The 2023-2024 Credit Cycle

Public & Private Credit Markets

Outlook & Opportunities

WHITE PAPER
Q4 2022

Executive Summary

The credit markets today represent one of the most anomalous investing periods since the advent of the high yield bond market in the 1980s. Persistent inflation and higher interest rates have created significant challenges for companies, corporate earnings outlook, and creditworthiness. The Federal Reserve, along with central banks abroad, have embarked upon a policy path of tightening financial conditions to fight inflation, collectively raising rates at the most aggressive pace in recent history. With higher interest rates and wider credit spreads, the cost of capital has begun to constrict issuer cash flow generation, dampen valuations, and limit refinancing prospects.

The U.S. and European non-investment grade credit markets have tripled in size since the Global Financial Crisis ("GFC"), from $1.7 trillion to $5.1 trillion. This was largely due to zero interest rate policies that enabled low-cost capital to fuel the credit markets to grow disproportionately to GDP during the past decade, creating a larger basket of riskier assets compared to past credit cycles. Companies levered their balance sheets to take advantage of cheap capital as investor demand for yield surged. Leverage ratios have now reached 20-year highs, creating unsustainable capital structures for a large cohort of corporate obligors. Covenant protections have eroded, reducing default probabilities and future recovery values for companies that will ultimately require a restructuring solution. Aggressive earnings projections have driven a significant divergence between adjusted EBITDA and actual cash earnings. Given the confluence of these factors, we believe that there is a reasonable probability of 2,000 downgrades and 200 issuer defaults during the 2023-2024 credit cycle.

This credit cycle will be defined by a recession with persistent inflation that we expect will result in an enormous multi-faceted opportunity to deploy capital in both the private credit markets and dislocated secondary credit investments in the public credit markets. Europe will present a multitude of credit investment opportunities given the magnitude and severity of the challenges the region faces. Investment managers who are experts in navigating complexity in both public and private markets will be best positioned to capitalize on this upcoming opportunity set. The consequent fallout across the most vulnerable segments within the corporate credit markets will be felt by businesses that are over-levered, struggling to manage their balance sheets, and unable to generate free cash flow. The prevailing wisdom is to remain patient waiting for "Good Companies with Bad Balance Sheets" in order to invest at entry points that are highly opportunistic.

Our view is informed by the following key themes that we will explore further herein:

I. The Corporate Credit Market Has Tripled in Size

II. Middle Market Direct Lending Has Surged, Raising Concerns & New Opportunities

III. 88% of the Leveraged Loan Market is Covenant-Lite

IV. First-Time Issuers Have Set a Record Pace

V. Leverage Ratios Underestimate True Leverage

VI. B3-Rated Loans are Highly Vulnerable

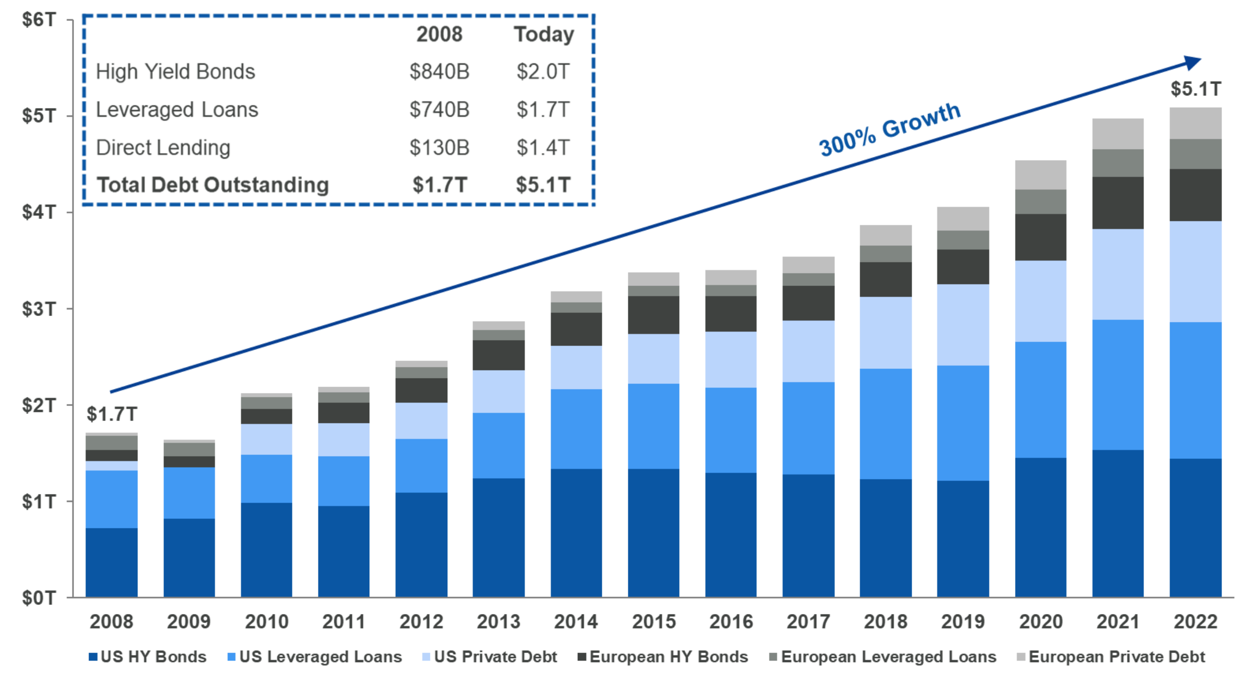
While economic forecasts are inherently uncertain, many pieces of the puzzle are starting to fit together based upon the key conditional impact from monetary policy response and weaker outlook for economic growth. This paper seeks to provide a blueprint for investors as we put together the pieces of this puzzle, we take stock in historical context and future considerations. We assess how corporate credit markets have evolved since the last recession, how we expect an economic downturn could impact markets, and, most importantly, how to opportunistically invest in global corporate credit markets given the opportunity that is developing for dislocated debt and special situations lending in the 2023-2024 credit cycle.

I. The Corporate Credit Market Has Tripled in Size

As shown in Figure 1, U.S. and European corporate credit markets exceed $5 trillion in size as compared to $1.7 trillion in 2008. Directly originated private credit has been the fastest growing component since the Great Financial Crisis ("GFC"), having grown more than ten-fold, from $130 billion to $1.4 trillion. Meanwhile, the leveraged loan market more than doubled in size from $740 billion to $1.7 trillion, and the high yield bond market more than doubled in size from $840 billion to $2 trillion.

Much of this growth can be attributed to the coordinated zero interest rate policy ("ZIRP") by the Federal Reserve and European Central Bank following the GFC. During this time, the Federal Reserve held interest rates at zero from 2009 through 2014, before raising rates to 2.00% by 2018. This increase was short-lived, as rates were lowered again to zero in response to the COVID-19 pandemic. ZIRP has led to significant risk-taking as companies issued debt at record volumes to capitalize on historically low borrowing costs; investors were also willing participants in their search for yield, resulting in significant growth in both the high yield bond and leveraged loan markets. Many of these more levered companies are now contending with significantly higher borrowing costs that may prove problematic, as they face not only higher borrowing costs, but also weaker margins from cost inflation at a time when the demand function is shifting lower as the Federal Reserve engineers a slowdown in growth.

Figure 1: Corporate Credit Market Growth (US and Europe)

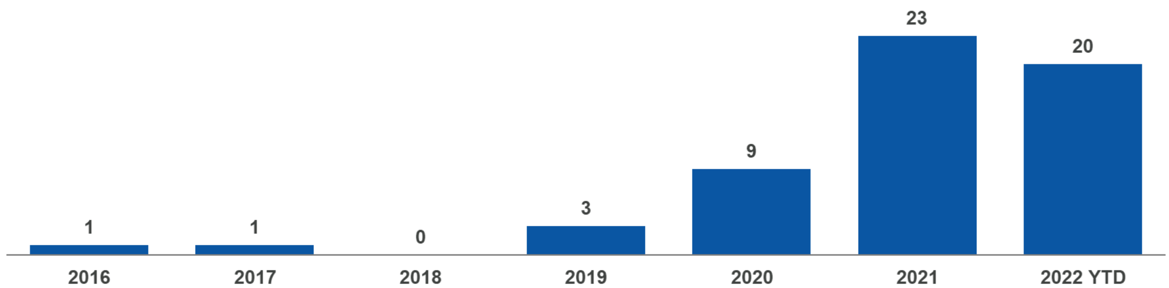


II. Middle Market Direct Lending Has Surged, Raising Concerns & New Opportunities

Direct lending in the U.S. and Europe has grown into a $1.4 trillion asset class from $130 billion in 2008. Banks historically extended credit to middle market companies, but stringent regulations following the GFC forced regulated financial institutions to retreat, and middle market lenders emerged to fill this void. Private equity sponsors and corporate obligors have increasingly opted in favor of middle market direct lending, eschewing the bank-led syndicated loan and high-yield bond market. This preference is often predicated on the speed of execution, greater certainty of closing, structuring flexibility, and simplicity of dealing with a single lender.

As direct lenders attracted more capital, they began to underwrite significantly larger deals. In recent years, middle market lending expanded from its historical focus on $100-$500 million sized financings to larger transactions, including loans that are in excess of $1 billion. Private credit loans greater than $250 million have increased from 28% of originations in 2017 to 77% today. In 2016, the market saw the first $1 billion private credit financing in support of Thoma Bravo's acquisition of Qlik Technologies. Direct lenders are now regularly underwriting multibillion dollar deals, taking share away from the broadly syndicated loan and high yield bond markets. As shown in Figure 2, over 50 transactions have come to market since 2020 with a par amount in excess of $1 billion, up significantly from only five direct loan transactions of this size from 2016 through 2020.

Figure 2: $1B+ Direct Lending Issues



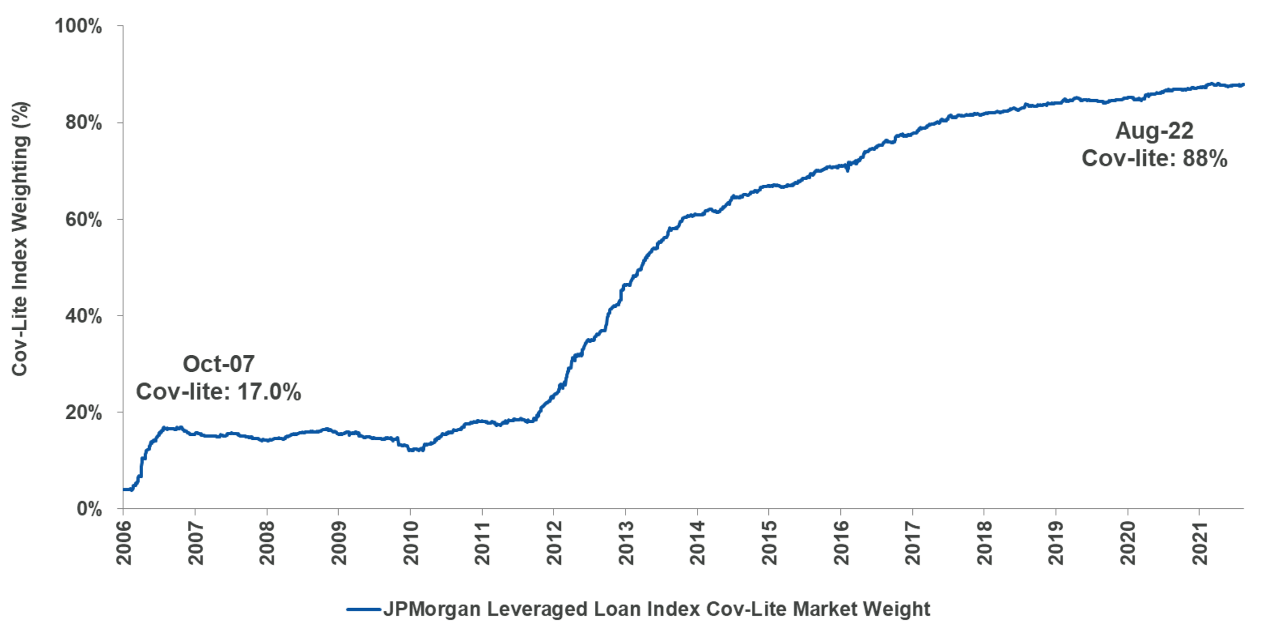
As direct lenders have made larger loans, there has been a convergence of terms between direct lending and the broadly syndicated markets. Whereas, in the past, private credit lenders insisted on relatively tighter credit documentation, many direct lenders are now offering greater covenant flexibility in an effort to "win" the deal as competition heats up against other private credit lenders and the broadly syndicated market. This dynamic is particularly prevalent in leveraged buyouts involving large sponsors who commit to stronger corporate obligors.

It remains to be seen how middle market loans will perform in a weaker economic environment, particularly given they have more leverage with weaker credit documentation than they have historically; while many of these loans may hold up well, as market conditions deteriorate, certain sponsors may become more willing to capitalize on covenant flexibility and take aggressive defensive action, such as stripping assets or raising priming loans, all at the expense of legacy lenders. Across industry sectors and transaction sizes, there will be ample opportunities for specialized new money lenders to provide capital solutions in a capital-constrained world. As strong operating businesses seek new money capital solutions, lenders will have the opportunity to earn a higher rate of return, including coupons, origination fees, and potentially detachable warrants, to aid companies as they favor out of court restructurings.

III. 88% of the Leveraged Loan Market is Covenant-Lite

Historically, leveraged loans have been underwritten with financial maintenance covenants that require companies to comply with maximum levels of leverage (Debt/EBITDA) and minimum levels of interest coverage (EBITDA/Interest Expense). When companies underperform their earnings targets, covenants provide lenders the opportunity to negotiate with the corporate obligor, a condition that sometimes proves onerous for the borrower. Most often, in exchange for a covenant waiver, lenders can negotiate conservative financial policies with stronger credit protection and enhanced economics that reflect riskier credit profiles. Additionally, negative covenants are generally implemented, limiting companies' ability to incur additional debt, pay dividends, and make add-on acquisitions, among other things.

Figure 3: Cov-Lite Loans Percentage of Loan Market



As shown in Figure 3, 88% of leveraged loans today are "covenant-lite," which means they have no maintenance covenants and have considerably weakened negative covenants. Without financial covenants, lenders have minimal governance rights in the event of deteriorating performance of the borrower - they do not have the ability to enhance their economics or take other measures to protect their investment prior to default. Moreover, weak negative covenants present additional risks to lenders, including the ability of the issuer to (a) incur additional debt (without the benefit of "most favored nations" repricing), (b) make dividend distributions to shareholders, or (c) engage in transactions that may be accretive to shareholders at the expense of the creditors. Opportunistic lenders willing to provide capital in special situations will often require enhanced structural protections that prime existing lenders, resulting in lower recoveries for existing creditors given the advantageous terms of the new money lender.

IV. First-Time Issuers Have Set a Record Pace

As shown in Figure 4, over the past five years, 1,497 debut issuers have tapped the syndicated loan market. Historically, first time issuers were held to higher credit standards as they faced greater scrutiny from investors. In recent years, however, lenders eased credit criteria by lowering their underwriting standards, which allowed an increasing number of first-time corporate obligors to access the syndicated loan market. Debut issuers represented a staggering 50% of loan issuance in 2019, significantly higher than the average debut issuer share of 37% of issuance from 2010 through 2017.

Many of these first-time issuers, such as Medline, which completed a $30 billion leveraged buyout, and Thyssenkrupp Elevator, which completed a €17 billion leveraged buyout, are well known companies with highly levered balance sheets. However, many other first-time issuers were smaller in size and ranged from high growth technology companies to family-run enterprises that were part of a roll-up strategy by private equity sponsors. These first-time issuers will certainly be tested as the economy enters recession.

Figure 4: Debut Syndicated 1st Lien Term Loan Issuers, by Year

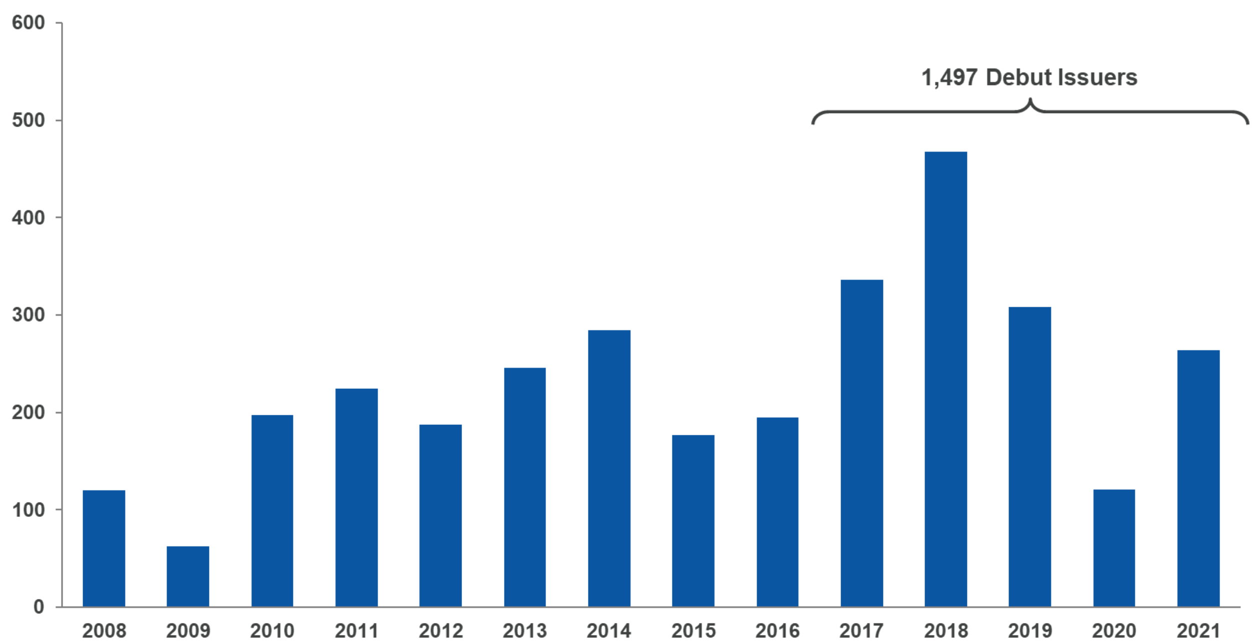
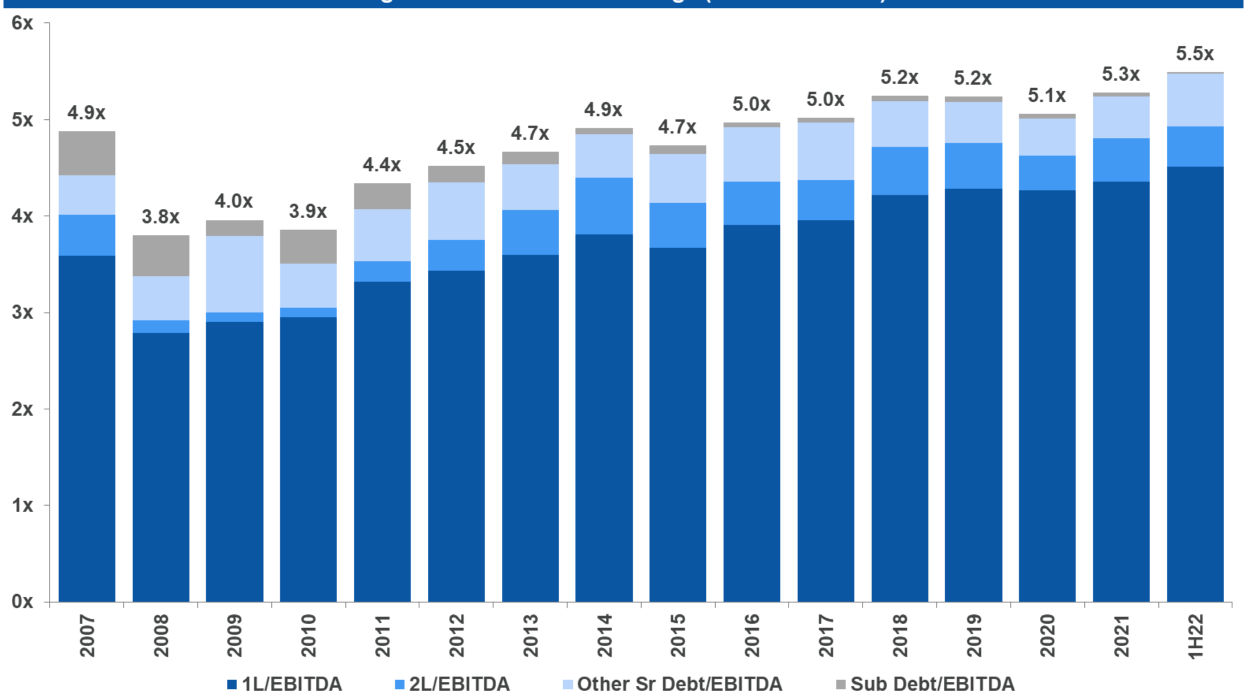


Figure 4 illustrates that the three most active years for debut corporate issuers were 2017-2019, with over 300 first-time issuers per year and 1,112 debut issuers in total. Given that most syndicated term loans have seven-year tenors, these issuers will need to approach the market to refinance its existing debt in the next two to three years. We expect a subset of these corporate obligors to struggle as they look to raise new debt in the midst of a higher rate environment (at least 100-300 bps higher than their original rates), an earnings recession, and a corporate credit downcycle. We expect this dynamic to provide ample opportunities for lenders to deploy attractively priced and well-structured new financing for good businesses facing maturity events and allow these investors to earn a significantly higher rate of return.

V. Leverage Ratios Underestimate True Leverage

As shown in Figure 5, the average debt-to-EBITDA ratio for new loan issuances reached 5.5x in 2022, the highest level in 20 years. Over 33% of loan issues since 2021 were levered 6.0x or higher. While 5.5x may seem only marginally higher than prior peak levels, true leverage is likely much higher since the ratios for many of the corporate obligors are based on "pro forma" earnings projections. Recalculating these leverage ratios using normalized EBITDA would reveal that new loan issuances are in fact more levered than they have been in the past. Furthermore, 70% of annual loan issuance is rated single-B or lower, a weaker credit rating profile than what has traditionally been the case for the loan market. In addition, loan issuers are funded with floating-rate debt, making them more vulnerable to rising rates than issuers who tapped the fixed coupon high yield bond market.

Figure 5: Transaction Leverage (Debt to EBITDA)

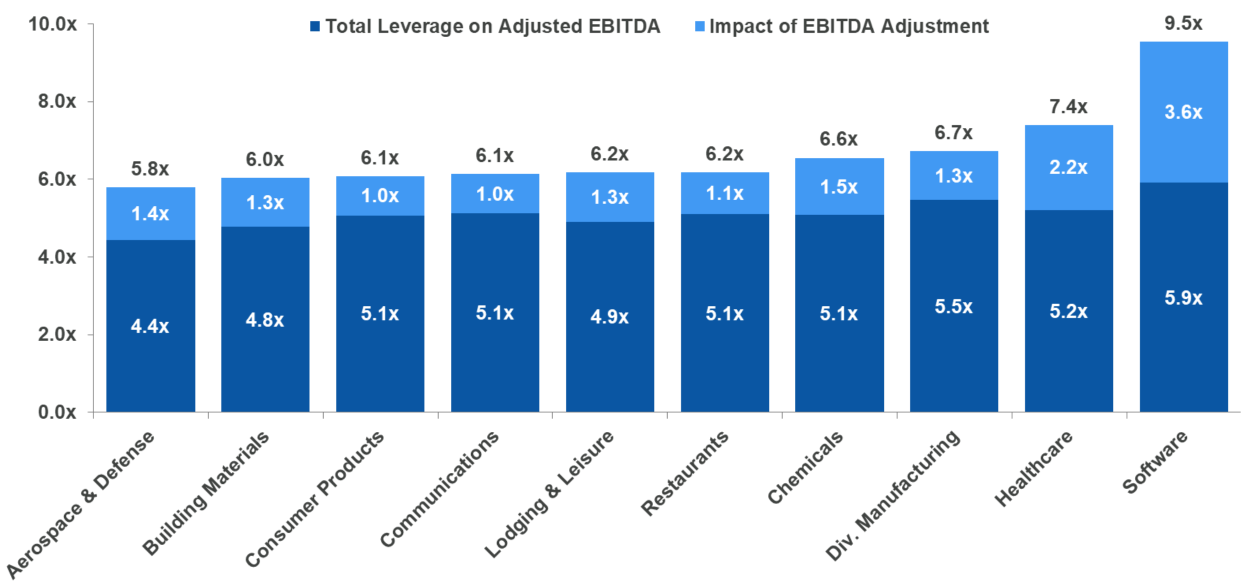


With leverage ratios at record levels, new issuance dominated by lower-rated debt, and fundamentals beginning to deteriorate, a clear warning sign is flashing. The non-investment grade credit market is on the cusp of a significant cycle for credit rating downgrades with the potential for surging default rates. These factors will be exacerbated by the upcoming recession. We expect that many corporate obligors will need fresh capital to fund losses and negative cash flow, creating opportunities for the direct lending community to provide capital solutions. We also expect there to be a significant opportunity to purchase debt in the secondary market at steep discounts as valuations adjust to reflect the economic realities that companies are facing. Dislocation always leads to opportunity.

In recent years, companies have become increasingly aggressive with their financial projections by employing significant adjustments and addbacks to paint a rosy picture of financial health. Presenting earnings in this manner is often inconsistent with prevailing accounting standards and does not accurately reflect a company's ability to generate cash flow and service debt.

As shown in Figure 6, adjustments to EBITDA resulted in an approximately 1.75x reduction in leverage in recent LBOs. According to Covenant Review, EBITDA adjustments in LBO financings now represent 22% of company adjusted EBITDA, compared to just 13% in 2007. Consequently, large adjustments and inflated metrics allow stressed issuers to comply with financial covenants and permit the incurrence of additional debt, dividend re-caps, or the ability for the corporate obligor to take other actions that may ultimately prove harmful to creditors.

Figure 6: LTM Credit Statistics, by Industry



Companies often do not achieve the optimistic projections shown in company presentations used to syndicate debt financings. A 2021 study that examined the financial performance of companies who issued debt in 2018 showed that 1-2 years later, a staggering 35% of issuers missed projections by more than 50%. This highlights why leverage ratios and credit risk are in reality materially higher than what is commonly reported by the market at large.

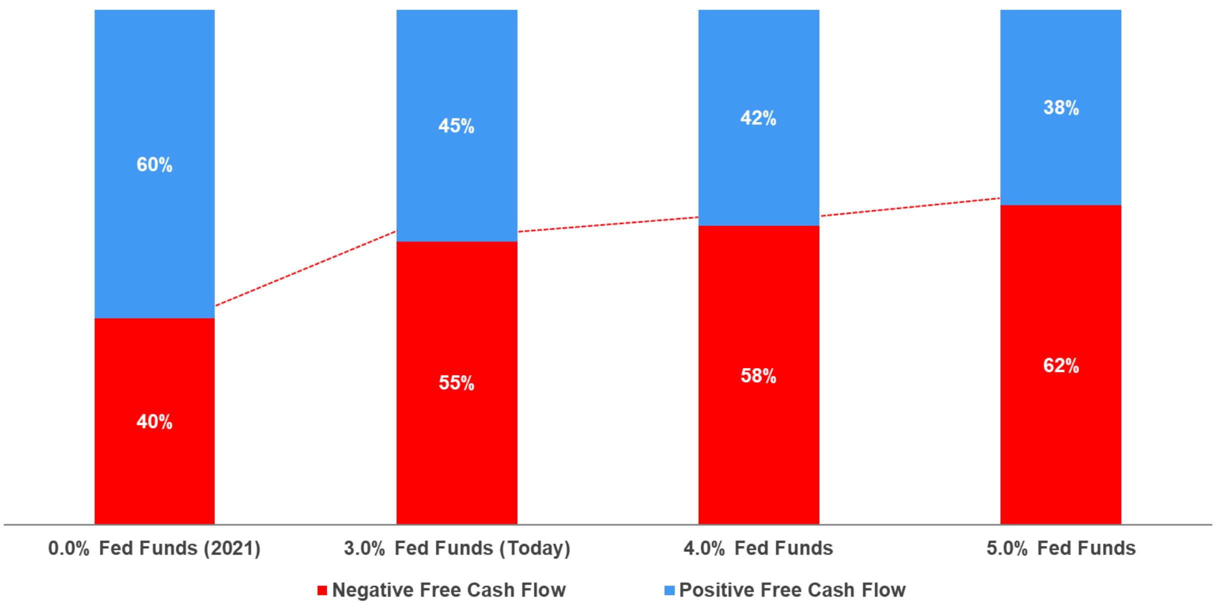
Rating agencies have increasingly incorporated issuers' aggressive pro forma adjustments when assigning a rating, with the caveat that a downgrade would occur if the issuer did not realize the projected results at a future date. Therefore, we expect many of the newly rated debt financings to experience credit rating downgrade pressure as pro forma adjustments fail to materialize and fundamental performance deteriorates during a weakening macroeconomic environment.

VI. B3-Rated Loans are Highly Vulnerable

In an analysis of over two hundred B3-rated corporate obligors representing nearly $300 billion of debt outstanding, Moody's found that, at today's interest rates, 47% of corporate obligors would not be able to cover their interest expense (i.e., EBITDA-Capex/Interest < 1.0x), and, in addition, 55% of corporate obligors would be cash flow negative. As shown in Figure 7, assuming interest rates rise an additional 100-200 bps, as the market expects, Moody's projects that 58-62% of B3-rated corporate obligors will become cash flow negative.

Rising interest rates and weaker corporate earnings will pressure the ability of companies to generate adequate free cash flow after debt service. Cash-burn will be most pronounced for lower-rated leveraged loan issuers, particularly given the migration of high-risk issuers to the loan market over the past several years.

Figure 7: Free Cash Flow Profile (% of B3 Rated Corporates)



While most companies will have adequate liquidity to withstand the cash burn, many of the highly levered companies will face a liquidity crunch in the near to medium term. A significant percentage of companies rated B3 will have inadequate liquidity. Approximately 60% of the B3-rated corporates are susceptible to ratings downgrades; for these companies, a one-notch credit rating downgrade would result in a CCC rating, which often comes with additional selling pressure given the holding constraints of CLOs. If earnings decline and/or recession becomes protracted, we expect to see debt prices for this subset of vulnerable credits that are B3-rated to decline by 20 points as a result of just a one notch rating downgrade. The coming wave of downgrades in the loan market will create opportunities in both the public secondary markets as well as in the private credit markets.

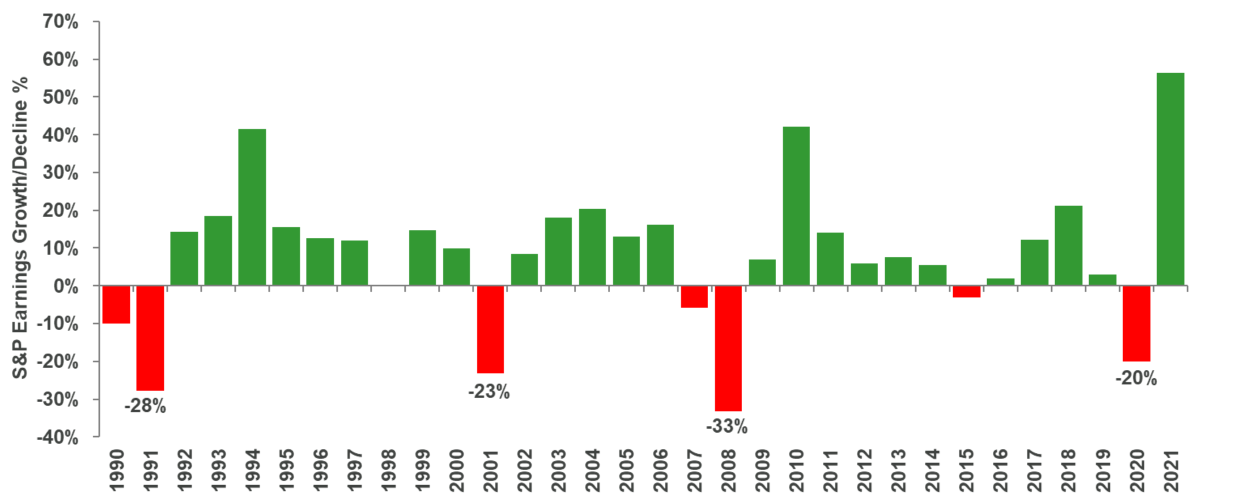
VII. A Bleak Forecast for Corporate Earnings

The Conference Board's measure of CEO confidence hit a 10-year low in August 2022. Notably, 93% of the CEOs surveyed are preparing for a recession over the next 12-18 months. CEOs are concerned about higher costs of goods sold, lower demand, and higher borrowing costs. These factors will likely result in weaker margins, tighter cash flow, and higher leverage ratios, impairing credit ratings.

As shown in Figure 8, S&P 500 earnings typically decline 20% during a recession. While we expect only a 5% decline in *nominal* earnings in this cycle given the fact that revenue and earnings are not inflation-adjusted, the decline in *real* earnings is more likely to be closer to the 20% historical level. Surprisingly, the market consensus for S&P 500 2023E earnings growth remains positive, but we expect analysts to revise their estimates lower in the coming months.

95% of S&P 500 companies are investment grade issuers, which are larger, less levered, and more resilient to recessions as compared to the majority of non-investment grade issuers. Non-investment grade issuers will be more materially impacted by a market downturn and will have more limited options to access new capital.

Figure 8: S&P 500 Earnings Growth



In the past five economic recessions, the Federal Reserve aggressively cut rates to offset economic weakness. Given the current macroeconomic environment, the Federal Reserve is fighting inflation and unlikely to ease until inflation trends back towards its 2% baseline. Federal Reserve Chairman Jerome Powell was explicit in stating that the Federal Reserve will use its tools "forcefully" to attack inflation that is still running near the highest level in more than 40 years. He acknowledged that "while higher interest rates, slower growth and softer labor market conditions will bring down inflation, they will also bring some pain to households and businesses." For this reason, we believe that higher interest rates will persist in 2023, while corporate earnings are in the process of declining, posing challenges for companies, particularly those levered companies that have cyclical business lines or are experiencing wage and manufacturing cost pressures.

VIII. A Deluge of Downgrades & Defaults to Come in 2023

Figure 9 highlights the number of defaults and downgrades that occurred during the past three credit cycles. How many downgrades and defaults do you expect to occur in the next recession?

Figure 9: Defaults During Recent Credit Cycles

2002-2003 Cycle	2007-2009 Cycle	2020-2021 Cycle	2023-2024 Cycle
183 defaults	279 defaults	124 defaults	# of defaults?
Enron, MCI, British Energy, Delta, Euro Tunnel, United, Adelphia, energis	Lehman Brothers, Washington Mutual, gm, Northern Rock, Fannie Mae, Freddie Mac, Chrysler, CIT, Six Flags, lyondellbasell, Countrywide Financial, GGP	JCPenney, J.Crew, Frontier Communications, Neiman Marcus, Hertz, Avianca, LATAM Airlines, swissport, Europcar, selecta	Who's Next???
884 downgrades	1,786 downgrades	1,509 downgrades	# of downgrades?

Question: # of defaults and downgrades you expect in the 2023–2024 credit cycle?

Defaults	Downgrades
A. 0 - 50	A. 500 - 1,000
B. 51 - 100	B. 1,001 - 1,500
C. 100 – 200	C. 1,501 – 2,000
D. > 200	D. > 2,000

We expect the answer to both of these questions will be "D". The 2023-2024 cycle should represent a massive opportunity, with more than 2,000 downgrades and 200 defaults. If the credit cycle plays out the way we expect, this has the potential for the volume of downgrades to exceed what was experienced in the 2007-2009 cycle. While we expect a shallow recession, tighter financial conditions may persist for longer. The publicly traded corporate credit market today is more than 8x the size of the market in 2000, so the opportunity for dislocation is considerably greater. We also expect more downgrades and defaults than what was experienced in the 2020-2021 cycle because the Federal Reserve is unlikely to "pivot" to lowering rates until inflation declines closer to the Federal Reserve's target of 2%. Whereas the Federal Reserve stimulated the economy in 2020-2021 resulting in a V-shaped recovery, the Federal Reserve today is tightening to create a recession through increasing rates in order to lower demand.

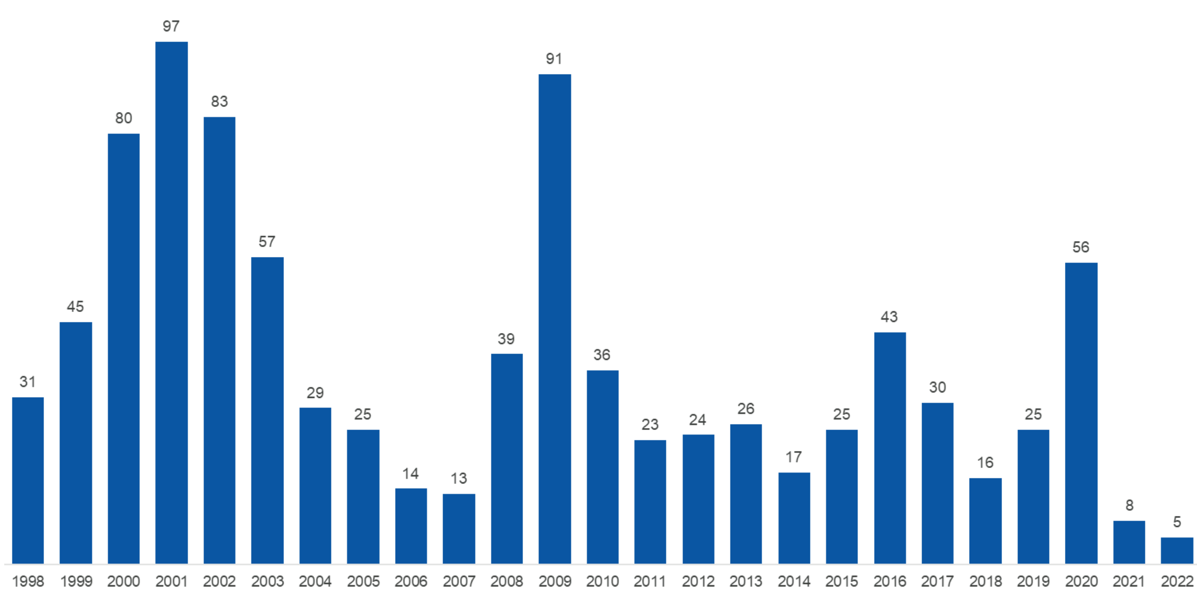
Downgrades lead to dislocation; defaults lead to a range of opportunities from DIP finance to the opportunity to purchase the "fulcrum security".

IX. The Fulcrum Security Creates Equity at a Discount

Corporate restructurings typically spike due to weak operating performance and illiquidity constraints for obligors with over-levered balance sheets. For many companies, "kick the can down the road" strategies allow for lender amendments, liquidity injections, and debt exchanges, which ultimately may prove to be insufficient. In this case, a comprehensive restructuring will be necessary to de-lever the balance sheet and address liabilities, which can be done "in-court" through the bankruptcy process or potentially "out-of-court", if requisite lender consent can be achieved.

As a company prepares to file for bankruptcy, it usually raises a DIP loan (i.e., debtor-in-possession loan) to fund Chapter 11 expenses and operating losses. These loans benefit from administrative expense status, which requires payment in full before a company emerges from bankruptcy and has the benefit that it ranks super senior to all other debt as it is secured by all available assets. DIP loans also carry high interest rates, strong covenants, and milestones to control the Chapter 11 case. They are often provided by existing senior lenders, including those who purchased the debt at distressed prices. Under certain circumstances, the company may turn to well-capitalized third parties for DIP financings if current creditors do not have the capital base to support and fund the company during bankruptcy.

Figure 10: Annual Bankruptcy Filings by Large, Public Companies



A classic form of distressed debt investing is to purchase the "fulcrum security" in a company's capital structure where the last dollar of value is the class of debt most likely to be converted to equity in a restructuring. Investors who own a meaningful block of this security often sit on the key creditors' committee that effectively directs the restructuring path through negotiation with the company and its advisors. Debt senior to the fulcrum is typically well protected as it is refinanced, while debt and equity junior to the fulcrum is typically wiped out or subject to a significant "haircut". The fulcrum security owner ends up owning the reorganized equity at an attractive valuation that is often struck at a point in time. This "point in time" is typically before the company can benefit from improvements to its balance sheet, cost structure, operating contracts, or industry outlook, presenting meaningful upside potential in the years subsequent to the company emerging from bankruptcy.

Restructurings are inherently complicated given bankruptcy code complexity and the many different players involved, each of whom bring their own set of motivations and perspectives: the debtor, multiple creditor classes, advisors, the bankruptcy court judge presiding over the case, jurisdiction, etc. Investing in restructurings requires tried-and-tested capabilities, experience restructuring a company, legal expertise, and relationships to successfully navigate the complexity and ultimately achieve strong results.

Below are tables of Debtwire's Top 10 Restructuring Law Firms and Financial Advisors based on Chapter 11 case funded debt over the last five years. It is important for any credit investor to have relationships with the parties that are involved in the restructuring process as creditors are well served by participating in the creditor committee and remaining active during the bankruptcy process.

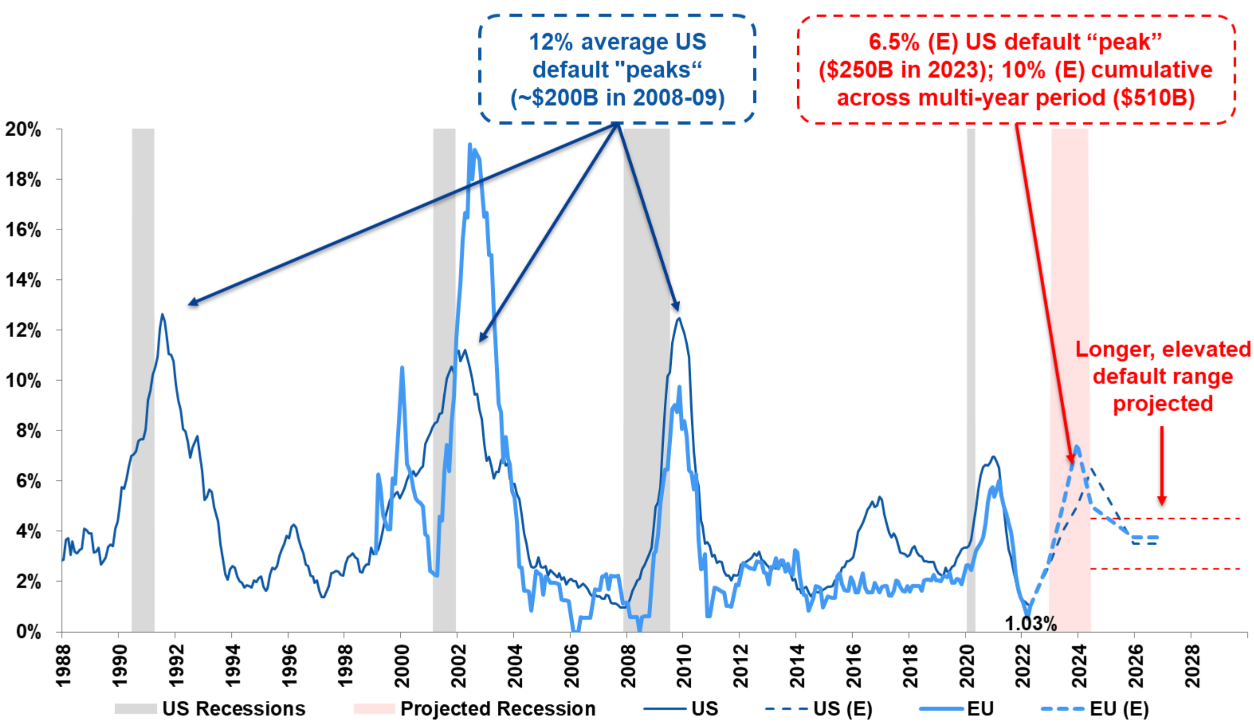
Corporate Restructurings: Top 10 Law Firms & Top 10 Financial Advisory Firms, by Debtwire

Top 10 Law Firms	Top 10 Financial Advisory Firms
1. Kirkland & Ellis	1. Houlihan Lokey
2. Akin Gump Strauss Hauer & Feld	2. FTI Consulting
3. Weil Gotshal & Manges	3. Moelis
4. Milbank	4. Centerview
5. Paul Weiss Rifkind W & G	5. PJT Partners
6. Paul Hastings	6. Lazard Freres & Co.
7. Latham & Watkins	7. AlixPartners
8. Gibson Dunn & Crutcher	8. Perella Weinberg Partners
9. Davis Polk & Wardell	9. Evercore
10. White & Case	10. Rothschild

X. The Volume of Defaults Could Reach Record Highs

In recent credit cycles, the U.S. high yield bond market has typically seen default rates peak at approximately 10%. In the upcoming recession, we expect the default rate to increase from a historically low level of 1% to a peak around 5%. Given the prevalence of covenant-lite loans, there will be an extended timeline for companies to delay the descent into bankruptcy, resulting in a lower default rate than prior recessions. Loans will likely experience a higher default rate than high yield bonds due to loan market dynamics (e.g., higher leverage, looser structure, lower credit quality), while the majority of high yield bonds are BB-rated with fixed coupons. Given our base case assumption, a 5% overall default rate implies a 6% default rate for loans along with a 4% default rate for high yield bonds (at peak levels) during the 2023-2024 time period.

Figure 11: Historical and Projected High Yield Bond Default Rates (US and EU)

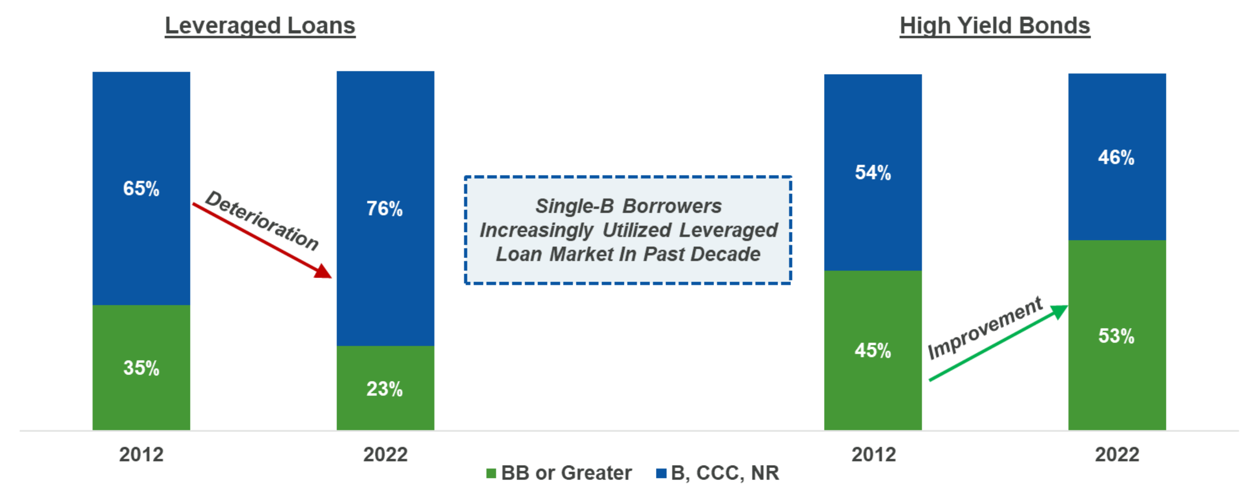


Even with a lower default rate compared to prior cycles, the absolute dollar value of defaults may reach a record level given the immense growth of the addressable market, which has tripled in size since 2008. However, given we expect this recession to be prolonged with the Federal Reserve's reluctance to pivot, it is likely that the *cumulative* defaults over two years will approach ~10%, which is closer to historical *annual* default rates at the peak.

XI. Leveraged Loans May Carry Greater Credit Risk than High Yield Bonds

When comparing high yield bonds to leveraged loans, the deterioration in credit quality in the loan market is easily observable. In contrast, the high yield market's credit metrics have improved. As shown in Figure 12, the percentage of leveraged loans rated BB or higher has declined from 35% in 2012 to 23% today. Conversely, the percentage of high yield bonds rated BB or higher has increased from 45% in 2012 to 53% today. An increased composition of riskier corporate obligors is the key reason why we expect greater distress in the loan market in 2023-2024 compared to the high yield bond market.

Figure 12: Loans vs. Bonds, Credit Profile Composition



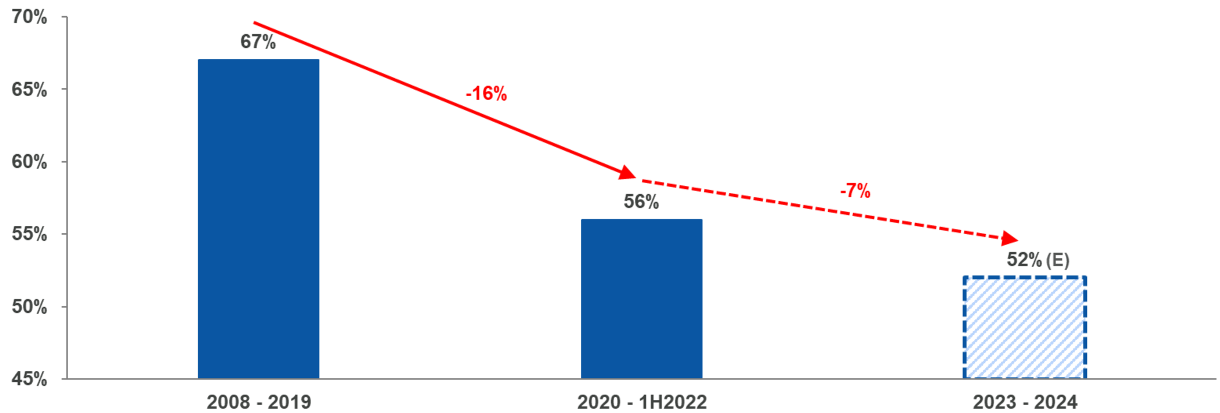
Leveraged loan issuers are also more exposed to rising interest rates, as most issuers do not hedge their interest rate exposure. As a result, loan issuers face rising interest expense as the Federal Reserve increases benchmark interest rates to fight inflation. Higher debt servicing costs and aggressive financing structures will exacerbate challenges for loan issuers. Loose covenants, resulting in flexibility for adverse credit actions like asset-stripping or priming debt, with higher leverage multiples for recent loan vintages, will likely increase default rates for loans compared to high yield bonds.

We expect high yield bonds and leveraged loans to trade at a 10% YTM, offering attractive current yields. Over 20% of the high yield bond market is expected to fall to a price below 80% of par in the next downturn, so considerable upside price potential exists, thus increasing the total rate of return potential. As weaker creditworthy issuers face liquidity crunches from debt servicing issues, the natural providers of new liquidity are existing lenders. However, many of the CLO managers are unable to provide new capital given the structural constraints of their vehicles, such as issuer rating limitations and new money restrictions. We believe this will create a highly attractive environment for private capital solutions capabilities to fill the funding gap and deploy capital at attractive pricing and favorable terms with priority ranking.

XII. Recovery Rates May Be Lower than Prior Cycles

As shown in Figure 13, defaulted first lien covenant-lite loans recovered 56% from 2020 through June 2022. This is markedly lower than what was realized during the 2008 to 2019 timeframe, which had a recovery rate that averaged 67% of par**.** We expect the erosion of underwriting standards and increased size of first lien loans to lead to even lower recovery values when future defaults occur in 2023-2024.

Figure 13: Recovery Rates for First Lien Cov-Lite Loans



In particular, recoveries for secured creditors should be lower in the next default cycle because (a) capital structures currently have record levels of leverage, (b) unitranche structures have increased in prevalence as the level of subordination to the unitranche has declined, (c) earnings will be lower due to revenue declines in an economic downturn coupled with higher costs caused by inflation, (d) covenant-lite documentation will permit value-destruction from “kick-the-can down the road” delays, and (e) looser negative covenants will permit more asset-stripping and priming.

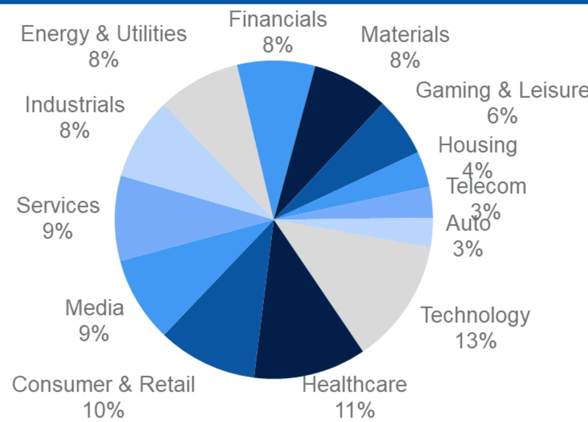
During the COVID-19 pandemic, there were numerous asset-stripping and priming financing transactions that diminished recovery prospects for existing secured creditors (e.g., Serta Simmons, TriMark, Envision Healthcare). In these situations, companies needed more liquidity, and a subset of the existing lender group stepped in to provide new capital while also “up-tiering” their existing holdings into a super-priority tranche. This had the effect of reducing the recovery for creditors who did not participate in the new money transaction. Given the covenant flexibility in recent loan and bond vintages, we expect this behavior to continue when corporate obligors encounter liquidity difficulties in the coming cycle.

Overall, we expect the coming cycle to present many opportunities for capital solutions providers to structure attractive financing packages for companies in need of capital. These financings often come in senior to existing creditors at attractive economics and generate excellent risk-adjusted returns.

XIII. Multiple Industry Sectors are Vulnerable

As an earnings recession materializes, we expect challenges to emerge across the following sectors: manufacturing, consumer and retail, technology, healthcare, construction & engineering, paper & packaging, telecom & communications, and hospitality & travel. This list is not meant to be exhaustive, as most sectors will be impacted during the next recession.

Figure 14: Industry Composition for High Yield Bonds and Leveraged Loans



Technology represents 13%, the largest component, of the corporate credit market. Debt outstanding in the technology sector has tripled over the past decade as lenders became more comfortable financing these companies, in large part due to record-high valuations providing significant equity cushions. Leveraged loans comprise 80% of technology debt. High cash burn companies will struggle.

Healthcare is the second largest component of the corporate credit market, representing 11% of debt outstanding. The healthcare sector is diverse, including hospitals, surgical centers, device manufacturers, and pharmaceutical companies, and is subject to headwinds that include reimbursement rate pressures, labor shortage, traffic shift to low-cost sites, and demographic change.

Consumer and retail represent 10% of the credit market. This sector is expected to face significant pressures as inflation pushes companies to increase their prices at the same time that consumers are forced to reign in non-discretionary spending. This sector has historically been active for private equity buyouts and recent transactions were financed at peak earnings during COVID-driven boosts in consumer consumption.

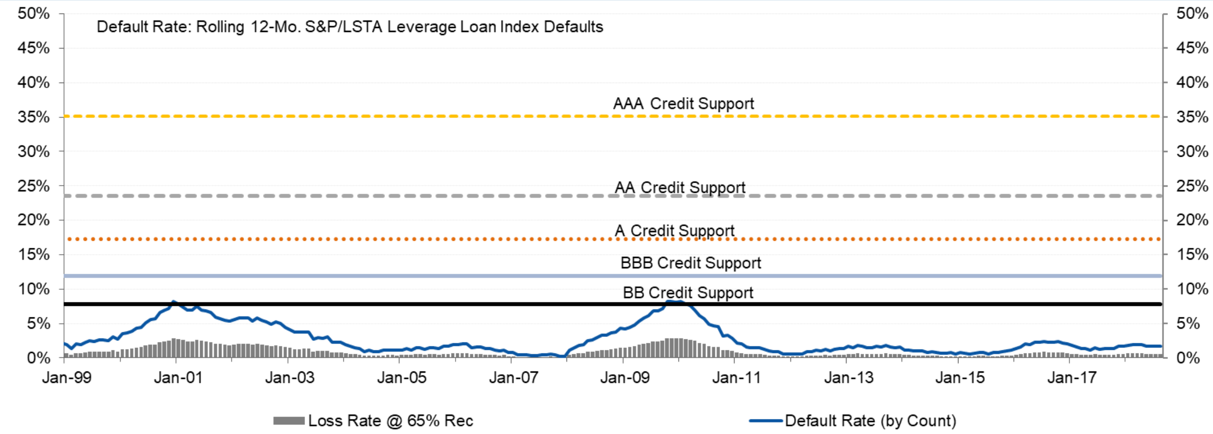
Housing represents a smaller portion of the corporate credit market at only 4%, but the impact of the recession will be felt by homebuilders, building products manufacturers, and distributors in this sector. In particular, building product companies saw significant buyout activity during the 2017-2019 time period, resulting in highly levered enterprises that will now need to contend with a cooling housing market.

Despite the challenges that these industries and others will face, we believe there will be opportunities to invest in underappreciated businesses with solid fundamentals at attractive valuations.

XIV. The Resilience of the CLO Structure

Nearly 70% of the broadly syndicated loan market is held in CLOs, a $1 trillion asset class. 88% of CLO collateral is comprised of cov-lite loans, however, CLO tranches are structured to withstand higher levels of losses than what has been realized during past credit cycles.

Figure 15: Loan Market Default Rate vs. Generic CLO Credit Support Levels



It is quite remarkable that in their 32-year history, CLOs have shown great resiliency, performing exceptionally well during times of market distress, including all prior recessions. As CLOs have evolved, credit rating agencies have worked with CLO arrangers and issuers to refine underwriting requirements. Credit rating agencies have put in place more stringent credit enhancement requirements, strengthening credit quality tests and structural protections for CLOs.

Figure 16: U.S. BSL CLO Default Rate

Rating	1994 to Q4 2020
AAA	0.0%
AA*	0.0%
A*	0.0%
BBB	0.4%
BB	1.2%

Figure 17: CLO Performance

	CLO BBs (IRR)	CLO Equity (IRR)
2005	7.4%	13.5%
2006	5.9%	14.3%
2007	6.2%	17.5%
2008	10.4%	18.1%

Given the strength of the CLO market and its continued evolution, it is interesting to note that there have been zero losses in broadly syndicated CLO tranches rated AAA, AA, and A since inception, 32-years ago.

What is very interesting is how well CLO equity has performed during credit cycles, as various circuit breakers incorporated into the structure and governing documentation act to protect the value of the CLO equity. As the CLO market has evolved, the best CLO managers are able to capitalize and perform.

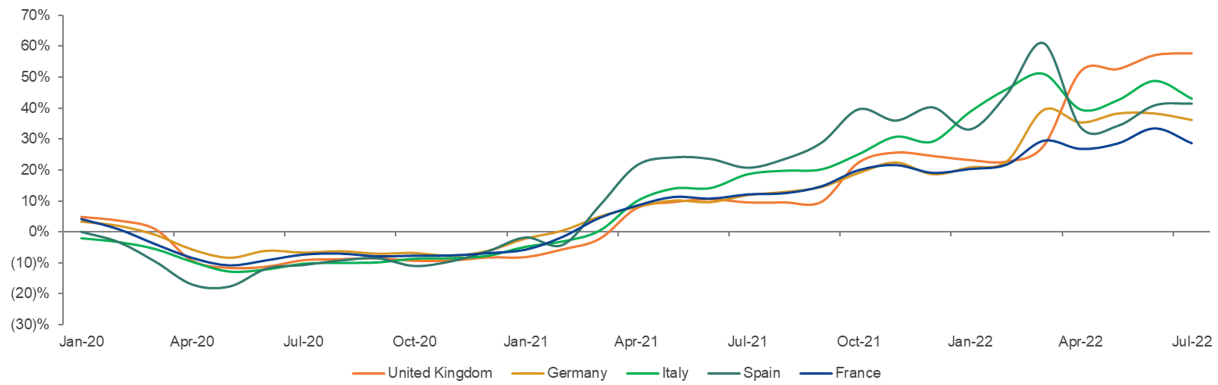
We expect recent and new vintage CLO equity to perform well in the coming credit cycle, similar to the GFC, where CLO equity withstood the highest level of defaults and downgrades as observed to the left.

In conclusion, despite a decline in corporate earnings, a recession, and credit deterioration associated with tighter financial conditions, we expect there to be terrific opportunities in the CLO market if any major dislocation were to occur.

XV. Europe Faces Protracted Recession

The energy crisis in Europe has resulted in one of the worst years for the European economy since World War II. The Russian invasion of Ukraine is having dramatic repercussions throughout the European energy and food markets. Inflation has now moved beyond commodities to become more entrenched and broad-based. Russia has been a key supplier of gas across Europe, with a 32% share of gas in the EU and UK, making Europe even more vulnerable. The announcement that gas flows from the Nord Stream pipeline are suspended indefinitely has further fueled volatility and uncertainty in the region.

Figure 18: European Energy Inflation



We believe that inflation will remain elevated across Europe during 2023. Unsurprisingly, consumer confidence in Europe is now at a record low level, falling below prior troughs in 2020, 2009, and the early 1990’s. We expect inflation to remain persistent in Europe and the resulting pressures on both corporates and consumers to result in a protracted European recession. Recession, like inflation, will be broad based across Europe, with GDP contraction expected to be 2%, twice the level we foresee in the U.S. We expect a sharper recession in the UK and Germany. Both countries are more vulnerable since the cost of energy has risen much more markedly than in other countries.

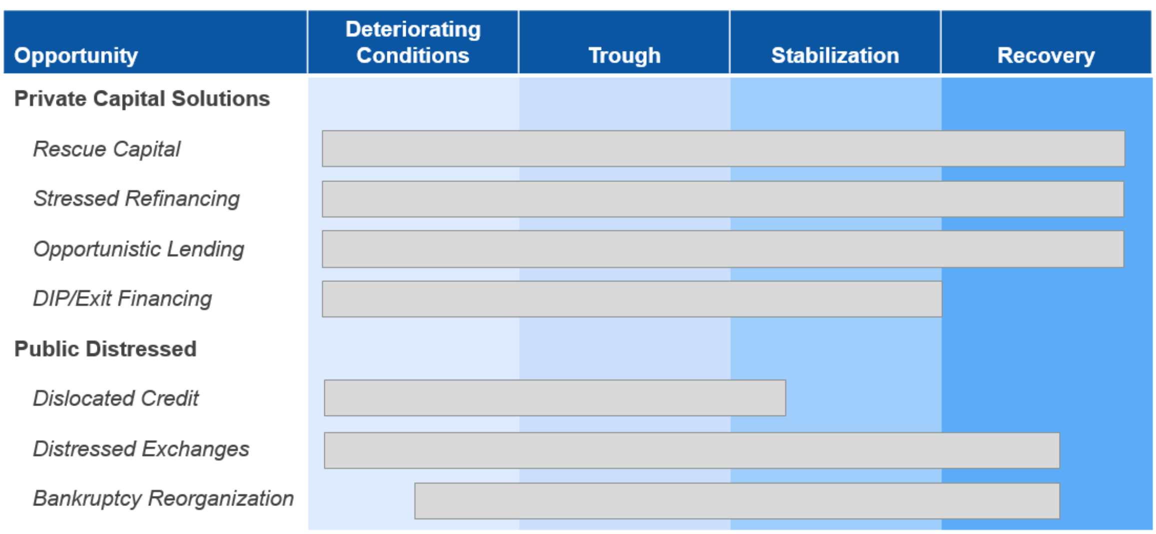
The European Central Bank (“ECB”) hiked rates by 75bps in September, the largest increase in ECB history. At this time, the ECB provided clear messaging: they are prepared to front-load rate hikes and do whatever is needed to get inflation under control. The market expects the ECB to raise rates to 3.0%. In the UK, interest rates have moved sharply higher while the pound has declined precipitously. The European High Yield market has repriced to reflect many of the risks identified above, with senior secured loans now offering 10%+ yields, for select high-quality, defensive credits. Despite the European corporate credit market being one quarter of the size of the U.S. corporate credit market, we expect significant opportunity to invest in dislocated credit given the meaningfully weaker outlook for European economies. This challenging macroeconomic environment will result in a multi-year credit investment opportunity in Europe across a broad range of sectors.

XVI. Conclusion

The next few years will likely offer some of the most attractive opportunities in the history of credit markets. Significant excesses have materialized in the non-investment grade corporate credit markets since the GFC. Years of cheap and abundant capital drove more aggressive financing structures and enabled lower quality corporate obligors to come to market. We are now entering a global recessionary environment characterized by rising interest rates, falling consumer demand, rising input costs, and shrinking valuation multiples.

We expect this environment to prove highly attractive for opportunistic credit investors. The best risk-reward outcomes occur at the market trough, when fear and pessimism are most pervasive. Banks, historically the primary source of underwritten debt capital for acquisitions and buyouts, have started to retreat after recent headline losses. We expect continued retrenchment from most "regular-way" investors in the credit markets as the credit cycle unfolds.

Creative capital structure financing solutions, offer a rich opportunity set. Compelling private capital lending opportunities will undoubtedly emerge as issuers face a liquidity crunch, while weak covenant packages enable new money solutions to take priority positions in capital structures. In the public credit markets, we expect leveraged loans to represent an outsized portion of the opportunity set as compared to its high yield bond counterpart given (i) the lower credit quality of loan issuers resulting in higher default rates, (ii) the floating-rate nature of leveraged loans that puts incremental pressure on issuers' cash flow, (iii) covenant-lite structures offering limited protection to legacy creditors, and (iv) the prevalence of unitranche loans resulting in less equity cushion than has historically supported first-lien loans.



The many variables, vulnerabilities, opportunities, sectors, and asset classes within corporate credit may help investors put the pieces of the puzzle together. As we evaluate the 2023-2024 credit cycle, we are highly confident that there will be a historic investment opportunity for corporate credit.

Written by Bruce Richards

For further information or questions contact:

Jason Friedman
jfriedman@marathonfund.com
212-500-3195

Disclosures & Footnotes

<u>Definitions of Indices Referenced:</u>

The ICE BofA US High Yield Index (H0A0 Index) is a market-capitalization-weighted index designed to measure the performance of US dollar denominated below investment grade corporate debt publicly issued in the US domestic market.; The Morningstar LSTA Leveraged Loan Total Return 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. Benchmark returns are presented gross of non-reclaimable withholding taxes.

End Notes

Page 4: Figure 1 Source: J.P. Morgan, LCD, Acuity, Marathon Asset Management, LP. As of June 30, 2022.
Page 5: Figure 2 Source: Pitchbook; Marathon Asset Management, LP. As of September 2022.
Page 6: Figure 3 Source: JP Morgan. As of August 2022.
Page 7: Figure 4 Source: JP Morgan. As of December 31, 2021.
Page 8: Figure 5 Source: S&P LCD Comps. Note: 2004 to 2021: L+225 and higher; 2022 to date: SOFR+225 and higher. As of June 30, 2022.
Page 9: Figure 6 Covenant Review. As of September 2022.
Page 10: Figure 7 Source: Moody’s; Marathon Asset Management, LP. As of September 2022.
Page 11: Figure 8 Source: Bloomberg. As of June 30, 2022.
Page 12: Figure 9 Source: J.P. Morgan. S&P LCD. Moody’s Investor Service
Page 13: Figure 10 Source: Florida-UCLA-LoPucki Bankruptcy Research Database. As of September 2022.
Page 15: Figure 11 Source: Deutsche Bank, Marathon Asset Management, LP. As of June 30, 2022.
Page 16: Figure 12 Source: S&P LCD Comps, ICE of BAML High Yield Index. As of September 30, 2022.
Page 17: Figure 13 Source: JP Morgan. As of September 30, 2022.
Page 18: Figure 14 Source: Moody’s. As of September 30, 2022.
Page 19: Figure 15 Source: S&P/LSTA. As of September 30, 2022.
Figure 16 Source: S&P Global Ratings * S&P has declared five tranches of pre-crisis CLOs originally rated A and one tranche originally rated AA as having defaulted. Each of these six were from CLOs comprised of credit derivatives or CRE loans and were not U.S. BSL CLOs. As a result, they are excluded from our analysis.
Figure 17 Source: BAML CLO Research 29 Jan 2021, Moody’s Analytics
Page 20: Figure 18 Source: OECD. As of September 30, 2022.