

Pushing On

Navigating opportunities in
fixed income and beyond

2024 INVESTMENT OUTLOOK



State of the Markets

Top five risks & opportunities



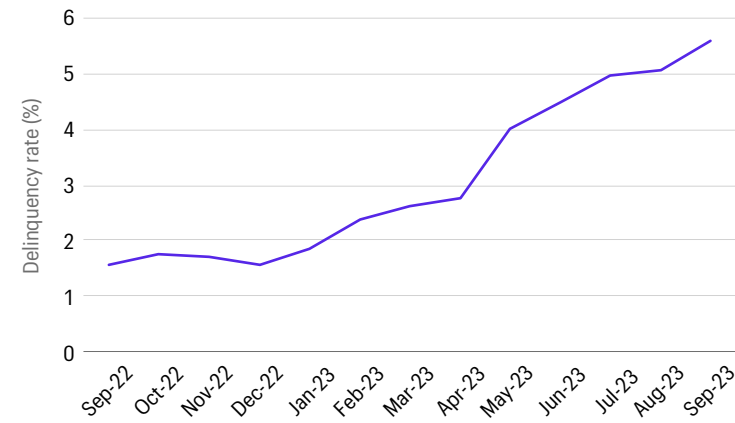
John Hockers, CFA, PRM
Co-Head of Investment Analytics



Matthias Scheiber, Ph.D., CFA
Head of Systematic Multi-Asset,
Systematic Edge

If ever there were a time to bring multiple views together to assess the markets, now would be it. We've asked two senior leaders from our Investment Analytics (**John Hockers, CFA, PRM**) and Systematic Edge (**Matthias Scheiber, Ph.D., CFA**) teams to share their predictions for the top five economic risks and opportunities in 2024.

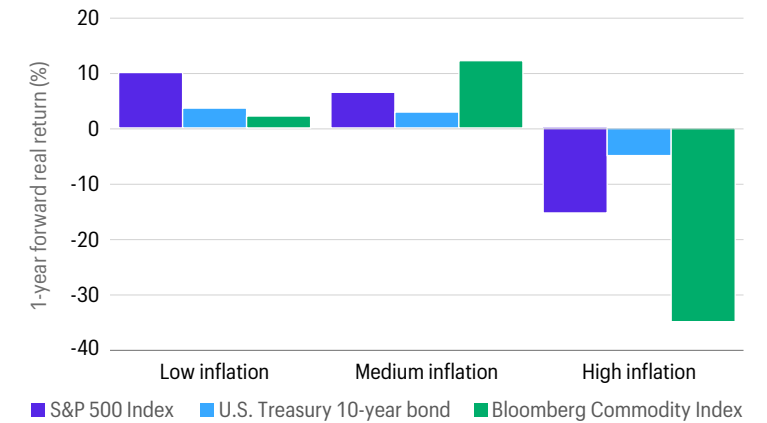
CHART 1: DELINQUENCY RATE FOR OFFICE PROPERTY LOANS MORE THAN TRIPLED OVER 12 MONTHS



Sources: Allspring and Trepp, as of September 2023

Loan delinquency rates are represented by delinquency rates for office property commercial mortgage-backed securities.

CHART 2: EXPECTED RETURNS ONE YEAR AHEAD BASED ON THE PREVIOUS YEAR'S INFLATION RATE



Sources: Allspring and FactSet

One-year-ahead calculations are from 31-Dec-71 through 31-Dec-22 for the years 1972 through 2023.

TOP FIVE RISKS

01 A global recession can't be ruled out.

The odds for a global recession are rising. Growth in international markets has already slowed, and U.S. growth will likely slow in 2024. While bad news economically, it could be good for asset prices if the slowdown is shallow. Europe is unlikely to add stimulus to revive economic growth as long as inflation stays high, and China is grappling with a slowing housing market and potential deflation of an asset bubble. In the U.S., interest rates are the highest in a decade, COVID stimulus is sunsetting, and student loan payments have resumed. **Consumers could tighten their spending, which could push the U.S. and Europe toward recession.**

02 Elevated interest rates are likely for at least the first part of 2024.

Consumer demand will likely decline, pressured by lower real wages and personal savings. Part of central banks' job in 2023 was to tighten financial conditions from very loose levels. Nominal rates had to rise while inflation fell, pushing real yields higher. **In 2024, real yields could fall back as the economy slows, and the U.S. dollar may weaken.**

03 Conflicts worldwide could escalate.

There are currently two main hot spots, and either one **could trigger a global equity sell-off:**

- Russia may conclude it's losing in Ukraine and pivot its strategy to include expanded environmental or nuclear terrorism to halt Ukrainian advances.
- A direct conflict between Iran and Israel or Iran and the U.S. could put Persian Gulf energy supplies at risk.

04 Commercial real estate (CRE) defaults could accelerate.

With employees working remotely more often, companies continue reducing office space. For CRE owners, fewer tenants mean less income. Today's higher rates complicate CRE debtors' ability to meet interest payments, driving higher delinquency rates. **Increased CRE defaults (Chart 1) could challenge investments tracking bond indexes.**

05 Sticky inflation will likely continue.

While inflation has fallen globally in 2023, more progress is needed—inflation in the U.S. and Europe is still nearly double the 2.0% target. Our research indicates progress will be hard unless demand slows. But there's good news: **Market expectations for inflation by year-end 2024 are 2.5%.**

TOP FIVE OPPORTUNITIES

01 Fixed income is likely to provide compelling investment opportunities.

- **Money market** yields are likely to remain robust. For investors worried about recession or geopolitical events, temporarily parking cash in money markets while their yields remain above the inflation rate could be lucrative.
- If there's a recession, **high-quality, long-duration bonds could rally.** When the Federal Reserve (Fed) cuts rates, longer-duration securities generally tend to rally. **U.S. municipal bonds may be among top performers globally in 2024,** especially for investors who can benefit from preferential U.S. tax treatment.

02 Alpha-generation potential should increase.

High short-term interest rates should lead to wider dispersion in 2024. Our analysis of historical trends (**Chart 2**) indicates an optimistic outlook for major asset classes given inflation's retreat into a "medium" 2%-4% range. The initial impact may be mixed, but alpha opportunities should increase.

- **U.S. small-cap stocks** hugely underperformed in 2023 but **could stage a 2024 comeback.**
- We see **value in U.S. bonds** for 2024 given higher real yields.

03 Emerging market (EM) equities (excluding China) may perform well.

If there's a recession in early 2024 and the U.S. dollar declines relative to other currencies, **EM equities could be poised to benefit** when recovery begins. Here's why:

- EM securities trade in local currencies. If those currencies increase versus the dollar, U.S. investors make money on exchange-rate changes.
- EM debts are partially in U.S. dollars, so when the dollar declines, EM debt costs do, too.
- Many EM countries (excluding China) sell commodities, which often rally when the dollar declines.

04 Real returns should be a key focus.

Focusing on real income and real capital growth will likely be essential to preserve purchasing power in 2024. With sticky inflation, real cash yields likely won't generate investors' desired investment outcomes. This environment **could favor real-return strategies focused on equities and higher-income bonds.**

05 Diversification using liquid alternatives could be beneficial.

Higher interest rates should make liquid strategies more attractive than illiquid strategies. **Focusing on liquid alternative investments** could be crucial as growth uncertainty persists. High asset class correlations can compromise diversification. **Market-neutral and alternative real-return strategies** offer uncorrelated returns to traditional assets.



Are Higher Fixed Income Allocations Warranted Today?

Capital market assumptions

Systematic Edge Team

The low interest rate era following the Global Financial Crisis challenged many individuals and institutions that required a specific level of return—whether a public pension with a 7% or greater return target, an endowment seeking to distribute 5% per year, or an individual seeking a 7–8% return.

Until recently, these investors may have believed their targets were unattainable without taking inappropriate amounts of risk. But today, the opportunity set is much more aligned with these total return benchmarks than it was only two short years ago. Below, we discuss how capital market assumptions (CMAs) have changed since late 2021 and what’s driven them. Our analysis reveals that most investors can pursue the return targets we noted with portfolios as conservative as 20% equities and 80% fixed income. Generally, we conclude that going forward, greater reliance on fixed income is warranted for a range of desired outcomes.

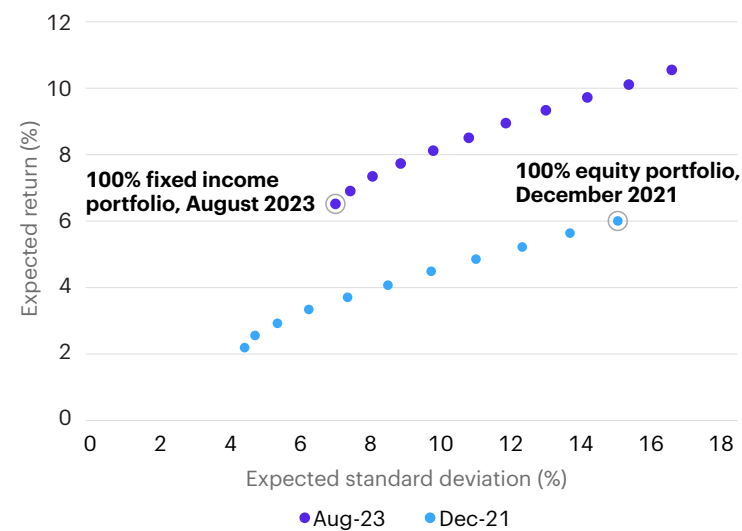
How have CMAs changed?

Since year-end 2021, the efficient frontier for an equity/fixed income portfolio has shifted to the northeast, according to our evolving CMAs (see adjacent chart). The efficient frontier plots the 10-year expected returns and volatility of a two-asset portfolio consisting of hypothetical combinations of the MSCI ACWI 100% Hedged to USD Index (USD) and the Bloomberg Global Aggregate Bond Index (USD Hedged). The shift’s severity is notable in that a 100% fixed income portfolio today has a higher expected return and markedly lower expected volatility than a 100% equity portfolio at year-end 2021. More generally,

all possible equity/fixed income allocations currently exhibit greater efficiency from a risk/return perspective in spite of moderately higher expected volatility.

So, what accounts for this drastic shift, and what does it mean for selecting an optimal allocation?

ALLSPRING 10-YEAR HORIZON CMA TOTAL RETURN FRONTIERS



For illustrative purposes only.

Source: Allspring

The chart presents 10-year expected annualized return and risk assumptions for hypothetical combinations of the MSCI ACWI 100% Hedged to USD Index (USD) (equity) and the Bloomberg Global Aggregate Bond Index (USD Hedged) (fixed income) at December 2021 and August 2023.

“ ... a 100% fixed income portfolio today has a higher expected return and markedly lower expected volatility than a 100% equity portfolio at year-end 2021.”



HIGHER CASH RETURNS

It’s important to remember that expected cash returns are embedded in both fixed income and equity CMAs. The rate-hiking cycle that began in March 2022 has been among the most rapid in history. According to the Federal Reserve Bank of St. Louis, the effective federal funds rate of 0.08% in December 2021 rose to 5.33% in August 2023, marking a 5.25% jump in less than two years. It’s not reasonable to expect that cash yields will persist at current levels indefinitely. However, of the current 6.4% CMA for fixed income and 10.3% for equities, fully 4.4% comes from a higher cash return assumption over the 10-year forecast period.¹ This compares with a 1.5% cash return assumption in December 2021, suggesting that 2.9% of the shift in the frontier is attributable to cash returns alone.

CMA	CASH RETURN	FIXED INCOME RETURN	EQUITY RETURN
December 2021	1.5%	2.1%	6.0%
August 2023	4.4%	6.4%	10.3%
Change	+2.9%	+4.3%	+4.3%

For illustrative purposes only.
Source: Allspring

HIGHER EXPECTED RETURNS AND VOLATILITY FOR RISK ASSETS

Beyond the cash return contribution to this shift, we note that December 2021 marked peak or near-peak levels in both fixed income and equity markets, reflecting the very powerful post-COVID rebound. The ensuing period brought a significant drawdown across the spectrum of risk assets. Required risk premiums for fixed income and equities since then have jumped and are embedded in our updated CMAs, which now have higher expected returns and higher volatility.

ARE HIGHER FIXED INCOME ALLOCATIONS MORE APPROPRIATE TODAY?

Many investors have a specific return target they need to achieve to fulfill their desired investment outcomes. For most, return targets of 7% to 8%+ today may be well within the scope of traditional equity/fixed income allocations. Dramatically higher cash returns mean these investors may take much less equity exposure to pursue their targets. If cash returns do start retreating, then this may need to be revisited. But, for now, other things equal, a (significantly) higher allocation to fixed income may be appropriate for many investors.

1. Cash return assumptions are based on Systematic Edge team research estimates combined with Federal Reserve long-term estimates.



Yield Advantage: Riding the Curve

2024 fixed income road map



George Bory, CFA
Chief Investment Strategist,
Fixed Income

Bond investors worldwide can use three basic principles to manage risk in 2024:

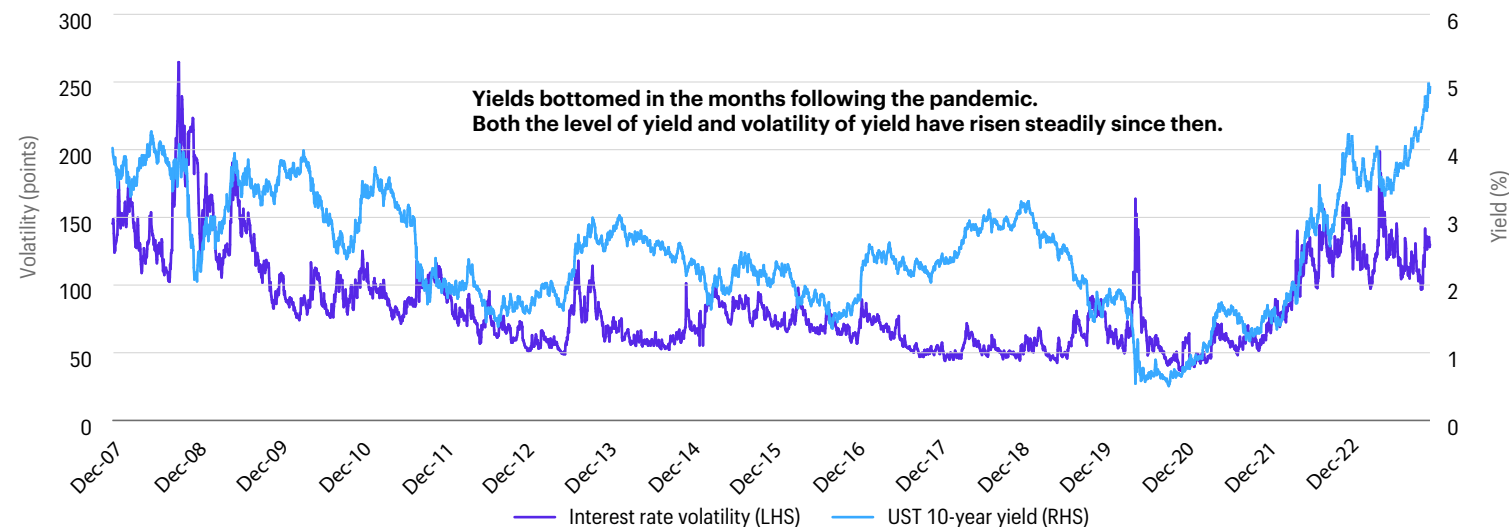
- 01 Diversify duration.** A relatively flat yield curve reduces the opportunity cost of extending or shortening duration, but it increases the risk of being too concentrated in one part of the curve.
- 02 Prioritize flexibility.** A wide range of macro risks has increased the dispersion of expected outcomes. Implementing many small decisions across multiple sectors and maintaining investment flexibility is preferable to investing based on one big macro view.
- 03 Be intentional with risk.** High nominal yields and generous real yields create an opportunity to build durable, inflation-beating cash flow streams over the coming years.¹

The global macroeconomic backdrop heading into 2024 is a mix of peak (or near peak) front-end interest rates, modest disinflation, and uneven growth. This is coupled with notably higher real

yields across the sovereign bond landscape. We believe the coordinated move higher in global bond yields could fragment as the broad reset in asset prices runs into domestic macroeconomic considerations and business cycles.

Fixed income markets should progress along a path of “normalization” in 2024 as policymakers around the world continue to remove many of the support structures set up after the Global Financial Crisis and carried through the COVID pandemic. Many investors will find it challenging to separate structural shifts from cyclical changes as they recalibrate to this new environment. Highly indebted entities face fiscal, or even solvency, pressures due to higher borrowing costs and tighter financial conditions. However, prudently financed public and private sector borrowers possess considerable advantages. In this environment, the cone of uncertainty has widened considerably as investors confront a broad range of potential economic, political, and social outcomes in 2024 and beyond. As such, higher levels of volatility will likely continue during this transition phase.

INTEREST RATE VOLATILITY & YIELD



Source: Bloomberg Finance L.P. Interest rate volatility is represented by the ICE BofA MOVE Index. UST 10-year yield is represented by the generic U.S. Treasury 10-year note. Data presented from 31-Dec-07 through 05-Oct-23.

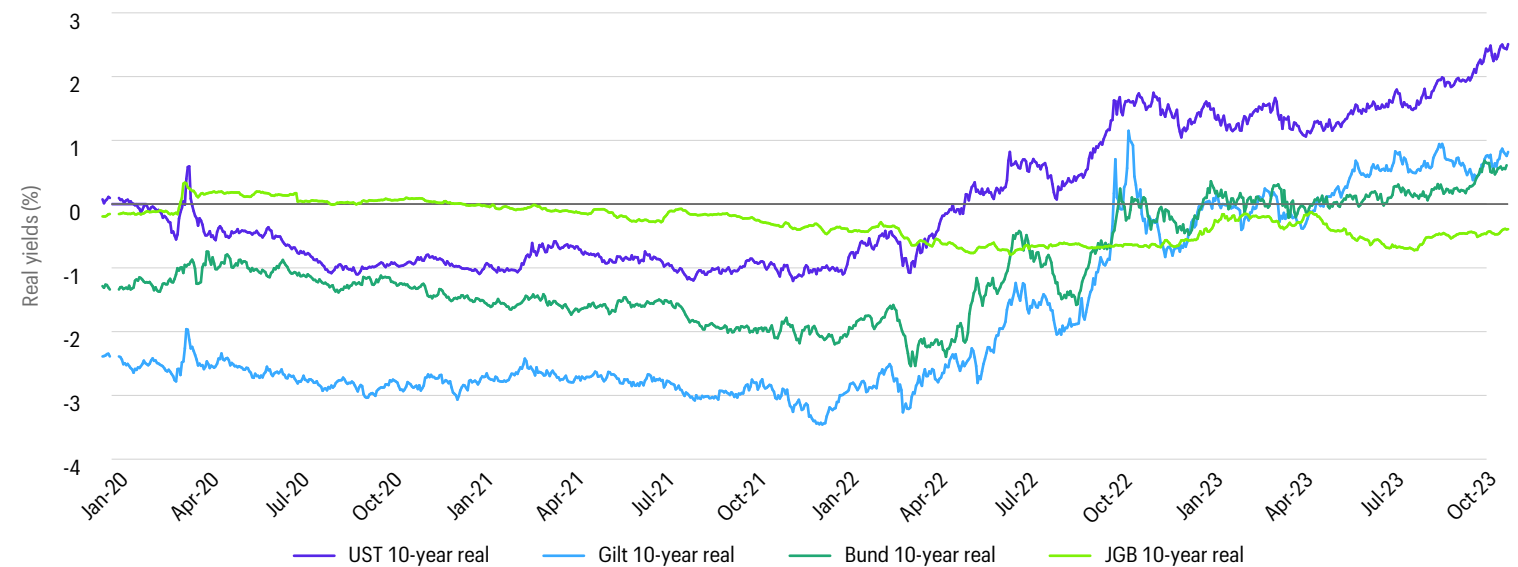
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1. Nominal yield is the stated yield or coupon rate of a bond. Real yield subtracts the expected inflation rate from the nominal yield.

“ Fixed income markets should progress along a path of ‘normalization’ in 2024 as policymakers around the world continue to remove many of the support structures set up after the Global Financial Crisis ...



GLOBAL REAL YIELDS



Source: Bloomberg Finance L.P. Real yields are represented by the difference between the generic 10-year government bond yield and the 10-year breakeven inflation rate. Data presented from 01-Jan-20 through 24-Oct-23.

Volatility in fixed income markets presents both challenges and opportunities. Long-held assumptions about the market’s structure and/or valuation principles may need to be revisited. However, volatility also presents an opening for educated investors. Risk premiums tend to widen and grow as uncertainty mounts, allowing investors a chance to capture these premia and carry them forward. In addition, price dispersion across sectors, issuers, and securities will likely expand, which should benefit investors who can monetize security selection and reduce dependence on large macro or directional positions.

With nominal yields at multidecade highs, higher interest rate uncertainty is currently priced into markets. Further, breakeven inflation rates remain anchored around 2.5% in the U.S., and they hover around 2.3% in Germany and 3.5% in the U.K. As a result, real yields around the world appear generously high,

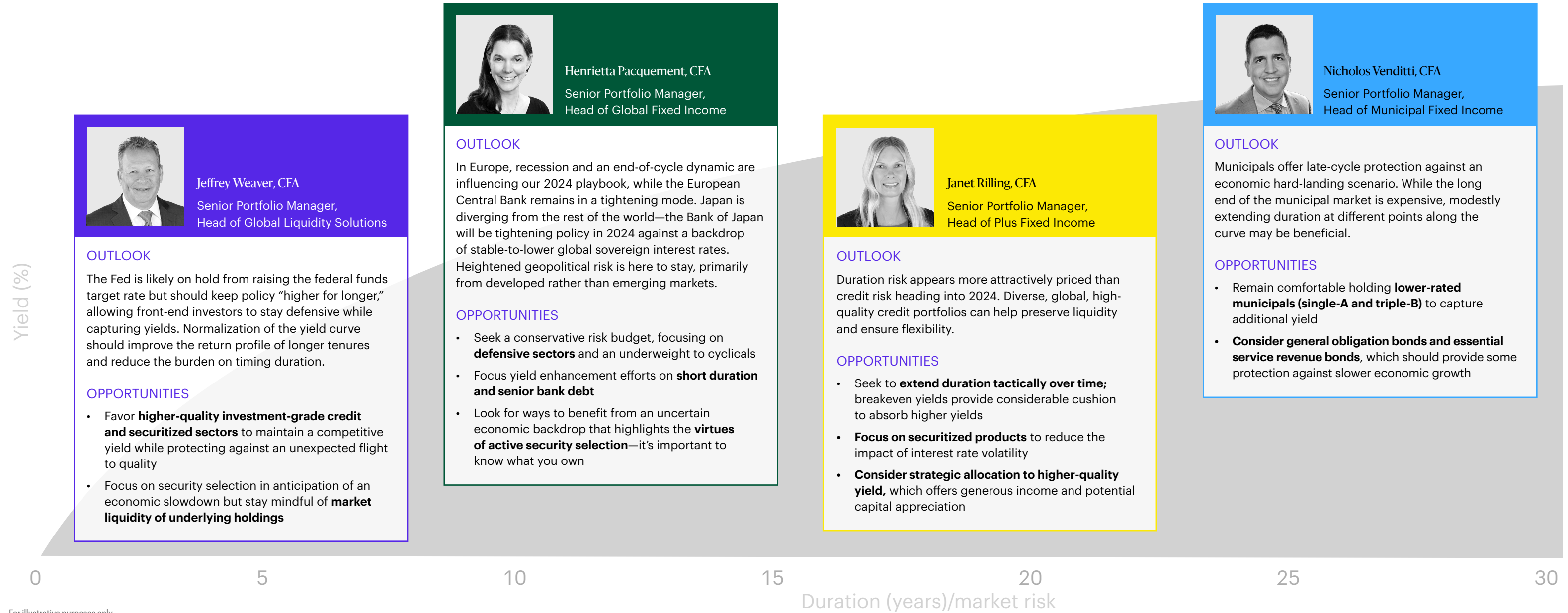
reflecting a disconnect between near-term uncertainty about inflation and longer-term expectations. This suggests issuers will face higher borrowing costs and, where possible, may adjust their funding decisions, including limiting their use of debt financing in the near term.

For investors, this presents an attractive opportunity to lock in long-term real yields of 100 basis points (bps; 100 bps equal 1.00%) to as much as 300 bps in liquid, higher-quality bonds. These bonds may exhibit near-term volatility, but over time, they should outperform the gnawing effects of inflation and compensate for an uptick in credit risk. Given this repricing, bond investors in all regions have the opportunity to diversify their duration positioning, Ride the Curve to capture positive real yields, and generate a steady and predictable stream of cash flows.



Riding the Curve in Fixed Income

Allspring's fixed income managers invest along the curve



Allspring fixed income key statistics¹:



170+ dedicated fixed income investment team members



\$415 billion in total fixed income AUA across the platform



Over **2,250** corporate credits analyzed globally



11th-largest money market fund sponsor/family²



Galliard Capital: One of the largest managers of stable value assets in the nation³

1. Allspring and affiliates. Figures are as of 30-Sep-23, unless otherwise noted. Please note that the assets under advisement (AUA) figures provided include discretionary and nondiscretionary assets and have been adjusted to eliminate any duplication of reporting among assets directed by multiple investment teams and includes \$86 billion from Galliard Capital Management (\$68 billion stable value; \$17 billion fixed income). AUA includes nondiscretionary assets that are not captured in Allspring's assets under management (AUM) figure of \$491 billion, which includes Galliard, an investment advisor that is not part of the Allspring trade name/GIPS firm. Numbers may not add up to the total presented due to rounding.

2. iMoneyNet. As of 30-Sep-23.

3. Pensions & Investments, data as of 31-Dec-22; total assets “ranked” are managed by Galliard and reported under Allspring Global Investments.



Uncovering Quality Through the Fog

Equity markets outlook



Ann Miletta
Head of Active Equity, Chief Diversity Officer

Given *everything* that transpired in 2023 and the ramifications that will carry forward, the outlook is foggy for equity markets in 2024. However, three expectations stand out for me:

- 01** Bad news first: The prospects are increasing for a 2024 recession.
- 02** Quality small- and mid-cap equities may be poised to outperform.
- 03** Defensive sectors could rally.

Yes, a recession may be in the cards.

Allspring's analyses indicate we could see a global recession in 2024—as John Hockers and Matthias Scheiber explained earlier in this report. However, any meaningful slowdown could help lower inflation further. Also, interest rate expectations could adjust lower—which may be a mixed blessing initially for the equity market as it could possibly pressure earnings.

Think quality small/midsize when pursuing 2024 equity opportunities.

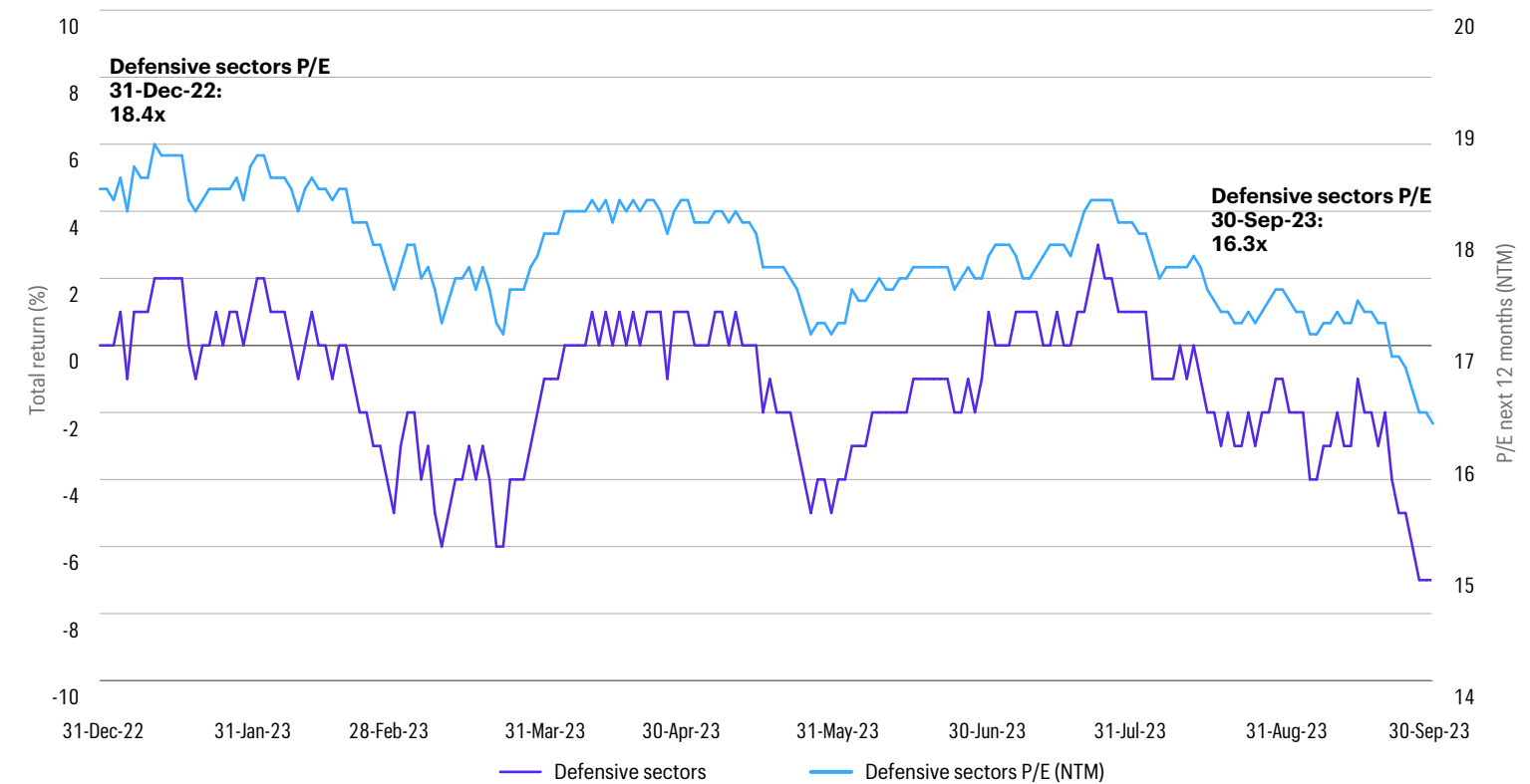
While major equity indexes rose during 2023, large-cap indexes led the market by far. Given the huge return disparity between

large-cap and small-/mid-cap stocks, the valuation spread between these groups has widened tremendously—and this valuation differential makes small/mid caps quite attractive relative to their larger counterparts. When seeking small-/mid-cap opportunities, however, it's critical to evaluate each company's quality to help determine whether it's an appropriate holding for your portfolio and tolerance for risk.

Defensive sectors could be attractive in 2024.

Utilities, consumer staples, real estate investment trusts, and health care—four defensive sectors—delivered weak results in 2023. Health care in particular underperformed substantially amid secular and cyclical concerns. The projected impact of GLP-1 drugs and their ability to dramatically lower obesity levels caused widespread multiple contraction as the market began assessing what impact a “thinner” population could have on volume and demand trends across the health care system. That came on top of some cyclical pressures the industry was already dealing with, such as ongoing staffing problems, reduced patient volumes, and rising inflation since the pandemic. However, trends like the application of more artificial intelligence (AI) capabilities, greater focus on preventative health care, and quality-of-life improvements for the elderly hold promise for a turnaround in 2024. In addition, should 2024 deliver a recession, defensive sectors have tended to withstand that pressure.

WITH DEFENSIVE SECTORS DOWN OVER 7% YTD THROUGH 30-SEP-23, THEIR VALUATIONS HAVE BECOME MORE ATTRACTIVE



Sources: Allspring and FactSet, as of 30-Sep-23.
 Defensive sectors' average returns and P/E NTM are based on S&P 500 sector total returns and average P/Es NTM, respectively.
 Note: Real estate multiple is calculated via price/funds from operations (P/FFO) NTM
 P/E = price/earnings ratio, which relates a company's share price to its earnings per share.

Key characteristics of quality companies:



Competitive advantage: A differentiated product or service with strong customer demand



Fluid cash flow: Sustainable cash generation through all parts of the economic cycle



Proven management team: Skilled capital allocators who have experience navigating through an economic cycle



Well-structured balance sheet: Modest financial leverage, elongated maturity profile, margin of safety versus debt covenants



“Leaning in” to quality to drive performance



Bryant VanCronkhite, CFA
 Managing Director, Senior Portfolio Manager,
 Special Global Equity

Before: Fed monetary policy amid low inflation enabled low-quality companies to thrive.

Up until 2021, the U.S. enjoyed several decades of below-target inflation. Globalization and technological advancements dominated those decades, driving meaningful reductions in costs for basic goods and services and the labor required to produce them. During this period, the Fed’s freedom to add capital and keep rates low biased its support toward the weakest companies in every industry. Low loan rates minimized interest expenses for highly indebted companies, which could then spend more cash on investments, share buybacks, and dividends. This reduced the ability for high-quality companies to differentiate from low-quality firms.

In that environment, increased use of passive indexes over active management became a dominant equity theme. This wasn’t without cause. For over 20 years, it became challenging for the average active manager in certain equity categories to beat their respective benchmarks. When viewed through the lens of the Fed’s continuous capital injections and low rates that supported low-quality businesses, this makes sense. Active managers don’t own low quality—it’s their job to find and own high quality. But the indexes hold all companies, including low-quality ones. The monetary paradigm at the time directly supported passive investing at the expense of quality active managers.

Now: The paradigm has shifted, and high-quality companies are poised to stand out.

The deflationary drivers of globalization have moved toward deglobalization—for example, friendshoring (shifting production away from geopolitical rivals to friendly countries)—which tends to be inflationary. The energy transition toward sustainable/green sources also is inflationary.

We’ll likely be living in this higher interest rate regime for an extended period, which will remove the tailwind for low-quality companies and passive investing—providing active managers with a more productive opportunity for outperformance. Higher interest rate environments increase the cost of capital, thus reducing the number of viable uses of capital to a small subset that can produce adequate returns. With less capital available and a shrinking set of strong risk-adjusted projects, the number of firms demonstrating the ability to sustain and grow returns on invested capital is likely to shrink.

Quality businesses with strong competitive advantages, strong earnings and cash flow, and low levels of debt are poised to clearly differentiate themselves via competitive, sustainable results going forward. Active management via the ownership of quality is well positioned to support investment goals under the current paradigm.

“ Active management via the ownership of quality is well positioned to support investment goals under the current paradigm.



Expanding your toolkit could improve your outcomes



Megan Miller, CFA
 Head of Systematic Edge Options,
 Co-Head of Custom SMA Investments

Uncertainty was a major theme globally throughout 2023, and as Ann discussed earlier, we expect the foggy view to continue into 2024. In times like this, investors’ uncertainty tends to create a double-edged sword: Market volatility has increased, but that may also lead to potential opportunities for outperformance. The environment we have now calls for bolstering portfolio assets by seeking more consistent returns and risk-reducing strategies. One approach to consider to meet this objective is employing an options-based strategy to complement an equity portfolio.

Equity market derivatives, such as options, are an effective tool to manage equity risk and provide increased flexibility, enabling investors to adjust portfolio risk and return expectations materially. In challenging times like now, it’s important for market participants to reconfirm what kind of outcomes they’re looking to achieve—whether that be steadying portfolio values, increasing cash flows from investments, or focusing on long-term growth despite short-term disruptions. Systematic option strategies may be used to achieve all of these outcomes and more.

Income generation from an options strategy could be particularly useful for defensive positioning when equity market outlooks call for increased risk or muted forward-looking returns. These strategies are designed to add value during times of market stress and could reduce the drag caused by portfolio volatility over the long run.

The lasting impact of portfolio losses is not symmetric: As the percentage of loss grows, the percentage of gain required to break even grows even faster. For example, a 30% loss on \$100—to \$70—requires a 43% gain to return to \$100, while a 50% loss on \$100—to \$50—requires a 100% gain to get back to even. By helping smooth equity volatility and reducing the legacy of loss, option strategies could enable a portfolio to grow at a higher compounded return over time.

While 2024 may be foggy, expanding your investment toolkit increases your flexibility to take on the road ahead.

A systematic options strategy can generate consistent income while mitigating equity risk, adding value to a portfolio:



How is income generated?

Consistent cash flow from options offers a diversified source of income and can potentially add value to a portfolio’s equity exposure.



How is risk mitigated?

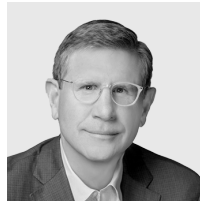
By helping smooth the ups and downs from equity volatility, the impact of large portfolio losses due to volatility fluctuations can be reduced—securing larger portfolio balances that enable the portfolio to grow at a higher compounded return over time.



Forging Our Own Path

PM evolution at Allspring

We asked **Jon Baranko** and **Dan Morris**, our chief investment officers for Fundamental and Systematic Investments, respectively, about two key topics at Allspring: the company's efforts to generate and employ fresh perspectives that elevate our clients' experience and its progress in applying AI and machine learning within the investment process.



Jon Baranko
Chief Investment Officer,
Fundamental Investments

HOW IS ALLSPRING EVOLVING AS AN ASSET MANAGER TO ENHANCE THE TRADITIONAL OPERATING MODEL AND EMBRACE INNOVATION?

I believe all innovations we undertake at Allspring must be targeted at elevating the client experience. This has two primary dimensions: How can we enhance our investment decision-making to improve our clients' investment performance, and how can we use innovation to provide access to the insights of our key decision-makers?

When I speak with clients, I'm reminded of the value of providing better context and depth to our portfolio managers' views. We work with distribution and marketing to improve responsiveness to investor inquiries at all stages of client engagement and to scale access to the most relevant and impactful content. This includes not only a full variety of media formats and distribution methods to expand reach, but also building content that is demand-driven and shaped by continuous feedback from the field. This philosophy also drives product development, allowing us to identify the right investment vehicles and build them cost-effectively for different investor segments.

WHAT ARE SOME OF THE EFFORTS YOU'VE MADE TO INNOVATE WITHIN THE FUNDAMENTAL INVESTMENT ORGANIZATION?

I believe our risk management framework and suite of proprietary tools can ultimately improve our ability to generate consistent returns in active management. The mission of our Investment Analytics team is to offer investment teams an edge

over competitors who are overly reliant on "off-the-shelf" tools. This team is developing a hybrid risk analytics platform, which combines proprietary software and vended risk models into a highly automated risk reporting infrastructure. This provides a more transparent view of the risk profiles of holdings and prospective holdings and greater speed in getting information into the hands of decision-makers.

Our Quantitative Insights & Data Science group is developing a machine-learning tool called CASPR®, which stands for Computer-Aided Selection Process. It uses transaction histories to learn which companies may be a good fit for specific Allspring strategies in real time. Its output provides portfolio management teams with ideas for investment. While investment decisions always reside within our teams, we believe the evolution of technologies like this has the potential to enhance the quality, speed, and conviction of buy and sell decisions.

HOW DO YOU SUPPORT YOUR TEAMS AND INSPIRE THEM TO DRIVE INNOVATION?

Technology is critical, but it's important to recognize that innovation is primarily a human endeavor. We are committed to attracting the brightest and most talented people in the industry to our organization. We are also committed to evaluating our client outcomes in the context of our peers. Allspring's mission is to elevate investing to be worth more, and our culture, beliefs, and values are critical to our future success. Ultimately, we seek to foster an environment that brings diverse people, ideas, and skills together to help our clients pursue their financial goals.

“ Technology is critical, but it's important to recognize that innovation is primarily a human endeavor.



“ The incentive to collaborate is rooted in identifying how research findings can be implemented into real investable solutions for the client.



Daniel Morris
Chief Investment Officer,
Systematic Investments

HOW IMPORTANT ARE AI AND MACHINE LEARNING TOOLS TO SYSTEMATIC EDGE?

Tools like AI and machine learning help distill raw data into signals that can inform our investment process. For example, we've leveraged a variety of large language models that can efficiently sift through news feeds and press releases for changes in sentiment. We continuously refine and use this to bolster our assessment of dividend policies, where shifts in sentiment on, say, looming business challenges, required capital expenditures, or competitor actions can be explanatory variables for future dividend increases or cuts. The scale of this work on a universe of thousands of securities is not feasible for a human analyst, but it presents a natural-use case for a machine learning application.

However, with any model, it's important to recognize that outputs can lend a false sense of security in their predictive value. I think the true value of these tools lies in the unbiased vetting of their output for informational value and then finding the best ways to translate this into portfolio positions that support desired client outcomes.

HOW DOES THE PROCESS OF VETTING THESE TOOLS WORK WITHIN YOUR TEAM?

This is where the team dynamic comes into play. First, you need people with raw skills who are pushing the boundaries in quantitative research, in new programming tools, in sector and asset class research, and in fundamental research.

Second, you need people who are willing to work with others who have completely different skill sets and who are comfortable challenging and being challenged by colleagues. The incentive to collaborate is rooted in identifying how research findings can be implemented into real investable solutions for the client.

The final hurdle is implementation. If we find that our research passes this test, we're comfortable that we've addressed the client need. Often, this process can reveal new questions that guide future research efforts. It can also reveal findings we can share with the client.

CAN YOU GIVE AN EXAMPLE OF HOW CLIENT FEEDBACK WORKS IN PRACTICE?

While we know at the outset of a client engagement what unknowns we need to solve for, a client's feedback helps us better understand their needs, where to focus our research, and ultimately which investment solutions to identify.

For example, a common theme we've identified among our clients is a growing concern about sustained inflation. This has directed our attention to fine tuning inflation sensitivities of client exposures—both at the asset class level and across their broader portfolios. Another theme that has become more prominent this year is mega-cap dominance in equities. Generally, high-beta stocks have performed well in 2023. This has channeled our research efforts toward gaining a better understanding of how equity betas may be affected under different economic regimes. From a portfolio perspective, today's jittery markets have supported a growing client preference for strategies that improve diversification and reduce market exposure.

Multiple client goals can often be addressed in a single implementation. Recently, a client who was aware of our experience managing long/short strategies asked us to design a bespoke portfolio to optimize market exposure to different macro environments, improve geographic diversification, and target a more consistent expected return profile. The resulting market-neutral portfolio was a completely new strategy for this investor. I think this example underscores the role that trust and partnership play in helping clients achieve better outcomes.

To learn more

We want to help clients build for successful outcomes, defend portfolios against uncertainty, and create long-term financial well-being. Visit our website at www.allspringglobal.com.

Contact details

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- For retail clients, contact your financial advisor.
- To reach our intermediary sales professionals, contact your dedicated regional director, or call us at **+1-866-701-2575**.
- To reach our institutional investment professionals, contact your existing client relations director, or email us at **AllspringInstitutional@allspringglobal.com**.
- To reach our retirement professionals, contact your dedicated defined contribution investment only specialist, or call us at **+1-800-368-1370**.

FOR EMEA AND APAC INVESTORS ONLY

- To reach our EMEA- and APAC-based investment professionals, contact us at **AllspringInternational@allspringglobal.com**.

FOR SUSTAINABLE INVESTING

- To discuss sustainable investing solutions, contact **Henrietta Pacquement**, head of Sustainability, and **Jamie Newton**, deputy head of Sustainability, at **henrietta.pacquement@allspringglobal.com** and **jamie.newton@allspringglobal.com**.

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