Geopolitical risk & threats to investment

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Impact of elevated geopolitical risks on investing

1. Higher geopolitical risks in a multi-polar world

2. U.S. elections

3. Higher market volatility and uncertain correlation environment

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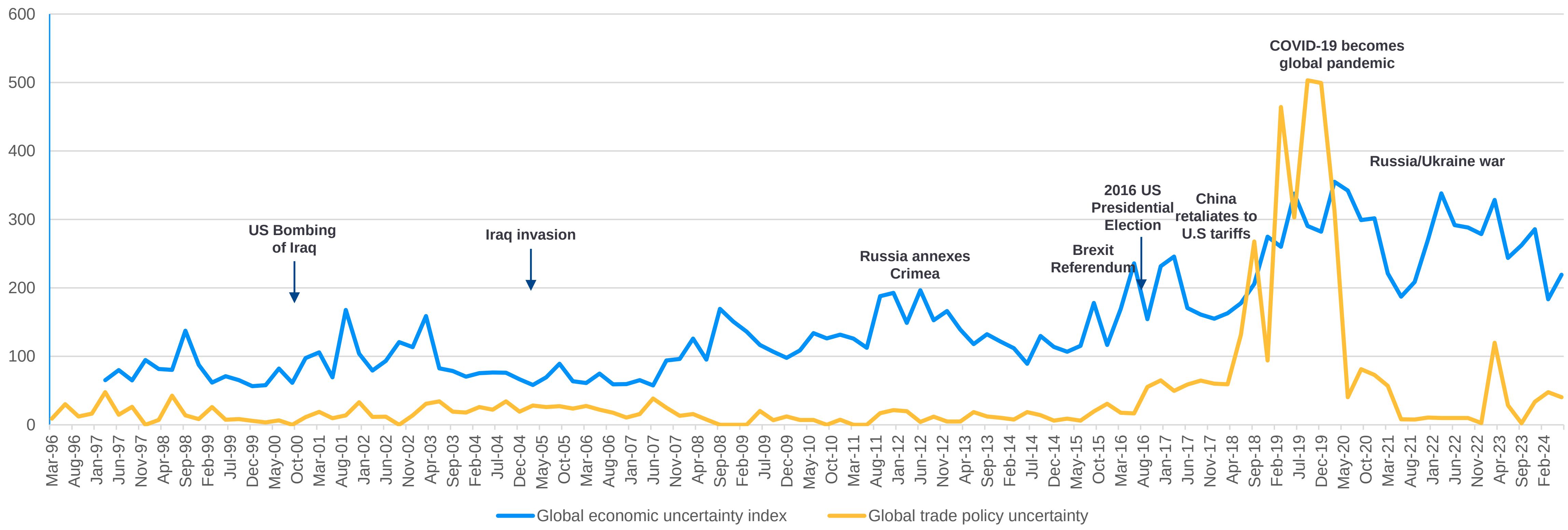
Geopolitical uncertainty: remains elevated but has not prevented equity markets making new ATHs

Geopolitical risks are high and warrant higher asset market volatility for a given economic view



Source: Bloomberg, Baker and Bloom, J.P. Morgan Asset Management, June 2024. Opinions, estimates, forecasts, projections and statements of financial market trends are based on market conditions at the date of the publication, constitute our judgment and are subject to change without notice and not to be construed as research or investment advice.

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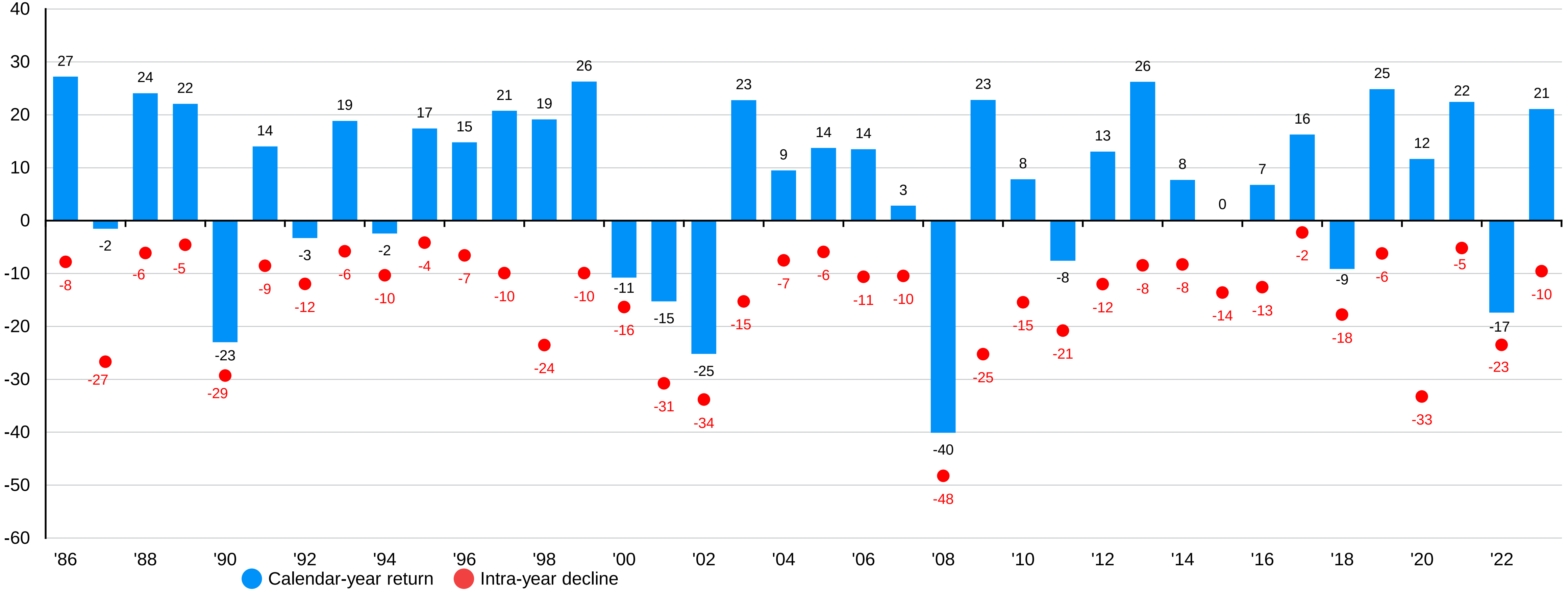
Volatility is normal

MSCI World intra-year declines vs. calendar-year returns

%; despite average intra-year drops of 14.7% (median 10.5%), annual returns are positive in 27 of 38 years



Source: MSCI, LSEG Datastream, J.P Morgan Asset Management. Returns shown are price returns for MSCI World in local currency. Intra-year decline refers to the largest market fall from peak to trough within the calendar year. Returns shown are calendar years from 1986 to 2023. Past performance is not a reliable indicator of current and future results. Data as of 5 August 2024.

A multi-polar world

A world in transition

Economy in Transition:
Fiscal boost from industrial policy

Policy in Transition:
From negative to positive real rates

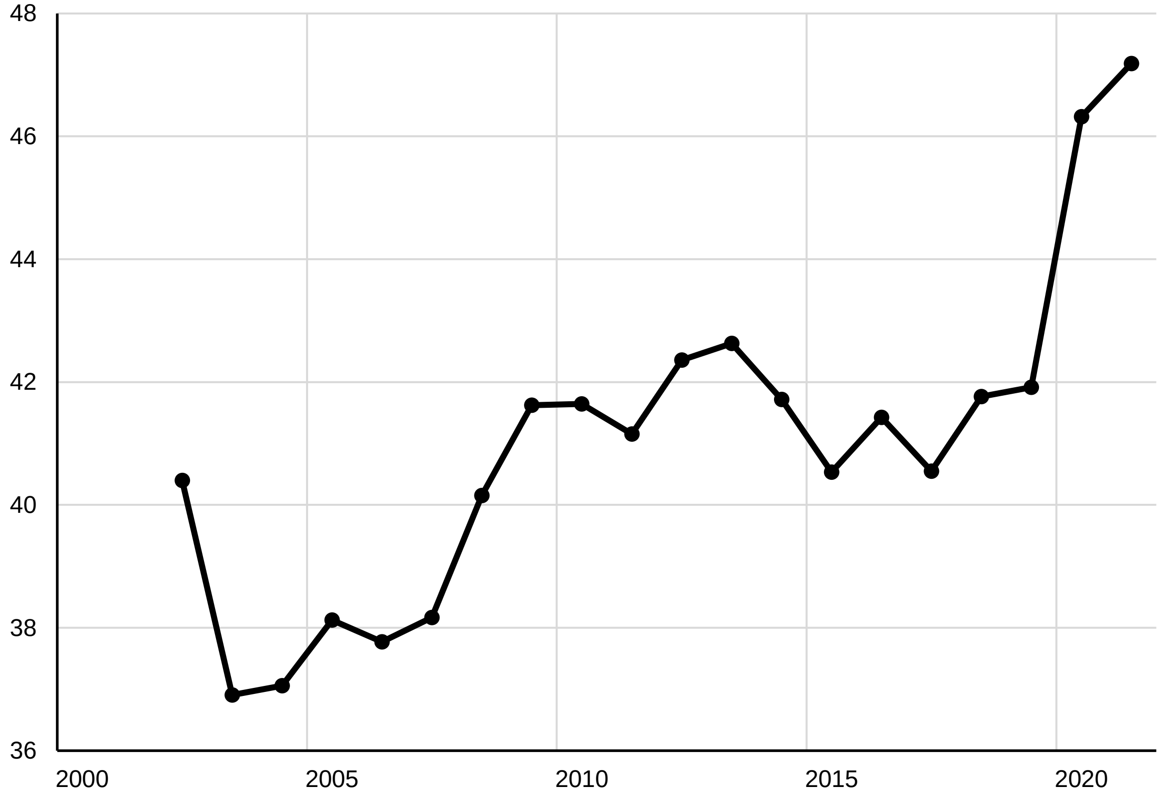
Smarter portfolios

Technology in Transition:
Productivity upside from AI and automation

Climate in Transition:
From conventional energy to renewable energy

Economy in transition: The state's role in the economy is rising

State intervention is on the rise again
Global subsidies and other transfers as % of government expense



Prior to the global pandemic, economic volatility trended downward
Standard deviation of OECD GDP, quarter-over-quarter, 10-year

Source: (Left) World Bank, Haver Analytics; data as of 2021. (Right) OECD; data as of 1Q 2020.

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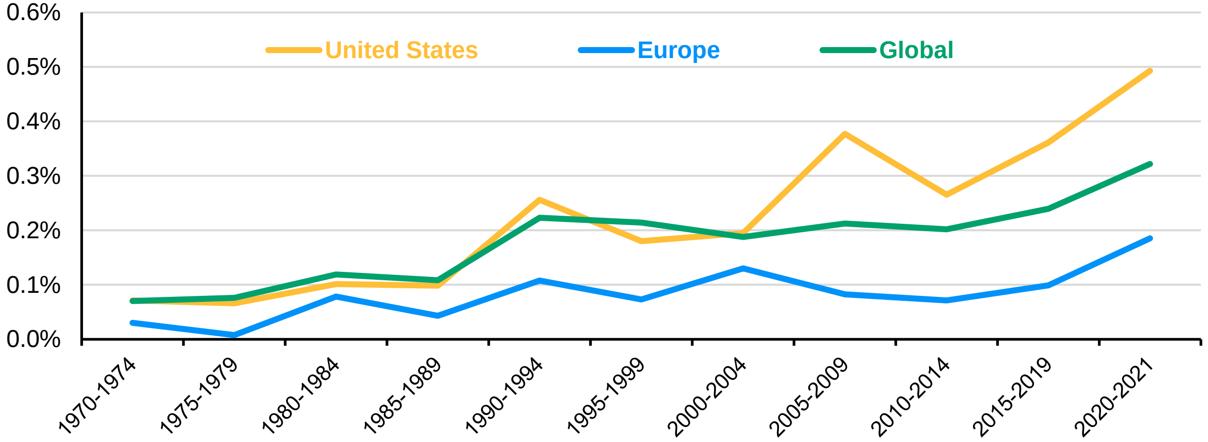
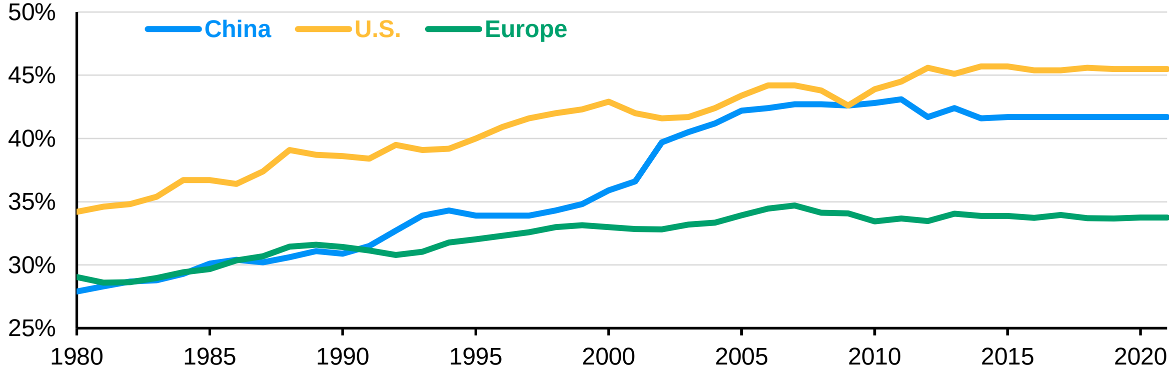
Economy in transition: Today's challenges are difficult for private actors alone to solve

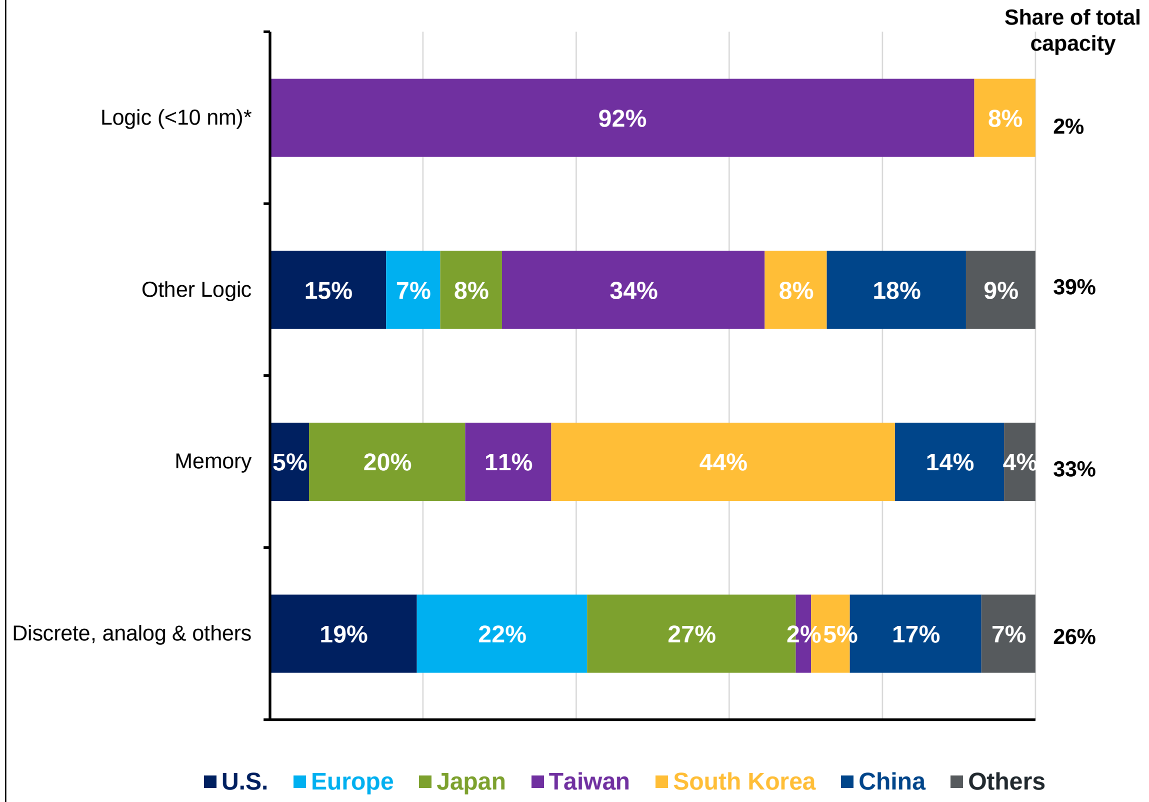
Economic toll of meteorological natural disasters has been steadily growing
Cost of meteorological natural disasters as a % of GDP



Inequality has risen notably since the 1980s
Top 10% share of income



Production of semiconductors is concentrated in certain producers
% share of global semiconductor wafer fabrication (fab) capacity, by type and location, 2019

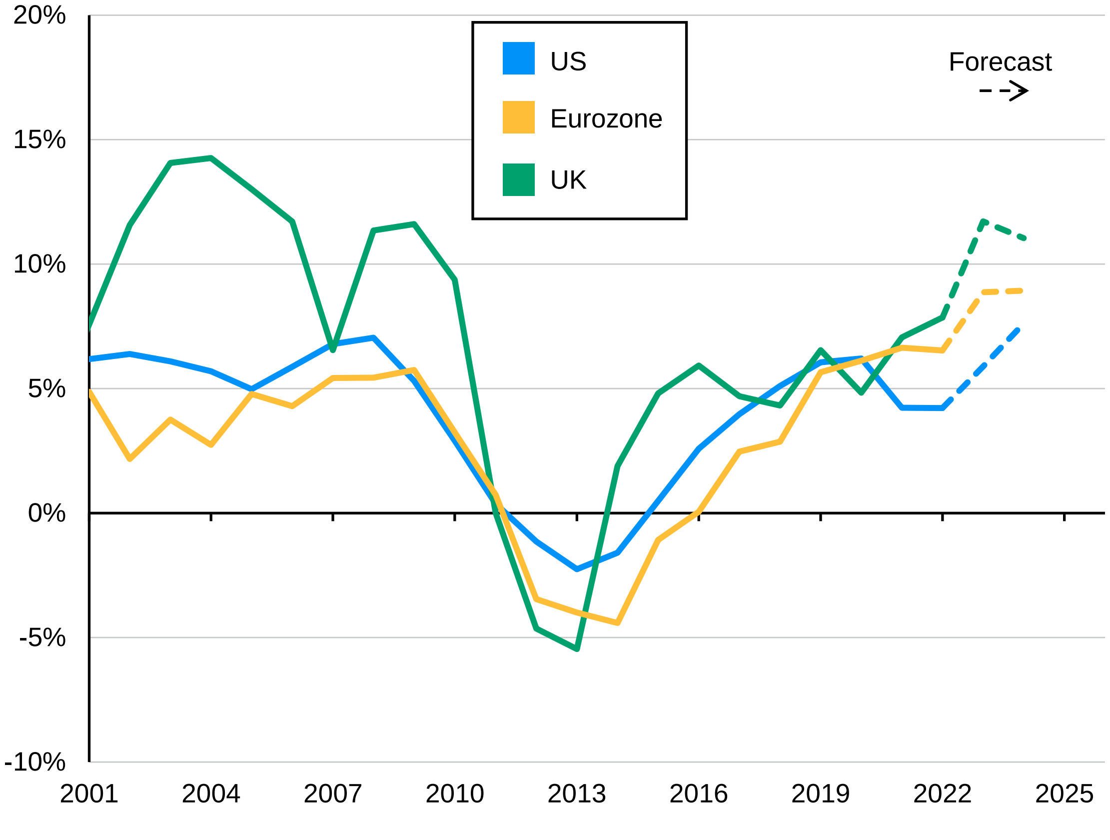


Source: (Top left) J.P. Morgan Asset Management. Data from the Centre for Research on the Epidemiology of Disasters (CRED), Catholic University of Louvain, World Bank, World Weather Attribution. (Bottom left) Source: World Inequality Report 2022. Europe uses a simple average of France, Germany, the UK, Italy, Spain and Sweden. (Right) Boston Consulting Group, SEMI fab database. * Nanometer. ** Newest generations of computing/professing wafers (since er, faster and more

Policy in transition: higher fiscal spending should keep bond yields high

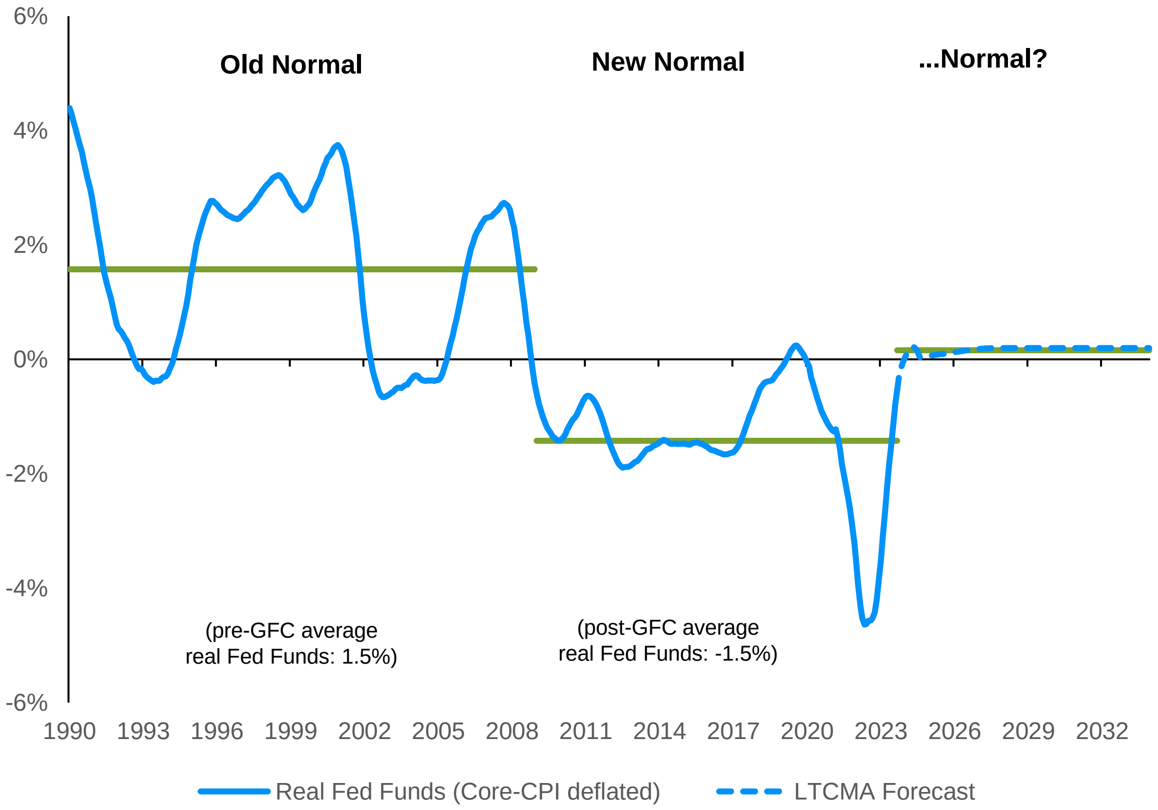
Fiscal activism is back…

Public sector investment, % change year on year (3-year moving average)



…leaving less need for negative interest rates

U.S. real policy rate



Source: (Left) Eurostat, LSEG Datastream, OECD, J.P. Morgan Asset Management. Eurozone is GDP-weighted average of France, Germany, Italy, and Spain. Forecasts are OECD. (Right) Bank of England, Bank of Japan, CANSIM, European Central Bank, Federal Reserve, LSEG Datastream, OECD, J.P. Morgan Asset Management. Data as of 6 October 2023.

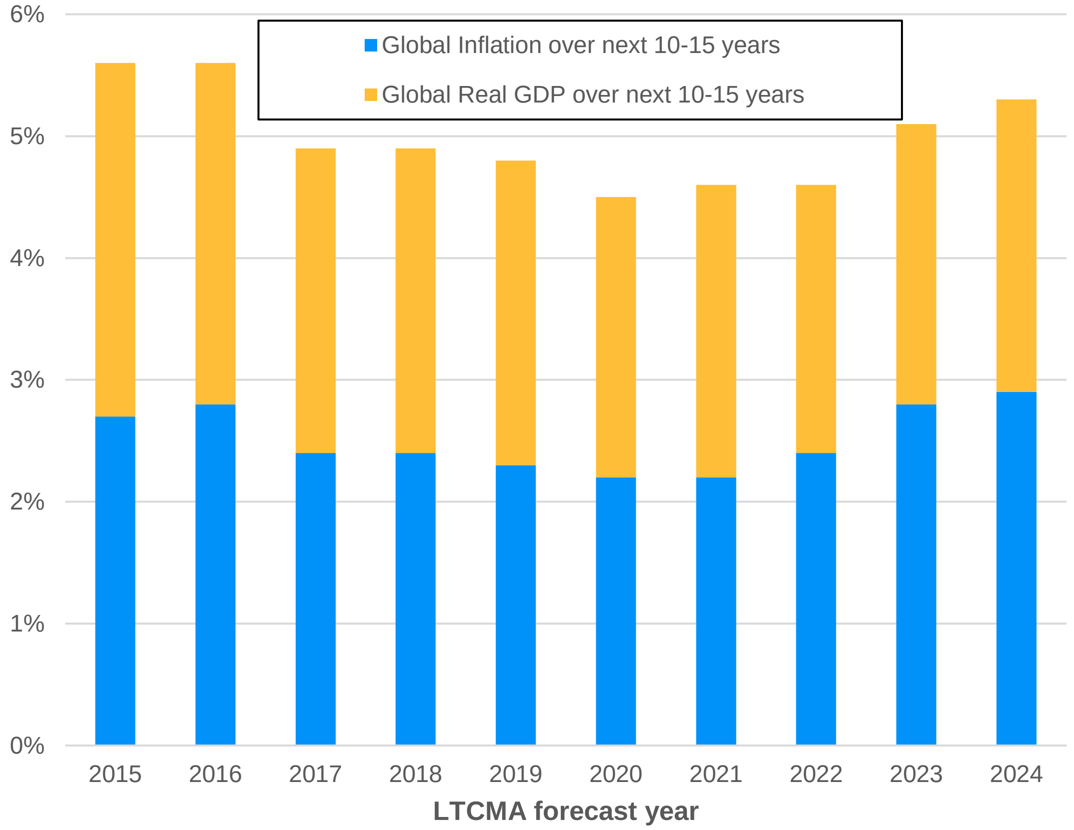
After a decade of disinflation, topside risks to inflation are emerging

	Impact on U.S. inflation	
Economic Forces	**Last global expansion (2008-2019)**	**Next 10-15 years**
Income distribution	-	0
Globalization/ deglobalization	-	0
Sustainability	0	++
Fiscal policy	-	0
Online markets and information availability	--	--
Artificial intelligence and automation	0	--
Inflation expectations	-	+
Union membership	-	-
Commodity prices	-	0

Source: J.P. Morgan Asset Management; data as of September 2023. Opinions, estimates, forecasts, projections and statements of financial market trends are based on market conditions at the date of the publication, constitute our judgment and are subject to change without notice. There can be no guarantee they will be met.

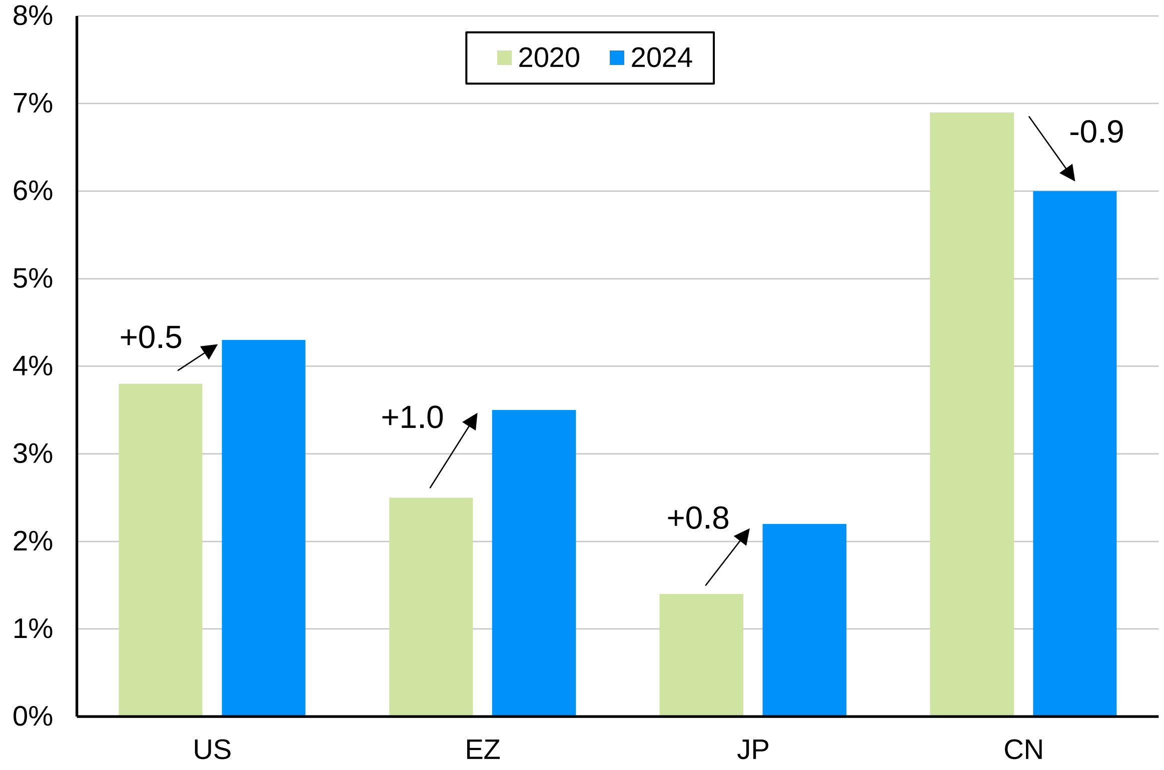
Economies in transition: higher inflation pushes up nominal growth expectations

Nominal growth has been revised up again



(LTCMA projections of 10-15 year average global growth and inflation from each calendar year)

Japan and Europe have exited their nominal growth rut, China's challenges appear more structural



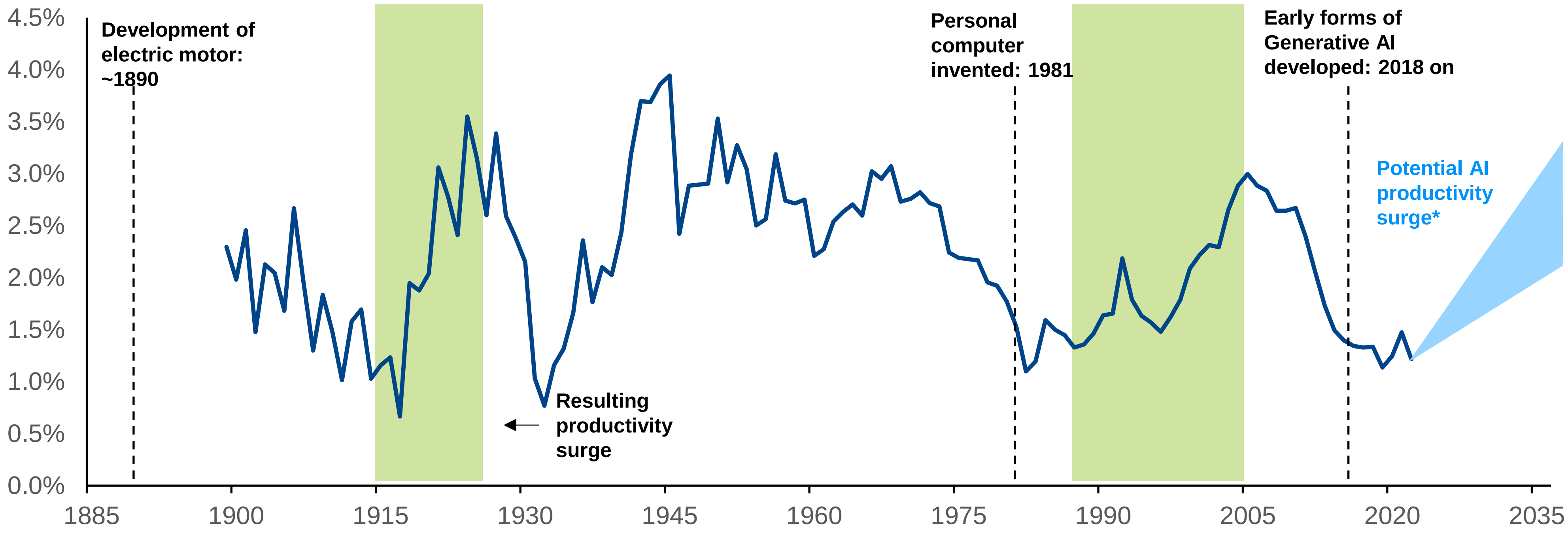
(LTCMA projections of 10-15 year average nominal growth)

Source: Bloomberg, Haver Analytics, JPMAM Multi-Asset Solutions. Forecasts, projections and other forward looking statements are based upon current beliefs and expectations. They are for illustrative purposes only and serve as an indication of what may occur. Given the inherent uncertainties and risks associated with forecasts, projections and other forward statements, actual events, results or performance may differ materially from those reflected or contemplated. Data as of September 2023.

Technology in transition: scope for a productivity surge

U.S. labor productivity growth

Rolling 10-year annualized rate



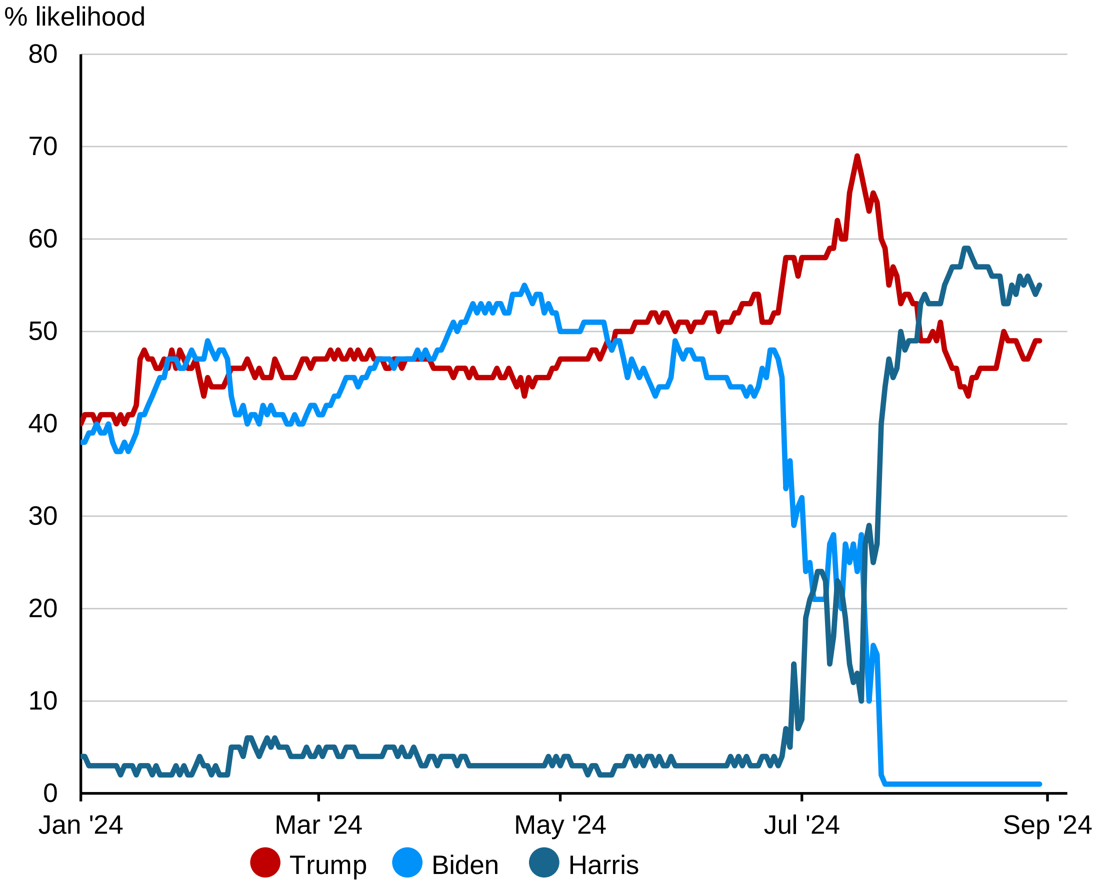
*J.P. Morgan Asset Management estimates plausible productivity gains of 1.4-2.7% from generative AI and other AI technologies over the next ten years, in addition to 1.5% annual productivity growth currently projected by the Congressional Budget Office.

Source: BLS, NBER, J.P. Morgan Asset Management. Data from 1888 to 1957 reflect productivity data for the total private economy from John Kendrick, "Productivity Trends in the United States," NBER. Data from 1958 to 2022 reflect non-farm productivity data from the BLS. Forecasts, projections and other forward-looking statements are based upon current beliefs and expectations. They are for illustrative purposes only and serve as an indication of what may occur. Given the inherent uncertainties and risks associated with forecasts, projections or other forward-looking statements, actual events, results or performance may differ materially from those reflected or contemplated. Data are as of August 31, 2023. Past performance is not a reliable indicator of current and future results. Opinions, estimates, forecasts, projections and statements of financial market trends are based on market conditions at the date of the publication, constitute our judgment and are subject to change without notice. There can be no guarantee they will be met. Past performance is not a reliable indicator of current and future results.

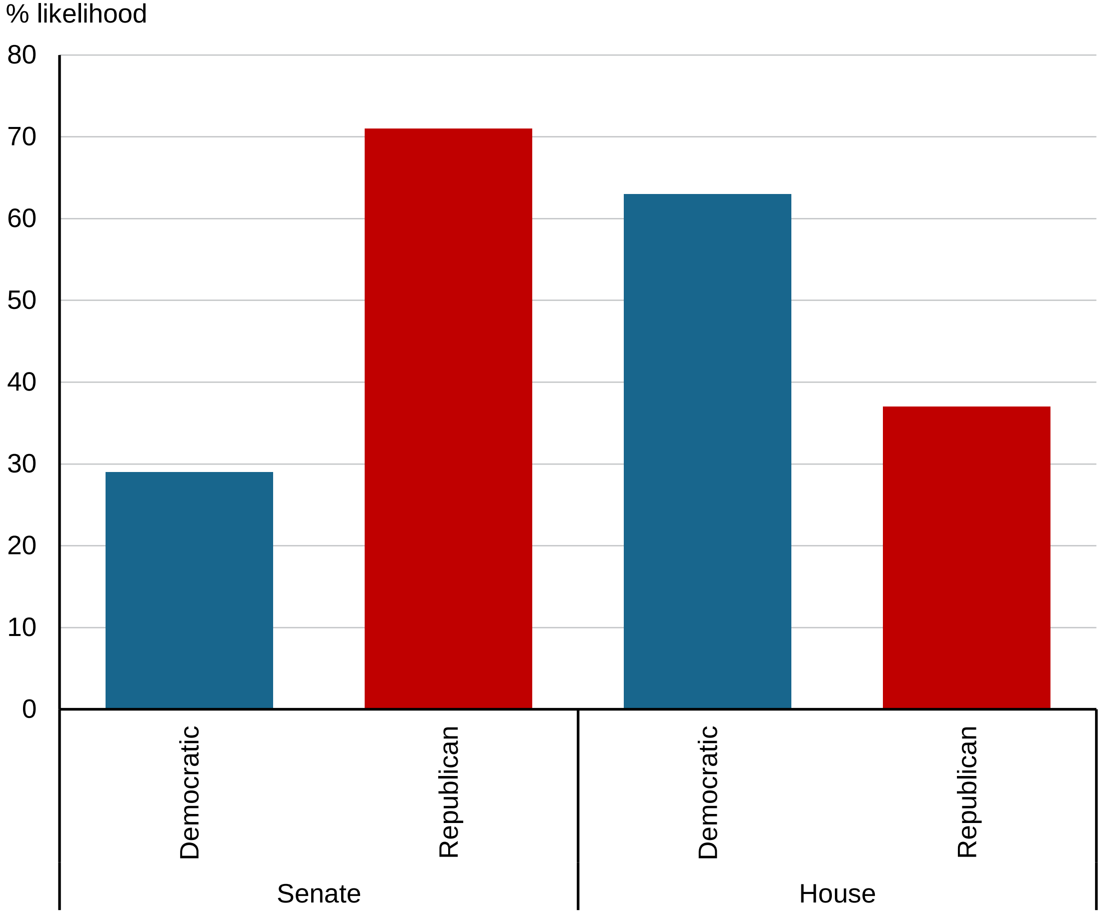
U.S. 2024 Presidential Election

US politics

Market-implied probabilities for the 2024 presidential election winner



Market-implied probabilities for control of Congress



Source: (Left) Bloomberg, PredictIt, J.P. Morgan Asset Management. President Biden withdrew from the race on 21 July 2024. (Right) Polymarket, J.P. Morgan Asset Management.
Guide to the Markets - UK. Data as of 30 August 2024.

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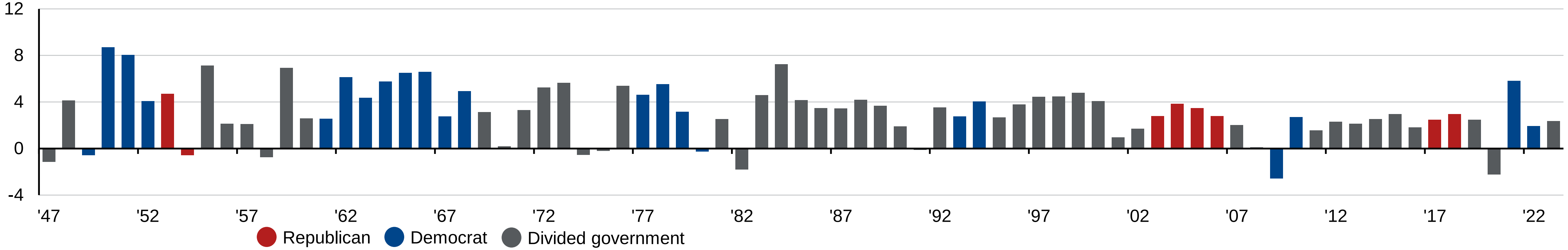
Historically, there is a weak relationship between politics and the economy & markets

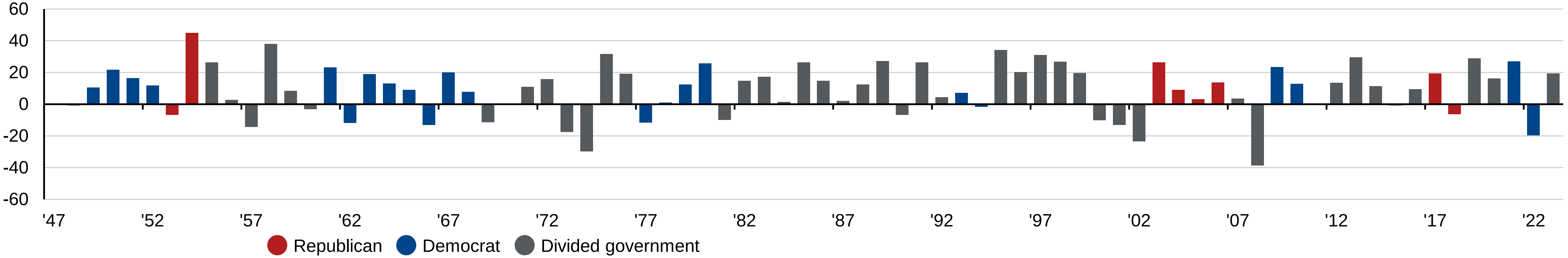
Real GDP

% change year on year



S&P 500 returns

% change year on year

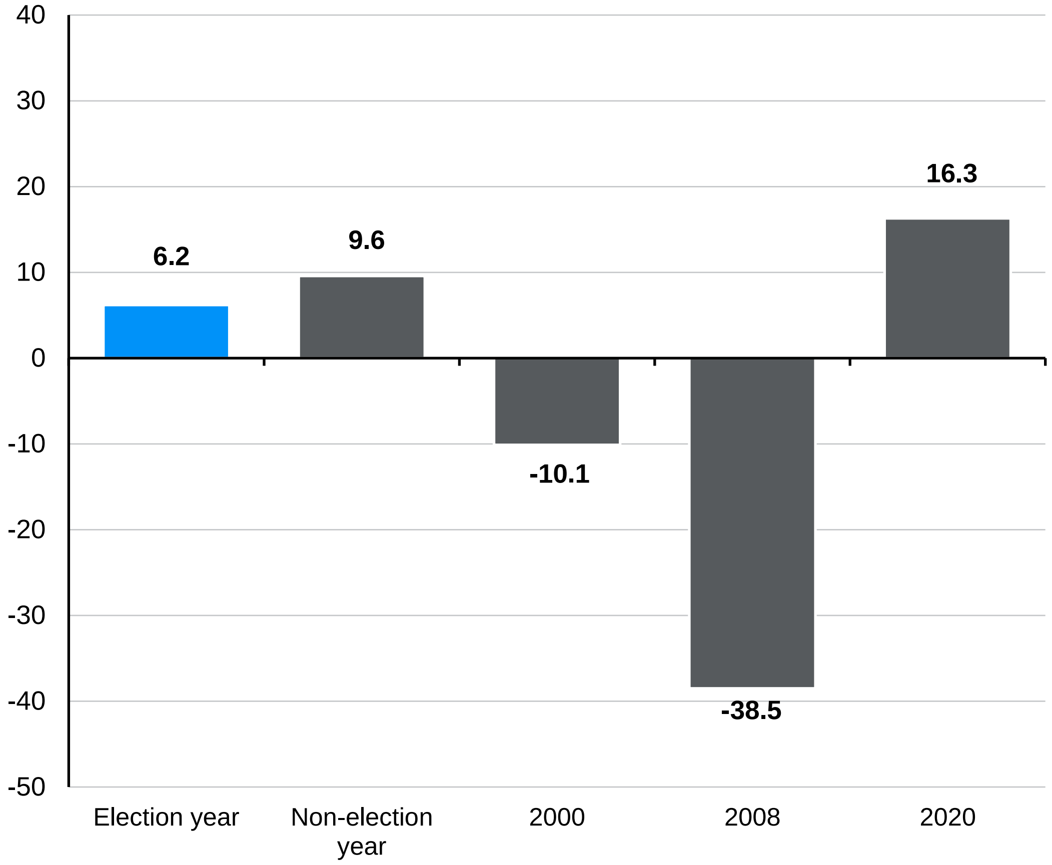


Source: (All charts) BEA, LSEG Datastream, S&P Global, J.P. Morgan Asset Management. Past performance is not a reliable indicator of current and future results. Data as of 9 August 2024.

Historically, there is a weak relationship between politics and the economy and markets

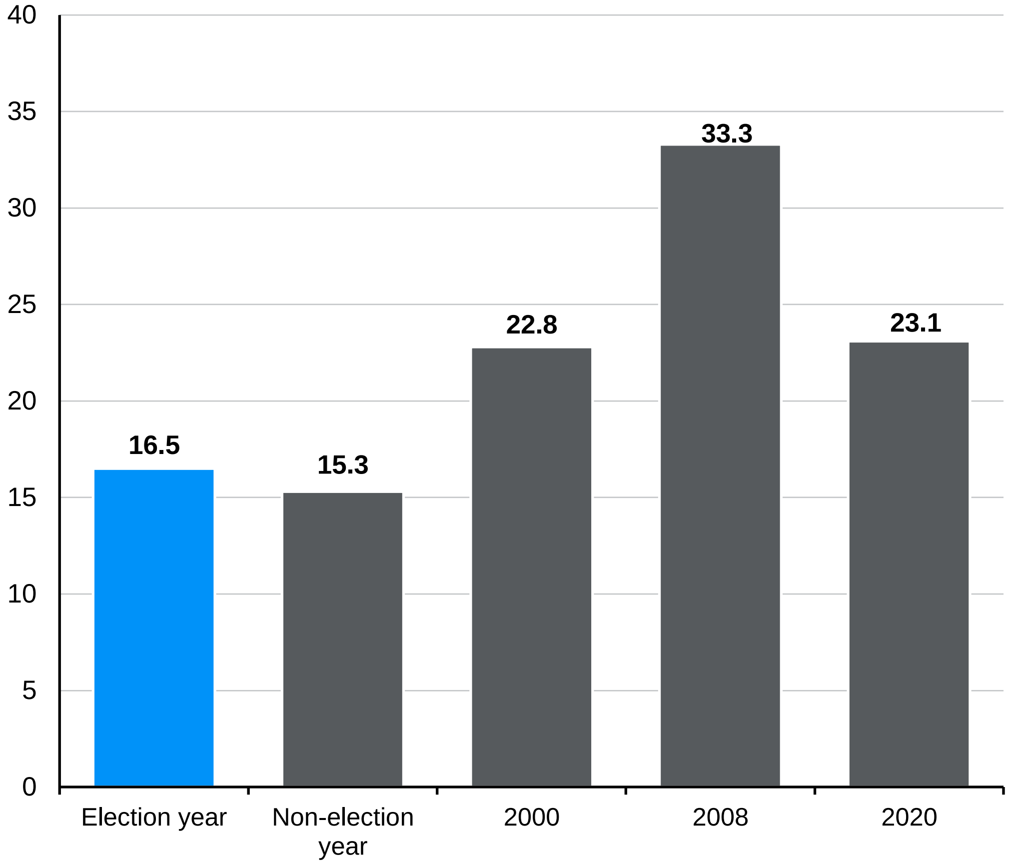
US equities price return

% change year on year



US equities realised volatility

%, 52-week standard deviation



Source: (All charts) FactSet, S&P Global, J.P. Morgan Asset Management. Election years are US presidential election years. Election and non-election years are the average annual returns from 1932 onwards. Past performance is not a reliable indicator of current and future results. Data as of 9 August 2024.

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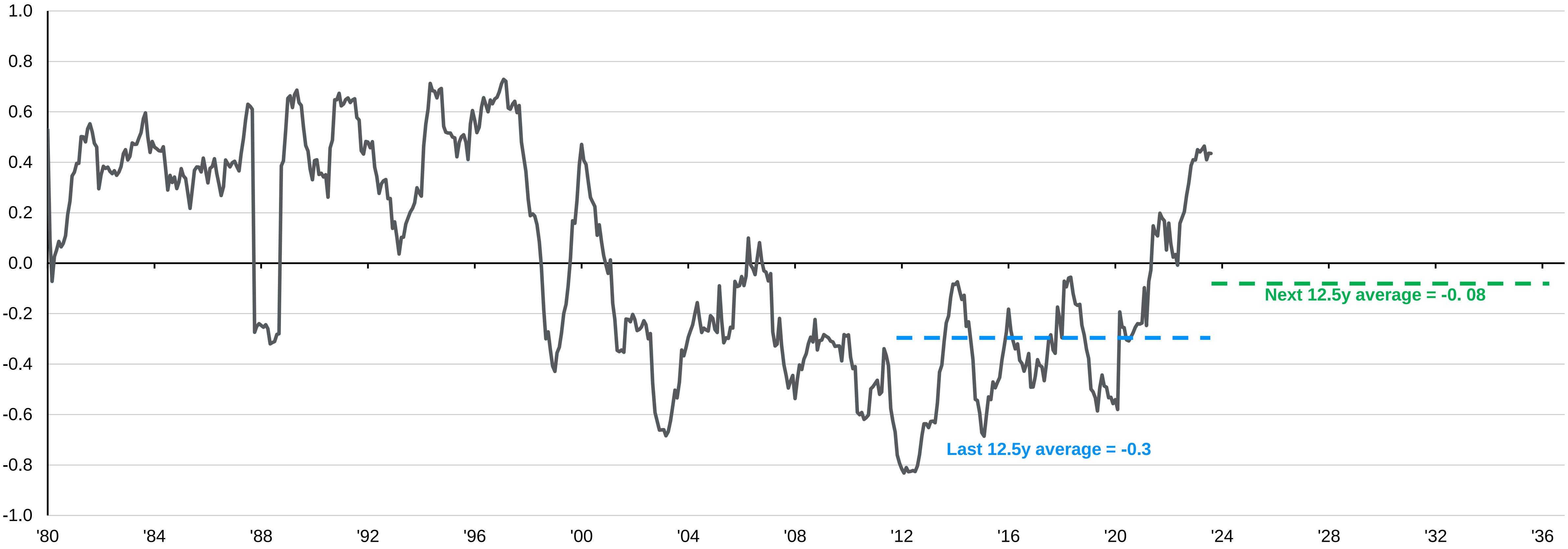
Asset class implications: uncertain correlations

There's more to diversification than bonds alone

Rolling 1-year weekly total return correlation S&P500 U.S. 10-year treasuries



Source: LSEG Datastream, S&P Global, J.P. Morgan Asset Management. Past performance is not a reliable indicator of current and future results. Data as of Q4 2023.

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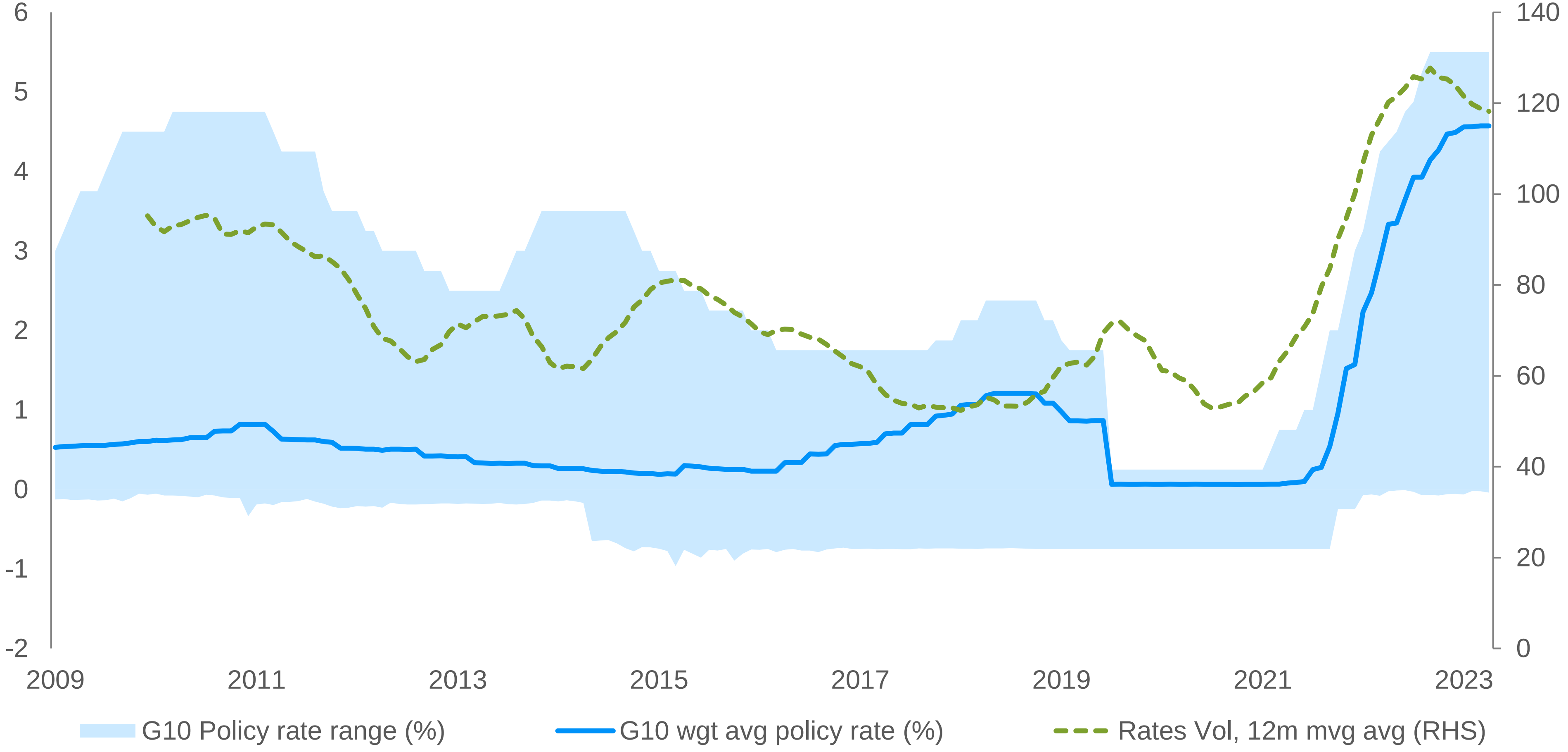
Tactical awareness: fixed income volatility to remain higher than experienced pre-Covid

MOVE volatility index and Developed market policy rates (average and range) over last 15 years

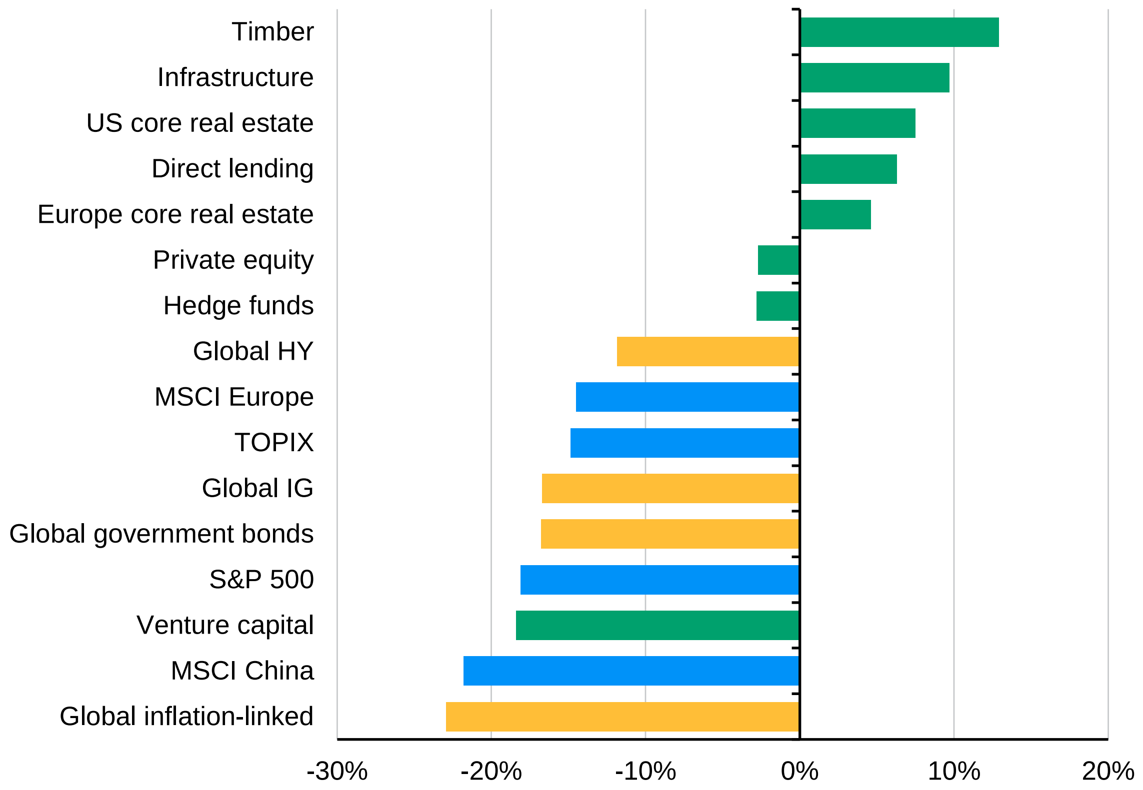


Source: Bloomberg, J.P. Morgan Asset Management Multi-Asset Solutions. Data as of January 2024. Past performance is not a reliable indicator of current and future results. Opinions, estimates, forecasts, projections and statements of financial market trends are based on market conditions at the date of the publication, constitute our judgment and are subject to change without notice. There can be no guarantee they will be met.

Building portfolio resiliency for a more uncertain world

Selected public and private market returns in 2022

%, total return in USD



Opportunities for enhancing the 60/40 stock-bond portfolio for different macroeconomic regimes

Diversifier	How it works	Diversifies against
Risk Premia - risk premia strategies	Trend strategies; multi-risk premia strategies, including long-short; and arbitrage strategies may help provide uncorrelated return streams	Declining economic growth, inflation
Risk Premia - Select equity sectors/styles	Equity sectors such as energy or utilities and factors such as minimum volatility and value	Rising economic growth, inflation
Active Management	Active equity, GTAA and active alternatives	All-weather
Currency	Currency overlay strategies may capture the inefficiencies of FX markets which have a low correlation with market beta	All-weather
Thematic Diversification	Exposure to thematic equity baskets may capture performance from longer-term, less cyclical growth trends	All-weather, especially helpful in capex cycles when government-private partnerships are in play
Alternatives – real assets	Cash flow-driven returns grow with inflation, providing ballast to a broader portfolio	All-weather; especially helpful during periods of high inflation / rising rates
Alternatives – hedge funds and alternative credit	Low correlation to traditional asset classes Commodities help mitigate energy-related inflation shock	Rising volatility, market downturns, energy supply shocks

Source: (Left) Bloomberg, Burgiss, Cliffwater, FactSet, HRFI, LSEG Datastream, MSCI, NCREIF, S&P Global, J.P. Morgan Asset Management. Global government bonds: Bloomberg Global Aggregate – Government; Global inflation-linked: Bloomberg Global Inflation-Linked; Global IG: Bloomberg Barclays Global Aggregate – Corporate; Global HY: ICE BofA Global High Yield Index; Hedge funds: HRFI Fund Weighted Composite; US core real estate: NCREIF Property Index – Open End Diversified Core Equity; Europe core real estate: MSCI Global Property Fund Index – Continental Europe; Direct lending: Cliffwater Direct Lending Index; Global infrastructure: MSCI Global Quarterly Infrastructure Asset Index (equal-weighted blend); Timber: NCREIF Timberland Total Return Index. Private equity and venture capital are time-weighted returns from Burgiss. Past performance is not a reliable indicator of current and future results. *Guide to the Markets - Europe.* Data as of 6 October 2023. (Right) J.P. Morgan Asset Management, as of September 2023

Impact of elevated geopolitical risks on investing

1. Higher geopolitical risks in a multi-polar world	• Transactional alliances • Greater role of state in economy • Build resilient supply chains • Strategic autonomy in defence, AI
2. U.S. elections	• Matters if clean sweep • Fiscal spending higher irrespective of outcome • Immigration and China policy in focus
3. Higher market volatility and uncertain correlations	• Higher inflation risk from bigger deficits • AI investment can potentially raise productivity • Govt bonds volatile and stock-bond correlation uncertain

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