

Senior Direct Lending Review
November 2023

Town of Palm Beach Retirement System





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This report uses assumptions from the 2023 JPMorgan Long Term Capital Market Assumptions (the “2023 JPMorgan Assumptions”). Accordingly, there are statements of future expectations, estimates, projections, and other forward-looking statements that are based on available information and views as of the time of those statements. Such forward-looking statements are inherently speculative as they are based on assumptions which may involve known and unknown risks and uncertainties. Actual results, performance or events may differ materially from those expressed or implied in such statements.

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RISK FACTORS

As presented in this report, although investing in private debt funds can be beneficial, it is also important to consider the associated risks. Investing in private debt funds is higher risk, may involve speculation, and is not suitable for all investors. Prospective investors should be aware of the long-term nature of an investment in private debt funds. Investments (direct or indirect) in private debt are typically illiquid. Other general risks and important considerations associated with private debt funds include, but are not limited to: volatilities in political, market and economic conditions; extensive and frequently changing regulation; downturns in demand; changes to private debt values and taxes; valuation and appraisal methodologies; interest rates; and environmental issues. The risks outlined herein do not purport to cover all risks or underlying factors associated with investing in private debt funds. Please refer to the respective offering documents for complete information.



Private Debt Overview

Benefits of Implementing an Allocation to Private Debt

Direct lending is expected to outperform core real estate and public fixed income over the long term with less risk than public equity, private equity and value-added real estate.^{1,2}

	Category	JPMorgan 2023 LTCMA Expectations ¹		
		Compound Return ²	Arithmetic Average Return ²	Volatility ³
Public	U.S. Large Cap Equity	7.9%	9.1%	16.1%
	U.S. Small Cap Equity	8.1%	9.9%	20.4%
	Developed International Equity	9.8%	11.1%	17.4%
	U.S. Core Fixed Income	4.6%	4.7%	4.1%
	U.S. Bank Loans	6.2%	6.5%	8.0%
	U.S. High Yield Bonds	6.8%	7.1%	8.5%
Private	Private Equity	9.9%	11.6%	20.0%
	U.S. Core Real Estate	5.7%	6.2%	10.6%
	U.S. Value-Added Real Estate	7.7%	9.1%	17.6%
	Senior Direct Lending⁴	7.8%	8.7%	13.7%

¹ Expected returns and volatility are from the "2023 JPMorgan Long-Term Capital Market Assumptions" (LTCMAs) and rounded to the nearest 0.1%. JPMorgan's expectations are for the next 10-15 years.

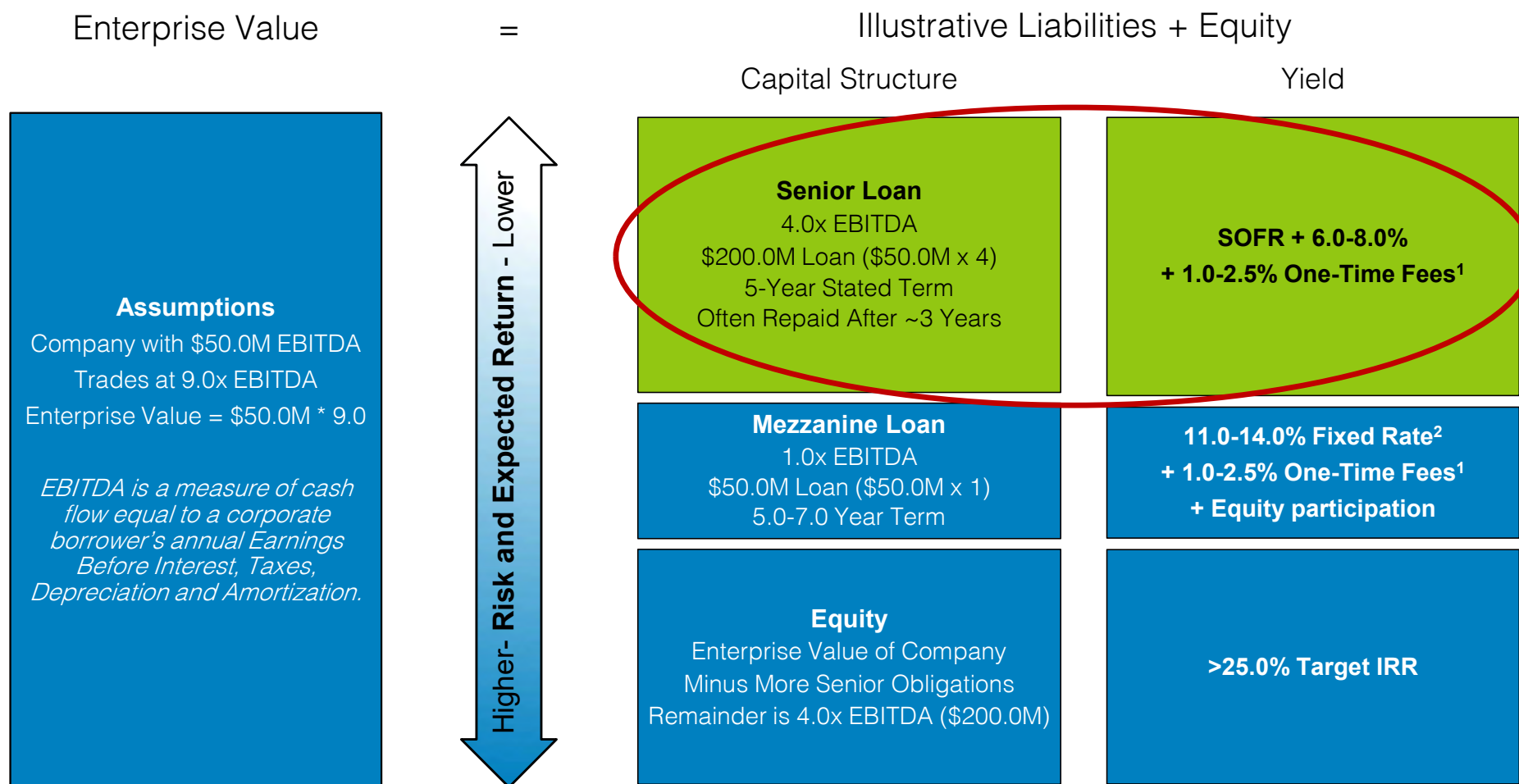
² The compound (or "geometric") return expectation is an expected multi-year growth rate. The arithmetic average return is a single-year return expectation. The compound return is always lower than the arithmetic return due to the variation drain in returns (the impact of standard deviation) over time. Asset classes that have a higher volatility expectation will have a larger difference between the compound return and the arithmetic return.

³ Volatility is defined as annualized standard deviation of total return.

⁴ The senior direct lending category's return and risk expectations were used as a surrogate for the private debt asset class.

Direct Lending – Senior Category’s Risk and Return

Risk of corporate investments is affected by borrower risk and seniority. Investments in the senior part of the capital structure have lower expected returns and risk.



¹ One-time fees include items like origination fees and original issue discounts. Borrowers may also pay other types of fees for items like early repayment and loan amendments.

² Mezzanine coupons often comprise cash and payment-in-kind (PIK) interest. PIK represents increases in the principal balance owed. Receiving PIK in lieu of cash increases the investor's risk but may also increase return multiples due to compounding.

The above represents a hypothetical scenario and is intended for illustrative purposes only, reflective of a sample capital structure for a mid-sized company. Hypothetical yields and target IRRs shown are intended to be long-term in nature, and do not reflect current market conditions.

Implementation Considerations – Illiquid Limited Partnerships

Asset managers cannot readily buy or sell illiquid assets to invest contributions or pay redemptions, so investors primarily invest in private debt through closed-end limited partnerships.

- Limited partnerships are generally not registered with the SEC.
- Partnerships are managed by “General Partners (GPs).” Investors are “Limited Partners (LPs).”
- Limited partnerships are offered using a private placement memorandum (PPM) and governed by a limited partnership agreement (LPA).
- Fees are usually assessed on the portfolio’s fair value, including any assets purchased using leverage. Some funds charge management fees on committed capital, but this is no longer common.
- Unaudited March, June and September financial statements are typically available 45 days after quarter-end. Audited financial statements are typically available 90 days after year-end.

Closed-end limited partnerships have limited terms, often 8.0-10.0 years plus extensions.

- Investors join by submitting subscription agreements (SAs) at closings held during the fundraising period, which is often 12-24 months.
- Each LP commits to invest up to a maximum amount. When the money is needed, the GP sends capital calls to LPs requesting contributions to pay for investments and expenses, up to their maximum commitments. LPs who do not contribute capital on time are in default at high cost.
- The GP makes investments during the investment period, which is usually 3.0 years. While most partnerships reinvest cash flow during the investment period, many direct lending partnerships distribute borrowers’ interest payments.
- When reinvestment ends, the partnership enters the harvest period and distributions accelerate. While many strategies sell their holdings in the harvest period, most direct lending strategies exit their investments through maturity.

Implementation Considerations – Fund-Level Leverage

Many senior direct lending funds use leverage to enhance returns. These funds may be standalone offerings or marketed alongside an unlevered fund in the same strategy.

- When a partnership uses leverage, we typically see managers target leverage of 1.0-2.5x the partnership's equity. We generally expect each 1.0x of fund-level leverage to increase net expected return by 2-3% for a representative strategy that we would consider well-managed.
- Expected return does not rise one-to-one with fund-level leverage due to the cost of financing, which we expect to be 2-3% over SOFR at current interest rates. We also tend to see higher incentive fees for levered funds than unlevered funds.
- The availability of leverage is affected by the portfolio's quality and diversification. In contrast to senior direct lending funds, distressed debt and mezzanine funds are normally unlevered due to the higher credit risk of those strategies.
- AndCo expects more-levered funds to have lower returns per unit of risk than less-levered funds, all else held equal. We expect investors to be fully exposed to the risks of assets purchased with leverage, but for returns on these assets to be reduced by financing costs.
- However, levered options can be a better fit for investors with higher return objectives or those who prefer to make smaller commitments in order to have more total portfolio liquidity.

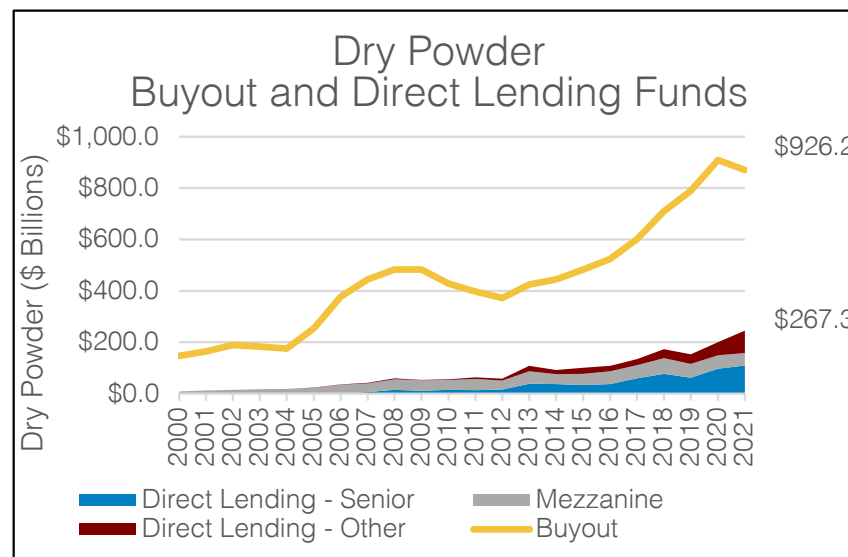
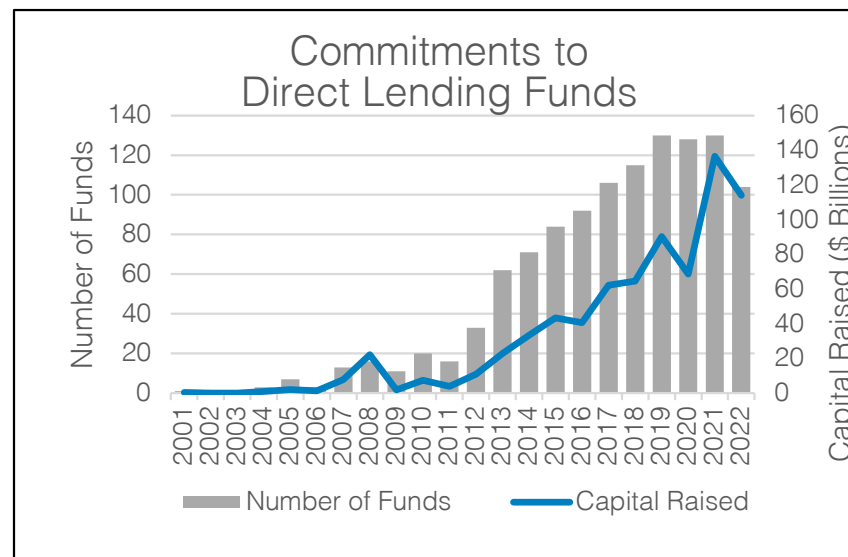
The above is considered representative based on AndCo Consulting's research. The cost and availability of leverage may differ for specific strategies.



Current Market Environment

Fundraising and Dry Powder

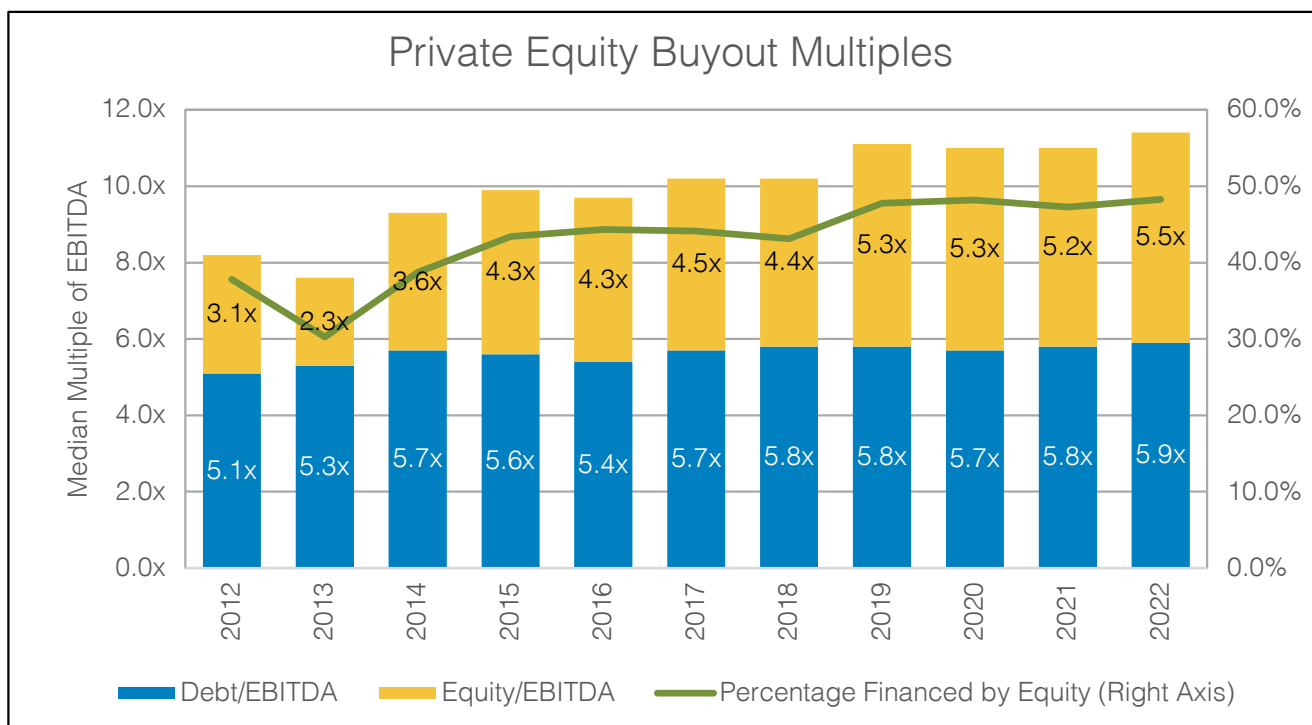
- We expect borrower demand to support the growth in the direct-lending market.
- As shown in the top chart, direct lending funds received \$114 billion in commitments in 2022. While this was down from \$136 billion in 2021, it was still more than the category raised in any calendar year prior to 2017.
- However, many direct-lending funds lend to private equity-owned companies. As shown in the bottom chart, direct-lending commitments that have not been called (dry powder) are much less than the uncalled commitments of the private equity buyout funds that often use direct lending for financing.



Source: Preqin. Accessed January 17, 2023. Both charts include the most recent data through December 31, 2022, that was available when the database was accessed. Preqin may revise totals as of the same date as the firm receives more data. The chart at the top includes Direct Lending funds that are not Mezzanine, which is subordinated to senior debt and thus considered of different risk. The numbers to the right of the chart at the bottom are 1) the total dry powder of buyout funds and 2) the sum of the dry powder of the three types of private debt funds shown (Direct Lending – Senior, Mezzanine and Direct Lending – Other) as of December 31, 2022.

Valuations and Equity Financing

While private corporate valuations have risen as a multiple of cash flow, the increase has primarily been funded with equity. As shown below, the median private equity (PE) buyout transaction was financed with 48% equity capital in 2022. This tied with 2019 for the largest proportionate equity contribution in the last 10 years.



In each transaction, PE investors' capital (in yellow) would generally be lost before debt investors (in blue) would begin to lose principal. This "cushion" is expected to insulate debt investors from valuation changes and has generally increased since 2013.

Source: PitchBook Data, Inc. (2023, January 12). *2022 Annual US PE Breakdown*. <https://pitchbook.com/news/reports/2022-annual-us-pe-breakdown>



Candidate Overview

Candidate Selection Criteria

Qualities to consider and evaluate when reviewing Private Debt managers:

Experience

- A long history as a reliable partner helps to drive deal flow by increasing the manager's reputation with prospective borrowers and intermediaries, allowing for greater selectivity.

Track Record

- Past success relative to strategies taking similar risks, including in adverse environments, increases confidence that the strategy will be successful in the future.

Institutional Investment Process

- Teams with established investment processes that do not overly rely on any individual, in order to increase confidence that past success may be repeatable.

Differentiated Sourcing

- Differentiated approaches to originating deal flow may allow the manager to find opportunities that are less competitively priced.

Strong Underwriting (for Direct Lending strategies)

- The ability to protect investor capital, as reflected in low historical annualized credit loss rates.

Credit Workout Capabilities

- Resources and experience working through troubled loans and restructurings.

Relative Value

- Competitive net expected returns in the context of the risks being taken.

Illiquidity Premium

- A well-grounded rationale for the strategy to outperform public investments of similar risk in the future.

Candidates¹

Based on our research process, we present the following candidates:

Firm	Fund
Ares Management LLC (Ares)	Ares Senior Direct Lending Fund III (SDL III)
GC Advisors, LLC (Golub)	Golub Capital Partners 15 (GCP 15)

¹ Unless noted otherwise, all data is as of the date each fund was added as an approved strategy with AndCo.

Firm Overview

Firm	Direct Lending Strategy Inception	Ownership	Firm / Direct Lending AUM	Direct Lending Team Primary Locations	Direct Lending Investment Professionals
Ares	2004	49.8% by the public (NYSE: ARES), 44.5% by senior management, and 5.7% by Sumitomo Mitsui Banking Corporation.	\$378 billion / \$165 billion	New York, NY; Los Angeles, CA; Chicago, IL	About 190
Golub	1994	80% owned by Lawrence Golub, David Golub and Golub family-related trusts. 20% owned by Dyal Capital, an affiliate of Blue Owl Capital (NYSE: OWL) that makes passive investments in alternative managers.	Over \$35 billion / Over \$30 billion	New York, NY; Chicago, IL	Over 130

Strategy Focus

Firm	Fund Offering	Strategy Focus
Ares	Ares Senior Direct Lending Fund III (SDL III)	Senior loans to PE-sponsored U.S. companies ranging from the lower through the upper middle-market that have \$10 million to over \$150 million in EBITDA.
Golub	Golub Capital Partners 15 (GCP 15)	Unitranche (proportionately larger) senior loans to PE-sponsored U.S. companies in the core middle-market with \$10-100 million in EBITDA.

Key Differentiators

Firm	Key Strengths	Points to Consider
Ares	<ul style="list-style-type: none"> ▪ We expect SDL III to be diversified among more than 200 issuers. Ares's broad deal flow of more than 1,000 lending opportunities annually may help the team to diversify SDL III without sacrificing selectivity. Ares typically invests in 4-5% of the opportunities it reviews, which is on the favorable side of the 4-8% range we consider typical. ▪ Ares has a strong long-term track record. In its U.S. senior direct lending strategy, the firm has deployed over \$100 billion in more than 2,000 investments since 2004. The team has achieved a 9.4% gross IRR through March 31, 2023, which is better than the 6-8% gross IRRs we consider illustrative of the category. 	<ul style="list-style-type: none"> ▪ The fund may lean toward larger borrowers, where we expect more competition. About 60% of the prior fund, SDL II, is invested in companies with more than \$75 million in EBITDA. While we think that competition from the broadly syndicated loan market is lessened today, borrowers of that size may be able to access the broadly syndicated loan market at less lender-friendly terms in normal market conditions. ▪ Unlike the other candidate, SDL III will not invest in evergreen master fund(s). We expect this to limit its exposure to investments made after its initial closing. Investors may like that this gives them larger exposure to loans originated after market conditions became more favorable in mid-2022. However, we also expect this to reduce the fund's vintage-year diversification relative to some peers.
Golub	<ul style="list-style-type: none"> ▪ Golub reviews more than 2,000 lending opportunities in the typical year. This is more than twice the 1,000 that we consider "broad" deal flow. Golub has invested in only 2-4% of opportunities it reviewed in each of the last 10 years, which we think represents greater selectivity than the 4-8% we consider typical for direct-lending teams. ▪ The fund is broadly diversified. It invests in a large, evergreen portfolio with exposure to over 600 borrowers. 	<ul style="list-style-type: none"> ▪ GCP 15 uses more fund-level leverage (2.0-2.5x investor equity) than the other candidate. ▪ GCP 15 invests through evergreen master fund(s). While this provides vintage-year diversification, investors who want to limit exposure to older vintage years may find this feature unappealing. We are comfortable with GCP 15's structure and note that contributions and redemptions from the master funds are processed at fair value. Fair value includes potential markdowns for loans issued before market conditions moved in lenders' favor in mid-2022.

Investment Team

Firm	Key Decision-Makers	Team Stability
Ares	<ul style="list-style-type: none"> Decisions are made by the eight-member Direct Lending Investment Committee (DLIC) comprising partners Mark Affolter, Michael Arougheti, Kipp deVeer, Michael Dieber, Mitch Goldstein, Jim Miller, Kort Schnabel, and Michael Smith. Arougheti co-founded Ares and is the firm's CEO and President; deVeer and Smith are Co-Heads of the Ares Credit Group; Affolter, Goldstein, Miller, and Schnabel are Co-Heads of U.S. Direct Lending; and Dieber is Co-Head of Portfolio Management, U.S. Direct Lending. The investment process is carried out in a "cradle-to-grave" model wherein the same people who originate lending opportunities also underwrite and monitor the loans. Most investment professionals on the investment team have underwriting responsibilities, and about 40 of the mid- and senior-level team members also have origination responsibilities. 	<ul style="list-style-type: none"> Each DLIC member is a partner of the firm with more than 20 years of experience, including at least 15 years of tenure with Ares. The Ares U.S. Direct Lending Team experienced 30 departures at the Principal level or above in the five years ended December 31, 2022. We consider this level of turnover typical.
Golub	<ul style="list-style-type: none"> The strategy is led by an eight-member IC comprising Lawrence Golub, David Golub, Andrew Steuerman, Greg Cashman, Jason Van Dussen, Spyro Alexopoulos, Marc Robinson, and Rob Tuchscherer. Lawrence Golub is CEO; David Golub is President; Steuerman and Cashman lead the middle-market lending (MML) team; Van Dussen is Head of Capital Markets; and Alexopoulos, Robinson, and Tuchscherer are Managing Directors on the MML team. Investment opportunities are sourced across the firm, but a large group of 13 originators leads that effort. Due diligence is conducted by a large team of more than 70 underwriters. 	<ul style="list-style-type: none"> Lawrence Golub founded the firm in 1994. Each member of the IC has been with the firm for at least 10 years and has more than 20 years of experience. The middle-market lending team experienced six departures at the Vice President level or above over the last five years. This is less than 5% annualized and we consider the rate low.

Key Terms

Product	Target Size	Minimum Commitment	Profile	Fund-Level Leverage (Debt/Equity)	First Close	Final Close ¹	Target Net IRR	Fund Lifecycle
Ares	\$10 billion	Negotiable ²	Senior debt. PE-owned companies with at least \$10M to over \$150M EBITDA.	1.0-1.5x ³	July 2023	May 2024	10-12%	Seven years from the final closing plus up to four one-year extensions. ⁴
Golub	N/A ⁵	\$1 million	Senior debt. Core mid-market PE-owned companies with \$10-100M EBITDA.	2.0-2.5x	July 2023	July 2025	10.5-13.5%	10 years from the first closing, plus up to two one-year extensions

¹ Anticipated final closing dates are as of the time this report was prepared. They may have changed since the respective product was approved at AndCo.

² The fund's stated minimum is \$25 million. Ares has agreed to waive or reduce their fund's minimum for this search.

³ The Ares fund's leverage is generally expected to be 1.0-1.5x debt/commitments. When investor equity is less than the fund's commitments, this may result in a higher debt/equity ratio than 1.0-1.5x.

⁴ The fund's three-year investment period may be extended by up to two one-year periods. The first extension of the investment period is at the manager's discretion and the second requires the approval of the fund's advisory committee or a majority in interest of the fund's investors. The fund's harvest period is four years and may also be extended by up to two one-year periods. The first extension of the harvest period is at the manager's discretion and the second requires the approval of the fund's advisory committee or a majority in interest of the fund's investors.

⁵ Golub does not disclose target fund sizes.

Key Terms

Firm	Investment Period	Investment Management Fees ¹	Preferred Return	Carried Interest
Ares	Three years from the final closing. The investment period may be extended twice in one-year increments.	Management Fee: 0.85% of invested capital annually. Administration: 0.025% of invested capital annually.	7.0%	12.5%
Golub	Five years from the final closing. Capital may be reinvested for six more months.	Management Fee: 1.00% of gross assets annually, excluding cash and cash equivalents. Administration: Estimated at 0.10-0.20% of gross assets annually.	8.0%	20.0%

¹ Each candidate is expected to use fund-level leverage. Consistent with prevailing direct lending industry practice, each candidate's fees are assessed on gross assets, including assets purchased using debt as well as equity. Their management fees would be much higher, approximately the rates shown multiplied by the expression (1 + the amount of fund-level leverage), if expressed as a percentage of invested equity.



Performance and Fee Comparison

Vintage-Year Performance as of June 30, 2023

- Diverse vehicle structures and amounts of fund-level leverage can make direct lending track records difficult to compare. Reviewing gross unlevered IRRs by vintage year can reduce the distortions of timing and leverage.
- The table below includes each manager's investments that we consider similar to those of the candidate funds, regardless of the product that held them. The returns shown do not reflect any specific product and were not realized by any client.

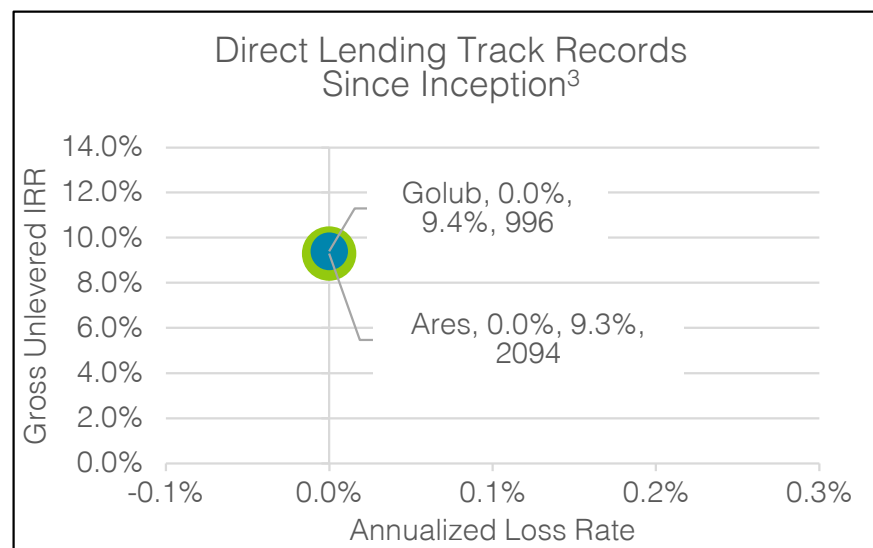
Vintage Year ¹	Ares	Golub
2004	10.3%	
2005	8.8%	
2006	11.7%	8.3%
2007	9.9%	6.3%
2008	16.9%	10.7%
2009	13.9%	11.6%
2010	9.2%	10.0%
2011	10.2%	9.3%
2012	8.7%	9.0%
2013	8.5%	7.9%
2014	8.5%	8.4%
2015	8.7%	9.5%
2016	9.6%	12.7%
2017	9.6%	8.9%
2018	8.7%	9.5%
2019	9.9%	8.9%
2020	13.3%	9.3%
2021	11.6%	8.3%
2022	18.9%	11.8%
2023	N/M	N/M
Aggregate IRR	9.3%	9.4%

¹ Vintage year refers to the year that the manager made an investment in a portfolio company. Performance is shown since inception, from the date the investments were made through the as-of date. For example, the performance of an investment made in 2009 is not only the performance of that investment during 2009, but from the date the investment was made through the earlier of when it was fully realized and the as-of date.

Track Record Robustness and Credit-Loss Rates

- Robust track records give us confidence that past results arose from skill rather than luck.
- We associate low annualized credit loss rates with strong underwriting and/or credit workout capabilities, which may help managers to provide downside protection. We consider loss rates of 0.5-0.8% typical for a senior direct lending strategy across a full market cycle.

Since-Inception Statistic	Ares	Golub
Track Record Inception	2004	2006
Investments	2,094	996
Total Cost (\$M)	\$100,889.3	\$130,444.2
Gross Unlevered IRR	9.3%	9.4%
Annualized Loss Rate ¹	0.0%	0.0% ²
As of Date	6/30/23	6/30/23

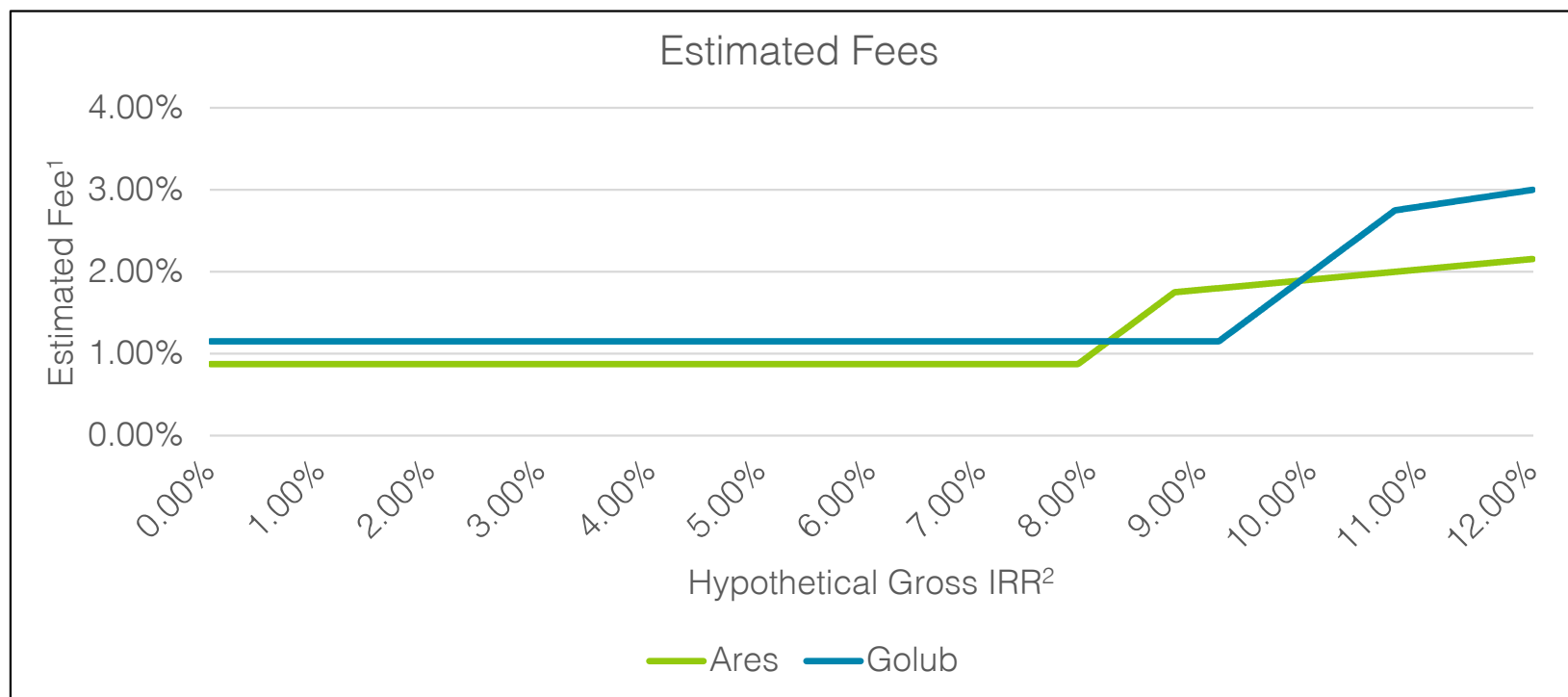


¹ Ares and Golub calculated their loss rates with reference only to losses arising from payment defaults. While we consider the rates they calculated comparable with one another, we expect this methodology to lead to lower calculated rates than some other managers' methodologies. We generally prefer that managers include realized and unrealized losses in their credit-loss rates (resulting in higher calculated rates) because payment default rates can be affected by managers' decisions about whether to 1) sell loans at losses before payment default occurs and 2) amend or waive covenants, each of which would result in lower returns than if the loan had performed as underwritten.

² Golub's loss rate includes loans made in 2004 and 2005. Those years are not included in the other Golub statistics on this slide.

³ The text in the chart is the annualized loss rate, gross unlevered IRR, and number of portfolio companies. Bubble sizes are based on the number of portfolio companies.

Fee Comparison



Assumptions	Ares	Golub
Management Fee ⁴	0.875%	1.15%
Carried Interest	12.50%	20.00%
Preferred Return	7.00%	8.00%
GP Catch-up	100.00%	100.00%

¹ Estimated annual management fee and carried interest as a percentage of the candidate fund's assets. Since each candidate fund is expected to use leverage and these fees are expressed as percentages of gross assets (including assets bought using debt as well as those bought using investor equity), the funds' fees would be higher as a percentage of investor equity. Carried interest was assumed not to be assessed on returns that were less than the sum of 1) the Hypothetical Gross IRR and 2) the Management Fee associated with each manager. When the Hypothetical Gross IRR was in excess of those fees, each additional basis point of gross return was assumed to be assigned to the general partner (GP) at the GP Catch-up rate shown until the GP had received the share of total Carried Interest shown on all returns in excess of the Management Fee. Once that point was reached, the GP was assumed to receive the Carried Interest shown on each additional basis point of gross return.

² The Hypothetical Gross IRR is an arbitrary assumption intended to show the relationship between the IRR and fees. The IRRs shown may not be achieved.

³ The green Carlyle line is not visible for a portion of the chart because it is covered by the gray Monroe line.

⁴ Operating and organizational expenses are not included. The management fees shown for Ares and Golub include estimated internal administration expenses of 0.025% and 0.15%. Please see the Key Terms page earlier in this report for more information.

Ares Direct Lending Performance – Jun. 30, 2023

	Investment-Level Performance by Vintage Year							
	Vintage Year	Investments (#) ¹	Investment-Level, In USD Millions				Gross of Fees	
			Total Invested Capital	Total Realized	Total Unrealized	Total Value	MOIC	IRR
	2004	13	\$ 58.3	\$ 62.7	\$ -	\$ 62.7	1.1x	10.3%
	2005	26	\$ 232.7	\$ 268.9	\$ -	\$ 268.9	1.2x	8.8%
	2006	34	\$ 616.6	\$ 744.6	\$ -	\$ 744.6	1.2x	11.7%
	2007	28	\$ 528.4	\$ 636.9	\$ -	\$ 636.9	1.2x	9.9%
	2008	12	\$ 160.6	\$ 213.7	\$ -	\$ 213.7	1.3x	16.9%
	2009	11	\$ 255.5	\$ 367.8	\$ -	\$ 367.8	1.4x	13.9%
	2010	27	\$ 2,826.0	\$ 3,299.1	\$ -	\$ 3,299.1	1.2x	9.2%
	2011	65	\$ 4,512.0	\$ 5,583.4	\$ -	\$ 5,583.4	1.2x	10.2%
	2012	78	\$ 5,131.7	\$ 6,182.5	\$ -	\$ 6,182.5	1.2x	8.7%
	2013	86	\$ 6,631.3	\$ 7,678.1	\$ -	\$ 7,678.1	1.2x	8.5%
	2014	70	\$ 4,357.7	\$ 5,112.2	\$ 120.1	\$ 5,232.3	1.2x	8.5%
	2015	70	\$ 3,149.0	\$ 3,680.7	\$ 139.5	\$ 3,820.1	1.2x	8.7%
	2016	123	\$ 4,247.9	\$ 4,892.0	\$ 320.7	\$ 5,212.7	1.2x	9.6%
	2017	169	\$ 8,122.0	\$ 8,912.5	\$ 976.3	\$ 9,888.8	1.2x	9.6%
	2018	176	\$ 8,039.6	\$ 8,032.2	\$ 1,459.7	\$ 9,491.9	1.2x	8.7%
	2019	190	\$ 9,183.4	\$ 6,667.3	\$ 4,343.6	\$ 11,010.9	1.2x	9.9%
	2020	171	\$ 7,562.6	\$ 4,281.7	\$ 4,620.6	\$ 8,902.2	1.1x	13.3%
	2021	367	\$ 17,863.1	\$ 6,613.1	\$ 13,510.6	\$ 20,123.7	1.1x	11.6%
	2022	274	\$ 14,282.7	\$ 2,855.2	\$ 12,726.8	\$ 15,582.0	1.1x	18.9%
	2023	104	\$ 3,128.3	\$ 114.5	\$ 3,109.2	\$ 3,223.7	1.1x	NM
	Total	2094	\$ 100,889.3	\$ 76,198.9	\$ 41,327.2	\$ 117,526.1	1.2x	9.3%

Fund Performance ¹									
Fund	Vintage Year	Investments (#) ¹	Fund-Level, In USD Millions ¹				Fund-Level		
			Total Invested Capital	Total Distributed	Total Unrealized	Total Value	Leverage (Debt / Equity)	Net MOIC	Net IRR ³
Fund I	2018	241	\$ 6,639.5	\$ 3,530.7	\$ 4,437.2	\$ 7,967.8	1.0x	1.2x	11.2%
Fund II	2021	214	\$ 10,512.6	\$ 2,287.9	\$ 9,504.2	\$ 11,792.1	1.2x	1.1x	14.9%
Total		2094	\$ 17,152.1	\$ 5,818.6	\$ 13,941.4	\$ 19,759.9		1.2x	

¹ The number of investments separately counts multiple investments in the same portfolio company.

Golub Direct Lending Performance – June 30, 2023 (p. 1 of 2)

	Investment-Level Performance by Vintage Year							
	Vintage Year	Portfolio Companies (#)	Investment-Level, In USD Millions				Gross of Fees	
			Total Invested Capital	Total Realized	Total Unrealized	Total Value	MOIC	IRR
	2006	58	\$ 934.4	\$ 1,145.2	\$ -	\$ 1,145.2	1.2x	8.3%
	2007	62	\$ 1,383.5	\$ 1,633.4	\$ -	\$ 1,633.4	1.2x	6.3%
	2008	28	\$ 620.8	\$ 789.9	\$ -	\$ 789.9	1.3x	10.7%
	2009	13	\$ 381.9	\$ 460.8	\$ -	\$ 460.8	1.2x	11.6%
	2010	43	\$ 1,386.1	\$ 1,697.7	\$ -	\$ 1,697.7	1.2x	10.0%
	2011	58	\$ 2,355.4	\$ 2,780.7	\$ -	\$ 2,780.7	1.2x	9.3%
	2012	73	\$ 4,511.5	\$ 5,486.2	\$ 6.7	\$ 5,492.9	1.2x	9.0%
	2013	59	\$ 4,279.7	\$ 4,925.0	\$ 0.0	\$ 4,925.0	1.2x	7.9%
	2014	58	\$ 7,607.5	\$ 8,919.2	\$ 23.2	\$ 8,942.3	1.2x	8.4%
	2015	79	\$ 11,853.8	\$ 13,236.0	\$ 1,160.7	\$ 14,396.7	1.2x	9.5%
	2016	56	\$ 10,186.4	\$ 11,038.4	\$ 1,460.8	\$ 12,499.2	1.2x	12.7%
	2017	52	\$ 13,218.3	\$ 12,804.7	\$ 2,770.5	\$ 15,575.1	1.2x	8.9%
	2018	63	\$ 13,597.8	\$ 11,738.2	\$ 4,308.7	\$ 16,046.9	1.2x	9.5%
	2019	77	\$ 18,717.7	\$ 13,055.1	\$ 8,971.2	\$ 22,026.3	1.2x	8.9%
	2020	29	\$ 6,644.2	\$ 3,147.6	\$ 4,723.0	\$ 7,870.6	1.2x	9.3%
	2021	111	\$ 19,488.5	\$ 6,343.8	\$ 15,430.1	\$ 21,773.9	1.1x	8.3%
	2022	66	\$ 12,040.3	\$ 2,368.5	\$ 10,880.7	\$ 13,249.2	1.1x	11.8%
	2023	11	\$ 1,236.3	\$ 60.3	\$ 1,220.6	\$ 1,280.9	1.0x	N/M
	Total	996	\$ 130,444.2	\$ 101,630.7	\$ 50,956.1	\$ 152,586.8	1.2x	9.4%

Fund Performance ¹										
Fund	Vintage Year	Portfolio Companies (#) ²	Fund-Level, In USD Millions ¹				Fund-Level			
			Total Invested Capital	Total Distributed	Total Unrealized	Total Value	Leverage (Debt / Equity)	Net MOIC	Net IRR ³	
Golub Capital Partners IV, L.P.	2004	N/A	\$ 207.3	\$ 412.1	\$ -	\$ 412.1	2.0-2.5x	2.0x	14.4%	
Golub Capital Int'l, Ltd.	2005	600	\$ 791.5	\$ 781.6	\$ 791.5	\$ 1,573.1	2.0-2.5x	2.0x	10.4%	
Golub Capital Partners V, L.P.	2006	N/A	\$ 234.9	\$ 502.3	\$ -	\$ 502.3	2.0-2.5x	2.1x	11.9%	
Golub Capital Partners VI, L.P.	2008	N/A	\$ 117.5	\$ 230.4	\$ -	\$ 230.4	2.0-2.5x	2.0x	11.2%	
Golub Capital Partners International VI, L.P.	2008	N/A	\$ 50.7	\$ 76.8	\$ -	\$ 76.8	2.0-2.5x	1.5x	11.7%	
Golub Capital Partners International VII, L.P.	2010	N/A	\$ 131.2	\$ 209.9	\$ -	\$ 209.9	2.0-2.5x	1.6x	10.5%	
Golub Capital Partners VII, L.P.	2010	N/A	\$ 330.5	\$ 559.0	\$ -	\$ 559.0	2.0-2.5x	1.7x	11.1%	
Golub Capital Partners International VIII, L.P.	2012	N/A	\$ 310.5	\$ 454.0	\$ -	\$ 454.0	2.0-2.5x	1.5x	10.2%	
Golub Capital Partners VIII, L.P.	2012	N/A	\$ 420.4	\$ 644.7	\$ -	\$ 644.7	2.0-2.5x	1.5x	10.6%	
Golub Capital Partners 9, L.P.	2014	612	\$ 368.0	\$ 301.8	\$ 386.0	\$ 687.8	2.0-2.5x	1.9x	9.8%	
Golub Capital Partners Int'l 9, L.P.	2014	600	\$ 481.1	\$ 350.6	\$ 499.3	\$ 849.9	2.0-2.5x	1.8x	9.6%	
Golub Capital Partners 10, L.P.	2015	612	\$ 649.3	\$ 404.5	\$ 677.0	\$ 1,081.5	2.0-2.5x	1.7x	9.6%	
Golub Capital Partners Int'l 10, L.P.	2015	600	\$ 885.5	\$ 493.2	\$ 915.3	\$ 1,408.5	2.0-2.5x	1.6x	9.4%	
GC Int'l Ladder, Ltd.	2016	600	\$ 1,392.9	\$ 161.8	\$ 1,392.9	\$ 1,554.7	2.0-2.5x	1.1x	9.1%	
Golub Capital Partners 11 Rollover, L.P.	2017	612	\$ 384.5	\$ 218.7	\$ 400.1	\$ 618.8	2.0-2.5x	1.6x	9.6%	
Golub Capital Partners 11, L.P.	2017	612	\$ 988.6	\$ 442.6	\$ 1,025.6	\$ 1,468.2	2.0-2.5x	1.5x	9.6%	
Golub Capital Partners Int'l 11, L.P.	2017	600	\$ 1,520.0	\$ 592.7	\$ 1,568.8	\$ 2,161.5	2.0-2.5x	1.4x	9.2%	
Golub Capital Partners 12, L.P.	2018	612	\$ 1,094.3	\$ 295.5	\$ 1,130.6	\$ 1,426.1	2.0-2.5x	1.3x	10.7%	
Golub Capital Partners Int'l 12, L.P.	2018	600	\$ 1,957.1	\$ 414.9	\$ 2,019.4	\$ 2,434.3	2.0-2.5x	1.2x	9.4%	
Golub Capital Partners Int'l Rollover Fund 2, L.P.	2018	600	\$ 648.3	\$ 88.4	\$ 444.5	\$ 532.9	2.0-2.5x	0.8x	9.2%	
Golub Capital Partners Rollover Fund 2, L.P.	2018	612	\$ 478.4	\$ 126.5	\$ 405.5	\$ 532.0	2.0-2.5x	1.1x	9.6%	
GCP International Tranches Ltd.	2020	600	\$ 324.6	\$ -	\$ 324.6	\$ 324.6	2.0-2.5x	1.0x	10.1%	
Golub Capital Partners 14, L.P.	2021	612	\$ 929.8	\$ 64.5	\$ 952.8	\$ 1,017.3	2.0-2.5x	1.1x	8.3%	
Golub Capital Partners Int'l 14, L.P.	2021	600	\$ 2,043.8	\$ 115.6	\$ 2,107.7	\$ 2,223.3	2.0-2.5x	1.1x	9.3%	
Total		996	\$ 16,740.7	\$ 7,942.1	\$ 15,041.6	\$ 22,983.7				

Please see the next page for the footnotes referenced in the tables above.

Golub Direct Lending Performance – June 30, 2023 (p. 2 of 2)

¹ In the bottom Fund Performance table, Total Invested Capital, Total Distributed, Total Unrealized, and Total Value are each shown at the limited partner level. They are not adjusted upward to account for leverage.

² The current number of portfolio companies is shown. Since the onshore and offshore “international” fund series invest in master funds, many of the funds have the same number of current holdings.

³ All net IRRs are calculated with respect to an indicative first close, Full Promote limited partner except for GCIL, Ladder, Tranches, GCP 10i, GCP 14 and GCP 14i. GCIL's IRR is calculated with respect to an indicative Class A Series 1 third close, Full Promote shareholder. GCIL held its first close on November 23, 2005. However, no first or second close shareholder remains in GCIL. The starting date for GCIL's ITD IRR is therefore its third close, January 1, 2007. GCP 10i's IRR is calculated with respect to an indicative second close, Full Promote limited partner. GCP 10i held its first close on July 1, 2015. However, no first close limited partner remains who did not also make an additional commitment in a subsequent closing. Therefore, we have chosen a second close limited partner, which we believe is generally representative of the fund's performance. The starting date for GCP 10i's ITD IRR is therefore its second close, October 1, 2015. GCP 14's and GCP 14i's (the “GCP 14 Funds”) IRRs are calculated with respect to an indicative second close, Full Promote limited partner. The GCP 14 Funds both held their first close on April 1, 2021. During the initial ramp period, the GCP 14 Funds had relatively small amounts of capital called. GCP 14i, in particular, reported an unusually strong performance in their first quarter ended June 30, 2021, which is not reflective of a typical return. Therefore, we have chosen a second close, July 1, 2021, Full Promote limited partner, for the GCP 14 Funds which we believe is a more accurate and conservative representation of these funds' performance. GCP 14's and GCP 14i's ITD IRRs for a first close, Full Promote limited partner are 8.7% and 12.8%, respectively. Ladder, and Tranches IRRs are calculated for each fund's shareholders or limited partners, respectively, taken as a whole. See Important Investor Information for a detailed definition of IRR.



Investment Manager and Fund Narratives

Ares Management LLC – Ares Senior Direct Lending Fund III (SDL III)

Firm Overview

Ares Management Corporation (Ares) was founded in 1997 to invest in broadly syndicated loans, high-yield bonds, private debt, and private equity. Ares became fully independent in 2002 and went public in 2014. Ares employs over 2,500 professionals, of which about 900 are investment professionals. As of December 31, 2022, the firm is owned 49.8% by the public (NYSE: ARES), 44.5% by senior management, and 5.7% by Sumitomo Mitsui Banking Corporation. Ares has business groups across credit (public and private), private equity, secondaries, and real assets.

Team Overview

The strategy is managed primarily by Ares' U.S. Direct Lending Team (DLT), which comprises about 190 investment professionals. The DLT is primarily based in New York, Los Angeles, and Chicago. The monitoring process is supported by a separate portfolio monitoring team of about 40 professionals, including about 10 restructuring professionals. Decisions are made by the eight-member Direct Lending Investment Committee (DLIC). Each DLIC member is a partner of the firm with more than 20 years of experience, including at least 15 years of tenure with Ares.

Strategy Overview

The strategy primarily originates senior loans to private equity (PE)-sponsored U.S. companies with at least \$10 million to over \$150 million in EBITDA. The loans are expected to be a weighted average of 5.0-6.0x EBITDA, which we consider typical borrower-level leverage for this style of direct lending.

The investment process is carried out in a "cradle-to-grave" model wherein the same people who originate lending opportunities also underwrite and monitor the loans. Most investment professionals on the team have underwriting responsibilities, and about 40 of the mid- and senior-level team members also have origination responsibilities. While PE sponsors like the relationship continuity of "cradle-to-grave" models like Ares', we generally prefer the competing "functional-specialist" model for large teams because we think that may help larger groups to maintain consistent underwriting standards.

Like peers, Ares identifies lending opportunities through its relationships with PE sponsors, portfolio company management teams, and intermediaries. The strategy is differentiated, though, by the consideration that Ares has made direct loans to over 2,000 borrowers. This leads to strong deal flow from existing borrowers, who represent 40-60% of the direct-lending transactions Ares reviews. Due diligence is conducted by deal teams, which typically include three members. Deal teams conduct initial screening based on the business and industry of the borrower, the transaction's risks, the capital structure, and the management team. If the senior member of the deal team thinks the opportunity warrants further consideration, he or she would advance it to the full DLT. The DLT meets twice weekly to discuss the pipeline and monitor past investments and works with the deal teams to determine due diligence plans for opportunities that warrant further consideration. Before proceeding, the deal team presents an overview to the DLIC for approval. Once full due diligence is approved, the deal team typically supplements its internal analysis with third-party reports prepared for the PE sponsor. After due diligence, the DLIC reviews a completed presentation and makes final investment approval decisions.

Expectations

SDL III will seek a 7-9% unlevered or 10-12% levered net IRR. We think these return targets are achievable.

The unlevered and levered funds' returns are mainly expected from cash coupons that float relative to SOFR. SOFR is about 5.3% and Ares seeks to lend at spreads of 5-7%, leading to total coupons of about 10.3-12.3%. After adding one-time closing fees of about 2.5% amortized over three years, which is about 0.8% annually, other fees from borrowers, and returns from limited equity participation, and deducting expected credit losses and the fund's fees, we think the unlevered return target is achievable.

The levered version of SDL III is expected to borrow 1.0-1.5x its equity, enabling it to own assets of 2.0-2.5x investor equity. Ares expects the cost of financing to be about 2.75% over SOFR. Adjusting the unlevered returns for this, we consider the levered fund's goals achievable.

Points to Consider

We expect SDL III to be diversified among more than 200 issuers. Ares's broad deal flow of more than 1,000 lending opportunities annually may help the team to diversify SDL III without sacrificing selectivity. Ares typically invests in 4-5% of the opportunities it reviews, which is on the favorable side of the 4-8% range we consider typical.

SDL III will cast a wide net by lending to companies with at least \$10 million to over \$150 million in EBITDA. Upper middle-market companies, which we define as those with over \$75 million in EBITDA, account for about 60% of the prior fund's invested capital. We generally prefer strategies that focus on smaller borrowers than that because competing sources of capital from the broadly syndicated loan (BSL) market tend to contribute to lower spreads, weaker covenants, and higher borrower-level leverage in the upper middle market. However, there could be a tactical opportunity in the upper middle market because the BSL market is currently less available for financing. This is because demand for collateralized loan obligation (CLO) securities has declined and CLOs are a key source of demand for BSLs. This situation may allow SDL III to lend to larger and potentially more stable companies on competitive terms.

Unlike some peers, SDL III will not invest in evergreen master fund(s). We expect this to limit its exposure to investments made after its initial closing. Investors may like that this gives them larger exposure to loans originated after market conditions became more favorable in mid-2022. However, we also expect this to reduce the fund's vintage-year diversification relative to some peers.

Recommendation Summary

Ares has a robust track record and the strategy casts a wide net. SDL III may be a fit for clients seeking exposure to a broader range of portfolio company sizes than the typical U.S. senior direct lending fund. Clients seeking higher returns may wish to consider direct-lending strategies that emphasize smaller borrowers or invest materially in non-PE-sponsored companies because we would expect those style factors to contribute to higher yields, all else held equal.



GC Advisors LLC (Golub) – Golub Capital Partners (GCP) 15

Firm Overview

Golub specializes in senior debt. The firm has two business lines, one managing direct lending strategies and the other managing broadly syndicated loans (bank loans). The firm has over 800 employees and over 170 investment professionals. Its primary offices are in Chicago and New York, with secondary locations in Charlotte, San Francisco, and London. Of the firm's over \$60 billion in assets under management, over \$50 billion is in direct lending, over \$8 billion is in bank loans, and over \$1 billion is in credit opportunities strategies. The firm was founded by CEO Lawrence Golub in 1994. He, President David Golub, and family trusts own most of the organization. Affiliates of Dyal Capital Partners and the Korea Investment Corporation passively own about 20% of the firm in aggregate. Golub initially managed mezzanine debt and private equity strategies. The firm strategically repositioned toward senior lending in 2002-2004.

Team Overview

The strategy is managed primarily by Golub's Direct Lending (DL) team of about 150 professionals. Among these, the DL team includes over 100 staff who focus on underwriting loans, about 20 focusing on originations, and about 20 in credit workouts. The strategy is also supported by Golub's centralized Portfolio Monitoring team, Treasury team, and a group focused on loan operations. The strategy is overseen by an eight-member investment committee comprising Lawrence Golub, David Golub, Andrew Steuerman, Spyro Alexopoulos, Greg Cashman, Marc Robinson, Rob Tuchscherer, and Jason Van Dussen. The Golub brothers are Executive Management, Steuerman is Vice Chair of Direct Lending, Alexopoulos and Cashman are Co-heads of Direct Lending, Robinson and Tuchscherer are Co-Heads of Underwriting, and Van Dussen is Co-Head of Capital Markets. Each has over 10 years of tenure with Golub and over 20 years of investment experience.

Strategy Overview

The strategy primarily originates senior loans to private equity (PE)-sponsored U.S. companies with \$10-100 million in EBITDA. The loans are generally expected to comprise 40-50% of the borrower's enterprise value. The strategy is expected to emphasize unitranche loans, which are larger than the typical senior loan in proportion to borrower cash flow. This is expected to increase their yield and risk. Equity co-investments and junior debt are expected to be less than 5% of the portfolio. The investment process is carried out in a structured "functional-specialist" model wherein different people are responsible for conducting each stage of the investment process. This is expected to increase process consistency.

Golub's originators identify opportunities by building relationships with PE sponsors. Deal teams conduct due diligence on deals that pass preliminary screening. These teams generally include 1-2 senior underwriters and 1-2 junior underwriters who lead the due diligence as well as the originator, who manages the PE sponsor relationship. The underwriting team's members are organized in five sector specialties (software, health care, consumer, financial services, and diversified industries). The investment committee approves opportunities by consensus. Approved opportunities are generally funded within two to four months of identification. Golub's Treasury team manages cash and the strategy's financing facilities, such as collateralized loan obligations (CLOs) and bank facilities, through which it obtains leverage. Loans are monitored by the Portfolio Monitoring team. When necessary, the credit workouts team assists in resolving troubled loans. This usually involves working with the PE sponsor when underperformance is expected to be temporary, but the credit workouts team also has a sub-group who takes more assertive action in restructuring situations.

Expectations

GCP 15 will seek a 10.5-13.5% net IRR. We think this return target is achievable. Golub expects the underlying portfolio to earn an unlevered gross IRR of about 8.0%. This comprises 6.9% interest, 0.7% in origination and other fees from borrowers, 0.3% from equity co-investments, and -0.4% in credit losses, each estimated and annualized. Golub's expectations are based on the historic performance of the underlying strategy, and we consider them reasonable.

The fund is expected to borrow 2.0-2.5x its equity, enabling it to own assets of about 3.25x investor equity. Deducting the financing costs, which we estimate as about 7.4% (3.3% assumed financing cost incurred on the 2.25x investor equity borrowed), expenses, management fees, and carried interest from the levered gross IRR causes us to think the estimate is reasonable. Underlying loans and financing costs are expected to have floating rates and SOFR is included in these yields.

Points to Consider

We expect Golub's reputation to drive repeat deal flow from PE sponsors. Golub reviews more than 2,000 lending opportunities in the typical year. This is more than twice the 1,000 that we consider "broad" deal flow. Golub has invested in only 2-4% of opportunities it reviewed in each of the last 10 years, which we think represents greater selectivity than the 4-8% we consider typical for direct-lending teams.

Funds in the strategy invest indirectly through centralized, evergreen portfolios. This structure is expected to provide exposure to more than 500 investments. We expect the portfolio's scale to allow Golub to manage the fund's leverage more efficiently. Since the underlying evergreen funds existed prior to GCP 15's inception, the fund is also expected to provide exposure to investments that were made before it was formed. This adds vintage-year diversification that may benefit a portfolio, but credit conditions prior to 2020 were also generally looser. This may make older loans that have not yet been repaid more likely to experience credit losses.

Golub's track record may reflect its ability to temper credit risk. Between 2006 and 2022, the firm invested \$125.6 billion in loans to almost 1,000 portfolio companies for an 8.6% unlevered gross IRR. The return These transactions had a 0.5% annualized credit-loss rate, which is on the lower end of the 0.5-0.8% range we consider representative of the category. We consider this strong considering the strategy's focus on larger loans, which we associate with higher risk of loss. We think this success is driven by selectivity and Golub's deep team dedicated to credit workouts.

Recommendation Summary

We recommend the strategy as a strategic allocation. It may be a fit for clients seeking higher returns and more broadly diversified exposure than the typical U.S. senior direct lending fund. While GCP 15's exposure to a range of vintage years makes it particularly appealing for clients incepting new allocations to the category, those with lower risk tolerances may wish to consider funds that use less leverage.





Glossary

Glossary

Alternative Investments: Broadly, investments in assets or funds whose returns are generated through something other than long positions in public equity or debt. Generally includes private equity, private debt, real estate, and hedge funds.

Bankruptcy: One of several federal court procedures that debtors may invoke to protect them from their creditors.

Broadly Syndicated Loans (BSLs): Senior term loans that are held by a large or potentially large group of investors. BSLs are originated by an agent bank who assigns participations in the loan to a group of investors (a “syndicate”) in a manner similar to the initial public offering for a stock. There is an established secondary market for BSLs, which allows them to be held in more liquid vehicles such as mutual funds. BSLs are also commonly called “bank loans.”

Buyouts: Investments made to acquire majority or control positions in businesses purchased from or spun out of public or private companies, or purchased from existing management/shareholders public equity shareholders in “going private” transactions, private equity funds or other investors seeking liquidity for their privately –held investments. Buyouts are generally achieved with both equity and debt. Examples of various types of buyouts include: small, middle market, large cap, and growth.

Carried Interest: Also known as “carry” or “promote.” A performance bonus for the GP based on profits generated by the fund. Typically, a fund must return a portion of the capital contributed by LPs plus any preferred return before the GP can share in the profits of the fund. The GP will then receive a percentage of the profits of the fund (typically 15.0-20.0%). For tax purposes, both carried interest and profit distributions to LPs are typically categorized as a capital gain rather than ordinary income.

Capital Commitment: The total out-of-pocket amount of capital an investor commits to invest over the life of the fund. This commitment is generally set forth on an investor’s subscription agreement during fundraising and is accepted by the GP as part of the “closing” of the fund.

Catch-up: A clause in the agreement between the GP and the LPs of a fund. Once the LPs have received a certain portion of their expected return, often up to the level of the preferred return, the GP is entitled to receive a majority of the profits (typically 50.0%-100.0%) until the GP reaches the carried interest split previously agreed.

Co-investments: Investment made directly into a company alongside a General Partner’s investment, rather than indirectly through a fund.

Covenant: A condition in a corporate loan agreement that requires the borrower to fulfill certain conditions (“maintenance covenant”) or prohibits the borrower from undertaking certain actions (“incurrence covenant”).

Covenant-Lite: A loan that does not have any maintenance covenants. The term’s spelling is by industry convention.

Creditor: The lender of a loan, who gives one or more debtors money in advance in exchange for later payments of principal and/or interest.

Debtor: The borrower of a loan, who receives money from one or more creditors in advance in exchange for later payments of principal and/or interest.

Default: This occurs when the borrower does not meet the terms to which it committed in a loan agreement. Default can occur from failing to meet covenant conditions as well as failing to make principal or interest payments.

Distressed Debt: Strategies that purchase the debt of companies that are troubled, have defaulted, are on the verge of default, or are seeking bankruptcy protection. Investors have been referred to as “vultures” as they pick the bones of troubled companies. Investment structures of focus include subordinated debt, junk bonds, bank loans, and obligations to suppliers.

Distribution: When an investment by a fund is fully or partially realized, the proceeds of the realizations may be distributed to the investors. These proceeds may consist of cash, or, to a lesser extent, securities.

Dry Powder: Capital that has been committed to a limited partnership and has not yet been called or may be called again (“recycled”).

EBITDA: A measure of annual corporate cash flow defined as earnings before interest, taxes, depreciation and amortization. This measure of annual cash flow is intended to make comparisons between different industries more relevant. Multiples of EBITDA are a generally accepted method for valuing private companies and describing the amount of leverage in direct lending.

Effectively Connected Income (ECI): Income that a foreign entity earns from conducting a trade or business in the U.S.

Efficient Frontier: The set of portfolios that maximizes the expected rate of return at each level of portfolio risk.

Fair Value: An estimate of the price at which an unrelated buyer and seller would exchange an asset in an arms-length transaction. For a publicly traded asset, fair value may be observed based on recent trades in the market. For assets that are traded less frequently or not at all, the value of an asset is often estimated by forecasting its future cash flows and discounting them based on assumed discount rates.

General Partner (GP): A class of partner in a partnership. The GP makes the decisions on behalf of the partnership and retains liability for the actions of the partnership. In the private equity industry, the GP is solely responsible for the management and operations of the investment fund while the LPs are passive investors, typically consisting of institutions and high net worth individuals. The GP earns a percentage of profits.

Gross Assets: The fair value of all the partnership’s holdings, including those funded using limited-partner equity and leverage.

Insolvency: The state of not being able to pay amounts owed. This can result from not having enough assets to meet the borrower’s commitments or not having enough liquidity.

Internal Rate of Return (IRR): The compound interest rate at which a certain amount of capital today would have to accrete to grow to a specific value at a specific time in the future. Basically, it is the average return on capital over the lifetime of the investment. This is the most common standard by which GPs and LPs measure the performance of their private debt portfolios and portfolio companies over the life of the investment. IRRs are calculated on either a net (i.e., including fees and carry) or gross (i.e., not including fees and carry) basis.

J-Curve: The IRR of a private investment plotted versus time. The J-curve refers to the fact that net IRRs in the early years of a fund are generally negative, dominated by drawdowns for fees and investments. As investments accrete in values and are gradually liquidated, returning capital and profits, the fund works through the J-curve and begins to show positive IRRs and multiples of investors’ capital.

Leverage: The use of debt to acquire assets, build operations and increase revenues. By using debt (in either the original acquisition of the company or subsequent add-on acquisitions), investors attempt to achieve investment returns beyond which they could achieve using equity capital alone. Increasing leverage on a company also increases the risk that assets and revenues will not increase sufficiently to generate enough net income and cash flow to service the increased debt load.

Leveraged Buyout (LBO): The purchase of a company or a business unit of a company by an outside investor using mostly borrowed capital.

Limited Partner (LP): A passive investor in a Limited Partnership. The General Partner (GP) is liable for the actions of the partnership, while the LPs are generally protected from legal actions and any losses beyond their original investment. The LPs receive income, capital gains and tax benefits.

Loan-to-Value (LTV): The ratio of a loan's balance to the value of the collateral that secures it. This is often used in asset-based lending.

London Interbank Offered Rate (LIBOR): LIBOR rates measured the interest rates at which banks lent a variety of currencies (including the U.S. dollar) to one another for a variety of terms (such as one month or three months). These rates are being replaced with other rates around the world, and specifically the Secured Overnight Financing Rate (SOFR) in the U.S., due to problems with its survey-based methodology and alleged manipulation during the Global Financial Crisis.

Management Fee: A fee paid to the Investment Manager for its services. For a senior direct lending strategy, the fee is generally assessed on gross assets, including assets purchased using leverage. Other types of private debt tend to have more variation in the denominator against which they assess fees, such as assessments based on the partnership's aggregate committed capital.

Mezzanine: An unsecured debt instrument that is subordinated to the senior debt in a company but ranking senior to any equity claims. The instrument may include equity features such as warrants or options.

Middle-Market: Companies with \$10.0-100.0 million in annual cash flow (EBITDA), which are generally considered established but not large enough to issue publicly traded debt. The middle market is segmented into lower, core and upper capitalization ranges. We typically see the lower middle-market defined as companies with \$10.0-25.0 million in EBITDA, the core middle market defined as companies with \$25.0-75.0 million in EBITDA and the upper middle-market defined as companies with more than \$75.0 million in EBITDA.

Multiple of Invested Capital (MOIC): The total return on an investment as measured by $(\text{Total Money Out})/(\text{Total Money In})$. Multiple of cost and IRR are the two most common measures of performance in private equity-style Limited Partnerships.

Net Asset Value (NAV): The value given by deducting an entity's liabilities from its assets. This can refer to the estimated value available to all investors in a pooled vehicle or the value of a specific limited partner's investment in it. The amount is different from gross assets because it includes an estimate for what it would cost to pay off the fund's debt. This distinction is particularly meaningful for levered investments.

Payment-in-Kind (PIK): Interest assessed as increases in the principal owed, rather than in cash. When the debtor has the option of paying in cash or PIK, this is called a "PIK toggle".

Preferred Return: The minimum return that the GP needs to achieve in order to receive carried interest. After the cost basis of an investment is returned to the LPs, they will also receive additional proceeds from the investment equal to a stated percentage, often 6.0-8.0%. Once the preferred return is paid, then the GP will be entitled to its carried interest on all profits realized from the investment in excess of zero (i.e. not limited to the portion above the preferred return).

Private Equity: May refer to the non-exchange-listed common equity of a corporation or a set of investment strategies that generally invest in that type of asset. Since such investments are illiquid, investors must be prepared for investment horizons from 5.0 to 10.0 years.

S&P/LSTA U.S. Leveraged Loan Index: A market-weighted index intended to track the performance of tradeable U.S. broadly syndicated loans ("bank loans"). The index represents a partnership of Standard & Poor's (S&P) and the Loan Syndications and Trading Association (LSTA).

Secured Overnight Financing Rate (SOFR): SOFR measures the cost of borrowing overnight collateralized by Treasury securities, as published by the Federal Reserve Bank of New York.

Senior: Higher priority than other claims on the borrower's assets. All else held equal, senior claims should receive higher recoveries in restructurings than subordinated claims.

Special Situations: Strategies that flexibly invest in companies that are in complex, less understood and/or troubled circumstances.

Subordination: Lower in priority than a more senior claim on the borrower's assets. All else held equal, subordinated claims should receive lower recoveries in restructurings than more senior claims.

Unrelated Business Taxable Income (UBTI): Income earned by a tax-exempt entity that is not substantially related to the entity's tax-exempt purpose.

Vintage Year: The year in which a private fund had its final closing.