Geopolitical risk dashboard

BlackRock

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Geopolitical Risks – February update

Geopolitical fragmentation is set to accelerate in 2024, and we see it contributing to inflation pressures. The recent Houthi militant attacks on shipping in the Red Sea highlight how conflicts can hit supply chains and increase production costs.

A series of intertwined dynamics are exacerbating volatility in global markets: the Gaza war, Russia's invasion of Ukraine, and U.S.-China competition. These shocks are driving structural changes in the geopolitical order. We see such shifts as fundamental, not transitory. The result: Geopolitics has become a persistent market risk, as described in our 2024 Global Outlook. Our BlackRock Geopolitical Risk Indicator, which tracks market attention to geopolitical risks, is at 18-month highs.

We expect three themes to dominate the geopolitical landscape in 2024. First, we see deeper fragmentation between competing geopolitical and economic blocs. Second, we see a more volatile and less predictable world order, as the number of violent conflicts reaches its highest level in 80 years. Third, we expect the rewiring of globalization to accelerate. These themes present risks and opportunities for investors, in our view, across both geographies and sectors.

Key highlights this month include:

- We reaffirm our highest-level rating on *Gulf tensions* given the ongoing Gaza war and signs of regional escalation. The longer and more lethal the Israeli operation, the greater the chance of escalation, expansion and contagion. We see this risk in areas like the Red Sea, Iraq, Syria and Lebanon.

- We keep our *U.S.-China strategic competition* risk rating at a high level. The U.S.-China relationship is experiencing a period of tactical stability amid targeted decoupling and intense, structural competition. Taiwan remains the most significant potential flashpoint, as the recent Taiwanese elections show.

- We maintain our *Major cyber attack(s)* risk rating at a high level. Recent large-scale attacks highlight the vulnerability of critical infrastructure. We see the risk increasing amid a historic year for global elections.

Our dashboard features both data-driven market attention barometers and judgment-based assessments of our top risks. We show market attention to each risk, assess the likelihood of it occurring over a six-month horizon and analyze its potential market impact.

Our BlackRock Geopolitical Risk Indicators (BGRIs) track market attention to each risk using mentions in brokerage reports and financial news stories. They integrate natural language processing and machine learning techniques. This assessment helps determine when geopolitical risks start to appear on investors' radar screens – and when they start fading.

We also have developed a market movement measure that we believe gives us insights into how asset prices are responding to geopolitical risks. It integrates analysis from our Risk & Quantitative Analysis (RQA) team and its Market-Driven Scenarios (MDS) for each risk. The gauge's score is based on how similar the market environment is to the MDS assumptions and how much the MDS-related asset prices have moved over the past month. See the "How it works" section. We also list the three assets that we see as the key variables of each MDS.

We continuously update our risk scenarios and refine our methodologies. Our scenarios are hypothetical and do not reflect all possible outcomes. Our market movement analyses are not recommendations to invest in any specific investment strategy or product.

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Top 10 risks by likelihood

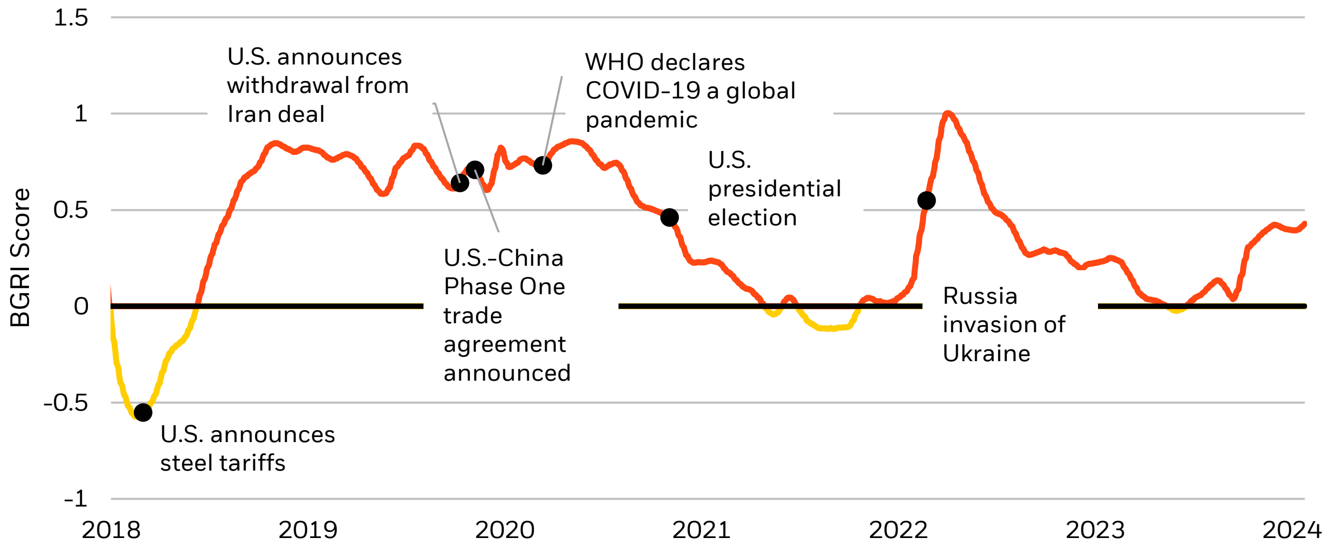
Risk	Description	Attention score	Likelihood	Our view
Major cyber attack(s)	Cyber attacks cause sustained disruption to critical physical and digital infrastructure.	1.38	High	We see cyber attacks increasing in scope, scale and sophistication as geopolitical competition mounts. Foreign hackers have infiltrated critical U.S. infrastructure and the accounts of U.S. officials, exposing key vulnerabilities. Recent large-scale attacks highlight the vulnerability of business infrastructure, as well, with ransomeware attacks surging in some industries. We see cyber activity increasing in conflict zones and particularly around upcoming elections, risking disruption and putting pressure on national security services to take a more proactive stance.
Major terror attack(s)	A terror attack leads to significant loss of life and commercial disruption.	1.33	High	The global terrorism risk is rising, and market attention is at its highest level since 2017. The conflict in the Middle East increases the threat of terrorism in the region, in the U.S. and in Europe, in our view. Law enforcement and intelligence officials have cited violent extremists and lone actors as the biggest concern. Al-Qaida and ISIS continue to rebuild and reestablish their global reach, and new terrorist hotspots are emerging. The Sahel region is of particular concern as military takeovers have threatened the West's efforts to fight against terrorism. In the U.S., the Biden administration has underscored the threat of domestic terrorism. We see heightened risk ahead of the 2024 presidential election.
U.S. China strategic competition	Tensions escalate meaningfully over Taiwan or in the South China Sea.	1.14	High	The U.S. and China have settled into a long-run, competitive posture. Last November's meeting between President Biden and President Xi reflects a serious effort on both sides to bring stability and better communication to the relationship. We see the meeting as a tactical exercise, however, and not a structural shift in the competitive dynamics of the relationship. Taiwan remains the most significant potential flashpoint, as the recent presidential election shows. A conflict over Taiwan would have a significant global impact, though we do not see military action in the near term. The new Taiwanese president's inauguration in May is the next signpost to watch.
Global technology decoupling	Technology decoupling between the U.S. and China significantly accelerates in scale and scope.	0.34	High	The U.S. and China are pursuing targeted decoupling, focused especially on advanced and military-related technologies. The U.S. is undertaking a comprehensive effort to preserve, protect, and extend its lead in advanced technologies, particularly those with military applications like AI, semiconductors and quantum computing. This includes more comprehensive export controls and a mechanism to review outbound investment in advanced Chinese technologies that will likely go into effect this year. The scope of these measures is likely to increase, as we see with the heightened focus on biotech, for example. U.S. allies in Europe and Asia are discussing similar measures. China is responding by investing in its own capabilities. We expect ongoing tension and parallel, competing tech stacks, as a result.
Russia-NATO conflict	The war in Ukraine becomes protracted, raising the risk of escalation beyond Ukraine.	0.24	High	Russia's invasion of Ukraine is the largest, most dangerous military conflict in Europe since WWII. The war is at an inflection point as it approaches its third year and after Ukraine's counter-offensive failed to achieve a major breakthrough. The conflict has effectively become a battle between the two sides' industrial bases. A ceasefire or diplomatic solution currently is unlikely, in our view, but pressure will mount this year. We see a significant risk of reduced Western support as the issue becomes increasingly politicized in the U.S. and parts of Europe – even as the NATO alliance is poised to keep expanding its membership. The most likely long-term outcome is a political, economic and military standoff between the West and Russia.

Risk	Description	Attention score	Likelihood	Our view
Gulf tensions	Regional conflict escalates, threatening energy infrastructure and increasing volatility	0.11	High	The Hamas attack was the largest, most sophisticated and deadly attack on Israel since the Yom Kippur War of 1973. The ongoing war is bringing significant volatility to the region and has led to a humanitarian crisis. Fighting in Gaza is set to continue for some time. We are seeing signs of escalation, with Iranian-backed militants in Lebanon, Syria, Iraq and Yemen stepping up attacks on Israeli and Western assets, including U.S. troops. Houthi militants have launched repeated attacks on shipping vessels in the Red Sea – causing significant trade disruptions and risking a broader economic impact. The U.S. has taken significant military action to respond to militia attacks on U.S. forces in Syria and Iraq and to degrade Houthi and Iranian-backed militants' capabilities. U.S. efforts are focused on an agreement to return Israeli hostages with an accompanying pause in fighting, and an increase in humanitarian aid – as well as a security agreement with Saudi Arabia. Yet significant hurdles remain.
Emerging markets political crisis	Ripple effects from the Ukraine war severely stress EM political systems and institutions.	0.54	Medium	Emerging market (EM) economies have been boosted by central bank rate cuts and resilient growth. Still, headwinds remain. China's challenged economic activity and the long-term costs of fragmentation present risks to EM. We expect divergence in EM outcomes. Countries like Argentina with substantial short-term debt obligations are particularly vulnerable. Others like India, Mexico and Vietnam are likely to benefit from supply chain diversification. We worry about a lack of cooperation on debt relief and the impact of a record number of global conflicts around the world.
North Korea conflict	North Korea pushes ahead with its nuclear buildup and takes provocative actions such as missile launches.	-0.43	Medium	North Korea's nuclear program continues unabated. Kim Jong Un has increased provocations, recently renouncing peaceful reunification with South Korea as a key policy goal. We may see an uptick in provocations as Kim looks to build leverage ahead of the U.S. elections. North Korea is also growing closer to China and Russia, to which it is now a top arms supplier. North Korea successfully launched its first military satellite, heightening tensions with the West. South Korea and Japan are bolstering their defenses and increasing ties with each other and the U.S. in response. We see the risk of provocations and military actions by North Korea increasing overall.
Climate policy gridlock	Developed economies fail to increase public investment or take action to achieve net-zero emission targets.	-1.05	Medium	The Ukraine war has brought energy security to the fore. The energy shock is boosting decarbonization plans in Europe amid a race for clean energy leadership as it responds to the U.S. Inflation Reduction Act (IRA). We believe the IRA will be a catalyst for accelerating the development and deployment of low-carbon technologies. Tensions are emerging between the transition agenda and other national priorities, causing some countries to curb their ambitions to prevent political blowback. We think this year's U.S. election represents a pivotal point for further clean energy legislation. Governments announced major initiatives to accelerate clean energy development at COP28 in Dubai.
European fragmentation	The energy crunch and inflationary pressures lead to a populist resurgence and economic volatility.	0.69	Low	Market attention to European fragmentation has increased sharply since last fall. Europe remains united on key issues: building up its strategic autonomy and de-risking from China, supporting Ukraine, and reforming migration. Disagreements are mainly about execution and financing. June 2024 will see key elections to the European Parliament, including a Commission President and Commissioners. While our base case is for a return of a more centrist coalition, several issues could strain political cohesion. This includes irregular migration to the EU, which last year reached the highest level since 2016.

Sources: BlackRock Investment Institute. Data as of February 2024. Notes: The "risks" column lists the 10 key geopolitical risks that we track. The "description" column defines each risk. "Attention score" reflects the BlackRock Geopolitical Risk Indicator (BGRI) for each risk. The BGRI measures the degree of the market's attention to each risk, as reflected in brokerage reports and financial media. See the "how it works" section on p.7 for details. The table is sorted by the "Likelihood" column which represents our fundamental assessment, based on BlackRock's subject matter experts, of the probability that each risk will be realized – either low, medium or high – in the near term. The "our view" column represents BlackRock's most recent view on developments related to each risk. This is not intended to be a forecast of future events or a guarantee of future results. This information should not be relied upon by the reader as research or investment advice regarding any funds or security in particular. Individual portfolio managers for BlackRock may have opinions and/or make investment decisions that may, in certain respects, not be consistent with the information contained herein.

Geopolitical risk framework

BlackRock Geopolitical Risk Indicator



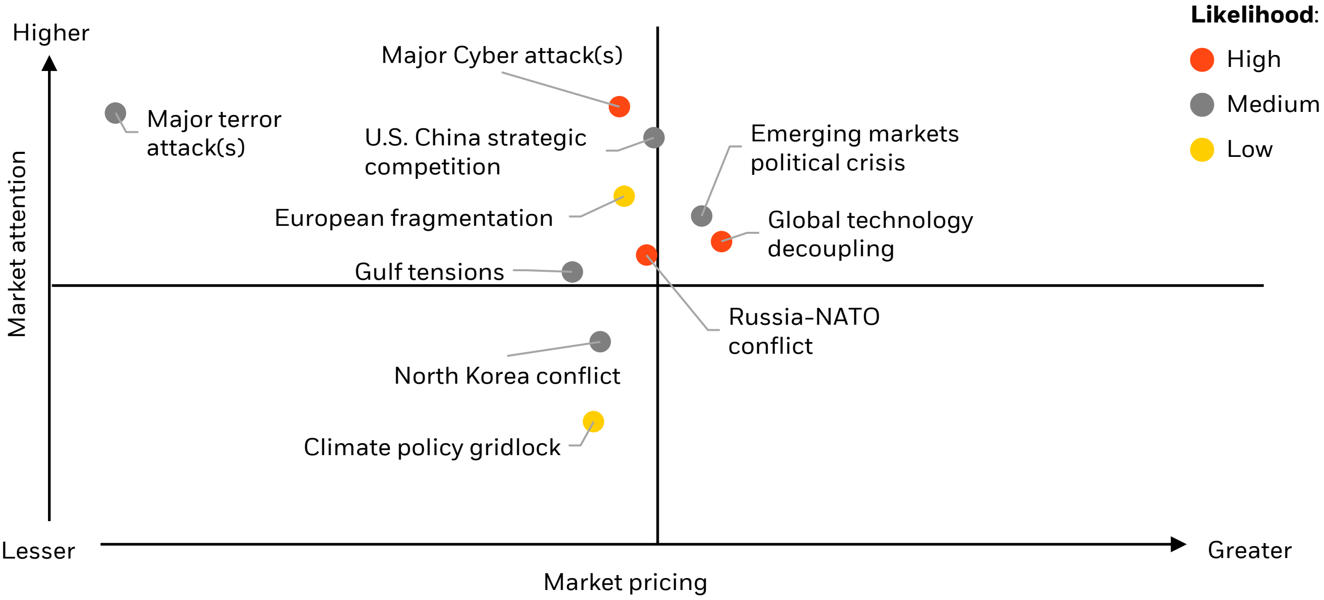
Forward-looking estimates may not come to pass. Source: BlackRock Investment Institute, January 2024. Notes: The BlackRock Geopolitical Risk Indicator (BGRI) tracks the relative frequency of brokerage reports (via Refinitiv) and financial news stories (Dow Jones News) associated with specific geopolitical risks. We adjust for whether the sentiment in the text of articles is positive or negative, and then assign a score. This score reflects the level of market attention to each risk versus a five-year history. We assign a heavier weight to brokerage reports than other media sources since we want to measure market attention to any particular risk, not public.

The BlackRock Geopolitical Risk Indicator aims to capture overall market attention to geopolitical risks, as the line chart shows. The indicator is a simple average of our top-10 risks. The indicator is at 18-month highs, indicating rising market concern about geopolitics. Markets are most focused on the risk of *Major terror attack(s)* or *Major cyber attack(s)*, as well as *U.S.-China strategic competition*.

We reinforce our high *Gulf tensions* risk rating given the ongoing Israel-Hamas war and risk of escalation in the region. We keep our *U.S.-China strategic competition* risk rating at a high level, given structural tensions in the relationship. And we maintain a high *Major cyber attack(s)* rating amid mounting risks to critical infrastructure. Market attention to our *North Korea conflict* risk is low. This risk could have an outsized impact on markets.

Risk map

BlackRock Geopolitical market attention, market movement and likelihood



Forward-looking estimates may not come to pass. Source: BlackRock Investment Institute, January 2024. Notes: The vertical axis depicts the market attention to each of our top-10 risks, as reflected in brokerage reports and financial media and measured by the BlackRock Geopolitical Risk Index (BGRI). The horizontal axis shows our estimate of the degree to which asset prices have moved in accordance with our risk scenarios (horizontal axis). See the "How it works" section on p.6 for details. The color of the dots indicates our fundamental assessment of the relative likelihood of the risk – low, medium or high, as per the legend. Some of the scenarios we envision do not have precedents – or only imperfect ones. The scenarios are for illustrative purposes only and do not reflect all possible outcomes as geopolitical risks are ever-evolving. The chart is meant for illustrative purposes only. This material represents an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. This information should not be relied upon by the reader as research or investment advice regarding any funds, strategy or security in particular.

Key scenario variables

How to gauge the potential market impact of each of our top-10 risks? We have identified three key “scenario variables” for each – or assets that we believe would be most sensitive to a realization of that risk. The chart below shows the direction of our assumed price impact.

Risk	Asset	Direction of assumed price impact
Climate policy gridlock	U.S. building products sector U.S. construction materials sector U.S. utilities	▼ ▼ ▲
Russia-NATO conflict	Russian equities Russian ruble Brent crude	▼ ▼ ▲
Emerging markets political crisis	Latin America consumer staples sector Emerging vs. developed equities Brazil debt	▲ ▼ ▼
European fragmentation	EMEA hotels & leisure Italy 10-year government bond Russian ruble	▼ ▼ ▼
Global technology decoupling	Chinese yuan U.S. investment grade Asia ex-Japan electrical equipment	▼ ▼ ▼
Gulf tensions	Brent crude oil VIX U.S. high yield credit	▲ ▲ ▼
Major cyber attack(s)	U.S. high yield utilities U.S. dollar U.S. utilities sector	▼ ▲ ▼
Major terror attack(s)	Germany 10-year government bond Japanese yen Europe airlines sector	▲ ▲ ▼
North Korea conflict	Japanese yen Korean won Korean equities	▲ ▼ ▼
U.S.-China strategic competition	Taiwanese dollar Taiwanese equities China high yield	▼ ▼ ▼

Source: BlackRock Investment Institute, with data from BlackRock’s Aladdin Portfolio Risk Tools application, July 2022. Notes: The table depicts the three assets that we see as key variables for each of our top-10 geopolitical risks – as well as the direction of the assumed shocks for each in the event of the risk materializing. The up arrow indicates a rise in prices (corresponding to a decline in yields for bonds); the down arrow indicates a fall in prices. Our analysis is based on similar historical events and current market conditions such as volatility and cross-asset correlations. See the “implied stress testing framework” section of the 2018 paper Market-Driven Scenarios: An Approach for Plausible Scenario Construction for details. For illustrative purposes only. The scenarios are for illustrative purposes only and do not reflect all possible outcomes as geopolitical risks are ever-evolving. This material represents an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. This information should not be relied upon by the reader as research or investment advice regarding any funds, strategy or security in particular.

How it works

The quantitative components of our geopolitical risk dashboard incorporate two different measures of risk: the first based on the market attention to risk events, the second on the market movement related to these events.

Market attention

The BlackRock Geopolitical Risk Indicator (BGRI) tracks the relative frequency of brokerage reports (via LSEG) and financial news stories (Dow Jones News) associated with specific geopolitical risks. We adjust for whether the sentiment in the text of articles is positive or negative, and then assign a score. This score reflects the level of market attention to each risk versus a five-year history. We use a shorter historical window for our COVID-19 risk due to its limited age. We assign a heavier weight to brokerage reports than other media sources since we want to measure market attention to any particular risk, not public.

Our updated methodology improves upon traditional "text mining" approaches that search articles for predetermined key words associated with each risk. Instead, we take a big data approach based on machine-learning. Huge advances in computing power now make it possible to use language models based on neural networks. These help us sift through vast data sets to estimate the relevance of every sentence in an article to the geopolitical risks we measure.

How does it work? First we augment a pre-trained language model with broad geopolitical content and articles representative of each individual risk we track. The fine-tuned language model then focuses on two tasks when trawling though millions of brokerage reports and financial news stories:

- classifying the relevance of each sentence to the individual geopolitical risk to generate an attention score
- classifying the sentiment of each sentence to produce a sentiment score

The attention and sentiment scores are aggregated to produce a composite geopolitical risk score. A zero score represents the average BGRI level over its history. A score of one means the BGRI level is one standard deviation above its historical average, implying above-average market attention to the risk. We weigh recent readings more heavily in calculating the average. The level of the BGRIs changes slowly over time even if market attention remains constant. This is to reflect the concept that a consistently high level of market attention eventually becomes "normal."

Our language model helps provide more nuanced analysis of the relevance of a given article than traditional methods would allow. Example: Consider an analyst report with boilerplate language at the end listing a variety of different geopolitical risks. A simple keyword-based approach may suggest the article is more relevant than it really is; our new machine learning approach seeks to do a better job at adjusting for the context of the sentences – and determining their true relevance to the risk at hand.

Market movement

In the market movement measure, we use Market-Driven Scenarios (MDS) associated with each geopolitical risk event as a baseline for how market prices would respond to the realization of the risk event.

Our MDS framework forms the basis for our scenarios and estimates of their potential one-month impact on global assets. The first step is a precise definition of our scenarios – and well-defined catalysts (or escalation triggers) for their occurrence. We then use an econometric framework to translate the various scenario outcomes into plausible shocks to a global set of market indexes and risk factors.

The size of the shocks is calibrated by various techniques, including analysis of historical periods that resemble the risk scenario. Recent historical parallels are assigned greater weight. Some of the scenarios we envision do not have precedents – and many have only imperfect ones. This is why we integrate the views of BlackRock's experts in geopolitical risk, portfolio management, and Risk and Quantitative Analysis into our framework. See the 2018 paper Market Driven Scenarios: An Approach for Plausible Scenario Construction for details. MDS are for illustrative purposes only and do not reflect all possible outcomes as geopolitical risks are ever-evolving.

We then compile a market movement index for each risk.* This is composed of two parts:

1. Similarity: This measures how "similar" the current market environment is to our expectation of what it would look like in the event the particular MDS was realized. We focus on trailing one-month returns of the relevant MDS assets.
2. Magnitude: This measures the magnitude of the trailing one-month returns of the relevant MDS assets.

These two measures are combined to create an index that works as follows:

- A value of 1 would means that asset prices reacted in an identical way as our MDS indicated.
- A value of zero would indicate that the pattern of asset prices bears no resemblance at all to what the MDS for a particular risk would indicate.
- A value of -1 would indicate that asset prices are moving in the opposite direction to what the MDS would indicate. Markets are effectively betting against the risk.

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