

The Case for Senior Loans



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3Q 2023 market update

Looking back throughout 2023 so far, there has been a significant focus on the uncertainty of the US macroeconomic backdrop and its potential implications for the senior secured bank loan market. Paramount among these concerns are three key questions:

- 1) How are underlying issuers able to handle inflation pressures and will they be able to pass along increased costs to their consumers?
- 2) Where are we in the interest rate cycle and how will this affect issuers?
- 3) What effect will a potential recession have on issuers?

This piece provides our view on the current market environment and attempts to answer these critical questions.

Why loans now?

In our view, there are three compelling reasons to consider investing in senior secured loans today:

1) High level of current income

Current income is comprised of two key components—base interest rates (which are expected to stay higher for longer) and credit spreads (which continue to remain wide). Coupon income for bank loans today is ~9%, which is its highest since 2009¹. Market expectations are for rates to remain high, well above pre-2022 levels. Loans have proven to provide consistent, stable income through varying market cycles, including recessionary periods and periods of falling rates.

2) Floating rate feature

Loans have virtually no duration risk (average ~45 days) and benefit from rising rates as coupons reset to higher base rates (SOFR). While there is uncertainty around the Federal Reserve's policy to increase rates, the market is still pricing in potentially one more rate increase before plateauing throughout 2024. This environment benefits senior secured bank loan investors through higher coupon income whether rates increase or not.

3) Compelling relative value

Loans have offered one of the best yields in fixed income, while providing downside risk mitigation by being senior in the capital structure and being secured by the assets of the company. Loans have offered these high yields with no duration risk. In a recessionary environment, loans offer downside risk mitigation by being senior which means they are the highest priority to be repaid in the event of default. Senior secured assets may offer added risk mitigation throughout recessionary periods.

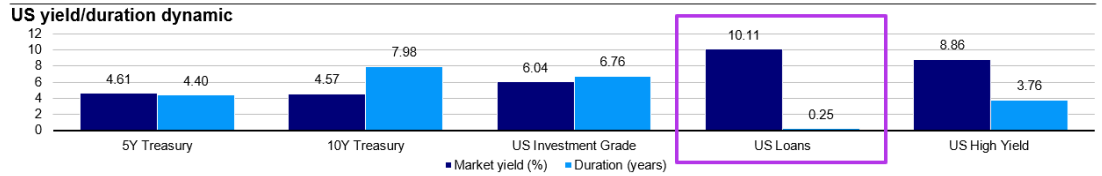
Yields

Current loan yields and spreads look very attractive both on a historical and a relative basis. A loan's yield is based on both coupon payments, which is the interest return, as well as on principal return. The average coupon for loans has been 9.15%, outpacing the average high yield coupon of 5.95%¹. After averaging 245 bps less than high yield bonds over the past fifteen years, this is the first time in history the average loan coupon has surpassed that of high yield bonds. It was only around two years ago when loans were yielding ~4.80%; loans have been yielding over 500 basis points more than that¹.

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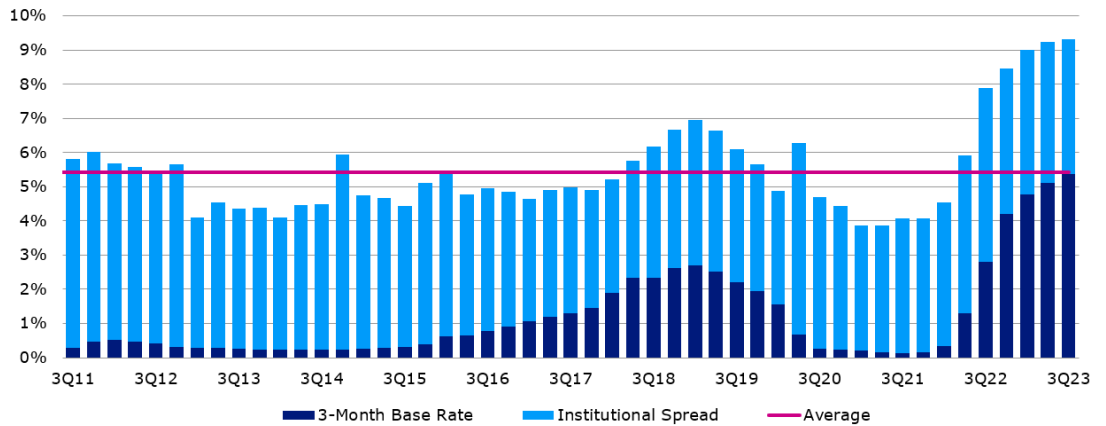
US senior secured loans have offered one of the best yields in fixed income

Past performance does not predict future returns.



Source: Bloomberg, JP Morgan, Credit Suisse, and Bloomberg L.P. as of September 30, 2023. The Bloomberg U.S. IG index represents IG corporates, the JPM US HY index represents High Yield and CS LLI represents the Leveraged Loans. Loan Yields represented yield to 3 year.

Total US loan coupons at highest levels in decades



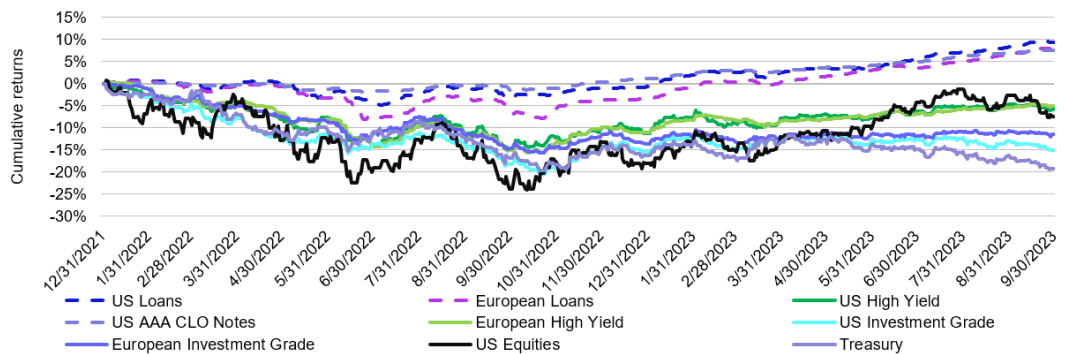
Source: Pitchbook LCD as of September 30, 2023. Base rate reflects the average during the quarter. Uses three-month LIBOR (prior to 2023) or SOFR (2023 or later) plus the weighted average institutional spread.

Bank loans were one of the only positive returning asset classes in 2022³. Rising rates have put the floating-rate loan asset class on pace for the strongest year since the Global Financial Crisis along with the largest increase in yields across all of fixed income². Loans still offer amongst the highest yields and are expected to remain high, as the market anticipates a higher for longer interest rate environment.

Asset class resiliency

Steady loan returns stood in stark contrast to other risk assets

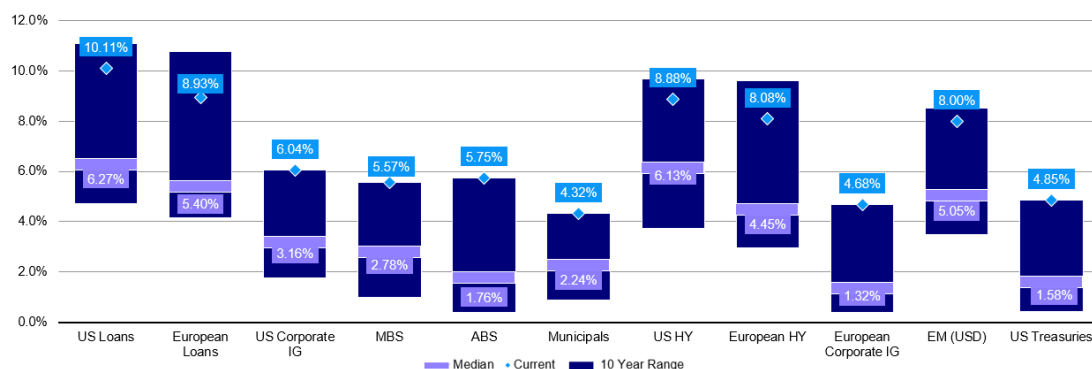
Past performance does not predict future returns.



Sources: Pitchbook LCD; Bank of America Merrill Lynch; Bloomberg as of September 30, 2023. The Morningstar LSTA US Leveraged Loan Index represents US Loans, the Morningstar European Leveraged Loan Index represents European Loans, CLO AAA Notes represented by J.P. Morgan CLO AAA Index, 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, US Equities represented by the S&P 500, the Bloomberg Euro Aggregate Corporate Total Return Index represents European Investment Grade, and the Bloomberg Pan-European High Yield Total Return Index represents European High Yield. All US-based indices are hedged to USD. All Euro-based indices are hedged to EUR. An investment cannot be made directly in an index.

Historical market yields

10 Year historical yield-to-worst/yield to 3-year across sectors



Sources: Barclays, Bloomberg as of September 30, 2023. The Credit Suisse Leveraged Loan Index represents US Loans, Credit Suisse West Euro Leveraged Loan Index represents Euro Loans, the Bloomberg US Corporate Investment Grade Index represents US Investment Grade, Bloomberg US Corporate High Yield Index represents US High Yield (HY), the Bloomberg US MBS Index represents MBS, Bloomberg US ABS Index represents ABS, Bloomberg Municipal Bond Index represents Municipals, Bloomberg US Treasury Index represents US Treasuries, Bloomberg Pan-European Aggregate: Corporate Index represents Euro Investment Grade, Bloomberg EM USD Aggregate Index represents EM (USD), and Bloomberg Pan-European High Yield Index represents Euro High Yield. Loan Yields represented yield to 3 year. An investment cannot be made directly in an index. Past performance is not a guarantee of future results.

When the Federal Reserve eventually does pause interest rate increases, it can have both direct and indirect positive effects on the leveraged loan market such as:

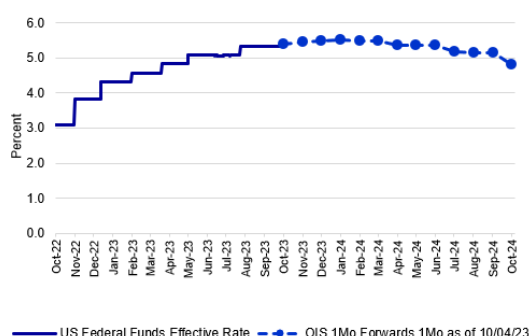
- **Lower borrowing costs:** pausing rate hikes lowers borrowing costs for companies and potentially stimulates demand for new issuance.
- **Improved debt serviceability:** stable or lower interest rates reduce interest expense burden for companies, which can positively impact loan performance.
- **Increased investor demand:** when the Federal Reserve signals a pause in rate hikes, it may boost investor confidence and appetite for credit risk assets such as bank loans.

Forward interest rates – US implied market expectations

Leveraged loan historical performance post a pause in Federal Reserve policy hikes¹

Month of last hike	Fed Funds Terminal Rate	Leveraged Loan Forward Returns			
		3 months	6 months	9 months	12 months
Dec-18	2.50%	3.89%	5.58%	6.67%	8.64%
Jun-06	5.25%	1.73%	3.68%	5.89%	7.54%
May-00	6.50%	1.85%	2.48%	5.15%	6.22%
Mar-97	5.50%	2.18%	3.74%	5.33%	7.62%
Average		2.41%	3.87%	5.76%	7.51%

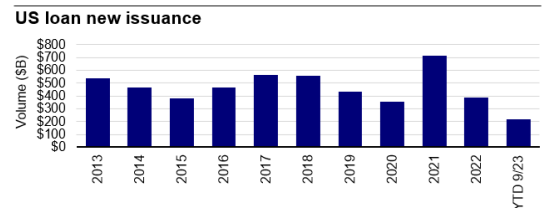
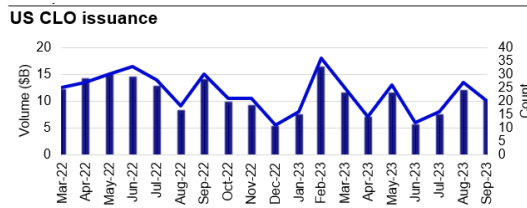
Central banks expected to plateau, not pivot, after additional rate hikes²



Sources: ¹JPMorgan as of April 28, 2023. ²Bloomberg as of October 4, 2023. Forward-looking statements are not a guarantee of future results. They involve risks, uncertainties and assumptions. There can be no assurance that actual results will not differ materially from expectations.

Market technicals

Earlier in the year, we saw retail demand for loans soften amidst broader risk-off investor sentiment. However, that trend has abated as some investors are becoming more comfortable with the “soft-landing” scenario for the US economy. There has also been a flow of new CLO creations through 2023. This indicates that there is still institutional investor appetite for loans. This steady CLO formation and minimal new issue helped support the loan market technical despite retail outflows and macro concerns. As of September 2023, 213 CLOs have priced \$91.8bn of issuance, and CLOs represent ~70% of the investor base in the loan market². Moreover, as demand for loans wanes, new loan issue supply will typically respond in kind to help re-establish equilibrium in the market. For example, year end 2022 gross and net issuance was \$252.5bn and \$163.1bn, -70% and -60% year-over-year, respectively⁴. This supply/demand imbalance forces CLOs to provide a bid in the secondary market. Having said that, the loan market is still trading at a significant discount to par which long term investors can view as an attractive buying opportunity.



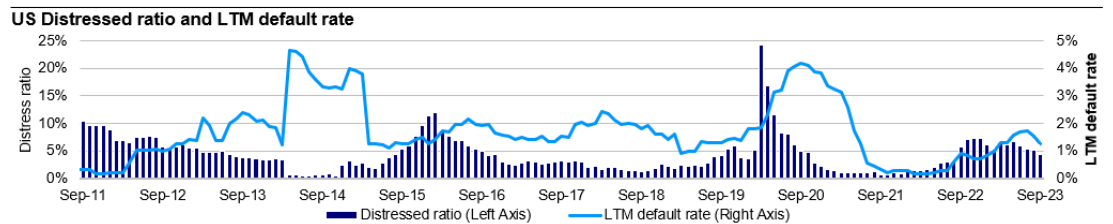
Source: Pitchbook LCD as of September 30, 2023.

Market fundamentals

While technicals are finding an equilibrium, market fundamentals for underlying issuers remain relatively strong.

First, defaults remain low relative to historical levels. The trailing twelve month default rate at the end of September was 1.27%, while the historical trailing default is more than double that around 2.70%.

Distressed ratio serves as a good leading indicator of potential default activity

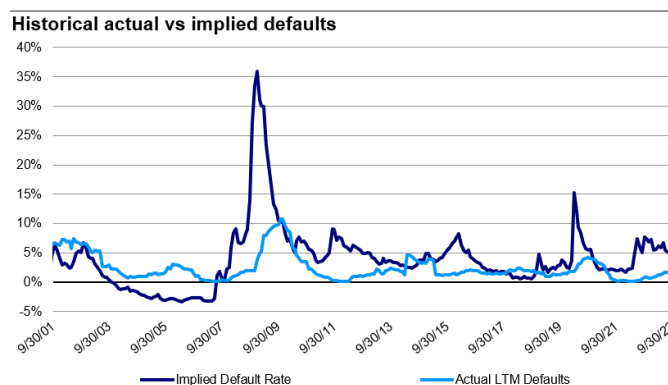


Source: Pitchbook LCD; Morningstar LSTA US Leveraged Loan Index. Data through September 30, 2023.

Given the macro concerns around a potential recession, we have seen default forecasts revised higher for the year. Default forecasts hover around the 3.0% – 3.5% level. However, we acknowledge if we enter a deep recession (which is not our base case), these estimates may be revised higher. Invesco’s forecast at the beginning of the year was more around the 4.0% – 4.5% range, which has not materialized.

The risk of defaults, while small, remains the largest risk to loan investors, but the senior secured nature of loans has historically provided a high recovery rate in the event of default. As shown in the chart below, we believe investors are being well compensated on a risk-adjusted basis. If we were to conservatively factor in historical defaults of 3.0% with recoveries lower than historical averages of 60%, the market is implying a default rate around 4.73%, as illustrated below. An implied default rate of 4.73% with an average recovery of 60% would equate to a 1.89% credit loss. This loss would be significantly offset by the current 9.15% coupon return and yield to 3yr of 10.11%¹.

Historically, implied default rates have overshot actual defaults

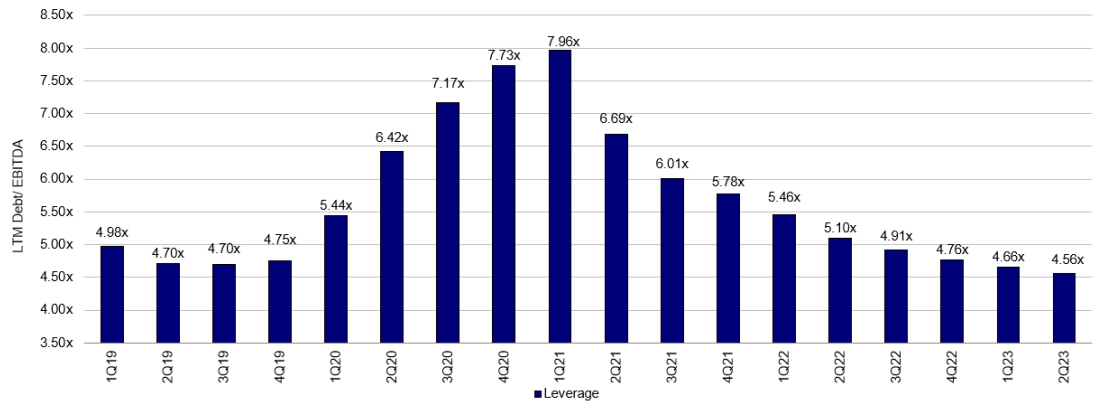


US Senior secured loan market implied default rate		2023 US default forecasts ⁵	
Historical Spread ²	B+469	Fitch	
Less Credit Loss (2.7% Default Rate ³ x 40% LGD ⁴)	108 bps	As of Mar-2023	3.0%
Historical Risk Premium	B+361	Citibank	
Current Spread ²	B+551	As of May-2023	3.6%
Implied Default Rate (40% LGD ⁴)	4.73%	JPM	
Peak Default Rate ³	10.81%	As of Aug-2023	3.5%

Source: CS Leveraged Loan Index, PitchBook Data, Inc. as of September 30, 2023. Implied default rate calculated by taking implied default loss (current spread – historical risk premium) and dividing by loss given default of 40%. “B” represents Base Rate. ¹Historical spread, price and yield reflect pre-credit crisis average from Jan. 31, 2000 - September 30, 2023, excluding 2008-2009 and March-Sept 2020, CS Leveraged Loan Index. ²Spread represented by Discount Margin (3-year life). ³Peak Default Rates, Average Annual default rates (Dec 1999- Dec 2022) and Actual LTM Defaults sourced from Morningstar LSTA US Leveraged Loan Index monthly default rates, the peak default month during 2009 was November. ⁴Loss Given Default (LGD). ⁵Fitch, Citibank and JPM respectively.

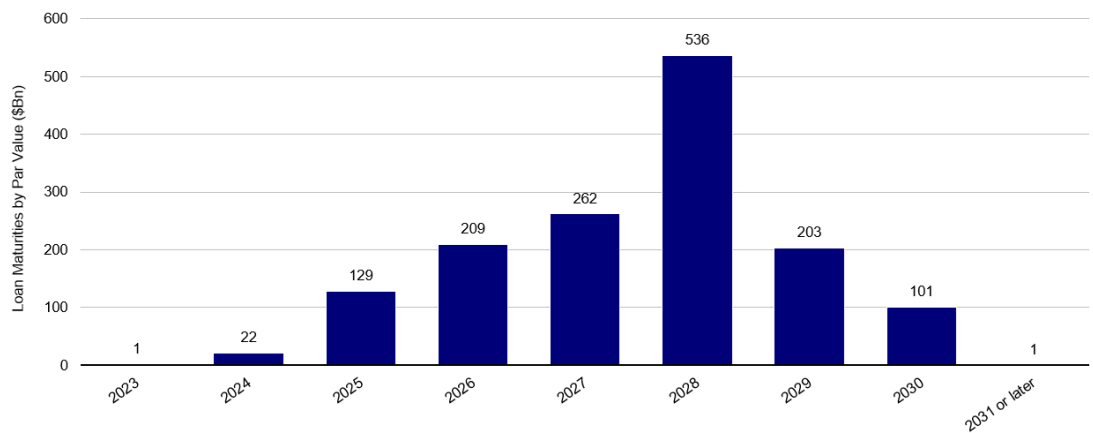
The chart below provides the average leverage of companies in the leveraged loan market serving as an indicator of the financial health of bank loan issuers. Borrowers have reduced their leverage for the 9th quarter in a row, and average leverage in the market has returned to pre-pandemic levels. Borrowers have repaired their balance sheets and pushed out their debt maturities. Currently only ~1% of outstanding loans mature in 2024, leaving little refinancing risk in the market.

Borrower leverage across the loans market



Source: JP Morgan as of June 30, 2023. Data always with a quarter lag.

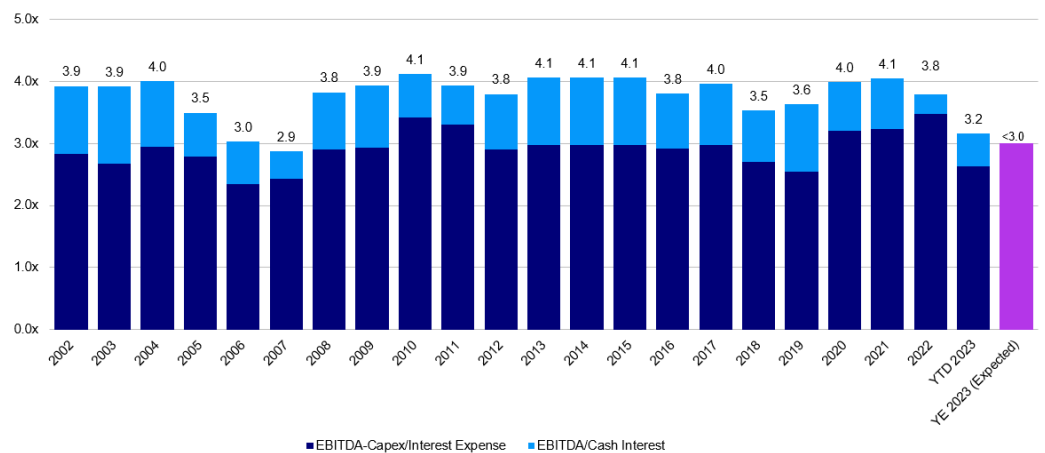
Loan Fundamentals have remained supportive Years of strong refinancing activity have kept maturity wall at bay



Source: Credit Suisse as of September 30, 2023.

With the market anticipating interest rates to plateau through 2024, another important investor concern is how current rates will impact issuers' ability to service their debt. As highlighted in the table below, the average borrower has entered this cycle with a very strong ability to service their debt. Interest coverage ratios are still robust, leaving companies with sufficient ability to absorb higher rates.

Interest coverage across the loan market



Source: Pitchbook LCD as of September 30, 2023.

Conclusion

As shown above, we believe there is likely still ample opportunity in the loan asset class to generate higher than historical average returns. As a closing point, following the four periods since the Global Financial Crisis, when loan yields exceeded 8% (they are currently around 10%), the loan market has delivered very strong

¹Credit Suisse as of September 30, 2023.

²Pitchbook LCD, Intex, Bloomberg, Credit Suisse as of September 30, 2023.

³JP Morgan as of December 31, 2022.

⁴Pitchbook LCD, Intex, Bloomberg, Credit Suisse as of December 31, 2022.

outperformance over the ensuing 6-12 months (with a 10.69% average 12 month forward return). We believe this may present a compelling entry point and opportunity for long term investors.

Historical Leveraged Loan Forward Performance

Leveraged Loan Forward Performance as Yields Breach 8%

Date	Leveraged Loan Forward Returns				Leveraged Loan Spread-to-worst Change (bps)			
	3 months	6 months	9 months	12 months	3 months	6 months	9 months	12 months
20-May-10	1.64%	5.34%	9.57%	10.37%	1 bp	-96 bp	-200 bp	-176 bp
19-Aug-11	3.42%	6.59%	8.38%	10.89%	-76 bp	-140 bp	-135 bp	-144 bp
20-Dec-18	3.74%	5.21%	6.35%	8.08%	-80 bp	-74 bp	-55 bp	-73 bp
11-Mar-20	3.87%	7.85%	10.78%	13.43%	-106 bp	-215 bp	-269 bp	-330 bp
10-May-22	0.55%	0.42%	NA	NA	40 bp	125 bp	NA	NA
Average	2.64%	5.08%	8.77%	10.69%	-44 bp	-80 bp	-165 bp	-181 bp

Leveraged Loan Forward Performance as Prices Breach Various Barriers

Price	Leveraged Loan Forward Returns				Leveraged Loan Spread-to-worst Change (bps)			
	3 months	6 months	9 months	12 months	3 months	6 months	9 months	12 months
\$96	-0.19%	-0.72%	2.60%	5.02%	54 bp	111 bp	42 bp	0 bp
\$95	0.37%	2.77%	5.27%	7.19%	37 bp	4 bp	-39 bp	-61 bp
\$94	1.37%	3.96%	6.98%	9.09%	-2 bp	-38 bp	-103 bp	-133 bp
\$93	1.56%	4.55%	7.74%	9.53%	2 bp	-55 bp	-125 bp	-143 bp
\$92	2.78%	5.90%	8.86%	10.64%	-50 bp	-119 bp	-172 bp	-189 bp

Source: JP Morgan Leveraged Loan Index data. As of January 6, 2022. Data shown represents historical performance once loan prices or yields hit certain thresholds. Past performance is not a guarantee of future results

Investment risks

Many senior loans are illiquid, meaning that the investors may not be able to sell them quickly at a fair price and/or that the redemptions may be delayed due to illiquidity of the senior loans. The market for illiquid securities is more volatile than the market for liquid securities. The market for senior loans could be disrupted in the event of an economic downturn or a substantial increase or decrease in interest rates. Senior loans, like most other debt obligations, are subject to the risk of default. The market for senior loans remains less developed in Europe than in the U.S. Accordingly, and despite the development of this market in Europe, the European Senior Loans secondary market is usually not considered as liquid as in the U.S. The value of investments, and any income from them, will fluctuate. This may partly be the result of changes in exchange rates. Investors may not get back the full amount invested.

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