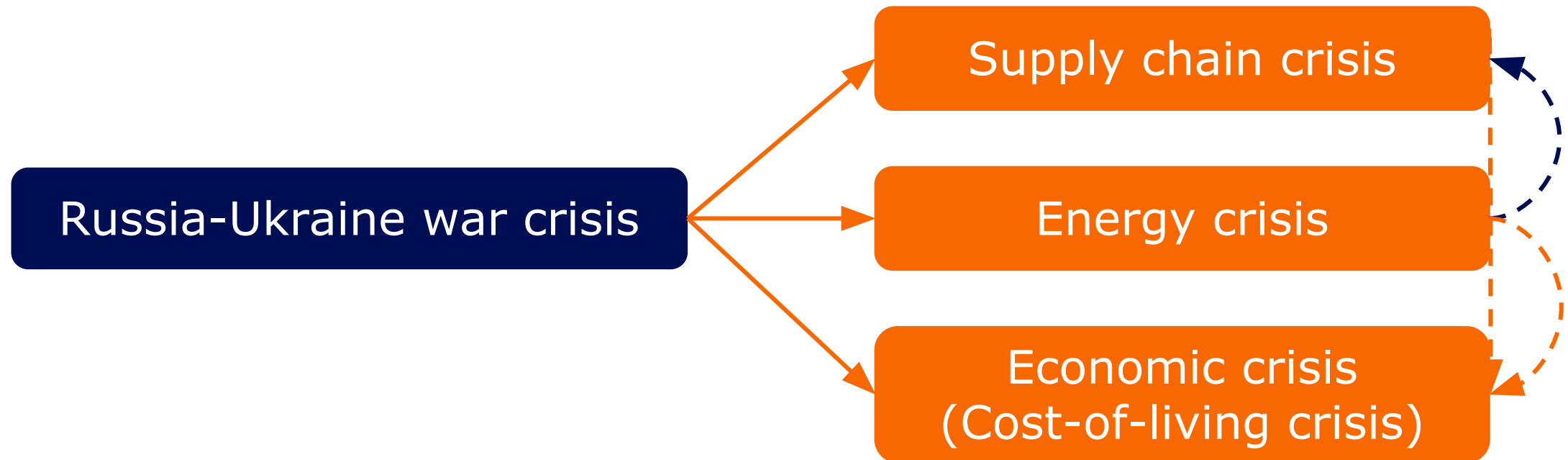
Summary: The ripple effect of Russia-Ukraine war

- In 2022, the Russia-Ukraine war has been the most significant crisis affecting Fortune 100 companies in the US.
- Based on Brand Watch's "topic analysis," 12 out of 21 industries were directly affected by the Russia-Ukraine war, with the other industries also finding it hard to avoid the impacts.
- The manufacturing, transport, and energy industry were the top 3 industries mentioned most often concerning the Russia-Ukraine war crisis.
- The ripple effect of the Russia-Ukraine war resulted in a supply chain crisis, energy crisis, cost-of-living crisis, and economic crisis.

Overview: Crises caused by the Russia-Ukraine war crisis

1st generation crisis

2nd generation crisis

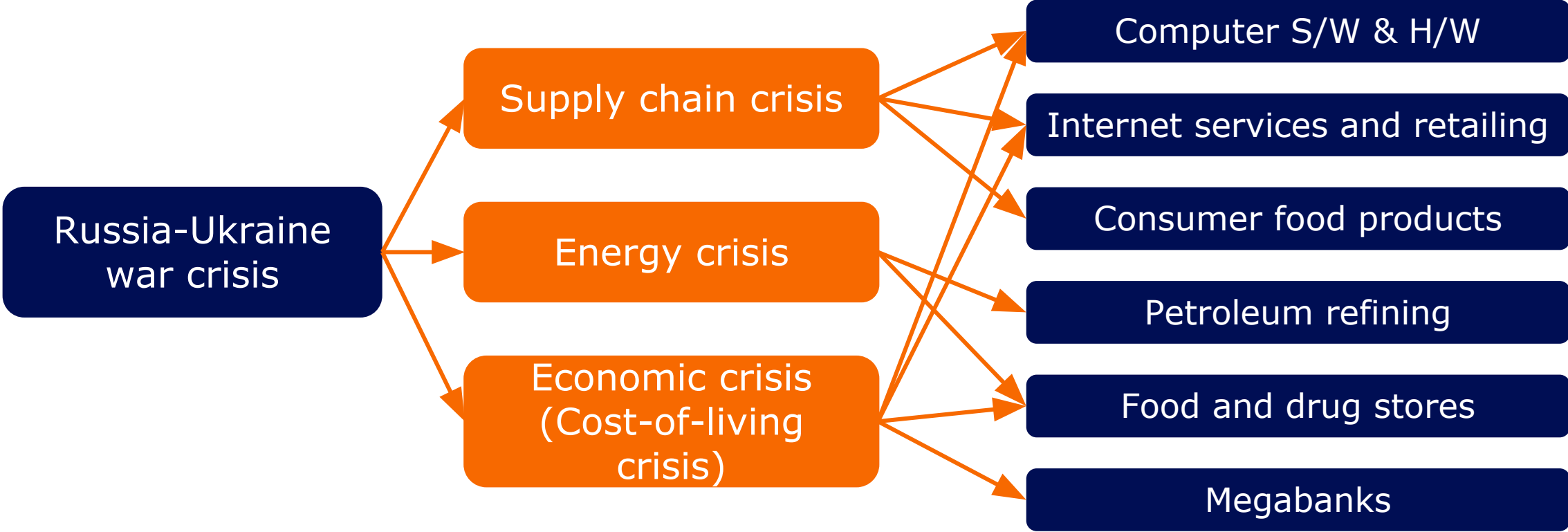


Overview: Industries that were most affected by Russia-Ukraine war crisis

1st generation crisis

2nd generation crisis

Industries



1. Supply chain crisis



- Russian invasion of Ukraine, combined with the COVID-19 pandemic, has delayed mobility of goods and people and created shortages of materials worldwide.
- Fuel prices have increased as many countries have restricted their energy imports from Russia, the world's largest producer and exporter of oil and gas. Additionally, the impact of reduced labor and border closures caused by COVID-19 has not yet fully recovered.
- Top 3 industries that were most affected by the supply chain crisis are computer software and hardware, internet services and retailing, and the consumer food products industry.

Supply chain crisis in the computer s/w and h/w industry

- Companies: Apple, Dell Technologies, HP, Microsoft, Oracle.
- The Russian-Ukraine war triggered severe disruptions to global markets for critical raw materials: neon and palladium.
- Chip shortages caused by raw material shortages contributed to supply chain problems, particularly in the automobile and electronics industries.
- Ukraine produces about half of the global neon, a noble gas needed for lasers in chip manufacture. Ukraine supplies 90% of U.S. semiconductor-grade neon.
- Russia exports about 40% of the global supply of the metal palladium, used in certain chip components.



Supply chain crisis in internet services and retailing industry



- Companies: Alphabet, Amazon.com, Meta Platforms.
- A lingering effect of the COVID-19 pandemic and the ongoing Russian invasion of Ukraine has caused damage to the global transportation network.
- In 2019 before COVID-19, the global container freight rate was an average of USD 1,405, but in December 2020 after the outbreak of COVID-19, the freight rate was USD 4,359, a 152% increase from the previous year.
- Container freight rates reached a high of USD 10,361 in September 2021 and have been decreasing since then. However, due to the aftermath of COVID-19 and the impact of the Russia-Ukraine war, logistics costs have not yet stabilized and are burdening the internet services and retailing industry.

Supply chain crisis in the food products industry



- Companies: Coca-Cola, PepsiCo.
- Since the start of the Russia-Ukraine war, the Russian army has blocked Ukrainian grain exports, affecting the world's food supply.
- Ukraine accounts for 10% of the world wheat market, 15% of the corn market, and 13% of the barley market. Ukraine also dominates the sunflower oil market, with over 50% of world trade.
- The average wheat price in 2022 was USD 435/mt, up 38% from pre-war, and the average maize price was USD 320/mt, up 23% from 2021.
- The rise in international grain prices is burdening the food products industry.

2. Energy crisis



- The price of energy has soared around the world since the second half of 2021. As a result of the invasion and Western sanctions, the pressure was heaped on oil and gas supplies that were already under strain from the rapid economic recovery following the pandemic.
- As a result, natural gas and oil prices have reached multi-year highs, accelerating the post-pandemic inflationary spiral that has crippled the cost of living across the globe.
- Russia is the world's second-largest natural gas and oil producer after the United States.
- Top 2 industries that were most affected by the energy crisis are petroleum refining and the food and drug stores industry.

Energy crisis and petroleum refining industry



- Companies: Chevron, Exxon Mobil, Marathon Petroleum, Phillips 66, Valero Energy.
- The world's top energy companies have halted their business in Russia and written off tens of billions of dollars in assets.
- However, the lack of supply combined with market volatility is causing gasoline prices to soar, with U.S. oil and gas companies expecting windfall profits by the tens of billions of dollars.
- Therefore, the Biden Administration is pressing American energy companies to boost production, pump more oil, and expand supplies to bring down prices.

3. Economic crisis (Cost-of-living crisis)



- Due to Russia's war of aggression against Ukraine, the global economy is slowing down as inflationary pressures continue to mount, sapping consumer confidence and household purchasing power, and increasing global risks.
- Global real GDP is expected to contract by 2.2% in 2023 from 3.2% in 2022.
- China is expected to lead global economic growth in 2023 as activity rebounds after China withdraws from its zero-COVID policy, with India expected to drive significant growth as well.
- Growth may be slower than expected if energy prices continue to rise, or if gas and electricity markets in Europe and Asia are disrupted by energy supply disruptions.
- Top 4 industries most affected by the economic crisis are megabanks, computer software and hardware, internet services and retailing, and food and drug stores.

Economic crisis in megabank industry



- Companies: Bank of America, Citigroup, Goldman Sachs Group, JPMorgan Chase, Morgan Stanley, Wells Fargo.
- In 2022, the banking industry was not that bad. A high-interest rate helped financial giants expand their margins, while the demand for loans was strong, helping them to grow their loan portfolios.
- Rising interest rates helped improve profitability, but it was also offset by an increase in non-performing loans.
- There is uncertainty about how the upcoming 'recession' will affect bank earnings due to the war in Ukraine and the unfinished effects of COVID-19.
- It is argued that megabanks could give away all their accumulated profits that were accumulated during the boom of 2022 when the macro environment deteriorates.

Economic crisis in computer s/w and h/w industry



- Companies: Apple, Dell Technologies, HP, Microsoft, Oracle.
- In 2022, global IT spending approximately increased by 3% to \$4.5 trillion. However, consumer spending on IT devices shrank by 5%.
- Tech companies have invested heavily during the pandemic to keep up with consumer demand but are now adjusting as spending slows down.
- Price hikes and delivery uncertainty exacerbated by the Russia-Ukraine war are accelerating the situation.
- Since the cost of living is rising along with inflation, more labor costs are being spent on retaining and attracting qualified personnel.

Economic crisis in internet services and retailing industry

- Companies: Alphabet, Amazon.com, Meta Platforms.
- Governments provided stimulus packages to prevent the global economy from sinking into a deep recession during the COVID-19 pandemic, pumping money into consumers and stimulating consumption. But inflation, which hit a 40-year high, now threatens to send the economy into recession. To make matters worse, the Russia-Ukraine war broke out, which triggered an energy crisis.
- As consumers assess their purchasing power and organizations assess their technology and advertising budgets, widespread inflation, rising fuel prices, and increasing energy costs are affecting the company's revenue growth.
- The internet services and retailing companies are facing a pullback in spending by some advertisers in certain areas and search ads such as financial services.



Economic crisis in food and drug stores industry



- Companies: Albertsons, Costco Wholesale, Kroger, Publix Super Markets, Target, Walgreens Boots Alliance, Walmart.
- Economic demand is declining in the United States and globally. As the cost of living rises and wages fail to keep pace with inflation, many people are slowly cutting back on spending.
- At the same time, many companies face rising input costs as energy (transport) and other raw materials become more expensive. This trend is exacerbated by rising interest rates, which lowers the borrowing capacity of businesses and households and increase interest expenses.
- According to the US Bureau of Labor Statistics said, inflation ended 2022 with a 6.5% annual reading, as measured by the Consumer Price Index.



Crisis forecast for 2023

Crisis forecast for 2023: Climate and Energy Crisis

- The energy crisis and climate crisis are the most important crisis topics to monitor in 2023, based on an analysis of key topics in the news media for four weeks beginning in January 2023.
- Among the crisis-related keywords searched in news media in January 2023, the Russia-Ukraine war crisis accounted for 25%, the climate crisis 16%, and the energy crisis 10%.
- The global energy supply crisis is predicted to worsen as the Russia-Ukraine war continues. Also, global awareness of energy security and unprecedented climate problems will lead to a greater focus on clean energy and climate change.

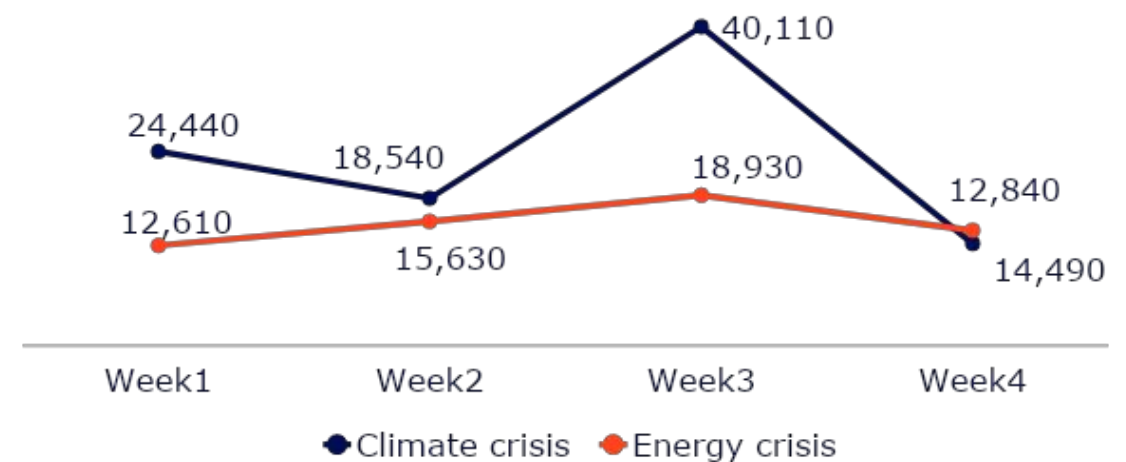


Figure1. word cloud related to “crisis”

Figure2. Weekly keyword search volume (date: Jan 1 – 29, 2023)



Appendix

Methodology: Brandwatch Search & Cleaning Criteria

- Search criteria
 - Date: January 1st 2022 – December 31st 2022.
 - Language: English only.
 - Content source: News media.
- Keyword selection criteria and data cleaning process
 - 1st step: To find what kind of crisis has occurred in the industry, search company name with “crisis” (e.g. CRIS* AND (company1 OR company2 OR company3)).
 - 2nd step: Among all keywords searched include (1) keywords that include “crisis” (e.g. COVID-19 crisis) and (2) keyword itself is a crisis (e.g. Supply chain).
 - 3rd step: Of all filtered keywords, include crisis keywords that account for 3% or more of the total keyword volume (e.g. Supply chain crisis: 8% - include, Mental health: 1.7% - remove).
 - 4th step: To select the industry that is most related to the crisis we included industries that account for 3% or more of the total keyword volume (e.g. Supply chain crisis total keyword volume: 34,230 keywords □ Computer S/W and H/W: 14,070 keywords, 41% - include).

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