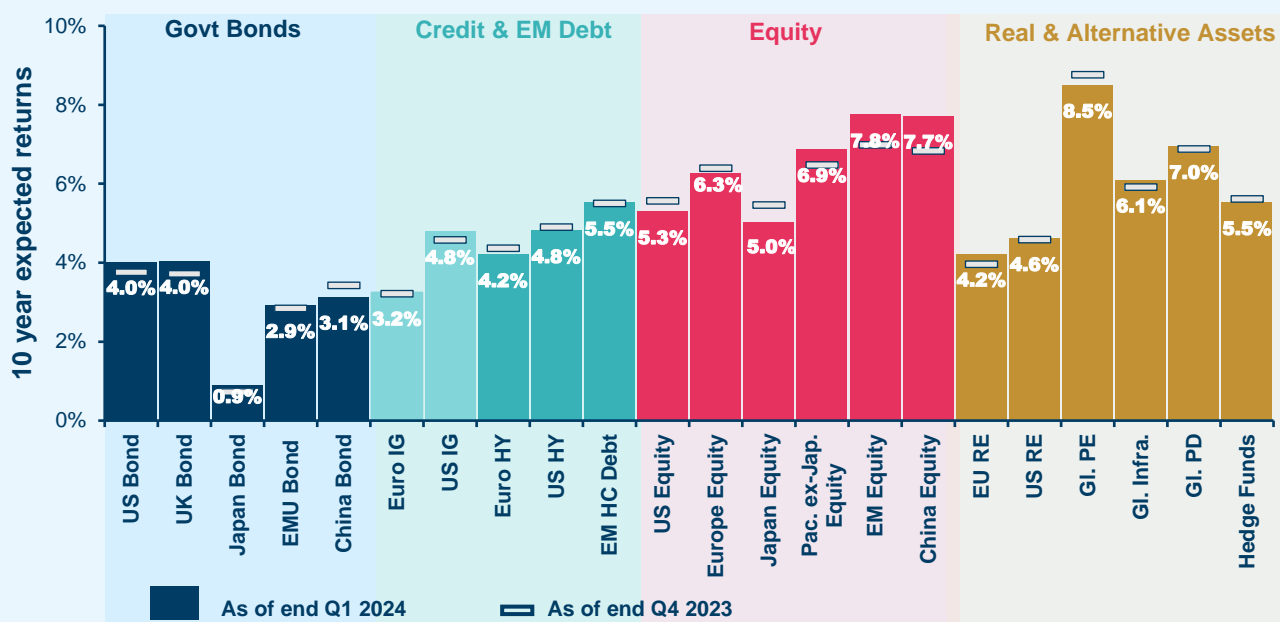


Capital Market Assumptions

Asset Class Returns Forecasts

- MACROECONOMICS:** Our long-term model assumptions are characterised by a **disorderly and delayed energy transition that integrates secular trends and uncertainty**, both affecting **price patterns and volatility**. Interest rates will normalise in the long run on upward-sloping curves. Our current scenario assumes some improvement in macro and fundamentals. In the medium term, some benefits that come from **milder transition risks and AI-induced productivity gains could result in less volatile inflation patterns**. Equity returns will be characterised by modest earnings growth and lower valuation multiples. Please read our [annual publication](#) to get more information about the macroeconomic scenario.
- VALUATION & EXPECTED RETURNS:** The valuation component mitigates the positive implications from the macro scenario, particularly for equities. Recently updated DM equity 10-year expectations show a mild reduction due to a significant price increase in the latest quarter. Fixed income assets see some improvements in their expected returns driven by higher starting yield levels. Credit is mostly unchanged.



Authors



Viviana Gisimundo
Head of Quant Solutions,
Multi Asset Solutions, Amundi



Lorenzo Portelli
Head of Cross Asset Research,
Amundi Investment Institute



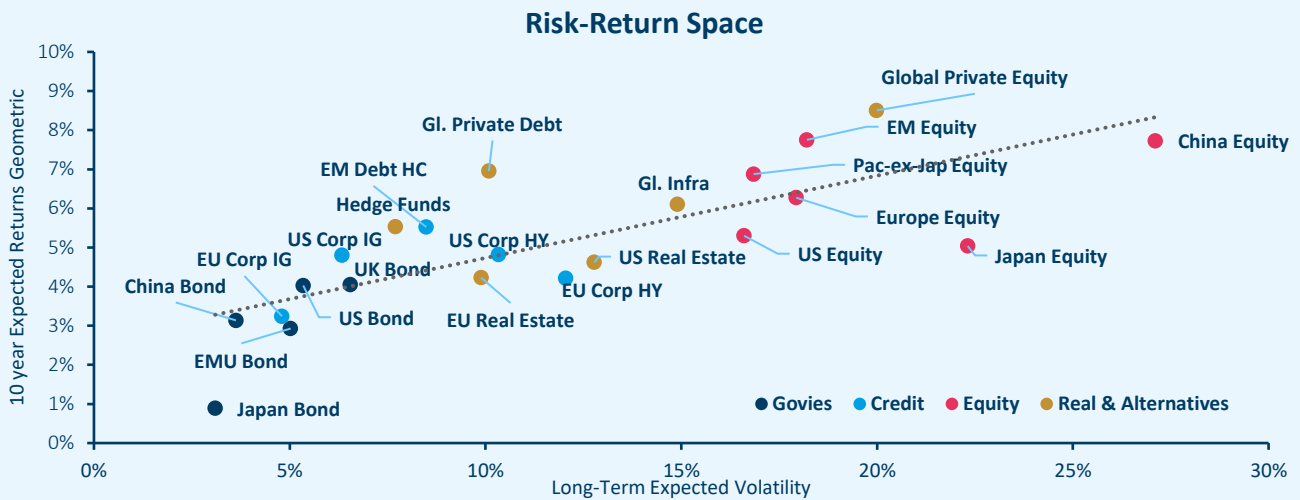
Tom Walsh
Senior Quantitative Analyst,
Multi Asset Solutions, Amundi



Nicola Zanetti
Quantitative Analyst,
Multi Asset Solutions, Amundi

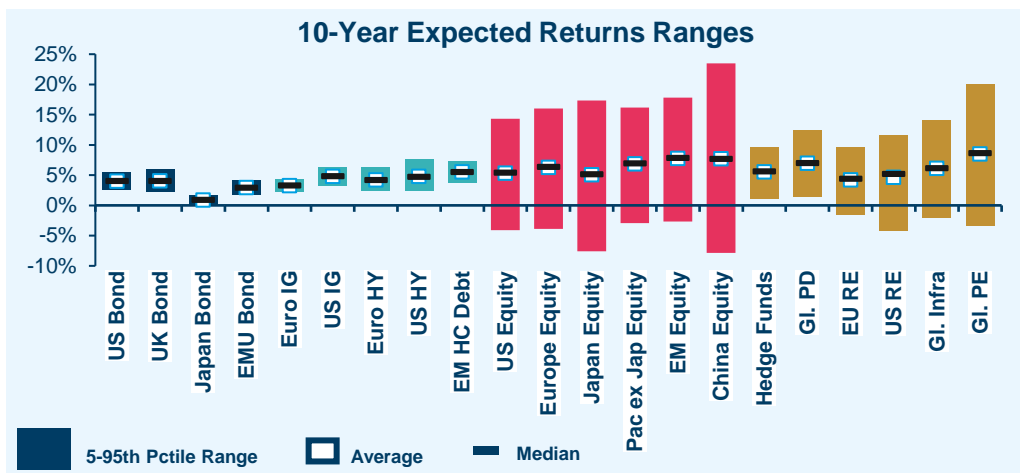


- RISK RETURN TRADE-OFF:** The capital market line remains flat, confirming that it can be challenging to reach high return targets just with liquid assets. Real and alternative assets are needed for their appealing diversification and dynamic return-generating features. In addition, fixed-income assets maintain their role as the fundamental building blocks of multi-asset portfolios.



ASSET CLASS RETURN DISTRIBUTIONS

The chart reports the 5th and 95th percentile range for our simulated 10-year annualised geometric returns. This represents a measure of the dispersion of expected outcomes around the average of the distribution, namely our central scenario. Our expectations for **government bond** returns remain attractive, despite the dispersion around the central scenario. In particular, UK and US bonds' expected returns dominate the sovereign bond universe (investors should keep in mind the duration mismatch on UK gilts) and Japanese bonds continue to lag behind peers.



Credit return forecasts for high-grade assets can offer a modest premium with respect to relative government bonds. Low-quality assets are expected to marginally outperform higher-quality ones, but not from a risk-adjusted returns point of view as they could be associated with a larger dispersion due to greater intrinsic volatility and

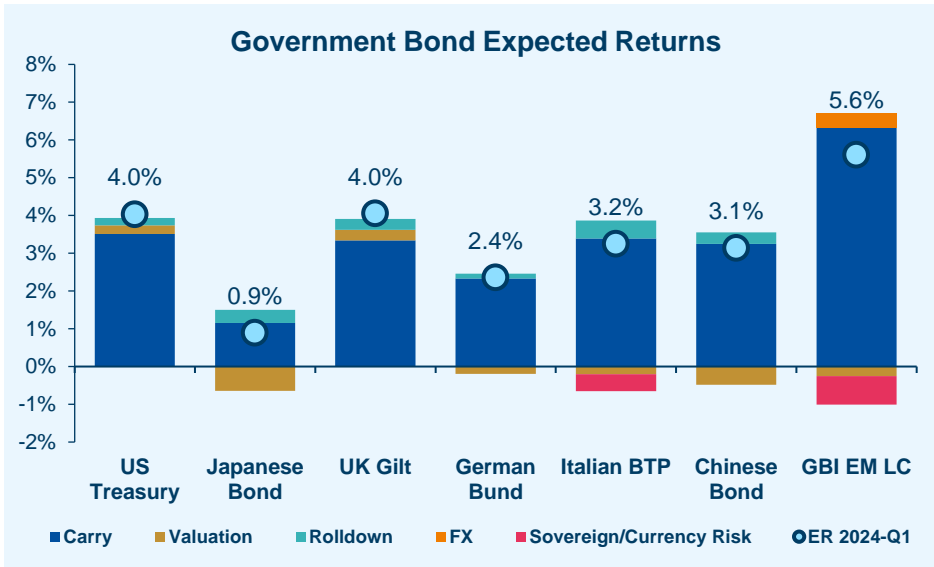
default loss assumptions. On the **equity side**, moderate 10-year expected returns are between 5.0% and 7.8%. However, based on our simulations we cannot exclude the possibility of **negative returns**: there is a **5% chance** of equity returns being around -5% over a 10-year horizon. Our equity fundamentals assumption have been slightly revised upward due to the developing macroeconomic backdrop and marginally improved starting valuations.

Hedge Funds maintain their role of diversifier in the portfolio exhibiting the steady returns associated with moderate risk and a good liquidity profile. **Global Private Debt** shows an interesting expected risk-adjusted return, making this asset a convincing alternative to liquid credit instruments. **Infrastructure** maintains a balanced risk-return profile and also shows strong diversification properties. **Private Equity** is expected to provide investors with returns close to double-digits. **Real Estate** expectations are subdued, at the same level as high-quality credit, due to its negative valuation; however, the dispersion around the central scenario is materially wider reflecting the illiquidity and complexities of this asset class. Real Estate, Infra and Private Equity also present a 5% chance that expected returns could be around -5% over a 10-year horizon.

Source: Amundi Asset Management CASM Model, Quant Solutions and Amundi Institute Teams. Full source on page 5.



ASSET CLASS RETURN ATTRIBUTION



The long-term outlook for government bonds has slightly improved.

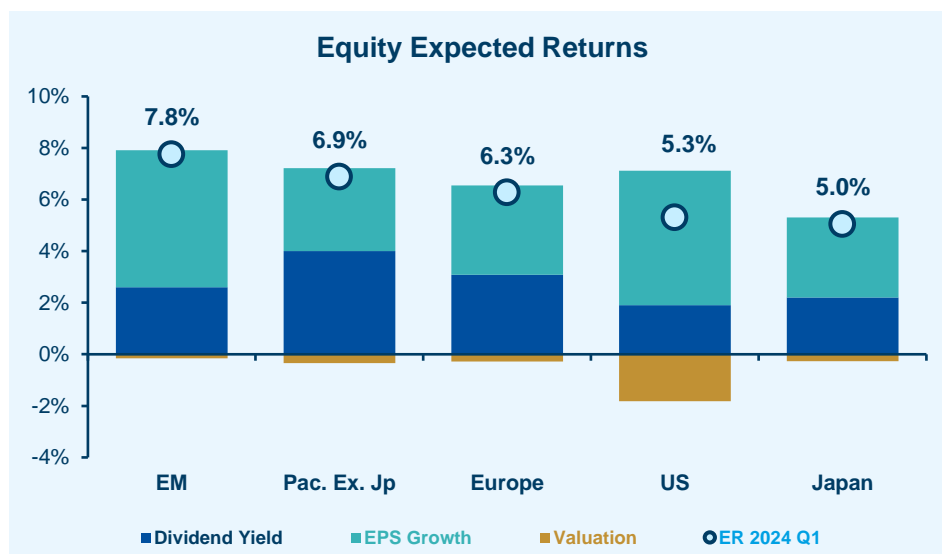
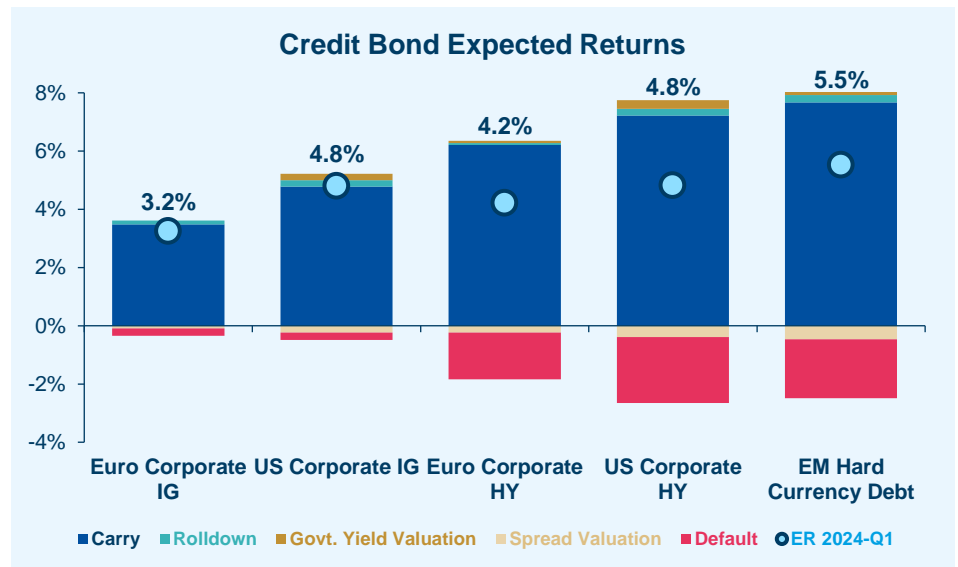
The expected returns for most government assets were revised mildly up by 20-30 bps due to higher carry and more favourable valuations.

Expectations for Chinese bonds and Italian BTP slightly decreased, mostly driven by a reduced carry component.

Expectations for EM Debt and Euro IG remained the same, with a more positive valuation for government assets balanced by a less supportive valuation spread.

US IG's expected return could benefit from a more favourable valuation on the government side in particular.

Expectations for HY credit are deteriorating because of lower expected carry moving forward.



Changes for equity's expected returns were mainly driven by valuations, while estimates regarding EPS growth were substantially unchanged.

EM equity and Pacific ex Japan have been the regions benefiting the most from recent market movements and valuations, while the rest of the DM equity pack could see a decrease in expectations (most significantly for the Japanese market).

Source: Amundi Asset Management CASM Model, Quant Solutions and Amundi Institute Teams. Full source on page 5.

ASSET CLASS RETURN FORECASTS

In the following table, we present our annualised return forecasts across different asset classes, calculated as the average simulated returns over different forward-looking horizons (five- and ten-years). We also report historical figures for annualised returns and volatility calculated over the last 20 years, a period that includes two major crises (GFC and Covid-19).

Assets in local currency	Reference Index	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)
		Average next 10 years	5-year Expected Returns	10-year Expected Returns	10-year Expected Returns				
Cash									
Euro Cash	JPCAUEU3M Index	0.2	2.4%	2.2%	2.2%	1.0%	2.6%	1.3%	0.9%
US Cash	JPCAUS3M Index	0.2	3.5%	3.2%	3.2%	1.0%	1.3%	2.0%	0.9%
Government Bonds									
US Bond	JPMTUS Index	6.0	4.4%	4.0%	4.1%	5.3%	11.4%	2.7%	5.5%
UK Bond	JPMTUK Index	9.2	5.0%	4.0%	4.2%	6.5%	14.6%	3.1%	7.8%
Japan Bond	JPMTJPN Index	9.2	1.0%	0.9%	1.0%	3.1%	6.6%	1.2%	2.6%
Emu Bond - Core	JPMTWG Index	7.1	2.4%	2.4%	2.5%	4.8%	10.7%	2.3%	5.2%
Emu Bond - Semi Core (France)	JPMTFR Index	7.1	3.0%	2.9%	3.0%	4.9%	10.2%	2.6%	5.4%
Italy Bond	JPMTIT Index	6.1	3.2%	3.2%	3.5%	7.1%	13.5%	3.6%	6.7%
Spain Bond	JPMTSP Index	6.6	3.1%	3.2%	3.4%	6.3%	12.2%	3.3%	5.8%
EMU Bond All Maturity	JPMGEMUI Index	6.8	2.9%	2.9%	3.0%	5.0%	10.2%	2.8%	5.2%
Barclays Global Treasury	BTSYTRUH Index	6.8	3.1%	2.9%	3.0%	3.7%	7.0%	3.2%	3.9%
Credit Investment Grade									
Euro Corporate IG	ER00 Index	4.5	3.1%	3.2%	3.3%	4.8%	7.7%	2.8%	4.7%
US Corporate IG	C0A0 Index	6.7	4.9%	4.8%	4.9%	6.3%	11.9%	4.0%	6.6%
Barclays Euro Aggregate	LBEATREU Index	6.3	3.0%	3.0%	3.1%	4.6%	9.1%	2.6%	4.6%
Barclays US Aggregate	LBUSTRUU Index	6.2	4.6%	4.3%	4.4%	4.8%	10.0%	3.0%	4.4%
Barclays Global Aggregate	LEGATRUH Index	6.6	3.8%	3.6%	3.7%	4.1%	7.7%	3.3%	3.7%
Credit High Yield									
Euro Corporate HY	HE00 Index	2.8	3.8%	4.2%	4.9%	12.1%	20.5%	6.0%	12.7%
US Corporate HY	H0A0 Index	3.3	4.5%	4.8%	5.2%	10.3%	20.2%	6.4%	10.5%
Emerging Market Debt									
EM Hard Currency Debt*	JPEIDIVR Index	6.4	5.1%	5.5%	5.8%	8.5%	17.9%	5.6%	9.4%
EM-Global Diversified**	JGENVUUG Index	5.0	6.2%	5.6%	6.2%	10.6%	22.7%	4.4%	11.8%
GBI-EM China LOC	JGNCNTL Index	5.2	1.7%	3.1%	3.2%	3.6%	9.3%	na	na
Convertible Bond									
Europe Index (Eur Hedged)	UCBIFX20 Index		4.7%	4.7%	5.4%	12.1%	27.7%	3.7%	10.2%
Equities									
US Equity	NDDLUS Index		6.2%	5.3%	6.5%	16.6%	44.8%	9.6%	16.2%
Europe Equity	NDDLE15 Index		6.9%	6.3%	7.6%	17.9%	47.4%	6.8%	15.0%
Euro zone Equity	NDDLEMU Index		6.6%	5.7%	7.4%	19.7%	52.0%	6.2%	17.9%
UK Equity	NDDLUK Index		7.5%	7.3%	8.1%	14.8%	37.9%	6.8%	13.4%
Japan Equity	NDDLJN Index		6.8%	5.0%	7.3%	22.3%	56.9%	6.4%	19.6%
Pacific ex Japan Equity	NDDLXJ Index		7.7%	6.9%	8.0%	16.8%	46.1%	7.4%	15.1%
Emerging Markets Equity	NDLEEGF Index		10.1%	7.8%	9.1%	18.2%	48.4%	7.9%	16.9%
China Equity	NDELCHF Index		9.5%	7.7%	10.9%	27.1%	63.3%	6.6%	25.1%
World Equity	NDDLWI Index		6.4%	5.5%	6.8%	16.7%	45.3%	8.4%	15.3%
AC World Equity	NDLEACWF Index		6.8%	5.8%	7.0%	16.7%	45.4%	8.2%	15.2%
Real and Alternative assets***									
EU Real Estate	Customized Index			4.2%	4.7%	9.9%	31.8%		
US Real Estate	Customized Index			4.6%	5.5%	12.8%	48.3%		
Global Private Equity	Customized Index			8.5%	10.2%	20.0%	53.9%		
Global Infrastructure	Edhec Infra 300			6.1%	7.0%	14.9%	35.2%		
Global Private Debt	Customized Index			7.0%	7.3%	10.1%	32.3%		
Hedge Funds	Customized Index			5.5%	5.7%	7.7%	21.9%		

* Hard Currency USD, China Bond starting date is the beginning of 2019. ** USD Unhedged, including the USD currency expectation towards EM currencies. ***Historical figures on real and alternatives are not available, as our models refer to un-smoothed data if necessary.

Source: Amundi Asset Management CASM Model, Quant Solutions and Amundi Institute Teams. Full source on page 5.

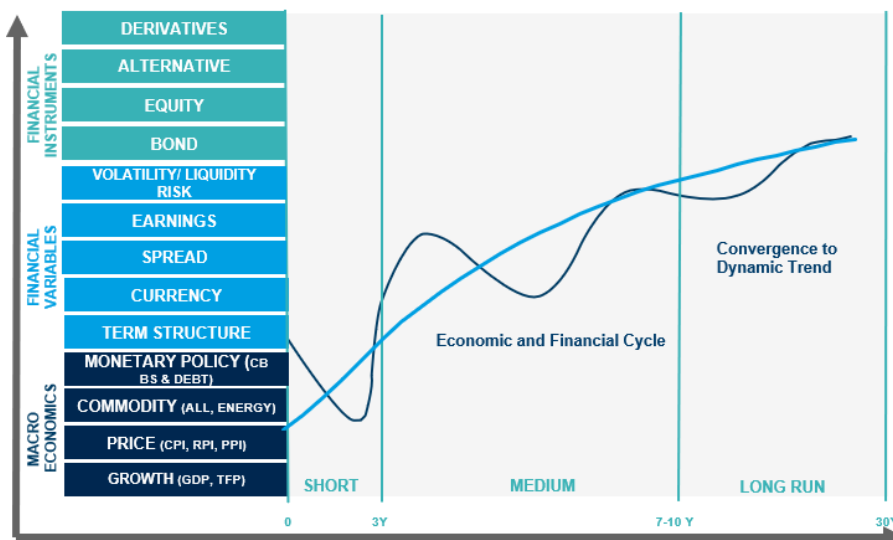


CASCADE ASSET SIMULATION MODEL (CASM)

This medium- and long-term return forecast report is intended to provide some guidance for investor expectations. The time horizon under consideration is 10 years, a timeframe deemed to be appropriate and during which long-term trend factors and issues can reasonably be expected to play out and, therefore, market returns should accurately reflect this information.

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 a long-term equilibrium, 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. 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 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 and periphery, UK, Japan, China). 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. Price returns are generated using 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 CASM platform covers macro and financial variables for major regions, in particular the US, UK, Eurozone, Japan, China and Emerging Markets as an aggregate.



The architecture of CASM can be described in two dimensions. The first dimension is a “cascade” of models. Asset and liability price models are composed 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 dynamic long-term levels. 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, Amundi Asset Management Quant Solutions and Amundi Investment Institute Teams. Macro figures as of the last release. Starting date as of 29 March 2024. Equity returns are based on MSCI indices. Reference duration are average figures. If not otherwise specified, expected returns are geometric annualised average total returns at the specific horizon. EM Debt HC, Global Infrastructure and Hedge Funds are in USD, all other indices are in local currency. Returns on credit assets are comprehensive of default losses. 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. Those returns are gross of fees, except Private Equity and Infrastructure returns which are net of fees.

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.

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).

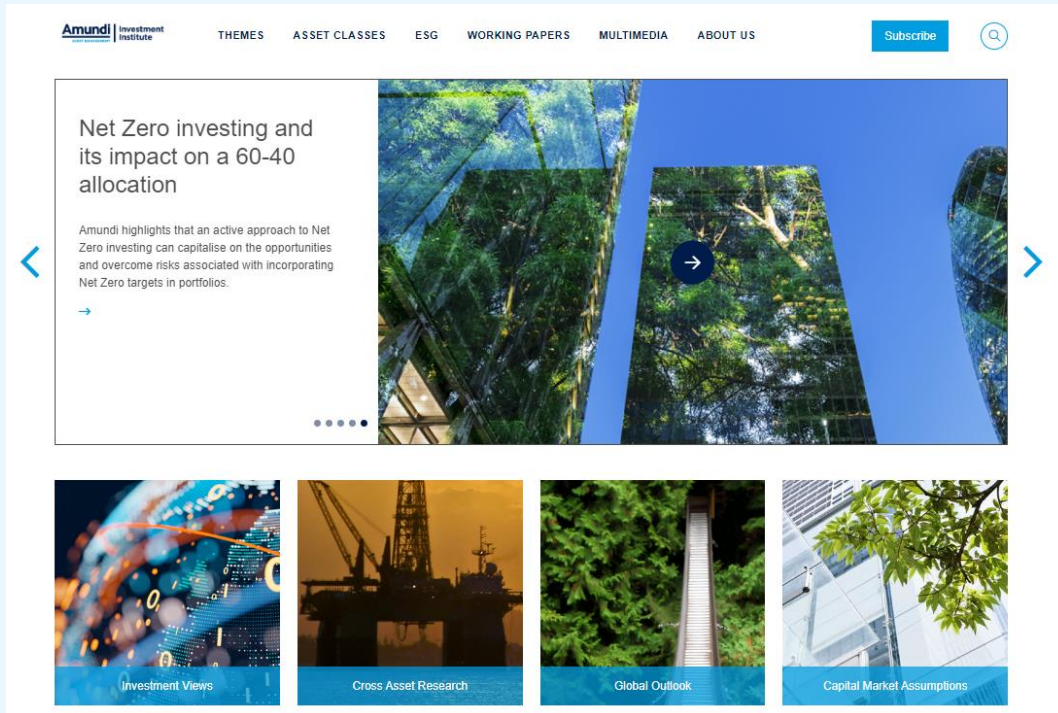
Forecasts for annualised returns are based on estimates and reflect subjective judgments and assumptions. These results were achieved by means of a mathematical formula and do not reflect the effect of unforeseen economic and market factors on decision-making. The forecast returns are not necessarily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

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



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Chief editors

Monica Defend

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Investment Insights & Publishing

Claudia Bertino

Head of Investment Insights & Publishing, Amundi Investment Institute

Laura Fiorot

Head of Insights & Client Division, Amundi Investment Institute

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