



ALTLOOK: Valuation Quarterly Update—December 2023

December 7, 2023

Leading Provider of Global Risk and Financial Advisory Solutions

We help clients detect, manage and mitigate enterprise risk and make strategic and informed financial decisions to protect and maximize value

Valuation

Valuation of businesses, assets and alternative investments for financial reporting, tax and other purposes.

Compliance and Regulation

End-to-end governance, advisory and monitorship solutions to detect, mitigate and remediate security, legal, compliance and regulatory risk.

Corporate Finance and Restructuring

M&A advisory, restructuring and insolvency, debt advisory, strategic alternatives, transaction diligence and independent financial opinions.

Cyber Risk

Incident response, digital forensics, breach notification, managed detection services, penetration testing, cyber assessments and advisory.

Environmental, Social and Governance

Advisory and technology solutions, including policies and procedures, screening and due diligence, disclosures and reporting, investigations, value creation and monitoring.

Investigations and Disputes

World-wide expert services and tech-enabled advisory through all stages of diligence, forensic investigation, litigation, disputes and testimony.

Digital Technology Solutions

Enriching our professional services, our integrated software platform helps clients discover, quantify and manage risk in the corporate and private capital market ecosystem.

Business Services

Expert provider of complex administrative solutions for capital events globally. Our services include claims and noticing administration, debt restructuring and liability management services, agency and trustee services and more.

Today's Agenda

1. Technology Update
2. New Regulation
3. Macro-economic Update
4. Valuation Hot Topics/Questions

Speaker's Introduction

Jenetta Mason



Managing Director

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Jenetta Mason is a managing director in the Chicago office and is part of the Portfolio Valuation group within Valuation Advisory Services practice. She specializes in the valuation of illiquid interests, investments and portfolios for private equity funds and hedge funds. Jenetta has performed valuations for global publicly traded and privately held clients across various industries, including consumer and industrial products, technology, healthcare, retail and many others.

Additionally, Jenetta has extensive experience encompassing the valuation of intangible assets, business interests, capital stock, partnership interests, and financial assets in connection with business combination decision support, financial reporting, corporate and estate tax planning and compliance, and dispute analysis.

Prior to joining Kroll, Jenetta was a director in the Valuation Services group at Grant Thornton LLP and was also part of the firm's subsidiary Grant Thornton Financial Advisors LLC, which is in the business of providing fairness opinion services.

Jenetta received her Bachelor of Science in accounting from Miami University.

Lea Carty



Managing Director

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Lea Carty joined the newly formed Kroll Digital Services in 2022, to focus on the development and commercialization of company credit-related data and analytics.

Prior to Kroll, Lea led the Investment Solutions Group at the London Stock Exchange Group, the credit decision support effort at ZAIS Group LLC, a specialist corporate credit hedge fund and CLO manager, and the Buyside Solutions Group of Bloomberg LP. While at Bloomberg, he also served as an executive director of Bloomberg Index Services, Ltd.

Prior to Bloomberg, Lea was a Managing Director in Lehman Brothers' Research department, focused on portfolio and index analytics capabilities. Before Lehman, Lea was a Managing Director with Moody's Investors Service where he led the quantitative bond default research effort and took a leading London-based role in the establishment of a new business unit – Moody's Risk Management Services (later Moody's KMV), which served as the analytic nucleus of what is now Moody's Analytics.

Before Moody's, Lea held positions with Bear Stearns, NY and Thomson-CGR, Paris and is currently a non-executive director of Credit Research Data Ltd in London. He holds degrees in French, Mathematics and Economics and has published research in the areas of credit risk, economic history, and credit market structure, in academic journals, professional journals, and books.

David Larsen



Managing Director

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David Larsen is a managing director in the Alternative Asset Advisory practice, based in Seattle, Washington. He has more than 37 years of transaction and accounting experience. He specializes in fair value accounting, specifically for valuation, accounting and regulatory issues faced by alternative asset managers and investors.

David advises leading private equity managers and institutional investors and has advised numerous strategic and private equity acquirers in all areas of mergers, acquisitions, joint ventures, divestitures and valuation-related matters.

Prior to joining Kroll (formerly Duff & Phelps), David was a Partner in KPMG's Transaction Services practice, where he was the segment leader of KPMG's U.S. Institutional Investor practice. He served for 13 years in KPMG's Seattle, Düsseldorf and Prague audit practices before moving full time to advisory work.

David advises leading private equity managers and institutional investors and has advised numerous strategic and private equity acquirers in all areas of mergers, acquisitions, joint ventures, divestitures and valuation-related matters. He provides valuation policy and process assistance to a number of the world's largest institutional limited partner investors and some of the world's largest alternative investment managers.

David is a member of the International Valuation Standards Council (IVSC) Standards Review Board, an advisor to and has served as Vice Chair of the International Private Equity and Venture Capital Valuations Board (IPEV), which in 2018 released updated its International Private Equity Valuation Guidelines, and serves as a member of the American Institute of Certified Public Accountants (AICPA) PE/VC Practice Guide Task Force. David's past professional affiliation and advisory experience includes serving as a special advisor to the Institutional Limited Partners Association; board member, project manager and technical advisor to the Private Equity Industry Guidelines Group and was instrumental in developing and drafting the Private Equity Industry Guidelines Group's Valuation and Reporting Guidelines; member of the Financial Accounting Standards Board's Valuation Resource Group responsible for providing the board with input on potential clarifying guidance on issues relating to the application of the principles of FASB ASC Topic 820, Fair Value Measurements; and a member of the AICPA Net Asset Value Task Force.

David received an M.S. in accounting from Brigham Young University's Marriott School and his B.S. in accounting from Brigham Young University. He is a Certified Public Accountant licensed in California and Washington. David is a CEIV credential holder, is a member of the AICPA and the California and Washington Society of Certified Public Accountants and is a FINRA Series 7, 24 and 63 registered representatives.

Peter Salvatori



Managing Director

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Peter Salvatori is a managing director in the Miami office and is part of the Portfolio Valuation service line. Peter's expertise focuses on portfolio valuation, as well as transaction-related valuations. He has more than 19 years of financial and valuation experience.

Peter specializes in advising a wide range of alternative asset managers, including hedge funds, private equity funds, and business development companies on valuing their positions in loans, subordinated and mezzanine debt, convertible debt, and common and preferred equity. Peter also has extensive experience in executing valuations of businesses and their underlying securities for tax, financial reporting, and strategic planning purposes, as well as performing decision support analyses for transactions under consideration.

Prior to joining Kroll, Peter was a senior portfolio analyst at a hedge fund specializing in direct private investments. There, he was responsible for monitoring and valuing the firm's portfolio companies and their underlying securities across a broad range of industries including media and telecom, financials, real estate, and hotels and gaming.

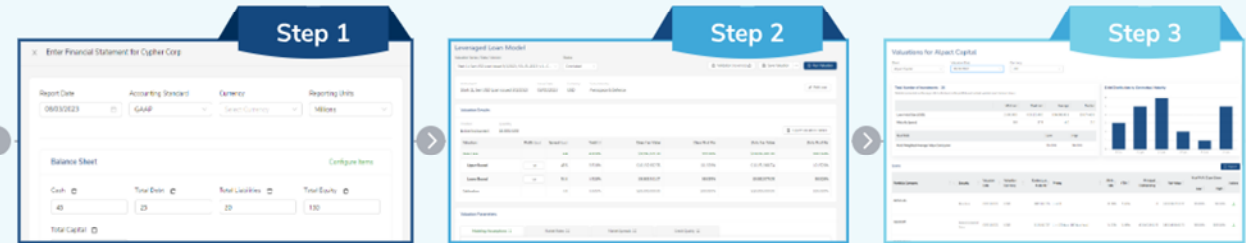
Peter has a B.S. in finance from the University of Vermont. He is also a Chartered Financial Analyst (CFA), and is a member of the CFA Institute and CFA Society New York.

1. Technology Update

Kroll Digital Solutions

- Document Portal
- Debt Valuation Portal
- Equity Valuation Portal (2024)

How It Works



Streamline
Data Collection

Automate Valuation
Modeling

Extract Insights
from Valuation Data

Resulting Benefits:

- ✓ A secure, centralized, and easily accessible database for all your valuation data
- ✓ Greater efficiency to complete and analyze valuations
- ✓ Industry-leading valuation approaches

2. New Regulation

Regulatory Environment

- IVSC Approves Update to International Valuation Standards
- SEC Releases Examination Priorities
- Public Business Entities Must begin applying the amendments to ASC Topic 820

3. Macro-economic Update

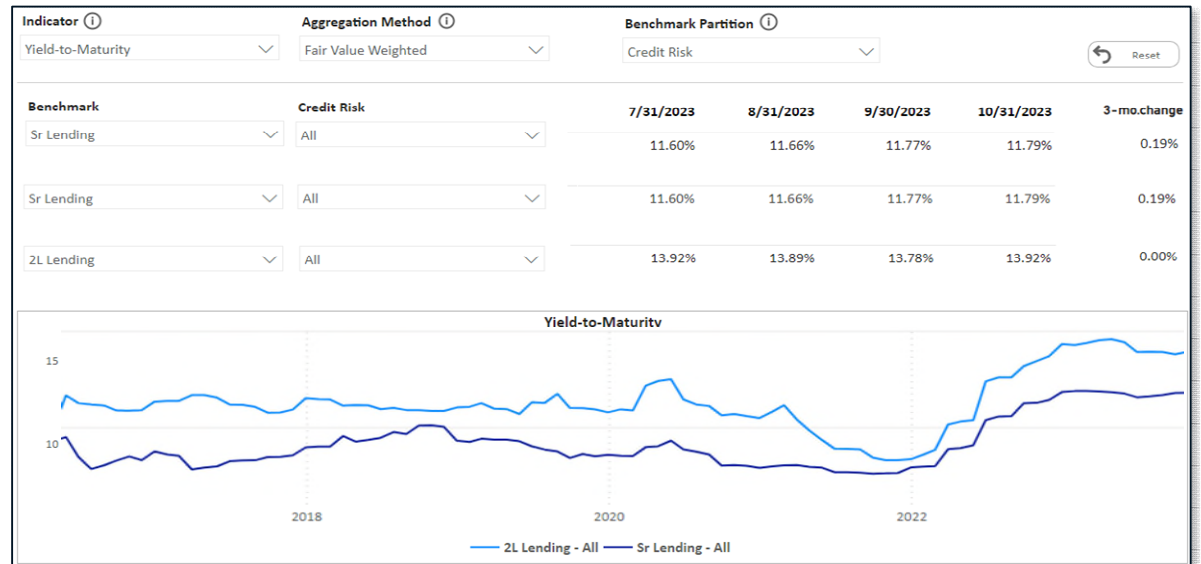
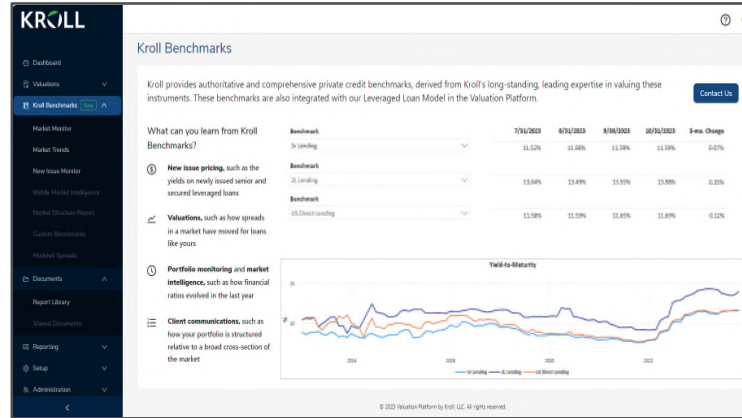
Private Credit Market Overview

Kroll Valuation Platform

- Augmented to incorporate a **beta** release of benchmarking capabilities
- If you don't have access already, please reach out

Yields

- Yield-to-Maturity
- Sr Lending is a broad benchmark of USD-denominated, senior and secured term loans
- 2L Lending is a similar collection of loans, but with second liens
- The fair value-weighted YTM of Sr Lending has increased 19bps since the end of July to reach 11.59% at the end of October
- 2L aggregate YTM remained flat at 13.92% over the same period



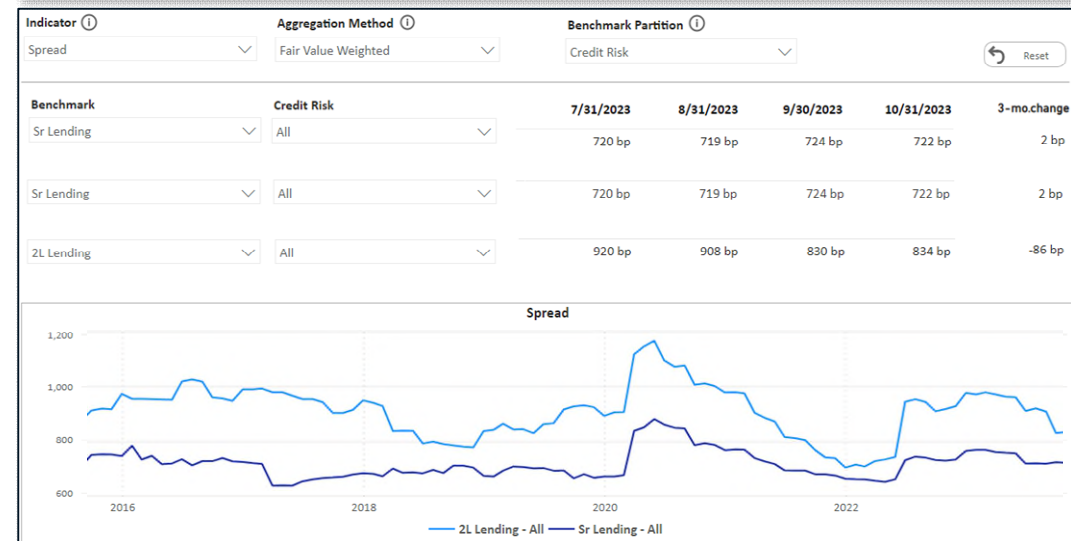
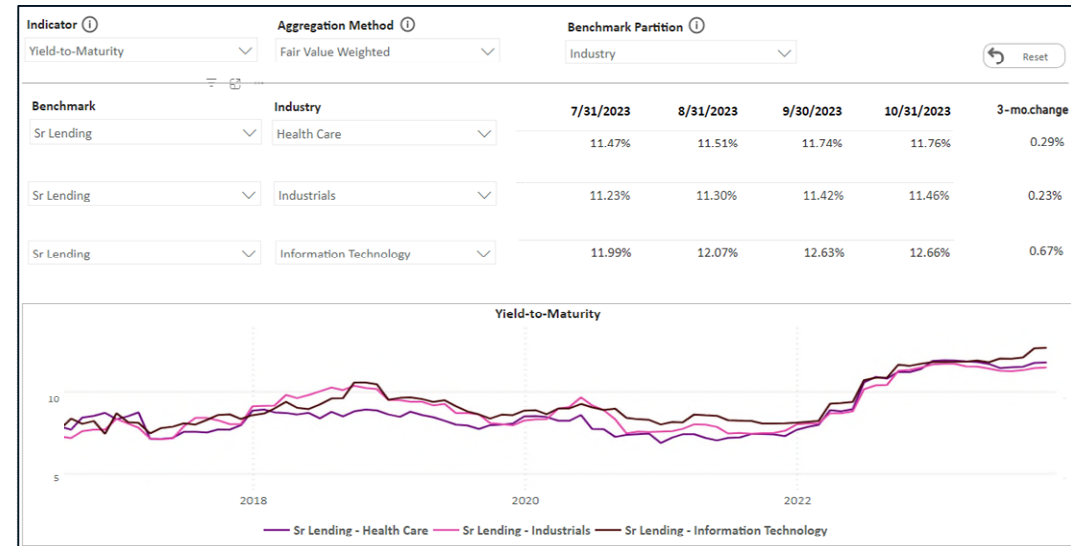
Private Credit Market Yields & Spreads

Sector Yields

- Yields vary by sector, holding constant the seniority and security
- For senior, first lien loans:
 - Industrials have the lowest yields, 11.46%
 - Information Technology have the highest, 12.66%

Spreads

- Spread: difference between a loan's yield-to-maturity and the swap rate at the equivalent-maturity
- Sr Lending's spreads have come in from wider levels in Q2, but there has only been a small 2bps gain since July to 722bps.
- Second lien loans, on the other hand, have tightened significantly, by 86bp, since the end of July, to 834bps.



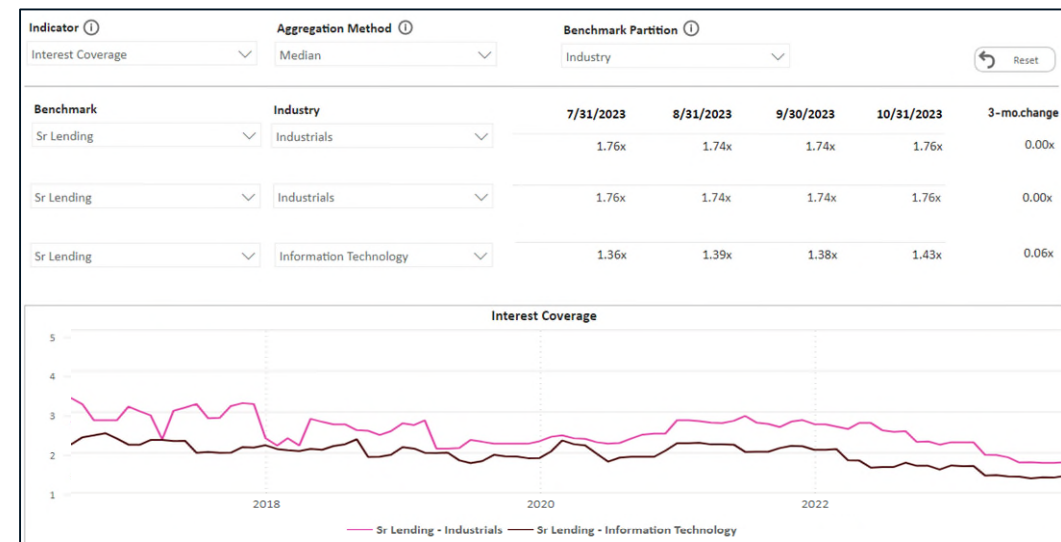
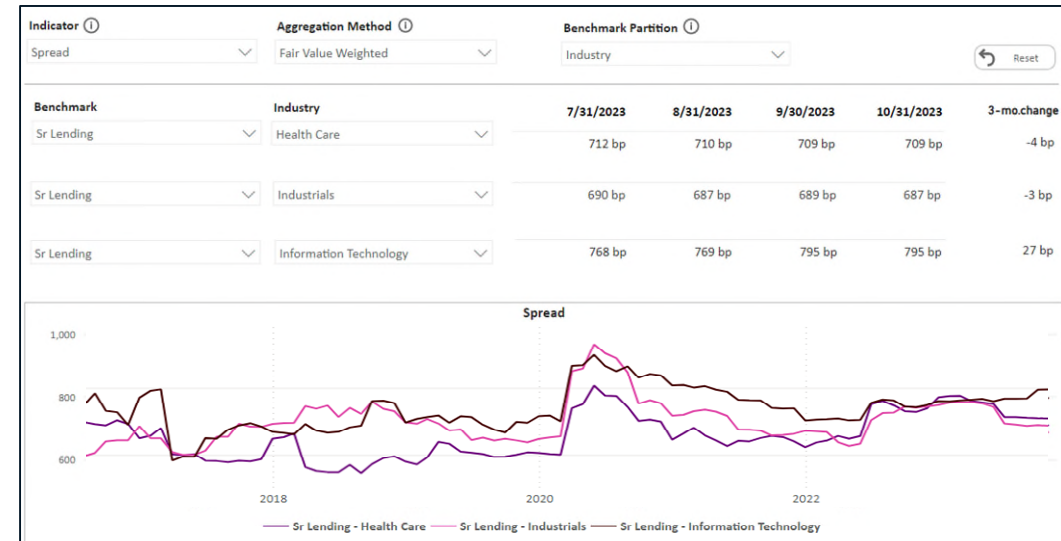
Private Credit Market Sector Spreads and Fundamentals

Sector Spreads

- Focusing on Sr Lending for comparability
- Information Technology sector has widened 27bp since the end of July, to 795bp.
- Industrials, over the same period, have tightened by 3bp to 689bp

Sector Fundamentals

- Interest Coverage in this context is the ratio of EBITDA to Interest Expense
- Information Technology, which has wider spreads than Industrials, also has lower earnings coverage of interest



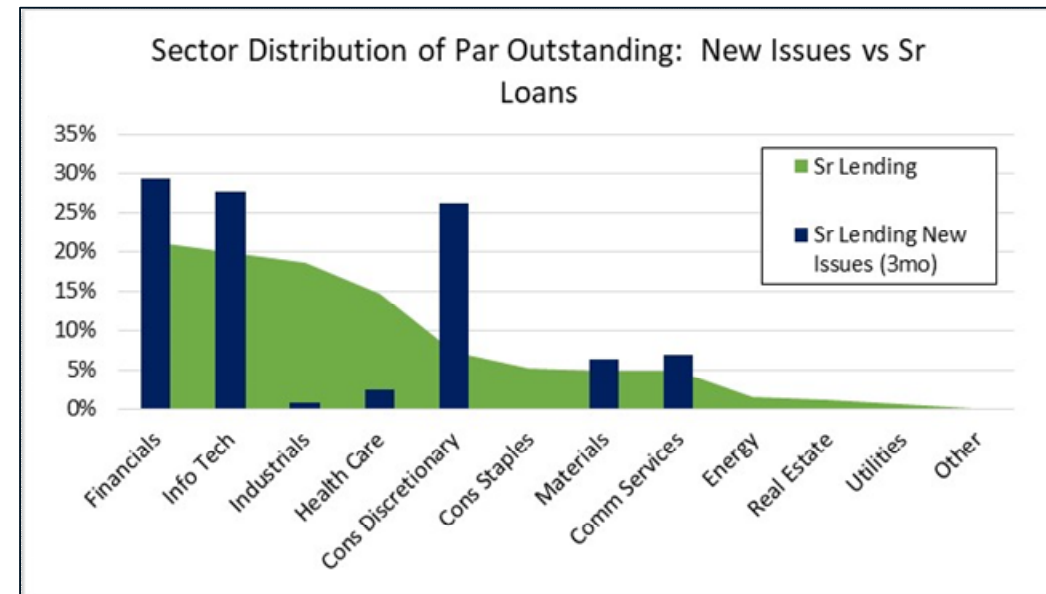
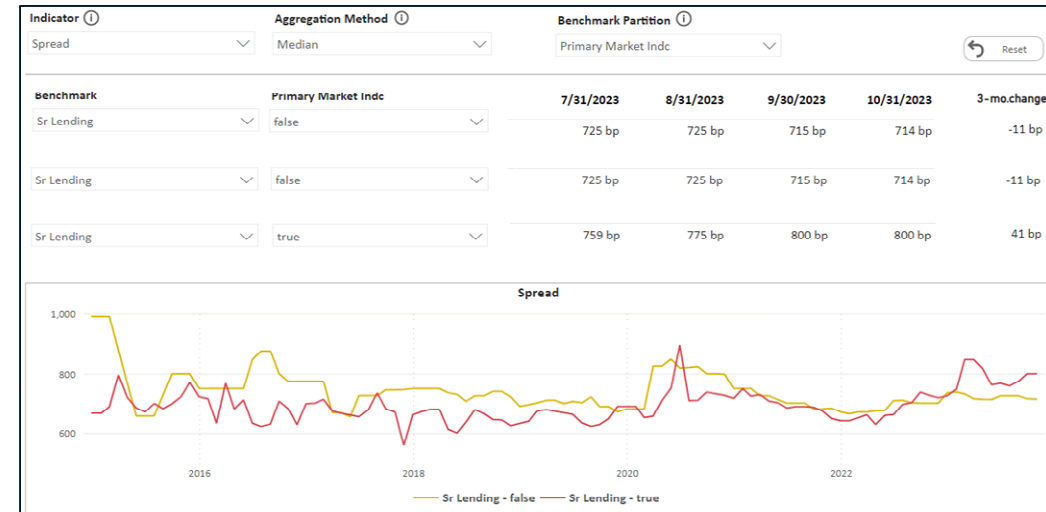
New Issues

New Issue Spreads

- Last quarter, we highlighted that new issues were spreading above the stock of outstanding loans. This pattern persists.
- For Sr Lending at the end of October:
 - Median New Issue spreads were 800bps
 - Outstanding spreads were 714bps

Sectors

- New issuance has been uneven across sectors
- The two largest sectors of Sr Lending – including the highest spreading sector, Information Technology – represent an even greater portion of originations over the last 3 months
- However, originations for the next two largest sectors of Sr Lending – including the lowest spreading Industrials sector – are a dramatically lower portion of new issuance.



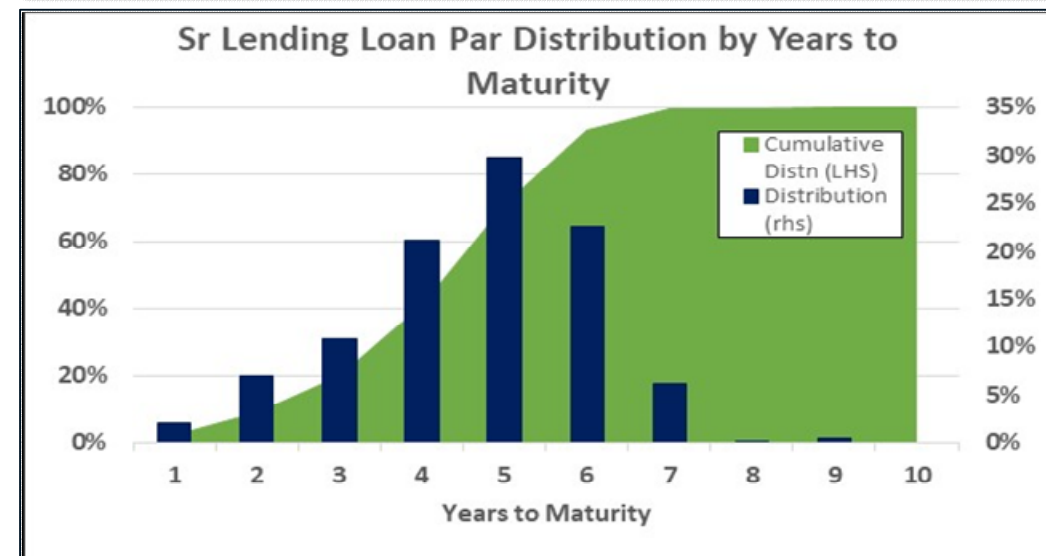
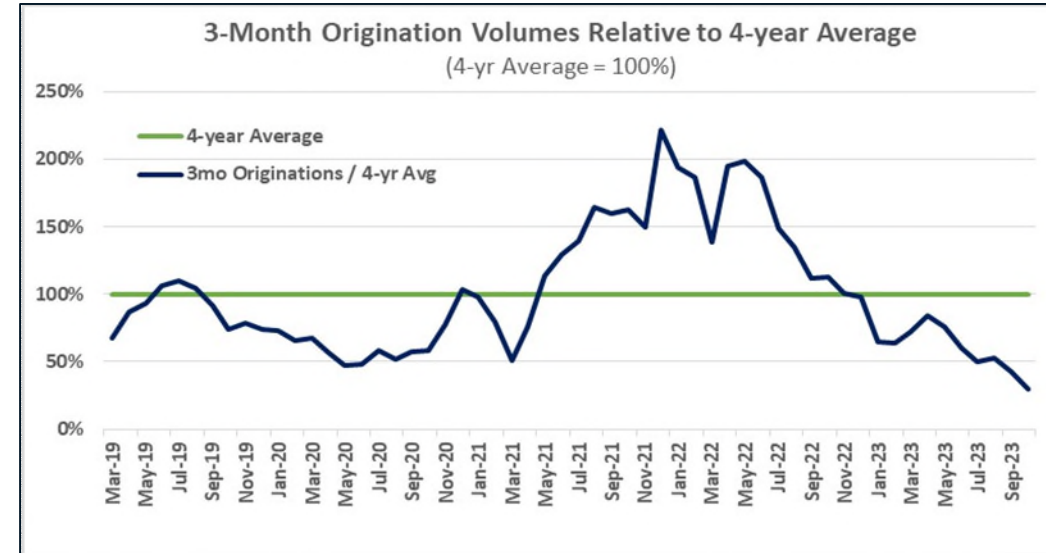
New Issues Activity

Primary Market Activity

- Originations continue, but are below long run average levels

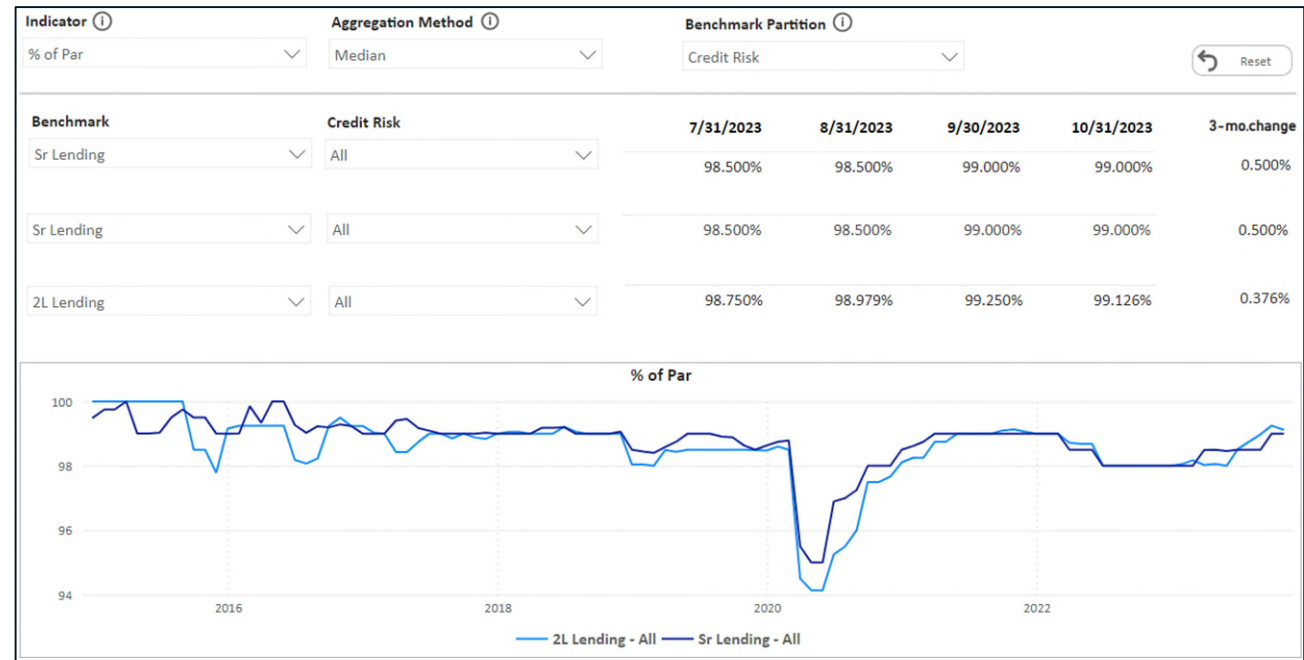
Senior Lending Maturity Profile

- The median maturity of Sr Lending outstandings is above 4 years
- Only about 20% of Sr Loan outstandings are due within 3 years



Trends in Valuations

- Valuations continue to recover from the dip that began with the fed’s rate hikes and the associated fears of a “hard landing”
- Sr Lending’s median % of Par increased 50 bps in the three months since July, to 99.000%
- The analogous increase for 2L Lending has been 38bps, bringing that benchmark’s median to 99.126%.



Highlights - Economies

US

- The October CPI report was softer-than-expected as both headline and core CPI came in below consensus expectations.
 - Headline CPI was little changed on the month (+0.04% unrounded). As a result, the y/y rate fell five-tenths to 3.2%, its lowest reading since June 2023.
 - Core inflation rose by 0.2% m/m, which was below consensus expectations for a 0.3% increase. This resulted in the y/y rate falling two-tenths to 4.0%.
- Growing consensus that Fed is done with its current tightening cycle.
- Consumer spending is expected to slow in coming quarters, but it should continue to be buoyed by a solid labor market.
 - Balance sheets are generally healthy. Most homeowners have been shielded from the brunt of Fed hikes because they are locked into low fixed-rate 30-year mortgages
- Labor demand is expected to weaken in the first half of 2024.
 - Recent job growth has been driven by a handful of laggard sectors – education & health, leisure & hospitality, and the public sector.

China

- Economic growth slowed sharply in 2Q, triggering doubts on the future growth trajectory in the absence of meaningful stimulus.
- Since mid-August, incremental policy easing, including policy rate reductions, down-payment ratio and mortgage rate cuts, relaxation of home purchasing curbs and eventually an increase in fiscal deficit, gradually kicked in to cushion the downturn.

U.K.

- Inflation has come down sharply (4.6% through Oct), below the government's target of 5% by year end.
- Slowing core inflation combined with signs of a loosening labor market and weaker growth many expect the BoE to hold the current rate of 5.25% well into next year.

Europe

- Euro zone inflation eased to 2.4% in November from 2.9% in October, well below expectations for a third straight month.

Public Equity Performance

Equity Indices	Country / Region	11/30/2023								
		SPOT	1M Δ	PQ Δ	6M Δ	YTD Δ	YoY Δ	5Y CAGR	10Y CAGR	
World	MSCI ACWI Index	World	694	9.07%	5.72%	7.43%	14.70%	10.06%	7.18%	5.62%
	MSCI EM (Emerging Markets) Index	World	987	7.86%	3.60%	2.98%	3.21%	1.52%	-0.15%	-0.31%
	MSCI World Ex USA Index	World	2,142	9.20%	4.52%	4.18%	8.92%	8.28%	3.47%	1.24%
USA & Canada	S&P 500	United States	4,568	8.92%	6.52%	9.28%	18.97%	11.95%	10.60%	9.72%
	Dow Jones Industrial Average	United States	35,951	8.77%	7.29%	9.25%	8.46%	3.94%	7.08%	8.37%
	NASDAQ Composite Index	United States	14,226	10.70%	7.62%	9.98%	35.92%	24.05%	14.18%	13.36%
	Russell 2000 Index	United States	1,809	8.83%	1.34%	3.39%	2.71%	-4.11%	3.36%	4.70%
	S&P/TSX Composite Index	Canada	20,236	7.22%	3.56%	3.39%	4.39%	-1.06%	5.89%	4.21%
Latin America	S&P Latin American 40 Index (iShares)	Latin America	28	12.58%	9.33%	13.47%	21.59%	6.51%	-2.75%	-3.12%
	AMEX Mexico Index	Mexico	312	12.53%	0.31%	-3.72%	22.41%	14.53%	13.34%	1.53%
Europe	FTSE 100 Index	United Kingdom	7,454	1.80%	-2.03%	0.10%	0.03%	-1.58%	1.32%	1.15%
	FTSE/ATHEX Large Cap Index	Greece	3,113	6.32%	6.11%	5.65%	38.25%	40.04%	13.44%	-4.09%
	Germany DAX Index (Performance)	Germany	16,215	9.49%	5.39%	3.52%	16.46%	12.63%	7.57%	5.60%
	Paris CAC 40 Index	France	7,311	6.17%	2.46%	2.99%	12.93%	8.49%	7.88%	5.46%
	Madrid Ibx 35 Index	Spain	10,058	11.54%	6.68%	11.14%	22.23%	20.27%	2.07%	0.22%
	OMX Stockholm 30 Index	Sweden	2,232	7.55%	3.57%	-0.11%	9.25%	6.19%	8.07%	5.49%
	Swiss SMI Index	Switzerland	10,854	4.46%	-1.00%	-3.24%	1.16%	-2.46%	3.73%	2.76%
	Brussels BEL 20 Index	Belgium	3,529	5.13%	-0.68%	-0.22%	-4.65%	-4.23%	0.23%	2.09%
	Amsterdam AEX Index	Netherlands	765	6.46%	4.98%	2.16%	11.03%	5.65%	8.05%	6.79%
Ireland ISEQ Overall Index	Ireland	8,356	6.65%	-0.73%	-1.26%	17.54%	14.96%	7.51%	6.36%	
Asia Pacific	S&P BSE Sensex	India	66,988	4.87%	1.76%	6.97%	10.10%	6.16%	13.10%	12.41%
	Shanghai Stock Exchange Composite Index	China	3,030	0.36%	-2.60%	-5.46%	-1.93%	-3.86%	3.20%	3.16%
	Hang Seng Index	Hong Kong	17,043	-0.41%	-4.31%	-6.53%	-13.84%	-8.36%	-8.45%	-3.32%
	Taiwan TAIEX Index	Taiwan	17,434	8.95%	6.60%	5.16%	23.31%	17.17%	12.01%	7.57%
	Nikkei 225 Index	Japan	33,487	8.52%	5.11%	8.41%	28.33%	19.73%	8.42%	7.90%
	South Korea Kospi Composite Index	South Korea	2,535	11.30%	2.85%	-1.62%	13.36%	2.54%	3.87%	2.17%
	S&P/ASX 200 Index	Australia	7,087	4.52%	0.55%	-0.06%	0.69%	-2.70%	4.57%	2.91%
Industry Specific Indices	S&P 500 Energy (Sector)	United States	641	-1.65%	-7.62%	9.50%	-4.62%	-7.64%	5.68%	0.14%
	S&P 500 Industrials (Sector)	United States	903	8.51%	5.29%	10.53%	8.60%	5.23%	8.24%	7.58%
	S&P 500 Materials (Sector)	United States	517	8.06%	4.58%	9.81%	5.65%	-0.48%	8.68%	6.37%
	S&P 500 Consumer Discretionary (Sector)	United States	1,337	10.76%	5.77%	12.53%	32.96%	17.93%	9.39%	9.92%
	S&P 500 Consumer Staples (Sector)	United States	744	3.74%	2.32%	-1.70%	-4.48%	-7.45%	5.24%	5.36%
	S&P 500 Health Care (Sector)	United States	1,527	5.23%	1.72%	2.75%	-3.69%	-5.66%	6.84%	9.12%
	S&P 500 Financials (Sector)	United States	595	10.68%	7.78%	12.98%	4.45%	-1.22%	5.89%	7.49%
	S&P 500 Information Technology (Sector)	United States	3,273	12.73%	12.65%	13.01%	50.68%	37.99%	22.43%	19.26%
	S&P 500 Communication Services (Sector)	United States	235	7.81%	5.66%	11.45%	47.31%	35.75%	9.39%	4.17%
	S&P 500 Utilities (Sector)	United States	317	4.52%	5.80%	-3.48%	-11.69%	-12.37%	2.43%	5.12%

Credit Market Performance – US

		Price / Rate	Observation Date	Percentage Change				
				1M Δ	PQ Δ	6M Δ	YTD Δ	YoY Δ
Index	LCD Performing Loan Index Price (1)	95.70	11/30/2023	0.55%	-0.27%	2.45%	3.52%	3.15%
	Smi LPC 100 Price - US (2)	95.08	11/30/2023	0.16%	-0.40%	3.42%	4.13%	3.54%
LIBOR	Three Month LIBOR	5.63%	11/30/2023	-0.24%	-0.46%	2.07%	18.12%	17.84%
SOFR	Three Month SOFR (3)	5.42%	11/30/2023	0.05%	0.45%	6.30%	17.91%	31.27%
Default Rates (1)	LTM \$ of Defaults / Total Loans Outstanding	1.48%	11/30/2023	8.62%	16.52%	-6.22%	105.59%	101.55%
	LTM # of Defaults / Total Issuers	1.94%	11/30/2023	9.71%	15.97%	21.05%	183.39%	182.42%
		Current Spread	Observation Date	Change in Spread				
				1M Δ	PQ Δ	6M Δ	YTD Δ	YoY Δ
Loan Spreads by Credit Rating (1)	BBB Loans	2.15%	11/30/2023	-0.05%	-0.04%	-0.24%	-0.26%	-0.38%
	BB Loans	3.29%	11/30/2023	-0.12%	0.02%	-0.59%	-0.41%	-0.45%
	B Loans	5.21%	11/30/2023	-0.22%	0.11%	-1.08%	-1.61%	-1.53%
	CCC Loans	14.87%	11/30/2023	-0.03%	0.53%	-0.86%	-3.58%	-2.40%
Loan Spreads by Seniority (1)	Overall Market Spreads - Smi (2)	6.08%	11/30/2023	-0.11%	0.08%	-0.60%	-0.96%	-0.83%
	All Loan Spreads - LCD	5.25%	11/30/2023	-0.19%	0.11%	-0.83%	-1.20%	-1.04%
	First Lien Spreads - LCD	5.08%	11/30/2023	-0.18%	0.11%	-0.80%	-1.07%	-0.93%
	Second Lien Spreads - LCD	13.70%	11/30/2023	-0.25%	0.40%	-1.12%	-5.05%	-3.52%
Loan Spreads by Industry (2)	Aerospace and Defense	5.48%	11/30/2023	-0.36%	-0.41%	-1.71%	-2.04%	-2.60%
	Automotive	6.53%	11/30/2023	0.05%	-0.33%	-0.97%	-2.25%	-1.71%
	Beverage and Food	5.86%	11/30/2023	-0.03%	-0.52%	-1.24%	-0.76%	-0.68%
	Chemicals and Plastic	6.40%	11/30/2023	-0.02%	0.33%	0.23%	-0.17%	0.00%
	Construction	4.63%	11/30/2023	-0.14%	0.06%	-1.18%	-1.45%	-1.41%
	Financial Services	5.02%	11/30/2023	-0.13%	-0.06%	-0.76%	-1.23%	-1.17%
	Healthcare	7.08%	11/30/2023	-0.49%	-0.30%	-1.49%	-1.37%	-1.06%
	Hotel and Gaming	3.95%	11/30/2023	0.02%	0.25%	-0.09%	-0.59%	-0.48%
	Leisure	5.70%	11/30/2023	0.17%	0.20%	0.04%	-1.27%	-1.15%
	Manufacturing	5.97%	11/30/2023	-0.24%	0.12%	-0.65%	-1.44%	-1.43%
	Media	5.14%	11/30/2023	-0.10%	0.18%	-0.50%	-1.29%	-1.14%
	Mining	5.28%	11/30/2023	0.10%	0.28%	0.44%	-0.36%	-0.41%
	Oil and Gas	4.68%	11/30/2023	0.09%	0.14%	-0.50%	-1.32%	-1.29%
	Paper and Packaging	5.79%	11/30/2023	-1.46%	0.50%	0.00%	-1.22%	-1.04%
	REITs	8.52%	11/30/2023	-0.04%	0.16%	-1.15%	0.39%	0.71%
	Restaurants	4.43%	11/30/2023	-0.15%	-0.04%	-0.77%	-1.86%	-2.29%
	Retail	4.47%	11/30/2023	0.18%	0.45%	-0.31%	-0.73%	-0.55%
	Services	6.61%	11/30/2023	0.09%	0.44%	-0.10%	-0.69%	-0.48%
	Technology	6.25%	11/30/2023	0.01%	0.49%	-0.41%	-0.89%	-0.51%
	Telecom	7.56%	11/30/2023	-1.00%	-0.49%	-1.32%	0.16%	0.46%
Textiles and Apparel	8.82%	11/30/2023	0.32%	0.87%	0.10%	1.27%	1.64%	
Transportation	5.96%	11/30/2023	0.40%	0.74%	-0.56%	-1.04%	-0.55%	
Utilities	5.51%	11/30/2023	-0.09%	0.02%	-0.36%	-0.65%	-0.77%	

Notes:

- (1) Data per Pitchbook Leveraged Commentary and Data.
- (2) Data per Refinitiv LPC.
- (3) Data per Bloomberg.

Commodities

	Price	Date	1M Δ	PQ Δ	6M Δ	YTD Δ	YoY Δ
Crude Oil							
WTI	75.96	11/30/2023	-6.25%	-14.46%	11.56%	-5.58%	-5.70%
Brent	80.86	11/30/2023	-4.89%	-12.30%	11.38%	-5.88%	-7.03%
Nasdaq Clean Edge Green Energy Index	477.91	11/30/2023	8.80%	-14.39%	-23.70%	-22.59%	-37.99%
S&P/TSX Renewable Energy and Clean Technology Index	116.13	11/30/2023	10.89%	6.66%	-10.68%	-18.93%	-23.29%
Gold	2,057.20	11/30/2023	3.15%	10.24%	3.79%	12.65%	16.89%
Silver	25.29	11/30/2023	10.20%	12.66%	7.23%	5.21%	17.37%

Highlights – Key Asset Classes

➤ Private Capital Markets

- Loan spreads have remained relatively constant in Q4 and YTD.
 - Momentum, however, appears to be shifting.
- LBO purchase multiples remain relatively constant throughout 2023 – albeit against significantly lower deal flow.
 - The few private market / LBO transactions that have closed have been at reduced multiples relative to what was observed in '20 and '21.
- Venture remains challenged – there needs to be a key pathway to profitability or exit.

➤ Real Estate

- A renewed focus on the efficient use of office space is leading to further footprint reductions and higher overall vacancy in the final months of 2023.
- Over 1.4 billion SF, representing 16.6% of inventory, is now available on the leasing market, the most ever observed.
 - Particularly notable is that the typical size of a new lease is also around 20% below its pre-pandemic average.

➤ Oil

- Brent and WTI prices backed up considerably in November.
- On November 30, OPEC+ announced an additional round of 'voluntary' production cuts of 2.2mm bpd.
- There is skepticism over the latest OPEC+ decision on supply cuts and uncertainty surrounding global fuel demand heading into 2024.

➤ Gold

- ~\$2,050/ounce and ~\$44,000/coin, respectively. Both have seen substantial gains in Q4.

Highlights – Valuation Implications

Q4 themes

➤ Valuation

- Public observation: growth highly concentrated in large businesses with tech focus.
- Private market translation: while valuations have ‘held up’ mark-ups may be hard to come by.

➤ Rates

- Public observation: higher for longer among the more coined terms in 2023.
- Private market translation #1: long duration assets such as growth equity and venture capital may continue to be challenged. On the credit side, any fixed income instrument may also continue to see pressure.
- Private market translation #2: for those portfolio companies that have locked in low rates (fixed pay or via swap), there can be meaningful benefits that should accrue to shareholders.
- Private market translation #3: in the LBO market, where deals are getting done, larger equity checks are getting cut.
 - Keeping multiples in check.

➤ Credit

- Majority of defaults are now occurring before the actual maturity date.
 - High real yields that erode interest servicing capacity will be the greater driver of current default cycle.
 - Reduced “optionality” relative to past downturns.
 - Now a recovery measurement (vs yield in the past).

WACC Guidance

	USD Denominated WACC	EUR Denominated WACC	GBP Denominated WACC
Risk Free Rate	Higher of 3.5 percent or Spot*	Higher of 3.0 Percent or Spot**	Higher of 4.0 Percent or Spot***
Equity Risk Premium	5.5 Percent	6.0 Percent	6.0 Percent

* The spot 20-year U.S. Treasury yield is recommended as the proxy for the risk-free rate if it rises above 3.5%.

** The spot 15-year German Government Bond yield is recommended as the proxy for the risk-free rate if it rises above 3.0%.

*** The spot 20-year UK Government Bond yield is recommended as the proxy for the risk-free rate if it rises above 4.0%.

4. Valuation Hot Topics/Questions

Valuation Hot Topics

What Questions are LPs/Regulators/Auditors Asking or expected to Ask?

- How should we be thinking about debt in the context of leveraged buyouts?
- When equity kickers are included in private credit investments, why is the credit component of the investment valued less than par?
- With the advent of more frequent and more timely valuations (daily or monthly) for private investments in the 40-act space, what impact does this have on managers reporting quarterly arrears?
- How worried should we be about Luxembourg, the SEC, or other global regulators?
- Other

Thank You!

Learn More About Kroll

Valuation Advisory Services

Financial Reporting	Tax	Alternative Asset Advisory	Real Estate Services	Fixed Asset Advisory Services
<ul style="list-style-type: none"> Purchase Price Allocation Goodwill and Asset Impairment Intellectual Property Valuation Fresh Start Accounting Derivative Valuation and Share-Based Compensation Business Valuation Strategic Value Advisory 	<ul style="list-style-type: none"> Tax Valuation Transfer Pricing Legal Entity Valuation Purchase Price Allocation Estate and Gift Tax Interest Expense Allocation Property Tax Consulting Sales and Use Tax Services Site Selection and Incentives Advisory 	<ul style="list-style-type: none"> Portfolio Valuation Valuation Policy and Procedures Consulting Fund Manager Valuations Created Value Attribution Secondary Transfers Valuation of Illiquid and Complex Securities Derivatives and Structured Credit Products Valuation 	<ul style="list-style-type: none"> Real Estate Valuation and Consulting Real Estate Financing Valuations Hospitality Advisory Services Right of Way Appraisal Cost Segregation Real Estate Investment Advisory Real Estate Transaction Advisory Property Asset Management and Optimization 	<ul style="list-style-type: none"> Fixed Asset Management Insurance Valuation Services Machinery and Equipment Valuation

Our Evolution

In Operation for
Nearly 100 Years

STORIED BRAND 1932-2004

- Duff & Phelps founded as investment research firm

NEW FIRM, EXPANDING CAPABILITIES 2005-2020

- Started as valuation and corporate finance advisor
- Rapid growth into other governance, risk, compliance and complementary solutions
- Acquired 30+ businesses, including Kroll

ONE TEAM, ONE KROLL 2021-present

- Duff & Phelps rebrands as Kroll and completes brand unification
- Full business life cycle capabilities across risk, governance and growth
- Serving clients in 140 markets across nearly every industry and sector
- Acquired Crisp and Resolver risk companies
- Acquires AVC Ltd. to create dedicated energy team within FAAS practice

Our Values

Our six values are at the core of who we are and how we interact with our people, clients and partners at work and within every community we serve. They describe the expectations our clients should have of us, guide how we work with each other, and hold us accountable to consistently deliver.

Excellence

Excellence is a mindset – we do challenging work and pursue extraordinary results. We relentlessly focus on excellence – for our clients and colleagues.

Ambition

We are energized to learn, to teach, to grow. We constantly seek to do better – comfort and excellence rarely co-exist.

Courage

We make bold decisions, not just the easy ones. We find, reveal and tell the truth. Integrity is the foundation of everything we do.

Inclusion

We embrace and cultivate diversity – we respect, include and value one another. We support and care about the communities where we live and work.

Innovation

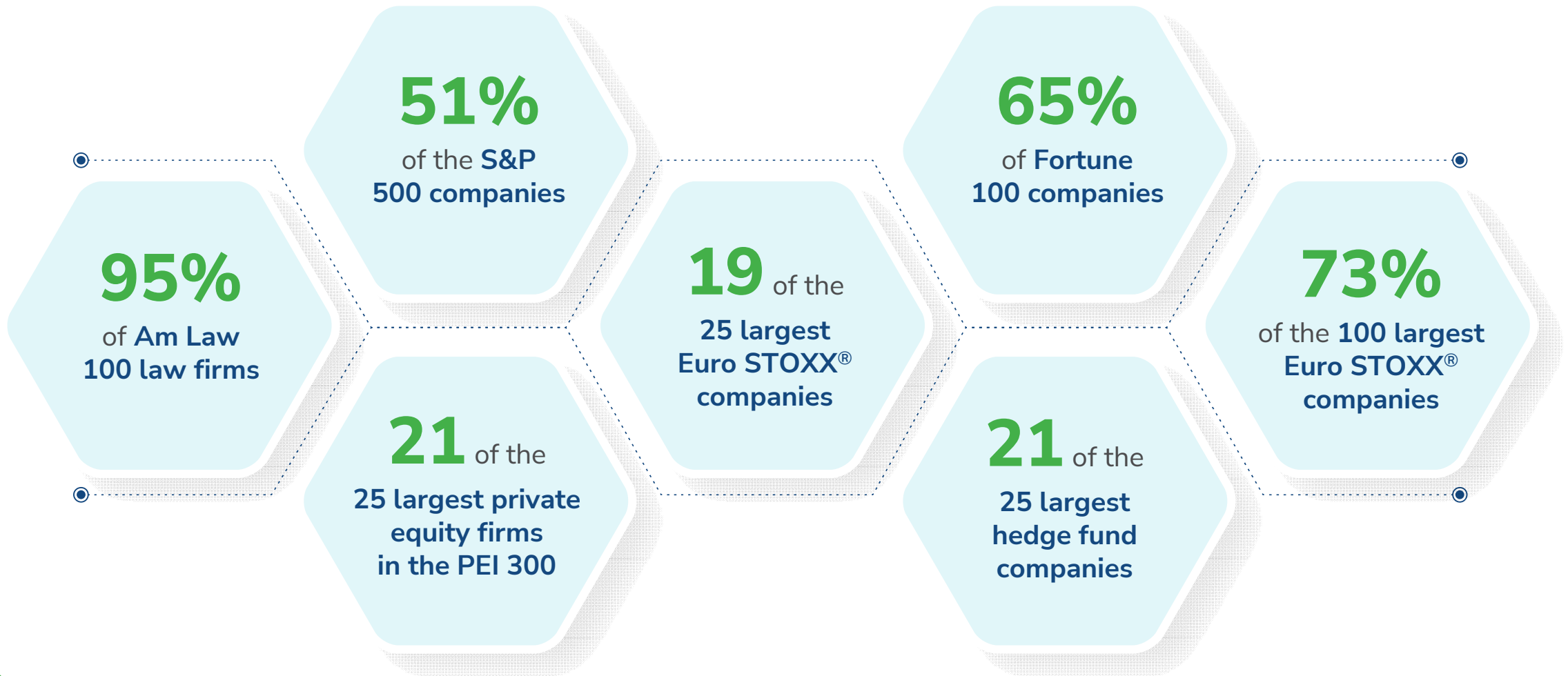
We challenge ourselves to discover new ways to create value. We harness the power of smart data with technology to enable faster decisions and always anticipate what's next for our clients.

One Team, One Kroll

We are stronger together – always focused on solutions, not silos. We collaborate across borders and disciplines in pursuit of excellence.



We are proud to work with



Our Awards and Rankings

Financial Advisory Recognition



REFINITIV 
**Refinitiv Global M&A
Review 2022**
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for Global Announced Fairness
Opinions for Full Year 2022¹
¹Based on 51 Credited Deals per Refinitiv's
Global Mergers & Acquisitions
Review Full Year 2022




**Private Equity Wire US
Awards 2022**
Kroll Wins Best Regulatory
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Forensic Accountants 2022
LEXOLOGY Client Choice
Awards 2022 - Exclusive Winner
of Forensic Accountants



 **TURNAROUND,
RESTRUCTURING
AND INSOLVENCY**
**Turnaround, Restructuring
& Insolvency Awards 2021**
**Winner - Turnaround Firm
of the Year**

Our Awards and Rankings

Risk Advisory Recognition



Who's Who Legal (WWL) 2022

Experts recognized in WWL Asset Recovery, Construction – Quantum Delay & Technical, Forensic Accountants Quantum of Damages



Global Arbitration Review's GAR 100 Expert Witness Firms Power Index - 2022

Ranked fifth on the annual list of top expert firms globally.



Global Investigations Review (GIR) 100 2021

Named as one of the top 100 cross-border investigations practices



Forrester Wave™ 2022

Kroll named a Strong Performer in the Forrester Wave™ Cybersecurity Incident Response Services Q1 2022



SC Awards Europe 2022

Winner - Managed Detection and Response Solution

Finalist - Best Incident Response Solution



IDC MarketScape 2021

Named a Global Leader in Incident Response Readiness



G2 Awards 2022

G2 Best Support 2022

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6,500 professionals worldwide continuing the firm's nearly 100-year history of trusted expertise. Across 34 countries and territories worldwide



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About Kroll

As the leading independent provider of risk and financial advisory solutions, Kroll leverages our unique insights, data and technology to help clients stay ahead of complex demands. Kroll's global team continues the firm's nearly 100-year history of trusted expertise spanning risk, governance, transactions and valuation. Our advanced solutions and intelligence provide clients the foresight they need to create an enduring competitive advantage. At Kroll, our values define who we are and how we partner with clients and communities. Learn more at www.kroll.com.

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