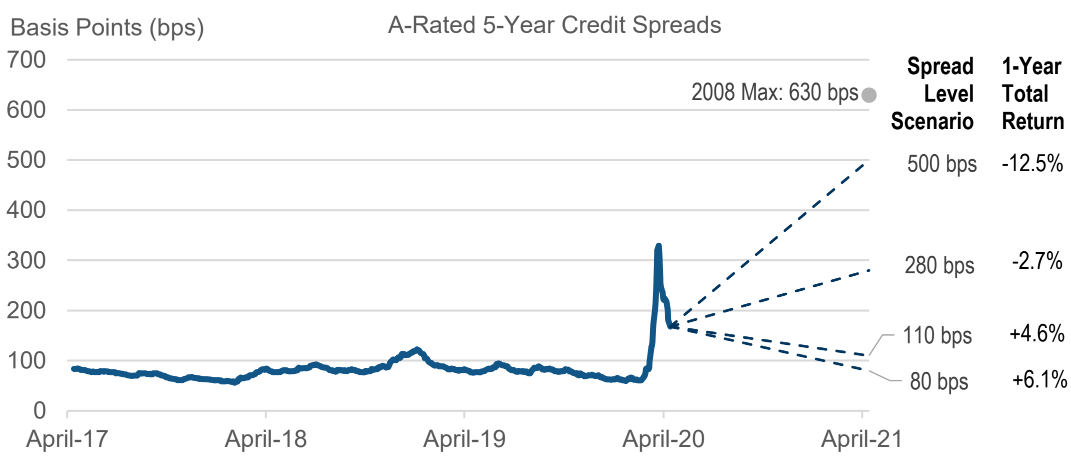
Corporate Credit: The Time is Now

Executive Summary

- US corporate credit has been among the sectors most affected by recent market volatility, with exposure to both the economic impact of coronavirus and the collapse in oil prices. While credit faces fundamental challenges, for investors seeking opportunities in an uncertain environment, we see several reasons why now might be the time to consider credit.
- First, credit spreads continue to offer significant compensation for recession and downgrade risk. Second, the US Federal Reserve (Fed) will soon begin buying corporate credit outright for the first time ever. Third, we expect strong demand for credit as a source of yield and diversification against equity risk.
- We believe the current opportunity is in high quality corporate bonds. In our view, short to intermediate maturities offer an attractive risk-return profile for opportunistic investors, with the potential for spread tightening that may produce one-year returns in the 4% to 6% range (Exhibit 1). For pension plans and other long-term investors, we believe longer-term credit can offer an attractive alternative to low-yielding government bonds.
- Over time, we think credit can continue to offer opportunities, as Fed purchases in investment-grade credit could lead to tighter spreads across the credit spectrum, including high yield, as was the case with corporate credit purchases conducted by the European Central Bank (ECB).
- In our view, an opportunistic approach not tied to a benchmark offers the most attractive strategy for capturing attractive valuations in credit. Buy-and-maintain strategies can also offer an attractive approach for capturing elevated yields while minimizing portfolio turnover.

Exhibit 1: Spread and Total Return Scenarios for A-Rated 5-Year US Corporate Credit



Source: GSAM, ICE BAML as of April 13, 2020. Spread scenarios are GSAM estimates for illustrative purposes only. **Past performance does not guarantee future results, which may vary.** The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this presentation.

Assessing the Risks in Credit: Is This Another Financial Crisis?

US credit markets were hit particularly hard in March as investors reacted to the growing economic impact of the coronavirus and the steep decline in oil prices, leading to outsized spread moves, severe market dislocations and heavy outflows from the asset class.

In considering the outlook for credit going forward, we believe the 2008-2009 global financial crisis offers a useful comparison. The risks for credit investors are largely the same: market dysfunction, corporate liquidity risks and downgrade risk in an environment of dramatically weaker economic growth. However, the policy response in 2020 has been quicker and more aggressive.

Market Dysfunction: Are the Markets Functioning Normally Yet?

Fed asset purchases have helped to ease the inventory problem on dealer balance sheets and credit market trading has begun to normalize.

Credit markets became highly dysfunctional in March as volatility led to large gaps between bids and offers. Price transparency disappeared and markets became illiquid. We believe the dysfunction in 2020 was mostly due to a balance sheet problem at broker-dealers, whereas the dysfunction in 2008 was driven by fundamental problems in the financial system, including uncertainty about the health of financial firms.

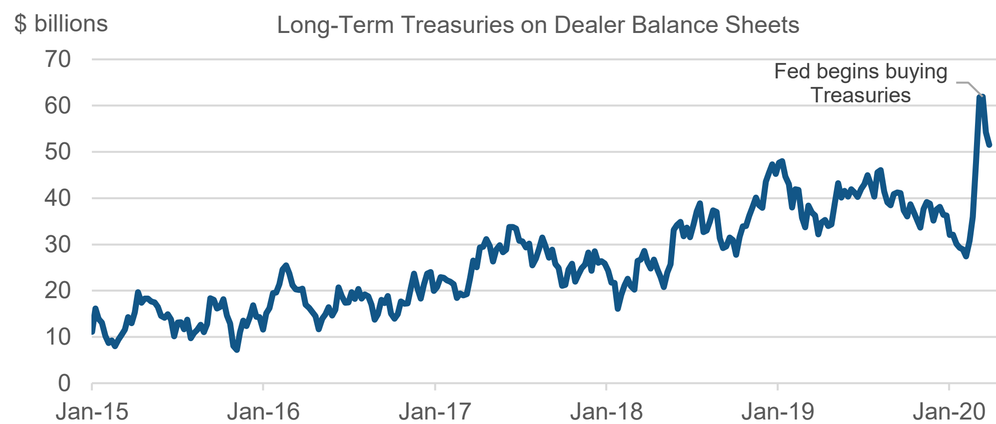
As volatility spiked in March, many investors sold Treasuries to raise liquidity or rebalance portfolios. Dealer inventories increased sharply, particularly in long-term Treasuries (**Exhibit 2**). Given the duration risk in long-term bonds and constraints on dealer balance sheets that were put in place after the financial crisis, dealers became unable to intermediate between buyers and sellers in the credit market.

On March 15, the Fed introduced a range of measures designed to ease conditions in funding and securities markets, including uncapped purchases of Treasuries and mortgage-backed securities. By April 9, the Fed had purchased more than $1 trillion in assets. The Fed’s rapid response has helped to ease the inventory problem on dealer balance sheets.

The Fed went a step further on March 23, announcing new programs to directly purchase corporate bonds, something the central bank never did during the financial crisis. These include the Primary Market Corporate Credit Facility (PMCCF), which allows the Fed purchase new bond and loan issuance and the Secondary Market Corporate Credit Facility (SMCCF), which allows the Fed to purchase outstanding corporate bonds in the secondary market.

The Fed’s aggressive response has already had a significant effect. Credit market trading has begun to normalize and flows have improved as buyers return to the market. Although markets may experience periods of volatility, we believe the improving trend in market function will continue.

Exhibit 2: Fed Asset Purchases Have Eased the Pressure on Dealer Balance Sheets



Source: New York Fed, Bloomberg. Long-term Treasuries include maturities of more than 11 years. As of April 1, 2020.

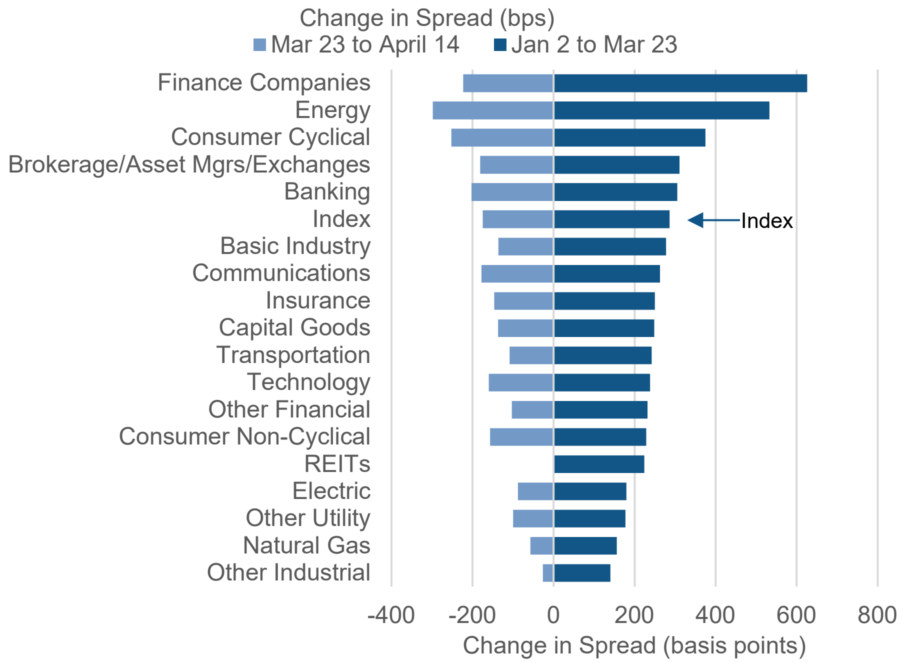
Corporations as a whole do not appear to have a liquidity problem, which creates opportunity for security selection.

Corporate Liquidity: Do Companies Have Enough Cash to Survive?

As shown in **Exhibit 3**, spreads across every sector of the US corporate market widened significantly—most by more than 200 basis points (bps)—from the start of the year through March 23. On March 23, the Fed announced that it would purchase corporate credit, something the central bank never did during the financial crisis. On April 9, the Fed expanded the scope and increased the size of the program announced on March 23. It will now purchase up $750 billion in corporate bonds through the secondary market, new corporate bond issuance and corporate bond ETFs. Since the Fed's March 23 announcement, spreads have tightened across every sector except for real estate investment trusts (REITs), which are exposed to rent-payment risks.

Exhibit 3: The Fed's Announcement of Corporate Bond Purchases Has Tightened Spreads

Spread changes by sector before and after the Fed's March 23 policy announcement



Source: Bloomberg US Corporate Index, as of April 14, 2020.

The Fed's intervention has been critical in reducing corporate liquidity risk. As markets stabilized and demand returned, companies were able to issue a record $262 billion in new debt in March (source: JP Morgan). If demand for new issues declines, the Fed's ability to purchase new corporate bond issues also provides a broad backstop for companies that need generate liquidity.

Fiscal policy also provides some degree of support for affected sectors and the economy as a whole. The US has already passed $2.7 trillion in fiscal stimulus, equivalent to almost 13% of GDP. The $2 trillion CARES Act stimulus package includes about $500 billion in aid for large corporations, including $25 billion for passenger airlines.

Similar measures have been implemented across the globe. Central bank asset purchases have resumed in the UK and Sweden, expanded in Europe and Japan and commenced for the first time in Australia, Canada and New Zealand. Every major developed country central bank has made at least one off-schedule rate cut, and most policy rates are at or near their lowest level ever. Fiscal stimulus has been implemented across the developed markets.

Finally, companies have drawn down $284 billion in revolving credit lines (source: Bloomberg as of April 14, 2020), reduced dividends, cut capital spending and halted stock buybacks, all of which should help to preserve liquidity.

Considering the policy response and investor demand for new corporate debt, corporations as a whole do not appear to have a liquidity problem, which creates opportunities for security selection.

Downgrade Risk: How Many Fallen Angels?

One of the key risks for investment-grade credit investors is downgrade risk, and particularly "fallen angel" risk, or the risk that an investment-grade company is downgraded to high yield.

US fallen angels in 2020 appear likely to surpass the record set in 2008 on a par value basis (i.e., the face value of the bonds when issued rather than the current market value). Our research team's bottom-up estimate is that a record $310bn in par value has a greater than one-in-three chance of falling to high yield in 2020. About $100bn of that has already occurred. Total US fallen angels in the 2008-2009 period were $164bn.

Due to the growth of the asset class, $310bn would amount to approximately 6% of the Barclays US Corporate Index at the start of 2020, consistent with the percentage during the financial crisis. In other words, while a meaningful portion of the outstanding debt in the investment grade (IG) market could be downgraded to high yield, we see limited fallen angel risk for the vast majority of the market.

In our view, fallen angel risk is primarily concentrated in sectors that have been directly affected by the coronavirus and the drop in oil prices.

We base our fallen angel estimate on conservative assumptions, including a severe economic downturn in the second quarter of this year and a slow pace of recovery. We also base it on what "could" happen, not what will happen. As a result, a worsening outlook would likely increase the probability of fallen angels, but not necessarily the size of our estimate. The main risk to this view is a much longer halt in activity with no improvement until much later in the year, which could move more companies into the potential fallen angel category.

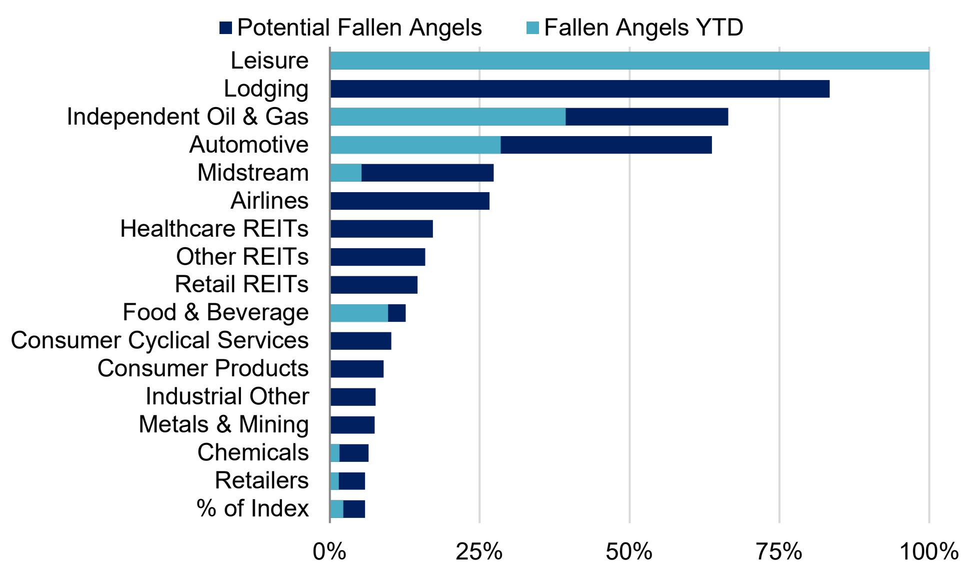
In our view, fallen angel risk is primarily concentrated in sectors that have been directly affected by the coronavirus and the drop in oil prices (**Exhibit 4**). We think the entire leisure sector (cruise lines) could be downgraded to high yield. The lodging sector also appears to be at significant risk, followed by the automotive sector (where risks are less driven by coronavirus or oil and more driven by secular changes and issuer-specific factors) and independent oil and gas producers.

Due to the fact that many of the downgrades to high yield could occur as a direct result of the pandemic, the Fed announced on April 9 that its corporate bond purchases will also include fallen angels that are downgraded after March 22 and maintain a BB rating (the highest high yield rating) at the time of the Fed's purchase.

Considering that the vast majority of the IG universe is unlikely to be downgraded to high yield, as well as the Fed's purchase program, we believe current spread levels offer ample compensation for this downgrade risk and provide an attractive entry point for investment.

Exhibit 4: Fallen Angel Risk is Highest in Sectors Directly Affected by Coronavirus, Energy

% of Bloomberg US Corporate Index sectors at risk of downgrade to high yield (GSAM estimate)



Source: GSAM estimates based on company data. As of April 5, 2020

Capturing the Opportunity: Why We Believe the Time is Now

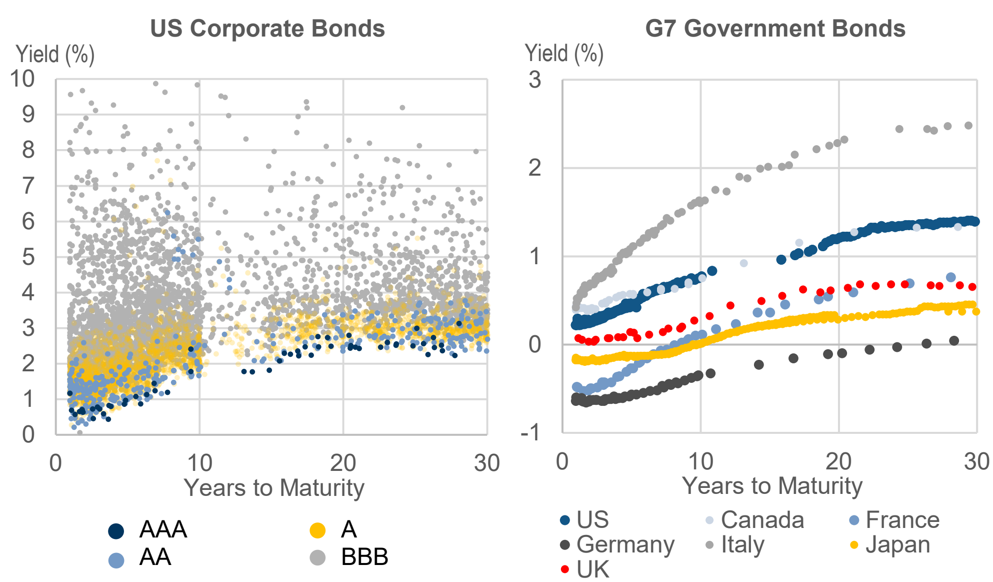
Credit market performance overall is likely to continue to reflect investor perceptions of the coronavirus pandemic and economic outlook. If economic shut-downs appear likely to be extended, credit could experience periods of spread widening and underperformance. However, if monetary and fiscal policy can successfully address systemic risks, we think credit spreads at current levels provide ample compensation for the risks, attractive yields versus government bonds and the potential for spread tightening over the next 6-12 months.

We see three main reasons why credit can outperform:

In our view, fallen angel risk is primarily concentrated in sectors that have been directly affected by the coronavirus and the drop in oil prices.

- **Global demand for yield.** As of April 8, 56% of the Bloomberg Global Aggregate Bond Index yielded less than 1%, versus 39% at the end of 2019. The change is mostly due to the decline in US Treasury yields. At the start of 2020, the entire US yield curve was above 1%. Now, only the 30-year bond yields more than 1%. US credit benefitted from global demand for yield before US Treasury yields fell below 1%. We expect the demand for yield to be even larger now. The US credit market offers a broad and diverse opportunity set for security selection, with a wide range of yields available with maturities under 10 years (**Exhibit 5**).
- **Risk and return potential are more balanced.** Coming into 2020, credit spreads were at or near historical lows across much of the corporate bond market, providing limited potential for further spread tightening. Although spreads have reversed some of their recent widening, we believe spreads have more room to tighten from current levels, offering a more attractive balance between risk and return potential.
- **Credit may replace government bonds as an equity diversifier.** Government bonds are at or near their lower bound, as the Fed, ECB and Bank of Japan have all signaled that further rate cuts are unlikely. As a result, government bonds may provide a less effective hedge against equity risk going forward. Credit may fill this gap. Bonds are less volatile and higher in the corporate capital structure compared to equities, and are supported by Fed asset purchases. As a result, credit could see demand from traditional asset allocation and risk parity strategies looking to diversify equity risk.

Exhibit 5: Low Yielding Government Bonds Likely to Support Demand for Corporates



Source: US corporate bonds based on Bloomberg US Corporate Index. G7 government bonds based on Bloomberg Global Treasury Index. Each dot represents an individual bond. Bonds with maturities beyong 30 years excluded. Non-rated corporate bonds and corporate bonds with yields above 10% excluded. Ratings based on Bloomberg composite ratings. As of April 13, 2020.

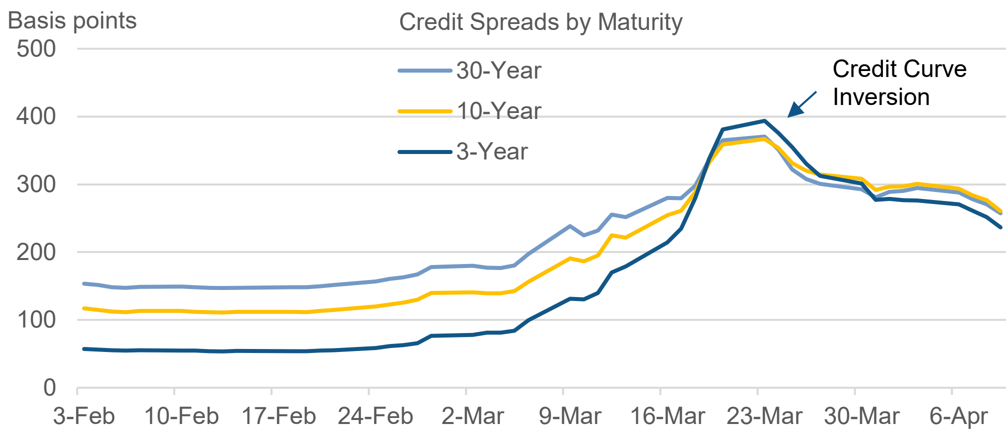
The Current and Evolving Opportunity Set

We believe high-quality credit with short to intermediate maturities offers the most attractive opportunity currently, but we expect this to evolve over time to include longer-term credit and high yield.

Short-term credit was hit particularly hard in the March sell-off. As investors became concerned about near-term corporate liquidity risk, credit curves inverted, with short-term (3-5 year) credit spreads rising above longer-term spreads (**Exhibit 6**). Since the Fed's corporate bond purchase announcement, the inversion in credit curves has begun to reverse.

We believe short-term, high-quality credit offers the most attractive opportunity currently, but we expect this to evolve over time to include longer-term credit and high yield.

Exhibit 6: Short-Term Credit Spreads Have Risen More than Longer-Term Spreads

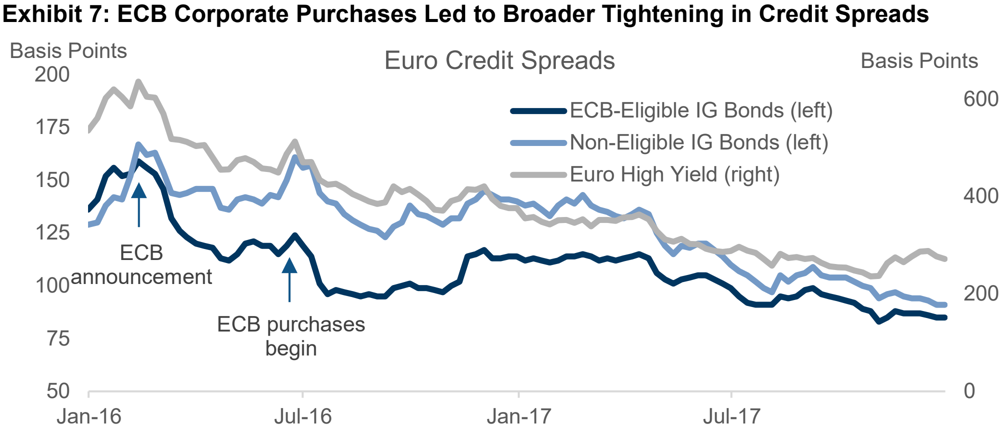


Source: JP Morgan US Liquid Index. As of April 9, 2020.

Considering the broad opportunity set available in the credit market, we believe diligent, fundamental research can identify short- to intermediate-term bonds within the credit universe that offer attractive yield, limited downgrade risk and significant potential for spread tightening.

Over time, we expect the opportunity set in credit to grow. As the economic outlook becomes clearer, we think low yields and Fed asset purchases will push investors out along the risk spectrum in search of yield. This is consistent with the experience in Europe after the ECB began purchasing corporate credit in 2016 (**Exhibit 7**). If short-term credit spreads decline as we expect, we think longer-term IG credit will become more attractive to a wider investor base. We also believe high yield offers attractive compensation for default risk, and we expect investors demand for high yield to growth as market volatility declines and higher-quality yields compress towards government bond yields.

Exhibit 7: ECB Corporate Purchases Led to Broader Tightening in Credit Spreads



Source: ICE BAML Euro Financial, Euro Non-Financial and Euro High Yield Indices. January 2016-December 2017. Non-Financial bonds used as a proxy for ECB-eligible bonds. Financial bonds and high yield were not eligible for ECB purchases.

Conclusion: The Time is Now for Corporate Credit

Financial markets are adjusting rapidly to changes in the outlook as a result of the coronavirus, the plunge in oil prices and the evolving policy response.

In this uncertain environment, our intention is not to call the bottom of what is likely to be a near-term recession, but to highlight the changes in market dynamics that suggest to us that credit offers a much more attractive risk-return proposition today relative to the end of February or even the beginning of the year.

Given elevated spreads, the combination of central bank asset purchases and fiscal stimulus, and the likelihood that demand for credit will rise due to low government bond yields across the developed markets, we believe now is an attractive entry point for an investment in credit. For opportunistic investors, we believe the most attractive opportunity currently is in short- to intermediate-term investment-grade bonds. For pension funds and similar long-term investors, we believe long-term credit offers an attractive alternative to low-yielding, long-term government bonds. In either case, we believe thorough credit research and security selection are critical to managing downgrade risk in an environment that is particularly uncertain.

For investors seeking exposure to credit, we believe an opportunistic approach rather than a benchmarked approach may be the most effective strategy in the current environment for capturing enhanced yields relative to government bonds and the opportunity for spread tightening and total return.

For more yield-oriented investors, a buy-and-maintain approach may be appropriate. With a buy-and-maintain approach, a carefully researched portfolio is constructed with the goal of avoiding downgrades or other credit events. Active management in this approach is focused on limiting portfolio turnover and trading costs, rather than the traditional, total-return focused active management that seeks to capture spread tightening as well as yield.

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