



RETIREMENT BOARD MEETING CALENDAR SHEET
September 11, 2024

To: Retirement Board

Through: Alison Romano
CEO & CIO

From: Kurt Braitberg, CFA, CAIA
Managing Director, Public Markets

Eunice McHugh
Director, Private Credit

Austin Rathe, CFA, CAIA
Senior Portfolio Manager, Private Credit

Henry Toothman
Investment Officer, Private Credit

Date: September 11, 2024

Agenda Item: Private Credit Asset Class Review

Recommendation:

This is a discussion only item.

Background:

As of March 31, 2024, the Private Credit Portfolio had approximately \$2.5 billion in NAV (or 8.7% of Total Plan assets) and total exposure (NAV + unfunded) of \$5.3 billion (or 14.9% of Total Plan assets). Since inception, the Private Credit Portfolio has generated a net IRR of 9.8% and a net TVPI of 1.3x.

Staff and Cambridge Associates will present an update including a review of the portfolio's strategy, performance, and composition. Additionally, Staff and Cambridge Associates will discuss the current market environment, opportunities, and initiatives.

Attachments:

Staff Presentation

Consultant Presentation – Cambridge Associates

Private Credit Update

Kurt Braitberg, Managing Director of Public Markets

Eunice McHugh, Director

Austin Rathe, Senior Portfolio Manager

Henry Toothman, Investment Officer

Kevin Cao, Assistant Portfolio Manager

September 11, 2024



SFERS

San Francisco Employees' Retirement System

Agenda

- Executive Summary
- Program Overview
- Portfolio Reclassification Proposal
- Performance Review
- Portfolio Exposures
- Initiatives

Executive Summary



Executive Summary

- SFERS' Private Credit portfolio continues to perform well and contribute towards Total Plan returns.

+10.1% in 2023

+10.1% 1-year

+9.8% ITD

- The portfolio underperformed the 1-year policy benchmark (+12.8%) due to strong public market recovery but outperformed the Cambridge Associates Private Credit benchmark by 160 basis points.
- All strategies contributed positively to performance in 2023 with a net total appreciation of \$252.1 million for the year.
 - Capital Preservation: +11.5%; Opportunistic: +8.8%; Return Maximization: +8.2%
- At 8.7% of total plan assets, the Private Credit portfolio is slightly below its target allocation though has increased from the 2022 year-end allocation of 7.7%.
 - \$3.1billion NAV and \$2.2 billion in unfunded commitments

Notes: Aksia, Cambridge Associates, and SFERS. Returns shown, including 1-year and ITD, reflect net IRRs as of March 31, 2024. 2023 returns are as of December 31, 2023. Returns for the policy benchmark are time weighted.



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Executive Summary (continued)

- The Private Credit Team is recommending a reclassification of the portfolio to ensure alignment with the objectives of the program and to better reflect the opportunity set.
 - Formal recommendation to be presented at the October 9th Retirement Board Meeting.
- Private Credit continues to remain attractive in the current, relatively higher interest rate environment.
 - The Private Credit Team will remain disciplined when assessing opportunities and deploying capital, and will continue to focus on relative value and risk-adjusted returns while being mindful of portfolio construction.



Program Overview



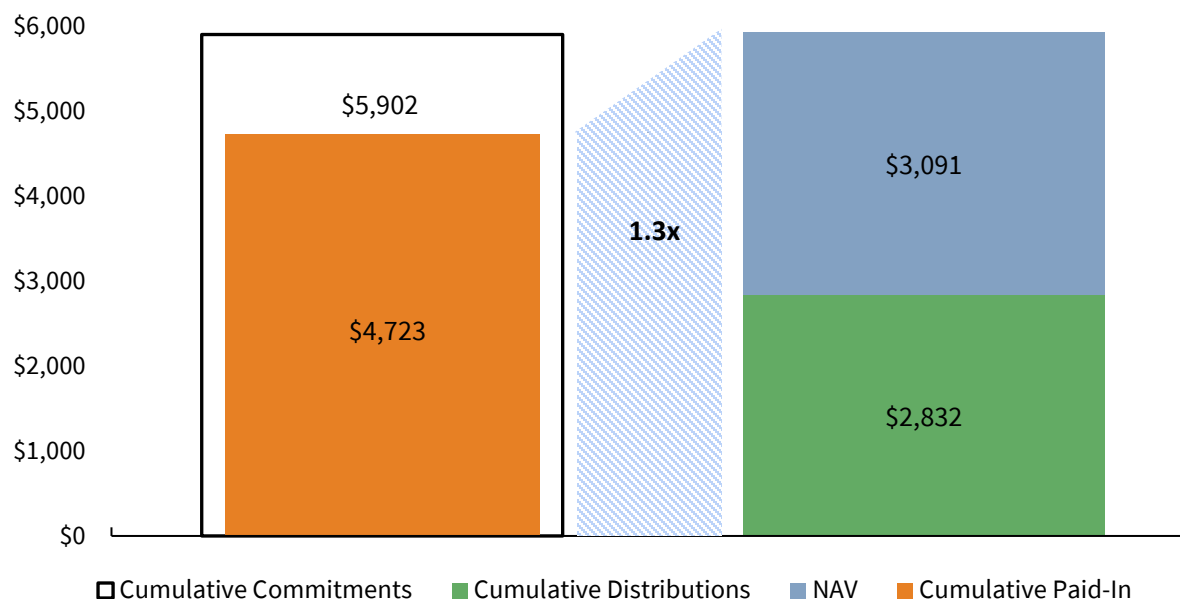
Role of Private Credit

- Generate long-term, risk-adjusted returns superior to Public Credit while also providing downside protection and diversifying Total Plan risk.
 - Seek to achieve long-term returns of 8%-10%, with an emphasis on returns driven by current income and to a lesser extent by capital preservation.
 - Policy Benchmark: (50% CS Leveraged Loan Index + 50% ICE BAML U.S. High Yield BB-B Constrained) + 150 basis points
- Emphasize diversification and portfolio construction to achieve attractive risk-adjusted returns.

The Private Credit portfolio has consistently delivered on these objectives

Portfolio Snapshot

- Since inception, SFERS has committed approximately \$5.9 billion to 103 funds, of which 80% or \$4.7 billion has been called.
- The portfolio has a total value to paid-in multiple of 1.3x, having generated \$1.2 billion in total value creation (net of fees and carried interest).
- Current portfolio NAV stands at \$3.1 billion, or 8.7% of Total Plan assets against a target of 10%, with unfunded commitments of \$2.2 billion to be contributed over a period of several years and offset by portfolio distributions.



Notes: Aksia, Cambridge Associates, and SFERS. All data as of March 31, 2024, unless noted otherwise. Includes 17 Distressed/Special Situation funds that were transferred from SFERS' Private Equity portfolio on June 30, 2019, totaling \$105 million in NAV.



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Annual Commitment Pacing

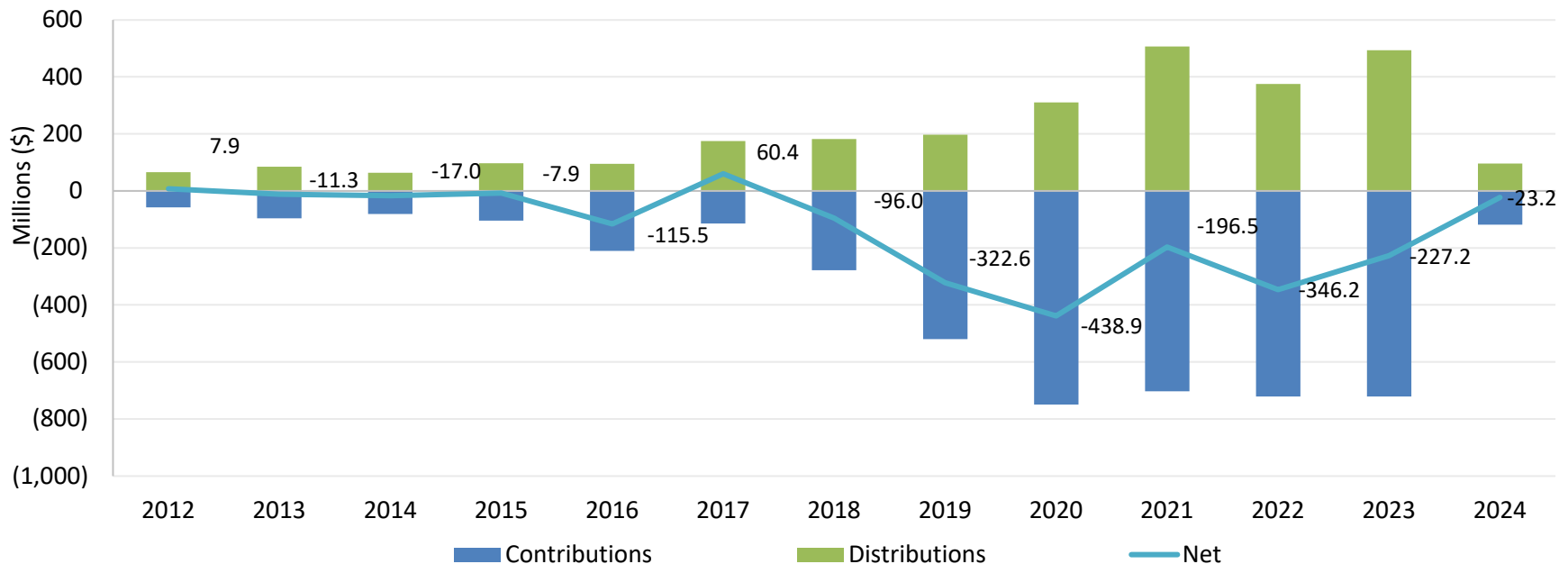
Year	Amount Approved	# Approved	Amount Closed	# Closed
2019	\$905 million	12	\$830 million	11
2020	\$610 million	11	\$885 million	12
2021	\$740 million	7	\$740 million	7
2022	\$905 million	11	\$905 million	11
2023	\$660 million	10	\$435 million	7
Average	\$764 million	10	\$754 million	10
2024 YTD	\$225 million	3	\$375 million	5

The Private Credit Team focuses on consistent annual pacing while considering portfolio construction, the market environment, fundraising dynamics, and business/legal negotiations among other factors

Notes: Aksia and SFERS. 2024 YTD commitments are through August 30, 2024. Amount and number of investments are rounded, and closed figures include those investments approved but not yet closed in prior years. Pacing models are included in the Appendix on pages 49-50.

Annual Cash Flows

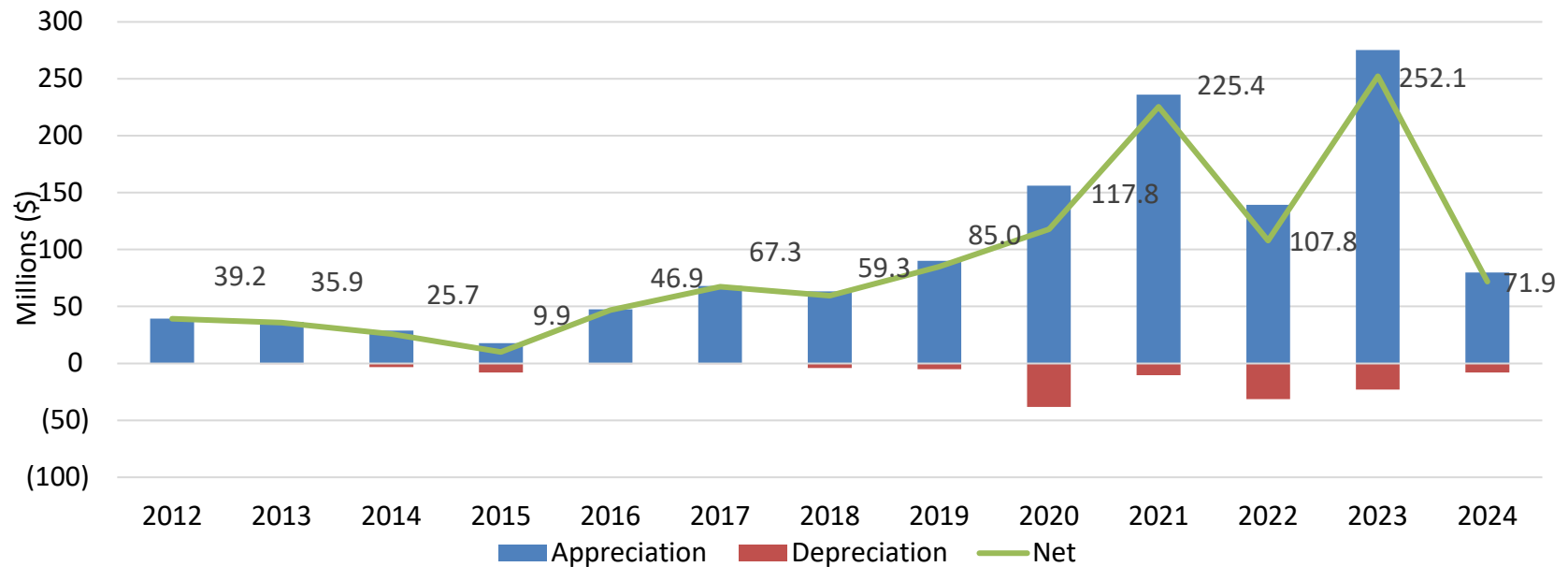
- Relative to their respective 2023 NAVs, Direct Lending (\$180.6 million) followed by Specialty Finance (\$97.6 million) distributed the largest amount of capital for the year.



The Private Credit portfolio is expected to be cash flow positive by 2026

Annual Appreciation & Depreciation

- For 2023, the portfolio generated a net total appreciation of \$252.1M with Direct Lending and Credit Opportunities collectively accounting for 67.6% of net appreciation. In addition, appreciation was concentrated in the 2020 vintage year funds, which represented 35.6% of net appreciation for the year.



The Private Credit portfolio has continuously generated positive net appreciation

Portfolio Reclassification Proposal



Private Credit Portfolio Construction Framework

- Establishing a portfolio construction framework is essential to implement, manage, and monitor the portfolio in accordance with its objectives.
 - It can also help ensure diversification, which can be used as a tool to mitigate risk in the portfolio.
 - It can also reflect the market opportunity set, which can evolve over time.
- When the allocation to Private Credit was approved in late 2017, the Private Credit Team recommended a portfolio construction framework as part of SFERS' Private Credit Strategic Plan.

Current Framework

Investment Strategy	Sub-Strategy		Allocation Range	Current NAV Exposure
Capital Preservation	-Senior Debt	-Mezzanine	30% - 80%	52%
Opportunistic	-Credit Opportunities -Specialty Finance	-Real Estate Debt	20% - 70%	34%
Return Maximization	-Distressed/ Special Situations	-Capital Appreciation	0% - 50%	13%

- Current Framework consists of three primary strategy allocations with sub-strategies included under each:
 - (1) Capital Preservation (30%-80%):
 - Sub-strategies: Senior Debt and Mezzanine
 - (2) Opportunistic (20%-70%)
 - Sub-strategies: Credit Opportunities, Real Estate Debt, and Specialty Finance
 - (3) Return Maximization (0%-50%)
 - Sub-strategies: Distressed/Special Situations and Capital Appreciation

Private Credit Portfolio Reclassification Proposal

- To better monitor the exposure to income generative strategies and to help ensure alignment with the objectives of the Private Credit program, the Private Credit Team is proposing a reclassification of the portfolio framework.
 - Establish two primary allocations:
 - (1) Income Focused. Target allocation range of 50%-90% with a current allocation of 57%.
 - (2) Opportunistic. Target allocation range of 10%-60% with a current allocation of 43%.
 - The proposed framework will result in a higher minimum allocation to income generative strategies.
 - This proposal also includes the recategorization of certain managers/funds to better reflect their exposures and drivers of return.

Private Credit Portfolio Reclassification Proposal (cont'd)

- Ongoing maturation of the Private Credit markets, including the continued development of the private asset-based finance markets and real assets lending opportunity sets, also supports a reclassification.
 - Asset-Based Lending and Real Assets Lending strategies are currently included under Specialty Finance within the Opportunistic allocation while Real Estate Debt is a standalone sub-strategy.
 - Proposed framework will include the spin out of Asset-Based Lending and Real Assets Lending from Specialty Finance and move both to Income Focused as well as rename Capital Appreciation to Subordinated Capital.
 - The Private Credit Team utilizes a relative value approach when assessing Asset-Based Lending and Real Assets Lending opportunities vs. Direct Lending.

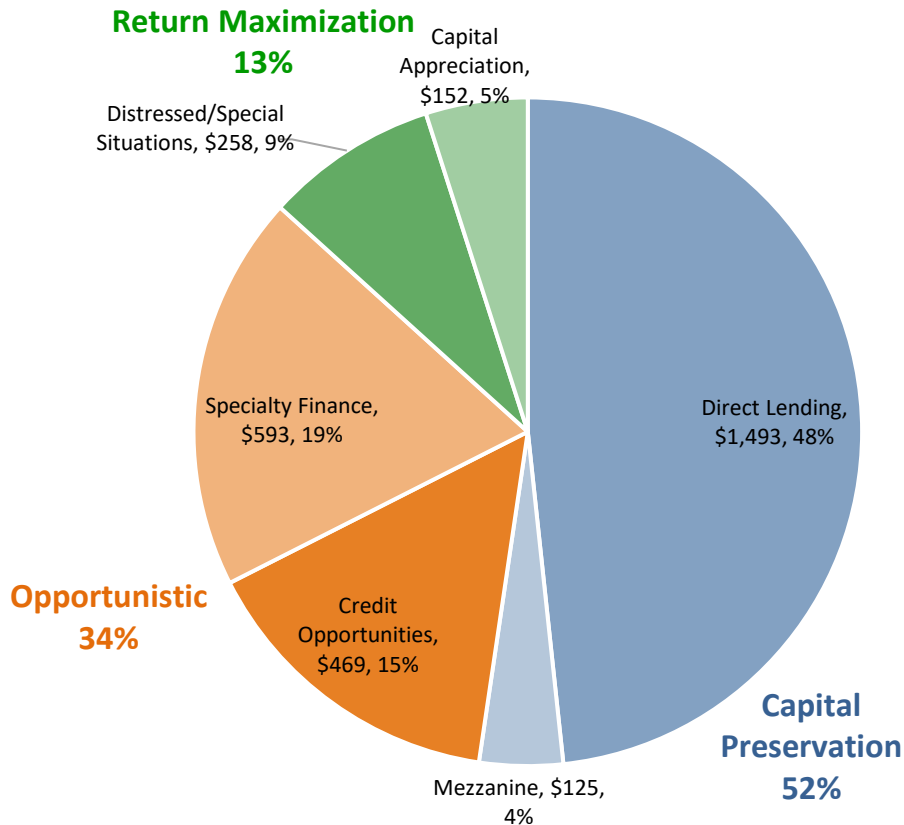
Proposed Framework

Investment Strategy	Sub-Strategy		Allocation Range	Current NAV Exposure
Income Focused	-Senior Debt & Specialty Lending -Subordinated Lending	-Asset-Based Lending -Real Asset Lending	50% - 90%	57%
Opportunistic	-Credit Opportunities -Distressed/ Special Situations	-Subordinated Capital -Specialty Finance	10% - 60%	43%

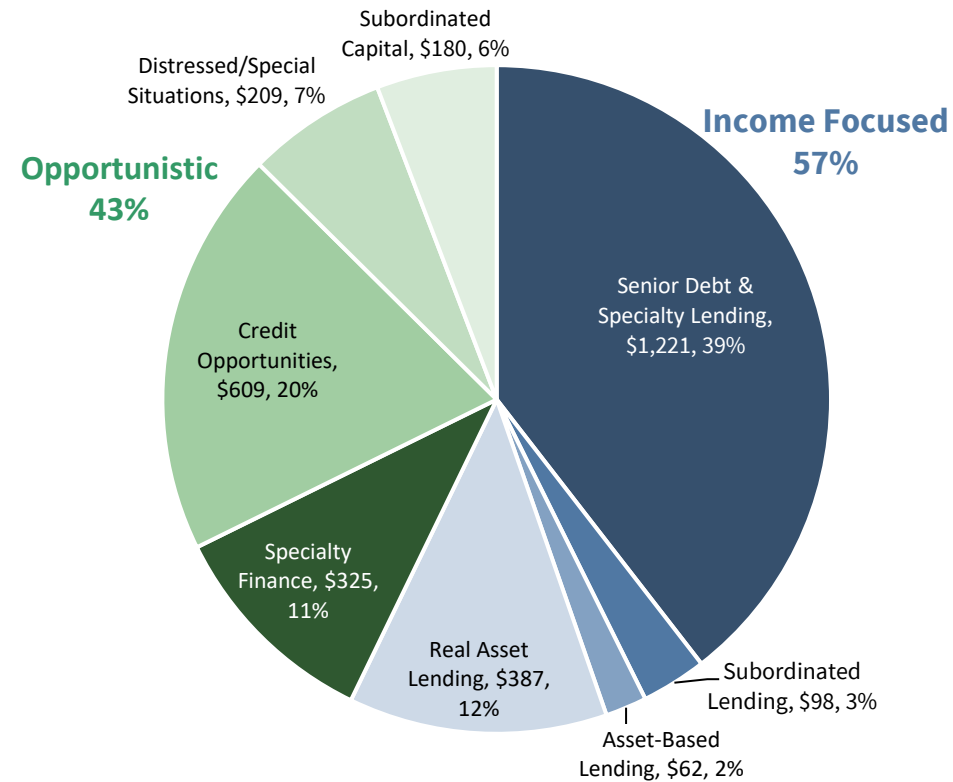
- Proposed framework will be comprised of two primary strategy allocations with sub-strategies included under each:
 - (1) Income Focused (50%-90%):
 - Sub-strategies: Senior Debt & Specialty Lending, Subordinated Lending, Asset-Based Lending, and Real Assets Lending
 - (2) Opportunistic (10%-60%)
 - Sub-strategies: Credit Opportunities, Distressed/Special Situations, Subordinated Capital, and Specialty Finance

Portfolio Exposures

Current Framework - Exposure by NAV



Proposed Framework - Exposure by NAV



Notes: Aksia, Cambridge Associates, and SFERS. As of March 31, 2024. Figures subject to rounding.



Portfolio Reclassification Summary

- Policy benchmark will remain the same. The Cambridge Associates Private Credit benchmark will also continue to be included.
- The Private Credit Team may consider proposing the spin out of Specialty Finance from Opportunistic into a third separate strategy allocation in the future. However, this will be dependent on the development of a relevant and dedicated benchmark.
- Next Steps: If the Retirement Board is supportive of this reclassification, the Private Credit Team will recommend an update to the “Investment Guidelines for Private Equity, Real Assets and Private Credit” to reflect these changes at the October 9th Retirement Board Meeting.

Performance Review



Performance vs. Policy Benchmark

- Relative to the Policy Benchmark and Public Market Equivalent (“PME”), which include a 150-basis points illiquidity premium, the Private Credit portfolio exceeds returns for all periods except the 1-year given a strong rally in the public credit markets.

	Time Weighted Rates of Return					Multiples	
	1 Year	3 Year	5 Year	10 Year	ITD ⁹	DPI	TVPI
SFERS Private Credit	9.9%	8.7%	8.8%	9.1%	10.3%	0.6x	1.3x
Policy Benchmark	13.0%	5.5%	6.3%	6.1%	7.1%	NA	NA
<i>Difference</i>	-3.1%	3.2%	2.5%	3.0%	3.3%	NA	NA

	IRRs and PME					Multiples	
	1 Year	3 Year	5 Year	10 Year	ITD ⁹	DPI	TVPI
SFERS Private Credit	9.9%	8.8%	9.3%	9.4%	9.8%	0.6x	1.3x
Policy Benchmark PME	13.0%	6.1%	6.9%	6.7%	7.4%	NA	NA
<i>Difference</i>	-3.0%	2.7%	2.4%	2.7%	2.5%	NA	NA

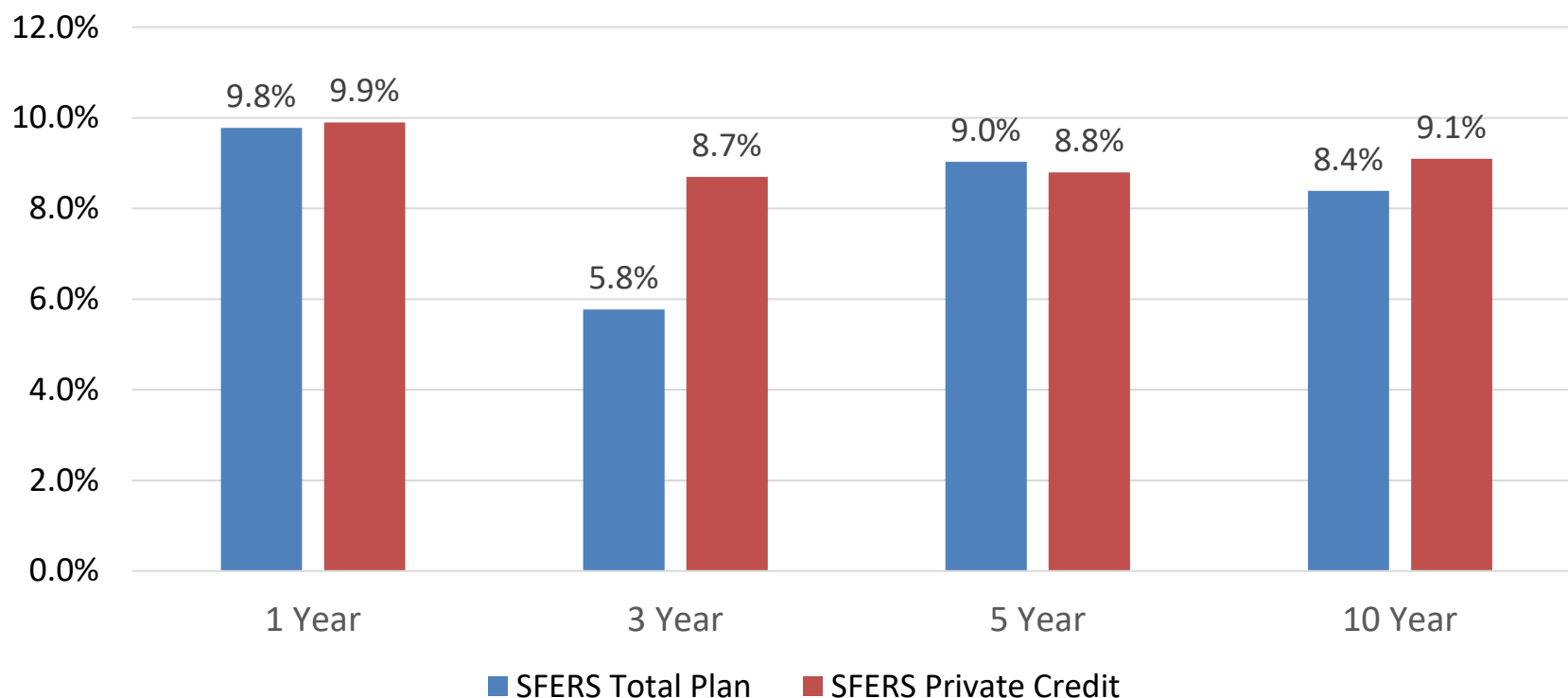
Notes: Aksia, Cambridge Associates, and SFERS. As of March 31, 2024. The PME is a dollar-weighted Long-Nickels calculation of monthly changes in the Policy Benchmark. Policy Benchmark is comprised of (50% CS Leveraged Loan Index + 50% ICE BAML U.S. High Yield BB-B Constrained) + 150 basis points). Performance figures, including differences, are rounded.



Private Credit vs. SFERS Total Plan Performance

- SFERS' Private Credit portfolio continues to contribute towards Total Plan returns, having achieved attractive absolute and relative performance across trailing term horizons.

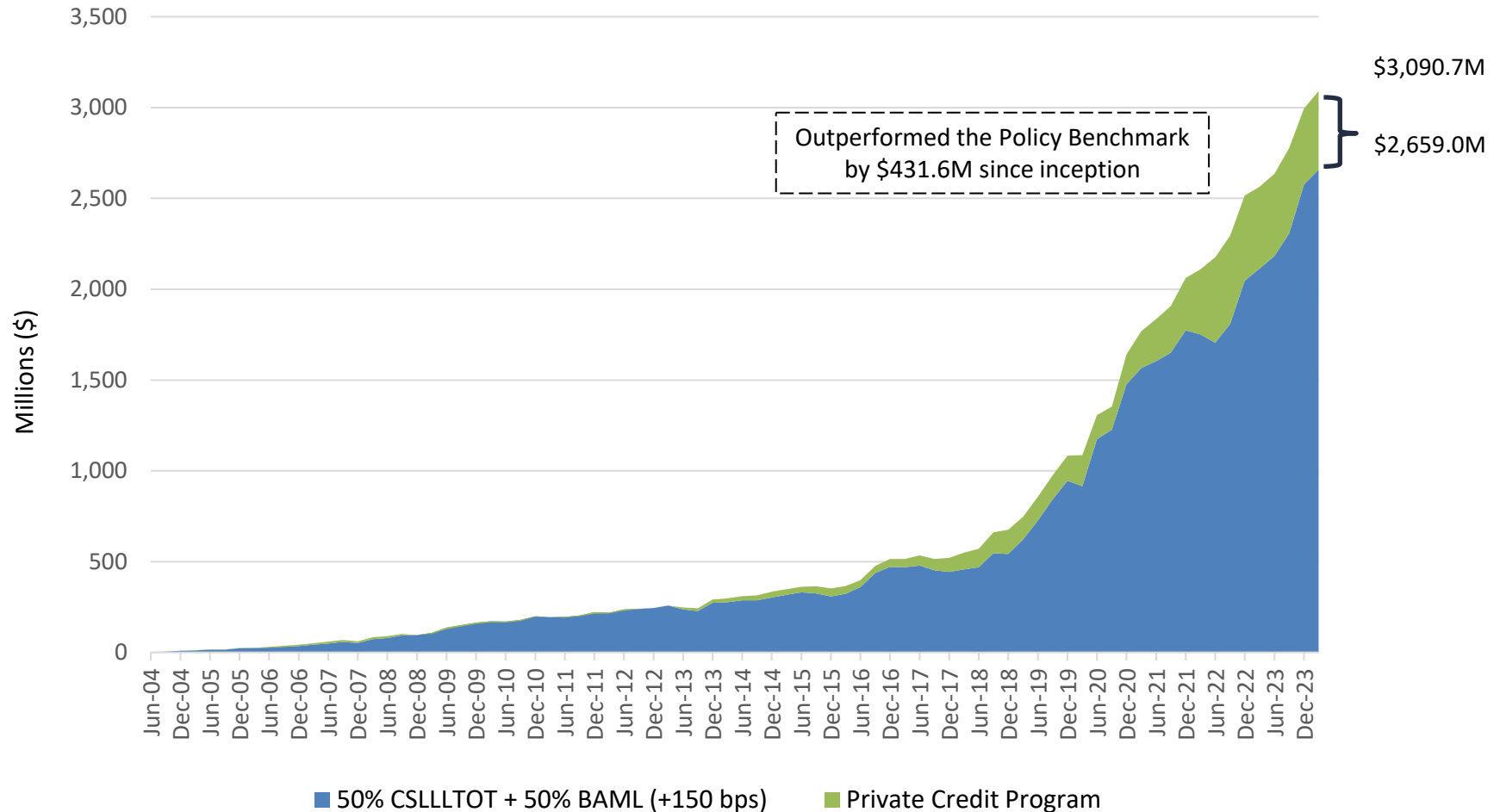
Time Weighted Rates of Return



Notes: Aksia, Wilshire, BNY Mellon, and SFERS. As of March 31, 2024.

Portfolio PME

SFERS Private Credit Portfolio vs 50% CS LL + 50% ICE BAML + 150 bps



Notes: Aksia, Cambridge Associates, and SFERS. As of March 31, 2024. The PME is a dollar-weighted Long-Nickels calculation of monthly changes in the Policy Benchmark. Policy Benchmark is comprised of (50% CS Leveraged Loan Index + 50% ICE BAML U.S. High Yield BB-B Constrained) + 150 basis points). Performance figures, including differences, are rounded.



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Performance vs. Cambridge Associates Benchmarks

Legacy Portfolio Framework

- SFERS' Private Credit portfolio has added value over the Cambridge Associates Private Credit benchmarks over most trailing periods.
- Over the longer-term periods, Capital Preservation and Opportunistic strategies have meaningfully outperformed the respective Cambridge Associates benchmarks.

	Net IRRs				
	Trailing 1-Year	Trailing 3-Year	Trailing 5-Year	Trailing 10-Year	Since Inception
SFERS Total Private Credit Portfolio	10.1%	8.7%	9.2%	9.4%	9.8%
Capital Preservation	11.0%	9.1%	9.2%	9.8%	10.3%
Opportunistic	10.0%	7.5%	8.8%	9.3%	9.1%
Return Maximization	7.3%	9.6%	9.7%	8.6%	10.0%
CA Private Credit Benchmark	8.5%	8.7%	8.7%	8.0%	9.4%
CA Senior Debt Benchmark	7.7%	6.4%	6.9%	7.0%	7.2%
CA Credit Opportunities Benchmark	8.2%	8.8%	8.4%	7.3%	8.8%
CA Subordinated Capital Benchmark	10.4%	11.1%	11.5%	10.9%	11.4%
<i>Difference (SFERS vs. CA)</i>	<i>1.6%</i>	<i>0.0%</i>	<i>0.5%</i>	<i>1.4%</i>	<i>0.4%</i>

Notes: Aksia, Cambridge Associates, and SFERS. As of March 31, 2024, unless noted otherwise. Since inception includes 17 Distressed/Special Situation funds that were transferred from SFERS' Private Equity portfolio on June 30, 2019, totaling \$105 million in NAV.

Performance vs. Cambridge Associates Benchmarks

Proposed Portfolio Framework

- Across all periods, both the Income Focused and Opportunistic allocations have outperformed their respective Cambridge Associates benchmarks.
- Income Focused strategies reflect the returns of the more yield-oriented strategies, including those proposed to be recategorized from Opportunistic – Specialty Finance.

	Net IRRs				
	Trailing 1-Year	Trailing 3-Year	Trailing 5-Year	Trailing 10-Year	Since Inception
SFERS Total Private Credit Portfolio	10.1%	8.7%	9.2%	9.4%	9.8%
Income Focused	10.7%	8.5%	8.9%	9.1%	9.6%
Opportunistic	9.3%	8.9%	9.6%	9.7%	10.1%
CA Private Credit Benchmark	8.5%	8.7%	8.7%	8.0%	9.4%
CA Senior Debt Benchmark	7.7%	6.4%	6.9%	7.0%	7.2%
CA Credit Opportunities Benchmark	8.2%	8.8%	8.4%	7.3%	8.8%
<i>Difference (SFERS vs. CA)</i>	<i>1.6%</i>	<i>0.0%</i>	<i>0.5%</i>	<i>1.4%</i>	<i>0.4%</i>

Notes: Aksia, Cambridge Associates, and SFERS. As of March 31, 2024, unless noted otherwise. Since inception includes 17 Distressed/Special Situation funds that were transferred from SFERS' Private Equity portfolio on June 30, 2019, totaling \$105 million in NAV.

2023 At A Glance

	Contributors	Detractors
<i>Strategy</i>	Capital Appreciation	Real Estate Debt
<i>Geography</i>	Latin America	Asia Pacific

- The rebound in the capital markets during 2023 benefitted Capital Appreciation strategies while investments in Real Estate Debt lagged.
- Latin America generated the highest performance for the year though investments in the Asia Pacific, largely driven by real estate debt in China, continued to face headwinds.

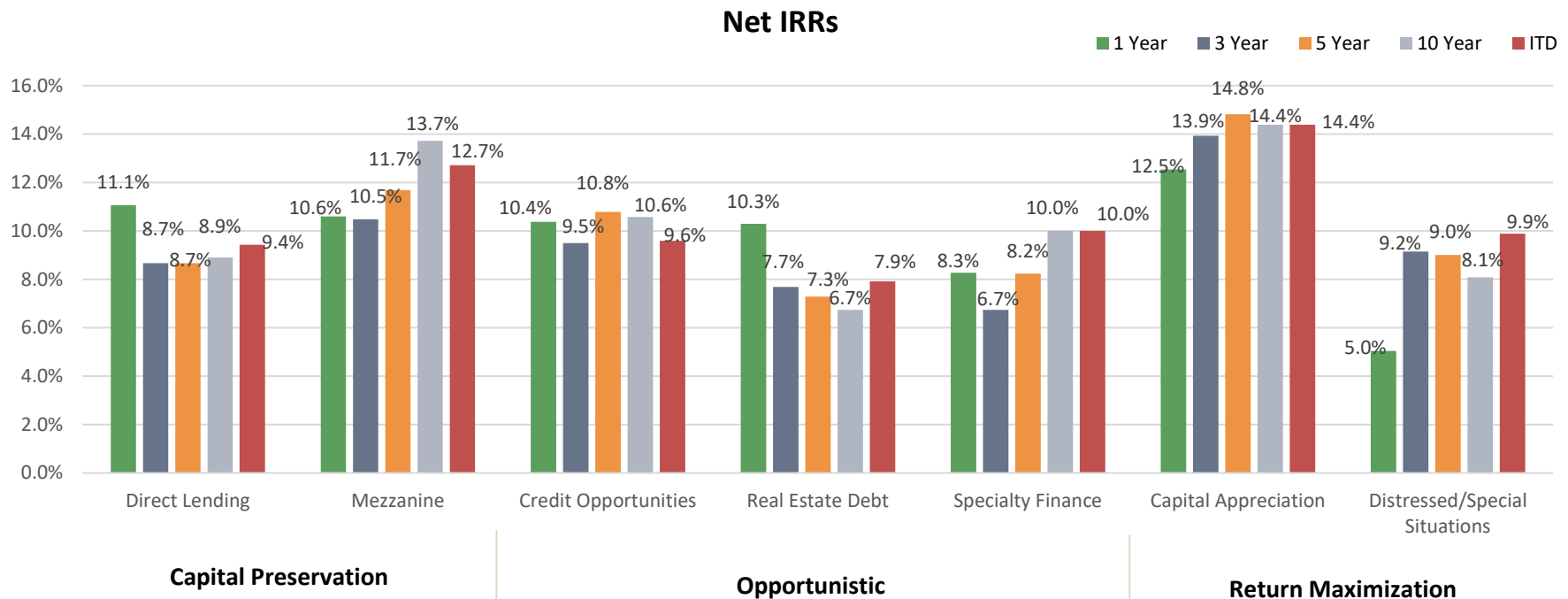
Notes: Aksia, Cambridge Associates, and SFERS. As of December 31, 2023. Contributors and detractors based on 1-year performance and based on current portfolio classifications. Performance by sub-strategy, as of December 31, 2023, is included in the Appendix on page 40.



Performance by Sub-Strategy

Legacy Portfolio Framework

- All sub-strategies have appreciated over the one-year led by Capital Appreciation and Direct Lending while Distressed/Special Situations lagged.

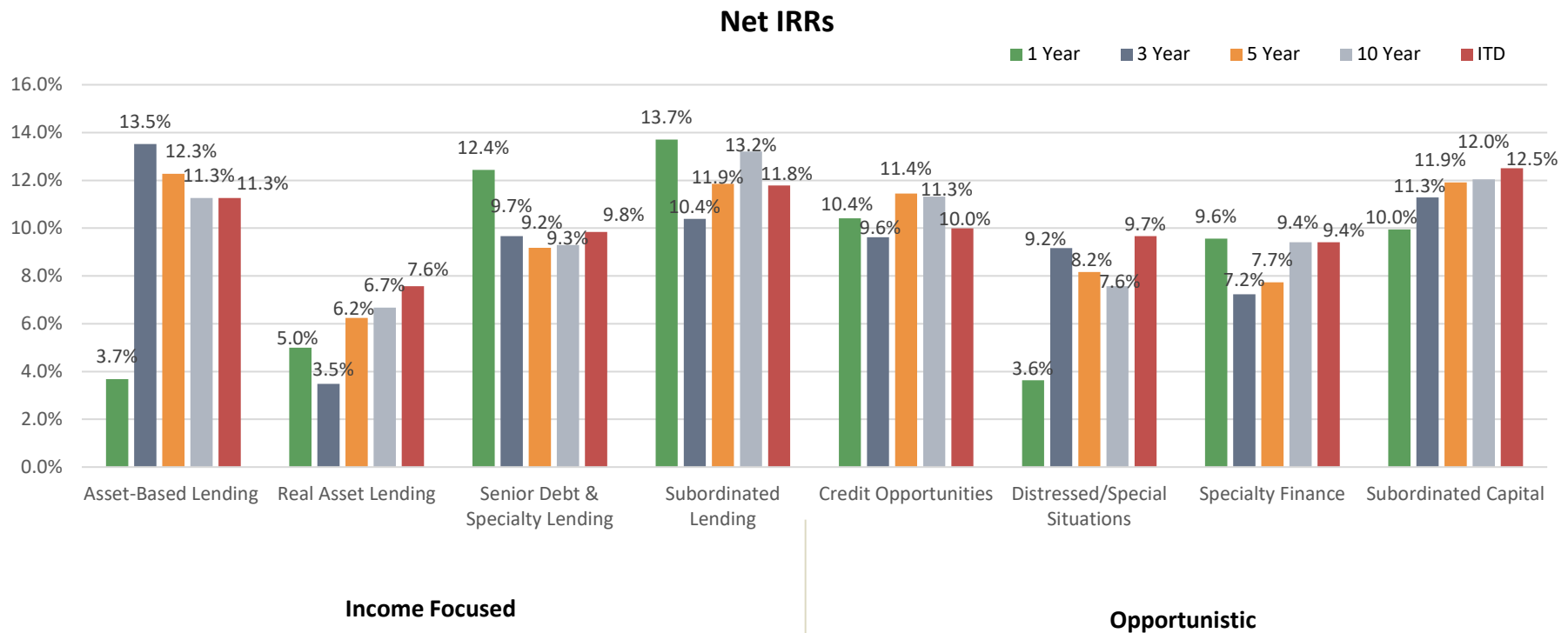


Notes: Aksia, Cambridge Associates, and SFERS. As of March 31, 2024. Since inception includes 17 Distressed/Special Situation funds that were transferred from SFERS' Private Equity portfolio on June 30, 2019, totaling \$105 million in NAV.

Performance by Sub-Strategy

Proposed Portfolio Framework

- Under the proposed reclassification, Subordinated Lending outperformed followed by Senior Debt & Specialty Lending while Distressed/Special Situations lagged followed by Asset-Based Lending though this was driven by more recent commitments made in the year.



Notes: Aksia, Cambridge Associates, and SFERS. As of March 31, 2024. Since inception includes 17 Distressed/Special Situation funds that were transferred from SFERS' Private Equity portfolio on June 30, 2019, totaling \$105 million in NAV.

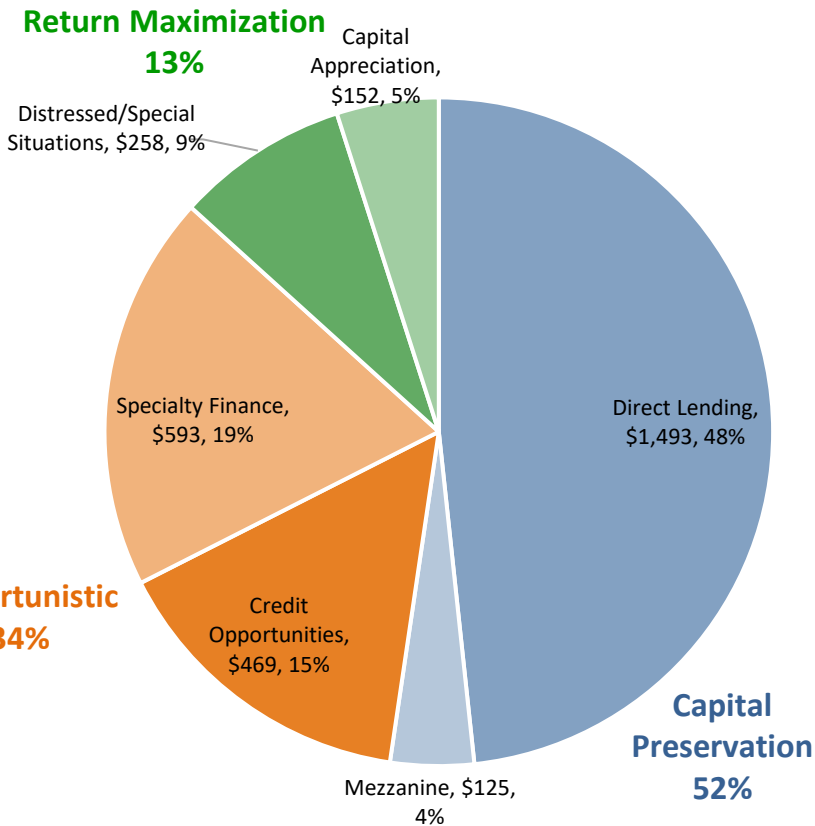


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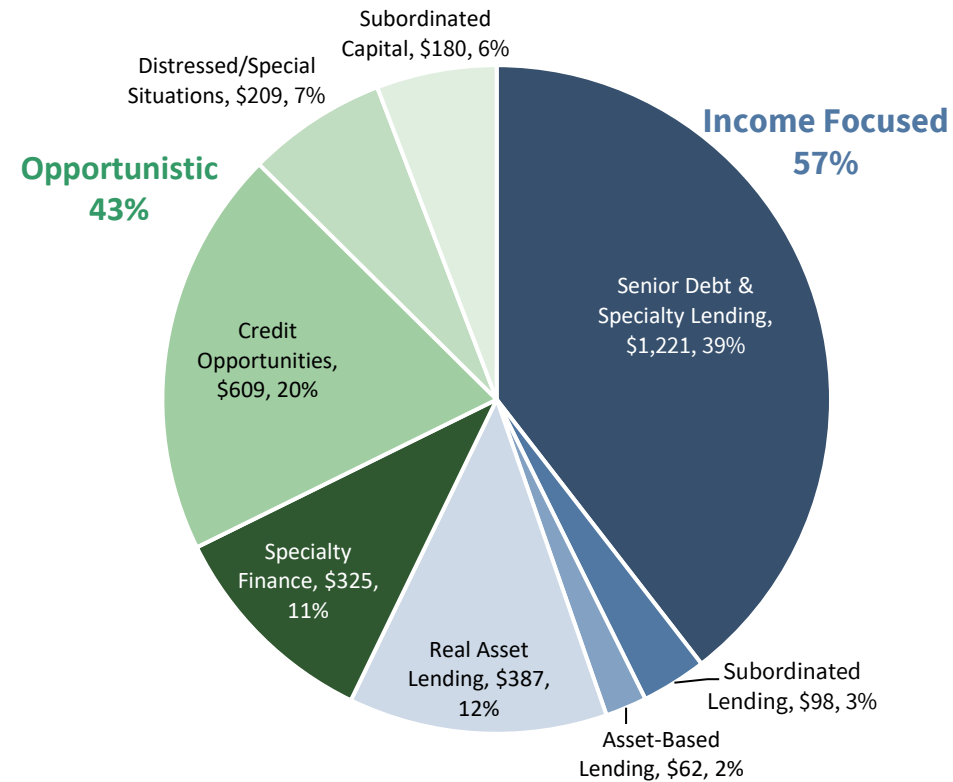
Portfolio Review

Portfolio Exposures

Current Framework - Exposure by NAV



Proposed Framework - Exposure by NAV

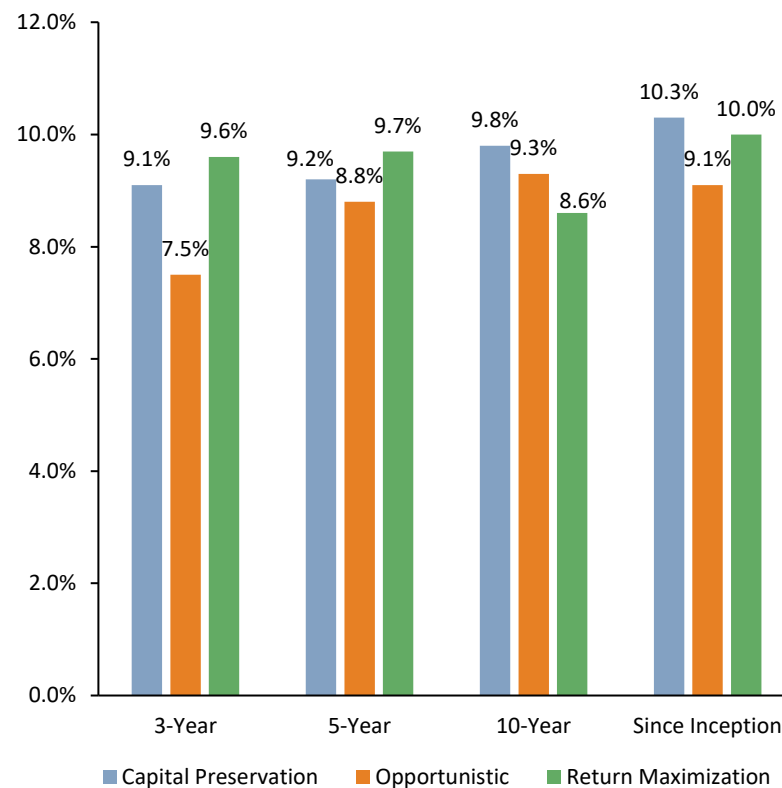
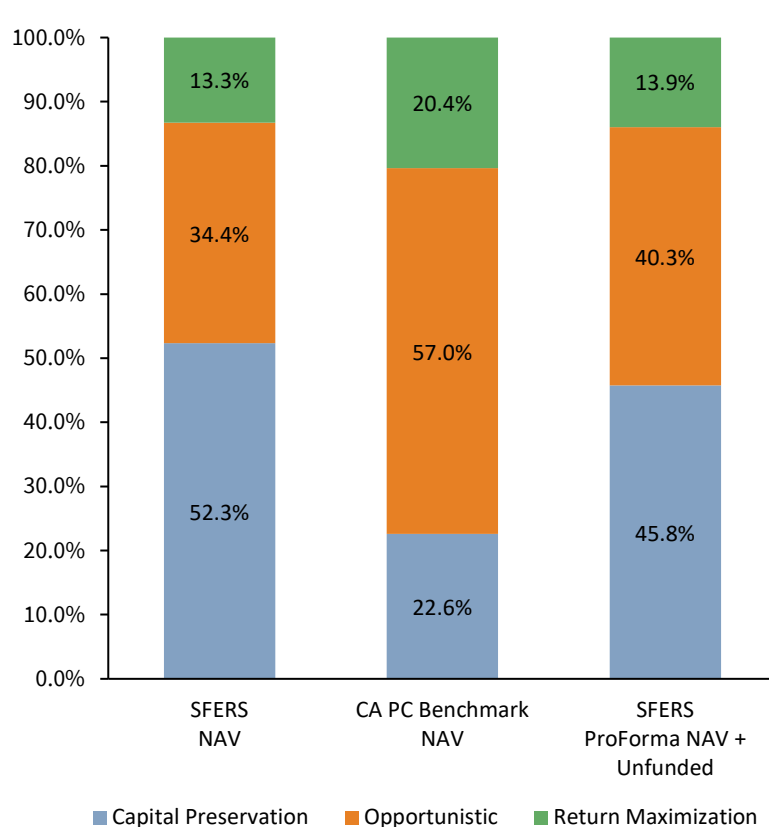


Notes: Aksia, Cambridge Associates, and SFERS. As of March 31, 2024. Figures subject to rounding.



Portfolio Exposure & Performance by Sub-Strategy

Legacy Portfolio Framework



The portfolio has a larger allocation to Capital Preservation strategies which have been accretive over most periods

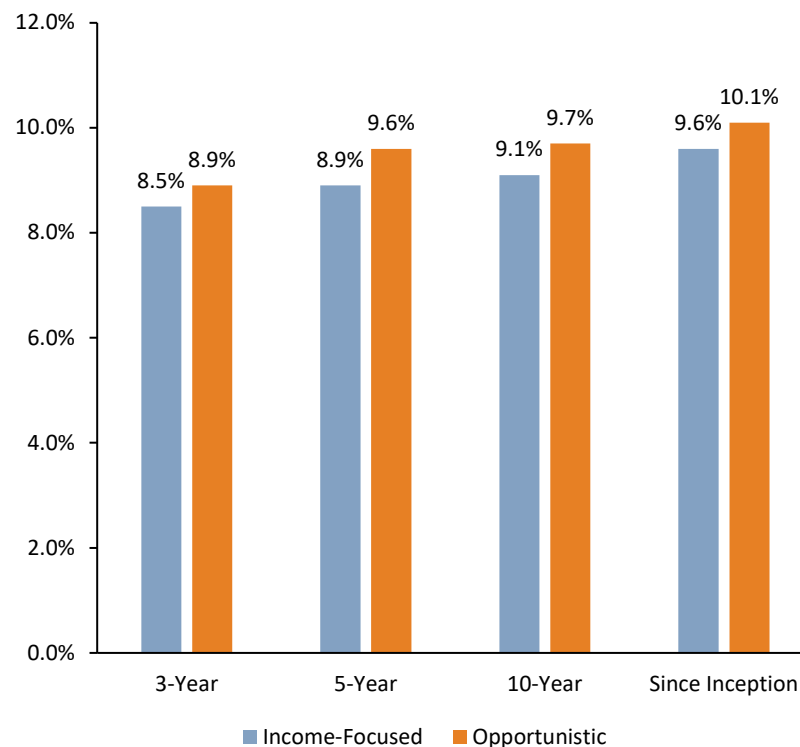
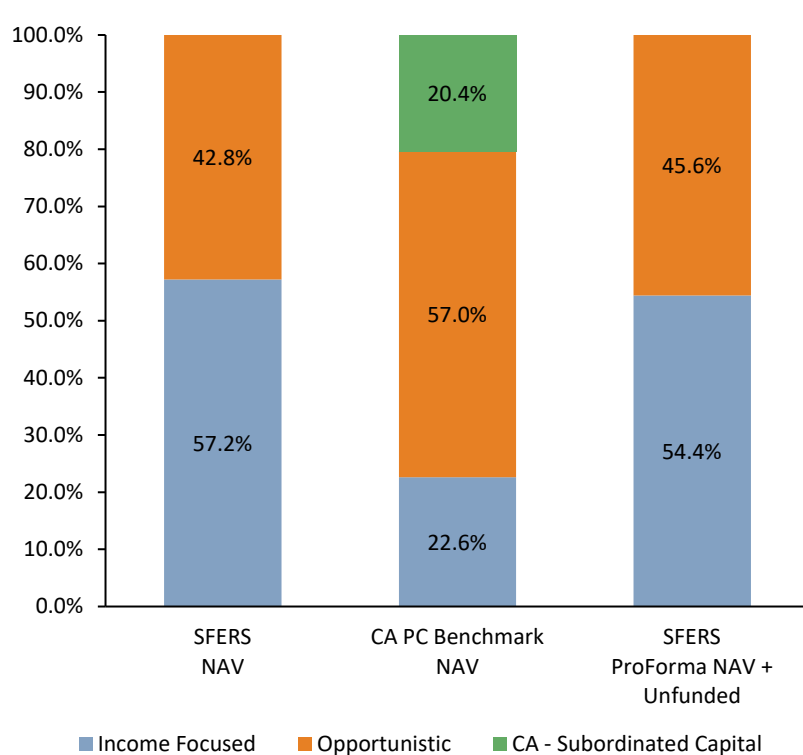
Notes: Aksia, Cambridge Associates, and SFERS. As of March 31, 2024. Since inception includes 17 Distressed/Special Situation funds that were transferred from SFERS' Private Equity portfolio on June 30, 2019, totaling \$105 million in NAV.



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Portfolio Exposure & Performance by Sub-Strategy

Proposed Portfolio Framework



Under the proposed reclassifications, Opportunistic has outperformed Income Focused and in line with expectations

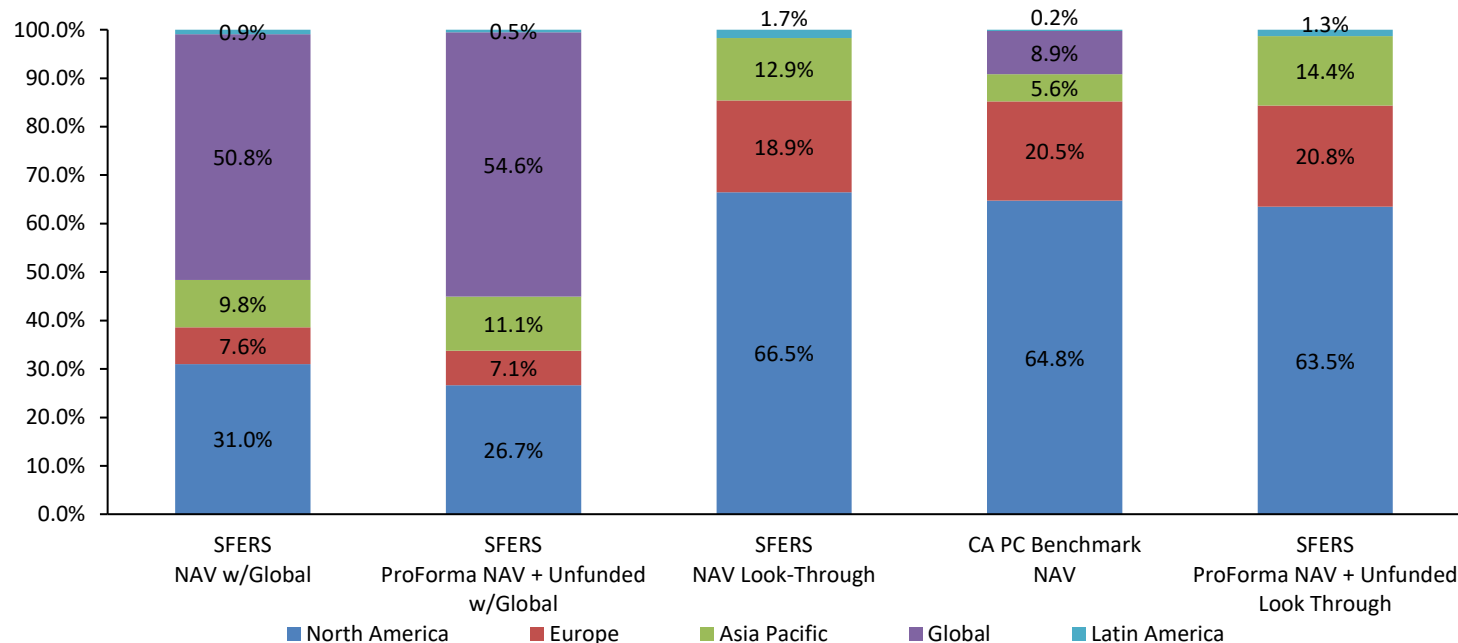
Notes: Aksia, Cambridge Associates, and SFERS. As of March 31, 2024. Since inception includes 17 Distressed/Special Situation funds that were transferred from SFERS' Private Equity portfolio on June 30, 2019, totaling \$105 million in NAV. According to Cambridge, Income Focused represents 55%-60% of the "CA – Subordinated Capital benchmark" with Opportunistic accounting for 40%-45%.



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Portfolio Exposure & Performance by Geography

- The portfolio has a larger allocation to Global though on a look-through basis the allocations to North America and Europe are in line with the CA Private Credit benchmark.
- Exposure to Asia Pacific continues to remain larger than the benchmark with underlying current exposure mostly in Australia and India followed by China.



Exposure to Asia Pacific is anticipated to decline given current relative value

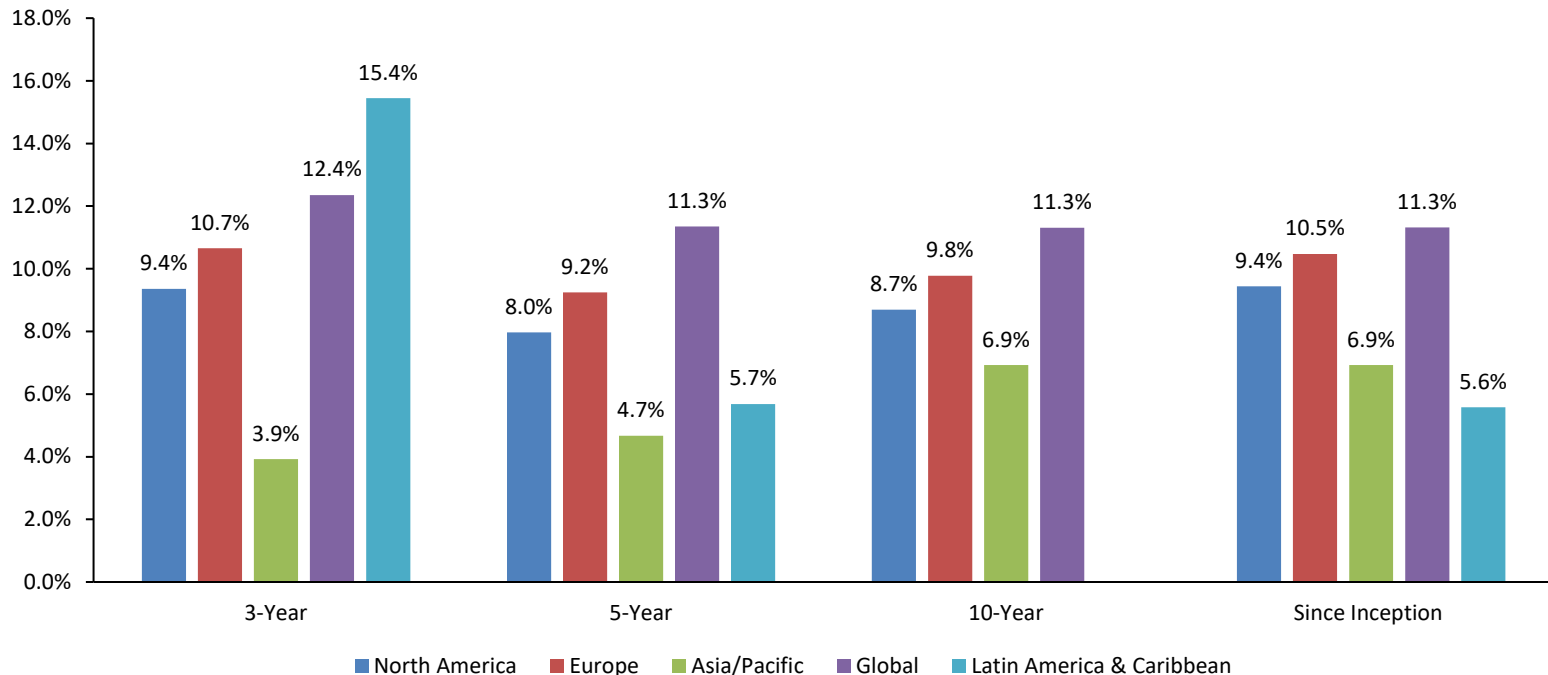
Notes: Aksia, Cambridge Associates, and SFERS. As of March 31, 2024, though ProForma NAV + Unfunded exposures include commitments made through August 2024. Since inception includes 17 Distressed/Special Situation funds that were transferred from SFERS' Private Equity portfolio on June 30, 2019, totaling \$105 million in NAV.



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Portfolio Exposure & Performance by Geography

- Global strategies have been the most accretive since inception while Asia Pacific has been a more recent detractor with underperformance largely driven by real estate debt exposure in China.



The Private Credit portfolio has benefitted from intentional geographic diversification

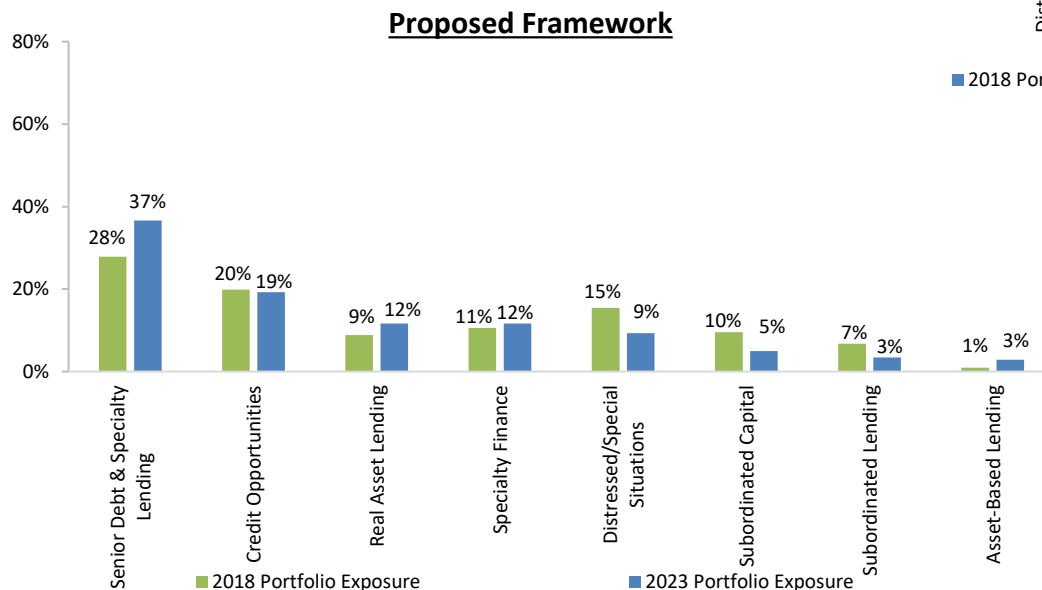
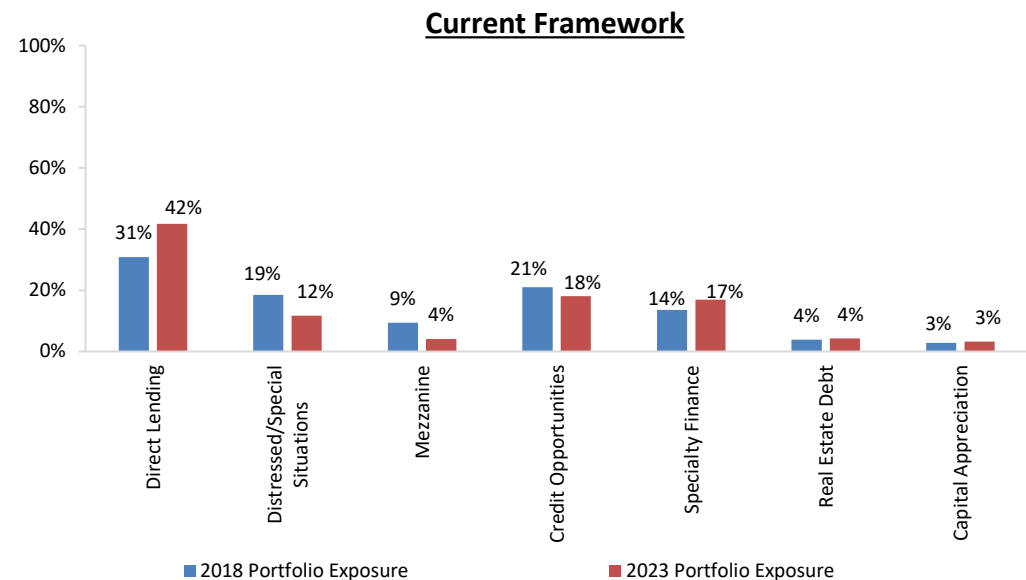
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Portfolio Exposures Over Time (Sub-Strategy)

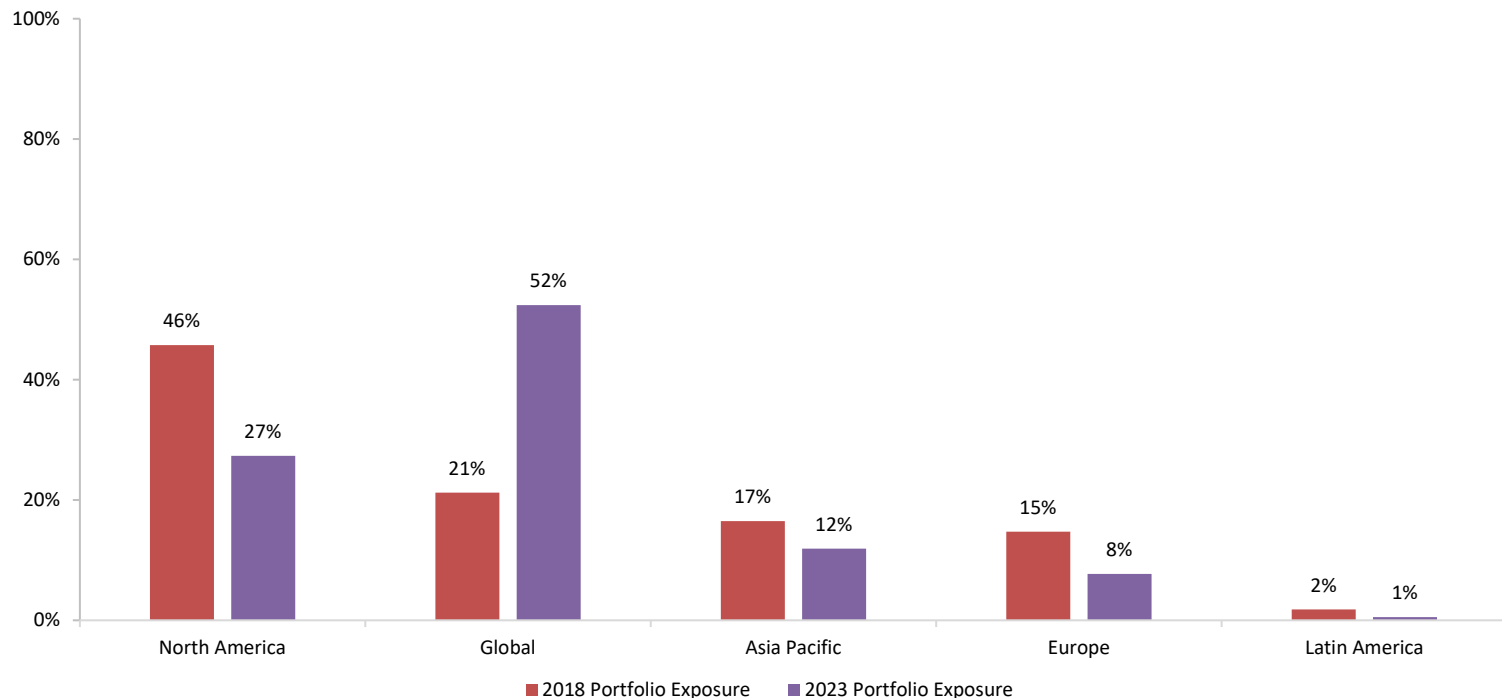
- The Private Credit Team has focused on purposefully diversifying the portfolio by sub-strategy since the establishment of the program.
- Under the current framework, exposure to Direct Lending and Specialty Finance have increased by design, while Distressed/Special Situations has decreased based on top-down macroeconomic factors.



- Under the proposed framework, exposure to Senior Debt & Specialty Lending has increased along with Real Assets Lending and Asset-Based Lending.
- Meanwhile, exposure to Subordinated Capital and Subordinated Lending have decreased along with Distressed/Special Situations.

Portfolio Exposures Over Time (Geography)

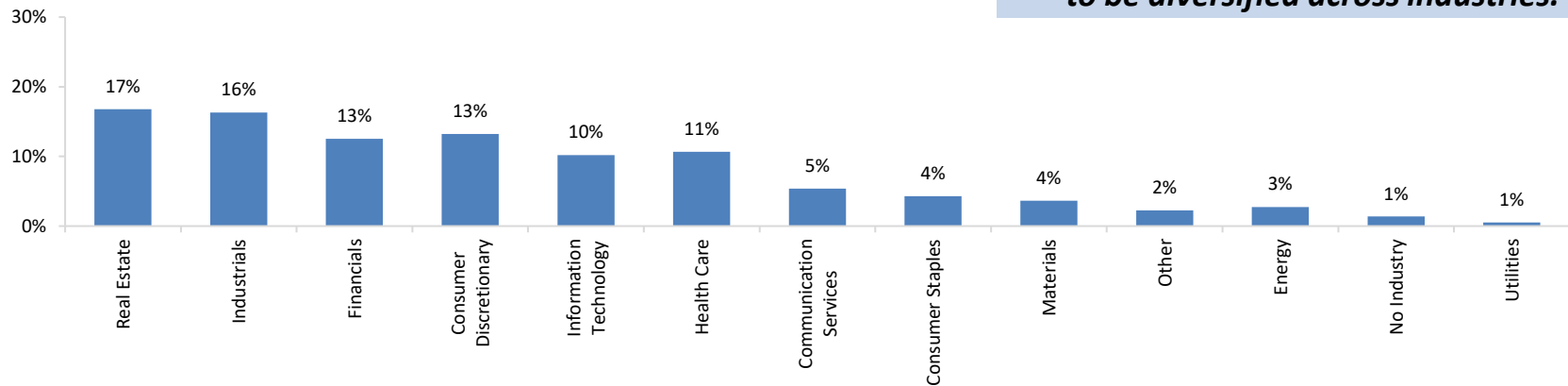
- Since 2018, the portfolio's exposure to Global strategies have meaningfully increased while all other dedicated geographic strategies have decreased.



Given the current opportunity set, exposure to Asia Pacific is anticipated to continue to decline

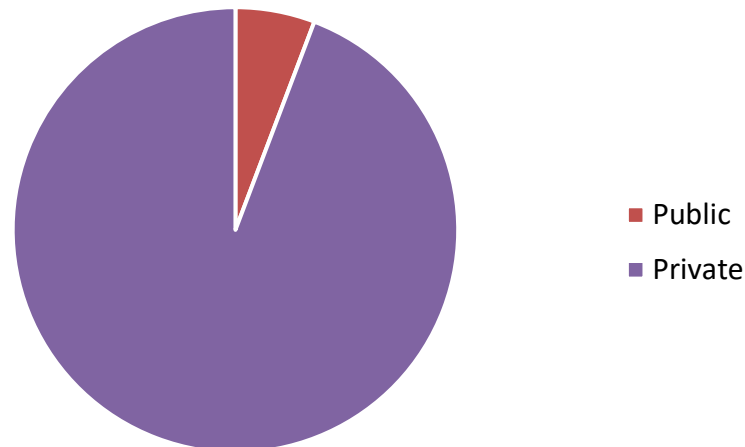
Portfolio Company Level Exposures

Industry



The Private Credit Portfolio is designed to be diversified across industries.

Public vs. Private



Notes: Aksia and SFERS. As of March 31, 2024. Exposures include NAV and unfunded commitments and excludes managers that do not provide underlying position information.



Initiatives

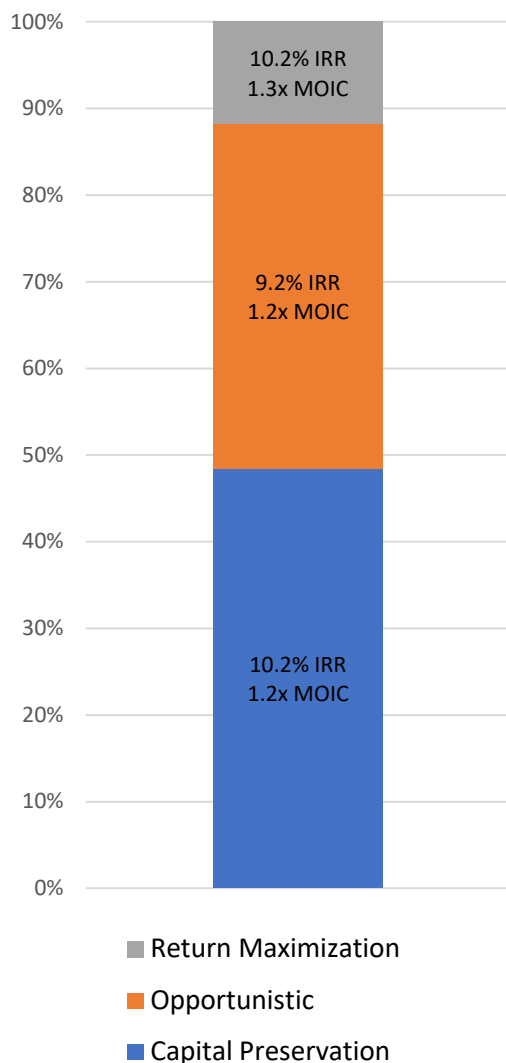
Ongoing Portfolio Initiatives

Initiatives	Details
Maintain consistent yet flexible pacing	Target \$750 million annually while considering the market opportunity set, fundraising dynamics, and portfolio construction.
Maintain focus on relative value and risk-adjusted returns	While manager selection remains critical, considerations around top-down factors are just as vital. Also, continue to look to de-risk, where possible, especially if interest rates remain relatively higher.
Continue emphasis on portfolio construction and maintaining a portfolio that will perform well throughout a full market cycle	Diversification remains key and can be beneficial especially during periods of market uncertainty. For example, exposure to asset-based lending, credit opportunities and distressed/special situations can benefit the portfolio during more volatile periods. Meanwhile, exposure to subordinated lending and capital can potentially contribute to returns during more benign markets.
Continue to improve and expand portfolio monitoring and analytics	Continue to work in conjunction with consultants on these efforts. Utilize CRM system for relationship management and internal tracking of the due diligence process. Explore other potential providers and systems.
Onboard the new Senior Portfolio Manager and continue to develop and mentor the Private Credit Team	Senior Portfolio Manager, Austin Rathe joined SFERS' Private Credit Team on September 3, 2024.

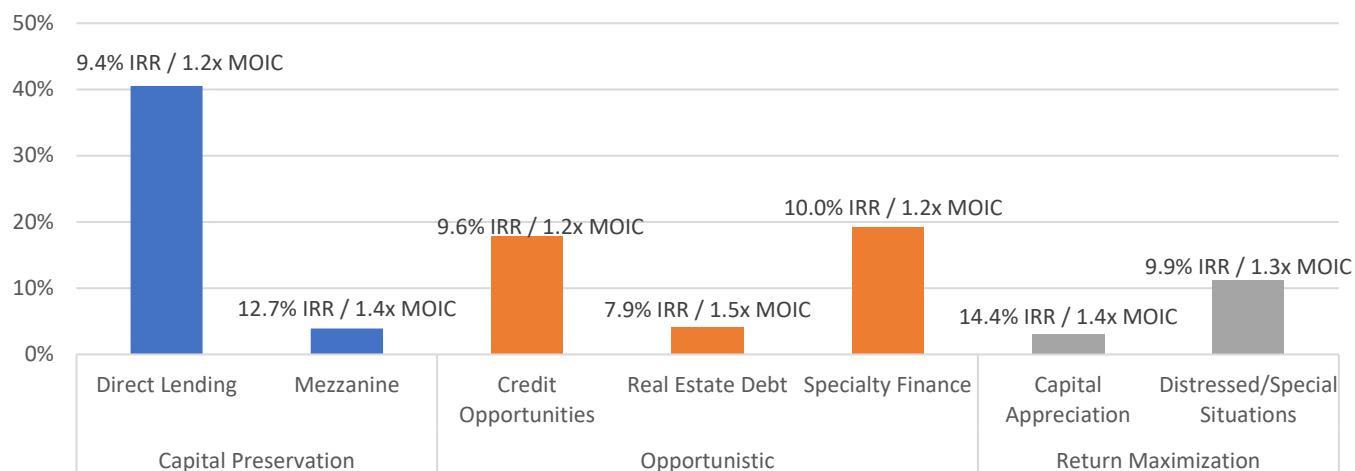


Appendix

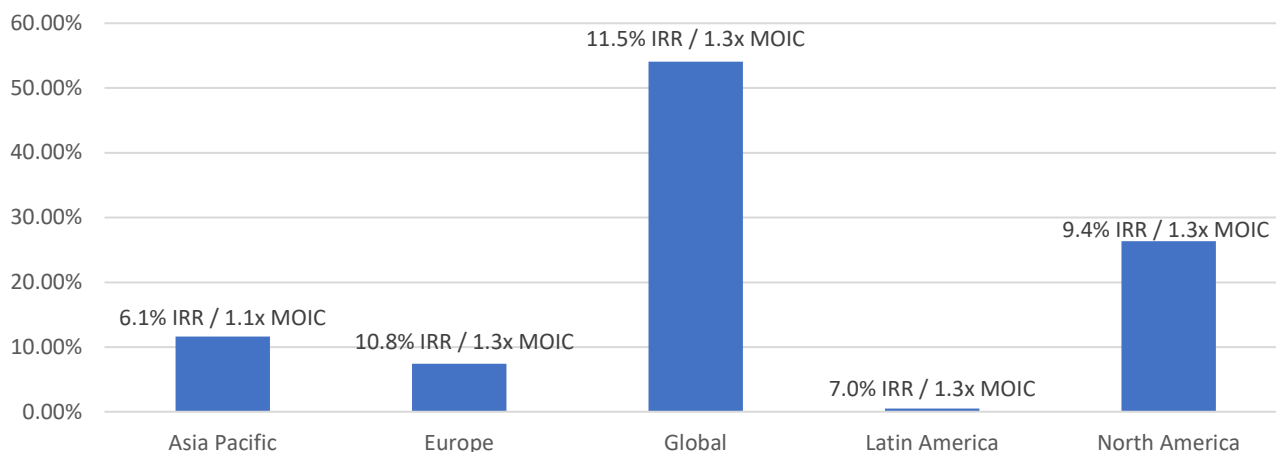
Portfolio NAV Attribution by Strategy, Sub-Strategy, and Geography



Private Credit Portfolio Sub-Strategy Exposures



Private Credit Portfolio Geographic Exposures



Notes: Aksia and SFERS. Represents ITD as of March 31, 2024. Since inception includes 17 Distressed/Special Situation funds that were transferred from SFERS' Private Equity portfolio on June 30, 2019, totaling \$105 million in NAV.



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Performance vs. Policy Benchmark

As of December 31, 2023

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SFERS Private Credit	9.8%	9.2%	8.9%	9.2%	10.3%	0.6x	1.2x
Policy Benchmark	14.5%	5.3%	7.0%	6.1%	7.0%	NA	NA
<i>Difference</i>	-4.8%	3.9%	1.9%	3.1%	3.3%	NA	NA

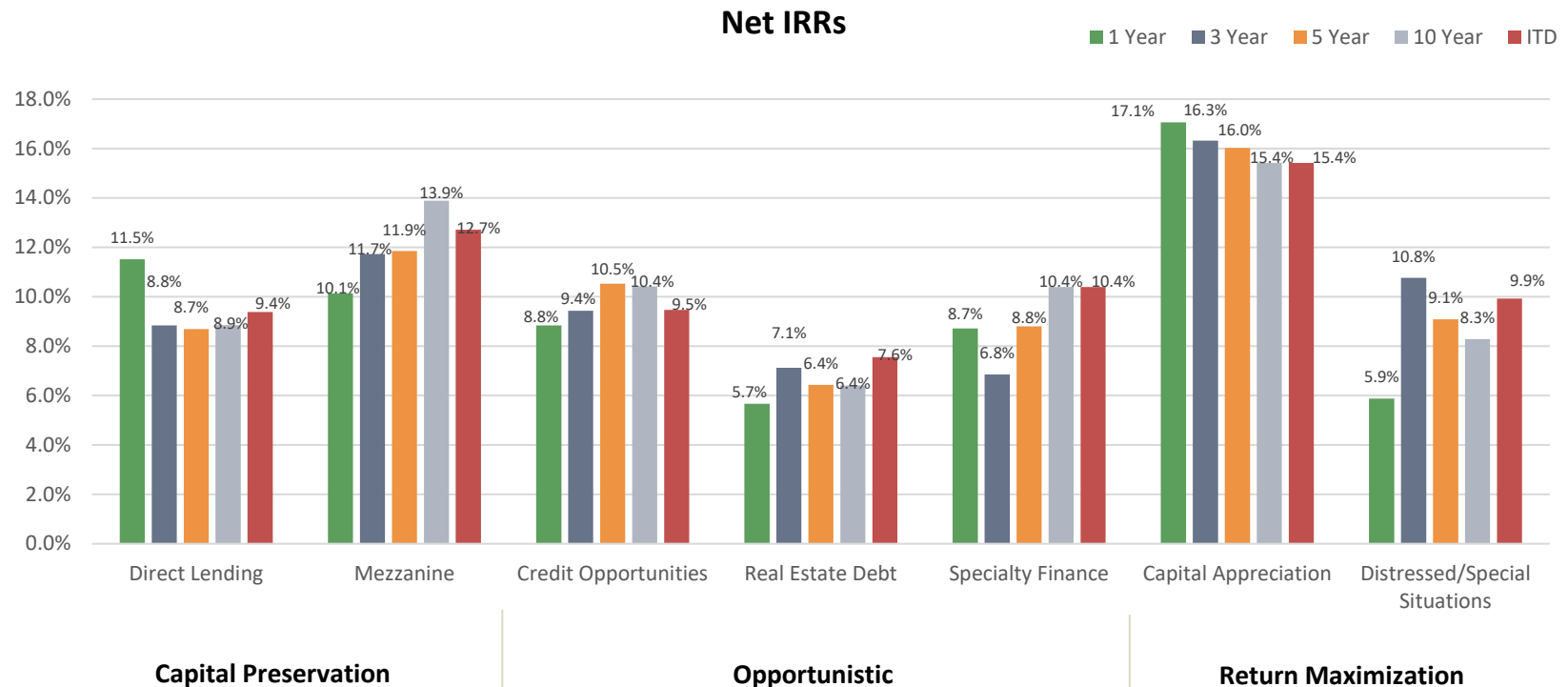
	IRRs and PME					Multiples	
	1 Year	3 Year	5 Year	10 Year	ITD ⁹	DPI	TVPI
SFERS Private Credit	9.9%	9.1%	9.3%	9.4%	9.8%	0.6x	1.2x
Policy Benchmark PME	14.6%	5.8%	7.1%	6.6%	7.3%	NA	NA
<i>Difference</i>	-4.8%	3.4%	2.2%	2.8%	2.6%	NA	NA

Notes: Aksia, Cambridge Associates, and SFERS. The PME is a dollar-weighted Long-Nickels calculation of monthly changes in the Policy Benchmark. Policy Benchmark is comprised of (50% CS Leveraged Loan Index + 50% ICE BAML U.S. High Yield BB-B Constrained) + 150 basis points). Performance figures, including differences, are rounded.

Performance by Sub-Strategy

Legacy Portfolio Framework

As of December 31, 2023

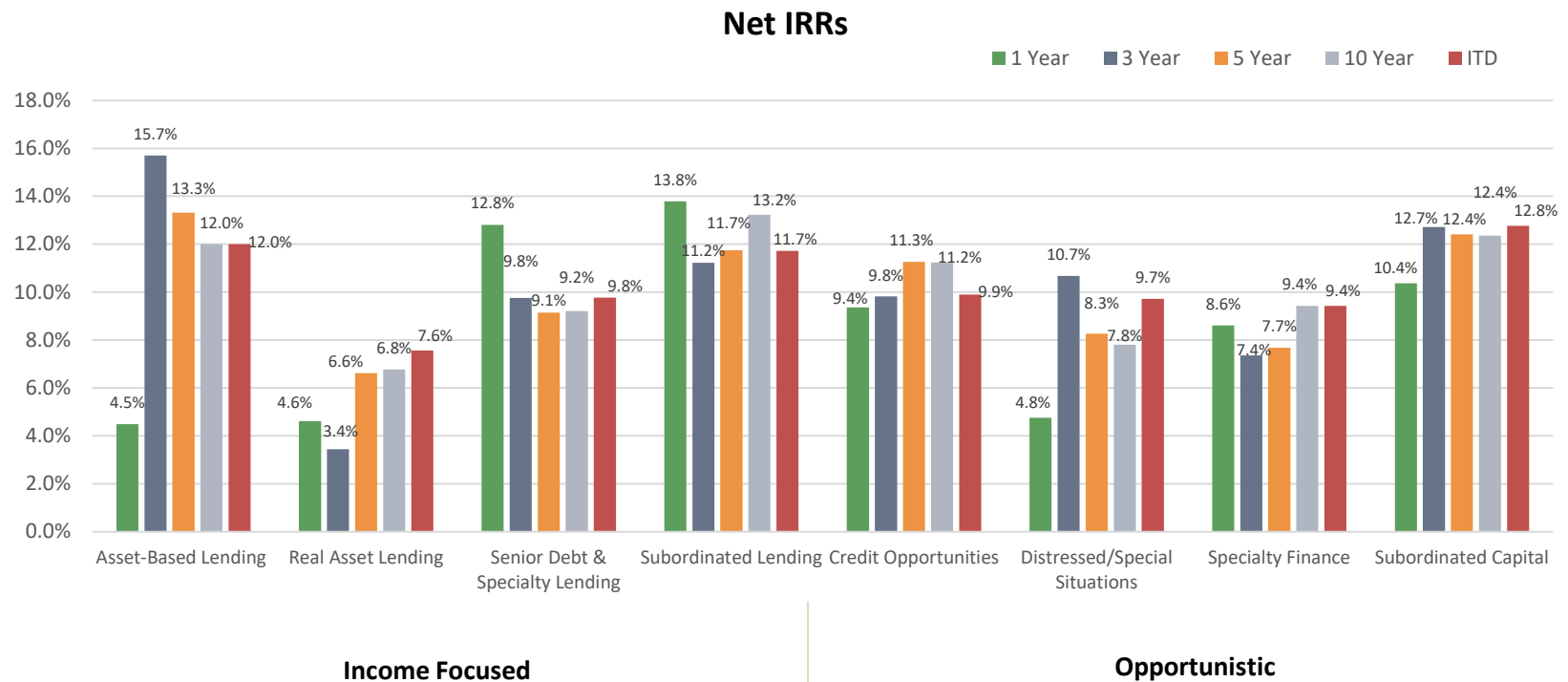


Notes: Aksia, Cambridge Associates, and SFERS. Since inception includes 17 Distressed/Special Situation funds that were transferred from SFERS' Private Equity portfolio on June 30, 2019, totaling \$105 million in NAV.

Performance by Sub-Strategy

Proposed Portfolio Framework

As of December 31, 2023

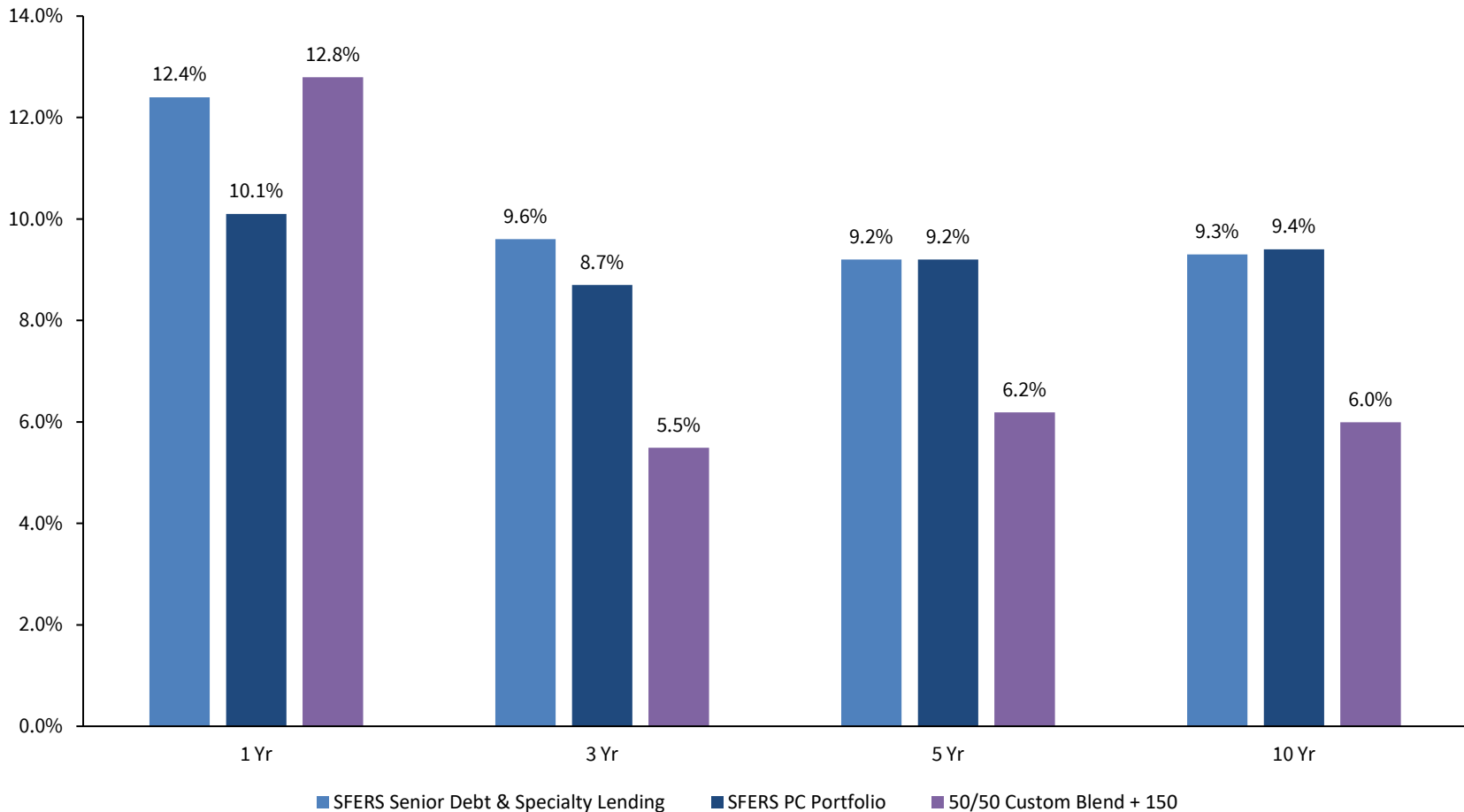


Notes: Aksia, Cambridge Associates, and SFERS. Since inception includes 17 Distressed/Special Situation funds that were transferred from SFERS' Private Equity portfolio on June 30, 2019, totaling \$105 million in NAV.



Senior Debt & Specialty Lending Performance

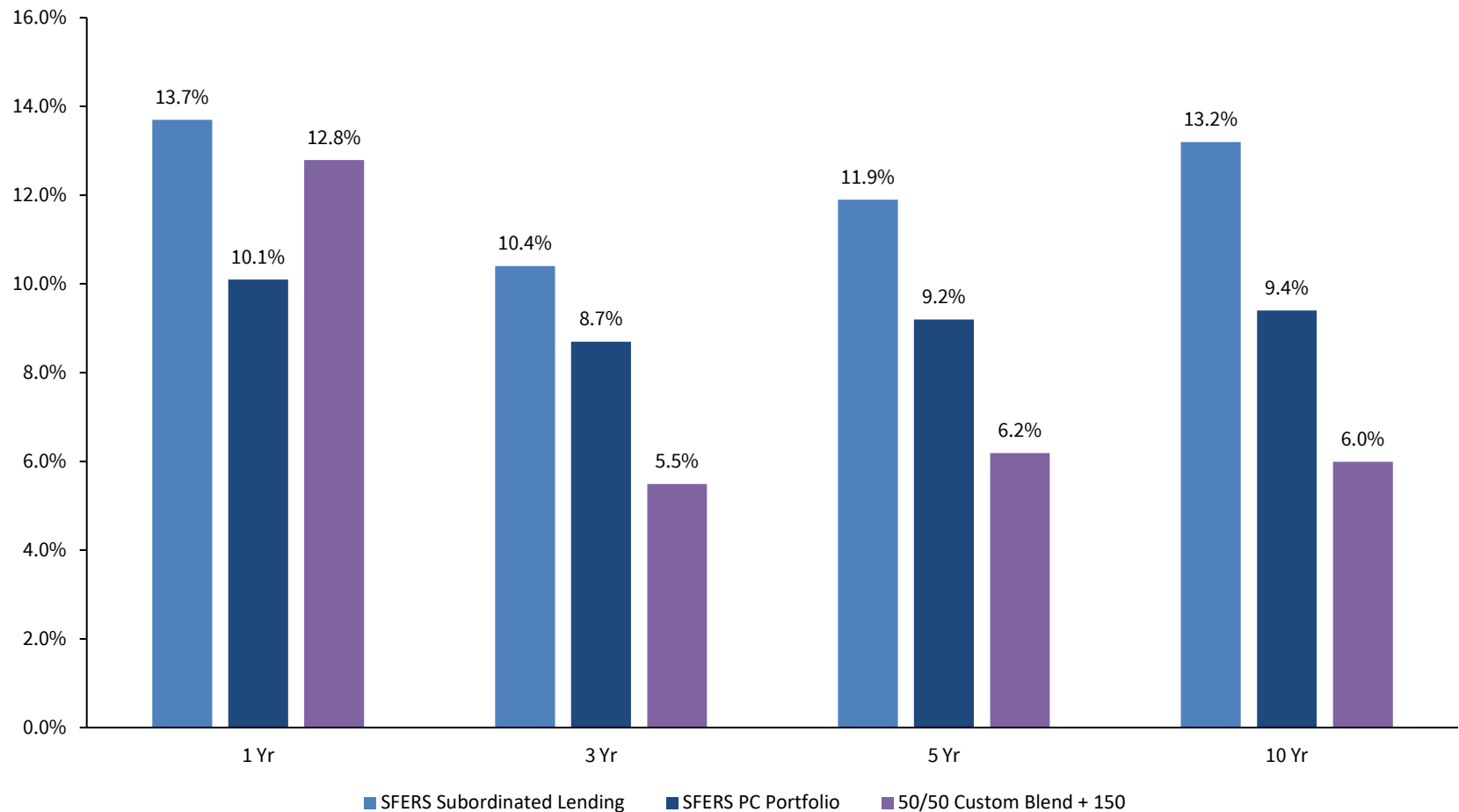
Periodic rates of return as of March 31, 2024



Notes: Cambridge Associates. Based on proposed portfolio framework.

Subordinated Lending Performance

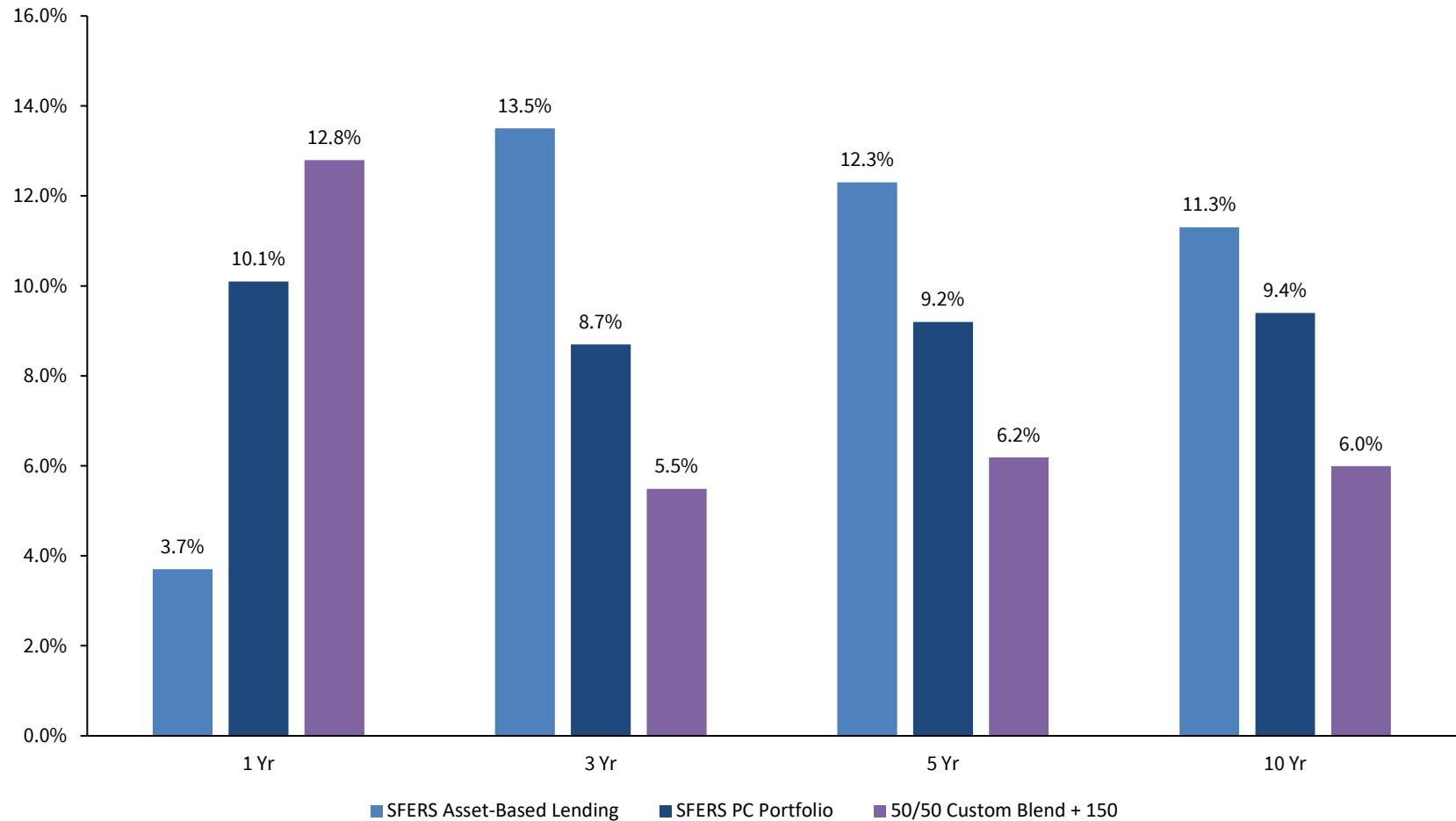
Periodic rates of return as of March 31, 2024



Notes: Cambridge Associates. Based on proposed portfolio framework.

Asset-Based Lending Performance

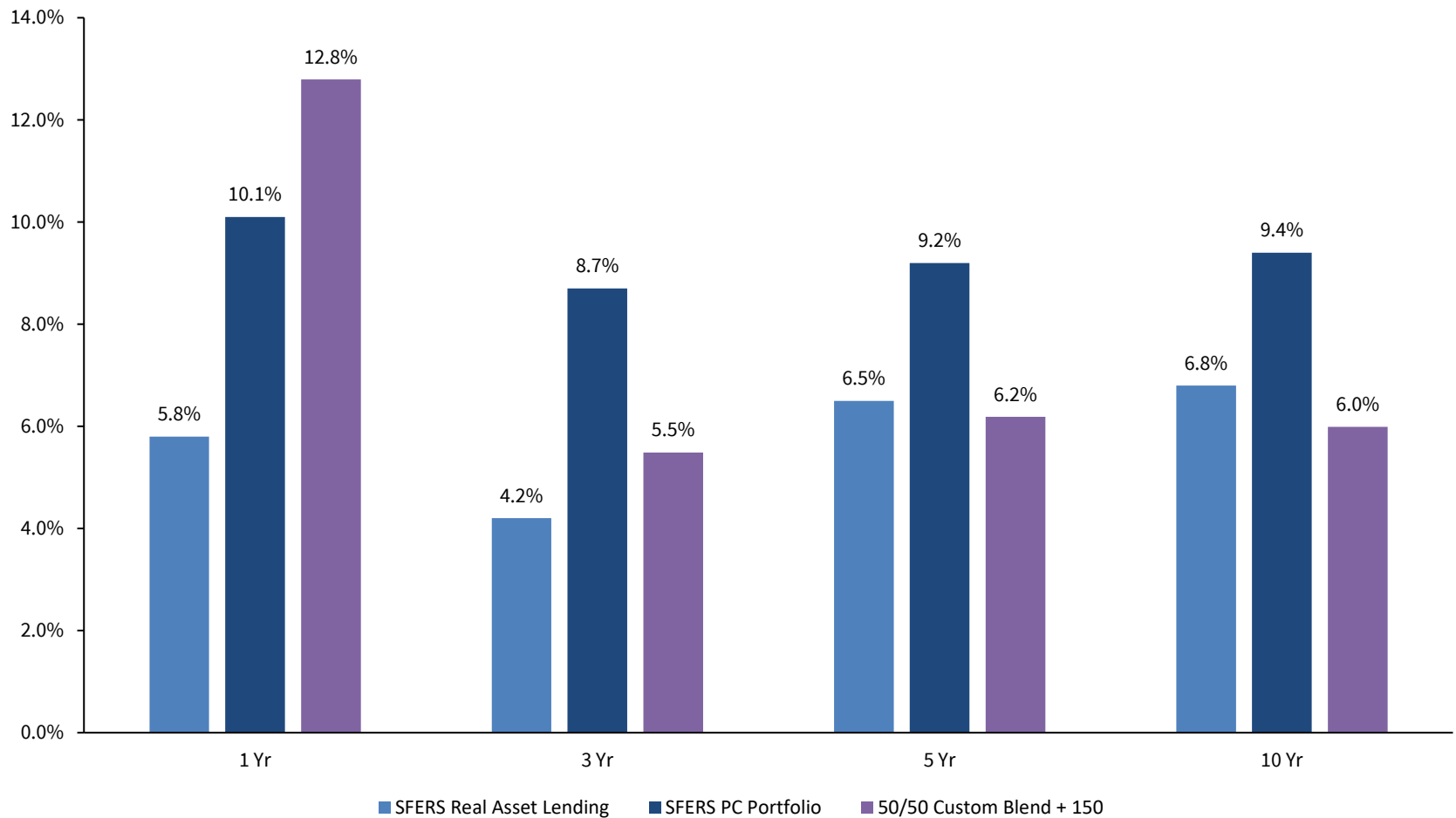
Periodic rates of return as of March 31, 2024



Notes: Cambridge Associates. Based on proposed portfolio framework.

Real Assets Lending Performance

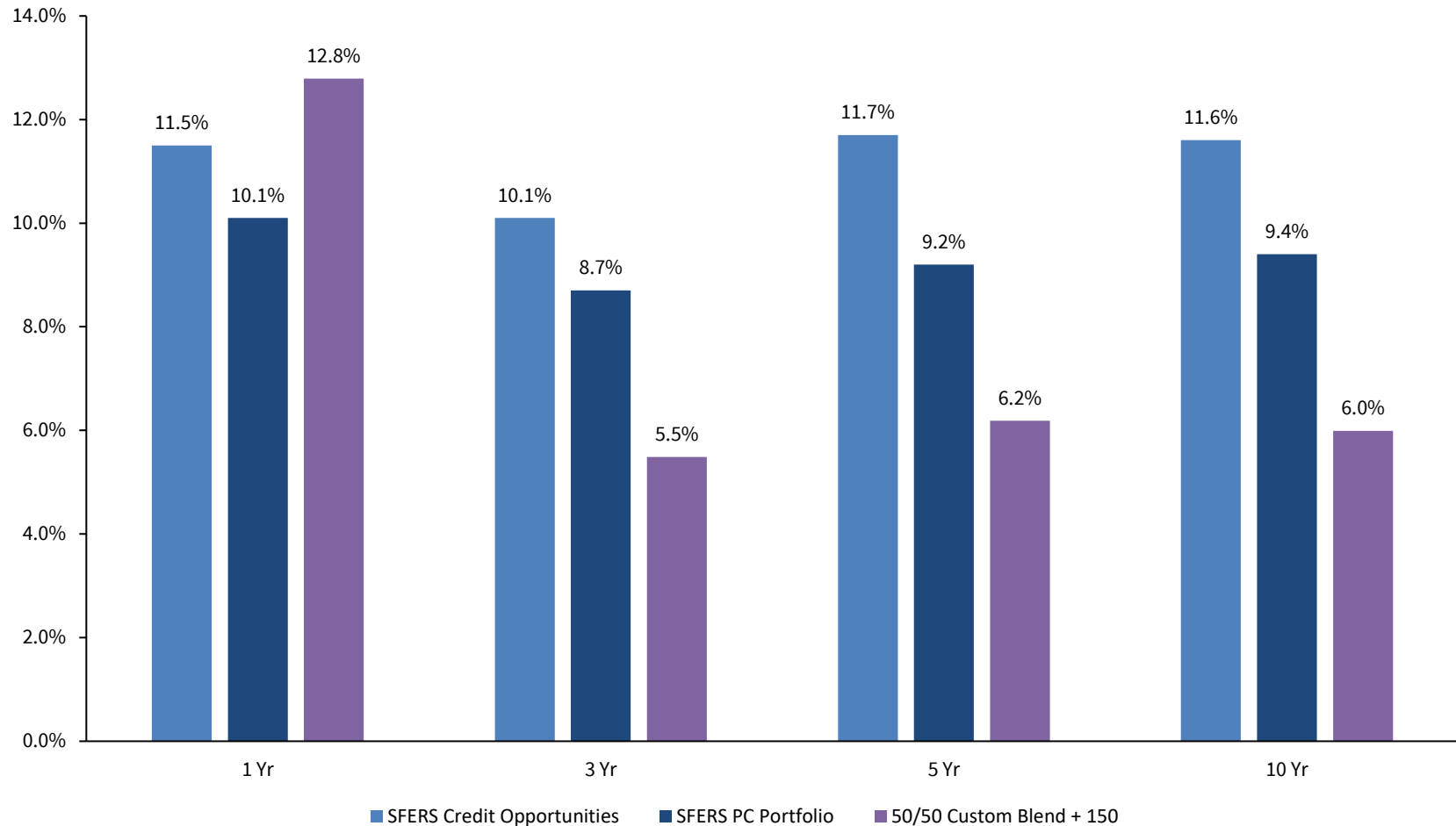
Periodic rates of return as of March 31, 2024



Notes: Cambridge Associates. Based on proposed portfolio framework.

Credit Opportunities Performance

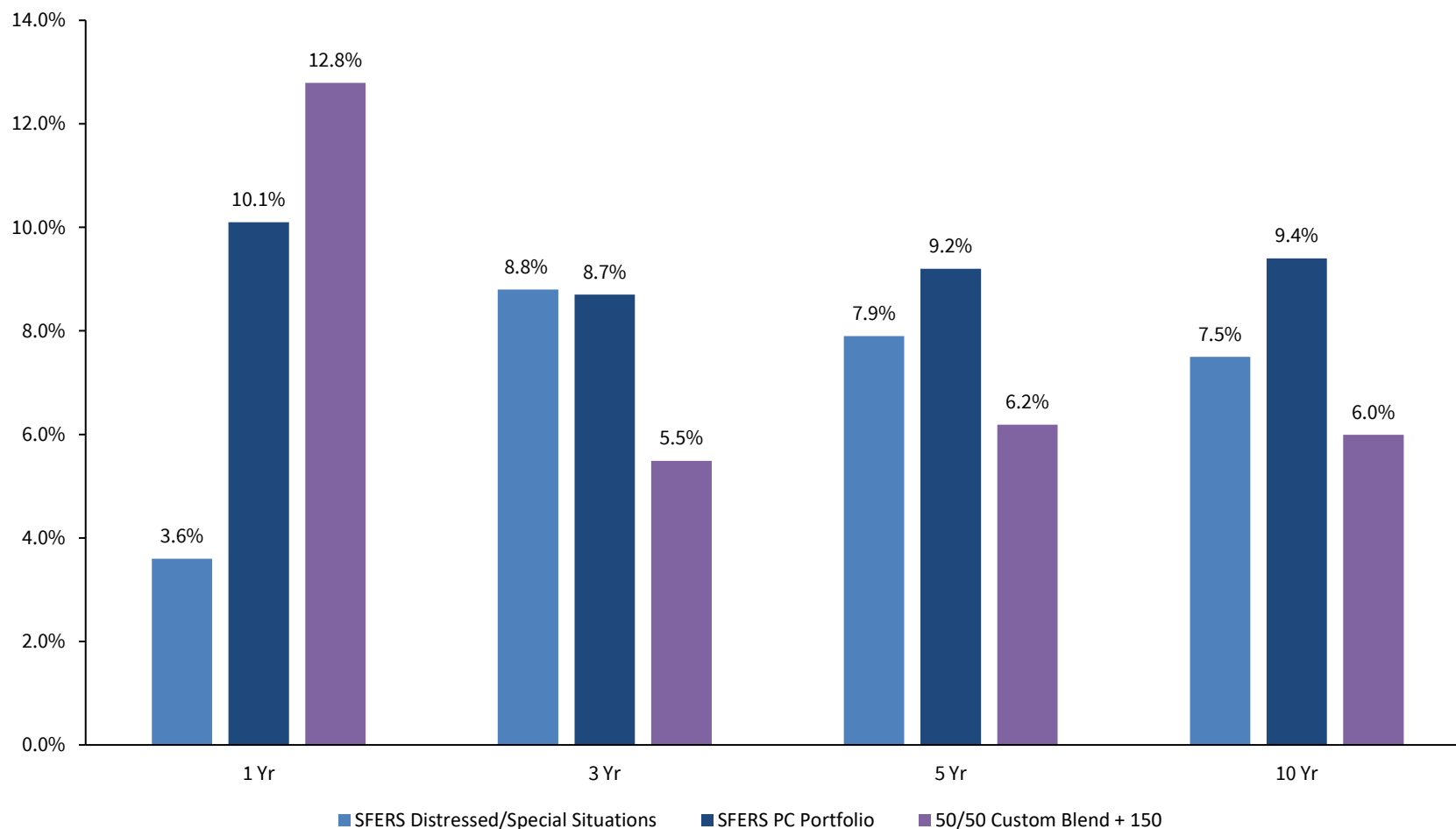
Periodic rates of return as of March 31, 2024



Notes: Cambridge Associates. Based on proposed portfolio framework.

Distressed/Special Situations Performance

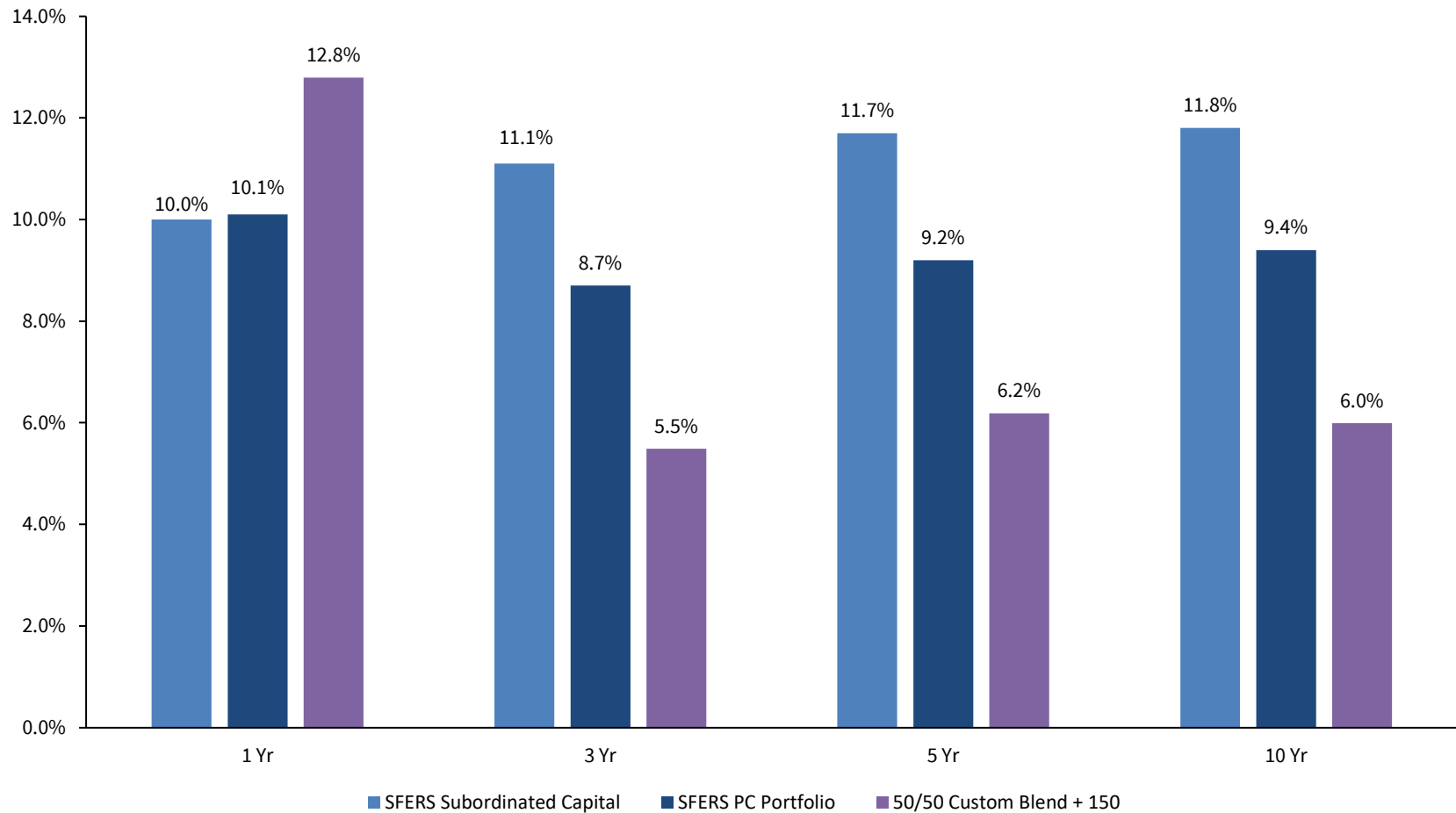
Periodic rates of return as of March 31, 2024



Notes: Cambridge Associates. Based on proposed portfolio framework.

Subordinated Capital Performance

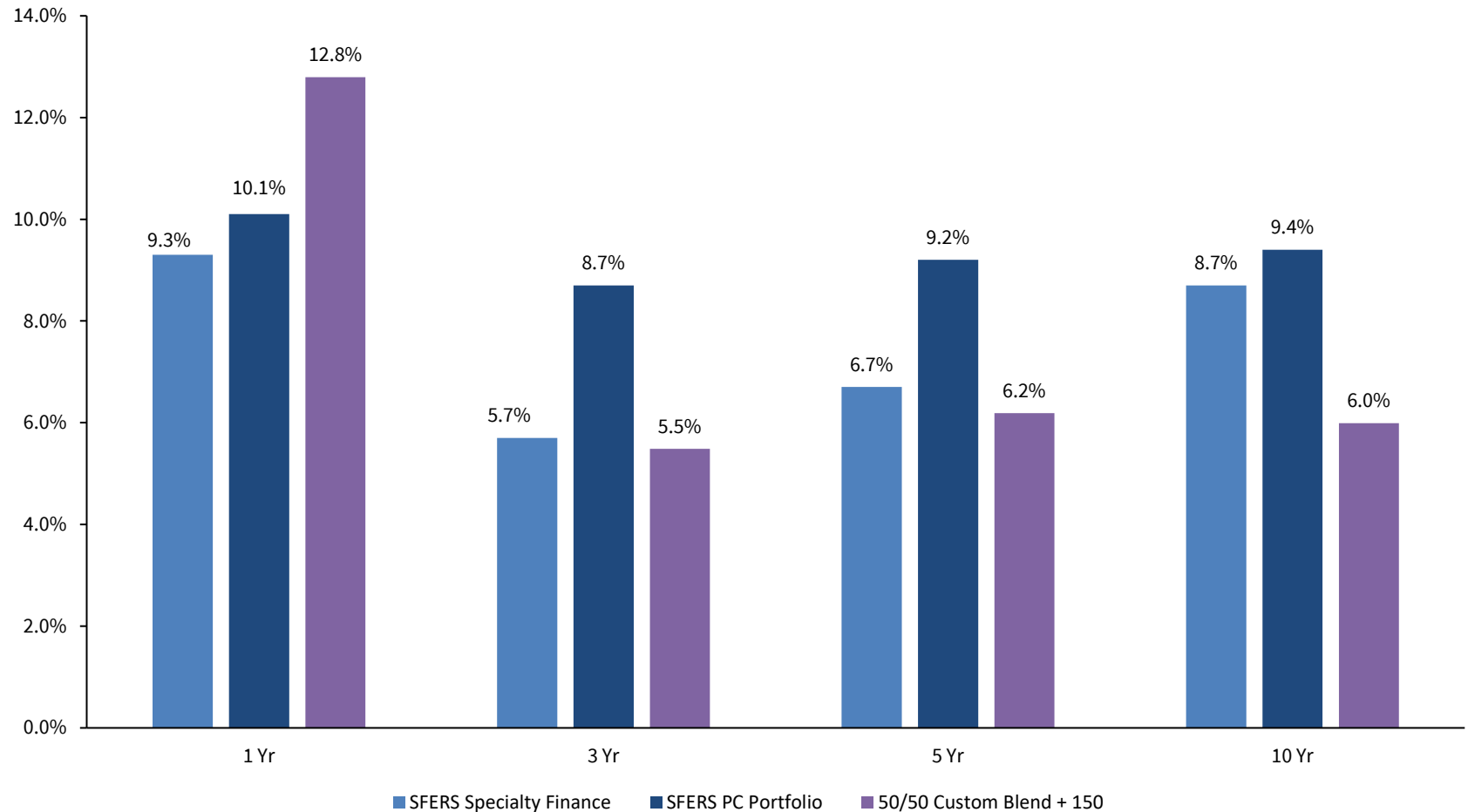
Periodic rates of return as of March 31, 2024



Notes: Cambridge Associates. Based on proposed portfolio framework.

Specialty Finance Performance

Periodic rates of return as of March 31, 2024

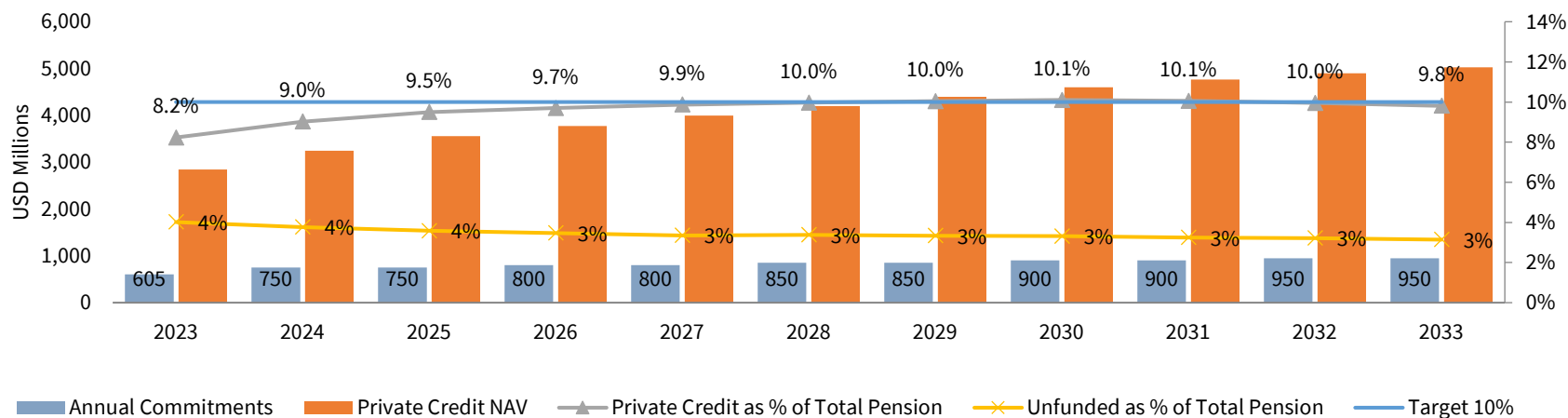


Notes: Cambridge Associates. Based on proposed portfolio framework.

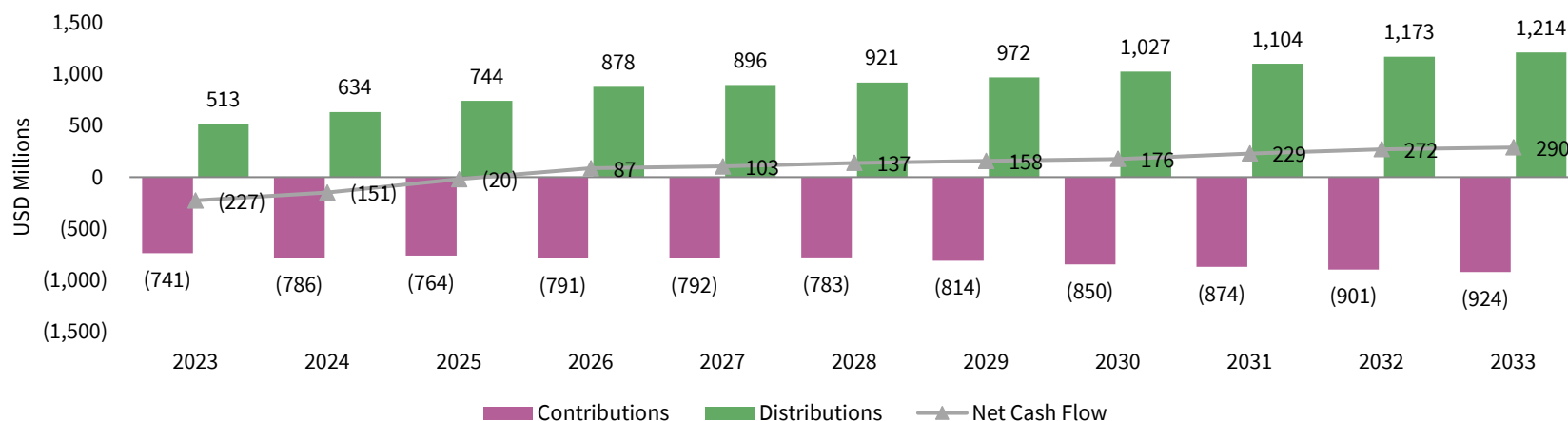
Base Case Pacing

Starting Pool Value: \$34.6 billion (as of December 31, 2023)

Commitment Pace



Estimated Annual Cash Flows

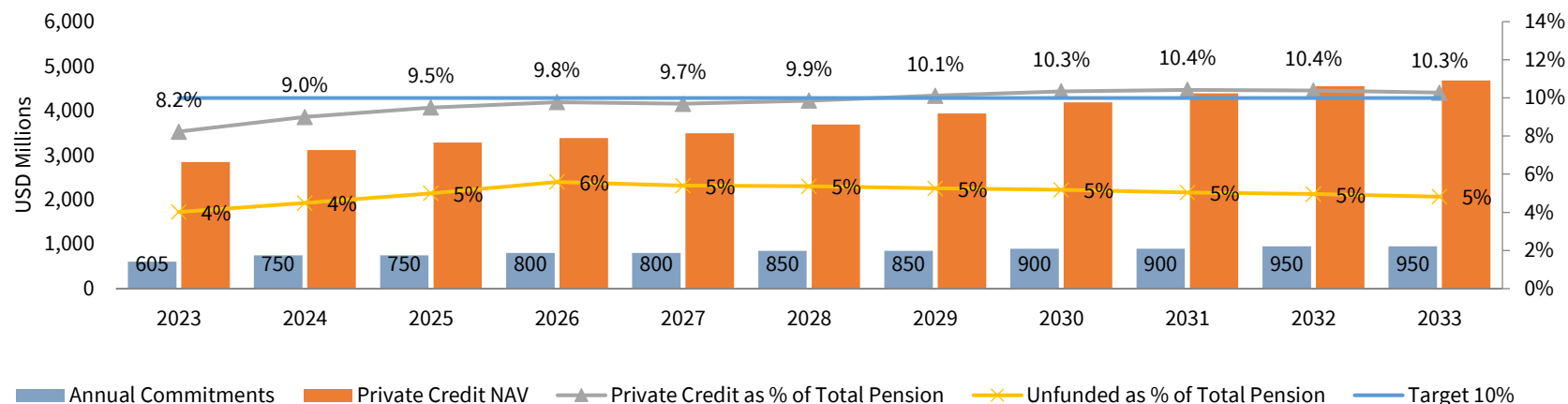


Notes: Cambridge Associates. Model populated with historical portfolio data as of September 30, 2023, unless otherwise noted. 2023 Annual Commitments and 2023 Annual Cash Flows are as of December 31, 2023. Projected cash flows and allocations based on CA modeling and proprietary assumptions. Modeling is intended to be used as a guideline; actual capital calls, distributions, and exposure may differ materially from projections, depending on macroeconomic and fund-specific variables.

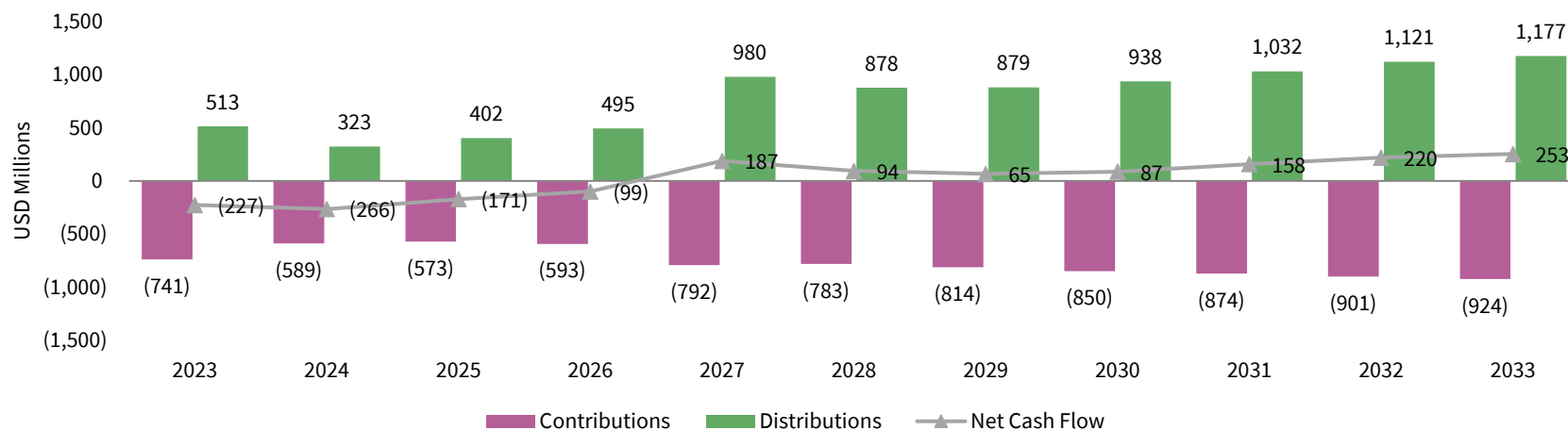
No Growth Pacing

Starting Pool Value: \$34.6 billion (as of December 31, 2023)

Commitment Pace



Estimated Annual Cash Flows



Notes: Cambridge Associates. : Model populated with historical portfolio data as of September 30, 2023, unless otherwise noted.

2023 Annual Commitments and 2023 Annual Cash Flows are as of December 31, 2023. Projected cash flows and allocations based on CA modeling and proprietary assumptions. Modeling is intended to be used as a guideline; actual capital calls, distributions, and exposure may differ materially from projections, depending on macroeconomic and fund-specific variables.



SFERS
San Francisco Employees' Retirement System

SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM

PRIVATE CREDIT PORTFOLIO UPDATE

PRESENTED BY ANITA NG, INVESTMENT MANAGING DIRECTOR, AND RICHARD GRIMM, INVESTMENT MANAGING DIRECTOR





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PORTFOLIO OVERVIEW



Key Highlights

- SFERS Private Credit portfolio provided a less-volatile anchor to SFERS' broader portfolio, as intended, through a disruptive environment that saw valuations in many other rate-sensitive asset classes dramatically reset
- The predominantly floating rate nature of performing private credit and meaningful loan-to-value cushions for existing portfolios has led to increasing yields that have outstripped headwinds from spread widening and provisioning
- For newly-originated performing private credit, while prospective returns have increased due to rate rises, 2024 to-date has experienced spread and fee compression. However, leverage ratios remain moderated, and loan documentation continues to provide better lender protections than in liquid markets
- Interest and debt service affordability has become a meaningful concern for select investments and segments leading to a meaningful universe of borrowers confronting liquidity challenges and the likelihood of a higher default rate (or constructive default rate) environment
 - Private credit would be positioned favorably to equities and liquid fixed income with expectations of recovery rates on defaulted investments to remain higher than that within liquid fixed income markets
- In a higher default environment, with the significant growth in the broadly syndicated leveraged loan and high yield markets since the last sustained downturn, opportunistic credit and distressed strategies are positioned to take advantage of a broad universe of overleveraged capital structures
- There is little reason to expect private credit won't continue to grow and take market share as the most reliable source of financing for many borrowers and as a solutions provider across sub-strategies

PRIVATE CREDIT MARKET UPDATE



Private Credit Continues to Provide Attractive Opportunities

LEVERAGE	<ul style="list-style-type: none">▪ New issue leverage multiples (Debt/EBITDA) had remained suppressed in recent history, weighed down by interest cost burdens and larger equity contributions. However, multiples have begun to trend upward year-to-date, driven in part by the growing adoption of payment-in-kind (PIK) loan structures, which enables further multiple expansion▪ A higher-for-longer rate environment (SOFR near 5.25%) may prove more challenging for interest coverage, although market participants expect at least one cut this year
PRICING & TERMS	<ul style="list-style-type: none">▪ The strengthening of leveraged finance markets along with broad-based spread compression in public markets have affected private credit spreads, which have narrowed c. 50-150 bps over 1H 2024▪ Supply and demand dynamics in the direct lending segment are shifting in favor of borrowers, driven by elevated dry powder levels, intensifying lender competition for scarce deals, and growing interest from retail platforms▪ While terms for privately negotiated loans remain more robust than those in the broadly syndicated loan (BSL) markets—with more restrictive EBITDA definitions, incurrence tests, and baskets—there continues to be pressure on loan structures
DEFAULT RATES AND RECESSION RISK	<ul style="list-style-type: none">▪ Default rates remain low by historical standards, and the downward/upgrade ratio for the BSL market, a leading indicator for private credit portfolio stress, is levelling off▪ Private credit defaults were skewed towards out-of-court liability management transactions, as lenders and sponsors pursued amendments—such as pricing increases, maturity extensions, and covenant holidays—ahead of true covenant breaches▪ Enhanced lender protections and covenants should allow private credit managers to continue outperforming the BSL and high yield (HY) markets in recovery rates▪ Unemployment remains low by historical measures and other macroeconomic metrics are generally holding up. However, heightened market volatility could be expected as the US election approaches

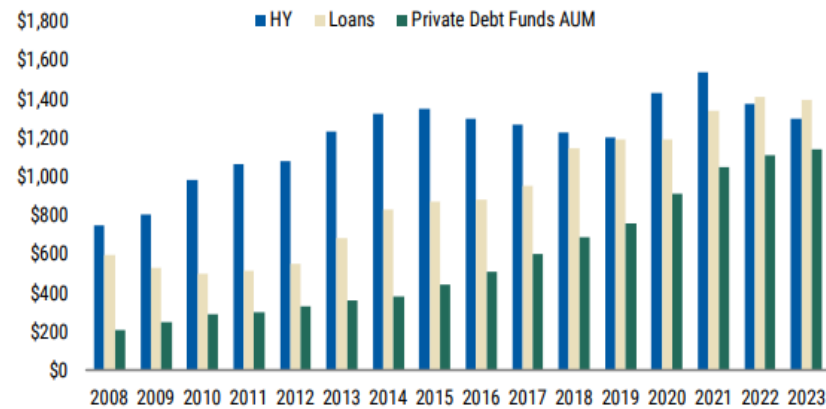
Private Credit Continues to Provide Attractive Opportunities (cont'd)

<p>OPPORTUNISTIC & DISTRESSED OPPORTUNITIES</p>	<ul style="list-style-type: none"> ▪ A prolonged higher interest rate environment, coupled with subdued revenue growth for some companies, has put pressure on more highly levered balance sheets, creating stressed opportunities ripe for opportunistic managers ▪ Poor quality of credit documents in existing capital structures may lead to significant rescue financing and capital solutions opportunities rather than traditional lender-led restructurings ▪ While pockets of distress are appearing across various sectors, a deeper stress/distress cycle seems increasingly inevitable for real estate-backed lending ▪ Focus remains on bank balance sheets as sourcing opportunities for portfolios and structured solutions
<p>DEALS, DRY POWDER, FUND RAISING, AND CONSOLIDATION</p>	<ul style="list-style-type: none"> ▪ Recent fundraising has skewed towards larger platforms, exemplified by Ares SDL closing with a record \$34 billion capital base in July, far exceeding its target. Managers are intent on growing their assets under management (AUM) and market share ▪ Consolidation in the private credit market is expected to continue as large platforms seek to add adjacent strategies and/or widen their geographical footprint ▪ M&A volumes remain below the 2022 highs, with recent direct lending deal volumes skewed to refinancing activity. Large existing portfolios and incumbency may support greater deal-flow
<p>BEST OPPORTUNITIES</p>	<ul style="list-style-type: none"> ▪ Across the private credit landscape, compelling opportunities emerge in areas such as lower middle market direct lending, specialty lending, niche specialty finance, opportunistic credit, and special situations ▪ Manager selection is expected to exacerbate return dispersion, leading to a wider performance gap than historically observed ▪ Diversification by strategy and across geographies remains a crucial element in optimizing performance

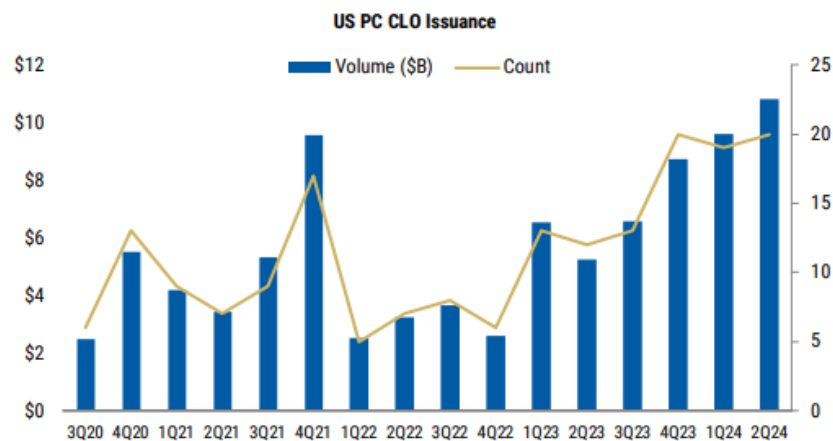
Private Credit AUM Continues to Grow

- US direct lending AUM has doubled in size over the past five years and continues to have meaningful dry powder to drive continued growth
- As direct lenders often employ leverage, more flexible, lower cost, capital such as CLO issuance could boost additional growth
- According to Morgan Stanley, however, private debt funds raised \$30 billion in Q1 2024, slower than the annualized pace from 2015 - 2022

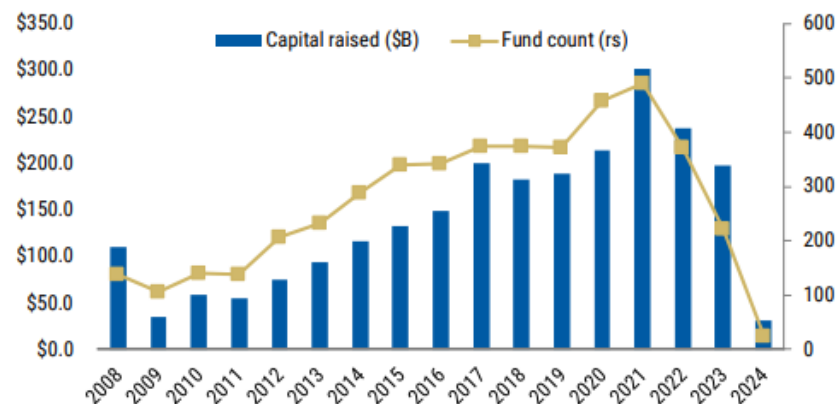
US Leveraged Finance Market Outstanding (\$ Bn)



US Private Credit CLO Issuance Providing Additional Capital Formation



Private Debt Fundraising Activity

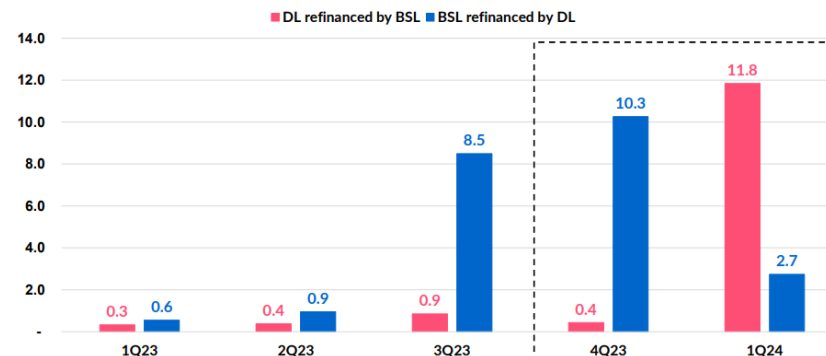


Direct Lending and Public Markets

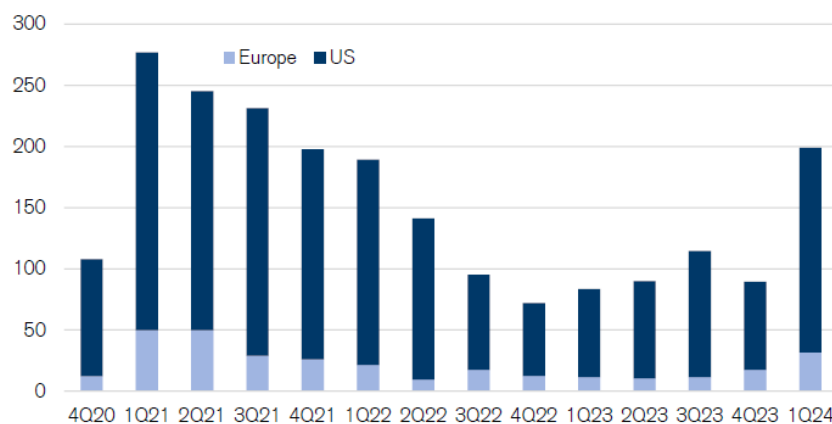
Large borrowers can now tap direct lending or debt capital markets for financing alternatives

- As capacity expanded, large borrowers have been able to toggle between private credit and capital market solutions; borrower and deal profiles dictate best alternatives
- The direct lending certainty of close, flexibility, and future-built (e.g., DDTL) characteristics have led to its dominance as the preferred source of capital for LBOs
- In good conditions, the BSL market remains in favor as a source of refinancing

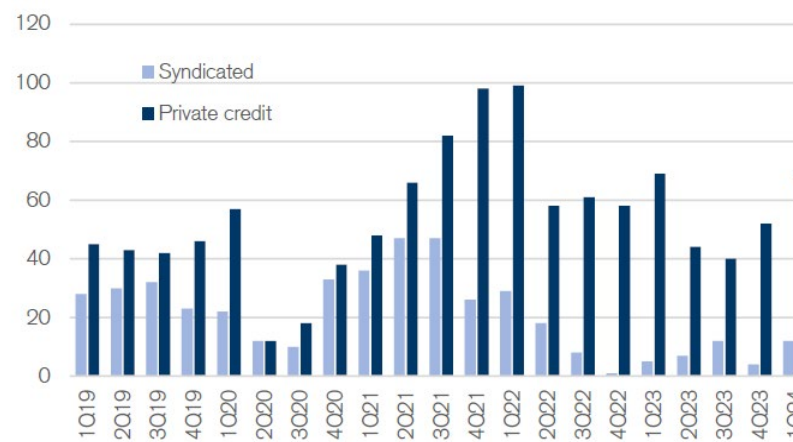
BSL & Direct Lending Takeouts



Quarterly Leveraged Loan New Issuance Volume (\$bn)



of LBOs Financed in PC & BSL Markets (\$bn)

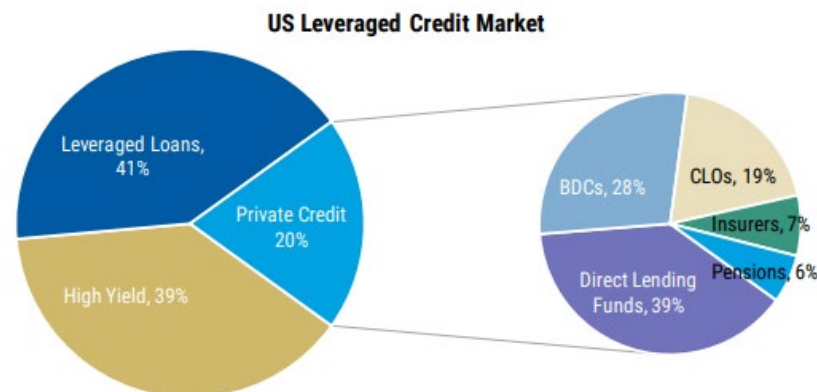


Private Credit Investor Types

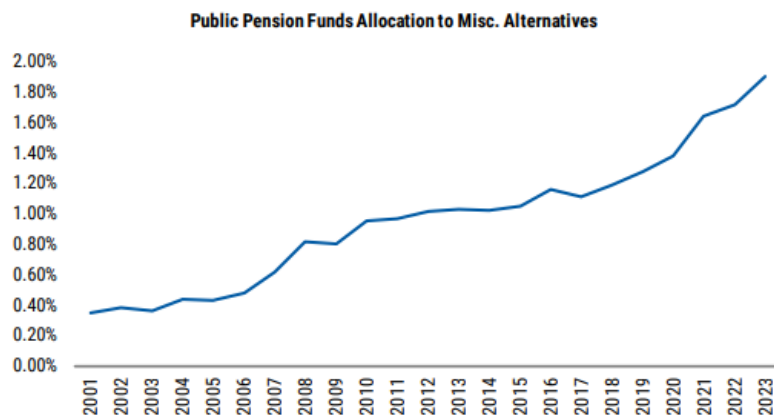
Private credit AUM growth driven by strong demand across institutional and retail investors

- Direct lending AUM increases have propelled growth in the size of the private credit market more broadly; the credit market disruptions of 2022/2023 served as a growth accelerant
- The stability in returns along with historical return premiums have continued to drive demand from institutional and retail investors
- Retail investor channels continue to be targeted for AUM growth, which could lead to more volatility of capital flows in the future

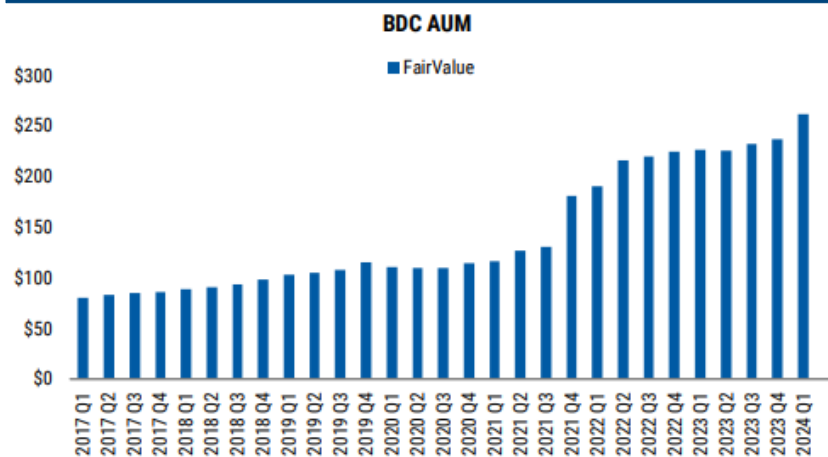
U.S. Direct Lending Estimated at 20% of Leveraged Finance Market



Institutional Investors Continue to Increase Private Credit AUM & Targets

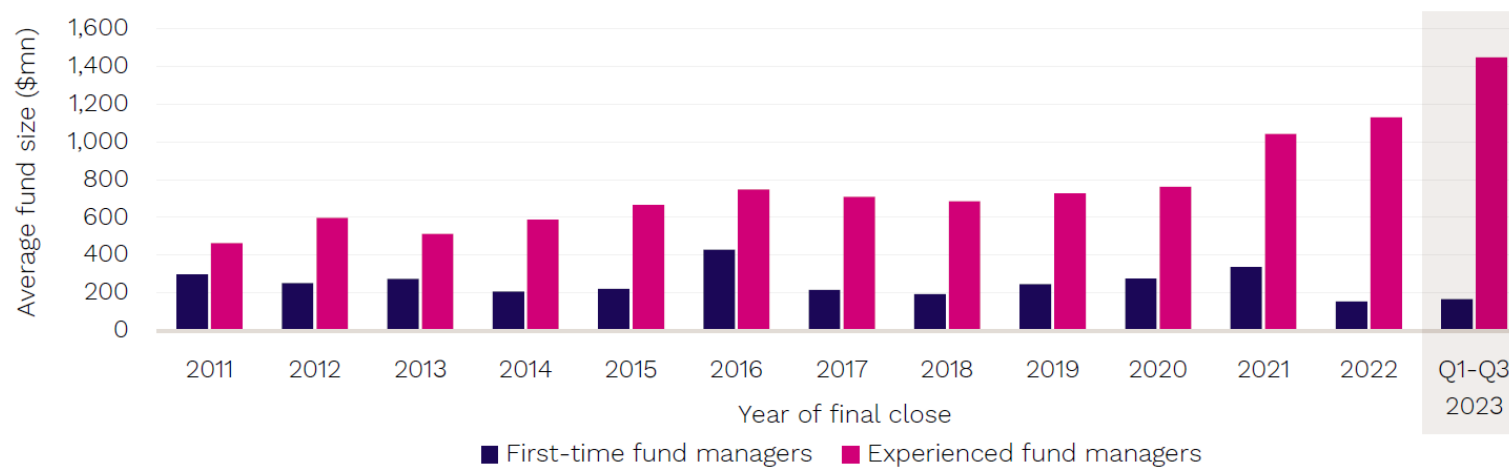


BDC AUM tracking at \$260 bn as of Q1 '24 (Pitchbook)

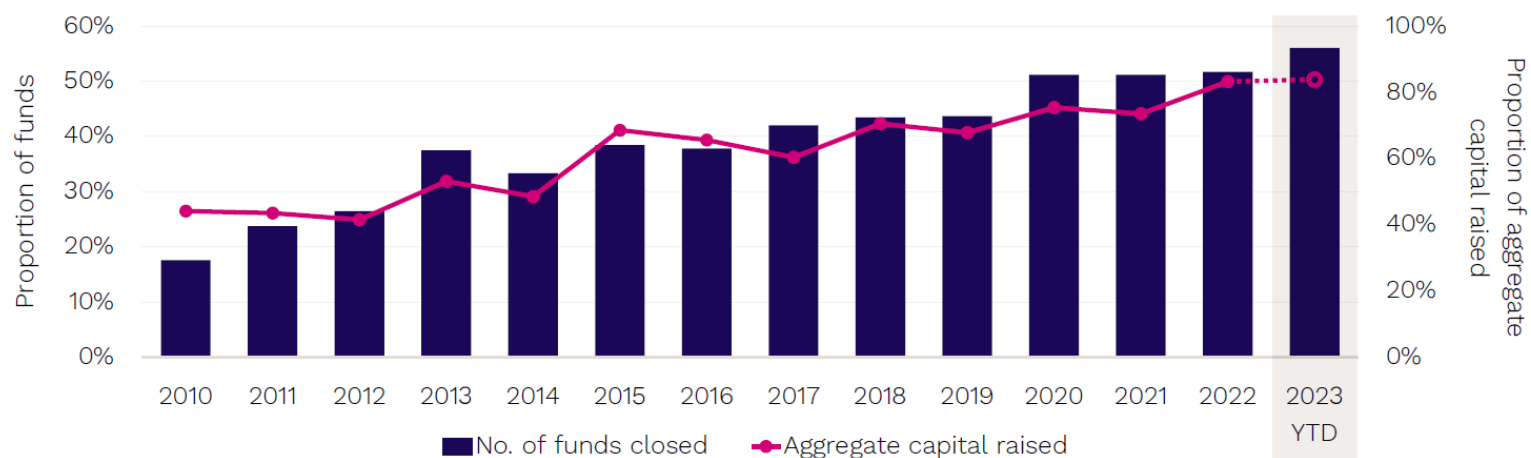


Larger Direct Lenders Dominate Fundraising

Average private debt fund size: first-time vs. experienced fund managers



Fourth fund or later private debt fundraising as a proportion of total

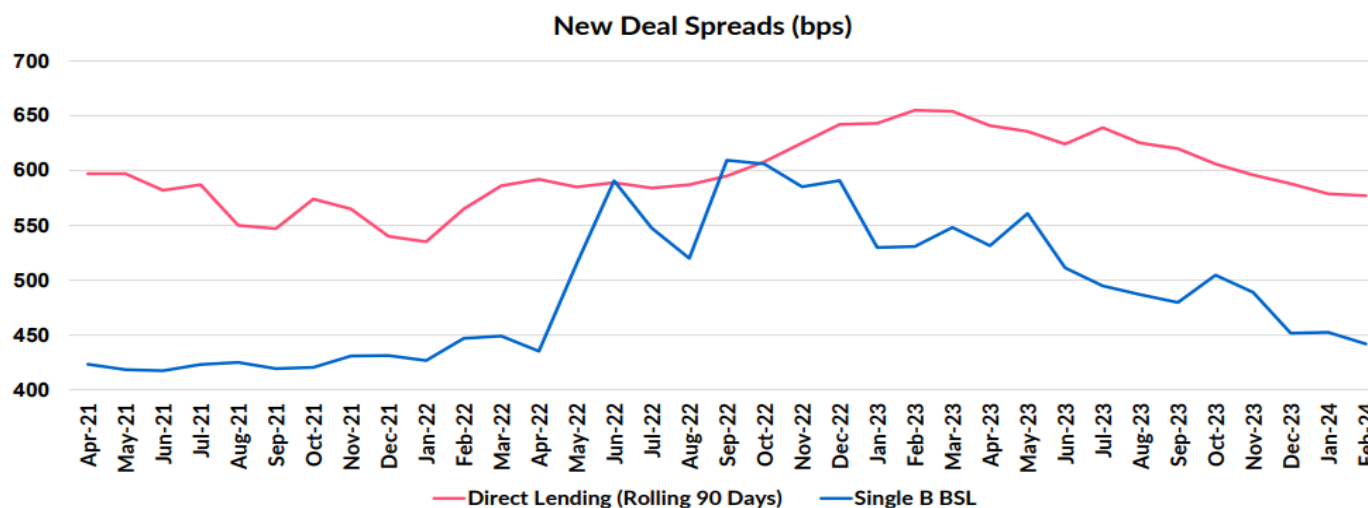
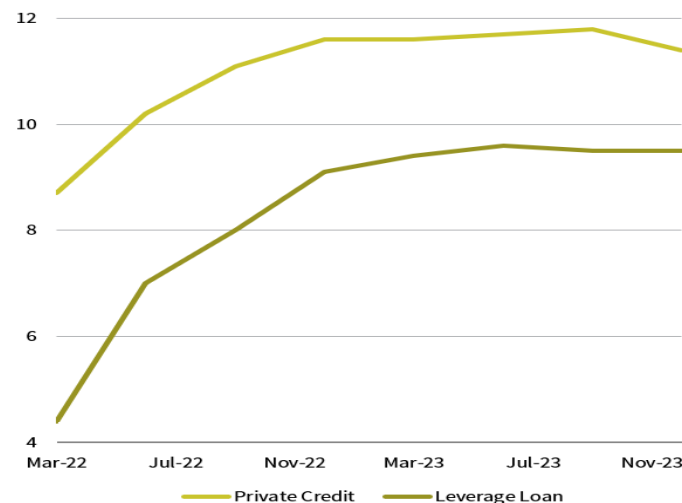


Yield Premium Persists for Direct Lending

With volatility in the BSL market, the private credit spread premium can collapse and even invert temporarily

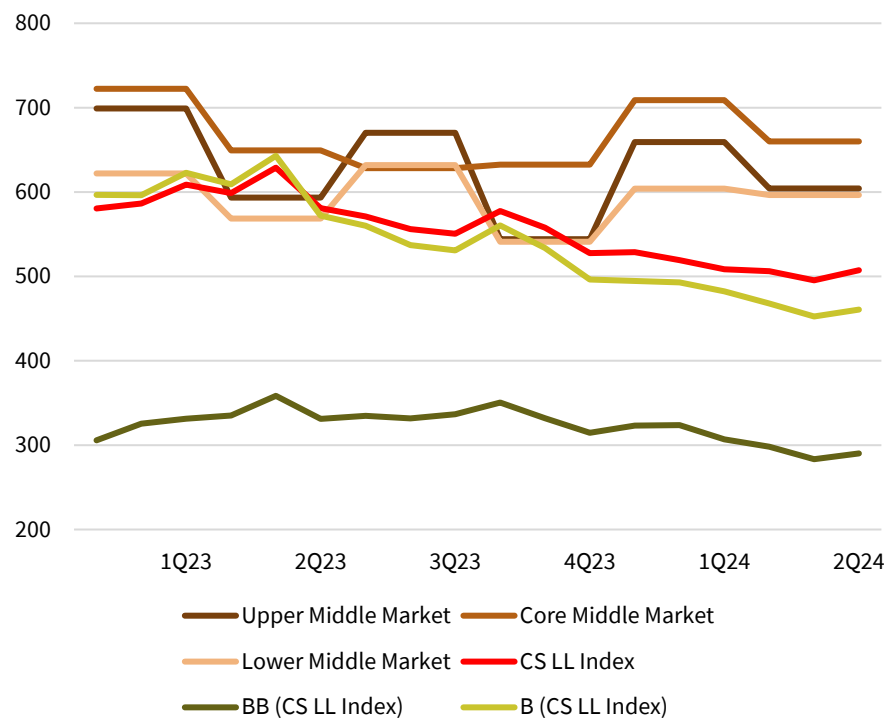
- Direct lending continues to deliver a yield premium, although this premium has shown some compression over time
- Direct lending is not homogenous; when capital markets are functioning well, it's sensible to think spread compression will be greater in the upper end of the market
- As spreads compress towards pre-2022 (prior to the base rate rise), vintage risk-reward relies more on base rates and limiting leverage

Yield Premium Persists for Direct Lending

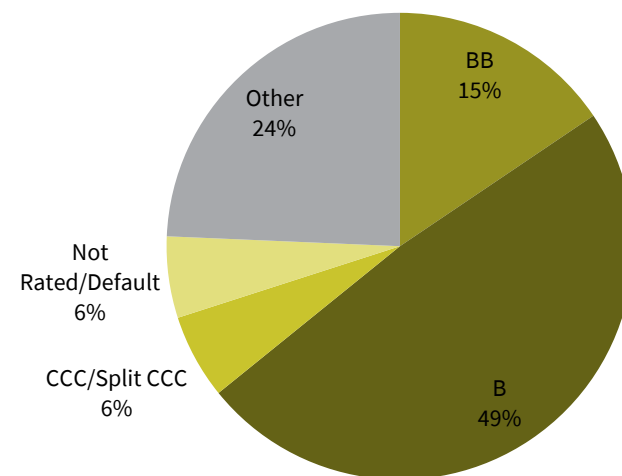


Public and Private Credit Spreads

Levered Loans vs. Private Credit Spreads¹



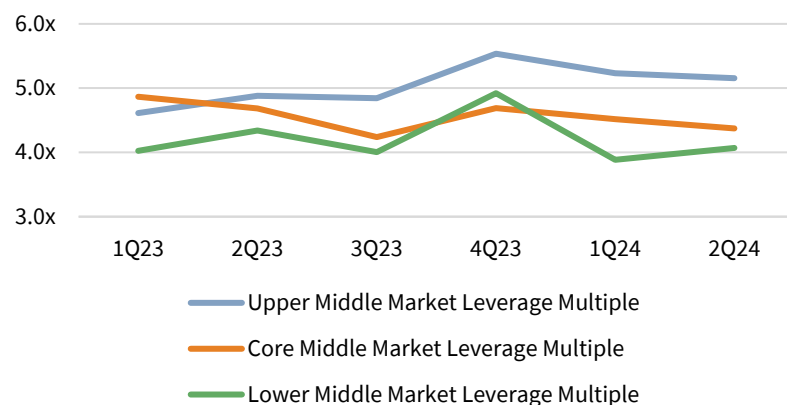
Ratings Breakdown: CS Leveraged Loan Index²



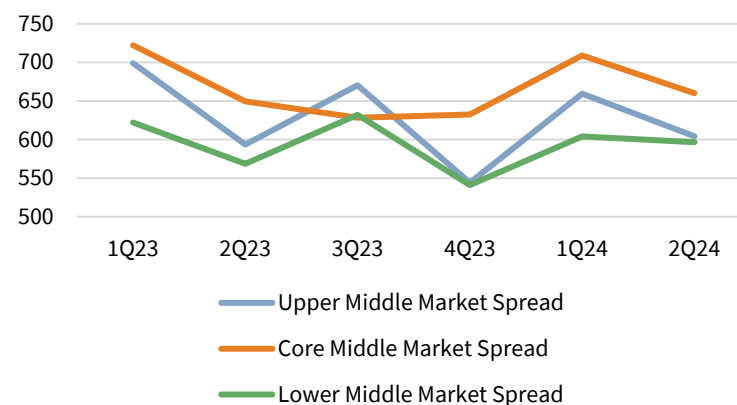
1. Cambridge Associates; Credit Suisse; underlying managers. As of 6/30/2024. Notes: Private Credit spreads data based on a total of 14 strategies, including five upper middle market managers, six core middle market managers, and three lower middle market managers. The definition of the middle market segment may vary across different managers based on portfolio company EBITDA, among other factors, but broadly falls within a \$35M to \$100M EBITDA range.
2. Credit Suisse. As of 6/30/2024. Notes: Discount margin assumes a three-year life, assuming all loans are paid off at par with no defaults. Other category includes Split BBB, Split BB, and Split B. Not Rated/Default includes CC, C, and Not Rated/Default loans.

Leverage and Pricing in Private Credit

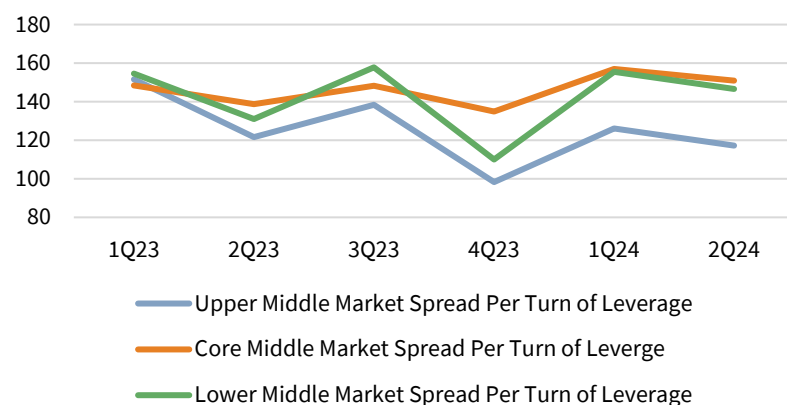
Leverage Multiple by Segment



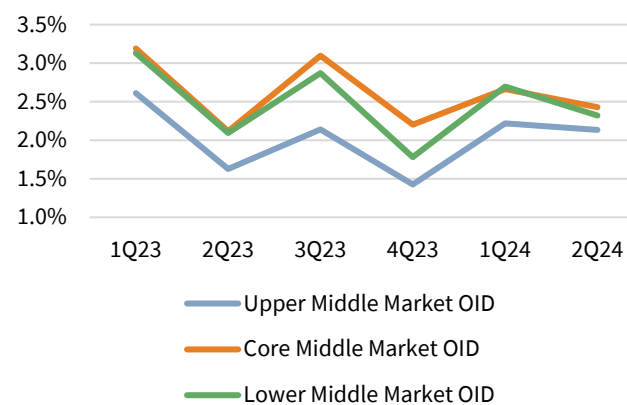
Spread by Segment



Spread Per Turn of Leverage by Segment



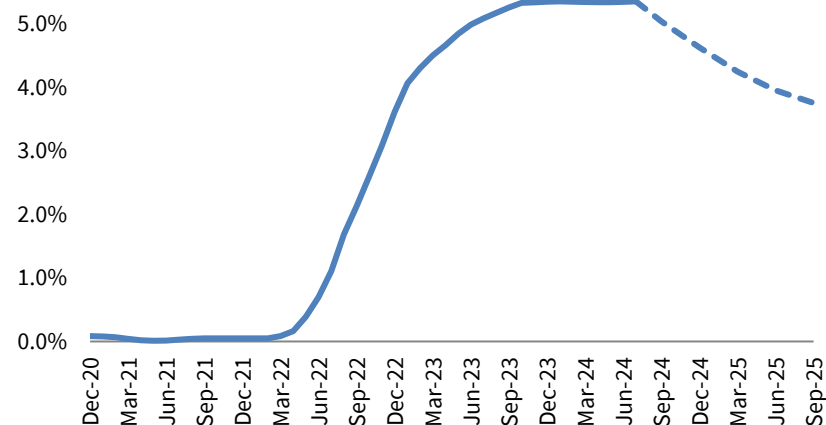
Upfront Fee by Segment (OID)



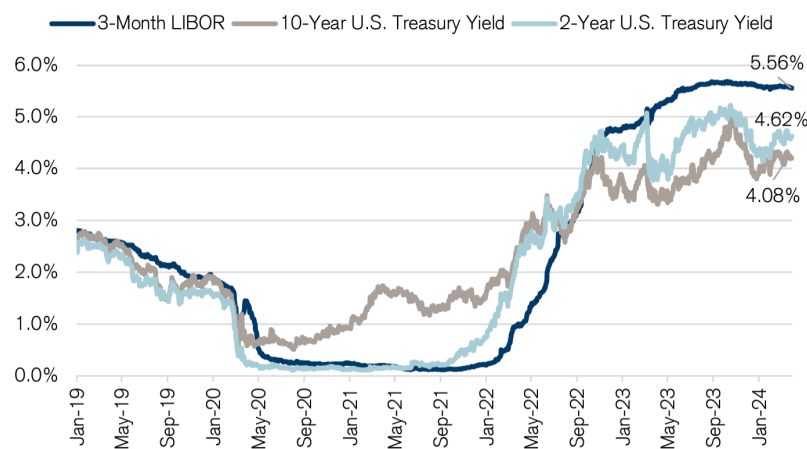
Higher for Longer Rates May Cause Stress

- After aggressively raising rates through 2022 and 2023, the Fed is maintaining its patience on rate cuts; first cut may come in September
- The 2/10 Treasury Yield Ratio, historically seen as a strong predictor of an upcoming recession remains inverted; GDP continues to show modest growth
- Even if SOFR rates follow expectations (lower), higher rates for longer will likely continue to pressure borrower cash flows

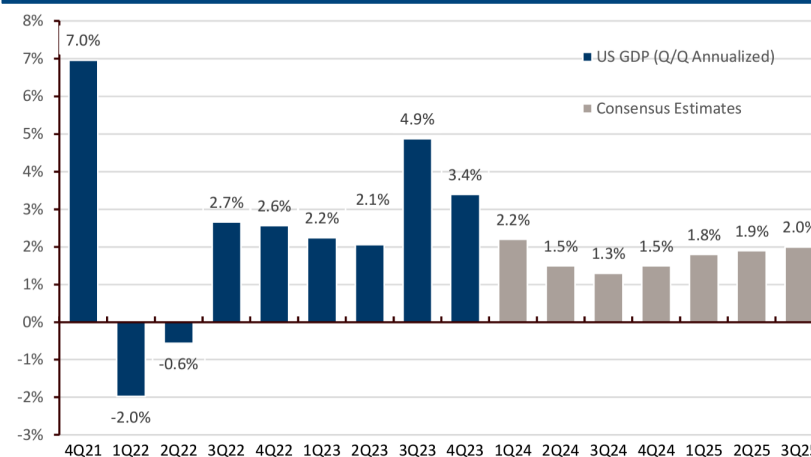
3 Month SOFR Rates¹



3 Month LIBOR and 2/10-Year US Treasury Yield²



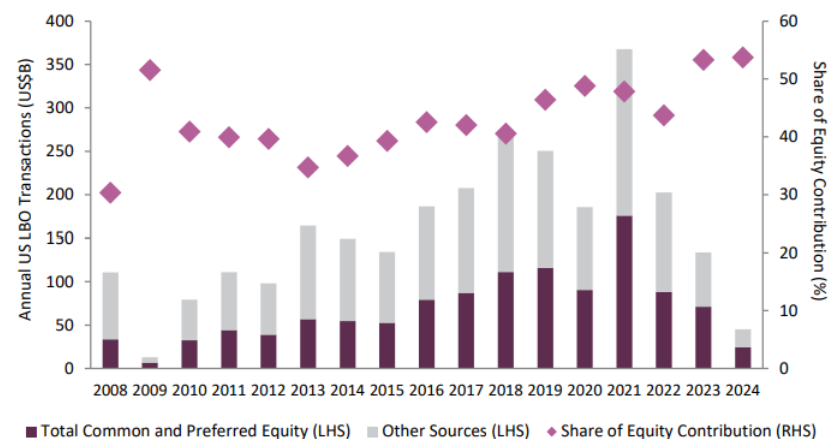
US GDP³



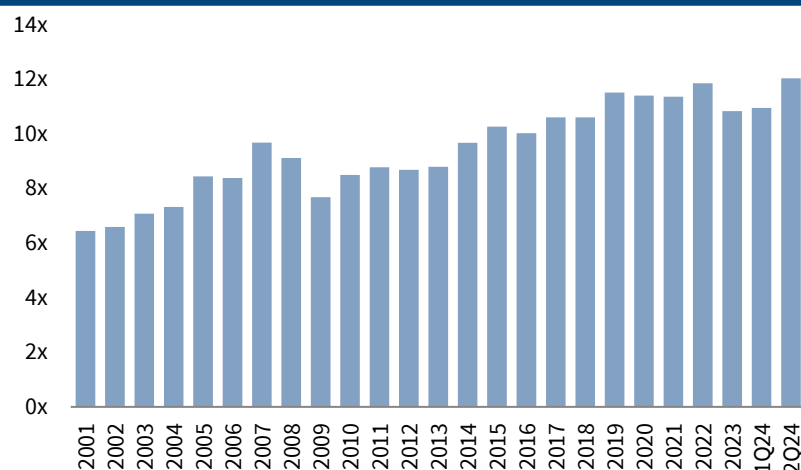
Purchase Price and Leverage Multiples Increasing

- After 2023 valuations had reset through Q1 2024, purchase prices increase once again, boosted by lower cost of capital but also by sponsor's willingness to contribute more equity
- Leverage ratios increase, although remain substantially lower than pre-2022 vintages; interest affordability serves as a key governor
- Lenders have been willing to introduce the limited use of PIK interest in senior debt to bridge early liquidity constraints

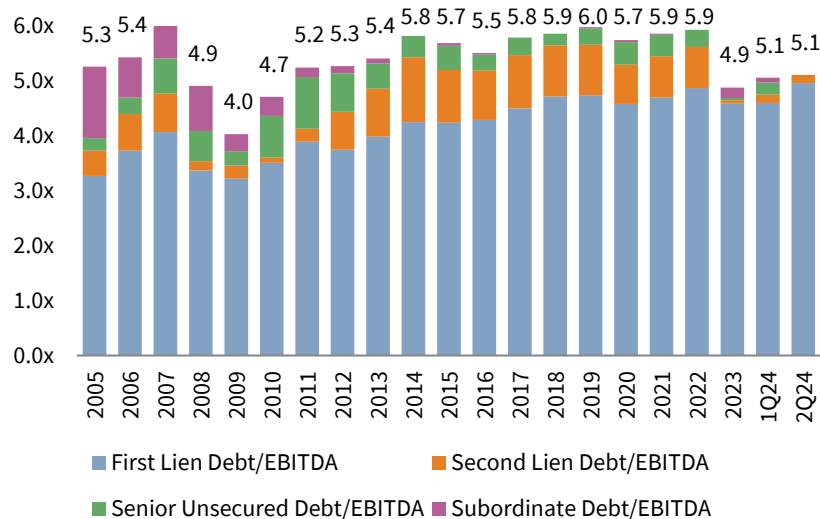
M&A Volumes & Equity Contributions¹



US LBO Purchase Price Multiples²



Average Debt Multiples by Tranche²



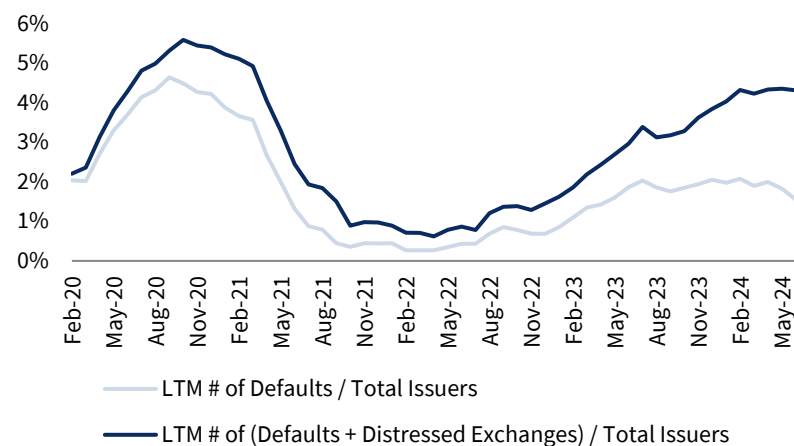
Source(s):

1. Pitchbook, LCD. As of 3/31/2024.
2. Pitchbook, LCD. As of 6/30/2024.

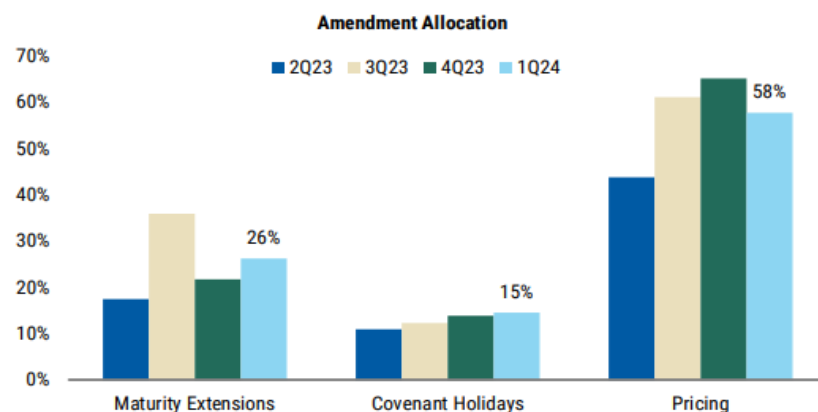
Default Rate Activity

Default rates may be depressed due to lack of material financial maintenance covenants; although distressed exchanges and amendments drive the majority of volumes

LEVERAGED LOAN DEFAULT RATE

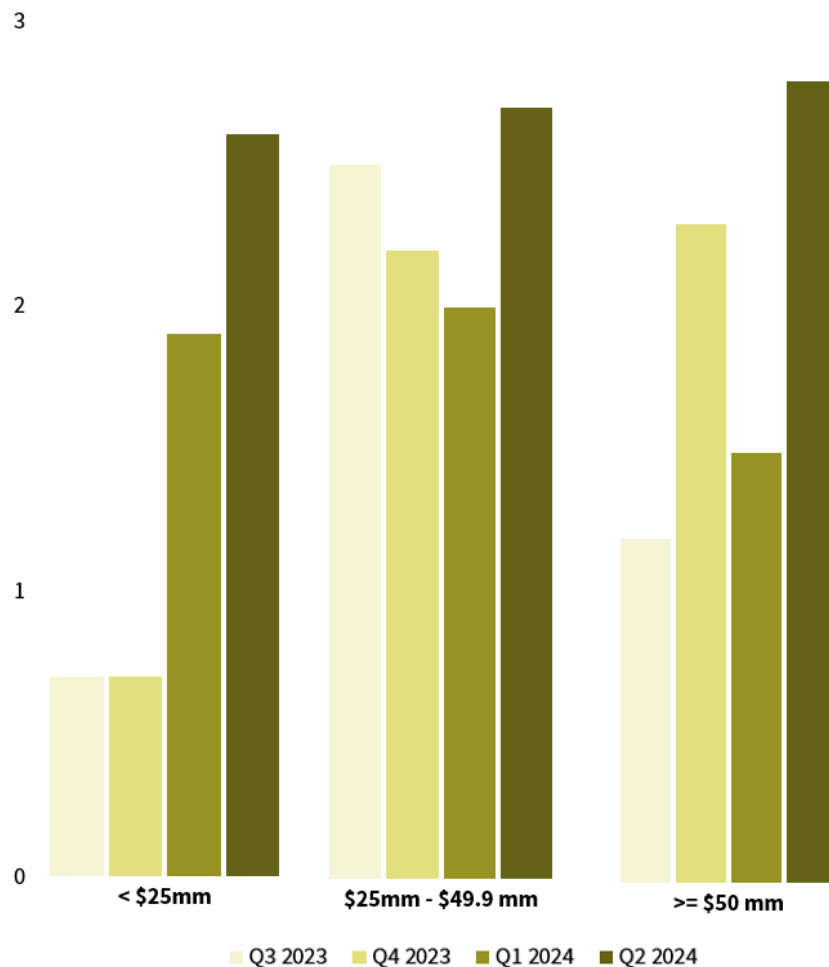


Amendments were focused on pricing increase and maturity extension



US PRIVATE CREDIT DEFAULT RATE BY EBITDA

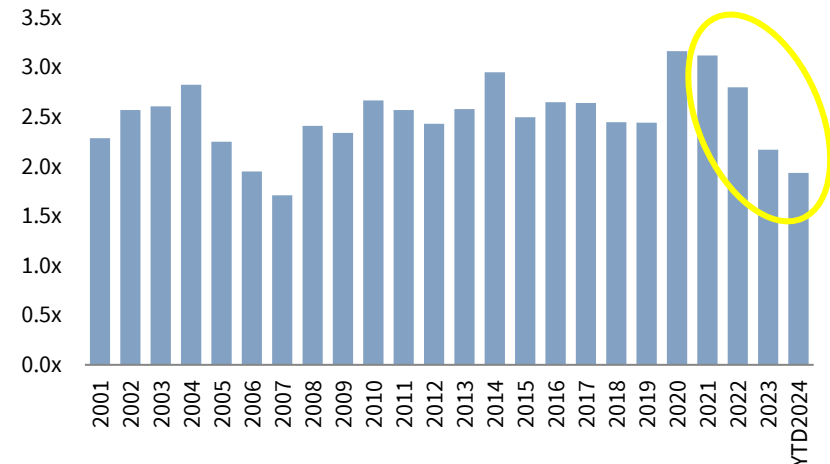
September 30, 2023 – June 30, 2024 • Percent (%)



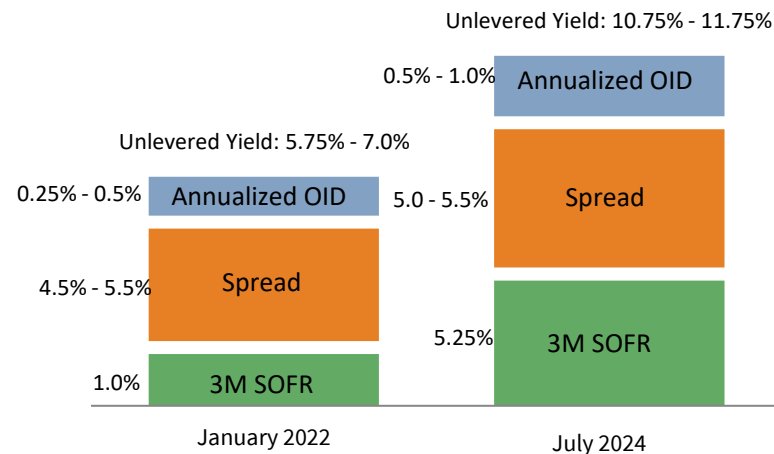
Increasing Interest Rates May Challenge Borrowers

- The rapid increase in rates continues to impact borrower liquidity – with declining coverage ratios as an indicator
- With elevated base rates, new direct lending loans price-in low double digits
- Over-levered borrowers combined with debt maturities creates opportunities for a broad set of private credit strategies

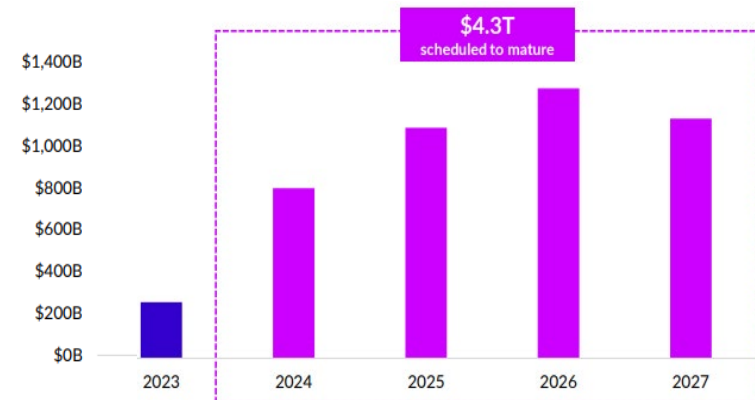
US EBITDA – Maintenance CapEx. / Cash Interest¹



Illustrative Cost of Capital Impact



Corporate Debt Maturities²



Attractive Market Conditions for Private Credit

Private credit continues to provide illiquidity premium

PRIVATE CREDIT RETURNS: PERIODIC RATES OF RETURN

As of March 31, 2024 • Percent (%)

