#3 / July 2024

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Investment Solutions

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Newsletter for Central Banks

Building together smart solutions to face a challenging environment

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In this issue...

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Dear Client!

Welcome to the third edition of Amundi's Newsletter for Central Banks, crafted by our experts for you. In a complex macroeconomic and geopolitical environment, our specialists share their views on global policy and investment themes important to central banks worldwide.

In this edition, we explore the possibility of multi-speed growth and examine the investment outlook for the remainder of the year, including in emerging markets. We also analyse the impact of risk/reward trends on central bank asset allocation and focus on how central banks are leading the green transition.

Finally, we provide an overview of the key takeaways from a discussion held during the central bank peer-to-peer session at the 2024 Amundi World Investment Forum, attended by over 10 central banks and other sovereign entities from around the globe.

We hope that this edition will match your expectations and, please, share your thoughts with us!

Contact us at sovereign@amundi.com

What's new & coming up?

June 2024

Amundi sponsors the 2024 OMFIF Global Public Investor Survey

Didier Borowski, Head of Macro Policy Research at the Amundi Investment Institute, joined a panel of experts to discuss the GPI survey results, focusing on central bank reserve managers' investment intentions and asset allocation trends.

Discover more

June 2024 NEWS

Amundi launches Global Corporate SRI 1-5Y Highest Rated ETF with initial investment from the Latin American Reserve Fund

Amundi, in collaboration with the Latin American Reserve Fund, co-created an ETF designed to assist central banks in meeting their responsible investment objectives.

Read more

July 2024 Amundi Outlook

Mid-Year Outlook: It's all about confidence

For the rest of 2024, investors are focused on economic growth, inflation, and monetary policies. With divergences continuing to emerge, are we heading towards a multispeed economy?

Read more | Watch the playback

September 2024 COMING SOON

In-House Training Programme

CIO Executive Discussion: Building Investment Views, From Hypothesis to Position-Taking

Amundi's training programmes, attended widely by central bank and sovereign clients, focus on the key principles of asset allocation and explore the diversification opportunities.

Learn more



Monica DEFEND
Head of Amundi Investment Institute

Vincent MORTIER
Group Chief Investment Officer

Matteo GERMANO
Deputy Group Chief Investment Officer

Harnessing multi-speed growth and divergent dynamics H2

In this cycle, restrictive monetary policies and fading fiscal expansion are curbing inflation and growth, without triggering a recession in the main economic areas. Now it is time for Central Banks to start a new cycle of cuts to avoid an excessive slowdown. Diverging growth rates, sticky inflation, limited fiscal space and geopolitical risks will add uncertainty to this transition into the next phase of the cycle. To navigate it, we favour high-quality equities, maintain a positive duration stance and consider commodities.

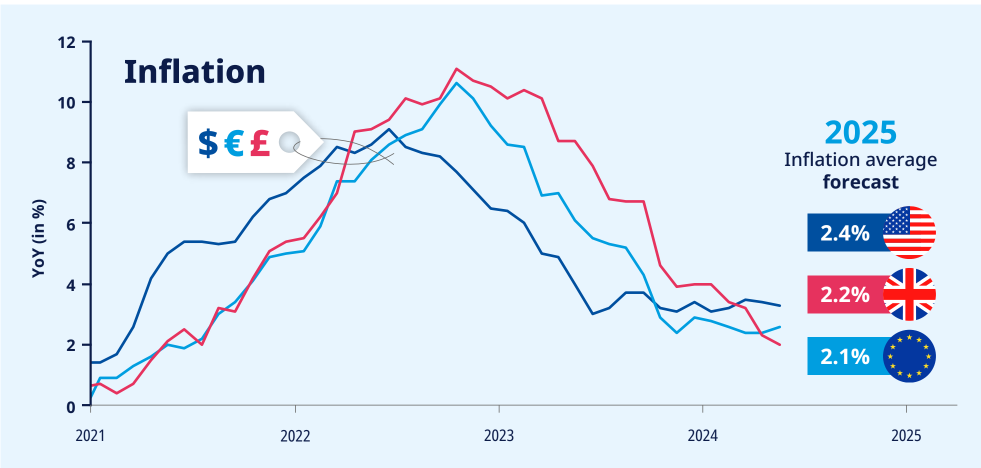
In the aftermath of last year's global inflation surge, and the subsequent tightening of monetary policies, the economic outlook now looks increasingly fragmented. The US is slowing down, the European Union is gradually recovering, China is in a controlled and policy-supported slowdown, and countries such as India are experiencing strong growth. On the inflation side, price pressures are more persistent than expected, but gradually normalising allowing major central banks to start cutting rates.

In this peculiar cycle, **investing will require confidence in the search for an asset allocation that can withstand different scenarios** with markets in some areas being priced for the best despite uncertainty stemming from geopolitical risks and the upcoming US elections. For the second half of the year, it's key to assess five "Big Bifurcation" themes to provide valuable insights into the unique nature of this cycle.

1. **US income and wealth inequalities to weigh on US consumption:** The increase in wealth has allowed US consumers to deplete their savings to historically low levels, with an average savings rate of 3.6% in May, compared to a pre-pandemic average of 5.2% (6% if shortened to the post-GFC period). Our projections indicate a very gradual return towards a more normal level given high wealth levels and a progressive slowdown in US growth driven by lower consumption. However, should consumption remain strong, thanks to household balance sheets remaining benign, this could lead to a slower disinflationary path. We expect bond markets to face ongoing high volatility in this disinflation phase.

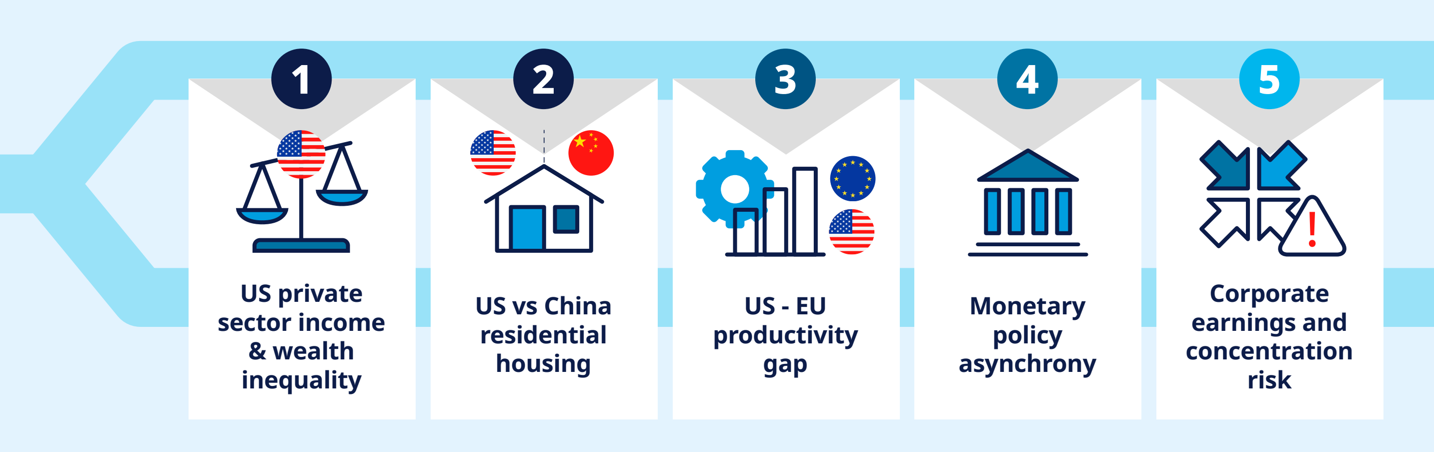
   → **Keep a positive and active duration stance.**

A benign inflation outlook with some sticky components



Source: Amundi Investment Institute forecast, Bloomberg, as of 3 July 2024.

The big bifurcations at play



Source: Amundi Investment Institute.

2. **US vs China residential housing dynamics:** The US economy has benefitted from resilient consumption, also helped by the positive dynamics of its residential housing market. On the other hand, Chinese households – heavily invested in real estate (with property investment accounting for almost 70% of their balance sheets) – have experienced a significant wealth shock due to declining property values. Moving ahead, tailwinds in the US will likely diminish, while China will focus on controlling its structural slowdown through supportive policies. With China and other Emerging equity markets being relatively cheap overall, this could support a return of investor appetite for these markets. However, investors will have to assess geopolitical and idiosyncratic risks.

   → **Keep a neutral stance on China and seek selective opportunities in Emerging Markets.**

3. **US vs EU productivity gap and market pricing:** The US experienced strong post-pandemic growth, driven by a surge in new businesses, especially in the high-tech sectors, and job growth in healthcare, retail services and government. This has prompted a strong rally for the US equity market. Conversely, Europe's recovery has been slower, worsened by the energy crisis. Despite Europe's weaker productivity growth, we expect a gradual recovery in 2025 as the impact of the energy shock fades. With Europe rebounding towards potential growth at a time when the US is projected to slow, we expect the appeal of European equities to continue and the divergences between the Fed and the ECB to be limited.

   → **In equities, look for opportunities in Europe, including small caps.**

4. **Monetary policy asynchrony:** We have observed monetary policy divergencies between the US, Emerging Markets, and Europe where rate cuts have started before the Fed. Fundamentals support the continuation of easing cycles in Emerging Markets as long as the Fed does not raise rates (which is not our base case). We anticipate that the Fed will begin cutting rates by September, only slightly diverging from other G10 Central Banks. While we are not concerned that this scenario will result in significant imported inflation for non-US G10 countries, it could create volatility in the foreign exchange market.

   → **As the Fed shifts its stance and the US dollar weakens, favour Emerging Market bonds in local currency. Gold could also benefit from lower rates.**

5. **Corporate earnings and concentration risk:** In the US, we have revised our forecast for 8% earnings per share (EPS) growth in 2024. Initially, this growth was driven by the Magnificent 7 and industrial sectors, but we now anticipate a more balanced earnings profile. In Europe and Japan, we expect to see accelerated EPS growth in the second half of the year, which will compensate for weaker results in the first half.

   → **Focus on quality and value, and stay cautious on the market concentration risk seen in many markets.**

"While H1 confirmed the US's supremacy, in H2 we expect market rotations with lagging areas, such as Europe and Emerging Markets, catching up."

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Claire HUANG
Senior EM Macro Strategist, Amundi Investment Institute

Debora DELBO
Senior EM Macro Strategist, Amundi Investment Institute

Yerlan SYZDYKOV
Global Head of Emerging Markets

Emerging markets winners in a fragmented world

Emerging Markets (EM) are playing a crucial role in driving the global economic recovery in 2024. We see three themes playing out:

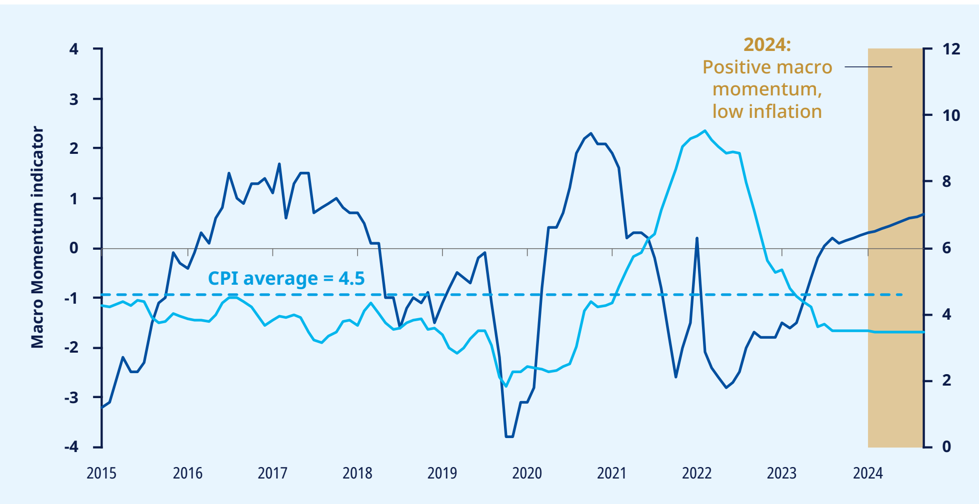
1. **Resilient, but not robust Emerging Market economic cycle:** **The weak macroeconomic momentum in the second half of 2023 has become positive in 2024** and is expected to improve moderately throughout the year. The recovery, driven by the export cycle, has also started to impact domestic demand due to a less restrictive policy mix.

2. **Fed's impact on Emerging Market central banks:** If the Fed makes even a marginal pivot or stays on hold, **the environment for Emerging Market Central Banks would remain favorable, as several have already begun their easing cycle.** Domestic economic conditions, particularly inflation, have influenced the current monetary policy cycle in Emerging Markets. While disinflation is expected to continue gradually, it may fall short of inflation targets in Latin America and Eastern Europe in the second half of 2024. This means that the easing path may not be as pronounced as the hiking one. **In most cases, the Fed's actions should not dictate a directional change for most Emerging Market central banks.** However, in some cases in Asia, the first Fed rate cut could signal the start of easing, allowing central banks to be more patient.

3. **Prudent fiscal approach:** Fiscal authorities in Emerging **Markets have adopted a prudent approach** to address excessive fiscal imbalances accumulated since the recent crisis. However, fiscal adjustments remain challenging. While 2024 is expected to end without further debt ballooning, some countries, such as Mexico, Thailand and China, are at a higher risk of a significant deterioration in their fiscal accounts. On the other hand, countries like Hungary, Poland, Colombia and, to some extent, India are making decent improvements towards a more sustainable debt trajectory.

"Emerging Markets, particularly India, are playing a crucial role in driving the global economic recovery in 2024 due to their resilience, adaptability and sound policy frameworks."

Emerging Markets' slightly positive macro momentum with receding inflation



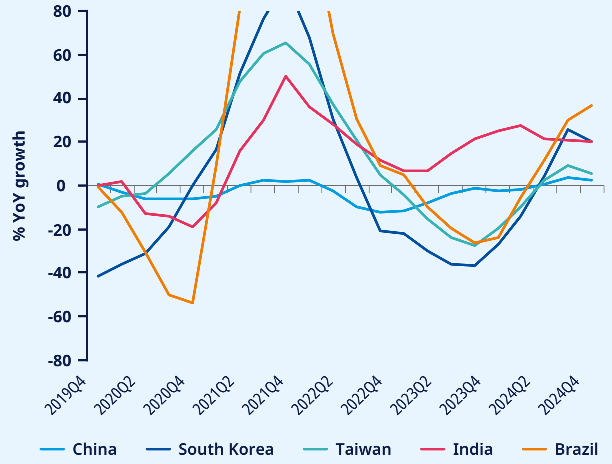
Macro Momentum (LHS)
CPI GBI weighted (RHS)

Source: Amundi Investment Institute on Bloomberg data. Data as of 31 May 2024. The Macro Momentum is based on a broad-based set of indicators aimed at assessing short-term momentum building in the economy. To follow the pillars considered: GDP expectations revisions, Domestic and External Demand Momentum, Fiscal Impulse Revision, Inflation Short Term expectations and central banks stance expectations for Brazil, Chile, China, Colombia, Czech Republic, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Philippines, Peru, Poland, Russia, South Africa, Taiwan, Thailand, Turkey.

EM directions for the second half of 2024

EM equities are favoured amid the recovering earnings growth in the second half of the year

EPS YoY growth



Source: Amundi Investment Institute on Bloomberg data. Data as of 10 June 2024.

We are positive on EM equities driven by the strong demand and economic growth. Country-wise, our convictions are:

- **India** benefits from supply chain relocation, internal policies and its capex cycle
- **Indonesia** benefits from structural tailwinds such as exposure to critical minerals and favourable demographics
- **South Korea** favoured by improving corporate governance
- **Brazil** benefits from being first to cut rates, attractive valuations and growth supported by agriculture
- Regarding **China**, recent supportive policies are encouraging, but we remain neutral overall

EM bonds offer attractive yields. Overall, we are positive across the board

EM Sovereign HC yield

Source: Amundi Investment Institute on Bloomberg data. Data as of 10 June 2024. Sovereign LC = J.P. Morgan GBI-EM Global Diversified Composite LOC, Sovereign HC = J.P. Morgan EMBI Global Diversified Composite, Corporate = J.P. Morgan Corporate EMBI Broad Diversified Composite Index.

The higher-for-longer rates narrative from the Fed is putting some pressure on EM debt, but we remain positive with a selective mindset.

EM Sovereign HC — **EM Hard Currency debt:** we are positive amid a supportive macro backdrop. Valuations and carry are attractive in HY vs IG and thus we maintain our preference for the former

EM Sovereign LC — **EM Local Currency debt:** we are selective and exploring high-yielding countries such as those in Latin America

EM Corporate — **EM Corporate:** we are positive, favouring HY over IG given the former's attractive valuations

Viviana GISIMUNDO
Head of Quant Solutions,
Multi Asset Solutions

Nicola ZANETTI
Quantitative Analyst,
Multi Asset Solutions

New trend on reward to risk and its impact on central banks' strategic allocations decisions

Portfolio tranching is a common reserve management practice for central banks (CBs)[1]: they usually divide excess reserves into investment and liquidity portfolios. Each tranche serves a different institution's goals. The liquidity portfolio helps maintain the liquidity in the reserves by allocating to money market instruments and highly rated government bonds. The investment portfolio, which traditionally allocates excess reserves to growth-oriented assets, aims at generating sustainable returns in line with the CB's objectives and preserving capital. The main benefit of portfolio tranching is that, by assigning a goal to each portfolio strategy, it allows central banks to be highly transparent in communication and reporting.

The Strategic Asset Allocation (SAA) choice is of paramount importance for every central bank with excess reserves, as they try to optimise the risk-return ratio of their investment portfolio, which is usually more flexible in terms of eligible asset classes. For the purpose of this paper, we focused on designing a model SAA for two separate entities with different investment universe and objectives, and reserves invested in US dollars. In order to stay generic, we have chosen to analyse the whole reserve portfolio without tranches, to avoid having to use specific liquidity requirements. In addition, by designing a complete SAA for all of the central bank's reserves, we target total portfolio efficiency. However, these results can be easily used by any central bank in their own portfolio tranches and currency composition based on entity-specific requirements.

Current vs. pre-Covid-19 risk/return trade-off

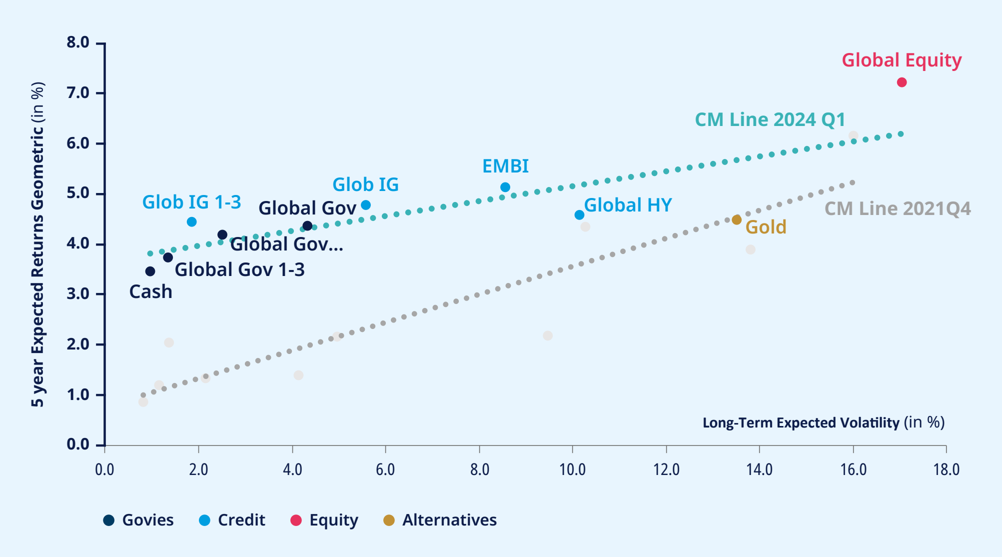
In light of rising inflation risks at the end of 2021, central banks' monetary policy reaction was robust. Short-term interest rates rose abruptly, while medium and long-term rates experienced only a marginal rise. Consequently, government yield curves inverted for months, and many of them still demonstrate such a shape, which might be related to a global economic slowdown. The vast majority of investment professionals had foreseen an economic recession, particularly for the US, which has not materialised thus far. Simultaneously, risky assets, such as equities and credit, demonstrated decent performance. As of the time of writing this article, corporate spreads have narrowed since the Covid-19 crisis and are hovering around our equilibrium levels. Equity markets surged on positive sentiment surrounding Artificial Intelligence and in response to signs of economic resiliency, which have materialized since then. Lastly, the price of gold is currently trading at an all-time high in response to geopolitical turmoil.

Amundi's Capital Market Assumptions (CMA)[2], updated at the end of March 2024, are defined by our macroeconomic views for the years to come, as well as by recent developments in financial markets. The surge in interest rates, which had not been experienced in decades, marked a structural upward adjustment in our expected returns for fixed income assets, benefiting from higher carry and attractive valuations. At the same time, a recent equity markets rally combined with our expectations for a costly, inefficient, and delayed energy transition make the forecasted returns for equities relatively unattractive compared to long-term historical returns.

Figure 1 below shows the return expectations over a 5-year horizon, updated at the end of the first quarter of 2024, together with the resultant capital market line ("CM Line"). Whereas the grey CM Line is obtained from the capital market assumptions as of pre-Covid times (end of December 2021), the current one (green CM Line in Figure 1) is materially steeper than the most recent one. This is not the result of attractive risky assets' performance forecasts, but rather that of muted fixed income assets returns. The CM line for 2024 looks flatter and slightly shifted compared to its predecessor. This is explained by a reduction in the reward for risk borne and has substantial impact on asset allocation decisions.

1. International Monetary Fund, Revised Guidelines for Foreign Exchange Reserve Management, 2014
2. https://research-center.amundi.com/files/nuxeo/dl/632647dc-5c23-4fe3-8050-01897f30c271

Figure 1: 5-year Expected Returns vs. Volatility Risk-Return



Source: Amundi Asset Management CASM Model, Amundi Asset Management Quant Solutions and Amundi Investment Institute Teams. CMA Line 2024Q1 figures are based on 29 March 2024 starting date. CMA Line 2021Q4 figures are based on end of December 2021 starting date. Equity returns based on MSCI indices. Reference duration are average simulated figures. Returns on credit asset are comprehensive of default losses. If not otherwise specified, expected returns are geometric annualized average total returns at the specific horizon. They are expressed in USD, foreign fixed income assets are hedged to USD, equity is USD unhedged. Forecast and fair values up to 3-year horizon provided by Research team (macro, yields, spread and equity). Expected returns are calculated on Amundi central scenario assumptions, which include climate transition.

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, which could differ substantially.

Summary of our current expectations

We have a positive outlook on fixed income assets, particularly in the Investment Grade (IG) and Emerging Market debt segments.

Those expected returns are mainly driven by the expectations on carry, which is the main contributor to bonds return. Valuations of government bonds, particularly in the UK and US curves, are generally positive. We foresee a minor negative valuation adjustment in US IG bonds, while spreads in EM bond index (EMBI) and Global High Yield bonds could have a more pronounced negative impact on valuations.

The potential risk-reward ratio between equities and fixed income is constrained, with global equity expectations limited by negative adjustments in US valuations in particular.

Introducing the conservative and progressive SAA case studies

Designing a Strategic Asset Allocation begins with identifying the investor's profile, its risk appetite and financial goals. In this section, we provide the results of an SAA analysis for two generic central banks broadly defined as "conservative" and "progressive". We use a global investment universe expressed in US dollar and different risk appetites, following most common practices as per the World Bank 2023 survey report[3].

The conservative central bank could be associated with an advanced economy or with an emerging market with low reserve adequacy metrics, hence having liquidity and capital preservation as their main focus. Reserve managers of such banks usually invest in shorter duration assets and have higher allocation to gold[4].

The progressive central bank, in contrast, is charged with efficiently managing ample reserves. This can lead to higher risk appetite for some portion of reserves beyond reserve adequacy metrics, leading to a broader eligible investment universe. Such investor has more leeway to invest in risky assets, while keeping the capital preservation goal at the core of its mandate. The investment universe, in this case, is expanded to include non-traditional asset classes such as Developed Market Equity and Global High Yield Debt. Exposure to assets with shorter maturities over the longer ones is optimised based on the relative preference of specific asset classes and the choice of maintaining duration within a certain range.

As capital preservation and avoiding significant drawdowns are central banks' main objectives, they commonly manage portfolios by taking into account potential adverse outcomes. As the World Bank shows, in the context of SAA design, Value-at-Risk (VaR) or Conditional Value-at-Risk (CVaR) combined are the most common metrics used by these types of institutions. Additionally, when dealing with shortfall risk minimization, CVaR is the best indicator due to its risk metric characteristics[5].

We define CVaR as the average of the worst possible outcomes beyond a certain threshold (defined by the VaR) over a given time horizon. In this exercise, by leveraging our proprietary simulations tool, we obtained the SAAs by minimizing the average annual CVaR simulated over a 5-year period. The choice of the horizon is based on the need to ensure consistency with an SAA objective and avoiding excessive focus on tactical signals.

In the progressive case, we maximize an expected return with a constraint on the CVaR being lower than 2% within a 95% confidence level. At the same time, we assume the conservative central bank is applying a more stringent framework and tries to prevent even more extreme losses by constraining the CVaR to be lower than 1%, within a 99% confidence level.

3. World Bank, Reserve Management Survey Report 2023
4. Amundi, Gold in central banks' asset allocation, 2019
5. Conditional Value-at-Risk: Optimization Approach, Rockafellar, T. and Uryasev, S., Stochastic Optimization: Algorithms and Applications, pp 411-435, 2001

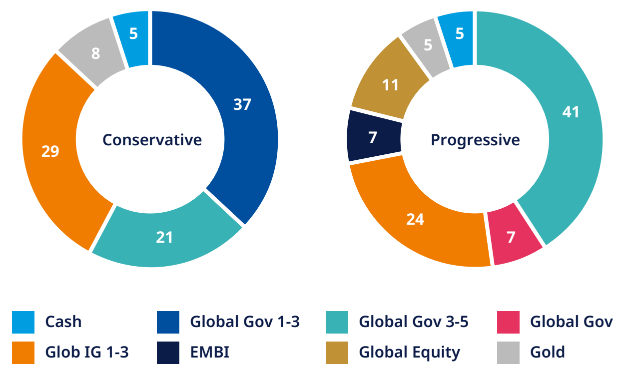
Strategic Asset Allocation findings

The composition of the allocations differs with respect to the assets included in the allocation, as the conservative central bank cannot invest in assets considered too risky. The conservative central bank allocates almost 60% of its portfolio to government bonds, with a preference for a 1-3 year maturity bucket. The remaining allocation consists of short-dated IG credit, Money Market instruments and Gold.

The progressive bank, in contrast, is allowed to take on more risk. Hence, higher exposures to duration, equity and spread risk premium are allowed in the allocation. The share of government bonds in the allocation is reduced by close to 10% versus the conservative reserves manager, in favor of an EMBI exposure. The composition of this bucket is also modified: short-term bonds are entirely replaced by 3-5 year maturity bonds and the all-maturity index. As the institution's risk appetite shifts up, the allocation to short-dated Investment Grade bonds is reduced, as it is optimal to build a mild exposure to equity risk, even at very low CVaR budgets.

Figure 2: Conservative and progressive central banks' SAAs

in %



The allocations identified for the conservative and progressive CB cases according to our current assumptions could deliver higher return expectation than a nominal return of 4% per annum. The conservative central bank can expect to generate returns slightly above 4%, while the progressive one, by taking more interest rate and equity risk, may gain 70 basis points more in returns compared to its conservative counterpart. The expected volatilities for these allocations are 1.7% and 2.9%, respectively. The simulated CVaR statistics are within the specified threshold given as expected, with 1.0% and 2.0% for CVaR 99% and CVaR 95%. On a separate note, for entities applying the concept of probability of negative returns, it could be of interest to notice that these portfolios have respectively a 0.1% and 4.7% chance of delivering below zero return in a one-year period[6].

We must highlight that the advantage of leveraging on our macro-based simulation model is the ability to calculate probabilistic measures for assets and allocations. For central banks, the probability of an allocation to deliver positive inflation-adjusted returns is considerable. In fact, capital preservation could be expressed as the probability of a portfolio to deplete capital by not generating returns greater than general price increases. Here, by taking US Consumer Price Index as a reference index for both central banks, we can show the values of this indicator. The two allocations have a similar probability to obtain a negative real return over a 5-year horizon, around 8% (see Figure 3 below). This means that even if we increase the risk budget, the probability to meet the capital depletion objective could not change.

Figure 3: SAAs simulated indicators

	Conservative	Progressive
Simulated Statistics (5-Year)		
Expected Return	4.1%	4.8%
Expected Volatility	1.7%	2.9%
Sharpe Ratio	0.39	0.46
Duration	2.0	3.0
Yearly CVaR95	-0.2%	2.0%
Yearly CVaR99	1.0%	4.7%
1-Year Probability of Negative Return	0.1%	4.6%
Expected Return in excess of CPI	1.8%	2.5%
Probability of Return < CPI	7.6%	7.7%
High Level Breakdown		
Money Market	5%	5%
Govt Bonds	58%	48%
IG Credit	29%	24%
Opportunistic Credit	0%	7%
Equity	0%	11%
Gold	8%	5%

Source : Amundi Asset Management CASM Model, Amundi Asset Management Quant Solutions. Figures are based on 29 March 2024 starting date. Quarterly rebalancing. Equity returns based on MSCI indices. Reference duration are average simulated figures. Returns on credit asset are comprehensive of default losses. If not otherwise specified, expected returns are geometric annualized average total returns at the specific horizon.

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, which could differ substantially.

6. Please be aware that we did not optimize portfolios to minimize this indicator.

Comparison with pre-Covid allocation expectations and statistics

When taking into account Amundi's pre-pandemic CMA, the return expectations for the two SAAs were significantly lower than what is reported in the table (1.9% and 2.5% nominal annualized return, respectively for conservative and progressive entities). This means that, considering a shortfall risk indicator such as CVaR, a substantial amount of risk budget has been released and part of it has been (or might be) deployed in assets that could improve the allocation risk profile while satisfying the central bank's preferences and limitations. For example, they might prefer high quality credit with short duration or EM debt.

Conclusive remarks

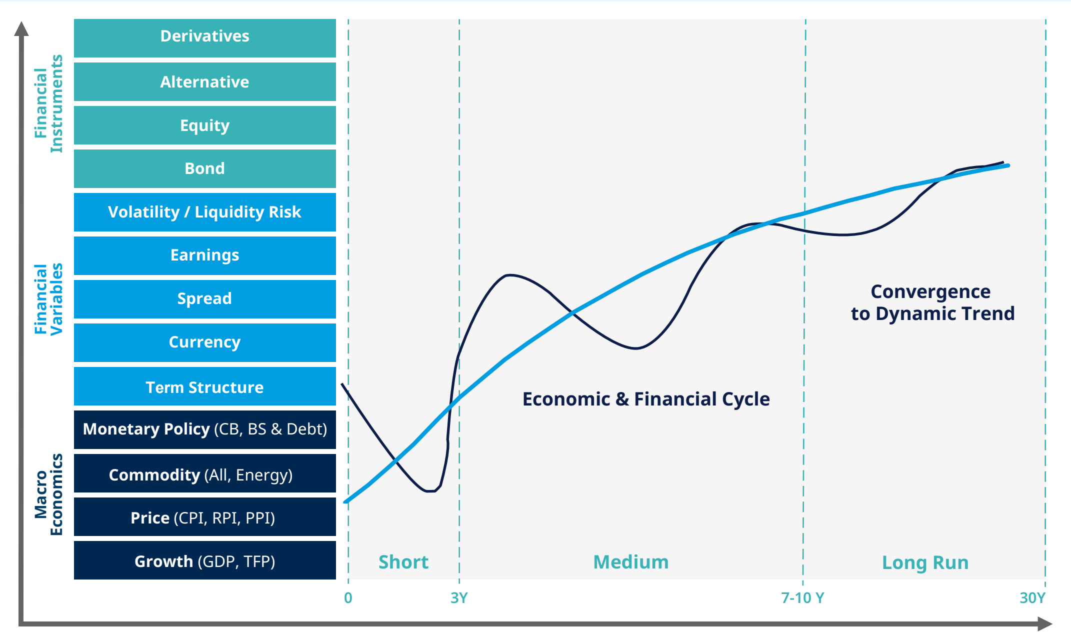
The investment landscape now differs from the one our Capital Markets Assumptions depicted immediately before the Covid-19 crisis. Bond yields are significantly higher, driving up expected returns for the fixed income assets. As explained above, the equity markets rally made valuations appear less attractive. Such an environment corresponds to a less favorable outlook for risky assets compared to high-quality bonds with short duration.

After years of challenges trying to navigate in a low-rate environment, central banks are now better positioned to achieve a higher risk-weighted return. Indeed, they now have the option of reducing the risk budget, while realizing high expected returns by investing in high-quality bonds with short duration. Alternatively, they might consider implementing the released risk budget into a portfolio return enhancement by adding exposure to Emerging Market and IG corporate bonds.

The focus for building efficient and well-diversified allocations remains a key priority for central banks, especially as growing risks around geopolitics and the energy transition are less straightforward to embed in the SAA design.

Cascade Asset Simulation Model (CASM)

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.



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Source: Amundi Asset Management CASM Model, Quant Solutions, October 2023. Model description available in the Long Term expected returns document- yearly edition: A rocky net zero pathway. Information given for indicative purposes only, may change without prior notice. CB BS: Central Banks Balance Sheet, CPI: Consumer Price Index, RPI: Retail Price Index, PPI: Producers Price Index, GDP: Gross Domestic Product, TFP: Total Factor Productivity.

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'scapability 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 blendseconometric 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, definedformally 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.

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Leading by example: Central Banks and the Green Transition

In a seminal 2015 speech entitled "Breaking the Tragedy of the Horizon," Mark Carney, then Governor of the Bank of England, emphasized the need for financial systems to adopt a long-term perspective on the relationship between financial stability and climate change. As climate risks – categorised into physical risks from direct climate impacts and transition risks from the shift to a low-carbon economy – become increasingly salient, central banks are facing a multifaceted challenge: managing persistent inflation amid geopolitical instability and to help expedite the transition to a sustainable economy. The Network for Greening the Financial System (NGFS), established in 2017, has been pivotal in this effort. It provides the overall envelope of green finance requirements, which, in principle can help central banks assess funding needs of both the private and public sectors if countries are to meet their Net Zero ambitions. These efforts aim to mitigate the potential financial disruptions posed by climate change and support the orderly transition to a sustainable economy.

Central banks have several levers to integrate sustainability considerations into their own practices and throughout the financial system: improving transparency by developing standards and taxonomies, developing climate stress tests to reinforce the financial system's resilience to climate risks, and channelling resources towards the energy transition through their own balance sheets.

This article aims to give an overview of these different tools at the disposal of central banks, before delving into the case of three regional leaders: the European Central Bank, the Monetary Authority of Singapore, and the Central Bank of Mexico.

Central banks' efforts to promote transparency and well-informed climate-related decision-making in financial markets

In the evolving landscape of sustainable finance, harmonised taxonomies for sustainable activities have emerged as vital tools for central banks to foster transparency and evaluate financial stability risks. These frameworks define and classify economic activities based on their environmental sustainability, offering clear criteria for investors, companies, and policymakers. In many regions, central banks and financial supervisors are actively promoting and developing the use of standardised taxonomies to provide clarity and improve transparency in financial markets. Globally, these taxonomies support the fight against greenwashing by establishing clear and rigorous criteria for what qualifies as sustainable. By providing a common language and understanding, taxonomies contribute to a more transparent and reliable market for sustainable finance, ensuring that capital is directed towards genuinely sustainable projects.

Beyond the establishment of taxonomies, central banks are instrumental in assessing and managing climate-related risks to ensure the financial system's resilience in the face of climate change. Climate stress tests, advocated by the NGFS, have become crucial for evaluating the financial system's resilience to climate-related risks. These stress tests reflect an emerging movement among central banks and supervisors to assess both transition risks and physical risks over long-term, typically spanning 30 years. These climate stress tests serve multiple objectives for central banks. First, they provide a comprehensive assessment of system-wide resilience and potential weaknesses in the face of climate change. This evaluation informs the development of future policies aimed at promoting an orderly green transition and effective mitigation of risks. Second, they facilitate the coordination and supervision of financial institutions under a standardised set of hypotheses, which ensures consistency, transparency and reliability in the response of financial institutions to climate risks. Additionally, they encourage the integration of climate considerations into risk management practices, both for central banks and other financial institutions, including banks and insurers.

Climate risk in financial regulation and supervision: the role of central banks in channelling financial resources towards the green transition

Climate-related disclosure has become increasingly crucial for fostering differentiated treatment in financial markets. Spearheaded by initiatives like the Task Force on Climate-Related Financial Disclosures (TCFD), endorsed and championed by the NGFS, climate-related disclosure mandates aim to encourage financial institutions to incorporate climate change in their operational frameworks. Central banks are urged to lead by example by disclosing the climate-related risks associated with their own balance sheets. This transparency not only improves data accuracy and metrics but also enhances market efficiency by better pricing climate risks. The climate-related risks are often measured by a set of statistical indicators and developed by central banks and supervisors, and taxonomies enable coordinated international approaches.

Central banks can then leverage these indicators to require financial institutions to disclose their exposures to transition and physical risks as eligibility criteria for collateral, thereby promoting transparency and incentivising improved performance reporting. This tool allows central banks to exclude collateral assets that would normally qualify, depending on their climate-related risk profile for debt securities or their evaluation of the carbon performance of underlying assets in pools of loans. Additionally, it empowers central banks to conduct positive screening to accept sustainable collateral, such as Green, Social, Sustainability, and Sustainability-Linked (GSSS) Bonds.

Finally, central banks are increasingly adopting strategies to adjust their holdings of corporate bonds in favour of issuers that demonstrate stronger climate performance. This involves identifying climate leaders notably through their enhanced disclosures on climate risks or emission reduction targets. Central banks may incentivise issuers to transition by offering preferential treatment to green bonds or by increasing the share of assets issued by companies with robust climate credentials on their balance sheets. Conversely, they may impose penalties by excluding assets with poorer climate performance, such as those associated with coal mining or high emissions, from their corporate bond holdings. This approach aims to align financial portfolios with sustainability goals by directing investments towards issuers with ambitious and realistic emission reduction targets. By tilting asset purchases and applying exclusionary criteria, central banks play a pivotal role in fostering a transition towards a more sustainable economy.

CASE STUDIES

The European Central Bank

The European Central Bank (ECB) underwent a significant shift in 2021, moving away from its long-standing market neutrality paradigm, which had been central to its strategic approach since 2003. This change prioritised the green transition alongside its primary mandates of maintaining price stability in the Eurozone and supporting EU economic policies, as outlined in Articles 127 of its governing principles.

Previously, the ECB included green bonds in its Corporate Sector Purchase Programme (CSPP) under the same eligibility criteria as other bonds. However, the new approach increases the proportion of CSPP-eligible debts and granting preferential treatment to green bonds, aiming to bolster investments in sustainable projects within the Eurozone. This includes supporting companies that adhere to high environmental standards, promote renewable energy, reduce carbon emissions, and enhance resource efficiency.

Additionally, the ECB's collateral framework provides liquidity to financial institutions while embedding climate-related risk assessments into the process. Financial institutions seeking ECB funds must present collateral assets that meet specific climate risk criteria, incentivising transparent reporting. The ECB also conducts stress tests that assess the financial system's readiness to withstand climate-related shocks, underscoring its commitment to integrating climate considerations into supervisory practices.

Finally, the ECB is actively involved in shaping climate-related policies within Europe and internationally. It advises European financial institutions and national central banks, helping formulate robust climate policies that align with global economic and environmental objectives. The ECB has also made efforts to foster interoperability in climate risk mitigation, and has notably worked with the People's Bank of China to jointly launch a green finance taxonomy (the Common Ground Taxonomy-Climate Change Mitigation) in 2021. This proactive stance ensures that the ECB remains at the forefront of global efforts to combat climate change, supporting the transition to a greener economy both in the Eurozone and globally.

The Monetary Authority of Singapore

On October 25, 2022, Singapore committed to achieving Net Zero emissions by 2050, aiming to reduce emissions to around 60 $MtCO_2e$ by 2030. Despite contributing only 0.1% of global emissions, Singapore faces significant climate change impacts.

Singapore heavily relies on energy imports due to its limited resources and low renewable energy capacity. In 2022, 92% of its electricity came from natural gas, 2.6% from petroleum, and 1% from coal, mainly imported from Malaysia and Indonesia. The country plans to expand solar energy and hydrogen solutions but will continue to rely on LNG and other alternatives in the meantime.

The Monetary Authority of Singapore (MAS) supports the country's energy transition. The power sector, responsible for 40% of Singapore's carbon emissions, is a key target for carbon efficiency improvements. MAS established the Singapore-Asia Taxonomy in late 2023 to channel funds toward these improvements, including transition activities for hard-to-abate sectors and retrofitting power plants for hydrogen blending.

Singapore's energy transition is linked with the broader region, where 60% of power generation comes from coal. The Singapore-Asia Taxonomy supports a responsible coal phase-out, providing criteria for early coal phase-out deals.

Regionally, MAS collaborates with other entities to advance the energy transition. In December 2023, MAS, the Asian Development Bank (ADB), and the Global Energy Alliance for People and Planet (GEAPP) launched a US$2 billion blended finance partnership to accelerate the energy transition in Asia. This supports ADB's Energy Transition Mechanism (ETM) initiative, including policy support and a pipeline of investable projects. MAS will mobilize Singapore's financial ecosystem, provide policy support, and develop high-integrity transition carbon credits through the Transition Credits Coalition (TRACTION).

To achieve an effective and just transition, MAS emphasizes the importance of credibility, incentives, and partnerships.

Banco de México

Mexico's geographical characteristics and large population make it highly susceptible and vulnerable to climate risks, like hurricanes and droughts. In response, Banco de México (BdM) is enhancing the resilience of the financial system against these risks. As a founding member of the Network for Greening the Financial System, BdM helps shape the international sustainable finance agenda.

In 2020, BdM proposed the creation of the Sustainable Finance Committee within the Financial System Stability Council, chaired by the Ministry of Finance with BdM as Secretariat. This committee includes all Mexican financial authorities and major financial sector associations.

BdM's key initiatives include developing a taxonomy for sustainable finance, published in March 2023, which defines green and sustainable activities. This aims to enhance market integrity and reduce greenwashing risks.

BdM focuses on mobilizing capital for green finance, aiming to attract investments to Mexico and other emerging markets in the region. It emphasizes risk transparency, employing tools for accurate disclosure of climate-related risks by financial institutions, which leads to better pricing of climate risks and informed investment decisions.

BdM's Directorate General of Financial Stability is analysing physical and transition risk exposures within the banking system and developing a framework for assessing climate-related macro-financial risks. Additionally, BdM is integrating ESG considerations into the investment and risk management of international reserves.

The Directorate of Analysis and Policies of Environmental and Social Risks works with financial authorities to develop regulations, policies, and research promoting sustainable development. This directorate integrates sustainability criteria into central bank activities and develops metrics to evaluate and monitor risks and opportunities in transitioning to a low-carbon economy.

Through these initiatives, BdM is committed to fostering a sustainable financial ecosystem in Mexico, mitigating climate risks, promoting green finance, and supporting the transition to a sustainable economy.

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Key Insights from the 2024 Amundi World Investment Forum Central Bank Peer-to-Peer Session

Overview of the peer-to-peer session

The 2024 Amundi World Investment Forum hosted a peer-to-peer meeting for a panel of central bank representatives from all over the world. The diverse audience featured fourteen representatives from ten central banks and other sovereign entities from across Latin America, Europe, the Middle East, and West, East and South-East Asia, including both emerging and developed markets institutions. Operating under the Chatham House Rule to ensure a candid dialogue, the format encouraged an open discussion on the main topics driving the asset allocation of central banks' reserve portfolios. While the specifics of the discussion are confidential, the main findings provide valuable insights into current trends and challenges in reserve management.

Current central bank asset allocation trends

Prior to the COVID-19 pandemic, central banks were actively in search for yield, leading to a noticeable trend of increased portfolio diversification. Beyond diversification within the fixed income space, which was implemented by the vast majority of participants, institutions from Asia, the Middle East, and Europe also mentioned having included some less traditional assets, such as equities and emerging market debt.

On the ESG front, green bonds remain a major focus as the preferred tool for implementing ESG considerations in portfolios, although this trend remains predominantly European. Some European central banks take their commitment to ESG one step further by introducing climate objectives directly within their Strategic Asset Allocation (SAA). However, the integration of ESG targets represents a number of challenges, notably when confronting these objectives with existing fiduciary duties of central banks.

The role of diversification

As mentioned above, the panel emphasised that central banks have substantially broadened their diversification beyond traditional low-risk government bonds in recent years. Whilst many intend to maintain this diversification, some are reassessing their strategies based on current market conditions: a return to vanilla USD investments is one of the routes, due to strong currency positioning and favourable outlook for rates.

Another diversification aspect which needs to be taken into consideration are the costs associated with managing a broad allocation, meaning some central banks recentre and focus on performance rather than on spreading investments across multiple asset classes and geographies.

Geopolitical risk as a key focus for reserve managers in building their portfolio allocation

During the panel discussion, geopolitical risk emerged as a primary concern among reserve managers. Several participants mentioned the fact that the questions they receive from their Board and executive management have increasingly centred on geopolitics, rather than macroeconomic or monetary policy. Some panel participants highlighted a shift in focus towards managing volatility and downside risks linked to geopolitical events and political milestones, such as the upcoming US presidential election in November 2024. Another aspect of the discussion focused on the impact of supply chain disruptions on their investment decisions.

When asked how they concretely incorporate these geopolitical risks considerations into their allocation, several participants acknowledged these risks are hard to anticipate and are consequently difficult to hedge. Despite this, some reserve managers acknowledged they are trying to limit their risks by incorporating broad geopolitical views into their asset allocation process (whether tactical or medium term). For example, in response to the unexpected nature of geopolitical risk, some central bankers emphasised the need to adopt broader hedging strategies, rather than targeting geopolitical risks in a very specific manner. Additionally, FX exposures and fixed income reallocations were mentioned by a panellist as the most efficient tools to tackle such risks. Amid these allocation and hedging challenges, many panellists mentioned that given the prospects of a very volatile and versatile environment, they need to keep looking for ways to improve geopolitical risk's forecasting, and incorporate these risks in their reserve portfolio asset allocation decisions.

Macroeconomic challenges

When it comes to key macro challenges, we observed a consensus that despite some desynchronization, monetary policy easing is globally on the table. As such, monetary policy became a secondary concern, compared to geopolitical risks that are now at the forefront of their considerations. However, the timing and the magnitude of interest rate cuts by the Federal Reserve and the European Central Bank remain a source of debates. In particular, central bankers from Asia expressed scepticism about multiple rate cuts, prioritising the long-term "higher for longer" trend over the short-term moves.

While the monetary policy outlook appears clear, a greater concern for our panellists was the fiscal expansion and stimulus, and particularly the impact of the US fiscal policy on interest rates, risk premia and global markets. Some reserve managers highlighted that the dramatic rise in US household wealth from 2020 to 2023 raises questions about its underlying causes and potential implications for long-term rates. Central banks are also wary of the sustainability of fiscal policies globally, especially in the US where the sovereign debt burden is rising. As several participants pointed out, the "higher for longer" policy from the Fed will have a dramatic implication for the debt service.

Conclusion

Such an insightful and open panel discussion highlighted several areas requiring further exploration, including the long-term integration of ESG targets within reserve management, the expected impact of geopolitical risks on financial markets, and the sustainability of current fiscal policies. Additionally, the potential resurgence of gold as a reserve asset was only briefly discussed during this peer-to-peer meeting, but remained clearly in many central bankers' list of challenges.

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IMPORTANT INFORMATION

Date of first use: 15 July 2024.

Document issued by Amundi Asset Management, “société par actions simplifiée”– SAS with a capital of €1 143 615 555 – Portfolio manager regulated by the AMF under number GP04000036 – Head office: 91-93 boulevard Pasteur – 75015 Paris – France – 437 574 452 RCS Paris – www.amundi.com – Photo credit: ©?????? – Designed by Atelier Art'6.