

Investment Insights

US Senior Loan Market



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2022 review and 2023 outlook

The year of 2022 began with promise. The pandemic was entering a less deadly phase, corporate earnings were roaring back, and financial markets were setting all-time highs. In an instant, the world changed when war erupted in Europe. Ensuing events in Ukraine have caused untold tragedy, disrupted the flow of energy and critical goods, and destabilized the global geopolitical order. Meanwhile, soaring inflation forced central banks the world over to dramatically tighten financial conditions in hopes of re-establishing price stability. The era of ultra-low interest rates – an enduring tailwind for risk assets since the global financial crisis (GFC) – ended emphatically. The reliable policy backstops of yesteryear were no more. Unexpectedly, 2022 devolved into one of the more challenging years for markets in recent memory.

Amid the financial market carnage, loans delivered relatively muted volatility and outperformed all other relevant asset classes. Due to their floating rate coupons, loan returns directly benefitted from the staggering increase in rates. Prices declined, but less severely than other asset classes with longer duration and lower capital structure seniority. Loan default rates remained under 1%, reflecting limited immediate credit stress in the market.

Inflation and the US Federal Reserve's (Fed) crusade against it continue to undermine growth prospects heading into 2023. The year sets up for diminishing policy risk but mounting risk to growth and earnings. Despite the macroeconomic headwinds, loans are positioned to deliver potentially favorable returns built on coupon rates at 15-year highs and price improvement from levels which, in aggregate, appear to sit below fair value. Just as investors discount credit deterioration ahead of confirmed growth / earnings weakness, the same is true when prospects begin to improve, and we expect that inflection will occur in 2023.

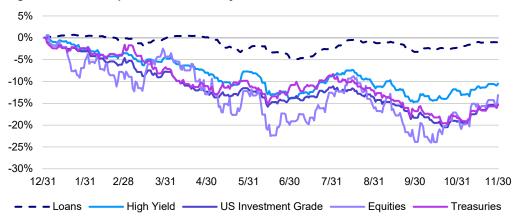
2022 review

Loans delivered year-to-date (YTD) returns of -1.41% through November, comprised of -6.34% in market value losses largely offset by interest income. Total returns fell short of expectations in 2022 with the asset class set to incur an annual loss for just the third time in the past 30 years. Heading into the year, our base case outlook called for broadly stable prices, a supportive economic background albeit with widening earnings dispersion, strong investor demand amid rising interest rates, and coupon-driven positive returns. Although our outlook missed the mark in several respects, we were prescient in our observation that loans' low duration could insulate investors from a sudden Fed hiking cycle:

"In our view, exposure to loans can help investors not only generate strong yields for their portfolios, but also hedge one of the key macroeconomic risks in 2022 – that of potentially unrelenting inflation that could force the US Federal Reserve to raise rates with unexpected haste."

As it turned out, persistent and broadening inflation did accelerate monetary tightening, thwarting a risk environment that was already reeling from Russia's shocking invasion of Ukraine in February. The exogenous shock emanating from Ukraine combined with central banks' sharp pivot to restrictive policy caused historic declines in several risk assets. Within that challenging context, loans performed exceedingly well as depicted in Figure 1, corroborating their value.

Figure 1: Loans outperformed in a bad year for risk assets



Sources: Pitchbook Leveraged Commentary & Data (LCD); Bank of America Merrill Lynch as of November 30, 2022. The Morningstar LSTA US Leveraged Loan Index represents US Loans, the ICE BofA US High Yield Index represents US High Yield, the ICE BofA US Corporate Index represents US Investment Grade, the ICE BofA Current 10-Year US Treasury Index-TR represents Treasury, and US Equities represented by the S&P 500. An investment cannot be made directly in an index.

Rising rates propelled loan demand early in the year until investor appetite for risk assets collapsed. Retail inflows of \$19.6bn during Q1 reversed in Q2-Q4, resulting in net outflows of \$6.1bn year-to-date.³ More importantly, however, CLO formation defied the market gloom with managers continuing to originate new structures throughout the year. This served as a steady source of demand for new issuance and secondary loans. While CLO liability costs widened during the year, loan asset spreads widened commensurately, supporting the so-called 'arbitrage' levels required by CLO equity investors to print new deals. The \$122.8bn of year-to-date CLO issuance (net of refi/resets)⁴ exceeded the comparable periods in all prior years except for 2021. The prevalence of CLOs within the loan buyer base (CLO's account for roughly 64% of the loan market)⁵ contributed stability to the asset class given that these structures have lengthy investment horizons and are rarely, if ever, subject to forced selling.

New loan supply, meanwhile, was sparse in 2022. Higher risk premia, a weakening economic outlook, and volatility in broader capital markets slowed deal making activity and paused opportunistic transactions. Just \$228.4bn of new loan issuance (net of \$7.5bn of repricings) cleared the market year-to-date. Between muted supply, steady CLO formation, and \$165.9bn of paydown activity, loan market technicals stayed tight. This left macro sentiment and the credit risk outlook to largely dictate month-to-month price evolution.

Issuer fundamentals held up well overall, but worsened relative to 2021. Earnings variance increased as fiscal/monetary stimulus dissipated, the post-pandemic reopening uplift faded, and inflation/supply chain disruption created challenges. This led to performance dispersion by sector and by ratings cohort; BB's returned 2.04%, B's returned -1.58%, and CCC's returned -12.42%. Concurrently, climbing base rates drove up interest expense for most loan issuers, pressuring those with already thin coverage ratios. As a result, credit migration was decidedly downward; the monthly downgrade/upgrade ratio worsened from 0.6x in January to 2.2x in November. The year-to-date evolution in ratings and price distribution depicted in Figure 2 reflect the higher degree of credit risk borne by loan investors.

Figure 2: Snapshot of the loan market shows moderate (but manageable) stress

	December 31, 2021	November 30, 2022
Loan index price	98.39	92.15
% of loans >100	11.76%	0.04%
% of loans 90-100	85.45%	82.69%
% of loans 80-90	1.91%	11.30%
% of loans ≤80	0.88%	5.98%
LTM default rate	0.29%	0.73%
% of loans BB+ and higher	6.67%	6.02%
% of loans BB	8.00%	7.44%
% of loans BB-	8.97%	10.17%
% of loans B+	13.68%	14.20%
% of loans B	29.86%	26.15%
% of loans B-	25.33%	28.48%
% of loans CCC+ and lower	4.91%	5.00%

Source: Credit Suisse Leveraged Loan Index and Pitchbook LCD as of December 31, 2021 and November 30, 2022, respectively. Price buckets are based on market value; ratings buckets are corporate credit rating and based on par value.

Overall, the loan market discounted higher credit risk into loan prices during 2022 as the earnings environment became more complicated and the Fed hiking cycle raised recession risk. Trading levels yo-yo'ed throughout a year marked by several risk reversals between peaks and troughs, but ended on a more positive tone. Following long-awaited downside inflation surprises in November and December, the market firmed up as investors began differentiating between stronger and weaker credits to a greater degree.

2023 outlook

Looking forward to 2023, we expect the loan market will generate total returns of approximately 10%. This forecast ascribes a partial recovery in loan prices during the year and is anchored by the historically strong coupon income investors could potentially stand to collect. We estimate that loan coupon income is currently accruing at an annual run-rate of nearly 8.0%,8 with additional upside if the current LIBOR forward curve materializes. The forward curve as of November 30, 2022 implies that 3-month LIBOR may potentially exceed 5% for most of the year, above today's 4.78% level.

Figure 3: ISSM's expectations for 2023

Component	Expected value	
Run-rate coupon	7.95%	
± change in prices	1.5-2.0%	
± change in nominal spread	0.0-0.1%	
± change in base rate	0.0-0.1%	
Forecasted total return	~10%	
Forecasted default rate	4-5%	

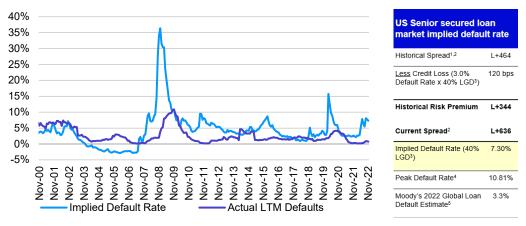
Source: Invesco, Credit Suisse Leveraged Loan Index (USD) as of November 30, 2022. The impact of LIBOR floors is reflected in the coupon. There is no guarantee that the expectations will be realized.

Loan prices have historically bounced back after negative return years, albeit the sample size is small. In 2023, we expect a net increase in prices driven by a majority of loans pulling towards par, partly offset by pockets of price erosion from increasingly stressed issuers. Price divergence by credit quality should be a key theme during the year.

That credit risk exists in the market is undeniable. Significant tightening of financial conditions during 2022 and the "long and variable lags" with which monetary policy filters into the real economy lead us to anticipate much of the economic damage from the Fed's inflation fight will materialize in 2023. In our view, heightened recession risk is appropriately signaled by the steeply inverted yield curve, which has accurately predicted growth contractions in the past. It follows that earnings should be cyclically weaker and risk of credit loss higher. However, the loan market – like all financial markets – is forward looking, and typically begins to recover ahead of a confirmed rebound in growth / earnings. This pattern followed both the 2008-2009 GFC and 2020 COVID shock. Granted, we do not foresee a linear upward price trajectory in 2023; in fact, we would prepare for declines in the first half of the year given clouded visibility to improved economic conditions and a Fed still in hiking mode. But ultimately, we believe that risk sentiment will find a bottom at some point during the year and the large majority of solvent, well capitalized loan issuers will advance in trading.

Consistent with that view, we believe loan issuer fundamentals will get worse before they get better. Weaker demand is anticipated to supplant cost inflation / supply chain issues as the key earnings concern. Elevated interest rates are expected to continue to weigh on cash flow for those who did not hedge their variable interest rate exposure. That said, we believe the loan market is overpricing default risk as we head into 2023. As illustrated in Figure 4, loan prices currently imply a 7.3% default rate, in excess of the 4-5% we expect will materialize next year. This indicates that the asset class is trading below fair value. The tendency to over-estimate default risk in periods of economic uncertainty is a well-worn pattern in loans, a function of investors requiring more yield to compensate for volatility when the distribution of possible outcomes is wide. A correction of this (possible) dislocation could follow from a sustained cooling of inflation, a Fed pause/pivot, a softer-than-feared landing for the US economy, and/or improved capital market access.

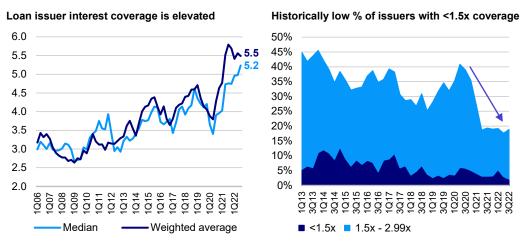
Figure 4: Loans, which have over-discounted default risk in past downcycles, imply a default rate of over 7%



Source: Credit Suisse Leveraged Loan Index, Pitchbook LCD as of November 30, 2022. Implied default rate calculated by taking implied default loss (current spread –historical risk premium) and dividing by loss given default of 40%. ¹Historical spread, price and yield reflect pre-credit crisis average from January 31, 2000 – November 30, 2022, excluding 2008-2009 and March-September 2020, Credit Suisse Leveraged Loan Index. ²Spread represented by Discount Margin (3-year life). ³Loss Given Default (LGD). ⁴Peak Default Rates and Actual LTM Defaults sourced from Morningstar LSTA US Leveraged Loan Index monthly default rates, the peak default month during 2009 was November. ⁵Default estimate provided by Moody's as of June 16, 2022.

As we consider risk of default / credit loss in 2023, we are encouraged by the relatively healthy credit metrics in the market. As illustrated in Figure 5, the share of issuers facing imminent liquidity challenges with respect to their interest cost burden is manageable. For our part, we regularly stress test our own portfolios to identify issuers most at risk of interest coverage compression in 2023, proactively reducing exposure to those with looming liquidity concerns. The maturity wall in 2023/2024 is also not significant with only 3.1% of the market comprised of B- or below rated issuers facing near maturities. Issuers by and large used the strong market conditions pre-COVID and in 2021 to extend maturities, so we do not foresee significant maturity driven defaults in 2023.

Figure 5: The over-levered, under-capitalized end of the loan market is contained entering 2023



Source: Credit Suisse, Pitchbook LCD as of September 30, 2022.

The technical environment in 2023 is likely to resemble the second half of 2022, in our view. We anticipate supply to remain constrained by two key factors: 1) the pipeline of M&A transaction financings is light, and 2) high cost of capital and economic uncertainty should weigh on new LBO activity as well as opportunistic financings. This is not a favorable environment for refinancing either, but we expect issuers with maturities in 2023-2025 will closely monitor market conditions for windows of opportunity to execute maturity extensions. For context, only 7.8% of the loan market faces maturities in 2024 or earlier, 60% of which have issuer ratings of B or better. ¹⁰ On the demand side, retail flows are not likely to rebound meaningfully in the absence of improved risk sentiment, especially given what we expect will be a peaking rate environment. CLO's will probably begin the year with slow issuance as is seasonally typical. The nearly 200 outstanding CLO warehouses could propel new originations in 2023, but we think new issuance may fall short of \$100mm given lackluster arbitrage and questionable demand from traditional AAA investors. Even this lower level of origination would support trading levels in the market amid low new loan issuance.

Topics in loans

Each year, we seek to highlight a few key themes and developments in the loan market:

- Midterm elections: Following the midterms, control of Congress is now split with Democrats
 retaining a slim Senate majority and Republicans gaining a slim House majority. Divided
 control of Congress is likely to stymie any further spending initiatives that may or may not
 have been on the Biden Administration's agenda. To the extent the US economy enters a
 recession, this reality lowers the odds of any counter-cyclical fiscal stimulus, though we
 expect a severe recession would likely catalyze bipartisan support for some form of fiscal
 relief.
- LIBOR transition update: The ongoing transition away from LIBOR as a base rate continued in 2022 with banks scheduled to cease publishing the 1-, 3-, 6-, and 12-month benchmark lending rates after June 30, 2023. With loan market stakeholders having coalesced around SOFR as a replacement rate, substantially all new issuance is utilizing SOFR at this point. Additionally, most existing loan issuers either built mechanisms into their credit agreements to effectuate this change or have obtained amendments to do so. Currently, 16% of loans are priced to SOFR¹¹ and another 76% of loans have documents that prescribe mechanisms to facilitate a seamless transition when LIBOR is no longer published. This leaves only 8% of outstanding loans that are unprepared to replace LIBOR with SOFR; we anticipate amendment activity in the first half of 2023 will address this small portion of the market.

Meanwhile, 15% of CLO debt is now priced to SOFR. ¹³ LIBOR succession progress on the CLO side has lagged for two reasons: 1) each CLO indenture is unique, with some CLOs only able to switch once 50% of their underlying assets convert to SOFR. Lower loan issuance in 2022 means that percentage has not been reached; 2) the LIBOR-SOFR basis has been narrower than the Alternative Reference Rates Committee (ARRC) recommended 26 basis point (bps) for much of 2022. This disincentivizes CLOs from switching before the mandated cut-over since, in many cases, they would be electing to pay SOFR + 26bps on liabilities, more than simply keeping LIBOR in place. However, the lack of conversion to-date is not a concern because the vast majority of CLO indentures do not require amendments to effectuate the switch. Rather, CLO managers have discretion to choose an alternative base rate without the consent of noteholders, making the process even more automatic than it will be for loans.

Key risks to 2023 returns

Our 2023 return forecast is the outcome we believe to be most probable for the loan market; however, we acknowledge that key variables could cause actual performance to differ from our base case, either positively or negatively. Important swing factors include, but may not be limited to:

- Central bank policy: After more than a decade of nearly uninterrupted accommodative
 monetary policy, investors had to adjust to ever more hawkish guidance from the Fed. It is
 possible that the Fed will continue to upend market expectations with respect to rates
 (which currently estimate the terminal policy rate at roughly 5%). If the Fed continues to
 prioritize inflation control above growth considerations, the conditions for market recovery
 may be delayed. Conversely, an unexpectedly rapid pivot to easing could form a significant
 tailwind for risk assets.
- Economic circumstances: We assume a mild recession in our base case during 2023 but acknowledge a wide distribution of possible outcomes. The depth and length of a potential recession is unknown and could result in a more or less severe default cycle that we contemplate.
- Geopolitics: So much about the Russian war in Ukraine defies logic, making it difficult to
 assess where the conflict is heading. Flare ups in other hotspots around the world,
 especially in the Taiwan Strait, represent significant downside risks to the global order.
 Other geopolitical realities (i.e., China's ability to transition away from a zero-COVD policy,
 OPEC's approach to oil production, Europe's success navigating winter amid challenged
 gas supply) will influence the operating environment for loan issuers.
- 1 Credit Suisse Leveraged Loan Index as of November 30, 2022.
- 2 Credit Suisse Leveraged Loan Index as of November 30, 2022.
- 3 JP Morgan as of November 30, 2022.
- 4 JP Morgan as of November 30, 2022.
- 5 JP Morgan and Credit Suisse as of November 30, 2022.
- 6 Credit Suisse Leveraged Loan Index as of November 30, 2022.
- 7 Pitchbook LCD as of November 30, 2022.
- 8 Credit Suisse Leveraged Loan Index coupon in November 2022, annualized.
- 9 Pitchbook LCD as of October 11, 2022.
- 10 Pitchbook LCD as of October 11, 2022.
- 11 JP Morgan as of November 7, 2022.
- 12 Covenant Review, November 7, 2022.
- 13 JP Morgan as of October 31, 2022.

Investment risks

The value of investments and any income will fluctuate (this may partly be the result of exchange rate fluctuations) and investors may not get back the full amount invested. Past performance is no guarantee of future returns.

Most senior loans are made to corporations with the below investment-grade credit ratings and are subject to significant credit, valuation and liquidity risk. The value of the collateral securing a loan may not be sufficient to cover the amount owed, may be found invalid or may be used to pay other outstanding obligations of the borrower under applicable law. There is also the risk that the collateral may be difficult to liquidate, or that a majority of the collateral may be illiquid. Compared to investment grade bonds, junk bonds involve greater risk of default or price changes due to changes in the issuer's credit quality. Diversification does not guarantee of profit or eliminate the risk of loss.

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