

PORTFOLIO PERSPECTIVES

Practical applications for asset allocators // Q1 2026

Portfolio Perspectives

*Practical applications
for asset allocators*

AUTHORS



Jonathan Hubbard, CFA
Managing Director,
Strategy and Insights Group



Soumya Mantha, CFA
Strategist, Strategy and
Insights Group

Source: ¹Bloomberg as of 30 June 2025 for Q2 and 30 September 2025 for Q3. ²Bloomberg as of 30 November 2025. ³Bloomberg as of 31 December 2025. US investment grade corporate bonds = Bloomberg US Corporate Index, US high yield credit = Bloomberg US Corporate High Yield Index.

SUMMARY

In this quarter's edition of Portfolio Perspectives, we will cover key topics facing asset allocators today:

- The Great Equity Rotation
- Japan Equities: A Rising Force In Global Markets
- The Rising Quality Of US Corporate Bonds
- Trends In Portfolio Design: Strategic AA, Total Portfolio Approach, and Scale Customization

Global economic expectations remain surprisingly upbeat despite 2025's retooling of global trade relationships, geopolitical tensions, and political dysfunction. After import-related weakness in early 2025, **US economic activity** accelerated in the second half, with real GDP rising 3.8% in Q2 and 4.3% in Q3.¹ While there have been some modest cracks in the labor market, a resilient consumer, strong exports, and robust corporate spending have kept the economy running hot. **Fiscal stimulus**, including tax rebates, is expected to be an additional tailwind, particularly in the first half of 2026. At the same time, inflation continues to be a concern at around 2.7%, as a hot economy could keep inflation elevated.² However, concerns over a weakening labor market and the desire to move closer to the neutral rate have kept the Fed in rate-cutting mode. The 25-basis-point cut at December's meeting moves the rate closer to the estimated **neutral rate**, but cuts are likely to become harder to justify amid sticky inflation. But whatever the macro mix is, equity markets have continued to cheer.

What we suggested as an **"everything rally"** last year did not disappoint; the year ended with stocks, bonds and precious metals all enjoying robust gains. While this seemed implausible early in the year when a trade and tariff war upended the global trade status quo, markets maintained their resilience, supported by positive corporate fundamentals. An expected strong fourth quarter earnings report for the S&P 500 would mark the **10th consecutive quarter** of positive earnings growth.

Equity markets have seen a notable rotation from US to **global ex-US**, a switch long anticipated by investors. In the

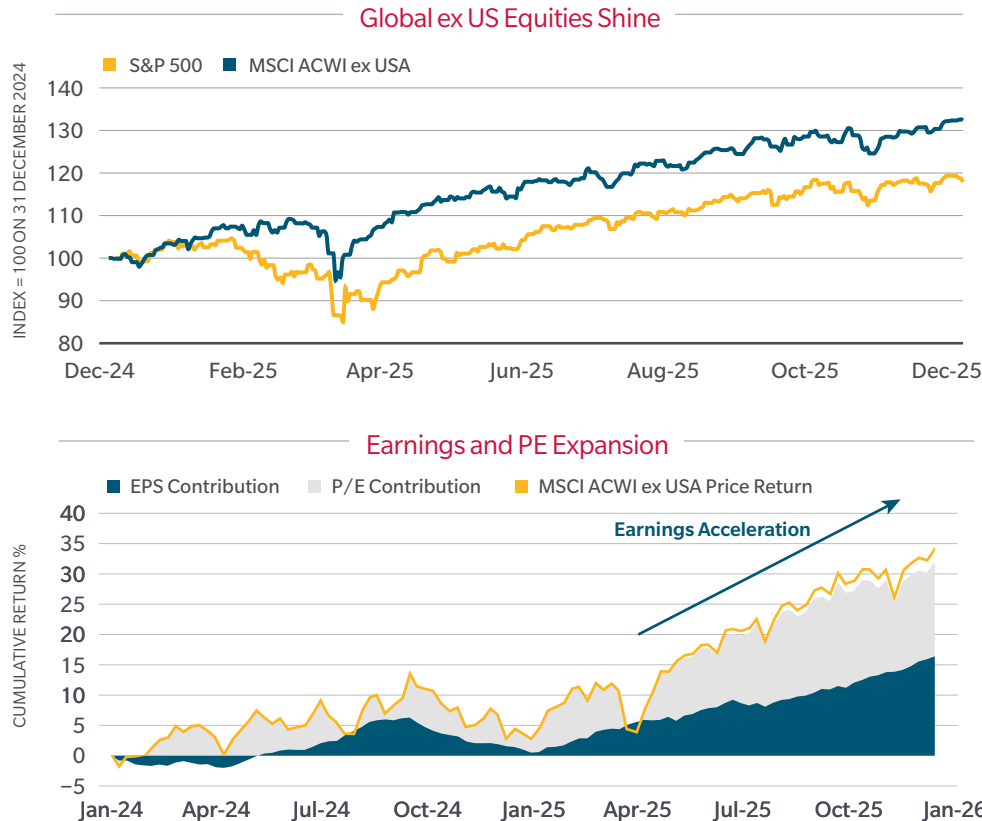
US, value and small cap closed their performance gap with growth and large cap, respectively. This could be the start of a **longer-term rotation**, suggesting that the Magnificent 7 are no longer seen as the only game in town. While there is still optimism over the benefits of **AI**, including increased efficiency and productivity, there are already signs of AI fatigue. Investors are digesting the reality of the massive costs of datacenter buildouts and the yet-to-be-seen return on AI investment. Several technology companies have turned to **credit markets** for bond issuance and announced complex vendor financing arrangements to meet these massive capital expenditures.

Overall, credit markets have been relatively placid, with US investment-grade corporate bond spreads under 80 basis points and high-yield credit spreads below 270 basis points.³ Despite a few high-profile cases, concerns over **private credit defaults** eased as these defaults were likely idiosyncratic rather than systemic. However, deteriorating underwriting standards and alternate payment measures such as in-kind payments bear watching. With the Fed expected to slow or pause rate cuts in 2026, and spreads remaining tight, fixed income returns will likely come from **carry** rather than duration or changes in spreads.

While **geopolitical conflict** remains a key risk, there are clear tailwinds for risk assets heading into the first quarter of 2026, including fiscal stimulus in the US and Europe, a reflating Japanese economy, and solid corporate earnings expectations. As always, we continue to emphasize the importance of a disciplined and diversified approach to portfolio design, as unanticipated risks are a persistent and pervasive element of capital markets.

The Great Equity Rotation

Can global ex US equities continue to run?



Source: Top LHS – Bloomberg. Daily data from 31 December 2024 to 31 December 2025. Returns are gross for S&P 500 and net for MSCI ACWI ex USA, and in USD. Bottom LHS – Bloomberg. Weekly data from 12 January 2024 to 26 December 2025. Price returns are in USD. EPS = earnings per share, P/E = price to earnings.

Source: ¹FactSet, as of 31 December 2025. ²Bloomberg. US dollar represented by DXY Index. Performance calculated using daily data from 31 December 2024 to 31 December 2025. ³FactSet. Daily data from 31 December 2024 to 31 December 2025. Return is price return and in USD. ⁴FactSet, as of 31 December 2025. The information included above as well as individual companies and/or securities mentioned should not be construed as investment advice, a recommendation to buy or sell or an indication of trading intent on behalf of any MFS® product. ⁵FactSet, as of 31 December 2025. Global ex-US equities = MSCI AC World ex USA, US equities = S&P 500. Forward P/E is next-twelve-months.

Since October 2022, US large-cap equities have driven global equity performance, with the Mag 7 leading the markets higher in 2023 and 2024. Optimism was so high that some investors questioned the wisdom of investing outside the US, citing the US technology orientation and the fact that around 42% of the S&P 500's revenue is sourced from international markets.¹ Although the term was originally coined in the 1800s to describe the country's democratic and capitalist system, investors commandeered the term "American exceptionalism" to describe modern US economic and equity outperformance.

The Rotation of 2025

This exuberance was quickly extinguished in early 2025 as the US embarked on the greatest trade and tariff war in modern history. Stocks dropped, credit spreads widened, and volatility hit levels not seen since the Global Financial Crisis. Furthermore, the US dollar quickly sold off. But as tariff deadlines were pushed back and rates were lowered, global equities resumed the climb that started in October 2022. However, they ended the year with far different leadership than the two prior years, with non-US equities leading the way and both US small caps and US value closing the gap with US large caps and growth, respectively. Investors also reduced their dollar exposure, primarily through hedging, contributing to a nearly 10% decline in the dollar in 2025.²

Outside the US, the Korean KOSPI index was one of the best-performing global indexes in 2025, returning an astonishing 79%.³ This performance was driven by technology hardware and services providers such as Samsung and SK Hynix, which together comprise more than 36% of the index, even more concentrated than the US market.⁴ European and Chinese equities also outpaced US markets by double digits, with European banks posting impressive performance, handily outpacing the Mag 7.

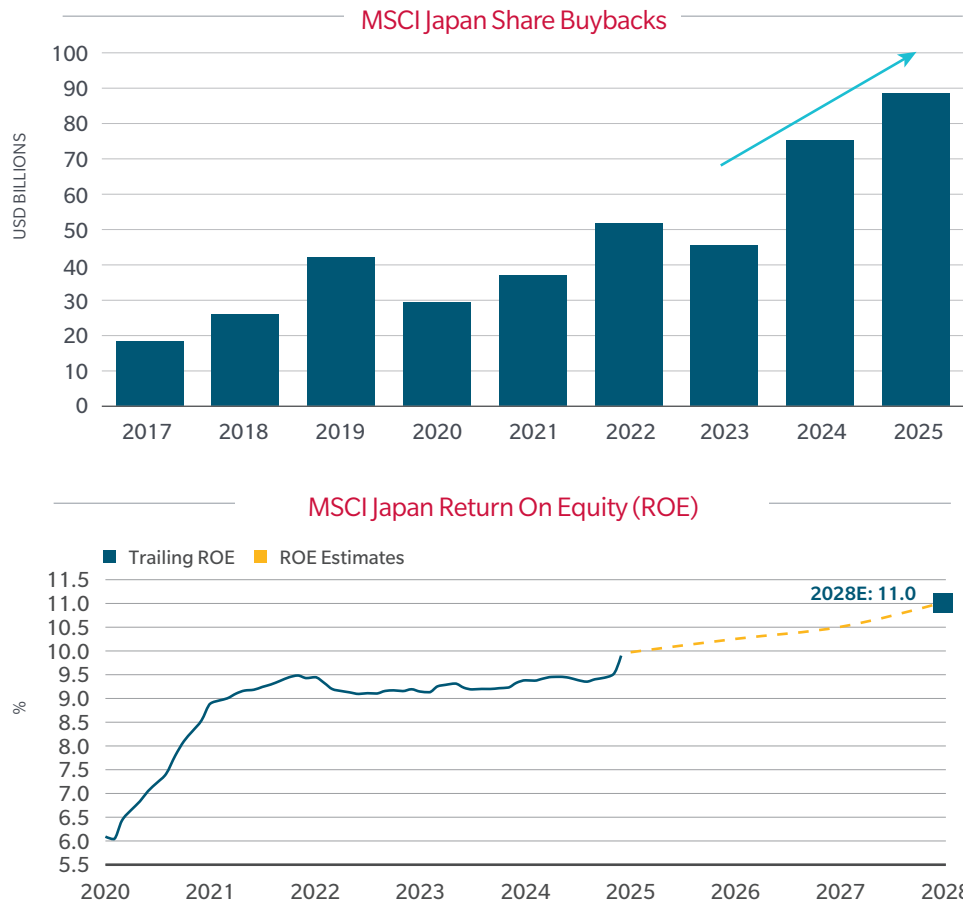
Enhancing Portfolio Design

While we don't believe investors will turn their backs on US equities, there is renewed interest in diversifying into other regions, styles, and caps from a risk management and portfolio design standpoint. From a structural standpoint, global ex-US equities are more value-oriented given their higher sector allocations to financials, industrials, and materials. They also trade at a significant valuation discount, with forward price to earnings (P/E) of 14.8x compared to US equity's 22.0x.⁵ P/E expansion played an important role in 2025 as renewed interest increased, but importantly, earnings growth was also a key driver, contributing more than half of the year's return. The pickup in earnings growth started early in the year and accelerated steadily into the new year, suggesting further potential.

MFS Long Term Capital Market Expectations have global ex US equity outperforming US equities over the next decade, supported by favorable valuations and potential for profit margin expansion. The European banking sector's deregulation and broader fiscal tailwinds should also support both consumer and corporate spending. We believe the broadening of market performance is healthy for the sustainability of risk assets into 2026 and that this may present opportunities for both active management and for asset allocators who have the discipline to stay diversified.

Japan Equities: A Rising Force in Global Markets

Reflationary tailwinds and shareholder-friendly policies



Source: Top LHS – Bloomberg. Annual data from 31 December 2017 to 31 December 2025. Bottom LHS – FactSet. Monthly data from 31 December 2020 to 31 December 2025. Return on Equity is last-twelve-months for 2020 through 2025. 2026, 2027 and 2028 are estimates as of 31 December 2025.

Source: ¹FactSet. Daily data from 31 December 2024 to 31 December 2025. Returns are net and in USD. ²Haver Analytics as of 31 December 2025. ³Bloomberg, “Japanese Savers Have a Quadrillion Yen Stashed Away. Here’s How Much That is”, 21 March 2024. ⁴Bloomberg, “Japan Households Rev Up Yield Hunt as Inflation Erodes Savings”, 16 December 2025. Stocks and investment trusts as % of total household assets as of 30 September 2025.

Amid the broader equity market rotation, Japanese equities have taken center stage in the global investment landscape, given both performance and the size of the market. In 2025, the TOPIX and Nikkei 225 indices reached record highs, delivering annual gains of approximately 25% and 28%, respectively.¹ This rally was driven by renewed investor confidence following the election of Prime Minister Sanae Takaichi alongside robust economic growth, a reflationary environment, shareholder-friendly reforms, and attractive valuations. We believe these factors have positioned Japanese equities as a compelling opportunity.

Deflation to Reflation

After decades of disinflation or outright deflation, Japan has undergone a significant economic shift. Post-pandemic, inflation surpassed 2%, achieving the Bank of Japan’s long-standing target and prompting interest-rate hikes. The current reflationary environment has fostered a healthier and more sustainable inflation rate, paving the way for faster wage growth. The 2025 Shunto wage negotiations resulted in a 5.52% average wage increase — the highest in more than 30 years.² In anticipation of higher wages, household spending has steadily risen, which has supported the expansion of Japan’s nominal GDP over the past two years and will likely continue to support corporate earnings. Moreover, Japanese companies have been able to pass higher costs on to consumers, helping to maintain healthy profit margins. Meanwhile, with Prime Minister Takaichi taking office, the new administration is anticipated to introduce a range of pro-growth initiatives — including tax cuts, financial incentives, and other strategies aimed at boosting earnings growth for Japanese companies.

The reflationary environment has also triggered a gradual change in household financial behavior. Historically, Japanese households have favored cash holdings, which accounted for over 50% of financial assets at the start of 2024.³ In a deflationary environment, the purchasing power of cash grows over time. However, rising inflation has encouraged a move toward riskier investments, such as stocks and investment trusts, which now represent approximately 20% of total household assets.⁴ This marks a significant departure from the deflation-era preference for cash and is expected to provide additional support for equity markets.

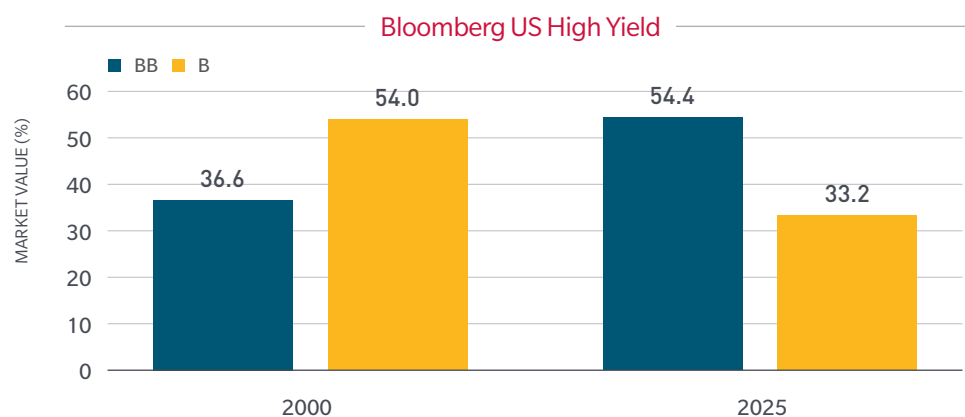
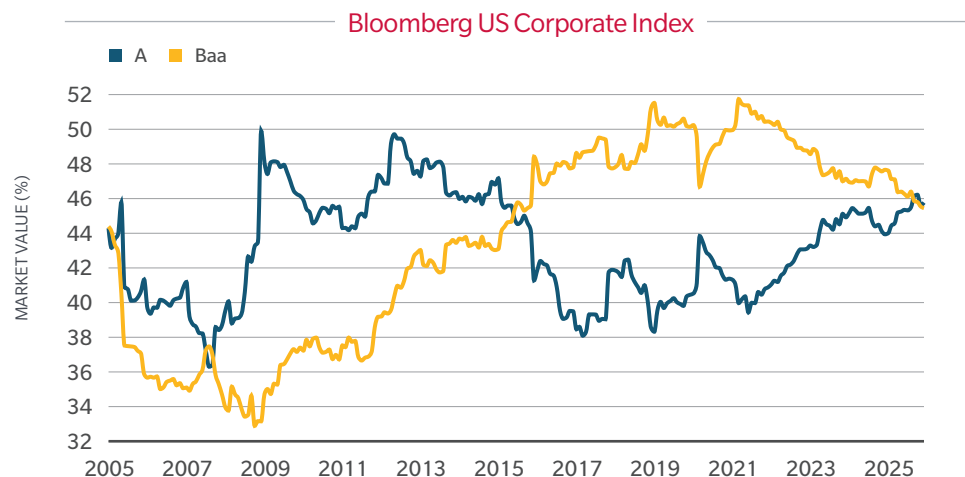
Corporate Reforms

Over the past decade, Japan has made significant strides in enhancing corporate governance to improve capital efficiency and profitability. The Tokyo Stock Exchange has begun a multi-stage overhaul and is implementing reforms designed to enhance returns and raise the value of listed Japanese companies. Meanwhile, the Japanese Financial Services Agency is aiming to strengthen engagement, enhance accountability, and promote more effective capital allocation and investment of cash reserves through the Stewardship Code and Corporate Governance Code.

These reforms have encouraged companies to prioritize shareholder value by increasing cash distributions, divesting underperforming assets, and pursuing growth opportunities. In an effort to enhance return on equity (ROE), there has been a notable surge in share buybacks in recent years, and Japan’s substantial cash reserves are expected to enable additional repurchases to further boost capital returns. Although Japan’s ROE remains among the lowest of major developed nations, ongoing improvements in corporate governance and a growing focus on shareholder-friendly policies are expected to boost ROE, which will likely be supportive of the long-term growth of Japanese equities. ▲

Rising Quality of US Corporate Bonds

Enhancing risk-adjusted returns with high-yield



Source: Top LHS – Bloomberg. Monthly data from 31 January 2005 to 31 December 2025. Bottom LHS – Bloomberg. 2000 = 31 December 2000, 2025 = 31 December 2025.

¹Source: FactSet. 2025 return = 31 December 2024 to 31 December 2025, 2024 (prior year) return = 31 December 2023 to 31 December 2024. ²Source: Financial Times, “AI debt boom pushes US corporate bond sales close to record”, 23 December 2025; SIFMA; Goldman Sachs. ³Source: BofA Global Research, as of 2 January 2026. Rising stars (issuers moving from HY to IG) and fallen angels (issuers moving from IG to HY) determined using ICE BofA HY index and ICE BofA IG index.

The quality of US corporate bonds has improved notably in recent years, underpinned by robust economic growth and stronger fundamentals. Many companies have prioritized reducing leverage, optimizing cash flow management, and maintaining healthier debt-to-equity ratios, which has led to higher credit ratings and lower default rates. Additionally, regulatory reforms and increased transparency in financial reporting have bolstered investor confidence in the corporate bond market.

US Investment-Grade Bonds

Following a decline in the proportion of A-rated bonds in the Bloomberg US Corporate Index after the Global Financial Crisis, recent years have seen a steady recovery. A-rated bonds now represent a share comparable to BBB-rated bonds. This improvement in credit quality coincides with higher all-in yields, enabling investors to achieve attractive returns without compromising on credit quality. In 2025, investment-grade (IG) bonds delivered a robust 7.8% return, compared to 2.1% in the prior year.¹

Looking ahead to 2026, IG bonds may face certain headwinds. In 2025, US corporations issued \$1.7 trillion in IG bonds, driven largely by financing needs for artificial intelligence infrastructure.² Major technology companies tapped the bond market to fund the development of datacenters and energy systems critical for AI operations. AI-related borrowing now constitutes approximately 30% of net IG issuance and is expected to grow further in 2026.² This surge in borrowing has raised concerns about the sustainability of rising debt levels, with the potential for IG spreads to widen, particularly within the technology sector.

Despite these challenges, IG bonds continue to offer attractive yields, and major technology firms are expected to maintain their high credit quality despite increased leverage. While the asset class is likely to remain resilient, we believe investors should focus on high-quality issuers within this space.

US High-Yield Bonds

The US high-yield (HY) bond market has also undergone a significant transformation, with credit quality improving markedly over the years. In 2000, over half of the Bloomberg US High Yield Index comprised B-rated bonds. Today, BB-rated issuers dominate the index. Further, since 2021, the number of issuers upgraded to investment-grade status (“rising stars”) has on average outpaced those downgraded to high yield (“fallen angels”).³ This shift is partially attributed to lower-rated companies increasingly turning to leveraged loans and private credit markets.

HY issuers have also maintained strong financial fundamentals. Leverage remains below pre-pandemic levels, and interest coverage ratios have remained sound. These strong credit metrics will likely be supportive of HY spreads remaining below their long-term average. Additionally, the duration of the HY index has shortened over time, potentially reducing default risk and contributing to historically low default rates. Lastly, unlike IG bonds, HY appear less exposed to thematic trends such as the AI buildout. These factors have enabled HY bonds to better withstand market volatility in recent years.

Overall, the US HY bond market has evolved into a higher-quality fixed income segment. With stronger fundamentals, low default rates, and reduced duration risk, this asset class may present a compelling opportunity for investors seeking diversification and enhanced, risk-adjusted returns. For portfolios without dedicated high-yield allocations, core plus managers can offer meaningful indirect exposures. ▲

Trends in Portfolio Design

Lessons from the past and novel approaches

Recent developments in portfolio design and construction have introduced several provocative approaches to asset allocation. Whether the investor is an institutional pension plan, professional buyer, or individual, portfolio design, construction, and governance are critical to successful investment outcomes. The first generally recognized asset allocation strategy dates back to the ancient Talmud scriptures of around 1200 BC, which instructed that one should invest one third of assets in business, one third in land, and keep one third in reserve (roughly, in today's world: stocks, real estate, and cash) — the first documented strategic asset allocation strategy. While today's available investments, tools, research, and practitioner expertise have evolved significantly, this concept of asset allocation remains on firm ground. At the same time, recent research and innovative thinking has challenged several conventional asset allocation practices that have become accepted norms. This has been driven by a combination of evolutionary thinking, increased complexity in the capital markets, and recent innovations in technology, in terms of both capabilities and costs.

There are three popular approaches that we are seeing increased discussion around: strategic asset allocation, the total portfolio approach, and scale customization. Of course, there are myriad variations within each of these approaches based on characteristics such as investor type, domicile, and objectives, to name just a few. As with many things in life, there are pros and cons to each approach, as well as incentives to develop further thinking around them.

Strategic Asset Allocation

One of the earliest modern approaches to asset allocation is the strategic approach, which is rooted in modern portfolio theory, capital market expectations, and portfolio optimization. This approach typically entails using both historical and forward-looking data to inform allocation across various asset classes such as stocks, bonds, cash, commodities, and alternatives in weights that will achieve the desired risk and return outcomes. These weights are periodically rebalanced and revisited based on the attributes and objectives of the investor. Performance measurement is typically assessed relative to a policy mix benchmark as well as the performance of sub asset classes and their managers.

Recent challenges to this approach suggest that it is overly rigid, with periodic allocations set only by board or committee calendar, which can hamper the ability to take advantage of shorter-term market dislocations or developments. It is, however, perhaps the most popular approach to asset allocation and provides a sound starting point for the development of policy statement and investment approach.

Total Portfolio Approach

Recently popularized by the Thinking Ahead Institute, an innovation network founded by Willis Towers Watson, the total portfolio approach takes a flexible and holistic approach to asset allocation, delegating the investment decision-making process closer to the practitioners rather than it being strictly a board-driven function. The goal is to allocate assets and investment responsibility in a manner that achieves the plan's overall objectives rather than primarily focusing on benchmark outperformance of the underlying asset classes. It also allows for the introduction of new or innovative strategies that may not fit neatly within asset class parameters but nonetheless contribute to the attainment of the portfolio's objectives. It also enables the asset allocators' navigation of regime shifts in economies and markets that may not be anticipated when strategic asset allocation or capital markets expectations are initially set.

There are some clear challenges to this approach, including the transition away from a strategic asset allocation governance system that may be institutionalized at the organizational level. It also requires significant expertise and trust to allocate increased responsibility to those closest to the investment decision-making process. However, for some organizations, there may be elements of the total portfolio approach that they can adopt and adjust as they move along the continuum.

Scale Customization

The use of Outsourced Chief Investment Officer (OCIO) providers for institutions and model portfolios for the mass affluent has risen to meet the increased demand for portfolio customization that is scalable — asset allocations that have common foundations and principles but allow for fine tuning based on the unique objectives of the underlying investor. For example, a foundation's portfolio may start with a pre-designed asset allocation, but then an OCIO might help adjust the portfolio's liquidity profile to meet the unique funding needs of that foundation. This allows for deep research and conviction in the development of the asset allocation reference portfolio while still providing flexibility to meet the foundation's liquidity parameters. A key driver of scale customization within asset allocations has been the massive strides made in technological capabilities and innovation, as well as the falling costs of those technologies. For example, the mass affluent now have access to multiple different asset classes across multiple different vehicles, such as funds, ETFs, separately managed accounts, and individual securities, all within a single platform.

As institutional investors, asset owners, and professional buyers revisit their asset allocation processes and markets enter what appears to be a new investment regime with respect to the growth and inflation outlook, we believe this is an opportune time to revisit these approaches to determine if best practices from each can be incorporated into your institution's asset allocation strategy. 

Index Returns – US Investor

As of December 31, 2025

BENCHMARK	10 YEARS	5 YEARS	3 YEARS	1 YEAR	YTD	3 MONTHS
EQUITY						
S&P 500	14.82%	14.42%	23.01%	17.88%	17.88%	2.66%
Russell 1000® Growth	18.13%	15.32%	31.15%	18.56%	18.56%	1.12%
Russell 1000® Value	10.53%	11.33%	13.90%	15.91%	15.91%	3.81%
Russell 2000®	9.62%	6.09%	13.73%	12.81%	12.81%	2.19%
MSCI EAFE	8.18%	8.92%	17.22%	31.22%	31.22%	4.86%
MSCI Emerging Markets	8.42%	4.20%	16.40%	33.57%	33.57%	4.73%
MSCI ACWI	11.72%	11.19%	20.65%	22.34%	22.34%	3.29%
FIXED INCOME						
Bloomberg US TIPS	3.09%	1.12%	4.23%	7.01%	7.01%	0.13%
Bloomberg US Aggregate	2.01%	-0.36%	4.66%	7.30%	7.30%	1.10%
Bloomberg Global Aggregate	2.39%	0.34%	5.12%	4.86%	4.86%	0.78%
CASH						
Cash	2.23%	3.10%	5.03%	4.40%	4.40%	1.02%

Visit [MFS.com](https://www.mfs.com) for current insights

Source: FactSet. Monthly data ending 31 December 2025. Returns are in USD. Equity returns are gross for S&P 500 and net for non-US indices. Fixed income returns are gross and hedged in USD. Cash = FTSE 3-month Treasury Bill Index.

Cash is based on returns for the FTSE 3-month Treasury Bill Index.

The historical performance of each index cited is provided to illustrate market trends; it does not represent the performance of a particular MFS® investment product. It is not possible to invest directly in an index. Index performance does not take into account fees and expenses. **Past performance is no guarantee of future results.** You should consider your client's financial needs, goals, and risk tolerance before making any investment recommendations.

Index Returns – Euro Investor

As of December 31, 2025

BENCHMARK	10 YEARS	5 YEARS	3 YEARS	1 YEAR	YTD	3 MONTHS
EQUITY						
S&P 500	13.34%	14.86%	18.63%	3.54%	3.54%	2.61%
MSCI Europe	8.34%	11.89%	15.24%	20.13%	20.13%	6.31%
MSCI EM	7.57%	5.05%	12.74%	17.76%	17.76%	4.78%
MSCI World ex USA	7.70%	10.36%	13.95%	16.25%	16.25%	5.25%
FIXED INCOME						
Bloomberg Global Germany (7-10Y)	-0.55%	-3.43%	2.12%	-0.65%	-0.65%	-0.44%
Bloomberg US Aggregate	-0.04%	-2.29%	2.48%	5.03%	5.03%	0.56%
Bloomberg Euro Aggregate	0.32%	-2.17%	3.66%	1.25%	1.25%	0.23%
Bloomberg Global Aggregate	0.40%	-1.50%	3.02%	2.68%	2.68%	0.25%
CASH						
Euro Cash	0.68%	1.69%	3.14%	2.39%	2.39%	0.52%

[Visit MFS.com](https://www.mfs.com) for current insights

Source: FactSet. Monthly data ending 31 December 2025. Returns are in EUR. Equity returns are gross for MSCI Europe and net for non-Europe indices. Fixed income returns are gross and hedged in EUR. Euro Cash = ICE BofA Euro Currency Deposit Offered Rate Constant Maturity (3M). Past performance is no guarantee of future results. It is not possible to invest in an index.

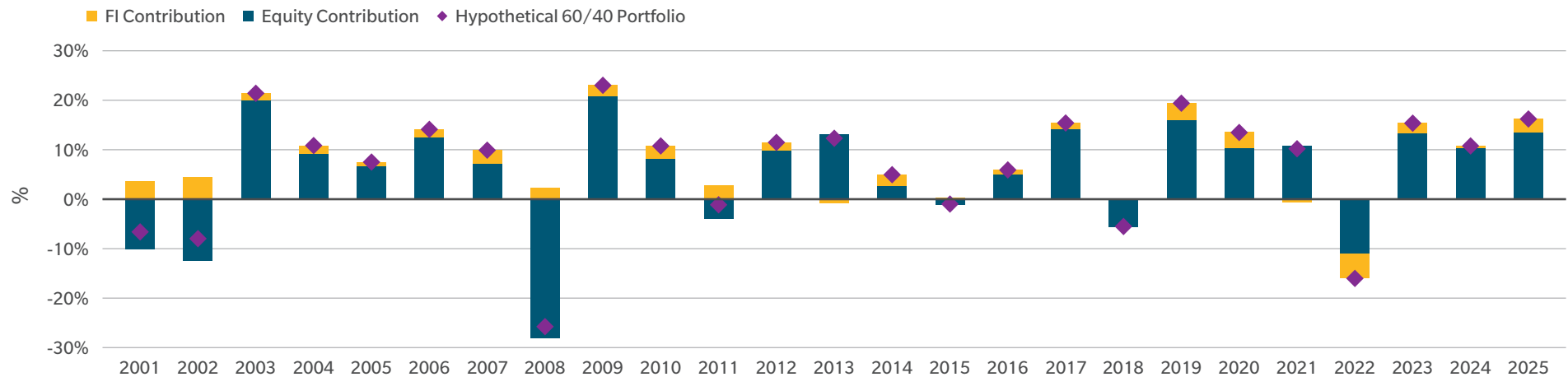
Cash is based on returns for the FTSE 3-month Treasury Bill Index.

The historical performance of each index cited is provided to illustrate market trends; it does not represent the performance of a particular MFS® investment product. It is not possible to invest directly in an index. Index performance does not take into account fees and expenses. **Past performance is no guarantee of future results.** You should consider your client's financial needs, goals, and risk tolerance before making any investment recommendations.

Reference Portfolio's Statistics

Return, risk and contributions to return

60/40 Calendar-Year Returns



Hypothetical Portfolio Statistics for Various Asset Mixes

	GLOBAL EQUITY WEIGHT (%)	US AGG WEIGHT (%)	10-YEAR RETURN	EQUITY 10-YEAR CONTRIBUTION	FI 10-YEAR CONTRIBUTION	10-YEAR VOLATILITY	10-YEAR SHARPE RATIO
MORE FIXED INCOME ↑	0%	100%	2.01%	0.00%	2.01%	5.05%	-0.04
	20%	80%	4.03%	2.39%	1.64%	5.90%	0.31
	40%	60%	6.02%	4.79%	1.23%	7.61%	0.50
	60%	40%	7.96%	7.15%	0.82%	9.73%	0.59
	80%	20%	9.87%	9.46%	0.41%	12.05%	0.64
MORE EQUITY ↓	100%	0%	11.72%	11.72%	0.00%	14.47%	0.66

Source: FactSet. 60/40 portfolio is 60% MSCI AC World (Equity) and 40% Bloomberg US Aggregate (FI). Returns are net for MSCI ACWI and gross for Bloomberg US Aggregate, and in USD. Returns are rebalanced monthly. Top chart – Annual data from 31 December 2001 to 31 December 2025. Bottom chart – Monthly data ending 31 December 2025. Past performance is no guarantee of future results. It is not possible to invest in an index.

Hypothetical portfolio returns presented herein are for illustrative purposes, do not represent actual trading or the impact of material economic and market factors, and are based on analysis designed with the benefit of hindsight.

Disclosures

The views expressed herein are those of the MFS Strategy & Insights Group (SAIG) within the MFS distribution unit and may differ from those of MFS portfolio managers and research analysts. These views are subject to change at any time and should not be construed as the Advisor's investment advice, as securities recommendations, or as an indication of trading intent on behalf of MFS.

MFS does not provide legal, tax, or accounting advice. Individuals should not use or rely upon the information provided herein without first consulting with their tax or legal professional about their particular circumstances. Any statement contained in this communication (including any attachments) concerning U.S. tax matters was not intended or written to be used, and cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code. This communication was written to support the promotion or marketing of the transaction(s) or matter(s) addressed.

"Standard & Poor's" and "S&P" are registered trademarks of Standard & Poor's Financial Services LLC ("S&P") and Dow Jones is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones") and have been licensed for use by S&P Dow Jones Indices LLC and sublicensed for certain purposes by Massachusetts Financial Services Company ("MFS"). The S&P 500® is a product of S&P Dow Jones Indices LLC, and has been licensed for use by MFS. MFS' product(s) is not sponsored, endorsed, sold or promoted by S&P Dow Jones Indices LLC, Dow Jones, S&P, or their respective affiliates, and neither S&P Dow Jones Indices LLC, Dow Jones, S&P, their respective affiliates make any representation regarding the advisability of investing in such product(s).

Frank Russell Company ("Russell") is the source and owner of the Russell Index data contained or reflected in this material and all trademarks, service marks and copyrights related to the Russell Indexes.

Russell® is a trademark of Frank Russell Company. Neither Russell nor its licensors accept any liability for any errors or omissions in the Russell Indexes and/or Russell ratings or underlying data and no party may rely on any Russell Indexes and/or Russell ratings and/or underlying data contained in this communication. No further distribution of Russell Data is permitted without Russell's express written consent.

Russell does not promote, sponsor or endorse the content of this communication.

BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indices. Bloomberg neither approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.

MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indices or any securities or financial products. This report is not approved, reviewed or produced by MSCI.

Source FTSE International Limited ("FTSE") © FTSE 2022. "FTSE" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data and no party may rely on any FTSE indices, ratings and/or data underlying data contained in this communication. No further distribution of FTSE Data is permitted without FTSE's express written consent. FTSE does not promote, sponsor or endorse the content of this communication.

The views expressed herein are those of the MFS Strategy and Insights Group within the MFS distribution unit and may differ from those of MFS portfolio managers and research analysts. These views are subject to change at any time and should not be construed as investment advice, as securities recommendations, or as an indication of trading intent on behalf of MFS. No forecasts can be guaranteed.

GLOBAL DISCLOSURE

Unless otherwise indicated, logos and product and service names are trademarks of MFS® and its affiliates and may be registered in certain countries.

Distributed by:

U.S. – MFS Institutional Advisors, Inc. ("MFSI"), MFS Investment Management and MFS Fund Distributors, Inc., Member SIPC; **Latin America** – MFS International Ltd.; **Canada** – MFS Investment Management Canada Limited.; **Note to UK and Switzerland readers:** Issued in the UK and Switzerland by MFS International (U.K.) Limited ("MIL UK"), a private limited company registered in England and Wales with the company number 03062718, and authorised and regulated in the conduct of investment business by the UK Financial Conduct Authority. MIL UK, an indirect subsidiary of MFS®, has its registered office at One Carter Lane, London, EC4V 5ER.; **Note to Europe (ex UK and Switzerland) readers:** Issued in Europe by MFS Investment Management (Lux) S.à r.l. (MFS Lux) – authorized under Luxembourg law as a management company for Funds domiciled in Luxembourg and which both provide products and investment services to institutional investors and is registered office is at S.a r.l. 4 Rue Albert Borschette, Luxembourg L-1246. Tel: 352 2826 12800. This material shall not be circulated or distributed to any person other than to professional investors (as permitted by local regulations) and should not be relied upon or distributed to persons where such reliance or distribution would be contrary to local regulation; **Singapore** – MFS International Singapore Pte. Ltd. (CRN 201228809M); **Australia/New Zealand** – MFS International Australia Pty Ltd ("MFS Australia") (ABN 68 607 579 537) holds an Australian financial services licence number 485343. MFS Australia is regulated by the Australian Securities and Investments Commission.; **Hong Kong** – MFS International (Hong Kong) Limited ("MIL HK"), a private limited company licensed and regulated by the Hong Kong Securities and Futures Commission (the "SFC"). MIL HK is approved to engage in dealing in securities and asset management regulated activities and may provide certain investment services to "professional investors" as defined in the Securities and Futures Ordinance ("SFO"); **For Professional Investors in China** – MFS Financial Management Consulting (Shanghai) Co., Ltd. 2801-12, 28th Floor, 100 Century Avenue, Shanghai World Financial Center, Shanghai Pilot Free Trade Zone, 200120, China, a Chinese limited liability company registered to provide financial management consulting services.; **Japan** – MFS Investment Management K.K., is registered as a Financial Instruments Business Operator, Kanto Local Finance Bureau (FIBO) No.312, a member of the Investment Trust Association, Japan and the Japan Investment Advisers Association. As fees to be borne by investors vary depending upon circumstances such as products, services, investment period and market conditions, the total amount nor the calculation methods cannot be disclosed in advance. All investments involve risks, including market fluctuation and investors may lose the principal amount invested. Investors should obtain and read the prospectus and/or document set forth in Article 37-3 of Financial Instruments and Exchange Act carefully before making the investments. **For readers in Saudi Arabia, Kuwait, Oman, and UAE (excluding the DIFC and ADGM). In Qatar strictly for sophisticated investors and high net worth individuals only. In Bahrain, for sophisticated institutions only:** The information contained in this document is intended strictly for professional investors. The information contained in this document, does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for or an opinion or guidance on a financial product, service and/or strategy. Whilst great care has been taken to ensure that the information contained in this document is accurate, no responsibility can be accepted for any errors, mistakes or omissions or for any action taken in reliance thereon. You may only reproduce, circulate and use this document (or any part of it) with the consent of MFS international U.K. Ltd ("MIL UK"). The information contained in this document is for information purposes only. It is not intended for and should not be distributed to, or relied upon by, members of the public. The information contained in this document, may contain statements that are not purely historical in nature but are "forward-looking statements". These include, amongst other things, projections, forecasts or estimates of income. These forward-looking statements are based upon certain assumptions, some of which are described in other relevant documents or materials. If you do not understand the contents of this document, you should consult an authorised financial adviser. Please note that any materials sent by the issuer (MIL UK) have been sent electronically from offshore. **South Africa** – This document, and the information contained is not intended and does not constitute, a public offer of securities in South Africa and accordingly should not be construed as such. This document is not for general circulation to the public in South Africa. This document has not been approved by the Financial Sector Conduct Authority and neither MFS International (U.K.) Limited nor its funds are registered for public sale in South Africa.

Massachusetts Financial Services®.