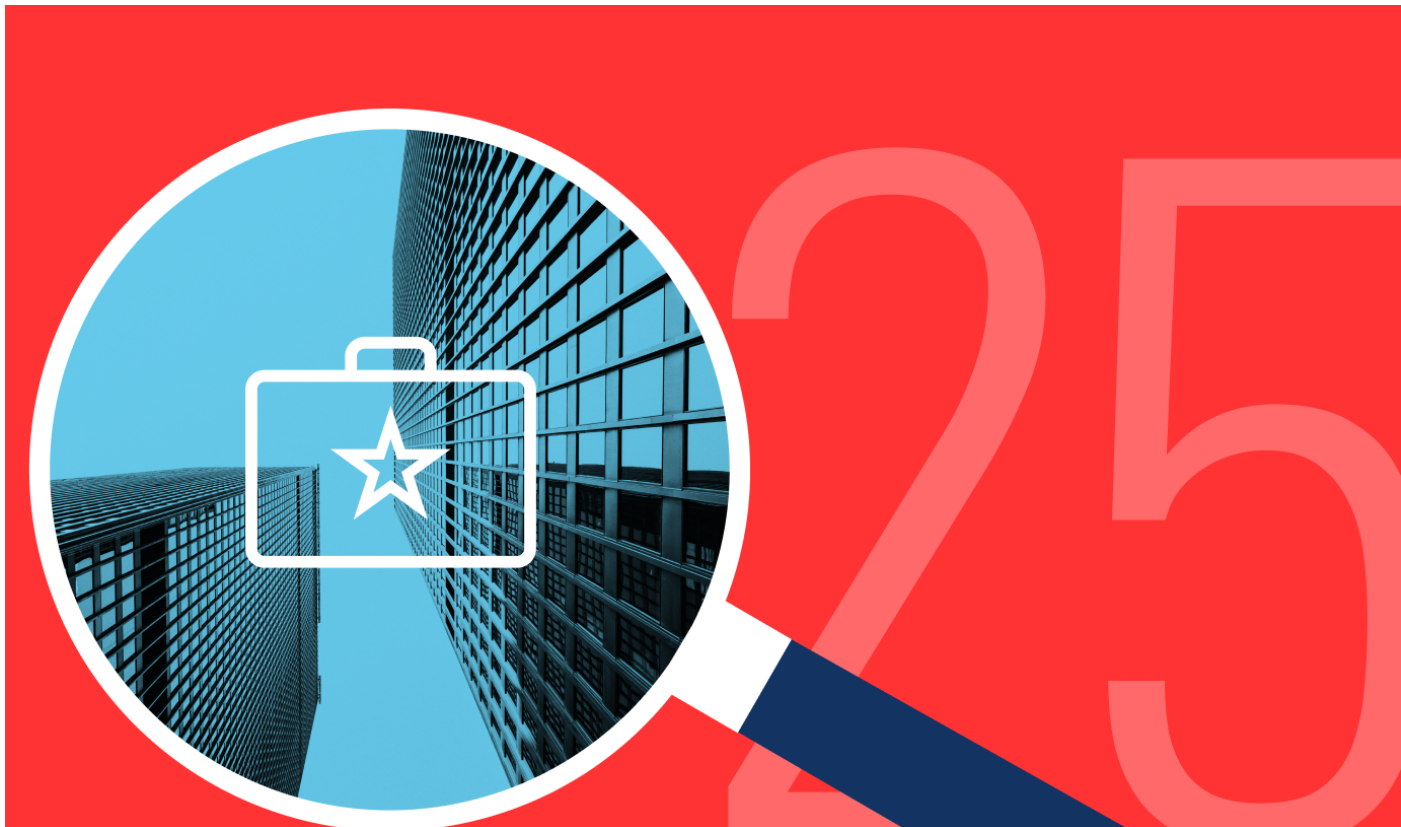


# 2025 Outlook Report

Empowering Investor Success



## Table of Contents

INTRODUCTION	1
<b>Welcome to Our 2025 Outlook</b>	
<hr/>	
CHAPTER 1	6
<b>Our Best Investing Ideas When the US Looks Expensive</b>	
<hr/>	
CHAPTER 2	10
<b>How to Build a Portfolio to Reach Your Goals</b>	
<hr/>	
CHAPTER 3	13
<b>Finding Returns in a Falling Rate Environment</b>	
<hr/>	
CHAPTER 4	19
<b>The Pros and Cons of Investing in Private Assets</b>	
<hr/>	
CHAPTER 5	22
<b>The Impact of AI on Investing in 2025</b>	
<hr/>	
CHAPTER 6	25
<b>How to Build a Portfolio That Looks After You</b>	

## Welcome to Our 2025 Outlook

As we look to next year, it is already clear that investing conditions in 2025 will be very different from 2024. Inflation has diminished, many central banks are loosening the reins on the economy, and formerly unloved assets have made a roaring comeback.

Yet, some things remain the same: There are many attractive opportunities for investors, artificial intelligence continues to dominate the spending of technology companies, and investors still favor cash deposits over longer-term assets.

Some conditions are timeless, such as the volatility of asset prices, the need for investors to lift their eyes to the horizon instead of focusing on the latest headline, and the importance of creating portfolios that meet your needs as an investor rather than simply chasing the highest returns.

As in previous years, this outlook is designed to help you succeed by bringing together the research and insights from analysts and investors across Morningstar to help you make better investment decisions in the year ahead.

We've divided the document into six sections, each of which addresses a key challenge or opportunity faced by investors as we enter the new year.

---

**1 Our Best Investing Ideas When the US Looks Expensive**

Following the stellar rise in US stock prices in 2024, many large US company stocks appear to be expensive and consequently are offering lower future returns. We highlight some better value opportunities for those making new investments or wanting to reduce their exposure to the US market.

---

**2 How to Build a Portfolio to Reach Your Goals**

Investing is fundamentally an exchange of spending power today for the attainment of a goal in the future. Building a portfolio to meet these goals requires a long-term perspective, a commitment to deep research, and a willingness to think (and act) independently. We share some thoughts on how to build a successful portfolio that meets these future needs.

---

**3 Finding Returns in a Falling Rate Environment**

As many central banks have started to cut interest rates, cash deposits look less attractive. We look at the alternative options.

---

**4 The Pros and Cons of Investing in Private Assets**

Private assets have risen to prominence over the past few years as more fast-growing companies are staying in private hands and others are seeking loans from nontraditional sources. We highlight the opportunities and challenges of investing in these popular assets.

---

**5 The Impact of AI on Investing in 2025**

As artificial intelligence continues to dominate the minds of investors, the opportunities are shifting. We look at where the best investments reside as we enter the new year.

---

**6 How to Build a Portfolio That Looks After You**

Many investors, especially those who have retired, need a portfolio that meets their immediate income needs. This requires a different approach to that used when saving for the future. We identify the key challenges that income-focused investors face and how they can be overcome.

---

While distilling our entire outlook into a few key takeaways is challenging, there are three areas we consider to be particularly important as we consider the year ahead.

### **My Top 3 Takeaways From the Morningstar 2025 Outlook**

---

#### **Make Sure Your Portfolio Meets Your Needs**

While it is always tempting to chase returns and buy assets that have experienced the fastest recent price growth, the key to success is to invest in assets that meet your specific needs, goals, and circumstances.

#### **The Best Opportunities Are Hidden in Plain Sight**

It is easy to dismiss the best opportunities because they are unpopular, but this unpopularity is often reflected in discounted prices. Like fashion, investing tastes change, and when they do, those discounted assets can deliver unusually attractive prices for the patient investor.

#### **Innovation Brings New Risks as Well as Opportunities**

Innovation in technology or investment is often accompanied by obvious benefits while the less obvious risks are often overlooked. Deep research and an independent perspective can help you make better decisions.

This outlook is guided by our commitment to championing the investor and is grounded in the independent research that has been a hallmark of Morningstar for 40 years. Through this period, we have seen countless investing fashions come and go and asset prices rise and fall. What has remained constant throughout is the psychological challenge of investing and the patience required to be successful. As we enter a new year, I have no doubt that we will be faced with booms, panics, scandals, and crises. I am equally confident that investing in high-quality assets at attractive prices will continue to deliver financial security for patient investors long after the specific events of 2025 become a distant memory. ■■■

## Thanks to Our Contributors

I am enormously grateful to the 400-plus strong team of researchers and investors across the globe whose work is represented in this document. My particular thanks go to the writers of this outlook, who are listed below. I believe their relentless dedication to empowering the success of the investors we serve shines through this outlook, and I hope you find it useful as we enter 2025.



**Dan Kemp**  
Chief Research and  
Investment Officer

### Our Best Investing Ideas When the US Looks Expensive



**Philip Straehl**  
Chief Investment  
Officer, Americas



**James Foot**  
Head of Research,  
Asia Pacific



**Lochlan Halloway**  
Market Strategist,  
Australia



**Michael Field**  
European Equity  
Market Strategist



**Nick Stanhope**  
Senior Portfolio  
Manager

### The Impact of AI on Investing in 2025



**David Sekera**  
Senior US Market  
Strategist



**Danielle Labotka**  
Behavioral Scientist



**Brian Colello**  
Equity Strategist



**Timothy Strauts**  
Head of Manager  
Research, North America



**Eric Compton**  
Director of Equity  
Research, Technology



**Dan Romanoff**  
Senior Equity Analyst

### Finding Returns in a Falling Rate Environment



**Dominic Pappalardo**  
Chief Multi-Asset  
Strategist



**Preston Caldwell**  
Senior US Economist



**Hong Cheng**  
Head of Fixed Income  
& Currency Research



**Mark Preskett**  
Senior Portfolio  
Manager



**Paul Arnold**  
Global Head of  
Multi-Asset Research

### How to Build a Portfolio to Reach Your Goals



**Ricky Williamson**  
Head of Investments,  
Multi-Asset Strategies



**Michael Malseed**  
Head of Institutional  
Portfolio  
Management



**Sean Neethling**  
Head of Investments,  
South Africa



**Samantha Lamas**  
Senior Behavioral  
Insights Researcher

### How to Build a Portfolio That Looks After You



**Mike Coop**  
Chief Investment  
Officer, EMEA



**Matt Wachter**  
Chief Investment  
Officer, Asia Pacific



**Michael Budzinski**  
Associate Portfolio  
Manager



**Nicoló Bragazza**  
Associate Portfolio  
Manager



**Brian Moriarty**  
Strategist



**Thomas Dutka**  
Director, Manager  
Research



**Jack Shannon**  
Senior Manager  
Research Analyst

# 1

## Our Best Investing Ideas When the US Looks Expensive

Following the stellar rise of US stock prices in 2024, many large US company stocks appear to be expensive and consequently are offering lower future returns. We highlight some better value opportunities for those making new investments or wanting to reduce their exposure to the US market.





## Key Takeaways

- + Although the US market appears expensive, there are good investment opportunities within the US and in other global markets.
- + Europe, especially the UK, is the most attractive of the developed markets.
- + China faces structural challenges but offers good value.
- + Concerns about Mexico and Brazil appear exaggerated.

In 2024, US stocks once again outpaced the rest of the world, rising over 25%, fueled by the strong performance of stocks that benefit from the AI boom and the prospect of lower interest rates. Yet, after the rally, valuations for US stocks appear expensive based on our stock-level valuation models and top-down expected return estimates.

As we look for opportunities heading into 2025, our focus naturally shifts to regions outside the United States, where we believe investors may achieve better risk-adjusted returns. Exhibit 1 shows our expected returns for various markets. Our asset-class valuation models point to low-single-digit returns in the US, while we expect some of the most attractive opportunities to deliver double-digit returns over the next decade.

Exhibit 2 shows the global valuation picture from the perspective of our Equity Research team’s bottom-up stock-level model. Our discounted cash flow models suggest that key markets trade at a discount. This is particularly true in the Asian and Latin American emerging markets.

We will drill down into the key areas that we find to be attractive across the key regions.

### Emerging Asia After the China Stimulus Bump

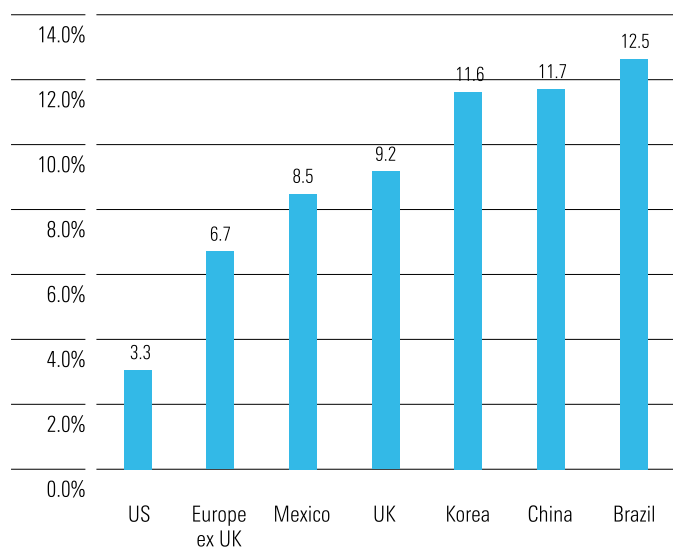
We are optimistic about the medium-term prospects for Chinese equities.

Past performance and a few “false dawns” have painted a bleak picture in recent years, but the potential upside remains. There are still structural issues, and key cyclical challenges will take time to resolve. The road is likely to remain bumpy.

Aging demographics, deleveraging, and weak consumer spending represent the core of the challenges. We are encouraged by signs that the authorities are prioritizing policy support to shore up the economy and expect stimulus measures to continue evolving in the coming months. A more benign regulatory backdrop compared with a few years ago is also constructive. Strong returns from the Chinese market toward the end of September and early October illustrated how the picture only needs to become “less bad” to provide a tailwind to returns. As a cyclical recovery takes shape, we anticipate moderate earnings growth from Chinese companies — but it will take time. We also maintain a positive outlook on several of the major Chinese technology firms as consumers regain their footing.

Exhibit 1: We Expect Double-Digit Returns From Most Attractively Valued Global Markets

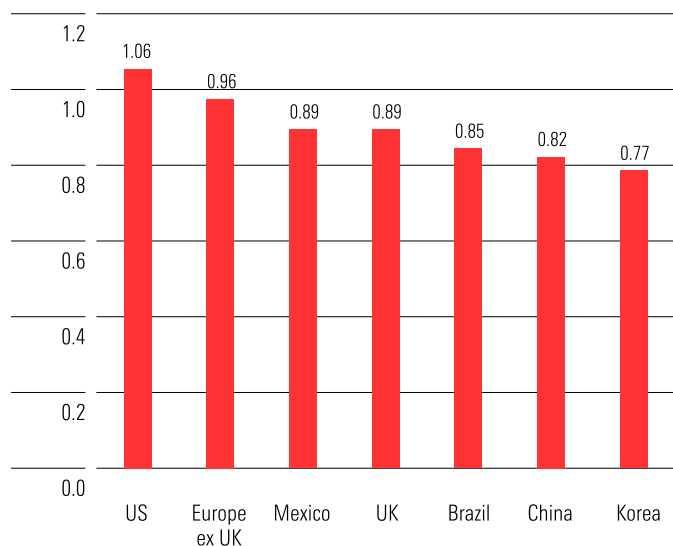
10-Year Expected Returns in USD



Source: Morningstar Investment Management LLC.

Exhibit 2: Key Non-US Markets Trade at a Discount to Their Intrinsic Value

Market-Cap-Weighted Price/Fair Value Estimate by Region



Source: Morningstar Investment Management LLC. Data as of Nov. 8, 2024.

However, careful management of total portfolio exposure is crucial, including sizing aggregate positions to account for the various regulatory, geopolitical, and economic risks in China.

Korean equities represent another opportunity in the Asia-Pacific region. Samsung Electronics makes up around 23% of the Morningstar Korea Index. Softer memory demand for non-AI products and doubts over whether the company will qualify as a supplier to Nvidia, the world’s largest AI company, have led to shares underperforming recently. But with shares trading at roughly 1.1 times book value, near the low end of Samsung’s historical range, these concerns look more than priced in. In its third-quarter 2024 earnings call, Samsung stated that it cleared an important phase in the qualification process for an undisclosed customer, likely Nvidia. A ramp-up in shipments of its latest high-bandwidth memory chips could significantly improve Samsung’s fundamentals and catalyze a rerating.

**Dissecting Valuations in European Equities**

On an absolute basis, European equities are trading at around a 5% discount based on our bottom-up valuation model. Not cheap, but also not expensive compared with where markets have traded over the past few years. The relative picture is even more compelling with Europe—the UK in particular—making it the most attractive developed-markets region globally. Add to this the macroeconomic tailwinds of rising gross domestic product, falling inflation, and lower interest rates, and the picture looks even brighter.

While a 5% discount to fair value is nothing to be sniffed at, we see even bigger opportunities for investors in Europe when we dig a little deeper. Small-cap stocks, for instance, offer much greater value than their large-cap peers, trading at a whopping 40% discount to their fair value estimate. On a sector basis, the standout areas are consumer discretionary and consumer defensive, which are trading at attractive discounts.

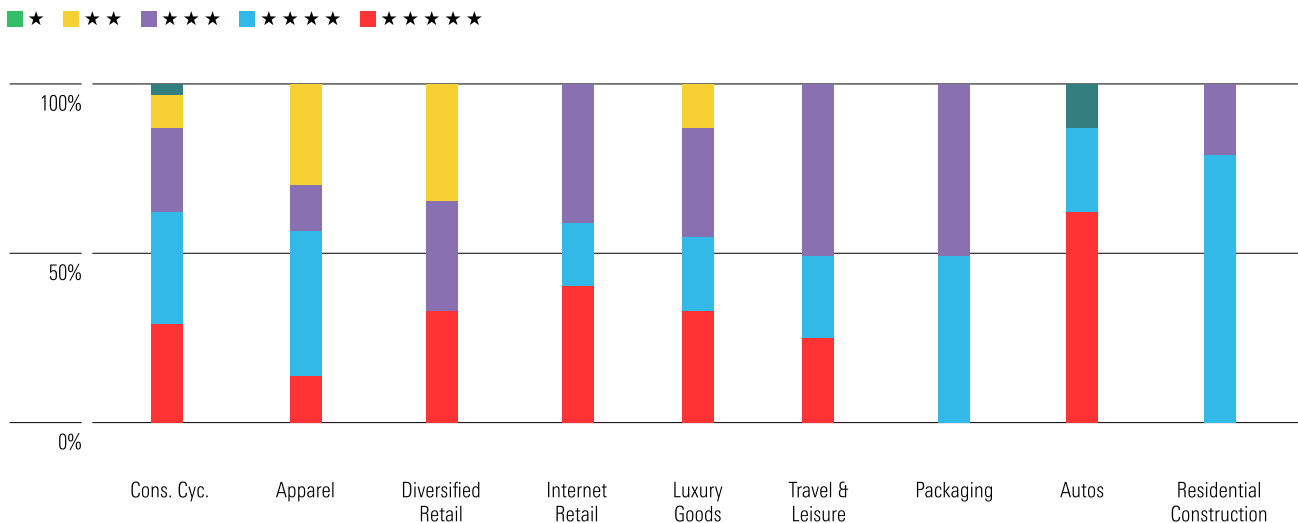
Within this, we see numerous subsectors with attractive discounts and near-term catalysts to help their share prices converge with their true value. Here are just two examples:

**+ Homebuilders:** UK homebuilders have been through the wringer. At one point, they lost two thirds of their value from the 2021 lockdown highs. Share prices have rallied over the past year, but we still believe names in this space could rise by as much as 50%. Lower interest rates are leading to more affordable mortgages, and supportive government policy should help pave the way in 2025.

**+ Autos:** It seems like the perfect storm for auto manufacturers currently with an influx of Chinese electric vehicles, a weak Chinese consumer, and potential tariffs on exports to the US. But we see huge discounts on many of the big European names. We also believe that with so much negativity baked in, it doesn’t take much good news to move share prices in a positive direction.

Exhibit 3: Opportunities Within European Consumer Sectors

Consumer Cyclical Star Rating Distribution by Industry



Morningstar. Data as of Nov. 11, 2024.

### Opportunities Emerging in Latin America

Looking back on 2024's banner year for broad stock indexes, it's worth remembering that not every market participated. As far as regions are concerned, Latin America was the worst performer.

Mexico, which makes up about one fifth of Latin America's market capitalization, plummeted almost 22% in 2024 through the end of October, a particularly egregious loss when you consider emerging markets in aggregate were up 12% over the same period.

The country's recent underperformance can be traced to a few issues. For starters, Mexican stocks, up until early 2024, had been doing extremely well, outperforming broad emerging markets by a huge margin in each of the preceding two years. So, investors were likely poised to take profits. June's presidential election gave investors a catalyst to sell, too, when the left-leaning Morena party increased its majority and ushered in judicial reforms, worrying investors and business leaders about the future independence of the courts and rule of law. The election of Donald Trump in the US has only put more pressure on Mexican stocks and the peso, as markets anticipate more protectionist US trade policies and tensions related to border controls.

Where do we see an opportunity emerge? Even when accounting for elevated uncertainty in Mexico, we believe the market provides a decent entry point for long-term, valuation-oriented investors. First, Mexico's stock market is more domestically focused, even as its economy has strong ties to the US, making it less vulnerable to any potential trade issues under a Trump presidency. Second, the Mexican equity index is defensive, with more than 40% in consumer staples and communication-services stocks, where steady cash flows, dividends, and strong balance sheets coexist. Third, Mexican stocks are relatively cheap. With US equity markets near peak valuations, valuations in Mexico look more attractive, particularly given much of the future cash flows are coming from stable, defensive sectors. Our valuation models imply an annualized return of 8.5% in US-dollar terms over the next 10 years.

Brazil carries an even higher expected return. Our model implies a 12.5% annualized gain in US-dollar terms over the next decade, making it among one of the most attractively valued countries we track. Why has Brazil gotten so cheap? Well, its recent troubles owe in part to persistently high inflation and a resulting central bank pivot to hike rates. The perception of political meddling in the corporate affairs of semi-state-controlled behemoths Vale and Petrobras has also scared away investors. While we acknowledge some deterioration in corporate governance, we believe investors have overreacted. Brazilian companies offer generous yields, thanks to consistently high payout ratios. Granted, Brazil is one of the most cyclically oriented markets that we follow, and earnings will undoubtedly ebb and flow with the global economy. But for those willing to invest through the cycle, this market's cheap valuation offers a margin of safety not often found.

Macroeconomic and political concerns often sully emerging markets. But for long-term-oriented investors, a period of uncertainty can often be a great time to buy, particularly for those who can ride out short-term volatility. ■■

# 2

## How to Build a Portfolio to Reach Your Goals

Investing is fundamentally an exchange of spending power today for the attainment of a goal in the future. Building a portfolio to meet these goals requires a long-term perspective, a commitment to deep research, and a willingness to think (and act) independently. We share some thoughts on how to build a successful portfolio that meets these future needs.



## Key Takeaways

- + Investing starts with setting goals.
- + Those who struggle to set goals can benefit from a checklist approach.
- + Higher interest rates benefit investors with lower return requirements.
- + There are plenty of opportunities for investors requiring a higher return.
- + Successful portfolios are those that are resilient to a range of potential outcomes.

When it comes to portfolio management, many investors may want to jump straight into asset-allocation conversations. These investors are making the mistake of neglecting a key aspect of what defines a good portfolio: financial goals. Without the right goals in mind, investors cannot know their risk capacity or time horizon, therefore any conversations about asset classes or market opportunities are moot.

Our research indicates that investors may struggle to identify their financial goals because of behavioral biases inherent in the goal-setting process. We recommend taking the time to systematically understand your financial goals by following a vetted aid, such as the three-step process depicted in Exhibit 4. In our research, we found that this simple process is effective in helping people better articulate and identify their financial goals.

Once investors uncover their financial goals, they can quantify those goals and define their time horizons. Investors can think of these items — accurate goals, quantification of those goals, and defined time horizons — as the foundation of their portfolio. With these necessary inputs in mind, investors can now move on, bridging the gap between financial goals and investment outcomes by building portfolios that take advantage of the market landscape and are resilient to different market scenarios.

### Keeping an Eye Out for Market Opportunities

Investors benefit from the ability to adapt their portfolios to the market landscape because the risk/reward trade-offs best suited to meet investment goals vary across assets and through time. Moreover, there are many instances where the market or benchmark portfolio is not ideal for an investor with ambitious financial goals. Market-cap indexes, for example, tend to be more concentrated in the most overvalued positions, which can be a detriment to appropriate risk management.

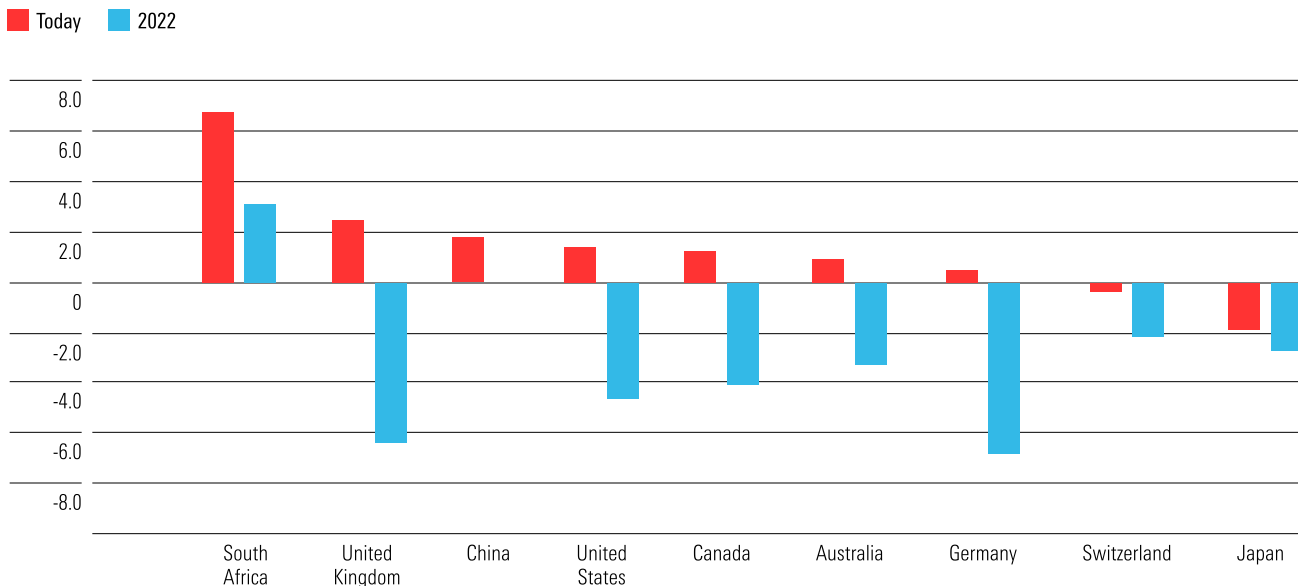
As we enter 2025, what the market is offering a goals-based investor is quite different than what it was offering just a few years ago, and we believe the current environment is a good one for a multi-asset investor. There are reasonable levels of return achievable without taking on excess risk.

An investor looking to meet an investment goal of 1% to 2% above inflation would not need to take on higher levels of investment risk by being fully invested in a 100% equity or equity-centric strategy. An income-focused multi-asset solution is more likely to both protect and grow that investor's capital. Since the beginning of 2021, the 10-year US Treasury yield has increased by more than 3%, and inflation has abated from its recent heights with the year-over-year US Consumer Price Index being less than 2.5% as of Sept. 30, 2024. Therefore, high-quality bonds offer a positive return over inflation, allowing clients to increase their purchasing power without taking on equity or credit risk.

### Exhibit 4: 3-Step Process to Identify Financial Goals

<p><b>What are your top three financial goals?</b></p> <p>Most important goal: Second-most important goal: Third-most important goal:</p>	<p>Here's a master list of common financial goals. Are there any goals here that are important to you? If so, check the box next to those goals. (Check five at most)</p> <ul style="list-style-type: none"> <li><input type="radio"/> To be better off than my peers</li> <li><input type="radio"/> To pay for personal self-improvement (e.g., go back to school, learn a skill)</li> <li><input type="radio"/> To experience the excitement of investing</li> <li><input type="radio"/> To start a new business</li> <li><input type="radio"/> To buy a house</li> <li><input type="radio"/> To help pay for my kids' college education</li> <li><input type="radio"/> To stop working and do something I love</li> <li><input type="radio"/> To go on a dream vacation</li> <li><input type="radio"/> To relocate in retirement</li> <li><input type="radio"/> To care for my aging parents</li> <li><input type="radio"/> To give to charity or other causes I care about</li> <li><input type="radio"/> To feel secure about my finances in retirement</li> <li><input type="radio"/> To feel secure about my finances now</li> <li><input type="radio"/> To leave an inheritance to my loved ones</li> <li><input type="radio"/> To retire early</li> <li><input type="radio"/> To pay for future medical expenses</li> <li><input type="radio"/> To not be a financial burden to my family as I grow older</li> <li><input type="radio"/> To manage my debt</li> </ul>	<p>Look at your initial list and master list. Consider the goals you wrote down and the goals you checked. Of these goals, what are the top three? Write them down in order of importance.</p> <p>Most important goal: Second-most important goal: Third-most important goal:</p> <p>Source: Morningstar Research.</p>
---	--	--

### Exhibit 5: 10-Year Sovereign Bond Yield Over Trailing 12-Month Inflation



Source: Bloomberg, Trading Economics. Data as of Sept. 30, 2024, and compared with Sept. 30, 2022.

But if your goals are more ambitious than simply outpacing inflation, we think there are also opportunities within risk assets that are priced to offer a reasonable risk/reward trade-off. Investors wanting to meet a more aggressive investment goal of 3% to 4% above inflation would be better suited to a more equity-centric portfolio to meet their higher-growth objectives. A multi-asset solution that combines the more predictable yield from fixed-income assets with the higher potential growth and capital upside from a diversified equity core provides the potential for superior risk-adjusted outcomes.

While equities in aggregate appear fully valued, there is a reasonable level of dispersion across sectors and regions to provide opportunities for the patient investor. US technology names have been standout contributors to global equity returns over the past two years, with the valuations of those leveraged to the AI theme appearing relatively full. But there are attractively valued opportunities elsewhere, such as smaller US companies and those in traditional industries that have fallen out of favor. With the global economic outlook remaining uncertain, there are also valuation opportunities in more-defensive areas of the equity market. Consumer staples and healthcare are two sectors that offer reasonable risk/reward trade-offs, particularly for those trading on European markets.

#### Building Resilient Portfolios

Unfortunately, investment returns don't usually come in a straight line. When constructing a portfolio, one must consider the range of potential scenarios moving forward and create a strategy that holds up across these outcomes.

For example, we believe looking to assets outside of fixed income as diversifiers may be wise given the uncertainty regarding inflation and interest rates, which has been amplified following the 2024 US election results. In this scenario, we look to historical periods for guidance, such as those before the 2000s when we experienced ultralow inflation and interest rates. In this environment, bonds did not always act as the equity hedge that many investors hoped for. Instead, many liquid alternative strategies were better equity diversifiers than fixed income.

#### Building a Robust Portfolio Aimed at Long-Term Financial Goals

Our perspective on building robust portfolios aimed at reaching investors' financial goals involves taking the time to uncover and quantify an investor's financial goals and then developing an investment strategy with allocations to defensive positions that provide downside protection in market drawdowns as well as more opportunistic allocations that provide considered upside participation during market rallies and recoveries.

While it's tempting to talk about the impact of economic and political events, the short-term sentiment stemming from those events tends to be just that—short-term. Thus, we believe that keeping an investor's financial goals at the forefront of portfolio decisions, following a repeatable valuation-driven approach, and unplugging from short-term noise give investors the best opportunity to meet their investment goals going into 2025. ■■

# 3

## Finding Returns in a Falling Rate Environment

As many central banks have started to cut interest rates, cash deposits look less attractive. We look at the alternative options.



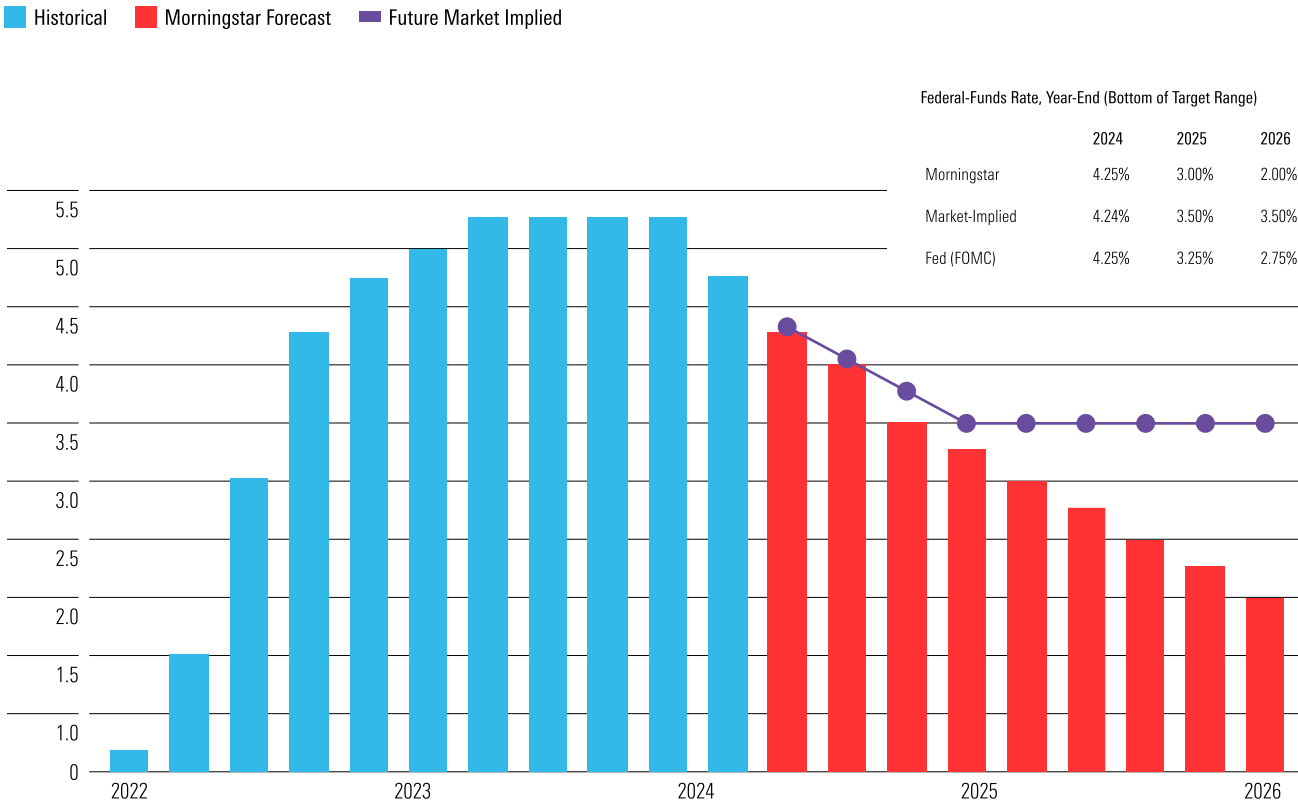
## Key Takeaways

- + As interest rates fall, cash is no longer the best low-risk investment.
- + Consider adding a little duration to your portfolio.
- + Avoid oversize credit positions.
- + Sprinkle in some emerging-markets debt.

With inflation on the downtrend and cash rates expected to fall around the globe, how should investors position the fixed-income portion of their portfolios? Here, we explore how investors can position their US Treasury, corporate bond, and non-US bond exposures in a falling interest-rate environment.

The Federal Reserve initiated interest-rate cuts in September 2024 after having kept the federal-funds rate at an elevated 5.25%–5.50% level since July 2023 to combat high inflation — a battle that appears mostly won. Entering this new phase in the monetary policy cycle, our economics team expects this rate to fall to the 4.25%–4.50% range by the end of 2024, 3.00%–3.25% by the end of 2025, and 2.00%–2.25% by the end of 2026, substantially reducing the income that bank deposits can generate.

Exhibit 6: Federal-Funds Rate, Year-End



Source: Chicago Mercantile Exchange, Morningstar.

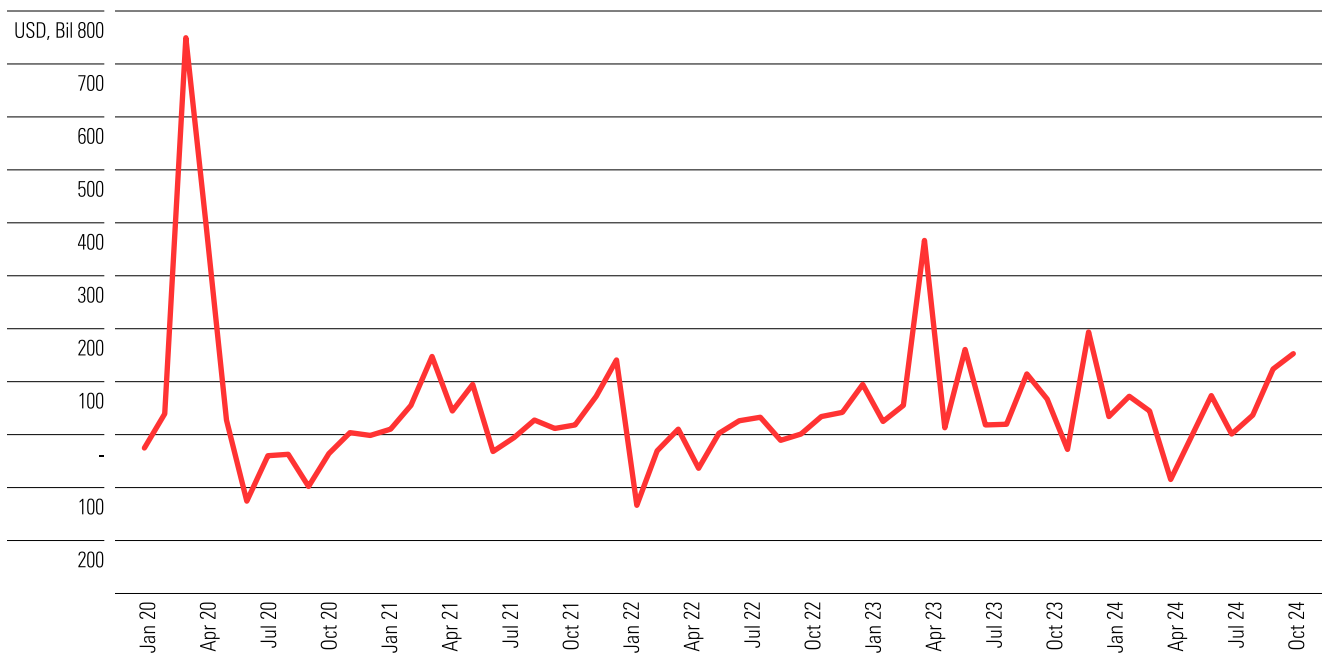


**US Treasuries: Cash Is No Longer King**

While cash deposits have many uses inside a portfolio, we continue to see elevated cash levels “on the sidelines” rather than making a useful contribution to returns. For a long-term investor, holding too much cash has historically led to lower long-term portfolio returns compared with nearly all other fixed-income asset classes. According to the Investment Company Institute, money market (cash) fund assets rose to USD 6.51 trillion as of Oct. 23, 2024. A further look at net monthly US money market fund flows highlights that investors have not unwound large cash hoards after the height of the covid pandemic.

Should our core federal-funds rate forecasts play out, investors would benefit by holding longer-term fixed-income bonds to maintain higher income levels. For example, the 10-year Treasury yield stands at 4.3%. If we assume a 1% term spread (the difference between shorter- and longer-term bond yields to account for the risk of longer-term investments), that implies an expected average federal-funds rate of 3.3% over the next 10 years. By contrast, we expect the federal-funds rate to average 2.3% over the next 10 years. Consequently, longer-term government bonds appear to offer an unusually high return relative to cash deposits.

**Exhibit 7: Net US Money Market Flows**  
(USD Billion)



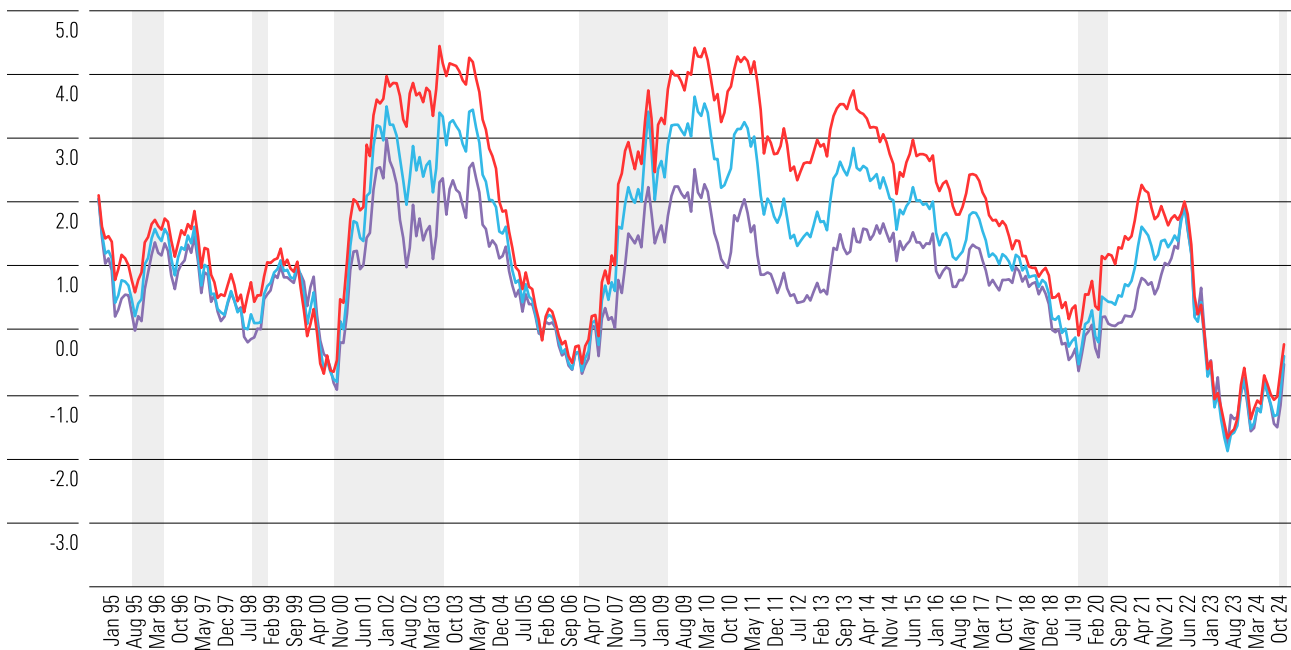
Source: Morningstar Direct. Data as of Sept. 30, 2024.

The benefits of holding cash fade in a world with falling global yields. By definition, cash cannot offer any price appreciation when rates decline, unlike longer-term bonds. This leaves income as the only return contributor for cash—a factor that will decline as the Fed continues to lower rates.

Now is a good time to move from cash to longer exposures. As Exhibit 8 shows, extending from cash now requires giving up less yield than at any point since 2022. The yield advantage dissipates quickly as easing cycles begin, so moving quickly has been rewarded. The intermediate segment of the yield curve (bonds with a five- to seven-year life) offers an attractive risk/reward balance as there is the opportunity for price appreciation without the larger drawdown risk that 30-year bonds carry if rates were to unexpectedly increase.

Exhibit 8: Yield Differentials (3 month = Cash Proxy)

30 Yr Treasury–3Mo 10 Yr Treasury–3Mo 5 Yr Treasury–3Mo Easing Period



Source: US Federal Reserve, Macrobond. Data as of Oct. 31, 2024.

**Credit Securities: Pennies in Front of a Steamroller?**

In contrast to government bonds, corporate debt offers unusually low returns for the additional risk that an owner must accept. While this may not come as news, a historical perspective reveals just how extreme current valuation levels have become. We can use credit spreads (technically the option-adjusted spread, or OAS), which measure the additional yield that investors receive to take on credit risk, as a proxy for valuations. The tighter the spreads, the more costly credit assets are.

Currently, US investment-grade corporate bond spreads are at their 16th percentile tightest level, last seen in 2021. During that period, the Fed’s unprecedented intervention in the corporate-bond market supported the economy’s recovery from the covid shock, with investment-grade spreads troughing at 81 basis points. Before that, spreads were last this tight in 2005—almost 20 years ago.

Exhibit 9: US Investment-Grade Corporate Bonds (0.84)

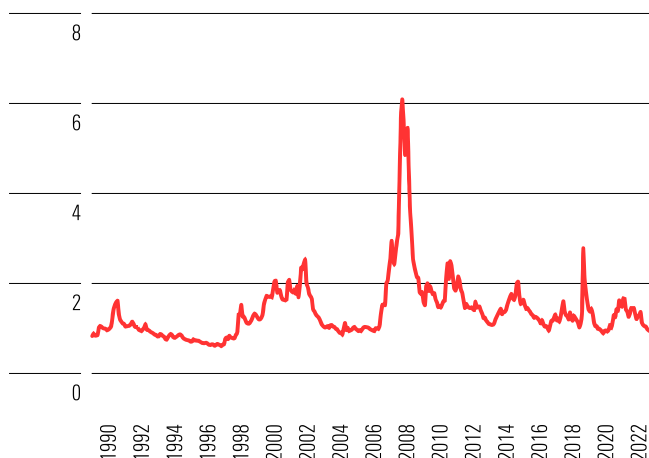
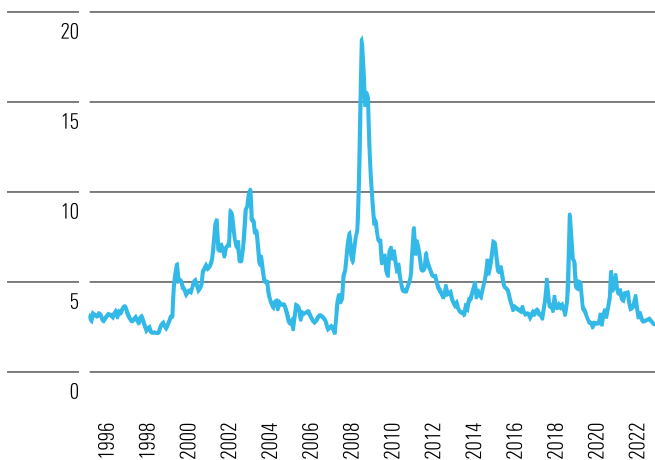
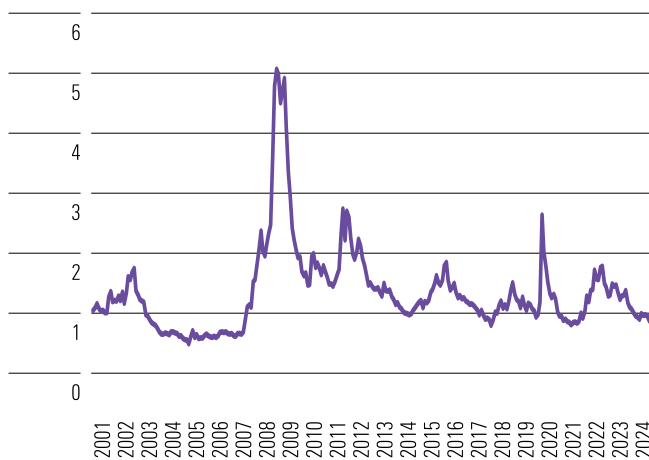


Exhibit 10: US High-Yield Corporate Bond (2.82)



For US high-yield bonds, the situation is even more pronounced. Today’s spread of 282 basis points places them at the 6th percentile tightest level in history.

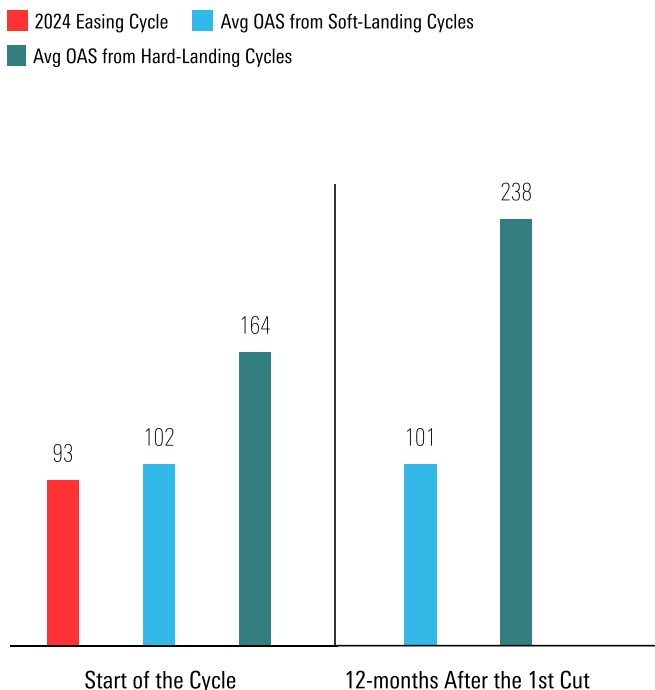
Exhibit 11: Global Investment-Grade Corporate Bonds (0.92)



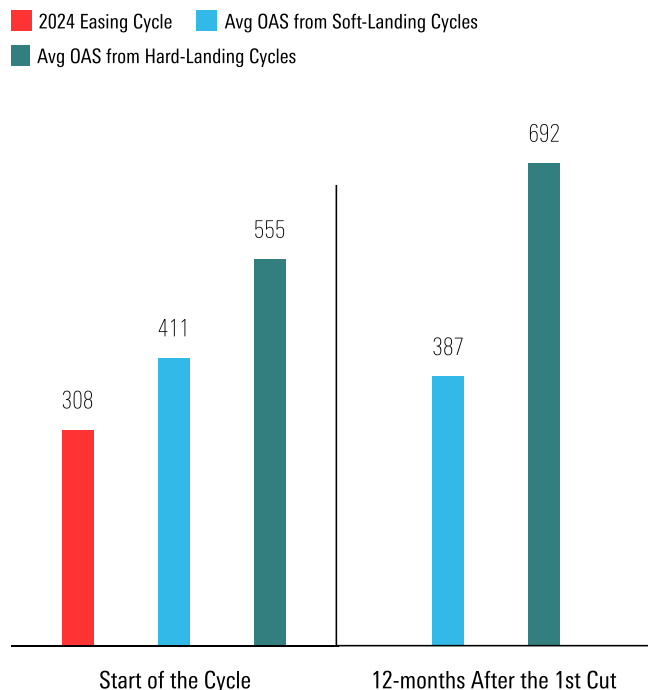
This trend is not confined to the US; global corporate-bond spreads are also compressed, sitting at the 18th percentile. While not as extreme as in the US, it’s clear that valuations are far from cheap.

Source: Bloomberg. Data as of Oct. 31, 2024.

### Exhibit 12: US Investment-Grade Corporate-Bond Spread Movements Current vs. Previous Easing Cycles



### Exhibit 13: US High-Yield Corporate-Bond Spread Movements Current vs. Previous Easing Cycles



Source: Bloomberg, Morningstar. Data as of Oct. 31, 2024

One might argue that, in a soft-landing scenario, tight spreads could persist, allowing investors to benefit from higher all-in yields. However, historical precedent offers a cautionary perspective. We examined the past six easing cycles since 1995, two of which did not coincide with a recession. In these two cases, credit spreads held steady in the 12 months following the first rate cut. However, the average starting spread level was notably higher than it is in the current cycle.

This points to an asymmetric risk profile for credit assets: limited upside owing to historically tight spreads, coupled with significant downside risk should the economy experience a hard landing.

#### Global Bonds: Emerging Land(s) of Opportunity

Outside of the US, we see some opportunities to add diversification and attractive yields to portfolios via global sovereign bonds. A simple rule of thumb when investing across the global-bond universe is to focus on real yields. In other words, look where nominal yields are higher than prevailing inflation and central bank inflation targets.

Under this framework, we see significant divergence across economies and countries. There are some very attractive real yields available in the emerging-markets space, including Brazil, whose five-year bond yield of 13.3% looks compelling against an inflation rate of 4.4%, and Mexico, which is issuing five-year debt with a yield of 10.4% against CPI of 4.6%.

Alternatively, in Europe and Japan, bond yields are not offering investors much headroom above inflation. In fact, in Japan, real yields are negative and there is a reasonable probability of further interest-rate hikes in 2025 if this persists. ■■

# 4

## The Pros and Cons of Investing in Private Assets

Private assets have risen to prominence over the past few years as more fast-growing companies are staying in private hands and others are seeking loans from nontraditional sources. We highlight the opportunities and challenges of investing in these popular assets.



## Key Takeaways

- + Public and private markets are converging, marked by new investing products.
- + The key challenge of investing in private assets is the lack of liquidity.
- + Australian superannuation funds provide a lesson on successful integration of private and public assets.
- + Private assets are even more heterogeneous than public assets.

The convergence of public and private markets in the United States became pronounced in 2024. It's a theme that's certain to continue through 2025, and several signposts marked its development: Cliffwater Corporate Lending, a private-credit interval fund distributed largely through registered investment advisors, exceeded USD 22 billion in assets after launching just five years ago; Capital Group and KKR partnered to launch interval funds in 2025 that will invest across public and private credit; Apollo and State Street Global Advisors filed to launch a private-credit exchange-traded fund; and BlackRock and Partners Group teamed up to create a model portfolio solution that plans to offer retail investors access to both public and "multi-private" assets.

Each of the three team-ups represents a different approach, with each attempting to address private markets' Gordian knot—liquidity—in a different way, with the SSGA/Apollo ETF being the most audacious. While we applaud efforts to meet investor demand, the liquidity risks associated with bringing private assets to retail products, as well as the potential costs associated with this convergence, are two areas that will draw our focus in 2025 and beyond.

The public-private convergence also appears to be largely taking place through private credit rather than private equity. For example, more than two thirds of both current and newly filed interval funds offer some form of credit exposure.

In our view, the market has coalesced around private credit as the leading edge of convergence for a number of reasons. Private credit can offer a return profile that is similar enough to public credit such that it doesn't meaningfully disrupt the total portfolio experience. The need for retirement income is a natural source of persistent demand. The nature of debt—it generates regular cash flow and self-liquidates through maturity, amortization, or refinancing—should make it easier to manage and own within semiliquid structures such as interval funds.

But there is one final reason: Private-company equities are more illiquid than private credit.

Private-equity exposure can come in many forms. While some interval funds take a fund-of-funds approach by being limited partners in buyout or venture capital funds, most of the industry buzz right now is around offering products that directly own private-company shares.

These products face significant structural challenges, though. First, pre-IPO companies in the US generally strictly limit shareholders' rights to sell their shares to another party, as they do not want meddlesome shareholders trying to dictate strategy. Further, the SEC can force a company to publicly report if it has 2,000 or more shareholders. Thus, most startups have a right of first refusal to any share sale, and it is not uncommon for them to require approval for any secondary trade at all. Managing investor flows in a continuously offered fund won't be easy given these liquidity constraints, and it will likely be particularly hard to source new shares to put investors' inflows to work in a timely manner, meaning cash drag can weigh on returns.

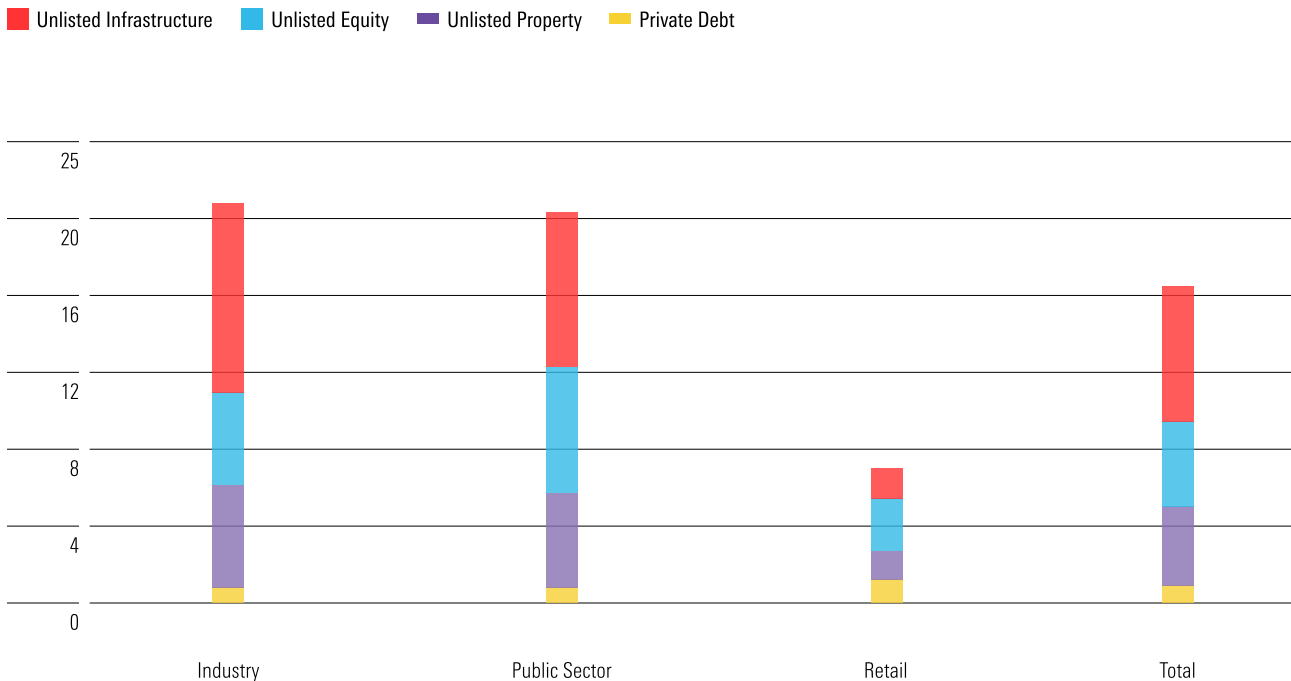
So far, the interval funds in the US that directly own private-company equity shares have not produced impressive returns. However, most of the funds are small, were launched in the past four years, and have faced an unfriendly market given higher interest rates and lower IPO volumes.

Competition among asset managers to lead this convergence of public and private markets should drive fees lower and create better products, although bringing complex and less liquid assets to the mass market remains largely uncharted territory—at least in the US.

### Private Assets: An Australian Pension Perspective

When it comes to retail investor exposure to private assets, Australia's superannuation pension system offers an insightful case study. Australia's super funds have successfully pioneered investment in asset classes such as unlisted infrastructure and property for decades, and many have made forays into private credit and private equity.

### Exhibit 14: Private Asset Allocation by Australian Superannuation Segment



Source: APRA. Data as of June 30, 2024.

Today, around 16.5% of sector assets are invested in private assets, although for the largest cohort, so-called “industry” funds, this figure exceeds 20%, with unlisted infrastructure as the most popular private asset allocation.

By allocating to private assets, Australian pension funds are playing to their strengths; their long-term investment horizon and liquidity profile neatly align with those of private assets. First, superannuation investors remain in the super ecosystem for decades. Second, with superannuation being compulsory—reaching 12% of Australian workers’ salaries in 2025—super funds can count on a steady, predictable stream of cash inflows to provide appropriate liquidity buffers. This enables a greater allocation to illiquid assets while being able to deftly handle sudden market selloffs and manage longer-term demographic risks.

As one of the key drawbacks of private assets—liquidity—is less of an obstacle for pension funds, the benefits of the asset class can be more freely utilized. A skilled private-asset investment manager can harness the complexity and liquidity premiums from direct investments. Private assets such as infrastructure can also offer direct access to key secular trends such as renewable energy. Additionally, classes such as core infrastructure also tend to have a revenue profile that offers strong inflation insulation, which was a benefit to investors in 2022 when equities and bonds both declined significantly.

Despite the benefits, private-asset investments by super funds have their drawbacks. Compared with public assets, valuations are infrequent—private assets are valued at intervals typically measured in months—and the local regulatory authority has only recently mandated valuations on at least a quarterly basis. A sharp, sudden economic jolt may see listed equities devalued instantaneously; private assets, meanwhile, may not be revalued for months thereafter. This can benefit members who switch out of their super fund before a private-asset revaluation, while those remaining are left to absorb the eventual devaluation. For this reason, super fund policies around out-of-cycle valuation triggers are receiving increased attention. Valuation assumptions are another area of recent focus; robust vetting by the fund is required to ensure that private assets are appropriately valued.

Of course, private assets are an umbrella term for what is, ultimately, a diverse asset class. That said, the superannuation fund experience demonstrates that private assets can play a positive role for individual investors, albeit in a setting such as retirement planning, where their potential drawbacks are tempered, and their benefits can be more freely cultivated. ■■

# 5

## The Impact of AI on Investing in 2025

As artificial intelligence continues to dominate the minds of investors, the opportunities are shifting. We look at where the best investments reside as we enter the new year.





## Key Takeaways

- + AI investing in 2024 focused on hardware and infrastructure.
- + The focus in 2025 is likely to move to businesses that can commercialize the use of AI.
- + Financial advice firms provide an interesting case study.
- + While clients are content with some uses of AI by advisors, they reject others.

During the gold rush, it's said that it wasn't necessarily the miners who got rich, but those who sold the picks and shovels. Fast forward to today, and it's those companies selling the graphics processing units and hardware to build out the infrastructure for artificial intelligence whose stocks have soared. For example, demand for Nvidia's GPUs is so high that its supply cannot keep up and pricing has shot through the roof. Cloud hosting platforms such as those from Amazon.com, Alphabet, and Microsoft are still seeing growth increase at an accelerating rate. Tying these together requires high-bandwidth networking equipment from suppliers such as Arista Networks.

Suppliers have not stood still and have invested tens of billions of dollars in building out their capacity. We expect 2025 will be the year that capacity begins to catch up to demand and the next evolution of AI will begin. The next step will be for corporations to embed AI within their products and services to drive revenue growth. Incorporating AI can give their products a competitive edge over competitors, providing the ability to capture new business and raise pricing as well as defend against customer attrition. For example, generative artificial intelligence within ServiceNow's Professional Plus tier continues to attract new customers to the platform and drive upsells from lower pricing tiers, which we think is now placing the company in the leadership position within enterprise software vendors. Not only have companies such as Amazon, Alphabet, and Microsoft provided AI infrastructure, but each has begun to disclose how AI is improving their business models by driving engagement.

Yet, it is not only on the top line where we see the benefits. Corporations are reexamining their business processes to determine where AI can be used to enhance productivity and drive efficiencies that in turn will bolster operating margins. For example, in its second-quarter earnings call, Walmart noted that it has used generative AI to improve its product catalog. Without the use of generative AI, this work would have required nearly 100 times the current headcount to complete in the same amount of time.

Those companies that drive revenue and/or expand operating margins will not only provide earnings growth today but either dig or widen their economic moats to bolster returns on invested capital for years to come. On the flip side of the coin, those companies that fall behind could quickly find themselves at a competitive disadvantage, suffer customer losses, lose pricing power, and suffer margin compression.

It's difficult to envision how a company would successfully leverage generative AI to drive growth given the novelty of the technology. Thus, we thought it would be instructive to provide a use case of how financial advisors are beginning to utilize AI within their practices. This serves both as an example of how it can benefit your own practice and as a way to help conceptualize the use cases that other businesses may leverage off the power of AI.

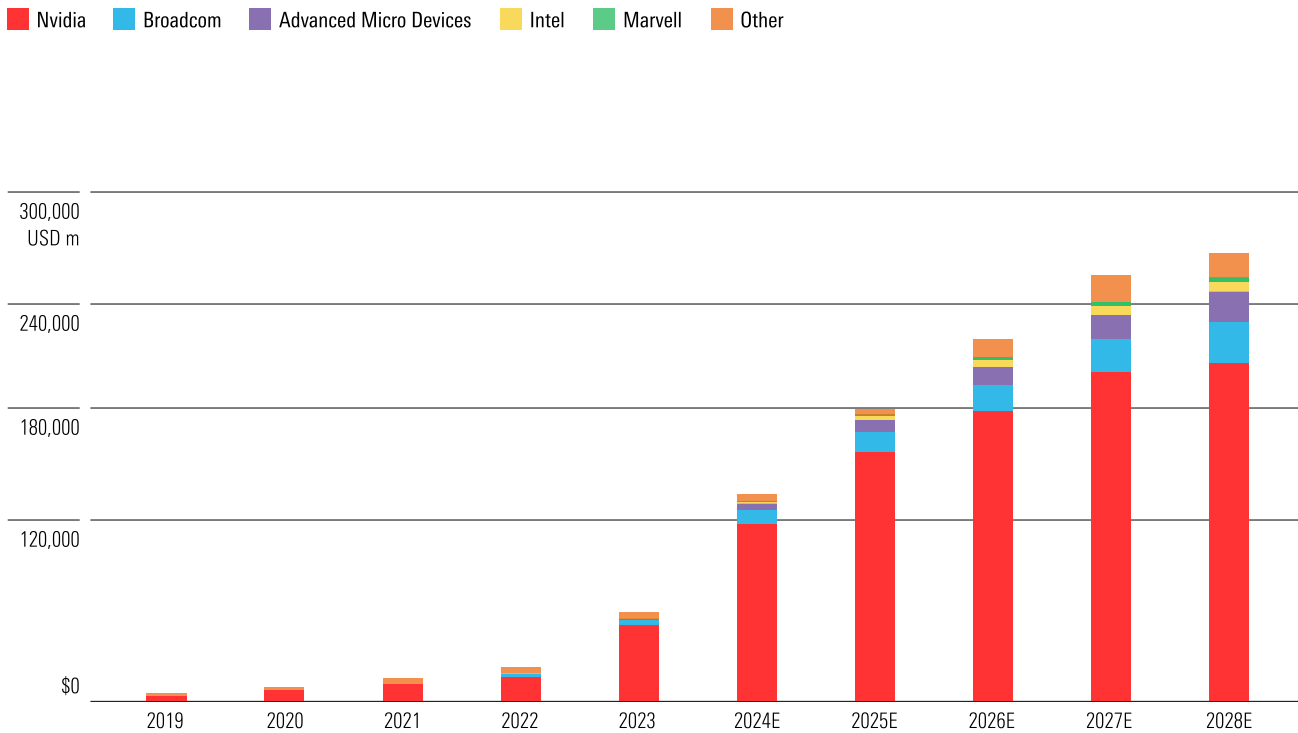
### Artificial Intelligence: Financial Advisor Use Case

Growth in the financial advising industry can be fickle, so advising firms (like all businesses) must ensure the time, energy, and capital invested in incorporating AI into their businesses are increasing profitability. Fortunately, incorporating generative AI in advisor workflows presents a clear path to improving revenue by revolutionizing how advisors spend one of their most valuable assets: time.

Research finds more productive advisors spend about 10% (approximately four hours) weekly working face-to-face with clients, allowing them to build deeper relationships, which can yield more assets under management. Advisors can buy back crucial hours working directly with clients by using AI to reduce the load of back- to middle-office activities such as administrative tasks, client meeting preparation, compliance, and investment research.

For example, some advisors use generative AI to take notes during client meetings and summarize the meeting afterward, saving time both following a meeting and when preparing for the next one. Other advisors may use generative AI to help create first drafts of educational materials they distribute to clients; this not only saves advisors time but also can help them provide valuable behavioral education to their clients more regularly. Furthermore, advisors may use generative AI to help produce marketing materials—an activity that not only frees up time to spend with clients but also has the potential to bring in new clients.

Exhibit 15: AI Accelerator Sales Will Quadruple Over the Next 5 Years With AI Demand



Source: Morningstar estimates, company documents. Data as of Sept. 11, 2024.  
An AI accelerator is essentially any chip specifically designed for AI workloads.

Exhibit 16: Stocks Mentioned in This Chapter

Name/Ticker	Rating	P/FV	Economic Moat
Nvidia NVDA	★★	1.33	Wide
Microsoft MSFT	★★★★	0.85	Wide
Alphabet GOOGL	★★★★	0.80	Wide
Amazon.com AMZN	★★★	1.01	Wide
Arista Networks AMET	★★	1.23	Wide
ServiceNow NOW	★★	1.12	Wide
Walmart WMT	★	1.50	Wide

Source: Morningstar. Data as of Nov. 19, 2024.

However, the advisory firm that finds the most uses for generative AI is not necessarily the one that will be the most successful in reaping its rewards: deployment matters. For one, such firms must ensure that their advisors and office staff use AI as intended to save time. An AI workflow cannot free up time if a human opts out of it or if its output is disregarded. This means that advisors must ensure those in their practice *trust* AI to take over the expected tasks by tackling issues like accuracy, reliability, and security. Similarly, freeing up time to spend with clients means little if the use of the technology alienates clients from their advisor. Morningstar research has found certain use cases of generative AI in financial planning (like personalizing emails or financial recommendations) can have a negative impact on the advisor-client relationship. Like workers, investors need insight into the accuracy, security, and reliability of an AI tool to trust its use. Therefore, the advisors who win by incorporating AI will be the ones who can free up time for client-facing activities while fostering trust in the use of the tool.

**Be on the Lookout for New AI Approaches**

Whether using AI for your own benefit or investing in those companies that will be able to leverage the power of AI, understanding the evolution of the scope and use cases for AI will be instrumental in 2025. ■■

# 6

## How to Build a Portfolio That Looks After You

Many investors, especially those who have retired, need a portfolio that meets their immediate income needs. This requires a different approach to that used when saving for the future. We identify the key challenges that income-focused investors face and how they can be overcome.



## Key Takeaways

- + Risk management is especially important when building income-focused portfolios.
- + Each risk requires a specific response.
- + Diversification is more than spreading your investment widely.
- + Intelligent diversification requires a strong understanding of the way assets behave in varied environments.

We are familiar with investing being focused on the future. However, there comes a point in most investors' lives when the capital accumulated in the portfolio is required to provide an income. This transition necessitates a different approach to investing, specifically one that is more focused on the risks that could prevent the portfolio from playing this role.

As we focus more on harvesting the returns of our portfolio and less on planting the seeds of future growth, risk management is naturally at the forefront of our minds. We have therefore identified key risks that investors in the harvesting stage of their investing careers should consider and how these may be addressed through robust investment selection and portfolio construction.

### Risk #1: Geopolitical Risks and Their Spillover Effects

Numerous political, military and macroeconomic issues mean that geopolitical risk will remain elevated in 2025. These risks can have negative spillover effects on the global economy. For instance, higher commodity prices, tariffs, and the reshoring of supply chains increase the risk of structurally higher inflation moving forward. In turn, bond investors may demand higher interest rates to compensate them for the risk of persistent inflation. Given the rise in government debt levels following the covid-19 pandemic, any increase in interest rates would make the cost of servicing that debt more challenging, forcing governments to cut spending, increase taxes, or both to bring their debt under control.

#### Response #1: Shorter-Dated Government Bonds

We believe that inflation and the fiscal deterioration of the US pose considerable risks to longer-dated bonds, and we therefore recommend that investors favor short- to intermediate-term government bonds. Although this may sound counterintuitive when the Fed is poised to deliver a series of rate cuts going forward, but market movements in the wake of the Fed's first rate cut in mid-September (short-term rates have fallen while long-term rates have risen) demonstrate that long-term interest rates are primarily driven by expectations around growth and inflation, and to a lesser extent by monetary policy.

### Risk #2: Rich Equity Valuations and a Strong US Dollar

US equities have handily outperformed international equities for over a decade. What's more, the US dollar has strengthened against a basket of major international currencies for over 13 years, accentuating the return differential between domestic and international stocks from the perspective of a US investor. It is a fool's errand to predict when these dynamics will reverse, but our valuation models suggest that US equities—especially large cap technology-related companies—are richly valued. Put simply, there are lofty expectations embedded in the prices of these assets, and their investment returns may suffer if these expectations are not met over the coming years.

#### Response #2: Dig Deeper Into the Market

As returns are strongly linked to the starting valuation of an asset, investors would be well served by emphasizing relatively unloved areas of the US market in their portfolios, areas such as smaller and midsize companies where valuations are less demanding. Furthermore, investors shouldn't abandon non-US stocks. Today, we see opportunities areas such as Chinese technology firms, Latin American equities, and European consumer cyclical stocks. Not only are these asset classes attractive on a local basis, but currency effects could provide further tailwinds to their US-dollar returns in the event of the dollar weakening.

### Risk #3: Disappointing Growth or Recession

Although a recession is not our base-case scenario for the year ahead, investors should never rule out such an occurrence, especially after a prolonged period of heightened interest rates and disappointing economic data. Furthermore, the low odds of recession implied by today's credit spreads and equity valuations leave investors particularly exposed to market reversals and negative surprises.

#### Response Number 3: Focus on the Quality of Your Bond Portfolios

When seeking protection from a recession, high-quality government bonds remain one of the most reliable assets to hold for diversifying equity risk, especially at current yield levels, as they provide the safety needed to protect investors' cash flows and portfolio value. Other assets with less sensitivity to real rates, such as liquid alternatives, can provide additional diversification in recessionary environments, but implementation via

manager selection remains key. For those investors employing private strategies to reduce volatility during selloffs, some words of caution are in order: Private equity is still equity, and private debt is still debt. Both have the same economic drivers as their liquid counterparts (often with much more leverage), and their reduced volatility relative to public assets is mainly illusory as they are simply priced less frequently.

This background on risks is important because it sheds some light on how we think about building portfolios looking forward to 2025 and beyond. We have been calling for a while on the need for investors, especially those focused on income, to prepare their portfolios for different outcomes via robust portfolio construction. We define a robust portfolio as one that can withstand different market environments without undermining its ability to deliver ongoing returns. Studying the historical behavior and understanding the underlying risk factors of each asset is essential to ensure that portfolio robustness is attained

and maintained over different time horizons. Prediction is a dangerous exercise as it is extremely hard to anticipate changes in correlations across assets and where risks will materialize in the future. Diversification is much more than just spreading your bets; it has to do with visualizing future risks and preparing for them by buying assets with attractive valuations and different underlying drivers.

Viewing investment through the lens of risk may appear counterintuitive, especially in a year when equities have risen so sharply. However, it is a necessary part of the transition from seeking future returns to reaping the returns of previous investing decisions. ■■

Exhibit 17: Asset Performance in Different Scenarios

		Recession	Low Growth Low Inflation	US Policy Rate Increasing	Positive Inflation Gap	High & Accelerating Inflation	World Equity Drawdown > 10%	Bond Markets Crash	Tech Stock Crash	Taper Tantrum	Financial Crisis
Equity	US Small Cap	-1.0%	16.6%	12.5%	3.4%	8.0%	-29.5%	1.0%	-21.6%	25.2%	-46.1%
Equity	US Large Value	-4.0%	15.8%	10.0%	5.9%	4.2%	-25.6%	3.2%	-8.7%	22.7%	-51.8%
Equity	US Large Growth	-2.8%	17.7%	10.5%	4.7%	5.0%	-29.9%	-1.3%	-36.4%	27.0%	-40.7%
Equity	EAFE	-10.4%	12.9%	12.0%	3.4%	3.3%	-33.0%	22.2%	-24.2%	20.5%	-45.0%
Fixed Income	High Yield	8.4%	15.6%	4.7%	3.2%	-0.7%	-6.0%	-2.5%	-3.2%	5.9%	-18.4%
Fixed Income	US Government	13.7%	11.3%	2.5%	5.0%	3.2%	11.1%	-7.0%	11.1%	-3.4%	9.6%
Fixed Income	US LT Treasury	17.0%	17.3%	1.4%	5.0%	-0.5%	15.5%	-16.0%	13.2%	-13.9%	13.3%

Source: Morningstar Direct, MIM. Data from July 31, 1975, to Dec. 31, 2022. Average annualized monthly returns are in US dollars. For illustrative purposes only. Past performance is not a guide to future returns. References to specific asset classes should not be viewed as a recommendation to buy or sell a specific security in those asset classes.

## Disclosures

These opinions are as of the date written, are subject to change without notice, do not constitute investment advice, and are provided solely for informational purposes.

Morningstar, Inc. and its affiliates shall not be responsible for any trading decisions, damages, or other losses resulting from, or related to, the information, data, analyses, or opinions, or their use. This document contains certain forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause the actual results to differ materially and/or substantially from any future results, performance, or achievements expressed or implied by those projected in the forward-looking statements for any reason.

The information, data, analyses, and opinions presented herein do not constitute investment advice; are provided solely for informational purposes and therefore are not an offer to buy or sell a security; and are not warranted to be correct, complete, or accurate. The information contained herein is the proprietary property of Morningstar, Inc. and its subsidiaries and may not be reproduced, in whole or in part, or used in any manner, without the prior written consent of Morningstar.

It is important to note that investments in securities (e.g., mutual funds, exchange-traded funds, common stocks) involve risk and will not always be profitable.

Stocks of small and mid-cap companies tend to be more volatile and less liquid than stocks of large companies. Small and mid-cap companies, as compared to larger companies, may have a shorter history of operations, may not have as great an ability to raise additional capital, may have a less diversified product line making them susceptible to market pressure, and may have a smaller public market for their shares.

Investing in international securities involve additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may increase these risks.

Fixed-income securities are influenced by interest rate sensitivity and credit risk. They have varying levels of sensitivity to changes in interest rates, but in general, the price of a fixed-income security tends to fall when interest rates rise and vice versa. The value of a fixed-income security with a longer duration or maturity is typically impacted more by a change in interest rates than one with a shorter duration or maturity.

U.S. Government securities are issued by the United States Treasury and backed by the full faith and credit of the U.S. Government. U.S. government agency securities are indirect obligation of the U.S. government and are issued by federal agencies and government sponsored entities. They have different levels of credit support and therefore different degrees of credit risk.

### Morningstar Medalist Rating™

The Morningstar Medalist Rating is the summary expression of Morningstar's forward-looking analysis of investment strategies as offered via specific vehicles using a rating scale of Gold, Silver, Bronze, Neutral, and

Negative. The Medalist Ratings indicate which investments Morningstar believes are likely to outperform a relevant index or peer group average on a risk-adjusted basis over time. Investment products are evaluated on three key pillars (People, Parent, and Process) which, when coupled with a fee assessment, forms the basis for Morningstar's conviction in those products' investment merits and determines the Medalist Rating they're assigned. Pillar ratings take the form of Low, Below Average, Average, Above Average, and High. Pillars may be evaluated via an analyst's qualitative assessment (either directly to a vehicle the analyst covers or indirectly when the pillar ratings of a covered vehicle are mapped to a related uncovered vehicle) or using algorithmic techniques. Vehicles are sorted by their expected performance into rating groups defined by their Morningstar Category and their active or passive status. When analysts directly cover a vehicle, they assign the three pillar ratings based on their qualitative assessment, subject to the oversight of the Analyst Rating Committee, and monitor and reevaluate them at least every 14 months. When the vehicles are covered either indirectly by analysts or by algorithm, the ratings are assigned monthly. For more detailed information about the Medalist Ratings, including their methodology, please go to: <http://global.morningstar.com/managerdisclosures>

The Morningstar Medalist Ratings are not statements of fact, nor are they credit or risk ratings. The Morningstar Medalist Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause expectations not to occur or to differ significantly from what was expected, (iii) are not guaranteed to be based on complete or accurate assumptions or models when determined algorithmically, (iv) involve the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, tax rates, exchange rate changes, and/or changes in political and social conditions, and (v) should not be considered an offer or solicitation to buy or sell the investment product. A change in the fundamental factors underlying the Morningstar Medalist Rating can mean that the rating is subsequently no longer accurate.

Analysts do not have any other material conflicts of interest at the time of publication. Users wishing to obtain further information should contact their local Morningstar office or refer to the Analyst Conflicts of Interest and Other Disclosures for North America, EMEA, or APAC at: <http://global.morningstar.com/managerdisclosures> under Section "Methodology Documents and Disclosures".

### Morningstar Rating

The Morningstar Rating for funds is a proprietary data point that is quantitatively driven. Funds are rated from 1 to 5 stars based on how well the fund performed (after adjusting for risk and accounting for sales charges) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive 5 stars and the bottom 10% receive 1 star. Funds are rated for up to three time periods—three, five, and 10 years—and these ratings are combined to

produce an overall star rating, which is noted within the Report. Funds with less than three years of history are not rated. Morningstar Ratings are based entirely on a mathematical evaluation of past performance. Star ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

For Recipients in Australia: This Report has been issued and distributed in Australia by Morningstar Australasia Pty Ltd (ABN: 95 090 665 544; ASFL: 240892). Morningstar Australasia Pty Ltd is the provider of the general advice ('the Service') and takes responsibility for the production of this report. The Service is provided through the research of investment products. To the extent the Report contains general advice it has been prepared without reference to an investor's objectives, financial situation or needs. Investors should consider the advice in light of these matters and, if applicable, the relevant Product Disclosure Statement before making any decision to invest. Refer to our Financial Services Guide (FSG) for more information at [www.morningstar.com.au/fsg.pdf](http://www.morningstar.com.au/fsg.pdf).

For Recipients in New Zealand: This report has been issued and distributed by Morningstar Australasia Pty Ltd and/or Morningstar Research Ltd (together 'Morningstar'). This report has been prepared and is intended for distribution in New Zealand to wholesale clients only and has not been prepared for use by New Zealand retail clients (as those terms are defined in the Financial Markets Conduct Act 2013). The information, views and any recommendations in this material are provided for general information purposes only, and solely relate to the companies and investment opportunities specified within. Our reports do not take into account any particular investor's financial situation objectives or appetite for risk, meaning no representation may be implied as to the suitability of any financial product mentioned for any particular investor. We recommend seeking financial advice before making any investment decision.

For Recipients in South Africa: This report has been issued and distributed by the Morningstar Investment Management group which comprises Morningstar Inc.'s registered entities worldwide, including South Africa. Morningstar Investment Management South Africa (Pty) Ltd is an authorised financial services provider (FSP 45679) regulated by the Financial Sector Conduct Authority and the entity provides advisory/discretionary management services to its clients. The information, views, and any recommendations in this report are provided for general information purposes only, and solely relate to the companies and investment opportunities specified within. Our reports do not take into account any particular investor's financial situation objectives or appetite for risk, meaning no representation may be implied as to the suitability of any financial product mentioned for any particular investor. We recommend seeking financial advice before making any investment decision.

For Recipients in EMEA: This Report is distributed by Morningstar Investment Management Europe Ltd which is authorised and regulated by the UK Financial Conduct Authority to provide services to Professional clients. Registered Office: 1 Oliver's Yard, 55-71 City Road, London, EC1Y 1HQ. Morningstar's fund research and ratings activities are not undertaken by Morningstar Investment

## Disclosures

Management Europe Ltd and therefore not regulated by the FCA. There are information barriers between Morningstar Investment Management Europe Ltd and other Morningstar research entities and any identified conflicts are managed in accordance with internal policies. Morningstar Investment Management Europe Ltd is a part of Morningstar Wealth EMEA – for more information, please visit [Morningstar Wealth EMEA Disclaimers](#).

For Recipients in Hong Kong: The Report is distributed by Morningstar Investment Management Asia Limited, which is regulated by the Hong Kong Securities and Futures Commission to provide services to professional investors only. Neither Morningstar Investment Management Asia Limited, nor its representatives, are acting or will be deemed to be acting as an investment advisor to any recipients of this information unless expressly agreed to by Morningstar Investment Management Asia Limited. For enquiries regarding this research, please contact a Morningstar Investment Management Asia Limited Licensed Representative at <https://shareholders.morningstar.com>.

For Recipients in India: This Investment Research is issued by Morningstar Investment Research India Private Limited (formerly known as Morningstar Investment Adviser India Private Limited). Morningstar Investment Research India Private Limited (CIN: U74120MH2013FTC249024), having its registered office at Platinum Technopark, 9th Floor, Plot No 17 & 18, Sector - 30A, Vashi, Navi Mumbai, Maharashtra, 400705, telephone number 022-61217100, is registered with SEBI as a research analyst (registration number INH000008686). In the event of any grievance, please contact Ms. Rashmi Pandit (Compliance Officer) or Mr. Mohit Agarwal on [Compliance.In@morningstar.com](mailto:Compliance.In@morningstar.com) or on the telephone number, 022-61217100.

Morningstar Investment Research India Private Limited has not been the subject of any disciplinary action by SEBI or any other legal/regulatory body. It is a wholly owned subsidiary of Morningstar Investment Management LLC, which is a part of the Morningstar Investment Management group of Morningstar, Inc. In India, Morningstar Investment Research India Private Limited has only one associate, viz., Morningstar India Private Limited, and this company predominantly carries on the business activities of providing data input, data transmission and other data related services, financial data analysis, software development etc. the Research Analyst has not served as an officer, director or employee of the relevant asset manager(s)/trustee company/ies, nor has the Research Analyst or associates been engaged in market making activity for the subject mutual fund(s).

The Research Analyst has not served as an officer, director or employee of the fund company within the last 12 months, nor has it or its associates engaged in market making activity for the fund company.

For Recipients in Japan: The Report is distributed by Morningstar Japan, Inc for informational purposes only. Neither Morningstar Japan, Inc., nor its representatives, are acting or will be deemed to be acting as an investment advisor to any recipients of this information.

For Recipients in Singapore: This report is distributed by Morningstar Investment Adviser Singapore Pte Limited, which is licensed and regulated by the Monetary Authority of Singapore to provide financial advisory services in Singapore. Recipients of this report should contact their financial advisor in Singapore in relation to this report. Morningstar, Inc., and its affiliates rely on certain exemptions (Financial Advisers Regulations, Section 28(1) (e), Section 32B and 32C) to provide its investment research to recipients in Singapore.

For Recipients in Korea: The Report is distributed by Morningstar Korea Ltd., which has filed to the Financial Services Committee, for informational purposes only. Neither Morningstar Korea Ltd, nor its representatives, are acting or will be deemed to be acting as an investment advisor to any recipients of this information.

### About Morningstar Manager Research

Morningstar Manager Research provides independent, fundamental analysis on managed investment strategies. Analyst views are expressed in the form of Morningstar Medalist Ratings, which are derived through research of three key pillars—People, Parent, and Process. A global research team issues Managed Investment Reports on strategies that span vehicle, asset class, and geography. Medalist Ratings are subjective in nature and should not be used as the sole basis for investment decisions. A Medalist Rating is an opinion, not a statement of fact, and is not intended to be nor is a guarantee of future performance.

### About Morningstar Manager Research Services

Morningstar Manager Research Services combines the firm's fund research reports, ratings, software, tools, and proprietary data with access to Morningstar's manager research analysts. It complements internal due-diligence functions for institutions such as banks, wealth managers, insurers, sovereign wealth funds, pensions, endowments, and foundations. Morningstar's manager research analysts are employed by various wholly owned subsidiaries of Morningstar, Inc. including but not limited to Morningstar Research Services LLC (USA), Morningstar UK Ltd, and Morningstar Australasia Pty Ltd.

### About Morningstar Behavioural Insights Group

Morningstar's Behavioural Insights Group researches how people make decisions about risk, money, and investing. We use our results to better understand and empower investors and the advisors who serve them. We produce original research, processes, and tools that investors can use on their own or with the guidance of a financial advisor. We are an interdisciplinary group bringing together methods and expertise from psychology, economics, and finance. Our current work centers on the intricacies of the client-advisor relationship, personalization, goal-centric investment planning, and the impact of new investment products and technology on investor decision-making.

### About Morningstar's Equity Research Group

Morningstar's Equity Research Group consists of various wholly owned subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC and Morningstar Holland B.V. Morningstar's Equity Research Group produces analysis, estimates and ratings on stocks through qualitative and quantitative means. The ratings for stocks are forward-looking assessments and include assumptions of future events, which may or may not occur or may differ significantly from what was assumed. Ratings on stocks are statements of opinions, subject to change, are not to be considered as guarantees, and should not be used as the sole basis for investment decisions. This publication is for informational purposes only; references to securities should not be considered an offer or solicitation to buy or sell the securities.

### About Morningstar Wealth

Morningstar Wealth is a global organization dedicated to empowering the success of advisors and individual investors alike. Our extensive range of offerings includes the Morningstar International Wealth Platform; investment strategies such as Model Portfolios and SMAs managed by the Morningstar Investment Management team, with \$328 billion in assets under management and advisement as of September 30, 2024; Morningstar Office (portfolio management software); ByAllAccounts (data aggregation and enrichment); Morningstar Investor (an all-in-one investment platform for individual investors that delivers research, portfolio tracking, and tools to build and monitor wealth); and Morningstar.com (a leading resource offering market insights, investment research, and educational content to help investors make informed decisions across a range of investment topics and goals).

\*