PGIM

2024 GLOBAL RISK REPORT

RESILIENT INVESTING AMID GEOPOLITICAL UNCERTAINTY

Fall/Winter 2024-2025

For professional investors only. All investments involve risk, including possible loss of capital.

About PGIM

PGIM is the global asset management business of Prudential Financial, Inc. (PFI). In 41 offices across 18 countries and jurisdictions, our more than 1,400 investment professionals serve both retail and institutional clients around the world.

As a leading global asset manager, with $1.33 trillion in assets under management, PGIM is built on a foundation of strength, stability, and disciplined risk management.* Our multi-affiliate model allows us to deliver specialized expertise across key asset classes with a focused investment approach. This gives our clients a diversified suite of investment strategies and solutions with global depth and scale across public and private asset classes, including fixed income, equities, real estate, private credit, and other alternatives.

*AUM as of June 30, 2024. PGIM is the investment management business of Prudential Financial, Inc. (PFI). PFI is the 12th largest investment manager (out of 411 firms surveyed) in terms of worldwide institutional assets under management based on Pensions & Investments' Top Money Managers list published June 2024.

CONTENTS

“

Great power competition itself is a reason that we will more likely see a divergence of economies under a potential confrontation between great powers.”

MEHILL MARKU
Lead Geopolitical Analyst,
PGIM Fixed Income

INTRODUCTION

As the global economy emerged from the COVID-19 pandemic, the world looked far different than it did before. Supply-chain bottlenecks, rampant inflation, and interest-rate hikes are only part of the story. Major wars in Europe and the Middle East, trade conflicts, the weaponization of economic statecraft, and intensifying competition over military and technological superiority each amplified the impact on the macro and geopolitical landscape. Taken together, these events might be signs of a fragile world order and a growing threat level from global risks, the likes of which investors have not faced in decades. Policy shifts that stem from a long list of major elections in 2024 inject even greater uncertainty into the policy outlook.

The world is changing more rapidly and in ways that can be hard to predict. The frequency of unexpected political and economic shocks has accelerated, forcing investors to reassess their market views just as frequently.

More risk often comes with opportunities for more reward. While geopolitical turmoil portends greater volatility, history has shown that periods of volatility are moments for long-term investors to deploy capital.

So, investors face a dilemma.

The range of possibilities in today's geopolitical climate appears unpredictable, if not infinite. Frequent changes to the portfolio in response to new risk assessments come with higher costs and may cause investors to miss out on opportunities. Reducing risk tends to limit potential reward. As a result, some investors feel the best course of action is to focus on trends that are more predictable or quantifiable—and deal with geopolitical surprises only after they transpire.

56%

INSTITUTIONAL INVESTORS WHO SAY THE THREAT LEVEL FROM GEOPOLITICAL RISK IS HIGH.

48%

INSTITUTIONAL INVESTORS WHO SAY THERE ARE TOO MANY GEOPOLITICAL RISKS TO EFFECTIVELY MITIGATE THEIR PORTFOLIO IMPACT.

However, investors' toolbox is not empty. With the right strategies, they can both manage risk from geopolitical turmoil and position their portfolios to capture opportunities.

In this uncertain environment, PGIM set out to uncover how geopolitical risks are changing the way institutional investors are constructing their portfolios. PGIM surveyed 400 institutional investors across eight countries and representing $9 trillion in assets under management. The results captured a growing sentiment that while geopolitics have emerged as the top risk facing global markets, there remains plenty of appetite to take on other forms of risk.

CAN MARKETS ABSORB AN ONSLAUGHT OF SHOCKS?

Investors have faced a series of massive geopolitical shocks in recent years. And still, such shocks have not always triggered market reactions of equal magnitude or length.

For example, energy prices skyrocketed in response to escalating tensions between Russia and Ukraine, and then the invasion in February 2022. By the end of the same year, Brent crude prices fell back to levels seen before the war began—even as the conflict continues more than two years later. The US's emergence as a top producer of oil and natural gas could mean that geopolitical shocks do not incur the same impact on energy markets they once did, such as when the breakout of the Gulf War caused crude prices to spike.

In August 2024, deteriorating economic indicators rekindled recession fears in the US and, alongside an unwinding of the yen carry trade, contributed to a sudden selloff in global markets. Yet investor sentiment recovered within days.

Markets have also taken the fraught US-China relationship, and the rerouting of supply chains, in stride. Strategic technologies such as semiconductors are at the center of this competition. The US, seeking to promote domestic manufacturing, embarked on a reset in trade policy during the Trump administration, which renegotiated NAFTA and imposed tariffs on a range of products in 2018 and 2019. The Biden administration kept most of those tariffs in place, introduced new levies targeting goods such as Chinese EVs and semiconductors, and restricted the sale of semiconductors and chip-making equipment to Beijing. China has adopted policy measures of its own to achieve self-sufficiency in these technologies. However, competition between the two nations is not a new phenomenon and can provide investors with historical context for the current moment.[1] Investments in related sectors have not halted, but rather shifted. US companies involved in the production and design of chips have benefited from enthusiasm around AI, while US investments in China's tech sector have narrowed.[2]

Reducing risk tends to limit potential reward. As a result, some investors feel the best course of action is to focus on trends that are more predictable or quantifiable—and deal with geopolitical surprises when they transpire.

1 PGIM Fixed Income. (2024, May 15). *The US-China Competition Through Four Lenses.*

2 PGIM Fixed Income. (2024, June 12). *The Weaponization of Statecraft and Its Investment Implications.*

KEY POINTS FOR INVESTORS

Bursts of volatility

These events illustrate a shift in market dynamics. Past cycles, from the 1987 stock market crash to the 2008 global financial crisis, suffered from more severe imbalances and systemic risks. By comparison, volatility from recent shocks may provide evidence of a different type of trading environment in which downside protections and a lack of market imbalances lead to sharp, but short-lived, moves in asset prices. While these bursts of volatility add to short-term risk, they also can create more tactical opportunities for investors.[3]

Converging risks

There is also a prominent view among investors that given the rise in geopolitical risks and a seemingly unlimited range of potential scenarios, it is nearly impossible to fully mitigate their impact. Some risks may be counterbalanced by others, and being too risk averse can limit returns in a macro environment that proves to be less turbulent than feared. It is thus difficult for markets to price in risk when multiple political and macro drivers converge.

"When managing risk in an uncertain geopolitical climate, it is critical for institutions to understand their time horizon and liquidity needs. An institution with a very long time horizon might be able to sit through a period of volatility, but an institution that requires instant liquidity might be more sensitive to volatility in the market."

JOHN HALL
Portfolio Manager
PGIM Quantitative Solutions

3 PGIM Fixed Income. (2024, August 12). *Short and Sharp, But Likely Not Systemic.*

AVOIDING A FAILURE OF IMAGINATION

Although recent shocks have been fleeting in their impact, investors will be left behind if they are unprepared for the unexpected. It is critical to avoid a failure of imagination.

A fast-changing world, great power competition, and a constantly evolving policy landscape will put geopolitical developments front and center when evaluating the outlook for financial markets and the broader economy. Trade tensions between the US, Europe and China, military conflicts, fiscal crises, interest rates near post-GFC highs, and structural changes in the global economy including new inflationary pressures are just a few sources of kindling that can spark the next period of market stress. There are no doubt macro imbalances that lie below the surface, too. In an increasingly multi-polar world, unknown linkages between countries or asset classes could break.

Investors must also avoid complacency. When normalizing risks, investors can be left exposed when existing risks escalate, new ones emerge, or efforts by major actors to prevent escalation fail.

With geopolitics taking a more prominent role in the outlook, how can investors best prepare their portfolios for the risks that materialize? Are market structures already fortified against geopolitical shocks, or are they vulnerable to the whims of regional politics and unpredictable events? It came as no surprise that geopolitical risk is top of mind for investors, according to PGIM's survey. More than half of investors globally (56%) say the threat level from geopolitical risk is high. Fewer investors hold a similar view for other risk categories, including inflation (36%), economic growth (35%), financial markets (34%) and credit (22%). Meanwhile, 59% of investors overall agree that geopolitical risks are having a negative impact on portfolio outcomes.

However, nearly half of the survey's respondents (48%) feel there are now too many geopolitical risks—encompassing elections, trade conflicts, cyberattacks, war, and beyond—to effectively mitigate their potential impact to portfolios. Only 28% disagree.

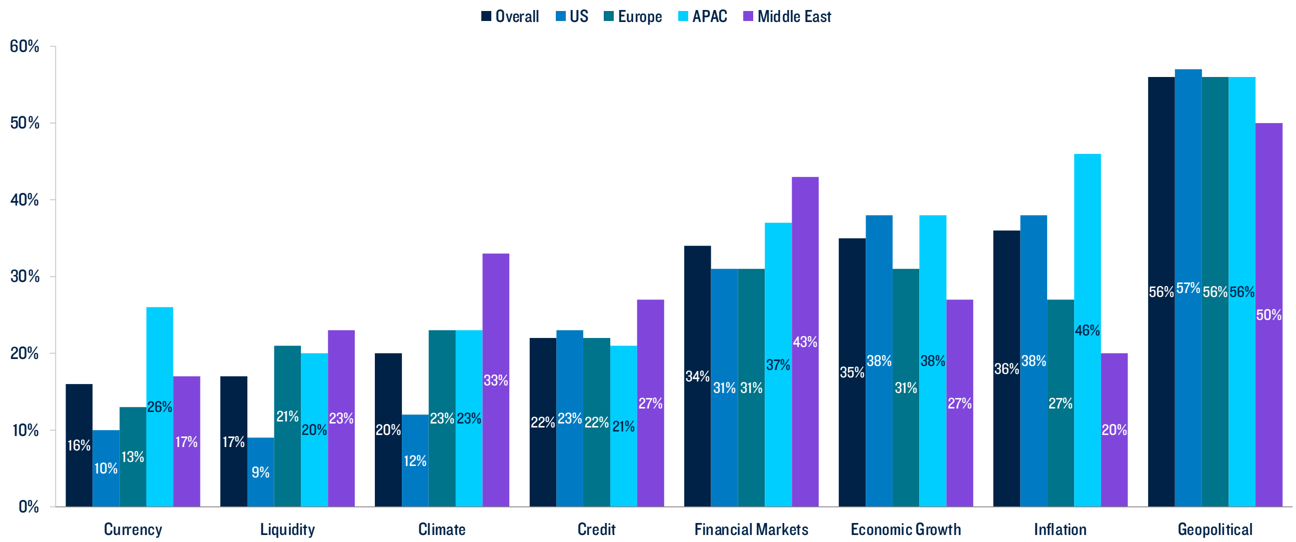
It is the uncertain nature of the current geopolitical environment that makes it such a challenge for investors. Risk can be predictable, such as likely policy outcomes that follow an election. When probabilities are less clear, it becomes more difficult to craft the right investment strategy for a resilient portfolio.

"If that can happen, then so many other things can happen," said the investment director of a US pension fund, referring to Russia's 2022 invasion of Ukraine. "That's the world that we've ushered into, whereby typical frameworks [and] typical constructs in terms of relations don't hold as strongly. Obviously, there's

"Some countries or sectors will benefit from trade diversion, and others will be impacted negatively. One way to mitigate these risks is by identifying the pockets of value. And because there are going to be winners and losers, don't put all of your eggs in one basket."

KATHARINE NEISS
Chief European Economist,
PGIM Fixed Income

Exhibit 1: Risk assessment for key factors in the next 24 months



Source: PGIM Global Geopolitical Risk Survey

a middle of the fairway on any given day, but the propensity for them to break, and break badly, is much greater than it once was even a decade ago."

Three Key Risks Emerge

There are three risks in particular—and their ties to asset prices and sectors—that investors are closely monitoring.

- First, tensions in the Taiwan Strait and South China Sea is at the top of the list, with 48% of investors identifying it as the risk most likely to impact global markets in the next 24 months. A conflict in the region could restrict the flow of key technologies, particularly semiconductors.
- Second, 27% view military conflict in the Middle East as the greatest risk, with the potential for such an event to ripple across global oil markets and the broader economy.
- Third, the military conflict in Ukraine remains a key risk for investors, particularly those in Europe where impacts to supply chains and energy markets are more acute. The Russia-Ukraine war registered a higher level of concern with investors than tensions between the US and Iran. However, investors in the Middle East were split on which presents the biggest risk to global markets.

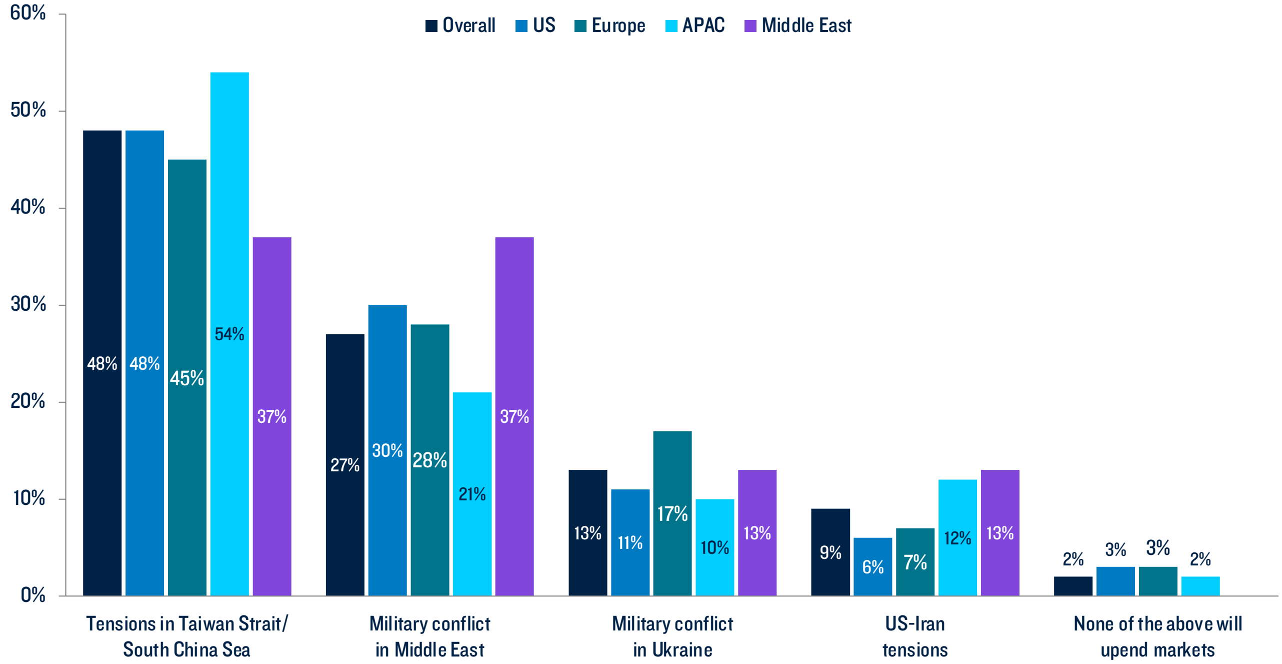
Elections in Focus

Elections around the world are drawing attention as well. Our survey found that 56% of institutional investors believe elections are a factor in portfolio decisions, and only 20% say they don't matter. In the UK, where the Labour party took power over the summer for the first time in 14 years, nearly three-quarters of investors (73%) agree that elections matter. Thirty-eight percent of US investors expect 2024 elections and their repercussions to influence portfolio changes.

"I think you can show this statistically [and] econometrically. Elections are having more impact on publicly traded securities and markets. And also, that is why many institutions pay more attention to this tactical element," according to the chairman of a Swiss pension fund's investment committee.

Major anticipated events like the 2024 US presidential election come with opportunities to develop a gameplan well in advance. A lack of potential policy surprises in the next administration could offset uncertainty over the eventual outcome of the election itself. In addition, optimism over a soft landing for the US economy has bolstered investor sentiment in 2024 and supported risk assets. While fiscal stress is cause for concern, it also puts pressure on central banks to keep policy rates as low as possible.

Exhibit 2: Geopolitical risks most likely to impact global markets in the next 24 months



Source: PGIM Global Geopolitical Risk Survey

Shifts in economic and trade policy can be a catalyst for unexpected opportunities to deploy capital. Evidence of a shift to a multi-polar world suggests a different power dynamic, which will likely play out most acutely in trade and investment policies, including the broader use of tariffs, and the regionalization of supply chains. Even as rising trade tensions cause alarm, industrial policy's reemergence is driving public spending toward new manufacturing capacity, infrastructure development and supply-chain redundancies. This is creating new possibilities for businesses and investors in economies both large and small. Investors must prepare for these shifts by assessing the potential negative impacts to their portfolio, as well as asset classes, sectors or countries that could benefit.

With that in mind, investors will find that effectively factoring geopolitical risks into portfolio decisions requires a long-term lens. How can investors mitigate geopolitical risks while retaining the agility necessary to capitalize on moments of opportunity?

PGIM asked global institutional investors to describe the actions they had taken to address some of the geopolitical risks on their radar, and which actions they plan to take over the next two years.

Despite a fracturing world and a heightened sense of geopolitical risk, investors say they are ready to take on risk in their portfolios—a sign that institutions are taking a long-term view by leaning into active investing and looking at volatility as an opportunity. Geopolitical risks are not a novel challenge for global markets, and when looking back at periods of war, market crashes and political upheaval, the post-pandemic world appears closer to the historical norm than the decade following the GFC. Even so, two factors make the current geopolitical landscape dangerously unique: The US faces a competitive military and technological power in China, and Europe faces its first ground war since World War II that risks upending its security order.

GEOPOLITICAL RISKS AND THE INVESTMENT OUTLOOK

PGIM's survey revealed that investors have responded to geopolitical strife by taking a broad range of portfolio actions to reduce risk exposure. Globally, 31% of investors have made allocation adjustments based on asset class, region, or risk tolerance. One-quarter of investors have adjusted their allocations based on sector or management style, while 29% say they are holding more cash or other short-term investments.

The flight to safety is most pronounced in the US, where 41% of investors say they moved into cash to manage risk. Some of this shift can be attributed to how attractive cash has become ever since central banks embarked on an aggressive rate-hike campaign to combat inflation's surge. With short-term rates reaching their highest levels since before the GFC, investors have been rewarded for keeping cash on hand.

Investors are also more prone to seek liquidity in advance of an unpredictable presidential election, seeing the benefits of maintaining dry powder until there is greater clarity over the path for federal policies. According to the survey, a majority of investors globally (55%) say their organizations plan to increase cash allocations heading into elections.

The investment director of a US pension fund explained that tactical plays can present themselves based on elections. However, aside from exposure to potential regulatory risk, the long-term fundamental thesis does not change.

"As an allocator, we're super patient capital," this investment director said. "But your cognizance around the externalities that could present themselves means you have to have a step function there, or else you're going to be blindsided by the market gyrations, by the rotations. Regime shift is a thing, and when it happens and you are caught off guard, good luck catching up."

Less than four in 10 investors say their organizations' portfolios are prepared for the effects of several geopolitical events, from 2024 elections and government policies to military conflicts. Investors are least prepared for the impact of a terror attack, global migration crises, and a conflict over natural resources.

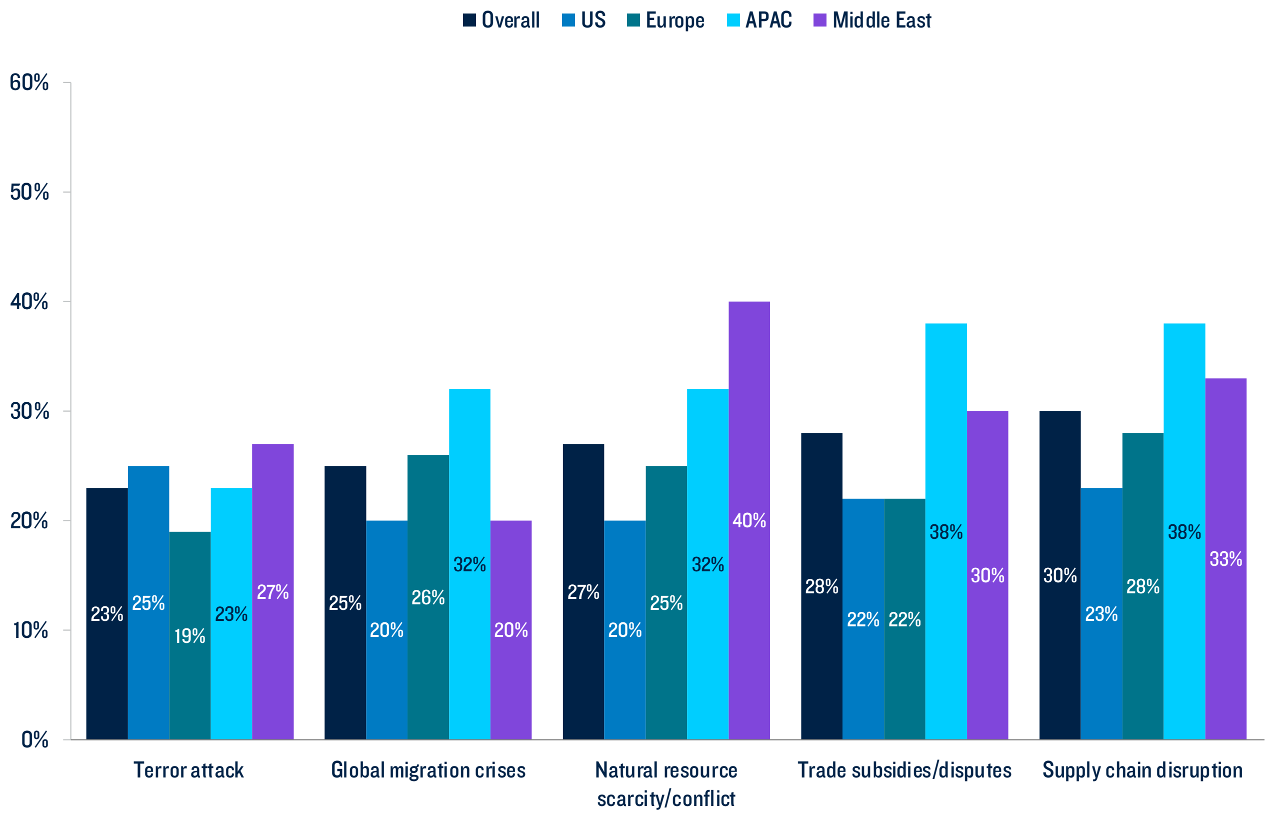
LESS THAN

4 IN 10

INVESTORS SAY THEIR ORGANIZATIONS' PORTFOLIOS ARE PREPARED FOR THE EFFECTS OF SEVERAL GEOPOLITICAL EVENTS.

There is a prominent view among investors that given the rise in geopolitical risks and a seemingly unlimited range of potential scenarios, it is nearly impossible to fully mitigate their impact.

Exhibit 3: Portfolio readiness for geopolitical risk events in the next 24 months



Source: PGIM Global Geopolitical Risk Survey

"As an investor, you have to be prepared for more of these shocks and trade shifts. In a global sense, broken trade links and more muted capital and investment flows may not be optimal. However, from more of a redundancy and political economy perspective, building more security into the economy by increasing domestic production of key products and technology actually can be beneficial."

MAGDALENA POLAN
Head of Emerging Market Macroeconomic Research,
PGIM Fixed Income

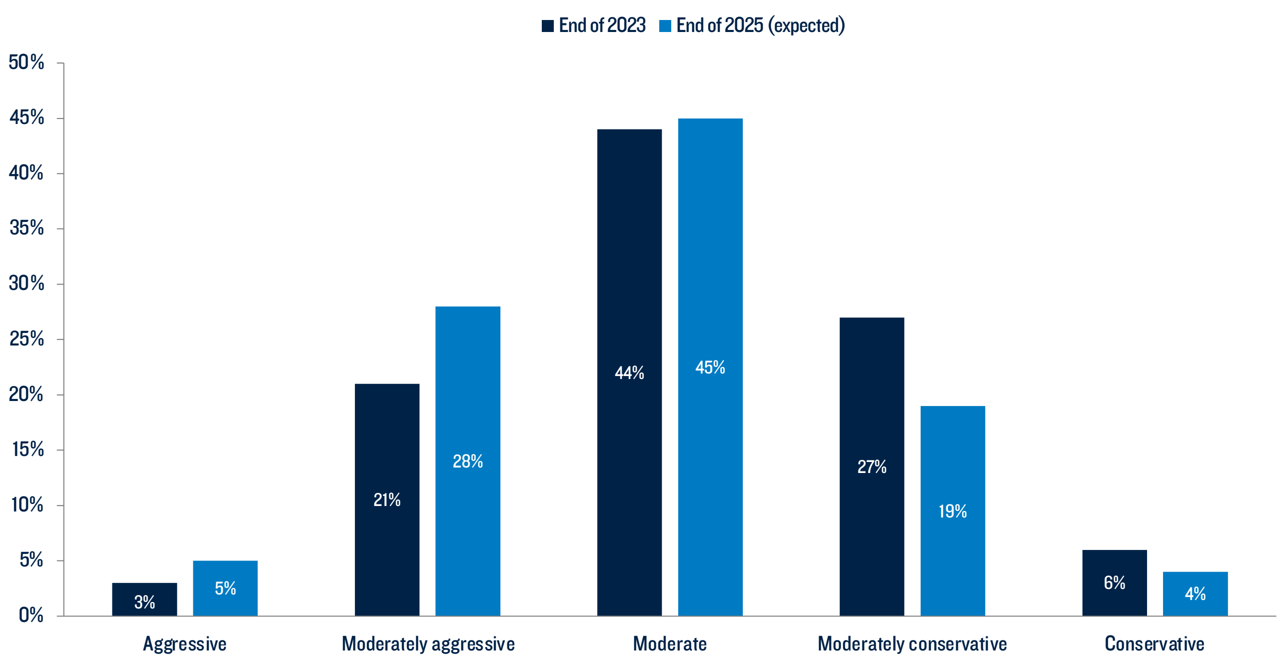
INVESTMENT STRATEGIES FOR AN UNPREDICTABLE WORLD

Despite a heightened sense of geopolitical risk, PGIM's survey found that one-third of institutional investors plan to have an aggressive portfolio strategy by the end of 2025, compared with about one-quarter who say they currently are aggressive in their risk tolerance. This risk-on mentality comes amid optimism over a soft landing in the US and that spillover from geopolitical events, including trade disputes and two major wars, can be contained. Even as the world evolves, opportunities will continue to present themselves. While geopolitics have come to the forefront, investors have grown less worried about risks that dominated portfolio decisions in recent years, including inflation.

Predictability is also a crucial element. When investors have a clearer understanding of the fallout from a variety of possible scenarios, they can better prepare for all outcomes. About three-quarters of institutional investors say their portfolios are moderately or well-prepared for the repercussions stemming from major elections in 2024, reflecting confidence that policy outcomes in the US and elsewhere will not come as a surprise. At least two-thirds said the same when polled about the investment impacts of trade subsidies and disputes, global debt levels, regulatory policies, and supply-chain disruptions.

But what can investors do when the fallout from geopolitical events is less certain? The right strategy will depend on investors' risk tolerance, liquidity needs, time horizon, and market outlook.

Exhibit 4: Portfolio risk tolerance



Source: PGIM Global Geopolitical Risk Survey

Markets May Not Behave Predictably

It is important to remember that markets may not behave in a predictable way in response to emerging risks. The interplay between economies is dynamic, and a constant state of change can lead to unexpected market moves that shatter typical asset correlations.

Busted correlations

Evolving correlations between asset classes will influence portfolio decisions. Some longer-term trends are shifting or breaking down, and these new regimes could hold for some time.

In 2022, the interplay between stock and bond markets exacerbated each other's challenges amid a broad selloff, and the correlation between the two has become positive.[4] Likewise, an inverted yield curve has not lived up to its historical role as a recession signal—at least so far. The relationship between oil and the US dollar may also be evolving. As the shale revolution took off, the US's transformation from a net energy importer to a net energy exporter had implications for the traditional relationship between oil and the dollar, which is the currency of choice for most commodity trading. Rising crude prices could provide support for US terms of trade and thus could be associated with a strengthening dollar, whereas a strong oil market often coincided with a weaker greenback previously.[5, 6] The US has recorded an improvement in its terms of trade since around 2015,[7] which is the same year lawmakers passed a bill that lifted a ban on oil exports. Monitoring changes in these sorts of correlations and interdependencies will help institutional investors determine which assets can serve as a suitable hedge.

Quantitative models that make it possible to quickly detect shifts in the correlation between asset classes and macro trends are another tool that could help keep investors ahead of the curve as geopolitical shifts take hold. Investors can also seek out solutions that tend to be resilient through market cycles or generate uncorrelated returns. When it comes to elections, investors tend to benefit when they think beyond short-term volatility tied to the outcome and adopt strategies to position their portfolios for the medium- and long-term environment.[8]

Volatility can create tactical opportunities

A comprehensive approach to diversification and liquidity can mitigate risk by helping investors avoid becoming a forced seller during unexpected events. Keeping cash on hand will allow investors to be opportunistic when markets are volatile and potentially allow them to enter the market at more attractive prices—even as right-timing investment decisions remains a challenge. These principles can form the foundation of a gameplan to navigate uncharted territory as the geopolitical situation unfolds.

Even expected events on the political calendar can lead to unexpected reactions in financial markets. Consider the US presidential election and its potential outcomes. Investors face multiple potential scenarios for control of the White House and both chambers of Congress, and they were already forced to reassess their election outlook in response to one of the biggest political curveballs in recent memory when President Joe Biden announced his last-minute withdrawal from the 2024 race. While market reactions to the winner of the presidential race may seem predictable in the short run, they could look quite different depending on which party holds the majority in the House and Senate—and a divided government would portend few major policy changes. No matter which candidate takes office, the US will continue to face a mounting debt crisis after several rounds of new federal spending as well as higher interest rates that pushed up the cost of servicing this debt. The long-term ramifications for the Treasury market hold the potential to ripple across global debt markets and could even force policymakers' hands.

4 PGIM. (2024, March 29). *Positive Stock-Bond Correlation: Prospects & Portfolio Construction Implications.* Accessed September 2024.

5 The Financial Times. (2023, October 16). *The Dollar Has Joined the Commodity Currency Club.* https://www.ft.com/content/07b162c9-1b73-43fd-8c30-9dfcea7e7eb5. Accessed September 2024.

6 Energy Intelligence. (2022, November 8). *Oil and the Dollar: The New Relationship.* https://www.energyintel.com/00000184-566e-dc1b-a9a4-d66e06950000. Accessed August 2024.

7 Federal Reserve Bank of St. Louis and US Bureau of Economic Analysis. GDP: Terms of Trade Index. https://fred.stlouisfed.org/series/W369RG3Q066SBEA. Accessed September 2024.

8 PGIM Quantitative Solutions. (2024, August 15). *Managing Through Election Cycle Volatility & Beyond.*

Geopolitical Expertise to Identify Winners and Losers

Remaining diversified could help fortify portfolios against unpredictable vulnerabilities, avoid the risk of a concentrated shock, and mitigate unforeseen impacts as winning and losing countries, sectors and asset classes shake out in a new era for global trade. Exposure to a range of asset classes can also help investors blunt inherent risks to markets themselves. Hidden imbalances and reduced liquidity in financial markets have increased the tendency for "flash crashes" to occur, such as the summer selloff of 2024 fueled by the yen carry trade.

When evaluating sectors, investors should take a macro view and consider how much policy goals—resilient supply chains and robust domestic production of critical supplies—will drive growth or create new headwinds. Portfolio managers should avoid relying solely on past events and market reactions when formulating an investment blueprint. Instead, geopolitical expertise can help navigate a changing world and identify linkages and asset-class implications that are less known. By identifying winners in global trade, investors can uncover pockets of value in overlooked sectors. Investors should also evaluate upside potential and vulnerabilities in the portfolio from the bottom-up by considering existing sector and company exposure to international customers and supply chains, as well as foreign exchange impacts on earnings.

Geopolitical analysts can offer expertise on how global power structures and economic policies are evolving—a particularly valuable source of insight as nations seek to build influence through sanctions, tariffs, export controls and other economic statecraft. With great power competition showing few signs of abating, experts on the intersection of economic and foreign policy can help investors not only understand the impact to their portfolios, but anticipate new measures. It is important to consider how global rivalries bring both downside and upside risk. Technology sharing, financial assistance through multilateral organizations, supply-chain linkages, and business incentives are all policy levers that can be turned on or off. As national security concerns contribute to elevated risk levels, accompanying industrial policies that incentivize domestic manufacturing provide a tailwind for select sectors, including semiconductors and alternative energy. A bipartisan "roadmap" from the US Senate recommended $32 billion in annual spending to support non-defense AI innovation.[9,10]

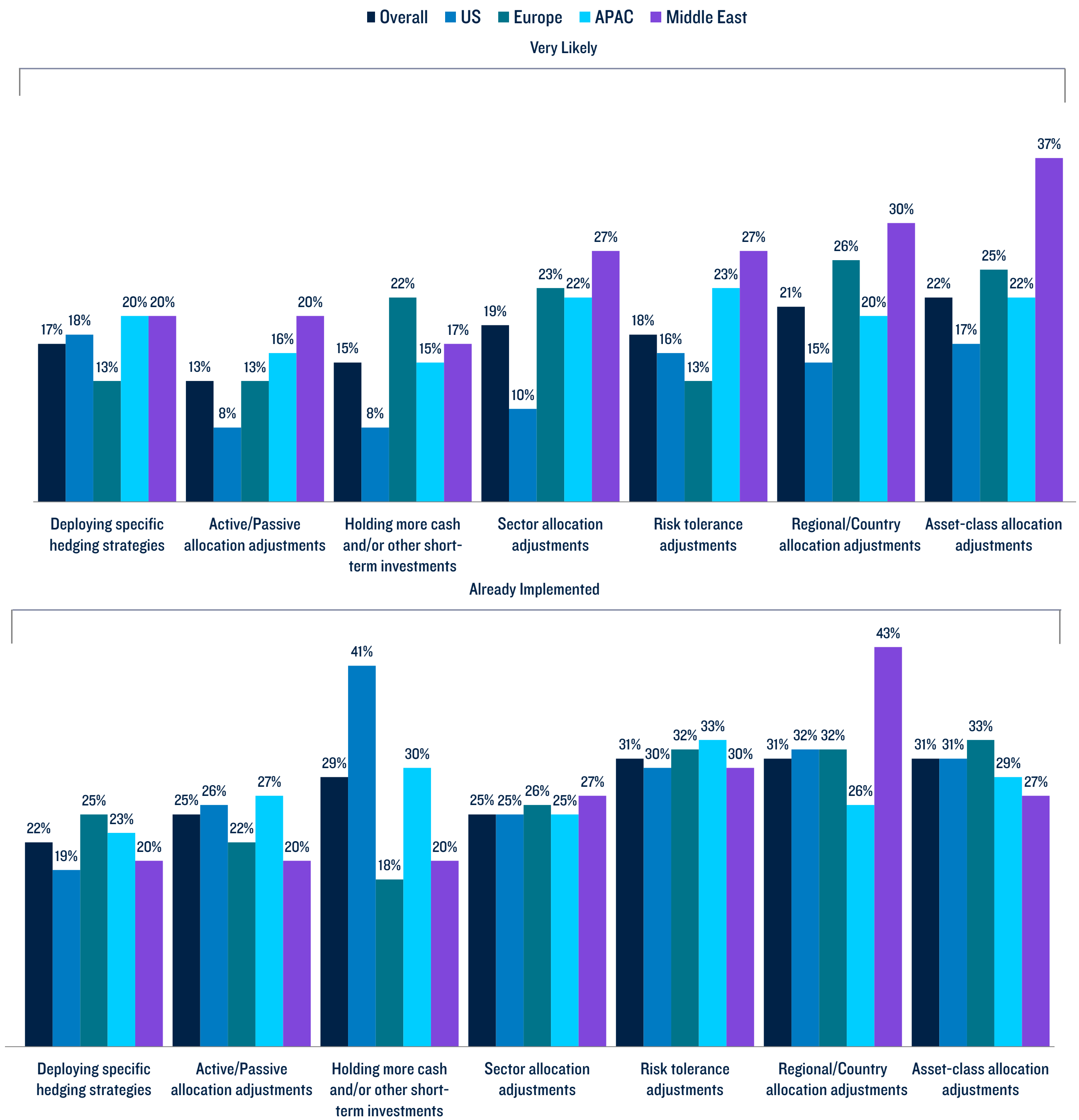
"Commodities are not only something that could do well in a high geopolitical risk environment, but they also could benefit from higher interest rates as well as structural forces, such as continued demand for fossil fuels through the energy transition."

MANOJ RENGARAJAN
Portfolio Manager
PGIM Quantitative Solutions

9 The Bipartisan Senate AI Working Group. (2024, May 15). *Driving US Innovation in Artificial Intelligence.* https://www.schumer.senate.gov/imo/media/doc/Roadmap_Electronic1.32pm.pdf. Accessed August 2024.

10 PGIM Fixed Income. (2024, June 12). *The Weaponization of Statecraft and Its Investment Implications.*

Exhibit 5: Actions to mitigate geopolitical risks



Source: PGIM Global Geopolitical Risk Survey

Going Beyond Traditional Diversifiers

Deep diversification requires a broad view of asset classes and portfolio solutions that goes beyond allocations to traditional conservative investment plays.

Some solutions can help mitigate downside risk while maintaining some exposure to the upside. Market participation strategies can combine long-term call options with conservative investments, giving a portfolio exposure to a larger share of the upside but still providing downside protection. Buffered ETFs buy a series of option contracts that have a payoff profile that blunts the impact of downturns while allowing the investor to participate on the upside, up to a cap. Options can also add downside protection. Tail-risk hedging often involves the purchase of out-of-the-money put contracts that can provide a floor on returns. This can be a particularly useful strategy for when investors anticipate a broad market selloff. An alternative strategy would be covered call writing, which limits upside potential but generates income that can help investors weather volatile market environments.

Portable alpha overlays offer unique characteristics as an alternative allocation for institutions. A portable alpha overlay is an uncorrelated and unfunded separate source of excess returns generated by alpha management. The strategy is designed to layer this additional alpha onto a portfolio that has beta exposure coming from different sources, such as futures contracts. The strategy can be implemented in existing portfolios without changing underlying allocations and existing active managers. A well-designed portable alpha overlay strategy with a low correlation to traditional asset class exposures can provide diversifying, additive returns when asset owners need them most.[11]

Safe Havens to Counter Geopolitical Uncertainty

Institutional portfolios can hedge against geopolitical risks that manifest themselves as supply shocks by allocating toward real assets such as gold, which reached a record high in August 2024 amid ongoing tensions in Europe and the Middle East. Gold funds have attracted strong inflows in another sign of investors' interest in using gold as a hedge against geopolitical uncertainty, as well as possible risks associated with fiat currencies in highly indebted countries. Physically backed gold ETFs recorded inflows for three consecutive months through July 2024, bringing total global assets under management to a new record of $246 billion.[12]

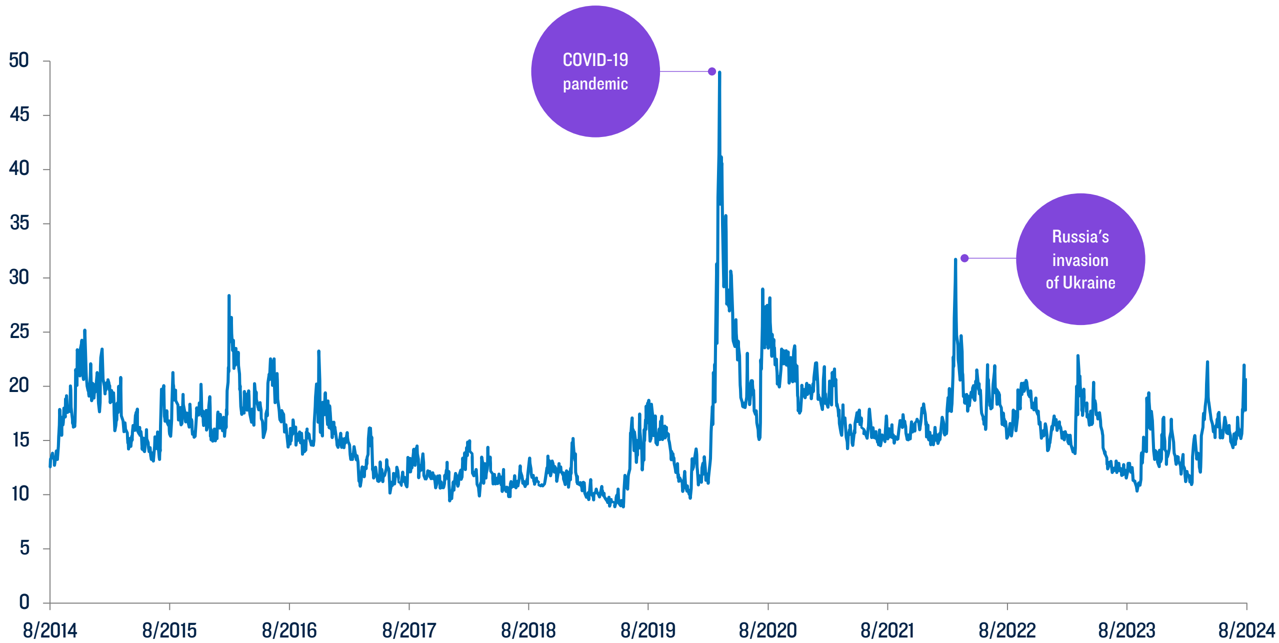
DATA CENTERS AT THE CORE OF NATIONAL SECURITY

Data centers, which have emerged as critical infrastructure to support the mass adoption of technologies such as cloud computing and AI, represent a growing alternative investment opportunity for institutional investors. One of the most overlooked aspects of this strategy is the role that data centers play in national security and the global battle for technological supremacy.

The advent of generative AI has accelerated demand for hyperscale data centers, which are on pace to more than double globally over the next five years. From an investment perspective, the imbalance between robust demand and limited supply could make allocating toward data centers attractive given the corresponding upward pressure on rents. Concerns over data sovereignty and geopolitical risks also create a supportive backdrop for data centers. Many data centers have government contracts and are crucial to keeping up in the AI arms race. Given the large amounts of resources required to operate data centers, investment is flowing toward the energy grid, making data centers more power efficient, and developing innovative cooling systems that reduce water and energy usage. This creates a broad opportunity set for investors in data centers and related infrastructure. Demand for data centers will make energy independence a more pronounced feature of national security in the AI age.

11 PGIM Quantitative Solutions. (2024, August 15). Managing Through Election Cycle Volatility & Beyond.
12 World Gold Council. *Gold ETF Flows*: July 2024. https://www.gold.org/goldhub/research/gold-etfs-holdings-and-flows/2024/08. Accessed August 2024.

Exhibit 6: CBOE gold ETF volatility



Source: Chicago Board Options Exchange, CBOE Gold ETF Volatility Index [GVZCLS], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/GVZCLS. Accessed August 2024.

"

Taking all of the potential political and geopolitical scenarios into consideration gives us a framework to better stress test emerging markets, and better understand different upside and downside risks that could develop."

CATHY HEPWORTH
Head of Emerging Markets Debt Team,
PGIM Fixed Income

A downshift in globalization and fractured supply chains could build a case for a diverse array of commodities if trade tensions result in a more inflationary environment. Higher interest rates mean bonds are once again behaving like a defensive asset as well, providing an opportunity to reallocate back into fixed income to protect against a macro downturn.

Heightened geopolitical risks may be favorable to other assets considered safe havens such as the US dollar, Swiss franc, and Treasuries. Despite some predictions for its decline, the US dollar remains the world's reserve currency. Data show the US dollar has accounted for 88% of global foreign exchange transactions, a rate that has been stable for two decades.[13] Although the dollar's share of foreign currency reserves has declined from 70% at the turn of the century to 58% in 2024, central banks revealed plans in a survey to increase exposure to the dollar over the following one to two years.[14] The dollar may strengthen in a period of global tumult that drives investors to reduce exposure to riskier assets. The reaction in emerging markets could vary depending on each country's economy—mainly, whether it is diversified or largely commodity based.

Risk Management Approaches in a More Volatile World

An evolving state of global power dynamics calls for engaging in scenario analysis. By stress-testing portfolios, investors can assign probabilities to tail risks and determine potential or likely impacts in a variety of geopolitical scenarios. This strategy can help determine a portfolio's vulnerabilities and mitigate risk from both high- and low-probability events. For emerging markets, country risks can be identified by considering how policymakers might respond to changes in geopolitical relationships. Take Mexico as an example: Domestic elections in 2024 and the US presidential race present a variety of plot lines that could play out related to tariffs and immigration. Simulating these scenarios, and how they could impact a positive story that has already developed around FDI flows into Mexico, will help clarify upside and downside potential. PGIM's survey found that 52% of institutional investors plan to make adjustments to regional or country exposure in their allocations to mitigate geopolitical risk.

"There are returns in illiquidity, but it is also key to have the flexibility to take advantage of market opportunities when they present themselves. Investors should thus have their radar open to both public and private opportunities."

ROBERT TIPP
Chief Investment Strategist & Head of Global Bonds, PGIM Fixed Income

13 Board of Governors of the Federal Reserve System. (2023, June 23). The International Role of the US Dollar Post-COVID Edition. https://www.federalreserve.gov/econres/notes/feds-notes/the-international-role-of-the-us-dollar-post-covid-edition-20230623.html. Accessed August 2024.

14 Financial Times. (2024, June 4). Global Central Banks Plan to Increase Dollar Reserves, Survey Suggests. https://www.ft.com/content/1be234f2-c680-4ce9-beb7-d0d9a2793330. Accessed August 2024.

CONCLUSION

Investors face a challenging dilemma. While geopolitical strife calls for rethinking risk management, shocks may appear too frequent, and too great in number, to effectively mitigate their impact. But with the right strategies, investors can construct portfolios with the goal of remaining resilient and capturing emerging opportunities in a new era of geopolitical uncertainty.

Investment Takeaways

- **Identify winning sectors and countries:** Investors can uncover pockets of value across sectors and regions as winners begin to emerge during global trade's transformation.
- **Hedge with real assets:** It may be prudent to increase allocations to real assets, such as gold, to hedge against geopolitical risks that arise. If trade tensions result in a more inflationary environment, investors can consider allocating toward commodities. Other assets considered safe havens, including the US dollar, Swiss franc, and Treasuries, can benefit during times of geopolitical tumult.
- **Stress-test portfolios:** Investors can stress-test their portfolios to determine potential or likely impacts in a variety of geopolitical scenarios. Engaging in scenario analysis will help investors mitigate risk from high- or low-probability events.
- **Utilize active strategies:** Active managers with experience investing through a variety of cycles can help build resilient portfolio strategies that cut across a diverse mix of public and private assets. Higher interest rates could provide an opportunity to reallocate back into fixed income to protect against a macro downturn and policy shifts. Some solutions, such as market participation strategies, can help mitigate downside risk while maintaining some exposure to the upside. Options can also add downside protection to the portfolio. A well-designed portable alpha overlay strategy with a low correlation to traditional asset class exposures can provide diversifying, additive returns when asset owners need them most.
- **Seek geopolitical expertise:** Geopolitical analysts can offer expertise on how global power structures and economic policies are evolving.
- **Keep dry powder:** In periods of volatility, investors with dry powder will be ready to enter the market at more attractive prices.
- **Monitor regime changes:** Quantitative models that make it possible to quickly detect shifts in the correlation between asset classes and macro trends can keep investors ahead of the curve as geopolitical shifts take hold.
- **Diversify:** It's not glamorous, but it is tried and true. In a world where there will be winning and losing countries, sectors and asset classes, remaining diversified will help fortify portfolios against the unpredictability of policy shifts and avoid concentration risk. Investors can also seek out solutions that tend to be resilient through market cycles.

From mid-May to June 2024, PGIM surveyed 400 institutional investors across eight countries and representing $9 trillion in AUM to get their perspectives on geopolitics and investing. The survey, which consisted of a questionnaire, was supplemented by one-on-one interviews with 12 institutional investors.

ACKNOWLEDGMENTS

PGIM gratefully acknowledges the contributions of the following individuals:

Taggart Davis, PGIM

Mao Dong, PGIM Portfolio Advisory

Guillermo Felices, PGIM Fixed Income

John Hall, PGIM Quantitative Solutions

Cathy Hepworth, PGIM Fixed Income

Morgan Laughlin, PGIM Real Estate

Mehill Marku, PGIM Fixed Income

Katharine Neiss, PGIM Fixed Income

George Patterson, PGIM Quantitative Solutions

Magdalena Polan, PGIM Fixed Income

Manoj Rengarajan, PGIM Quantitative Solutions

James Sonne, PGIM

Robert Tipp, PGIM Fixed Income

IMPORTANT INFORMATION

Professional Investor Use Only. All investments involve risks, including possible loss of principal. Past performance is not indicative of future results.

The information contained herein is provided by PGIM, Inc., the principal asset management business of Prudential Financial, Inc. (PFI), and a trading name of PGIM, Inc. and its global subsidiaries. PGIM, Inc. is an investment adviser registered with the U.S. Securities and Exchange Commission (SEC). Registration with the SEC does not imply a certain level of skill or training.

In the United Kingdom, information is issued by PGIM Limited with registered office: Grand Buildings, 1-3 Strand, Trafalgar Square, London, WC2N 5HR. PGIM Limited is authorised and regulated by the Financial Conduct Authority ("FCA") of the United Kingdom (Firm Reference Number 193418). In the European Economic Area ("EEA"), information is issued by PGIM Netherlands B.V. with registered office: Gustav Mahlerlaan 1212, 1081 LA Amsterdam, The Netherlands. PGIM Netherlands B.V. is, authorised by the Autoriteit Financiële Markten ("AFM") in the Netherlands (Registration number 15003620) and operating on the basis of a European passport. In certain EEA countries, information is, where permitted, presented by PGIM Limited in reliance of provisions, exemptions or licenses available to PGIM Limited under temporary permission arrangements following the exit of the United Kingdom from the European Union. These materials are issued by PGIM Limited and/or PGIM Netherlands B.V. to persons who are professional clients as defined under the rules of the FCA and/or to persons who are professional clients as defined in the relevant local implementation of Directive 2014/65/EU (MiFID II). In Italy, information is provided by PGIM Limited authorized to operate in Italy by Commissione Nazionale per le Società e la Borsa (CONSOB). In Japan, information is provided by PGIM Japan Co., Ltd. ("PGIM Japan") and/or PGIM Real Estate (Japan) Ltd. ("PGIMREJ"). PGIM Japan, a registered Financial Instruments Business Operator with the Financial Services Agency of Japan offers various investment management services in Japan. PGIMREJ is a Japanese real estate asset manager that is registered with the Kanto Local Finance Bureau of Japan. In Hong Kong, information is provided by PGIM (Hong Kong) Limited, a regulated entity with the Securities & Futures Commission in Hong Kong to professional investors as defined in Section 1 of Part 1 of Schedule 1 of the Securities and Futures Ordinance (Cap. 571). In Singapore, information is issued by PGIM (Singapore) Pte. Ltd. ("PGIM Singapore"), a regulated entity with the Monetary Authority of Singapore under a Capital Markets Services License to conduct fund management and an exempt financial adviser. This material is issued by PGIM Singapore for the general information of "institutional investors" pursuant to Section 304 of the Securities and Futures Act 2001 of Singapore (the "SFA") and "accredited investors" and other relevant persons in accordance with the conditions specified in Section 305 of the SFA. In South Korea, information is issued by PGIM, Inc., which is licensed to provide discretionary investment management services directly to South Korean qualified institutional investors on a cross-border basis.

These materials are for informational or educational purposes only. The information is not intended as investment advice and is not a recommendation about managing or investing assets or an offer or solicitation in respect of any products or services to any persons who are prohibited from receiving such information under the laws applicable to their place of citizenship, domicile or residence. In providing these materials, PGIM is not acting as your fiduciary. These materials represent the views, opinions and recommendations of the author(s) regarding the economic conditions, asset classes, securities, issuers or financial instruments referenced herein. Distribution of this information to any person other than the person to whom it was originally delivered and to such person's advisers is unauthorized, and any reproduction of these materials, in whole or in part, or the divulgence of any of the contents hereof, without prior consent of PGIM is prohibited. Certain information contained herein has been obtained from sources that PGIM believes to be reliable as of the date presented; however, PGIM cannot guarantee the accuracy of such information, assure its completeness, or warrant such information will not be changed. The information contained herein is current as of the date of issuance (or such earlier date as referenced herein) and is subject to change without notice. PGIM has no obligation to update any or all of such information; nor do we make any express or implied warranties or representations as to the completeness or accuracy or accept responsibility for errors. These materials are not intended as an offer or solicitation with respect to the purchase or sale of any security or other financial instrument or any investment management services and should not be used as the basis for any investment decision. No risk management technique can guarantee the mitigation or elimination of risk in any market environment. Past performance is not a guarantee or a reliable indicator of future results and an investment could lose value. No liability whatsoever is accepted for any loss (whether direct, indirect, or consequential) that may arise from any use of the information contained in or derived from this report. PGIM and its affiliates may make investment decisions that are inconsistent with the recommendations or views expressed herein, including for proprietary accounts of PGIM or its affiliates. Any projections or forecasts presented herein are as of the date of this presentation and are subject to change without notice. Actual data will vary and may not be reflected here. Projections and forecasts are subject to high levels of uncertainty. Accordingly, any projections or forecasts should be viewed as merely representative of a broad range of possible outcomes. Projections or forecasts are estimated, based on assumptions, and are subject to significant revision and may change materially as economic and market conditions change. PGIM has no obligation to provide updates or changes to any projections or forecasts.

PGIM and its affiliates may develop and publish research that is independent of, and different than, the recommendations contained herein. PGIM's personnel other than the author(s), such as sales, marketing and trading personnel, may provide oral or written market commentary or ideas to PGIM's clients or prospects or proprietary investment ideas that differ from the views expressed herein.

Prudential Financial, Inc. of the United States is not affiliated in any manner with Prudential plc, incorporated in the United Kingdom or with Prudential Assurance Company, a subsidiary of M&G plc, incorporated in the United Kingdom.

"As I travel the world talking to our large institutional investors, their number one risk is geopolitical and what it means for their portfolio construction."

DAVID HUNT
President & CEO
PGIM

PGIM

THE PURSUIT OF OUTPERFORMANCE™

留意事項

※ 本資料は米国 SEC の登録投資顧問会社である PGIM インクが作成したものです。

※ 本資料は情報提供を目的としたものであり、特定の金融商品の勧誘又は販売を目的としたものではありません。また、本資料に記載された内容等については今後変更されることもあります。

※ 記載されている市場動向等は現時点での見解であり、これらは今後変更することもあります。また、その結果の確実性を表明するものではなく、将来の市場環境の変動等を保証するものでもありません。

※ 本資料に記載されている市場関連データ及び情報等は信頼できると判断した各種情報源から入手したものですが、その情報の正確性、確実性について当社が保証するものではありません。

※ 過去の運用実績は必ずしも将来の運用成果等を保証するものではありません。

※ 本資料は法務、会計、税務上のアドバイスあるいは投資推奨等を行うために作成されたものではありません。

※ 当社による事前承諾なしに、本資料の一部または全部を複製することは堅くお断り致します。

※ 本資料内で取り上げられた資産クラス、個別セクター等はあくまで例示目的であり、推奨ならびにこれらにかかる将来性を明示・暗示的に示唆するものではありません。

※ “Prudential”、“PGIM ”、それぞれのロゴおよびロック・シンボルは、プルデンシャル・ファイナンシャル・インクおよびその関連会社のサービスマークであり、多数の国・地域で登録されています。

※ PGIM ジャパン株式会社は、世界最大級の金融サービス機関プルデンシャル・ファイナンシャルの一員であり、英国プルーデンシャル社とはなんら関係がありません。

PGIM ジャパン株式会社

金融商品取引業者　関東財務局長（金商）第 392 号

加入協会：一般社団法人投資信託協会 、一般社団法人日本投資顧問業協会、一般社団法人第二種金融商品取引業協会

PGIMJ111628

3850497_240912