

GUGGENHEIM

May 2019

High-Yield and Bank Loan Outlook

**Quantifying the Credit Risk
and Default Runway**



Investment Professionals

Scott Miner

Chairman of Investments and
Global Chief Investment Officer

Kevin H. Gundersen, CFA

Senior Managing Director,
Portfolio Manager

Thomas J. Hauser

Senior Managing Director,
Portfolio Manager

Brian Smedley

Senior Managing Director,
Head of Macroeconomic and
Investment Research

Maria M. Giraldo, CFA

Managing Director,
Investment Research

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Summary

A dovish pivot by both the Federal Reserve (Fed) and the European Central Bank (ECB) alleviated the perceived risk that the central banks were headed for irreversible policy mistakes, and may even support a rebound in economic growth in both regions later this year. But with the eurodollar futures market pricing in a near certainty that the Fed will ease by March 2020, markets appear unconvinced of the efficacy of a pause. Credit investors must prepare for all possible scenarios unfolding later this year and in 2020.

Data suggest that if a recession were to begin today, high-yield corporate bond and bank loan issuers may have at least a 12-month runway before we experience a large wave of defaults. But market valuations can disconnect from fundamentals, as we experienced in the fourth quarter of 2018. Investors should continue to take the long view in their credit portfolios and manage late-cycle risks accordingly.

Report Highlights

- Bank loan mutual fund outflows, coupled with a shift in issuance to secured bonds, led to lower issuance levels in the loan market.
- A lack of new supply contributed to one of the best first quarters on record for performance in the leveraged credit market. High-yield corporate bonds delivered 7.4 percent total return and 5.7 percent excess return in the first quarter of 2019, and bank loans delivered 3.8 percent total return and 3.1 percent excess return over the same period.
- High-yield corporate bond issuer leverage multiples ticked down for a fifth consecutive quarter in the fourth quarter of 2018, reverting leverage ratios to 2015 levels. We find that loan-issuer fundamentals are slightly weaker than high-yield corporate bond issuers based on leverage ratios, but comparable based on interest coverage.
- If a recession were to begin today, healthy interest coverage of 4.3x may give both sectors at least a 12-month runway before default volume increased meaningfully.

Leveraged Credit Scorecard

As of 3.31.2019

High-Yield Bonds

	December 2018		January 2019		February 2019		March 2019	
	Spread	Yield	Spread	Yield	Spread	Yield	Spread	Yield
ICE Bank of America Merrill Lynch High-Yield Index	539	7.95%	445	6.95%	401	6.57%	417	6.48%
BB	368	6.28%	284	5.38%	247	5.06%	256	4.90%
B	582	8.38%	483	7.33%	439	6.95%	448	6.80%
CCC	1,103	13.59%	965	12.16%	901	11.62%	931	11.65%

Bank Loans

	December 2018		January 2019		February 2019		March 2019	
	DMM*	Price	DMM*	Price	DMM*	Price	DMM*	Price
Credit Suisse Leveraged Loan Index	550	94.09	482	95.81	443	96.89	467	96.30
BB	414	95.63	326	98.07	291	99.06	310	98.55
B	568	95.02	510	96.50	464	97.69	492	96.99
CCC/Split CCC	1,164	86.54	1,170	86.69	1,154	86.93	1,149	86.62

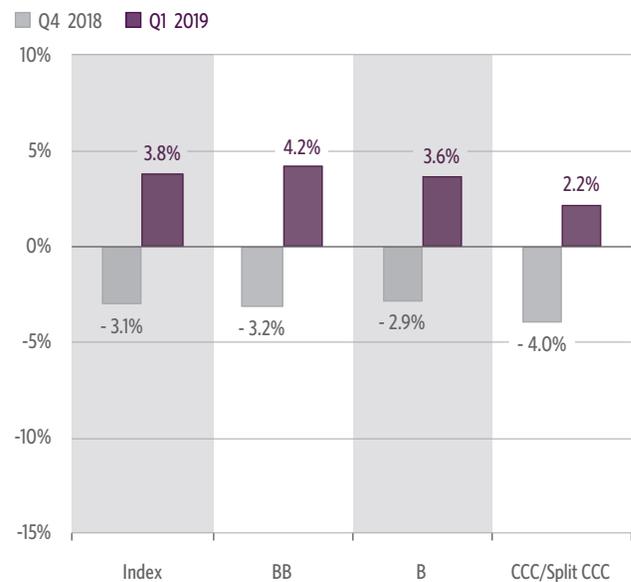
Source: ICE Bank of America Merrill Lynch, Credit Suisse. *Discount Margin to Maturity assumes three-year average life. Past performance does not guarantee future results.

ICE Bank of America Merrill Lynch High-Yield Index Returns



Source: ICE Bank of America Merrill Lynch. Data as of 3.31.2019. Past performance does not guarantee future results.

Credit Suisse Leveraged Loan Index Returns



Source: Credit Suisse. Data as of 3.31.2019. Past performance does not guarantee future results.

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The longer the Fed encourages people to hold risk assets, the more complacent markets get, and the higher leverage ratios go. Ultimately, there is a day of reckoning. At some point we're going to face a recession. I would be very cautious of risk premia continuing to fall across markets.

– Scott Miner, *Chairman of Investments and Global Chief Investment Officer*

Macroeconomic Overview

Economic Head Fake

Late 2018 and early 2019 U.S. economic data stoked recession fears, prompting the Fed to abort its tightening cycle and the three-month/10-year Treasury yield curve to invert. Housing activity weakened markedly in the second half of 2018, personal spending growth downshifted, job gains moderated, and industrial production growth slowed. The underlying trend in growth is probably stronger, but it has been understated in the data by seasonal statistical distortions, the government shutdown, inclement weather, and a delay in the disbursement of tax refunds. In fact, the first estimate of first-quarter gross domestic product (GDP) exceeded market expectations at 3.2 percent, but inventory building and export gains caused an overstatement relative to trend growth which is closer to 2.0-2.5 percent.

We expect to see the decline in interest rates and recovery in risk assets support a rebound in U.S. economic growth to around 3 percent or more on a sequential basis in the second quarter. This would confirm a slowing trend from 2018, with the 4.2 percent annualized growth rate setting a high bar in the second quarter of 2018. But it would also tell us that the winter slowdown was an economic head fake.

Taking a longer view, the indicators we track as part of our U.S. Recession Dashboard continue to evolve as if we are heading into a recession in about a year. The unemployment rate has leveled off after years of steady declines, the Fed has moved to a neutral bias on rates, the yield curve has inverted, growth in leading indicators has rolled over, gains in total hours worked have slowed, and real retail sales growth has fallen sharply. Taken together, these data points reinforce our longstanding view that we should prepare for the next recession beginning as early as the first half of 2020.

Overseas, continued weakness in economic data finally prompted policy action. The ECB recognized that more persistent adverse factors were at play in the slowing momentum and consequently revised expected real GDP growth for 2019 to 1.1 percent, down by 0.6 percentage point from December's projections. Shortly after, the ECB began to deliver policy initiatives for further accommodation. Rate hikes are now forecast to come later than previously indicated, and the ECB launched a series of two-year targeted long-term refinancing operations. First quarter improvement in GDP growth may be a harbinger of a European rebound.

China, another major economy that is slowing, showed a mix of softening and signs of stabilization in recent economic activity. Industrial production growth slowed to a 5.4 percent annual pace in April, the slowest since the global financial crisis. Retail sales growth also disappointed expectations at 7.2 percent, the weakest since 2003. China's manufacturing PMI picked up to 50.5 in March after spending three months below 50, only to tick down unexpectedly to 50.1 in April. However, the timing of the Chinese New Year and Labor Day Golden Week holidays distorted these indicators, so several more months of data will be needed

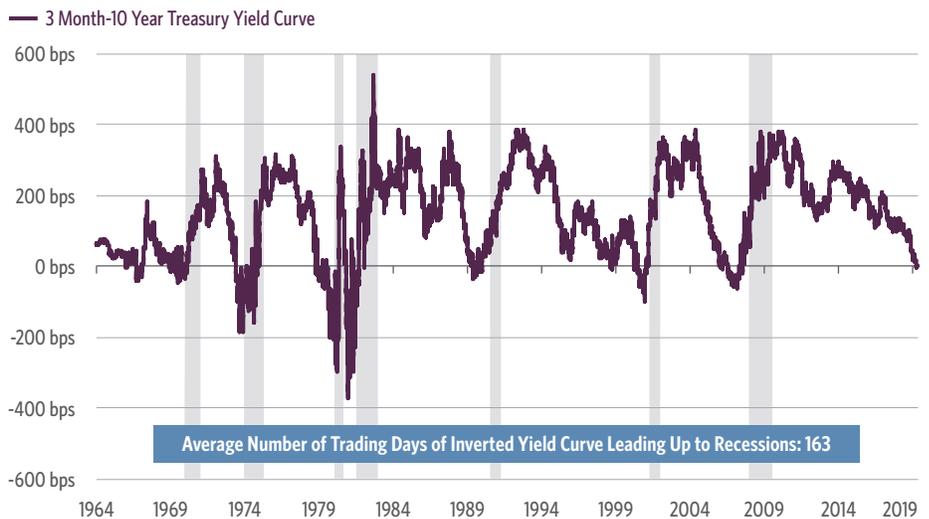
to gauge the effect of recent stimulus measures on the economy. Announced fiscal stimulus through tax cuts and infrastructure spending, along with monetary stimulus in the form of a reduction in the reserve requirement ratio, should provide a lift to the Chinese economy. If recent tariff increases significantly affect growth, policymakers will do more.

Foreign government stimulus to their local economies may prove to be good news for U.S. activity in due time. The downward trend in global growth has weighed on U.S. activity, evidenced by some weakness in 2018 U.S. exports and downward revisions to this year's expected corporate earnings. If policy changes are enough to avoid recession across Western Europe or boost growth in China, the combination of this and lower U.S. rates should be positive for U.S. growth later in the year. However, the U.S., Europe, and China are not yet out of the woods. All three remain key risks to global growth given the lack of a Brexit agreement, significant weakening in German manufacturing activity, and unresolved U.S.-China tariff negotiations. With prospects of new tariffs on European and Mexican automotive-related exports, without a positive catalyst the trajectory for the United States at this time remains negative.

Appropriately, the Fed validated the policy pivot it communicated in January by leaving rates unchanged at the March 2019 Federal Open Market Committee (FOMC) meeting, with the median projection for fed funds suggesting no rate hikes this year. It also announced that it would stop shrinking the size of its balance sheet beginning in September, while gradually lowering the roll-off caps between now and then. Despite this dovish pivot, or perhaps because of it, the three-month/10-year Treasury yield curve inverted two days after the March

As a recession signal, an inverted three-month/10-year Treasury curve has been one of the more reliable indicators, typically preceding a recession by an average of 12 months. The bond market is signaling that a pause may not be enough to avert a recession.

The Treasury Yield Curve Is a Reliable Recession Indicator



Source: Guggenheim Investments, Bloomberg. Data as of 5.16.2019. Shaded areas represent recession.

FOMC meeting for the first time since 2007. As a recession signal, an inverted three-month/10-year Treasury curve has been one of the more reliable indicators, typically preceding a recession by an average of 12 months. The bond market is signaling that a pause may not be enough to avert a recession, and while we are inclined to agree we cannot rule out that the recession may come later than we expect. Nevertheless, the potential upside in risk assets, especially high yield and bank loans, is somewhat limited and does not warrant a shift into riskier assets at this time.

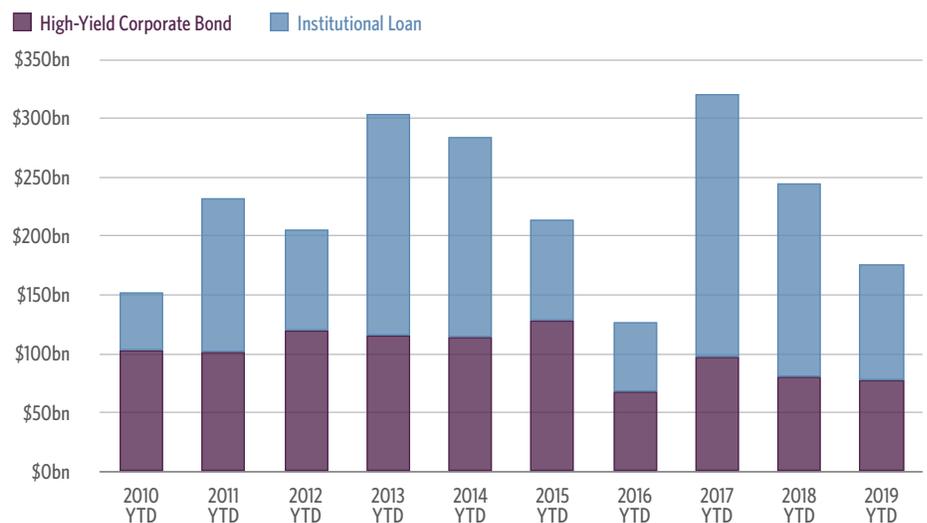
A Cautious Rally

Markets have been attuned to developments in leveraged credit following significant spread widening in November and December, coupled with a liquidity-driven pullback. Could these conditions persist in 2019? Was the Fed's pivot too late to prevent a rating downgrade and default cycle? Markets seem to still be forming answers to these questions, as weak new issue volumes and strong returns send conflicting messages about market willingness to take on more credit risk. But price increases on the back of low volume are classically viewed as unsustainable. The limit on new supply makes price increases easier.

Combining high-yield corporate bond and institutional loan issuance, total gross volume of \$176 billion from January through April of 2019 represents a decrease of 28 percent from the same period last year, and down 45 percent from the same period in 2017. That decline stems largely from the institutional loan market, where issuance is down 40 percent year over year due to waning demand for floating-rate investments and higher new issue yields, which reduce

Combining high-yield corporate bond and institutional loan issuance, total gross volume of \$176 billion from January through April of 2019 represents a decrease of 28 percent from the same period last year, and down 45 percent from the same period in 2017.

Weaker Volume Versus the Same Period in 2017 and 2018



Source: Guggenheim Investments, S&P LCD. Data as of 4.30.2019. Historical year-to-date data through 4.30 of each year.

issuer demand for refinancing transactions. With no rate hikes priced in for the remainder of the year, we have continued to witness loan mutual fund outflows, albeit at a slowing pace.

Given waning demand for loans, institutional loan issuers migrated to the high-yield corporate bond market this year. Of 89 unique issuers that completed high-yield corporate bond offerings in 2019 through the end of April, 49 also issued a loan two or more times since 2013. The purpose of crossing over varied: In many cases, the issuer exchanged some portion of existing loans, often revolving credit facilities, for bonds (called a bond-for-loan takeout). These exchanges typically allow the issuer to raise additional debt, extend the maturity of existing debt, or swap existing debt for cheaper financing. Bond-for-loan takeouts this year represent over 25 percent of total high-yield corporate bond new issue volume.

Despite attracting loan issuers to the high-yield primary market, bond issuance is down 3 percent on a year-over-year basis. But relatively limited new issue supply has been a tailwind to performance in the secondary market. High-yield corporate bonds delivered their best start to the year since 2009 with a quarterly return of 7.4 percent in the first quarter, and 8.9 percent through the end of April. The leveraged loan index underperformed high-yield corporates but still delivered a positive return of 3.8 percent, its best quarterly return since the first quarter of 2010, and 5.4 percent through the end of April. We continue to expect positive returns over the next three to six months, but we see gains moderating to a more sustainable pace in high-yield corporates due to much lower convexity in bonds and limited room for additional spread compression.

Market pricing of future monetary policy moves warrant special attention in this environment. As of the end of April, federal funds futures are pricing in a high probability that the Fed will ease by year-end 2020. The implication is that market participants see growth risks as skewed to the downside, which would be bad news for risk assets. Since the market is pricing in a near certainty that the ease will happen, investors must be prepared for all possible outcomes.

The Disciplined March of High-Yield Bond Issuers

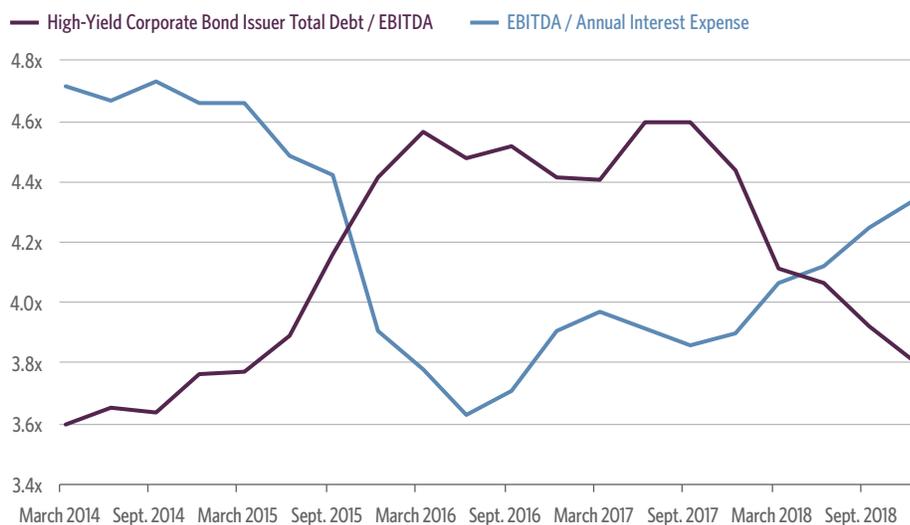
As we consider the wide range of scenarios that could unfold in the upcoming quarters, a key question is how the leveraged credit market will fare during an economic downturn. For this, we turn to the latest complete set of fundamental data as reported in the fourth quarter of 2018.

Based on fundamentals, the high-yield corporate bond market looks comparable to the beginning of 2015, just as we were headed to an earnings recession and the worst of the oil bear market. High-yield corporate bond issuers have seen strong earnings growth since mid-2017, and as a result have benefited from five consecutive quarters of steady deleveraging through the fourth quarter of 2018, based on median gross leverage ratios (total debt/earnings before interest, tax,

depreciation, and amortization, or EBITDA). As of the fourth quarter of 2018, the median gross leverage ratio was 3.8x, down from the recent peak of 4.6x. This is based on the current universe of high-yield issuers and excludes issuers that are no longer in the index from our historical data. By omitting defaulted names, we can see how the surviving set and any recent entrants have evolved.

High-yield corporate bond issuers have benefited from five consecutive quarters of steady deleveraging through the fourth quarter of 2018 based on median gross leverage ratios. As of the fourth quarter of 2018, the median gross leverage ratio was 3.8x, down from the recent peak of 4.6x. Due to refinancing and strong EBITDA growth, interest coverage has improved.

Improving Leverage and Interest Coverage in the High-Yield Issuer Universe



Source: Guggenheim Investments, ICE Bank of America Merrill Lynch, Factset. Data as of 12.31.2018.

Declining leverage ratios have been the result of more than just strong EBITDA growth. It is also an outcome of surprising discipline exercised by high-yield issuers over the past three years. Since 2016, high-yield bond issuers have taken advantage of narrowing spreads to retire near-term, high-coupon debt and replace it with cheaper, longer-dated debt. Refinancing activity has made up over 60 percent of primary market issuance each year since 2016, which contrasts with the last two years of the previous cycle (2006 and 2007), when only 31 percent of activity was for refinancing and 52 percent was for M&A and leveraged buyout (LBO) activity. Total debt growth on high-yield bond issuer balance sheets has slowed from averaging 4.4 percent year over year between 2011 and 2015, to an average of only 0.7 percent year over year from 2016–2018, meaning that this is not strictly the result of migrating to the loan market. As a result, the total par value outstanding in the ICE Bank of America Merrill Lynch High-Yield Constrained index has shrunk by 8 percent since 2015.

Due to refinancing and strong EBITDA growth, interest coverage has improved. The median ratio of 12-month trailing EBITDA over fourth-quarter interest expense has risen to 4.3x, its highest level since the third quarter of 2015, based on credit ratios compiled from Factset. Given improving fundamentals and the

Refinancing activity has made up over 60 percent of primary market issuance each year since 2016, which contrasts with the last two years of the previous cycle (2006 and 2007), when only 31 percent of activity was for refinancing and 52 percent was for M&A and LBO activity.

Heavy 2016–2018 Refinancing Activity Lowered Borrowing Costs



Source: Guggenheim Investments, S&P LCD. Data as of 5.15.2019.

Fed's recent dovish pivot, high-yield bonds are likely to perform well over at least the next couple of quarters under current economic conditions. We continue to expect that the par-weighted default rate will tick a little higher this year, ending around 3 percent, but remain below the historical average of 4 percent.

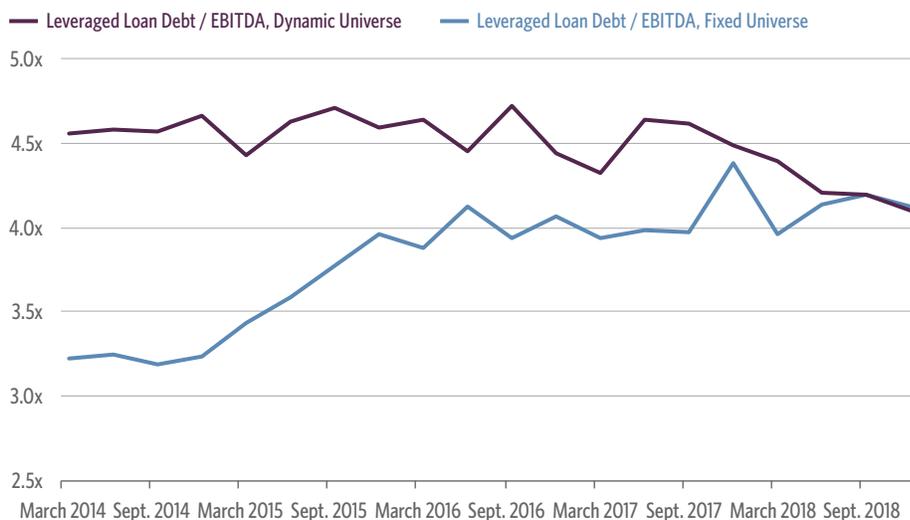
Echoes of the Past

Loan issuer credit metrics have improved based on the evolving set of constituents of the index (a dynamic set), but deteriorated if we eliminate those that are no longer in the index from the historical data. Based on a dynamic list, median total debt/EBITDA was above 4.5x for much of 2014–2016, and has ticked lower to 4.1x as of the fourth quarter of 2018. The median interest coverage ratio (EBITDA/interest expense) was only 3.1x in 2013, compared to 4.3x today. However, if we omit issuers that are no longer in the index today from the historical data, the trend paints a slightly different picture. Based on the current universe, median leverage ratios have held within a tight range of 4.0x–4.2x since 2016, but are 0.8x higher than in 2014, while interest coverage is 0.7x lower. Admittedly, our approach of omitting issuers that have exited the loan index creates survivorship bias, but it allows us to see how the fundamentals of the current universe have evolved.

Over the past five years, loan constituents have fallen out of the index due to credit default, rating upgrade, or call activity. Index constituent turnover has also been high because, unlike the high-yield corporate bond market, a larger share of loan issuance has been for M&A and LBO activity since 2014, and is currently consistent with the share of M&A /LBO activity in 2007–2008. In many cases, old loans have been retired through an M&A transaction or replaced by a larger loan under a

Based on the current universe, median leverage ratios have held within a tight range of 4.0x-4.2x since 2016, but are 0.8x higher than in 2014, while interest coverage is 0.7x lower.

Loan Fundamentals Have Deteriorated Based on Today's Universe



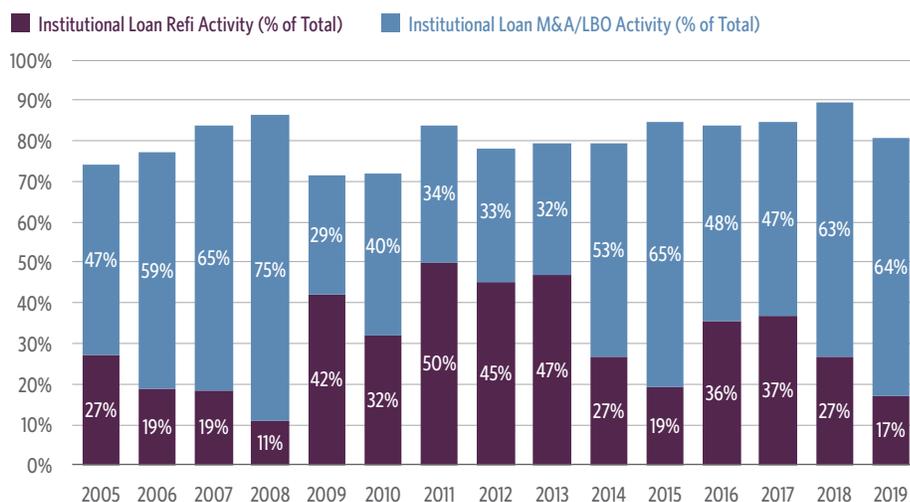
Source: Guggenheim Investments, Credit Suisse, Factset. Data as of 12.31.2018.

combined entity. These factors explain why trends in the historical data would differ based on whether a fixed or a dynamic universe is being evaluated.

Because M&A and LBO activity often carry higher leverage multiples, new issue debt/EBITDA (whether first lien only or total) has been rising. According to S&P LCD data, new issue first-lien debt/EBITDA was only 3.6x in 2013, and is up to 4.2x in 2018. This trend more closely aligns with the fundamental data we see based on today's constituent universe.

Unlike the high-yield corporate bond market, M&A and LBO activity has constituted a larger share of loan activity since 2014, and is currently at a level last seen in 2007-2008. This trend has contributed to steadily rising leverage ratios among loan issuers.

Echoes of the Past: M&A/LBO Activity in Loans Looks Like 2007



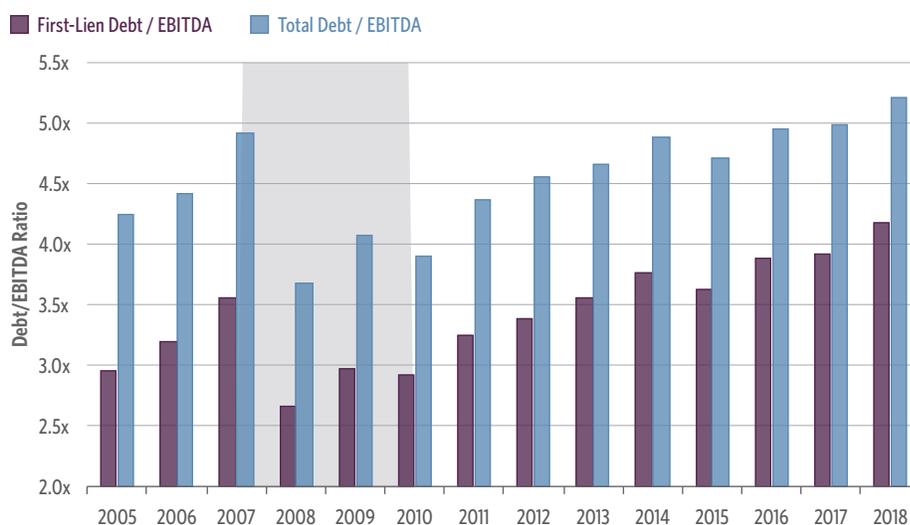
Source: Guggenheim Investments, S&P LCD. Data as of 5.15.2019.

Comparing the high-yield corporate bond and bank loan market side by side, we would argue that high-yield corporate bond issuers are marginally better positioned to avoid default in a recession based on leverage ratios only. The median high-yield corporate bond leverage ratio of 3.8x is slightly lower than median leverage of 4.1x in the bank loan market (also a reflection of differences in the distribution of issuer quality). It also reflects years of proactive deleveraging by high-yield bond issuers. In the loan market, a slightly higher leverage ratio reflects debt growth that has outpaced total earnings growth of the current loan constituents since 2013.

Given that loans are more senior in the capital structure than an unsecured bond, a loan tranche's leverage is often lower than its issuer's total leverage. But we believe total leverage should also be taken into consideration. High debt multiples could cripple a borrower's ability to raise additional financing in a more adverse economic scenario and impede access to immediate liquidity that could help extend its credit runway. This increases the probability of default in a recession.

New issue debt/EBITDA (whether first lien only or total) has been rising. According to S&P LCD data, new issue first-lien debt/EBITDA was only 3.6x in 2013, and is up to 4.2x in 2018.

Primary Market Brings in More Levered Loan Issuers



Source: Guggenheim Investments, S&P LCD. Data as of 12.31.2018. Shaded area represents recession.

In the event of a default, an important consideration is how much a lender should expect to recover. First-lien loan investors have historically recovered 70 percent of their principal following a default, on average. But in this cycle, which has seen a high volume of loan-only structures, total leverage could also affect recovery prospects. S&P Ratings reports that debt cushions have declined from an average of 30 percent in 2007 to 20 percent in 2018. Therefore, a high leverage ratio could impact both the default probability of a loan and the lender's ultimate recovery. But it is important to note that in the event of a default, a high-yield bond lender would be no better off than a loan lender, in our opinion.

A leverage ratio of 4.1x in the loan market is not high enough to hurt access to financing today, and possibly not in the future. There are new issues today brought to market with higher starting leverage multiples. Historically, a median leverage ratio of 6x or greater has attracted regulatory scrutiny, and a median interest coverage ratio of below 3x is consistent with periods of high defaults. Both sectors have healthy median coverage of 4.3x. Of course, there are always weak links. Hidden beneath the obscurity of median ratios we find 102 high-yield corporate bond or loan issuers with interest coverage below 3x and 119 issuers with leverage multiples above 6x.

Investment Implications

Optimistically, fourth-quarter 2018 median leverage ratios and interest coverage suggest that if we were in a recession today, the leveraged credit sector may have at least a 12-month runway before experiencing high default volume. As we highlighted in the previous section, leverage ratios and interest coverage in the bank loan and high-yield corporate bond markets look comparable to 2015. Despite facing an earnings recession, lower new issue volumes, and wider spreads in 2015, corporate defaults were largely concentrated in the energy sector, and did not ramp up in volume until 2016. This equates to roughly a 12-month runway. In the loan market, significant defaults never materialized due to the sector's limited exposure to energy.

Had 2016 evolved into a recession, we believe the market would have experienced defaults across multiple industries, a longer period of widening spreads, and limited new issue volume. At the next economic downturn, we expect that leveraged credit issuers will first experience widening credit spreads and limited access to financing via primary markets and bank lending. As it becomes clearer that an economic recession is unfolding, corporate issuers could face a typical recession-driven contraction in earnings. According to Bank of America Merrill Lynch research data, average EBITDA has declined by 20 percent on a year-over-year basis during the last two recessions. Based on current interest coverage ratios, EBITDA would have to decline by 30 percent from current levels to breach the worrisome 3x interest coverage ratio. This is a rough guideline, as credit metrics can vary by industry.

With a recession on our radar beginning as early as the first half of 2020, we expect defaults to ramp up in 2021. The magnitude of the default cycle will be contingent on a variety of factors, including the length and severity of the recession, the ability of fiscal and monetary policy to stimulate growth, investor willingness to extend credit, and the technical impact of downgrades from the BBB-rated corporate bond market on the high-yield market. Keeping in mind that market pricing will reflect expected defaults in advance, we continue to implement our view of staying up in credit quality, considering both fundamentals and relative value, with the aim of avoiding the magnitude of spread widening that has occurred in past recessionary environments.

Important Notices and Disclosures

INDEX AND OTHER DEFINITIONS

The referenced indices are unmanaged and not available for direct investment. Index performance does not reflect transaction costs, fees or expenses.

The **Credit Suisse Leveraged Loan Index** tracks the investable market of the U.S. dollar denominated leveraged loan market. It consists of issues rated “5B” or lower, meaning that the highest rated issues included in this index are Moody’s/S&P ratings of Baa1/BB+ or Ba1/BBB+. All loans are funded term loans with a tenor of at least one year and are made by issuers domiciled in developed countries.

The **Intercontinental Exchange (ICE) Bank of America Merrill Lynch High-Yield Index** is a commonly used benchmark index for high-yield corporate bonds.

The **S&P 500 Index** is a capitalization-weighted index of 500 stocks, actively traded in the U.S., designed to measure the performance of the broad economy, representing all major industries.

A **basis point (bps)** is a unit of measure used to describe the percentage change in the value or rate of an instrument. One basis point is equivalent to 0.01%.

The three-year **discount margin to maturity (dmm)**, also referred to as discount margin, is the yield-to-refunding of a loan facility less the current three-month Libor rate, assuming a three year average life for the loan.

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

Spread is the difference in yield to a Treasury bond of comparable maturity.

EBITDA, which stands for earnings before interest, taxes, depreciation and amortization, is a commonly used proxy for the earning potential of a business.

RISK CONSIDERATIONS

Fixed-income investments are subject to credit, liquidity, interest rate and, depending on the instrument, counter-party 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 or issuers of the reference obligations, general economic conditions, the condition of certain financial markets, political events, developments or trends in any particular industry. Fixed-income investments are subject to the possibility that interest rates could rise, causing their values to decline.

Bank loans are generally below investment grade and 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. Securities rated below investment grade are commonly referred to as “junk bonds.” 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.

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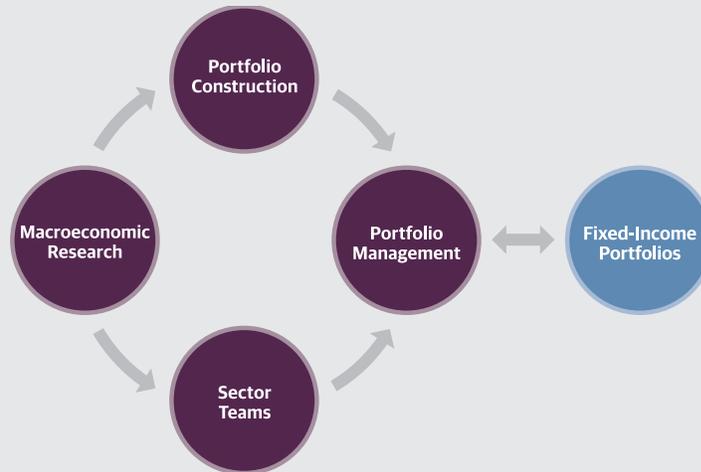
2. Guggenheim Partners assets under management are as of 3.31.2019 and include consulting services for clients whose assets are valued at approximately \$60bn.

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Guggenheim's Investment Process

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

Guggenheim Investments is the global asset management and investment advisory division of Guggenheim Partners, with more than \$209 billion¹ in total assets across fixed income, equity, and alternative strategies. We focus on the return and risk needs of insurance companies, corporate and public pension funds, sovereign wealth funds, endowments and foundations, consultants, wealth managers, and high-net-worth investors. Our 300+ investment professionals perform rigorous research to understand market trends and identify undervalued opportunities in areas that are often complex and underfollowed. This approach to investment management has enabled us to deliver innovative strategies providing diversification opportunities and attractive long-term results.

Guggenheim Partners

Guggenheim Partners is a global investment and advisory firm with more than \$265 billion² in assets under management. Across our three primary businesses of investment management, investment banking, and insurance services, we have a track record of delivering results through innovative solutions. With 2,400 professionals based in offices around the world, our commitment is to advance the strategic interests of our clients and to deliver long-term results with excellence and integrity. We invite you to learn more about our expertise and values by visiting GuggenheimPartners.com and following us on Twitter at twitter.com/guggenheimptnrs.

For more information, visit GuggenheimInvestments.com.

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