Introduction

Extraordinary monetary easing since the 2008 financial crisis drove yields on U.S. Treasury and Agency securities to historic lows, and yields have risen only modestly since the Federal Reserve began to tighten policy in 2015. The fact that nearly 70 percent of the Bloomberg Barclays U.S. Aggregate Bond Index is comprised of low-yielding government-related securities presents a conundrum: How can core fixed-income investors meet their total return objectives without taking on undue credit or duration risk?

In our view, the answer lies in a more diversified, multi-sector approach to core fixed-income management. Specifically, investors may find better value in fixed-income sectors that are underrepresented in the Bloomberg Barclays U.S. Aggregate Bond Index, such as commercial asset-backed securities and collateralized loan obligations that may offer attractive yields, limited duration risk, and investment-grade ratings. We believe the Guggenheim approach to core fixed-income investment represents a more sustainable way to generate income and enhance risk-adjusted returns in today’s persistent low-rate environment.
Low interest rates and a benign credit environment have encouraged some investors to reach for yield by increasing duration risk, credit risk, or both. Investors may be underestimating the risks posed by these investment shortcuts, particularly as U.S. monetary policy tightens.

Most core investors benchmark to the Bloomberg Barclays U.S. Aggregate Bond Index, which is dominated by low-yielding government-related securities. At $17.4 trillion, the Bloomberg Barclays U.S. Aggregate Bond Index represents less than half of the total U.S. fixed-income universe, leaving out $21.7 trillion of non-indexed securities.

This group of securities not included or underrepresented in the benchmark index includes commercial asset-backed securities and collateralized loan obligations, which may offer comparable (or higher) yields and lower durations than similarly rated corporate bonds. Investors concerned about liquidity in these sectors should also consider how structural changes in the corporate bond market may cause liquidity to vanish when it is needed most.

For investors with longer duration targets, we believe a barbell approach that combines short-maturity, floating-rate credit, and long-duration, fixed-rate bonds can offer some protection against rising rates while meeting their yield and duration targets.
In an environment where the benchmark core fixed-income index is heavily concentrated in low-yielding Treasury and Agency securities, remaining closely aligned to the Bloomberg Barclays U.S. Aggregate Bond Index (Agg) and achieving historical rates of total return have become contradictory objectives. Recent monetary and fiscal policy developments have contributed to creating this conundrum for core fixed-income investors.

Monetary Policy Has Distorted Government and Agency Markets

In 2008, the Federal Reserve (Fed) reached the limit of conventional monetary policy tools when it lowered the federal funds target rate to a range of 0–0.25 percent for the first time in history. With the U.S. economy contracting and credit markets frozen, the Fed expanded its toolkit to include unconventional policy tools. It introduced more explicit forward rate guidance and launched quantitative easing (QE) programs to directly purchase Treasurys, Agency debentures, and Agency mortgage-backed securities (MBS) in an effort to reduce long-term interest rates and stimulate growth. Three rounds of QE and a maturity extension program were ultimately needed before the Fed deemed economic recovery in the United States to be sustainable.

As a result of these efforts, the Fed's balance sheet grew from $869 billion in 2007 to $4.5 trillion by October 2014, when QE3 purchases ended. Fed Vice Chairman Stanley Fischer summarized research on the impact of these programs in 2015, estimating that the Fed had reduced the 10-year U.S. Treasury term premium (the premium for holding a longer maturity bond over a series of shorter-term bonds) by 110 basis points. In other words, QE substantially reduced investors' expected compensation for taking duration risk.

As of Dec. 31, 2016, the Fed owned $2.5 trillion of Treasury securities and $1.7 trillion of Agency MBS, making it a sizable investor in each market. Although QE ended in 2014, these markets remain distorted by the Fed's reinvestment program, which rolls over maturing Treasury securities at auction and reinvests all MBS principal repayments from its portfolio. In 2016, reinvestments totaled $210 billion in Treasurys and approximately $380 billion in Agency MBS. The Fed has said it intends to maintain the size of its balance sheet in this manner until normalization of the level of the federal funds rate is “well underway.”

The Fed is not the only central bank whose market intervention is depressing long-term interest rates. The Bank of Japan (BoJ) has been engaged in multiple QE programs since 2010, repeatedly expanding the size and scope of its QE asset purchases in order to achieve price stability. In...
September 2016, the BoJ introduced a target of around zero percent for the 10-year Japanese government bond (JGB) yield. This policy change committed the BoJ to purchase any amount of JGBs necessary to achieve its yield target.

In March 2015, the European Central Bank (ECB) initiated the Public Sector Purchase Programme, a QE purchase program, which entails large-scale purchases of euro zone sovereign debt securities. The ECB’s QE program has since been expanded to include corporate debt, but progress towards its inflation goal remains unsatisfactory. In December 2016, the ECB announced an extension of their QE program through 2017, while reducing monthly purchase volumes from €80 billion to €60 billion (approximately $85 billion to $65 billion) beginning in April 2017. If the ECB chooses to start winding down the program at the end of 2017, we expect monthly purchases would be tapered slowly from €60 billion, resulting in an extension of QE into 2018.

The ECB and BoJ actions have created a scarcity of high-quality securities and pushed sovereign yields in Japan and Europe close to zero. Foreign investors searching for yield have therefore increasingly turned to U.S. Treasurys and Agency debt, and most recently to investment-grade corporate debt, thereby depressing yields below levels that might otherwise prevail. This suppression of yields has significant implications for U.S. fixed-income investors.

Fiscal Policy Has Altered the Composition of the Bloomberg Barclays Agg

Since its creation in 1986, the Bloomberg Barclays Agg (formerly known as the Lehman Agg and then the Barclays Agg) has become the most widely used proxy for the U.S. bond market, with over $2 trillion in fixed-income assets managed to the Agg, according to Guggenheim research. Inclusion in the Agg requires that securities be U.S. dollar-denominated, investment-grade rated, fixed rate, taxable, and have above a minimum par amount outstanding. In 1986, the Agg was a useful proxy for the broad universe of fixed-income assets,

1 For purposes of this discussion, government-related securities includes U.S. Treasury and Agency bonds, as well as Agency mortgage-backed securities.
which at the time primarily consisted of Treasurys, Agency bonds, Agency MBS, and investment-grade corporate bonds—all of which met these inclusion criteria. However, the fixed-income universe has evolved over the past 30 years with the growth of sectors such as asset-backed securities (ABS), non-agency residential MBS (RMBS), high-yield corporate bonds, leveraged loans, and municipal bonds. While the fixed-income universe has become more diversified in structure and quality, the composition of the Bloomberg Barclays Agg has not kept pace with this change. In fact, the Agg has become increasingly concentrated in Treasurys due to the massive net issuance volume experienced since the financial crisis.

The sheer glut of Treasurys and their dominant representation in the Agg is unlikely to reverse anytime soon. The need to fund government deficits—present and future—is astonishing. Marketable U.S. Treasury securities outstanding totaled $4.5 trillion in 2007. By the end of 2016, the figure had skyrocketed to $13.9 trillion (a compound annual growth rate of 13.3 percent). It is projected to go even higher, reaching $24.9 trillion by 2027, according to the Congressional Budget Office’s (CBO) January 2017 baseline projections.

As Treasurys climbed from 19 percent of the U.S. fixed-income universe in 2007 to over 40 percent in 2016, the market-capitalization weighted Agg followed suit, according to Guggenheim research. Treasurys today comprise approximately 37 percent of the Agg, which, when combined with Agency securities, brings the weighting of low-yielding U.S. government-related debt to nearly 70 percent. At the end of the year, the average yield of the Treasury, Agency MBS, and Agency debt components of the Agg were just 1.9 percent, 2.9 percent, and 2.2 percent, respectively, making it difficult for core fixed-income investors to achieve any meaningful yield target.

Treasury Securities Outstanding Surged Post-Crisis, and Will Continue to Rise
Treasury Securities Outstanding in $trillions

U.S. deficit spending in response to the financial crisis resulted in a significant rise in net Treasury issuance. Treasury securities outstanding more than tripled from $4.5 trillion in 2007 to $13.9 trillion by the end of 2016. Although the annual fiscal deficit has steadily declined to $587 billion in 2016 from its peak of $1.4 trillion in 2009, the CBO projects that it will rise to $1.4 trillion by 2027. As a result, Treasury debt outstanding is projected to increase by approximately 80 percent to $24.9 trillion, likely further skewing the profile of the Bloomberg Barclays Agg toward low-yielding U.S. government debt.
Asymmetric Risk in Treasurys

With annual net Treasury issuance set to rise further in coming years, the Agg will continue to be heavily skewed towards government-related assets. A large allocation to Treasurys will not only continue to drag down the yield of the Agg, but it will also expose investors to risk of capital losses if rates move higher.

We are mindful of this risk given the multi-decade bear market that followed the end of the Fed’s efforts to suppress Treasury yields during the 1940s. In 1942, the Fed, acting in coordination with the U.S. Treasury Department, agreed to fix Treasury bill yields at three-eighths of a percent and cap yields on long-term Treasury bonds at 2.50 percent in order to keep debt service costs low during World War II. Although not the sole cause, the end of this arrangement, brought about by the Treasury-Federal Reserve Accord of 1951, set the stage for 30 years of rising interest rates.

The massive increase in Treasury debt since the financial crisis has reshaped the core fixed-income universe. Since bottoming in 2007 at 21 percent of core U.S. bonds outstanding, the weighting of Treasurys has almost doubled to 37 percent of the Agg in 2016. Combined with Agency-related debt, U.S. government bonds now comprise approximately 70 percent of the Agg.

Today, the Fed seeks to manage Treasury yield volatility through forward guidance, though this has not always been effective. For example, in May 2013, Fed Chairman Ben Bernanke signaled the possibility that the Fed might soon taper its purchases of Treasurys and Agency MBS as it wound down its third QE program. This early indication involved no immediate action by the Fed, but bond markets sold off dramatically nonetheless. The 10-year Treasury yield spiked to 3.0 percent from 1.7 percent over the course of 20 weeks in what is now referred to as the “taper tantrum.” The clarity of the Fed’s communications has arguably improved since then, but Janet Yellen’s term ends in February 2018, and the confirmation of a more hawkish Fed chair could potentially trigger a similar selloff.

Even modest increases in rates would be sufficient for core fixed-income investors to incur losses. Ignoring the roll-down effect (the positive return earned when a bond’s yield falls as its maturity approaches because the yield curve is upward sloping), a mere 27-basis point increase in yields would wipe out the coupon income on the current 10-year Treasury note...
Historically, the End of Fed Intervention Is Bad News for Bonds

U.S. 10-Year Treasury Yields Since 1875

The Fed intervened in the Treasury market during the 1940s and early 1950s in order to suppress long-term interest rates. The removal of Fed support of long-term bond prices prompted by the Treasury-Fed Accord of 1951 ushered in a bear market in bonds that lasted 30 years. Could history repeat itself once the current period of low rates ends? If it does, portfolios that extended durations to pick up yield in the present environment may be left painfully exposed.

Treasury Investors Are Vulnerable to Rising Yields and Volatility

10-Year Treasury Yield Volatility vs. “Breakeven” Increase in Yields

Even modest increases in yields would be sufficient for core fixed-income investors to incur losses. Ignoring the roll-down effect (the positive return earned when a bond’s yield falls as its maturity approaches because the yield curve is upward sloping), a mere 27-basis point increase in yields would wipe out the coupon income on the current 10-year Treasury note issued in February 2017. This represents a low bar in realized yield volatility observed over the past year.

Issued in February 2017. With yields still close to historic lows, some observers have labeled Treasurys as “return-free risk,” rather than the traditional label of “risk-free return.”

The removal of Fed support of long-term bond prices prompted by the Treasury-Fed Accord of 1951 ushered in a bear market in bonds that lasted 30 years. Could history repeat itself once the current period of low rates ends? If it does, portfolios that extended durations to pick up yield in the present environment will be left painfully exposed.
Traditional yield-enhancement techniques, such as increasing duration and lowering credit quality, may boost total returns in the short term, but at what cost? Today’s benign credit conditions may be masking the potentially damaging long-term effects of increased exposure to duration and credit risk.

Risks to the Conventional Approach

Achieving return targets is of utmost importance to core fixed-income investors, such as insurance companies, pension funds, and endowments, who incorrectly believe their only choice is to stay benchmarked to the Agg. These investors face a tradeoff between accepting the lower returns offered by the Agg or taking more credit or duration risk than the benchmark.

The weighted-average yield of the Bloomberg Barclays Agg was just 2.6 percent at the end of December 2016, which is roughly 60 percent lower than the historical average yield of 6.9 percent since inception, and far below the highest yield of 16.8 percent. Adjusted for inflation using the trailing 12-month change in the core personal consumption expenditures price index, the Agg offers a real yield of just 90 basis points. To satisfy the pressing need for income, many investors have in recent years assumed additional credit risk, which has precipitated a market-wide relaxation in underwriting standards.

In addition to record levels of issuance in both investment-grade and high-yield bond markets following the financial crisis, the market has witnessed high levels of debt issued by lower-rated, first-time issuers, a significant increase in deals lacking covenant protection, and an increase in aggressive deal structures. The negative long-term impact of these trends is currently being obscured by the benign credit environment, which itself is a byproduct of the Fed’s unprecedented monetary accommodation. Ultimately, however, the reach for yield into greater credit risk may culminate in losses from future defaults. The last three recessions saw 12-month default rates rise above 10 percent for high-yield issuers.

Another strategy some investors have employed to generate extra yield is extending duration, though this exposes them to greater losses in the event of rising interest rates. As we demonstrate later, longer-duration securities do have a place in portfolio construction, but in today’s environment they should be complemented by shorter-maturity floating-rate securities.
The Scarcity of Yield Across the U.S. Fixed-Income Landscape

Yields in Traditional Core Sectors

<table>
<thead>
<tr>
<th>Index/Subsector</th>
<th>Historical Range</th>
<th>Historical High</th>
<th>Historical Average</th>
<th>Historical Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloomberg Barclays Agg</td>
<td>6.8% - 2.6%</td>
<td>7.6%</td>
<td>6.8%</td>
<td>4.0%</td>
</tr>
<tr>
<td>ABS</td>
<td>4.4% - 2.6%</td>
<td>5.2%</td>
<td>4.4%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Municipals</td>
<td>2.6% - 2.6%</td>
<td>4.8%</td>
<td>2.6%</td>
<td>2.8%</td>
</tr>
<tr>
<td>CMBS</td>
<td>3.4% - 3.4%</td>
<td>6.0%</td>
<td>3.4%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Corporates</td>
<td>1.9% - 3.4%</td>
<td>6.0%</td>
<td>1.9%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Treasuries</td>
<td>2.8% - 1.9%</td>
<td>7.4%</td>
<td>2.8%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Agency MBS</td>
<td>4.0% - 4.0%</td>
<td>4.0%</td>
<td>4.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Agency Bonds</td>
<td>2.2% - 4.0%</td>
<td>4.0%</td>
<td>2.2%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

The Bloomberg Barclays Agg yielded 2.6 percent as of the end of December 2016, well below its historical average yield of 6.8 percent. With each index subsector now yielding less than 4.0 percent, investors are faced with scarcity of yield across the fixed-income landscape. Extending duration or increasing credit risk to meet yield objectives may prove rewarding in the near term, but these investment shortcuts carry significant long-term risks.

Assessing the Relative Value of the Bloomberg Barclays Agg

Yield per Unit of Duration

The Bloomberg Barclays Agg offers little value as measured by yield per unit of duration. As of Dec. 31, 2016, investors closely tied to the Agg earned only 0.44 percent yield for every year of duration risk.

At $17.4 trillion, the Agg represents less than half of the total U.S. fixed-income universe, leaving out $21.7 trillion in securities that do not meet its requirements for inclusion, including bank loans, high-yield bonds, and non-agency RMBS, as well as the majority of the ABS and municipal sectors. We believe there is a more sustainable strategy that relies on the ability to uncover value in investment-grade securities outside of the traditional benchmark-driven framework. This approach to portfolio construction may help generate higher yields without adding undue credit or duration risk.

Increasing Yield Without Adding Credit or Duration Risk

Shortening duration, maintaining an investment-grade portfolio, and generating attractive yields do not necessarily have to be competing investment objectives for core fixed-income investors. Investment-grade assets exist outside the traditional benchmark, and many of these offer attractive yields that are comparable to, or higher than, similarly rated corporate bonds with significantly less interest-rate risk. These are complex investments and not suitable for all investment strategies. In this section, we offer background and perspective on Guggenheim’s approach to two of those asset classes: Collateralized loan obligations (CLOs) and commercial ABS.

CLOs are investment vehicles that primarily buy a diversified pool of bank loans to businesses. Although the assets they invest in are rated below investment grade, key features such as overcollateralization, seniority, and cash flow triggers that cut payments to junior tranches allow the vehicle to issue investment-grade debt. This sector is benefiting from over four years of low bank loan default rates, a trend that has historically continued for two years after the Fed begins raising interest rates, according to Guggenheim research.

CLOs are typically backed by over 100 bank loans. Each of these must be reviewed as part of the structural analysis that evaluates the extent to which junior CLO tranches, which help protect senior tranches from losses, could experience principal loss in the event of widespread defaults. The heterogeneous nature of the underlying investments in a single CLO demands significant credit and legal expertise.

Our expertise in these areas has enabled us to take advantage of attractive spreads in this sector, particularly since the financial crisis. At the end of 2016, AAA-rated, post-crisis CLO debt traded at spreads between 120–150 basis points over the three-month London Interbank Offered Rate (Libor), compared to an average spread of only 40 basis points for AAA-rated CLO debt issued before the financial crisis.

AA-rated, A-rated, and BBB-rated post-crisis CLO debt priced at average spreads of 190 basis points, 285 basis points, and 485 basis points over Libor at the end of 2016, respectively, compared to pre-crisis averages of only 67 basis points, 118 basis points, and 218 basis points.

Another attractive asset class is commercial ABS, which is typically backed by cash flows from the receivables generated by businesses. Although less familiar to some investors, commercial ABS typically finances recognizable products such as cell towers, shipping containers, and aircraft. They may also finance well-known businesses, such as restaurant franchises and hotel time shares.

In addition to offering comparable, or even higher, yields and lower durations than similarly rated corporate bonds, there are other attractive features to investing in CLCs and ABS. While corporate bond investors are exposed to the credit risk of one specific issuer or entity, idiosyncratic risks may be mitigated in commercial ABS and CLCs through large, diversified collateral pools. These securities also seek to offer downside protection during stressed economic environments through overcollateralization, excess spread, reserve accounts, and triggers that cut off cash flows to subordinated tranches. In addition, the amortizing structures of many asset-backed securities reduce credit exposure over time as a portion of the principal is paid down with each cash flow payment. Principal payments made prior to maturity also represent a source of liquidity for investors. Conversely, principal payments for corporate bonds are typically expected only at maturity, which makes the full principal amount vulnerable to a deterioration in the financial position of the borrower as the scheduled maturity date approaches. (For more information, read “The ABCs of Asset-Backed Securities” at guggenheiminvestments.com/perspectives).

The complexity of the deal structures and security-specific collateral of commercial ABS and CLCs require proactive and comprehensive credit and legal analysis. With over

Asset-backed securities may not be suitable for all investors. Investors in asset-backed securities generally receive payments that are part interest and part return of principal. These payments may vary based on the rate loans are repaid. Some asset-backed securities may have structures that make their reaction to interest rates and other factors difficult to predict, making their prices volatile, and they are subject to liquidity and valuation risk.
80 investment analysts and a 16-person dedicated legal team, Guggenheim is well positioned to uncover the value in these markets. Our deep level of due diligence has been highly effective in identifying attractive investment opportunities.

**Addressing Liquidity Concerns**

When describing the value proposition of the ABS subsectors with existing and potential clients, we sometimes find ourselves correcting overgeneralizations that drive investor skepticism. For example, some prospective investors assume that ABS securities are inherently illiquid due to their lack of inclusion in the Agg. For this reason, some investors bypass the attractive yields, floating coupons, and attractive credit profiles that these securities offer. Rather than assuming ABS is illiquid and avoiding the asset class, investors should consider how liquidity may have changed in the corporate bond market since the financial crisis, and reevaluate ABS within this context.

Post-crisis regulatory limits on proprietary trading and increases in bank capital requirements have served to reduce the capacity of dealers to provide liquidity in the corporate bond market. Fed data from the post-crisis period support this conclusion. Primary dealer net inventories of investment-grade and high-yield corporate bonds declined from a peak of $165 billion in October 2007 to an average of $9 billion in 2016. Prior to the financial crisis, dealer inventories were sufficient to cover 45 percent of one-month corporate bond trading volume, on average, but this number has since declined to around 3 percent.

Furthermore, the turnover rate of the corporate bond market—defined as the ratio of bond trading volumes during a specified time period to the total market size—declined precipitously after 2007 and has not recovered. In the fourth quarter of 2016, just under $900 billion of investment-grade bond trades were reported to Wall Street’s self-regulatory body.

**Liquidity from Traditional Providers Has Declined**

*Primary Dealer Net Inventories of Corporate Bonds*

- Primary Dealer Inventory as a % of Rolling One-Month Trading Volume (LHS)
- Primary Dealer Inventory of Corporate Bonds (RHS)

Primary dealer net inventories of corporate bonds (excluding commercial paper) have fallen more than 90 percent since peaking in October 2007. From 2006 to mid-2007, prior to the financial crisis, primary dealer net inventories averaged 45 percent of monthly trading volume in corporate bonds. Primary dealer net inventories currently represent less than 3 percent of corporate bond monthly trading volume.

Source: Federal Reserve Bank of New York, Bloomberg, Guggenheim Investments. Data as of 1.25.2017. LHS = left hand side; RHS = right hand side.
Finra through the Trade Reporting and Compliance System (TRACE), representing approximately 15 percent of the investment-grade market. In the five years preceding the emergence of post-crisis macroprudential policies (2005–2009), 25 percent of the investment-grade market was traded on average in a single quarter. Given that dealers generally reduce their balance sheet risk during volatile periods, as observed during the financial crisis, corporate bond market depth and liquidity could deteriorate in future periods of distress.

Regulators dispute the notion that bond market liquidity has deteriorated. In 2016, New York Fed researchers reaffirmed their earlier findings that bid-ask spreads, a price-based liquidity measure, remain low by historical standards, indicating ample liquidity in corporate bond markets. The Treasury Department echoed this, concluding in its market review that there is not enough data to confirm a broad-based deterioration in corporate bond market liquidity. Earlier in 2015, Finra’s Office of the Chief Economist noted that measures such as the price impact of block trades suggest liquidity has not been notably impacted, though it conceded that more trades are needed to transact a given volume today compared to before 2008. This latter conclusion is consistent with our own experience.

We caution against assuming that current liquidity conditions will prevail in future periods of market stress. Under the new regulatory regime, fixed-income assets that were traditionally liquid may not be so when investors most need liquidity. Despite this shift in the underlying structure in the corporate bond market, investors accept lower returns in corporate bonds than in equally rated ABS securities. We believe this presents an opportunity for investors to generate attractive risk-adjusted returns by buying ABS securities not included in the Agg.
Constructing a Barbell Strategy for Long-Duration Investors

We recognize that many core fixed-income investors have longer duration needs than investments in CLOs and commercial ABS alone can satisfy. We believe a barbell strategy is the best way to meet those needs as the Fed raises short-term interest rates. A barbell strategy structures a portfolio with both short- and long-duration securities. Our view is that at the short end, investors should allocate to short-duration, floating-rate credit. At the long end, investors should look beyond 20-year maturities where we expect yields to remain largely unchanged through the end of the current Fed tightening cycle.

Our barbell approach is based on an analysis of how the yield curve has moved during past Fed tightening cycles. Between the first and last rate hikes during the past three tightening cycles (1994–1995, 1999–2000, and 2004–2006), three-month Treasury bill yields rose by 242 basis points, on average, while 30-year Treasury yields rose by only 31 basis points. This relative move caused the three-month/30-year Treasury curve to flatten by 173 basis points, 111 basis points, and 379 basis points, respectively, in the last three cycles. Furthermore, the three-month/30-year Treasury curve inverted just before the Fed lowered short-term interest rates at the end of each of these cycles, which means that short-term rates rose above long-term rates. Given that three-month Treasury bill yields generally trade close to the fed funds rate, this means that 30-year Treasury bond yields fell below each cycle’s terminal rate (the level of the fed funds target observed at the end of a Fed tightening cycle). We expect a similar dynamic to play out as the current tightening cycle proceeds.

Our internal research indicates that the terminal rate in this tightening cycle will be near 3 percent, which is close to the current level of 30-year Treasury bond yields. If we assume

Historically, the yield curve flattens as the Fed tightens monetary policy by raising short-term interest rates. A flattening yield curve is associated with higher yield volatility in short- and intermediate-term fixed-rate bond yields compared to longer-term bonds. In light of our view that the yield curve will flatten, we believe a barbell strategy is the best approach for fixed-income investors who must maintain longer portfolio durations but also seek to limit downside risks in a rising rate environment.
for simplicity that all points on the yield curve converge to 3 percent over the next 12 months, we find that a portfolio that is 100 percent invested in five-year Treasurys, which have a duration of 4.5 years, would lose 2.9 percent on a total return basis. In contrast, a barbell strategy that allocates 75 percent to floating-rate assets earning 250 basis points over Libor and 25 percent to 30-year Treasury bonds would have a similar duration of 4.8 years but would generate a positive total return of 3.7 percent.

In reality, the forward curve may already price in some rise in bond yields in the future, and gains from rolling down the yield curve would offset some losses. Incorporating bond convexities would result in a more accurate illustration of bond price movements. Nonetheless, our hypothetical example demonstrates that yield curve positioning can be as impactful as duration when the yield curve is flattening.

In practice, we currently find long-dated taxable municipal bonds to be attractive at the long end of a barbell strategy. They typically offer higher yields than long-dated Treasurys and provide similar duration exposure. Since Donald Trump’s election as president, elevated market uncertainty regarding the federal budget, infrastructure initiatives, healthcare policy, and tax reform has weighed on the municipal market, resulting in some cheapening of municipal bonds relative to Treasurys. Notwithstanding increased policy uncertainty, we still find value in AA and A-rated special tax and monopolistic utility revenue bonds. Like other sectors that have historically carried greater credit risk, we follow a credit intensive approach when selecting municipal securities.

The Future of Core Fixed Income Management

We believe that the surest path to underperformance is to remain anchored to outdated core fixed-income conventions. Traditional core strategies are overly confined to a benchmark that no longer accurately reflects all of the investment options that exist in today’s fixed-income landscape. As such, they restrict portfolios from reallocating toward more attractive opportunities that have emerged as a result of the evolution of U.S. capital markets.

Taking the easy path of bearing greater credit or interest-rate risk to generate incremental yield today may come at the expense of future returns. The accommodative policy stances of major central banks may continue to foster a benign credit environment in the near term, but we believe they are also likely resulting in a general underappreciation of investment risks.

With the chasm between investors’ income targets and benchmark yields likely to persist, traditional views of core fixed-income management need to adapt. Achieving yield targets while maintaining a high-quality portfolio is possible, but it requires a willingness to look beyond the benchmark. In our view, investors must gravitate to sectors where value remains unexploited. This approach demands significantly more credit expertise and ongoing diligence, but it may offer the prospect of superior risk-adjusted returns over time.
The Changing of the Guard
The Future of Core Fixed-Income Management

Traditional View: Bloomberg Barclays U.S. Aggregate Index

<table>
<thead>
<tr>
<th>Weight</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Treasurys</td>
<td>1.89%</td>
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<tr>
<td>Agency MBS</td>
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<tr>
<td>Agency Bonds</td>
<td>2.21%</td>
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<td>Corporates</td>
<td>3.37%</td>
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<td>Non-Agency RMBS</td>
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<tr>
<td>CMBS</td>
<td>2.78%</td>
</tr>
<tr>
<td>Municipals</td>
<td>3.66%</td>
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<tr>
<td>ABS</td>
<td>1.86%</td>
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<tr>
<td>Commercial Mortgage Loans</td>
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<tr>
<td>Other</td>
<td>2.65%</td>
</tr>
<tr>
<td>Weighted-Average Yield</td>
<td>2.63%</td>
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The Bloomberg Barclays Agg is a broad-based flagship index typically used as a core benchmark. It measures the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market. By remaining tightly aligned to the Bloomberg Barclays Agg, which is currently dominated by low-yielding government-related debt, investors are giving up the flexibility to take advantage of undervalued sectors and to limit exposure to unattractive ones.

Future View: Guggenheim Core Fixed Income¹

<table>
<thead>
<tr>
<th>Weight</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Treasurys</td>
<td>2.3%</td>
</tr>
<tr>
<td>Agency MBS</td>
<td>3.7%</td>
</tr>
<tr>
<td>Agency Bonds</td>
<td>3.4%</td>
</tr>
<tr>
<td>Corporates</td>
<td>4.3%</td>
</tr>
<tr>
<td>Non-Agency RMBS</td>
<td>3.7%</td>
</tr>
<tr>
<td>CMBS</td>
<td>5.0%</td>
</tr>
<tr>
<td>Municipals</td>
<td>4.5%</td>
</tr>
<tr>
<td>ABS</td>
<td>5.4%</td>
</tr>
<tr>
<td>Commercial Mortgage Loans</td>
<td>4.4%</td>
</tr>
<tr>
<td>Other</td>
<td>4.7%</td>
</tr>
<tr>
<td>Weighted-Average Yield</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

Even within the traditional confines of a core fixed-income mandate, Guggenheim differentiates its strategy from the Bloomberg Barclays Agg by underweighting low-yielding government-related securities (which account for under 15 percent of assets) in favor of municipals and structured credit, in particular ABS. Our investment process has capitalized on the attractive returns offered by these sectors while meeting our duration and yield curve targets.

Future View: Guggenheim Core-Plus Fixed Income¹

<table>
<thead>
<tr>
<th>Weight</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Treasurys</td>
<td>2.7%</td>
</tr>
<tr>
<td>Agency MBS</td>
<td>3.0%</td>
</tr>
<tr>
<td>Agency Bonds</td>
<td>3.3%</td>
</tr>
<tr>
<td>Corporates</td>
<td>5.0%</td>
</tr>
<tr>
<td>Non-Agency RMBS</td>
<td>3.7%</td>
</tr>
<tr>
<td>CMBS</td>
<td>4.8%</td>
</tr>
<tr>
<td>Municipals</td>
<td>5.1%</td>
</tr>
<tr>
<td>ABS</td>
<td>4.1%</td>
</tr>
<tr>
<td>Commercial Mortgage Loans</td>
<td>1.9%</td>
</tr>
<tr>
<td>Other</td>
<td>1.9%</td>
</tr>
<tr>
<td>Weighted-Average Yield</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

The greater flexibility of Core Plus mandates allows Guggenheim to further differentiate our strategy from the Bloomberg Barclays Agg, resulting in an even greater weighting of non-agency RMBS and ABS.

Source: Bloomberg Barclays Indexes, Guggenheim Investments. Data as of 12.31.2016. ¹Based on representative accounts in the Guggenheim Core Fixed Income Composite and the Core Plus Fixed Income Composite, respectively. The representative accounts were chosen since, in our view, they are the accounts within each composite which, generally and over time, most closely reflects the portfolio management style of their respective strategies. (For more information, read “Fixed-Income Outlook: Assessing Value in a Faith-Based Rally” at guggenheiminvestments.com/perspectives).
Important Notices and Disclosures

Past performance is not indicative of future results.

The Bloomberg Barclays U.S. Aggregate Index represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. These major sectors are subdivided into more specific indexes that are calculated and reported on a regular basis.

The London Interbank Offered Rate (Libor) is a benchmark rate that a select group of banks charge each other for unsecured short-term funding.

The Bloomberg Barclays AA Corporate Index, the Barclays A Corporate Index and the Barclays BBB Corporate Index are all subcomponents of a broader Barclays U.S. Corporate Investment Grade Index, which is comprised of publicly issued and SEC-registered U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements.

The Bloomberg Barclays BB Corporate Index is a subcomponent of the Barclays U.S. High Yield Index, which covers the universe of fixed rate, non-investment grade debt. Original issue zeroes, stepup coupon structures, 144-A's, and pay-in-kind bonds (PIKs, as of 10.1.2009) are also included.

Fixed-income investments are subject to credit, liquidity, interest rate and, depending on the instrument, counterparty risk. These risks may be increased to the extent fixed-income investments are concentrated in any one issuer, industry, region or country. The market value of fixed-income investments generally will fluctuate with, among other things, the financial condition of the obligors on the underlying debt obligations or, with respect to synthetic securities, of the obligors on or issuers of the reference obligations, general economic conditions, the condition of certain financial markets, political events, developments or trends in any particular industry and changes in prevailing interest rates.

Investing in bank loans involves particular risks. Bank loans may become nonperforming or impaired for a variety of reasons. Nonperforming or impaired loans may require substantial workout negotiations or restructuring that may entail, among other things, a substantial reduction in the interest rate and/or a substantial write-down of the principal of the loan. In addition, certain bank loans are highly customized and, thus, may not be purchased or sold as easily as publicly traded securities. Any secondary trading market also may be limited and there can be no assurance that an adequate degree of liquidity will be maintained. The transferability of certain bank loans may be restricted. Risks associated with bank loans include the fact that prepayments may generally occur at any time without premium or penalty.

High-yield debt securities have greater credit and liquidity risk than investment grade obligations. High-yield debt securities are generally unsecured and may be subordinated to certain other obligations of the issuer thereof. The lower rating of high-yield debt securities and below investment grade loans reflects a greater possibility that adverse changes in the financial condition of an issuer or in general economic conditions or both may impair the ability of the issuer thereof to make payments of principal or interest. Risks of high-yield debt securities may include (among others): (i) limited liquidity and secondary market support, (ii) substantial market place volatility resulting from changes in prevailing interest rates, (iii) the possibility that earnings of the high-yield debt security issuer may be insufficient to meet its debt service, and (iv) the declining creditworthiness and potential for insolvency of the issuer of such high-yield debt securities during periods of rising interest rates and/or economic downturn. An economic downturn or an increase in interest rates could severely disrupt the market for high-yield debt securities and adversely affect the value of outstanding high-yield debt securities and the ability of the issuers thereof to repay principal and interest. Issuers of high-yield debt securities may be highly leveraged and may not have available to them more traditional methods of financing.

Investors in asset-backed securities generally receive payments that are part interest and part return of principal. These payments may vary based on the rate loans are repaid. Some asset-backed securities may have structures that make their reaction to interest rates and other factors difficult to predict, making their prices volatile and they are subject to liquidity and valuation risk.

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2 Guggenheim Partners’ assets under management are as of 12.31.2016 and include consulting services for clients whose assets are valued at approximately $63bn.

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Guggenheim’s fixed-income portfolios are managed by a systematic, disciplined investment process designed to mitigate behavioral biases and lead to better decision-making. Our investment process is structured to allow our best research and ideas across specialized teams to be brought together and expressed in actively managed portfolios. We disaggregated fixed-income investment management into four primary and independent functions—Macroeconomic Research, Sector Teams, Portfolio Construction, and Portfolio Management—that work together to deliver a predictable, scalable, and repeatable process. Our pursuit of compelling risk-adjusted return opportunities typically results in asset allocations that differ significantly from broadly followed benchmarks.

Guggenheim Investments

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Guggenheim Partners

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