While fixed income still plays an important role in well-diversified portfolios, interest rate volatility has increased. Fixed income investors face three main challenges:

- Producing enough income
- Hedging against possible losses
- Combating the gradual erosion of purchasing power

Despite headwinds, J.P. Morgan's framework for fixed income diversification can help investors utilize fixed income to achieve critical objectives: generating income and reducing overall portfolio volatility.

**Yields are low**

Yields remain near their historic lows

**Core correlation benefits**

Core bonds still have low volatility and a negative correlation to stocks

**Equity volatility continues**

Core bonds can reduce the overall volatility of a diversified portfolio

Source: J.P. Morgan Asset Management. Data as of 6/30/19. For illustrative purposes only. Past performance is not indicative of future returns. CHART 1: BLS, FactSet, Federal Reserve. Real 10-year Treasury yields are calculated as the daily Treasury yield less year-over-year core CPI inflation for that month except for the last month of the period shown, where real yields are calculated by subtracting the prior month’s year-over-year core inflation. CHART 2: Barclays Capital Inc., DJ UBS, MSCI Inc., Standard & Poor’s. Correlation to Core Bonds as represented by the Bloomberg Barclays US Aggregate Bond Index. Indexes used: U.S. Stocks: S&P 500 Index; Core Bonds: Bloomberg Barclays US Aggregate Bond Index; Treasuries: Bloomberg Barclays US Treasury Index; Municipal Bonds: Bloomberg Barclays US 1-15 blend (1-17) Municipal Bond Index; High Yield Bonds: Bloomberg Barclays US High Yield Index; Emerging Markets Debt: Bloomberg Barclays US EMD Index. All correlation coefficients calculated based on monthly total return data for period 2/1/99 to 12/31/18. CHART 3: FactSet, Standard & Poor’s. Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year.
THE CHALLENGE WITH THE AGG

Because of their complexity and composition, accurately replicating fixed income indexes in investment vehicles is difficult. These vehicles may also embed risks that investors may not be aware of, or be compensated for. By definition, investors who index to the Barclays Agg are most exposed to the biggest debtors within that market.

Index duration has increased markedly...

Passive, core bond portfolios suffer from an increased sensitivity to rates and a relatively low yield that may not cushion any decline in price.

While increasing duration can benefit investors at times, passive investments are unable to adjust when the inverse is likely.

Bond prices will likely be adversely impacted by rising rates for a time, although different sectors, structures and maturities will respond differently.

But as funds are reinvested at higher rates, investors could benefit over time.


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Diversification does not guarantee investment returns and does not eliminate the risk of loss. Investments in fixed income securities are subject to interest rate risk. If rates increase, the value of the investment generally declines. Lowering a portfolio’s volatility can, in and of itself, improve returns. Mathematically, when comparing two portfolios with the same average annual return, the portfolio with the lower volatility (i.e., the portfolio where each year’s returns are generally closer to the average) will have higher compounded returns over time. The larger the swings in compounded return, the lower the total return over time.
A WORLD BEYOND THE AGG

These headwinds can be navigated. While the S&P 500 Index captures more than 80% of the U.S. stock market, bond indexes are less reflective of the markets they seek to emulate. Prudent diversification beyond core indexes enables investors to access opportunity and reduce the impact of eventual U.S. rate hikes while still generating income and diversifying equity volatility.

Bloomberg Barclays US Aggregate Bond Index only captures 49% of the U.S. bond market and 18% of the global market.

ACCESS OPPORTUNITY AND INCOME THROUGH DIVERSIFICATION

ANNUAL RETURNS FOR KEY FIXED INCOME SECTORS (%)

For both institutional and individual investors, asset allocation remains a primary driver of investment returns.

DIVERSIFIED PORTFOLIO

Strategic diversification across fixed income sectors is a crucial step toward increasing income and improving portfolio performance.

J.P. MORGAN’S “FIXED INCOME TRIANGLE”: A STRATEGIC FRAMEWORK FOR DIVERSIFICATION

An appropriately diversified fixed income portfolio can help investors generate income and diversify equity volatility while balancing bond market risk and opportunity. It’s important to:

- Maintain a broad allocation to core bonds to diversify stock volatility
- Augment with core complements to reduce fixed income volatility
- Add extended sectors to increase income and return potential

**CORE HOLDINGS**
- Provide income and diversification to stocks, but rising rates and low yields can present challenges.
- Active management and broader diversification within core portfolios can improve risk-adjusted returns.

**CORE COMPLEMENTS**
- Can hedge downside risk and reduce volatility.
- Absolute return and inflation strategies seek returns with little or no correlation to rates.
- Ultra-short strategies reduce portfolio duration and therefore volatility.

**EXTENDED SECTORS**
- Can provide income and the potential for returns but may be more volatile.
- High yield bonds and bank loans can outperform when rates rise but require frequent evaluation.
- Global bonds (both developed and emerging markets debt) provide gain potential and diversification.

Shown for illustrative purposes only. Because everyone’s circumstances are unique, this model can provide a framework for discussion between you and your financial advisor.
ADJUST STRATEGIC ALLOCATIONS TO REFLECT INVESTMENT GOALS AND MARKETS

The optimal bond allocation for each investor will differ based on their unique circumstances and goals. And as markets move, opportunities and risks emerge and recede. J.P. Morgan’s framework for fixed income diversification is designed to reflect these interactions.

**INVESTMENT CONSIDERATIONS**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Risk tolerance</th>
<th>Time horizon</th>
<th>Rate expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you seeking capital preservation, income or a combination of both?</td>
<td>How much rate sensitivity are you willing to accept?</td>
<td>Are you focused on the short term or long term?</td>
<td>Will rates change? If so, when and in which direction?</td>
</tr>
<tr>
<td>Could you benefit from the tax treatment of municipal bonds?</td>
<td>How much volatility can you weather?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RATE EXPECTATIONS**

- **FALLING RATE**
  - EXTENDED: 20–30%
  - COMPLEMENTS: 10–20%
  - CORE: 55–65%

- **RANGE BOUND**
  - EXTENDED: 35–45%
  - COMPLEMENTS: 15–25%
  - CORE: 35–45%

- **RIsing RATE**
  - EXTENDED: 40–50%
  - COMPLEMENTS: 30–40%
  - CORE: 20–30%

**INVESTMENT CONSIDERATIONS**

- **CORE HOLDINGS**
  - Seek lower volatility and diversification to equities

- **CORE COMPLEMENTS**
  - Seek reduced fixed income volatility

- **EXTENDED SECTORS**
  - Seek income and total return

A note about duration and time horizons: Rising rates have the potential to cause a portfolio to suffer from short-term losses. However, in most rate environments, a high-quality core portfolio that is managed to a specific duration (for example, a short- or intermediate-term portfolio) has the ability to largely – or even completely – offset these losses by reinvesting at higher yields over time. Thus, an investor’s time horizon should be a key determinant of the duration of their core portfolio, assuming that the investor is able to hold the portfolio for a length of time equal to its duration.

Shown for illustrative purposes only. Because everyone’s circumstances are unique, these models can provide a framework for discussion between you and your financial advisor.
PORTFOLIO INSIGHTS

J.P. MORGAN TAXABLE FIXED INCOME FUNDS

GLOBAL BOND OPPORTUNITIES FUND

- **A GBOAX | GBOSX | ETF JGBP**
- **GLOBAL**
- Designed to deliver total return from a global, diversified bond portfolio.
  - Invests in bond and currency sectors across developed and emerging markets without benchmark constraints.
  - Combines insights from over 200 sector specialists with global perspectives to develop high-conviction ideas while actively managing risk.
  - Dynamically shifts sector and duration exposure in response to changing market conditions.

HIGH YIELD FUND

- **A OHYAX | OHYFX**
- **HIGH YIELD**
- Designed to deliver a high level of income from a portfolio of below investment-grade securities.
  - Invests primarily in a diversified portfolio of intermediate-term below investment-grade debt securities.
  - Leverages a dedicated team of credit analysts.
  - Seeks to provide less interest rate sensitivity while navigating changing economic environments.

INCOME FUND

- **A JGIAX | JGISX**
- **MULTI-SECTOR**
- Designed to deliver income with a secondary objective of capital appreciation by investing across debt markets.
  - Invests opportunistically in a wide variety of debt securities that have high potential to produce attractive risk-adjusted in come and have low correlations to each other.
  - Utilizes a flexible approach, allowing allocation shifts based on changing market conditions.
  - Uses a strategy of managing distributions throughout the year to help minimize fluctuations in monthly dividends.

STRATEGIC INCOME OPPORTUNITIES FUND

- **A JSOAX | JGOSX**
- **ABSOLUTE RETURN**
- Designed to deliver high total return by investing in a broad range of fixed income securities.
  - Allocates assets among a broad range of fixed income securities, including cash and short-term investments in an attempt to deliver positive returns over time.
  - Uses an opportunistic, go-anywhere approach that includes long/short strategies.
  - Dynamically shifts allocations across traditional and alternative fixed income while managing duration and actively hedging.

CORE BOND FUND

- **A JGBDX | WGBDX**
- **INTERMEDIATE BOTTOM-UP**
- Designed to deliver total return from a portfolio of investment-grade intermediate- and long-term bonds.
  - Invests primarily in a diversified portfolio of intermediate-term, high-quality bonds.
  - Leverages a team of dedicated credit analysts.
  - Utilizes value-driven, bottom-up security selection process with an emphasis on risk management.

EMERGING MARKETS DEBT FUND

- **A JEDAX | JEMDX**
- **EMERGING MARKETS**
- Designed to deliver total return primarily from a portfolio of emerging market debt instruments.
  - Invests primarily in sovereign debt securities from emerging market issuers.
  - Allocates opportunistically to emerging market corporates and local currency debt.
  - Seeks individual fixed income investments that should perform well over market cycles.

FLOATING RATE INCOME FUND

- **A JPHAX | JPHSX**
- **BANK LOANS**
- Designed to deliver current income with a secondary objective of capital appreciation through a portfolio of floating rate instruments.
  - Invests primarily in below investment-grade floating rate instruments.
  - Combines value-oriented, bottom-up research process with fundamental credit analysis to identify opportunities across sectors, industries and structures.
  - Utilizes disciplined approach to manage fluctuations in interest rates.

ULTRA-SHORT INCOME ETF

- **ETF JPSF**
- **ULTRA-SHORT**
- Designed to deliver current income while seeking to maintain a low volatility of principal.
  - Invests mainly in investment-grade, U.S. dollar-denominated fixed, variable and floating-rate debt.
  - Employs a single, globally integrated credit process centered on research-driven sector allocation.
  - Seeks to maintain a duration of one year or less under most market conditions.

UNCONSTRAINED DEBT FUND

- **A JISAX | JISIX**
- **ABSOLUTE RETURN**
- Designed to deliver long-term total return.
  - Invests opportunistically across different markets and sectors.
  - Utilizes a flexible approach that allows the fund to shift portfolio allocations in changing market conditions.
  - Combines local insights with global perspectives to develop high conviction ideas.

CORE PLUS BOND FUND

- **A JCPAX | HCPFX | ETF JCPB**
- **INTERMEDIATE**
- Designed to deliver a high level of current income from a portfolio of investment-grade and non-investment-grade securities.
  - Invests primarily in investment-grade bonds, with the flexibility to tactically add up to 35% in high yield and foreign debt.
  - Combines bottom-up security selection with dynamic sector allocation.
  - Uses macro analysis to guide yield curve positioning, duration and portfolio risk.
J.P. MORGAN MUNICIPAL FIXED INCOME FUNDS

TAX FREE BOND FUND  
A PMBAX | I PRBIX

Designed to deliver high level of federal tax-exempt current income while maintaining stability of principal.
- Invests in municipal securities across all maturities.
- Uses a value-oriented approach that combines credit research with extensive risk/reward analysis.
- Aims to help minimize tax liability while preserving capital.

ULTRA-SHORT MUNICIPAL FUND  
A USMIX | I USMITX

Designed to deliver high level of federal tax-exempt current income while maintaining stability of principal.
- Invests in high-quality, ultra-short municipal bonds that are exempt from federal income taxes.
- Emphasizes comprehensive risk/reward analysis to identify investments that will perform well over market cycles.
- Seeks to maintain an average weighted maturity of two years or less under most market conditions.

TAX AWARE REAL RETURN FUND  
A TXRAX | I TXRSX

Designed to maximize after-tax returns while minimizing the potential impact of inflation.
- Invests primarily in a portfolio of municipal obligations whose interest payments are excluded from federal income taxes.
- Utilizes inflation swaps in combination with core portfolio of municipal bonds.
- Actively manages inflation swap portfolio and tactically trades to deliver incremental returns.

SHORT-INTERMEDIATE MUNICIPAL BOND FUND  
A OSTAX | I JIMIX

Designed to deliver high level of federal tax-exempt current income while maintaining stability of principal.
- Invests primarily in municipal bonds that are exempt from federal income taxes.
- Selects individual securities following risk/reward evaluation of interest rate risk, credit risk and the complex legal and technical structure of the transaction.
- Aims to uncover opportunities in high-quality, short-term municipals in an effort to achieve repeatable results through market cycles.

INTERMEDIATE TAX FREE BOND FUND  
A JITAX | I VSITX

Designed to deliver monthly income (excluded from federal gross income) and capital preservation by investing in municipal bonds.
- Invests primarily in a diversified portfolio of intermediate-term municipal bonds in an effort to protect after-tax investment value.
- Aims to help minimize tax liability while producing income.
- Conducts extensive risk/reward analysis to select securities.

HIGH YIELD MUNICIPAL FUND  
A JTIAX | I JTISX

Designed to deliver a high level of current income exempt from federal income taxes.
- Invests in municipal securities that are exempt from federal income taxes.
- Seeks a competitive yield and higher after-tax returns by focusing on high yield municipal bonds.
- May invest up to 100% in securities rated below investment-grade which offer a higher yield than investment-grade securities but involve a greater degree of risk.

ULTRA-SHORT MUNICIPAL INCOME ETF  
JMST

Designed to deliver high level of federal tax-exempt current income while maintaining stability of principal.
- Invests primarily in investment-grade fixed, variable and floating-rate municipal securities exempt from federal income taxes.
- Emphasizes comprehensive risk/reward analysis to identify investments that may perform well over market cycles.
- Seeks to maintain an average weighted maturity of two years or less under most market conditions.

MUNICIPAL ETF  
JMUB

Designed to deliver federal tax-exempt income and capital preservation by investing in municipal securities.
- Invests primarily in investment-grade fixed, variable and floating-rate municipal securities exempt from federal income taxes.
- Emphasizes comprehensive risk/reward analysis to identify investments that may perform well over market cycles.
- Seeks to maintain an average weighted maturity between three and ten years under most market conditions.

MUNICIPAL INCOME FUND  
A OTBAX | I HLTAX

Designed to deliver current income exempt from federal income taxes by investing primarily in a portfolio of municipal securities.
- Uses a value-oriented approach to investing in municipal securities.
- Invests in a core fixed income portfolio of municipal bonds, with emphasis on municipal mortgage-backed and asset-backed securities.
- Offers exposure to securities whose use of proceeds aim to provide positive social or environmental benefits.
- Conducts an extensive risk/reward analysis of factors such as income, interest rate risk, credit risk and the transaction’s legal/technical structure.
The risk of defaults is generally higher in the case of subprime mortgage-related and asset-backed securities, which include so-called "subprime" mortgages. The structure of some of these securities may be complex and there may be less information available about these other types of debt securities. These securities may or may not be guaranteed by governments or their agencies, supranational organizations, corporations, or banks. The value of these assets will be influenced by factors affecting the housing market, such as interest rates, consumer confidence, and housing prices. Additionally, investment-grade securities are generally rated in the top five rating categories of Standard & Poor's and Moody's Investors Service. These risks may decrease the value of the Fund's investments...

JPMorgan Tax Aware Real Return Fund

Financial stress may make it difficult for the municipality to make interest and principal payments when due. Municipal obligations may be more susceptible to downgrades or defaults during recessions or similar periods of economic stress. Such a downgrade or risk of being downgraded may have an adverse effect on the market prices of the bonds and thus the value of the Fund's investments. These risks could decrease the Fund's income or hurt the ability to preserve capital and liquidity. In addition, an insolvency procedure may be initiated for bankruptcy. The reorganization of a municipality's debts may significantly affect the rights of creditors and the price of its bonds. High-yield, or "junk," bonds generally are rated in the seventh or lower rating categories of Standard & Poor's and Moody's Investors Service. Although these securities tend to provide higher yields than higher-rated securities, they tend to carry greater risk. International investing bears greater risk due to social, economic, regulatory and political instability in countries in "emerging markets." This makes emerging markets securities more volatile and less liquid than developed market securities. Changes in exchange rates and differences in accounting and taxation policies outside the U.S. can affect returns. Additionally, some overseas markets may not be as politically and economically stable as the United States and other nations. Emerging markets also involve heightened risks related to the same factors as well as increased volatility and decreased trading volume. The Fund is actively managed and there is no guarantee the Fund will achieve its investment objective. Actively managed funds typically charge more than index-linked products. Diversification may not protect against market loss.

JPMorgan Inflation Managed Bond Fund Investments in bonds and other debt securities will change in value based on changes in interest rates. If rates rise, the value of these investments generally decreases, thereby causing the Fund to be more volatile than it would be if it had not used derivatives. Emerging markets and foreign and international securities involve special risks, including economic, political and currency instability — especially in emerging markets. The Funds' investments in emerging markets could lead to more volatility in the value of the Funds' shares. The small size of securities markets and the limited availability of pricing information may increase price volatility. The Funds' investments may be considered "high-yield," "junk," bonds. The value of these investments generally...