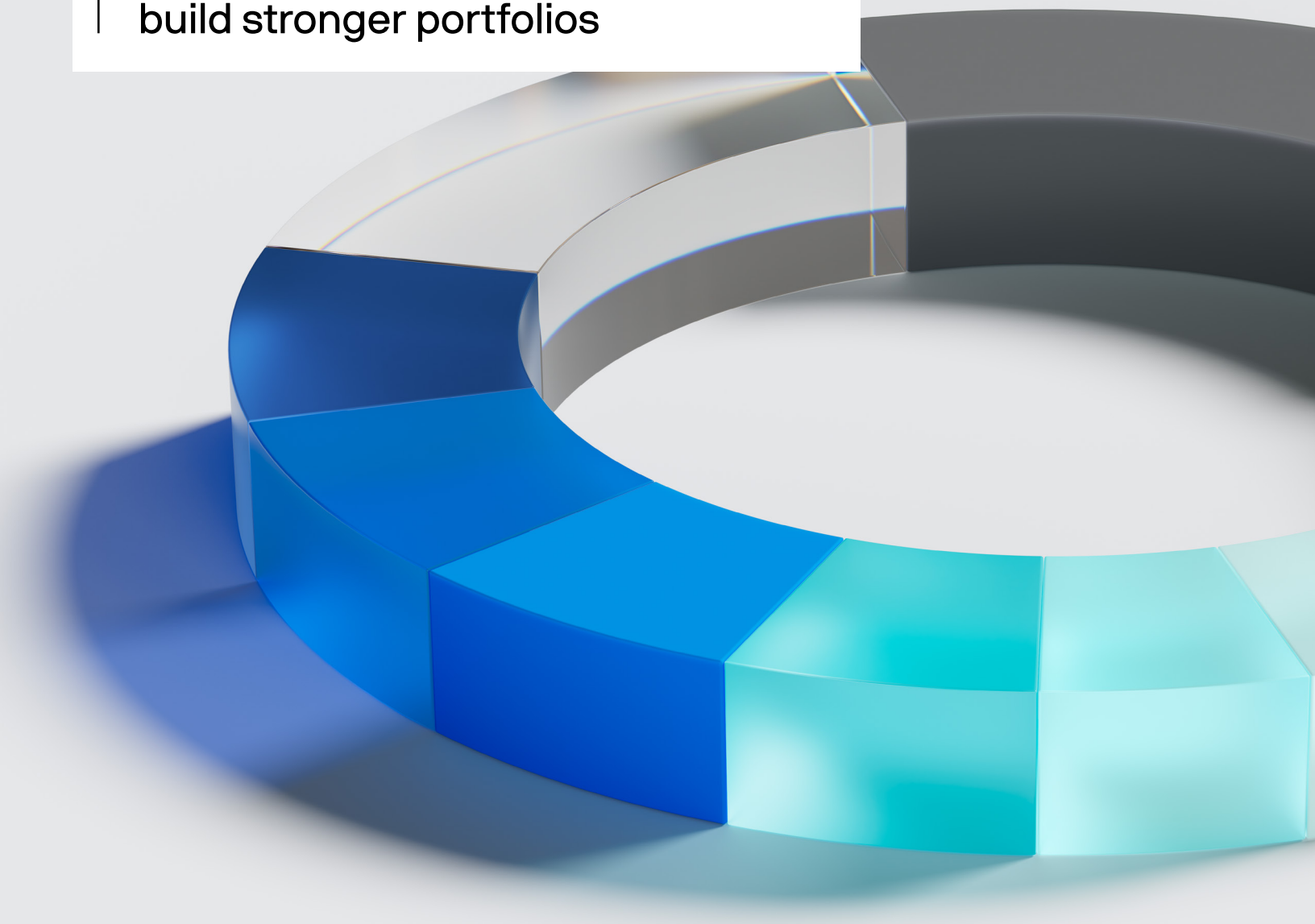
Portfolio Insights

2027 Long-Term Capital Market Assumptions

31st Annual Edition
Time-tested projections to build stronger portfolios



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J.P.Morgan
ASSET MANAGEMENT



Foreword



There's no doubt it's an extraordinary time. There's lots of noise out there: tremendous uncertainty and volatility around geopolitics, oil markets, deficits, valuations and employment markets. There's less clarity about the future than ever before, and there couldn't be a better time to share J.P. Morgan Asset Management's 2027 Long-Term Capital Market Assumptions.

For the publication's 31st year, we have gathered a team of 90-plus industry-leading portfolio managers, economists and research analysts worldwide to produce these return assumptions for 200-plus assets in more than 20 base currencies. Many investors, including our own, rely on these assumptions to set strategic asset allocations and establish risk and return expectations for the coming 10 to 15 years. The goal is the same across all of our insights: to give clients the tools to navigate a complex world with facts and research.

This year, our experts expect resilient markets with a wider range of outcomes.

They forecast stronger growth, greater AI-driven productivity and higher corporate profits and bond yields. Long-term global bond return forecasts are the highest in over two decades. In this evolving environment, advice, research and risk management earn their keep.

For more than three decades, the LTCMAs have reflected our dedication to rigorous, objective global forecasting, and I am proud to bring our firm's expertise to support our clients' long-term financial goals.

On behalf of J.P. Morgan Asset Management, we hope our 2027 analysis helps guide your long-term perspective and successful active asset allocation.

As always, we welcome your feedback.



George Gatch
Chief Executive Officer
Asset Management

Key insights

Productivity returns:
An investment surge lifts growth … and volatility

A USD 15 trillion global capex supernova fuels higher growth and strong asset returns over the next 10 to 15 years. Productivity gains mitigate rising inflation risks and an aging workforce. Despite the tail risks, a resilient economy drives resilient markets.

1

Three forces shape the future and drive returns

Economic nationalism boosts domestic investment but risks a crosscurrent of inflation volatility. **Technology adoption** is the fair wind filling the global economy's sails. Rising domestic investment drives **capital rewiring**, resulting in shifts in public and private capital flows.

2

The best developed world growth outlook in 15 years

A global investment surge, centered on AI and extending to 2040, boosts total factor productivity by 50%, to 120bps, pushing our U.S. real GDP growth forecast up to 2.1% and developed world nominal growth up to 4.2%. The mix of GDP-to-inflation is the most favorable since the pandemic.

3

U.S. equity upgrades, a global bond renewal and a first look at bitcoin

Profit margins of over 15% push our U.S. large cap equity forecast up 80bps, to 7.5%, leading to our developed market equity forecasts overtaking our emerging market equity forecasts. Higher real yields drive global aggregate bond forecasts from a low of 2.1% in 2021 to 5.3% today – the highest in two decades. And for the first time, we put a range on bitcoin returns, though we do not yet include bitcoin in our main covariance matrices.

4

Alternatives for return enhancement, diversification and inflation resilience

We upgrade diversified hedge funds by 140bps on sustained alpha trends and higher rates – with alpha to play for, manager selection is vital. Real asset returns are resilient in the face of persistent inflation volatility, with global transportation returning 8.1%, global core real estate 7.9% and global infrastructure 7.1%.

5

Greater opportunities to diversify, greater rewards for doing so

A balanced global stock-bond portfolio rises 60bps, to 7.0%, but higher stock-bond correlation demands further diversification. Alternatives can boost risk-adjusted returns: Allocating 30% to diversified alternatives can push returns up to 7.5% and boost Sharpe ratios by 21% compared with a simple balanced portfolio. Diversifying relative to themes as well as across assets can further strengthen portfolio resilience.

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Executive summary

Productivity returns:

An investment surge lifts growth ... and volatility

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In brief

- The 31st annual edition of our Long-Term Capital Market Assumptions explores how three key themes – economic nationalism, technology adoption and capital rewiring – will define the economy and drive asset returns over the next 10 to 15 years. We expect governments to invest in national resiliency, companies to race to deploy new innovations and these changing patterns of spending to shift how capital gets deployed.
- A USD 15 trillion global capex supernova, centered on technology adoption, fuels higher growth and strong asset returns over the next 10 to 15 years. Productivity gains mitigate rising inflation risks and an aging workforce. We raise our global growth outlook by 20 basis points (bps), to 4.2%, while also forecasting elevated inflation volatility.
- Higher growth boosts profits and yields in pushing up the projected returns for a global balanced stock-bond portfolio in USD[1] by 60bps, to 7.0%. A balanced portfolio with a 30% alternatives allocation sees forecasts rise 50bps, to 7.5%, and enjoys a 21% higher Sharpe ratio compared with a public markets-only portfolio.
- We see more resilient profit margins in the U.S. than in emerging markets, which are dominated by traditionally cyclical sectors, where margins for artificial intelligence hardware are at extreme levels. As a result, developed market equity forecasts rise above emerging market forecasts.
- Global bond return forecasts are the highest in two decades as real yields have fully normalized and put the abnormally low returns of the post-financial crisis era firmly behind them.
- The trade-weighted dollar remains structurally overvalued, but more so against Asian than European cross-currency pairs.
- Higher inflation volatility, ongoing risk of currency debasement and growing opportunities to capture active alpha reinforce the role of alternatives as essential portfolio diversifiers and drivers of return.

[1] A global balanced stock-bond portfolio in USD signifies 60% MSCI All Country World equity (ACWI) and 40% Bloomberg US Aggregate bonds.

In each of our annual editions after the pandemic, we highlighted increased investment, solid growth and more volatile inflation, making the case for strong returns despite geopolitical tension. In 2026, the pattern extended: A global balanced stock-bond portfolio in USD delivered a 9.1%[2] total return – 220 basis points (bps) above the 25-year average.

Looking ahead, we acknowledge that volatility is inevitable over our 10- to 15-year forecast horizon as a global capex boom fuels higher growth and strong asset returns. Productivity gains mitigate rising inflation risks and an aging workforce. Despite the tail risks, a resilient economy drives resilient markets. This environment calls for a broad investment opportunity set – and raises the rewards for diversification.

This view attracts scrutiny, and rightly so. Market participants point to demographics, deficits, energy transition and geopolitical fragmentation as causes for concern. These issues are important, but they are starting conditions that define the world today. The choices made to adapt to them will define the world, and the returns, of tomorrow.

Three powerful forces shape the economy and drive returns. Economic nationalism boosts domestic investment but risks a crosscurrent of inflation volatility. Technology adoption is the fair wind filling the global economy's sails. Rising domestic investment drives capital rewiring, resulting in shifts in public and private capital flows.

Economic nationalism[3] has become entrenched as governments focus inward and spend on projects that bolster domestic resilience, at times trading economic efficiency for political expediency. Some elements of economic nationalism – industrial strategy, for instance – can be useful in reframing global issues such as climate change.[4] While this can add to overall demand over time, it may also spur inflation and market volatility.

Technology adoption[5] today is synonymous with artificial intelligence (AI), but breakthroughs in other areas, from medicine to robotics to space, will likely advance in the next decade, further supporting trend growth via investment and productivity. As investment intensifies, there is scope for capital rewiring.[6] Former nation savers will become nation spenders.

Capital allocation ultimately steers the economy toward its destination. This has important implications for the nature and geographic spread of growth over our forecast horizon.

These themes may be disruptive, but together they boost our G7[7] nominal growth forecast by 30bps, to 4.2% – the best in 15 years, with the best mix of real growth and inflation since the pandemic (**Exhibit 1**). Still, economies driven by investment and productivity risk becoming more unequal as gains accrue faster to capital than to labor. That inequality is central to today's K-shaped economy,[8] which likely persists over our investment horizon. A K-shaped economy, with unequal returns to capital vs. labor, is a metastable state – surprisingly durable, but sensitive to stress or shock. Its persistence relies on channeling sufficient economic reward to the lower leg of the K to maintain stability while optimizing the growth and profit accruing to the upper leg of the K.

Higher growth and fiscal deficits imply higher real rates and larger term risk premia. These factors, combined with starting yields that have fully normalized from the low rates of the 2010s, give us the highest global bond forecasts in two decades.

Strong investment and productivity underpin profits and equity returns, as we make a 50bps upgrade to global equity forecasts, to 7.5%. We factor prevailing risks into modestly higher volatility forecasts. For investors in a balanced portfolio, our 10- to 15-year return forecast improves 60bps, to 7.0%,[9] while a balanced portfolio with

[2] Bloomberg, J.P. Morgan Asset Management. Total return for a global balanced stock-bond portfolio in USD (60% ACWI equity and 40% US Aggregate bonds), rebalanced quarterly, from September 30, 2025, to September 30, 2026. The 25-year average is the annualized return from September 30, 2001, to September 30, 2026. Past performance is not a reliable indicator of current and future results.

[3] Economic nationalism refers to policies that prioritize national security, resilience and strategic advantage over economic efficiency, such as industrial strategy, tariffs and restrictions on trade and migration.

[4] Ludovic Thulliez, John Bilton, Kerry Craig, "Who bears the cost? The evolving economics of climate change," *2027 Long-Term Capital Market Assumptions*, J.P. Morgan Asset Management, October 2026.

[5] Technology adoption refers to the spread of new technologies through businesses and the wider economy as firms invest in them and embed them in their processes, raising productivity. See Stephanie Aliaga, Madison Faller, David Kelly et al., "A brighter productivity outlook for the AI era," *2027 Long-Term Capital Market Assumptions*, J.P. Morgan Asset Management, October 2026.

[6] Capital rewiring refers to shifts in where global savings are invested as former surplus economies deploy more capital at home and governments steer domestic savings, such as pension assets, toward local investment, reshaping public and private capital flows.

[7] G7 refers to Canada, France, Germany, Italy, Japan, the UK and the U.S. Nominal growth reflects our real GDP growth and inflation forecasts combined.

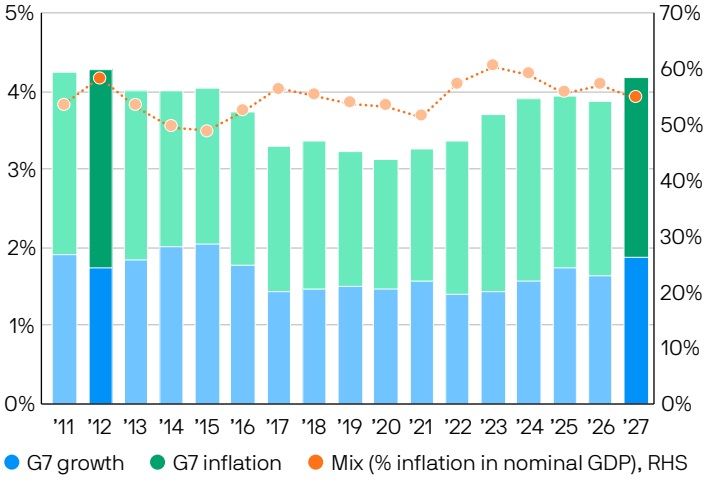
[8] A K-shaped economy is one in which outcomes diverge, with gains accruing faster to owners of capital and higher income households (the upper leg of the K) than to labor and lower income households (the lower leg).

[9] Compound annual return in USD for the balanced portfolio defined in footnote 1, vs. 6.4% in our 2026 LTCMAs. Source: J.P. Morgan Asset Management; estimates as of September 30, 2026.

30% diversified alternatives[10] sees forecasts increase 50bps, to 7.5%, with hedge funds in particular capturing the more favorable alpha environment.

Our 10-year G7 trend nominal growth forecast is the highest in 15 years

Exhibit 1: LTCMA 10-15 year forecasts of G7 growth and inflation



Source: Bloomberg, International Monetary Fund World Economic Outlook April 2026, J.P. Morgan Asset Management; data as of September 2026.

Cyclical challenges won't derail long-term returns

In a centuries-old tale, a weary traveler asks a farmer how to get to Dublin, only to be told, "Well, I wouldn't start from here." The story should resonate with investors today. The cyclical starting point for their journey includes demographic challenges, high deficits, ongoing energy transition and geopolitical fragmentation.

But while these conditions define our cyclical starting point and create a hurdle, they do not derail long-term growth or asset returns. Indeed, the normalization of yields since 2022 creates a compelling entry point not just for bonds but also for other assets, including many alternatives, that have repriced relative to bonds.

Post-pandemic, governments are more willing to use fiscal levers to ignite better growth – and if corporations can be brought along for the ride, all the better. Fiscal spending by G7 nations in the 2020s has risen by 7% compared with the 2010s, and corporate capex is now growing at 6.1%, 1.4% and 1.6% year-over-year in the U.S., Europe and Japan, respectively.

Investment is a necessary precondition for lifting productivity. The McKinsey Global Institute finds that a change in investment[11] explains 80% of productivity gains from 1997 to 2022. With investment rising as fiscal faucets are loosened and firms are scrambling to assert technology leadership, we see growth supported and increasingly dictated by capital deepening[12] and total factor productivity (TFP).[13] Even then, our productivity forecasts[14] are more measured than OECD estimates.[15]

Higher overall growth can partially offset unequal distribution of economic gains across capital and labor, but it cannot entirely mitigate the division that fuels economic nationalist tendencies. These spending forces will influence both demand and potential supply. How this nets out will determine inflation. On average over our forecast horizon, we expect supply to keep pace and therefore inflation to remain in check, and are forecasting a global rate of 2.6%. However, we anticipate periods of supply-demand mismatch and therefore episodes of choppy inflation along the way, particularly in higher deficit nations such as the U.S. and the UK.

Economic nationalism: The good, the bad and the dangerous

This year, we dive deeper into our first theme, economic nationalism, which we have discussed in prior editions. It is a response to growing concerns over security and resilience. Economic nationalism is also a consequence of inequality[16] and political polarization, creating fertile ground that more-extreme political opportunists can exploit.

[10] A balanced portfolio with 30% diversified alternatives refers to 40% MSCI ACWI, 30% Bloomberg US Aggregate, 7.5% private equity, 7.5% real estate, 7.5% real assets, 4.5% private credit and 3% hedge funds. J.P. Morgan Asset Management; estimates as of September 30, 2026.
[11] Jan Mischke, Chris Bradley, Marc Canal et al., "Investing in productivity growth," McKinsey Global Institute, March 27, 2024.
[12] Capital deepening refers to an increase in the amount of capital per worker, which raises labor productivity.
[13] Total factor productivity is the share of output growth not explained by growth in labor and capital inputs, capturing efficiency gains from technology, innovation and better organization of production.
[14] David Kelly, Karen Ward, Stephanie Aliaga et al., "Macroeconomic assumptions: AI leaders pull ahead, and inflation paths diverge," *2027 Long-Term Capital Market Assumptions*, J.P. Morgan Asset Management, October 2026
[15] Francesco Filippucci et al., "Macroeconomic productivity gains from Artificial Intelligence in G7 economies," OECD Artificial Intelligence Papers, No. 41, OECD Publishing, June 2025.
[16] Dani Rodrik, "Populism and the economics of globalization," *Journal of International Business Policy, 2018*

Economic nationalism can be a headwind to growth, yet some aspects are certainly good housekeeping. Developing an industrial strategy can create strategic advantages, as we explore in our article on how climate change affects trend growth.[17] Improving supply chains, energy security and defense can boost investment and near-term growth. Nevertheless, such spending may demand trade-offs between economic efficiency and resiliency.[18]

Even where intent is benign, spending driven by an agenda shaped by economic nationalism carries the risk that the investment fails to translate into productivity gains or that it crowds out other useful investments. At the more extreme end of policy choices, restrictions on trade and labor migration can directly suppress growth. On balance, we see economic nationalism as a modest growth risk but a greater risk to inflation.

In this year's Long-Term Capital Market Assumptions, cash return forecasts are mostly stable. Meanwhile, our projection of modestly steeper curves at equilibrium, together with higher starting yields, pushes up bond return forecasts sharply, leading to global sovereign bonds offering the best return forecasts in two decades (**Exhibit 2**).

Many governments face high debt and persistent deficits. By contrast, corporations are often cash rich and, in public credit markets at least, quite savvy in their debt management. In short, sovereigns are perhaps not as risk free as they once were, while corporations have a shareholder return incentive to service debt responsibly. This "up in quality" trend leads us to tighten our equilibrium credit spread assumptions. While prevailing spreads are tighter than our cycle-neutral forecasts, our projections for credit returns generally keep pace with equivalent sovereign forecasts.

Technology adoption: Capex supernova

If economic nationalism creates crosscurrents for our economic vessel, then technology adoption is the fair wind filling its sails. We believe that AI adoption is in its early stages, but the promise of what might be possible has grown dramatically in just a few years. A historic USD 15 trillion investment boom is underway as firms seek an advantage along a fast-moving frontier. Yet we are just starting to glimpse the economy-wide potential of AI. While only 6% of U.S. work hours are AI-assisted today, we expect AI adoption to reach 40% of today's tasks by 2040.[19]

Global bond returns are up sharply, given higher starting yields and upgrades to trend growth forecasts

Exhibit 2: Fixed income returns

	USD		GBP		EUR		JPY	
2027 assumptions	**Cycle-neutral yield (%)/ spread (bps)**	**2027 expected return**	**Cycle-neutral yield (%)/ spread (bps)**	**2027 expected return**	**Cycle-neutral yield (%)/ spread (bps)**	**2027 expected return**	**Cycle-neutral yield (%)/ spread (bps)**	**2027 expected return**
Inflation	2.4%		2.4%		2.2%		1.9%	
Cash	3.0%	3.2%	2.7%	2.9%	2.6%	2.6%	1.9%	1.8%
10-year bond	4.3%	5.5%	3.9%	5.4%	3.7%	5.0%	2.7%	3.3%
30-year bond	4.8%	6.2%	4.1%	6.6%	4.0%	6.2%	3.1%	4.9%
Investment grade credit	5.6%/140bp	6.1%	5.4%/175bp	6.0%	4.8%/140bp	4.6%	3.2%/75bp	3.1%
High yield	8.2%/440bp	6.7%			7.0%/375bp	5.9%		
Emerging market debt*	7.6%/350bp	6.5%						

Source: J.P. Morgan Asset Management; estimates as of September 30, 2026. EUR: 15y+ index; JPY: JGB Bond Index; GBP: 15y+ index; USD: 20y+ index.
* EMD = hard currency debt.

[17] See Thulliez, Bilton, Craig, "Who bears the cost? The evolvong economics of climate change."
[18] Shekhar Aiyar, Jiaqian Chen, Christian Ebeke et al., "Geoeconomic Fragmentation and the Future of Multilateralism," IMF Staff Discussion Note SDN/2023/001, January 2023. This paper estimates the long-term cost of trade fragmentation at up to 7% of global GDP.
[19] Share of U.S. work hours assisted by generative AI as of 2Q 2026. Source: Alexander Bick, Adam Blandin and David Deming, Generative AI Adoption Tracker, Real-Time Population Survey; Federal Reserve Bank of St. Louis. The 2040 projection is a J.P. Morgan Asset Management estimate; see Stephanie Aliaga, Madison Faller, David Kelly et al., "A brighter productivity outlook for the AI era," *2027 Long-Term Capital Market Assumptions*, J.P. Morgan Asset Management, October 2026.

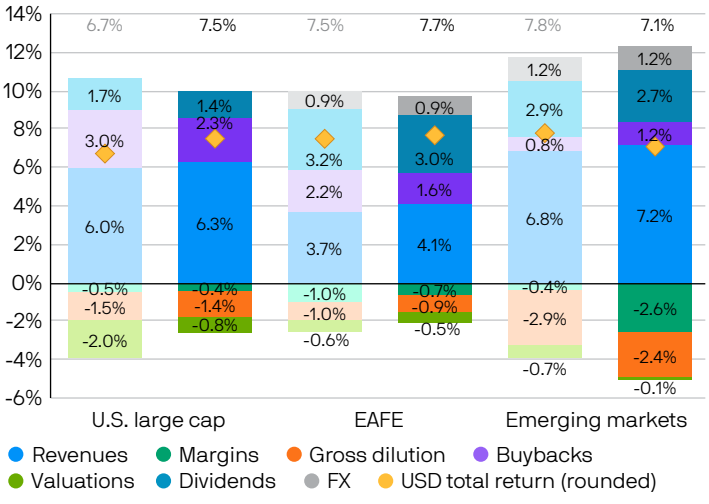
AI adoption is following a contour familiar from prior innovation cycles.[20] Initially, innovators capture supernormal profits and invest to build scale. Then other sectors jump in; only later are rewards shared more broadly as investments become embedded into business processes. The transition from the early to later phases is often bumpy. But over the full cycle, we see AI providing an upside risk to trend growth sufficient to more than outweigh the negative impact on labor force growth that comes from population aging and hostility to migration.

AI capex has boosted profits in regions with large technology sectors, notably the U.S., Korea and Taiwan. Over our full investment horizon, tech sector profit growth will likely moderate from current levels. But as productivity gains materialize, earnings in other sectors should rise. Korean and Taiwanese indices are dominated by cyclical technology sectors (chipmakers). Even if this tech cycle proves more durable than past ones, eventual normalization of cyclical tech profits weighs on aggregate margins, as other sectors are too small to provide an offset. Since Korea and Taiwan account for 51% of the emerging market (EM) index, our EM equity 10-15 year forecast falls below developed markets for the first time in our publication's history (**Exhibit 3**).

Developed market equity returns are higher this year, supported by margins and the investment cycle, but high cyclical margins in Korea and Taiwan bring down emerging market returns

Exhibit 3: Equity return forecasts 2026 vs. 2027

Forecast USD total returns (2026 faint vs. 2027 bold)



Source: Bloomberg, International Monetary Fund World Economic Outlook April 2026, J.P. Morgan Asset Management; data as of September 2026.

Note: Due to rounding, components may not precisely sum to the rounded total return.

By contrast, the U.S. is more balanced across defensive and cyclical technology sectors, and is well diversified beyond tech. So even as tech profits normalize, we expect profits in other sectors to counteract the decline, resulting in greater aggregate margin resilience. U.S. firms also have a strong record of turning capex into returns: U.S. RoIC over the last decade averages around 17%, vs. low-teens in Europe and Japan. The result is a sizable uplift to our U.S. equity forecast, and the U.S. vs. rest of world (RoW) return differential swings in favor of the U.S., from -70bps last year to +10bps in this year's edition.

The technology cycle also widens the opportunity set for private equity (PE) funds, partially offsetting the drag from dry powder[21] and the still-challenging exit backdrop. Adoption of AI and automation is reshaping cost structures and competitive moats, in turn creating clearer dispersion between winners and losers. Together with growing competition for capital and a pipeline of dynamic innovation, these factors support the alpha share of total returns in large cap private equity – even as higher financing costs trim large cap private equity median manager returns by 60bps, to 9.6%.

Aside from PE, investment in the ecosystem enabling AI (compute, power, cooling, fiber and data centers) also supports returns across infrastructure, as well as in the communications and data-exposed segments of real estate (**Exhibit 4**).

[20] Carlota Perez, *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages,* Edward Elgar, 2002.

[21] Global buyout dry powder stands at USD 1.3 trillion, the majority raised in 2022–23 fund vintages. Source: Bain & Company, Global Private Equity Report 2026.

Solid growth supports our return expectations for alternative assets, but manager selection remains key

Exhibit 4: LTCMA expected returns (leveraged,* net of fees, %), 2027 vs. 2026

Real assets	2027	2026
Private real estate equity (USD)		
U.S. core	8.1	8.2
U.S. value-added	10.2	10.1
European core	7.1	6.9
European value-added	8.2	9.0
Asia-Pacific core	8.7	8.4
REITs (USD)		
U.S. REITs	8.2	8.6
European REITs	8.1	6.5
Asia-Pacific REITs	7.9	8.1
Global REITs**	8.2	8.4
Commercial mortgage loans (USD)		
U.S.	6.3	6.2
Global infrastructure (USD)		
Core	7.1	6.5
Global transport (USD)		
Core	8.1	7.9
Global timberland (USD)		
Global timberland	6.2	6.3
Commodities (USD)◊		
Commodities	4.8	4.6
Gold	5.5	5.5

Financial alternatives	2027	2026
Private equity (USD)†		
Cap-weighted composite	9.8	10.2
Private equity - small cap	10.6	10.1
Private equity - mid cap	10.0	9.9
Private equity - large/mega cap	9.6	10.2
Private debt (USD)		
Direct lending	7.8	7.7
Venture capital (USD)		
Venture capital	8.8	8.5
Hedge funds (USD)		
Equity long bias	7.3	5.5
Event-driven	7.1	5.2
Relative value	6.1	5.7
Macro	5.6	4.1
Diversified††	6.7	5.3
Conservative‡	4.7	4.0

Source: J.P. Morgan Asset Management; estimates as of September 30, 2025, and September 30, 2026.
* All return assumptions incorporate leverage, except for commodities, where it does not apply.
** The global composite is built assuming the following weights: roughly 70% U.S., 10% Europe and 20% Asia-Pacific.
◊ The 2026 commodity projections do not account for execution/management fees consistent with a passive benchmark.
† The private equity composite is AUM-weighted: 65% large cap and mega cap, 25% mid cap and 10% small cap. Capitalization size categories refer to the size of the asset pool, which has a direct correlation to the size of companies acquired, except in the case of mega cap.
†† The Diversified assumption represents the projected return for multi-strategy hedge funds.
‡ The Conservative assumption represents the projected return for multi-strategy hedge funds that seek to achieve consistent returns and low overall portfolio volatility by primarily investing in lower volatility strategies such as equity market neutral and fixed income arbitrage. The 2026 Conservative assumption uses a 0.70 beta to Diversified.

Capital rewiring: Nudge, nudge; wink, shove

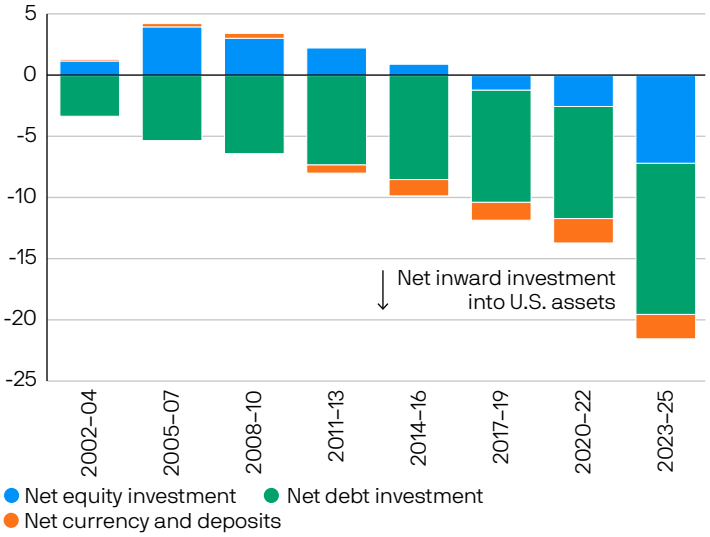
Capital allocation is ultimately the rudder that steers our economic vessel. Since 2000, global savings balances[22] have grown from USD 9 trillion to USD 29 trillion – in real terms, a 70% increase over 25 years; nominal pension balances[23] have quadrupled, from USD 15 trillion to USD 62 trillion; and the U.S. net international investment position (NIIP)[24] had swelled to USD 22.4 trillion (a net liability) by the end of 2Q 2026 (**Exhibit 5**). While we do not expect this balance to reverse, with global yields having normalized post-pandemic there is simply more competition for excess capital.

As economies such as Germany deploy more of their capital at home to improve their economic resilience, this reduces the amount of excess savings seeking a home globally, with important implications for global capital flows.

[22] Gross national savings aggregated across countries in current U.S. dollars, 2000–25; real terms deflated by U.S. CPI. Source: International Monetary Fund World Economic Outlook database, J.P. Morgan Asset Management.
[23] Assets managed by pension providers in OECD countries, end-2001 to end-2024. Source: OECD, Pension Markets in Focus 2025.
[24] The NIIP is the difference between U.S. residents' foreign financial assets and their liabilities to foreign residents. It stood at –USD 22.4 trillion at end-2Q 2026. Source: Bureau of Economic Analysis, September 24, 2026.

In the last 25 years, the U.S. net international investment position has totaled USD 22.4 trillion, much of it in bonds

Exhibit 5: U.S. net international investment position last 25 years, sequential 3-year cumulative net periods



Source: Bloomberg, Bureau of Economic Analysis, J.P. Morgan Asset Management; data as of December 31, 2025. Equity and debt investments include funds.

Governments may also be tempted to encourage domestic capital to support domestic growth. Reforms aimed at channeling pension savings into domestic investments is one such example of a trend that could become increasingly forceful in the years ahead.

Reserve allocation[25] is another key feature and a material driver of currency markets. Despite the chatter in the media, we see limited evidence of any "sell America" trends.[26] Were any challenge to U.S. exceptionalism to materialize, we believe it would impact bond and FX markets far more than U.S. stocks. Simply put, as governments globally unlock domestic savings to finance local growth, marginal investment flows may be distributed more globally than in the last 15 years, when the U.S. disproportionately benefited from global capital flows.

High deficits, economic nationalism and shifts in global capital flows all point to a further decline in the trade-weighted dollar. But as expected inflation gaps between the U.S. and Europe narrow, the fair value for European crosses has fallen. By contrast, cheap valuations in Asian currencies and still-wide inflation differentials vs. the U.S. suggest that further declines in the trade-weighted dollar will be driven mainly by the South Korean won, Japanese yen and Chinese yuan (**Exhibit 6**).

Asian currencies remain heavily undervalued vs. USD, while European crosses are now much closer to fair value

Exhibit 6: Key 2027 LTCMA currency assumptions

		Terminal spot forecast (10–15 years out)			
	Current spot	2027	2026	Change	Change %
AUD*	0.6947	0.66	0.70	-0.04	-6.1%
BRL	5.1787	6.18	6.50	-0.33	-5.0%
CAD	1.4217	1.26	1.24	0.01	0.9%
CHF*	1.1974	1.34	1.36	-0.02	-1.2%
CNY	6.7060	5.30	5.46	-0.16	-2.9%
EUR*	1.1330	1.21	1.26	-0.06	-4.6%
GBP*	1.3265	1.38	1.45	-0.07	-5.0%
JPY	157.40	117.02	118.34	-1.32	-1.1%
MXN	18.0636	24.16	24.20	-0.04	-0.2%
SEK	10.0008	8.83	8.19	0.64	7.8%
KRW	1340.40	1000.00	909.09	90.91	10.0%

Source: J.P. Morgan Asset Management; estimates as of September 30, 2025, and September 30, 2026. * USD as base currency except where indicated (*).

In the same way that a cheaper USD doesn't diminish the currency's reserve status, fiat-currency debasement driving bitcoin price appreciation won't necessarily lead to greater allocations in portfolios which also depends on improving regulatory clarity, deepening liquidity and growing stability in correlations with other assets. For now, the volatility and unstable correlation of assets like bitcoin (BTC) remain obstacles to widespread inclusion portfolios. Nevertheless, we initiate a long-term return forecast for BTC this year while stopping short of its full inclusion in our covariance matrices. Instead, we provide a separate, smaller covariance matrix with BTC against a subset of assets in our public markets chapter.

In sum, capital rewiring may be the least immediately observable of the three themes shaping markets over the next 10 to 15 years, but for investors and asset allocators, it may well have the greatest impact on relative asset returns.

[25] The U.S. dollar accounted for 57.2% of allocated official foreign exchange reserves in 1Q 2026, vs. 20.0% for the euro and 2.0% for the renminbi. Source: International Monetary Fund, Currency Composition of Official Foreign Exchange Reserves (COFER); data as of 1Q 2026.

[26] Foreign holdings of U.S. assets rose to USD 69.4 trillion at end-2Q 2026, led by portfolio investment, and net financial flows showed USD 370 billion of net foreign investment into the U.S. in the quarter. Source: Bureau of Economic Analysis, September 24, 2026.

Asset allocation: Fair winds, choppy waters

Our upbeat growth outlook may seem at odds with today's flood of global headlines. Still, we're constructive on returns despite the later-cycle turbulence. The key is building a resilient portfolio.

We examine the rationale for upgrading productivity forecasts and margins in the macro and public markets chapters. Still, we recognize the inherent uncertainty involved in adopting a disruptive innovation and in translating a burgeoning investment cycle into real and durable economic gains. We also acknowledge that valuations offer little cushion and that capex cycles often take a volatile final turn.

So alongside upgrading our return forecasts, we raise our volatility projections, notably in equities. Sharpe ratios are up for U.S. large cap equity, flat for EAFE and down for EM equity, where extreme cyclical margin expansion has effectively borrowed a lot from future returns (**Exhibits 7A** and **7B**).

As a result, the relative Sharpe ratios between public and private assets tilt in favor of real assets. This reflects our economic narrative of increased competition for capital and higher inflation volatility: Alternative assets with inflation resilience, capacity for alpha capture and low correlation to public markets are an essential part of portfolios in the world we envision.

Hedge funds are winners from this new world. The higher yields we expect provide a boost to hedge funds via the carry collected on their short positions. As governments look for new ways to fund growth and pools of capital open up, opportunities for uncorrelated alpha, which hedge funds are positioned to capture, increase sharply. These supportive factors, together with improvements to our forecasting methodology, push our diversified hedge fund median manager returns up 140bps, to 6.7%, this year – with dispersion across funds offering further rewards from manager selection.

Without question, there are risks. Strong asset returns in 2026 may imply calm waters, but our themes of economic nationalism, tech adoption and capital rewiring create potent undercurrents. Our outlook implicitly projects a continuation of the K-shaped economy, which doubtless creates social (and moral) issues that policymakers must grapple with.

Risk-adjusted returns for sovereign bonds improve, given higher starting yields and steeper curves. But Sharpe ratios for equities are little changed overall while Sharpe ratios for real assets remain strong.

Exhibit 7A: Sharpe ratios

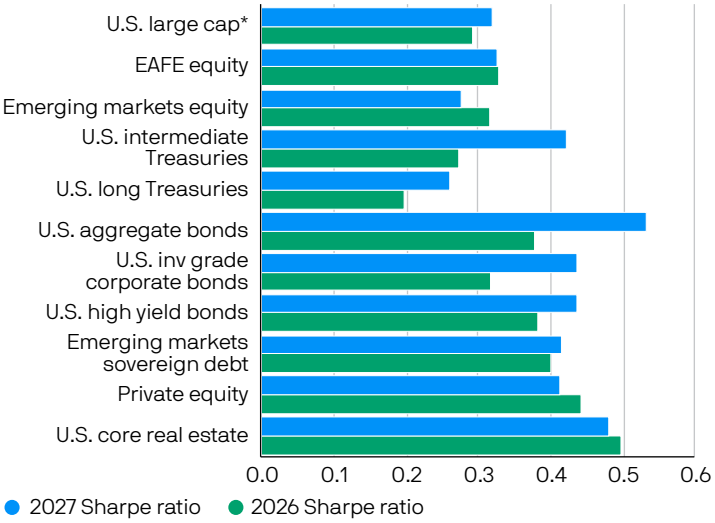
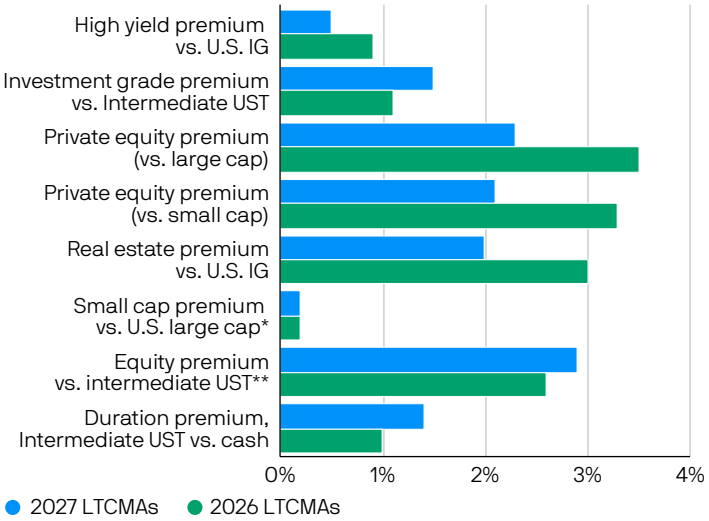


Exhibit 7B: Return uplift (premia)



Source: J.P. Morgan Asset Management; data as of September 30, 2026.
Note: Sharpe ratio calculated from forecast asset arithmetic return less cash arithmetic return divided by volatility.
* U.S. small cap forecast return less U.S. large cap forecast return
** Forecast uplift in returns of U.S. large cap equity vs. U.S. intermediate (1-10 year) Treasury index

The greatest risk to our outlook is a miscalculation of the balance between the upper and lower legs of the K. Underappreciating the needs of the labor pool could destabilize the system. Equally, overzealous attempts to redistribute returns from capital to labor could disincentivize investment. While we expect the metastable equilibrium of the K-shaped economy to persist, factors that push the balance of rewards between capital and labor too far in either direction could cause bouts of volatility.

Other risks to our constructive outlook include restrictions on the flow of capital and widespread capital misallocation. Economic nationalism today affects labor and trade, but it has left capital flows largely untouched. Should this change, investment-led growth would surely suffer. Meanwhile, if today's investment boom fails to boost productivity, the net effect would be lower trend growth and excess capacity that raises the risk of disinflation.

There are topside risks as well. Past innovation cycles have led to meaningful improvements in living standards. If that recurs, it might restrain some of the most damaging instincts of populism. And as AI adoption spreads, its impact can compound when it combines with other, possibly more mundane, inventions in business supply chains, creating further upside potential for corporate profits.

Portfolios: More return, more risk, a lot more opportunity

Over our 10- to 15-year investment horizon, we believe that investors can capitalize on the fair winds of solid growth and favorable asset returns while navigating the undercurrents of economic nationalism, tech adoption and capital rewiring.

In portfolios, this calls for balance and robustness. It also demands willingness to use a broad investment opportunity set. A strong margin outlook reinforces the case for U.S. equities in portfolios despite concerns over valuation and sector concentration. Still, regional diversification is essential.

Diversification with EM equities is compromised by stretched cyclical margins, which weigh heavily on return forecasts. Increasingly, however, developed market equities offer diversification options, particularly in Europe and Japan, where rising capex and investment are improving the growth outlook.

High quality bonds reflect much of the inflation volatility we anticipate in current yields. Should growth undershoot our projections, we see upside to our bond return forecasts. This in turn implies diversification potential to stocks, even allowing for positive stock-bond correlation driven by a volatile inflation environment.

A balanced stock-bond portfolio is an attractive starting point. But to navigate the themes in play, as well as uncertainty around the investment cycle and policy, alternatives can play a vital role in portfolios.

Alternatives can serve as return enhancers – adding 30% of a blend of private equity, venture capital and direct lending can boost balanced portfolio returns by 80bps and the Sharpe ratio by 11%. Alternatives can also serve as diversifiers – adding 30% of a blend of diversified hedge funds, gold, infrastructure and transportation boosts the balanced portfolio Sharpe ratio by 22% while maintaining portfolio returns (**Exhibits 8A** and **8B**). Other alternative assets, such as real estate, can serve both to diversify and to enhance returns, given that our global core real estate forecast sits at 7.9% while global value-added real estate is at 9.3%.

Investing in a volatile world shaped by the three powerful themes we have discussed can be daunting (**Exhibit 9**). Focusing too much on the prevailing news cycle is distracting, but thoughtful asset allocation can keep the impulse in check. And when events heat up, a robust and diversified portfolio allows us to ask calmly: Has anything changed other than the price?

As the USD stock-bond frontier moves higher, expected returns for a balanced portfolio increase to 7.0%. Adding alternatives – as return enhancers or diversifiers – can meaningfully boost risk-adjusted returns.

Exhibit 8A: USD stock-bond frontiers and balanced portfolios based on 2027 vs. 2026 LTCMAs for risk and return (%)

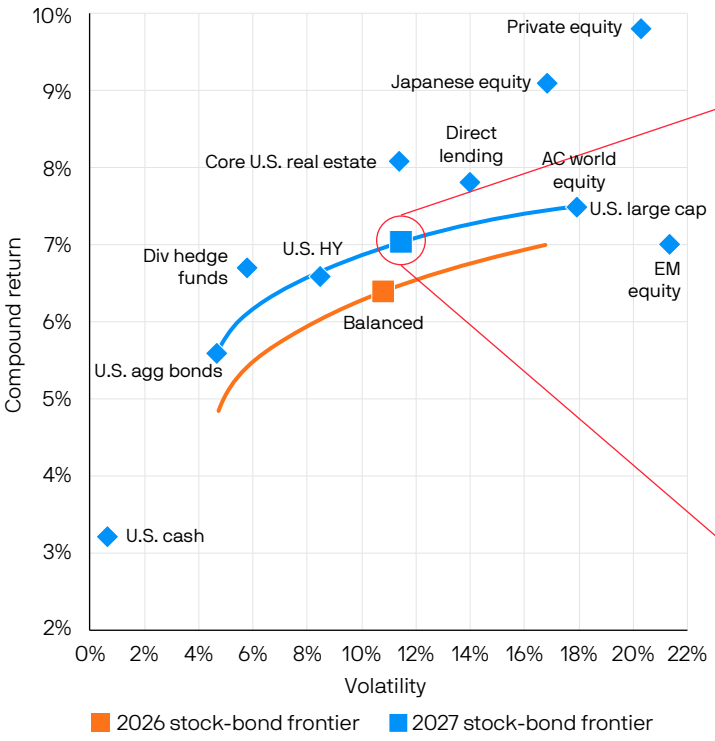
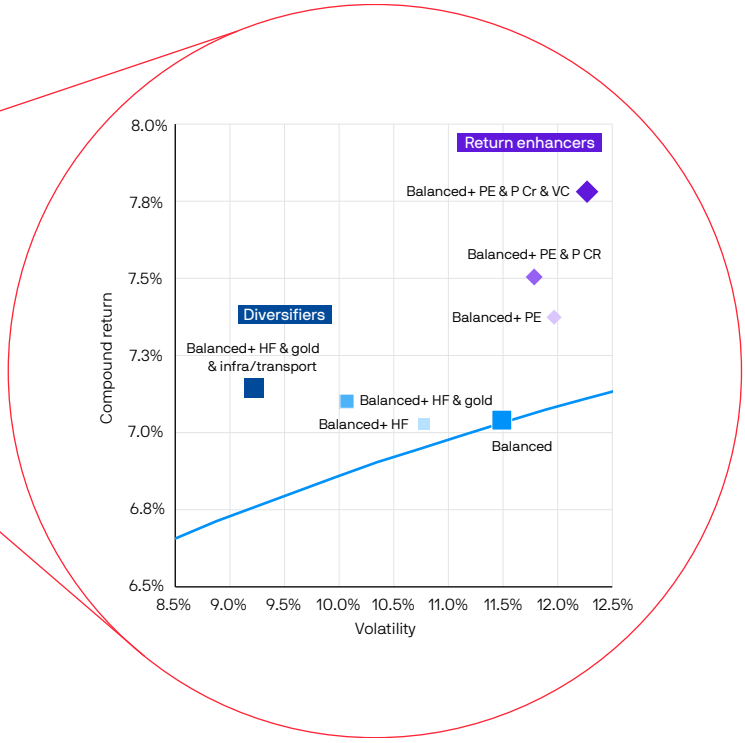


Exhibit 8B: USD stock-bond frontier and balanced portfolio with a 30% allocation to alternatives based on 2027 vs. 2026 LTCMAs for risk and return (%)



Source: J.P. Morgan Asset Management; data as of September 30, 2026.

Note: Balanced refers to 60% ACWI equity/40% Bloomberg US Aggregate bonds. Diversifiers: Balanced + hedge funds = 54/36/10 stock/bond/diversified hedge funds; Balanced + hedge funds & gold = 48/32/10/10 stock/bond/diversified hedge funds/gold; Balanced + hedge funds & gold & transport/infrastructure = 42/28/10/10/5/5 stock/bond/diversified hedge funds/gold/global transport/global infrastructure. Return enhancers: Balanced + private equity = 54/36/10 stock/bond/private equity; Balanced + private equity & private credit = 48/32/10/10 stock/bond/private equity/private credit; Balanced + private equity & private credit & venture capital = 42/28/10/10/10 stock/bond/private equity/private credit/venture capital.

There are two-sided risks to our constructive view, many of which are captured by increased volatility forecasts for inflation and some assets

Exhibit 9: Key structural risks affecting our long-term forecasts and asset return assumptions

Risk	Upside or downside	Short description	Potential implications
U.S. fiscal & institutional erosion	Downside	Persistent deficits, debt brinkmanship and pressure on central bank independence gradually weaken policy credibility and the "safe asset" premium (incl. reserve diversification away from USD).	Structurally higher/less stable term premia; fatter inflation tail risk; USD weaker at the margin; relative support for gold/real assets; equity multiples pressured.
Geopolitical fragmentation & protracted conflict	Downside	Protracted conflicts plus a deeper U.S.-China split hardwire trade/tech/finance frictions, duplicative supply chains and higher security/ industrial policy costs.	Lower global potential growth with more frequent inflation shocks; supports defense, energy security and some commodities; headwind to global trade leverage and cross-border tech margins.
AI & tech investment cycle disappoints	Downside	AI capex overshoots near-term monetization; a reset in investment and regulation follows (cyber/critical-infrastructure events could accelerate scrutiny).	Growth drag via capex and tech profits; equity de-rating concentrated in tech/AI complex; pockets of credit stress in the AI supply chain; disinflation impulse can be bond-supportive.
Power scarcity from AI & data centers	Near-term downside; long-term upside	Grid and generation build-out lags AI electricity demand, keeping power tight until major capacity investment catches up.	Near-term CPI/margin pressure for power-intensive sectors; beneficiaries in utilities, grid equipment and generation; longer-run productivity upside if energy constraint is relieved.
Labor supply & demographic headwinds	Downside	Tighter migration regimes and adverse health shocks can shrink effective labor supply and raise dependency ratios in developed markets.	Lower trend growth and higher fiscal strain; tighter labor markets support wages; nudges faster automation/AI adoption (partial offset over time).
Productivity renaissance from AI & investment supercycle	Upside	Broad AI diffusion and a sustained capex cycle (AI, reshoring, defense, energy) lift total factor productivity and reduce organizational complexity drag.	Higher sustainable earnings and potentially lower inflation volatility; supportive for equities; may limit the rise in equilibrium real yields vs. otherwise.
Acceleration of energy transition & independence	Upside	Energy shocks catalyze faster deployment of grids, storage, nuclear and electrification, reducing reliance on fossil fuel exporters over time.	Near-term capex boost; longer-run lower/ less volatile energy costs; supports energy-intensive industries; terms-of-trade pressure for oil exporters.
Breakthroughs in health & longevity	Upside	Medical innovation extends healthy working life and reduces chronic disease burden, improving labor supply and lowering long-run social costs.	Better trend growth and fiscal arithmetic; supportive for risk assets; health care productivity/innovation winners, with broader economy spillovers.
Frontier tech step-change (fusion/ quantum/space)	Upside (tail)	Low probability breakthroughs that materially change energy/computing/transport cost curves and widen the productivity frontier.	Potential step-change in productivity and a new capex wave; major sector dispersion of winners/losers; policy/social adjustment risks rise alongside upside.

Source: J.P. Morgan Asset Management; data as of September 2026.

Macroeconomic assumptions

AI leaders pull ahead, and inflation paths diverge

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In brief

- Economic nationalism and technology adoption are two major and often offsetting forces that will shape the path of economic growth in the coming years. These forces will also contribute to a rewiring of global capital flows and create new patterns of growth, by both sector and geography.
- We raise our developed market growth assumptions, as stronger productivity from artificial intelligence (AI) adoption and capital deepening, plus higher investment in tech, defense and energy, outweigh the constraints of aging demographics and tighter immigration and trade restrictions.
- AI-driven productivity gains are broadening across regions but will be uneven, led by economies with both deep exposure to AI and supportive institutions, such as the U.S. Benefits are also concentrated in parts of Asia tied to supply chains and frontier computing, such as South Korea and Taiwan.
- We leave emerging market (EM) economies' growth expectations broadly steady, as India's upgraded productivity and urbanization and selected economies' AI-linked investment are offset by weaker capital spending in China and limited productivity gains across much of Latin America and South Africa.
- In aggregate, our inflation outlook is unchanged, although we see near-term inflation pressures from trade friction and AI investment subsiding as supply chains adapt.
- We modestly lower our inflation forecast for the U.S., where inflationary forces should still be restrained despite strong capital spending on AI, large deficits and economic nationalism. By contrast, these forces decisively end the era of exceptionally low inflation in Europe and Japan. Our EM inflation projections are mixed, shaped by central bank targets and shifts in tariff and trade regimes.
- We expect greater inflation volatility than in the decades prior to the pandemic even as average inflation over our time horizon remains tame, with important implications for investors.

Our global growth outlook is modestly stronger this year relative to last year's edition, reflecting broad upgrades to productivity and capital spending in developed market (DM) and selected emerging market (EM) economies. These uplifts help offset drags from demographics and geopolitical tensions. Our inflation outlook is unchanged in aggregate, but forecasts diverge: Inflation falls in many economies where trade and supply-side shocks fade over our long-term horizon (the U.S., Sweden, Switzerland, Brazil). Inflation rises, however, in those economies seeing the greatest surge in artificial intelligence (AI) and capital spending, and in those seeing the greatest boost to defense spending (the euro area, Japan, Taiwan and Korea) (**Exhibit 1**).

Two spending forces are reshaping the global economy. Governments are spending more to build domestic resilience, and companies are spending more to deploy powerful new technologies. Together, these shifts are likely to affect not only the pace of growth but also its distribution. As capital flows to take advantage of shifting opportunities (and at times is actively "persuaded" to move by governments), this capital rewiring will have implications for the global economy and the returns that economic activity generates.

GDP growth forecasts strengthen modestly; inflation assumptions diverge

Exhibit 1: 2027 long-term macroeconomic assumptions (%, annual average)

	Real GDP			Inflation		
	2027	2026	Change*	2027	2026	Change*
Developed markets	**1.9**	**1.7**	**0.2**	**2.3**	**2.3**	**0.0**
United States	2.1	1.8	0.3	2.4	2.5	-0.1
Euro area	1.7	1.5	0.2	2.2	2.0	0.2
Japan	1.0	0.9	0.1	1.9	1.7	0.2
United Kingdom	1.7	1.5	0.2	2.4	2.2	0.2
Australia	2.3	2.2	0.1	2.8	2.7	0.1
Canada	1.7	1.7	0.0	2.2	2.2	0.0
Sweden	2.0	2.1	-0.1	2.1	2.2	-0.1
Switzerland	1.8	1.6	0.2	1.1	1.2	-0.1
Emerging markets	**3.7**	**3.7**	**0.0**	**3.0**	**3.0**	**0.0**
China	3.6	3.6	0.0	1.8	1.6	0.2
India	6.1	5.9	0.2	4.4	4.5	-0.1
Brazil	2.1	2.1	0.0	4.5	4.7	-0.2
Korea	2.4	2.1	0.3	2.1	1.9	0.2
Taiwan	2.3	1.8	0.5	1.8	1.5	0.3
Mexico	2.1	2.1	0.0	3.9	3.9	0.0
South Africa	1.9	2.1	-0.2	3.8	4.9	-1.1
Turkey	3.2	3.1	0.1	11.6	13.3	-1.7
Global	**2.6**	**2.5**	**0.1**	**2.6**	**2.6**	**0.0**

Source: J.P. Morgan Asset Management; estimates as of September 30, 2026. Composite GDP and inflation numbers for DM, EM and global aggregates are calculated by assigning weights to individual economies that are proportional to projected nominal GDP over the forecast horizon.

Government spending: The quest for economic resilience

We have acknowledged for some years that the global economy has entered a new regime in which governments need and desire to influence economic activity. Events over the past year have only deepened that conviction. Uncertainty about the reliability of traditional allies and the prospect of supply chains being weaponized have broadened the list of strategic activities that many governments now deem necessary to bring back in-house – from defense and energy to critical minerals and, increasingly, technological capabilities. Economic nationalism also shows up in political pressures to reduce immigration.

The challenge comes in paying for these self-sufficiency initiatives. Decades of outsourcing created room for expanding welfare and making rising commitments to aging electorates. Reversing that outsourcing means funding both self-sufficiency and social spending priorities as political pressures to reduce immigration further slow the growth of the working population.

Reducing government deficits and putting public debt on a sustainable path at a time of rising spending looks exceptionally challenging in many Western economies, not least the U.S. Indeed, U.S. policymakers appear to have accepted that debt will rise faster than output and are asking bond investors for larger amounts each year. This should support rising yields over the forecast horizon.[1]

AI investment and deployment become the primary growth accelerants

Equity investors have become accustomed to excitement about AI and other evolving technologies, but until recently their measurable growth effects were concentrated in the capital spent to create them – on data centers, chips and power generation infrastructure. That phase is giving way to a new capital rewiring as the emphasis shifts from the creation of AI to its integration into broader corporate life.

Since 2023, we have incorporated incremental upgrades to our total factor productivity (TFP)[2] and capital growth assumptions because of AI's potential impacts. This year, we have rebuilt our AI methodology to reflect growing evidence of the technology's impact and faster-than-expected adoption. Firms are investing in tools and reorganizing processes, workers are experimenting, and the early evidence is consistent with an outlook for durable and diffuse productivity gains.

In our framework, the uplift comes through two channels: capital deepening as the build-out adds to the capital stock and TFP as AI adoption raises output per unit of labor and capital. (See the chapter, "A brighter productivity outlook for the AI era" in this volume.)

This potential uplift in productivity has been a long time coming. In many ways, productivity is an economy's most reliable source of improved living standards. Productivity can raise incomes over time and, by strengthening the tax base, help governments support aging populations, potentially easing the political tensions that arise when average living standards stagnate.

Capital rewiring: The mechanism widening divergence

Government spending on economic nationalism and corporate spending on technology adoption and adaptation will lead to a significant capital rewiring. Some of this will happen organically. As productivity gains are felt across the corporate sector broadly, investors will reallocate assets to take advantage of potential profits. This will shift the natural flow of capital by both sector and geography.

Some of the rewiring will be forced or encouraged. Governments may want to play a role in redirecting capital more actively through a combination of carrots (tax incentives) and sticks (home-bias mandates). "Make at home" and "invest at home" government policies are proliferating.

On the whole, we are optimistic about the potential for the global economy to expand over the coming years. How those gains accrue to different segments of the population is likely to come under greater scrutiny as the K-shaped expansion, marked by widening inequality, creates political tensions.

There is a risk that if gains accrue too narrowly – toward capital owners or toward the technological frontier – then policy responses, through taxation, redistribution, regulation, migration and industrial policy, both limit growth and raise inflation over our forecast horizon. However, on balance, we believe that a rising productivity tide will sufficiently lift all economic boats to avoid the most reactionary of policies.

[1] Tim Lintern, Thushka Maharaj, Sean Daly et al., "Public market assumptions: Strong but uneven returns in a changing world," *2027 Long-Term Capital Market Assumptions*, J.P. Morgan Asset Management, October 2026.

[2] TFP captures economic growth that cannot be attributed to labor or capital in isolation; long term, TFP primarily reflects the pace of technological change.

DM growth: Productivity offsets a shrinking labor force

Our aggregate developed market growth forecast firms modestly this year, to 1.9% from 1.7%, as AI's contribution to productivity broadens across the advanced economies. The U.S. remains at the frontier of AI deployment, but we expect productivity growth to broaden to Europe and parts of Asia as well. Demographics remain a headwind nearly everywhere, particularly given immigration restrictions, so investment and productivity are doing nearly all of the work in driving economic growth. We expect the scale of the AI-driven TFP upgrade to vary widely (**Exhibit 2**): largest in economies that combine the broadest exposure to AI and the institutional readiness to adopt it (such as the U.S. and Switzerland), more modest where that readiness lags (such as Mexico and Brazil). Separately, AI makes the largest contribution to capital deepening where its supply chain and frontier computing are concentrated, such as in South Korea and Taiwan.

U.S.: AI drives an upgrade, immigration restrictions create a smaller drag

AI is doing the heavy lifting for the U.S. economy. We raise our long-term U.S. growth forecast to 2.1%, up from 1.8%, a sizable single-year leap for a developed economy and one driven almost entirely by AI. Our new AI assumptions add 20 basis points (bps) to U.S. TFP, while capital growth holds firm at 2.3%, as the AI capex boom shows every sign of running hotter for longer. We trim hours per worker as an aging workforce works less, and as part of the AI productivity dividend is cashed in as leisure rather than additional output. After two years of sharply lower U.S. immigration, we pencil in a modest improvement in workforce growth relative to the U.S. Census Bureau's low immigration scenario. This assumes that today's very restrictive immigration policy is softened in response to increasingly obvious labor shortages. That improvement reverses part of last year's cut to U.S. labor input.

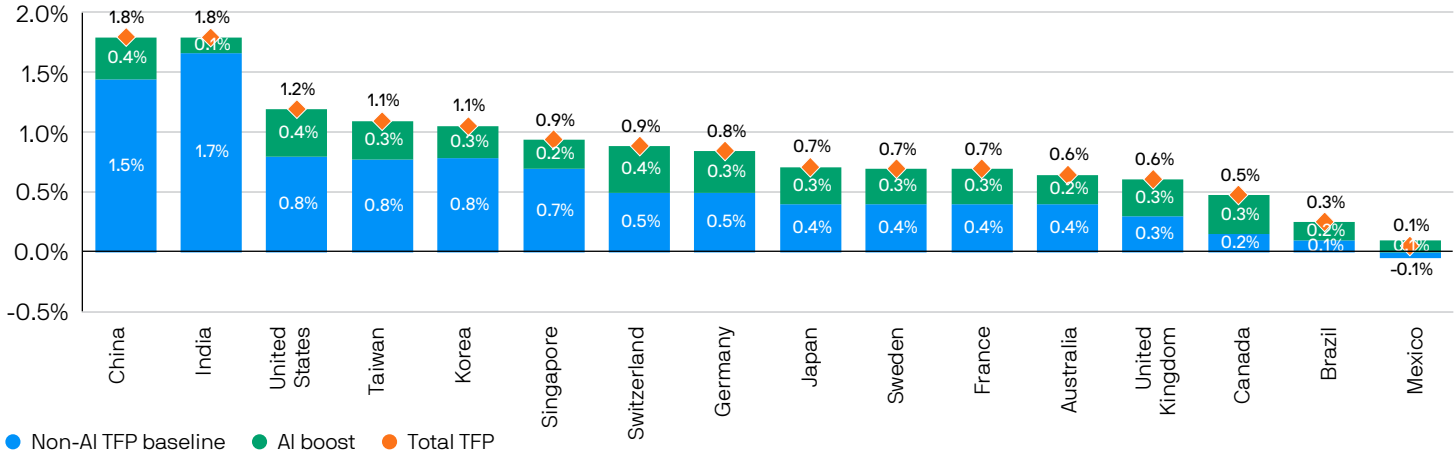
Euro area: Strategic investment offsets a shrinking workforce

We raise our euro area growth forecast to 1.7%, from 1.5%, with a 20bps upgrade to trend TFP (comparable to the U.S.'s), as the region appears well positioned to deploy AI within its digitally native services industries. While Europe's gains run more through adoption than creation, with hyperscaler investment modest relative to that of the U.S., the gap could narrow as European governments increase investment in critical resources such as advanced chips and secure grids.

European governments are also rethinking self-sufficiency after decades of relying on other regions for various activities. Since Russia's 2022 invasion of Ukraine, European nations have moved to rebuild domestic defense manufacturing capacity, a capability many members had spent decades running down. Securing the supply of critical minerals has climbed the priority list alongside energy security, and the same logic now extends to technology. We raise the growth rate of capital services to 2.5%, up roughly 20bps, reflecting strong investment from a better fiscal starting point than in the U.S. and the UK, and the impact of hyperscaler AI capex expanding to Europe.

The scale of AI's boost to total factor productivity varies widely

Exhibit 2: AI contribution to TFP



Source: J.P. Morgan Asset Management; data as of September 30, 2026. The non-AI TFP baseline is each economy's assumed trend productivity growth before any AI contribution.

The majority of spending is happening in the economies most able to afford it, notably Germany (**Exhibit 3**). However, fixed income investors will have to be ever more watchful of governments pushing the spending envelope too far.

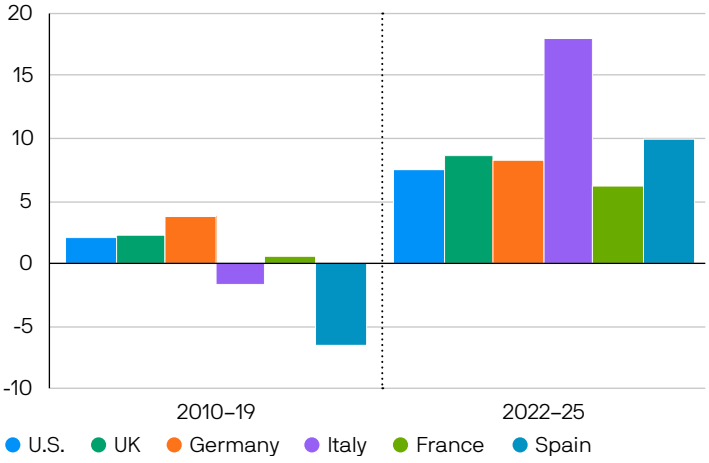
Other DM growth: Mixed labor picture

We raise our UK growth forecast to 1.7%, from 1.5%, again largely from a 20bps AI lift to TFP. Limited fiscal space keeps capital growth flat, even though the UK shares the euro area's hunger for self-sufficiency.

Japan's growth inches up to 1.0%, a 10bps AI-driven increase, attributable evenly to TFP and capital growth. More older and female workers stepping in softens but doesn't cure a bleak demographic outlook. Australia's growth forecast also ticks up 10bps as 15bps of added TFP and a hyperscaler-driven investment bump outweigh the modest drag from softer growth in the working-age population. Canada holds steady, with slower labor force growth offset by higher capital spending from a government infrastructure push and AI productivity gains.

Government investment has increased significantly

Exhibit 3: Nominal government investment, annualized change over period, %



Source: OECD, J.P. Morgan Asset Management; data as of September 30, 2026.

All told, the DM growth outlook brightens this year as AI's productivity dividend broadens across the advanced economies, even as demographics remain a near-universal drag and economic nationalism reroutes investment flows.

EM growth: Steady in aggregate, economies diverging

Emerging market growth holds steady at 3.7%, but performance diverges as AI-driven upgrades lift parts of Asia, while weaker capital spending prompts a downgrade in South Africa.

We hold China's long-term growth steady at 3.6%, but with updated assumptions on labor and capital composition. We lower China's long-term employment growth by 90bps, primarily reflecting a rebased labor data source,[3] and reduce capital services growth amid ongoing weakness in the property sector and subdued private sector investment – offset by a corresponding TFP upgrade. Our labor productivity growth estimate rises to 4.6%, from 4.0%, as Chinese AI models permeate economic activity and the state promotes their adoption.

Taiwan and Korea are the largest EM upgrades. Taiwan's working-age population could shrink 15%–20% by 2035, yet rising foreign direct investment, defense spending and an R&D push lead us to lift capital services growth by 50bps, with AI adoption contributing a further 30bps to TFP. In Korea, a new National Growth Fund channeling capital into AI-linked investment adds 20bps to capital services growth and, through AI exposure, 30bps to TFP, helping the country absorb a shrinking labor supply as elderly workers shift into part-time roles.

We lift India's growth rate 20bps, to 6.1%, as more women enter the workforce and TFP gains (from AI, urbanization and formalization[4]) outweigh a modest pullback in government capex in manufacturing hubs amid fiscal consolidation. Latin America is mostly steady, with Chile the exception: A new government fast-tracking copper and lithium permits, alongside energy investment, should lift the country's capital and productivity. South Africa is our largest growth downgrade, by 20bps, to 1.9%, as a tougher migration narrative takes hold amid higher unemployment and strained public services, compounded by the removal of a modest cyclical adjustment.

Overall, while some EM economies face idiosyncratic headwinds, AI-linked productivity gains and India's demographic strength keep the long-term outlook constructive across the group.

[3] In this edition, our data source for China's labor supply is the country's National Bureau of Statistics, which we view as more reliable than our previous source, United Nations population estimates.

[4] Formalization typically involves workers' shift in urban labor markets from informal, unregistered activity into legally recognized employment and enterprises with participation in tax and social security systems, and improved access to finance and public services.

Inflation: Stable, more volatility

The forces of economic nationalism and technology adoption make the inflation outlook highly uncertain. Whether the long-term outcome ultimately ends up inflationary or deflationary will depend on the extent to which these spending initiatives increase supply vs. demand, and over what time horizon.

In the near term, political disruption and trade frictions may push inflation higher. Governments' desire to build, onshore and upgrade infrastructure may also add to inflation pressures – or at least trigger sharp bouts of inflation like those of recent years. But supply capacity could eventually catch up with demand and even overtake it, creating a disinflationary force.

We caution against the idea that productivity gains are purely disinflationary. While they expand an economy's capacity to produce, they also increase income. If those income gains are fully spent by firms and households through investment and consumption, the resulting demand impulse can offset the supply boost, leaving inflation little changed. That said, the net inflation outcome will depend on how the gains are distributed across income cohorts, the relative timing of output vs. income growth and whether the technology increases or diminishes competition across the economy.

Our inflation forecasts are thus stable: Global inflation remains at 2.6%, with developed markets at 2.3% and emerging markets at 3.0%. We modestly lower our U.S. forecast while raising forecasts across much of Europe and for Japan, as domestic spending has lifted these regions permanently from the plague of too-low inflation. We revise China higher, as the disinflationary impulse we expected from weaker exports to the U.S. has been less pronounced and China has successfully diversified its export markets. Even so, our forecast remains below the central bank's target, largely reflecting persistent demographic headwinds (**Exhibit 4**).

Many macro forces influence inflation. In **Exhibit 5**, we track some of the most important and try to separate these forces and their inflationary impacts, but the reality is that they all intermingle.

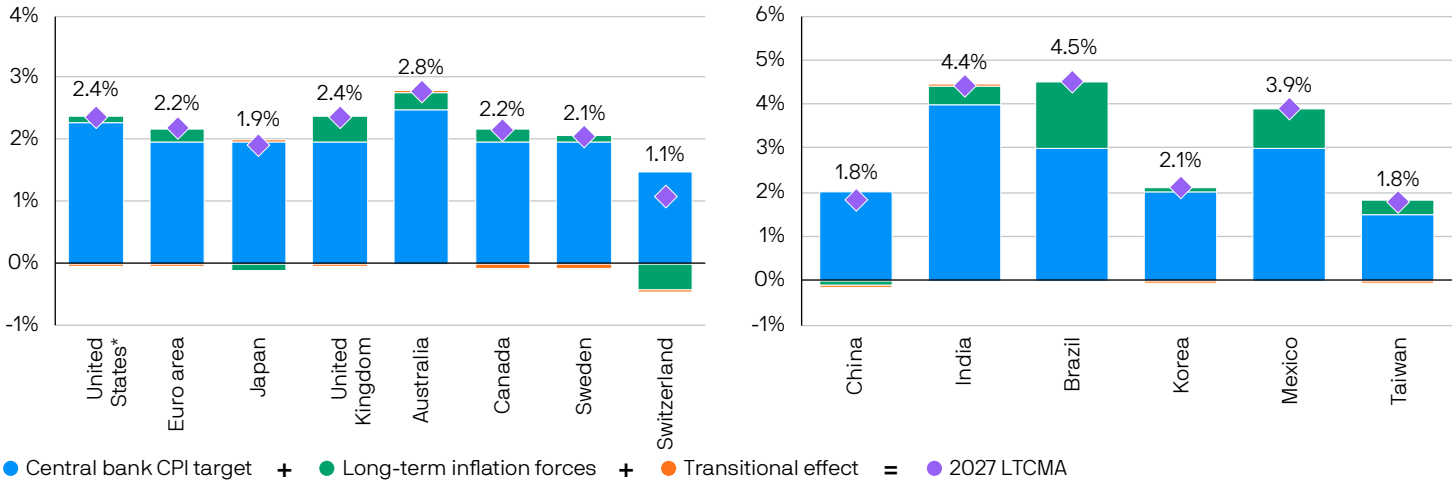
Overall, while we expect inflation over our forecast horizon to be little changed, on average, we anticipate more substantial bouts of volatility, which have important implications for interest rates, relative asset class returns and portfolio construction.

Risks: Policy, politics and climate

Several risks could alter this outlook. Economic nationalism could bring about greater-than-expected price pressures and constrain growth. AI's development could be hindered if national security concerns were to restrict companies' addressable markets.[5]

Global long-term inflation projections and contributors

Exhibit 4: Central bank targets, long-term inflation forces, transitional effects and 2027 LTCMA projections



Source: J.P. Morgan Asset Management; estimates as of September 30, 2026. * Level implied by the Personal Consumption Expenditures (PCE) deflator target.

[5] Model training data could also be limited, along with earnings that could fund innovation and drive GDP growth.

Trade protectionism is a risk to our growth and inflation assumptions. While companies and consumers often adapt to tariffs and trade barriers, the additional costs are ultimately absorbed either by consumers through higher prices or by businesses through lower profitability.

Rising populism could encourage short-term policy choices aimed at winning voter support at the expense of long-term growth. Spending on infrastructure, education and other policies that promote social mobility could lose out to tax cuts and cash transfers. Economies with unsustainable fiscal policies may be penalized by investors, pushing yields higher and constraining private sector investment.

Intensifying extreme weather could stress global supply chains, dampening growth and lifting prices. Floods and droughts threaten agricultural output and can disrupt electricity generation and shipping.[6] Extreme temperatures reduce labor productivity, and technological solutions may struggle to win the capital and attention needed to address them.

Finally, as is evidenced by recent conflicts in the Middle East and Ukraine, the global economy will always be vulnerable to the effects of geopolitical turmoil.

Conclusion: More spending, more growth

We see a momentum behind government and corporate spending that is likely to lift demand in the short term and, at least in part, lift growth sustainably as productivity improves. The nature of this growth will shift by sector and geography, leading to a great capital rewiring with profound implications for currencies, interest rates and relative asset class returns, as well as for the magnitude of growth and inflation. The rest of this edition of *Long-Term Capital Market Assumptions* examines those implications.

Global forces impacting our inflation assumptions

Exhibit 5: Inflationary forces across economies

	Fiscal policy	Inflation expectations	Green energy transition	Global trade dynamics	Info technology/ AI productivity impacts*	Commodity prices	Labor market dynamics	Exchange rate effects	Country-specific forces
United States		+		+	--	+	-	+	
Euro area	+		+	+	-	+		-	
Japan	+	-	+	+	-			--	
United Kingdom		++	+	+	-	+	+	-	
Australia	+		+	+	-				+
Canada	+		+		-	+	-		+
Sweden			+	+	-	+		-	
Switzerland	-	--		+	-	+		-	-
China	+			-	-		--	++	++
India		+	+		-	+			++
Brazil	++	++		+	-	++	++	++	+
Korea	+		+	+	-			-	
Mexico	++	+		+	-	+	++	++	+
Taiwan	+	+	+	+	-				

Source: J.P. Morgan Asset Management; estimates as of September 30, 2026. * Reflects the supply-side effects of productivity in isolation.

[6] Ludovic Thulliez, John Bilton and Kerry Craig, "Investing in climate mitigation: Who bears the cost? The evolving economics of climate change," *2027 Long-Term Capital Market Assumptions*, J.P. Morgan Asset Management, October 2026.



I
Thematic articles

Technology adoption

A brighter productivity outlook for the AI era

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In brief

- We believe artificial intelligence (AI) will drive a meaningful, durable uplift to productivity over our 10- to 15-year forecast horizon, adding to our growth and return expectations.
- We have incrementally incorporated AI's potential into our Long-Term Capital Market Assumptions since 2023, but the dramatic acceleration in capabilities and investment now requires more sophisticated analysis. This year, we have rebuilt our methodology to capture both the efficiency gains from scaling AI and the capital deepening required to deploy it.
- AI adoption remains early and uneven. Only 6% of U.S. work hours are AI-assisted today, even as two-thirds of tasks may be theoretically exposed. We expect adoption to reach 40% of today's tasks by 2040 as AI shifts to more agentic, and even robotic, workflows and spreads from knowledge-intensive industries to routine work across sectors.
- Our base case estimates that AI will boost U.S. total factor productivity (TFP) growth by roughly 40 basis points (bps) above the pre-AI norm, to 1.2% annually, and lift U.S. capital stock growth by about 30bps, to 2.3% per year. Together, these gains raise our U.S. labor productivity forecast by 50bps over the same period, to 2.2%. In our forecast, improved productivity is the main force behind U.S. GDP growth returning to a 2%-plus pace over the coming decade.
- The pace of AI diffusion and the resulting productivity boost are likely to be gradual, with the most significant gains emerging in the 2030s and beyond. This is an important premise of our macroeconomic and asset class assumptions. Steady uptake should limit rapid, economy-wide job displacement while giving supply chains time to adapt.
- The U.S. looks well positioned to lead AI adoption. It registers the largest AI-driven TFP increase in our forecast universe, reflecting the economy's robust technology ecosystem and supportive institutions. Europe, Asia and emerging markets stand to see material benefits while facing varying constraints based on industry mix, regulation, infrastructure and cultural and workplace norms.
- We don't think markets fully appreciate the economy-wide potential of AI, but selectivity and thoughtful diversification are key to investing in this space. We believe portfolios can best capture AI's opportunity by balancing exposure across the AI value chain and funding cycle, spanning public and private markets.

AI's promise is becoming real. As the technology races forward, trillions of dollars are flowing into semiconductors, data centers and power suppliers – the new AI ecosystem. But will AI make the economy more productive and, if so, by how much, how quickly and for whom?

No force has a greater impact on our Long-Term Capital Market Assumptions (LTCMAs) than productivity growth, the pace at which an economy turns its labor and capital into more output. Productivity underpins economic growth, living standards, corporate earnings, inflation and interest rates. As the economist Paul Krugman once said, "Productivity isn't everything, but in the long run, it is almost everything."

We believe AI will raise productivity meaningfully and durably over our 10- to 15-year horizon, reshaping the nature of work and patterns of investment. While we have incrementally incorporated AI's potential into our LTCMAs since 2023, the dramatic acceleration in capabilities and investment now requires more sophisticated analysis. To capture that shift, we have rebuilt our AI methodology and embedded it within our macroeconomic building blocks. Anchored around a Cobb-Douglas production function, it attributes an economy's output to its labor and capital, and how efficiently those are used (see *Methodology Handbook*).

In that framework, AI lifts labor productivity, measured as output per hour worked, through two channels. First, it makes existing work more efficient, enabling the same people and machines to produce more (*total factor productivity*, or TFP). Second, it equips workers with improved tools, systems and infrastructure as investment scales (*capital deepening*).[1] Here, we present our new methodology and the insight it delivers.

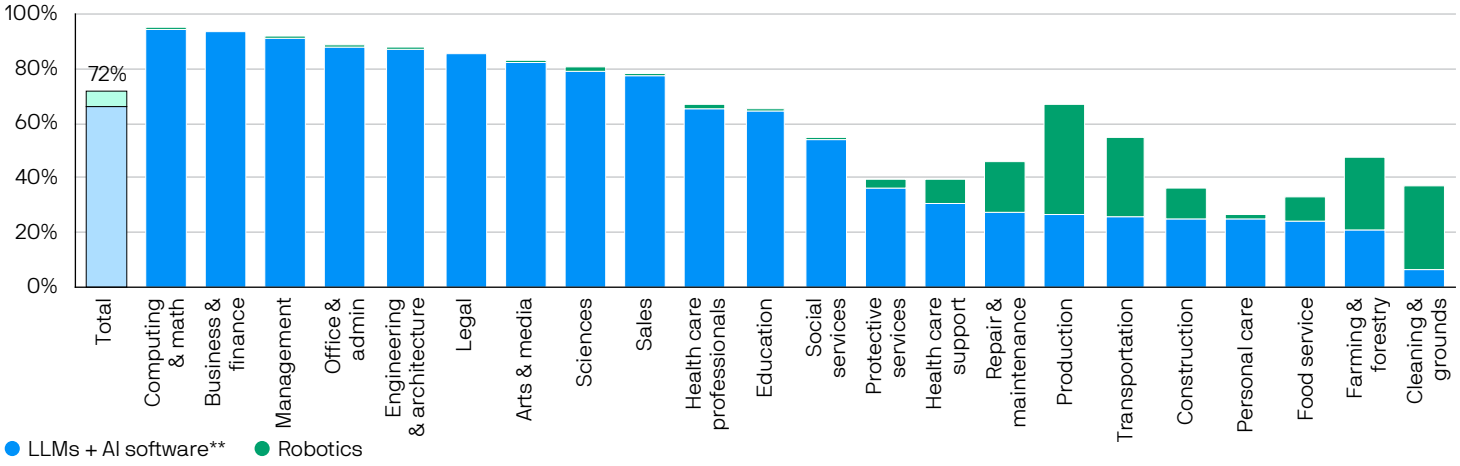
AI capability has outrun adoption

Back in 2023, AI was essentially a fluent text generator. Today, frontier models can reason through complex multistep problems, write code and call upon external tools and information sources. The newest models can autonomously execute tasks that would take skilled software engineers hours to complete.[2]

Yet business adoption is still early and uneven. Research suggests only 6% of U.S. work hours are currently AI-assisted,[3] even as over two-thirds of U.S. work tasks may be theoretically exposed (**Exhibit 1**).

AI's potential reaches across the workforce

Exhibit 1: Percentage of today's U.S. work tasks exposed to AI by 2040, by occupation*



Source: Tyna Eloundou, Sam Manning, Pamela Mishkin et al., "GPTs are GPTs: Labor Market Impact Potential of LLMs," *Science*, June 2024; J.P. Morgan Asset Management. *Exposure is defined as AI reducing the time to complete a task by at least 50% at equivalent quality. **LLMs (large language models) are AI systems trained on text and code, used directly as a chatbot. AI software refers to the specialized tools built on top of these systems, such as documentation search, code execution and image generation. The frontier combines tasks reachable by AI software (roughly 66%, following Eloundou et al.), with an additional layer of robotics deemed commercially viable by 2040, including autonomous trucking, warehouse and factory automation, construction and agriculture, bringing the total to 72%. Tasks requiring a general-purpose humanoid robot are excluded. Occupations reflect major U.S. groups, weighted by each occupation's share of total U.S. wages.

[1] TFP is economic growth not attributable to labor or capital growth in isolation. Capital deepening is the increase in capital available per worker.
[2] Thomas Kwa, Ben West, Joe Becker et al., "Measuring AI Ability to Complete Long Software Tasks," METR, May 2026.
[3] Alexander Bick and Adam Blandin, "GenAI Adoption Tracker," Harvard University's Project on Workforce, May 2026.

To date, we've seen only faint signals of AI's impact on productivity.[4] While the tech sector has been an early leader,[5] economy-wide U.S. productivity growth has averaged 2.4% per year since 2023 – much improved from 1.5% in 2005–19, but below the internet era's 3% (1995–2005).

Building our LTCMA base case

What might lie ahead? Forecasting productivity is difficult even in ordinary times, and profound technological change makes the challenge even greater. Our updated methodology should offer a solid framework from which to reason and refine as new evidence develops.

For total factor productivity, we focus on the specific tasks AI can perform, and how efficiently. We then map those gains across the economy, an approach grounded in Hulten's theorem as applied by Daron Acemoglu and others.[6] We estimate capital deepening by projecting how AI-related investment affects the economy's productive capital stock, net of depreciation and "crowding out" (displacing other productive investments).

By 2040, we believe, AI adoption will have shifted to more embedded agentic,[7] and even robotic, workflows, spreading beyond knowledge-intensive early users to routine work across sectors.

But diffusion will be gradual. We expect a slow start, with adoption accelerating in the early 2030s and then tapering as remaining use cases become harder or less economically attractive. Scaling AI will require integrating with legacy systems and redesigning operating models. Friction may be most acute where oversight and liability management require human involvement, particularly where AI missteps could prove costly.

This gradual pace is an important premise of our macroeconomic and asset class assumptions. Steady uptake should limit rapid, economy-wide job displacement and keep broad inflation contained, even as the build-out strains supply chains in the near term.

In our base case, AI boosts U.S. TFP growth above its pre-AI trend by roughly 40bps, to 1.2% annually,[8] and it lifts U.S. capital stock growth by about 30bps, to 2.3% per year. Together, this raises our total U.S. labor productivity forecast by 50bps vs. our pre-AI baseline, to 2.2%. Small gains compound: A sustained 50bps boost over 15 years would make the U.S. economy 7%–8% larger than it otherwise would have been. Given this is our fourth year incorporating AI into our assumptions, this year's incremental productivity lift vs. last year is 20bps.

Relative to other forecasts, our view appears cautiously optimistic. The 40bps AI-driven TFP uplift exceeds the Congressional Budget Office's more conservative 10bps estimate while landing in the lower half of the OECD's 27bps to 85bps scenario range.[9]

Against that backdrop, our analysis first builds a baseline forecast for the U.S., then extends it globally, accounting for regional variation.

TFP: How does task automation become economy-wide productivity?

Our TFP approach draws on four inputs:

- **AI exposure**, the share of labor tasks AI can perform in theory. We estimate just over 70% of today's tasks are exposed to AI by drawing on Eloundou et al.'s analysis,[10] which weights each task by importance within a job and each job's share of economy-wide wages.
- **Effective penetration**, the share of tasks where AI can be used and is ultimately used. We expect this will rise from about 5% today to roughly 40% by 2040.

[4] Early signals of AI-driven productivity gains have been ambiguous, consistent with past technological shifts where productivity often lags during early adoption (the "productivity J-curve"). As such, the recent firming in U.S. productivity may better reflect supply-side shocks than AI. See Stephanie Aliaga, "Is AI already driving productivity growth?" J.P. Morgan Asset Management, March 11, 2026.

[5] More discernible signs of AI's productivity impact are emerging in the information sector, where output per hour has grown roughly 9% annualized since late 2022. That is about three times the pace of nonfinancial corporates, reflecting the information sector's early role in building and deploying AI.

[6] Daron Acemoglu, "The Simple Macroeconomics of AI," MIT, April 2024; Philippe Aghion and Simon Bunel, "AI and Growth: Where Do We Stand?" Federal Reserve Bank of San Francisco, June 2024; Francesco Filippucci, Peter Gal and Matthias Schief, "Miracle or Myth? Assessing the macroeconomic productivity gains from Artificial Intelligence," OECD, November 2024. See the *Methodology Handbook* for more detail.

[7] Agentic AI refers to AI models that can operate fairly autonomously, with minimal human involvement.

[8] We assume a non-AI trend TFP baseline of 0.8%, anchored to our 2023 LTCMA projection prior to any explicit AI adjustments.

[9] "The Budget and Economic Outlook: 2026 to 2036," Congressional Budget Office, February 2026; Francesco Filippucci, Peter Gal, Katharina Laengle et al., "Macroeconomic productivity gains from Artificial Intelligence in G7 Economies," OECD, June 30, 2025. The OECD reports AI gains in labor productivity terms; we convert to the TFP equivalent by dividing by 1.5, the study's capital deepening factor.

[10] Tyna Eloundou, Sam Manning, Pamela Mishkin et al., "GPTs Are GPTs: Labor Market Impact Potential of LLMs," *Science,* June 2024.

- **Gain per task**, the productivity lift on the tasks that AI performs. We assume a gain of just under 30%, derived from the median across several task-level studies.[11]
- **Labor share of the economy**, used to scale task-level gains into a contribution to overall output. We assume an average 52% of U.S. GDP, down from 55% in the past decade and over 60% in the late 20th century.

TFP gains will vary widely across tasks, sectors and economies.[12] The largest near-term benefits should emerge in knowledge work-heavy industries and in the economies most exposed to them, as we discuss below.

Capital deepening: How much AI investment will prove productive?

Beyond TFP, our outlook hinges on how much the surge in AI spending ultimately increases productivity.

Since 2023, AI demand and enthusiasm have driven U.S. hyperscalers to cumulatively invest close to USD 1.6 trillion in capex, spanning data centers, power, semiconductors and networking. Globally, the total exceeds USD 2 trillion over the same period.[13]

Our outlook for capital deepening builds on four factors: the path of AI spending, its composition, the rate of depreciation and the extent to which it crowds out other productive capex. Broadly, the first two variables are additive to growth, while the latter two detract.

- **Spending path**: We see demand justifying elevated investment, with annual U.S. AI capex[14] rising from over USD 800 billion in 2026 to nearly USD 1.2 trillion by 2030, then settling at around 70% of that peak.[15] A steeper pullback is possible, as in the dot-com era, if spending fails to generate sufficient revenue or financing dries up. But we believe AI's diffusion will be more profound than the internet. Adoption is already tracking three times faster,[16] ROI is building, and the biggest AI spenders have healthier corporate fundamentals. The dot-com bust was also compounded by a prolonged equity bear market, which we do not project.
- **Spending composition**: We assume AI spending will expand beyond today's hyperscaler-led, equipment-heavy build toward the data centers, power and software that make compute (AI's raw processing power) deployable at scale.[17]
- **Depreciation**: Across equipment, structures and software, we assume a blended four-year life for AI capital investments. AI hardware such as semiconductors, for instance, turns over especially quickly, so as the installed base grows, more capex serves as replacement rather than net new capacity.
- **Crowding out**: So far, the AI build-out doesn't appear to be materially crowding out other private capital investments. But this should change as spending becomes less self-funded by hyperscaler cash and more reliant on debt and external sources. We assume that about half of AI capex displaces other productive investments, applying a 50% haircut to AI's net contribution to capital growth.

On balance, we expect AI to deliver a measured and sustained boost to capital growth beyond the 2025–26 boom.

A rising tide lifts economies unevenly

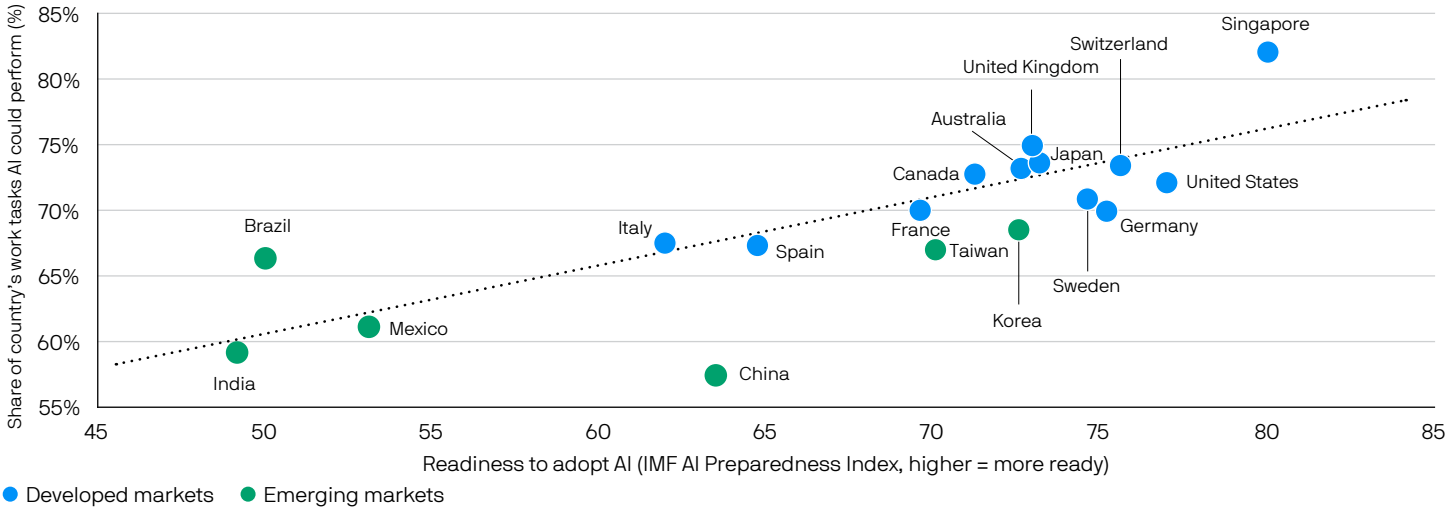
Developed markets appear better positioned to deploy AI at scale, given their large service sectors, strong digital infrastructure and supportive institutions. Where workforces are shrinking – from Japan and China to the U.S., Germany and Italy – firms will have a greater incentive to use AI to help offset demographic challenges.

But economic gains will vary between AI *enablers*, which supply key inputs for the build-out, and *adopters*, which successfully integrate AI (**Exhibit 2**). The two can be mutually reinforcing: Better tools and infrastructure can speed up adoption, and durable monetization can incentivize further investment.

[11] Our research draws on nine controlled studies of AI's impact on task productivity, spanning coding, writing, customer service, marketing and ad creation. While not exhaustive, our estimate aligns with Acemoglu (2024) and the OECD (2024), which estimate task-level productivity gains of 29%–30%.
[12] Our task-based approach does not capture every channel through which AI could raise TFP, such as input-output spillovers (where gains for producers flow through supply chains) and the creation of entirely new categories of work. We assume such channels would be positive drivers.
[13] Figures reflect annual hyperscaler capex from 2023 to 2026 (expected). Source: Bloomberg Finance L.P.
[14] We anchor our U.S. AI capex assumption to the current and projected spend by the five largest hyperscalers (Alphabet, Meta, Amazon, Microsoft and Oracle). We restrict our analysis to U.S.-located investment, which we then scale up to reflect capex by neoclouds, enterprises and governments.
[15] Projecting AI spending is inherently difficult, and the outlook has shifted considerably in just the past year. This trajectory reflects the best estimate from the LTCMA research and investment teams, and we will revise as conditions evolve.
[16] Bick and Blandin, "GenAI Adoption Tracker," May 2026.
[17] We allocate AI capex across three categories and assume the mix shifts over time. We estimate that equipment (GPUs, servers, memory and networking) falls from just over 40% of AI capex in 2026 to 30% by 2040. At the same time, structures (data centers and power infrastructure) rise from 30% to 40% and intellectual property products (software and R&D) increase from about 25% to 30%.

Exposure to AI may not translate into readiness to adopt it, and that gap varies widely across economies

Exhibit 2: Estimated exposure (% of country's work tasks exposed to AI) by 2040, IMF AI Preparedness Index (0 to 100)



Source: Eloundou et al. (2024), International Monetary Fund, J.P. Morgan Asset Management. The IMF AI Preparedness Index scores countries' AI adoption readiness across digital infrastructure, human capital, innovation and regulation (0 to 1, rescaled to 0 to 100). Task exposure is the estimated share of work tasks AI could perform based on each country's occupation mix, building on the approach of Eloundou et al. with an added robotics layer.

The U.S. leads as both an enabler and an adopter, registering the largest AI-driven TFP boost in our forecast universe. Its concentration of frontier model developers, hyperscalers and software platforms is unmatched. Corporate America also has the financial strength and appetite to sustain the AI build-out, supported by a flexible, innovation-oriented business environment.

Meanwhile, Europe's early AI gains skew toward a few key enablers in areas where it has outsize global influence, notably semiconductor manufacturing equipment and power grid and infrastructure. Broader gains should follow as AI diffuses across Europe's services-heavy economies (several of which are more AI-exposed than the U.S.). However, its fragmentated single market, legal and regulatory burdens, labor constraints and energy supply vulnerabilities may slow AI's rollout.

China is building a parallel AI ecosystem, with homegrown models, domestic chip production and a push into robotics. China's cost competitiveness may prove an advantage, while deployment of AI (which is often state-mandated) across industrial and consumer sectors could drive economy-level productivity gains. Chinese models are also gaining traction globally, recently overtaking U.S. models in token usage on OpenRouter, a widely used developer gateway. Still, weaker monetization by Chinese firms and export controls on advanced U.S. chips should restrain investment and development.

Taiwan and South Korea should continue to benefit from their central role in global tech supply chains, notably in advanced semiconductor manufacturing. Both economies rank among the largest upward revisions to our GDP growth assumptions. That competitive position is a strength but also a risk, as economic nationalism and geopolitical uncertainty drive the U.S. and China toward onshore alternatives. Finally, Japan arguably has the strongest incentive to adopt AI, given its aging workforce, but long-tenure norms may hinder diffusion.

Multiple paths ahead

Our base case is just one plausible path among many alternate scenarios (**Exhibits 3A** and **3B**).

AI could disappoint if regulation or social backlash restrains adoption, or if capex resets more sharply due to obsolescence, margin pressure, tighter financing or power constraints. Even with broad diffusion, AI may still underdeliver if oversight adds more work, time savings shift to leisure rather than new tasks, or skill gaps and worker preferences become binding constraints. Such a downside scenario could see AI reach only a quarter of tasks by 2040 (vs. 40% in our base case) and annual TFP growth settle below 1%.

We expect stronger TFP growth and sustained capital investment, but a range of outcomes could unfold

Exhibit 3A: U.S. TFP growth, % change, 10-year trailing average

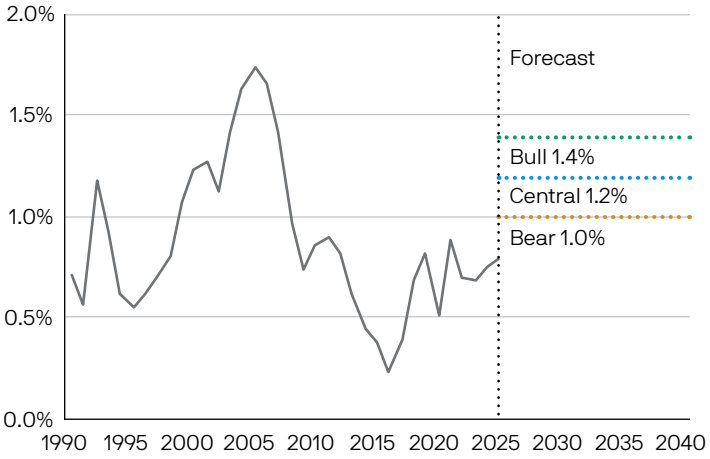
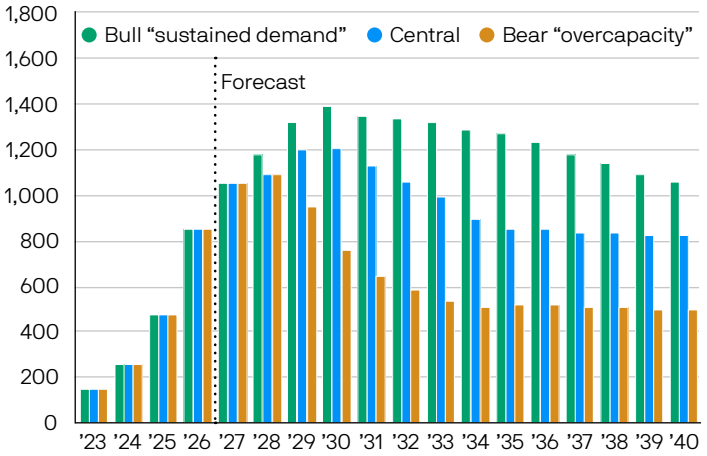


Exhibit 3B: U.S. AI-related capital expenditures, USD billions



Source: J.P. Morgan Asset Management; LHS: Federal Reserve Bank of San Francisco (Fernald TFP series) for historical data, RHS: company reports. Total factor productivity is for the private nonfarm business sector, 10-year trailing average of annual growth rates. The capex outlook anchors to reported and projected capex from the top five U.S. hyperscalers, with additional assumptions for neocloud, enterprise and government AI infrastructure.

On the other hand, a faster and more durable AI rollout could push adoption even further, toward its theoretical potential. In this upside scenario, higher utilization, clearer monetization and longer hardware life sustain reinvestment and broaden the build-out beyond today's hyperscalers. Even larger gains could arise if AI accelerates the pace of innovation itself, compressing the timeline from discovery to commercialization for new or improved medicines, materials and power sources.

From productivity to portfolios

Despite the profound impact AI has already had on markets, we don't think its potential is fully appreciated. Investors will seek to identify where value accrues, whether through profit growth, risk premia or pricing power. We believe portfolios can best capture that potential by balancing exposure across the AI value chain and funding cycle, spanning public and private markets. That calls for strategic discipline and tactical flexibility.

Returns have so far favored the AI enablers. But the set of beneficiaries already extends beyond hyperscalers and semiconductors into infrastructure and power. As adoption spreads, more sectors should participate. This expectation underpins our view that equities will deliver stronger, broader earnings growth and sustain structurally higher margins and valuations than they would have in a world without AI.

Value should shift toward adopters deploying AI, in areas such as predictive analytics, speed to market, product fit and supply chain management. Financial services, health care, retail and logistics firms are among such early adopters and tend to rank higher in measures of AI exposure and labor intensity (**Exhibit 4**).

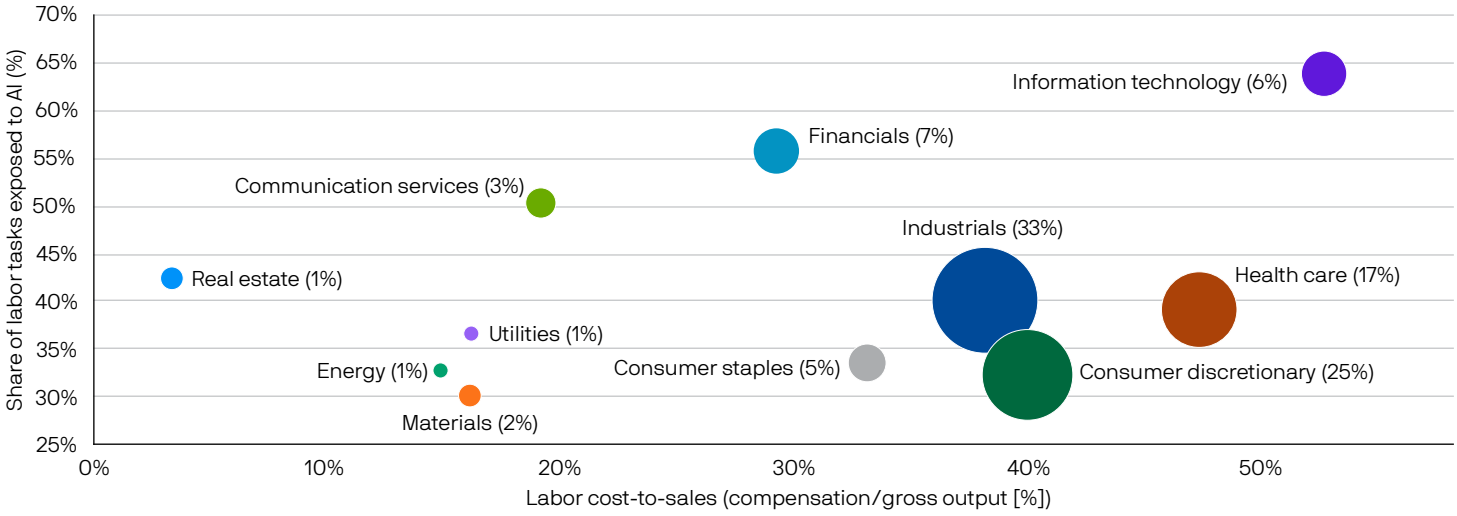
The U.S. remains at the core of global allocations, offering exposure to a vibrant culture of innovation, tech-heavy indices and deep capital markets. It ranks among the highest in profit margins in our forecast universe. In Europe, value stands to remain concentrated in "pick-and-shovel" enablers until adoption broadens. And while Asian companies should remain essential to tech supply chains, the strength of the current capex wave may have pulled forward some revenue and margin gains, making stock selection crucial after recent investor optimism.

We anticipate that the capex build-out will contribute to our outlook for higher real rates, elevated term premia and steeper yield curves, even if AI produces disinflationary effects over time. Credit issuance is rising as hyperscalers become a more pronounced presence in debt markets, lifting index quality despite biasing spreads wider. Investors may find relative value in issuers that can fund investment without stretching balance sheets, though complex financing structures and off-balance sheet obligations warrant scrutiny. Because the AI ecosystem is so interconnected, cross-asset correlations may shift in ways that make traditional diversification less reliable.[18]

[18] "AI-conscious asset allocation: Portfolio construction in a capital investment boom," Strategic Investment Advisory Group, J.P. Morgan Asset Management, September 2026.

Early AI adoption is emerging where high task exposure intersects with high labor intensity

Exhibit 4: By GICS (Global Industry Classification Standard) sector; bubble size = share of economy-wide wages, %



Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Eloundou et al. (2024). Sector exposure and labor cost scales are wage-bill-weighted across industries, and bubble sizes reflect each sector's share of the total wage bill. Task exposure follows Eloundou et al.'s theoretical measure. AI exposure is scored by occupation, then aggregated to industries using BLS Occupational Employment and Wage Statistics data weighted by wages, and mapped from NAICS industries to GICS sectors. Data as of July 2026.

Alternative assets can reach parts of the AI value chain that public markets cannot, potentially improving portfolio diversification. Commodities supply key inputs. Infrastructure and real estate add critical capacity across power, cooling, transmission and storage, and offer inflation resilience via contracted cash flows. But risk profiles vary widely, from regulated grid power to data centers and on-site generation, and warrant specialized underwriting.

Private equity managers can enhance value creation and improve operating efficiency by deploying AI across portfolio companies. Meanwhile, venture capital backs many of the AI-native companies now growing to unprecedented scale in private markets, albeit with highly skewed outcomes. Private credit in turn finances parts of the AI build-out, though deal terms will need to evolve in tandem, given direct lending's meaningful exposure to software and technology. And as disruption accelerates, hedge funds may capitalize on dislocations. Above all, manager selection will be critical, as outcomes may vary considerably by exposure, vintage and strategy.

As we model the world in 2040, we believe the AI ecosystem will evolve in ways that prove transformative. This should drive efficiency gains, support margin resilience and unlock new growth opportunities that extend well beyond the tech sector. But the path of adoption and diffusion won't be smooth, bringing higher volatility and wider dispersion that necessitate a disciplined, diversified approach. Investors should build AI exposure intentionally and prepare to shift course as a new era of innovation and value creation unfolds.

Investing in climate mitigation

Who bears the cost? The evolving economics of climate change

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In brief

- Climate degradation is accelerating, but the typical analysis – measuring costs and inferring a drag on GDP growth – misses the investible point: Although GDP tracks the *flow* of factors driving output, climate damage impairs the *stock* of wealth.
- Although storms, heat, floods, etc., degrade assets and threaten the reliability of production, asset loss doesn't mechanically subtract from GDP. Yet rebuilding activity after losses adds to measured economic output.
- The core risk from climate events over our 10- to 15-year forecast horizon is not a steady, smooth drag on trend growth but an uneven dispersion of costs and risks across sectors. Climate events, like supply shocks, can increase inflation volatility and term risk premia.
- Differences between GDP accounting and corporate cost accounting mean the cost of climate damage doesn't show up cleanly at the national level, reducing states' incentive to invest in mitigation.
- At the national level, climate investment can generate strategic advantages when framed as a matter of energy security, industrial strategy and resilience. At the firm level, focusing on the cost of inaction would be better suited to incentivizing investment.
- Technology may determine whether mitigation is a cost or a source of competitive advantage. As renewable and grid technologies become less expensive – even as the demand for power for artificial intelligence raises the stakes on grid investment – transition capex is shifting from a defensive expense toward more of a productivity-enhancing investment. The resulting gains, however, will likely accrue unevenly across regions and sectors.
- We expect national industrial strategies to increasingly and more explicitly seek to align climate investment with government and firm interests, consistent with our conviction that economic nationalism and capital rewiring are key long-term investment themes. Such an industrial strategy could give firms strategic advantages and lessen input cost volatility.
- Understanding which entities bear climate damage's cost, which accounts book the damage remediation activity and which control the rebuilding and transition supply chains is a more meaningful analysis than reducing the impact to a single GDP haircut or a "climate risk premium."

A growing problem, a shrinking response

The measurable effects of climate change are accelerating worldwide. The Intergovernmental Panel on Climate Change (IPCC) reported that global surface temperatures in 2011–20 were 1.1° C (around 2° F) higher than during 1850–1900, and found a 200 millimeter (about 8 inch) sea-level rise between 1900 and 2018.[1] Copernicus Programme data show that large parts of Europe now experience weeks of consecutive heat stress (32° C to 38° C [around 90° F to 100° F]), which was rare 50 years ago.[2] And wildfires in many regions threaten lives and livelihoods with increasing regularity.

Yet despite mounting climate-related costs, the apparent impact on GDP remains limited. GDP is a flow measure that tracks current activity, whereas climate events erode the stock of wealth and threaten the reliability of production. Over a 10- to 15-year horizon, GDP may capture only a modest effect of climate-driven disruption, even as it disperses across the economy and its impact on prices grows. Inconsistent measurement can lead to misaligned incentives to tackle climate change and may partially explain the shortfall between promised and actual spending on climate remediation.

Here we explore how to better frame the economic impact of climate change, aligning the macroeconomic impact with the costs experienced at the industry and sector levels. We also consider how governments view their incentive to invest in climate remediation and sustainable technologies, and the implications for investors.

In our view, three factors are commonly underappreciated in estimating the economic effects of climate change:

- **The accounting problem**: The acute costs of climate damage are measured differently at the firm, household, sectoral and national levels.
- **The impact problem**: Acute damage can reverberate across the economy like a supply shock, with complex impacts.
- **The policy problem**: The incentive for governments to invest today for a diffuse future benefit is weaker than a policy aligned to national strategic advantage.

Unpacking the accounting problem

Debates about the economic impact of climate change often treat national economies like households: If your house is damaged, you are poorer. While this is undeniably true, GDP is not a wealth account but a measure of current production. An asset lost to climate damage isn't booked as negative GDP,[3] and the effects of output interruptions and damaged productivity accrue only slowly. Meanwhile, spending to repair or replace lost assets adds to output, even if it merely restores prior capacity.

This accounting inconsistency undermines political incentives (**Exhibit 1**). Policymakers anchor their efforts to headline GDP, often over a short horizon, and may systematically underestimate the erosion of capital stock and productive capacity. This in turn risks encouraging policymaker complacency if the measurable effect of climate degradation on GDP is small once an acute event passes.

Viewing climate economics as a subtraction issue counts only one side of the ledger. Damage that reduces output through asset destruction, supply chain disruption and lost working hours impairs the capital stock. While these are real and critical channels at the corporate level, they do not map cleanly onto GDP, as there is no clear depreciation term in many GDP accounting frameworks.

For a firm or sector, lost labor hours and damaged assets (or supply chains) are recognized straight away in cost accounting. This creates immediate pressure to replace lost assets, adapt processes and build resilience to maintain a competitive position. In many sectors, swift adaptation is companies' dominant response – particularly under the invisible hand of shareholder pressure. Yet long-horizon GDP damage estimates often assume that private sector adaptation is limited, slow or exogenous.

Climate-induced losses do not necessarily stay within the affected sectors, making second-order effects important. This "incidence" or burden problem – who ultimately bears the economic cost of a climate shock[4] – means that climate shocks can manifest as supply shocks. Where demand is inelastic (e.g., food and energy), prices adjust and higher costs pass through to consumers as inflation. Elasticity, in effect, decides whether a shock is measured as inflation or as forgone output.

[1] "AR6 Synthesis Report: Climate Change 2023," IPCC. A sea-level rise of 20 centimeters pushes shorelines back by meters and makes once-rare coastal floods recurrent, magnifying the economic exposure of coastal assets.
[2] Copernicus is the European Union's Earth observation program, which provides open climate and environmental data through a network of satellites (the Sentinel missions) and in situ measurements.
[3] GDP accounts do not have a line item that subtracts the value of assets destroyed by disasters.
[4] Incidence, or burden, can be shifted and shared across sectors after an initial hit – for example, to utilities hit by storms or real estate by floods. Second-order effects, as we discuss, include supply chains, prices, employment, insurance, credit markets, public finance and lost inputs in some geographies.

Cost bearing and interest alignment vary greatly by industry, ownership, accounting convention and impact

Exhibit 1: Mapping climate-related damage to growth and accounting frameworks

Negative | Somewhat negative | Neutral | Somewhat positive | Positive

Phenomenon	GDP (Cobb-Douglas/ growth account)	GDP (flow)	Wealth (national balance sheet)	Firm financials/ cost account
Market output loss (stopped production, unavailable inputs, logistics choke points)	Capital stock is not directly destroyed, but disruptions lower effective TFP and labor.	If production is constrained, GDP is hit via lower value-added.	Not a direct stock write-off, but wealth may fall via lower savings and profits.	Lost revenue; lower margins; downtime costs.
Acute destruction of produced assets (storm destroys plant)	Not captured unless measured capital services or TFP subsequently fall.	Destruction is not current production; only output interruption hits GDP.	Destruction is recorded as a stock loss or volume change.	Write-off/impairment, business interruption.
Gradual physical degradation (heat, corrosion, faster wear)	Often appears as lower TFP.	Output can be reduced.	Net stock is reduced over time from shorter service lives and faster depreciation.	Higher maintenance, lower productivity, potential accelerated depreciation/impairment.
Labor heat stress/ morbidity (lost hours, lower productivity)	Labor and/or TFP are effectively lower from lost hours/quality of output.	Lower production/ income.	Human capital is not well booked in core wealth accounts.	Lower output per worker, higher unit labor cost, absenteeism.
Asset impairments/write-downs (valuation change)	Not part of production function (market value ≠ productive services).	Valuation changes are not current production.	Wealth falls through revaluation and recognition of lower asset value.	Impairment charge reduces profits; balance sheet down.
Stranded assets (policy and/or technology renders assets unusable)	Only material if it reduces capital services investment or TFP (from premature asset retirement).	Stranding event itself is not accounted in GDP but materializes later via lower sector output and reallocation effects.	Wealth falls as assets lose economic value or are retired early.	Impairments, decommissioning provisions, lower future cash flows.
Reconstruction/ replacement investment (rebuild after damage)	Raises capital (deepening) and may lift TFP if capital stock is replaced with better assets.	Usually raises GDP via higher investment (GFCF) and construction activity.	Can restore wealth toward pre-damage level (net effect depends on quality of replacement).	Capex (cash outflow); earnings impact depends on pricing, regulation, insurance; D&A rises later.
Process change/ technology substitution (efficiency, electrification, new generations of technology)	Potentially leads to higher TFP and higher investment.	Higher GDP as it raises value-added and investment/services activity.	Wealth may rise if new assets are more enduring.	Higher short-term opex, capex (training/R&D); profitability depends on pricing power, competitive dynamics.
Policy-driven transition capex (mandated build-out, redundancy)	Raises investment, but effect on TFP is ambiguous.	Raises measured investment and activity; can be inflationary even if welfare-neutral in near term.	Can increase produced assets but may be partly duplicative, so welfare gains are not 1:1.	Higher short-term capex burden; returns depend on subsidies, regulation, commodity pricing.
Adaptation hardening capex (sea walls, grid hardening, flood defenses)	Increases capital stock and may reduce future TFP losses via shorter downtime and disruptions.	Counts as investment and construction/services output.	Increases capital stock.	Short-term capex; payoff via avoided losses.
Welfare loss vs. activity (broken-window gap)	Production function does not measure welfare.	GDP can rise from reconstruction spending even though society is only restoring what was lost.	Wealth is lower if losses are irreversible or rebuilding is delayed/ partial.	Some firms profit from rebuild; others are impaired; micro dispersion dominates.

Source: J.P. Morgan Asset Management; information as of September 30, 2026. Cobb-Douglas production function: relates output to inputs (typically capital and labor); GFCF: gross fixed capital formation; D&A: depreciation and amortization; micro dispersion: variation in firm-level outcomes within a defined market sector; opex: operating expenditure (including training, research and development); broken-window gap: the error of treating the spending prompted by destruction of an asset as a net economic gain while ignoring what the same resources would have produced had the destruction never occurred; TFP: total factor productivity.

The aggregate effect of remedial and adaptation investment at the firm level, in addition to the risk of higher inflation, can leave nominal GDP appearing resilient even as real incomes and welfare suffer. This tilts the balance of risk toward higher term risk premia, steeper curves and higher yields – the opposite conclusion of studies that translate incurred climate costs directly into a drag on GDP.

Competitive and shareholder pressure incentivizes firms to remediate damage quickly after a disaster. Policymakers could wield a powerful tool by reconfiguring climate policy to encourage investment in prevention and resilience instead – for example, with nudges such as accelerated depreciation and subsidies. Such investment under an industrial strategy would, in aggregate, advance climate goals, protect welfare and support GDP.

Unpacking the impact problem

Over the next decade, climate events will likely appear as volatility and localized disruption, not clean drags on trend growth. Investors should focus not only on the assumed aggregate costs of climate change but also on where frictions are emerging and which firms can pass through costs or recover capital.

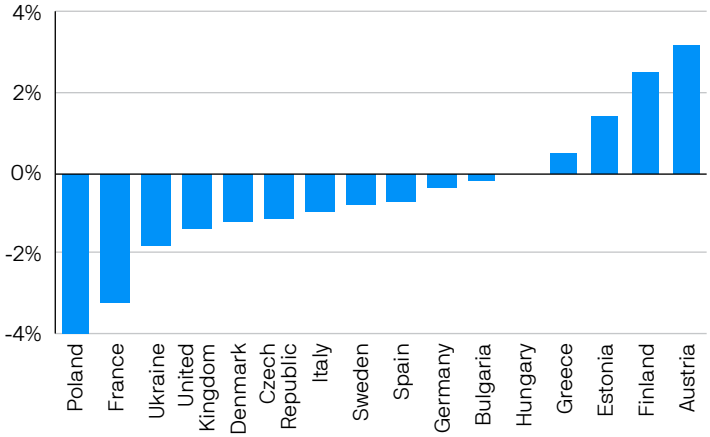
Climate impact varies by sector but follows a common pattern. Agriculture experiences climate variability as yield volatility and elevated crop failure risk. Transport faces disruptions (e.g., low river flow limiting shipping, heat buckling rail tracks). Construction and manufacturing confront heat-driven productivity and safety constraints, forcing a reallocation of labor that may preserve output but raise unit labor costs. This matters beyond those sectors' own margins, as labor-intensive industries are central to the adaptation and transition build-out. Climate stress raises the cost of the supply-side response at the same time that it raises the demand for it, making the delivery of physical capacity more inelastic than capex plans may assume.

Incidence – the rate, frequency or probability of an event that can multiply its impacts – complicates the picture. For example, in Europe, Rhine river shipping disruptions don't hit the transport sector in isolation. Goods can be rerouted to road or rail. Rising freight prices support sector income, while losses are incurred downstream, in industrial supply chains, higher shipping rates and lost output.

Agriculture is another sector in which GDP understates climate stress. Despite evidence that climate stress meaningfully reduces agricultural productivity (**Exhibit 2A**), the small size of the sector in many developed nations mutes the overall impact on GDP (**Exhibit 2B**). The supply response is slow: Adjusting cropping patterns, irrigation and land use takes seasons or years, so yield shocks pass into prices before capacity adjusts.

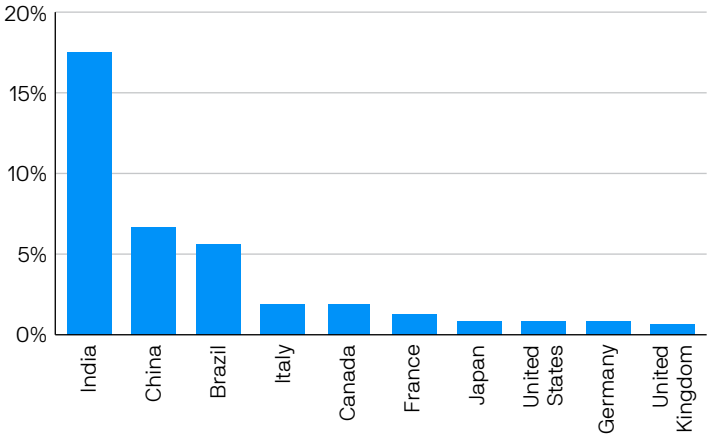
Agricultural yield is expected to decline significantly in some European nations ...

Exhibit 2A: European agriculture expected yield losses (for flagship crops) around 2040, from current levels



... yet because agriculture makes up a small share of developed market GDP, such losses receive limited recognition

Exhibit 2B: Agriculture – % of GDP, 10 largest economies



Source: International Energy Agency, Food and Agriculture Organization of the United Nations, Copernicus Programme, World Bank DataBank and World Development Indicators, J.P. Morgan Asset Management; agricultural GDP numbers as of 2024 except Canada, 2022, and U.S., 2021. All data latest available.

Despite the limited GDP effect, the implications for food inflation and real incomes are considerable. Mapping where climate damage is felt, who bears the ultimate costs and where profits generated by remediation accrue would help identify sectoral winners and losers from climate degradation (as we discuss next and map in **Exhibit 3**).

Unpacking the policy problem

Climate investment has lagged commitments: The USD 100 billion annual pledge for developing economies, made at the UN's 15th Conference of the Parties (COP15, 2009) was met in 2022, two years late,[5] and public adaptation finance commitments cover less than a tenth of estimated needs.[6]

Investors may view global climate policy as purely an international relations subject when it is in fact a key transmission mechanism directing capital flows. While climate investment may be underwhelming today, we believe leaders are beginning to consider it a matter of strategic advantage with profound economic and financial implications.

Two armed conflicts in four years, in Ukraine and the Gulf, have roiled energy markets and underscored the strategic advantage of energy independence. Europe has felt this acutely: With almost half of the Continent's energy grid due for replacement in the next 15 years[7] and the cost of renewable technology falling rapidly, building a sustainable grid has become a clear strategic issue.

Outside the European Union (EU), leaders are reframing climate investment similarly – not only for energy security but also from the perspective of technology leadership (decarbonization and renewable energy rely on technical innovation and critical minerals) and industrial competitiveness.

The dominant levers differ by jurisdiction: regulation in Europe,[8] tax incentives in the U.S.,[9] revenue floors in Australia[10] and state-directed planning in China.[11]

This policy variation in climate economics and investment is linked inexorably with geopolitics and national resilience considerations. Such pressures may in turn create subsidy races, protectionism and bottlenecks that reshape winners and losers. Fiscal constraint shapes the choice of lever. Governments with elevated debt burdens favor policy – mandates, tax expenditure, revenue underwriting – over direct budget spending, shifting costs onto companies and households and adding regulatory complexity to an already inelastic supply response.

Viewing climate investment as a matter of national self-interest is revealing. The offensive realism[12] view of international relations fits today's multipolar world. Expecting global cooperation, even against severe climate threats, may be more hope than reality. Recognizing that strategic advantage is a powerful incentive for states – and that it doesn't preclude cooperation but makes it transactional and contingent – is a helpful starting point for investors exploring climate economics.

The investing implications of climate economics

Climate investment requires understanding the incentives and costs felt by all actors. Misalignment of incentives or mismeasurement of costs can lead to complacency and can delay investment. We believe climate should be seen less as a global coordination problem with an international policy solution and more as a matter of strategic advantage with an industrial policy solution.

At the state level, policymakers, who tend to optimize for growth, are drawn to investments that secure a strategic advantage. Meanwhile, firms, which are feeling the effects of climate damage acutely through asset losses and production downtime, are motivated to invest to mitigate those costs. We expect national industrial strategies will increasingly and more explicitly seek to align climate investments across these interests.

[5] According to the OECD and the UN Framework Convention on Climate Change forum.

[6] Estimates of international public flows to finance climate adaptation in developing countries were USD 26 billion in 2023, vs. needs of USD 310 billion–365 billion per year by 2035. "Adaptation Gap Report," UN Environment Program, 2025.

[7] An assessment by the European Court of Auditors found that almost half of the EU's electric power distribution lines are more than 40 years old. The European Commission estimated that €1.99 trillion–€2.29 trillion (USD 2.31 trillion–USD 2.66 trillion) of grid investment will be required 2024–50 to modernize and expand the network.

[8] The European Union has introduced multiple legislative measures to reduce carbon emissions, including the 2009 Renewable Energy Directive (RED), updated in 2023; RED III, which established a binding EU-wide target for renewable energy by 2030; the Fit for 55 package (2021–23), which expanded the emission trading scheme to cover new sectors; and the Carbon Border Adjustment Mechanism that applies a carbon cost to certain imported goods so their embedded emissions are priced similarly to products made under the EU's carbon rules.

[9] Two significant laws on tax incentives for renewable energy in the U.S. were the PATH Act (2015), providing an extended tax credit for solar and wind investment, and the Inflation Reduction Act (2022), offering new tax incentives for U.S. manufacturers of eligible clean energy inputs, although the One Big Beautiful Bill Act (2025) curtailed some incentives.

[10] Australia's Capacity Investment Scheme, launched in 2023, a government revenue-underwriting mechanism, provides a floor and ceiling for pricing renewable energy generation and battery storage contracts, providing greater certainty for investors and providers of finance.

[11] The 13th, 14th and 15th Five-Year Plans set national targets for renewable energy as a share of total power generation and directed state financing and investment to both state-owned enterprises and private developers.

[12] John Mearsheimer's *The Tragedy of Great Power Politics* defines "offensive realism" as the view that great powers in an anarchic world are driven to maximize relative power, often seeking regional dominance, to ensure their security. He suggests that global solutions require contingent cooperation because governments first act to project their own strategic leadership.

Mapping sectors against our three tests: Who passes through costs, gains from remediation and bears the residual?

Exhibit 3: Climate stress: Risks, impacts, affected Cobb-Douglas factor and market drivers

Sector/Region	Impact	Most affected	Firm financials/cost accounting
Adaptation goods, engineering suppliers/Global	++	Capital (beneficiary of the capital formation cycle)	Growth from global investments in adaptation solutions (flood defenses, HVAC, etc.)
Critical mineral extraction & processing/China	+	Capital (processing capacity)	Structural demand from global mega trends (decarbonization, AI build-out)
Utilities: Grid replacement/Europe Tax incentives/U.S.	+	Capital (grid rebuild and renewables build-out)	Growth from grid rebuild and renewables build-out; earnings visibility from regulated returns
Energy-intensive manufacturing/Europe*	-/+	TFP (energy cost volatility drives production efficiency)	Input cost advantage as renewable technology gets cheaper for firms that can lower fossil fuel dependence
Insurance & reinsurance/ Global	-/+	Capital (capital-at-risk repriced against rising catastrophic losses)	Repricing climate risk lifts premiums; underwriters with pricing power benefit, but rising premiums can increase inflation volatility
Food producers & staples retailers/Global	-/+	TFP (climate-driven supply shocks flow through to processing efficiency)	Pricing power on inelastic demand allows cost pass-through, supporting nominal revenue, but food inflation shocks can increase inflation volatility
Transport & logistics/ Europe**	-/+	Capital (asset and network impairment)	Inland reroutable modes (road, rail) can raise freight prices and support income; disruption risk to fixed assets
Labor-intensive construction & manufacturing/Global	-	Labor (heat-driven productivity and safety constraints cut effective labor hours)	Heat-driven productivity and safety constraints raise unit labor costs, pressuring margins
Agriculture/Global	-	TFP (yield volatility and crop failure are direct productivity shocks)	Yield volatility, crop failure risk and food inflation shocks can increase inflation volatility

Source: J.P. Morgan Asset Management; information as of September 30, 2026. HVAC: heating, ventilation, air conditioning; TFP: total factor productivity.
* An energy security imperative, with 60% of grid due for replacement in the next 15 years.
** Rhine shipping disruption, disruptions to rail networks from extreme heat.

Distinguishing sectoral winners from losers rests on three questions:

First, who can pass through costs? Firms serving inelastic demand can recover much of the climate hit through price; those facing elastic demand absorb it in their margins.

Second, who captures remediation spending? Suppliers of adaptation goods and services, such as engineering, grid technology and resilient infrastructure, tend to gain as remediation and prevention budgets expand.

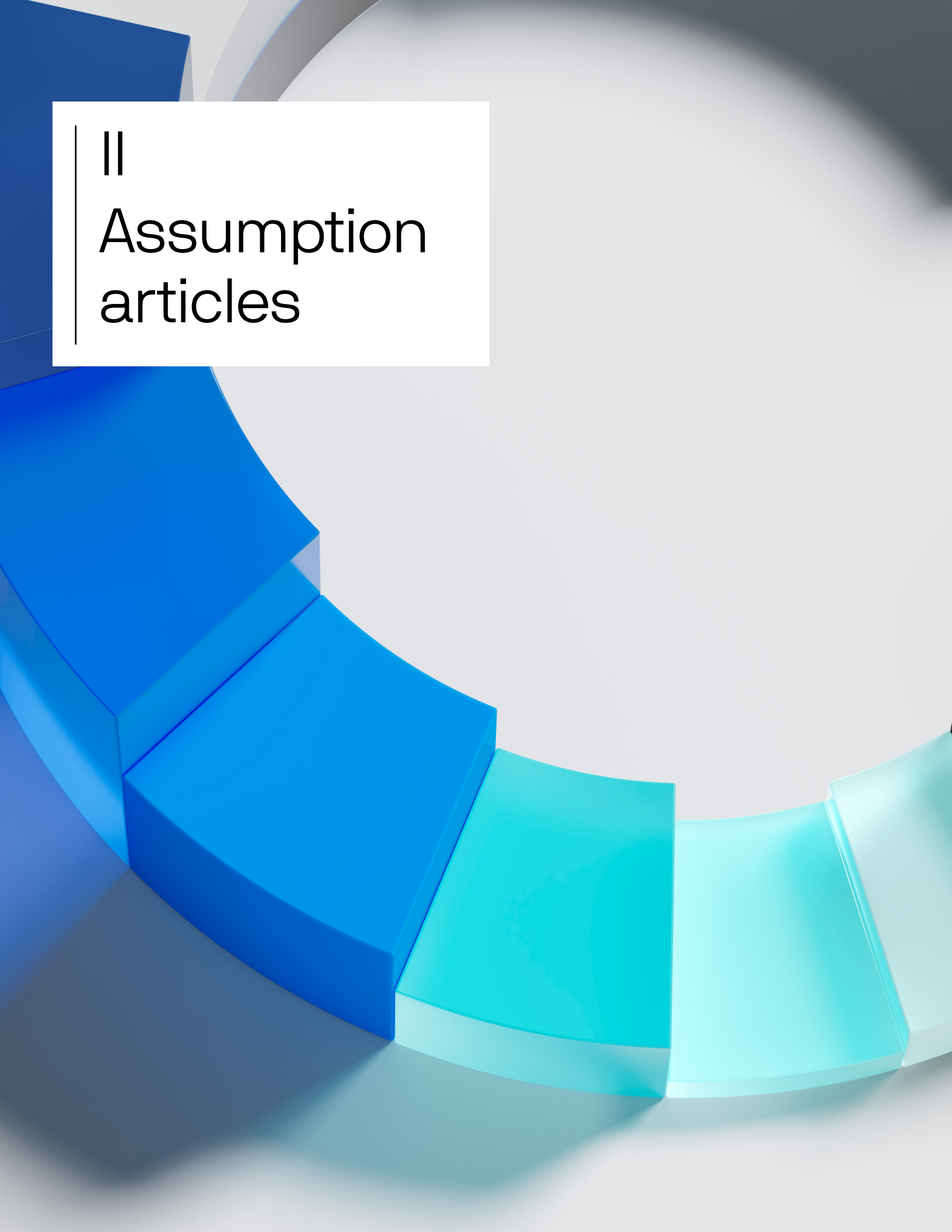
Third, who bears the residual? Those left carrying the loss are typically downstream processors and end consumers. Exhibit 3 maps sectors against these three tests.

There are three key implications for long-term investors:

- Don't assume climate damage subtracts from trend growth over a 10- to 15-year horizon. Expect it to manifest as periodic supply shocks leading to elevated inflation volatility and term risk premia.
- As renewable technology cheapens, energy-intensive industries will benefit in those regions able to reduce their dependence on fossil fuels. Europe leads in this regard.
- Regulated utilities, some consumer staples and reinsurers with pricing power, as well as companies that process key minerals to a usable purity (often domiciled in China), stand to be relative winners.

Climate costs are booked in different places by different actors – as impairments and capex for firms, as revaluation on national balance sheets, as the price of goods and services for households – and barely at all in the GDP flow that policymakers watch. That dispersion, not a smooth drag on trend growth, is what investors should underwrite. The question is not how large the climate discount should be but who bears the cost, who captures the remediation and who controls its delivery.

II
Assumption articles



Public market assumptions

Strong but uneven returns in a changing world

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In brief

- Long-term return opportunities look strong across public markets, driven by the three themes that form the backbone of our forecasts this year: economic nationalism, technology adoption and capital rewiring.
- **Government bonds**: Higher normalized cash rate assumptions and rebuilt term premia lift long-term returns, and starting yields look attractive. Bond returns are the best since before the financial crisis, yet we continue to believe that duration will be a less reliable portfolio hedge, with inflation uncertainty high and fiscal risks impacting the long end of government bond curves.
- **FX**: We expect continued but slower depreciation of the U.S. dollar, concentrated against Asian currencies, where valuation gaps are the widest. Still, the dollar's reserve status remains unchallenged over our horizon.
- **Credit**: Spreads are tight, but yields look attractive; meanwhile, dispersion is rising. Our leveraged loan outlook shows more distress, while our high yield outlook is constructive as index quality improves.
- **Equities**: Global equities are set to deliver solid 10- to 15-year returns, driven by robust profits. Technology adoption is the best structural reason for optimism about stocks, especially in the U.S., where we believe productivity gains will accrue to shareholders.
- **Bitcoin:** We review the potential returns from bitcoin (BTC) for strategic investors and conclude that while volatility has declined, unstable correlations to other assets impair any role it might have in a strategic allocation. As a result, we believe it is premature to consider BTC as a diversifier in a balanced portfolio. But should volatility continue to decline and correlations to other asset stabilize, this may evolve in the future, particularly as regulation becomes clearer and liquidity and price discovery continue to improve.

Long-term investors have enjoyed a period of healthy return generation in recent decades, their diversified portfolios having weathered a wide range of shocks. The mantra "stay invested" has proved a generally effective investment strategy. From here, we see strong long-term return opportunities across public markets, driven by the three themes that form the backbone of our forecasts this year: economic nationalism, technology adoption and capital rewiring.

Initial conditions: The world we inherit

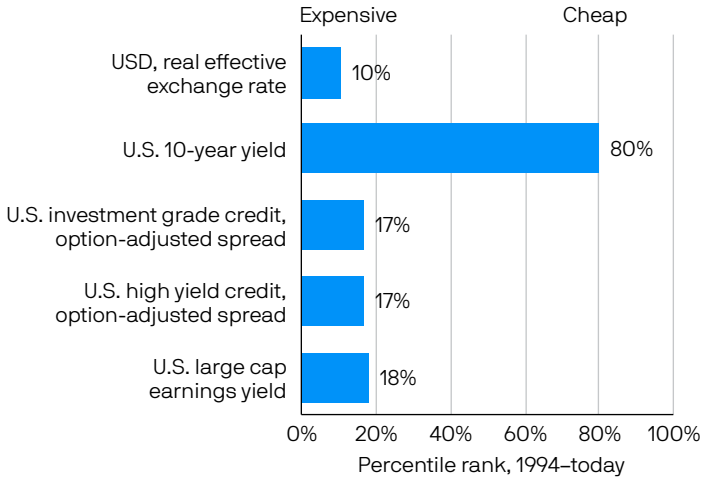
Before discussing the themes that shape our outlook, we acknowledge the key initial conditions that shape the starting point for public markets:

- **Aging demographics** are a constraint on potential growth that lowers neutral interest rates. For the equity indices in which corporate sales are closely tied to domestic output, weak demographics also slow revenue growth.
- **High deficits and debt overhangs** have reshaped government bond markets. Higher fiscal spending and rising debt-to-GDP ratios have rebuilt term premia, and yield curves are materially steeper than three years ago. Credit spreads, by contrast, remain tight.
- **The energy transition** continues to be a source of commodity price volatility. Outside the U.S., the impetus to invest in the transition remains higher, with meaningful consequences for the world's industrial and manufacturing base.
- **Geopolitical fragmentation** has deepened both within economies and across them. In general, this has raised inflation volatility and complicated the reaction functions of central banks, raising the risk premium attached to long-duration assets.

Despite these crosscurrents, a global balanced portfolio has earned 6.7% annualized over the past five years,[1] led by equities bolstered by outstanding U.S. corporate profit growth. Broadly today, bonds look cheap and risk assets look expensive (**Exhibit 1**).

Risk assets and the U.S. dollar look expensive; U.S. government bonds look inexpensive

Exhibit 1: Initial conditions in major public asset classes



Source: Bloomberg, J.P. Morgan Asset Management; data as of September 30, 2026.

Translating our themes into public market returns

The choices policymakers and capital owners make to adapt to the initial conditions we see today will define the economic landscape of tomorrow. These choices can be described as three themes that dominate our outlook: economic nationalism, technology adoption and capital rewiring. Each impacts our public market returns in important and competing ways (**Exhibit 2**).

Next, we assess each major public asset class and how it relates to our key themes in the context of our building block methodology, which can be found in our *Methodology Handbook*.[2] We then pivot to exploring the implications of our themes in our return and risk forecasts, asset by asset.

[1] Bloomberg, J.P. Morgan Asset Management. Total average annualized return from September 30, 2021 to September 30, 2026 for a 60/40 ACWI/U.S. Aggregate Bond portfolio rebalanced quarterly in USD.

[2] Long-Term Capital Market Assumptions: *Methodology Handbook*, a comprehensive guide to our annual asset class projections, J.P. Morgan Asset Management, October 2026.

Economic nationalism, capital rewiring and tech adoption impact our forecasts

Exhibit 2: Key themes' effect on public market asset class returns

	Economic nationalism	Capital rewiring	Technology adoption
Government bonds	Lifts real rates and inflation risk premium Steepens curve, heavier long-end supply	Competition for savings lifts yields Fewer price-insensitive duration buyers	Elevates neutral real rate Near-term inflationary, later disinflationary
Currencies	"America first" capital bid supports USD; elevated valuations cap it	Less ex-U.S. capital recycled into USD Reserves diversify into gold and hard assets	Supports FX of semiconductor producers
Credit	Creates structural, rising demand for income and yield products	Loans: More distress, higher default levels, spreads widen High yield: Quality up, spreads down	Hyperscaler investment grade supply increases, enlarging high quality share, lowering fair value spreads
Equities	Sales: Onshoring and defense produce revenue (especially in Europe) Margins: Causes a mild drag Fewer buybacks, more dividends	East Asian corporate reform continues	U.S. revenue and terminal margin rise Issuance up, dividend yield down Korean returns look lower from here

Source: J.P. Morgan Asset Management; data as of September 30, 2026.

Government bonds: Repricing a more capital-hungry world

For government bonds, we build our return assumptions from the real cash rate and inflation through the cash-to-10-year curve to the 10- to 30-year segment. Returns can be broken down into cash, carry, roll-down and a normalization component. In general, we see our key themes pushing up both yields and returns (**Exhibit 3**).

Economic nationalism is a rates-up theme working through two channels. First, investment in national imperatives – such as energy security, defense and grid and infrastructure upgrades – increases debt loads and tends to push real rates higher. Second, populist policies, from higher minimum wages to restricted immigration, lift the inflation risk premium by constraining labor force growth and raising costs, prices and uncertainty. The result is a steeper curve, with more issuance and a higher inflation risk premium embedded at the long end.

Capital rewiring lifts yields through competition for capital. The normalization of yields outside the U.S., driven higher by domestic spending, also erodes the real yield advantage U.S. Treasuries offer vs. other developed market sovereigns, prompting in turn the potential reallocation of global bond holdings.

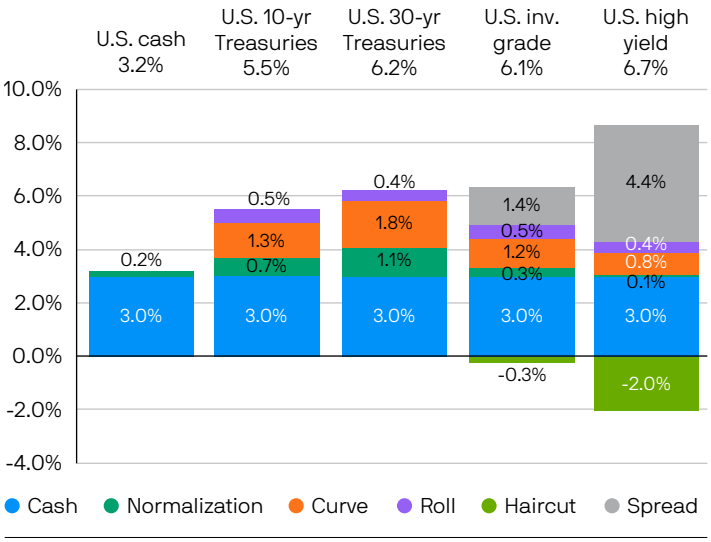
Separately, defined benefit pension funds and insurers, the traditional price-insensitive buyers of duration, are shrinking as a share of the market, and the public and private sectors now compete for the same savings at the same time, offering higher yields to attract those savings. We raise our forecast for long-end U.S. yields relative to other developed markets, partly because U.S. investment is being repatriated into domestic markets and partly because of higher inflation risk premia. Still, starting yields and inflation forecasts – as well as forecasts for USD depreciation, explored next – mean a narrow spread of real returns across DM bond markets and the potential for capital to diversify further across sovereign markets.

Technology adoption raises potential growth and the neutral real rate, lifting cash rates as a result. Over our full forecast horizon, the effects of technology adoption on inflation likely net off. Still, there are distinct inflationary risks early on as capex and power demand squeeze supply chains. Later in our horizon, the productivity boost we expect presents a disinflationary risk. Even if the effects net off on the level of inflation, technology adoption contributes to the volatility of inflation over our forecast horizon.

Inflation-linked bonds should carry a lower inflation risk premium over the long run as productivity improves and topside inflation risks diminish, partially offsetting the nationalism effect. Inflation-linked bonds are a natural winner from the broader inflation backdrop, although we believe our prior forecasts captured much of the higher inflation environment; as a result, we do not make further changes at this time but note the attractiveness of inflation-linked bonds in a balanced portfolio.

Our key themes raise government bond yields and returns

Exhibit 3: Government bond return building blocks



Source: J.P. Morgan Asset Management; data as of September 30, 2026.

FX: Dollar depreciation continues gradually; semiconductors support Asia

Our FX framework starts from a purchasing-power-parity estimate of fair value, then adjusts with our forecasted inflation differentials and, in the case of emerging markets, growth forecasts.

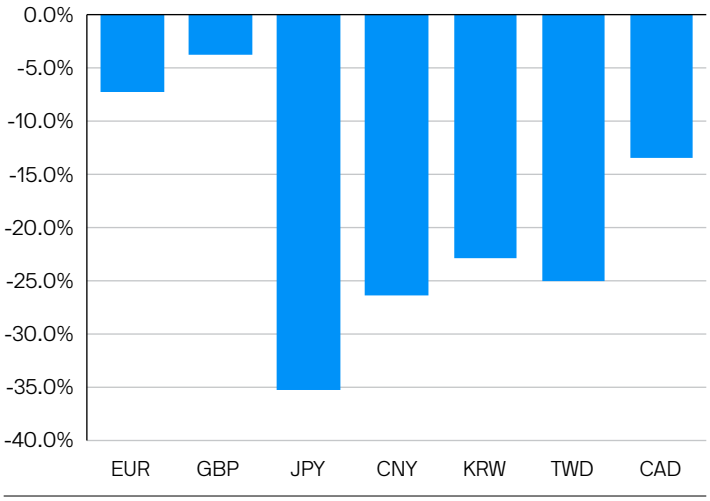
We see the U.S. dollar caught between competing forces. Generally, a tilt toward economic nationalism, with rising domestic investment, may be currency supportive. Also, we do not see a challenger to the U.S. dollar's reserve status over our forecast horizon. However, the "America first" agenda includes dollar-negative components: Tariffs and deficit spending weigh on the currency; so, too, does the administration's focus on perceived "currency manipulators," and our inflation assumptions point to a weaker USD. On balance, we forecast continued but slower depreciation, concentrated in USD-Asian currency crosses where valuation gaps are the widest. European crosses are closer to fair value today in our projections.

Capital rewiring reinforces this direction for the U.S. dollar, at the margin. We acknowledge some de-dollarization in trade, reserves and financial transactions but do not regard it as the dominant driver of dollar depreciation. As governments outside the U.S. require more domestic investment, less excess capital is being recycled into U.S. assets, and reserve managers are building positions in gold and other hard assets to diversify their dollar concentration and hedge against inflation. At the same time, global capital remains heavily concentrated in U.S. equities and the strong U.S. asset returns we forecast should keep attracting international investors.

Technology adoption favors the early leaders of the artificial intelligence (AI) race until the technology is diffused and commoditized. While AI is a general-purpose technology that will impact every economic region, in our currency forecasts we are most comfortable raising FX forecasts for AI enabler economies where substantial domestic investment is underway – the Korean won and the new Taiwan dollar (**Exhibit 4**).

We see Asian currencies as the least expensive, relative to fair value

Exhibit 4: FX, deviation from fair value



Source: J.P. Morgan Asset Management; data as of September 30, 2026.

Credit: Income quest in a higher rate world hits credit subsectors unevenly

In credit, the building blocks for our forecasts are the underlying sovereign yields, credit spreads and the expected impact of defaults and recoveries. Returns remain attractive in income terms, but our themes drive rising dispersion.

Economic nationalism and capital rewiring generate a structural and growing demand for yield products as investors seek income in a higher rate world, and this hits credit subsectors unevenly. We raise both our default and our average spread assumptions for loans. Leveraged loan issuance has surged over the past five years,

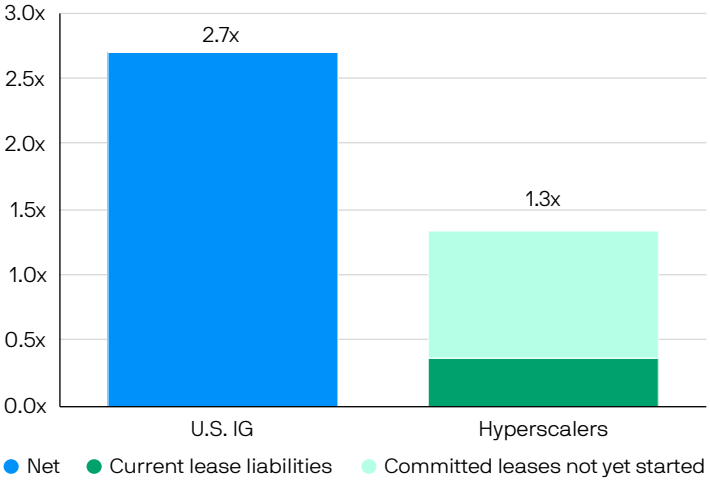
much of it tied to software and AI. Default levels remain low, but distressed exchanges have risen, pointing to a market with more "repeat offenders": Roughly 30% of defaults and distressed transactions now involve firms that previously undertook a liability management exercise.[3]

High yield (HY) is the more constructive story. Index quality has continued to improve, with less AI- and software-related issuance and persistently low defaults. The BB share of the index has risen beyond our prior expectations, prompting us to upgrade our ratings mix and lower our spread assumption, leading to an upgrade of U.S. HY returns.

Investment grade (IG) returns also improve this year. This is mainly driven by the riskless rate, but we also lower our cycle-neutral IG spread assumption by 20 basis points (bps), given the IG index's changing sector and company mix. While heavy issuance by hyperscalers put some strain on primary markets in 2026, these remain highly profitable and cash flow-generative companies. Over time, we believe this improves the quality and cash flow profile of the index, warranting a cut to equilibrium credit spread expectations (**Exhibit 5**).

Heavy issuance by cash flow-generative, highly profitable hyperscalers improves IG index quality

Exhibit 5: Hyperscaler vs. IG issuer leverage 2Q26, net debt/ trailing 12-month EBITDA



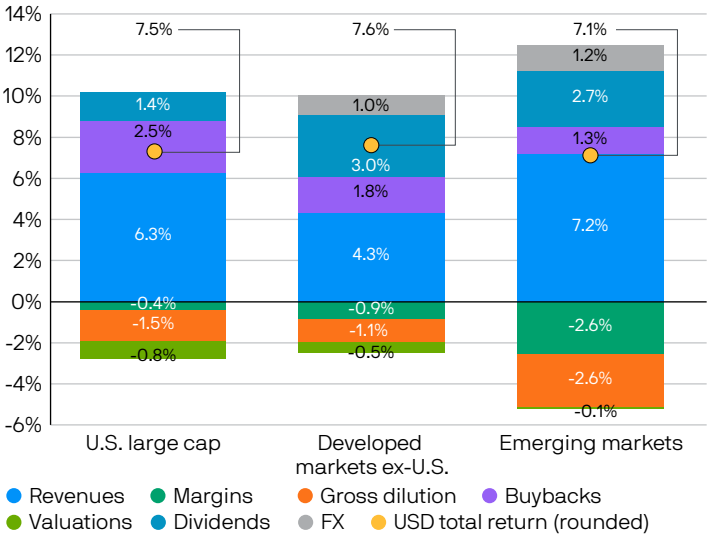
Source: J.P. Morgan Asset Management; data as of September 30, 2026.

Equities: Technology selectively boosts returns

We build our equity return assumptions from revenues, margins, net dilution (buybacks less issuance), valuations and dividend yield, informed by return on equity and payout ratio cross-checks (**Exhibit 6**).

Equities deliver solid long-term returns, although starting valuations are a headwind

Exhibit 6: 2027 LTCMA equity return building blocks by region (total return, USD)



Source: Bloomberg, FactSet, J.P. Morgan Asset Management; data as of September 30, 2026.

Technology adoption is the strongest structural reason for optimism about equity returns. The ongoing capex surge and long-term boosts to productivity and margins drive a meaningful U.S. upgrade. Diversification with other developed market (DM) equities is still attractive. However, today's supernormal profits earned by the emerging market (EM) technology sector are a drag on the return outlook and for the first time, our DM equity forecasts sit above those for EM equities.

Korea deserves a special mention in our EM equity analysis this year, as it is bound up with the essence of our tech adoption theme. Where U.S. tech is well diversified across subsectors, around half of the Korean stock index is geared to cyclical tech – that is, to chipmakers. These firms win during the AI capex surge, but as capacity is built to meet demand, their profits fade. In short, today's supernormal profits that have boosted

[3] A restructuring transaction that modifies or exchanges existing debt to reduce near-term cash obligations and improve liquidity, sometimes executed via amendments or exchange offers; it may shift value among creditor groups.

Korean equities, and EM equities more widely, will likely normalize. That creates a headwind to EM returns over our forecast horizon.

For U.S. large cap equity, we lift our long-term revenue growth assumption for the second year running to reflect growing optimism about AI's revenue-generating potential. We also believe edge-case technologies, like quantum computing, could become feasible within our time frame due to AI advances. The sum of these forces boosts our U.S. equity return forecast 80bps, to 7.5% – the highest since the pandemic – in turn pushing our global equity forecast (ACWI) up by 50bps, to 7.5%.

We also raise our terminal U.S. large cap equity margin assumption to 15.1%, close to today's levels, reflecting supportive operating leverage and the potential for labor substitution to reduce costs. Our forecast for U.S. margins is higher than that for any other major market in our assumption set. In the near term, U.S. margins could well expand further as the AI capex boom gathers pace. Over the longer term, some normalization is a reasonable expectation as the benefits of AI diffuse away from the technology sector.

We also upgrade our long-term return outlook for DM equities ex-U.S. The uplift to revenues and margins from tech adoption should be broader and less concentrated than in the U.S., but still meaningful. A capex boom that extends well beyond the tech sector supports domestic growth in Europe and Japan, and AI adoption adds a further tailwind to these markets over our forecast horizon. We expect a gradual handoff from today's AI enablers to tomorrow's AI adopters, including "old economy" firms that may be slower to move now but have the longest runway for productivity gains. With U.S. and DM ex-U.S. returns now very close, the advantages from diversification across DM equities remain significant for investors in all regions.

Capital rewiring: Effects on equities

Capital rewiring is reshaping equity returns, most notably in East Asia. China has historically eroded per-share returns through persistent share growth, but data show a newfound buyback impulse in the region. Japanese authorities continue to pressure companies trading below book value to unlock balance-sheet value and shrink their low return businesses. And we have long emphasized the importance of Korea's Value-Up program[4] in our modeling.

There are risks to our optimistic global equity assumptions. Stock-based compensation in the AI talent race is increasing share supply, and the pipeline of technology listings adds incremental float to the market. We also expect free-float percentages to rise as lockups expire, eventually increasing the share count. The rising index weight we anticipate of low dividend technology firms may also reduce the U.S. market's overall dividend yield over time.

Hyperscalers' upfront capex has boosted margins for their suppliers. The hyperscalers, however, capitalize that spending and expense it as depreciation over several years, which will weigh on their earnings. The drag will be larger if AI revenues take longer to arrive, or if the equipment becomes obsolete faster than is assumed. We expect the benefits of this investment to outweigh the depreciation cost, but depreciation remains a risk to earnings.

Given the risks, as well as pockets of elevated multiples across equity markets, we balance out our upgrades to equity return forecasts with a higher assumption of volatility. In sum, this maintains Sharpe ratios close to last year's levels and reflects a more optimistic but more uncertain path ahead for global equities.

Risks to our outlook

Aside from the specific risks to equity returns we've discussed, the risks to the outlook cluster at the overlap of our core themes.

At the interface of capital rewiring and technology adoption, the risk of **capital misallocation** is central. If the AI capex wave produces depreciation without productivity, our return estimates will likely be too high. We do not think capital is being significantly misallocated today. Also, higher rates impose greater capital discipline, raising the hurdle for new spending and sharpening the focus on returns. However, as the capex cycle extends, this is a key downside risk to watch.

Fiscal overspending is at the intersection of economic nationalism and capital rewiring. Should government debt markets become unruly, the rebuilding of term premia might continue past the point that equity valuations can absorb. Still, we don't believe our current equity valuation forecasts are overly optimistic, and recent history suggests equity valuations can be resilient to higher interest rates.

[4] A government-led initiative to encourage listed companies to adopt shareholder-friendly policies and improve shareholder returns and corporate value, typically through better governance, capital efficiency and transparency measures.

Persistent **capital-labor disparity** occurs where technology adoption meets economic nationalism. If sections of society are left behind or marginalized as technology disrupts labor markets, the risk of economically damaging populism must be carefully evaluated.

At the center of all three themes sits the **K-shaped economy**.[5] If those toward the bottom of the income and wealth distribution (the lower leg of the K) are not rewarded enough to sustain the social contract, the likely response is an acceleration of economic nationalism and its efficiency-diminishing effects, essentially reducing what accrues to the upper leg of the K and sustains economic activity, growth and profits.

A balanced portfolio built at these starting points earns a respectable return over the next 10 to 15 years: better bond returns than in the last cycle, equity returns lower than the last decade but still strong and a wider opportunity set for investors willing to look beyond the index (**Exhibit 7**).

In conclusion, we advocate for diversified portfolios capturing our upgrade to U.S. stocks, the best bond returns in two decades and a weaker EM outlook, but with diversification across DM equities and high quality public credit.

A balanced portfolio earns a respectable return over the next 10 to 15 years

Exhibit 7: Public market return assumption changes vs. prior edition of LTCMA

Asset, USD return	2026	2027	Change
U.S. cash	3.1%	3.2%	0.1%
U.S. intermediate Treasuries	4.0%	4.6%	0.6%
U.S. investment grade bonds	5.2%	6.1%	0.9%
U.S. high yield bonds	6.1%	6.7%	0.6%
U.S. large cap	6.7%	7.5%	0.8%
AC World equity	7.0%	7.5%	0.5%

Source: J.P. Morgan Asset Management; data as of September 30, 2026.

How to think about bitcoin's long-term outlook

Dr. Sheena Shah, Portfolio Manager, Global Fixed Income, Currency and Commodities
Dennis Cristallo, CFA, Head of Digital Asset Strategy, Global Private Bank

At the moment, we do not make a case for bitcoin (BTC) as a diversifier in portfolios due to its unstable market correlations. We see bitcoin as a speculative asset and a hedge against monetary easing.

Investors are nevertheless increasingly exploring crypto assets, supported by more defined regulation and growing infrastructure (e.g. exchange-traded funds, futures, publicly traded crypto companies, options, bank-grade custody and financing markets). With over 60 million coins and tokens, bitcoin is the anchor of the crypto ecosystem, offering transactional security, longevity, improving regulatory clarity and liquidity.

Today, crypto is an asset class worth over USD 2.5 trillion, roughly the size of the Swiss stock market or the entire private credit market. Tokenized assets, such as money market funds, are valued around USD 40 billion, with scope for rapid growth. J.P. Morgan Private Bank's *2026 Global Family Office Report* found that around a tenth of clients surveyed said their portfolios held crypto assets, and 17% of respondents planned to prioritize crypto and other digital assets.

Originally designed to facilitate pseudonymous peer-to-peer payments, BTC is now seen as a scarce store of wealth independent of central banks. As yet, it lacks a strategic role in portfolios other than as a bet on fiat currency expansion or future asset trading on blockchains.

BTC mostly trades like a high beta risk asset that tracks global money supply growth, but it is sometimes treated as "digital gold." Unstable correlations with other assets present a modeling hurdle. A further challenge is forecasting an asset whose fundamentals are not cash flows and whose economics may be as much about adoption, regulation and liquidity as technology.

Although we think it is premature to create a 10-year forecast for bitcoin or to integrate it into our covariance matrices, examining its potential range of outcomes is instructive. **Exhibit A** shows that three key drivers of valuations inform our base, bull and bear cases for potential 10-year returns (see the LTCMA *Methodology handbook* for further details). We also include BTC in a smaller, standalone covariance matrix against a subset of key assets (**Exhibit B**).

[5] An economy (or recovery or expansion) in which different groups perform in sharply divergent ways. The upper arm of the K represents those improving or gaining, the lower those stagnating or declining.

BTC currently lacks a clear role as a diversifier in balanced portfolios due to unstable correlations to other asset classes. Uncertain correlations, combined with high volatility, also limit its utility in strategic asset allocation today, in our view. If correlations stabilize and volatility declines, BTC's portfolio utility may improve in the future. Further regulatory clarity and ongoing improvements in market depth, liquidity and price discovery would also aid in its evolution. For the time being, exposures to BTC should continue to be scrutinized carefully and portfolios with any allocation stress tested thoroughly against both bull and bear cases for BTC returns.

Our base, bull and bear case return forecasts use three forecasting frameworks with confidence weights to derive overall projections

Exhibit A: Base, bull and bear case projections for bitcoin 10-yr returns

Forecasting framework and key driver	10 year return, % annualized		
	Base case	Bear case	Bull case
1) Bitcoin supply growth (4-yr cycle) vs USD/global money supply	10.7%	-9.7%	17.0%
2) Complement gold in a portfolio (investors rotate some in base case, in reserves of a central bank in bull case)	10.7%	-13.3%	17.3%
3) Network adoption (Bitcoin blockchain usage, assume little benefit from growth of tokenized assets on other blockchains)	-3.2%	-19.1%	6.1%
Overall: Weighting framework 1:2:3 at 65:30:5, based on our confidence in the underlying drivers	**10.0%**	**-11.2%**	**16.6%**

Source: J.P. Morgan Asset Management; data as of September 30, 2026: Spot USD 83,000, 10-year annualized return.

Given BTC's unstable historic correlation to other assets, plus very high volatility, we do not add BTC to our main covariance matrices but include an abridged, standalone version for illustration

Exhibit B: Standalone illustrative covariance matrix* – core USD assets vs. base case BTC forecast

	Compound return, %	Arithmetic return, %	Annualized volatility, %	Bitcoin	U.S. cash	U.S. Aggregate bonds	U.S. inv. grade corporate bonds	U.S. high yield bonds	U.S. large cap	U.S. small cap	EAFE equity	Emerging market equity	AC world equity	Gold	U.S. REITs	Diversified HF
Bitcoin	10.0	20.9	55.0	1.00												
U.S. cash	3.20	3.20	0.7	-0.05	1.00											
U.S. Aggregate bonds	5.60	5.70	4.7	0.15	0.16	1.00										
U.S. inv grade corporate bonds	6.10	6.34	7.2	0.26	0.13	0.91	1.00									
U.S. high yield bonds	6.60	6.94	8.5	0.34	0.07	0.53	0.77	1.00								
U.S. large cap	7.50	8.95	18.0	0.33	0.04	0.40	0.60	0.80	1.00							
U.S. small cap	7.70	9.66	21.0	0.27	0.00	0.32	0.53	0.78	0.86	1.00						
EAFE equity	7.70	9.21	18.3	0.27	0.06	0.49	0.65	0.79	0.84	0.76	1.00					
Emerging market equity	7.10	9.13	21.4	0.17	0.05	0.43	0.59	0.66	0.69	0.63	0.81	1.00				
AC world equity	7.50	8.94	17.9	0.32	0.05	0.46	0.66	0.84	0.97	0.87	0.93	0.81	1.00			
Gold	5.50	6.86	17.2	0.10	0.21	0.40	0.36	0.16	0.12	-0.02	0.30	0.37	0.21	1.00		
U.S. REITs	8.20	9.55	17.3	0.23	0.01	0.58	0.71	0.75	0.78	0.75	0.74	0.57	0.79	0.22	1.00	
Diversified HF	6.70	6.86	5.9	0.32	0.06	0.23	0.49	0.74	0.75	0.78	0.74	0.70	0.80	0.14	0.63	1.00

Source: J.P. Morgan Asset Management; data as of September 30, 2026. * Historic correlations and volatility from equal-weighted lookback methodology.

Private market and alternative asset assumptions

New forces lift private markets; greater dispersion offers alpha

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In brief

- Three powerful forces – economic nationalism, technology adoption and capital rewiring – drive upgrades to economic growth and higher inflation volatility, transforming our long-term investment outlook. We lift our return assumptions broadly across private markets over the coming 10 to 15 years but expect to see widening performance dispersion across real assets and financial alternatives.
- Real assets stand to gain as economic nationalism prompts concern over energy security and strategic resilience. This shift reroutes supply chains and brings manufacturing back onshore. Technology adoption, rapidly becoming a real asset story, supports potential investment opportunities in infrastructure, transportation/logistics and “powered” realestate, including data center-adjacent development.
- In financial alternatives, the expected dispersion of investment outcomes is widening. Private equity’s return potential depends on repeatable value creation and identifying operational efficiencies, which now include deploying artificial intelligence (AI) across portfolio companies. With the AI build-out, private credit financing demand rises, but underwriting discipline and structural protections remain paramount as technology cycles shorten and residual value risk increases.
- As capital flows deepen across private markets and approaches to portfolio construction evolve, investors’ allocations may need to focus on actual outcomes, not asset class labels. Long term, portfolio construction benefits from pairing return-enhancing private market exposures, such as private equity and value-added real estate, with time-tested diversifiers, including gold, real assets and certain hedge fund strategies. This will be particularly important if, as we expect, uncertainty persists around the rate of inflation and its impact on stock-bond correlations.

Over our 10- to 15-year investment horizon, three powerful forces – economic nationalism, technology adoption and capital rewiring – drive both risk and return in public and private markets. Collectively, these forces lead our G7[1] nominal growth projections to the highest level since 2012, but their impact varies widely across private markets. Investors need to understand how this new era – marked by higher rates, greater inflation volatility, faster productivity-driven growth and wider return dispersion – will impact return drivers for real assets and financial alternatives, as well as their respective roles in portfolios.

Here we address the implications of each theme in turn. As globalization gives way to economic nationalism, governments and companies trade efficiency for resilience, rerouting supply chains and prioritizing energy security and defense. Technology – notably the diffusion of artificial intelligence (AI) – is already an essential means of addressing those strategic needs, offering productivity-enhanced growth at scale. But the scarcity of real economy assets (power availability and grid interconnection, among others) both enables and constrains AI's build-out. The resulting tension drives capital rewiring as resources flow toward asset owners and platform providers that can secure access and deliver results despite shifting regulatory and stakeholder requirements.

As portfolio construction evolves, once-clear boundaries between asset class and exposure become less distinct. This means that outcomes – whether focused on return enhancement or diversification – become more important. We simultaneously expect performance dispersion to widen as these shifts place greater value on cash flows, pricing power and execution. To build resilient private market portfolios, investors will need to prioritize:

- Exposures that offer inflation-resilient and less correlated return streams
- Scarcity – as both a growth driver and a portfolio diversifier
- Sources of excess return beyond concentrated public markets

Some asset classes will clearly benefit (**Exhibit 1**). Infrastructure and real assets, for example, layer in contracted cash flows for more durable income, while commodities supply key inputs. Private credit remains critical to financing the AI build-out, but underwriting discipline and structural protections increasingly differentiate outcomes. Gold and hedge fund strategies, particularly macro and relative value, provide useful diversifiers as stock-bond correlations shift and macro catalysts increase. As technology transforms competitive dynamics, venture capital connects investors to early-stage innovation while private equity helps drive operational efficiencies by both investing in technology and deploying it across portfolio companies.

Against this backdrop, access to private markets and alternatives will continue to democratize. In the U.S., pension reform and more retail-friendly structures are already reducing barriers to entry and broadening the investor base. While we still see private markets offering investors much-needed sources of diversification, inflation protection and return enhancement, the dispersion of manager performance across alternative assets will be greater than what many experienced in the previous market cycle. That said, we see managers' skills contributing to returns rising and have meaningfully upgraded our alpha estimates – especially for hedge funds, as lower correlations and higher volatility support returns.

Looking ahead, return drivers are shifting from macro to micro: Income growth and operational efficiency may become far more critical drivers of return than valuation. Furthermore, with correlations unstable and volatility expected to be higher, investors will need to sharpen their focus on investment outcomes as powerful currents reshape global risks and opportunities.

[1] G7 refers to Canada, France, Germany, Italy, Japan, the UK and the U.S. Nominal growth reflects our real GDP growth and inflation forecasts combined.

New forces support our 2027 return expectations for real assets and financial alternatives, but investment outcomes are widening

Exhibit 1: LTCMA expected returns (leveraged,* net of fees, %) 2027 vs. 2026

Real assets	2027	2026
Private real estate equity (USD)		
U.S. core	8.1	8.2
U.S. value-added	10.2	10.1
European core	7.1	6.9
European value-added	8.2	9.0
Asia-Pacific core	8.7	8.4
Asia-Pacific value-added	9.9	–
Global core**	7.9	7.9
REITs		
U.S. REITs	8.2	8.6
European REITs	8.1	6.5
Asia-Pacific REITs	7.9	8.1
Global REITs***	8.2	8.4
Commercial mortgage loans (USD)		
U.S.	6.3	6.2
Global infrastructure (USD)		
Core	7.1	6.5
Global transport (USD)		
Core	8.1	7.9
Global timberland (USD)		
Global timberland	6.2	6.3
Commodities (USD)◊		
Commodities	4.8	4.6
Gold	5.5	5.5

Financial alternatives	2027	2026
Private equity (USD)†		
Cap-weighted composite	9.8	10.2
Private equity - small cap	10.6	10.1
Private equity - mid cap	10.0	9.9
Private equity - large/mega cap	9.6	10.2
Private debt (USD)		
Direct lending	7.8	7.7
Venture capital (USD)		
Venture capital	8.8	8.5
Hedge funds (USD)		
Equity long bias	7.3	5.5
Event-driven	7.1	5.2
Relative value	6.1	5.7
Macro	5.6	4.1
Diversified††	6.7	5.3
Conservative‡	4.7	4.0

Source: J.P. Morgan Asset Management; estimates as of September 30, 2026, and September 30, 2027.

* All return assumptions incorporate leverage, except for commodities, where it does not apply.

** Return assumptions for global core real estate are new for 2027; for more detail, see our *Methodology Handbook*, page 26.

*** The global composite is built assuming the following weights: roughly 70% U.S., 10% Europe and 20% Asia-Pacific.

◊ The 2027 commodity projections do not account for execution/management fees consistent with a passive benchmark.

† The private equity composite is AUM-weighted: 65% large cap and mega cap, 25% mid cap and 10% small cap. Capitalization size categories refer to the size of the asset pool, which has a direct correlation to the size of companies acquired, except in the case of mega cap.

†† The Diversified assumption represents the projected return for multi-strategy hedge funds.

‡ The Conservative assumption represents the projected return for multi-strategy hedge funds that seek to achieve consistent returns and low overall portfolio volatility by primarily investing in lower volatility strategies such as equity market neutral and fixed income arbitrage. The 2027 Conservative assumption uses a 0.70 beta to Diversified.

Part one: Economic nationalism – trade tensions rise globally

This year, we revisit our analysis of economic nationalism, which continues to rise as concerns grow over security and resilience, particularly in the U.S. In this new era, industrial strategy, national security priorities and election-driven policy swings reroute both capital and supply chains.

Economic nationalism poses a clear risk to inflation, which is likely to remain volatile over the forecast horizon. We expect rates will be higher for longer, return drivers will shift, and income will increasingly accrue to capital and businesses that operate within – and profit from – supply-side bottlenecks.

The impact of this dynamic will be felt across all private markets, with real assets receiving a boost from more active fiscal policy and private equity increasingly focusing on domestic opportunities. The greatest potential for returns, however, lies with those operators that can effectively grow the cash flows to generate higher or more convex returns. Volatility also rises in this more unsettled environment, enhancing potential alpha from hedge funds as well as other opportunistic strategies.

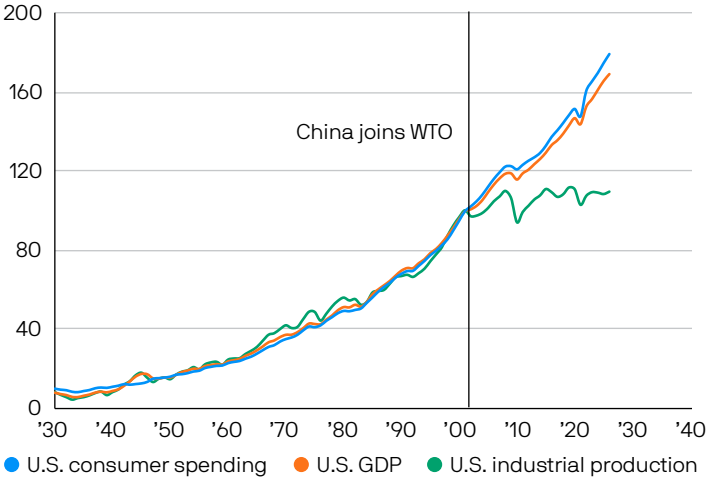
Fair winds for real assets: Real estate, infrastructure and transportation benefit

To understand the scale of this change, it's important to remember a historical pivot point: After China joined the World Trade Organization (WTO) in 2001, manufacturing globalized rapidly – and U.S. industrial production growth stalled (**Exhibit 2**). In response, economic nationalism intensified; since we began tracking its effects, global supply chains have deliberately rerouted as trade tensions have risen.

Increasingly, manufacturers are "reshoring," bringing production back to the country of origin, and "friend-shoring" by moving production to politically aligned countries. These trends, which will likely lead to a reacceleration of industrial production growth, support our 2027 return forecasts for global real estate and transportation assets. Companies are now optimizing for resilience alongside cost, even when the effort means supply chain redundancy and higher capex. A persistent and mispriced imbalance between supply and demand, which should strengthen capital values going forward, also supports our return projections.

As global supply chains have rerouted, we now anticipate that U.S. companies will accelerate efforts to reshore supply chains

Exhibit 2: Growth in U.S. consumer spending, GDP and industrial production, 1930 = 100



Source: U.S. Bureau of Economic Analysis, the Federal Reserve, J.P. Morgan Asset Management; data as of 2025.

This imbalance, grounded in the physical world, impacts nearly the entire real asset complex. Real world constraints have already become bottlenecks, helping support returns from infrastructure, real estate, transportation assets and commodities. However, physical location will become increasingly important, making geographies with reliable regulatory frameworks ever more attractive. For example, in 2026, nine U.S. states considered repealing data center tax incentives, and 28 of the 38 states that already provide incentives considered bills to amend and/or scale them back.[2] Inevitably, these bottlenecks will serve to reduce supply, giving asset owners more leverage to raise rents, which will drive cash flows and interest rates back to more normal levels.

As we look ahead, investments tied to logistics, data centers, pipelines and railways will likely benefit from supply-side tightness and policy rigidity, increasing upside performance potential, or convexity of returns. Asset owners and platform providers with access to grid capacity, skilled labor and fast, scalable permitting – aswell as connectivity to ports, railways and highways – are well positioned to deal with this shift in both supply and demand. Those with access will also be able to charge and sustain premium pricing for their services. From an investor's perspective, these assets will add to

[2] "Subsidizing Servers: How States Are Competing to Attract Data Centers," National Conference of State Legislatures, April 2026.

portfolio resilience, especially as an increase in domestic capital spending keeps inflation volatility and stock-bond correlations volatile.

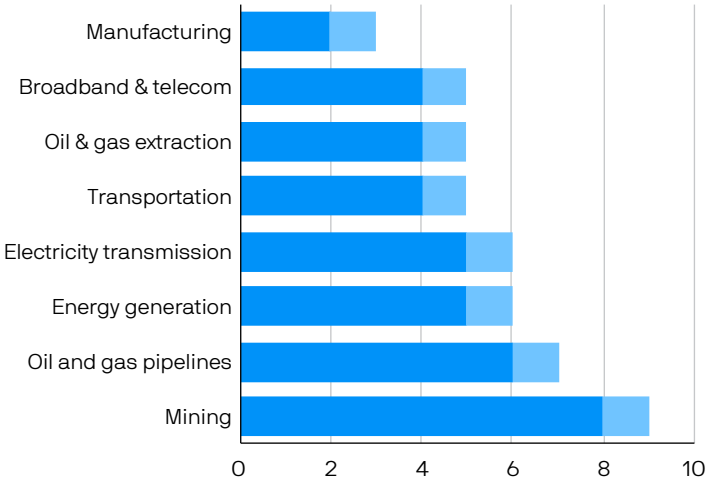
Changing policy risks reshape opportunities

As supply chains reorganize, the importance of understanding local policy will rise. Policy variability may become a persistent feature as mounting debt levels – and increasing capital costs – force governments to pursue policy objectives through a rules-based approach as opposed to simply spending more. Under these conditions, local knowledge and expertise become increasingly relevant: In real estate, for example, fiscal constraints mean that climate change policies will likely become a part of national industrial strategy and increasingly dependent on rules-based implementation rather than subsidies.[3] This change could lead to higher construction costs, limiting development activity and embedding low vacancy rates for sustainably built, market-leading assets.

From mining to manufacturing, we expect to see a sharper bifurcation between institutional, future-proof assets and everything else (**Exhibit 3**). Shifting levels of demand, capex need and terminal value also increase the complexity of alpha generation for asset managers as the drivers of excess return migrate beyond the underlying fundamentals.

The average permitting time for projects varies significantly by industry sector

Exhibit 3: Average permitting time by industry sector in years (light bar represents potential extension)



Source: McKinsey & Company, J.P. Morgan Asset Management; data as of September 30, 2026.

Infrastructure, which links strategic goals to tangible assets, will become increasingly critical. With USD 31 trillion of infrastructure needed across the U.S., Europe and Japan by 2040,[4] we expect public investment – in combination with strategic development – to enhance and modernize electrical grids, transport and logistics networks, and other infrastructure and transportation assets. Execution may well be the most binding constraint. Permitting timelines for data centers, for example, are subject to community opposition, supply chain constraints and changing political appetites. We expect the contrast between local opposition and societal need to become increasingly stark, supporting returns from many real assets but also causing greater dispersion of returns.

Gold still provides a valuable hedge

Over our forecast horizon, rising economic nationalism reshapes commodity and input risks. Access to critical minerals remains structurally tight and politically sensitive, pushing our 2027 return assumption for commodities up to 4.8% from 4.6% last year. Gold's expected return is stable at 5.5%; what is arguably more important is that it retains its role as a key hedge as globalization's erosion raises the probability of policy shocks and abrupt correlation changes. However, given the volatile nature of these assets, using commodities as an effective portfolio hedge will require ongoing monitoring and management.

Venture capital supports strategic innovation

Economic nationalism is also likely to create a more deliberate, strategic cycle in venture capital, providing a modest lift to returns. We remain constructive on technology aligned to strategic initiatives, including defense and security, advanced manufacturing and development goals – especially technologies that help reduce country- or route-specific dependency across critical supply chains. This environment should also create opportunities in logistics assets that are capacity constrained by land availability, transport access, available power, grid interconnectivity and compute potential – a dynamic that is further supported by the intersection of fiscal constraint and policy complexity. In addition to real estate, this trend has direct implications for venture capital as well as traditional buyout and infrastructure strategies.

[3] Ludovic Thulliez, John Bilton and Kerry Craig, "Who bears the cost? The evolving economics of climate change," 2027 Long-Term Capital Market Assumptions, J.P. Morgan Asset Management, October 2026.
[4] Chris Heathcote, Ian Mulheirn, "Global Infrastructure Outlook," Global Infrastructure Hub (G20) and Oxford Economics, 2017; J.P. Morgan Asset Management.

A heightened focus on domestic investment, however, looks set to collide with more frequent macroeconomic and policy-related catalysts. This will likely result in relative value dislocations becoming more common, increasing demand for global macro and relative value hedge fund strategies to mitigate geopolitical risk and policy uncertainty.

Part two: Technology adoption – a gathering wave gains speed

Over our 10- to 15-year investment horizon, technology adoption helps offset pressures created by economic nationalism and fiscal activism, namely capital spending and deficit expansion. Although artificial intelligence supports productivity gains, providing a boost to growth and return expectations, the market impact will not belinear.

Across private markets, this shift from a world of capital abundance to one in which capital is more discerning will likely enhance returns for venture capital, private equity and direct lending. All three invest in companies developing new technology while simultaneously using it to improve their underlying investment processes. Return dispersion will be increasingly tied to implementation as workflow automation, faster and more informed decision-making and less expensive AI models lift margins and reduce unit costs.

In private equity and venture capital portfolios, this trend may create a more consistent playbook for mispricing and value creation. Instead of reinventing systems, sponsors will be able to create shared tooling and centralized enablement teams to help portfolio companies scale their businesses. This focus on operational efficiency and firm-level productivity boosts small cap private equity's returns relative to large cap, with additional support coming from resource bottlenecks that may trap some returns at the local level. Higher returning or private equity-like real estate, infrastructure and transportation strategies should also benefit from the same tailwinds.

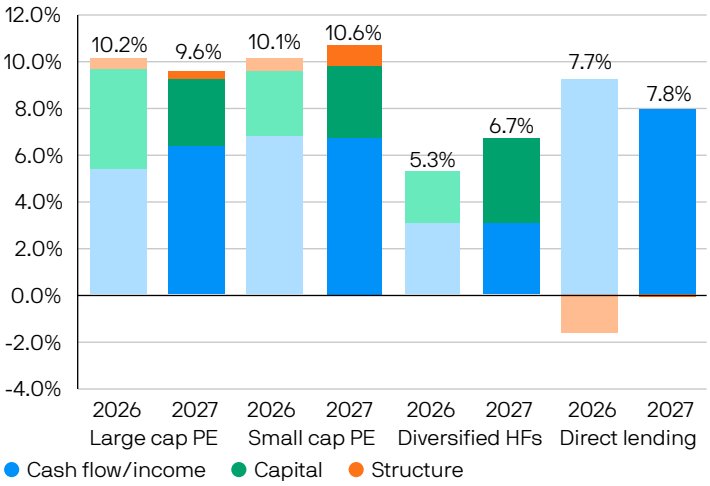
In both core real estate and infrastructure, AI is boosting demand for data centers and for logistics/industrial sites that offer ample and reliable electric power. Over the near term, constraints on the supply of properly entitled land, available power and fiber capacity will enable the owners of scarce, well-located assets to raise rents faster. This dynamic will be amplified by constraints related to capital spending, reinforcing the importance of manager operational efficiency and income as drivers of returns.

AI informs everything, everywhere

As challenging demographics – and reduced immigration – affect businesses, technology adoption continues to gain momentum. Robotics and automation can help mitigate labor constraints in physical businesses, supporting output and quality while reshaping capex intensity. The best managers across private markets will be able to show evidence of how they operationalize technology adoption regardless of the underlying assets in the portfolio. In real assets, this push will translate into income growth; in financial alternatives, it will manifest as an increase in capital values (**Exhibit 4**).

Technology will increasingly differentiate between winners and losers

Exhibit 4: Financial alternatives' expected returns, 2026 vs. 2027



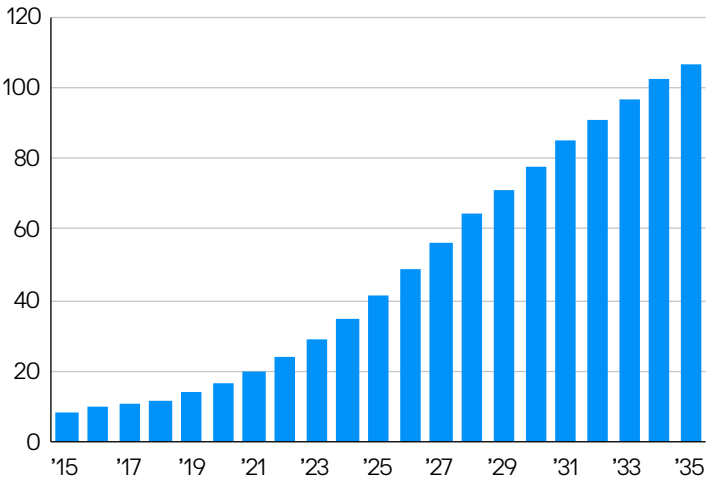
Source: J.P. Morgan Asset Management; data as of September 30, 2026.

The risks are equally material. Implementation is always uneven, benefits can be competed away, and technology adoption – particularly AI-related integration – can introduce new risks. If AI lowers barriers to entry, economic "moats," which depend on a company's ability to maintain a lasting competitive edge over its rivals, can erode faster than traditional underwriting assumptions imply. This raises the importance of location and local expertise for real estate and infrastructure but disadvantages those strategies that rely too heavily on financial engineering ormacroeconomic shifts to drive returns.

Infrastructure offers a range of opportunities as grid modernization, transmission, distribution and storage become backbone assets. Individual assets with durable regulatory frameworks, contracted cash flows or advantageous siting – another form of competitive moat – can attract significant capital, especially if their cash flows are expected to grow. Conversely, projects exposed to permitting risk or policy uncertainty may require higher risk premia despite robust demand (**Exhibit 5**), but these trends still support rising allocations to the real asset complex.

AI electricity demand is projected to grow significantly through 2030

Exhibit 5: Projected data center energy demand growth (in terawatt hours per year)



Source: Bloomberg Finance L.P., J.P. Morgan Asset Management; data as of September 30, 2026. *Power demand refers to the total electricity used by the data center facility.

Technology adoption reshapes real estate opportunities

These market forces will directly reshape real estate. For example, we expect "powered" sites and data center-adjacent development to gain in value, but the bottlenecks will be decisive, with both direct and indirect impacts. Grid capacity and permitting can constrain supply even as demand accelerates, creating the potential for both high utilization and project execution risk. Legacy real estate stock faces faster obsolescence: Tenant preferences evolve, and electrification, resiliency and power quality requirements may force reinvestment. All these factors will support rental growth for higher quality assets but also greater dispersion of returns.

Other asset classes will feel the effects. Transportation is likely to shift as automation reshapes last-mile costs and service levels. This change is creating both platform opportunities and disruption risks, depending on labor dynamics and capex requirements. In hedge funds and systematic trading strategies, the tooling and data environment may expand the feasible strategy set, but – at the same time – crowding and model risk may increase. As a result, our alpha estimate for diversified hedge funds increases meaningfully,[5] but this improvement is likely to come with wider dispersion of returns.

While private real estate markets may gradually tilt toward power-intensive industrial exposures, the change could increase sensitivity to power pricing, policy and capex reinvestment needs, making asset class labels less informative than the underlying drivers of return – and creating new and less familiar return drivers. Despite these changes, we still believe that all three of these strategies – real estate, transportation and hedge funds – have the potential to be effective diversifiers within the context of a broader portfolio.

With AI adoption, venture capital opportunities bifurcate

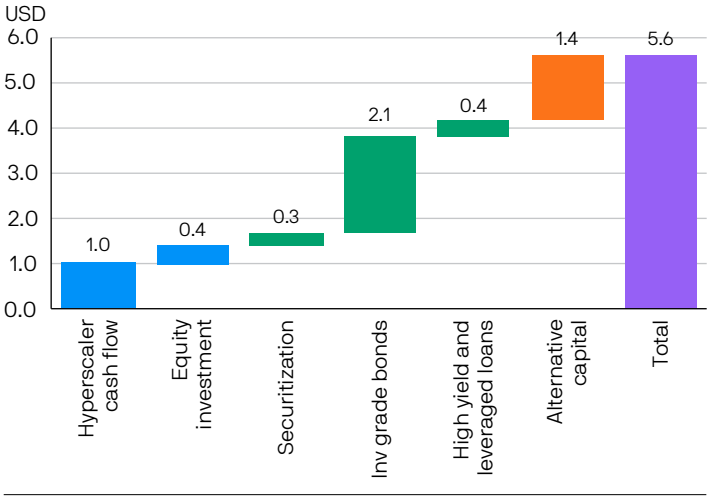
Technology adoption also alters – and bifurcates – the venture capital opportunity set. We expect to see continued value creation in AI-native software alongside efforts tied to compute, energy efficiency, automation and enabling infrastructure. Distribution, proprietary data access, regulatory knowledge and execution will be key differentiators, leading to an increase in both the left and right tails of the expected return distribution and making manager selection increasingly important.

Private credit sits at the intersection of these market forces. On the opportunity side, we see potential growth in tech-linked collateral and financing needs related to data centers, equipment financing and asset-backed structures (**Exhibit 6**). However, residual value risk rises as technology cycles shorten, compressing the lifespans of dedicated assets. The greatest risk, however, is dispersion: As more capital reaches for yield in AI-adjacent financings, documentation and structural protections will increasingly differentiate outcomes. That said, even as the lines between public and private markets blur, private credit has clearly secured its place as a long-term, durable portfolio allocation.

[5] Since return assumptions for diversified hedge funds represent a weighted sum of the other strategies and the alpha assumption changed for other strategies, the alpha projection for diversified also increased. For more detail, see our *Methodology Handbook*.

Expect an array of funding sources for AI capital spending

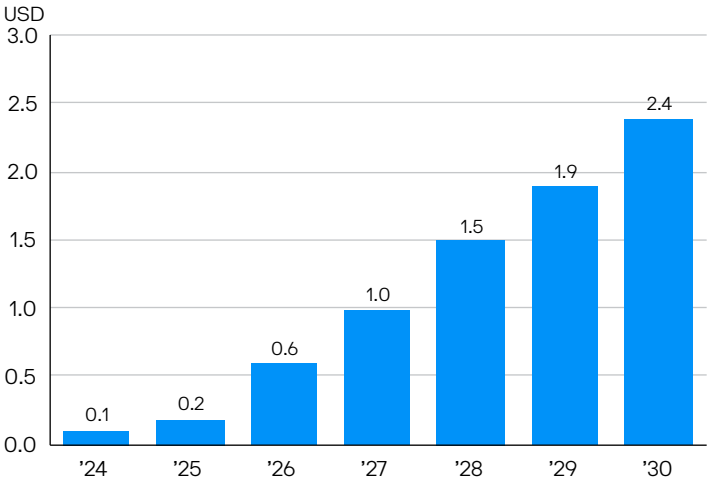
Exhibit 6: Expected total capex investment through 2030 (USD trillions)



Source: J.P. Morgan Asset Management; data as of September 30, 2026.

U.S. retail investors' allocations to private capital in retirement accounts may grow exponentially by 2030

Exhibit 7: Projected assets under management (USD trillions)



Source: Deloitte Center for Financial Services, J.P. Morgan Asset Management; data as of September 30, 2026.

Part three: Capital rewiring alters investment flows

The capital rewiring theme – driven by increasing domestic investment keeping more capital in home markets and by a normalization of interest rates and monetary policy – reflects the shift in capital flows that will likely result as policymakers, facing high levels of government debt, finance capital spending by unlocking vast pools of dormant funds. It is also a consequence of capital spending being more domestically focused. This shift, we believe, is already visible as private markets grow – both as a portfolio allocation and as a source of funds for domestic investment.

As fiscal activism pulls capex cycles forward, demand for capital is clearly rising; it will likely be met by greater participation from retail and institutional investors (**Exhibit 7**). This combination – fiscal activism plus democratizing access – will expand the investible opportunity set and support fundraising across both real assets and financial alternatives. At the same time, higher inflation volatility and less stable stock-bond correlations will increase the importance of holding real assets, which can provide additional diversification as well as a credible inflation hedge.

As demand from retirement and wealth channels rises, practical risks may come to the fore, including liquidity mismatches, valuation governance issues and crowding risks. Investment vehicles that offer periodic liquidity against inherently illiquid assets can work well in stable markets, but they can behave pro-cyclically under stress.

Increasingly, investors are taking a total portfolio approach, focusing on outcomes – diversification, income, return enhancement or factor exposures – rather than fixed allocations or labels. This trend, we believe, further supports the adoption of semiliquid vehicles. It also sharpens focus on areas where private markets offer attributes that public markets struggle to replicate, including direct operational control, bespoke cash flow structuring and illiquidity premia.

In private credit, for example, semiliquid vehicles such as evergreen funds can broaden access to income-oriented strategies, but their use can also amplify scrutiny of leverage, asset-level liquidity and workout timelines when spreads gap wider. In private equity and real estate, greater retail participation can reduce the appetite for opaque valuation practices, meaning managers that can demonstrate a robust valuation framework and effectively address liquidity needs may earn a structural fundraising advantage. (The opposite will hold true for managers that cannot address these needs.)

Few assets are likely to be left behind as these forces continue to shape the economic backdrop. While this makes allocating the incremental dollar to these asset classes easier, market tailwinds will also push return dispersion higher.

Performance dispersion gets supercharged

We expect performance dispersion to widen across most alternative assets as larger flows increase the premium investors place on strategies capable of outperforming the median manager. This alpha, importantly, can come in different forms, with real assets and hedge funds providing diversification while private equity and venture capital help boost overall rates of portfolio return. We expect the following impacts to emerge in three key asset classes:

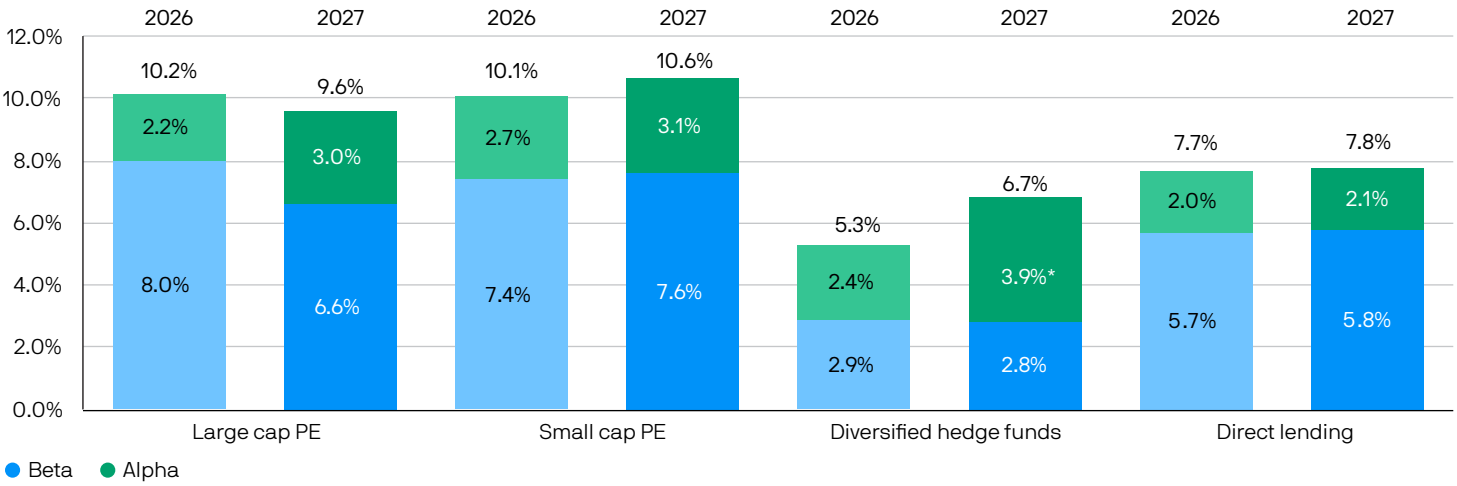
- In private credit, a wider gap will likely emerge between lenders that actively engage with their borrowers vs. more passive lenders that simply provide capital.
- In private equity, greater performance dispersion will reinforce the shift from multiple expansion to repeatable value creation, governance and operational alpha (**Exhibit 8**).
- In real estate, dispersion will underscore the value of market access and understanding local idiosyncrasies, while increasing the importance of income maintenance and growth.

The confluence of these factors will increasingly differentiate managers, increasing the convexity of these private market investments. We expect allocations to gold and hedge funds to rise as stock-bond correlations prove less stable and the ability to harvest alpha improves.

With a higher, more durable cost of capital, both investment hurdles and potential rewards reset. Discount rates and financing costs may be higher, but so too will starting yields. Consequently, income will account for a greater proportion of returns. At the same time, capital growth will rely less on cap rate compression and more on stronger real income growth. In this environment, real estate, infrastructure and transportation gain a structural advantage as the primary driver of capital returns shifts from yield moves to income growth – enhancing the convexity and sustainability of returns (**Exhibit 9**).

Rising alpha estimates across financial alternatives will be matched by an increase in performance dispersion

Exhibit 8: Financial alternatives' expected returns and drivers

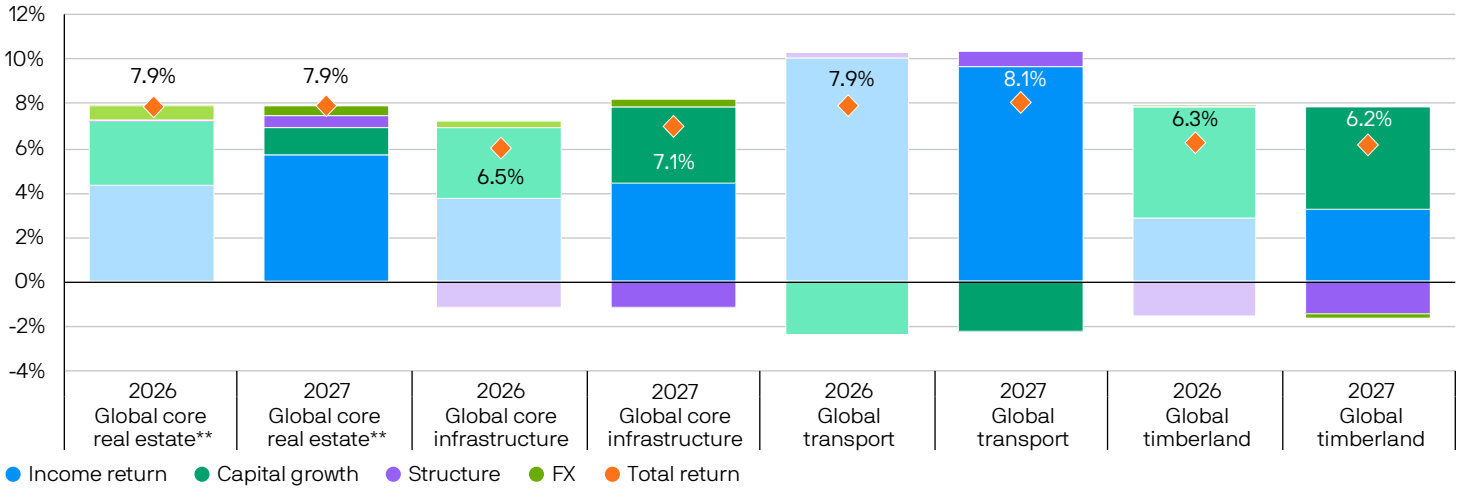


Source: J.P. Morgan Asset Management; data as of September 30, 2026. Alpha is defined as the intercept (or, in the case of private equity, the sum of the intercepts), except for direct lending, where alpha is defined as the excess return over the expected leveraged loan spread.

* The alpha boost seen in hedge fund returns comes in part from methodology enhancements this year.

Real estate, infrastructure and transportation assets gain a structural advantage as primary return drivers shift

Exhibit 9: Real assets' total returns and drivers*



Source: J.P. Morgan Asset Management; data as of September 30, 2026.

Note: Global core real estate's expected return is the weighted sum of the published regional forecasts.

* 2026 real estate calculations used the initial net operating income (NOI) yield as a proxy for the expected income return. For 2027, we have adopted an amended methodology that uses the expected path of NOI yields combined with the impact of capital expenditures and a gradual unwind of reversionary potential as the basis of the income return calculation. As a result of this change, returns categorized as capital growth in our 2026 numbers are now reported as income returns in our 2027 numbers. While the change doesn't alter the year-over-year comparability of our total return projections, it does mean that income and capital elements of the forecasts are not comparable.

** Global core real estate return assumptions are new for 2027; for more detail, see our *Methodology Handbook*, page 26.

Conclusion: Fair winds, with volatility in the forecast

Our three themes – economic nationalism, technology adoption and capital rewiring – are reshaping the investment landscape and our long-term outlook for returns across private markets (**Exhibit 10**). Managers that can navigate this environment, especially those that can steer capably through shifts in policy, will be able to deliver compelling alpha and contribute positively to a range of multi-asset portfolio goals.

But where should one allocate the incremental investment dollar today? Leveraging an outcome-oriented approach focused on either return enhancement or diversification will be key, with income growth and operational efficiency key attributes to consider as manager selection gains importance.

The risks, however, are clear: Normalized interest rates will limit upward pressure on multiples for most assets. That means operational expertise – the ability to deliver earnings growth and enhance the quality of revenues – will become a critical skill, particularly as AI adoption drives transformation. Legacy real estate, for example, often has hidden and complex capex requirements. As a result, liabilities, especially those tied to power quality obsolescence, may be understated. We would also encourage investors to avoid weaker private credit vintages in which more permissive documentation and crowded yield-chasing look set to collide with higher-for-longer financing costs.

Over the coming decade, asset class and strategy choices still matter, but investors should view them through the lenses of diversification and return enhancement. Further, manager selection will be equally, if not more, important amid rising return dispersion as new forces, such as a manager's ability to improve underlying assets' earnings power, gain significance. Investment decisions will be increasingly tied to outcomes, and while plenty of alpha remains to be had, the key will be recognizing that the drivers have changed: Income growth and operational efficiency now top the list.

Our three themes reshape the investment landscape and our long-term outlook for all alternative assets

Exhibit 10: Opportunities created by our three themes (by asset class/strategy type)

Asset class	Economic nationalism	Technology adoption	Capital rewiring
Global private equity real estate	U.S./EU industrial/logistics plus "node" locations benefit; policy/permitting drives dispersion	Prioritize powered sites; avoid legacy stock with rising resiliency/electrification capex	More retail/institutional inflows into vehicles; terms/valuation discipline matter
REITs	"Node winners" favored over broad beta; property/geography dispersion rises	Tilt to power-intensive exposures, including powered sites; obsolescence risk for legacy	Retail channels plus persistent discounts elevate vehicle terms and governance; M&A/take-privates possible
Commercial mortgage loans	More policy/permitting sensitivity leads to premium on local structuring/enforcement	Price obsolescence plus capex plus power constraints; favor upgraded/powered collateral	Semiliquid demand raises focus on liquidity mismatch, valuation governance, workout timelines
Global infrastructure	Pipelines expand under industrial strategy; underwriting centers on jurisdiction/policy durability	Grid, plus transmission, distribution and storage; permitting/interconnection are binding	Fiscal activism pulls capex forward; democratized access supports fundraising and financing demand
Global transport	Rerouted trade plus resilience reprices corridors/nodes; dispersion rises	Automation reshapes last-mile economics; platform winners vs. disruption risk	Capex pull-forward supports pipelines/financing but increases execution dispersion
Global timberland	Fragmentation increases jurisdictional optionality/dispersion	Benefits indirectly from this trend; emphasize platform execution/asset stewardship	Broader inclusion can increase flows to scalable platforms
Commodities	Critical minerals: higher project volatility; gold: hedge under fragmentation	Power/permitting links to real assets; flag stranding/obsolescence pockets	Greater allocator use as a "real asset" sleeve; episodic dislocations
Private equity	Strategic-domain winners; premium on local execution; dispersion rises	"Horizontal" AI value creation; moat duration may compress	Bigger LP base supports fundraising; governance/operational alpha matters more
Private debt/direct lending	More idiosyncratic risk results in higher value of covenants/workouts	Tech-linked collateral grows; residual value plus power contracts matter	Income demand plus new capital expands private credit; dispersion widens by manager
Venture capital	Hard-tech tailwinds in strategic domains (defense/security/advanced manufacturing/health)	AI-native software plus longer-duration hard tech; distribution/data/regulation differentiate	Broader participation supports fundraising, but manager dispersion remains high
Hedge funds	More macro/policy volatility results in stronger macro/relative value opportunity set; demand for geopolitical hedging	Tooling expands systematic set; crowding/model risk rises	Broader allocators can raise demand as "financial alternative"; capacity discipline matters

Source: J.P. Morgan Asset Management; information as of September 2026.

Portfolio implications

How intentional thematic exposure can build portfolio resilience

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In brief

- Overall, our three Long-Term Capital Market Assumptions themes (economic nationalism, technology adoption and capital rewiring) boost our return assumptions. Higher earnings and yields push up the projected return for a balanced portfolio by 60 basis points, to 7.00%. A USD balanced portfolio with a 30% alternatives allocation offers returns of 7.50% and, importantly, a Sharpe ratio 21% higher than a public markets-only portfolio.
- Investors should understand the changing nature of risk both within and across asset classes. We raise our volatility forecasts and shift our correlation assumptions. The volatility of inflation, rates and equities will likely move higher over our investment horizon. Meanwhile, we expect the stock-bond correlation to be more positive and unstable.
- A resilient portfolio can lean into opportunities while drawing on diversifiers to cushion the impact of different types of shocks. We think negative supply shocks will occur almost as frequently as demand-side shocks. For supply shocks, portfolios need inflation hedges and real assets. For demand shocks, duration continues to play an important role in portfolios, especially now that forward-looking return assumptions begin with higher rates.
- Investors need to be intentional about thematic exposure by analyzing portfolios holistically, with a total portfolio focus and an evaluation of both public and private markets. Our framework allows an investor to consider the portfolio implications of increasing or decreasing exposure to a particular theme.
- A portfolio optimized using our projected returns will result in an elevated tilt toward the tech adoption theme. We think that's a net positive. But an investor looking for less exposure to the tech adoption theme can choose to decrease exposure to U.S. and emerging market equities, as well as financial alternatives, and add exposure to developed market ex-U.S. equities, parts of core real estate, and gold.

As we have discussed elsewhere in our Long-Term Capital Market Assumptions (LTCMAs), three powerful themes – economic nationalism,[1] technology adoption[2] and capital rewiring[3] – will drive the economy and markets over the next 10 to 15 years. The crosscurrents of these themes collectively push up our economic growth and asset class return projections. Overall, growth tailwinds should prevail over the policy and market headwinds that will buffet portfolios over our investment horizon (**Exhibit 1**).

Relative winners and losers vary across themes

Exhibit 1: Asset market impacts of themes

	Stocks	Bonds	Alts	Real assets
Economic nationalism	⇅	−	⇅	+
Technology adoption	+	⇅	+	+
Capital rewiring	+	⇅	+ / ⇅	+

Source: J.P. Morgan Asset Management; data as of September 30, 2026.

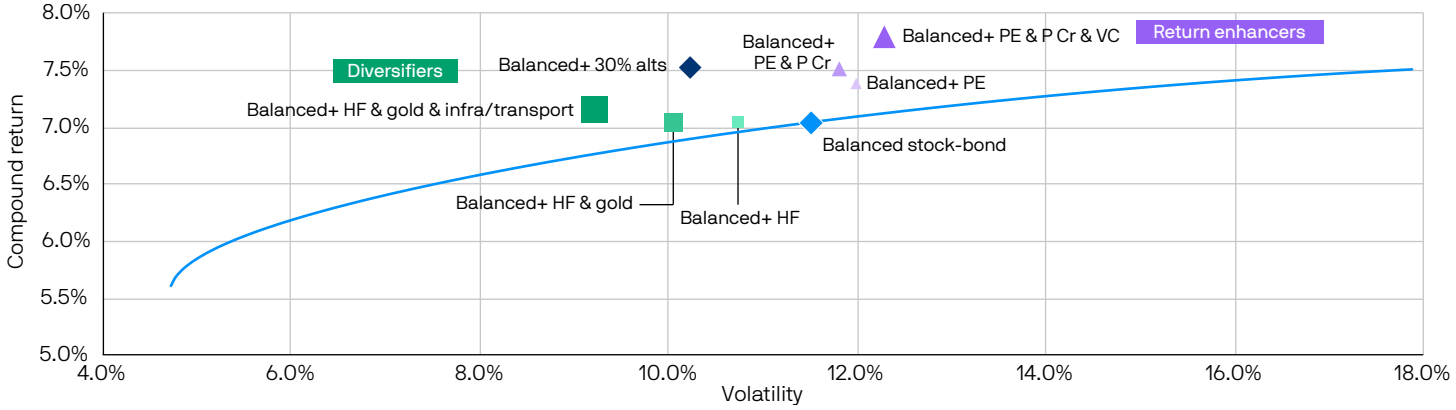
How might each theme impact asset class performance? Economic nationalism cuts in different directions: Inflationary risks pressure bonds and make real assets a standout performer, while increased domestic investment potentially creates new corporate revenue streams. The technology adoption theme boosts our return assumptions for stocks, alternatives and real assets, and it nudges our economic growth assumptions higher via productivity gains. The theme is mixed for bonds by increasing the cost of capital in the short term given rising debt issuance. Capital rewiring supports U.S. stocks with some global spillovers, emerging markets (EM) growth and FX, and G-4 ex-U.S. bonds relative to Treasuries. Hedge funds and real assets can benefit from capital in motion.

A balanced stock-bond portfolio offers solid returns and a starting point from which investors can navigate the themes in play. Upgrades to earnings and yields push up the projected returns for a balanced stock-bond portfolio by 60 basis points (bps) compared with the 2026 LTCMAs, to 7.0%. Given normalized yields, global bond return forecasts are the highest in two decades.

A balanced portfolio that includes a 30% alternatives[4] allocation offers higher returns, up 50bps from the stock-bond portfolio, to 7.5%, and more tools for "theme-aware" investing. In a portfolio, alternatives can serve either as return enhancers or diversifiers. Adding 30% of a blend of private equity, venture capital and direct lending can boost balanced portfolio returns by 80bps and the Sharpe ratio by 11%. Adding 30% of a blend of diversified hedge funds, gold, infrastructure and transportation boosts the balanced portfolio Sharpe ratio by 22% while maintaining portfolio returns (**Exhibit 2**).[5]

Adding alternatives to a balanced portfolio improves the risk-return profile

Exhibit 2: Portfolios vs. the 2027 USD stock-bond frontier



Source: J.P. Morgan Asset Management; data as of September 30, 2026.

[1] Economic nationalism: policies that focus on national advantage, potentially at the expense of international cooperation.
[2] Technology adoption: the building and subsequent widespread integration of an innovation (in this case, artificial intelligence) into business processes.
[3] Capital rewiring: a shift in public and private capital flows, a consequence of nations focusing on domestic investment, at the margin reducing international capital flows, which have tended to accrue to the U.S.
[4] 7.5% core real estate, 7.5% other real assets, 7.5% private equity, 4.5% private credit and 3% hedge funds.
[5] In this case, we have modeled returns for diversifiers including hedge funds, gold, infrastructure/transport. Note that core real estate can also provide powerful diversification. However, with U.S. real estate forecasts north of 8% for core and above 10% for value-added, there is also a case for core real estate sitting with return enhancers.

Quantifying what uncertainty may do to portfolios

Our LTCMAs acknowledge that market uncertainty will likely rise over the next 10 to 15 years. That suggests two-sided risks to inflation and the potential for capital misallocation amid a capex boom. As a result, we boost our volatility forecasts and shift our correlation assumptions. Investors thus need to understand the changing nature of risk both within and across asset classes.

We identify each theme's implications for the overall types of risk portfolios need to be prepared for, including macro shocks (demand-side and supply-side) and nonmacro shocks such as those related to capital rewiring and tech adoption. We map out how each theme might impact our volatility and correlation assumptions, and consider the potential takeaways for portfolio construction (**Exhibit 3**). The ultimate goal: understanding how portfolios need to adapt to build more resilience.

More than just macro shocks: Diversifying the diversifiers

Economic nationalism

Types of shocks: As domestic capex rises – and, with it, competition for scarce resources – negative supply-side shocks will likely become more commonplace. Indeed, we expect inflation shocks to occur nearly twice as often as they would have historically. Investors will likely demand greater compensation for taking on those risks. In constructing our risk projections, we assign a 12.5% weighting to periods of higher inflation (and rate) uncertainty, double the average over the past 20 years. For negative demand-side shocks (recession), we assign a 15% weighting, which is in line with the long-run probability but higher than the average of the past 20 years.

Our framework considers how each theme might impact our volatility and correlation assumptions, and presents potential takeaways for portfolio construction

Exhibit 3: Portfolio building blocks to themes

	Economic nationalism	Capital rewiring	Technology adoption
Type of shocks	Negative supply-side shocks may occur almost as frequently as demand-side shocks	Can lead to sudden, disruptive market swings that are unrelated to traditional macroeconomic indicators	Demand-side shock may occur should there be capital misallocation and an eventual capex bust
			Can lead to sudden market swings around pricing the "winners and losers"
Volatility	Elevated inflation and rate volatility remains a feature	Leads to more turbulence across markets	Higher global equity volatility assumptions, especially U.S., leading to unchanged Sharpe ratio
	Long U.S. Treasury volatility now above post-GFC average		
Correlation	Stock-bond correlation positive and drifting higher at 0.34 (global equity and U.S. Agg)	Unstable stock-bond correlation	Higher correlation between regions, sectors, assets as exposure to tech build-out and adoption grows
			Pairwise correlation within indices remains low due to corporate winners and losers
	Average masks the unstable nature of these correlations	Unstable U.S. dollar-U.S. stocks correlation	
Portfolio construction implications	Add diversifiers against negative supply-side shocks: inflation-linked bonds, gold, real assets and liquid alternatives	Diversify the diversifiers	Given potential for demand-side shocks, traditional recession diversifiers like duration and quality factor are important
	Bonds can still lower overall portfolio volatility: High quality bonds have lowest correlation to equities in public markets	Avoid too much concentration to momentum strategies	Imperative to understand holistic portfolio exposure to AI/tech adoption
		Non-U.S. dollar-based investors: Hedge more U.S. equity exposure	Diversify exposure to nontech theme: European equities, parts of core real estate

Source: J.P. Morgan Asset Management; information as of September, 2026.

Volatility: Since 2023, our LTCMAs have incorporated inflation and rate volatility assumptions that are elevated relative to the post-global financial crisis (GFC) average. We do so again this year, with the greatest impact on long-duration assets. For example, long U.S. Treasury volatility is now higher than the post-GFC average (**Exhibit 4A**).

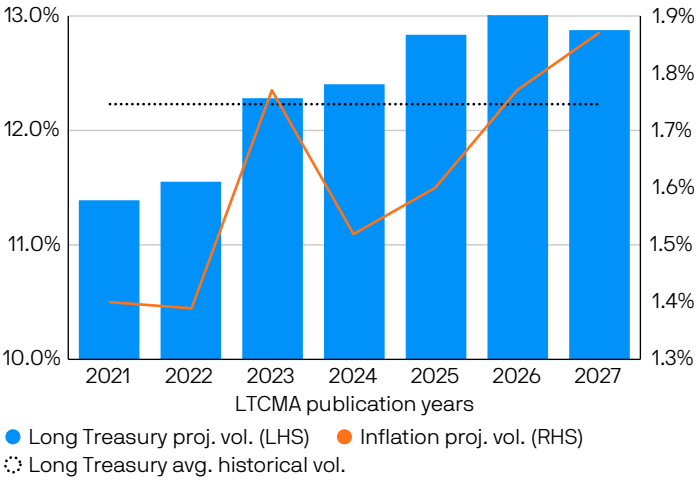
Correlation: We expect stock-bond correlation will remain positive and may continue to drift higher over our investment horizon. Consistent with the upward move in both realized correlations and correlation forecasts since the 2023 LTCMAs, we project a 34% correlation between global equity[6] and U.S. aggregate bonds (**Exhibit 4B**). But that average masks the underlying instability of these correlations. They can turn negative during negative demand shocks and positive – at times quite positive – during negative supply shocks.

Portfolio construction implications: A resilient portfolio requires assets that can help mitigate negative supply-side shocks. As the inflation shock of 2022 made painfully clear, investors cannot rely solely on duration for portfolio diversification in an environment of rising, positive and unstable stock-bond correlations. Yet bonds continue to play an important role in portfolios, lowering overall portfolio volatility. We still expect high quality fixed income to have the lowest correlation to equities among liquid assets.[7]

There is no one-stop shop for full portfolio resilience. Asset allocators have multiple levers to pull to strengthen portfolios, such as adding "inflation-proof" assets like gold, real assets (infrastructure, transportation) and liquid alternatives (alpha strategies and options-based income strategies).[8]

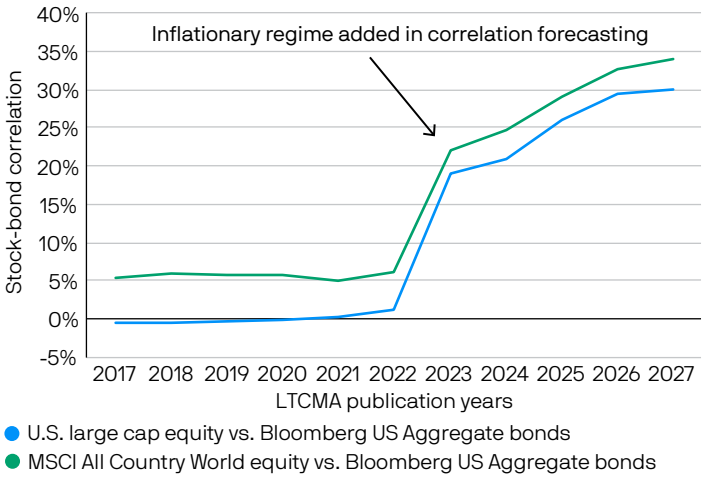
Inflation and bond volatility forecasts remain elevated compared with the historical average

Exhibit 4A: Long U.S. Treasury volatility, U.S. inflation volatility, projected and history since 2006



We have been raising our U.S. stock-bond correlation forecasts since 2023

Exhibit 4B: Projected stock-bond correlations, by LTCMA publication year



Source: J.P. Morgan Asset Management; data as of September 30, 2026.

[6] MSCI All Country World equity in USD.
[7] See Jared Gross, Grace Koo, Gabriela Santos et al. "No time for autopilot: Charting a path to resilient portfolios," *2025 Long-Term Capital Market Assumptions*, J.P. Morgan Asset Management, October 2024.
[8] See Grace Koo, Jared Gross, Gabriela Santos et al., "Changing portfolio construction in shifting landscapes," *2026 Long-Term Capital Market Assumptions*, J.P. Morgan Asset Management, October 2025.

Technology adoption

Types of shocks: We believe the adoption of artificial intelligence (AI) will ultimately boost productivity, economic growth and corporate profit margins. But we also believe the AI build-out and adoption across the economy will come with its fair share of market volatility. Investors should prepare for market shocks related to turbulence around the AI theme, as seen in January 2025 and July 2026. As past large innovation/capex booms have shown, they bring with them an elevated risk of eventual busts and capital misallocation, even if the long-run impact of the investment on the economy is net positive.

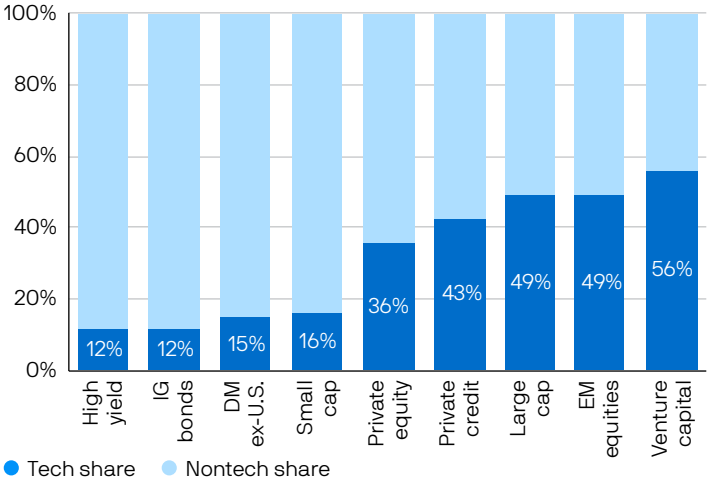
Volatility: Optimism about the impact of AI on revenues and margins has pushed up our global equity forecasts. However, uncertainty over the timing and impact of these gains leads us to also raise our global equity volatility assumptions. This results in largely unchanged Sharpe ratios. U.S. equity volatility in particular increases, given higher valuations and increasing risks of capital misallocation. History shows that in any large and rapid capex cycle (and the AI capex boom may well be unrivaled), episodes of market volatility are to be expected.

Correlation: Exposure of various asset classes to the AI theme is rising as the AI build-out encompasses more industries and regions – and draws on various funding sources across public and private markets (**Exhibit 5**). Currently, the highest concentration to the theme is found in equities, especially the U.S. and Asian equities. Going forward, the representation within investment grade credit is also set to rise meaningfully. Private equity and private credit show noticeable AI concentration as well; as a result, their correlations to public equity and credit are on the rise.

Portfolio construction implications: Over the coming decade, the AI ecosystem will evolve as investors reassess the scale of capex, the pace of AI adoption and what markets have and haven't priced in. Understanding exposure to the AI theme holistically across a portfolio will be essential. As we assess the current landscape, the U.S. equity market is the global market most directly exposed to the tech adoption theme. But even more concentrated exposure exists elsewhere – notably in Asia, where exposure to the most cyclical elements of the AI value chain is especially acute.

Exposure of various asset classes to the AI theme is rising

Exhibit 5: Exposure to technology by asset class



Source: J.P. Morgan Asset Management; data as of September 30, 2026.

In credit markets, the transmission channel to the tech adoption theme is not limited to growth-sensitive areas such as high yield bonds or EM currencies. Tech exposure is broadening as issuance accelerates, including in the investment grade markets where hyperscalers and other firms are financing the AI build-out.

Certain assets – for example, U.S. core fixed income – stand apart from the tech adoption theme. In addition, European and UK equities, and to an extent Japanese equities, mainly reflect their own fundamentals. This suggests these assets can serve as useful portfolio diversifiers.

AI exposure varies across alternative assets.[9] Venture capital and real assets such as data centers and some power generation companies have the greatest exposure to the tech adoption theme. Second in line are private equity and private credit diversified strategies (depending on the manager), as well as core infrastructure. Gold and parts of core real estate are the least exposed to technology and can thus provide uncorrelated return streams and strengthen portfolio diversification.

Capital rewiring

Types of shocks: The capital rewiring theme refers to shifts in public and private capital flows arising from an increasing focus on domestic investment. It is also driven in part by policymakers' efforts to unlock dormant pools of savings. While it is a slow-moving force, it can abruptly

[9] Mapping AI exposure in private markets is discussed in more detail in "AI-conscious asset allocation," Strategic Investment Advisory Group, J.P. Morgan Asset Management, September 2026.

reshape markets. For example, fiscal activism can cause rapid, policy-induced unwinding of foreign investments and a reshoring of capital flows.

Volatility: Capital rewiring shocks generally lead to greater turbulence across markets. However, standard asset volatility metrics may not fully capture the impact of these shocks. Since currencies are a crucial offset to sharp changes in capital flows, the impact on portfolio FX exposure may be more important than the direct effect on asset volatility.

Correlation: After 15 years of negative correlation, the correlation between the U.S. dollar and U.S. stocks may be changing (or at least proving to be more unstable, as it was in 2025). In addition, the potential for disruptive position unwinding can cause assets to become temporarily correlated to one another.

Portfolio construction implications: Global investors may especially benefit from having well-diversified portfolios, given the potential for sudden unwinds of crowded or momentum positions. Additionally, investors may need to rethink their currency exposure. For U.S.-based investors, unhedged international equity exposure can offer diversification to U.S.-driven moments of volatility via foreign currencies.

For non-U.S. dollar-based investors choosing to invest in U.S. stocks, the optimal currency hedging decision may be changing from fully unhedged exposure to partially hedged exposure.[10] In short, capital rewiring has the potential to create advantages for non-U.S. markets, but preparing for this move can be costly. Adding exposure to hedge funds and real assets can be beneficial, given they benefit from the capital in motion.

Putting it all together: Creating theme-aware portfolios

A thorough assessment of thematic portfolio exposure is critical to avoid unintentional tilts within a portfolio. Understanding how the themes impact returns, risks and portfolio diversification is a necessary first step. The equally important next step: incorporating that understanding into portfolio design so that portfolios have an intentional tilt toward or away from different themes.

To that end, we create a framework to evaluate portfolio exposure to individual themes. First, we build three theme portfolios by selecting the relative winners within each theme.[11] We then derive the correlations of a portfolio asset to each theme portfolio.[12] Combining the correlations with portfolio weights,[13] we can calculate the overall portfolio correlation to each theme. In other words, we can measure a portfolio's theme exposure holistically.

Using this year's LTCMA estimates, compared with the stylized balanced and balanced-with-alternatives portfolios, a mean variance-optimized portfolio[14] would overweight long-duration bonds, credit, Japanese equities, private core real estate, transportation and hedge funds. It would underweight European and EM equities and private equity. Due to our optimistic projections, as well as the rising representation of technology within asset classes, all three portfolios result in very high correlations to the tech adoption theme. Correlations to economic nationalism and capital rewiring are less strong, and they are further compressed by the optimizer (**Exhibit 6A**).

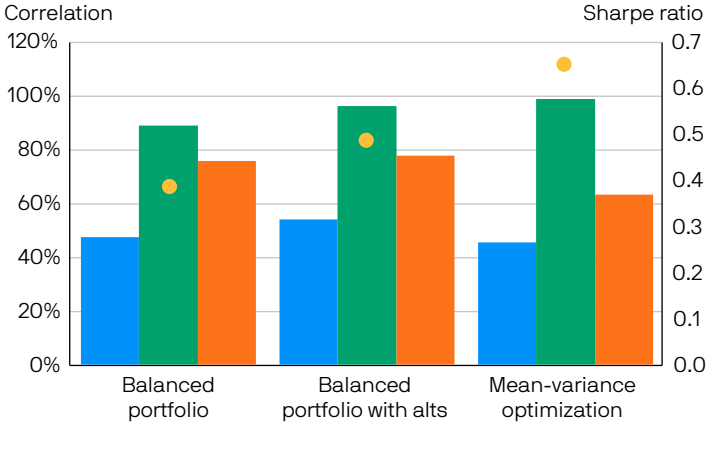
Investors can introduce portfolio correlations to themes as additional constraints when optimizing portfolios. This framework allows us to easily dial up or dial down our thematic exposures. While we are optimistic about the tailwinds from tech adoption, an investor may be more circumspect (or just desire greater thematic diversification). To reduce tech adoption exposure and raise exposure to economic nationalism and capital rewiring, an investor would decrease exposure to long-duration bonds, U.S. and EM equity, and financial alternatives, and add exposure to developed ex-U.S. equities, core real estate and gold. Similarly, investors can also maximize portfolio exposure to an individual theme by leveraging the same framework.

Exhibit 6B presents a simple analysis of a few variations of theme-aware portfolios.[15]

[10] See Koo, Gross, Santos et al., "Changing portfolio construction in shifting landscapes." *2*
[11] Theme portfolios are constructed using an equal risk contribution approach with a 10% portfolio risk target.
[12] Correlation is calculated using three-year weekly returns between portfolio asset and theme portfolios.
[13] Correlations are first converted to betas using the volatility forecasts. Portfolio correlations are then derived from portfolio beta (the weighted sum of asset betas) and portfolio risk.
[14] Optimization objective: Maximize the Sharpe ratio, subject to asset and group notional constraints.
[15] The optimizer identifies the portfolio with the highest Sharpe ratio within the feasible region, defined by LTCMA inputs and imposed constraints. As a result, the outcomes may not strictly enforce thematic correlations. For example, achieving perfect correlation to the economic nationalism theme is not possible, given the parameters set by the optimizer.

Optimization simultaneously improves a portfolio's Sharpe ratio and alters its theme exposure

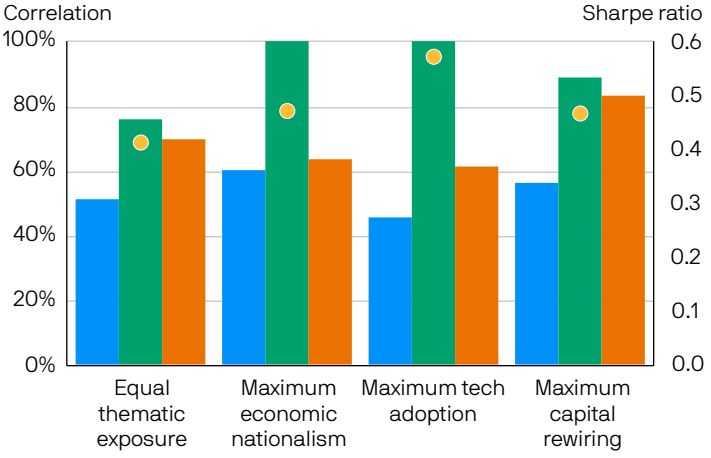
Exhibit 6A: Portfolio Sharpe ratio and correlation to themes



	Balanced portfolio	Balanced portfolio with alts	Mean-variance optimization
Fixed income	40% Global aggregated bonds	30% Global aggregated bonds	▲ Long-duration bonds, credit
Equities	60% AC World equity	40% AC World equity	▲ Japan equity ▼ European equity, EM equity
Real assets		7.5% Core real estate, 7.5% other real assets	▲ Core real estate, transportation
Financial alts		7.5% Private equity, 4.5% direct lending, 3% hedge funds	▲ Hedge funds ▼ Private equity

Theme-aware optimization can be used for intentional tailoring of a portfolio's theme exposure

Exhibit 6B: Portfolio Sharpe ratio and correlation to themes



	Equal thematic exposure	Maximum economic nationalism	Maximum tech adoption	Maximum capital rewiring
Fixed income	▲ Investment grade ▼ Long-duration bonds	▼ Long-duration bonds	▲ Long-duration bonds, credit	▲ EM sovereign debt ▼ Long-duration bonds
Equities	▲ Developed market ex-U.S. equity ▼ U.S. equity, EM equity	▲ U.S. equity, EM equity ▼ EAFE equity	▲ Japan equity ▼ European equity, EM equity	▲ UK equity, EM equity ▼ EAFE equity
Real assets	▲ Gold, core real estate	▲ Gold, transportation	▲ Core real estate, transportation	▲ Gold, infrastructure, transportation
Financial alts	▼ All	▼ All	▲ Hedge funds ▼ Private equity	▲ Hedge funds ▼ Private equity, direct lending

Source: J.P. Morgan Asset Management; data as of September 30, 2026. Note: Sharpe ratio calculated from forecast portfolio compound return less cash return divided by volatility.

What the numbers don't tell us ...

The theme-aware portfolio construction framework relies on our LTCMA forecasts for risk and return. These are forward-looking projections of asset class behavior over the next 10 to 15 years. The near-term performances of portfolio assets could deviate from the long-term forecast meaningfully, however. There could be pockets of short-term investment opportunities in asset classes that are less favored by our LTCMAs.

For example, EM Asia equities have surged as chip demand has increased. In our long-term framework, such cyclical booms tend to normalize eventually, but in the near term, chip demand remains elevated. That makes further near-term gains possible even in extended markets. Investors should evaluate their asset allocation decisions periodically with a clear time horizon in mind.

In building portfolios resilient to the themes of economic nationalism, tech adoption and capital rewiring, asset allocation is critical, as we have discussed. But the asset allocation playbook of the past won't work as well going forward. Given the speed and magnitude of the disruption we expect, markets will likely deliver bigger winners and bigger losers, with greater dispersion among them. (The 2026 sell-off in software and semiconductor stocks may be a harbinger of volatility to come.) Active managers will have a lot more to play for. Some will succeed while others will stumble.

Already, manager dispersion is on the rise as stock-level outcomes become more differentiated (**Exhibit 7**). Unlike in prior cycles, dispersion is now occurring outside a typical crisis backdrop. In the past, elevated dispersion was usually tied to recessions, liquidity strains or abrupt policy shocks. In 2026, dispersion remains high despite an economic expansion and a period of strong earnings growth. This suggests to us that we are already starting to see the effects of the crosscurrents of economic nationalism, tech adoption and capital rewiring.

We see two potential implications. First, manager selection becomes more consequential as the opportunity set broadens and idiosyncratic winners and losers separate. Second, the case for breadth in implementation strengthens, as conviction in concentrated exposures may be less reliable when market leadership is fragmenting across sectors, styles and business models.

We believe a resilient portfolio should therefore emphasize process diversification by combining genuinely differentiated managers and multiple return drivers rather than concentrating exposure in a narrow set of themes or the last cycle's leaders.

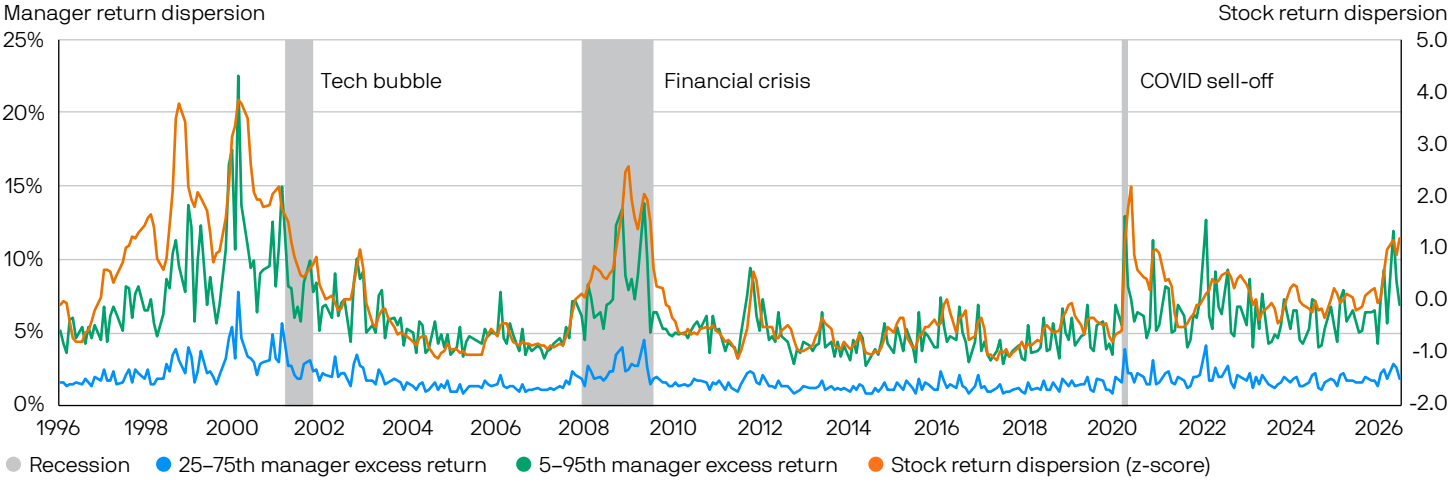
Conclusion

Portfolio resilience is multifaceted. Thematic diversification is one way to strengthen that resilience and provide a useful complement to asset class diversification and manager selection.

We believe the tailwinds of our three themes will ultimately prove more powerful than the headwinds for a variety of asset classes. However, as volatility rises and correlations become less stable, investors should continually evaluate how economic nationalism, tech adoption and capital rewiring might interact to shape portfolio outcomes. Of course, no forecast can be perfectly certain. But portfolio construction should be intentional, based on a deliberate decision to lean into, or away from, thematic exposures.

Global equity manager dispersion is increasing as stock-level outcomes become more differentiated

Exhibit 7: Global equity manager dispersion and stock return dispersion



Source: eVestment, J.P. Morgan Asset Management; data as of June 30, 2026.

III
Assumption matrices



		Compound Return 2027 (%)	Arithmetic Return 2027 (%)	Annualized Volatility (%)	Compound Return 2026 (%)	U.S. Inflation	U.S. Cash	U.S. Intermediate Treasuries	U.S. Long Treasuries	TIPS	U.S. Aggregate Bonds	U.S. Securitized	U.S. Short Duration Government/Credit	U.S. Long Duration Government/Credit	U.S. Inv Grade Corporate Bonds	U.S. Long Corporate Bonds	U.S. High Yield Bonds	U.S. Leveraged Loans	World Government Bonds hedged	World Government Bonds	World ex-U.S. Government Bonds hedged	World ex-U.S. Government Bonds	Emerging Markets Sovereign Debt	Emerging Markets Local Currency Debt	Emerging Markets Corporate Bonds	U.S. Muni 1-15 Yr Blend	U.S. Muni High Yield
Fixed income	U.S. Inflation	2.40	2.42	1.87	2.50	1.00																					
	U.S. Cash	3.20	3.20	0.68	3.10	-0.01	1.00																				
	U.S. Intermediate Treasuries	4.60	4.66	3.44	4.00	-0.27	0.19	1.00																			
	U.S. Long Treasuries	5.80	6.57	12.87	4.90	-0.21	0.04	0.84	1.00																		
	TIPS	5.10	5.26	5.80	4.30	-0.03	0.04	0.65	0.61	1.00																	
	U.S. Aggregate Bonds	5.60	5.70	4.68	4.80	-0.24	0.11	0.85	0.85	0.77	1.00																
	U.S. Securitized	6.00	6.08	4.16	5.20	-0.21	0.11	0.79	0.76	0.71	0.94	1.00															
	U.S. Short Duration Government/Credit	4.40	4.41	1.60	4.00	-0.29	0.31	0.85	0.61	0.65	0.83	0.78	1.00														
	U.S. Long Duration Government/Credit	6.50	7.08	11.22	5.20	-0.21	0.04	0.75	0.91	0.71	0.94	0.82	0.67	1.00													
	U.S. Inv Grade Corporate Bonds	6.10	6.34	7.16	5.20	-0.20	0.03	0.56	0.62	0.73	0.88	0.77	0.68	0.86	1.00												
	U.S. Long Corporate Bonds	6.60	7.26	11.97	5.40	-0.19	0.01	0.55	0.69	0.68	0.87	0.75	0.62	0.92	0.97	1.00											
	U.S. High Yield Bonds	6.60	6.94	8.54	6.10	0.00	-0.04	0.03	0.05	0.51	0.41	0.41	0.31	0.36	0.67	0.61	1.00										
	U.S. Leveraged Loans	6.60	6.93	8.46	6.60	0.17	-0.04	-0.34	-0.25	0.19	0.04	0.05	-0.05	0.04	0.36	0.31	0.76	1.00									
	World Government Bonds hedged	5.00	5.08	3.99	4.30	-0.29	0.12	0.87	0.87	0.64	0.88	0.80	0.74	0.85	0.68	0.70	0.17	-0.17	1.00								
	World Government Bonds	5.10	5.35	7.22	4.30	-0.19	0.12	0.77	0.68	0.70	0.82	0.75	0.76	0.76	0.71	0.70	0.35	-0.04	0.75	1.00							
	World ex-U.S. Government Bonds hedged	4.80	4.87	3.93	4.20	-0.30	0.11	0.74	0.74	0.59	0.79	0.71	0.65	0.77	0.66	0.68	0.24	-0.07	0.96	0.68	1.00						
	World ex-U.S. Government Bonds	5.10	5.48	9.03	4.30	-0.18	0.11	0.68	0.57	0.67	0.75	0.69	0.71	0.69	0.70	0.68	0.41	0.03	0.67	0.98	0.63	1.00					
	Emerging Markets Sovereign Debt	6.50	6.86	8.77	6.30	-0.15	0.05	0.35	0.38	0.63	0.67	0.62	0.52	0.64	0.83	0.79	0.75	0.45	0.47	0.62	0.49	0.65	1.00				
	Emerging Markets Local Currency Debt	7.30	7.96	11.99	6.70	-0.07	0.11	0.27	0.22	0.47	0.50	0.45	0.45	0.47	0.64	0.60	0.62	0.34	0.31	0.64	0.32	0.69	0.81	1.00			
	Emerging Markets Corporate Bonds	6.30	6.56	7.51	6.10	-0.10	-0.01	0.23	0.28	0.55	0.58	0.51	0.46	0.55	0.80	0.73	0.72	0.55	0.34	0.49	0.34	0.51	0.89	0.72	1.00		
	U.S. Muni 1-15 Yr Blend	4.40	4.48	4.17	3.80	-0.20	0.07	0.55	0.53	0.59	0.74	0.71	0.59	0.66	0.71	0.68	0.43	0.17	0.63	0.59	0.61	0.58	0.64	0.43	0.50	1.00	
	U.S. Muni High Yield	5.70	6.05	8.63	5.30	0.16	-0.06	0.20	0.29	0.49	0.47	0.47	0.25	0.43	0.57	0.52	0.54	0.50	0.33	0.29	0.33	0.30	0.58	0.33	0.58	0.62	1.00
Equities	U.S. Large Cap	7.50	8.95	17.96	6.70	-0.01	0.02	0.00	0.03	0.35	0.30	0.30	0.17	0.30	0.51	0.49	0.74	0.57	0.15	0.33	0.23	0.39	0.63	0.60	0.56	0.29	0.35
	U.S. Mid Cap	7.70	9.34	19.16	7.00	-0.02	-0.01	-0.04	0.01	0.35	0.29	0.30	0.14	0.29	0.52	0.50	0.78	0.61	0.12	0.29	0.20	0.36	0.64	0.60	0.57	0.30	0.36
	U.S. Small Cap	7.70	9.66	21.03	6.90	-0.04	-0.01	-0.07	-0.04	0.26	0.23	0.24	0.10	0.22	0.43	0.41	0.70	0.54	0.07	0.23	0.16	0.30	0.55	0.54	0.47	0.24	0.27
	Euro Area Large Cap	8.10	10.36	22.69	7.80	-0.04	0.09	0.05	0.02	0.33	0.34	0.33	0.27	0.31	0.53	0.50	0.72	0.50	0.13	0.45	0.18	0.53	0.68	0.74	0.61	0.32	0.32
	Japanese Equity	9.10	10.37	16.89	8.80	-0.08	0.05	0.08	0.09	0.33	0.37	0.36	0.28	0.35	0.55	0.53	0.67	0.47	0.17	0.40	0.21	0.46	0.62	0.64	0.58	0.31	0.32
	Hong Kong Equity	6.90	8.92	21.27	7.40	-0.05	-0.01	0.00	0.02	0.24	0.30	0.28	0.22	0.28	0.50	0.47	0.56	0.46	0.03	0.32	0.03	0.38	0.59	0.67	0.62	0.30	0.34
	UK Large Cap	6.40	7.90	18.17	6.60	0.03	0.04	-0.06	-0.07	0.29	0.25	0.26	0.17	0.23	0.48	0.45	0.71	0.59	0.02	0.35	0.07	0.43	0.62	0.67	0.59	0.25	0.37
	EAFE Equity	7.70	9.21	18.34	7.50	-0.03	0.06	0.04	0.03	0.36	0.35	0.35	0.27	0.33	0.57	0.54	0.76	0.56	0.13	0.45	0.18	0.53	0.71	0.76	0.65	0.32	0.36
	Chinese Domestic Equity	7.40	10.84	28.26	7.70	-0.05	0.07	0.00	0.03	0.13	0.21	0.20	0.14	0.19	0.32	0.29	0.35	0.29	0.06	0.18	0.06	0.21	0.36	0.37	0.41	0.15	0.21
	Emerging Markets Equity	7.10	9.13	21.36	7.80	-0.01	0.05	0.01	0.04	0.35	0.33	0.31	0.25	0.31	0.54	0.51	0.70	0.55	0.10	0.42	0.13	0.49	0.70	0.79	0.69	0.29	0.39
	AC Asia ex-Japan Equity	7.10	9.14	21.42	7.90	-0.06	0.05	0.04	0.08	0.34	0.35	0.33	0.27	0.34	0.56	0.53	0.67	0.51	0.13	0.41	0.15	0.47	0.68	0.75	0.68	0.31	0.38
	AC World Equity	7.50	8.94	17.88	7.00	-0.02	0.04	0.01	0.03	0.37	0.34	0.33	0.23	0.32	0.56	0.54	0.78	0.60	0.14	0.40	0.21	0.47	0.70	0.71	0.63	0.31	0.37
	U.S. Equity Value Factor	8.50	10.13	19.16	7.70	-0.03	-0.01	-0.04	-0.03	0.30	0.26	0.28	0.15	0.25	0.47	0.45	0.74	0.56	0.10	0.29	0.18	0.36	0.60	0.60	0.53	0.26	0.31
	U.S. Equity Momentum Factor	8.50	10.06	18.74	7.60	0.01	0.04	-0.01	0.04	0.38	0.31	0.30	0.15	0.31	0.52	0.51	0.75	0.59	0.15	0.31	0.23	0.37	0.63	0.56	0.54	0.32	0.38
	U.S. Equity Quality Factor	7.50	8.74	16.59	6.60	-0.02	0.02	0.02	0.05	0.36	0.32	0.31	0.18	0.31	0.52	0.51	0.73	0.54	0.17	0.34	0.25	0.40	0.64	0.61	0.56	0.31	0.35
	U.S. Equity Minimum Volatility Factor	7.60	8.52	14.25	7.00	-0.03	-0.06	0.04	0.08	0.36	0.33	0.32	0.17	0.34	0.52	0.51	0.71	0.51	0.19	0.34	0.25	0.40	0.63	0.61	0.54	0.32	0.36
	U.S. Equity Dividend Yield Factor	8.30	9.68	17.57	7.50	-0.01	-0.04	-0.01	0.01	0.34	0.29	0.30	0.16	0.29	0.50	0.48	0.73	0.56	0.12	0.31	0.18	0.38	0.62	0.62	0.55	0.29	0.33
	Global Convertible Bonds hedged	7.50	8.11	11.53	6.70	-0.09	0.03	-0.01	0.05	0.38	0.36	0.33	0.23	0.35	0.60	0.57	0.80	0.66	0.16	0.32	0.23	0.39	0.71	0.61	0.68	0.36	0.40
Alternatives	Global Core Real Estate	7.90	8.85	14.50	7.90	0.33	-0.09	-0.17	-0.11	0.27	0.05	0.09	-0.06	0.03	0.21	0.17	0.50	0.53	-0.09	0.08	-0.06	0.13	0.33	0.33	0.41	0.00	0.47
	Americas Core Real Estate	8.10	8.69	11.40	8.20	0.37	-0.12	-0.25	-0.15	0.15	-0.08	-0.04	-0.19	-0.08	0.04	0.02	0.40	0.49	-0.16	-0.13	-0.13	-0.10	0.16	0.13	0.27	-0.15	0.42
	European Core Real Estate	7.10	8.39	16.89	6.90	0.25	-0.01	-0.07	-0.10	0.31	0.14	0.17	0.10	0.08	0.30	0.24	0.49	0.44	0.00	0.28	0.03	0.33	0.39	0.43	0.43	0.11	0.36
	Asia Pacific Core Real Estate	8.70	9.88	16.22	8.40	0.05	-0.07	0.07	0.07	0.37	0.27	0.26	0.13	0.26	0.41	0.38	0.43	0.33	0.08	0.37	0.07	0.43	0.48	0.52	0.46	0.28	0.40
	U.S. Core Real Estate	8.10	8.69	11.40	8.20	0.37	-0.12	-0.25	-0.14	0.14	-0.08	-0.04	-0.19	-0.08	0.04	0.01	0.39	0.48	-0.16	-0.13	-0.12	-0.11	0.15	0.12	0.26	-0.15	0.42
	U.S. REITs	8.20	9.55	17.33	8.80	0.00	-0.04	0.15	0.24	0.41	0.42	0.41	0.22	0.43	0.54	0.55	0.68	0.42	0.29	0.39	0.33	0.42	0.61	0.58	0.52	0.33	0.39
	Commercial Mortgage Loans	6.30	6.59	7.91	6.20	0.08	0.09	0.27	0.25	0.54	0.49	0.50	0.36	0.39	0.52	0.45	0.50	0.42	0.35	0.32	0.36	0.33	0.58	0.45	0.54	0.50	0.59
	Global Core Infrastructure	7.10	7.59	10.29	6.50	0.14	0.07	-0.15	-0.20	0.24	0.09	0.11	0.09	0.02	0.30	0.24	0.56	0.55	-0.11	0.26	-0.07	0.35	0.49	0.55	0.49	0.16	0.31
	Global Core Transport	8.10	8.82	12.57	7.90	0.27	0.16	0.02	0.02	-0.06	-0.12	-0.09	-0.09	-0.12	-0.29	-0.25	-0.21	-0.12	-0.05	-0.09	-0.10	-0.12	-0.26	-0.11	-0.25	-0.24	-0.09
	Global Timberland	6.20	6.61	9.40	6.30	-0.05	0.13	-0.05	-0.13	0.18	0.11	0.13	0.13	0.06	0.27	0.24	0.37	0.29	-0.04	0.26	-0.01	0.33	0.40	0.51	0.34	0.15	0.14
	Commodities	4.80	6.29	17.97	4.60	0.29	-0.01	-0.16	-0.20	0.26	-0.01	-0.02	0.02	-0.01	0.17	0.14	0.41	0.39	-0.20	0.17	-0.18	0.24	0.30	0.40	0.31	-0.07	0.20
	Gold	5.50	6.86	17.24	5.50	-0.02	0.13	0.37	0.31	0.46	0.39	0.34	0.40	0.35	0.36	0.32	0.14	-0.05	0.29	0.51	0.23	0.50	0.32	0.39	0.30	0.25	0.15
	Private Equity	9.80	11.60	20.31	10.20	0.08	-0.02	-0.30	-0.34	0.19	0.02	0.04	-0.01	-0.04	0.35	0.26	0.70	0.66	-0.21	0.11	-0.13	0.22	0.57	0.58	0.59	0.15	0.38
	Venture Capital	8.80	10.96	22.20	8.50	-0.07	-0.05	-0.21	-0.23	0.15	0.04	0.06	-0.02	-0.01	0.26	0.20	0.53	0.50	-0.10	0.04	-0.02	0.11	0.45	0.39	0.45	0.14	0.32
	Diversified Hedge Funds	6.70	6.86	5.94	5.30	0.05	0.08	-0.24	-0.16	0.21	0.08	0.06	0.00	0.10	0.35	0.32	0.60	0.66	-0.12	0.07	-0.04	0.14	0.47	0.41	0.48	0.13	0.39
	Event Driven Hedge Funds	7.10	7.44	8.56	5.20	0.05	0.02	-0.18	-0.15	0.27	0.16	0.17	0.09	0.15	0.43	0.40	0.76	0.75	-0.05	0.18	0.03	0.26	0.57	0.53	0.57	0.21	0.42
	Long Bias Hedge Funds	7.30	7.89	11.29	5.50	-0.02	0.05	-0.08	-0.07	0.31	0.25	0.24	0.19	0.24	0.50	0.47	0.76	0.66	0.03	0.29	0.09	0.37	0.63	0.62	0.60	0.26	0.36
	Relative Value Hedge Funds	6.10	6.23	5.17	5.70	0.10	-0.02	-0.23	-0.17	0.28	0.15	0.15	0.08	0.14	0.45	0.40	0.80	0.84	-0.10	0.11	-0.02	0.19	0.59	0.53	0.62	0.21	0.49
	Macro Hedge Funds	5.60	5.86	7.39	4.10	0.02	0.03	-0.12	-0.09	0.04	-0.09	-0.16	-0.01	-0.03	0.00	0.02	0.08	0.05	-0.12	0.05	-0.09	0.07	0.05	0.13	0.03	-0.11	-0.08
	Direct Lending	7.80	8.69	13.98	7.70	0.22	0.00	-0.39	-0.40	0.13	-0.10	-0.06	-0.14	-0.14	0.18	0.11	0.67	0.73	-0.29	-0.14	-0.17	-0.04	0.44	0.36	0.47	0.06	0.35

U.S. dollar assumptions

Note: For the 2027 numbers we have amended the composites used for the core and value-add real estate forecasts, adding a new global composite alongside three amended regional composites for the Americas, EMEA and APAC. 2026 numbers for each new composite have been estimated by aggregating the relevant 2026 country forecasts.

All estimates on this page are in U.S. dollar terms. Given the complex risk-reward trade-offs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations to all of these asset classes and strategies. Exclusive reliance on this information is not advised. Please note that information shown may use quantitative frameworks but final forecasts are based on qualitative analysis. These asset class and strategy assumptions are passive only for liquid assets and industry averages (median managers) for alternatives. The assumptions do not consider the impact of active management. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Forecasts are based on current market and financial conditions, and our judgement, and are subject to change without notice. Assumptions, opinions and estimates has been prepared for information and illustrative purposes only and is not intended to provide, and should not be relied on for, accounting, legal or tax advice. They should not be relied upon as recommendations to buy or sell securities. This information is not intended as a recommendation to invest in any particular asset class or strategy. References to future returns are not promises or estimates of actual returns a client portfolio may achieve.

Source: J.P. Morgan Asset Management; as of September 30, 2026. Alternative asset classes (including hedge funds, private equity, real estate, direct lending, transportation, infrastructure and timberland) are unlike other asset categories shown above in that there is no underlying investible index. The return estimates for these alternative asset classes and strategies are estimates of the industry average – median manager, net of manager fees. The dispersion of return among managers of these asset classes and strategies is typically significantly wider than that of traditional asset classes. For the 2027 Core and Value-Added Real Estate we have amended their composites, adding a new global aggregate alongside three amended regional aggregates for the Americas, European and Asia Pacific. For the new core composites, their corresponding 2026 compound returns have been estimated by aggregating the relevant 2026 country forecasts. For equity and fixed income assumptions we assume current index regional weight in composite indices with multiple countries/regions. All returns are nominal. The return forecasts of composite and hedged assets are computed using unrounded return and rounded to the nearest 10bp at the final stage. In some cases this may lead to apparent differences in hedging impact across assets, but this is purely due to rounding. For the full opportunity set, please contact your J.P. Morgan representative.

	U.S. Large Cap	U.S. Mid Cap	U.S. Small Cap	Euro Area Large Cap	Japanese Equity	Hong Kong Equity	UK Large Cap	EAFE Equity	Chinese Domestic Equity	Emerging Markets Equity	AC Asia ex-Japan Equity	AC World Equity	U.S. Equity Value Factor	U.S. Equity Momentum Factor	U.S. Equity Quality Factor	U.S. Equity Minimum Volatility Factor	U.S. Equity Dividend Yield Factor	Global Convertible Bonds hedged	Global Core Real Estate	Americas Core Real Estate	European Core Real Estate	Asia Pacific Core Real Estate	U.S. Core Real Estate	U.S. REITs	Commercial Mortgage Loans	Global Core Infrastructure	Global Core Transport	Global Timberland	Commodities	Gold	Private Equity	Venture Capital	Diversified Hedge Funds	Event Driven Hedge Funds	Long Bias Hedge Funds	Relative Value Hedge Funds	Macro Hedge Funds	Direct Lending
U.S. Large Cap	1.00																																					
U.S. Mid Cap	0.95	1.00																																				
U.S. Small Cap	0.90	0.95	1.00																																			
Euro Area Large Cap	0.84	0.83	0.75	1.00																																		
Japanese Equity	0.74	0.74	0.68	0.78	1.00																																	
Hong Kong Equity	0.55	0.56	0.48	0.66	0.59	1.00																																
UK Large Cap	0.81	0.80	0.72	0.91	0.77	0.71	1.00																															
EAFE Equity	0.87	0.87	0.79	0.97	0.87	0.71	0.94	1.00																														
Chinese Domestic Equity	0.35	0.34	0.31	0.38	0.35	0.60	0.39	0.41	1.00																													
Emerging Markets Equity	0.74	0.74	0.66	0.82	0.73	0.82	0.80	0.86	0.57	1.00																												
AC Asia ex-Japan Equity	0.70	0.70	0.64	0.78	0.71	0.86	0.76	0.82	0.62	0.98	1.00																											
AC World Equity	0.97	0.94	0.87	0.92	0.82	0.68	0.90	0.96	0.42	0.86	0.82	1.00																										
U.S. Equity Value Factor	0.96	0.96	0.93	0.83	0.74	0.54	0.82	0.86	0.33	0.73	0.69	0.94	1.00																									
U.S. Equity Momentum Factor	0.96	0.96	0.89	0.80	0.73	0.53	0.76	0.84	0.35	0.73	0.70	0.94	0.91	1.00																								
U.S. Equity Quality Factor	0.99	0.95	0.89	0.83	0.73	0.53	0.80	0.86	0.34	0.72	0.68	0.95	0.96	0.96	1.00																							
U.S. Equity Minimum Volatility Factor	0.90	0.91	0.83	0.78	0.68	0.53	0.78	0.82	0.29	0.66	0.63	0.87	0.90	0.87	0.92	1.00																						
U.S. Equity Dividend Yield Factor	0.91	0.94	0.88	0.80	0.71	0.57	0.82	0.85	0.30	0.71	0.67	0.90	0.96	0.86	0.92	0.95	1.00																					
Global Convertible Bonds hedged	0.86	0.88	0.83	0.79	0.76	0.64	0.76	0.84	0.47	0.81	0.79	0.90	0.83	0.88	0.84	0.73	0.78	1.00																				
Global Core Real Estate	0.51	0.49	0.40	0.44	0.38	0.42	0.53	0.49	0.29	0.51	0.49	0.52	0.47	0.49	0.47	0.51	0.47	0.43	1.00																			
Americas Core Real Estate	0.37	0.35	0.29	0.23	0.24	0.24	0.34	0.29	0.17	0.33	0.31	0.35	0.34	0.36	0.33	0.38	0.34	0.28	0.93	1.00																		
European Core Real Estate	0.54	0.49	0.40	0.55	0.42	0.45	0.59	0.57	0.37	0.58	0.55	0.59	0.47	0.52	0.51	0.46	0.44	0.51	0.83	0.63	1.00																	
Asia Pacific Core Real Estate	0.47	0.50	0.41	0.53	0.41	0.57	0.59	0.57	0.28	0.55	0.54	0.53	0.48	0.47	0.47	0.56	0.54	0.44	0.66	0.44	0.53	1.00																
U.S. Core Real Estate	0.36	0.34	0.28	0.22	0.24	0.22	0.33	0.28	0.16	0.31	0.30	0.34	0.33	0.35	0.32	0.36	0.33	0.27	0.93	1.00	0.62	0.43	1.00															
U.S. REITs	0.76	0.79	0.75	0.68	0.59	0.45	0.64	0.71	0.18	0.59	0.57	0.75	0.78	0.73	0.77	0.82	0.81	0.65	0.54	0.47	0.41	0.52	0.46	1.00														
Commercial Mortgage Loans	0.30	0.33	0.24	0.31	0.17	0.34	0.32	0.32	0.25	0.39	0.37	0.33	0.28	0.33	0.32	0.40	0.34	0.34	0.44	0.37	0.36	0.41	0.37	0.43	1.00													
Global Core Infrastructure	0.48	0.48	0.43	0.58	0.48	0.54	0.61	0.59	0.15	0.59	0.54	0.56	0.49	0.47	0.47	0.45	0.49	0.46	0.44	0.33	0.47	0.39	0.32	0.39	0.40	1.00												
Global Core Transport	-0.07	-0.12	-0.11	-0.05	-0.20	-0.08	-0.10	-0.11	-0.11	-0.12	-0.11	-0.10	-0.11	-0.07	-0.06	-0.02	-0.09	-0.23	0.17	0.24	0.03	0.03	0.23	0.07	0.08	0.04	1.00											
Global Timberland	0.45	0.47	0.44	0.56	0.38	0.53	0.54	0.56	0.34	0.54	0.51	0.52	0.46	0.44	0.45	0.46	0.47	0.40	0.19	0.03	0.26	0.43	0.01	0.35	0.13	0.46	-0.02	1.00										
Commodities	0.40	0.41	0.34	0.42	0.34	0.40	0.55	0.47	0.17	0.51	0.43	0.47	0.39	0.39	0.37	0.37	0.44	0.39	0.46	0.36	0.45	0.43	0.35	0.29	0.15	0.44	-0.08	0.38	1.00									
Gold	0.04	0.04	-0.02	0.13	0.12	0.25	0.16	0.17	0.21	0.27	0.24	0.13	0.01	0.06	0.06	0.11	0.07	0.15	0.12	-0.01	0.20	0.33	-0.01	0.11	0.41	0.22	0.11	0.20	0.33	1.00								
Private Equity	0.75	0.78	0.73	0.75	0.59	0.66	0.77	0.78	0.49	0.79	0.75	0.80	0.75	0.75	0.74	0.69	0.72	0.78	0.53	0.36	0.57	0.54	0.35	0.52	0.35	0.62	-0.19	0.60	0.53	0.10	1.00							
Venture Capital	0.63	0.66	0.70	0.54	0.51	0.48	0.54	0.57	0.47	0.60	0.59	0.64	0.60	0.66	0.61	0.52	0.53	0.72	0.38	0.28	0.44	0.32	0.27	0.34	0.28	0.42	-0.15	0.40	0.28	0.02	0.76	1.00						
Diversified Hedge Funds	0.68	0.71	0.65	0.63	0.60	0.53	0.67	0.69	0.43	0.68	0.64	0.73	0.64	0.74	0.66	0.58	0.60	0.80	0.48	0.37	0.48	0.44	0.36	0.42	0.27	0.43	-0.17	0.44	0.47	0.13	0.76	0.70	1.00					
Event Driven Hedge Funds	0.81	0.85	0.82	0.75	0.69	0.58	0.79	0.81	0.41	0.74	0.70	0.85	0.82	0.82	0.78	0.71	0.78	0.86	0.50	0.37	0.49	0.49	0.36	0.59	0.32	0.50	-0.17	0.46	0.50	0.06	0.81	0.67	0.86	1.00				
Long Bias Hedge Funds	0.87	0.89	0.85	0.82	0.77	0.68	0.83	0.88	0.48	0.85	0.81	0.92	0.86	0.88	0.85	0.76	0.82	0.92	0.47	0.31	0.53	0.47	0.30	0.62	0.31	0.53	-0.18	0.49	0.50	0.16	0.82	0.72	0.86	0.93	1.00			
Relative Value Hedge Funds	0.68	0.73	0.66	0.67	0.63	0.63	0.74	0.73	0.44	0.74	0.70	0.75	0.69	0.70	0.65	0.63	0.68	0.80	0.55	0.45	0.51	0.48	0.44	0.52	0.39	0.52	-0.17	0.42	0.54	0.11	0.78	0.59	0.83	0.90	0.84	1.00		
Macro Hedge Funds	0.15	0.17	0.14	0.18	0.14	0.16	0.24	0.22	0.10	0.25	0.22	0.21	0.16	0.17	0.14	0.16	0.19	0.24	0.04	0.02	0.05	0.08	0.01	0.10	-0.14	0.04	-0.08	0.27	0.42	0.31	0.22	0.14	0.46	0.27	0.33	0.27	1.00	
Direct Lending	0.59	0.65	0.59	0.51	0.42	0.41	0.58	0.55	0.26	0.56	0.50	0.61	0.62	0.62	0.58	0.55	0.61	0.63	0.49	0.44	0.40	0.40	0.43	0.40	0.43	0.46	-0.10	0.29	0.50	0.04	0.73	0.54	0.65	0.73	0.68	0.78	0.12	1.00

		Compound Return 2026 (%)																								
		Annualized Volatility (%)																								
		Arithmetic Return 2027 (%)																								
		Compound Return 2027 (%)				Euro Inflation	Euro Cash	U.S. Aggregate Bonds hedged	Euro Aggregate Bonds	U.S. Inv Grade Corporate Bonds hedged	Euro Inv Grade Corp Bonds	U.S. High Yield Bonds hedged	Euro High Yield Bonds	U.S. Leveraged Loans hedged	Euro Government Bonds	Euro Govt Inflation-Linked Bonds	World Government Bonds hedged	World Government Bonds	World ex-Euro Government Bonds hedged	World ex-Euro Government Bonds	Global Multiverse Bonds hedged	Emerging Markets Sovereign Debt hedged	Emerging Markets Local Currency Debt	Emerging Markets Corporate Bonds hedged	European Large Cap
Fixed income	Euro Inflation	2.20	2.22	2.01	2.00	1.00																				
	Euro Cash	2.60	2.60	0.62	2.30	-0.09	1.00																			
	U.S. Aggregate Bonds hedged	5.10	5.21	4.75	4.00	-0.31	0.16	1.00																		
	Euro Aggregate Bonds	4.30	4.40	4.64	3.60	-0.29	0.19	0.76	1.00																	
	U.S. Inv Grade Corporate Bonds hedged	5.50	5.75	7.21	4.40	-0.29	0.09	0.87	0.72	1.00																
	Euro Inv Grade Corp Bonds	4.60	4.71	4.79	4.00	-0.25	0.09	0.66	0.83	0.84	1.00															
	U.S. High Yield Bonds hedged	6.10	6.45	8.62	5.30	-0.05	-0.02	0.40	0.34	0.65	0.65	1.00														
	Euro High Yield Bonds	5.90	6.31	9.38	5.30	-0.05	-0.06	0.25	0.33	0.53	0.68	0.87	1.00													
	U.S. Leveraged Loans hedged	6.10	6.44	8.48	5.80	0.05	-0.10	0.06	0.09	0.36	0.46	0.77	0.86	1.00												
	Euro Government Bonds	4.20	4.33	5.29	3.40	-0.27	0.19	0.73	0.98	0.64	0.73	0.23	0.21	-0.03	1.00											
	Euro Govt Inflation-Linked Bonds	4.50	4.67	5.90	3.60	-0.06	0.11	0.54	0.76	0.60	0.72	0.46	0.42	0.22	0.74	1.00										
	World Government Bonds hedged	4.40	4.48	4.01	3.50	-0.31	0.22	0.87	0.88	0.68	0.61	0.16	0.05	-0.16	0.90	0.59	1.00									
	World Government Bonds	4.60	4.82	6.80	3.70	-0.17	0.14	0.40	0.57	0.27	0.31	-0.10	-0.07	-0.16	0.59	0.27	0.61	1.00								
	World ex-Euro Government Bonds hedged	4.50	4.58	3.99	3.50	-0.30	0.15	0.88	0.71	0.65	0.46	0.10	-0.06	-0.25	0.74	0.43	0.95	0.55	1.00							
	World ex-Euro Government Bonds	4.80	5.18	8.91	3.90	-0.14	0.11	0.27	0.38	0.12	0.13	-0.22	-0.17	-0.22	0.40	0.11	0.46	0.96	0.43	1.00						
	Global Multiverse Bonds hedged	4.70	4.77	3.84	3.80	-0.31	0.20	0.95	0.90	0.88	0.79	0.45	0.34	0.12	0.87	0.68	0.92	0.49	0.85	0.32	1.00					
	Emerging Markets Sovereign Debt hedged	6.00	6.37	8.92	5.50	-0.25	0.08	0.67	0.56	0.81	0.73	0.75	0.60	0.45	0.48	0.56	0.47	0.00	0.41	-0.16	0.69	1.00				
	Emerging Markets Local Currency Debt	6.80	7.14	8.52	6.10	-0.08	0.09	0.34	0.41	0.46	0.52	0.47	0.47	0.39	0.35	0.38	0.27	0.31	0.16	0.20	0.43	0.57	1.00			
	Emerging Markets Corporate Bonds hedged	5.70	5.97	7.57	5.30	-0.25	0.03	0.58	0.45	0.78	0.71	0.74	0.64	0.56	0.35	0.42	0.33	-0.03	0.29	-0.17	0.58	0.90	0.55	1.00		
Equities	European Large Cap	6.80	7.92	15.66	6.40	0.00	-0.15	0.21	0.28	0.44	0.56	0.70	0.76	0.63	0.19	0.43	0.05	-0.10	-0.04	-0.20	0.29	0.56	0.50	0.53	1.00	
	European Small Cap	7.30	8.77	18.03	7.20	-0.07	-0.14	0.23	0.29	0.47	0.59	0.74	0.80	0.68	0.19	0.43	0.06	-0.10	-0.03	-0.20	0.31	0.57	0.43	0.55	0.92	
	U.S. Large Cap	7.00	8.30	16.96	6.10	0.05	-0.17	0.12	0.28	0.31	0.48	0.58	0.61	0.56	0.22	0.37	0.07	0.17	-0.05	0.09	0.23	0.38	0.51	0.35	0.80	
	U.S. Large Cap hedged	6.90	8.37	18.01	5.90	0.00	-0.12	0.30	0.33	0.50	0.58	0.73	0.67	0.57	0.25	0.46	0.15	-0.18	0.06	-0.32	0.36	0.63	0.40	0.56	0.84	
	Euro Area Large Cap	7.60	9.03	17.81	7.20	-0.02	-0.12	0.24	0.29	0.44	0.54	0.69	0.73	0.58	0.21	0.44	0.08	-0.18	-0.02	-0.28	0.31	0.58	0.46	0.54	0.97	
	Euro Area Small Cap	7.40	8.87	18.07	7.80	-0.05	-0.13	0.21	0.25	0.45	0.54	0.72	0.77	0.64	0.16	0.43	0.03	-0.19	-0.05	-0.30	0.28	0.56	0.40	0.54	0.92	
	UK Large Cap	5.90	7.00	15.45	6.00	0.07	-0.17	0.09	0.17	0.33	0.48	0.62	0.73	0.65	0.08	0.33	-0.07	-0.05	-0.17	-0.12	0.16	0.43	0.49	0.45	0.92	
	UK Large Cap hedged	5.80	6.70	13.98	5.50	-0.01	-0.09	0.18	0.18	0.38	0.44	0.59	0.60	0.50	0.11	0.36	0.00	-0.22	-0.05	-0.31	0.23	0.53	0.43	0.49	0.86	
	Japanese Equity	8.60	9.65	15.32	8.20	-0.06	-0.10	0.19	0.30	0.37	0.48	0.51	0.56	0.47	0.23	0.34	0.09	0.19	-0.01	0.12	0.26	0.37	0.53	0.38	0.70	
	Japanese Equity hedged	7.60	9.07	18.09	7.90	0.05	-0.11	0.00	0.08	0.21	0.33	0.51	0.55	0.50	0.02	0.26	-0.13	-0.35	-0.22	-0.43	0.06	0.36	0.33	0.37	0.73	
	Chinese Domestic Equity	6.90	10.09	27.09	7.10	-0.13	0.00	0.10	0.11	0.21	0.22	0.25	0.30	0.28	0.08	0.05	0.01	0.00	-0.06	-0.03	0.11	0.21	0.28	0.30	0.28	
	Emerging Markets Equity	6.60	7.97	17.37	7.20	-0.08	-0.07	0.22	0.24	0.45	0.52	0.65	0.68	0.62	0.15	0.34	0.04	-0.10	-0.05	-0.20	0.27	0.58	0.63	0.62	0.74	
	AC Asia ex-Japan Equity	6.60	8.07	18.01	7.30	-0.13	-0.08	0.25	0.26	0.47	0.51	0.61	0.64	0.56	0.17	0.32	0.08	-0.05	0.00	-0.13	0.29	0.56	0.60	0.60	0.69	
	AC World Equity	7.00	8.10	15.52	6.40	0.02	-0.15	0.18	0.30	0.41	0.56	0.68	0.73	0.65	0.22	0.42	0.06	0.07	-0.05	-0.03	0.28	0.49	0.57	0.48	0.90	
	AC World ex-EMU Equity	6.90	8.00	15.56	6.30	0.02	-0.15	0.16	0.30	0.39	0.55	0.67	0.72	0.64	0.22	0.41	0.06	0.10	-0.06	0.00	0.27	0.47	0.58	0.46	0.88	
	Developed World Equity	7.00	8.15	15.91	6.30	0.03	-0.16	0.16	0.30	0.39	0.55	0.66	0.71	0.63	0.22	0.41	0.06	0.09	-0.05	-0.01	0.27	0.47	0.54	0.44	0.90	
	Global Convertible Bonds hedged	6.90	7.52	11.62	5.90	-0.16	-0.03	0.35	0.37	0.61	0.65	0.78	0.74	0.66	0.27	0.47	0.15	-0.16	0.06	-0.30	0.41	0.69	0.43	0.67	0.78	
	Global Credit Sensitive Convertible hedged	4.90	5.13	6.94	4.10	0.00	-0.13	0.24	0.31	0.44	0.52	0.62	0.66	0.66	0.23	0.27	0.12	-0.01	0.04	-0.13	0.30	0.54	0.33	0.65	0.58	
Alternatives	Global Core Real Estate	7.40	8.15	12.77	7.30	0.08	-0.35	-0.07	-0.05	0.03	0.10	0.30	0.31	0.41	-0.08	0.04	-0.12	0.13	-0.14	0.14	-0.06	0.10	0.28	0.22	0.35	
	Americas Core Real Estate	7.60	8.28	12.15	7.60	0.12	-0.32	-0.13	-0.08	-0.04	0.05	0.27	0.30	0.40	-0.11	0.02	-0.15	0.12	-0.17	0.14	-0.11	0.04	0.25	0.16	0.28	
	European Core Real Estate	6.60	7.24	11.80	6.30	-0.03	-0.25	-0.01	0.02	0.10	0.15	0.34	0.32	0.41	-0.02	0.10	-0.08	-0.03	-0.12	-0.08	0.00	0.17	0.15	0.26	0.37	
	Asia Pacific Core Real Estate	8.20	9.16	14.56	7.80	0.04	-0.36	0.08	0.01	0.16	0.13	0.19	0.14	0.20	-0.02	0.02	0.00	0.30	0.03	0.32	0.07	0.17	0.38	0.20	0.33	
	Europe ex UK Core Real Estate	6.40	6.94	10.80	-	-0.08	-0.23	0.04	0.03	0.10	0.12	0.22	0.18	0.27	0.00	0.08	-0.01	0.00	-0.03	-0.04	0.04	0.15	0.11	0.21	0.27	
	Global REITs	7.70	8.54	13.59	8.10	-0.04	-0.17	0.31	0.38	0.49	0.58	0.66	0.67	0.55	0.32	0.49	0.22	0.16	0.13	0.07	0.40	0.52	0.59	0.48	0.79	
	Commercial Mortgage Loans	5.80	6.53	12.50	5.60	0.01	-0.05	-0.07	0.02	-0.15	-0.10	-0.14	-0.11	-0.01	0.05	-0.10	0.05	0.60	0.02	0.66	-0.03	-0.19	0.31	-0.14	-0.09	
	Global Core Infrastructure	6.60	7.16	11.00	5.90	0.23	-0.18	-0.18	-0.10	-0.03	0.07	0.28	0.32	0.45	-0.13	0.05	-0.23	0.12	-0.27	0.12	-0.13	0.12	0.35	0.18	0.27	
	Global Core Transport	7.60	8.56	14.51	7.30	0.28	-0.07	-0.26	-0.22	-0.44	-0.39	-0.36	-0.31	-0.19	-0.15	-0.25	-0.10	0.35	-0.06	0.45	-0.26	-0.45	0.05	-0.40	-0.19	
	Global Timberland	5.70	6.21	10.49	5.70	0.21	-0.03	-0.20	-0.12	-0.17	-0.09	-0.04	0.00	0.06	-0.11	-0.02	-0.15	0.31	-0.17	0.36	-0.15	-0.14	0.31	-0.11	0.14	
	Commodities	4.30	5.55	16.41	4.00	0.28	-0.15	-0.19	-0.16	-0.02	0.06	0.27	0.28	0.38	-0.21	0.14	-0.31	-0.09	-0.34	-0.08	-0.17	0.07	0.21	0.11	0.29	
	Gold	5.00	6.21	16.15	4.90	-0.01	0.10	0.22	0.14	0.15	0.08	-0.05	-0.08	-0.09	0.15	0.10	0.21	0.33	0.24	0.32	0.20	0.07	0.23	0.08	-0.13	
	Private Equity	9.30	10.78	18.30	9.60	0.05	-0.23	-0.16	-0.07	0.15	0.28	0.54	0.55	0.61	-0.16	0.13	-0.31	-0.12	-0.38	-0.15	-0.09	0.34	0.45	0.41	0.66	
	Venture Capital	8.30	10.16	20.50	7.90	-0.13	-0.19	-0.07	0.03	0.13	0.23	0.40	0.36	0.44	-0.03	0.07	-0.14	-0.03	-0.22	-0.07	0.00	0.28	0.34	0.32	0.47	
	Diversified Hedge Funds hedged	6.10	6.26	5.86	4.50	-0.04	-0.10	0.08	0.10	0.36	0.42	0.61	0.66	0.66	0.00	0.24	-0.12	-0.26	-0.18	-0.35	0.13	0.47	0.31	0.49	0.70	
	Event Driven Hedge Funds hedged	6.50	6.84	8.52	4.40	0.02	-0.11	0.17	0.18	0.43	0.51	0.77	0.77	0.75	0.07	0.33	-0.05	-0.26	-0.13	-0.37	0.22	0.58	0.39	0.58	0.79	
	Long Bias Hedge Funds hedged	6.70	7.28	11.24	4.70	-0.07	-0.06	0.25	0.23	0.50	0.54	0.75	0.73	0.66	0.12	0.36	0.02	-0.29	-0.05	-0.41	0.29	0.62	0.40	0.61	0.80	
	Relative Value Hedge Funds hedged	5.50	5.63	5.17	4.90	0.03	-0.07	0.16	0.15	0.44	0.52	0.81	0.83	0.86	0.03	0.31	-0.09	-0.24	-0.17	-0.33	0.21	0.60	0.46	0.64	0.72	
	Macro Hedge Funds hedged	5.00	5.25	7.33	3.30	0.05	0.09	-0.09	-0.06	0.01	0.01	0.06	0.08	0.05	-0.08	0.13	-0.11	-0.11	-0.11	-0.14	-0.06	0.05	0.05	0.02	0.18	
	Direct Lending	7.30	8.93	19.05	7.10	0.16	-0.10	-0.28	-0.12	-0.22	-0.08	0.03	0.08	0.21	-0.13	-0.10	-0.22	0.39	-0.28	0.45	-0.21	-0.16	0.34	-0.08	0.12	

Euro assumptions

Note: For the 2027 numbers we have amended the composites used for the core and value-add real estate forecasts, adding a new global composite alongside three amended regional composites for the Americas, EMEA and APAC. 2026 numbers for each new composite have been estimated by aggregating the relevant 2026 country forecasts.

All estimates on this page are in Euro terms. Given the complex risk-reward trade-offs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations to all of these asset classes and strategies. Exclusive reliance on this information is not advised. Please note that information shown may use quantitative frameworks but final forecasts are based on qualitative analysis. These asset class and strategy assumptions are passive only for liquid assets and industry averages (median managers) for alternatives. The assumptions do not consider the impact of active management. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Forecasts are based on current market and financial conditions, and our judgement, and are subject to change without notice. Assumptions, opinions and estimates has been prepared for information and illustrative purposes only and is not intended to provide, and should not be relied on for, accounting, legal or tax advice. They should not be relied upon as recommendations to buy or sell securities. This information is not intended as a recommendation to invest in any particular asset class or strategy. References to future returns are not promises or estimates of actual returns a client portfolio may achieve.

Source: J.P. Morgan Asset Management; as of September 30, 2026. Alternative asset classes (including hedge funds, private equity, real estate, direct lending, transportation, infrastructure and timberland) are unlike other asset categories shown above in that there is no underlying investible index. The return estimates for these alternative asset classes and strategies are estimates of the industry average – median manager, net of manager fees. The dispersion of return among managers of these asset classes and strategies is typically significantly wider than that of traditional asset classes. For the 2027 Core and Value-Added Real Estate we have amended their composites, adding a new global aggregate alongside three amended regional aggregates for the Americas, European and Asia Pacific. For the new core composites, their corresponding 2026 compound returns have been estimated by aggregating the relevant 2026 country forecasts. For equity and fixed income assumptions we assume current index regional weight in composite indices with multiple countries/regions. All returns are nominal. The return forecasts of composite and hedged assets are computed using unrounded return and rounded to the nearest 10bp at the final stage. In some cases this may lead to apparent differences in hedging impact across assets, but this is purely due to rounding. For the full opportunity set, please contact your J.P. Morgan representative.

	European Small Cap	U.S. Large Cap	U.S. Large Cap hedged	Euro Area Large Cap	Euro Area Small Cap	UK Large Cap	UK Large Cap hedged	Japanese Equity	Japanese Equity hedged	Chinese Domestic Equity	Emerging Markets Equity	AC Asia ex-Japan Equity	AC World Equity	AC World ex-EMU Equity	Developed World Equity	Global Convertible Bonds hedged	Global Credit Sensitive Convertible hedged	Global Core Real Estate	Americas Core Real Estate	European Core Real Estate	Asia Pacific Core Real Estate	Europe ex UK Core Real Estate	Global REITs	Commercial Mortgage Loans	Global Core Infrastructure	Global Core Transport	Global Timberland	Commodities	Gold	Private Equity	Venture Capital	Diversified Hedge Funds hedged	Event Driven Hedge Funds hedged	Long Bias Hedge Funds hedged	Relative Value Hedge Funds hedged	Macro Hedge Funds hedged	Direct Lending
European Small Cap	1.00																																				
U.S. Large Cap	0.75	1.00																																			
U.S. Large Cap hedged	0.82	0.83	1.00																																		
Euro Area Large Cap	0.89	0.74	0.84	1.00																																	
Euro Area Small Cap	0.96	0.68	0.80	0.93	1.00																																
UK Large Cap	0.85	0.76	0.71	0.84	0.81	1.00																															
UK Large Cap hedged	0.77	0.62	0.73	0.84	0.81	0.84	1.00																														
Japanese Equity	0.66	0.71	0.58	0.65	0.62	0.70	0.55	1.00																													
Japanese Equity hedged	0.67	0.62	0.68	0.73	0.68	0.67	0.63	0.79	1.00																												
Chinese Domestic Equity	0.28	0.28	0.23	0.25	0.26	0.31	0.20	0.27	0.26	1.00																											
Emerging Markets Equity	0.72	0.62	0.68	0.71	0.71	0.71	0.67	0.61	0.62	0.51	1.00																										
AC Asia ex-Japan Equity	0.67	0.60	0.63	0.67	0.66	0.67	0.62	0.60	0.58	0.57	0.97	1.00																									
AC World Equity	0.86	0.96	0.87	0.85	0.81	0.86	0.74	0.78	0.72	0.34	0.78	0.74	1.00																								
AC World ex-EMU Equity	0.84	0.97	0.86	0.82	0.78	0.84	0.71	0.78	0.71	0.35	0.77	0.74	1.00	1.00																							
Developed World Equity	0.85	0.97	0.87	0.84	0.80	0.85	0.72	0.78	0.71	0.31	0.72	0.68	1.00	0.99	1.00																						
Global Convertible Bonds hedged	0.82	0.68	0.85	0.78	0.81	0.66	0.69	0.60	0.66	0.36	0.77	0.73	0.80	0.78	0.77	1.00																					
Global Credit Sensitive Convertible hedged	0.62	0.50	0.60	0.56	0.59	0.54	0.43	0.42	0.41	0.27	0.58	0.55	0.58	0.57	0.56	0.66	1.00																				
Global Core Real Estate	0.32	0.50	0.29	0.24	0.24	0.44	0.20	0.36	0.28	0.24	0.38	0.38	0.47	0.49	0.47	0.20	0.42	1.00																			
Americas Core Real Estate	0.26	0.45	0.23	0.18	0.18	0.37	0.12	0.33	0.26	0.18	0.31	0.31	0.41	0.43	0.41	0.13	0.41	0.97	1.00																		
European Core Real Estate	0.37	0.46	0.39	0.29	0.31	0.43	0.25	0.30	0.36	0.31	0.39	0.38	0.45	0.46	0.45	0.32	0.39	0.82	0.74	1.00																	
Asia Pacific Core Real Estate	0.28	0.40	0.20	0.24	0.22	0.43	0.29	0.34	0.05	0.21	0.34	0.36	0.40	0.41	0.39	0.15	0.27	0.69	0.58	0.40	1.00																
Europe ex UK Core Real Estate	0.27	0.38	0.33	0.21	0.22	0.31	0.22	0.24	0.28	0.28	0.31	0.30	0.36	0.37	0.36	0.25	0.30	0.75	0.64	0.93	0.41	1.00															
Global REITs	0.75	0.79	0.74	0.73	0.71	0.75	0.68	0.66	0.55	0.23	0.65	0.63	0.84	0.83	0.84	0.67	0.50	0.53	0.49	0.40	0.50	0.28	1.00														
Commercial Mortgage Loans	-0.16	0.27	-0.23	-0.19	-0.25	0.02	-0.22	0.19	-0.10	0.13	-0.03	0.02	0.13	0.17	0.15	-0.25	-0.09	0.47	0.50	0.20	0.43	0.15	0.18	1.00													
Global Core Infrastructure	0.23	0.42	0.17	0.19	0.15	0.38	0.10	0.37	0.27	0.05	0.30	0.27	0.39	0.41	0.39	0.12	0.27	0.48	0.52	0.27	0.32	0.14	0.38	0.50	1.00												
Global Core Transport	-0.33	0.11	-0.28	-0.23	-0.33	-0.12	-0.26	-0.01	-0.14	-0.05	-0.21	-0.16	-0.04	-0.01	-0.01	-0.42	-0.17	0.36	0.43	0.09	0.26	0.08	0.02	0.69	0.35	1.00											
Global Timberland	0.05	0.38	0.01	0.07	0.01	0.23	0.10	0.28	0.10	0.24	0.16	0.18	0.30	0.33	0.32	-0.08	-0.06	0.31	0.31	0.06	0.42	0.07	0.27	0.62	0.44	0.48	1.00										
Commodities	0.28	0.31	0.22	0.20	0.24	0.45	0.32	0.22	0.21	0.08	0.37	0.29	0.36	0.37	0.34	0.22	0.22	0.44	0.42	0.35	0.36	0.28	0.28	0.15	0.37	0.05	0.29	1.00									
Gold	-0.11	-0.07	-0.17	-0.18	-0.14	-0.04	-0.10	-0.04	-0.23	0.14	0.05	0.05	-0.07	-0.05	-0.08	-0.06	-0.06	0.15	0.12	0.05	0.28	0.07	-0.02	0.37	0.15	0.26	0.18	0.25	1.00								
Private Equity	0.66	0.72	0.59	0.60	0.59	0.69	0.54	0.51	0.51	0.44	0.69	0.65	0.75	0.76	0.74	0.60	0.46	0.50	0.45	0.45	0.45	0.35	0.59	0.26	0.52	-0.02	0.48	0.48	-0.02	1.00							
Venture Capital	0.50	0.61	0.49	0.44	0.41	0.47	0.33	0.47	0.45	0.45	0.53	0.54	0.61	0.62	0.61	0.57	0.37	0.37	0.33	0.37	0.28	0.30	0.40	0.26	0.40	0.03	0.38	0.24	-0.02	0.76	1.00						
Diversified Hedge Funds hedged	0.76	0.58	0.68	0.67	0.73	0.66	0.60	0.53	0.63	0.38	0.70	0.64	0.71	0.69	0.68	0.81	0.58	0.32	0.26	0.38	0.24	0.32	0.53	-0.16	0.21	-0.31	0.09	0.39	0.00	0.67	0.60	1.00					
Event Driven Hedge Funds hedged	0.85	0.67	0.80	0.77	0.83	0.73	0.70	0.57	0.66	0.32	0.73	0.66	0.78	0.76	0.76	0.86	0.69	0.29	0.23	0.35	0.25	0.26	0.66	-0.21	0.20	-0.35	0.03	0.37	-0.11	0.67	0.53	0.86	1.00				
Long Bias Hedge Funds hedged	0.84	0.67	0.87	0.80	0.84	0.71	0.71	0.59	0.70	0.35	0.80	0.74	0.80	0.78	0.77	0.92	0.64	0.21	0.15	0.33	0.16	0.27	0.64	-0.29	0.15	-0.40	-0.03	0.31	-0.07	0.63	0.56	0.87	0.93	1.00			
Relative Value Hedge Funds hedged	0.76	0.57	0.67	0.69	0.75	0.71	0.64	0.54	0.61	0.37	0.75	0.69	0.70	0.69	0.67	0.79	0.65	0.39	0.34	0.42	0.29	0.32	0.61	-0.11	0.30	-0.30	0.07	0.45	-0.02	0.67	0.48	0.83	0.90	0.83	1.00		
Macro Hedge Funds hedged	0.18	0.07	0.13	0.16	0.23	0.21	0.28	0.08	0.15	0.06	0.24	0.19	0.16	0.15	0.14	0.24	0.05	0.00	-0.01	0.00	0.02	0.02	0.14	-0.11	-0.04	-0.10	0.17	0.39	0.26	0.20	0.10	0.47	0.27	0.31	0.26	1.00	
Direct Lending	0.05	0.46	-0.03	0.02	-0.03	0.25	0.02	0.35	0.13	0.18	0.16	0.18	0.35	0.40	0.37	-0.04	0.04	0.53	0.54	0.28	0.47	0.21	0.28	0.89	0.58	0.60	0.69	0.39	0.23	0.52	0.41	0.09	0.05	-0.05	0.15	0.01	1.00

		Compound Return 2027 (%)	Arithmetic Return 2027 (%)	Annualized Volatility (%)	Compound Return 2026 (%)	UK Inflation	UK Cash	U.S. Aggregate Bonds hedged	Euro Aggregate Bonds hedged	U.S. Inv Grade Corporate Bonds hedged	Euro Inv Grade Corp Bonds hedged	UK Inv Grade Corporate Bonds	U.S. High Yield Bonds hedged	Euro High Yield Bonds hedged	Global Credit hedged	U.S. Leveraged Loans hedged	Euro Government Bonds hedged	UK Gilts	UK Inflation-Linked Bonds	World Government Bonds hedged	World Government Bonds	World ex-UK Government Bonds hedged	World ex-UK Government Bonds	Emerging Markets Sovereign Debt hedged	Emerging Markets Local Currency Debt	Emerging Markets Corporate Bonds hedged	UK All Cap	UK Large Cap
Fixed income	UK Inflation	2.40	2.42	1.87	2.20	1.00																						
	UK Cash	2.90	2.90	0.69	2.70	-0.05	1.00																					
	U.S. Aggregate Bonds hedged	5.40	5.51	4.72	4.50	-0.25	0.19	1.00																				
	Euro Aggregate Bonds hedged	4.60	4.70	4.61	4.00	-0.25	0.17	0.76	1.00																			
	U.S. Inv Grade Corporate Bonds hedged	5.80	6.04	7.17	4.90	-0.27	0.08	0.87	0.72	1.00																		
	Euro Inv Grade Corp Bonds hedged	4.90	5.01	4.71	4.50	-0.24	0.05	0.67	0.83	0.84	1.00																	
	UK Inv Grade Corporate Bonds	6.00	6.28	7.76	5.30	-0.12	-0.04	0.65	0.68	0.80	0.84	1.00																
	U.S. High Yield Bonds hedged	6.40	6.75	8.66	5.80	-0.15	-0.03	0.40	0.34	0.65	0.66	0.59	1.00															
	Euro High Yield Bonds hedged	6.20	6.58	8.97	5.80	-0.11	-0.09	0.26	0.32	0.54	0.68	0.58	0.88	1.00														
	Global Credit hedged	5.40	5.54	5.48	4.70	-0.27	0.08	0.88	0.80	0.98	0.90	0.85	0.65	0.56	1.00													
	U.S. Leveraged Loans hedged	6.30	6.64	8.54	6.30	0.03	-0.15	0.04	0.07	0.34	0.45	0.41	0.75	0.84	0.34	1.00												
	Euro Government Bonds hedged	4.50	4.63	5.29	3.90	-0.23	0.18	0.73	0.98	0.63	0.72	0.60	0.23	0.20	0.71	-0.05	1.00											
	UK Gilts	5.10	5.39	7.79	4.70	-0.18	0.16	0.73	0.71	0.57	0.50	0.67	0.13	0.03	0.62	-0.15	0.73	1.00										
	UK Inflation-Linked Bonds	5.80	6.41	11.40	5.50	-0.21	0.03	0.67	0.60	0.63	0.55	0.64	0.40	0.27	0.67	0.18	0.58	0.74	1.00									
	World Government Bonds hedged	4.70	4.78	4.02	4.00	-0.25	0.24	0.87	0.88	0.68	0.60	0.57	0.16	0.05	0.73	-0.19	0.90	0.85	0.67	1.00								
	World Government Bonds	4.80	5.12	8.24	3.70	-0.18	0.24	0.42	0.40	0.19	0.07	0.12	-0.25	-0.34	0.21	-0.47	0.46	0.57	0.38	0.60	1.00							
	World ex-UK Government Bonds hedged	4.60	4.67	3.86	3.90	-0.24	0.24	0.88	0.89	0.68	0.61	0.56	0.17	0.06	0.74	-0.18	0.90	0.82	0.66	1.00	0.58	1.00						
	World ex-UK Government Bonds	4.80	5.15	8.63	3.60	-0.17	0.24	0.40	0.38	0.18	0.06	0.09	-0.28	-0.35	0.20	-0.49	0.44	0.54	0.36	0.58	0.99	0.56	1.00					
	Emerging Markets Sovereign Debt hedged	6.20	6.57	8.95	6.00	-0.27	0.08	0.67	0.57	0.82	0.75	0.68	0.75	0.64	0.84	0.44	0.47	0.38	0.52	0.47	0.05	0.47	0.04	1.00				
	Emerging Markets Local Currency Debt	7.00	7.50	10.37	6.10	-0.14	0.22	0.36	0.33	0.37	0.31	0.30	0.25	0.22	0.38	0.07	0.32	0.27	0.28	0.31	0.44	0.31	0.44	0.49	1.00			
	Emerging Markets Corporate Bonds hedged	6.00	6.27	7.64	5.80	-0.27	0.02	0.58	0.46	0.78	0.72	0.62	0.74	0.67	0.78	0.55	0.35	0.23	0.44	0.33	-0.06	0.35	-0.07	0.90	0.40	1.00		
Equities	UK All Cap	6.20	7.09	13.89	6.00	-0.07	-0.09	0.21	0.22	0.43	0.49	0.51	0.65	0.67	0.44	0.53	0.13	0.10	0.24	0.03	-0.15	0.03	-0.15	0.58	0.43	0.54	1.00	
	UK Large Cap	6.10	7.00	13.97	6.00	-0.02	-0.09	0.17	0.17	0.38	0.44	0.47	0.61	0.63	0.39	0.50	0.10	0.07	0.21	0.00	-0.14	0.00	-0.14	0.54	0.44	0.50	0.99	1.00
	UK Small Cap	7.40	8.74	17.26	6.50	-0.16	-0.10	0.28	0.30	0.50	0.59	0.56	0.71	0.72	0.53	0.58	0.20	0.15	0.28	0.10	-0.21	0.10	-0.23	0.62	0.27	0.59	0.86	0.79
	U.S. Large Cap	7.20	8.38	16.11	6.10	-0.11	-0.07	0.21	0.30	0.36	0.45	0.45	0.55	0.51	0.39	0.39	0.25	0.23	0.34	0.16	0.10	0.15	0.08	0.46	0.47	0.38	0.74	0.72
	U.S. Large Cap hedged	7.20	8.66	18.00	6.40	-0.11	-0.10	0.29	0.32	0.50	0.58	0.55	0.74	0.69	0.52	0.57	0.24	0.16	0.31	0.14	-0.26	0.14	-0.27	0.63	0.27	0.56	0.78	0.73
	Euro Area Large Cap	7.80	9.35	18.63	7.20	-0.11	-0.02	0.29	0.26	0.45	0.47	0.49	0.63	0.63	0.47	0.42	0.19	0.15	0.27	0.12	-0.03	0.13	-0.03	0.61	0.53	0.53	0.88	0.86
	Euro Area Large Cap hedged	7.90	9.32	17.81	7.70	-0.07	-0.11	0.23	0.28	0.44	0.55	0.53	0.70	0.74	0.47	0.58	0.20	0.09	0.22	0.07	-0.31	0.07	-0.31	0.59	0.29	0.54	0.87	0.84
	Euro Area Small Cap	7.60	9.22	19.02	7.80	-0.15	-0.06	0.26	0.22	0.45	0.46	0.50	0.66	0.66	0.46	0.48	0.14	0.12	0.25	0.08	-0.05	0.08	-0.07	0.61	0.46	0.56	0.86	0.83
	Euro Area Small Cap hedged	7.60	9.07	18.11	8.20	-0.11	-0.13	0.20	0.24	0.44	0.53	0.53	0.72	0.78	0.46	0.64	0.14	0.05	0.20	0.02	-0.31	0.02	-0.34	0.57	0.25	0.55	0.85	0.81
	Japanese Equity	8.80	9.73	14.40	8.20	-0.16	0.00	0.28	0.30	0.39	0.42	0.40	0.44	0.42	0.40	0.27	0.25	0.18	0.26	0.18	0.12	0.18	0.12	0.43	0.49	0.38	0.64	0.63
	Japanese Equity hedged	7.80	9.28	18.19	8.40	-0.01	-0.09	0.00	0.08	0.22	0.33	0.31	0.52	0.55	0.23	0.49	0.01	-0.11	0.04	-0.14	-0.47	-0.13	-0.47	0.36	0.16	0.37	0.65	0.63
	AC Asia ex-Japan Equity	6.80	8.34	18.44	7.30	-0.21	-0.01	0.31	0.24	0.47	0.45	0.40	0.55	0.53	0.47	0.40	0.16	0.14	0.28	0.13	0.01	0.13	0.02	0.60	0.56	0.60	0.68	0.66
	Chinese Domestic Equity	7.10	10.23	26.83	7.10	-0.18	0.04	0.15	0.10	0.23	0.18	0.11	0.21	0.21	0.21	0.17	0.08	0.02	0.08	0.05	-0.05	0.06	-0.04	0.26	0.22	0.32	0.24	0.23
	Emerging Markets Equity	6.80	8.29	18.17	7.20	-0.17	0.00	0.27	0.21	0.46	0.45	0.41	0.60	0.57	0.46	0.45	0.14	0.11	0.29	0.09	-0.01	0.09	-0.01	0.64	0.59	0.63	0.72	0.70
	AC World Equity	7.20	8.22	14.95	6.40	-0.13	-0.05	0.27	0.30	0.45	0.51	0.51	0.64	0.61	0.47	0.46	0.23	0.21	0.35	0.15	0.05	0.14	0.04	0.59	0.55	0.51	0.85	0.83
	AC World ex-UK Equity	7.20	8.25	15.16	6.40	-0.14	-0.04	0.27	0.30	0.45	0.50	0.50	0.64	0.60	0.47	0.45	0.24	0.22	0.35	0.16	0.07	0.15	0.05	0.58	0.56	0.51	0.84	0.82
	Developed World Equity	7.20	8.25	15.16	6.30	-0.12	-0.05	0.26	0.30	0.43	0.50	0.51	0.63	0.59	0.46	0.45	0.24	0.22	0.35	0.15	0.06	0.15	0.04	0.56	0.53	0.48	0.84	0.82
	Global Convertible Bonds hedged	7.20	7.82	11.60	6.30	-0.21	-0.01	0.35	0.35	0.60	0.64	0.56	0.79	0.75	0.60	0.65	0.25	0.14	0.31	0.14	-0.24	0.14	-0.26	0.70	0.30	0.67	0.75	0.69
	Global Credit Sensitive Convertible hedged	5.20	5.46	7.37	4.60	-0.09	-0.15	0.22	0.31	0.40	0.51	0.45	0.58	0.63	0.43	0.64	0.23	0.04	0.21	0.12	-0.25	0.13	-0.28	0.51	0.06	0.63	0.46	0.42
Alternatives	Global Core Real Estate	7.60	8.37	12.97	7.30	-0.06	-0.34	-0.05	-0.02	0.00	0.07	0.14	0.21	0.18	0.03	0.29	-0.05	-0.02	0.24	-0.06	-0.12	-0.05	-0.15	0.06	-0.06	0.16	0.22	0.23
	Americas Core Real Estate	7.80	8.39	11.39	7.60	0.02	-0.33	-0.15	-0.10	-0.09	0.02	0.06	0.23	0.22	-0.06	0.36	-0.12	-0.12	0.16	-0.16	-0.29	-0.15	-0.31	0.01	-0.19	0.14	0.13	0.13
	European Core Real Estate	6.80	7.56	12.82	6.30	-0.21	-0.14	0.08	0.10	0.12	0.13	0.14	0.15	0.13	0.13	0.14	0.09	0.07	0.26	0.08	0.04	0.08	0.02	0.11	0.04	0.16	0.24	0.24
	Asia Pacific Core Real Estate	8.40	9.44	15.21	7.80	-0.09	-0.26	0.18	0.09	0.17	0.09	0.25	0.00	-0.05	0.17	-0.07	0.08	0.23	0.25	0.16	0.34	0.15	0.33	0.12	0.31	0.09	0.26	0.29
	UK Core Real Estate	7.40	8.20	13.20	7.80	-0.05	-0.27	-0.09	0.00	0.06	0.15	0.09	0.38	0.37	0.07	0.43	-0.05	-0.16	0.11	-0.14	-0.40	-0.13	-0.41	0.12	-0.25	0.23	0.26	0.26
	Global REITs	7.90	8.75	13.68	8.10	-0.13	-0.11	0.37	0.36	0.50	0.52	0.57	0.64	0.58	0.53	0.42	0.30	0.32	0.45	0.26	0.12	0.26	0.10	0.60	0.51	0.52	0.75	0.74
	Global Core Infrastructure	6.80	7.34	10.77	5.90	0.20	-0.09	-0.09	-0.03	-0.05	-0.02	0.05	0.01	0.01	-0.03	0.11	-0.03	0.02	0.16	-0.05	0.16	-0.06	0.15	0.05	0.21	0.03	0.03	0.05
	Global Core Transport	7.80	8.70	14.09	7.30	0.20	0.05	-0.16	-0.16	-0.42	-0.44	-0.33	-0.51	-0.50	-0.39	-0.42	-0.07	0.05	0.01	0.04	0.41	0.04	0.41	-0.49	0.07	-0.47	-0.36	-0.30
	Global Timberland	5.90	6.37	10.02	5.70	0.05	0.11	-0.03	0.00	-0.12	-0.15	-0.07	-0.30	-0.29	-0.12	-0.33	0.04	0.16	0.16	0.09	0.55	0.07	0.55	-0.19	0.38	-0.24	-0.02	0.03
	Commodities	4.50	5.72	16.22	4.00	0.17	-0.06	-0.12	-0.17	-0.01	-0.02	-0.01	0.20	0.14	-0.04	0.23	-0.21	-0.19	0.04	-0.24	-0.03	-0.24	-0.03	0.12	0.24	0.13	0.34	0.38
	Gold	5.20	6.59	17.38	4.90	-0.03	0.19	0.27	0.14	0.15	0.02	0.06	-0.12	-0.18	0.14	-0.27	0.15	0.29	0.23	0.27	0.44	0.27	0.44	0.08	0.36	0.03	-0.06	-0.04
	Private Equity	9.50	10.79	17.05	9.60	-0.11	-0.17	-0.11	-0.03	0.18	0.27	0.23	0.44	0.43	0.18	0.44	-0.11	-0.15	0.16	-0.22	-0.14	-0.23	-0.14	0.33	0.32	0.36	0.62	0.60
	Venture Capital	8.50	10.14	19.19	7.90	-0.25	-0.11	-0.03	0.06	0.13	0.22	0.17	0.32	0.26	0.17	0.32	0.01	-0.04	0.24	-0.07	-0.12	-0.08	-0.14	0.27	0.15	0.28	0.40	0.34
	Diversified Hedge Funds hedged	6.40	6.56	5.89	5.00	-0.04	-0.09	0.06	0.08	0.34	0.41	0.40	0.60	0.65	0.34	0.66	-0.02	-0.10	0.15	-0.13	-0.41	-0.13	-0.43	0.46	0.11	0.48	0.64	0.60
	Event Driven Hedge Funds hedged	6.80	7.14	8.53	4.90	-0.09	-0.11	0.15	0.18	0.42	0.52	0.48	0.75	0.78	0.43	0.74	0.07	-0.04	0.18	-0.06	-0.41	-0.05	-0.43	0.56	0.22	0.55	0.75	0.70
	Long Bias Hedge Funds hedged	7.00	7.58	11.21	5.20	-0.14	-0.05	0.24	0.22	0.49	0.54	0.48	0.75	0.74	0.49	0.65	0.11	0.02	0.21	0.01	-0.37	0.02	-0.38	0.62	0.26	0.60	0.77	0.72
	Relative Value Hedge Funds hedged	5.80	5.92	5.13	5.40	-0.06	-0.09	0.14	0.15	0.43	0.52	0.46	0.79	0.83	0.44	0.85	0.03	-0.11	0.20	-0.10	-0.45	-0.09	-0.46	0.58	0.23	0.62	0.69	0.66
	Macro Hedge Funds hedged	5.30	5.56	7.42	3.80	0.02	0.09	-0.10	-0.06	0.00	0.01	0.04	0.04	0.07	-0.02	0.02	-0.07	-0.05	-0.04	-0.10	-0.04	-0.11	-0.04	0.04	0.12	0.01	0.26	0.27
	Direct Lending	7.50	8.93	17.84	7.10	0.03	0.00	-0.20	-0.07	-0.25	-0.19	-0.18	-0.23	-0.23	-0.23	-0.14	-0.04	0.02	0.06	-0.05	0.44	-0.07	0.44	-0.27	0.26	-0.24	-0.08	-0.04

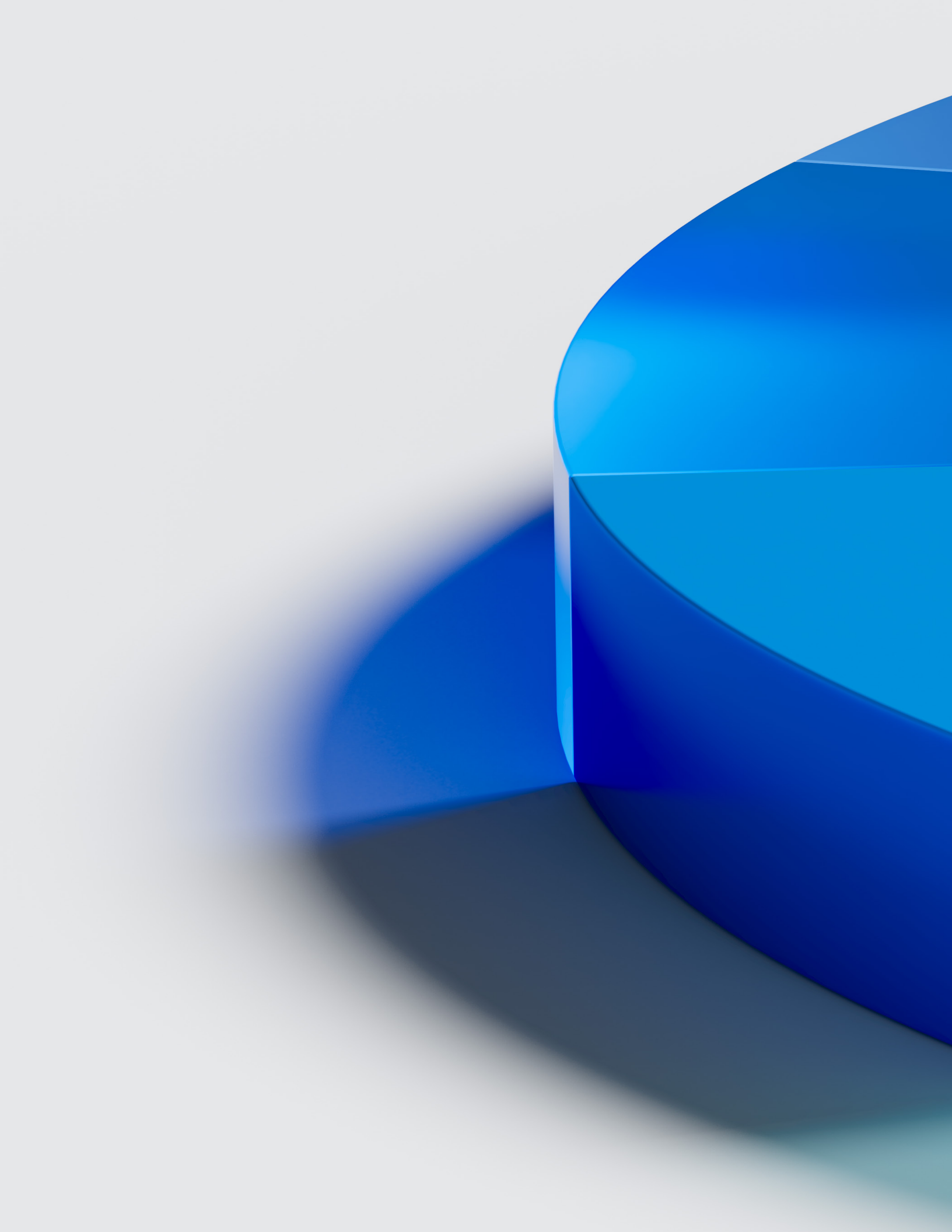
Sterling assumptions

Note: For the 2027 numbers we have amended the composites used for the core and value-add real estate forecasts, adding a new global composite alongside three amended regional composites for the Americas, EMEA and APAC. 2026 numbers for each new composite have been estimated by aggregating the relevant 2026 country forecasts.

All estimates on this page are in Sterling terms. Given the complex risk-reward trade-offs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations to all of these asset classes and strategies. Exclusive reliance on this information is not advised. Please note that information shown may use quantitative frameworks but final forecasts are based on qualitative analysis. These asset class and strategy assumptions are passive only for liquid assets and industry averages (median managers) for alternatives. The assumptions do not consider the impact of active management. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Forecasts are based on current market and financial conditions, and our judgement, and are subject to change without notice. Assumptions, opinions and estimates has been prepared for information and illustrative purposes only and is not intended to provide, and should not be relied on for, accounting, legal or tax advice. They should not be relied upon as recommendations to buy or sell securities. This information is not intended as a recommendation to invest in any particular asset class or strategy. References to future returns are not promises or estimates of actual returns a client portfolio may achieve.

Source: J.P. Morgan Asset Management; as of September 30, 2026. Alternative asset classes (including hedge funds, private equity, real estate, direct lending, transportation, infrastructure and timberland) are unlike other asset categories shown above in that there is no underlying investible index. The return estimates for these alternative asset classes and strategies are estimates of the industry average – median manager, net of manager fees. The dispersion of return among managers of these asset classes and strategies is typically significantly wider than that of traditional asset classes. For the 2027 Core and Value-Added Real Estate we have amended their composites, adding a new global aggregate alongside three amended regional aggregates for the Americas, European and Asia Pacific. For the new core composites, their corresponding 2026 compound returns have been estimated by aggregating the relevant 2026 country forecasts. For equity and fixed income assumptions we assume current index regional weight in composite indices with multiple countries/regions. All returns are nominal. The return forecasts of composite and hedged assets are computed using unrounded return and rounded to the nearest 10bp at the final stage. In some cases this may lead to apparent differences in hedging impact across assets, but this is purely due to rounding. For the full opportunity set, please contact your J.P. Morgan representative.

	UK Small Cap	U.S. Large Cap	U.S. Large Cap hedged	Euro Area Large Cap	Euro Area Large Cap hedged	Euro Area Small Cap	Euro Area Small Cap hedged	Japanese Equity	Japanese Equity hedged	AC Asia ex-Japan Equity	Chinese Domestic Equity	Emerging Markets Equity	AC World Equity	AC World ex-UK Equity	Developed World Equity	Global Convertible Bonds hedged	Global Credit Sensitive Convertible hedged	Global Core Real Estate	Americas Core Real Estate	European Core Real Estate	Asia Pacific Core Real Estate	UK Core Real Estate	Global REITs	Global Core Infrastructure	Global Core Transport	Global Timberland	Commodities	Gold	Private Equity	Venture Capital	Diversified Hedge Funds hedged	Event Driven Hedge Funds hedged	Long Bias Hedge Funds hedged	Relative Value Hedge Funds hedged	Macro Hedge Funds hedged	Direct Lending
UK Small Cap	1.00																																			
U.S. Large Cap	0.66	1.00																																		
U.S. Large Cap hedged	0.78	0.84	1.00																																	
Euro Area Large Cap	0.77	0.75	0.77	1.00																																
Euro Area Large Cap hedged	0.82	0.70	0.84	0.90	1.00																															
Euro Area Small Cap	0.85	0.69	0.74	0.93	0.83	1.00																														
Euro Area Small Cap hedged	0.90	0.65	0.81	0.84	0.93	0.91	1.00																													
Japanese Equity	0.55	0.66	0.55	0.65	0.59	0.61	0.56	1.00																												
Japanese Equity hedged	0.62	0.56	0.68	0.62	0.73	0.58	0.68	0.72	1.00																											
AC Asia ex-Japan Equity	0.60	0.59	0.59	0.69	0.60	0.68	0.59	0.57	0.49	1.00																										
Chinese Domestic Equity	0.23	0.21	0.21	0.24	0.21	0.24	0.22	0.21	0.22	0.55	1.00																									
Emerging Markets Equity	0.63	0.62	0.63	0.73	0.63	0.73	0.64	0.58	0.52	0.97	0.49	1.00																								
AC World Equity	0.76	0.95	0.86	0.87	0.80	0.83	0.76	0.74	0.64	0.75	0.29	0.79	1.00																							
AC World ex-UK Equity	0.75	0.96	0.86	0.86	0.79	0.82	0.75	0.74	0.64	0.75	0.29	0.79	1.00	1.00																						
Developed World Equity	0.75	0.97	0.86	0.86	0.80	0.81	0.75	0.74	0.64	0.68	0.25	0.72	0.99	0.99	1.00																					
Global Convertible Bonds hedged	0.81	0.69	0.85	0.74	0.78	0.77	0.81	0.58	0.67	0.70	0.35	0.73	0.80	0.79	0.78	1.00																				
Global Credit Sensitive Convertible hedged	0.53	0.38	0.57	0.39	0.54	0.44	0.57	0.26	0.39	0.40	0.18	0.44	0.44	0.43	0.42	0.61	1.00																			
Global Core Real Estate	0.17	0.30	0.24	0.07	0.14	0.11	0.16	0.09	0.15	0.16	0.07	0.19	0.26	0.26	0.26	0.13	0.38	1.00																		
Americas Core Real Estate	0.13	0.22	0.22	-0.03	0.13	0.02	0.14	0.02	0.21	0.08	0.02	0.10	0.16	0.16	0.17	0.09	0.42	0.94	1.00																	
European Core Real Estate	0.20	0.30	0.26	0.19	0.13	0.23	0.16	0.11	0.14	0.21	0.16	0.24	0.30	0.30	0.30	0.21	0.21	0.72	0.53	1.00																
Asia Pacific Core Real Estate	0.11	0.27	0.06	0.18	0.07	0.16	0.06	0.20	-0.18	0.24	0.06	0.22	0.27	0.27	0.27	0.02	0.08	0.53	0.30	0.31	1.00															
UK Core Real Estate	0.29	0.22	0.37	0.15	0.30	0.21	0.33	-0.02	0.31	0.14	0.11	0.19	0.22	0.21	0.22	0.32	0.37	0.60	0.60	0.66	-0.04	1.00														
Global REITs	0.68	0.77	0.71	0.73	0.67	0.72	0.66	0.60	0.48	0.64	0.18	0.67	0.83	0.83	0.82	0.65	0.41	0.40	0.34	0.25	0.40	0.27	1.00													
Global Core Infrastructure	-0.06	0.15	-0.04	0.01	-0.08	-0.06	-0.14	0.09	-0.04	-0.06	-0.30	0.01	0.10	0.10	0.11	-0.10	0.04	0.10	0.12	-0.04	0.12	-0.15	0.12	1.00												
Global Core Transport	-0.53	-0.02	-0.41	-0.28	-0.39	-0.39	-0.48	-0.12	-0.33	-0.29	-0.16	-0.33	-0.17	-0.16	-0.14	-0.53	-0.29	0.20	0.19	0.03	0.24	-0.20	-0.11	0.32	1.00											
Global Timberland	-0.19	0.21	-0.21	0.02	-0.19	-0.06	-0.24	0.18	-0.21	0.02	0.07	0.00	0.15	0.16	0.16	-0.26	-0.32	-0.01	-0.13	0.00	0.40	-0.40	0.09	0.34	0.51	1.00										
Commodities	0.16	0.25	0.18	0.21	0.13	0.26	0.18	0.14	0.13	0.27	0.03	0.36	0.31	0.30	0.29	0.19	0.12	0.30	0.25	0.22	0.25	0.16	0.25	0.20	-0.04	0.17	1.00									
Gold	-0.14	-0.05	-0.21	-0.06	-0.23	-0.04	-0.20	0.01	-0.30	0.10	0.12	0.10	-0.01	-0.01	-0.03	-0.09	-0.23	-0.03	-0.15	0.03	0.29	-0.24	0.01	0.16	0.30	0.32	0.27	1.00								
Private Equity	0.57	0.65	0.55	0.56	0.52	0.55	0.51	0.38	0.37	0.56	0.32	0.61	0.69	0.69	0.68	0.56	0.31	0.27	0.19	0.25	0.30	0.20	0.49	0.23	-0.19	0.28	0.38	-0.07	1.00							
Venture Capital	0.45	0.53	0.45	0.36	0.38	0.34	0.35	0.34	0.37	0.44	0.36	0.44	0.52	0.53	0.52	0.54	0.28	0.18	0.14	0.19	0.11	0.17	0.28	0.15	-0.10	0.18	0.10	-0.11	0.70	1.00						
Diversified Hedge Funds hedged	0.70	0.50	0.68	0.57	0.67	0.62	0.73	0.42	0.63	0.54	0.32	0.59	0.61	0.60	0.59	0.80	0.55	0.23	0.22	0.21	0.06	0.33	0.45	-0.04	-0.46	-0.18	0.29	-0.10	0.60	0.55	1.00					
Event Driven Hedge Funds hedged	0.80	0.61	0.80	0.67	0.77	0.73	0.83	0.49	0.65	0.57	0.26	0.63	0.71	0.70	0.70	0.85	0.66	0.21	0.20	0.18	0.07	0.35	0.58	-0.05	-0.50	-0.23	0.28	-0.19	0.62	0.48	0.86	1.00				
Long Bias Hedge Funds hedged	0.81	0.65	0.87	0.73	0.80	0.76	0.84	0.55	0.70	0.68	0.33	0.73	0.77	0.76	0.75	0.92	0.60	0.13	0.11	0.18	0.00	0.30	0.60	-0.09	-0.54	-0.26	0.26	-0.11	0.58	0.52	0.87	0.93	1.00			
Relative Value Hedge Funds hedged	0.70	0.49	0.67	0.59	0.69	0.64	0.76	0.44	0.61	0.59	0.30	0.64	0.61	0.60	0.59	0.79	0.64	0.29	0.29	0.21	0.07	0.39	0.54	0.00	-0.48	-0.24	0.35	-0.13	0.58	0.41	0.83	0.90	0.84	1.00		
Macro Hedge Funds hedged	0.16	0.13	0.12	0.19	0.15	0.23	0.20	0.13	0.14	0.21	0.07	0.25	0.21	0.21	0.20	0.21	0.05	0.02	-0.02	0.06	0.08	-0.03	0.16	0.04	-0.05	0.23	0.42	0.30	0.28	0.14	0.45	0.26	0.30	0.26	1.00	
Direct Lending	-0.21	0.27	-0.24	-0.14	-0.24	-0.19	-0.28	0.17	-0.15	-0.08	-0.04	-0.09	0.13	0.14	0.16	-0.24	-0.23	0.21	0.15	0.07	0.36	-0.14	0.05	0.34	0.60	0.65	0.23	0.25	0.27	0.20	-0.17	-0.20	-0.30	-0.16	0.06	1.00



IV
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