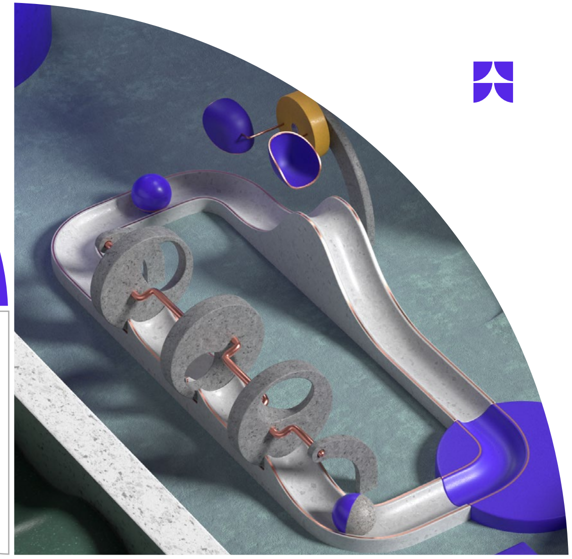


There IS an Alternative:

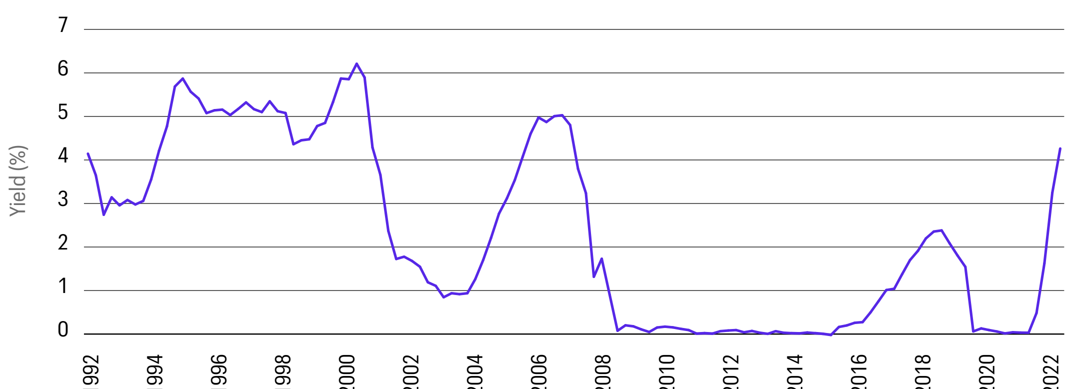
Fixed Income Road Map—2023

GEORGE BORY, CFA
+ Chief Investment Strategist, Fixed Income

For much of the past 15 years, the Fed maintained a zero-interest-rate policy. Other global central banks took rates deep into negative territory. This period of ultra-low rates across global fixed income markets was a game changer for cash investors and for those looking to preserve principal and earn income above the rate of inflation. With few options to generate income and a meaningful return, many investors felt the pressure of TINA ("There Is No Alternative" to adding risk) and shifted allocations from traditional publicly traded fixed income markets into equities and private markets.

Toward the end of this period, ultra-loose monetary policy collided with two massive global supply-side shocks within a two-year span: COVID-19 and war in Eastern Europe. This ignited an inflationary surge not seen in nearly half a century. To realign monetary policy with the new macroeconomic landscape, the Fed raised rates faster and higher in 2022 than at any other time in history. Byproducts of this record-breaking policy shift were an increase in yields at the front end of the yield curve and a sharp repricing of much of the global bond market. Today, yields are close to their highest levels in 15 years.

TREASURY BILL (T-BILL) YIELDS SURGED HIGHER IN 2022



Source: Bloomberg, as of 05-Dec-22; U.S. 3-month T-bill (USGG3M Index)

The landscape has changed yet again. After 15 years in the wilderness, meet TIA (**T**here **I**s an **A**lternative). Looking forward, we believe publicly traded bonds can provide investors with three long-awaited benefits:

THE BENEFITS OF PUBLICLY TRADED BONDS TODAY

HIGHER INCOME to compensate investors for inflation and credit risk

A MORE GENEROUS BUFFER against future volatility

IMPROVED DIVERSIFICATION against cyclical economic risks

Below, we suggest ways that all three of these benefits can be extracted from rejuvenated bond markets.

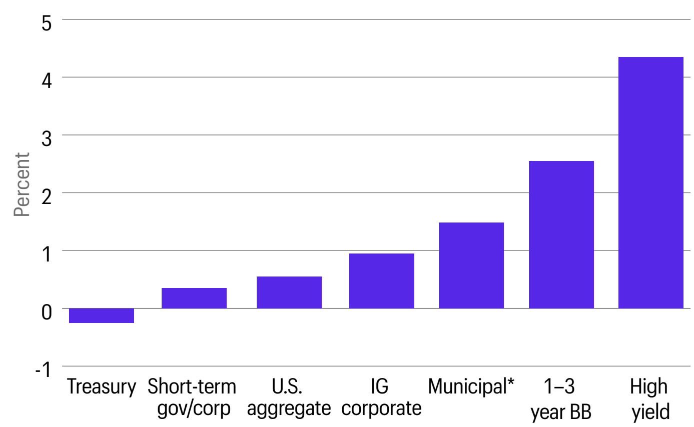
01 Income generation

Much of the bond market has followed the upward move in front-end yields, and wider spreads have pushed credit yields even higher. As a result, all-in yields across many fixed income sectors are close to their highest levels in over a decade and are well clear of the now-higher cash hurdle rate.

With average yields for U.S. Treasuries at about 4%, investment-grade corporates and tax-exempt municipals at roughly 6%, and high yield bonds and leveraged loans at 8% to 10%, we believe fixed income investors should be compensated for both inflation and credit risks this year and beyond.

Core inflation (as measured by the Consumer Price Index [CPI] excluding food and energy) recently peaked at 6.25%. The Fed has stated it intends to drive this measure down toward 2.00% over the next two years. To do so, it will likely need to raise rates above current inflation and maintain that rate until inflation falls close to target. Since both the inflation rate and the federal funds rate are moving targets, we expect them to cross at around 5% sometime during the first half of 2023. If and when this occurs, the Fed would be viewed as "ahead of the curve" and would likely become more deliberate and, importantly, patient with monetary policy changes. Indeed, Fed Chair Powell suggested as much during a recent Brookings Institute speech.[1]

HIGHER YIELDS GENERATE HIGHER INCOME

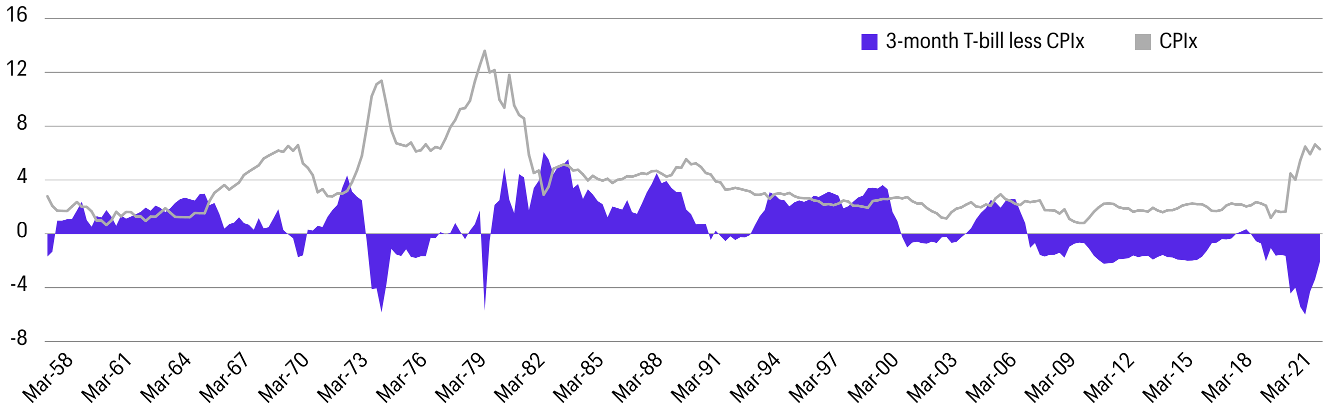


Sources: Bloomberg and ICE BofA, as of 05-Dec-22. Yield to worst for each index less the U.S. Treasury 3-month T-bill (USGG3M Index) yield. Treasury = Bloomberg U.S. Treasury Index (LUATTRUU Index), short-term gov/corp = Bloomberg 1–3 Year Gov/Credit Bond Index (LGC3TRUU Index), U.S. aggregate = Bloomberg U.S. Aggregate Bond Index (LUBSTRUU Index), IG corporate = Bloomberg U.S. Corporate Bond Index (LUACTRUU Index), municipal = Bloomberg Municipal Index (LMBITR Index), 1–3 Year BB = ICE BofA 1–3 Year BB Index (J1A1 Index), high yield = Bloomberg U.S. Corporate High Yield Bond Index (LF98TRUU Index).

*Pre-tax municipal yield adjusted for 37% federal tax bracket and 3.7% Medicare tax.

1. Brookings Institute, 30-Nov-22

REAL CASH YIELDS AND CPI SHOULD CONVERGE IN THE FIRST HALF OF 2023



Sources: Allspring Global Investments and Bloomberg, as of 05-Dec-22; U.S. Treasury 3-month T-bill (USGG3M Index), CPIx (CPI XYOY Index)

Taming inflation

To protect purchasing power, returns must beat inflation. Inflation is a curious beast, resulting from the interplay between supply and demand with many factors affecting both sides of the equation. The cost of debt is a dominant factor because borrowing costs directly influence economic behavior. Tighter policy has begun to reduce inflationary pressures but has yet to fully tame inflation. Over time, however, tighter policy should dampen demand and shake out weak borrowers.

The supply side of the economy suffered a sequence of meaningful shocks in 2020 and early in 2022. Recent data suggest supply chains are slowly realigning but are still far from pre-COVID-19 conditions. Frictional costs will likely remain high, and supply constraints should persist. We expect further improvement this year, but there are looming threats that suggest improvements will be slow and hard fought. These include tight labor markets, volatile energy supplies, global drought conditions, and China's seemingly perennial zero-COVID-19 policy. Despite these risks, supply-side improvements should help reduce inflationary pressures.

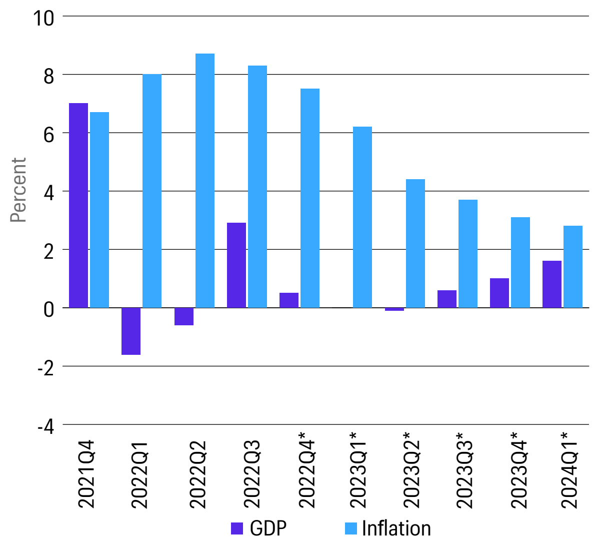
Q: In 2022, interest rate volatility contributed to the worst fixed income returns in 40 years. As inflation in the U.S. rages, what do you expect in 2023?

A: All-in yields are the highest they've been for bond investors in nearly 15 years. Market conditions are certainly challenging, but they present good opportunities to source income for investors, which, in the end, is the key driver of total returns in fixed income. The time to shorten duration or be worried about rising rates has likely passed us. Instead, cautiously adding rate exposure could be beneficial at this point. To buffer against cyclical volatility, we are mindful of credit exposure and will look for ways to build optionality into portfolios. This means moving up in quality but not sacrificing yield. Finally, keeping a global perspective is important and presents a wide range of opportunities. For example, a German bund swapped back into the U.S. dollar currently yields nearly 100 basis points (bps; 100 bps equal 1.00%) more than a comparable-duration U.S. Treasury.

JANET RILLING, CFA
+ Senior Portfolio Manager and Head, Allspring Plus Fixed Income

LOWER AGGREGATE DEMAND SHOULD HELP TAME INFLATION

GDP GROWTH AND INFLATION EXPECTATIONS



Sources: Allspring Global Investments and Bloomberg, as of 05-Dec-22; inflation = U.S. GDP Personal Consumption Price Index (GDPCPRIY Index), GDP = U.S. Real GDP QoQ % SAAR (GHGDUS Index)

*Consensus forecast

Against a backdrop of tight monetary policy and tangled supply chains, it is no surprise that global growth continues to slow. Some countries are worse off than others, especially the U.K. and countries in the eurozone. Their proximity to the war in Ukraine and their continued adjustment away from Russian energy loom over their outlooks. Slowdowns in areas like Australia and China may be mild and short-lived, especially since China's slowdown is self-inflicted from its zero-COVID-19 policy. U.S. consumption has shown resilience, but manufacturing is still struggling. Consumer preferences are quickly shifting toward lower-priced items, and rate-driven demand is well past its peak. These trends are likely to persist deep into 2023 as economies groan under the weight of tighter monetary policy and slide toward recession. However, continued growth challenges will likely aid the Fed's plight to tame inflation as weaker demand eases price pressures.

In sum, tight monetary policy, slowly improving supply chains, and sluggish demand should help constrain inflation pressures and preserve the purchasing power of income generated from bond funds going forward.

02 Building a buffer

In addition to building a generous income stream, current yield levels offer a larger buffer against volatility than offered in the recent past. For example, in late 2021, the U.S. Treasury 2-year note yielded about 0.50%. From this level, yields could rise only 25 bps before an investor would generate a mark-to-market loss over a one-year holding period. However, in December 2022, the same note yielded about 4.25%, which implies a breakeven buffer of 225 bps. In other words, the U.S. Treasury 2-year note would need to rise to 6.50% for an investor to generate a negative mark-to-market return over a one-year holding period. While such a move is certainly possible—and to be fair, a move of that magnitude already happened in 2022—the economic conditions are much different today from a year ago. With the Fed deep into a tightening cycle, growth decelerating, and inflation showing signs of cooling, it seems unlikely that this much cushion would be necessary to cover the risk. For bond investors, this presents an attractive opportunity to capture positive real yield over time.

Q: How do short-duration portfolios differ from other points along the fixed income yield curve?

A: Yields have risen across the entire yield curve, yet front-end maturities, with their inherently lower price volatility, are now uniquely positioned to offer substantial downside protection against a further, unexpected rise in Treasury yields. As such, the probability of short-duration bonds generating positive total returns is now high, particularly over a 12-month horizon.

JEFF WEAVER, CFA
+ Senior Portfolio Manager and Head, Global Liquidity Solutions

03 Benefits of diversification

All financial assets were negatively affected by the surge in inflation caused by COVID-19, the war in Ukraine, and the subsequent increase in yields. The math tells us that future cash flows are worth less as discount rates increase. As such, it is no surprise that bonds—especially long-duration bonds—proved an inadequate hedge against other long-duration assets such as equities in 2022 as inflation surged and the Fed increased policy yields to combat inflation. However, with bonds more attractively priced and yields more appropriately aligned with the current economic environment, bonds are better positioned to offset cyclical risks. As a result, there is a good chance that bonds should once again provide an effective counterbalance to the more cyclical assets in investors' broad portfolios.

Q: How can customized solutions provide increasingly sophisticated fixed income investment strategies for individuals?

A: Portfolio customization offers individual clients the ability to tailor investment solutions to target specific outcomes or objectives. Financial goals may include achieving certain yield or income targets, credit quality, factor tilts, industry/sector preferences, risk targets, or tax objectives, among others. Value-based goals may include environmental, social, and corporate governance preferences. Diversification is also a key consideration for many clients looking to achieve desired outcomes in their portfolios over their investment horizon. A customized solution can balance various client objectives while optimizing diversification across multiple portfolio characteristics, including duration, sector and industry exposures, credit quality, issuers, and many others.

MANJU BORAIAH
+ Head, Systematic Edge Fixed Income and Custom SMA Investments

One step beyond: Climate transition

Climate-transition investing is top of mind for many bond investors around the world. The need to balance both financial and climate objectives is critical to a successful strategy. Successful climate-transition investing for fixed income portfolios rests on the principles of building a globally diversified portfolio of credits with a clear climate focus whose investment performance is intended to beat the broad market.

A robust investment process anchored in deep, fundamental research is paramount to identifying, correctly quantifying, and sizing climate risks and opportunities in a borrower's operating plan. Combining securities of targeted companies into a cohesive portfolio can dramatically reduce its carbon intensity against that of the broad market. Furthermore, targeted credit selection and systematic corporate engagement can help further decarbonize the portfolio on a go-forward basis.

Security selection should be the cornerstone of any climate-transition strategy. Rigorous analysis is necessary to quantify a borrower's carbon intensity and its path toward carbon reduction. Forward-looking insights help establish an informational edge over what is readily available in widely followed databases. It is also critically important to wed financial objectives with climate objectives. Identifying balance sheet strength, durable cash flow generation, and managerial integrity is fundamental to an investment process well equipped to deliver high-conviction recommendations.

Q: How can sustainability strategies meet both decarbonization objectives and financial objectives?

A: Using our Climate Transition Framework, our fundamental analysts draw and build upon their deep knowledge to evaluate and score the implications of climate change on company fundamentals. This allows us to rigorously assess investment opportunities and their associated risks while targeting optimal investor outcomes through a combined climate and financial lens. It provides a foundation for designing investment solutions for clients that account for both their financial and climate objectives.

HENRIETTA PACQUEMENT, CFA
+ Senior Portfolio Manager and Head, Global Fixed Income, and Head, Sustainability

Fixed income road map—2023

After some serious heavy lifting in 2022, central banks are poised to slow their pace of tightening in 2023. While this is good news for bond investors, it is still a far cry from the all-clear signal. The balance of risks has shifted more toward growth and away from inflation, but both will still be challenges going forward. However, with the Fed poised to move at a slower pace, markets should be less volatile and investors should be able to recalibrate portfolios in response to economic shifts in an orderly fashion. More predictable policy changes combined with scheduled cash flows should support steady returns in bond portfolios. This is good news for bond investors.

Last year, we set out a five-step process for bond investors to consider. We've included an updated version of our views on the right.

A FIVE-STEP PROCESS FOR BOND INVESTORS

01 **DURATION: MODEST LONG**
Bond yields have come a long way. At current levels, compensation at the long end of the curve appears attractive.

02 **YIELDS: CONTINUE TO COMPOUND POSITIVE REAL YIELDS**
High-income strategies at the front end of the curve (1- to 3-year maturities) should offer positive real yields to beat inflation over time.

03 **CORPORATE CREDIT: BETTER TECHNICALS, WEAKER FUNDAMENTALS**
Corporations may face a tougher economic environment in 2023, but technicals in the corporate bond market are likely to be more favorable.

04 **SECURITIZED DEBT: BUILDING STABILITY**
From pass-through mortgages to asset-backed securities, structured credit should continue to provide stable cash flows in an unstable market.

05 **MUNICIPALS: A BUFFER TO CYCLICAL RISKS**
Municipal fundamentals move at a different pace than the broad economy. This should provide a buffer during periods of economic uncertainty.

TINA, meet TIA

After 15 years of TINA, TIA (There Is an Alternative) has finally arrived. A dramatically repriced publicly traded bond market—which offers higher yields, more attractive risk premiums, and better underwriting standards—should work to the benefit of fixed income investors over the coming months and years. At the very least, the additional income generated from bonds should compensate investors for inflation and credit risks, provide a generous buffer against future volatility, and offer diversification against cyclical economic risks.

For further information

We want to help clients build for successful outcomes, defend portfolios against uncertainty, and create long-term financial well-being. To learn more, investment professionals can contact us.

Contact details

FOR U.S. INVESTORS ONLY

- To reach our U.S.-based investment professionals, contact your existing client relations director, or contact us at **AllspringInstitutional@allspringglobal.com**.
- To reach our U.S.-based intermediary sales professionals, contact your dedicated regional director, or call us at **1-888-877-9275**.
- To reach our U.S.-based retirement professionals, contact Nathaniel Miles, head of Retirement at Allspring Global Investments, at **nathaniel.s.miles@allspringglobal.com**.
- 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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- To reach our non-U.S.-based investment professionals, contact us at **AllspringInternational@allspringglobal.com.**

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The Bloomberg 1–3 Year Gov/Credit Bond Index is the one- to three-year component of the Bloomberg U.S. Government/Credit Bond Index that includes securities in the Government and Credit Indexes. The Government Index includes Treasuries (that is, public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (that is, publicly issued debt of U.S. government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. government). The Credit Index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements. You cannot invest directly in an index.

The Bloomberg U.S. Aggregate Bond Index is a broad-based benchmark that measures the investment-grade, U.S.-dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, mortgage-backed securities (agency fixed-rate and hybrid adjustable-rate mortgage pass-throughs), asset-backed securities, and commercial mortgage-backed securities. You cannot invest directly in an index.

The Bloomberg U.S. Corporate Bond Index is an unmanaged market-value-weighted index of investment-grade corporate fixed-rate debt issues with maturities of one year or more. You cannot invest directly in an index.

The Bloomberg Municipal Bond Index is an unmanaged index composed of long-term tax-exempt bonds with a minimum credit rating of Baa. You cannot invest directly in an index.

The ICE BofA 1-3 Year BB U.S. Cash Pay High Yield Index represents the yields of U.S.-dollar-denominated 1- to 3-year–maturity BB-rated bonds. You cannot invest directly in an index. Copyright 2023. ICE Data Indices, LLC. All rights reserved.

The Bloomberg U.S. Corporate High Yield Bond Index is an unmanaged, U.S.-dollar-denominated, nonconvertible, non-investment-grade debt index. The index consists of domestic corporate bonds rated Ba and below with a minimum outstanding amount of $150 million. You cannot invest directly in an index.

The Consumer Price Index is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. You cannot invest directly in an index.

The Bloomberg USGG3M Index represents the yields of 3-month U.S. Treasury bills. You cannot invest directly in an index.

The Bloomberg CPI XYOY Index measures year-over-year changes in the U.S. CPI of urban consumers minus food and energy. You cannot invest directly in an index.

The Personal Consumption Expenditures Price Index reflects changes in the prices of goods and services purchased by consumers in the U.S. It is part of the Personal Income and Outlays Report issued by the Bureau of Economic Analysis of the U.S. Department of Commerce. You cannot invest directly in an index.

The GHGDUS Index measures quarter-over-quarter changes in the seasonally adjusted, annualized rate of U.S. gross domestic product growth. You cannot invest directly in an index.

A seasonally adjusted annual rate is a rate adjustment used in business to account for changes in data due to seasonal variations.