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Fixed income portfolios: a diversified, goals-based approach

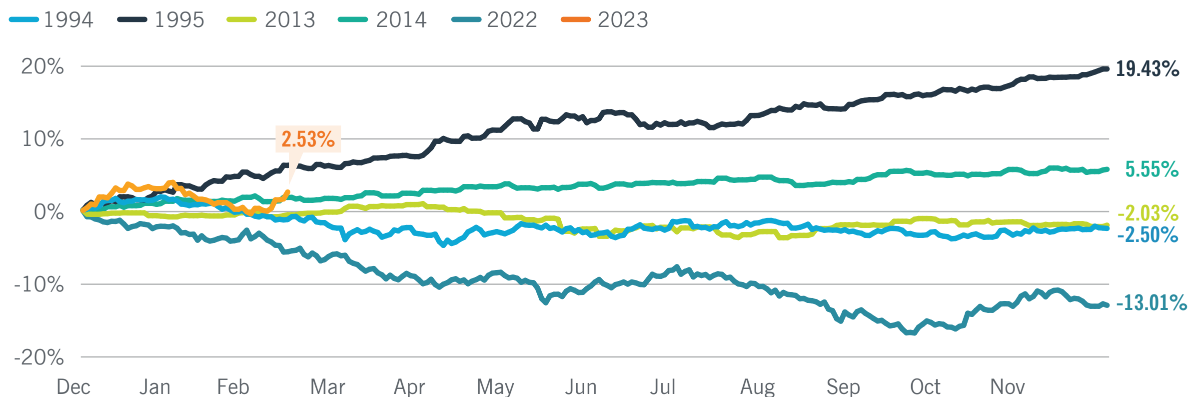
In today's environment, we see three primary goals for fixed income portfolios: generate income, hedge growth risk and manage inflation risk. Staying in cash or short-term bonds may seem tempting during times of volatility, but we believe these goals can be better achieved by diversifying fixed income allocations to include a higher-yielding set of assets after taxes, while maintaining risk constraints.

A TIMELY OPPORTUNITY TO RESET A BOND ALLOCATION

2022 was the worst year for U.S. bonds since the inception of the Bloomberg U.S. Aggregate Index. The good news? Historically, negative price returns have produced higher starting yields across the fixed income universe, creating an opportunity for investors.

Figure 1: Worst bond years have typically rewarded patience

Bloomberg U.S. Aggregate Bond Index, calendar year path



Data source: Bloomberg, L.P., index inception through 31 Mar 2023. **Performance data shown represents past performance and does not predict or guarantee future results.**

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THOUGHTFUL PORTFOLIO CONSTRUCTION INVOLVES BALANCING INCOME AND RISK

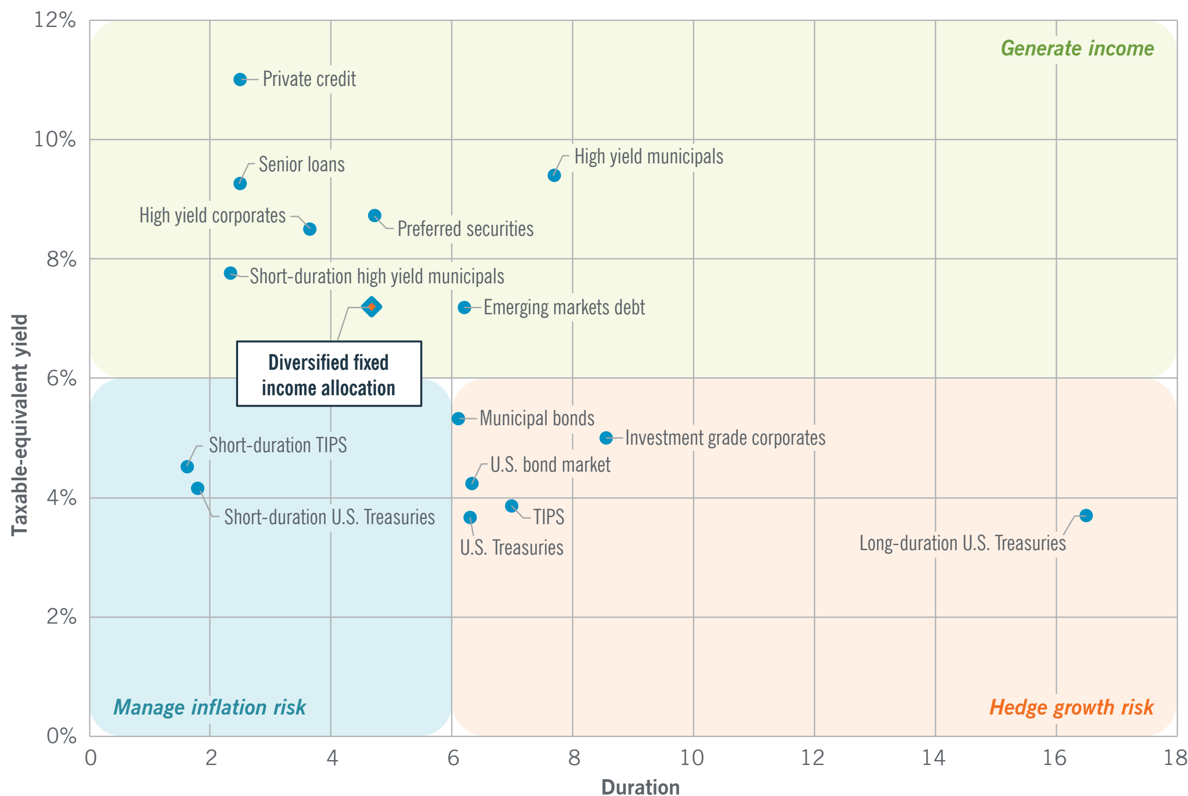
Diversified fixed income portfolios use a strategic allocation mix that captures today's yield opportunity with an eye on longer-term goals. Cash and short-term instruments may provide meaningful nominal yields, while credit instruments offer equity-like return prospects. With that in mind, investors may be seeking to fulfill three main goals in a portfolio:

Generate income. After-tax yield is the objective (depending on the type of account), balanced against various risks.

Hedge growth risk. Slow economic growth is challenging for risk assets. However, intermediate- to long-duration, high quality bonds have produced positive returns in slow growth environments as interest rates fall.

Manage inflation risk. When inflation rises, central banks raise interest rates to cool economic activity. Therefore, shorter-duration and floating-rate bonds are generally best positioned within the fixed income sleeve to withstand inflation pressures.

Figure 2: A broader reach helps achieve investor goals



Data source: Nuveen, 31 Mar 2023; private credit as of 31 Dec 2022, most recent data available. **Performance data shown represents past performance and does not predict or guarantee future results. Representative indexes: emerging markets debt:** Bloomberg EM USD Aggregate TR Index; **high yield corporates:** Bloomberg U.S. High Yield 2% issuer Cap TR Index; **high yield municipals:** Bloomberg Municipal High Yield TR Bond Index; **investment grade corporates:** Bloomberg U.S. Corporate Index; **long-duration U.S. Treasuries:** Bloomberg U.S. Long Treasury U.S. TR Index; **municipal bonds:** Bloomberg Municipal Bond TR Index; **preferred securities:** ICE BofA U.S. All Capital Securities Index; **private credit:** Cliffwater Direct Lending Index, yield is 3-year takeout yield for the CDLI, sourced and calculated via 2022 Q3 Report on U.S. Direct Lending; **senior loans:** Morningstar LSTA U.S. Leveraged Loan 100 Index; **short-duration high yield municipals:** Bloomberg Municipal High Yield Short Duration Index; **short-duration TIPS:** Bloomberg U.S. Treasury TIPS 0-5 Years TR Index; **short-duration U.S. Treasuries:** Short Duration USD 1-3 Year Treasury Index; **TIPS:** Bloomberg U.S. Treasury Inflation Notes TR Index Value; **U.S. bond market:** Bloomberg U.S. Aggregate Bond TR Index; **U.S. Treasuries:** Bloomberg U.S. Treasury TR Index.

RECALIBRATING FIXED INCOME IN THREE STEPS

Step 1: Determine goals

Hedging growth risk is a long-standing objective for a fixed income allocation, and the current environment elevates the importance of generating real income, both after inflation and after taxes. Therefore we seek to strike a balance between these three goals in our example.

Step 2: Define the universe and key inputs

To create a durable fixed income allocation that balances these three goals, we suggest broadening the opportunity set to include tax-efficient asset classes such as municipal bonds and preferred securities. And allocating to private credit helps improve the income potential per unit of volatility.

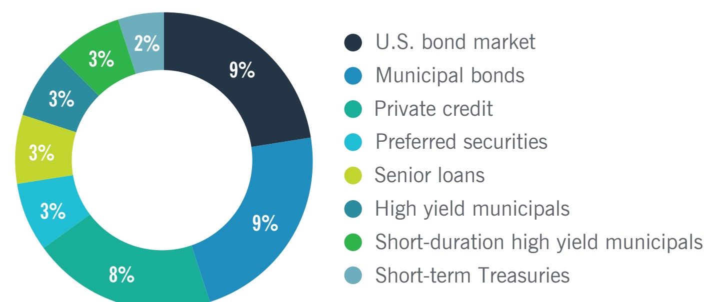
To determine asset class weightings, key inputs to consider include the historical risk, return and correlation of representative indexes; forward-looking capital market assumptions; and tax considerations.

The initial output allocates to taxable and tax-exempt core bonds to fulfill the goal of hedging growth risk, while tapping into healthy coupon opportunities generated through liquid and illiquid credit (Figure 3).

Step 3: Review strategic and tactical allocations within a risk model

Once the individual allocations within the fixed income allocation are determined, it is important to understand how fixed income acts as a whole and how it interacts with equities. This fixed income allocation may hold more credit risk versus the benchmark in pursuit of higher yield, and we accept that this positioning can potentially come with positive correlation to equities in balanced portfolios. However, a slightly more credit sensitive fixed income allocation is designed to provide higher coupons to outpace inflation, a key concern for investors today.

Figure 3: Fixed income allocation designed to balance goals



	Fixed income allocation	U.S. bond market
Yield to worst (%)	6.2	4.4
Average effective duration (years)	4.6	6.3

Data source: Bloomberg, L.P., 31 Mar 2023, except for 31 Dec 2022 3-year Takeout Yield from the Cliffwater Direct Lending Index for U.S. private credit yield. **Performance data shown represents past performance and does not predict or guarantee future results. Representative indexes: U.S. bond market:** Bloomberg U.S. Aggregate Bond TR Index; **municipal bonds:** Bloomberg Municipal Bond TR Index; **private credit:** Cliffwater Direct Lending Index; **preferred securities:** ICE BofA U.S. All Capital Securities Index; **senior loans:** Morningstar LSTA U.S. Leveraged Loan 100 Index; **high yield municipals:** Bloomberg Municipal High Yield TR Bond Index; **short-duration high yield municipals:** Bloomberg Municipal High Yield Short Duration Index; **short-duration Treasuries:** Short Duration USD 1-3 Year Treasury Index.

PRIVATE CREDIT OFFERS GREATER POTENTIAL FOR STABLE RETURNS

The resulting allocation contains a large weighting to private credit, given its high yield per unit of volatility and a track record of providing stability in a way that its public market peers have not.

For example, private markets provided stability during the Global Financial Crisis. Peak-to-trough, private credit experienced only 26% downside capture versus senior loans (Figure 4). The private equity and real estate downside capture versus public market equivalents were still beneficial at approximately 60%. More specifically, the S&P 500 was down -46% while private equity values declined only -27%, which with hindsight was more in line with the fundamentals of the period.

Why the difference? Public markets tend to sell off more than fair value because they often rely on the wisdom of crowds and are subject to moments of panic. Private markets rely on the wisdom of experts to reflect economic conditions in their valuations.

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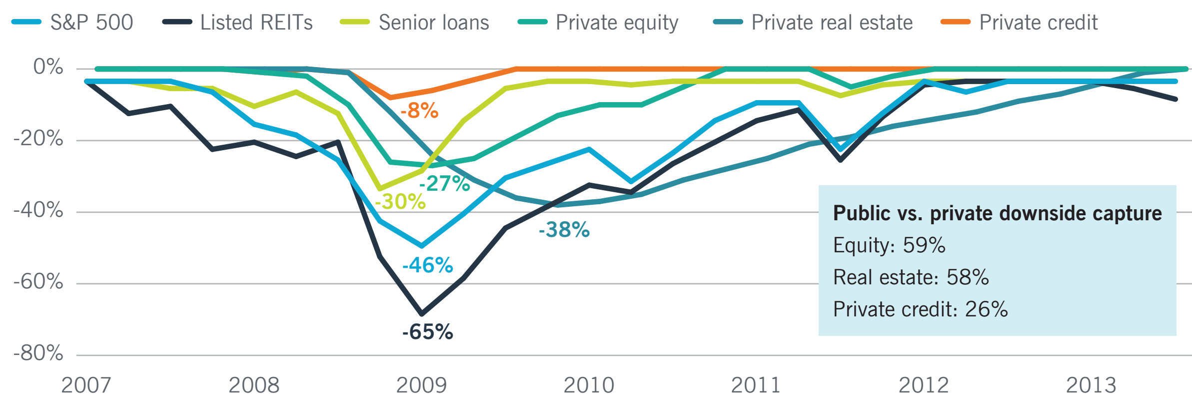
Assuming a prudent level of liquidity for the end investor, we cap the allocation to private credit at 8% of the total portfolio, 20% of the fixed income sleeve. However, we feel higher allocations in this space may be warranted and advisable depending on individual investor goals and circumstances.

MUNICIPAL BONDS HELP WITH TAX EFFICIENCY

For investors seeking tax efficiency, the interest earned on municipal bonds is exempt from regular federal taxation. Additionally, bonds issued from

Figure 4: What does a downturn look like for private markets?

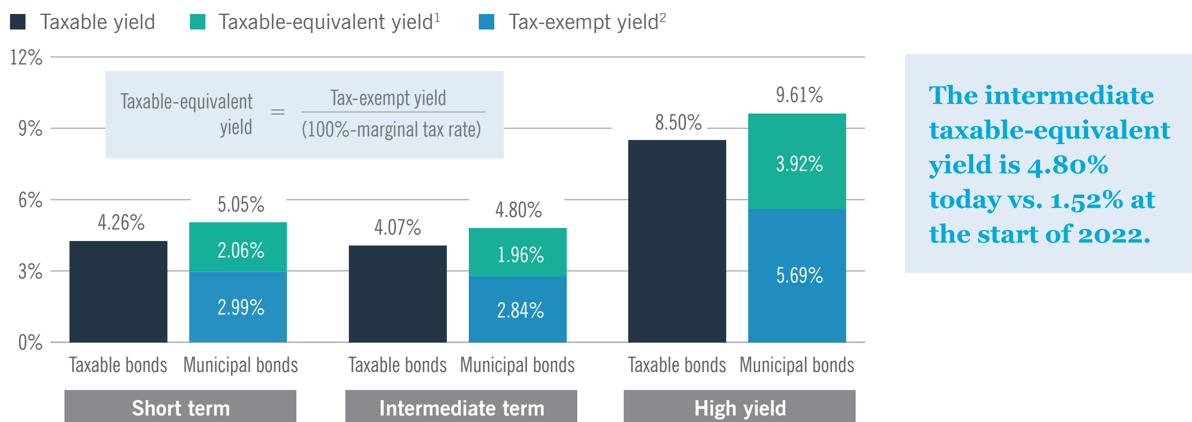
Maximum drawdowns (%)



Data source: Bloomberg, L.P., 31 Mar 2007 – 30 Sep 2013. **Performance data shown represents past performance and does not predict or guarantee future results. Representative indexes: listed REITs:** FTSE NAREIT All Equity REITS Total Return Index; **senior loans:** Credit Suisse Leverage Loan Total Return Index; **private equity:** Cambridge Private Equity Index; **private real estate:** NCREIF Fund Index Open End Diversified Core (ODCE) Total Returns; **private credit:** Cliffwater Direct Lending Index Total Return.

Figure 5: Municipal bonds are attractive on an after-tax basis

Yield comparison



The intermediate taxable-equivalent yield is 4.80% today vs. 1.52% at the start of 2022.

1 The taxable-equivalent yield is based on the highest individual marginal federal tax rate of 37%, plus the 3.8% Medicare tax on investment income (the Net Investment Income Tax). Individual tax rates may vary.

2 Some income may be subject to state and local taxes and the federal alternative minimum tax.

Data source: Bloomberg L.P., 30 Apr 2023. **Performance data shown represents past performance and does not predict or guarantee future results.** Yields are yield to worst. **Yield to worst** is the lowest potential yield that can be received on a bond without the issuer defaulting. **Taxable-equivalent yield** is the yield a taxable investment needs to possess (before taxes) for its yield to be equal to that of a tax-free municipal investment. The yields shown are based on the highest individual marginal federal tax rate of 37%, plus the 3.8% Medicare tax on investment income. Individual tax rates may vary. They do not take into account the effects of the federal alternative minimum tax (AMT) or capital gains taxes. **Representative indexes: short term taxable bonds:** Bloomberg U.S. Government/Credit 1-5 Year Index; **short term municipal bonds:** Bloomberg Municipal Short Index; **intermediate term taxable bonds:** Bloomberg U.S. Government/Credit 5-10 Year Index; **intermediate term municipal bonds:** Bloomberg Municipal Intermediate Index; **high yield taxable bonds:** Bloomberg Corporate High Yield 2% Issuer Capped Index; **high yield municipal bonds:** Bloomberg High Yield Municipal Bond Index. Different benchmarks, economic periods, methodologies and market conditions will produce different results.

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entities within a certain state are often exempt from taxation in that state. Occasionally, bonds issued within a certain municipality or region are exempt from taxes in that municipality, possibly providing triple tax exemption — federal, state and local (Figure 5).

Municipal bonds may also provide stability in uncertain markets. Recent municipal price volatility has been driven almost exclusively by macroeconomic factors and fund outflows, rather than credit fundamentals. In fact, 2022 state revenues rose by 10%, and revenue collections and reserve levels are the highest in more than 40 years.

Unlike past recessions, the states are in a stronger position to weather a recession or economic downturn. Injecting tax-advantaged income via a high credit quality asset into an otherwise taxable fixed income sleeve produces portfolio level benefits — suggesting a dedicated allocation to municipals.

WORKING TOWARD INVESTMENT GOALS THROUGH DIVERSIFICATION

A more robust fixed income allocation — diversified across different borrower types, credit profiles, currencies and coupon structures — is one way to potentially improve portfolio outcomes as rates gradually normalize.

Quantitative tools like risk factor analysis and scenario analysis may help to inform the asset mix decision for a given client's risk tolerance. Experienced financial professionals can help clients develop diversified income portfolios with professionally managed solutions that are well suited to help meet long-term goals.

For more information, please visit nuveen.com.

Endnotes

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Important information on risk

All investments carry a certain degree of risk and there is no assurance that an investment will provide positive performance over any period of time. Equity investing involves risk. Investments are also subject to political, currency and regulatory risks. These risks may be magnified in emerging markets. Diversification is a technique to help reduce risk. There is no guarantee that diversification will protect against a loss of income. Investing in municipal bonds involves risks such as interest rate risk, credit risk and market risk, including the possible loss of principal. The value of the portfolio will fluctuate based on the value of the underlying securities. There are special risks associated with investments in high yield bonds, hedging activities and the potential use of leverage. Portfolios that include lower rated municipal bonds, commonly referred to as "high yield" or "junk" bonds, which are considered to be speculative, the credit and investment risk is heightened for the portfolio. Credit ratings are subject to change. AAA, AA, A, and BBB are investment grade ratings; BB, B, CCC/CC/C and D are below-investment grade ratings. As an asset class, real assets are less developed, more illiquid, and less transparent compared to traditional asset classes. Investments will be subject to risks generally associated with the ownership of real estate-related assets and foreign investing, including changes in economic conditions, currency values, environmental risks, the cost of and ability to obtain insurance, and risks related to leasing of properties. Investors should be aware that alternative investments including private equity and private debt are speculative, subject to substantial risks including the risks associated with limited liquidity, the use of leverage, short sales and concentrated investments and may involve complex tax structures and investment strategies. Alternative investments may be illiquid, there may be no liquid secondary market or ready purchasers for such securities, they may not be required to provide periodic pricing or valuation information to investors, there may be delays in distributing tax information to investors, they are not subject to the same regulatory requirements as other types of pooled investment vehicles, and they may be subject to high fees and expenses, which will reduce profits. Alternative investments are not appropriate for all investors and should not constitute an entire investment program. Investors may lose all or substantially all of the capital invested. The historical returns achieved by alternative asset vehicles is not a prediction of future performance or a guarantee of future results, and there can be no assurance that comparable returns will be achieved by any strategy.

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