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INCOME INVESTING

Managing fixed income late in the credit cycle: navigating the path forward

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2Q19

Highlights

- While we are clearly in the late stage of the credit cycle, we don't think a recession is imminent and believe investors should feel comfortable investing in credit markets throughout the rest of 2019.
- We believe investors should focus on higher-quality issues with improving credit fundamentals, while seeking to diversify across industries and geographies.
- Nuveen's sector specialist teams are finding attractive opportunities in U.S. credit sectors, including high yield, but they are increasingly diversifying into other higher-income areas, such as emerging market debt and leveraged loans.
- Active management can add value in any environment, but we believe it is especially beneficial at the current stage of the credit cycle.

The multi-trillion-dollar question for investors: How late are we in the credit cycle, and what are the portfolio implications?

That's the question we most often hear from our clients. And while there are few certainties in life or markets, we feel confident in our answer: We are clearly in the late stage of the credit cycle. But "late" doesn't mean "done," and credit cycles don't die of old age. Rather, a combination of fundamentals and sentiment bring about their demise, and even in their later stages, savvy investors can find opportunities not only to protect their investments, but to position their portfolios for an emphasis on income as the cycle turns.

Nuveen believes most investors should be comfortable investing in the credit markets throughout the rest of 2019. But an increasing preference for higher-quality issuers and diversification across sectors and countries seems wise.

In this article, we ask investment professionals across our broad platform of fixed income specialists — who collectively manage approximately \$400 billion in assets for clients — to assess risks and opportunities in all corners of the credit markets.¹

We hope you enjoy this issue of *Nuveen knows* and we encourage you to contact your Nuveen representative with any questions, views or needs.



Bill Martin
Head of Global Fixed Income



Tony Rodriguez
Head of Fixed Income Strategy

Why is the stage of the credit cycle important for fixed income investors? And where are we now?

The credit cycle tracks the expansion and contraction of access to credit over time. It influences the overall economic cycle because access to credit affects a company’s ability to invest in their business and drive economic growth. Over time, performance of sectors such as investment grade corporate bonds, high yield corporate bonds, leveraged loans, emerging markets corporate debt and preferred securities is linked directly to the credit cycle. While we think we are in the late stage of the cycle, this is not the same as being

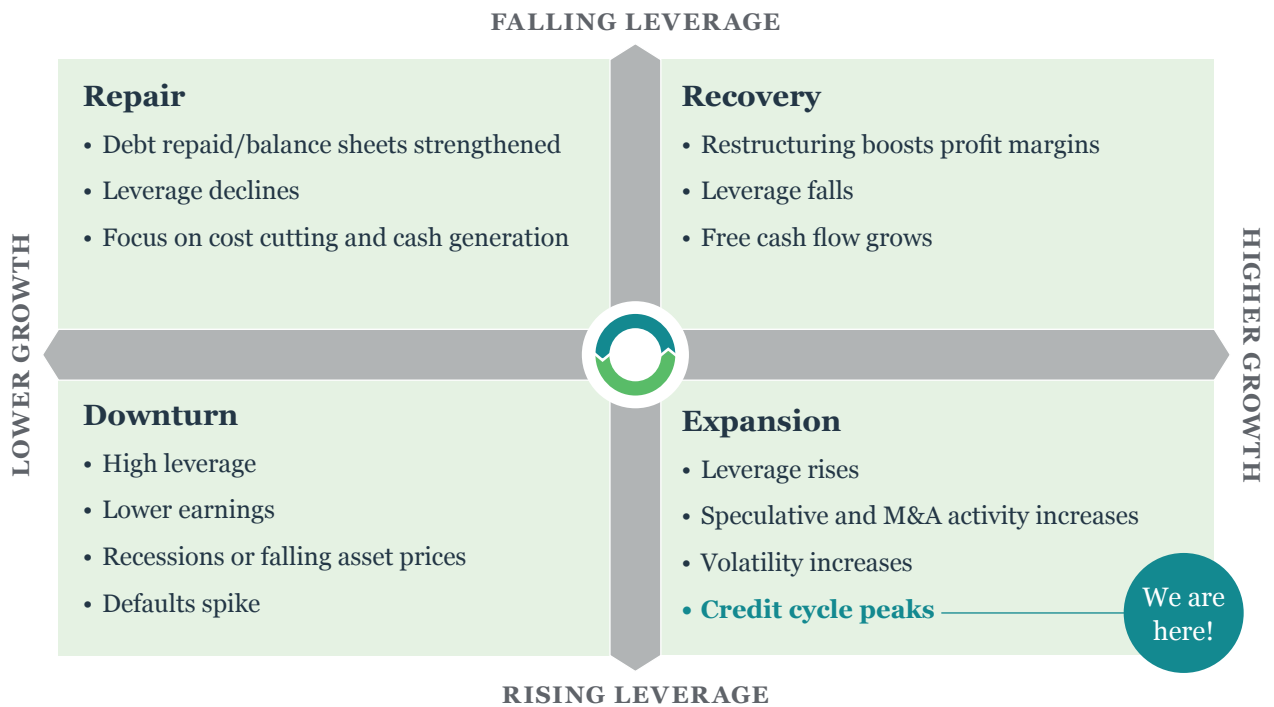
at the end of the credit cycle, and we see compelling opportunities for investors across the vast and diverse global fixed income markets.

There is no rule covering how long a cycle can last: Credit cycles don’t just end with age. While some parts of the U.S. and global economy appear to be in the late cycle, others do not. Global economic weakness remains a concern, and the effects of further trade tensions and tariffs can shift sentiment and stifle economic growth should the worst outcomes manifest.

Consumers remain in good shape as it relates to household balance sheets and spending power, but corporate debt levels have reached historic highs.

We suggest combining a broad view across sectors with deep analytical resources to navigate the credit markets. All in all, there is no obvious indicator that the cycle is about to shift from “expansion” to “downturn,” as shown in Figure 1.

Figure 1: Credit cycle in the late expansion stage



How can an active fixed income strategy add value in this environment?

At Nuveen, we firmly believe that an actively managed bond strategy can add value in any environment, but is especially beneficial at the current stage of the credit cycle. While the likelihood of a recession is based on a number of factors, the exact timing is almost always a surprise and can be driven by a geopolitical shock, policy shock or other events that change the landscape on short notice. Active managers have the flexibility to protect investor capital and take advantage of potentially wider spreads that arise from such shocks, unlike passive approaches that must stay closely aligned with their selected index and its associated methodology.

We believe that active management aids in reducing excesses that accumulate over an economic cycle and become embedded in market indexes. For example, there has been a significant increase in BBB-rated bonds (the lowest rating of bonds still considered investment grade) in the corporate bond market since the financial crisis (see Figure 2). This is a potential risk associated with a passive approach. That's because, in fixed income indexes, securities are weighted by the market value of the outstanding debt, so issuers with the most debt comprise more of the index. When the concentration of weaker corporate securities in

the market increases, so does an index's (and, consequently, a passive strategy's) exposure to them.

Active managers can potentially reduce risk not only by managing position sizes, but by capturing undervalued opportunities that happen to fall outside of traditional indexes. We see ample opportunity to identify mispriced bonds and sectors, yield enhancers and diversifiers that are excluded from indexes because of their deal size, issuer type, structure or maturity. Such opportunities provide the potential for excess return over the index, as well as risk management.

Figure 2: The amount of BBB-rated bonds has increased significantly since 2008

BBB exposure in U.S. investment grade corporate market



Source: Bloomberg, as of 31 Dec 2018.

Figure 3: Guide to credit ratings

Rating	Description
AAA AA A BBB	Investment grade
BB B CCC	Below investment grade
D	In default

Source: Nuveen

How should fixed income investors prepare for late-cycle dynamics? What are the investment implications across corporate credit sectors?

We are comfortable investing in the credit markets at this stage of the credit cycle, given the collective judgment of our research and investment teams. We think investors should focus on higher-quality issues with improving credit fundamentals. Industry and geographical diversification also remain critically important.

Our sector specialist teams are finding attractive opportunities in U.S. credit sectors, including high yield, but they are increasingly diversifying into other higher-income areas, such as emerging markets debt and leveraged loans. The following sections highlight the current views of our highly experienced, sector-focused portfolio managers.

Sector views from our portfolio managers

INVESTMENT GRADE CORPORATE BONDS

As we entered 2019, risk assets were heavily oversold and valuations appeared attractive resulting from the “risk-off” sentiment that was prevalent late in 2018. However, an improving macroeconomic environment, a more dovish stance from the Federal Reserve (Fed), and expected progress on U.S. and China trade have supported a relatively dramatic rebound in asset values across the board.

In the near term, we don’t expect further spread tightening in the investment grade corporate sector, as credit spreads have reached our near-term forecasts. However, fundamentals are generally healthy, and we expect supply to drop in the coming year, supporting yields for investment grade corporate bonds. Strategically, we continue to prefer the financials sector over non-financials given their strong capital positions relative to event risk, such as M&A activity. Tactically, we see value in banks, telecommunications, higher-quality energy and autos, but have a less favorable view on most other industries in the sector.

We think the market’s concerns over BBB-rated concentration risk is overblown, and we are not overly concerned about “fallen angel” risk. Many corporate issuers that have increased debt levels for mergers and acquisition (M&A) activity have indicated plans to reduce that debt. In the event of an economic slowdown, these issuers have many levers to pull to avoid a downgrade to high yield, such as cutting dividends, reducing capital spending, and curtailing share buybacks. We think investors should be more vigilant about managing exposures to single-A issuers that may risk dropping to BBB for the sake of M&A transactions or other shareholder-friendly initiatives.

What is a “fallen angel” bond?

A fallen angel is a bond that was issued with an investment-grade rating (BBB or higher) but has since been downgraded to below investment grade due to the weakening financial condition of the issuer.

Fallen angels can include corporate, municipal or sovereign issuers. Initial ratings and subsequent downgrades are assigned by one or more nationally recognized statistical rating organizations such as Standard & Poor’s, Fitch or Moody’s Investors Service. Our analysts assign our own proprietary credit ratings to make decisions internally.

PREFERRED SECURITIES

The preferred and contingent capital (CoCo) sector offers strong fundamentals and technicals. Banks — representing the largest industry within the sector at 69% — were wildly profitable in 2018 and passed the most rigorous set of stress tests to date with flying colors, demonstrating that current capital levels are sufficient.² Furthermore, in a strong vote of confidence regarding the underlying strength and capital levels of the banking sector, the Fed allowed banks to meaningfully increase dividends and share buyback programs. Net supply was negative in the U.S. preferred market, and banks were redeeming more preferred paper than they were issuing.

Nevertheless, these strong fundamentals and technicals couldn't overcome investor outflows of \$5.9

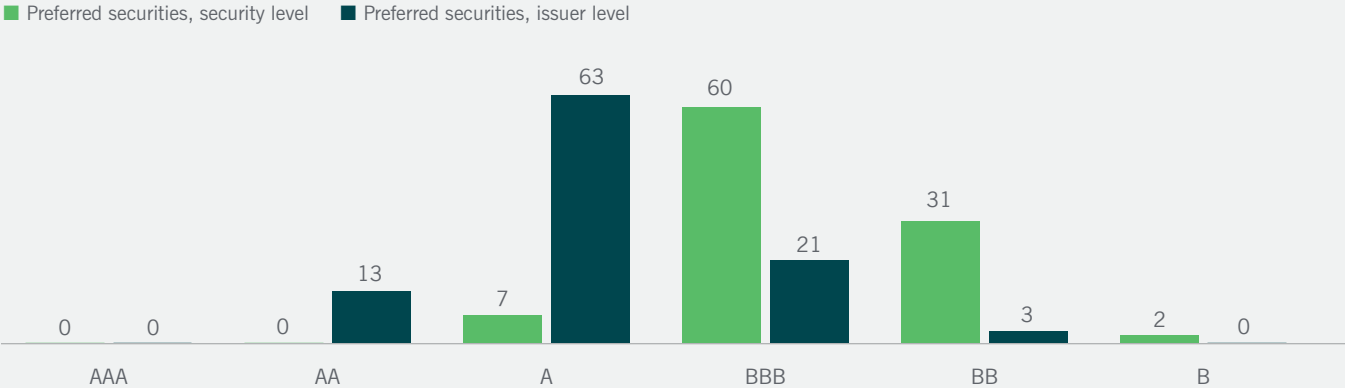
billion (12% of the mutual fund category) in 2018, which significantly hurt performance.³ Almost all of the outflows were in the fourth quarter, initially sparked by a general risk-off sentiment when the sector underperformed the broad fixed income market, but greatly exacerbated by tax loss harvesting later in the quarter. All in, spreads in the sector widened over 200 basis points during the fourth quarter of 2018. Although positive flows of \$350 million have returned to the category in 2019, there is much more to come in our opinion, and spreads have tightened by over 100 basis points.⁴

We see opportunity in the current market environment for a variety of reasons. We believe the fundamentals of the bank sector should remain strong for the rest of the year, and net new issue supply will remain negligible. Furthermore, we think preferred securities offer additional

characteristics that make them especially attractive at this stage of the credit cycle, including:

- **Diversified issuer base:** The bank and insurance issuers that dominate the preferred market are uncommon borrowers in the high yield and leveraged loan markets, which diversifies investors' sources of income and risk.
- **Higher quality:** Many preferred securities are actually higher quality than their credit ratings suggest. Often, BB- or BBB-rated issues are A-rated or higher at the senior debt level, as shown in Figure 4. For example, 76% of preferred issuers have ratings of A or better, despite a market weight of 60% BBB and 33% below investment grade at the security level. Furthermore, banks and insurance companies operate in highly regulated industries, which may offer additional protection for investors in preferred securities.

Figure 4: Preferred securities are predominantly rated investment grade from high-quality issuers (%)



Data source: Bloomberg L.P., BofA Merrill Lynch and Nuveen Asset Management, 30 Jun 2018. **Past performance does not guarantee future results.** Breakdown of the credit quality of the constituent components of each of the indexes being compared: Preferred Securities represented by the ICE BofA Merrill Lynch U.S. All Capital Securities Index; Security Level ratings based on the highest ranking of Standard & Poor's, Moody's or Fitch (including intra-rating gradations like A2/A3). Issuer Level ratings based on the highest ranking of Standard & Poor's, Moody's or Fitch using Bloomberg's S&P LT Issuer Rating, Moody's Issuer Rating and Fitch's Senior Unsecured Ratings. AAA, AA, A and BBB are investment grade ratings; BB, B, CCC/CC/C and D are below-investment-grade ratings. Investors cannot invest in an index.

EMERGING MARKETS CORPORATE DEBT

We think emerging markets corporate valuations are attractive compared to investment grade corporates in the U.S., Europe and Japan as well as U.S. high yield corporate bonds.

Emerging markets are a large and growing share of the global economy, and are projected to grow faster than developed markets, making them an important contributor to the world's economy. According to the International Monetary Fund (IMF), emerging markets are expected to contribute an estimated 60% to global gross domestic product (GDP) in 2019, up from 37% in 1990.⁵

Our outlook for emerging markets corporate debt is based on the complexity and nuance of the sector. The universe of U.S. dollar-denominated emerging markets corporate debt comprises both traditional corporate issuers and those that are defined as “quasi-sovereign,” meaning a government owns 50% or more of a company's equity and/or voting rights.

Compared with emerging markets sovereign debt (bonds issued directly by a government), we favor emerging markets corporate debt given that it has provided strong risk-adjusted returns and tends to be higher quality. We approach emerging markets investing with a healthy appreciation that what happens with agencies or large corporations/financial institutions can have significant implications to government financing and vice versa.



A word on China

No discussion of emerging markets would be complete without commenting on China. There is very little U.S. dollar-denominated sovereign debt outstanding from China. Within the dollar-denominated quasi-sovereign sector, we see little differentiation and think that valuations look unattractive given the sizable government presence in the economy. While we don't foresee a hard landing, we always need to be mindful of China as the biggest global macro risk given its relevance to global trade and commodity markets.

Tactically, we have found interesting opportunities in the China high yield corporate space, but are mindful to be price-sensitive and not to chase a rallying market. China defaults will be rising and garner headlines, but this is expected and should be contained to the local investor base and smaller non-systemic issuers.

Currently, some of our highest-conviction views are:

- + **Turkey:** We believe banks' non-performing loans are under pressure, but valuations are still attractive. Our cautious approach has us favoring the large private banks with bigger capital buffers, many of which have foreign or large sponsorship from the private sector.
- **Argentina:** High interest rates, higher-than-expected inflation and political risks continue to dominate. While corporate bonds have a better track record than sovereign debt in terms of default, they are not immune to a selloff. We will be closely watching elections in the second half of 2019.
- +/- **Mexico:** Concerns remain in Mexico due to uncertainty surrounding the country's state-owned petroleum company and the amount of government support that will be provided. Furthermore, worries over growth prospects for the country and the potential for a deterioration in credit lead us to take a more cautious approach.

HIGH YIELD CORPORATE BONDS

We believe the high yield corporate bond market currently offers attractive value for investors, despite recent spread volatility and uncertainty around interest rates. We don't see high yield as overvalued, and our current fundamental outlook for defaults remains benign. Additionally, the strong year-to-date performance within high yield has been driven more by changes in interest rates than by shifts in credit quality, which may present some future opportunities for our intensive credit research process.

We think investors should focus on identifying those companies with strong cash-flow that are properly capitalized for the volatility in their businesses and positioned to navigate different economic cycles. While we don't anticipate an imminent recession, we think investors should prepare for future economic uncertainty by de-emphasizing the lowest-quality tier of the high yield sector, bonds rated CCC and below.

We are not expecting to see a mass migration of fallen angels into the high yield market. It is important to note that the size of the BBB market is not a good proxy for companies that will become fallen angels. In general, BBB borrowers are very large companies with many levers to pull to prevent getting downgraded, not the least of which is reducing dividends and share buybacks.

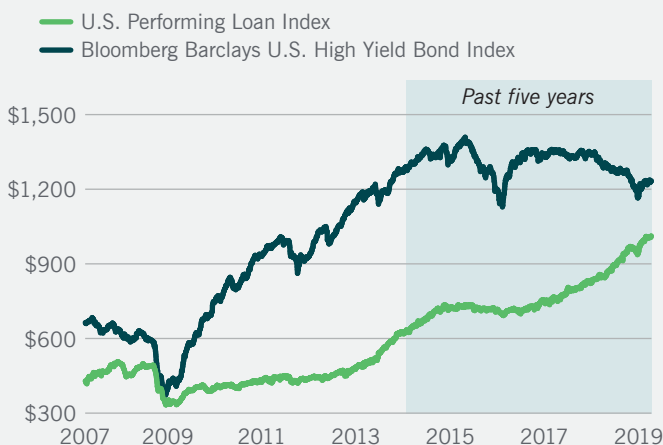
LEVERAGED LOANS

The leveraged loan market has experienced tremendous growth over the past several years. We view this growth as being driven by demands from investors looking for floating-rate exposure to offset rising rate/duration concerns, yield-seekers driving new collateralized loan obligations (CLOs) issuance, and corporate issuers opportunistically favoring loans due to their flexibility and attractive borrowing costs given this aggregate demand. The combination of market growth and investors' perceptions that we are in a late stage of the credit cycle has created concern from the media, market strategists, regulators and even Fed committee members. However, we find this angst, and the volatility that has ensued, to be misplaced. In fact, it has created attractive long-term risk-adjusted opportunities for investors, and we remain constructive on the sector given our rigorous research process.

However, the Fed's recent announcement that it will pause on rate hikes for 2019 removed a near-term tailwind for loans and, as a result, many individual fixed income investors and yield-seekers now seem to be less interested in floating-rate exposure. At the same time, the Fed's policy pivot removed our key downside risk: We no longer see the risk of the Fed raising rates too quickly and accelerating an end to the credit cycle.

Figure 5: Growth in the leveraged finance market shifted from high yield to bank loans as the credit cycle advanced

Amount outstanding (\$B)

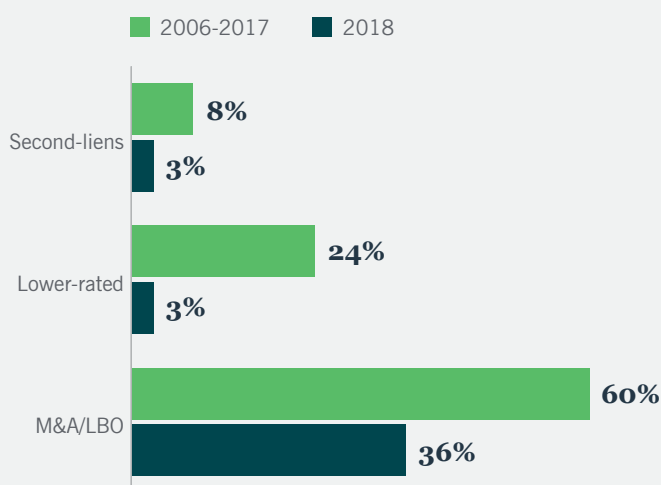


Source: Bloomberg Barclays, S&P Leveraged Commentary & Data (S&P LDC). U.S. performing loans are represented by the S&P/LSTA Leveraged Loan Index.

A by-product of the strong demand for leveraged loans and the “blurring” interest between high yield bonds and leveraged loans has been the significant growth of covenant-lite (cov-lite) issuance, which has been a long-term, secular trend. Cov-lite loans now represent roughly 80% of the loan market and as much as 87% of new issuance in 2018, which has caused investor concern and been a subject of debate in the market.⁶ However, it’s important to note that “covenant-lite” does not mean “covenant-free.” Cov-lite loans do indeed have covenants, but instead of traditional maintenance-based tests, the covenants are based on certain events. Additionally, it is important to point out that part of the reason for the rise in cov-lite loans is due to the fact that larger, higher-quality and more-established companies have been entering the market, and lenders/investors naturally demand fewer covenants from these types of borrowers.

We have been paying close attention to the cov-lite trend and factor it into our investment assessments. We expect loan recoveries to be lower in the next credit downturn compared to historical experiences. Compared to a covenant-heavy structure, the cov-lite nature likely will push out the actual event of default due to less onerous or restrictive tests. We think the cov-lite trend is noteworthy, but some of the key warning signs of the pre-financial crisis era are not particularly alarming right now, as indicated in Figure 6.

Figure 6: Issuance quality for leveraged loans has improved since pre-financial crisis



Source: JP Morgan

Loan covenants: a closer look

A loan covenant is a condition in a loan or bond issue that requires the borrower to fulfill certain conditions, forbids the borrower from undertaking certain actions, or which possibly restricts certain activities to circumstances when other conditions are met.

Covenant-lite loans are a type of financing that is issued with fewer restrictions on the borrower, but fewer protections for the lender.

Loans with traditional covenants require the borrower to perform certain financial maintenance tests at regular intervals, usually quarterly. Covenant-lite loans may be subject to incurrence tests, which do not occur at specified intervals, but may be triggered by a specific event.

Ultimately, we believe that the best offense in the leveraged loan market is strong research. We doubt that the cov-lite trend will end any time soon. Our deep and experienced research team identifies loans, cov-lite or not, that are well-positioned to repay investors and potentially drive strong returns. We tend to focus on companies that generate solid free cash flow through a business cycle, favoring more predictable industries and higher-quality sectors. Furthermore, we size our exposures to cyclical and more-volatile sectors conservatively. Areas of chief concern for us relate to borrowers with very aggressive and loose credit agreements, generous and sizeable expenses added back to earnings before interest, tax, depreciation and amortization (EBITDA), and aggressive leveraged buyout (LBO) capital structures with stretched debt levels, and/or structures wherein only the first-lien holders are paid in the event of a default.

And while we acknowledge the near-term risks within this asset class, we believe loans remain an important strategic allocation for most investors. The following section on portfolio construction describes how our Solutions team considers incorporating loans into diversified portfolios.

Positioning credit investments in portfolios

Solutions view



Frank van Etten
Chief Investment Officer and
Head of Nuveen Solutions

When deciding the amount and types of credit sectors to include in a portfolio, investors should distinguish between strategic, longer-term allocations and more tactical, shorter-term positioning. Regardless of time horizon, we think investors would benefit from working with active managers who have proven track records in risk management when determining these allocations, particularly in the late stages of the credit cycle.

Strategic allocation view

The amount of credit exposure to hold within a strategic fixed income allocation depends on an investor's intended long-term outcome. For **growth investors**, the fixed income allocation should provide attractive risk-adjusted returns over time and diversify the overall equity risk of the portfolio.

Diversified credit sectors such as high yield bonds, leveraged loans, preferred securities and emerging markets debt have shown to diversify core bonds and improve risk-adjusted returns over various time periods (see Figure 7). For most growth investors, we believe that the appropriate allocation to a diversified basket of credit sectors falls somewhere in the range of 15-30% of the total fixed

Figure 7: Diversifying across credit sectors may produce attractive risk-adjusted returns ...

Historic Sharpe ratios for various combinations of U.S. aggregate bonds and diversified plus sectors

Years	100% Core FI	75% Core/ 25% Plus	50% Core/ 50% Plus	25% Core/ 75% Plus	100% Plus Sector FI
5	0.57	0.81	0.94	0.96	0.92
10	1.07	1.54	1.66	1.60	1.52
15	0.68	0.82	0.78	0.71	0.64
20	0.75	0.90	0.87	0.78	0.70

Data source: Bloomberg, 31 Mar 1989 to 31 Mar 2019. **Past performance is no guarantee of future results.** Representative indexes: **Core Fixed Income:** Bloomberg Barclays U.S. Aggregate Index; **Diversified Plus Sectors:** 30% Bloomberg Barclays U.S. Corporate High Yield TR Index, 30% S&P/LSTA Leveraged Loan TR Index, 30% JP EMBI Global Diversified Composite, 10% ICE BofAML Fixed Rate Preferred Security Index. Performance for indexes does not reflect investment fees or transactions costs. Investors cannot invest directly in an index.

Figure 8: ... But may cause increased equity sensitivity

Historic beta versus U.S. stocks for various combinations of U.S. aggregate bonds and diversified plus sectors

Years	100% Core FI	75% Core/ 25% Plus	50% Core/ 50% Plus	25% Core/ 75% Plus	100% Plus Sector FI
5	-0.01	0.05	0.11	0.17	0.23
10	-0.03	0.05	0.14	0.22	0.30
15	0.00	0.09	0.19	0.28	0.37
20	-0.02	0.06	0.14	0.21	0.29

Interest rate sensitive ← → Credit sensitive

Data source: Bloomberg, 31 Mar 1989 to 30 Sep 2018. **Past performance is no guarantee of future results.** Representative indexes: **Core Fixed Income:** Bloomberg Barclays U.S. Aggregate Index; **Diversified Plus Sectors:** 30% Bloomberg Barclays U.S. Corporate High Yield TR Index, 30% S&P/LSTA Leveraged Loan TR Index, 30% JP EMBI Global Diversified Composite, 10% ICE BofAML Fixed Rate Preferred Security Index.; **U.S. stocks:** Russell 3000 Index. Investors cannot invest directly in an index.

income allocation. The remaining fixed income should be allocated to core fixed income strategies, which are designed to diversify equity risk and mitigate portfolio volatility.

Income investors should place higher emphasis on the current income a portfolio can generate, typically measured by current yields. We think investors should consider increasing their allocation to diversified credit sectors to meet their income goals, but to do so cautiously given that the higher allocation to certain credit sectors may increase portfolio sensitivity to equity market swings (as measured by historic beta versus U.S. stocks shown in Figure 8).

Tactical allocation view

Over the next six to 12 months, we see more attractive risk-adjusted return prospects from taxable investment grade credit than from U.S. high yield bonds, as late cycle dynamics may create increased price volatility in lower-quality sectors. With regard to leveraged loans, we expect the U.S. Treasury yield curve to remain flat, or even bull steepen (where short rates fall more than long

rates) if the Fed reverses course and decides to cut rates in 2019.⁷ If this plays out, it may create a ceiling on leveraged loan demand.

Shifting from low- to high-quality fixed income would mean that investors would be accepting lower yields in an effort to better protect principal. For income investors who wish to maintain higher yield levels, we suggest overweighting emerging markets debt, given that higher credit quality than U.S. speculative grade credit, attractive valuations, and (in our view) a U.S. dollar stabilized by accommodative monetary policy could create tailwinds for the remainder of 2019. For income investors comfortable with added U.S. equity market volatility, allocating to preferred securities is another way to increase credit quality, but without sacrificing as much yield when compared to investing in investment grade corporate bonds. For tax-sensitive income investors, we continue to see value in longer-dated municipals as well, including high yield municipals, which remain attractive based on AAA/U.S. Treasury yield ratios and favorable supply/demand dynamics.

Putting it all together

Following are our summary views for how investors may want to consider constructing portfolios in the latter stages of the credit cycle:

- We believe the **current economic cycle still has room to run**, and see no evidence that we will see a near-term end to the credit cycle.
- As such, our fixed income portfolio managers continue to see select opportunities in diversified credit sectors such as **high yield bonds, leveraged loans, preferred securities and emerging market debt**.
- We generally favor **higher-quality issues** across asset classes, which may provide a good risk/return balance.
- Above all, retain a focus on **research-based active management**, which has the flexibility and nimbleness to seek out opportunities across sectors, credit qualities and geographies.

For more information, please visit nuveen.com.

Endnotes

1 Assets under management as of 31 Dec 2018. 2 Source: Nuveen. 3 Source: Morningstar, as of 21 Mar 2019. 4 Ibid. 5 Source: IMF as of Oct 2018. Percent of global gross domestic product (GDP) is based on purchasing power parity (PPP). 6 S&P LCD. 7 As of 4 Apr 2019.

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Glossary

Beta is a measure of the variability of the change in the share price for a fund in relation to a change in the value of the fund's market benchmark. Securities with betas higher than 1.0 have been, and are expected to be, more volatile than the benchmark; securities with betas lower than 1.0 have been, and are expected to be, less volatile than the benchmark. **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. **Bloomberg Barclays U.S. High Yield 2% Issuer Capped Index** tracks the performance of U.S. noninvestment-grade bonds and limits each issue to 2% of the index. **Bloomberg Barclays U.S. Corporate High Yield Bond Index** measures the USD-denominated, high-yield, fixed-rate corporate bond market. **Credit Suisse Leveraged Loan Index** is designed to mirror the investable universe of the U.S. dollar-denominated leveraged loan market. Loans are added to the index if they qualify according to the following criteria: The highest Moody's/S&P ratings are Ba1/BBB+, only funded term loans are included, and the tenor must be at least one year. **Duration** measures how long it takes, in years, for an investor to be repaid a bond's price by total cash flows. Generally, for every 1% change in interest rates, a bond's price will change approximately 1% in the opposite direction for every year of duration. **Earnings before interest, tax, depreciation and amortization (EBITDA)** is a measure of a company's operating performance. Essentially, it's a way to evaluate a company's performance without having to factor in financing decisions, accounting decisions or tax environments. **First lien** is the first to be paid when a borrower defaults and the property or asset was used as collateral for the debt. A first lien is paid before all other liens. **ICE BofA Merrill Lynch Core Plus Fixed Rate Preferred Index** is designed to replicate the total return of a diversified group of investment-grade preferred securities. **ICE BofA Merrill Lynch U.S. All Capital Securities Index** is a subset of the ICE BofA Merrill Lynch U.S. Corporate Index including all fixed-to-floating rate, perpetual callable and capital securities. **JPMorgan Emerging Markets Bond Index (EMBI) Global** tracks total returns for U.S.-dollar denominated debt instruments issued by emerging market sovereign entities. **Leveraged buyout (LBO)** is the acquisition of another company using a significant amount of borrowed money to meet the cost of acquisition. **Russell 3000 Index** measures the performance of the largest 3000 U.S. companies representing approximately 98% of the investable U.S. equity market. **S&P 500 Index** is a capitalization-weighted index of 500 stocks designed to measure the performance of the broad domestic economy. **S&P/LSTA Leveraged Loan Index** is a market value-weighted index designed to measure the performance of the U.S. leveraged loan market based upon market weightings, spreads and interest payments. **Sharpe ratio (risk-adjusted return)** is a risk-adjusted return measure calculated using standard deviation and excess return to determine reward versus unit of risk. The higher the Sharpe ratio, the better the historical risk-adjusted performance.

A word on risk

Investing involves risk; principal loss is possible. Debt or fixed income securities are subject to market risk, credit risk, interest rate risk, call risk, derivatives risk, dollar roll transaction risk and income risk. As interest rates rise, bond prices fall. Below investment grade or high yield debt securities are subject to liquidity risk and heightened credit risk. The guarantee provided by the U.S. government to treasury inflation protected securities (TIPS) relates only to the prompt payment of principal and interest and does not remove the market risks of investing in the fund shares. Preferred securities are subordinated to bonds and other debt instruments in a company's capital structure and therefore are subject to greater credit risk. Foreign investments involve additional risks, including currency fluctuation, political and economic instability, lack of liquidity and differing legal and accounting standards.

Asset-backed and mortgage-backed securities are subject to additional risks such as prepayment risk, liquidity risk, default risk and adverse economic developments. This information represents the opinion of Nuveen Asset Management, LLC and is not intended to be a forecast of future events and this is no guarantee of any future result. It is not intended to provide specific advice and should not be considered investment advice of any kind. Information was obtained from third party sources which we believe to be reliable but are not guaranteed as to their accuracy or completeness.

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