WORLD ECONOMIC FORUM

Centre for the New Economy and Society

Chief Risk Officers Outlook

July 2023

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Chief Risk Officers Outlook

July 2023

This mid-year briefing on the global risks landscape is underpinned by consultations and surveys with leading chief risk officers from both the public and private sectors, organized by the Global Risks Initiative within the World Economic Forum's Centre for the New Economy and Society.

It aims to provide a real-time view on critical global risks to identify priorities for further action by policy-makers and business leaders facing compounding shocks to economies and societies.

The survey featured in this briefing was conducted in June 2023.

Contents

Executive summary 5

1. Mid-year outlook 7

Economic headwinds 8

Geopolitical fallout 10

Politics of risk 12

2. Risk spotlight: AI technologies 14

Risky business 14

Regulatory shortfalls 16

Contributors 19

Acknowledgements 20

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Executive summary

This first edition of the *Chief Risk Officers Outlook* launches against a backdrop of economic instability and political tensions. The aim of the outlook is to provide a mid-year pulse check from the perspective of on-the-ground risk practitioners, conducted through a new survey of the World Economic Forum's community of chief risk officers.

The survey asked chief risk officers to gauge the likely level of global volatility across five broad areas (geopolitical relations, economy, domestic politics, society and technology) and to identify up to five risks that they expect to have a severe impact on their organizations in the remainder of 2023. The results point to a range of global risks with the potential to threaten economic growth, destabilize global markets and disrupt broader business operations over the next six months.

Chief risk officers are most concerned with continuing volatility in geopolitical and geoeconomic relations between major economies, with the majority anticipating upheavals at a global scale. Over 85% of chief risk officers also expect some level of continued volatility in economic and financial conditions within and across major economies.

Among the risks that the chief risk officers considered, there are four that predominate, with half or more of respondents stating that the following are highly likely to have a severe impact on their organizations in the next six months.

- **Macroeconomic indicators:** The chief risk officers' focus on economic risks is in line with gloomy international assessments of the global growth outlook. Headline rates of inflation have begun to fall, but they continue to shape the economic risk landscape, not least through increases in interest rates that have squeezed demand and pushed up borrowing costs.

- **Pricing and/or supply disruptions of key inputs:** Although global supply-chain pressures have eased from the levels recorded over the last two years, many organizations are still grappling with significant uncertainty related to input availability and pricing, particularly for some raw materials. A number of the chief risk officers surveyed believe that further environmental or geopolitical shocks to key inputs – for example, stemming from the return of El Niño conditions or heightened controls on critical industrial inputs – are also a material possibility within the next six months.

- **Armed conflicts and/or use of weapons:** Chief risk officer's concerns about conflict risks may relate in part to the continuation of the war in Ukraine, as well as indirect disruptions to trade patterns and supply chains. However, numerous organizations worldwide are directly impacted by armed conflicts, with approximately 110 such conflicts currently occurring globally.

– **Regulatory changes, compliance and enforcement:** The examples of regulatory risks highlighted by the chief risk officers included trade restrictions and evolving provisions relating to climate change and technology. Respondents also note the growing importance to organizations of ethical and societal risks, which they viewed as more complicated to manage than regulatory compliance.

The survey also considered the risks posed by the exponential advances that are being made in AI technologies. Three-quarters of respondents expect volatility in the technology domain over the remainder of 2023, and a similar proportion agrees that AI technologies pose reputational risks to their organization, for example, due to the possibility of sensitive data being breached either inadvertently or due to malicious intent.

There was consensus that the development and deployment of AI technologies are outpacing the management of associated risks, and 90% of respondents want to see an acceleration of the introduction of regulations and guardrails. Self-regulation is becoming increasingly important, and more than half of respondents indicate that their organization plans to conduct an AI audit within the next six months. While progress on AI-related regulation has already begun, actions by organizations over the next six months will be critical to help ensure that these rapidly developing technological risks do not cascade into the next global crisis.

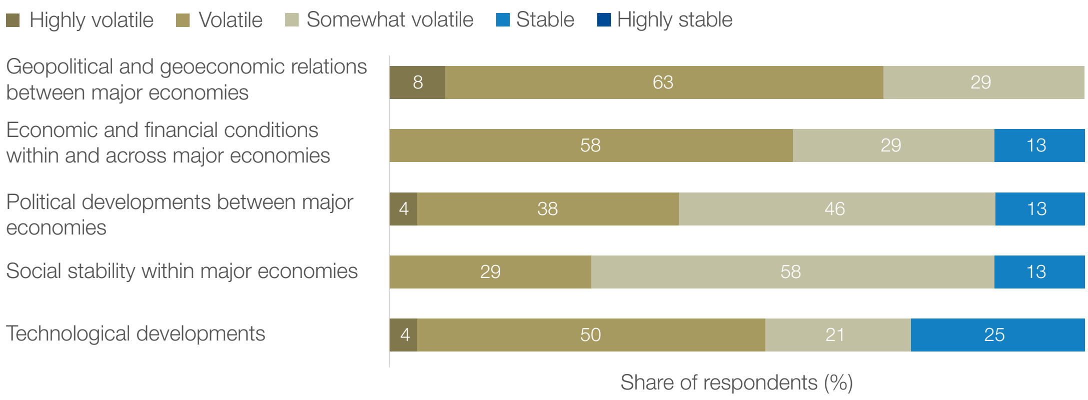
1. Mid-year outlook

Against a backdrop of continuing economic instability and political tensions, this first edition of the *Chief Risk Officers Outlook* launches with the aim of providing a mid-year pulse check on global risks through the lens of on-the-ground risk practitioners. A survey of the World Economic Forum's community of chief risk officers conducted in June 2023 reveals both new and evolving risks with the potential to threaten economic growth, destabilize global markets and disrupt broader business operations. This chapter provides an overview of the key risks and disruptions that the chief risk officers expect to shape the second half of 2023, while the next chapter looks more closely at the potential risks entailed by the recent step-change in the pace of development of artificial intelligence (AI) technologies.

The chief risk officer survey asked respondents to gauge the likely level of global volatility across five broad areas (geopolitical relations, economy, domestic politics, society and technology). The responses highlight areas of likely rapid, significant and unpredictable change, which in turn can result in fast-moving risks to organizations. The chief risk officers were also asked to select up to five risks that they expect to have a severe impact on their organizations in the remainder of 2023. The results of these two questions are summarized in Figures 1 and 2.

Figure 1. Mid-year outlook for volatility

On a global scale, what level of volatility do you expect in the following indicators over the remainder of 2023?

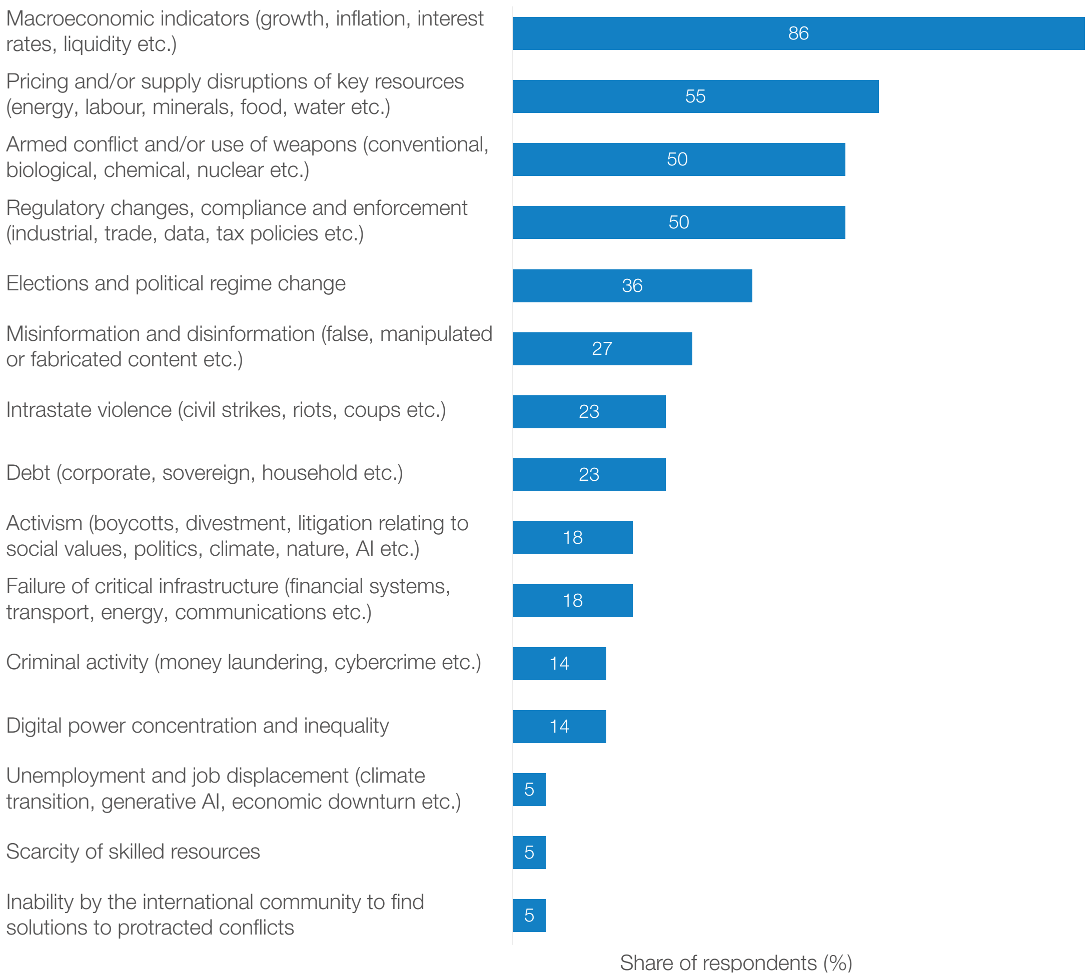


Note: Options included: Highly volatile (catastrophic risks looming); Volatile (upheavals likely at a global scale); Somewhat volatile (pockets of persistent instability within regions or industries); Stable (quick rebound from minor, isolated shocks); and Highly stable (negligible chance of serious, contagious crises). The numbers in the graphs may not add up to 100% because figures have been rounded up/down. n=21.

Source: Global Risks Outlook Survey, June 2023.

Figure 2. Top external risks to organizations

Please select up to five macro, external risks that are highly likely to have a severe impact on your organization by the end of 2023.



Note: The list of global risks explicitly excluded "perma-risks", such as chronic and infectious diseases, and extreme weather events and natural disasters. n=22.

Source: Global Risks Outlook Survey, June 2023.

Economic headwinds

Over 85% of chief risk officers expect there to be volatility in **economic and financial conditions within and across major economies** in the remainder of 2023. A similar proportion cites **macroeconomic conditions (growth, inflation, interest rates, liquidity etc.)** as among the top risks facing their organizations over the same period. This gloomy economic outlook is in line with international assessments. Recent forecasts have downgraded estimates of global gross domestic product (GDP) growth in 2023 to as low as 2.1%,[1] and the projected expansion across the world's advanced economies

1 World Bank, *Global Economic Prospects: June 2023*, 2023, https://www.worldbank.org/en/publication/global-economic-prospects.

is significantly weaker still, at 0.7%.[2] This is unlikely to be a short-lived squeeze on activity: the IMF expects global growth to average just 3% over the next five years, its lowest medium-term projections since 1990.[3]

Looking at the timeliest indicators of the world economy's performance, there are signs of renewed weakness heading into the second half of 2023, following some improvement earlier in the year. A global composite purchasing manager's index (PMI) covering both manufacturing and services sectors reached an 18-month high in May but then dipped to a four-month low in June.[4] The manufacturing component of the index signalled a contraction in June for the first time since January.

Against this backdrop of sluggish growth, inflation continues to shape the economic risk landscape. Headline rates have begun to ease from their recent highs, but in many countries, core inflation – which strips out volatile price categories such as food and energy and is used as a measure of underlying inflationary pressure – remains stubbornly high.[5]

Persistent inflationary pressures make it very difficult for central banks to halt, let alone reverse, their sharp tightening of monetary policy since early 2022. Interest rates are now at their highest in about 15 years,[6] squeezing demand and pushing up debt-servicing costs for households, businesses and governments alike. A new financial conditions index released by the US Federal Reserve in June 2023 points to the tightest US financial conditions since the global financial crisis and suggests that they will exert a drag of 0.75% percentage points on growth over the next year.[7]

The end of an era of exceptionally low-interest rates has also led to concerns about a potential surge in levels of debt distress or default. Almost a quarter of chief risk officers surveyed said that **debt** is highly likely to have a severe impact on their organization this year. Debt distress is a particular worry in relation to lower-income countries with dollar-denominated sovereign borrowing – for example, debt-servicing costs recently increased by 56% in Nigeria within three months[8] – but private-sector debt is becoming a source of growing concern as financial conditions tighten.

One risk is that so-called "zombie firms", which have been just about able to keep up with debt servicing in a low-rates environment, will no longer be able to continue operating as borrowing costs rise. The Institute of International Finance (IIF) suggests that 14% of US companies can be

2 World Bank, *Global Economic Prospects: June 2023,* 2023, https://www.worldbank.org/en/publication/global-economic-prospects; International Monetary Fund (IMF), *World Economic Outlook: A Rocky Recovery*, April 2023, https://www.imf.org/en/Publications/WEO/Issues/2023/04/11/world-economic-outlook-april-2023.

3 IMF, *World Economic Outlook: A Rocky Recovery*, April 2023, https://www.imf.org/en/Publications/WEO/Issues/2023/04/11/world-economic-outlook-april-2023.

4 J.P. Morgan, *J.P. Morgan Global Composite PMI* [Press release], 6 July 2023, https://www.pmi.spglobal.com/Public/Home/PressRelease/aa935e0542484ce8b942d07fe9eb55e0.

5 Weber, Alexander, "Euro-Area Core Inflation Quickens Again in Setback for ECB", *Bloomberg*, 30 June 2023, https://www.bloomberg.com/news/articles/2023-06-30/euro-area-core-inflation-accelerates-again-in-setback-for-ecb#xj4y7vzkg.

6 Ziady, Hannah, "European Central Bank hikes interest rates to highest level in 22 years", *CNN Business,* 15 June 2023, https://edition.cnn.com/2023/06/15/economy/european-central-bank-interest-rates/index.html; Sherman, Natalie, "US interest rates raised to highest level in 16 years", *BBC*, 4 May 2023, https://www.bbc.com/news/business-65474456.

7 Ajello, Andrea et. al., "A new index to measure U.S. financial conditions", *Board of Governors of the Federal Reserve System*, 30 June 2023, https://www.federalreserve.gov/econres/notes/feds-notes/a-new-index-to-measure-us-financial-conditions-20230630.html.

8 Nigeria's debt servicing costs rose from NGN 550.51 billion (Nigerian naira) from October to December 2022 to NGN 1.24 trillion between January and March 2023: Tunji, Sami, "Q1 2023 debt servicing rose to N1.24tn", *Punch*, 26 June 2023, https://punchng.com/q1-2023-debt-servicing-rose-to-n1-24tn-report/.

categorized as zombies.[9] Even in the absence of this kind of acute distress, however, the dual hit to businesses of high-interest rates and inflationary pressures is likely to lead to reduced spending in areas such as investment, innovation and expansion.[10]

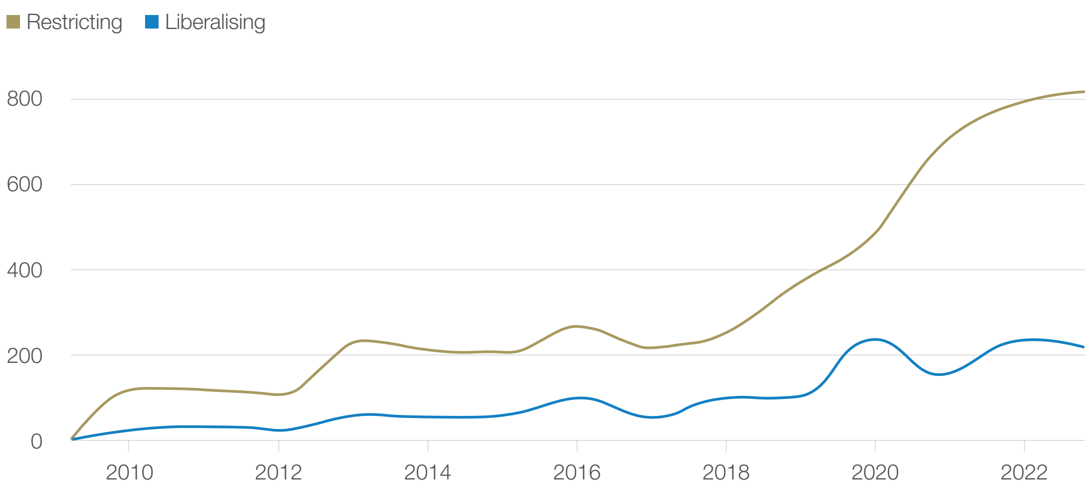
Very few chief risk officers highlighted **unemployment** as among the top risks to their organization over the next six months. This is in line with the continued buoyancy of labour market conditions in many economies, with half of Organisation for Economic Co-operation and Development (OECD) member countries reporting record highs in employment and labour market participation rates in 2022.[11] In the aforementioned global composite PMI, June 2023 was the 34th consecutive month in which rising employment levels were recorded.[12] One consequence of this labour-market tightness for employers has been a period of robust wage pressures.[13]

Geopolitical fallout

Economic and financial challenges may be exacerbated by ongoing shifts in global power dynamics. Of the five areas where they were asked to gauge volatility, on average, chief risk officers expect the highest levels in **geopolitical and geoeconomic relations**, with a majority expecting upheavals on a global scale (see Figure 1). This is perhaps

Figure 3. Trade measures

Number of new trade policy interventions against foreign commercial interests



Source: GTA and World Bank, cited in Wolf, Martin, "Developing countries have hit the financial rocks", *Financial Times*, 13 June 2023.

9 Institute of International Finance, *Global Debt Monitor: Cracks in the Foundation,* 2023, https://www.iif.com/Products/Global-Debt-Monitor#:~:text=The%20global%20debt%20stock%20grew,leverage%20in%20the%20financial%20system.

10 Allianz SE, *Mind the gap: the USD30trn global liquidity gap is here to stay,* 16 March 2023, https://www.allianz.com/en/economic_research/publications/specials_fmo/2023_03_16_WCR-and-Liquidity-Gap__AZ.html.

11 Organisation for Economic Co-operation and Development (OECD), *Labour Market Situation, OECD – updated: April 2023* [Press release], 13 April 2023, https://www.oecd.org/newsroom/labour-market-situation-oecd-updated-april-2023.htm; OECD, *OECD job markets remain tight though inflation is hitting real wages* [Press release], 11 July 2023, https://www.oecd.org/newsroom/oecd-job-markets-remain-tight-though-inflation-is-hitting-real-wages.htm.

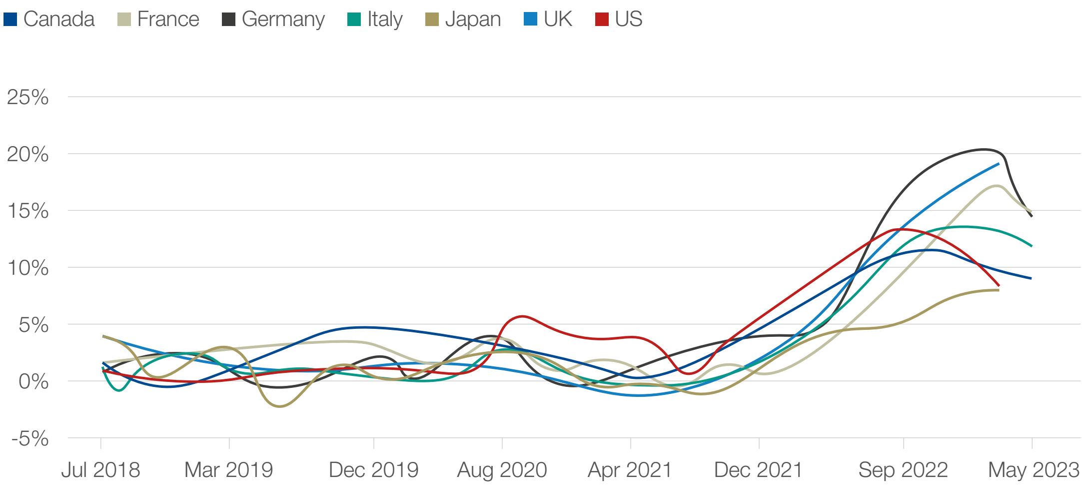
12 J.P. Morgan, *J.P. Morgan Global Composite PMI* [Press release], 6 July 2023, https://www.pmi.spglobal.com/Public/Home/PressRelease/aa935e0542484ce8b942d07fe9eb55e0.

13 Casselman, Ben, "Wages Continue to Grow, Good for Workers but a Worry for the Fed", *New York Times*, 28 April 2023, https://www.nytimes.com/2023/04/28/business/wage-inflation-march.html#:~:text=Inflation%20Cools%20Sharply-,Wages%20Continue%20to%20Grow%2C%20Good%20for%20Workers%20but%20a%20Worry,efforts%20to%20tamp%20down%20inflation.

unsurprising given the ongoing war in Europe and continuing US-China economic tensions, but it also points to a wider trend towards more adversarial international economic relations. Organizations face increased costs of doing business and potential limitations in market access owing to factors cited by chief risk officers, such as instability within and between major markets, sharp swings in policies and changing international trade patterns. One aspect of recent dynamics is illustrated in Figure 3, with economic policy being increasingly used to influence cross-border flows.

One consequence of geopolitical and geoeconomic turmoil in recent years has been significant supply chain disruption. This remains a concern for chief risk officers, with more than half of survey respondents identifying **pricing and/or supply disruptions of key resources** as highly likely to have a severe impact on their organizations over the remainder of the year. Although overall global supply chain pressures have eased,[14] many organizations are still grappling with significant uncertainty related to input availability and pricing, particularly for some raw materials. For example, global fuel prices remain elevated compared to pre-pandemic levels.[15] Food prices are above historical averages in most major economies (see Figure 4), and further volatility is possible if the return of El Niño conditions impacts crop production and exacerbates water shortages. A number of the chief risk officers surveyed believe that further geopolitical shocks to key inputs – such as a renewed energy crisis or heightened controls on critical industrial inputs – are also a material possibility within the next six months.

Figure 4. Food inflation in the G7



Note: 12-month rate of food Consumer Prices Index (CPI) inflation in the G7 from July 2018 to May 2023.

Source: OECD, *Consumer prices – Annual inflation, Food and non-alcoholic beverages* [Graphs], https://stats.oecd.org/Index.aspx?DataSetCode=G20_PRICES.

14 Federal Reserve Bank of New York, *Global Supply Chain Pressure Index (GSCPI)*, 2023, https://www.newyorkfed.org/research/policy/gscpi#/interactive.

15 The global fuel energy price index was 192.37 index points in April 2023, up from 100 in the base year 2016. The index includes prices for crude oil, natural gas, coal and propane: Aizarani, Jessica, "Monthly fuel energy price index worldwide from January 2020 to April 2023", *Statista,* 17 May 2023, https://www.statista.com/statistics/1302801/monthly-fuel-energy-price-index-worldwide/.

Remarkably, half of the chief risk officers surveyed believe that **armed conflict and/or the use of weapons** are among the top risks that are highly likely to have a severe impact on their organization within the next six months. It is possible that some of this relates to indirect effects. As one chief risk officer survey respondent notes, "Conflict is not localized – it has knock-on effects due to global interdependencies". Cross-border impacts can range widely, from supply chain disruptions discussed, to currency volatility, the introduction of trade restrictions and sanctions. Indeed, sanctioned individuals – due to, among other things, links with terror networks, crime, arms trafficking and war crimes – have grown by an estimated 25.4% in the past year.[16]

It is worth noting, however, that many organizations are directly affected by conflict. Around 110 armed conflicts are currently taking place across the world, and the first half of 2023 saw conflict break out in Sudan and clashes on the border between Armenia and Azerbaijan.[17] The survey of chief risk officers highlights the possibility of heightened military activity or even the outbreak of conflict elsewhere, including parts of Africa and the Middle East.[18] In addition, the horizontal or vertical escalation of the war in Ukraine remains a source of concern, while recent developments in Russia point to conditions that may act as a driver of uncertainty and further instability in the region over the short term.[19]

In addition to international tensions and conflict, organizations also face new and evolving sources of civil unrest, threatening business continuity. Nearly a quarter of chief risk officers predict that **intrastate violence (civil strikes, riots, coups, etc.)** is highly likely to have a severe impact on their organizations this year. By some measures, global peacefulness has been on the decline for much of the past fifteen years, and while the number and intensity of internal conflicts have shown improvement over the past year, deaths from internal conflict, violent crime and perceptions of criminality have all risen globally over the same period.[20] Beyond physical security risks, businesses operating in fragile countries with weak rule of law can be exposed to heightened risks of corruption, human rights abuses and appropriation of assets.

Politics of risk

Chief risk officers expect **political developments within the world's major economies** to be characterized by volatility over the rest of 2023, with over 40% believing upheavals are likely at a global scale. Similarly, when respondents were asked about the risks that are highly likely to have a severe impact on their organizations, political factors featured prominently:

– A third of chief risk officers highlighted the potential organizational risks posed by **elections and political regime change**.

16 Based on the Global Sanctions Index, which measures "inflation" in sanctions, or the annual increase in the total number of de-duplicated sanctioned persons on all explicit sanctions lists. Latest available data is from April 2023: Meadon, Michael, *The Global Sanctions Index (GSI): Unpacking Worldwide Sanctions*, Refinitiv, 2023, https://www.refinitiv.com/en/resources/white-paper/global-sanctions-index#.

17 "Today's Armed Conflicts", *Geneva Academy*, n.d., https://geneva-academy.ch/galleries/today-s-armed-conflicts#first; "Fighting erupts in Sudan's southeast after RSF advance in Khartoum, *Reuters*, 26 June 2023, https://www.reuters.com/world/africa/reports-fighting-sudans-southeast-after-rsf-advance-khartoum-2023-06-26/; "Russia urges Azerbaijan to unblock access to Karabakh", *The Moscow Times*, 23 June 2023, https://www.themoscowtimes.com/2023/06/23/russia-urges-azerbaijan-to-unblock-access-to-karabakh-a81614.

18 "Today's Armed Conflicts", *Geneva Academy*, n.d., https://geneva-academy.ch/galleries/today-s-armed-conflicts#first.

19 Kirby, Paul, "Wagner chief's 24 hours of chaos in Russia", *BBC News,* 25 June 2023, https://www.bbc.com/news/world-europe-66006880.

20 Institute for Economics & Peace, *Global Peace Index 2023: Measuring Peace in a Complex World,* 2023, https://www.visionofhumanity.org/wp-content/uploads/2023/06/GPI-2023-Web.pdf.

This is likely to cover a range of disruptive factors, from political and policy discontinuity (particularly in the context of heightened societal polarization) to politically fuelled violence. Elections are set to take place in a number of key markets in the remainder of this year, including Poland, Pakistan, Zimbabwe and Argentina, while the early stages of the next US presidential election begin in January 2024.

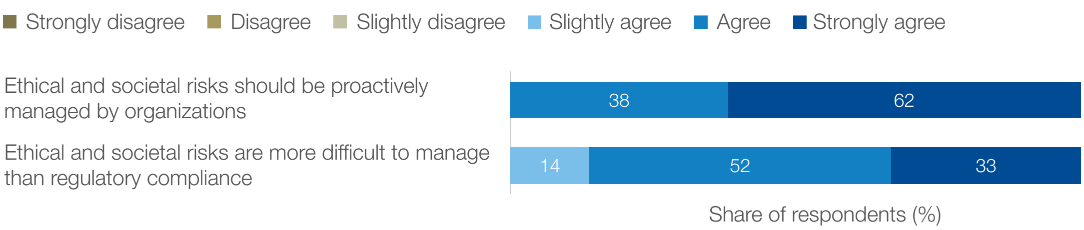
– Half of chief risk officer respondents also pointed to **regulatory changes, compliance and enforcement** as a top risk over the next six months. The examples cited by chief risk officers included trade restrictions and regulatory developments relating to climate change and AI technologies. Mirroring this trend, compliance risks are growing as regulatory scrutiny increases in key areas. This is particularly true in the EU, where, for example, data protection fines reached a record €1.6 billion in the first half of this year,[21] and where new corporate sustainability reporting requirements will take effect from 2024.[22]

Respondents also note the growing complexity of the ethical and societal risk landscape that organizations must navigate. There was unanimity among chief risk officers about the need to proactively manage these risks, but also consensus that **ethical and societal risks** are more difficult to manage than regulatory compliance (see Figure 5). As one respondent commented: “Ethical and social risks are far less black and white than regulatory compliance and are constantly evolving”. Another noted the need to contend with “differing expectations from various interest groups in societies that no longer seek political legitimation for change but directly pressure companies”.

Societal expectations can change rapidly and may exceed or even conflict with the requirements of existing legislation. There is also growing interest in potential negative externalities associated with business activities. This creates an environment of significant uncertainty and volatility for organizations and can culminate in reputational risk and potential loss of capital and revenue via consumer boycotts, investor divestment, litigation and even organizational failure. A number of chief risk officers said they expect to see activism related to the environmental, social and governance (ESG) agenda in the months ahead, but overall, activism was cited by a small proportion of respondents as a top risk to their organization.

Figure 5. Risk management

Please indicate the extent to which you agree with the following statements.



Note: The numbers in the graphs may not add up to 100% because figures have been rounded up/down. n=21.

Source: Global Risks Outlook Survey, June 2023.

21 Armstrong, Martin, “Data protection fines reach record high in 2023”, *Statista*, 23 May 2023.

22 “Corporate sustainability reporting”, *European Commission*, n.d., https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en.

2. Risk spotlight: AI technologies

Recent months have seen a sharp increase in the discussion of technology-related risks, particularly in the context of a surge of interest in the exponential advances being made in generative AI technologies. The rapid development of these technologies has triggered a wave of investment – technology stocks have boomed in the first half of 2023 – setting the scene for further rapid development in the months and years ahead.[23] Among the chief risk officers surveyed, a quarter expect **technology-related stability** in the months ahead, but three-quarters expect volatility, with more than half expecting global upheaval (see Figure 1). It is therefore becoming increasingly urgent to examine both the risks that AI technologies may pose and the most appropriate responses to those risks.

Risky business

Recent progress in the development and deployment of AI models combines algorithmic advances with access to computing power and training data of unprecedented scale. It represents a potentially disruptive inflexion point for societies and creates a complex and uncertain environment in which organizations must operate. These models promise significant benefits in key sectors, such as agriculture, education and healthcare, but they also have the power to cause significant harms.

One source of harm is the deliberate misuse of the technologies by bad actors. AI is a general-purpose, dual-use technology deployed with increasingly intuitive interfaces. The ease of use of these technologies makes them accessible to a wide range of users, including those with malicious intent. Examples of potential misuse cited by chief risk officers include misinformation and disinformation, increasingly sophisticated cyberattacks, and the targeting of sensitive data. As one chief risk officer notes, organizations can be responsible for personal data that, in the wrong hands, will “put people’s lives in danger”. Beyond these organizational risks, the malicious use of AI technologies also has the capacity to pose societal and global threats. For example, it has been suggested that the ability of generative AI models to collate publicly accessible but hard-to-find information could enable the development of biological or chemical weapons.[24]

A second factor that shapes the risks posed by AI technologies is how opaque their inner workings are: no one fully

23 Goodkind, Nicole, “The credit crunch is getting worse and bankruptcies are on the rise”, *CNN Business,* 3 July 2023, https://edition.cnn.com/2023/07/03/investing/premarket-stocks-trading/index.html; Goodkind, Nicole, “How can we possibly be in a bull market right now? Two letters: AI”, *CNN Business,* 9 June 2023, https://edition.cnn.com/2023/06/09/investing/bull-market-artificial-intelligence/index.html.

24 Scharre, Paul, “AI’s Gatekeeper’s Aren’t Prepared for What’s Coming”, *Foreign Policy*, 19 June 2023, https://foreignpolicy.com/2023/06/19/ai-regulation-development-us-china-competition-technology/.

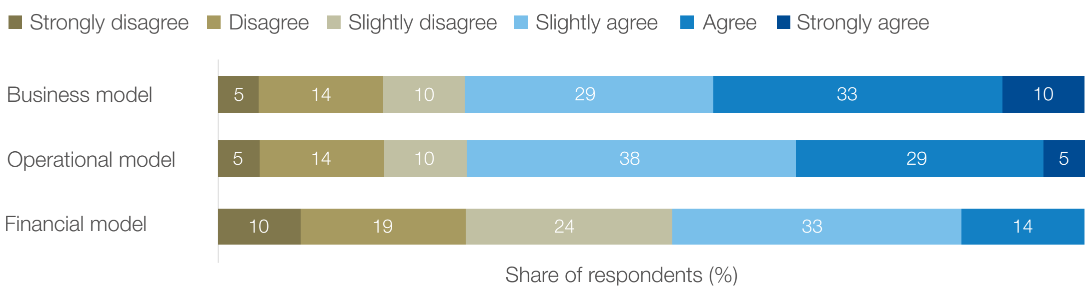
understands how they arrive at particular outputs. This increases the likelihood of harms being caused inadvertently.

It also makes it very difficult to assess and anticipate the potential risks that the use of these technologies might cause. It is perhaps unsurprising then that more than 75% of chief risk officers agree that **the use of AI technologies is posing reputational risks to their organization**. They note the importance of following responsible AI principles and flag risks related to the inadvertent sharing of personal data as well as bias in algorithmic decision-making.

When asked which aspects of their organizations are most likely to be affected by AI technologies this year, respondents said they expect the impact to be slightly more on operations, business models and strategies rather than on financial models (see Figure 6). However, it was also suggested that it would take time for the effects of AI to be felt: the short-term impact might be one of "limited change", but the longer term might bring a "completely different perspective".

Figure 6. Business risks of AI technologies

Please indicate the extent to which you agree with the following statements in the context of risks to organizations: *AI technologies will have a material impact on the following components of my organization by the end of 2023:*



Note: The numbers in the graphs may not add up to 100% because figures have been rounded up/down. n=21.

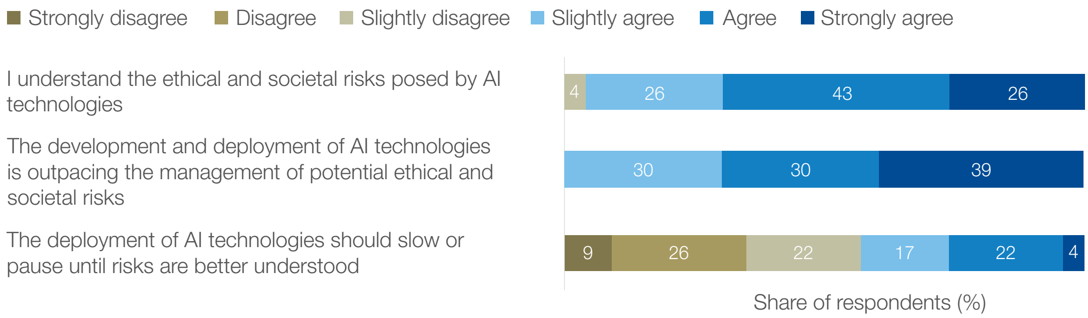
Source: Global Risks Outlook Survey, June 2023.

Regulatory shortfalls

Most respondents are confident that they understand the ethical and societal risks posed by AI technologies, but there is concern and uncertainty around the question of how to manage those risks (see Figure 7). All of the chief risk officers surveyed agreed with the proposition that the **development and deployment of these technologies are outpacing the management of the potential ethical and societal risks**. This challenge is not unique to AI technologies, but it is particularly acute in relation to them, given the recent rapid acceleration in their development. As one chief risk officer comments: "Without deeper and broader shared understandings, it will be difficult to fashion solutions. I fear that AI deployment and evolution will outpace society's ability to understand and respond constructively".

Figure 7. Rapid deployment of AI technologies

Please indicate the extent to which you agree with the following statements in the context of risks to economies and societies.



Note: The numbers in the graphs may not add up to 100% because figures have been rounded up/down. n=21.

Source: Global Risks Outlook Survey, June 2023.

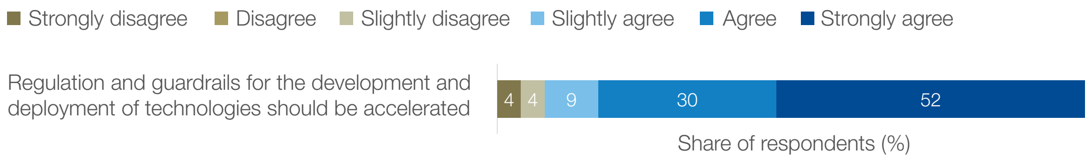
It is striking that almost half of the respondents (43%) agree with the idea of **slowing or pausing the development of AI technologies until the associated risks are better understood**. This echoes high-profile calls earlier this year for a six-month moratorium on the development of advanced AI systems.

There is almost complete agreement among the chief risk officers on the need for improved regulation to manage these risks. Over 90% of respondents are of the view that the **introduction of regulation and guardrails for the development of these technologies should be accelerated** (see Figure 8). Progress on AI-related regulation has already been made, most notably in the EU, US and China,[25] but many are calling for regulators to go further and faster. Measures that have been proposed include creating new regulatory authorities dedicated to AI,

25 Browne, Ryan, "EU lawmakers pass landmark artificial intelligence regulation", *CNBC,* 14 June 2023, https://www.cnbc.com/2023/06/14/eu-lawmakers-pass-landmark-artificial-intelligence-regulation.html#:~:text=The%20European%20Union's%20AI%20Act,ban%20real%2Dtime%20facial%20recognition; Shepardson, David and Bartz, Diane, "US begins study of possible rules to regulate AI like ChatGPT", *Reuters,* 12 April 2023, https://www.reuters.com/technology/us-begins-study-possible-rules-regulate-ai-like-chatgpt-2023-04-11/; Feng, Coco, "China to draw up AI regulation in 2023 as Beijing races against EU, US to roll out new laws covering the technology", *South China Morning Post*, 8 June 2023, https://www.scmp.com/tech/policy/article/3223429/china-draw-ai-regulation-2023-beijing-races-against-eu-us-roll-out-new-laws-covering-technology.

Figure 8. Risk management of AI technologies

Please indicate the extent to which you agree with the following statements in the context of risks to economies and societies.



Note: The numbers in the graphs may not add up to 100% because figures have been rounded up/down. n=21.

Source: Global Risks Outlook Survey, June 2023.

placing restrictions on the most powerful versions of the technology, imposing tiered access to the computing power that these technologies require, and creating auditing and certification systems.[26]

The current phase of regulatory evolution creates significant uncertainty for organizations. Only 55%of chief risk officers surveyed say they **understand how existing and upcoming regulation relating to AI will impact their organization**.[27] This is not only true of AI-specific regulations, but also of other regulations that may apply to these new technologies. It is not yet clear, for example, how the use of generative AI may interact with and inadvertently breach existing laws across areas as diverse as intellectual property, employment, competition, data protection and privacy, and human rights.

An additional consideration for organizations is the potential costs associated with new regulations. If moves to regulate AI in the US, China, EU and elsewhere result in sweeping, complex and possibly globally unaligned regulatory reforms, it could entail significant costs for organizations. It could also create inadvertent spill-over business risks. For example, there has been significant corporate backlash against proposed data-sharing provisions of the EU's Data Act on the basis of their impact on European competitiveness and cybersecurity.[28]

Creating new regulations tends to be a slow and careful process, often lagging behind the rapid development and deployment of exponential technologies. These technologies are now approximately 1,000 times larger and far more powerful than they were five years ago when the initial work on what would become the EU's AI Act first began. Regulatory gaps are therefore likely to persist, and some chief risk officers suggest that enhanced societal and investor scrutiny will play an increasing role. For example, the world's largest sovereign wealth fund has announced that it intends to introduce a set of standards around the ethical use of AI as part of its broader responsible investment framework.

26 Waters, Richard, "Can AI be regulated?", *Financial Times*, 19 May 2023, https://www.ft.com/content/8446842c-537a-4fc4-9e02-667d719526ae?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content.

27 n=21.

28 Ruff, Chris, "CEOs call for urgent rethink on Data Act", *Digital Europe*, 8 May 2023, https://www.digitaleurope.org/news/ceos-call-for-urgent-rethink-on-data-act/.

Self-regulation by organizations is becoming increasingly important. More than half of chief risk officers surveyed indicated that their organization **plans to conduct an AI audit** within the next six months to ensure the safety, legality and ethical soundness of the algorithms being used.[29] However, there is a lack of incentives to address externalities, so not all organizations are approaching AI risks in this way. One chief risk officer comments: "My organization is not prioritizing this subject as a risk, and it is unlikely that management would support a pivot in this direction".

This is likely to be a challenge for the technology sector in particular. Chief risk officers highlight that resources tend to be heavily weighted towards development rather than risk management and mitigation and that "responsible AI" teams were among the first to be let go when the tech sector downsized in the face of economic headwinds earlier this year.[30]

However, in the face of the growing disruptive power of AI technologies, it will be increasingly important for organizational leaders to demonstrate that their use of AI clearly aligns with societal values and interests and that they are committed to ensuring that AI risks do not cascade into the next global crisis.

29 n=19.

30 Hogarth, Ian, "We must slow down the race to God-like AI", *Financial Times*, 13 April 2023, https://www.ft.com/content/03895dc4-a3b7-481e-95cc-336a524f2ac2?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content; Criddle, Cristina and Madhumita Murgia, "Big tech companies cut AI ethics staff, raising safety concerns", *Financial Times*, 29 March 2023, https://www.ft.com/content/26372287-6fb3-457b-9e9c-f722027f36b3?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content.

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