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Investment Solutions

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Seeking potential in a pivoting world

CAPITAL MARKET ASSUMPTIONS

MARCH 2025 • Document for professional investors only

WHAT'S NEW

Capital market assumptions: what's new in this year's edition

Given the current geo-economic and technological shifts, along with more frequent extreme climate events and a slow transition, the next 3 to 5 years will be challenging for economic projections. This uncertainty affects financial markets, increases volatility and influences long-term economic patterns like inflation, with contrasting effects.

This publication is based on data and insights as of end-December 2024 and relies on a quantitative framework. While this approach provides discipline and consistent assumptions, it is inherently limited – particularly in today's world – where structural shifts may emerge and influence the future for decades.

This does not prevent us from mentioning key topics that will shape the economy and markets in the future, but due to their depth and complexity, these will require ad hoc studies that we will cover in upcoming publications. Such topics include the potential watershed moment in Europe. Should the region respond decisively to possible shifts in US trade and defence policies, it could unlock enormous potential – particularly if member states advance plans for Capital Market and Banking Unions, ally on a more integrated industrial policy, and implement proposals from the Draghi and Letta reports. Similarly, in China, recent institutional responses to internal imbalances and external pressures (e.g., tariffs) might accelerate structural improvements.

In this year's Capital Market Assumptions (CMA), the Amundi Investment Institute – in partnership with Amundi's Multi-Asset Solutions Teams – examines the impact of the significant game-changers currently at play and their implications on expected return assumptions for over 40 asset classes over the next decade. Our themes range from the rise of nationalism and increasing geopolitical fragmentation – exacerbated by the Trump era – to the transformative effects of artificial intelligence's adoption, global shifts in demographics between Developed and Emerging Markets, and the resurgence of fiscal spending with potential impacts on long-term interest rate dynamics. We also delve into the transformation that will enhance Europe's competitiveness, and India's growing role as a global tech hub.

To account for these game-changers, and their macro and market implications, this year's CMA includes:

- *A revision of the macro long-term scenarios to incorporate a new socio-economic configuration, addressing increasing geopolitical fragmentation and a more fragmented and delayed energy transition.*
- *A more granular assessment of the impact of artificial intelligence at a country level.*
- *An analysis of the implications of the macro backdrop on financial variables, with a fine-tuning of long-term financial assumptions, particularly regarding interest rates and earnings growth.*
- *A reassessment of the risk-reward profile for equity, real assets and alternative investments, with a focus on valuations and fundamentals in US equity.*
- *Continued enhancements to private asset modelling.*

We have also enhanced the digital experience, which allows investors to navigate the full set of expected returns data in various currencies, and to delve into the main assumptions driving our asset class modelling process.

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New opportunities arise in a pivoting world

In a pivoting world marked by rising nationalism and geopolitical fragmentation, Europe has the potential to boost its competitiveness, Asia is emerging as a global tech powerhouse, and the US will continue to reap the benefits of artificial intelligence. While these trends point to a favourable growth/inflation mix for the next decade, long-term growth towards 2050 will face challenges from deteriorating demographic dynamics, high debt and climate impacts.

Appealing returns with some structural shifts

Structural changes – such as widespread AI adoption – and current valuation levels imply a shift in the long-term ordering of returns with implications for strategic asset allocation. Bonds are back, and equity investing has to go beyond the US market into European and pan-Asian equities. Returns for private assets will gradually normalise, but they will remain a key diversification engine.

VINCENT MORTIER
GROUP CHIEF INVESTMENT OFFICER

PHILIPPE D'ORGEVAL
DEPUTY GROUP CHIEF INVESTMENT OFFICER

The empowerment of Europe

One of the key themes emerging from this year's Capital Market Assumptions is Europe. The journey towards greater autonomy, higher competitiveness and innovation will drive investment opportunities that will make European markets eligible for an increased emphasis within a strategic asset allocation.

Diversification is back

Diversification is back as a key focus for investors: a less concentrated equity approach, Emerging Market bonds and exposure to a liquidity premium through private assets will chart the way forward.

JOHN O'TOOLE
CIO MULTI ASSET SOLUTIONS

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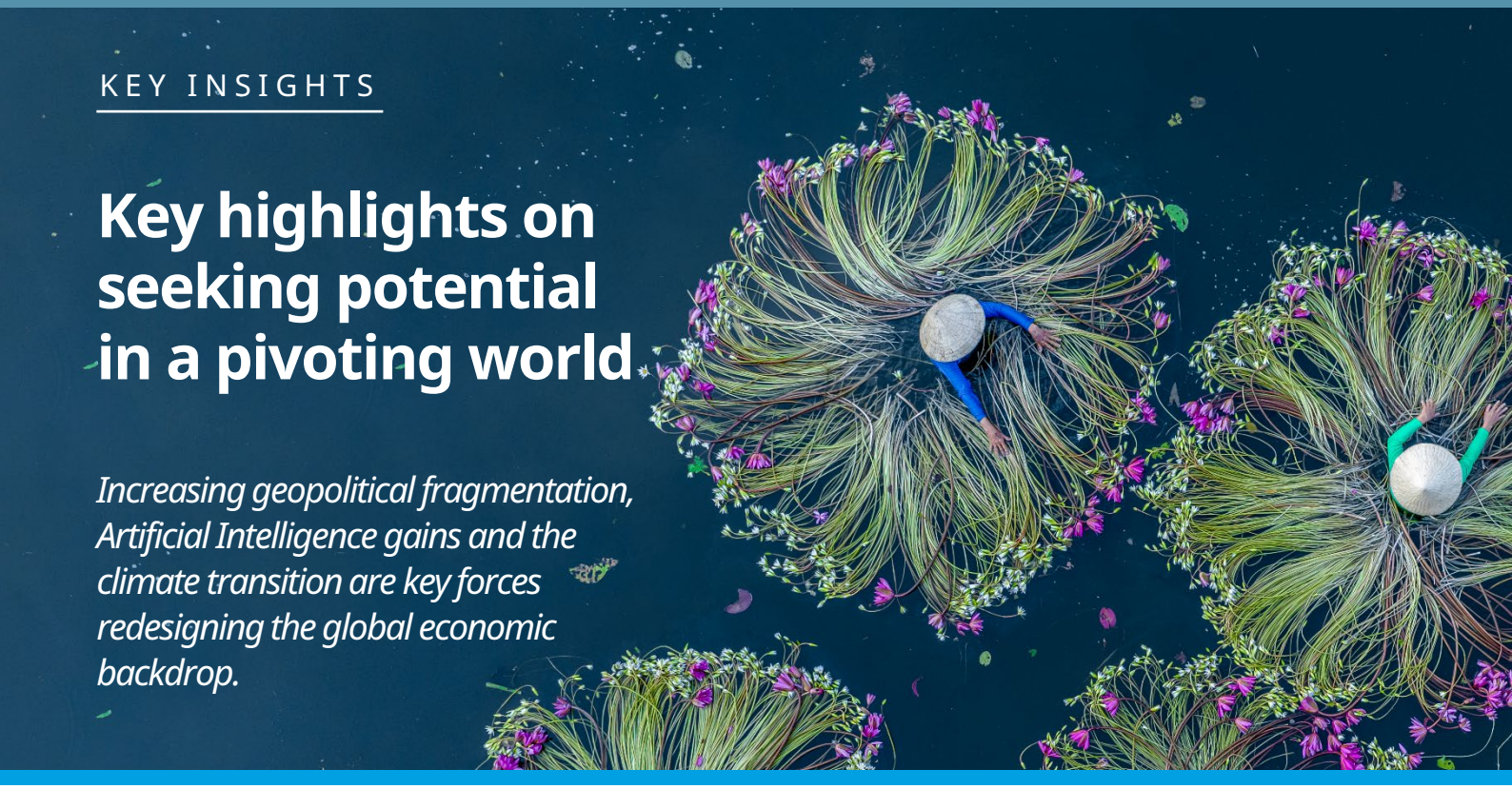
KEY INSIGHTS

Key highlights on seeking potential in a pivoting world

Increasing geopolitical fragmentation, Artificial Intelligence gains and the climate transition are key forces redesigning the global economic backdrop.



While the global economy faces challenges from rising nationalism, job and business transformations stemming from the widespread adoption of artificial intelligence, and long-term demographic shifts, the ultimate outcome may not be negative for economies and markets. Instead, **we see appealing and improved returns for investors over the next decade compared to last year's forecasts, with a greater emphasis on diversification, particularly in equities**. As some of the trends in our CMA (based on end of 2024 valuation levels) are accelerating and already starting to materialise in 2025, we also provide insights on which of these trends are likely to endure over the long term.

1

Towards three decades of growth rebalancing in a more fragmented world

Artificial intelligence (AI)-driven productivity gains and more spread-out costs related to a gradual implementation of climate policies are likely to support the growth-inflation mix in the next decade. From the 2040s, potential growth will primarily be driven by demographic factors, including the Emerging Markets (EM) which are still benefitting from a demographic dividend, while chronic climate physical costs will increase across regions. This will lead to a compression of the EM growth premium.

2

Game-changers in Europe will empower European transformation

Increased defence spending and investments to boost innovation and European competitiveness will drive productivity gains when properly targeted on specific projects. While we have started modelling some of these gains, the recent extraordinary fiscal push in Germany, the plan to enhance defence at the EU level, and a potential ceasefire and reconstruction in Ukraine are not yet factored into this year's assumptions and could further lift European growth. Hence, we believe that the rising appeal of European asset classes (equities, bonds and the euro) have room to continue over the next years.

3

Bonds are back is reaffirmed, but be prepared for long-term rates uncertainty

Bonds are expected to remain appealing in both Europe and the US thanks to attractive carry, providing a stable anchor for future asset allocations. Yet, investors should consider rising inflation uncertainty stemming from geopolitical tensions and supply chain disruptions, food security and increasing demand for resources deriving from the world's technological transformation. These factors, combined with higher expected public debt, could exert pressure on long-term rates.

Cover image | Five Vietnamese women harvesting water lilies in the Mekong river during flooding season. Vietnam. Photo by Abstract Aerial Art @Gettyimages

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4 Appealing global equity returns supported by improving earning growth dynamics

We see appealing returns in equities for the next decade, as better growth prospects and AI-driven productivity gains will improve the earnings trajectory. In our CMA, we anticipated some rotations that are now materialising, with US concentration fading and a return of interest in Europe and Emerging Markets. A greater focus on geographical diversification will be key, while sector-wise we see long-term opportunities in Financials, Healthcare, Industrials and select IT.

5 Asia in focus in the tech race, with India set to benefit

We expect technological advancements to continue driving growth opportunities in the future, with the theme broadening as adoption rises. Asia is rapidly emerging as a powerhouse in the global tech landscape, particularly India, which should benefit from the tech rivalry between China and the US. This is expected to drive appealing returns in EM equities, with Indian equity expected returns at 8.2% for the next decade: the highest among the equity markets covered.

6 The rising need for portfolio diversifiers in a riskier world

Portfolio construction will have to address multiple challenges coming from concentration risk and potential valuation resets in some areas, high uncertainty on long-term rate dynamics and unstable correlations in an uncertain inflationary environment. These factors will increase the demand for "portfolio construction diversifiers". Private debt, Emerging Market debt and hedge funds are the favourite candidates in this space.

7 Appealing returns for the next decade for an optimised 60-40 allocation

A more favourable growth/inflation mix for the next decade supported by the boost from artificial intelligence, delayed costs for the energy transition and higher bond rates, translate into better return prospects across the board which will lead the optimised 60-40 strategic asset allocation* to deliver returns around 7% in USD and 6% in EUR.

* Diversified optimised allocation with a risk profile similar to a 60% global equity – 40% global bond, see page 18 for the ER for the different optimised allocation.

2.6%

Expected average world real GDP growth for the next decade, with EM's growth premium slowing from an average 2.7% over the past decade to 1.8% for the next one.

~70%

70% of the 40 liquid asset classes covered in the CMA are expected to deliver returns above the past 20-year average, largely due to improved bond returns.

>7.5%

Asset classes with the highest return potential for the next decade: global private equity, Indian equity, EM equity ex China, EM equity, global infrastructure, China and European equity.

~ 7%

Expected return for a diversified dynamic USD allocation targeting a 12% volatility range (6.8% with only liquid assets, 7.3% including real and alternative assets).

~20%

Expected allocation to real and alternative assets, with a preference for private equity for dynamic allocation and private debt for moderate risk allocation.

Source: Amundi 2025 Capital Market Assumptions.

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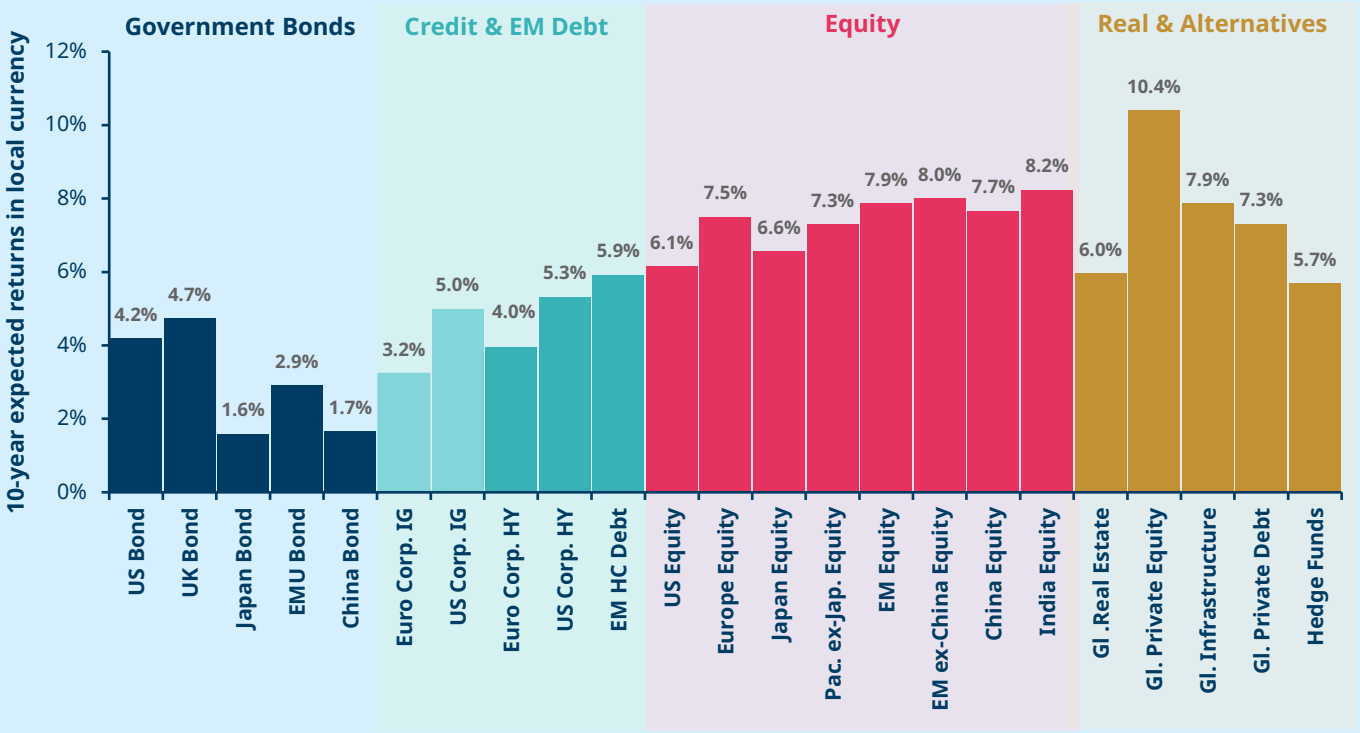
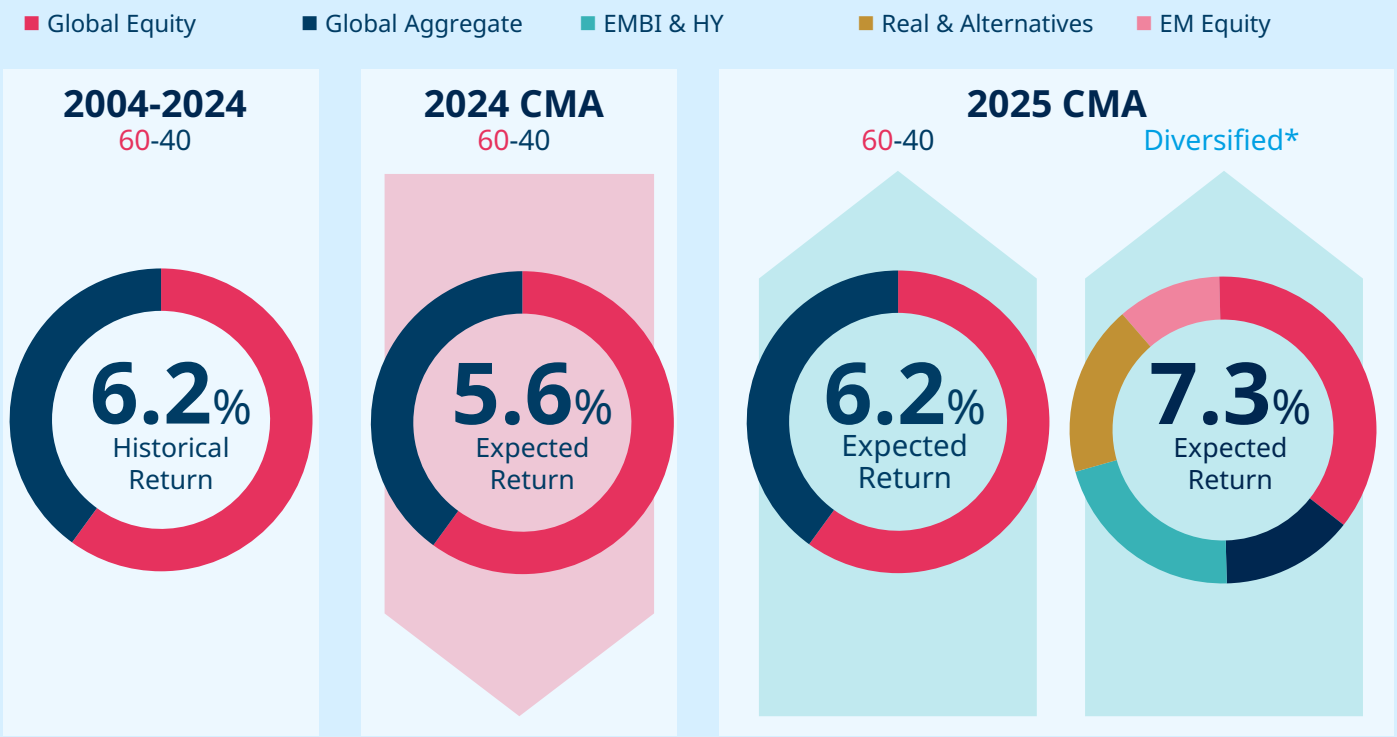
Appealing long-term expected returns across the board

10-year expected returns in local currency, excluding alpha



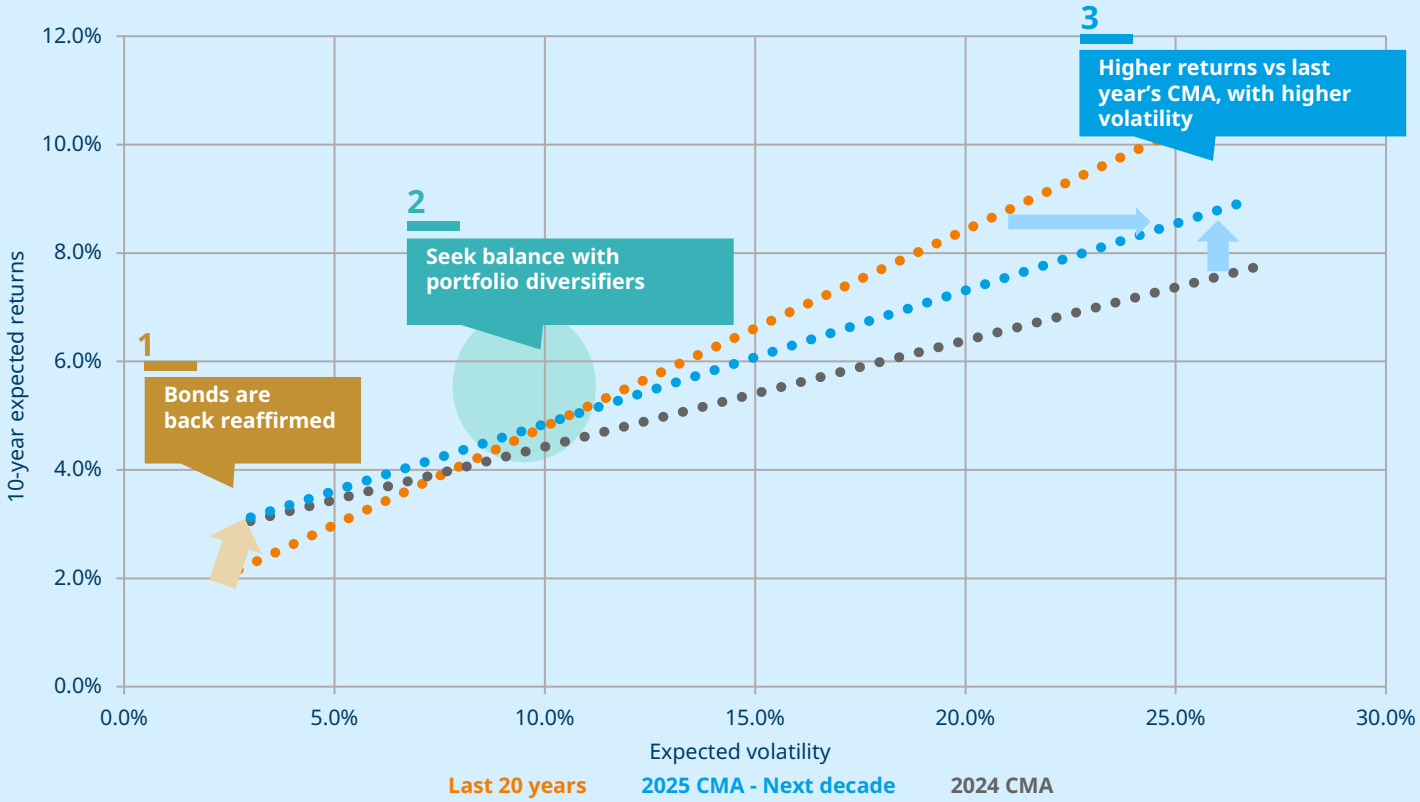
60-40 allocation returns are back, with higher potential from a diversified Strategic Asset Allocation in USD



Source: Amundi CASM Model, Bloomberg. Simulations starting date is 31 December 2024. For additional information see 'Sources and Assumptions' at the end of this document. The forecast returns are not necessarily indicative of future performance, which could differ substantially. Returns are nominal and gross of fees, except private equity which is net of fees. EM HC debt, global infrastructure and hedge funds are in USD, all other indices are in local currency. The expected returns consider the market beta and the alternative assets risk premium. The alpha return component generated by portfolio management, strategy selection or specific value creation programs – that can be significant above all for real and alternative assets – is not considered in any form. 60-40 allocation: 60% MSCI world total return in USD, 40% global aggregate bond index hedged in USD. *The diversified Strategic Asset Allocation refers to the dynamic optimised allocation targeting a 12% volatility. For further details see article on page 18.

Three portfolio construction themes for the next decade

Capital market lines derived from historical and expected risk-return payoffs for a homogeneous set of representative liquid asset classes in local currencies



1

Bonds are back is reaffirmed

A core bond allocation will be a key performance engine, particularly for investors with a moderate risk profile.

To optimise opportunities, consider flexible fixed income approaches to leverage shifts in yield curves and actively manage duration exposure.

Government and high-quality corporate bond returns are set to shine with attractive carry, but expect higher volatility.

2

Seek balance with portfolio diversifiers

With both bonds and equities bringing higher returns, **investors will have to seek balance by adding medium volatility assets** that exhibit low to medium correlations with bonds and equities.

Emerging Market bonds and private debt will be key pillars in asset allocation to balance the overall risk allocation, particularly for moderate risk profiles.

3

Higher returns vs last year's CMA, with higher volatility

Equity returns are more compelling compared to last year's CMA.

Yet, compared to the past decade of strong and stable US market returns, **we expect future outperformance to come from European equities, Emerging Markets** – which brings higher volatility – or from private equity, which entails more complex risks.

Source: Amundi CASM Model. Data as of 31 December 2024. For additional information see 'Sources and Assumptions' at the end of this document. The forecast returns are not necessarily indicative of future performance, which could differ substantially.

THE BIG TAKE

THE BIG TAKE

The global economy's path in a fragmented world

With the world on the brink of significant structural changes, projecting the long-term macroeconomic scenario for 2025-2050 presents unique challenges. It is crucial to identify emerging trends while evaluating the acceleration of existing ones. Key factors to consider include shifts in trade relationships shaped by geopolitical developments, a more fragmented global landscape marked by rising nationalism, and major demographic changes such as declining fertility rates and a shrinking working-age population. These trends may be counterbalanced by renewed migratory flows, increased labour intensity through later retirement ages, and enhanced productivity driven by a technological revolution.

Compared to the 2024 Capital Market Assumptions (CMA), we have revised our long-term macro scenarios to factor in important expected changes in terms of socio-economic developments, the climate transition, and the impact of artificial intelligence (AI) on growth.

New socioeconomic paths

We introduced a new combination of socio-economic scenarios, moving away from "a world that follows a path in which social, economic and technological trends do not shift markedly from historical patterns"[1], adding complexity instead through different emerging paths. Regional rivalry becomes the dominant narrative, as nations increasingly prioritise domestic and regional issues over global cooperation. This resurgence of nationalism, driven by concerns over competitiveness and security, leads to a focus on achieving energy and food security within regional confines, often at the expense of broader development goals. Consequently, inequality rises as resources are concentrated within regions, leaving marginalised communities behind. In this starkly divided landscape, investment in human capital is unevenly distributed, further exacerbating disparities in economic opportunity and political power. This stratification is evident both within and between countries, where high-tech sectors thrive while local environmental policies primarily benefit affluent areas. Meanwhile, the energy sector is diversifying, balancing investment in carbon-intensive fuels with low-carbon alternatives, although the costs and benefits are not equitably shared. Lastly, in a world where fossil-fuelled development coexists with rapid technological progress, local environmental challenges like air pollution should be effectively addressed, and geo-engineering is considered a viable option for sustainable development.[2]

Climate

We are factoring in a more fragmented and delayed transition. In line with findings from previous years, the 2025 CMA is characterised by a disorderly Net Zero transition, with both transition costs and especially physical ones rising over the long term, although transition costs for the next decade will be lower compared to last year's assumptions, as they are deferred to the future.

What's NEW

In our CMA central macro scenario for 2025 we incorporate:

New socio-economic paths to include higher geopolitical fragmentation and tariffs

More fragmented and delayed **climate transition**

More granular assessment of **AI's impact at the country level**

As regional rivalries intensify, we expect a more fragmented and delayed climate transition.

ALESSIA BERARDI
Head of Emerging Macro Strategy,
Amundi Investment Institute

[1] Refer to SSP2 Shared Socioeconomic Pathways (SSPs) called "Middle of the Road".
[2] We have also included part of the SSP3 ("Regional Rivalry"), SSP4 ("A Road Divided") and SSP5 ("Fossil-fuelled Development").

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Climate transition: more fragmented and delayed

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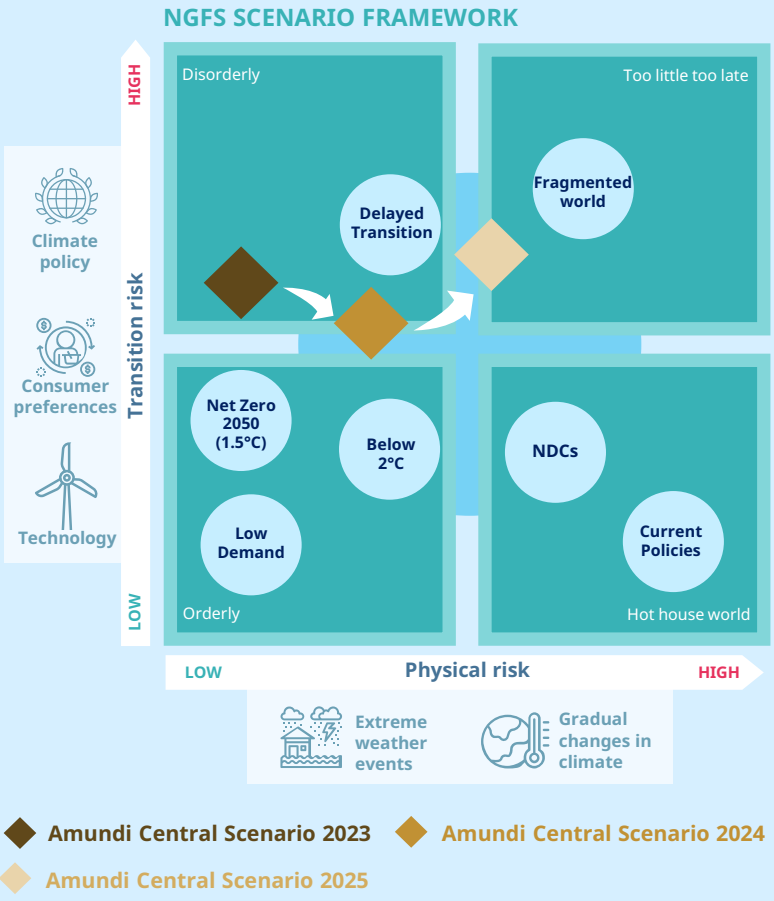
CENTRAL CLIMATE SCENARIO 2025

The Network for Greening the Financial System (NGFS) framework remains the starting point for our scenario.

Changes in NGFS scenarios: The newly released NGFS scenarios* are similar to last year's, but the narrative indicates a generally more disorderly transition, **introducing a new damage function that significantly impacts GDP levels due to climate risk.**

2025 central scenario: a mix of the **Fragmented World** (with a higher probability compared to last year) and **Delayed Transition** with limited Net Zero efforts up to the mid-2030s, followed by a faster acceleration to mitigate physical costs as damage becomes evident. Graphically, from 2024's brown diamond, risks move up as awareness of higher physical risks grows and the delayed transition leads to increased transition costs. We expect policy and emissions reactions to be gradual, with a modest rise in shadow carbon prices initially.



Source: Amundi Investment Institute, NGFS. NGFS is The Network of Central Banks and Supervisors for Greening the Financial System. NDC = Nationally Determined Contributions. Discover more on NGFS scenarios at www.ngfs.net *NGFS scenarios released in November 2024.

A more granular and model-driven approach to the impact of artificial intelligence. This year, we explicitly model AI-driven productivity at the country level, (see the article on page 24) using the IMF preparedness index (IMF AIPI) for differentiation. The IMF AIPI is used to establish the starting point for each economy, while factors such as regulation, innovation intensity, and capital availability (as indicated by IMF AIPI subcomponents) influence the peak and pace of productivity gains over time.

Our central scenario has some important macro implications:

A generally more disorderly and delayed transition will extend over a longer timeframe, deferring economic costs and softening inflation peaks.

Enactment of emission policies is more gradual, translating into modest initial increases in carbon prices and investments in infrastructure to ensure energy transmission and grid stability are challenged by shifting policy agendas that have to cope with the new geopolitical environment.

While transition-driven inflation may take a backseat for now, the technological transformation, amid national security concerns, might represent a structural support for the demand for commodities, potentially driving up prices. Food security policies, coupled with increasing climate-related concerns, might cause food prices to come under pressure, with significant impacts especially on Developed Markets (DM).

A more disorderly and delayed transition will spread economic costs over time, but technological shifts and national security concerns could trigger renewed inflation episodes.

ANNALISA USARDI, CFA
Senior Economist, Head of Advanced Economy Modelling, Amundi Investment Institute

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For food exporters, a rise in global food prices may trigger more protectionist measures by governments aiming to favour domestic markets over external ones to shield consumers, ultimately contributing to a further escalation of protectionism and supply chain disruption. Moving towards 2040, as pressures for the transition mount, we see inflation deviating from targets in a more pronounced way, which will only be partly offset by increases in productivity and technological progress. On average, we therefore expect the inflation regime to remain supported above central banks' targets by a relay of factors over the next three decades (from 2025 to 2055), with temporary bouts of volatility, but remaining under control overall.

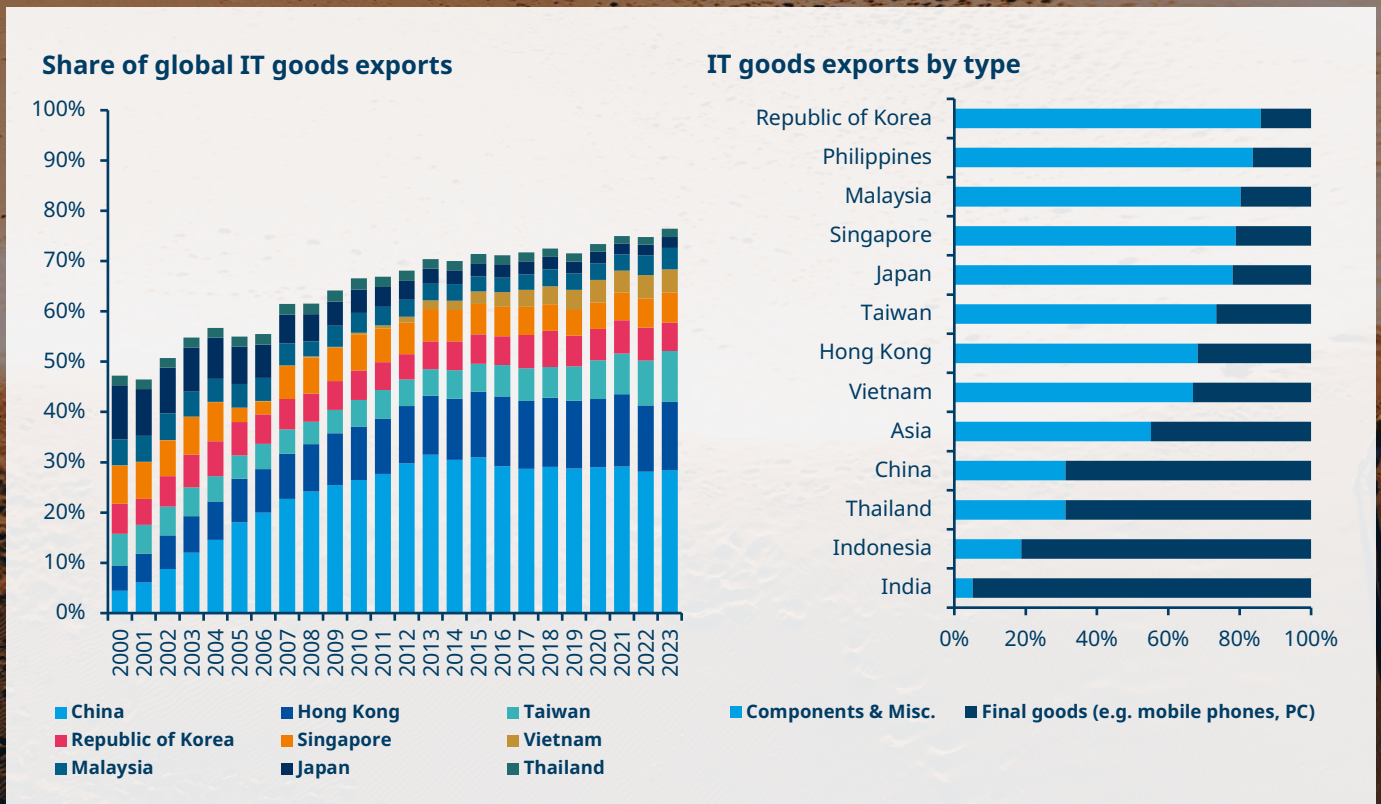
Long-term growth patterns remain driven by demographic and productivity trends. Asian tech leadership will be a larger contributor to global growth in the future, while the demographic dividend will benefit Africa the most.

Against a general backdrop of older and shrinking populations across several developed and emerging countries (see the demographics infographic on page 22), the positive effects of the productivity gains generated by adopting AI will temporarily limit the deceleration for the most demographically challenged countries, especially around the mid-2030s to mid-2040s. Only those countries enjoying a positive demographic dividend, such as India and Sub-Saharan countries, are able to grasp both the positive effects of younger and more productive economies, enjoying higher sustainable potential growth for longer.

Asia's growth premium is likely to persist, fuelled by technological advancements that are reshaping economies and creating substantial investment opportunities. With a strong commitment to innovation and a young, tech-savvy population, the region is positioned as a leader in the global tech landscape. Asia is a powerhouse in the technology sector, leading in various fields: manufacturing and supply chain technology (China and Vietnam), semiconductor production (Taiwan and South Korea), fintech innovations and financial inclusion (India), and e-commerce. In 2023, Asia accounted for 76.6% of World IT Goods Exports and 33% of World IT Services Exports, with China and India respectively leading the two segments.

In the medium to long term, insufficient early efforts to mitigate climate risks will lead to increased chronic physical costs across regions. This, combined with the waning impact of AI on productivity, will ultimately shift potential growth to be primarily driven by demographic factors. Consequently, we expect a deceleration in potential growth across Developed Markets and China, while Asian countries like India will play an increasingly significant role.

Asia is rapidly becoming a powerhouse in the global tech landscape



Source: Amundi Investment Institute on UN Trade and Development (UNCTAD) data for select Asian countries in 2023. Latest available data for Vietnam is 2022 (2023 Vietnam data point in the left chart uses the 2022 share as a proxy).

A transition with higher risks

Geopolitical and trade fragmentation with inequalities

Rising nationalism and regional rivalry dominate, leading nations to prioritise domestic and regional issues over global cooperation. This results in increased inequality, uneven human capital investments, and a focus on regional energy and food security.

Climate delays

The transition to Net Zero is fragmented and delayed, with transition costs deferred to the future due to more emission policies. However, supply chain disruptions and higher protectionism may lead to prolonged higher inflation.

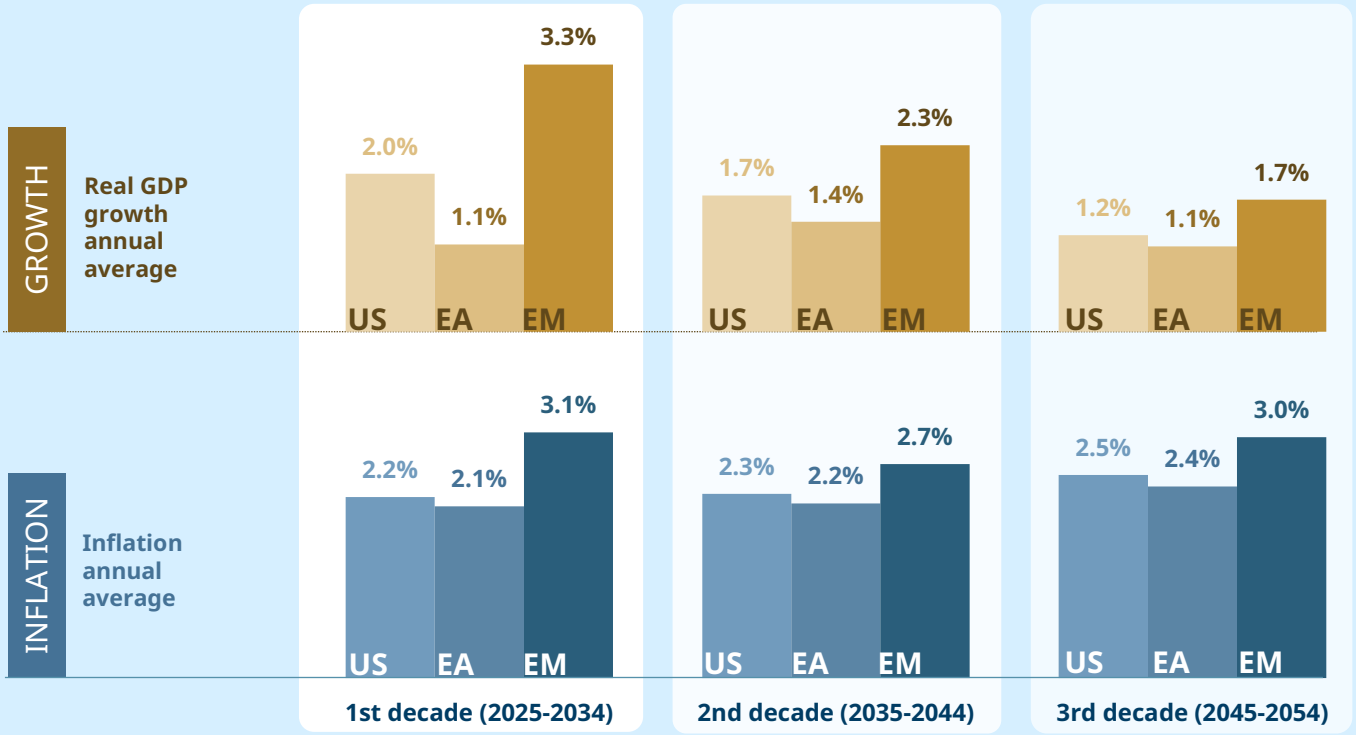
Demographics

Declining fertility rates and an ageing population should be counterbalanced by migratory flows and later retirement ages. Countries with a positive demographic dividend will experience higher growth for longer, while others will face a faster deceleration.

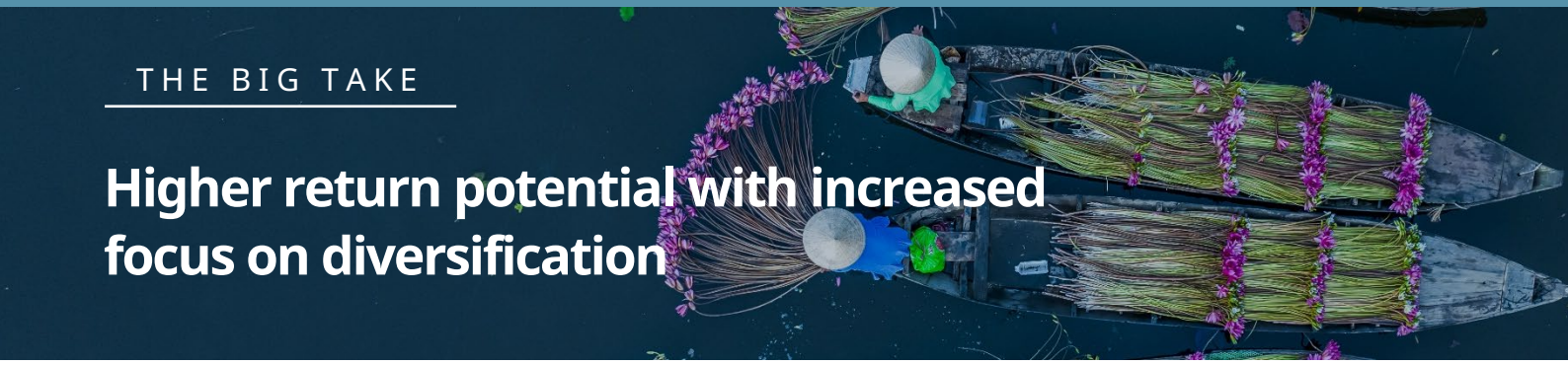
Artificial Intelligence

AI-driven productivity gains vary by country, influenced by regulation and innovation intensity. Prepared countries will see earlier benefits, while laggards should catch up over time. A broader adoption will boost global productivity.

Growth and inflation paths



Source: Amundi Investment Institute, NGFS. Data as of 31 December 2024. US= United States, EA=Euro Area, EM=Emerging Markets. Simulations include a review of the socio-economic paths due to a reset of international trade in a higher fragmented world with updates from the new SSP and NGFS scenarios. They do not include specific plan on industrial policy changes, particularly for Europe.



THE BIG TAKE

Higher return potential with increased focus on diversification

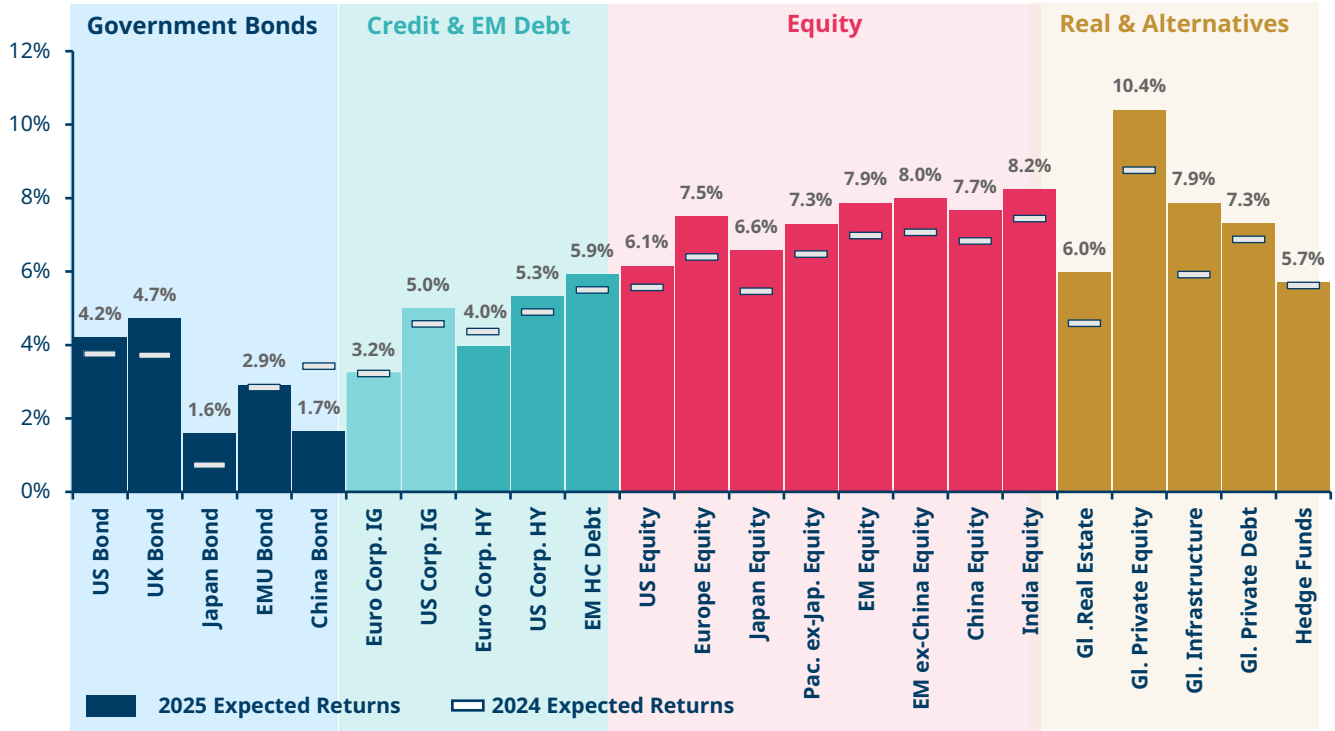
Our 2025 macro scenario is characterised by a disorderly and fragmented energy transition that integrates secular trends and rising geopolitical uncertainty, with important implications on asset class expected returns:

- **Improved growth/inflation mix:** Overall, we see a more favourable growth/inflation outlook for the next decade compared to last year's assumptions, with higher uncertainty on inflation, which will affect asset class behaviour, particularly bond volatility.
- **Across the board, expected returns are higher compared to last year, with the median return in local currency across the 23 asset classes analysed now at 6%, up from 5.5% in 2024.** Expectations have been revised upwards for riskier assets in particular: almost 70% of the risky asset classes covered (9 of the 13 among equity regional markets and private assets) are now expected to deliver returns above 7%, compared to a meagre 23% in last year's CMA assumptions.
- **Private equity, infrastructure and European equity have shown the most significant improvements** compared to last year's assumptions, while only a few asset classes, namely China bonds and Euro high yield credit, exhibit lower returns. This shift will offer opportunities for higher returns in the Strategic Asset Allocation, as discussed on page 18.

We expect a more favourable outlook for risky assets over the next decade, with private equity, infrastructure and European equity showing the strongest potential.

VIVIANA GISIMUNDO
Head of Quant Solutions, Multi Asset Solutions, Amundi

10-year expected returns vs last year's forecasts in local currency, excluding alpha



Source: Amundi CASM Model. Simulation starting date is 31 December 2024. For additional information see 'Sources and Assumptions' at the end of this document. The forecast returns are not necessarily indicative of future performance, which could differ substantially. Returns are nominal and gross of fees, except private equity which is net of fees. EM HC debt, global infrastructure and hedge funds are in USD, all other indices are in local currency. The expected returns consider the market beta and the alternative assets risk premium. The alpha return component generated by portfolio management, strategy selection or specific value creation programs – that can be significant above all for real and alternative assets – is not considered in any form.

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- **In fixed income, expected returns are slightly higher, with mixed effects across markets due to varying assumptions.** For the next decade, we see slightly higher interest rate targets compared to last year, together with upward-sloping yield curves. Cash rates have been revised upwards for the US, EU and India. The impact of these revised yield assumptions is mixed: while there is higher carry on one side, expected capital gains are lower on the other. This, coupled with more favourable valuations, results in some return improvement for US, UK and Japanese government bonds, while EMU bonds remain unchanged. In credit, we expect spreads to widen towards their long-term levels particularly affecting high-yield bonds in Europe, while US credit expected returns still see some improvements supported by enhancements in the government bond component. Emerging Market debt will remain an appealing asset class, with return expectations close to 6%, the highest in the fixed income space. The fiscal U-turn in Germany represents a change in the landscape for European bonds, and euro yields are closer to their long-term norm and better positioned from a return perspective.
- **Equities benefit from solid and improved EPS growth prospects, with an average expected return increase of 0.7% for the MSCI AC World Index compared to last year's assumptions.** This improvement is mainly due to stronger earnings growth forecasts in Developed Markets. EM EPS growth remains steady, as the effects of commodity prices are complex, and AI-driven productivity gains are initially less significant. Within DM equities, Europe shines with improving earnings prospects and more appealing valuations as of December 2024. In the US, although valuations have worsened compared to last year, the increase in EPS more than offsets the negative impact of stretched valuations, leading to some improvement in expected returns. Similarly, expected returns also improved across Emerging Market equities, albeit to a lesser extent in India where valuations are more expensive compared to last year. Overall, better return prospects for Europe and Emerging Markets should favour a rotation towards these markets, which has already started in the first quarter of 2025, and we believe this has room to continue in the future.
- **Real and alternative assets are also more appealing**. Private debt remains the most appealing asset class on a risk-adjusted basis, with returns far above those expected in high-yield credit. Private equity is expected to be the only asset class to deliver double-digit returns, with a 1.5% increase on last year. This revision is primarily driven by higher expected returns in public equity and improved assumptions regarding private equity value-added (see the article on page 40). Global infrastructure returns have also significantly improved to almost 8%, driven by long-term demand in the energy and data sectors. Real estate projections have risen close to 6%, supported by higher nominal GDP assumptions and a return-to-office culture. Finally, hedge funds are expected to deliver slightly below 6% thanks to higher cash returns bolstered by rising real rates.

SCAN OR CLICK TO VIEW DIGITAL VERSION

Notwithstanding the enhanced return prospects for a traditional 60% global equity and 40% global aggregate bond allocation, heightened volatility from risks related to geopolitical developments, market concentration, and climate change require a combination of traditional and non-traditional asset classes to navigate these complexities, and to take advantage of different correlation characteristics.

JOHN O'TOOLE
CIO Multi-Asset Solutions, Amundi

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Capital market line: an upward shift versus last year

Compared to last year, the 2025 capital market line (CM line) – based on our comprehensive asset class coverage, including real and alternative assets as well as Emerging Market equity – **has steepened and partially shifted upward**. This change is driven by higher expected returns across the board, particularly in equities and private assets.

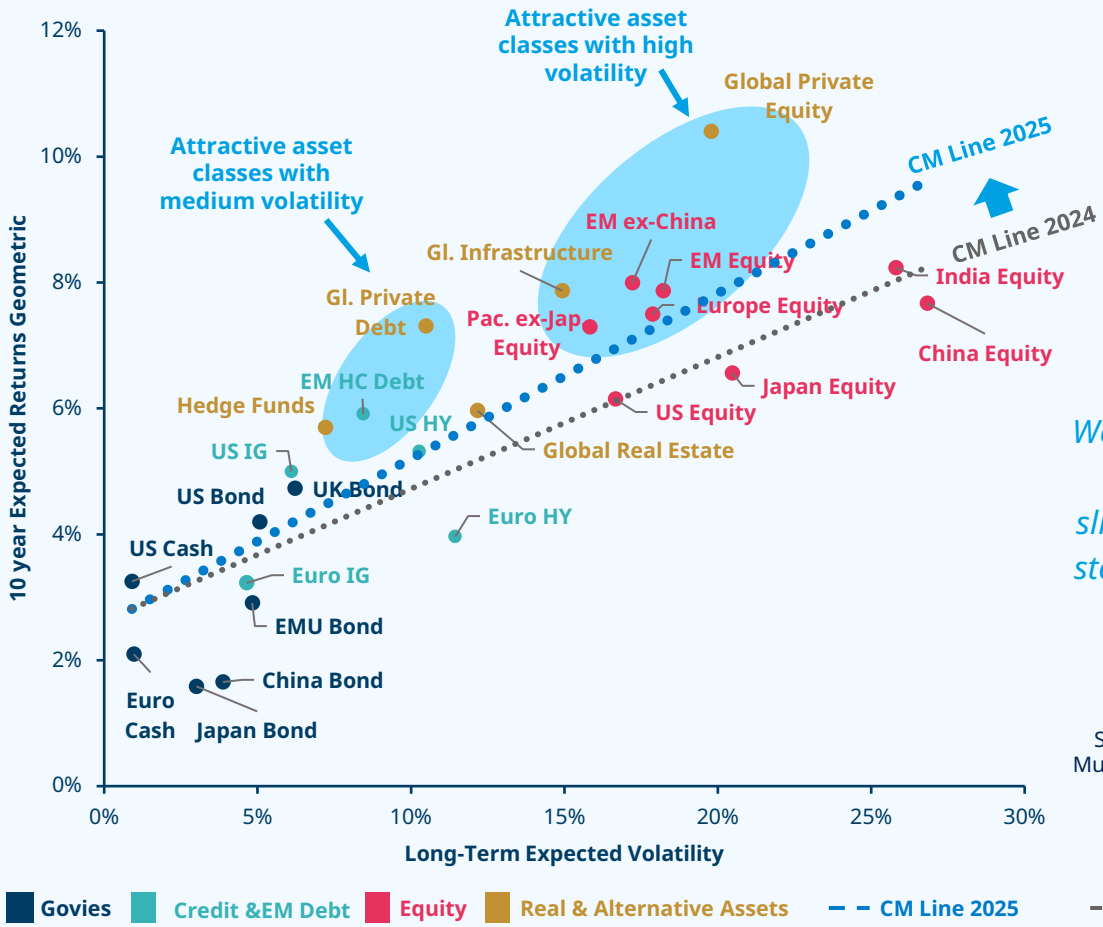
Cash and government assets continue to serve as a stable anchor in the risk-return trade-off, thanks to the support from carry, notwithstanding the higher interest rate volatility over the horizon. Bond index volatility results from the combination of two effects. First, higher interest rate volatility increases the risk for bonds. Second, the market risk is dampened by the lower expected duration of market cap indices amid higher expected interest rates levels. This is particularly evident for the UK, Japan, and France indices.

In the medium risk spectrum, hedge funds, EM bonds and global private debt remain the most appealing asset classes. By contrast, high yield credit offers only marginal return improvements compared to the investment grade segment, which does not compensate for the higher risk.

In the liquid space, equities present a diverse landscape, with expected volatility ranging from 15-20% for Developed Markets to over 25% for equities in India and China. Emerging Market equity, and European and Pacific ex-Japan equities can help enhance returns, especially as US equities appear less appealing from a return perspective (positioned below the market line). Regarding EM equity, we anticipate potentially higher volatility due to transition uncertainties and US policies.

Finally, in private assets, global private equity along with infrastructure investments can also help to enhance expected returns and provide diversification benefits, though these investments come with liquidity and complexity risks that require specific technical expertise.

10-year expected returns vs expected volatility* scatter plot in local currency, excluding idiosyncratic alpha



We expect the capital market line to shift slightly upwards and steepen compared to last year.

THOMAS WALSH
Senior Quantitative Analyst,
Multi Asset Solutions, Amundi

Govies | Credit &EM Debt | Equity | Real & Alternative Assets | CM Line 2025 | CM Line 2024

Source: Amundi CASM Model Data as of 31 December 2024. * Expected volatility for alternative assets is derived from unsmoothed return series. Hence, this measure of volatility will be different from the one obtained from realised IRR. For additional information see the 'Sources and Assumptions' section at the end of this document. The forecast returns are not necessarily indicative of future performance, which could differ substantially.

Capital Market Assumptions

Details on expected and historical risk return measures for liquid asset classes

		Duration	Average Annualised GEOMETRIC		Average Annualised ARITHMETIC	10-year Simulated Volatility	10-year Simulated CVaR 99%	2004-2024 Historical Returns (annualised)	2004-2024 Historical Volatility (annualised)
Assets in local currency	Reference Index	Average next 10 years	5-year Expected Returns	10-year Expected Returns	10-year Expected Returns				
Cash									
Euro Cash	JPCAEU3M Index	0.2	2.0%	2.1%	2.1%	1.0%	1.6%	1.4%	0.9%
US Cash	JPCAUS3M Index	0.2	3.4%	3.3%	3.2%	0.9%	0.8%	2.2%	1.0%
Government Bonds									
US Bond	JPMTUS Index	5.8	4.7%	4.2%	4.3%	5.1%	10.9%	2.7%	5.5%
UK Bond	JPMTUK Index	8.8	5.5%	4.7%	4.9%	6.2%	13.2%	2.8%	7.9%
Japan Bond	JPMTJPN Index	8.8	1.3%	1.6%	1.6%	3.0%	6.1%	1.0%	2.7%
Emu Bond - Core	JPMTWG index	6.7	2.0%	2.3%	2.4%	4.4%	9.4%	2.2%	5.1%
Emu Bond - Semi Core (France)	JPMTEUFR Index	7.0	3.1%	3.1%	3.2%	4.7%	9.5%	2.4%	5.4%
Italy Bond	JPMTIT index	6.1	2.6%	3.0%	3.3%	7.0%	13.8%	3.6%	6.7%
Spain Bond	JPMTSP Index	6.6	2.8%	3.0%	3.2%	6.3%	12.6%	3.2%	5.8%
EMU Bond All Maturity	JPMGEMUI Index	6.7	2.7%	2.9%	3.0%	4.8%	9.6%	2.7%	5.2%
Barclays Global Treasury	BTSYTRUH Index	6.5	3.3%	3.3%	3.3%	3.7%	6.9%	3.2%	3.9%
Credit Investment Grade									
Euro Corporate IG	ER00 index	4.4	2.8%	3.2%	3.3%	4.6%	7.3%	2.8%	4.7%
US Corporate IG	C0A0 index	6.5	5.0%	5.0%	5.1%	6.1%	11.2%	4.0%	6.6%
Barclays Euro Aggregate	LBEATREU Index	6.2	2.7%	3.0%	3.1%	4.5%	8.5%	2.6%	4.6%
Barclays US Aggregate	LBUSTRUU Index	6.0	4.8%	4.5%	4.6%	4.6%	9.5%	3.0%	4.5%
Barclays Global Aggregate	LEGATRUH Index	6.3	3.9%	3.8%	3.8%	3.9%	7.4%	3.3%	3.8%
Credit High Yield									
Euro Corporate HY	HE00 index	2.7	3.1%	4.0%	4.6%	11.4%	19.6%	5.9%	12.7%
US Corporate HY	H0A0 index	3.2	4.5%	5.3%	5.7%	10.3%	19.3%	6.3%	10.4%
Emerging Market Debt									
EM Hard Currency Debt*	JPEIDIVR Index	6.3	5.2%	5.9%	6.1%	8.4%	18.3%	5.4%	9.2%
EM-Global Diversified**	JGENVUUG Index	5.2	6.6%	6.2%	6.8%	10.6%	22.1%	3.5%	11.6%
GBI-EM China LOC	JGENCNTL Index	5.7	0.8%	1.7%	1.8%	3.9%	9.4%	na	na
GBI-EM India LOC	JGENINTL index	6.8	7.1%	6.9%	7.1%	6.5%	10.5%	na	na
Convertible Bond									
Europe Index (Eur Hedged)	UCBIFX20 Index		4.6%	5.2%	5.8%	12.1%	24.6%	3.8%	10.1%
Equities									
US Equity	NDDLUS Index		6.8%	6.1%	7.3%	16.7%	42.0%	9.8%	16.1%
Europe Equity	NDDLE15 index		7.6%	7.5%	8.7%	17.9%	39.7%	6.2%	15.0%
Euro zone Equity	NDDLEMU Index		7.4%	7.3%	8.9%	19.8%	42.7%	5.7%	17.9%
UK Equity	NDDLUK Index		7.8%	7.7%	8.5%	14.8%	34.7%	6.5%	13.4%
Japan Equity	NDDLJN Index		7.8%	6.6%	8.3%	20.5%	43.7%	6.5%	19.6%
Pacific ex Japan Equity	NDDLPXJ Index		8.3%	7.3%	8.2%	15.8%	35.5%	7.0%	15.1%
Emerging Markets Equity	NDLEEGF index		10.2%	7.9%	9.2%	18.2%	40.0%	7.9%	16.7%
China Equity	NDELCHF Index		9.1%	7.7%	10.8%	26.8%	50.5%	7.4%	25.5%
India Equity	NDELSIA index		9.7%	8.2%	11.1%	26.0%	59.5%	13.8%	22.8%
EM ex China Equity***	M1CXBRV Index		9.9%	8.0%	9.1%	17.2%	42.3%	6.2%	21.0%
World Equity	NDDLWI index		7.1%	6.4%	7.5%	16.5%	41.0%	8.4%	15.3%
AC World Equity	NDLEACWF Index		7.4%	6.6%	7.7%	16.4%	40.5%	8.3%	15.1%

* Hard Currency USD, China Bond starting date is beginning of 2019. ** USD Unhedged, including the USD currency expectation towards EM currencies. *** LC for expected returns and simulated volatility, USD unhedged for historical statistics. Amundi CASM Model. Data as of 31 December 2024. For further information see the 'Sources and Assumptions' section. The forecast returns are not necessarily indicative of future performance, which could differ substantially.

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THE BIG TAKE

Strategic Asset Allocation: Rising rewards from equities and real assets

KEY TAKEAWAYS ON STRATEGIC ASSET ALLOCATION

Over the next decade, a more supportive macroeconomic scenario translates into generally higher expected returns across the universe of investable assets, improving the Strategic Asset Allocation (SAA) expected risk-return profile across different investor types.

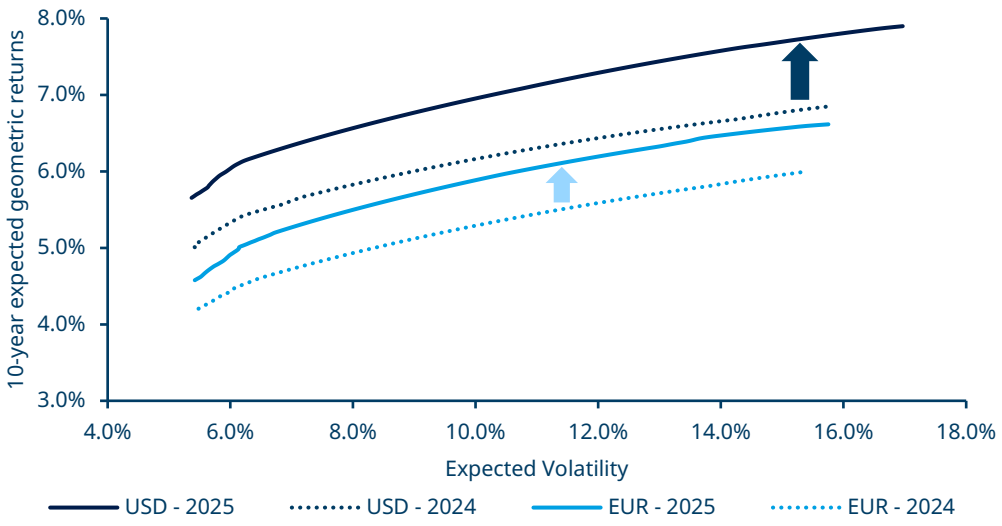
Efficient frontiers are 50-100 bps higher when alternative assets are considered. Compared to last year, the optimal SAA shows a reduction in the global aggregate in favour of riskier assets, mainly for moderate risk profiles. The risk budget is reallocated to equity in a liquid-only universe, and to private assets and 'opportunistic' fixed income when considering real and alternative assets.

Within equity, this year's preference is for Developed Markets, due to their improved risk-return profile (thanks to lower transition costs and productivity gains from AI). For alternative and real assets, the preference is for infrastructure and private debt for moderate risk profiles, and private equity for more aggressive ones.

In this article, we present the annual update of the strategic asset allocation (SAA) exercise over a 10-year horizon. The global investment universe is unchanged versus last year. It includes global fixed income, Developed and Emerging Market equities, and real and alternative assets. We assess the SAA from the perspective of US dollar (USD) and euro (EUR) based investors. For each base currency, we consider two risk profiles: moderate (with a volatility target of around 6%) and dynamic (volatility target of around 12%).

We also consider an illiquidity tolerance, which penalises real and alternative assets relative to public ones, in accordance with investor preference. SAA, based on our capital market assumptions, helps guide investors on how to efficiently diversify assets to target a specific level of risk. In addition to traditional forward-looking statistics, we report the probability of the optimised portfolio being below simulated inflation, therefore taking into account the distribution around the average scenarios. The SAA is based on simulated scenarios that consider a distribution of economic outcomes. Thus, the derived SAA is more robust than scenarios that deviate from the central scenario.

Efficient frontiers for EUR and USD investors including alternative assets



Source: Amundi Quant Solutions based on CASM model simulations and POwR optimiser. Data as of 30 January 2025. Efficient frontiers are obtained by minimising portfolio Conditional Value at Risk (CVAR), while respecting diversification constraints and the investor's liquidity preference. Frontiers may exhibit irregular patterns when plotted in the mean-volatility space. Forecast returns are not necessarily indicative of future performance, which could differ substantially.

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Strategic asset allocation for a moderate risk investor

Euro based investors with a moderate risk exposure can expect 4.4% annual returns over the next decade, rising to 4.9% when including real and alternative assets. A US investor with the same profile can expect annual returns of 5.6-6%. These figures are respectively 30 to 70 basis points (bps) higher than last year, primarily due to the higher expected returns for risky assets.

Although global aggregate remains the SAA's main pillar, representing 47-51% of the euro investor's allocation and 50-54% for the USD based one, its weight is lower compared to last year, given that **there is more risk-adjuster reward coming from risky assets**. Yet, this exposure remains key for investors with a mild risk appetite to effectively exploit the downside diversification versus risky assets.

Similar to last year, the allocation to 'opportunistic fixed income' (i.e., global high yield and the Emerging Market Bond Index) is around 20-25% of the optimised portfolio for both investor types.

The overall equity allocation has risen compared to last year, reaching 25% for the EUR portfolio. This allocation is particularly tilted towards Developed Markets, while it is marginally lower compared to last year for emerging ones. This reflects our view that the EM aggregate, in spite of higher return expectations, could face some instability due to transition risks and US policies.

The equity allocation drops to 21% when looking at the USD portfolio, due to the inherent advantage in hedging foreign fixed income (i.e., positive carry and somewhat lower volatility). Another advantage for US investors is the higher probability of outperforming inflation, supported by higher average expectations for the greenback compared to the euro, despite similar inflation forecasts.

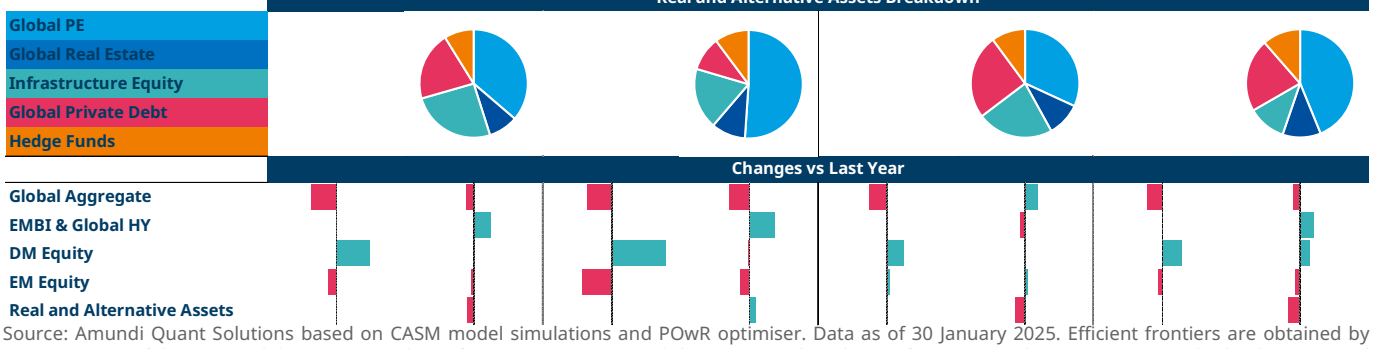
Our global SAAs are positioned to benefit from the rise in risky asset expectations while showing improvements in risk-adjusted returns.

NICOLA ZANETTI
Quantitative Analyst,
Multi Asset Solutions,
Amundi

SCAN OR CLICK TO VIEW DIGITAL VERSION

Euro & US dollar 10-year optimised portfolios for moderate and dynamic risk profiles

Investor Currency	Euro				US Dollar			
Risk Appetite	Moderate		Dynamic		Moderate		Dynamic	
Asset Universe	No Alts	With Alts	No Alts	With Alts	No Alts	With Alts	No Alts	With Alts
Portfolio Statistics								
Geometric Exp. Return	4.4%	4.9%	5.6%	6.2%	5.6%	6.0%	6.8%	7.3%
Exp. Volatility	6.0%	6.0%	12.0%	11.9%	6.0%	6.0%	11.9%	12.0%
Sharpe Ratio	0.39	0.47	0.30	0.34	0.40	0.46	0.30	0.34
CVaR 95% at 10-Year	8.7%	9.3%	19.2%	19.5%	7.4%	7.9%	17.6%	18.4%
P(Ret < 0) at 10-Year	0.2%	0.1%	5.1%	3.8%	0.0%	0.0%	1.8%	1.7%
P(Ret < CPI) at 10-Year	13.8%	9.4%	18.9%	15.6%	3.0%	1.8%	9.8%	8.5%
Portfolio Composition								
Global Aggregate	51%	47%	12%	10%	54%	50%	18%	14%
EMBI & Global HY	25%	20%	25%	23%	25%	20%	25%	21%
DM Equity	20%	8%	52%	37%	16%	8%	44%	36%
EM Equity	4%	2%	10%	11%	5%	2%	13%	11%
Real and Alternative Assets	0%	23%	0%	20%	0%	20%	0%	18%



Source: Amundi Quant Solutions based on CASM model simulations and POwR optimiser. Data as of 30 January 2025. Efficient frontiers are obtained by minimising portfolio CVAR, while respecting diversification constraints and the investor's liquidity preference. Fixed income asset are hedged, equity and real and alternatives are unhedged. Real and alternative assets include global private equity, global real estate, infrastructure equity, global private debt, and hedge funds. Volatility and other risk metrics for alternative assets are simulated considering unsmoothed returns series, Hence those measures will be different from the ones obtained from realised IRR. Forecast returns are not necessarily indicative of future performance, which could differ substantially.

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The allocation to real and alternative assets is similar for both investor types with a mix of private debt, private equity and infrastructure. While exposure to private equity enhances the return potential, allocating to income-like alternatives (private debt and infrastructure) helps optimise the overall risk-return profile. **Compared to last year's SAA, our analysis suggests reducing the exposure to hedge funds, while adding to private debt and equity where returns have improved most.**

Moving towards more dynamic risk profiles, the evolution of the efficient frontier weights (see charts below) shows that the overall allocation to bonds has decreased in favour of risky assets, with DM equities the most favoured, followed by EM equities and private equity. In the bond space, the highest risk profiles see an allocation tilted towards EM bonds & HY.

Within the real and alternative space, we see a larger allocation towards private debt and private equity this year compared to last year, thanks to their improved risk-return payoff.

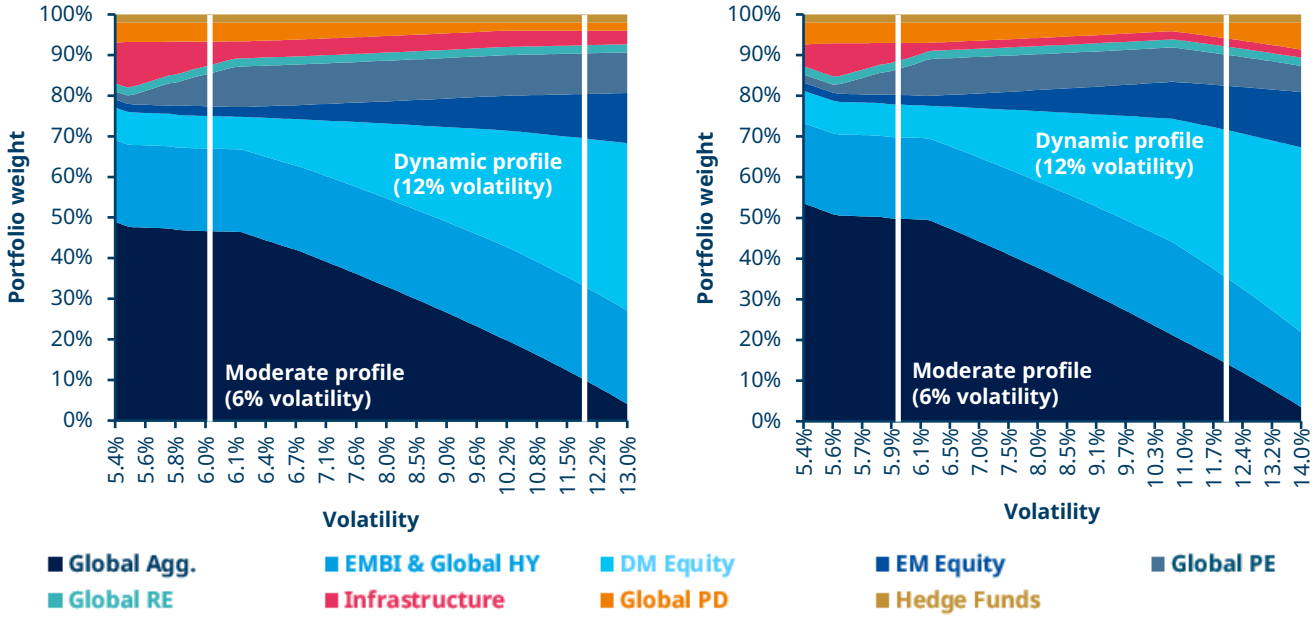
VIVIANA GISIMUNDO
Head of Quant Solutions, Multi Asset Solutions, Amundi

Strategic asset allocation for a dynamic risk investor

Return expectations increase by more than 100bps for aggressive risk profiles compared to a moderate risk profile, ranging from 5.6% to 6.2% for EUR based investors, and 6.8%-7.3% for USD ones. These represent a 50 to 90bps increment on last year, due to the greater equity exposure to capture growth opportunities.

For a dynamic investor with a target volatility of around 12%, the overall bond allocation remains approximately one-third of the total portfolio (consistent with last year), with a greater preference for opportunistic fixed income. Meanwhile, the allocation to the global aggregate decreased to around 10-14%. For the dynamic investor profile, **the inclusion of real and alternative assets in the Strategic Asset Allocation optimisation is funded by a reduction in the allocation to Developed Market equities. The inclusion of real and alternative assets** (private equity and debt represent two-thirds of this bucket) **helps to improve the portfolio's Sharpe Ratio** while keeping the tail risk under control and reducing the probability of underperforming inflation. Investors should bear in mind that while exposure to alternatives offers risk-return diversification benefits, it also comes with increased risks related to illiquidity and complexity that require specific technical expertise.

Efficient frontier weights for EUR (left) and USD (right) investors with alternative assets



Source: Amundi Quant Solutions based on CASM model simulations and POwR optimiser. Data as of 30 January 2025. Efficient frontiers are obtained by minimising portfolio CVAR, while respecting diversification constraints and the investor's liquidity preference. Frontiers may exhibit irregular patterns when plotted in the mean-volatility space. Forecast returns are not necessarily indicative of future performance, which could differ substantially.

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LONG-TERM THEMES

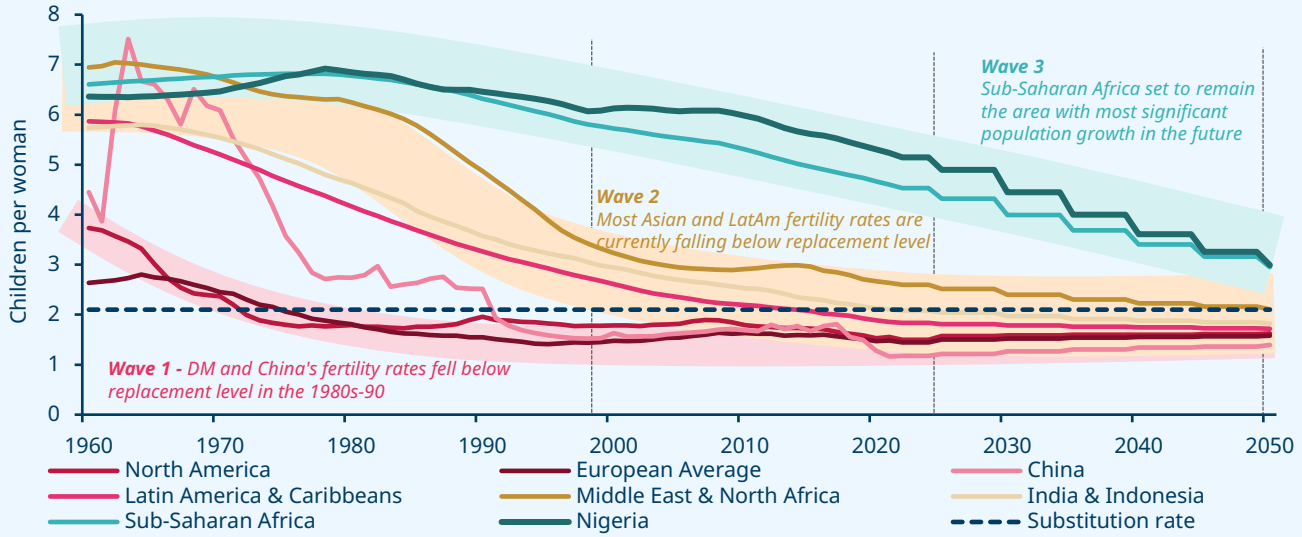
Demographics will shape future growth potential

Demographics represent one of the major underlying forces of our macro-financial projections, as labour is one of the key inputs of production and economic growth. Three important trends will shape the macro-financial landscape over the coming decades.

Shrinking populations in most DM and several EM...

In the absence of immigration, **fertility rates are declining below the substitution threshold.** Many DM and China have already peaked, a large group of EM (e.g. India, LatAm) should peak in the next decade, while Sub-Saharan Africa should stay above the threshold for the next 25-30 years.

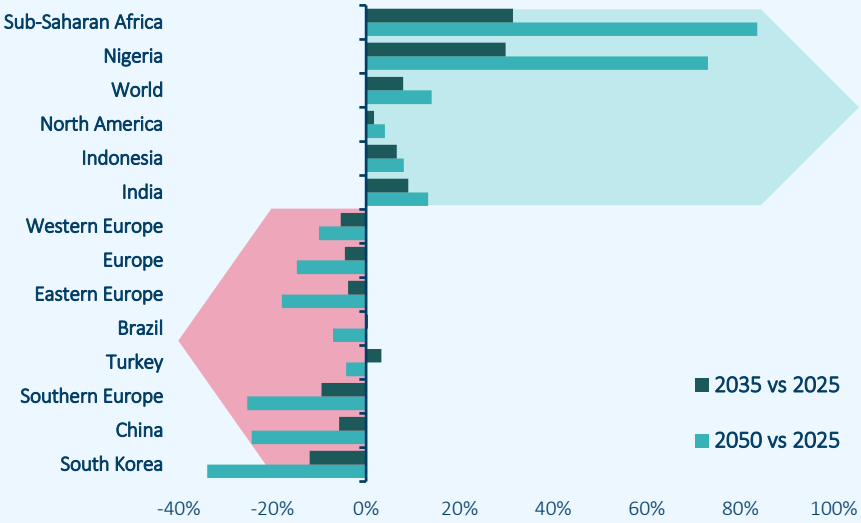
Fertility rates by region



Source: Amundi Investment Institute on Macrobond data as of 21 February 2025.

... leads to a lower workforce that will reduce potential economic growth...

Projected change in working age population



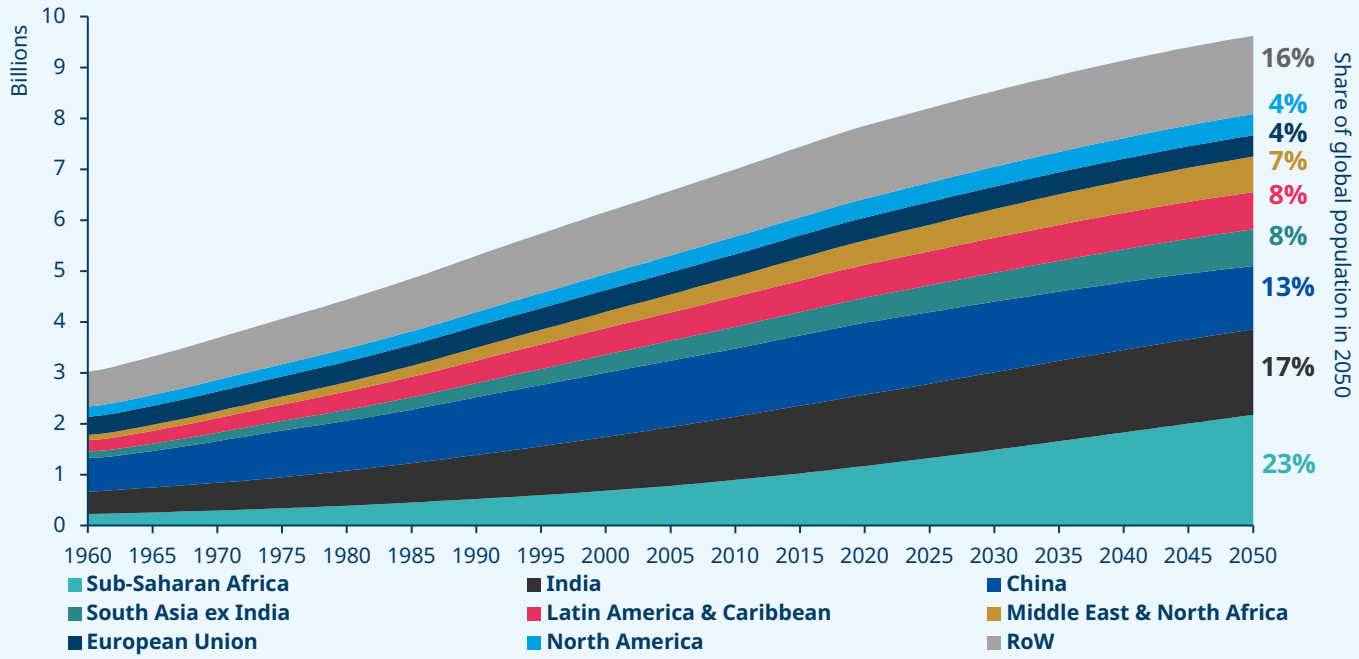
Source: Amundi Investment Institute on Macrobond, based on the medium scenario projections from United Nations World Population Prospects 2024.

Based on current projections, many regions will face a **significant decline in the working age population** even faster than population ageing. This will increase dependency ratios, albeit at different paces and points in time, and **lead to lower potential economic growth.**

...however Sub-Saharan Africa, India and a few other EM are still enjoying a positive demographic dividend.

Emerging Markets will continue to enjoy better demographic dynamics. However, they will face a challenge to employ a younger population while artificial intelligence is transforming the labour market.
Overall, these demographic shifts will impact labour force availability, potential growth, consumption patterns, savings and investment preferences.

Global population by region



Source: Amundi Investment Institute on Macrobond data as of 21 February 2025. RoW = Rest of World.

Mitigating factors to offset negative impacts on potential growth.

These demographic dynamics will challenge the economic transition of the main DM and some EM countries and lead to lower potential growth. **Some mitigating factors may partially offset the decline in the labour component of GDP growth** driven by decreasing working age populations:

Shift towards a different working population mix
via relocation of supply chains in areas with higher fertility rates, migration and later retirement ages

Enhanced productivity growth through artificial intelligence

Potential GDP Growth
Some mitigating factors may partially offset the decline in the labour component of GDP growth.

LONG-TERM THEMES

The diverse economic impacts of artificial intelligence

Last year, we explored how artificial intelligence (AI) could impact the major production factors in the economy (labour, capital and productivity). Here, we extend our analysis by focusing on **differentiating macroeconomic productivity gains across countries.** We use the IMF's AI Preparedness Index and its sub-components (digital infrastructure, innovation and economic integration, human capital and labour market policies, and regulation and ethics) to differentiate the starting point and adoption of AI across economies. Productivity, capital investment and capital depreciation are then modelled to estimate the impact of productivity on potential GDP growth.

According to our simulations, **AI adoption should progressively boost productivity at the global level,** reaching its peak in ten years' time, but will not be sufficient to offset the long-term potential growth reduction driven by demographics. Broader adoption of more commercial applications of AI should allow for similar patterns across regions, although for some countries and regions, economy-wide benefits might appear sooner in light of their preparedness, for which the DM vs. EM divide does not apply. If the first years see some differentiation, a broadening of AI adoption will help the 'laggards' to catch up on productivity as we reach the middle of the next decade.

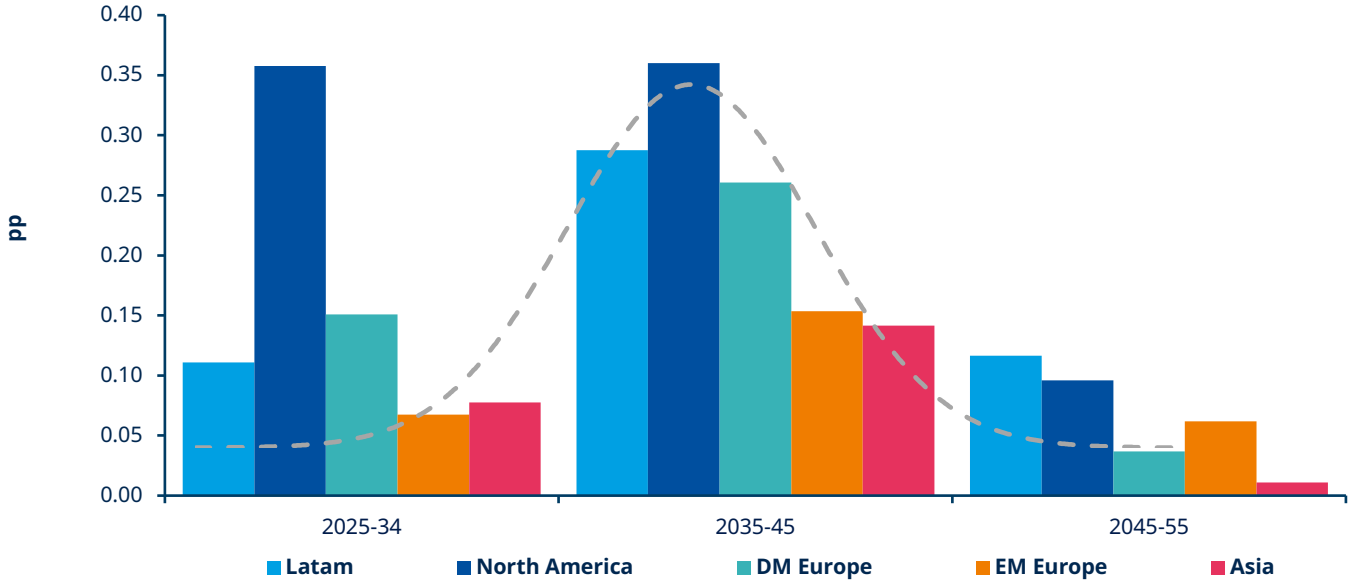
Ongoing competition and innovation in the field of AI are key to broadening the benefits of the new technology across the economy (by lowering barriers to entry, accelerating adoption, and creating new opportunities) and making the benefits spread from the microeconomic level (firm, industry, sector) to the macroeconomic one. Breakthroughs in efficiency gains that make a technology more affordable will be pivotal as they make AI investments and benefits affordable to many small companies, previously cut out. **Lower costs for AI models could lead to faster adoption by both corporates and households**, higher spending, and aggregate investment for AI, boosting aggregate productivity.

Continued competition and innovation are likely to create winners and losers, and help broaden the benefits of the new technology across the economy.

ANNALISA USARDI, CFA
Senior Economist, Head of Advanced Economy Modelling, Amundi Investment Institute

SCAN OR CLICK TO READ FULL PAPER

Contribution to GDP growth from the AI boost to productivity



Source: Amundi Investment Institute, S&P Global. Data is as of 4 February 2025.

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LONG-TERM THEMES

The direction of long-term rates in an era of high debt

Real interest rates have been on a secular decline since the mid-1980s but have corrected sharply higher since the Covid pandemic, higher inflation and the end of central banks' Quantitative Easing (QE). Now, **public debt is much higher and there are new demands for funding** (e.g., for defence and net zero ambitions), which should argue for structurally higher long-term interest rates. Yet numerous empirical studies find that the secular decline in real rates is due to adverse demographics and **declining productivity (at least in the advanced economies),** which are expected to continue.

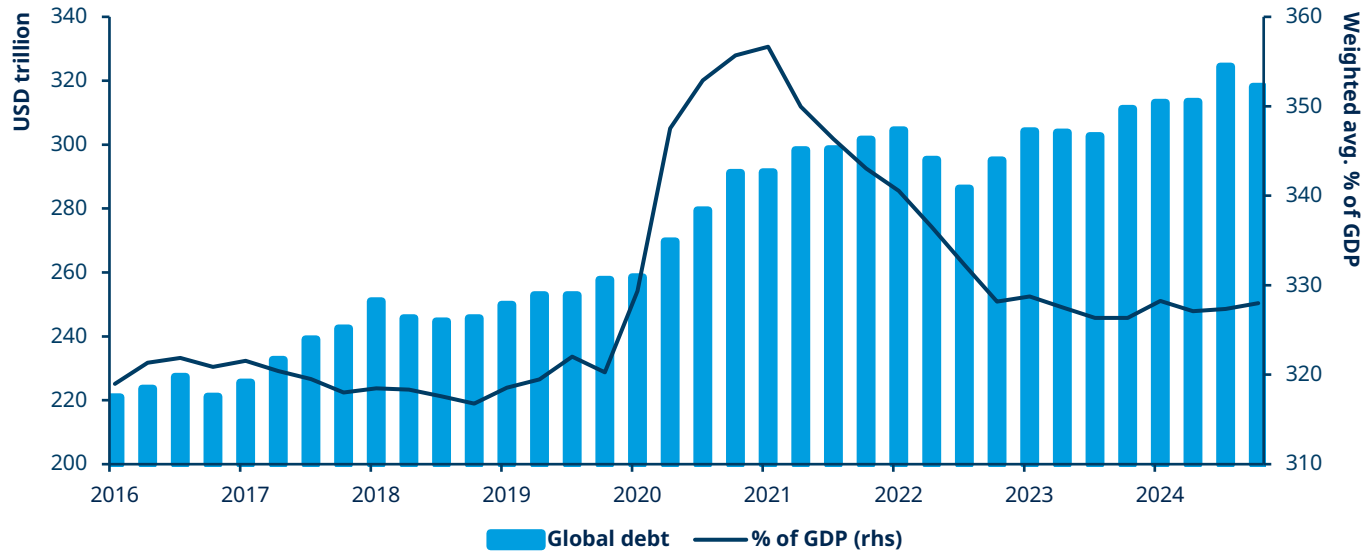
Abstracting from the current bout of sharply rising yields triggered by the sea change in Germany's fiscal policy, what would constitute a prudent capital market assumption over the long term for asset allocation and the expected returns of the main asset classes?

The structural determinants of the equilibrium for real interest rates (R* in the jargon) provide a good starting point. Ageing populations imply lower growth, which in turn requires less investment, hence a lower demand for funds. Similarly, declining productivity reduces incentives to invest. Economists, in general, expect R* to come back to lower levels in the long term, primarily because demographic trends (which only change over very long periods) are expected to remain adverse. While there is some optimism that artificial intelligence (AI) could increase productivity**, it would only stem the secular decline that has been underway over the last few decades.** This would suggest a real rate back at around 1% in the US (from the current level of around 1.5%), with current R* estimates moved slightly upwards. Other advanced countries should also see a similar return to their longer-term norms.

High, and possibly rising, public debt will keep real rates high and delay the return to estimates of equilibrium for real interest rates.

MAHMOOD PRADHAN
Head of Global Macroeconomics, Amundi Investment Institute

Global debt increased by nearly USD 7 trillion in 2024



Source: Amundi Investment Institute on Institute of International Finance data as of 1 December 2024.

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But investors will rightly question such a sanguine view, not least on the grounds that, given the current environment, how can economists be confident about getting to this long-run level? For one, there **is little evidence that governments are attempting to reduce public debt** – for most advanced economies, it will likely rise for a while. The recent rise in German Bund yields, which has a large real component, is a good example of more debt increasing real rates. Moreover, **over the last two years, real interest rates have been rising despite well-anchored, longer-term inflation expectations.** And even more importantly, we now have ample evidence that longer-end yields are strongly correlated across advanced economies, which implies that countries may suffer higher real rates through global contagion.

High, and possibly rising, public debt will keep real rates high and delay the return to estimates of R*. But for some countries, it will raise debt sustainability concerns, including the US if fiscal policy remains on its current path. And for most countries, the market will implicitly enforce fiscal trade-offs. This, in turn, implies lower medium-term growth and that will be one way real interest rates decline. However, it is also possible that high public debt will weigh on inflation, which will result in higher central bank policy (neutral) rates. We also expect higher interest rate volatility due to more volatile inflation through our cascade model structure.

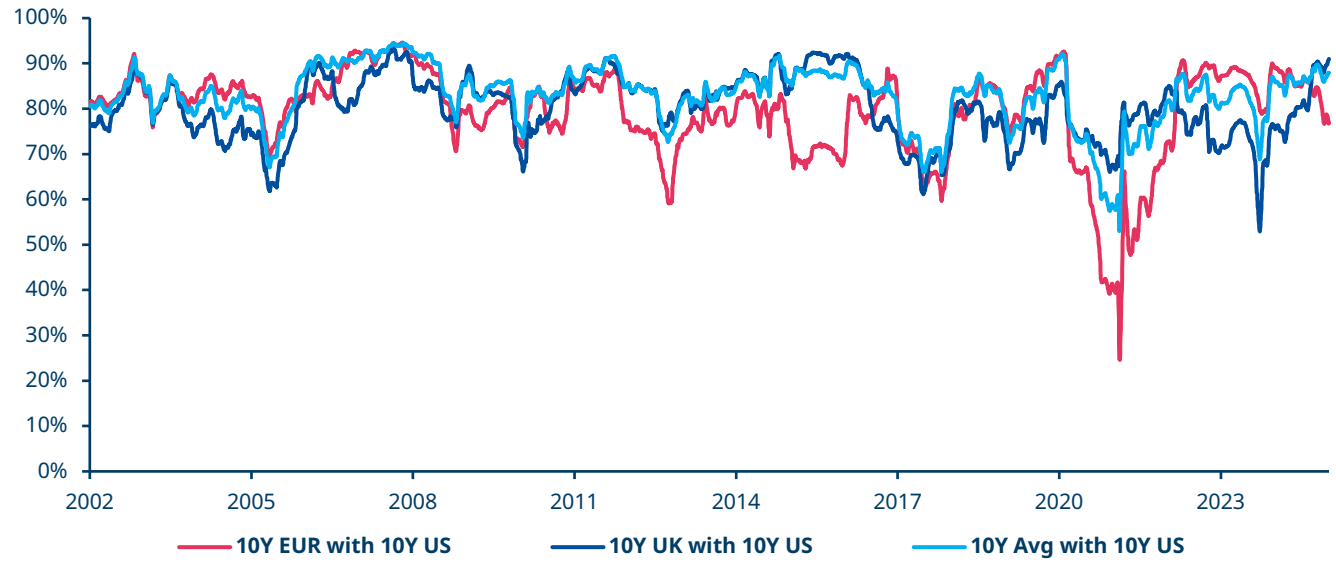
As central banks have maintained a restrictive policy stance over the last three years, much of the rise in long bond yields has been due to an increase in real yields – inflation has come down gradually, but market expectations of inflation have remained stable. This fuels doubt among investors whether real rates will return to pre-GFC levels (of around 1%). But this also begs the question of what has fundamentally changed such that the US, for example, can be resilient to and sustain real rates moving higher than 1.5% towards potential GDP. Estimates of potential output have not budged much. Consensus estimates, similar to official estimates, point to 1.8-2% as the long-run potential. Elsewhere – in Europe and the UK, for example – potential growth is arguably slightly lower than before**. This is the fundamental reason why we believe real rates will eventually revert to their long-run equilibrium.**

A more worrying issue is the correlation between long bond yields across Developed Markets, with two very strong recent illustrations. First, the rise in US bond yields following Trump's election, when markets revised up US inflation and growth expectations. This had a very immediate impact on German and UK bond yields, despite no change in any underlying fundamentals in Europe. A second, more recent episode is Germany's policy announcement to increase defence and infrastructure spending. The impact on global bond yields was immediate, including contagion to the US.

Contagion implies that some risks, prime among these would be the secular rise in US public debt, are global risks. An increase in the US term premium would be transmitted across borders. And this could keep real interest rates high and volatile beyond what is warranted by domestic factors. This would amplify headwinds to growth and financing conditions.

In short, a return to equilibrium R* could take time, until public debt is on a stronger footing. Hence, the medium to long-term horizon could be characterised by higher interest rate volatility and some contagion risk.

One-year correlations of long-end yields to the US



Source: Amundi Investment Institute on Bloomberg data as of 31 January 2025. One year correlations computed on daily observations. The 10 year average correlation line is computed as the average of the EUR and UK yields.

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LONG-TERM THEMES

Empowering transformation in Europe

Europe is facing major economic and security challenges. The European Commission (EC) has started translating the Draghi report's recommendations into effective proposals.

On the economic front, insufficient investment and weakening productivity, coupled with an ageing population, are weighing on potential growth in Europe in general and in the Eurozone in particular. On the security front, the White House's announcement that the US will abandon its military umbrella over Europe will force EU Member States to step up their defence efforts significantly. The decision recently ratified by the German parliament to massively increase infrastructure and defence spending represents a historic shift that will revive German growth, which Europe should benefit from in the coming decade.

EU leaders are preparing to take significant measures on both fronts. The EC is in the process of translating some of the Draghi report's recommendations – published in 2024 – into action. Its proposals will be examined by the European Parliament this year, starting on 1 April with the vote on the 'stop the clock' proposal (postponing the implementation of key EU sustainable development legislation until 2027-28) of the "Omnibus Package"[1].

In the medium term, **our scenario for Europe assumes that the EU will gradually catch up in terms of investment, innovation and competitiveness**.

By targeting actions to address the underlying issues of low productivity, Europe could achieve productivity gains over the next decade.

DIDIER BOROWSKI
Head of Macro Policy Research, Amundi Investment Institute

[1] A package that aims to simplify and streamline EU sustainability regulations, in order to reduce administrative burdens, particularly for SMEs.

Incorporating the EU Commission's Competitiveness Compass into our macro assumptions

For the Eurozone, we are incorporating part of the EU Commission's Competitiveness Compass and its implications on growth by assuming a boost to productivity in two ways:

The boost from **artificial intelligence** (AI), which has a major impact on labour productivity (see the article on AI, on page 24)

The boost from reforms **improving competitiveness** (i.e., governance, public procurement, ease of doing business) is conservatively estimated to contribute about 1% to trend growth over 10 years, in line with research on the impact of structural reforms.

Euro area productivity historical trends

Source: Amundi Investment Institute on Macrobond data. Data as of end of Q3 2024.

In a nutshell, the broad guidelines for action are:

- Reducing regulation and administrative burdens to encourage innovation and improve productivity;
- Relaxing regulations on sustainable finance to support Small and Medium-sized Enterprises (SMEs);
- Reducing external energy dependency and developing renewable energies to enhance competitiveness, particularly for countries with a strong industrial base;
- Closer integration of capital markets to effectively channel Europe's abundant savings;
- Broadening and strengthening existing commercial partnerships to reduce dependency of supply chains.

2025 is a pivotal year as the EC unveils concrete action plans:

1. The **Competitiveness Compass** (presented on 29 January 2025) outlined flagship **measures aimed to reverse industrial decline and step up efforts to compete with the US and China** in areas like AI, while reducing energy costs and cutting red tape. Its three main pillars are innovation (promoting AI and robotics), decarbonisation (facilitating affordable energy access and reducing CO2 emissions), and security and defence (increasing resilience).

2. The **Clean Industrial Deal** (CID, presented on 26 February 2025) details actions to help energy-intensive industries decarbonise and stimulate clean technology production, aiming to lower energy bills. **The goal is to stimulate investment by fostering innovation and competitiveness, making decarbonisation a growth driver for industry**. The EU must accelerate clean energy deployment by speeding up electrification, creating an internal energy market, and reducing the share of imported fossil fuels in the energy mix. To finance this transition, the **CID will mobilise more than EUR 100 bn** and is proposing to adopt a new framework for state aid aimed at deploying renewable energies (in order to speed up their approval). The CID is also proposing to increase the amount of financial guarantees to support investments which, according to the EC, should make it possible to mobilise up to EUR 50 bn.

3. Finally, the **EC's White Paper on Defence,** along with the "ReArm Europe/Readiness 2030 plan (both presented on 19 March) proposes measures to strengthen the defence sector. The recommended strategy is the most important undertaking since the Cold War. Among the conditions for achieving this are the establishment of pan-European supply chains and the promotion of innovative Research & Development, in order to increase the economic impact of defence spending over time. To this end, the strategy will offer member states financial levers to stimulate investment, with the potential mobilisation of nearly EUR 800 bn over the next four years. The flagship measures are centred on three main axes: first, enabling member states to increase their defence spending without triggering an excessive deficit procedure, allowing each member state to mobilise up to 1.5% of GDP per year in additional defence spending. Second, granting up to EUR 150 bn in loans to member states for defence-related investments via a new instrument called 'SAFE.' Lastly, accelerating the establishment of the 'Investment and Savings Union' (the new name for the Capital Markets Union).

Are European equities becoming structurally more appealing?

After a prolonged period of underperformance, European equities have started to reverse this trend. Historically, European equities outperformed in the 90s due to strong economic growth from market integration, technological advancements and regulatory changes, but they have lagged over the past decade. With more attractive valuations (although to a lesser extent after the recent rally), and anticipated gains from industrial policies and higher productivity that could trigger relevant changes at sector/ country levels, we project European equities will outperform the world index over the next decade. Despite the recent outperformance, we believe that the structurally improved appeal for Europe should continue, supported by the recently approved extraordinary fiscal push in Germany and a potential ceasefire and reconstruction in Ukraine.

Our CMA sees Europe outperforming other Developed Markets over the next decade. While this trend has started to materialise during the first quarter of 2025, we believe that Europe has the potential to become structurally more appealing, as its new industrial policy will trigger relevant opportunities at sector/country levels.

GUY STEAR, Head of Developed Markets Strategy, Amundi Investment Institute

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LONG-TERM THEMES

Equity sectors: a mix of Growth and Value to navigate AI, climate change & geopolitics and deregulation

We see three themes shaping sector returns in the coming decade. Artificial intelligence (AI) will support the Information Technology (IT) sector followed by Healthcare, but it is due to extend to others as well. Regarding climate change and geopolitical dynamics, capital expenditure (Capex) will play a more important role than consumption, benefitting Industrials more than the Consumer Staples and Discretionary sectors. Finally, policies supporting deregulation should improve capital efficiency and shareholder returns, to the benefit of Financials. Sector assessment is also important in assessing regional opportunities, as the sector composition of equity markets differs from the sector composition of the economy.

Painting a broad picture of expected returns by sectors

Looking at the top sectors in our ranking of the MSCI All Countries World Index (ACWI), there is a mixture of Value and Growth. Whereas Financials sit in the Value camp, IT is on the Growth side. Industrials and Healthcare vary across regions: they are considered Value in the US and Growth in Europe, for example, according to MSCI. Both the Consumer sectors (Staples and Discretionary) sit at the bottom of the ranking.

Across regions, Financials, Healthcare and Industrials consistently top the rankings. Financials, in particular, are consistently above the market average, except in Pacific ex-Japan, and have some of the highest expected returns in Europe and Japan. Industrials are also well favoured across regions with the exception of Emerging Markets, whereas IT is only above the market average in the US and EM.

At the bottom of the list, Staples and Utilities are consistently below average everywhere. Consumer Discretionary is only above average in Japan and Communication Services in the Pacific.

Across regions, the most highly ranked sectors are a mixture of Value and Growth, particularly Financials, Healthcare, and Industrials.

ERIC MIJOT
Head of Global Equity Strategy,
Amundi Investment Institute

Physical risk: the next research frontier to assess companies' and sectors' expected returns

At the Amundi Investment Institute, we are working on new research to assess the bottom-up impacts of physical risks stemming from climate change considerations. Our recent working paper, titled *Investor Concerns and the Pricing of Physical Risks,* examines **companies' exposures to tropical cyclone risks.** In particular, we find that **a significant number of companies** – up to 75% of our sample – **are exposed to this risk, with East and Southeast Asia, the US and Central America being the most affected.** Our analysis shows that stock performance is influenced not only by the anticipated damage from tropical cyclones but also by investor attention during periods of high cyclone activity. **While highly exposed stocks exhibit a premium during periods of low cyclone activity, this premium is offset by investor concerns during active periods, resulting in an insignificant long-term impact on equity performance.**

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Sector implications of key themes

Artificial Intelligence

The democratisation of AI and the rotation from 'hyperscalers' to 'enablers', particularly in the Software sector, is expected to boost global productivity and equity in the long run. Not all 'Magnificent 7' sectors are at the top of our rankings. While IT remains a strong candidate, it is expensive in the US but supported by climate change initiatives and ESG scores, and is more affordable in EM. It should also deliver better returns than Communication Services and Consumer Discretionary. As AI's benefits expand, other sectors like Healthcare are poised to benefit.

Climate change and geopolitics

Energy, Materials and Staples are the most negatively impacted by climate change and ESG considerations. Utilities fare slightly better in this regard, but their overall expectations remain below regional market averages. Industrials are a broad group that includes the Aerospace and Defence sectors benefitting from ongoing geopolitical dynamics. While industrial emissions are high, they can also be part of the solution. Moreover, they should fare better than the Consumer Discretionary, which is also broadly neutral on climate change. Capex will be a stronger theme than consumption.

Deregulation and policy support

Policy changes should mostly support global Financial sectors, but in different ways across regions. Deregulation will play a key role in the US, while capital efficiency and the unbundling of cross-shareholding will be the main driver in Japan. By contrast, high shareholder returns should benefit Financials in the Eurozone. Notably, this sector represents another way to play the Capex theme, as these investments will need to be financed. Additionally, the sector should eventually enjoy higher efficiency with the adoption of AI.

We assess sectors' expected returns on the basis of earnings growth, valuation and dividend yield dynamics, also considering a risk premium linked to climate change, ESG and Net Zero considerations. Across regions, the most highly ranked sectors in our analysis are a mixture of Value and Growth, particularly Financials, Healthcare and Industrials.

Long-term expected returns adjusted by flows

31 - DEC 2024	USA	Europe	Japan	Pacific ex Japan	Emerging	World AC
Consumer Discretionary	5.0%	7.4%	7.2%	5.7%	5.9%	5.6%
Consumer Staples	4.0%	4.0%	4.4%	6.6%	3.2%	4.0%
Energy	6.2%	6.9%	9.0%	5.8%	8.1%	6.5%
Financials	6.7%	9.0%	9.3%	5.9%	8.2%	7.4%
Real Estate	6.0%	4.4%	6.9%	9.1%	7.9%	6.4%
Health Care	7.4%	8.3%	7.1%	5.0%	5.0%	7.5%
Industrials	6.7%	7.6%	6.5%	9.2%	5.7%	6.9%
Information Technology	6.9%	6.0%	5.9%	5.4%	8.5%	7.0%
Materials	6.3%	4.9%	6.9%	7.4%	8.6%	6.5%
Communication Services	5.6%	7.3%	7.2%	9.7%	4.9%	5.8%
Utilities	5.8%	6.6%	6.3%	5.9%	6.6%	6.1%
Total	**6.1%**	**7.5%**	**6.6%**	**7.3%**	**7.9%**	**6.6%**

Source: Amundi Investment Institute on MSCI, Factset data as of 31 December 2024. Highlighted cells indicate above average expected returns by region. The forecast returns are not necessarily indicative of future performance, which could differ substantially.

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LONG-TERM THEMES

India: a rising global tech innovation hub

India's ambitions to become a global innovation hub should benefit from the tech rivalry between China and the US

ALESSIA BERARDI
Head of Emerging Macro Strategy,
Amundi Investment Institute

India's economic performance in the coming decades will be shaped by key factors such as demographics, urbanisation and the continuation of growth-enhancing investment strategies. A pivotal initiative in this regard is the **Production Linked Incentive** (PLI) scheme, launched by the Indian government to strengthen the country's performance in strategic sectors, reduce import dependency and enhance export capabilities.

To sustain growth, India must strike a balance between its robust Services sector, which boasts numerous excellent companies, and its Manufacturing sector, which provides a significantly higher share of labour force benefits. By incentivising domestic production, the PLI scheme aims to empower Indian businesses to **compete effectively in global markets, fostering technological innovation and improving overall competitiveness.** This approach positions India to capitalise on the 'China +1' strategy.[1]

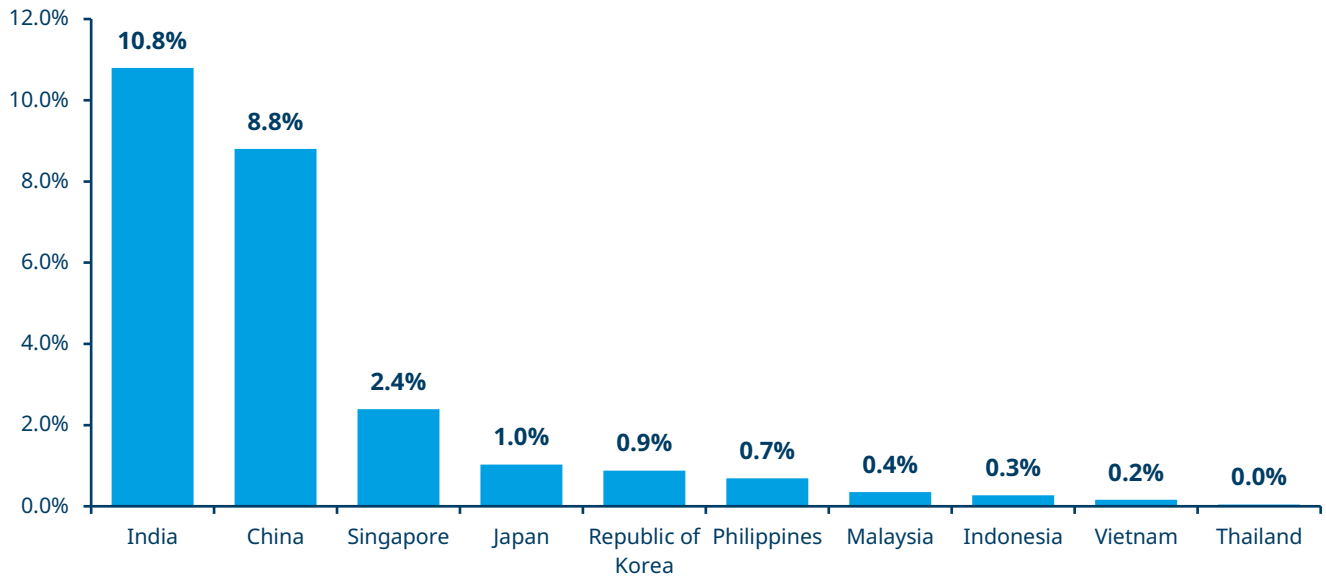
The combination of targeted investment strategies and the country's advanced state of digitalisation is driving the development of artificial intelligence (AI) in specific sectors. In a vast nation with a substantial rural population and a significant number of small businesses, **AI is proving to be transformative.**

Digital platforms are enabling more precise farming practices, optimising the use of resources, reducing waste and improving crop yields. Additionally, new platforms are connecting farmers with markets, enhancing market access and facilitating price formation, particularly as the food segment is crucial to India's inflation basket.

From a broader geopolitical perspective, the tech rivalry between China and the US is benefiting countries like India, which aspire to become innovation hubs for companies seeking to mitigate supply chain risks. In this context, India offers the advantage of a rapidly growing start-up ecosystem.

[1] The term ascribed to supply chain diversification, adding alternatives to China.

India leads the way in Asia's share of global IT services exports, 2023



Source: Amundi Investment Institute on UN Trade and Development (UNCTAD) data for 2023.

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ASSET CLASS VIEWS

DEC 2024-DEC 2034

ASSET CLASS VIEWS

Deep dive into assumptions on liquid assets

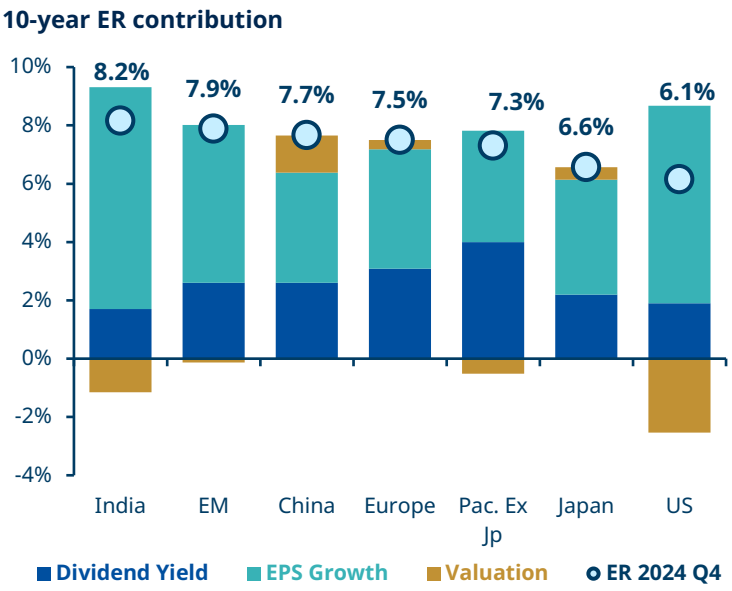
Navigating equities: strong EPS growth vs. US valuation challenges

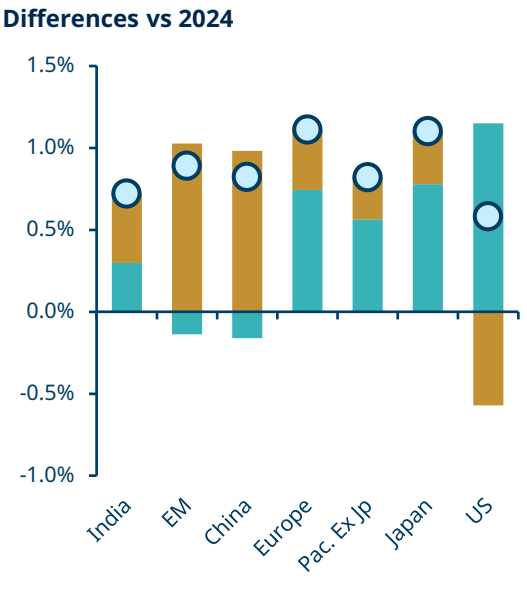
Over the next decade, we anticipate a macroeconomic environment characterised by inflation rates consistent with last year's projections, coupled with improved economic growth across both Developed and Emerging Markets. This outlook suggests an improvement in earnings per share (EPS) growth estimates of approximately 1% for Developed Markets (DM) on an annualised basis. While EPS growth prospects in Emerging Markets (EM) remain largely in line with our previous estimates, as the effects of commodity prices are more complex and AI-driven productivity gains are less pronounced. In a changing trade environment, our EPS estimates now also take into account the countries where companies generate their revenues, allowing us to incorporate cross-country interconnections and highlight the potential impacts related to tariffs.

Regarding market assessment, the most notable changes are in China and as consequence in EM. There is now greater clarity regarding policy support from Beijing, which is expected to foster increased market confidence and stability. However, **Chinese equity performance will depend heavily on US containment policies** and **continued domestic measures**. Our central scenario assumes fiscal support will offset the economic impact of 40% tariffs on US imports from China. Meanwhile, Indian equities should continue to shine thanks to good earnings growth prospects and are only partially offset by somewhat stretched valuations, while remaining insulated from tariffs.

At December 2024 the US market remained overvalued, with a larger valuation gap with respect to last year due to the 2024 market rally (see page 38 for an in-depth analysis), which enters into our long-term calculations. **In Q1 2024, the delta valuation has been reduced faster than expected,** which translates into around a 30% improvement in the valuation component compared to the one assessed at the end of 2024. Even with this improvement, the valuations' contribution to US equity expected returns remains negative. The outlook for European equities is promising, driven by **improving earnings growth, increased productivity** (pushed by AI and reforms), **and anticipated structural reforms** in the Eurozone, all supported by relatively favourable valuations. A similar positive outlook applies to the Pacific region excluding Japan, bolstered by significant dividend yields.

10-year expected returns decomposition for equity





Source: Amundi CASM Model. Data as of 31 December 2024. For additional information see 'Sources and Assumptions' at the end of this document. Buybacks yield (if significant) is included in the EPS Growth component. The forecast returns are not necessarily indicative of future performance, which could differ substantially.

Improved corporate governance is driving higher shareholder returns, positively impacting market sentiment for Japan's equities. Moreover, the end of deflation should support a further rerating of the equity market.

Overall, total expectations are rising across global equity markets, benefiting initially from enhanced valuations and a stable or positive EPS outlook. The ranking of asset classes remains consistent with last year's expectations, with EM equities outperforming Developed Markets. There is a **preference for EM excluding China,** while valuation pressures continue to weigh on US equities, counteracting some of the positive gains from solid earnings growth. **Within Developed Markets, we maintain a preference for European and Pacific ex-Japan equities,** as both are characterised by recovering fundamentals and attractive valuations.

At the same time, the currently eventful political phase will play a role in shaping future market performance and may affect the relative regional preferences assessed at the beginning of 2025. The ongoing policy shift aimed at increasing Europe's fiscal capacity may support higher growth potential in future, further emphasising our more optimistic expectations for European equity markets in spite of their strong performance so far this year. Similarly, the unfolding technological transformation and its associated benefits have recently boosted Chinese equity markets, partially narrowing the previously more attractive valuation gap. But a renewed and reinforced policy commitment to support the economy should be reflected in higher earnings growth expectations. These factors reinforce our positive outlook for China, while maintaining our preference for Emerging Markets outside of China moving forward.

Expected equity returns on a 10-year horizon by currency

	USD	EUR	GBP	JPY
Cash Return	3.3%	2.1%	3.1%	1.2%
	10-year Expected Returns			
Local Government	4.2%	2.9%	4.7%	1.6%
US Equity	6.1%	4.7%	4.7%	2.1%
Europe Equity	9.0%	7.5%	7.5%	4.8%
Japan Equity	10.8%	9.3%	9.3%	6.6%
Emerging Markets Equity	9.1%	7.6%	7.6%	4.9%
China Equity	7.7%	6.2%	6.2%	3.6%
India Equity	9.6%	4.7%	2.1%	6.1%
EM ex China Equity	9.1%	7.7%	7.7%	5.0%
Global Equity	6.9%	5.7%	5.6%	3.1%
AC Global Equity	7.2%	5.9%	5.9%	3.4%

Source: Amundi CASM Model. Data as of 31 December 2024. For additional information see 'Sources and Assumptions' at the end of this document. The forecast returns are not necessarily indicative of future performance, which could differ substantially.

Considering the expected move in the currency, unhedged exposure to Japanese equities emerges as the most attractive exposure for the long term.

NICOLA ZANETTI
Quantitative Analyst,
Multi Asset Solutions, Amundi

The equity assessment discussed thus far focuses exclusively on asset class expectations expressed in local currencies, without taking foreign exchange (FX) into account. Investors must consider FX changes as these can significantly alter relative preferences for assets, as illustrated in the table above displaying the unhedged expected returns for local government bonds and equity indices expressed in G4 currencies.

Japanese equity consistently emerges as the most attractive asset class across all currencies, benefiting from its exposure to the JPY. This has not changed versus last year, as the JPY is even cheaper today. Conversely, US equity appears less favourable, as the strong USD contribution is added to the original expectations in local currencies. EM and EM excluding Chinese equity exhibit promising return premiums in all currencies except for JPY. China and India equity expectations are appealing for USD and EUR based investors.

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A careful and balanced approach to US stock market valuations

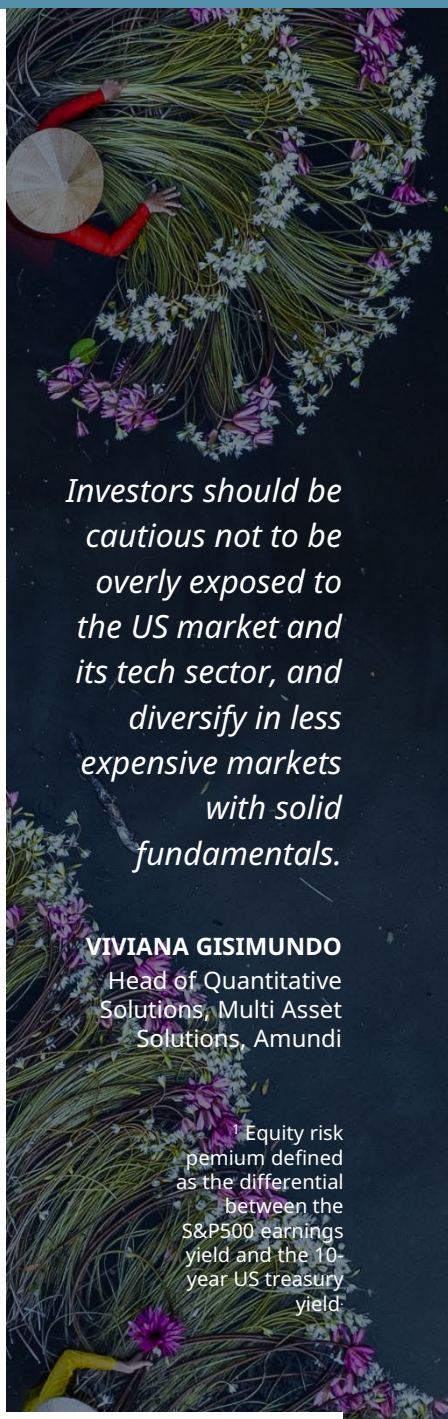
A key topic of concern in the current economic landscape is the possibility of a bubble in US stock markets, which are undeniably high quality, but still appear overvalued at the time of writing. The market has experienced one of its most robust growth periods since 1928, fuelled by optimism surrounding the macroeconomic outlook, strong corporate earnings and, lately, artificial intelligence developments. These high valuations are primarily driven by a small group of companies: in fact, 34% of market capitalisation is concentrated in just the seven largest companies. Excluding big tech, valuations are closer to their historical average, even if they remain overvalued.

These elevated valuations, however, are not unjustified. **Earnings growth and technological innovation have played a significant role in driving up prices.** Moreover, there are no clear signs of speculative excess comparable to what was seen during the dot-com bubble of 2000 or the financial crisis of 2008. Another point to consider is the US equity risk premium*, which is at its lowest level since the dot-com bubble era, explaining why many view US equity as being overvalued today.

Despite the apparent mismatch in US equity valuations, this may not necessarily indicate the presence of a bubble. Today's economic context is very different from that of the 1990s dot-com era. The US economy, along with its corporations, remains strong, and the ability to generate earnings is robust. Looking **beyond the largest companies, valuations of broader indices,** like an equally-weighted index or the S&P 500 excluding the Magnificent 7 **are more in line with long-term averages.**

However, the importance of valuation cannot be ignored on a shorter-term horizon, especially since the market capitalisation-weighted index remains a key reference for global investors. Furthermore, the risk of market concentration in the US, or a shift in investor sentiment, could amplify any negative effects and lead to financial instability and greater economic vulnerability. In addition, geopolitical risks, including protectionist measures coming from the US, could add further uncertainty to markets. Sectors that are highly globalised could be particularly affected by these developments.

Even if market valuations and last year's investment flows reflect the positive results achieved by US companies and the economy, investors are now turning more cautious, so as not to be overly exposed to the market and its tech sector, and are already diversifying in less expensive markets with solid fundamentals.

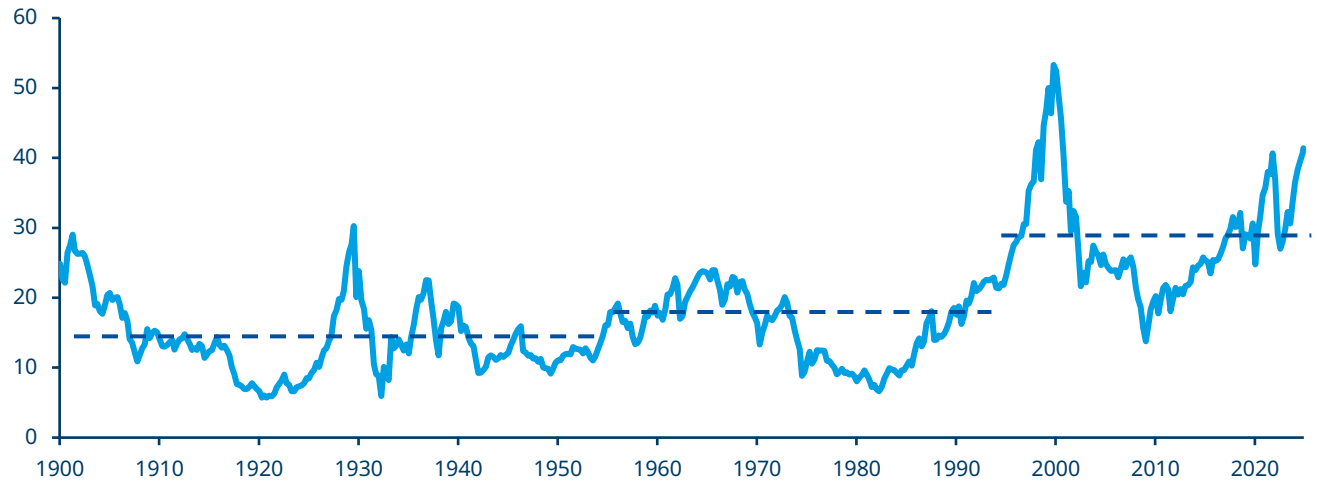


Investors should be cautious not to be overly exposed to the US market and its tech sector, and diversify in less expensive markets with solid fundamentals.

VIVIANA GISIMUNDO
Head of Quantitative Solutions, Multi Asset Solutions, Amundi

* Equity risk premium defined as the differential between the S&P500 earnings yield and the 10-year US treasury yield.

S&P 500 10-year CAPE ratio



Source: Finaeon, Global Financial Data, as of 31 January 2025. CAPE = Cyclically Adjusted Price Earnings.

Revising cash rates and real neutral rates

Our central scenario, along with considerations regarding potential GDP growth and other factors (like demographics) that will play a relevant role, has led to an **upward revision of cash rates and real neutral rates**. Specifically, we observed a slight increase in rates for the US and Japan, consistent with recent macroeconomic updates. The real neutral rate has eventually shifted into positive territory for Germany, driven by higher labour productivity and a potentially more favourable economic growth outlook. We also differentiated our neutral rate estimates across Eurozone countries due to idiosyncratic sovereign risk assumptions and economic potential. India's nominal cash rate target level is expected to rise primarily due to the upward revision of inflation forecasts. As a result, we upgraded 10-year rates, albeit only slightly for Germany, where we anchored the 10-year Bund at 3% given that, by lifting the cash rate, we expect a lower term premium. Our assumptions regarding other term structures, such as those for China and the UK, remain unchanged vs last year, as the bigger change that is regarding Chinese rates was already anticipated last year and is now confirmed.

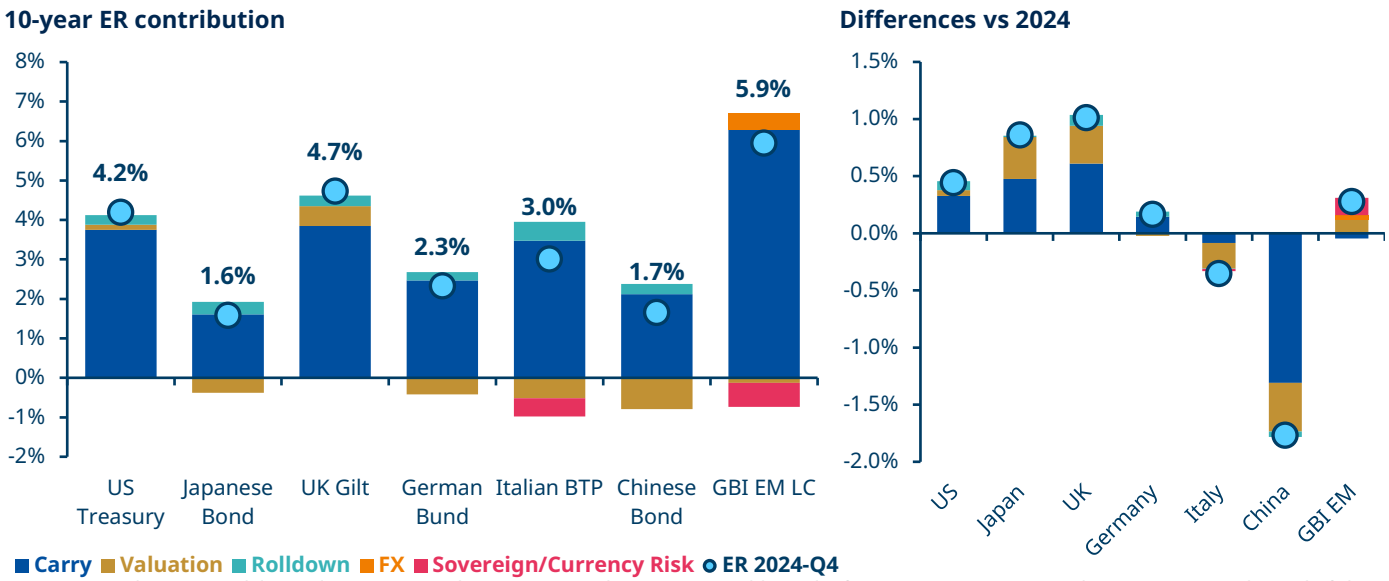
Government bond expectations surge: driven by carry and improved valuations

Expectations for government bonds have generally improved, supported by more favourable starting yields reinforced by higher anticipated carry and more attractive future valuations. However, the impact of revised yield assumptions is mixed, sometimes indicating higher carry and others diminishing the capital gain component. Average 10-year cash returns have risen for the US, driven by the revised neutral rate, and for Japan due to both the new neutral rate and updated monetary policy stance. By contrast, Eurozone cash returns are slightly lower due to a faster monetary policy normalisation and in spite of a higher neutral rate.

The significant rise in expectations for UK and Japanese bonds is attributable to higher carry, further enhanced by longer durations. Japanese yields are progressing towards higher and positive yields, consistent with the pattern predicted last year. For US bonds, the increase driven by higher carry is mitigated by the effect of higher long-term interest levels. This effect is similarly observed in France and, to a lesser extent, in Germany. The slight reduction we anticipate for Italy and Spain is due to their targets being revised slightly downward, incorporating a lower risk premium for the periphery, coupled with compressed sovereign spreads at the outset, particularly for Italy. The downward revision for Chinese bond expected returns is justified by the medium-term macroeconomic outlook, which reinforces the observation that the 10-year yield has surprised to the downside. There are slight improvements in the Government Bond-Emerging Market Index (GBI EM), linked to higher carry and positive support from foreign exchange exposure.

Recent market developments have seen some yield adjustment materialise that we forecasted. The most relevant is the impact of the fiscal U-turn in Germany, which changes the landscape for European bonds, prompting implied Euro yields to move closer to their long-term norm and they are now better positioned from a return perspective.

10-year expected returns decomposition for government bonds



Source: Amundi CASM Model. Simulation starting date is 31 December 2024. For additional information see 'Sources and Assumptions' at the end of this document. The forecast returns are not necessarily indicative of future performance, which could differ substantially. Fixed income assets' expected returns are broken down into: **Carry,** proxied by the par government or credit yield; **Rolldown**, the effect on bond prices generated by the passing of time; **Valuation**, the effect on bond prices generated by the movement of government yields and spreads; **Sovereign/ Currency Risk**, the impact from being exposed to sovereign and currency risks; **FX,** the performance associated with the FX exposure vs the USD.

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Moving forward, we confirm that interest rate volatility will remain sustained, as increasingly observed in recent times, in an environment where inflation could stay persistently above central bank targets and show significant fluctuations and uncertainty. This is incorporated in our modelling of interest rates.

Credit expectations are rising as well, but less than for govies

Long-term levels of credit spreads are consistent with our previous update. We expect the dynamic toward these targets to accelerate, and anticipate a risk of overshooting them in the medium term (i.e., within five years).

Our **default and recovery assumptions** are generally supportive, as we anticipate **some minor improvements**: we see a reduction in short-term default risk for lower-quality bonds and an increase in recovery rates for higher-quality ones. Currently, credit spreads are significantly narrower than their long-term levels across various regions and quality tiers, as a result of the compression experienced throughout 2024. **We expect spreads to widen in the medium to long term, in line with a normalisation of risks priced into the credit market.**

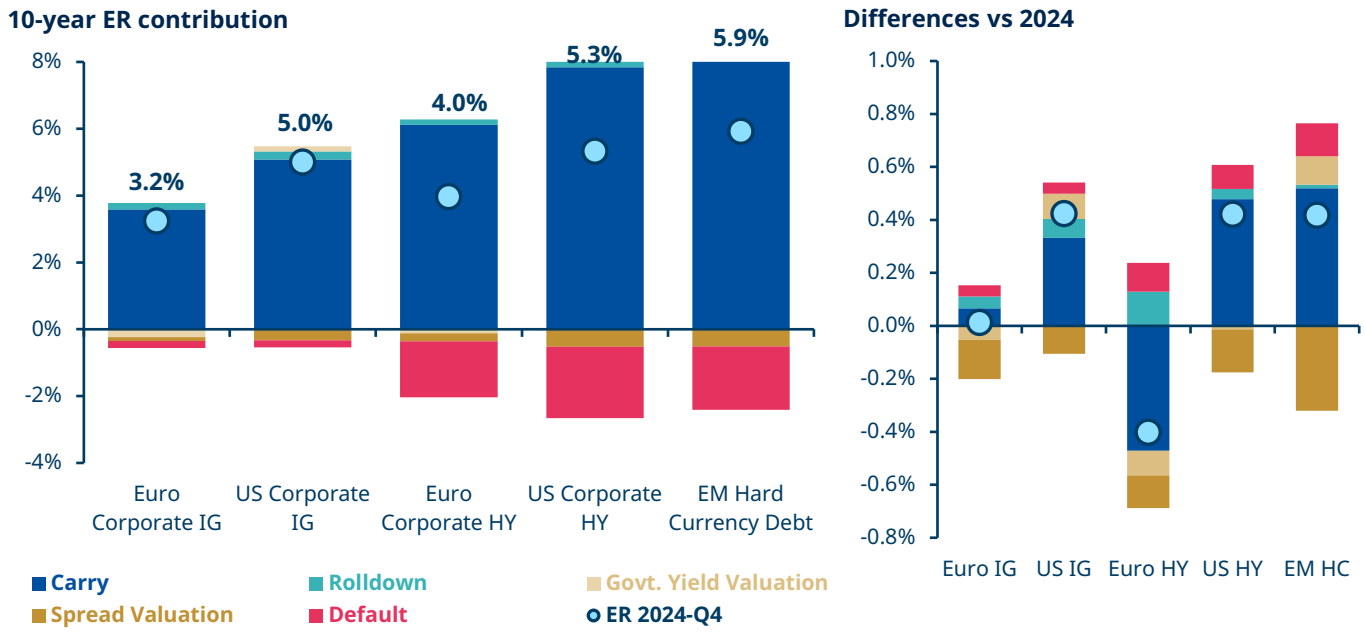
The negative impact from the upward adjustment of spreads is offset by the support provided by government yields, resulting in **positive albeit modest improvements in credit expected returns.** Overall, the outlook for credit fixed-income assets remains positive, especially when compared to other asset classes, and **particularly for the investment grade (IG) segment and EM bonds.**

Across regions, high-quality assets are likely to offer a reasonable premium over their respective government bonds. The relatively higher return expectations for high-yield (HY) bonds over investment-grade ones don't fully compensate for the increased intrinsic risks, particularly in the US.

Spreads in the EU HY bond market are significantly below their long-term levels and considerably lower than at the beginning of last year. Future returns may be penalised by a normalisation towards higher levels. By contrast, the mismatch with long-term levels in the US is less pronounced, but we remain cautious due to the extent of credit losses.

We expect the **Emerging Market Bond Index (EMBI) spread to widen in line with other credit assets**, given that the starting level is significantly below its long-term average. The negative impact is only partially mitigated by the decrease in US Treasury yields and a more stable carry moving forward, which supports our overall expectations for EMBI.

10-year expected returns decomposition for credit bonds



Source: Amundi CASM Model. Starting date is 31 December 2024. For additional information see 'Sources and Assumptions' at the end of this document. The forecast returns are not necessarily indicative of future performance, which could differ substantially. Fixed income assets' expected returns are broken down into: **Carry,** proxied by the par government or credit yield; Rolldown, the effect on bond prices generated by the passing of time; **Valuation,** the effect on bond prices generated by the movement of government yields and spreads; **Default,** assumption on the loss from the default.

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FX: towards a long-term mean-reversion of US dollar strength

President Trump's administration is seeking to rebalance aggregate demand towards the US to reinforce domestic manufacturing and industries and raise revenues from exporters. While higher tariffs on imports into the US undoubtedly make foreign products more expensive than domestic ones over time, the impact on the currency market is all but trivial, as the recent USD price action suggests. On the one hand, a high degree of protectionism is a headwind for global trade, capping the upside for the currencies of more open economies. On the other hand, high uncertainty and an unfriendly attitude towards trading partners may gradually reduce the pace of capital inflows into the US, which would be significant for the country's future funding needs considering the amount of money international investors have parked in US assets since the financial crisis. While we believe it will be strategically important for the US to defend its currency's role in international trade and funding, we also see reasons why a too strong USD is inconsistent with the administration's priorities, as structurally redirecting trade flows towards the US will prove a difficult task with the greenback running so richly.

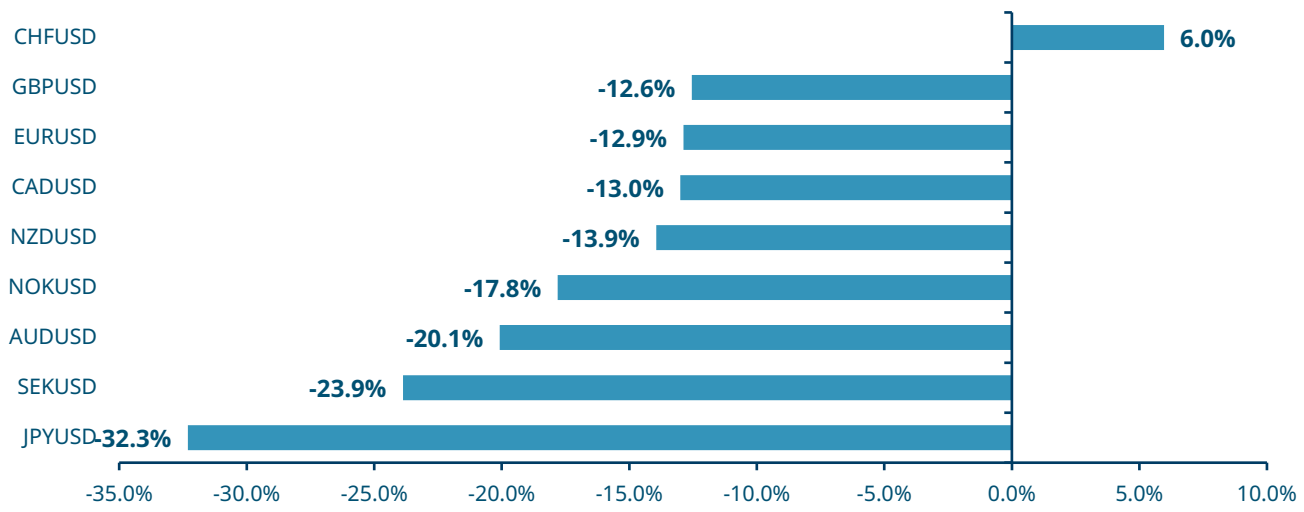
The USD is likely to remain dominant in international funding, but redirecting trade flows will be difficult with the greenback running so richly.

FEDERICO CESARINI
Head of DM FX,
Cross Asset Strategist,
Amundi Investment Institute

Our framework – which looks at three variations of Purchasing Power Parity (PPP) and Behavioural Effective Exchange Rate (BEER) models – suggests **the USD is the second most overvalued currency in G10 today, after the Swiss Franc,** even after the recent dollar correction. Empirically, such levels of overvaluation tend to clear-up in the medium term, and today's global backdrop reinforces this direction of travel. We expect the USD to weaken in the next decade: a move in line with the potential (and gradual) convergence of US yields and growth towards the G10 average and the stock market rebalancing towards global equities, which offer more compelling valuations. Among others, **we see the Japanese yen more than 30% below its fair value** and expect it to deliver the highest returns over the next 10 years. Japan has finally become unstuck from deflation, which suggests higher rates are in order in the country. **The euro and pound sterling show similar patterns.** Higher yields relative to the pre-pandemic years dating back to the Great Financial Crisis, a recovery in trade balances and terms of trade, and substantial undervaluation make these currencies attractive in the medium term.

EM currencies are likely to appreciate against the US dollar over the next decade, driven by several factors: stronger economic growth rates compared to developed economies, rising interest rates aimed at combating inflation or attracting foreign investment (FDI), increased FDI that boosts demand for local currencies and higher global commodity prices benefiting commodity-exporting nations.

G10 FX over- / under-valuations vs long-term fair values

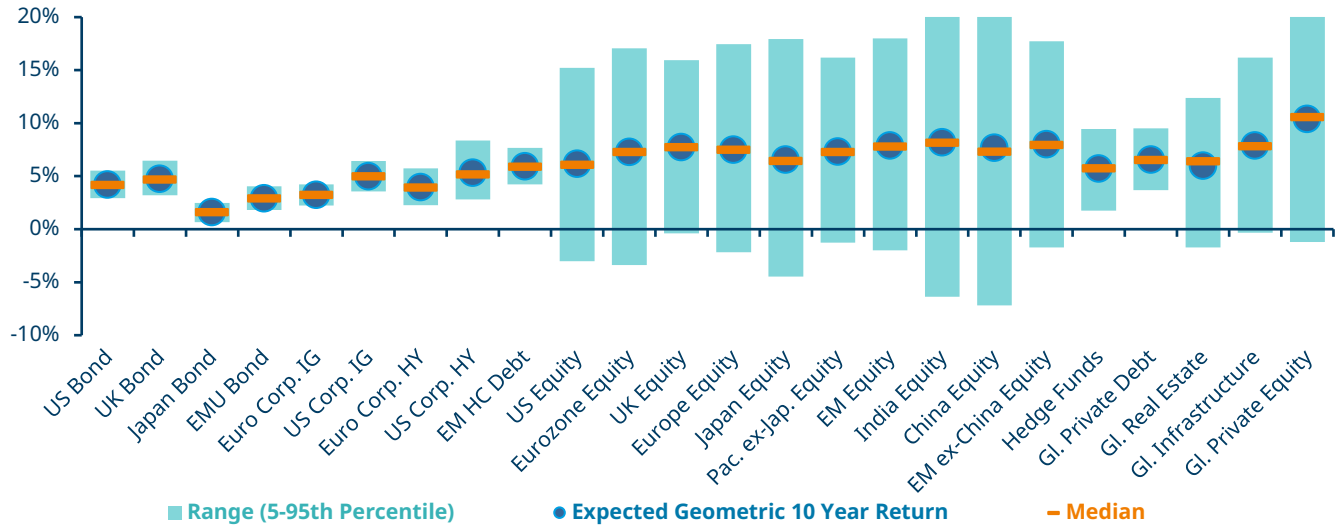


Source: Amundi Investment Institute as of 31 December 2024.

Asset class return distributions

We believe it is crucial for investors to consider a distribution around our expected returns for every asset class. **The width of the distribution goes hand in hand with the asset's risk profile.** Our central scenario does not envision recessions or major troubles for the economies we cover. However, it is important to consider that periods of declining economic growth or higher than expected inflation might happen and our stochastic model can help us navigate those scenarios. This means that **we do not look at a single estimate of future returns, but we analyse and leverage the stochastic distribution around the central scenario**. Hence, for some equity and alternative assets we can expect a 5% chance of experiencing negative returns over the next decade. Expected return distributions are quite a useful tool for fine tuning investors' Strategic Asset Allocations.

Inter-percentile range of expected returns in local currency



The chart reports the difference between the 5th and 95th percentile of the 10-year annualised return distribution for some assets (the inter-percentile range). This represents a measure of the dispersion of expected outcomes around the central scenario. Source: Amundi CASM Model. Data as of 31 December 2024. Geometric returns, local currency. For additional information see 'Sources and Assumptions' at the end of this document. The forecast returns are not necessarily indicative of future performance, which could differ substantially.

10-year versus 30-year expected returns

If developing macro and financial scenarios over a decade is a complicated task, this becomes even more challenging when the future horizon covers 30 years. However, this effort is crucial for our investors who need to plan their allocation over the very long term (institutional clients, mainly pension funds) and would like to have some **visibility of climate transition policies' effects and climate risks on economies and their financial assets as a consequence**. In addition, looking at very long-term expected returns (30-years) compared to the next ten years provides valuable insights into the relationship between asset returns and different factors like macro trends and the reversion towards long-term equilibrium levels. **Over this horizon, credit, particularly lower-quality assets, shows more attractive returns as the effect of valuations wanes.** Similarly, US equity returns increase over the 30-year horizon, becoming the most appealing region. On the other hand, **EM equities show declining long-term expected returns across the board, as the effects of the climate transition start to bite.**

30-year versus 10-year expected returns

Source: Amundi CASM Model. Data as of 31 December 2024. Geometric returns, local currency. For additional information see 'Sources and Assumptions' at the end of this document. The forecast returns are not necessarily indicative of future performance, which could differ substantially.

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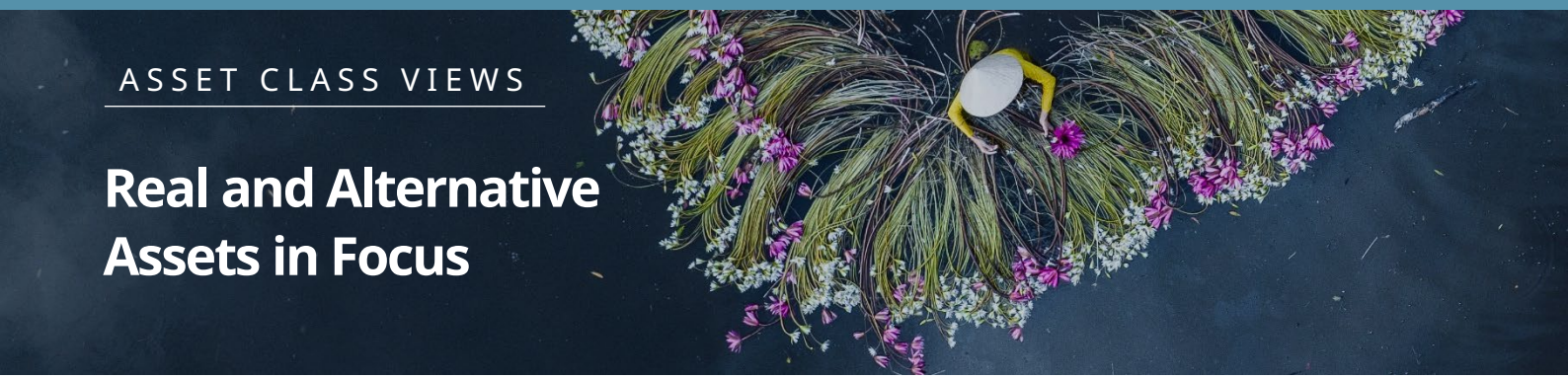


ASSET CLASS VIEWS

Real and Alternative Assets in Focus

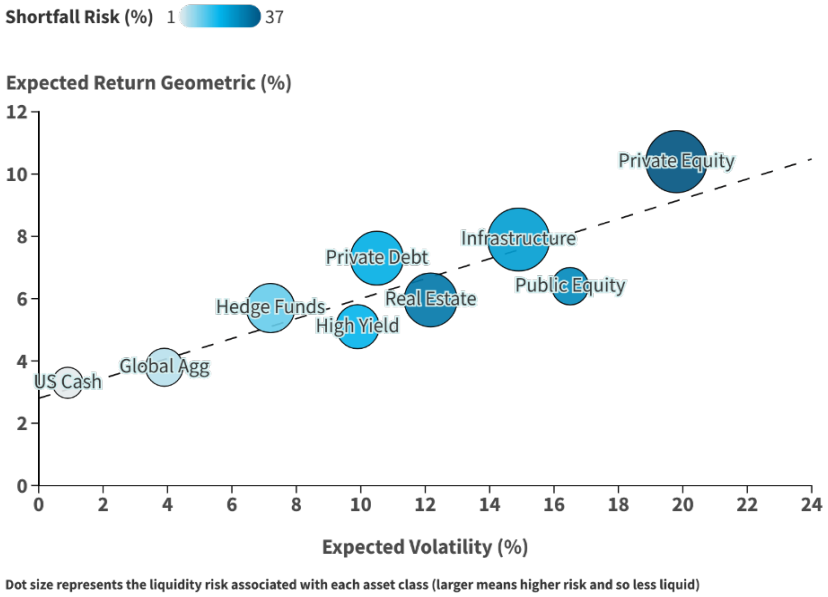
Modelling expected returns for alternative assets is a complex task for several reasons. Primarily, these assets differ from their liquid counterparts in terms of structure, access to underlying investments, and cash flows. Furthermore, within a single alternative asset class, there exist a variety of strategies and managers, each of which can greatly influence the investment's final outcome.

Yet, as these asset classes can bring important benefits to investors' Strategic Asset Allocations (SAA), we model them in order to allow their inclusion within a robust SAA framework. As such, the assumptions around returns and volatility differ from the historical evidence offered by industry indices, and from investors' potential future experiences.

Regarding returns, **we estimate the market beta of alternative assets, and the additional risk premia these assets provide in terms of illiquidity and complexity which we believe should be compensated**. Idiosyncratic return components guided by portfolio management, manager selection or specific value creation programmes typical of these investments are not included in the expected returns and are not factored in when designing the SAA. **Our expected returns represent the average returns for investments in alternatives, well diversified across managers and vintage years, without taking into account the J-curve effects. Volatility assumptions are based on unsmoothed return series which implies higher volatility** for alternative assets compared to the one obtained from realised returns (IRR). This approach is considered best practice when including them into an optimisation framework with liquid assets. These assumptions are specific to the SAA exercise, although they could be refined for customised analysis and portfolio implementation.

Even without considering additional alpha potential and adjusting volatility, real and alternative assets exhibit attractive risk/return profiles. In particular, global private equity (with returns shown net of fees) and global private debt are above the market line, while we expect their liquid counterparts to fall below.

10-year expected returns, volatility*, shortfall and liquidity risk** in local currency



Real and alternative assets are key to enhancing risk-adjusted returns, and private equity and debt appealing in search for higher return potential.

NICOLA ZANETTI
Quantitative Analyst,
Multi Asset Solutions, Amundi.

Source: Amundi Quant Solutions, CASM Model. Data as of 31 December 2024. Real Estate refers to all property unlevered real estate. The expected returns do not consider the potential alpha, generated by portfolio management that can be significant above all for real and alternative assets. *Expected volatility for alternative assets is derived from unsmoothed return series. Hence, this measure of volatility will be different to the one obtained from realised IRR. **Shortfall Risk is defined as the 95% CVaR based on the distribution of the year-on-year simulated returns at the 10-year horizon. Liquidity risk is defined as a liquidity rank based on several characteristics including time horizon, cash flow curve, and liquidity among others. The forecast returns are not necessarily indicative of future performance, which could differ substantially.

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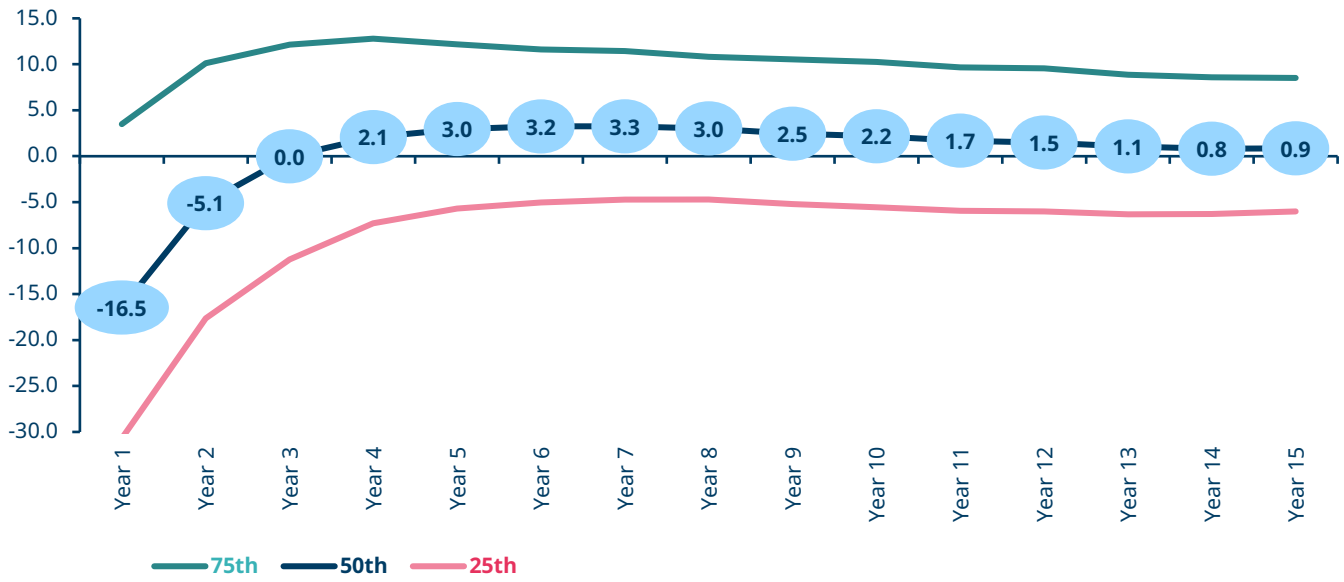
Global private equity alpha dispersion by fund age



Source: Amundi Quant Solutions based on MSCI Burgiss data as of September 2024. Dispersion of annualised outperformance over the MSCI World Index per fund age in USD. The data covers all vintages, and private equity strategies include Buyout and Venture Capital. Geographies include North America and Western Europe. Direct alpha is a measure of additional performance delivered by private investments on top of liquid benchmarks, which takes into account cash flow amounts and timing.

Private equity and global infrastructure present attractive investment opportunities, with improved expected returns.

We expect demand for infrastructure investments will rise in the long-term, particularly for energy and data centres.

Private equity (PE) is modelled as an aggregate of Buyout and Venture Capital strategies. Our 10-year expected returns (net of fees and idiosyncratic alpha) for global private equity are slightly above 10%, reflecting an **increase of around 1.5% with respect to last year, and an extra performance of 4% relative to public markets.** This change is driven by revised public equity returns and new assumptions for value added, guided by a deeper look into the asset class's performance data. Higher interest rates compared to last year lift the cost of leverage which harms the attractiveness of Buyout strategies. This could be partially offset by the increased IRR generated by lower entry multiples due to the higher cost of capital. The implementation of value creation plans will be key for GPs* to navigate the future landscape and are also affected by potentially expensive leverage. Manager selection in PE is crucial, as between 25% to 50% of funds historically underperformed against liquid benchmarks, particularly based on fund age.

We view **global infrastructure** as a broad range of strategies. We can now break down returns into income and capital appreciation. The income component is modelled as a function of future nominal rates to capture indexation mechanisms, plus a spread to account for illiquidity. The capital growth part is linked to public equity returns. **Our 10-year expected returns for global infrastructure are around 7.9%,** which is significantly higher than last year. This increase results from a model change and higher equity returns, with the old framework estimating around 7%. We believe long-term demand for infrastructure investments will rise, especially for energy and data centres. **The necessity for secure energy production and AI expansion will be key drivers,** more than offsetting any potential decline in the climate transition narrative. Demographic trends, such as **urbanisation and population growth, will further support demand** for infrastructure, especially in emerging economies.

*A private equity firm is called a general partner (GP) while the investors are called limited partners (LPs) and generally consist of pension funds, institutional investors and wealthy individuals. VC is Venture Capital.

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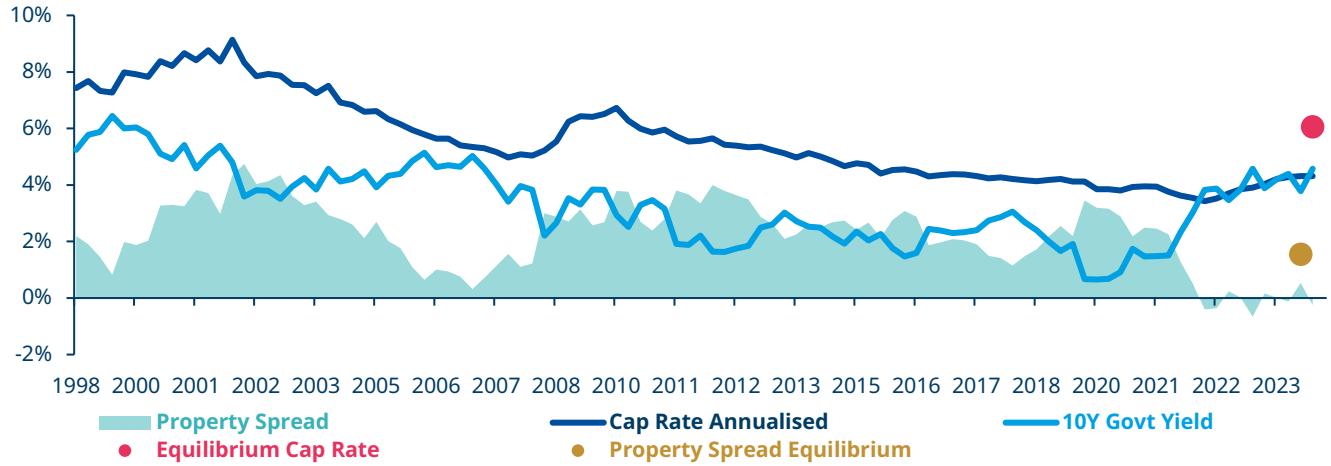
US Real Estate valuations still expensive, while European properties are more fairly valued



Source: Amundi Quant Solutions based on MSCI and Bloomberg data as of 31 December 2024

Real estate returns over the next decade are projected to be **between 5.3% and 6% for European and US properties respectively.** These expectations imply an improvement versus last year of around 1.5%. The upward revision is mainly due to higher nominal GDP assumptions which impact the growth component of the model and mildly improved valuations. **Lower transition costs and a return-to-office culture being pursued globally will push returns for commercial real estate higher,** which is an important component of our reference benchmark. Across Europe, we see valuations roughly in line with equilibrium. However, US cap rates remain below our estimate of equilibrium, with property spreads close to zero, which could indicate slightly expensive valuations for US properties.

US real estate returns are only a little higher than corporate bonds, due to expensive valuations

Private debt assets are predominantly structured as floating rate, which has allowed them to benefit from the current environment of generally high interest rates. Although the upcoming quarters may pose some headwinds for the asset class, as monetary policy across Developed Markets normalises and drives interest rates lower, we estimate the illiquidity premium to be consistent with last year's assumptions. We expect the illiquidity premium to remain a significant driver of direct lending returns in the long term. In the US, which represents a significant portion of the global market, we see higher interest rates and spreads going forward, and we expect return assumptions to be higher than for euro assets. All in all, **our estimates for global private debt (levered) are around 7.3% for the next 10 years, with a marginal uptick compared to last year.**

Private debt is positioned to benefit from higher interest rates

Hedge funds' (HF) expected return model is based on alternative risk premia added to a cash contribution and does not consider alpha contribution (which is unpredictable over the long run). Returns are presented gross of fees. **Cash returns**, a key variable for HFs, **are expected to increase marginally due to our upward revision of real rates in the US, providing tailwinds to the asset class.** The return's premium component is almost unchanged versus last year, as equity and credit betas are offset by the negative duration beta. A diversified basket of HF strategies could deliver returns slightly below 6%, with a similar risk profile to fixed income.

Hedge fund returns are marginally unchanged but could benefit from higher cash returns

HFs' risk-return profiles, along with their low correlation to traditional asset classes, positions them as a compelling source of diversification within the SAA. As the dispersion of returns is wide in this space, manager and strategy selection is key to further enhancing the risk-return potential.

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SOURCES AND ASSUMPTIONS

Sources and assumptions

Sources of CMA: CMA: Amundi Asset Management CASM Model, Amundi Asset Management Quant Solutions and Amundi Investment Institute Teams. Macro figures as of the last release. The starting simulation date is 31 December 2024. Equity returns based on MSCI indices. Reference durations are average figures. Returns on credit assets are comprehensive of default losses. If not otherwise specified, expected returns are geometric annualised average total returns at the specific horizon. EM debt HC, EM-GBI, global infrastructure and hedge funds are in USD, all other indices are in local currency. Returns are nominal and gross of fees, except private equity which are net of single manager fees. Real estate refers to all property unlevered real estate. Hedge fund returns represent the expectations for a diversified aggregate of Funds of Hedged Funds are gross of Fund of Funds fees. The expected returns consider the market beta and the alternative assets risk premium. The alpha return component generated by portfolio management, strategy selection or specific value creation programmes, which can be significant above all for real and alternative assets, is not considered in any form.

The arithmetic average returns are derived using the price generated by our simulation engine. By definition, the arithmetic mean is always greater than or equal to the geometric mean. In particular, higher volatility of returns and higher frequency of returns and/or a longer time horizon will increase the difference between the two measures.

Simulated volatilities are calculated on simulated prices over a 10-year horizon. Simulated volatility for alternative assets is derived from unsmoothed return series. Hence, this measure of volatility will be different from the one obtained from realised IRR.

Expected returns are calculated using Amundi central scenario assumptions, which include climate transition. Forecast and fair values up to a 3-year horizon are provided by the Amundi Investment Institute Research team (macro, yields, spread and equity).

Forecasts for annualised returns are based upon estimates and reflect subjective judgments and assumptions. These results were achieved by means of a mathematical formula and do not reflect the effect of unforeseen economic and market factors on decision-making. The forecast returns are not necessarily indicative of future performance.

Data sources: Bloomberg, Cambridge Associates, Global Financial Data. Edhec Infra, MSCI and MSCI Burgiss.

Sources of sectoral expected returns: The expected returns of sectoral indices consider: 1. long-run earnings growth, 2. expected change in valuation and 3. the income component. Long-run earnings growth: for sectoral indices we consider two distinct periods. The first two years of forecasts are based on the IBES consensus estimates, which allows us to incorporate bottom-up considerations. The second period until the end of the decade is derived from the long-term trend in earnings growth for a given region in our central scenario with the addition of the buyback component. It is also tilted by a coefficient depending on the growth or value characteristics of the sector. As a final step, the outcome is aggregated to match the long-term earnings per share trend of each region. Expected change in valuation: to assess this repricing component, we look first at the PE ex growth of a given region and adjust it from the repricing of the region, making sure it is consistent with the outcome of the regional equity section, which integrates the climate risk by definition at a regional level. Then from this adjusted regional Target PE, we derive a Target PE for each sector, depending on its long-run earnings growth (as defined previously). Finally, we compare this sectoral Target PE with its average historical PE to get the sector valuation change and we adjust for ESG and climate change flows as well a sector low carbon and NetZero risk premia. For income, we use the average of the last three years' consensus dividend yield of each sector, here again adjusted to be consistent with the regional outcome.

G10 FX Fair Valuation models: The literature is full of theoretical foundations at the basis of currency fair valuation. Our battery of models leverages two main concepts: 1) Purchasing Power Parity equilibria (which in turn expresses FX equilibria as a function of relative price dynamics across countries) and 2) Behavioural Exchange rate equilibria (where we focus on short to long-term fundamental drivers. Purchasing Power Parity models: Standard PPPs rely on CPI differential, we enrich our framework to take into account two additional variations: 1) PPP based on PPI differential (to take into account the differential in costs of production) and 2) a standard PPP but adjusted for productivity (we proxy with CPI-PPI differentials, following the Balassa-Samuelson framework). Both CPI and PPI induce a negative contribution to the FX (i.e. higher inflation means a depreciation in the long run), whilst higher productivity (i.e. higher CPI-PPI differential) empirically translates into stronger FX Behavioural Exchange rate models: We leverage here on the theoretical findings of Clark and McDonald and estimate FX equilibrium based on short to medium- and long-term fundamental drivers. On top of inflation (our longest-term driver, given the empirical convergence rate from spot), we do consider 1) interest rates differentials, 2) terms of trade, 3) fiscal spending, 4) productivity (GDP per capita) and 5) the degree of openness of each G10 economy.

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SOURCES AND ASSUMPTIONS

CASM model

We believe capital markets are not always efficient and they deviate from long-term fair values. We follow a disciplined approach to asset allocation that blends quantitative input and qualitative assessment to identify superior asset allocations. Our multivariate approach to modelling assets and liabilities focuses on complex relationships between risk factors over multiple investment horizons. Simulating asset prices that are consistent with our risk factor models allows us to capture complex market dynamics. Macro and financial risk factors explain asset returns and the correlations between assets.

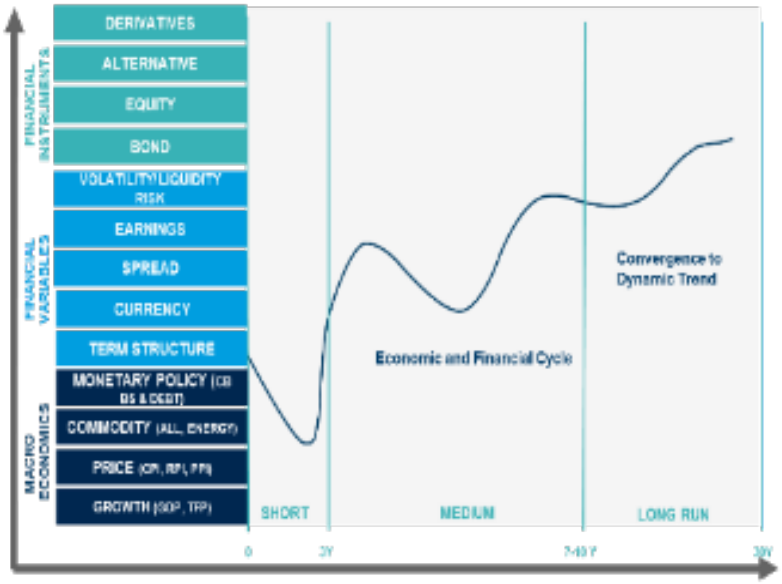
Cascade Asset Simulation Model (CASM) is a platform developed by Amundi in collaboration with Cambridge University*. CASM combines our short-term financial and economic outlooks. It incorporates medium-term dynamics into long-term dynamic trends, to simulate forward-looking returns for different asset classes over multiple horizons. CASM generates asset price scenarios and underlying economic and financial factors that determine Amundi's expected returns. It is a valuable tool for strategic asset allocation and asset-liability management analysis. The flexibility of CASM allows us to provide highly customised solutions to our clients.

We estimate model parameters quarterly to incorporate new market data and our short-term outlook. The process for calibrating models that reflect our view of economic and financial market trends is a close collaborative process between many teams at Amundi. We reach a consensus for the short-to-medium-term outlooks for macro and financial variables for each region under consideration (US, Eurozone (core, semi-core and periphery), UK, Japan, China, India, EM area). The models are calibrated to be consistent with these outlooks and long-run estimates. At each step in the process, results are analysed against stylised facts and checked for consistency. The estimation process for each region progresses from calibrating macro and financial variables to simulating asset prices, where asset prices are driven by the underlying macro and financial variables.

Price returns are generated using a **Monte Carlo simulation**. Stochastic generation of risk factors and price scenarios allows us to analyse a **wide range of possible outcomes and control the uncertainty surrounding these**. We can change starting assumptions and see the effect on possible future asset prices. The platform allows us to simulate consistent scenarios across any instrument in a multi-asset portfolio, a feature that is particularly relevant for institutional investors with long time horizons.

The CASM platform covers macro and financial variables for major regions, in particular the US, UK, Eurozone, Japan, China, India and Emerging Markets as an aggregate. Models are constructed to capture the main drivers of economic variables that affect asset prices. The definition of the building blocks within the cascade structure **has been enhanced to incorporate the climate policy actions and their implications**.

Cascade Asset Simulation Model (CASM) is a platform developed by Amundi used to simulate forward-looking returns and derive expected returns (see a more detailed description at the end). We distinguish between macro-economic, financial and pricing models as described in the following chart:



The architecture of CASM can be described in two dimensions. The **first dimension** is a "cascade" of models. Asset and liability price models are made up of market risk factor models. Market risk factor models are made up of macroeconomic models. Initially proposed by Wilkie (1984) and further developed by Dempster et al. (2009), this cascade structure is at the root of the platform's capability to model linear and non-linear relationships between risk factors, asset prices and financial instruments. The **second dimension** is a representation of the future evolution of the aforementioned "cascade" effect. The unique formulation allows us to simulate asset price scenarios that are coherent with the underlying risk factor models. In the short term, CASM blends econometric models and quantitative short-term outlooks from in-house practitioners. In the long term, we assume the market variables are subject to a mean reverting process, defined formally through structural break analysis and general equilibrium models. The short term evolves into a long-run state through the medium-term dynamic driven by business cycle variables.

Source: Amundi Asset Management – CASM model.

**A.D. Wilkie. (1984), A stochastic investment model for actuarial use [with discussion]. Transaction of the Faculty of Actuaries, 341-403*

***Dempster, M., Germano, M., Medova, F., Murphy, J., Ryan, D., & Sandrini, F. (2009),** Risk Profiling Defined Benefit Pension Schemes. Journal of Portfolio Management, Summer (2009)*

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ACKNOWLEDGMENTS

We also would like to thank the Amundi Real Assets team, Sergio Bertoncini, Jean-Baptiste Berthon, Nadia Bobbio, Marie Brière, Rebecca Dal Bon, Delphine Georges, Karine Huynh, Swaha Pattanaik and Armelle Sens for their contributions.

* Amundi Investment Institute

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Investment Solutions

Trust must be earned

Amundi Investment Institute

In an increasing complex and changing world, investors need to better understand their environment and the evolution of investment practices in order to define their asset allocation and help construct their portfolios.

This environment spans across economic, financial, geopolitical, societal and environmental dimensions. To help meet this need, Amundi has created the Amundi Investment Institute. This independent research platform brings together Amundi's research, market strategy, investment themes and asset allocation advisory activities under one umbrella; the Amundi Investment Institute. Its aim is to produce and disseminate research and Thought Leadership publications which anticipate and innovate for the benefit of investment teams and clients alike.

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DOC ID: 4360835

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