



ESDI

**LINCOLN EUROPEAN
SENIOR DEBT INDEX™**

Important Disclosure

The Lincoln European Senior Debt Index™ (Lincoln ESDI) is an informational indicator only and does not constitute investment advice, an investment recommendation or other information recommending or suggesting an investment strategy (within the meaning of the EU and UK regulations), an offer to sell or a solicitation to buy any security. It is not possible to directly invest in the Lincoln ESDI. Some of the statements below contain opinions based upon certain assumptions regarding the data used to create the Lincoln ESDI, and these opinions and assumptions may prove incorrect. Actual results could vary materially from those implied or expressed in such statements for any reason. The Lincoln ESDI has been created on the basis of information provided by third-party sources that are believed to be reliable, but Lincoln International has not conducted an independent verification of such information. Lincoln International makes no warranty or representation as to the accuracy or completeness of such third-party information.

The Lincoln ESDI should not be construed as an offer to sell or buy, or a solicitation to sell or buy, any products which refer to the Lincoln ESDI. The use of the Lincoln ESDI in any manner is not endorsed or recommended by Lincoln International, and Lincoln International is not responsible for any use made of the Lincoln ESDI. Use of the Lincoln ESDI is by permission only via a Data Usage Agreement with Lincoln International. The Lincoln ESDI must not be used to: (i) determine the amount payable under a financial instrument or a financial contract or the value of a financial instrument; or (ii) measure the performance of an investment fund with the purpose of tracking the return of the Lincoln ESDI, of defining the asset allocation of a portfolio or of computing the performance fees (within the meaning of the EU and UK Benchmarks Regulations). Lincoln International does not guarantee the accuracy and / or completeness of the Lincoln ESDI, and Lincoln International shall not have any liability for any errors or omissions therein. None of Lincoln International, any of its affiliates or subsidiaries, nor any of its directors, officers, employees, representatives, delegates or agents shall have any responsibility to any person (whether as a result of negligence or otherwise) for any determination made or anything done (or omitted to be determined or done) in respect of the Lincoln ESDI and any use to which any person may put the Lincoln ESDI. Lincoln International has no obligation to update the Lincoln ESDI and has no obligation to investors with respect to any product which refers to the Lincoln ESDI. Any investment in such a product will not acquire an interest in the Lincoln ESDI. Lincoln International is not an investment advisor and will not provide any financial advice relating to a product which refers to the Lincoln ESDI. Investors should read any such product offering documentation and consult with their own legal, financial and tax advisors before investing in any such product.

© 2025 Lincoln Partners Advisors LLC. All rights reserved. LINCOLN SENIOR DEBT INDEX, LINCOLN EUROPEAN SENIOR DEBT INDEX, and LINCOLN INTERNATIONAL are service marks owned by Lincoln Partners Advisors LLC and its affiliated entities. Any use of these service marks and these materials, including the reproduction, modification, distribution or republication of these materials, without the prior written consent of Lincoln International, is strictly prohibited.

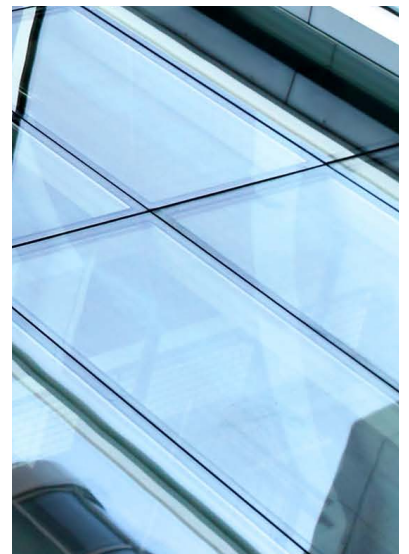
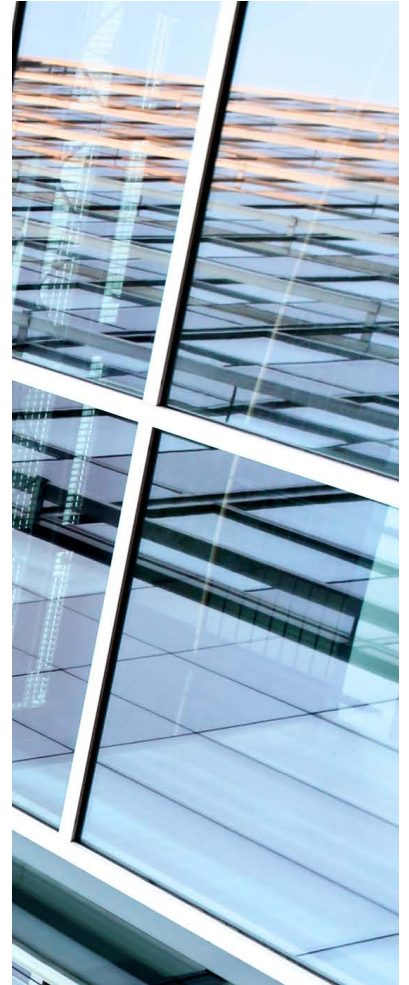


Table of Contents

Lincoln European Senior Debt Index Key Observations: Q2 2025 Results	4
Background	5
Results: Total Return	6
Results: Yields	8
Results: Fair Value – Price – Trends	10
Results: Bifurcation of the Impact on Total Return Due to Credit Risk and Interest Rate Risk	11
Summary	12
Comparing Lincoln's European and U.S. Senior Debt Indices	13
Results: Quarterly Returns	14
Results: Index Yields	15
Results: Fair Value	16
Methodology	17

Lincoln European Senior Debt Index

KEY OBSERVATIONS: Q2 2025 RESULTS

QUARTERLY RESULTS SUMMARY

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

It was a challenging start to the quarter, brought on by "Liberation Day" in the U.S. Public debt markets traded off between two and three points in March and April, while middle market pricing looked to be moving 25-50 bps wider. However, since then, a recovery in both the public and private debt markets drove pricing to return to pre-tariff levels. In addition, enterprise value declines that began in February and continued through April reversed after a deferral of tariffs.

Despite this broader market volatility, overall portfolio performance continues to be positive, but the rate of LTM EBITDA growth has slowed across the portfolio from 9.6% to 6.7%.

All of this played out in the ESDI this quarter. Quarterly returns dropped from 2.7% in Q1 to 2.1% in Q2, with the ESDI fair value dropping 28 bps to 98.9%. The ESDI yielded 9.6%, reflecting a decline of nine bps relative to the prior quarter and lower base rates.

While results for the quarter were positive overall, the macroeconomic impact of higher tariffs has caused heightened global market volatility, and therefore the outlook going forward remains uncertain. Lincoln's Valuations and Opinions Group has been monitoring recent events and their impact on the private markets in real time. We encourage readers to contact any Lincoln valuation professional for continued updates on the current state of the private markets.

98.9

Average Fair Value
of Loans in the Index
as of Q2 2025

ESDI- Key Observations- Q2 2025

- The ESDI achieved a 2.1% quarterly return for the quarter ending June 30th, 2025, which was 64 bps lower relative to the return in the Q1 2025.
 - The total quarterly return from interest was 2.3%, while the total return from capital loss was 0.2% compared to the Q1 2025 capital gain of 0.3%.
 - The weighted average swap rate was 2.6%, which was 22 bps lower than Q1 2025.
- The 3.1% gap between the yields derived from the ESDI and Morningstar European Leveraged Loan Index (ELLI) in Q2 2025 has increased since Q1 2025, returning to the long-term historical average. This highlights the attractive returns available to private credit investors relative to the broadly syndicated loan (BSL) market.
- ESDI prices decreased 28 bps to 98.9% but lagged BSL prices, which increased marginally from 97.7% to 97.8%. However, the ESDI did not experience the same losses that the BSL market did in Q1, highlighting the stability and lower volatility in the ESDI compared to BSL market.



BACKGROUND:

Lincoln European Senior Debt Index

Q2

2025

The Lincoln ESDI provides insight into the direct lending market, as it is a fair value index of recurring quarterly valuations 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.

In addition, we provide additional descriptive statistics including:

- (a) the impact of interest rates (base rates) and credit changes (spread) on total return and
- (b) decomposition of yields into implied spreads, base rates and floor rates.

The European non-investment grade corporate loan market has two segments: the public BSL market, which attracts investors investing in broadly syndicated loan deals, and the private 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 visible public liquidity in the BSL market, pricing and terms are a function of the relative credit quality or ratings as well as the relatively more competitive lender environment, whereas the more illiquid direct lending market has a stronger orientation to bilateral price negotiations, more limited competitive dynamics, less financial reporting transparency and more direct and responsive borrower-lender discussions.

In contrast to the Morningstar ELLI, which is comprised of companies borrowing in the BSL market, the constituents in Lincoln's ESDI are all private credit borrowers.

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

How We Obtain the Information

On a quarterly basis, globally Lincoln values more than 6,250 private companies primarily owned by more than 225 alternative investment funds. These companies are levered via borrowings from the direct lending market. We then bifurcate loans by geography, creating a U.S. Senior Debt Index and a European Senior Debt Index. As the subject companies are private, both the U.S. and European Senior Debt Index constituents are based upon Lincolns valuations of these loans for our alternative investment fund clients and therefore not disclosed publicly. 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 U.S. generally accepted accounting principles and International Financial Reporting Standards fair value principles and have been reviewed by fund management, fund boards, limited partners and auditors. The U.S. and European Senior Debt Indices are size-weighted; however, the maximum contribution to the index of any single loan valuation in any period is 2.0% (i.e., no one loan can constitute more than 2.0% of the overall index value).

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

www.lincolninternational.com/perspectives/an-overview-of-the-lincoln-senior-debt-index/

RESULTS:

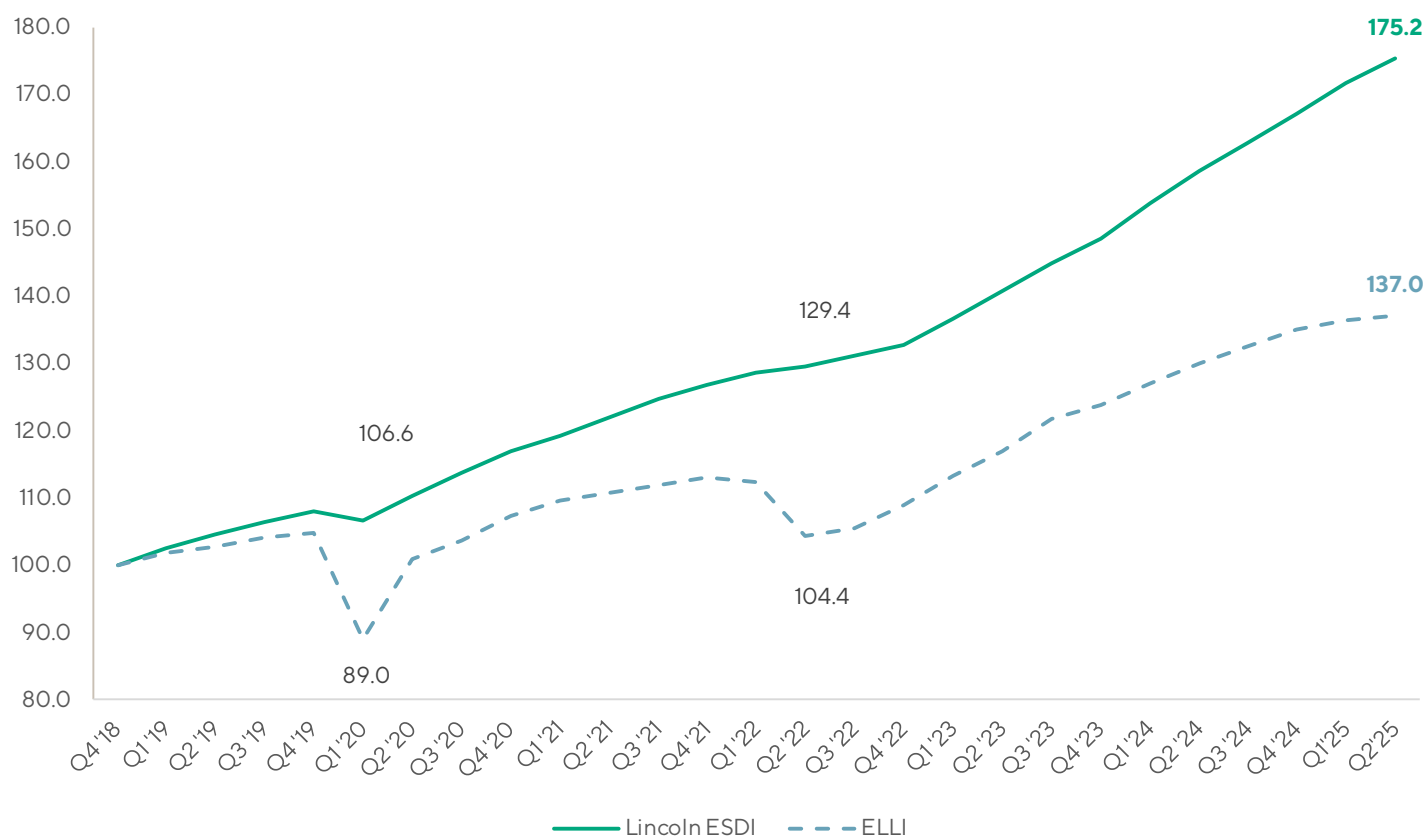
A. Total Return

Q2

2025

The starting date of the Lincoln ESDI is Q4 2018, commencing with an index value of 100.0.

Figure 1: Comparison of Total Return – Lincoln ESDI to Morningstar ELLI



Observations:

- Investment return in the Lincoln ESDI is generated from two sources: (1) capital gains and losses; and (2) income return. For the historical period of our index, income returns dominate capital gains or losses, resulting in a positive quarterly total return.
- Since the inception of the ESDI Index, both the Morningstar ELLI, which measures the performance of the public BSL market in Europe, and the European direct lending market have experienced an increase in total return. However, since inception of the ESDI, it showed a higher CAGR of 9.0% as compared to 5.0% for the ELLI.
- This difference in quarterly yield makes intuitive sense, given the illiquidity of private credit assets compared to the BSL.

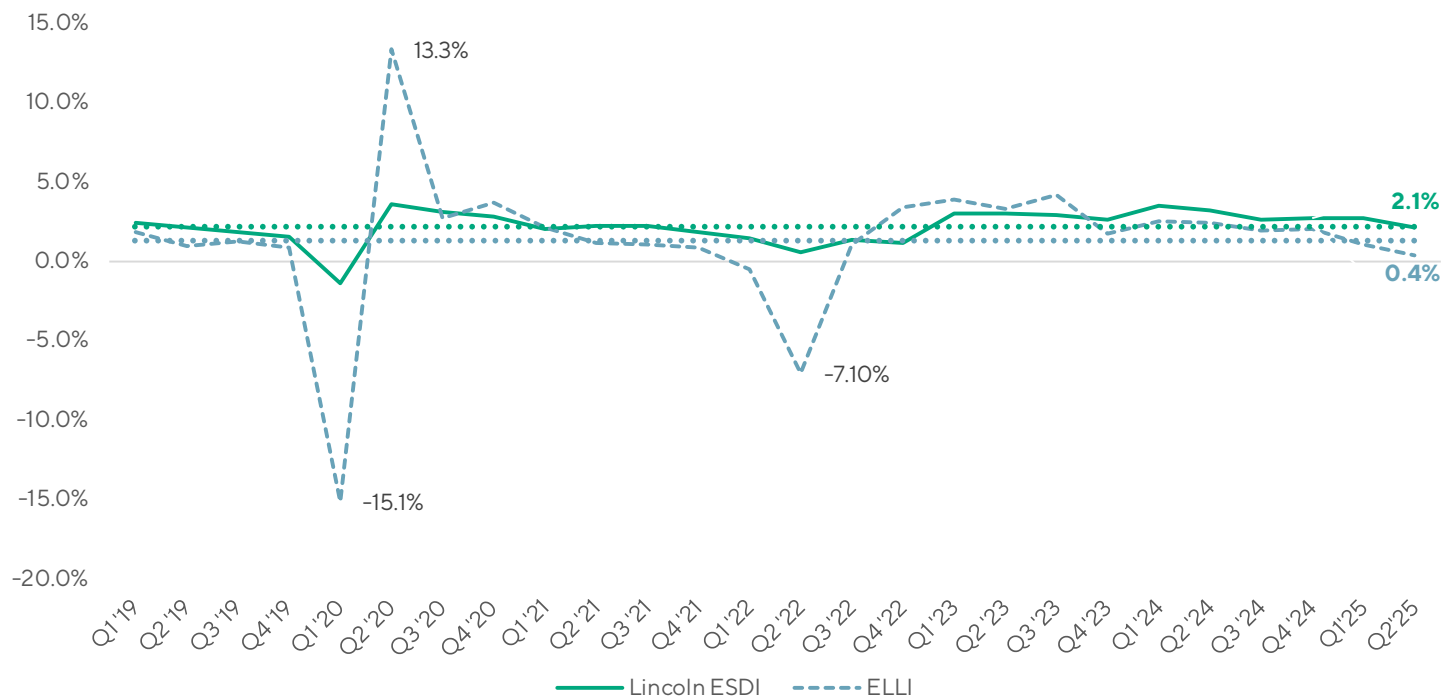
RESULTS:

A. Total Return (cont.)

Q2

2025

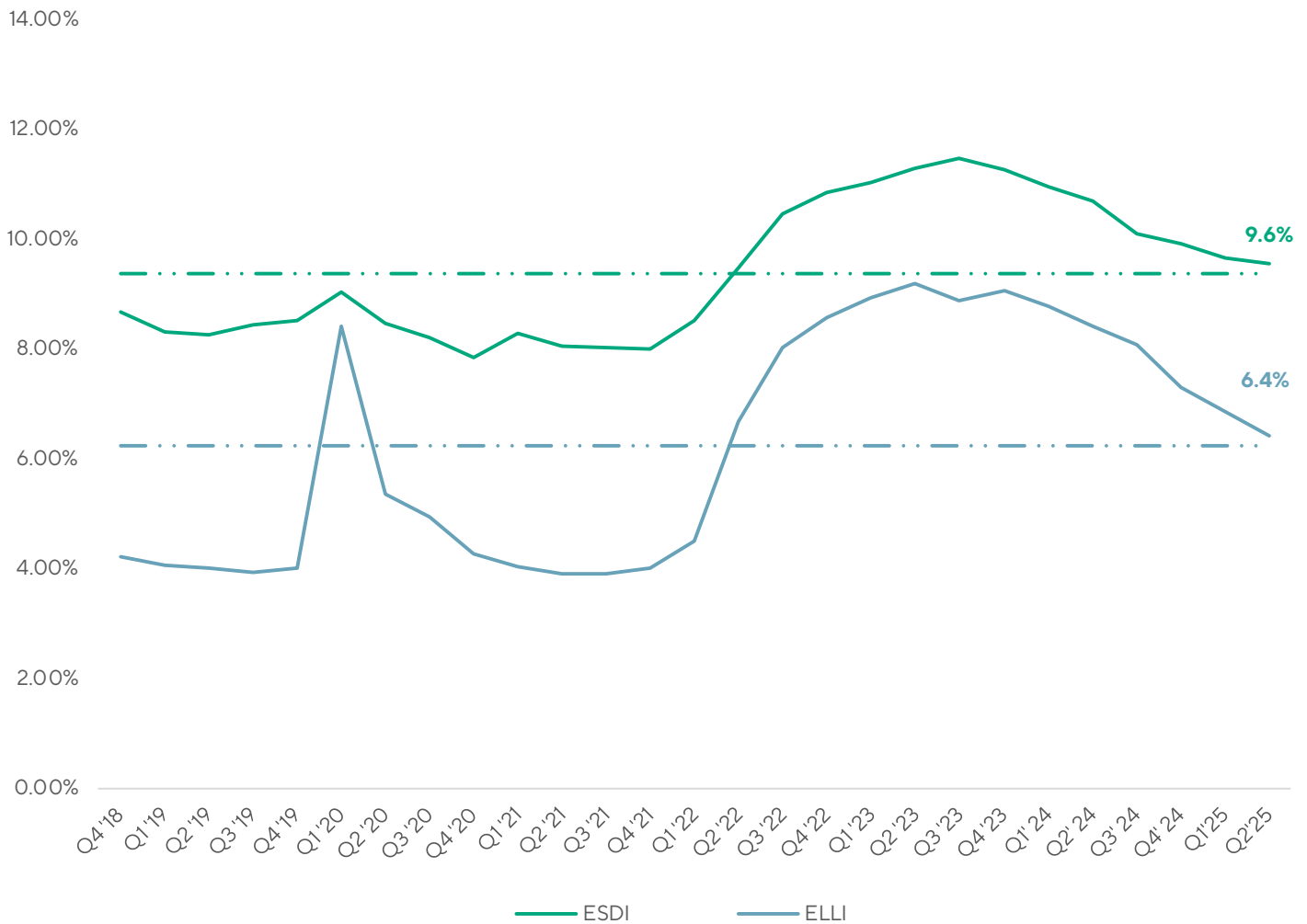
Figure 2: Correlation and Comparison of Quarterly Returns – Lincoln ESDI to BSL Market (ELLI)



Observations:

- The correlation between the ESDI and Morningstar ELLI is high at $r = 0.85$; however, there are two distinct differences:
 - The standard deviation of quarterly returns for the life of the ESDI was 1.0% versus the 4.5% for the Morningstar ELLI over the same time period, implying lower volatility.
 - The ESDI generates higher returns. Current quarterly BSL returns for the quarter ending June 30, 2025, were 0.4% versus the ESDI of 2.1%. Since the inception of ESDI, average quarterly ESDI returns have been higher (2.2%) than those for the ELLI (1.3%).
- The direct lending market experiences negative returns much less frequently than the BSL market.
- Since the inception of the ESDI on December 31, 2018, through June 30, 2025, the ESDI reported a negative quarterly return only in Q1 2020, whereas the BSL market has experienced three quarters of negative returns (Q1 2020, Q1 2022 and Q2 2022).

Figure 3: Comparison of Yields – Lincoln ESDI to BSL Market (ELLI)



Observations:

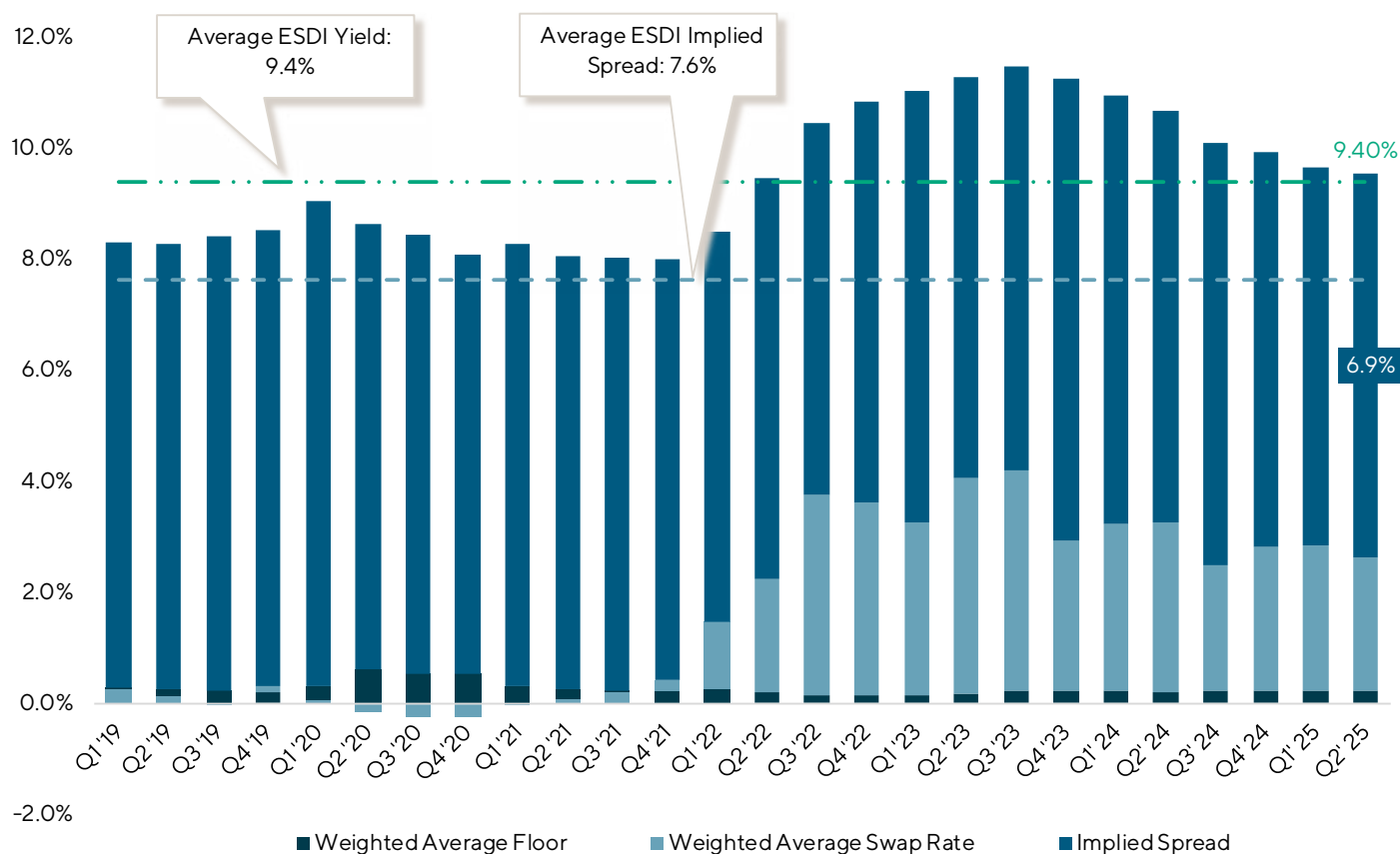
- For the quarter ending June 30, 2025, the yield of the Lincoln ESDI was 9.6%, exceeding its historical average of 9.4%, while the yield of the ELLI was 6.4%, above its historical average of 6.2%, both driven by elevated base rates.

RESULTS: B. Yields (cont.)

Q2

2025

Figure 4: Decomposing Yields in the European Direct Lending Market: Weighted Average Base Rates / Floors and Spreads



Note: 1. Weighted average floor and weighted average swap rates are calculated based on index weightages of different securities.

Observations:

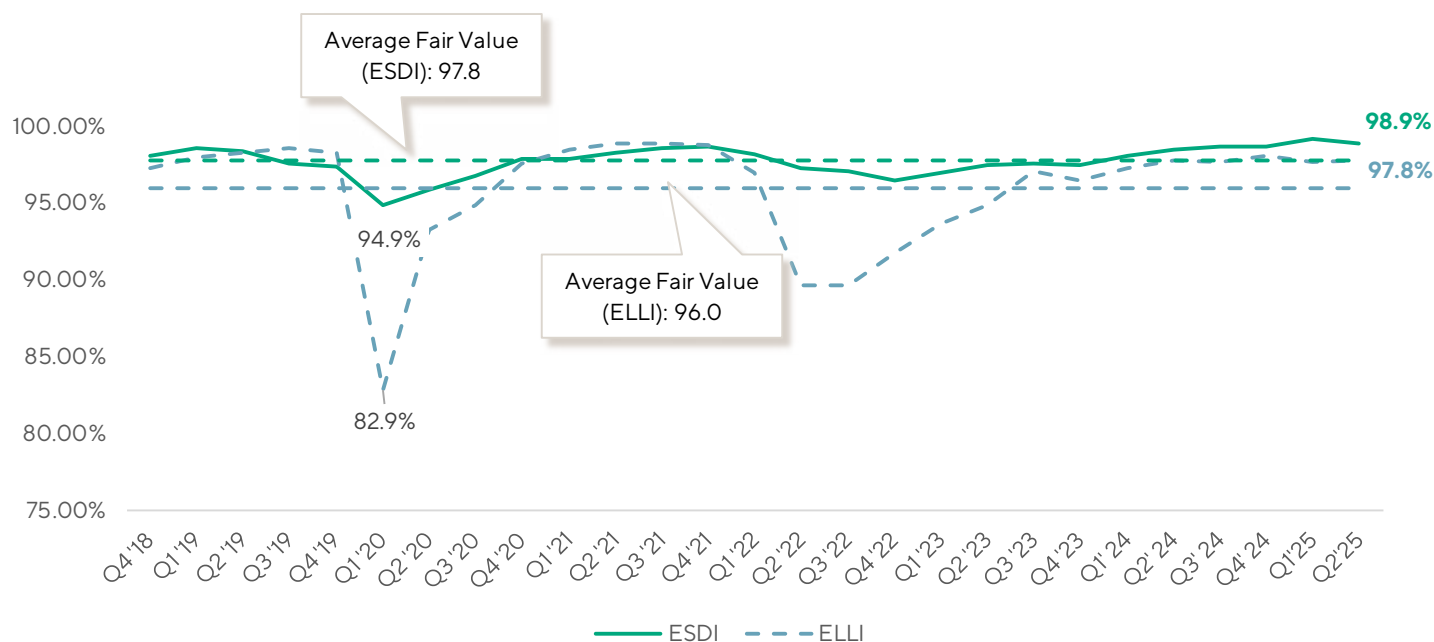
- The average yield of the Lincoln ESDI since inception was approximately 9.4%. From 2019 until the quarter ending June 30, 2022, yields in the direct lending market remained in a band between 8.0% and 10.0%. However, as reference rates began to increase in 2022, yields increased as well and exceeded 10.0% between Q3 2022 and Q3 2024.
- Yield over the past 12 months slowly declined given easing of interest rate policies but remain above the historical average.
- The implied spreads decreased since the peak in 2020 given the increased competition seen within the direct lending market.

RESULTS: C. Fair Value – Price – Trends

Q2

2025

Figure 5: Fair Value – Lincoln ESDI Compared to the Morningstar ELL Index



Note: Price based on fair value of the Lincoln ESDI and average bid of the Morningstar ELLI

Observations:

- The European Senior Debt Index declined to 98.9% as of June 30, 2025, a decrease of 28 bps over Q1 2025. The majority of this decrease was due to a slowdown in the rate of EBITDA growth, as well as companies exhibiting caution in their near term outlook in the context of the uncertain macroeconomic environment.
- The fair value of 98.9% continued to surpass the historical average fair value of 97.8% but has fallen by 0.3% from the all-time high seen in Q1 2025.
- The standard deviation of fair values for the ESDI was at 1.0% as compared to 3.7% for the ELLI, which showed a lower price volatility of the direct lending market as compared to the BSL market. In Q2 2025, the BSL market experienced a high degree of volatility following tariff concerns before recovering to its pre-tariff announcement levels.
- 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 are subject to capital flows and therefore potential liquidity constraints, leading to much higher volatility in public marks and implied yields.

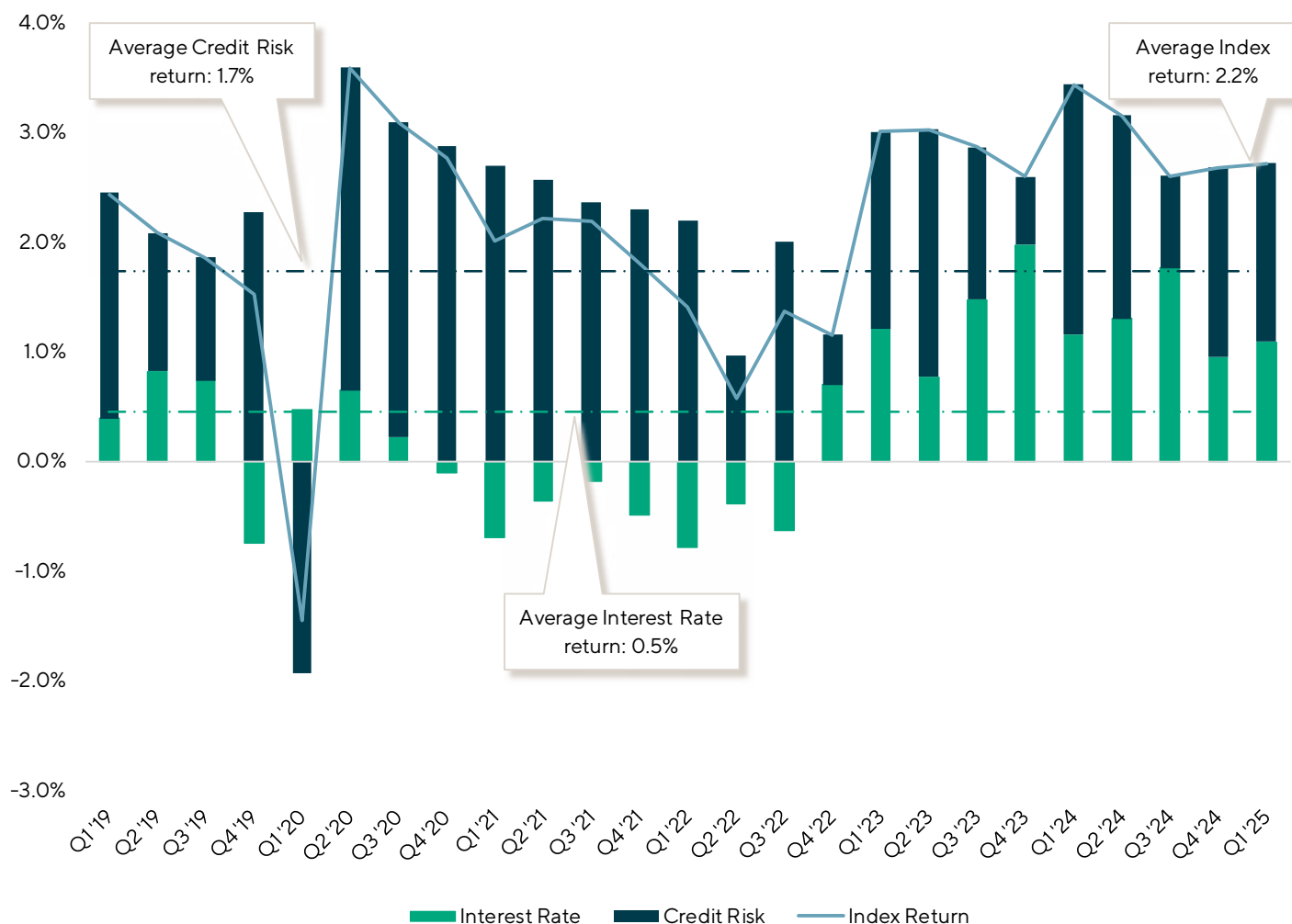
RESULTS:

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

Q2

2025

Figure 6: Decomposition of Quarterly Index Returns: Interest Rate versus Credit Risk



Observations:

- The ESDI returned 2.1% for Q2 2025, which was 64 bps lower than Q1 2025.
- Decomposing the quarterly return of 2.1%, the return was attributable to changes in credit risk and interest rate risk, with credit risk accounting for 0.96% of the return and interest rate risk making up the remaining 1.1% of the return.

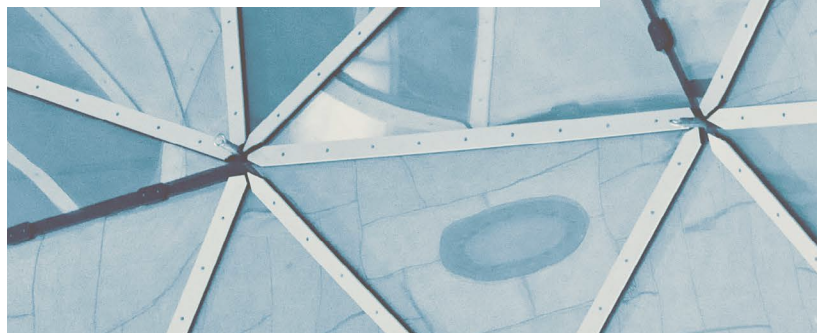
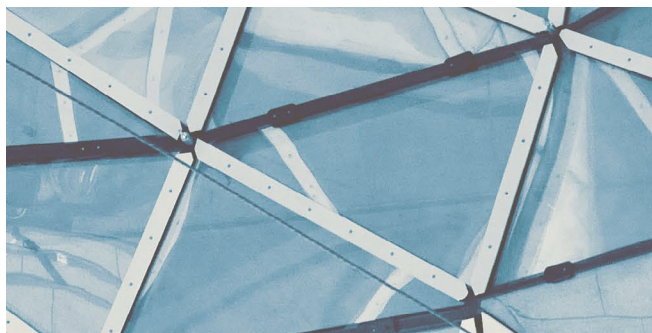
SUMMARY:

Q2 2025 European Senior Debt Index

Q2

2025

- From 2018 through June 30, 2025, the portfolio of direct lending loans in the ESDI yielded higher returns and lower volatility relative to broadly syndicated loans.
- The Lincoln ESDI 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.



Comparing Lincoln's European and U.S. Senior Debt Indices

Q2

2025

Lincoln International releases two private credit reports each quarter: the U.S. Senior Debt Index (LSDI) and the ESDI, encompassing our comprehensive data research and analysis. The indices provide overviews of the U.S. and European markets and reveal a high correlation of private credit lending returns and yields between both geographies since 2019.

How We Collect and Analyze the Information

On a quarterly basis, globally Lincoln values more than 6,250 private companies primarily owned by more than 225 alternative investment funds. These companies are levered via borrowings from the direct lending market. We then bifurcate loans by geography, creating a U.S. Senior Debt Index and a European Senior Debt Index. As the subject companies are private, both the U.S. and European Senior Debt Index constituents are based upon Lincoln's valuations of these loans for our alternative investment fund clients and therefore not disclosed publicly. 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 U.S. GAAP and IFRS and fair value principles and have been reviewed by fund management, fund boards, limited partners and auditors. The U.S. and European Senior Debt Indices are size-weighted. However, the maximum contribution to the index of any single loan valuation in any period is 2.0% (i.e., no one loan can constitute more than 2.0% of the overall index value).

Additional information about the methodology discussion can be found at:

[www.lincolninternational.com/perspectives/
an-overview-of-the-lincoln-senior-debt-index/](http://www.lincolninternational.com/perspectives/an-overview-of-the-lincoln-senior-debt-index/)



RESULTS: Quarterly Returns

Q2

2025

Figure 1: Comparison of Quarterly Returns – Lincoln ESDI to LSDI (U.S.)



Index	Quarterly Return	LTM Returns	CAGR (since Q1 2019)	Standard Deviation of Annual Returns (since Q1 2019)
ESDI	2.1%	10.5%	9.0%	2.7%
LSDI	2.3%	10.4%	8.5%	3.5%

Key Observations:

- In Q2 2025, private credit returns in the U.S. were slightly higher than those in Europe, driven by higher base rates and stronger company performance.

RESULTS: Index Yields

Q2

2025

Figure 2: Comparison of Yields – Lincoln ESDI to LSDI (U.S.)



Key Observations:

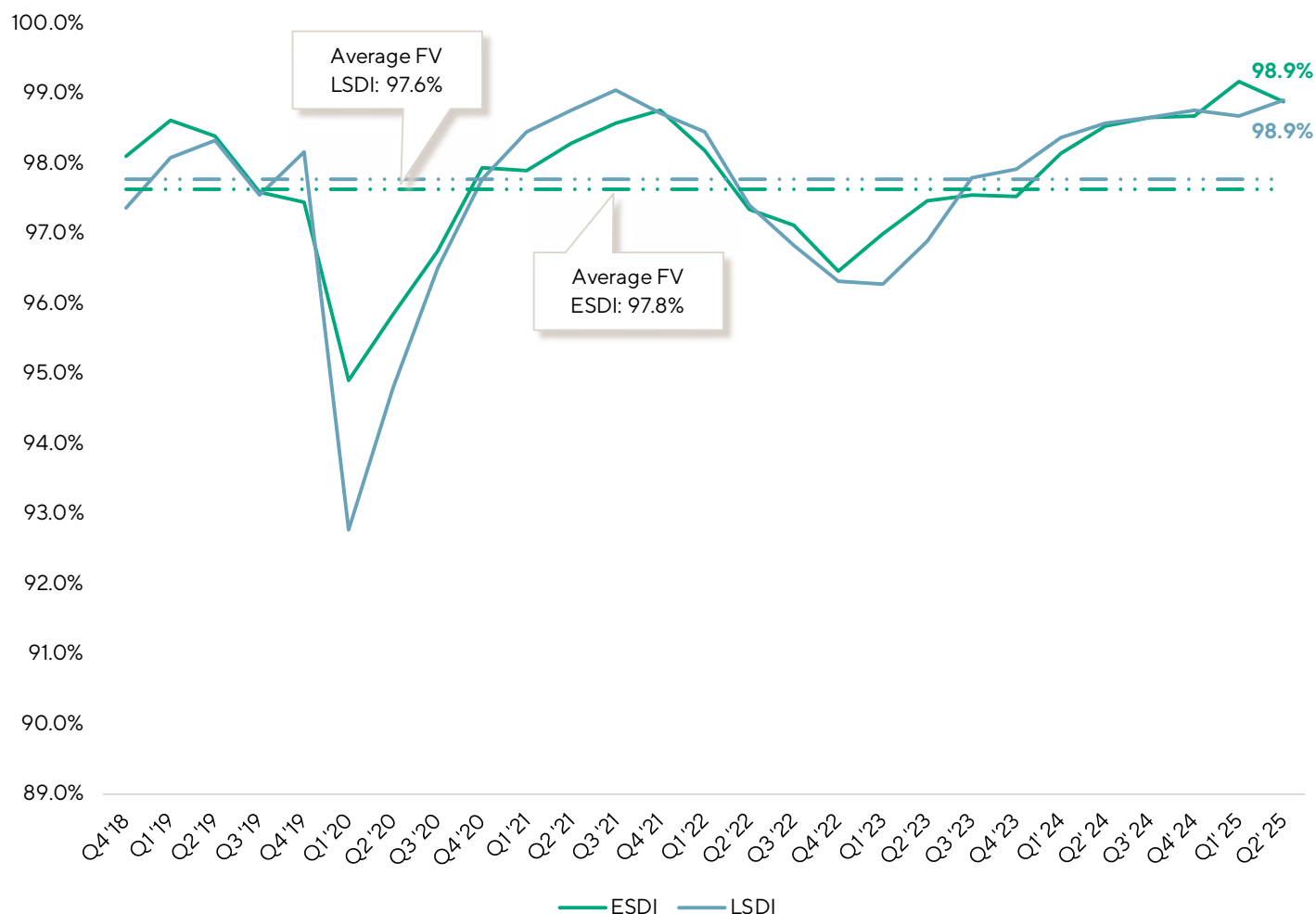
- Yields of the European and U.S. Senior Debt Indices are highly correlated ($r = 0.95$)
- Yields have been historically higher in the U.S. due to higher base rates
- European average annual yields are lower than U.S. by 0.4%

RESULTS: Fair Values

Q2

2025

Figure 3: Comparison of Fair Values – Lincoln ESDI to LSDI (U.S.)



Key Observations:

- Both indices show high correlation ($r = 0.94$) (although COVID and higher inflation and interest rates have had a greater impact on U.S. fair values)

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 PhD-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 laurea 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 PhD in Economics from Harvard University in 1997.

Lincoln's Valuations & Opinions Group

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 determining and supporting fair value measurements for traditional and complex securities.

Contributors

Ron Kahn

Managing Director & Group Co-Head
rkahn@lincolninternational.com
+1 (312) 580-6280

Larry Levine

Managing Director, Chicago
llevine@lincolninternational.com
+1 (312) 506-2733

Nick Baldwin

Managing Director, London
nbaldwin@lincolninternational.com
+44 7980 738 896

Johnny Mullins

Managing Director, London
jfmullins@lincolninternational.com
+44 20 4515 3154

6,250

Valuations
quarterly

€220B+

of Investments
Valued Annually

225+

Fully Dedicated
Professionals

200+

Alternative Asset
Manager Clients

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 1,000 professionals in 25+ offices across 16 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.

GLOBAL INDUSTRY GROUPS

Business Services
Consumer
Energy Transition, Infrastructure & Power Group
Financial Institutions
Healthcare
Industrials
Technology

ADVISORY SERVICES

Mergers & Acquisitions
Capital Advisory
Private Funds Advisory
Valuations & Opinions