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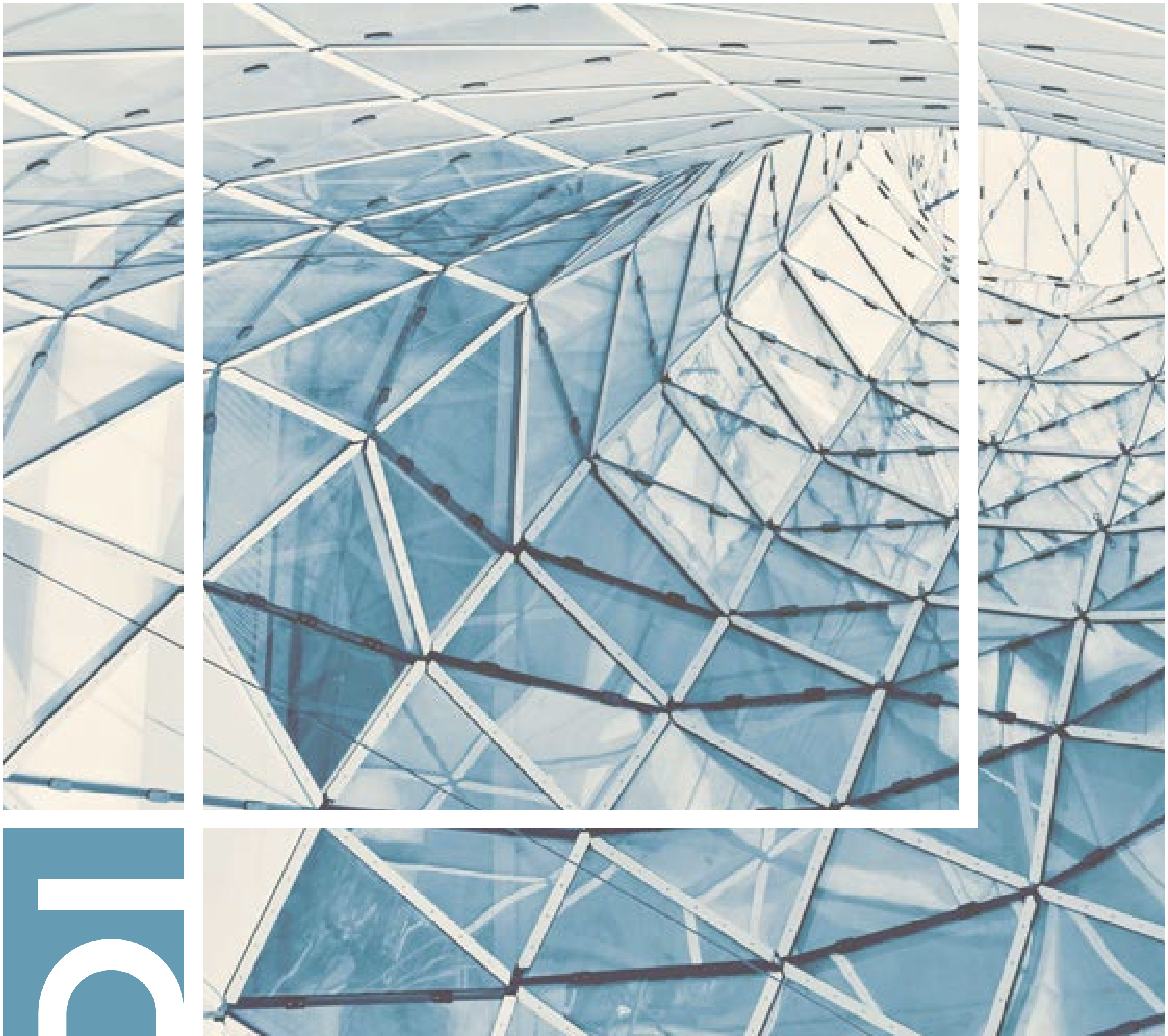
Q4
2023



LSDI

LINCOLN SENIOR DEBT INDEX

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INTRODUCING:

The Lincoln Senior Debt Index

Lincoln International is pleased to release the quarterly Lincoln Senior Debt Index (LSDI). The LSDI represents years of research and analysis of data and was developed by professionals from Lincoln's Valuations & Opinions Group in collaboration with Professor Pietro Veronesi of The University of Chicago Booth School of Business.

Current trends in the direct lending market at the end of 2023 were comparable to those at the tail end of 2022. The LSDI yielded 11.4%, a 20-basis point decline relative to yields as of Q4 2022 given how SOFR rates trended during the year. As a result, fair value continued to climb, finishing the fourth quarter of 2023 at 97.9. Finally, the default rate declined approximately 50 basis points since Q3 2023, continuing the trend of decreased rates of default in the direct lending market as seen throughout 2023. Lenders continued to benefit from high interest rates resulting in record yields and stable prices while also getting a better handle on the credit stresses in portfolio companies that were resulting in continued defaults. Since the start of 2023, approximately 740 amendments have been executed for the companies valued by Lincoln, or 18% of the total companies valued by Lincoln. Of the companies with recent amendments, 14% included covenant holidays and 29% included sponsor infusions. We believe the decline in default rates demonstrates that borrowers and lenders anticipated defaults, which primarily resulted not from declining earnings but from increases in interest rates, and proactively addressed the issue by amending the loan documents. Despite the decreased rates of default in a rising rate environment, Lincoln also noted that, of these amendments, 65.3% had increases in interest spreads.

In the fourth quarter of 2023, the direct lending and broadly syndicated loan (BSL) market continued to experience a contraction in their yield differential with only a 2.0% yield difference relative to the historical average of 3.8%. As competition to deploy capital has increased, returns between the two markets decreased. LSDI yields have contracted from 11.6% to 11.4% (-0.2%) from December 31, 2022, to December 31, 2023, whereas BSL yields have risen from 9.1% to 9.5% during this same period (0.4%).

The LSDI provides insight into the direct lending market as it is a fair value index consisting of four components:

1. Total return (income return plus capital gain return);
2. Price (i.e., fair value);
3. Spread; and,
4. Yield to maturity.

Each of the four components is then categorized into three types of senior loans:

1. All senior loans – consisting of first lien, Unitranche, and second lien loans;
2. Senior loans consisting of first lien and
3. Second lien loans.

In addition, we provide additional descriptive statistics including: (a) loan-to-value; (b) the impact of interest rate and credit changes on total return; (c) default rates and (d) historical yields by EBITDA size.

The U.S. non-investment grade corporate loan market has two segments: the BSL market, which attracts investors investing in broader syndicated deals and the direct lending market for investors investing in club deals. While correlated, there are subtle but significant differences between the two markets. Both markets primarily provide floating-rate loans; however, divergences exist in terms of market liquidity, company size and credit facility size. Given the greater liquidity in the BSL market, pricing and terms are a function of the technical market and competitive factors, whereas the more illiquid direct lending market has a stronger orientation to assessing company fundamentals.

In contrast to the Morningstar LSTA U.S. Leveraged Loan 100 Index which is comprised of companies borrowing in the BSL market, the constituents in the LSDI are virtually all companies borrowing in the direct lending market.

The direct lending market is a significant source of capital to private equity-backed middle-market companies. The LSDI benefits market participants by providing information to facilitate a greater understanding of the attributes of this important source of capital to the private sector.

KEY OBSERVATIONS:

Lincoln Senior Debt Index

Q4

2023

How We Obtain the Information

On a quarterly basis, Lincoln values more than 4,500 private companies primarily owned by over 150 alternative investment funds and lenders to funds. Most of these companies are levered via borrowings from the direct lending market. A significant percentage of the LSDI constituents are based upon valuations of loans provided for non-public business development companies and other private investment vehicles and, therefore, not disclosed in public filings.

For many of the private companies valued quarterly, Lincoln advises on the fair value of at least one senior debt security in the capital structure. All valuations conform with GAAP and fair value principles and have been reviewed by fund management, fund boards, limited partners, and auditors.

Additional information can be found in our methodology discussion and on our website.

97.9

Average Fair Value of Loans in the Index as of Q4 2023

LSDI – Key Observations – All Loans – Fourth Quarter 2023

- The LSDI returned 2.8% for the quarter ending December 31, 2023, and represented a decline of 0.9% relative to the return in the third quarter of 2023 considering the lower yields observed and stabilization of interest rates over the last few months.
  - Returns consist of two components: (a) interest income; and (b) capital gains or losses. Both income returns and returns from capital gains were positive due to increasing interest rates and yield and stable prices.
- Yields between the direct lending market and BSL market continued to compress relative to the historical average of 3.8% in the fourth quarter of the year, with a 2.0% gap between the yields derived from the LSDI and Morningstar's LSTA. As competition to deploy capital has increased, returns between the two markets decreased.
- Prices increased in both the BSL market and the LSDI, with fourth quarter prices stepping up $0.60 to 96.2 and $0.10 to 97.9 within each index, respectively

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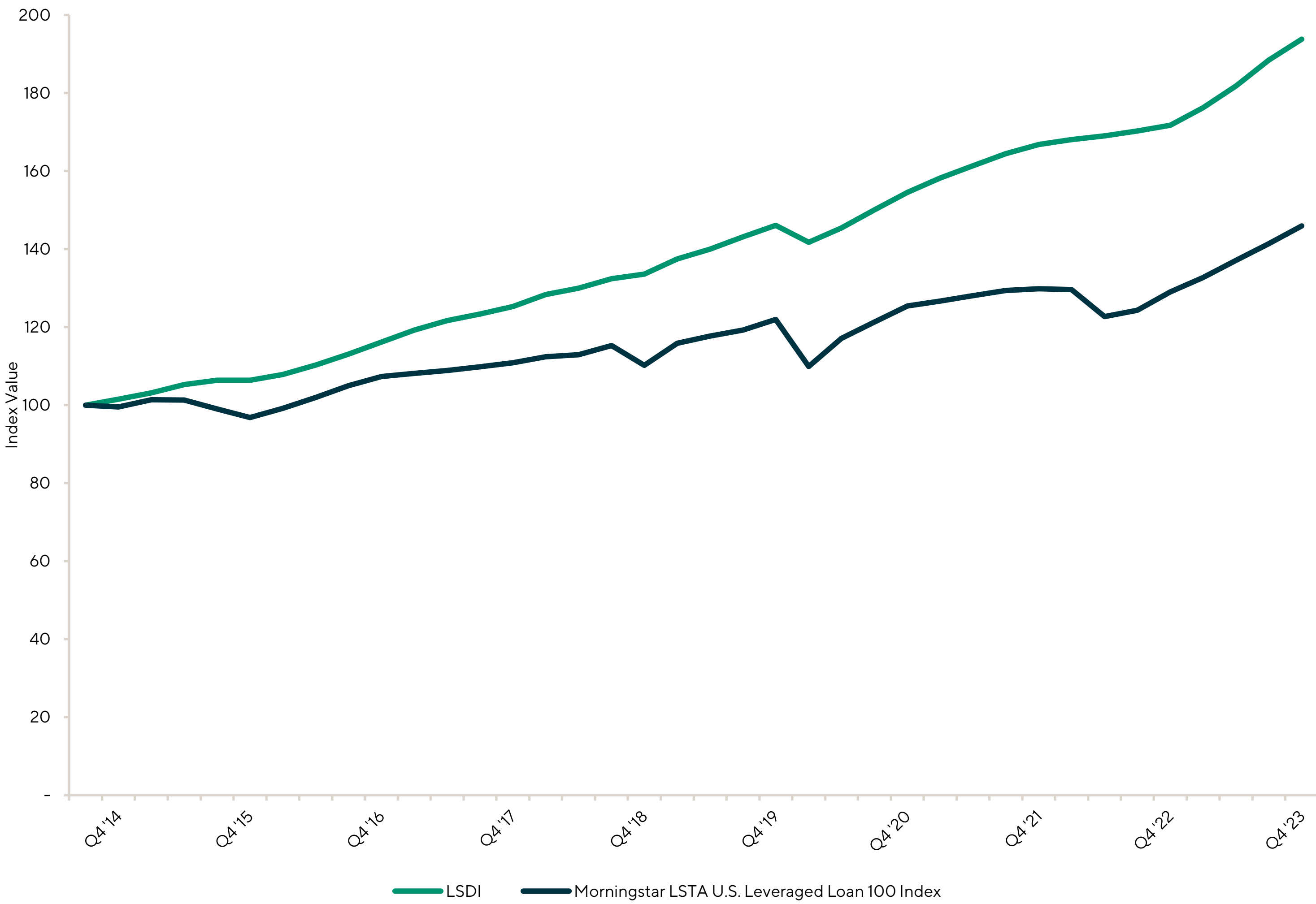
RESULTS:
A. Total Return

Q4

2023

Table 1: Comparison of Total Return – LSDI (All Loans) to Morningstar LSTA U.S. Leveraged Loan 100 Index



Observations:

- Investment return is generated from two sources: (1) capital gains and losses; and (2) income return. In the leverage lending asset class, income returns dominate capital gains or losses, resulting in a positive quarterly total return.
- Since the inception of the LSDI, both the Morningstar LSTA U.S. Leverage Loan 100 Index, which measures the performance of the BSL market, and the direct lending market have experienced an increase in total return. BSL returns for the quarter ending December 31, 2023, were 3.2% versus the LSDI of 2.8%.
- Given the relatively high level of interest rates, we expect returns to remain high by historical standards.

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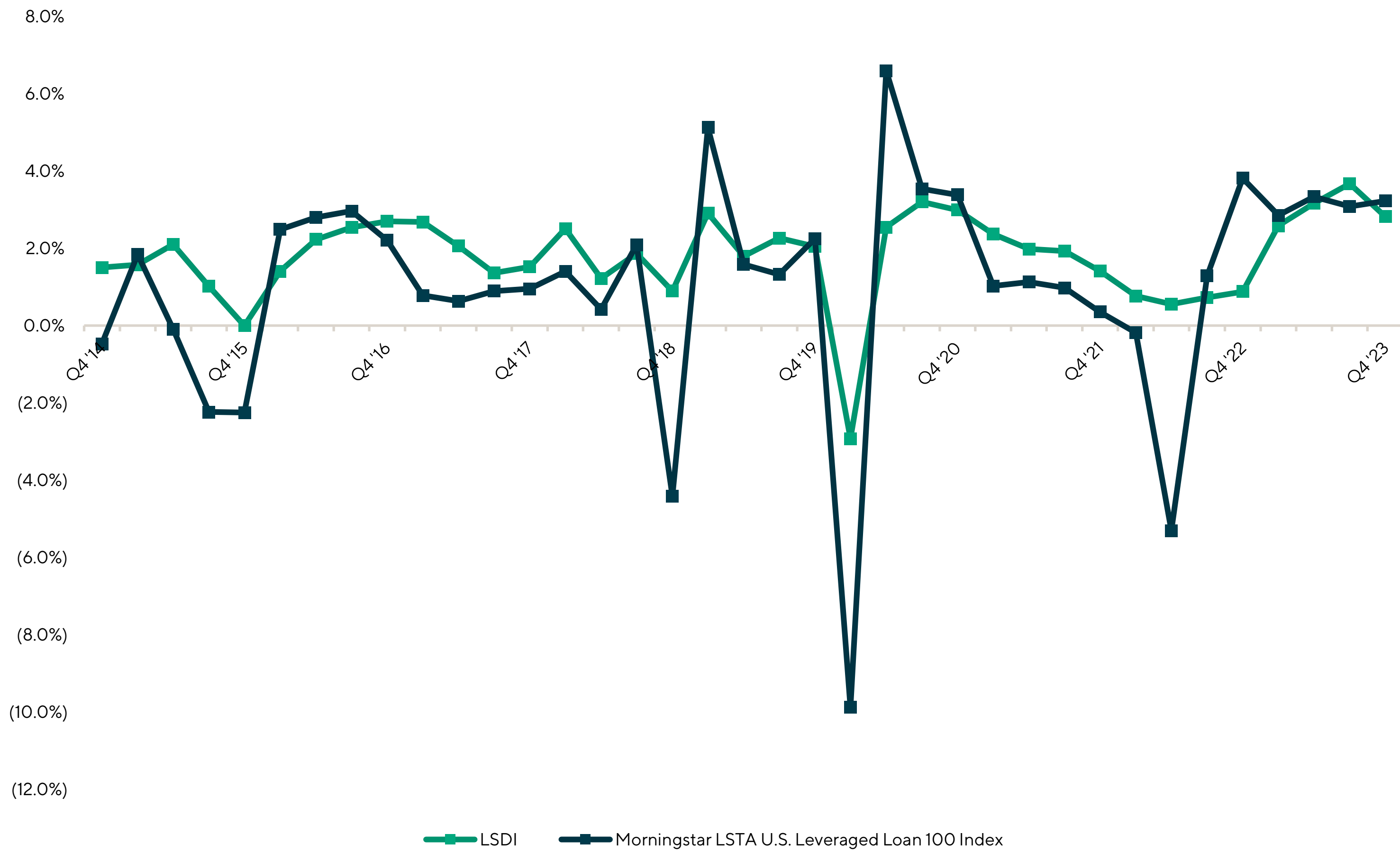
Table 2: Correlation and Comparison of Quarterly Returns – LSDI (All Loans) to B Market



Observations:

- The correlation between the LSDI and Morningstar LSTA 100 Investment is high at approximately 81.4%. However, there are two distinct differences:
  - the LSDI is significantly less volatile; and
  - the LSDI generates higher returns on average.
- The direct lending market experiences negative returns much less frequently than the BSL market, given its higher yields.
- Since the inception of the LSDI on September 30, 2014, through December 31, 2023, only the quarter ending March 31, 2020, reported a negative quarterly return whereas the BSL market has experienced eight quarters of negative returns.

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B. Yields

Table 3: Comparison of Yields – LSDI (All Loans) to B Market

Observations:

- The yield of the LSDI was 11.4% for the quarter ending December 31, 2023, which was higher than the average yield of the index of 9.74% given rising interest rates.
- Despite the higher than historical average interest rates, SOFR decreased marginally relative to the third quarter of 2023, resulting in a slight decline in the LSDI yield from 11.8% in the prior quarter to the current yield of 11.4%. In contrast, the yield for the BSL market was 9.4%.

RESULTS:
B. Yields (cont.)

Q4
2023

Table 4: Comparison of Yields – LSDI (All Loans) by Size

Observations:

- In keeping with classic corporate finance theory, Lincoln's observations of yields within the index demonstrate that yields for small companies, as defined as companies having EBITDA values of less than $30 million, tend to be higher than yields for large companies, as defined as those businesses having EBITDA values of greater than $100 million.

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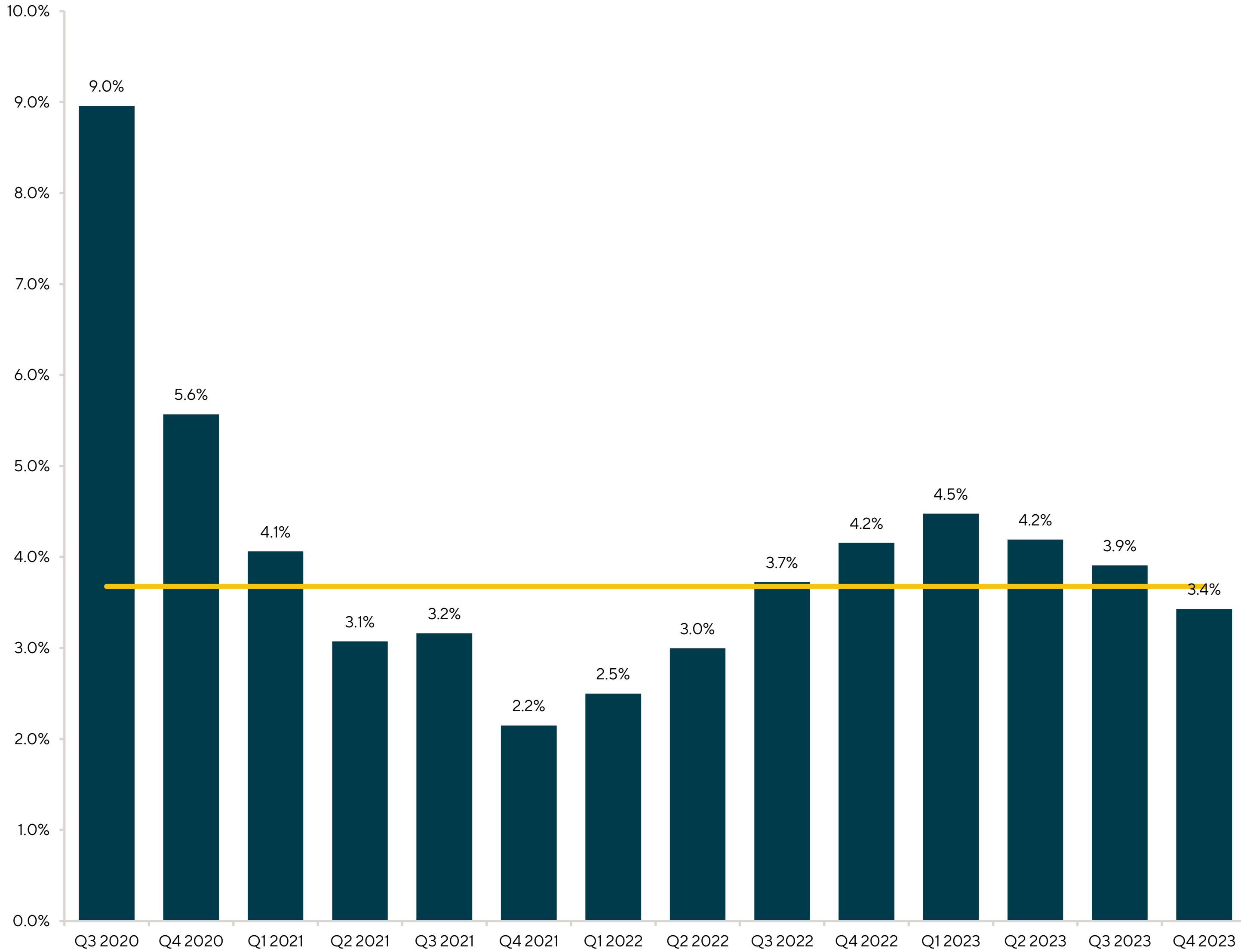
RESULTS:
C. Default Rates

Q4
2023

Table 5: Direct Lending Default Experience



Note: Defaults defined as loan covenant defaults (not monetary defaults)

Observations:

- 2023 resulted in a steady decline in observed default rates, with instances of default dropping as low as 3.4% of Lincoln's universe of observations as of December 31, 2023. Prior to Q2 2023, a decline in the default rate had not been seen since Q4 2021.

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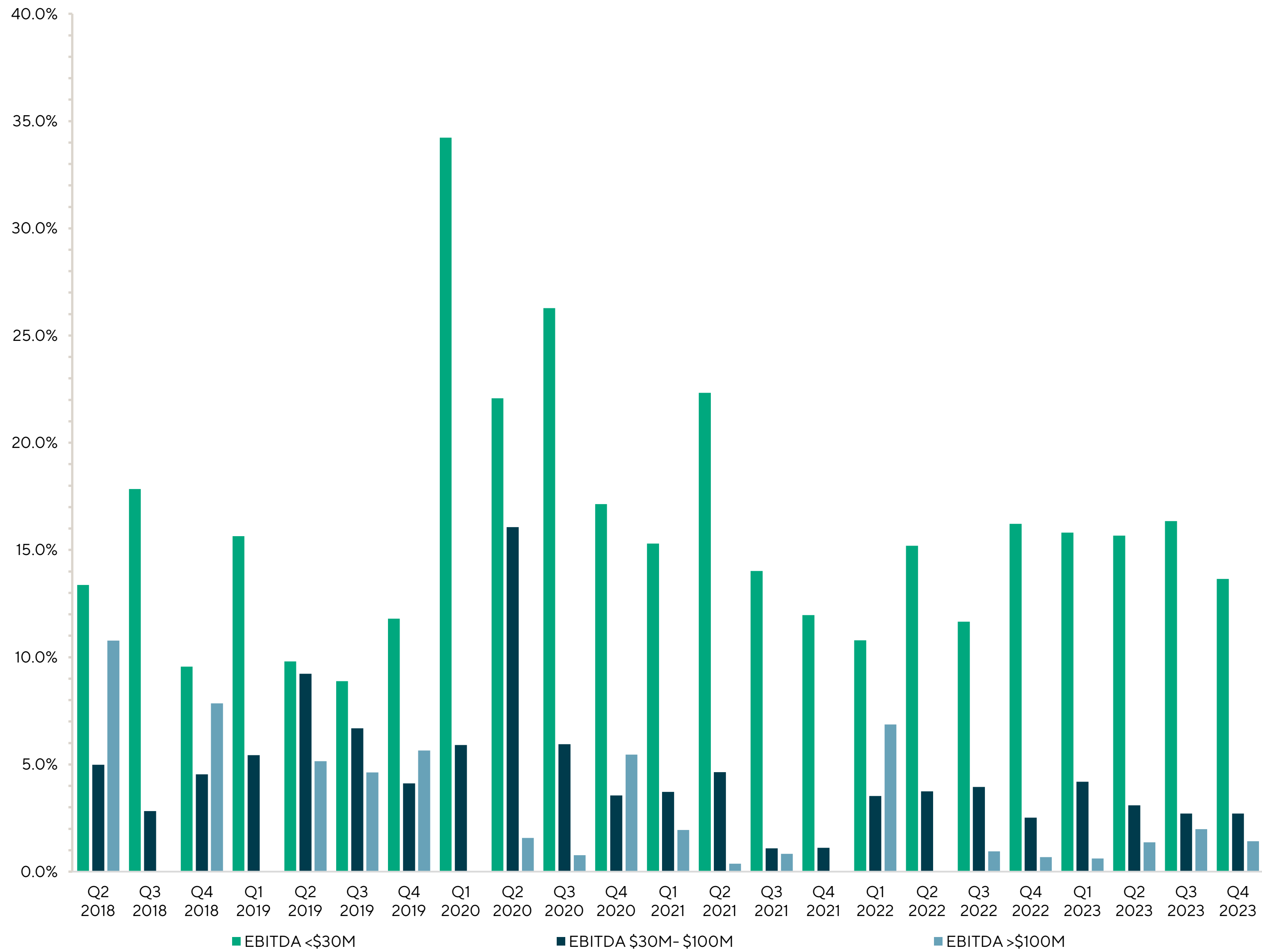
C. Default Rates (cont.)

Table 6: Direct Lending Default Experience by Size



Source: VOG Private Market Proprietary Data. Data as of: February 07, 2024

Observations:

- When bifurcated into defaults by company size, small companies tend to have higher instances of default than larger companies. This further illustrates the risk and return tradeoff given the higher yields associated with investments in smaller businesses.

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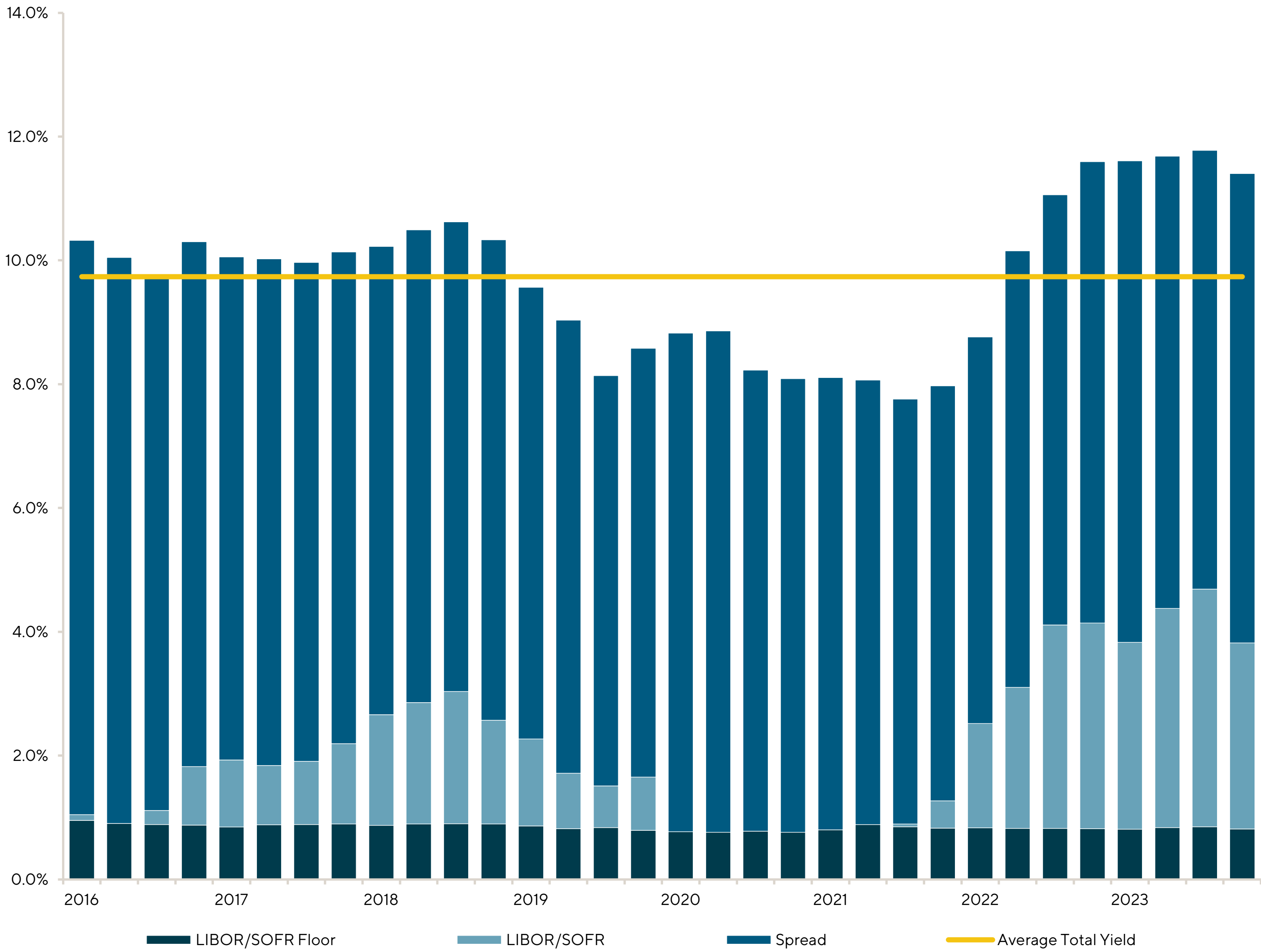
D. Decomposing Yields in the Direct Lending Market – LIBOR / SOFR Floors and Spreads

Table 7: Decomposing Yield – LIBOR / SOFR Floors and Spreads – All Loans



Observations:

- The average yield of the LSDI since inception has been approximately 9.7%.
- From 2016 until the quarter ending June 30, 2022, yields in the direct lending market had remained in a band between 8.0% and 10.0%. However, as reference rates began to increase in 2022 Q2 and 2022 Q3, yields increased as well and have exceeded 11.0% since 2022 Q3.

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RESULTS:

E. Fair Value – Price – Trends

Q4

2023

Table 8: Fair Value – LSDI (All Loans) Compared to the S&P / LSTA U.S. Leveraged Loan Index

Note: Price based on fair value of the LSDI and average bid of the Morningstar LSTA U.S. Leveraged Loan Index

Observations:

- The LSDI was 97.9 as of December 31, 2023, up $0.10 from the prior quarter's price of 97.8.
- The fair value of 97.9 incrementally surpassed the historical average price of 97.7. Since 2014 the lowest price of the LSDI was 92.7 in Q1 of 2020 while the highest fair value was 99.2 in Q1 of 2018.
- There are several reasons for the phenomenon whereby loans in the direct lending market do not experience the same price volatility as observed in the BSL market:
  - Loans in the direct lending market trade much less frequently than loans in the BSL market.
  - Investors in the BSL market have a greater ability to liquidate their investment should they decide to exit, as trading is a viable option. In contrast, investments in direct lending funds are structured whereby investor redemptions are limited. Therefore, capital flows are not as volatile as the BSL market.

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RESULTS:

F. Bifurcation of the Impact on Total Return Due to Credit Risk and Interest Rate Risk

Q4

2023

Table 9: Decomposition of Index Returns: Interest Rate versus Credit Risk

Observations:

- The LSDI returned 2.8% for the fourth quarter of 2023 versus 3.7% for the third quarter of 2023.
- Decomposing the quarterly return of 2.8%, the majority of the return is attributable to changes in credit risk while interest rate changes only accounted for 0.8% of the return in the current quarter.

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METHODOLOGY:
Source of Data and Sample Size

Source of Data and Sample Size

On a quarterly basis, Lincoln determines the enterprise fair value of over more than 5,000 portfolio companies for approximately 150 private equity sponsors and lenders. These portfolio companies report quarterly financial results to the sponsor (i.e., private equity group) or lender. Lincoln obtains company and loan level information to create the Lincoln Senior Debt Index.

All information is prepared in accordance with the fair value measurement principles of generally accepted accounting principles. Finally, each valuation is then vetted by auditors, company management, boards of directors and regulators.

Additional information about the methodology of the Lincoln Senior Debt Index can be found at: **www.lincolninternational.com/perspectives/an-overview-of-the-lincoln-senior-debt-index**.

Academic Advisor

Professor Pietro Veronesi is the Chicago Board of Trade Professor of Finance at the University of Chicago, Booth School of Business. He is also a research associate of the National Bureau of Economic Research and a research fellow of the Center for Economic and Policy Research. Professor Veronesi's research has appeared in numerous publications, including the Journal of Political Economy, American Economic Review, Quarterly Journal of Economics, Journal of Finance, Journal of Financial Economics and Review of Financial Studies. He is the recipient of several awards, including the 2015 AQR Insight award, the 2012 and 2003 Smith Breeden prizes from the Journal of Finance; the 2008 WFA award; the 2006 Barclays Global Investors Prize from the EFA; the 2006 Fama / DFA prizes from the Journal of Financial Economics and the 1999 Barclays Global Investors / Michael Brennan First Prize from the Review of Financial Studies. Professor Veronesi teaches both masters- and Ph.D.-level courses. He is the recipient of the 2009 McKinsey Award for Excellence in Teaching.

His undergraduate work was in economics at Bocconi University where he received a laureate magna cum laude with honor in 1992. He earned a master's degree with distinction in 1993 from the London School of Economics. He joined the Chicago Booth faculty upon obtaining his Ph.D. in economics from Harvard University in 1997.

SUMMARY:
Q4 2023 Lincoln Senior Debt Index

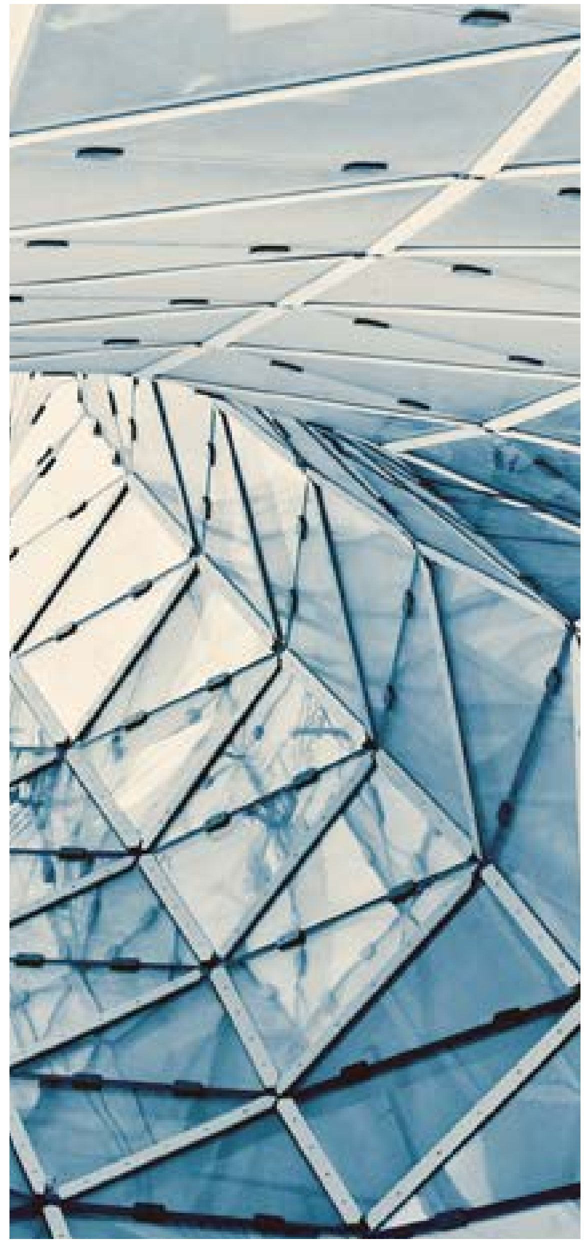
- From 2014 through December 31, 2023, a portfolio of direct lending loans has yielded higher returns and lower volatility relative to broadly syndicated loans.
- The LSDI provides market participants many unique valuation insights into the fair value of direct lending loans and represents a significant enhancement to the information available within an opaque market.

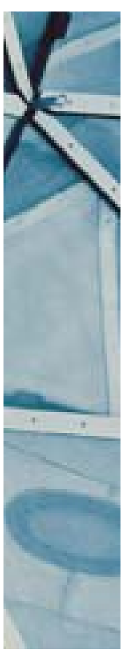
ABOUT LINCOLN INTERNATIONAL

We are trusted investment banking advisors to business owners and senior executives of leading private equity firms and their portfolio companies and to public and privately held companies around the world. Our services include mergers and acquisitions advisory, private funds and capital markets advisory and valuations and fairness opinions. As one tightly integrated team of more than 950 professionals in more than 20 offices in 15 countries, we offer an unobstructed perspective on the global private capital markets, backed by superb execution and a deep commitment to client success. With extensive industry knowledge and relationships, timely market intelligence and strategic insights, we forge deep, productive client relationships that endure for decades. Connect with us to learn more at **www.lincolninternational.com**.

Lincoln's Valuations & Opinions Group is a leading independent valuation advisor to managers of illiquid assets and lenders to alternative assets funds. The group specializes in the valuation of illiquid debt, equity and derivative securities. Additionally, they provide independent fairness, solvency and other transaction opinions for a variety of corporate transactions for both public and private companies.

The firm's Valuations & Opinions Group is widely recognized for leveraging Lincoln's "real world" transaction experience from its mergers and acquisitions and debt advisory practices to assist its clients in the determination of fair value. Lincoln's highly skilled professionals have extensive experience in determining and supporting fair value measurements for traditional and complex securities.





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