Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 14

MEETING DATE: **October 18, 2017**

SUBJECT: **Education on Available Structures for Private Credit Investments**

SUBMITTED FOR: ___ **Consent** ___ **Deliberation and Action** _X_ **Receive and File**

RECOMMENDATION

Staff recommends the Board receive and file the educational presentation on available structures for Private Credit investments.

PURPOSE

To provide an overview on available structures under consideration by SCERS' investment staff ('Staff') and Cliffwater for making investments in Private Credit consistent with the Board-approved implementation protocol and investment plan.

While no specific action or approval is requested from the Board at this time, Staff hopes to confirm the Board is comfortable with the approach to portfolio construction for Private Credit as outlined herein by Staff and Cliffwater.

PRIVATE CREDIT OVERVIEW

As you will recall, SCERS' Board approved a new strategic asset allocation in early 2017, which included the creation of the Private Credit asset class (target allocation of 4% of the total portfolio), newly distinguished from the Private Equity allocation, but both remaining a part of the Growth asset category.

Private credit is an illiquid, lending-oriented strategy to performing companies. It includes primarily debt investments, where an investor expects to receive principal and interest, with the majority of returns being generated from cash flow yield. Private credit is typically structured with floating rate loans, with a spread over Libor, so cash flow income increases or decreases as interest rates rise or fall. The average duration of a loan is generally three years, and most loans are senior secured loans, but some strategies incorporate different layers of the capital structure. Loans are typically either sponsored (private equity backed companies) or non-sponsored (direct loans to middle market companies). The latter typically have higher yields than the former because they are direct loans to middle market companies which have fewer avenues to attain financing than in the sponsored space.

The Private Credit asset class is intended to produce attractive risk-adjusted returns and generate current cash flow for SCERS. It is expected to generate returns in excess of the publicly traded leverage loan index (large syndicated bank loans) with an illiquidity premium. The Policy Index Benchmark for the Private Credit asset class is the Credit Suisse Leverage Loan Index + 2%

The target allocation for Private Credit is 4%. The sub-strategy allocation for Private Credit is shown in the table at right. The two sub-strategies, direct lending and opportunistic credit, are somewhat similar in their investment strategy (lending oriented strategies to performing companies), but there are several distinguishing characteristics in terms of seniority in the capital structure, collateral, equity participation, leverage and industry focus.

SCERS Private Credit Portfolio
Targets and Allocation Ranges

	Target Range	Target %
Direct Lending	50% - 100%	70%
Opportunistic Credit	0% - 50%	30%
U.S.	75% - 100%	85%
Non-U.S.	0% - 25%	15%

	Profile	
Criteria	Direct Lending	Opportunistic Credit
Seniority	Primarily senior debt, typically secured	Often includes subordinated structures, including structured equity
Collateral	May include general corporate assets or be secured by specific collateral	Typically backed by specific assets such as receivables or inventory (i.e. asset-based lending)
Equity Participation	Loans may include some equity participation, often through warrants	May have meaningful equity participation depending on the structure
Leverage	Common to use 1 to 2.5 times leverage; can also invest unlevered	Little to no leverage
Industry Focus	Broadly diversified	Typically sector specific

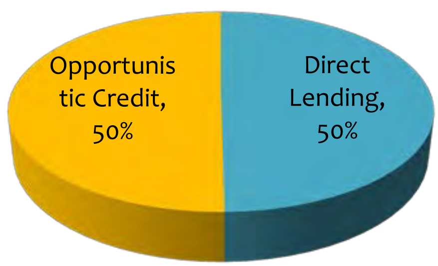
IMPLEMENTATION CONSIDERATIONS FOR PRIVATE CREDIT

Earlier in 2017, SCERS' Board approved a twelve-month investment plan for Private Credit. The investment plan calls for SCERS to target fund commitments, with a range between 3 and 5, and a target commitment size per fund of $60 million, with a range between $25 and $100 million. The direct lending sub-strategy will generally have an average fund size between $50 million and $100 million (the larger number corresponds to any potential separate accounts), while the opportunistic credit strategy generally will have an average fund size between $25 million and $50 million. The aggregate target commitment level for 2017 is $200 million, with a range between $150 and $250 million. Private Credit will target a more concentrated number of general partner ('GP') relationships (8

	Target	Range Min	Range Max
Commitment Level	$200 MM	$150 MM	$250 MM
Number of Funds	4	3	5
Direct Lending Fund(s)	3	2	4
Opportunistic Credit Fund(s)	1	0	2
Commitment per Fund	$60 MM	$25 MM	$100 MM
Direct Lending Commitment per Fund(s)		$50 MM	$100 MM
Opportunistic Credit Commitment per Fund(s)		$25 MM	$50 MM

to 12) compared to other private market segments, such as Private Equity. The concentered approach to GP relationships and larger fund commitments is based on the smaller universe of managers in private credit and the lower risk return profile associated with private credit funds.

SCERS' current allocation to Private Credit, as of June 30, 2017, is 50% direct lending and 50% opportunistic credit, compared to the target allocations of 70% direct lending (50% to 100% range) and 30% opportunistic credit (0% to 50% range). This will change as more direct lending strategies are targeted going forward. Within direct lending, SCERS has investments with Summit Partners Credit Funds I and II, and within opportunistic credit, SCERS has investments with Athyrium Opportunities Funds II and III.



PRIVATE CREDIT INVESTMENT VEHICLES

At a prior Board meeting, Cliffwater and Staff presented the most common investment vehicles used in direct lending segment of private credit:

	Private BDCs	Private Commingled Funds	Separate Accounts
Description	Invest in new non-traded regulated BDC with intention to go public after 5-6 years	Like private equity, invest in drawdown partnerships as a limited partner	Ability to customize a direct lending portfolio for large investments
Investor Minimums	$5m	$5m	$50m - $100m
Leverage	Less than 1.0x	0.0x to 2.5x depending on offering	Investor directed
Management Fees	0.75% - 1.00%	1.00% - 2.00%	0.50% - 1.00%
Performance Fees	Most have performance fees between 10% and 15% of profits, after 7-8% preferred return		
Positives	Strong offerings with opportunity to earn additional 10-20% IPO premium	Access to good firms with strategies/terms to match investor objectives	Lowest fees with ability to customize terms and portfolio; co-investment opportunities
Negatives	IPO opportunity may not transpire and fund liquidates	Lack of liquidity, but better than private equity	Large commitment

A familiar vehicle for private credit investments are direct investments in private commingled funds (limited partnerships), similar to how SCERS executes investments in the other private markets asset classes. Private commingled funds are drawdown structures with management fees between 1.0% and 2.0%. Direct lending strategies generally have lower fees than other private market strategies, and often only charge management fees on invested capital, not committed capital. Carried interest (performance fees) ranges between 10% and 15%, with a preferred return hurdle typically between 7% and 8%. Opportunistic funds can have higher management fees and carried interest given their higher return targets.

Separate accounts are also a vehicle that can be used to invest in direct lending segment of private credit, especially since the average investment size is expected to be approximately $60 million, as identified in the twelve month investment plan for Private Credit. Separate accounts, which are also referred to as fund of one structures, are larger and customizable accounts that have greater flexibility in the guidelines, greater input from Staff and consultant, and sometimes lower fees. Separate accounts often have a size greater than $50 million; typically around $100 million or larger for SCERS. SCERS is invested in separate account/fund of one vehicles in other asset classes, including:

SCERS Fund of One Mandates (as of June 30, 2017):

Investment Manager	Asset Class	Strategy	Investment Value	Commitment Amount (if not fully invested)
Brigade Capital Management	Public Credit	high yield/bank loans	$170 million	-
Grosvenor Capital Management	Absolute Return	diversified absolute return portfolio	$330 million	-
BlackRock Realty and Barings Realty	Real Estate	core separate accounts	$240 million	-
Atalaya Capital Management	Real Assets	loan originations backed by real assets	$13 million	$100 million
Pantheon Ventures	Real Assets	secondary and co-investments in real assets	$40 million	$100 million

Over the next few months, Staff and Cliffwater expect to bring a couple of direct lending investments for consideration. These will include a private commingled fund (limited partnership structure) as well as a separate account/fund of one vehicle. The limited partnership investment will be in the range of $50 million to $75 million, and the fund of one investment will be for $100 million.

Historically, when Staff and investment consultants have considered fund of one separate account structures, prior to making a recommendation on a specific investment manager, education has been provided on the investment opportunity and why the opportunity fits within a larger fund of one structure, in order to confirm that the SCERS Board is comfortable with this approach, which is an objective of this presentation. The section below provides a description of the attributes of using a fund of one structure in Private Credit.

SEPARATE ACCOUNT/FUND OF ONE STRUCTURE

There are several appealing features of a fund of one structure in private credit, particularly direct lending. First, investment guidelines and portfolio construction parameters can be customized within areas such as leverage targets and limits, targets and ranges for seniority of loans in the capital structure and sizing of individual loans.

An appealing attribute of an opportunity that Staff and Cliffwater have been performing due diligence on is that the fund of one vehicle is an 'evergreen' structure. An evergreen fund, also called a perpetuity vehicle, would have an initial principal amount of capital committed (i.e., $100 million in this case). As the principal capital is deployed and then repaid, it would stay with the manager for reinvestment over time. While the principal stays with the manager, the cash flows of the investments, income and gains associated with the underlying loans, would flow to SCERS on a quarterly basis. So, SCERS would not need to re-invest in subsequent funds in order to maintain an investment with the manager, such as with a traditional closed-end limited partnership commingled fund structure. The evergreen fund of one would auto-renew every two years, and would be structured with liquidity provisions. SCERS could continue making new investments or terminate the investment period at any time, and let the existing investments in the vehicle run off over time.

As you will recall, in a traditional limited partnership commingled fund structure, an investor's commitment is typically invested over a three year period during which underlying portfolio investments are harvested, and income, gains and principal are returned to investors. Two to three years subsequent to the prior fund's capital raise, a new fund is marketed and, if the investor seeks to maintain exposure to the manager and its strategy, an additional commitment to that manager's follow-on fund is made. With the evergreen fund of one structure, the manager would maintain the principal while returning income and gains, and the investor would maintain continuing exposure to the manager, similar to an open end fund vehicle, without having to 're-up' with a subsequent fund.

Using a larger fund of one structure makes sense in direct lending, as this is a lower risk strategy compared to most illiquid asset classes. Direct lending is a segment where there are a fewer number of investment managers than other asset classes like private equity, and the direct lending investment strategy is more homogenous than other segments. These are private loans to performing mid-market companies, primarily within the U.S. Within a direct lending fund, there will be a pool of close to fifty underlying loans, diversified by borrower type, borrower size, industry and loan type. In addition, vintage year diversification is less important in private credit than in private equity.

Using large fund allocations is also beneficial to SCERS. A fund of one structure would help SCERS minimize its manager and fund proliferation, and reduce accounting and reporting overhead, especially as it relates to managing cash flows and the increasing focus by institutional investors on fee and expense transparency.

Staff has determined that the likely entry point to create a fund of one vehicle is $100 million, which would be an appropriate size for SCERS relative to the overall size of the Private Credit asset class. While there can be discounted fees associated with larger fund of one structures ($200 million or more), that is too large of an allocation for SCERS to a fund of one structure at this point. It is likely SCERS' fees for a fund of one structure would be similar to its fees as a limited partner in a commingled fund vehicle. Specifics on terms would be provided in the due diligence reporting by Staff and Cliffwater.

NEXT STEPS

The expectation is to have a combination of traditional closed end commingled funds and fund of one separate account vehicles within direct lending segment of Private Credit. Staff and

Cliffwater anticipate submitting Private Credit investment opportunities to the Board for consideration over the next few months. For these opportunities, detailed due diligence reporting will be provided by Cliffwater and Staff on the investment opportunity and investment manager within the Board approved implementation protocol for Private Credit.

ATTACHMENTS

Education on Available Structures for Private Credit Investments Presentation by Cliffwater and Staff
Private Credit Asset Class Structure, Investment Implementation Plan, Twelve Month Investment Plan, and Implementation Protocol (approved on May 5, 2017)

Prepared by:	Reviewed by:
/S/	/S/
Steve Davis Chief Investment Officer	Annette St. Urbain Interim Chief Executive Officer

Los Angeles • New York

Sacramento County Employees' Retirement System

Education on Available Structures for Private Credit Investments

October 18, 2017

Introduction

Overview of the Private Credit asset class

Description of Private Credit investment vehicles and structures

Update the Board on upcoming implementation considerations for Private Credit

Private Credit Overview

SCERS has a 4% target allocation for Private Credit

- Private Credit includes lending-oriented strategies to performing companies
  - Primarily debt investments; manager expects to receive principal and interest
- The private credit portfolio will not include distressed oriented strategies

Intended to produce attractive risk-adjusted returns and generate current cash flow

- Expect to outperform leveraged loans (large, syndicated bank loans) by 2% annually
- Expect the majority of the return to be generated by cash flow yield

Private Credit includes Direct Lending and Opportunistic Credit strategies

- Direct Lending will comprise the majority of the private credit portfolio (targeting 70% Direct Lending)
  - Opportunistic Credit can be considered a niche lending strategy within Private Credit

	Target Range	Target %
Direct Lending	50% - 100%	70%
Opportunistic Credit	0% - 50%	30%
U.S.	75% - 100%	85%
Non-U.S.	0% - 25%	15%

Private Credit Lending Characteristics and Considerations

Key Characteristics:

- 7-15% annualized expected net total return[1]
- Quarterly cash flow
- Low volatility relative to other asset classes with similar expected returns
- Minimal interest rate risk due to floating rate structures
- Institutional asset management
- Mitigated J-curve effects vs. typical private equity investments

Important Considerations:

- Illiquid, but drawdown/distribution windows are <3 years versus >5 years for private equity
- Lesser known sector of the corporate debt market
- Limited institutional investor history
- Increasing institutional capital flowing into the market

Manager selection is important to favorable outcomes, given dispersion among manager returns

[1] References to expected returns should not be considered a prediction or guarantee that such results will be achieved. Expected returns are based upon assumptions regarding future events and conditions that may prove to be inaccurate. Accordingly, expected returns should not form the primary basis for an investment decision.

Defining Direct Lending and Opportunistic Credit

SCERS applies objective criteria to distinguish between Direct Lending and Opportunistic Credit strategies, as shown in the table below

	Profile	
Criteria	Direct Lending	Opportunistic Credit
Seniority	Primarily senior debt, typically secured	More flexibility to include subordinated structures, including structured equity
Collateral	May include general corporate assets or be secured by specific collateral	Typically backed by specific assets such as receivables or inventory (i.e. asset-based lending)
Equity Participation	Loans may include some equity participation, often through warrants	May have meaningful equity participation depending on the structure
Leverage	Common to use 1 to 2.5 times leverage; can also invest unlevered	Little to no leverage
Industry Focus	Broadly diversified	Typically sector specific

SCERS' Private Credit Implementation Plan

Expect the private credit portfolio to be more concentrated than the private equity portfolio

- Private Credit represents a specific investment strategy previously included in Private Equity
- Relative to Private Equity, expect larger commitment sizes and fewer GP relationships
  - Expect 8 to 12 long-term GP relationships in Private Credit

SCERS has a $200 million Private Credit commitment budget for 2017

- Target commitment size of $60 million, with a range between $25 million and $100 million
  - $50 - $100 million for direct lending and $25 - $50 million for opportunistic credit

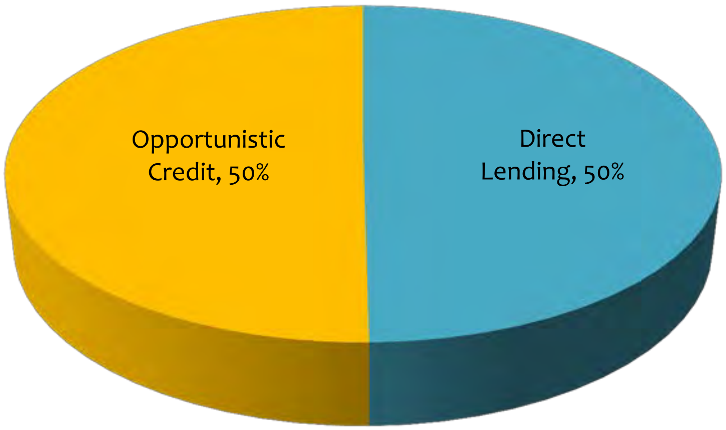
SCERS 2017 Private Credit Annual Investment Plan

		Range	
	Target	Min	Max
Commitment Level	$200 MM	$150 MM	$250 MM
Number of Funds	4	3	5
Direct Lending fund(s)	3	2	4
Opportunistic Credit fund(s)	1	0	2
Commitment per Fund	$60 MM	$25 MM	$100 MM

SCERS' Private Credit Portfolio Composition

Current Private Credit allocation as of June 30, 2017

- 50% allocation to direct lending
  - Investments with Summit Partners Credit Funds I and II
- 50% allocation to opportunistic credit
  - Investments with Athyrium Opportunities Funds II and III
- Current focus on direct lending investments



CLIFFWATER LLC

Private Direct Lending Vehicle Characteristics

	Private BDCs	Private Commingled Funds	Separate Accounts
Description	Invest in new non-traded regulated BDC with intention to go public after 5-6 years	Like private equity, invest in drawdown partnerships as a limited partner	Ability to customize a direct lending portfolio for large investments
Investor Minimums	$5m	$5m	$50m - $100m
Leverage	Less than 1.0x	0.0x to 2.5x depending on offering	Investor directed
Management Fees	0.75% - 1.00%	1.00% - 2.00%	0.50% - 1.00%
Performance Fees	Most have performance fees between 10% and 15% of profits, after 7-8% preferred return		
Positives	Strong offerings with opportunity to earn additional 10-20% IPO premium	Access to good firms with strategies/terms to match investor objectives	Lowest fees with ability to customize terms and portfolio; co-investment opportunities
Negatives	IPO opportunity may not transpire and fund liquidates	Lack of liquidity, but better than private equity	Large commitment

SCERS is likely to invest through private BDCs, private commingled funds, and separate accounts

– SCERS may also invest in fund-of-funds vehicles

SCERS may make secondary private credit investments; co-investments are not likely

Source: Cliffwater research.

SCERS’ Current Separate Account/Fund of One Strategies

SCERS currently has several separate account/fund of one structures in the total portfolio

- Larger and customizable accounts that have greater flexibility in the guidelines, greater input from Staff and consultant, and sometimes lower fees
- SCERS’ separate accounts typically have a size of $100 million or larger.

SCERS Fund of One Mandates (as of June 30, 2017):

Investment Manager	Asset Class	Strategy	Investment Value	Commitment Amount (if not fully invested)
Brigade Capital Management	Public Credit	high yield/bank loans	$170 million	-
Grosvenor Capital Management	Absolute Return	diversified absolute return portfolio	$330 million	-
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Larger Allocations within Direct Lending

Direct Lending is a category where SCERS can consider making larger allocations

- Lower risk strategy than most other illiquid asset classes
- The potential for larger allocations is reflected in the Private Credit Annual Investment Plan
  - Have an expected range of $25 million to $100 million per commitment
  - Expecting smaller commitments for Opportunistic Credit and larger commitments for Direct Lending

Can achieve appropriate portfolio diversification with fewer managers

- Direct Lending is more homogeneous than broader asset classes such as Private Equity
  - Private loans to performing mid-market companies, primarily in the U.S.
- Focus on strong manager selection and diversification within the underlying pool of assets
  - Diversify by borrower type, borrower size, industry, and loan type
- Vintage year diversification less important than with Private Equity

Benefits of larger allocations

- Increases the potential to have separate account mandates
- Helps SCERS to control its overall number of investment manager relationships and the number of individual funds that are invested in with a given manager
- Adds efficiency with accounting and reporting, especially as it relates to managing cash flows and the increasing focus by institutional investors on fee and expense transparency

Appeal of Separate Accounts/Fund of Ones for Direct Lending

Potential benefits of a Separate Account/Fund of One

- Can customize investment guidelines and portfolio construction parameters
  - Loan sizes
  - Size of borrower
  - Leverage
  - Capital structure targets
- Can create an "evergreen" structure to permit the GP to continue reinvesting capital over time
  - Principal remains with GP, while cash flows (income and gains) are returned to the investor
  - Maintain control over the investment activities
  - Ability to continue making new investments or terminate the investment period
  - Can include other veto rights and governance terms
- Evergreen structure eliminates the need to fully re-underwrite a strong GP over successive fundraises
  - Direct Lending GPs may raise successive funds every 2 to 3 years
  - Still maintain controls over the investment pool and continually assess the GP's capabilities

Expected portfolio characteristics limit the risks of larger, dedicated accounts

- Relatively short investment holding periods, with 5 year loan terms and 3 year average loan life
- Steady cash flow generated from the underlying loan portfolio

Next Steps

Upcoming Implementation Activity

– Over the next couple of months, Staff and Cliffwater expect to bring private credit (direct lending) investment opportunities to SCERS' Board

  - Will include private commingled funds (limited partnership structures) as well as a separate account/fund of one vehicles
  - Detailed due diligence reporting will be provided by Cliffwater and Staff on specific investment opportunities and managers within the Board approved implementation protocol for Private Credit

Fund of One Consideration

– $100 million evergreen structure

  - Principal stays with the manager, while cash flows, income and gains associated with the underlying loans, would be sent back to SCERS on a quarterly basis
  - Auto-renews every two years, with ability for SCERS to continue making new investments or terminate the investment period at any time
  - Differentiated investment manager and strategy

General Disclosures

Important Notice

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ITEM 17

SCERS
SACRAMENTO COUNTY
EMPLOYEES' RETIREMENT SYSTEM

For Agenda of:
May 11, 2017

May 5, 2017

TO: President and Members
Board of Retirement

FROM: Steve Davis
Chief Investment Officer

SUBJECT: Recommended asset class structure, investment implementation plan, twelve month investment plan, and implementation protocol for the Private Credit asset class

RECOMMENDATION:

It is recommended that your Board approve the asset class structure for Private Credit, investment implementation plan for Private Credit, twelve month investment plan for Private Credit, and implementation protocol for Private Credit, as proposed by Cliffwater LLC and SCERS' Investment Staff.

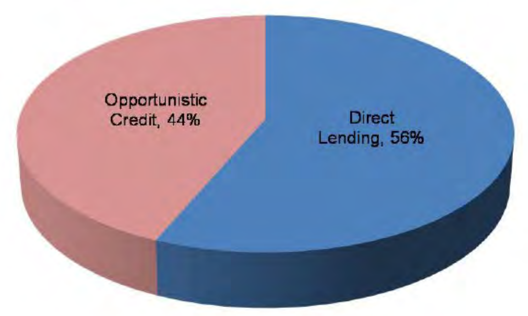
INTRODUCTION:

SCERS' Board approved a new asset allocation model in early 2017. The new asset allocation resulted in the creation of a new asset class, Private Credit, which will part of the Growth asset category. As you will recall, the Growth asset category includes: (1) Public Equities (domestic and international); (2) Private Equity; (3) Public Credit (high yield credit /bank loan); (4) Private Credit; and (5) Growth-oriented Absolute Return. The primary risk factors that the Growth asset category is exposed to are equity and credit risk, and underlying investments tend to perform best in a high growth and low/moderate inflationary environment. In contrast, they tend to perform poorly during recessionary periods, when GDP growth is contracting, or during certain periods when unexpected inflation arises.

Private credit is an illiquid, lending-oriented strategy to performing companies. It includes primarily debt investments, where an investor expects to receive principal and interest, with the majority of returns being generated from cash flow yield. Private credit is typically structured with floating rate loans, with a spread over Libor, so cash flow income increases as interest rates increase. The average duration of a loan is generally three years, and most loans are senior secured loans, but some strategies incorporate different layers of the capital structure. Loans are typically either sponsored (private equity back companies) or non-sponsored (direct loans to middle market companies). The latter typically have higher yields than the former.

The target allocation for Private Credit is 4%. In conjunction with the creation of Private Credit, the target allocation for Private Equity was reduced from 10% to 9%. As you will recall, private credit investments have historically been made within SCERS' Private Equity portfolio. A small number of existing Private Credit investments will be moved to the new Private Credit asset class. These include investments in (1) Summit Partners Credit Fund I, LP ($16.4 million; vintage year 2011); (2) Summit Partners Credit Fund II, LP ($35 million; vintage year 2014); and (3) Athyrium Opportunities Fund II, LP ($32 million; vintage year 2015). The aggregate market value of these three funds is approximately $54 million as of September 30, 2016. Including these investments, SCERS' current allocation to Private Credit is 0.7%.

SCERS Private Credit Sub-Strategy Exposure*



The purpose of this presentation is: (1) To provide SCERS' Board with a recommended asset class structure for Private Credit, which includes segments such as investment objective, policy benchmark, permissible investments, sub-strategy targets and ranges, eligible investment vehicles, diversification, and expected range of general partner ('GP') relationships; (2) Provide a long-term investment implementation plan for reaching the 4% target allocation; (3) Provide a twelve month investment plan for 2017, including target commitment level, number of targeted funds and average commitment amount per fund; and (4) Provide a recommended implementation protocol for the Private Credit asset class, which will be similar to the implementation protocol for other private market asset classes, including Private Equity. An investment policy statement ('IPS') for Private Credit will be recommended at a future Board meeting, and will contain much of the content that is being recommended for approval at the May Board meeting.

In order to keep the Board updated on the status of the asset class, going forward on an annual basis, SCERS' investment staff ('Staff') and Cliffwater (SCERS' alternative assets consultant) will present an annual review of the Private Credit investment program, and recommend an annual Private Credit investment plan for the forward year.

Please note that at the May Board meeting, the Board is being asked to approve the recommended asset class structure for the Private Credit asset class, the investment implementation plan for Private Credit, the twelve month investment plan for Private Credit, and the implementation protocol for Private Credit. The remainder of this memorandum will cover each of these components separately, and the attached Cliffwater presentation will also cover each. The Cliffwater presentation will also provide education on private credit investing.

RECOMMENDED ASSET CLASS STRUCTURE FOR PRIVATE CREDIT:

Investment Objective:

The Private Credit asset class is intended to produce attractive risk-adjusted returns and generate current cash flow. It is expected to generate returns in excess of the publicly traded leverage loan index (large syndicated bank loans) with an illiquidity premium. The expected premium to public bank loans is due to the illiquidity premium afforded to private market investments. The typical investment period for a private credit fund is between three and four years, with a fund life between five and eight years. According to Cliffwater's capital market assumptions for 2017, the unlevered expected 10-year return and standard deviation for private credit is 7.1% and 7.0%, respectively, versus 5.5% and 7.0%, respectively for publicly traded bank loans. While the volatility targets between private credit and publicly traded banks loans are similar, private credit is less subject to the mark-to-market risk (daily pricing fluctuations) that public bank loan investments are subject to.

The target return for the asset class will range between 7% and 11%, and will vary based on the type of strategy (direct lending versus opportunistic credit) and leverage utilized. The majority of the return should be generated by cash flow yield. Many private credit funds will have floating rate loans, often at a spread over Libor, and typically have a Libor floor structured in, which minimizes interest rate risk.

Policy Benchmark:

Given that private credit has similar characteristics to bank loans (small company loans that are senior in the capital structure, with claims to a borrower's assets, and that typically have floating interest rate structures), Staff, Cliffwater and Verus recommend using a commonly used index for bank loans as the benchmark for Private Credit, but with an illiquidity premium. A widely used bank loan index is the Credit Suisse Leverage Loan Index. The recommended illiquidity premium is 2%, which approximately equates to spread between the 10-year expected return for private credit and bank loans within Cliffwater's capital market assumptions.

Therefore, the recommended Policy Index Benchmark for the Private Credit asset class is the Credit Suisse Leverage Loan Index + 2%.

As you will recall, for Private Equity, Staff, Cliffwater and Verus recommended moving toward a private market peer universe index for the Policy Index, the Cambridge Associates LLC Global Private Equity & Venture Capital Pooled IRR, which compiles data from more than 1,200 institutional buyout, growth equity, venture capital, private equity energy and mezzanine funds. A private market peer universe index would be preferable in Private Credit as well, but there is not currently one available. If a viable one does become available in the future, a corresponding change to the Private Credit Policy Index could be recommended, but for the time being, the recommended Credit Suisse Leverage Loan Index + 2% represents the most effective benchmark for Private Credit.

Sub-strategy allocation:

Private Credit is a somewhat nascent asset class, and historically has represented a sub-set of a private equity portfolio for many institutional investors, SCERS included. Because of this, it will include fewer sub-strategies and less delineation than private equity. Cliffwater and Staff propose having the following sub-strategies for Private Credit: (1) Direct Lending; and (2) Opportunistic Credit. The primary geographic focus within Private Credit will be in the United States, though the portfolio can also include non-U.S. investments.

SCERS Private Credit Portfolio
Targets and Allocation Ranges

	Target Range	Target %
Direct Lending	50% - 100%	70%
Opportunistic Credit	0% - 50%	30%
U.S.	75% - 100%	85%
Non-U.S.	0% - 25%	15%

The recommended sub-strategy allocation for Private Credit is: (1) Direct Lending, with a 70% target and a 50% to 100% range; and (2) Opportunistic Credit, with a 30% target and a 0% to 50% range. The recommended geographic allocation for Private Credit is: (1) U.S. with an 85% target and a 75% to 100% range; and (2) Non-U.S. with a 15% target and a 0% to 25% range.

These two sub-strategies, direct lending and opportunistic credit, are somewhat similar in their investment strategy (lending oriented strategies to performing companies), but there are several distinguishing characteristics.

	Profile	
Criteria	Direct Lending	Opportunistic Credit
Seniority	Primarily senior debt, typically secured	Often includes subordinated structures, including structured equity
Collateral	May include general corporate assets or be secured by specific collateral	Typically backed by specific assets such as receivables or inventory (i.e. asset-based lending)
Equity Participation	Loans may include some equity participation, often through warrants	May have meaningful equity participation depending on the structure
Leverage	Common to use 1 to 2.5 times leverage; can also invest unlevered	Little to no leverage
Industry Focus	Broadly diversified	Typically sector specific

Source: Cliffwater

Direct lending will make up the bulk of the Private Credit asset class, with a target allocation of 70%, and a range between 50% and 100%. These are directly originated, non-traded and performing loans to middle market companies. Direct lending is primarily senior secured debt, which can be secured by general corporate collateral or by a company's specific collateral. Equity participation can be structured into the loan, typically through warrants, but this is generally a small component of the strategy. Yields are often lower than those in opportunistic credit strategies, so direct lending strategies often use 1.0 to 2.5 times leverage at the fund level to increase returns. However, these are lower-risk, senior secured loans, so the leverage is less susceptible to major drawdowns compared to the leverage used with other asset class investment strategies. Direct lending funds also have broadly diversified sector exposure, and include a combination of sponsored (private equity back companies) and non-sponsored (direct loans to middle market companies) borrowers, with the former representing lower yields and returns than the latter. The overall expected return for a direct lending strategy is lower than that of an opportunistic credit strategy, and will generally be in the range of 7% to 10%, with a cash yield between 7% and 9%.

SCERS' investments in Summit Partners Credit Fund ('SCF') I and II represent a good example of a direct lending investment. The strategy mostly includes senior secured loans to middle market companies across several sectors with a variety of collateral types. The SCF strategy has historically not used leverage, but has structured leverage into its newer funds.

Opportunistic credit will make up a smaller portion of the Private Credit asset class, with a target allocation of 30%, and a range between 0% and 50%. Opportunistic credit strategies are also performing loans (not distressed) like direct lending, but generally represent a broader range of investment types. Opportunistic credit includes mostly senior secured structures, but can also include subordinated debt structures, convertible debt and structured equity. Opportunistic credit is often designated as an asset-back lending strategy, where collateral comes in the form of specific assets such as receivables, inventory or royalty streams. Opportunistic credit funds often have meaningful equity participation, depending on the structure. This is often in the form of warrants and convertible bonds, but can also include direct equity participation. Yields are often higher than those in direct lending strategies, so opportunistic credit strategies generally use little to no leverage. Opportunistic credit funds generally have a targeted sector focus, which can often include only one sector, and generally are targeted toward higher returning non-sponsor borrowers. The overall expected return for an opportunistic credit strategy is higher than that of a direct lending strategy, and will generally be in the range of 10% to 15%, with a cash yield between 9% and 11%.

SCERS' investments in Athyrium Opportunities Fund ('AOF') II and III (recent as of May 2017), represent a good example of an opportunistic credit investment. The AOF strategy in a healthcare specific structured credit fund that includes mostly senior secured debt, but also includes subordinated debt, convertible bonds and meaningful equity participation.

Collateral is typically asset specific, including the royalty streams off of patented cash flowing biopharma drugs.

While there are distinguishing characteristics between direct lending and opportunistic credit strategies, it is not always clear cut. Therefore, Staff and Cliffwater will apply objective criteria in determining whether an investment opportunity should be categorized as direct lending or opportunistic credit.

It should be noted that SCERS has two other private direct lending strategies in other asset classes. Within the Private Real Estate asset class, SCERS is invested in DRC European Real Estate Debt Fund II, L.P. (a commingled debt fund backed by core real estate), and within the Private Real Assets asset class, SCERS is invested in Atalaya SCERS SMA, LLC (a $100 million separate account structured to invest in debt backed by real assets, and managed by Atalaya Capital Management). Going forward, any debt investments specific to real estate and real assets will continue to be allocated to the Private Real Estate and Private Real Assets asset classes, respectively, rather than Private Credit.

Investment Vehicles:

Cliffwater has provided the characteristics of the most common investment vehicles used in private credit:

	Private BDCs	Private Commingled Funds	Separate Accounts
Description	Invest in new non-traded regulated BDC with intention to go public after 5-6 years	Like private equity, invest in drawdown partnerships as a limited partner	Ability to customize a direct lending portfolio for large investments
Investor Minimums	$5m	$5m	$50m - $100m
Leverage	Less than 1.0x	0.0x to 2.5x depending on offering	Investor directed
Management Fees	0.75% - 1.00%	1.00% - 2.00%	0.50% - 1.00%
Performance Fees	Most have performance fees between 10% and 15% of profits, after 7-8% preferred return		
Positives	Strong offerings with opportunity to earn additional 10-20% IPO premium	Access to good firms with strategies/terms to match investor objectives	Lowest fees with ability to customize terms and portfolio; co-investment opportunities
Negatives	IPO opportunity may not transpire and fund liquidates	Lack of liquidity, but better than private equity	Large commitment

Source: Cliffwater

A familiar vehicle for private credit investments are direct investments in private commingled funds (limited partnerships), similar to how SCERS executes investments in the other private markets asset classes. Private commingled funds are drawdown structures with management fees between 1.0% and 2.0%. Direct lending strategies generally have lower fees than other private market strategies, and often only charge management fees on invested capital, not committed capital. Carried interest (performance fees) ranges between 10% and 15%, with a preferred return hurdle typically between 7% and 8%. Opportunistic funds can have higher management fees and carried interest given their higher return targets.

Separate accounts are also a vehicle that can be used to invest in private credit, especially since the average investment size is expected to be approximately $60 million (see the twelve month investment plan for Private Credit). Separate accounts are larger and customizable accounts that have greater flexibility in the guidelines, greater input from Staff and consultant, and lower fees. Separate accounts often have a size greater than $50 million; often around $100 million. SCERS is invested in separate account vehicles in other asset classes, including Public Credit (Brigade Capital Management), Absolute Return (Grosvenor Capital Management), Private Real Estate (Blackrock Realty and Barings) and Private Real Assets (Atalaya Capital Management).

Another investment vehicle that is common in private credit is business development companies (‘BDCs’). Public BDCs are akin to real estate investment trusts (‘REITs’), and are a way for investors to gain publicly traded exposure to direct lending. Many BDCs also offer private vehicles for institutional investors, which have similar investment strategies as a private commingled fund, but have a differing structure. These vehicles can have lower fees, lower yields, but have the potential to earn a return premium by going public through the IPO markets.

Other forms of private credit investments can occur through traditional fund of funds and secondary investments. Co-investments are not prevalent in private credit, as they are in private equity.

Diversification:

The Private Credit asset class will diversify across the sub-strategies identified in the prior section. It will include mostly U.S. investments, but can also include some non-U.S. investments. Similar to Private Equity, the Private Credit asset class will be diversified across vintage year. The performance and outcome of credit investments can be tied to a business cycle, so timing of deployment of capital relative to a specific point in a cycle is difficult. As SCERS makes future commitments within the Private Credit asset class, it is important to understand that in order to maintain vintage year diversification, investment commitments will be made consistently on an annual basis, and throughout a cycle.

Number of General Partner relationships:

Private Credit will have a more concentrated number of GP relationships compared to Private Equity. While the Private Equity asset class targets a range of 20 to 30 GP relationships, **<u>it is recommended that the Private Credit asset class target 8 to 12 long-term GP relationships</u>**. The allocation to Private Credit is smaller than the allocation to Private Equity, which partly accounts for the smaller number of GP relationships; however, Cliffwater and Staff recommend investing larger amounts in individual funds compared to Private Equity. While the average commitment amount per fund in Private Equity is $35 million, the average commitment amount per fund in Private Credit is recommended at $60 million. The investable universe for private credit, while having grown significantly over the past several years, is small relative to private equity, and the risk return profile for private credit funds are very different than that of private equity funds. The direct lending sub-strategy will generally have an average fund size between $50 million and $100 million (the larger number accounts for any potential separate accounts), while the opportunistic credit strategy generally will have an average fund size between $25 million and $50 million.

<u>INVESTMENT IMPLEMENTATION PLAN FOR PRIVATE CREDIT:</u>

<u>Cliffwater and Staff recommend adopting the Cliffwater Private Credit Capital Budget Plan below.</u>

Private Credit Capital Budget Projections

	SCERS - Capital Budget Model	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
1	Forecast Plan Total Assets	8,094,141	8,660,731	9,266,982	9,915,670	10,609,767	11,352,451	12,147,123	12,997,421	13,907,241	14,880,747
2	New Commitments		200,000	200,000	220,000	220,000	250,000	250,000	250,000	250,000	250,000
	Private Credit Fair Value by Sector:	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
3	Private Credit	53,801	98,362	198,294	323,329	424,549	491,677	540,474	577,599	600,046	611,811
4	Private Credit Total	53,801	98,362	198,294	323,329	424,549	491,677	540,474	577,599	600,046	611,811
5	Private Credit Fair Value as % of Total Plan Assets	0.7%	1.1%	2.1%	3.3%	4.0%	4.3%	4.4%	4.4%	4.3%	4.1%
6	Private Credit Target Asset Allocation	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Unfunded Commitments and Fair Value	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
7	Private Credit Unfunded Commitments	25,850	177,755	265,826	318,598	342,419	377,497	395,367	402,520	405,382	406,528
8	Unfunded Commitments + FV	79,651	276,117	464,121	641,927	766,969	869,174	935,842	980,120	1,005,428	1,018,339
9	Unfunded Commitments + FV as % of Assets	1.0%	3.2%	5.0%	6.5%	7.2%	7.7%	7.7%	7.5%	7.2%	6.8%
10	Ratio of Unf Com + FV to Target Allocation	0.25x	0.80x	1.25x	1.62x	1.81x	1.91x	1.93x	1.89x	1.81x	1.71x
	Net Cash Flow Requirements		12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
11	Private Credit		(39,746)	(91,698)	(109,819)	(77,454)	(36,615)	(13,923)	1,000	18,275	30,538
12	Total Net Cash Flow to Private Credit		(39,746)	(91,698)	(109,819)	(77,454)	(36,615)	(13,923)	1,000	18,275	30,538
	Annual Commitments by Strategy		12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
13	Existing Commitments		0	0	0	0	0	0	0	0	0
14	Private Credit		200,000	200,000	220,000	220,000	250,000	250,000	250,000	250,000	250,000
15	Total Annual Commitments to Private Credit		200,000	200,000	220,000	220,000	250,000	250,000	250,000	250,000	250,000

Total Plan Assets assumed to grow at 7.0% per annum

Source: Cliffwater

Cliffwater estimates that SCERS will need to invest approximately $200 to $220 million annually over the next four years to reach the 4% target allocation, with a projection to reach this level in 2020. The 4% target to Private Credit represents a long-term target as, similar to other private market asset classes, it will take a few years to prudently implement. However, the build out period for Private Credit is shorter than Private Equity given that funds have shorter investment periods and deploy capital quicker, and given that the majority of returns are cash flows where funds return capital much quicker. Private credit also experiences a minimal ‘J-curve’ compared to private equity, where for the former’s returns are negative initially and then generate significant returns later when underlying company investments are sold. The private credit returns are almost immediate, due to the heavy cash flow component, and more consistent throughout the life of a fund.

The Cliffwater forecast considers a number of dynamics in reaching the target allocation, including: (1) The growth in SCERS’ total portfolio, which will have volatility that can differ from what is forecasted in the capital budget projections; (2) The unique cash flow cycle of private credit investments, which factors in commitments, drawdown of capital, cash flow distributions and return of capital; (3) total plan liquidity; and (4) The annual commitment level necessary to meet and maintain SCERS’ 4% target allocation to Private Credit.

It should also be understood that, similar to private equity, SCERS will need to over commit to private credit, in order to reach the target allocation. Due to the cash flow characteristics of private credit, a private credit investment will not reach the value of its initial commitment level at any point in its cycle, since cash flows are being distributed back to investors as investments progress. Therefore, it is typically necessary to commit approximately 1.7x the target allocation in order to reach a given target allocation, with 2.0x being the upper bound. As a result, SCERS will need to commit more than 4% to the asset class in order to ultimately achieve its target allocation of 4%. Given this dynamic, Cliffwater and Staff anticipate that SCERS will reach its 4% target fair market value in 2020.

The capital budget forecast is a tool to help monitor and manage the Private Credit portfolio over the long-term. However, this forecast is expected to change dynamically due to the considerations above. Therefore, forecasting, monitoring and managing SCERS’ private credit cash flows will be a process of: (1) Developing the capital budget for Private Credit; (2) Monitoring actual performance; and (3) Adjusting the capital budget annually.

Private credit investments are illiquid and longer-term in nature. In making investments within the asset class, SCERS is seeking to earn a ‘liquidity premium’ above publicly traded fixed income, while also striving to achieve additional excess returns through the building of long-term relationships with, and the selection of top-tier investment managers. SCERS is comfortable adjusting its pace within the ranges during a given year to achieve these objectives.

<u>RECOMMENDED TWELVE MONTH INVESTMENT PLAN FOR PRIVATE CREDIT:</u>

<u>Cliffwater and Staff recommend the 2017 Private Credit Annual Investment Plan below.</u>

		Range	
	Target	Min	Max
Commitment Level	$200 MM	$150 MM	$250 MM
Number of Funds	4	3	5
Direct Lending fund(s)	3	2	4
Opportunistic Credit fund(s)	1	0	2
Commitment per Fund	$60 MM	$25 MM	$100 MM

Source: Cliffwater

The investment plan calls for SCERS to target fund commitments, with a range between 3 and 5, and a target commitment size per fund of $60 million, with a range between $25 and $100 million. As discussed earlier in the memo, the direct lending sub-strategy will <u>generally</u> have an average fund size between $50 million and $100 million (the larger number accounts for any potential separate accounts), while the opportunistic credit strategy <u>generally</u> will have an average fund size between $25 million and $50 million. The aggregate target commitment level for 2017 is $200 million, with a range between $150 and $250 million. The long-term forecast for the Private Credit asset class can be found within the Capital Budget Projections of the Cliffwater presentation, which calls for SCERS reaching the 4% target allocation in 2020.

SCERS recently made a $25 million commitment to Athyrium Opportunities Fund III, L.P. (opportunistic credit), which will count toward the 2017 annual investment plan, which leaves $175 million remaining to reach the 2017 target commitment amount.

It should be noted that the annual budget is based upon underlying fund vintage years, and not when SCERS makes a commitment to a fund. As an example, if SCERS were to make a commitment to a fund in the fourth quarter of 2017, but the fund does not begin investing until 2018, this fund would be a 2018 vintage year fund, and would therefore count toward the 2018 annual investment plan, and not the 2017 annual plan.

While the targets above are helpful to keep pace with the long-term plan for building SCERS' Private Credit asset class, it is important to add flexibility around the annual commitment amount, which is why the annual plan incorporates broad ranges around the targets. The objective of the investment plan is to provide a roadmap for achieving the targeted allocations in a prudent fashion, while managing vintage year, strategy, geography and investment manager diversification. As mentioned previously, it is important to understand that reaching the target allocation is a dynamic process, and therefore the allocation plan and capital budget forecasts within the asset class should be revisited on an ongoing basis.

RECOMMENDED PRIVATE CREDIT INVESTMENT IMPLEMENTATION PROTOCOL:

The recommended implementation protocol for the Private Credit asset class is similar to the implementation protocol for other private market asset classes, including Private Equity. As you will recall, the implementation protocol for Private Equity, Absolute Return, Real Assets and Real Estate were created in 2011, and are fairly similar to one another in concept. A catalyst for the development of these implementation protocols was the switch that SCERS made from investing in private market investments and absolute return funds through fund-of-funds vehicles, and instead, making investments in underlying funds directly (also referred to as a direct investment approach). The number of investments that are made with this approach versus a fund-of-fund approach, in addition to making such investments in a timely manner, as well as the relatively small size of any one investment, led to the establishment of this investment protocol for making such investments to effectively address these issues, while also allowing for sufficient oversight by the SCERS Board.

The implementation protocol for Private Credit designates the responsibilities shared between SCERS' Board, Staff and consultants. Overall, the Private Credit implementation protocol delegates the most time intensive elements of the process including development of the long-term and short-term investment plans and the screening and selection process of investment managers to Staff and consultant, while preserving the Board's oversight of the overall Private Credit program.

On an annual basis, the Board will approve the long-term Private Credit asset allocation structure and twelve month Private Credit investment plan as developed and presented by Staff and Consultant. The long-term Private Credit asset allocation structure will articulate the long-term direction and objectives of the Private Credit Program including elements such as: (1) An asset allocation target and ranges by strategy and vintage year; (2) A target range for the number of investment managers and types of vehicles; (3) A level of commitments to achieve and maintain SCERS' asset allocation target; (4) A capital budget and long-term forecast of cash flows; and, (5) The types of investment vehicles used to implement on the structure. The twelve month investment plan will articulate the direction over the next year in taking the necessary steps to achieve the above long-term asset allocation structure.

The execution of the long-term asset allocation structure and twelve month investment plan, including the selection of investment managers will be delegated to Staff, subject to the Board's ability to review, discuss and object to the recommendations of Staff and Consultant during the investment protocol process.

The SCERS Board approved this approach in other private market asset classes for several important reasons:

- The implementation process allows for a more expedited search since it is less dependent on decisions made at the once-a-month Board meeting. Among other things, a faster timeline can be important for taking advantage of an opportunity that is closing quickly.

- The implementation process is more efficient and demands less Board time, which is an important consideration given the length of Board Meetings and the volume of the materials that must be assessed for Board Meetings.

- Most important, the implementation process provides for a more extensive and intensive assessment of manager candidates since Staff and the consultant can undertake the analysis over a longer time period and draw upon more resources than what would be available to the Board.

- Taken together, the implementation process has the potential for producing more focused and effective manager selection decisions.

When managing SCERS' portfolio, including Private Credit assets, the SCERS Board must act as prudent fiduciaries. In carrying out these fiduciary duties, the SCERS Board can delegate various responsibilities to other parties, but such delegation must be reasonable, prudent and properly monitored and controlled. Because of the knowledge and expertise required to properly identify, screen and select private credit manager candidates, these tasks are suitable for a prudent fiduciary delegation of responsibilities. The manager selection process in private credit reflects the SCERS Board's recognition that Staff and consultants possess the requisite knowledge and expertise to help assure prudent decisions in these areas.

The key features of the proposed Private Credit investment protocol are as follows:

- Cliffwater and Staff will identify the most qualified candidates for a prospective private credit investment commitment based on: (a) The Private Credit asset allocation structure approved by the Board; and (b) The twelve month Private Credit investment plan approved by the Board (which takes into account SCERS' existing private credit investments and prioritizes and targets optimal new investment opportunities expected to come to market in the next twelve months).

- Staff will prepare an initial report for the Board outlining why a given private credit manager has been identified for closer scrutiny for a possible private credit commitment. That report will be posted on the secure Board website. If the Cliffwater investment strategy and operational due diligence reports have already been completed for the manager, they will be posted as well.

- Staff and Cliffwater will pursue more extensive due diligence on the manager candidate, including conducting extended interviews with the portfolio managers and other key members of the investment team. Cliffwater will complete the investment strategy and operational due diligence reports, if they have not done so already. Legal counsel will begin reviewing the documentation for the possible commitment and preliminary negotiation of deal terms will take place.

- If/When: (a) The due diligence process is completed; (b) Deal terms have been determined; (c) Staff and Cliffwater have concluded that a commitment should be made; then (d) Staff will prepare a final report outlining the basis for the decision, the proposed commitment amount, and the target date for closing on the commitment. This report will include an assessment of investment strategy and operational due diligence.

- At any point in the process, questions or concerns by any Board member regarding a proposed investment or proposed manager will be communicated to the Chief Executive Officer (‘CEO’). The CEO will be responsible for assuring that a prompt response is provided. The CEO will also provide the full Board with the response. If the Board member is not satisfied with the response, the Board member can request that the matter be brought to the full Board for consideration. In such a case, the CEO will refer the matter to the Board President who will determine whether the manager search process should be suspended until the matter is resolved. As a general rule, it is anticipated that the process of identifying and vetting a proposed investment will take place over a period of time sufficient to allow, if necessary, for full Board consideration of questions or concerns before a commitment is finalized.

- Absent questions or concerns by the Board, the proposed investment will be finalized and the necessary documentation executed.

- Staff and consultant will then prepare an updated status report on SCERS’ Private Credit portfolio for the Board.

Overall, the proposed Private Credit implementation protocol delegates the most time intensive elements of the screening and selection process to the Staff and consultant, while preserving the Board’s oversight of how the analysis is unfolding and the Board’s ability to raise questions and concerns regarding that analysis. If this proposed protocol meets with the Board’ approval, it will be incorporated in the investment policy statement for the Private Credit asset class, which will be presented to the Board at a future Board meeting.

CONCLUSION:

At the May Board meeting, the Board is being asked to approve the following: (1) The recommended asset class structure for the Private Credit asset class; (2) The investment implementation plan for Private Credit; (3) The twelve month investment plan for Private Credit; and (4) The implementation protocol for Private Credit.

An investment policy statement for Private Credit will be recommended at a future Board meeting (most likely June), and will contain much of the content that is being recommended for approval at the May Board meeting.

We would be happy to address any questions.

Respectfully submitted,	Concur:
Steve Davis Chief Investment Officer	Richard Stensrud Chief Executive Officer

Attachment

CLIFFWATER LLC

Los Angeles • New York

Sacramento County Employees' Retirement System

Private Credit Structure and Annual Plan

May 11, 2017

Introduction and Education

Inception of the Private Credit Asset Category

SCERS is creating a new asset category for Private Credit

- Being done in connection with SCERS' new asset allocation plan
- Represents a further segmentation of the SCERS private equity portfolio
  - These strategies were previously included within Private Equity

Private Credit will include lending-oriented strategies to performing companies

- Primarily debt investments; manager expects to receive principal and interest
  - Often referred to as "performing credit" or "par lending"
- The private credit portfolio will not include distressed oriented strategies

SCERS has some investments in Private Equity that will move to Private Credit

- Moving Summit Credit I & II, and Athyrium II
  - Total market value of $53.8 million as of 12/31/16, approximately 0.7% of the SCERS total portfolio
- Private Equity will continue to include distressed oriented strategies

SCERS has set a 4% target allocation for Private Credit

- Will further segment Private Credit into Direct Lending and Opportunistic Credit strategies
  - These classifications provide further granularity for this lending oriented asset category
- Direct Lending will comprise the majority of the private credit portfolio
  - Opportunistic Credit can be considered a niche lending strategy within Private Credit

Direct Lending Overview – U.S. Middle Market Loans

Illiquid loans to U.S. companies with $10m to $100m EBITDA

- Similar in size to Russell 2000 companies

Originated directly by an asset manager without a banker/broker intermediary

- Mostly buy and hold, not syndicated
- Some club deals

Floating rate loans

- Libor plus a spread; generally with a 1% Libor floor
- Income increases with rising interest rates (zero interest rate duration)

5 year average maturity and 3 year average loan life

Various credit structures

- First lien, unitranche, second lien, subordinated, mezzanine

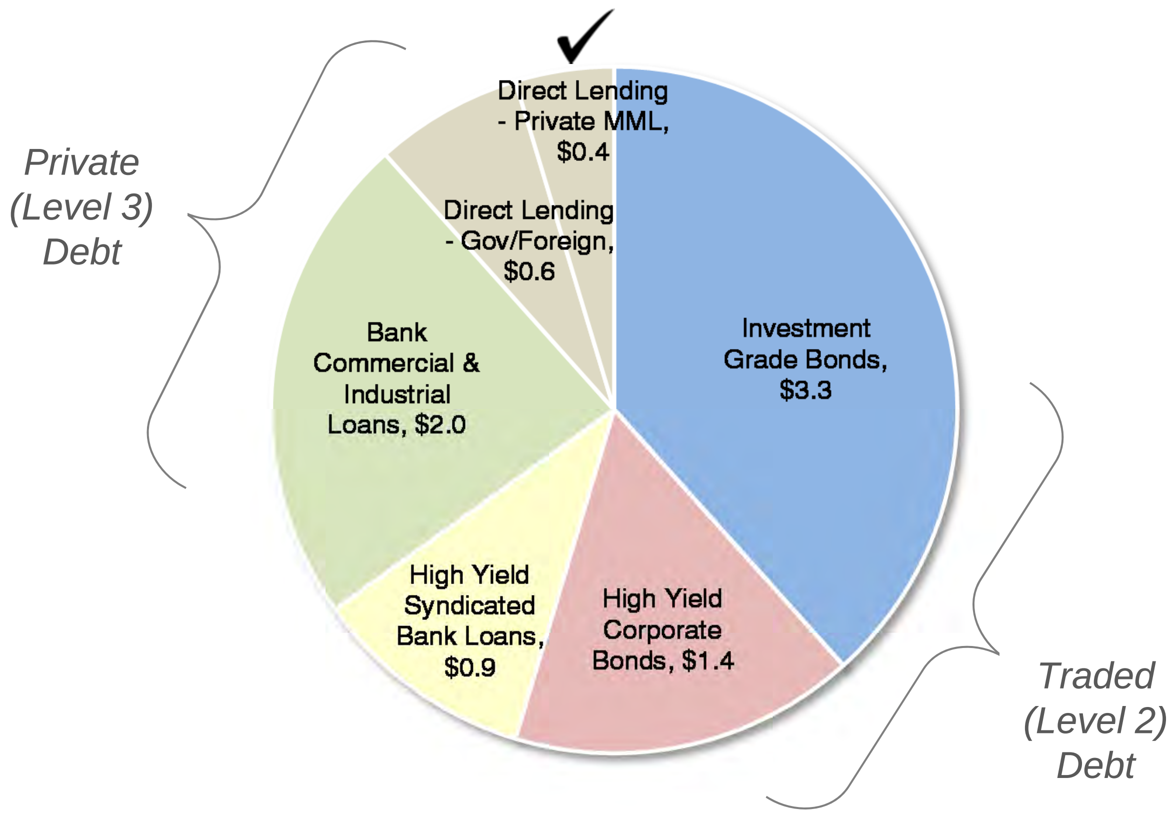
Sponsored (private equity backed) and non-sponsored borrowers

Broad industry representation

Source: Cliffwater research, as of December 31, 2016.

Private direct lending provides 5% of U.S. corporate debt financing

$8.6 Trillion U.S. Corporate Debt Market



Sources: Federal Reserve, Barclays, S&P Capital IQ. Information as of December 31, 2015.

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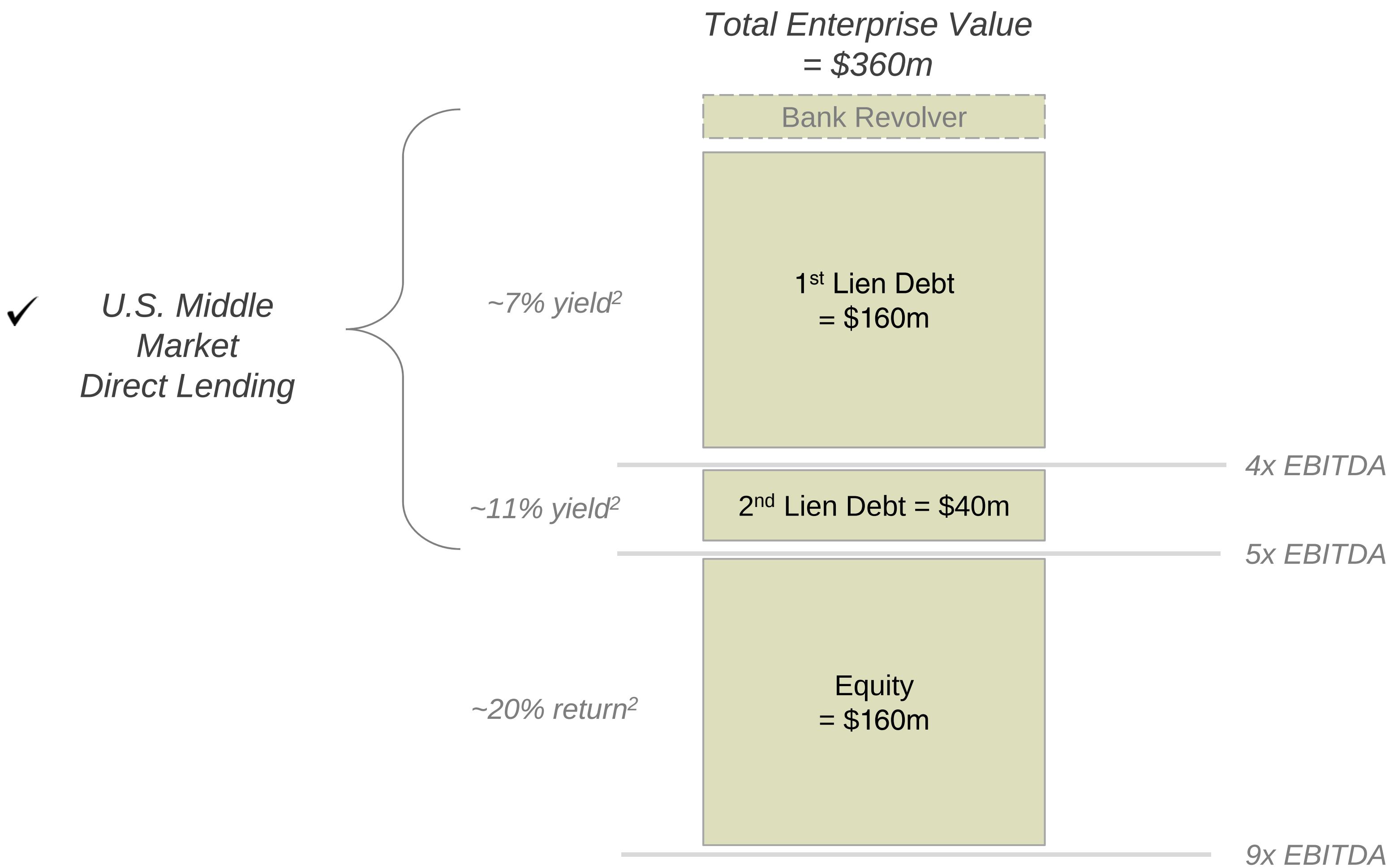
Illustrative capitalization of $40m EBITDA middle market company[1]

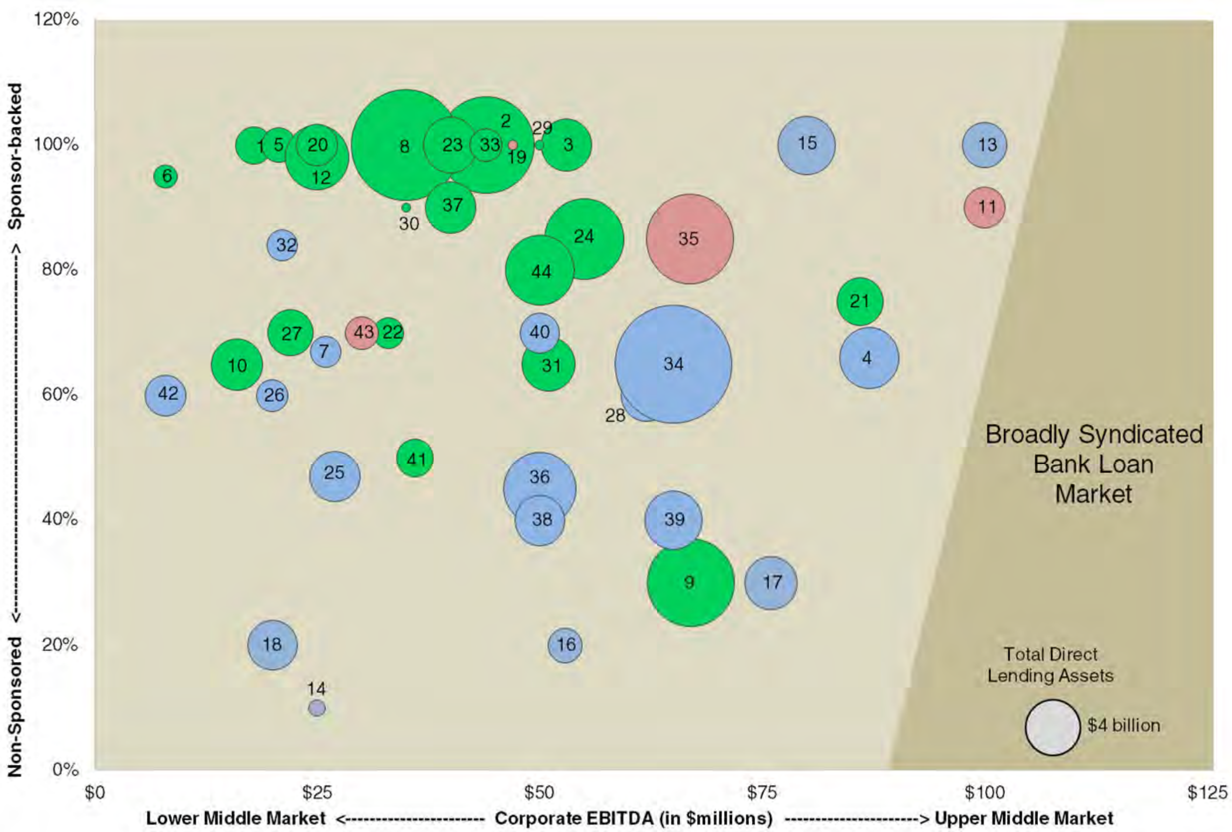


[1] EBITDA means earnings before interest, taxes, depreciation, and amortization. Based on Cliffwater's research, the data included in this chart is indicative of recent middle market deals. This data is based upon assumptions regarding future events and conditions that may not prove to be accurate. This chart is for illustrative purposes only and does not reflect an actual investment.

[2] Source: JMP Securities.

Differences across Direct Lending Managers

Representative Mapping of Direct Lending Managers



Green indicates managers focused on portfolios greater than 80% senior secured, blue indicates managers focused on portfolios between 50% and 80% senior secured and red indicates managers focused on portfolios with less than 50% senior secured.
The smallest bubbles represent managers that do not currently manage direct lending assets but are in the process of fundraising.

The graph shows manager assets, loan seniority, type, and borrower size

Source: Cliffwater research based on public information and confidential responses to Cliffwater inquiries. Information may be up to a year old and subject to interpretation by direct lending manager respondents. Plots a representative mapping of direct lending managers along the following four factors: total direct lending assets (bubble size), loan seniority (bubble color), expected/actual share of sponsor vs. non-sponsor lending (y-axis) and expected/actual portfolio company size by average EBITDA (x-axis). “Sponsor” refers to loans to companies as part of a financial sponsor transaction (e.g., private equity LBOs). “Non-sponsor” refers to loans to companies without the backing of a financial sponsor.

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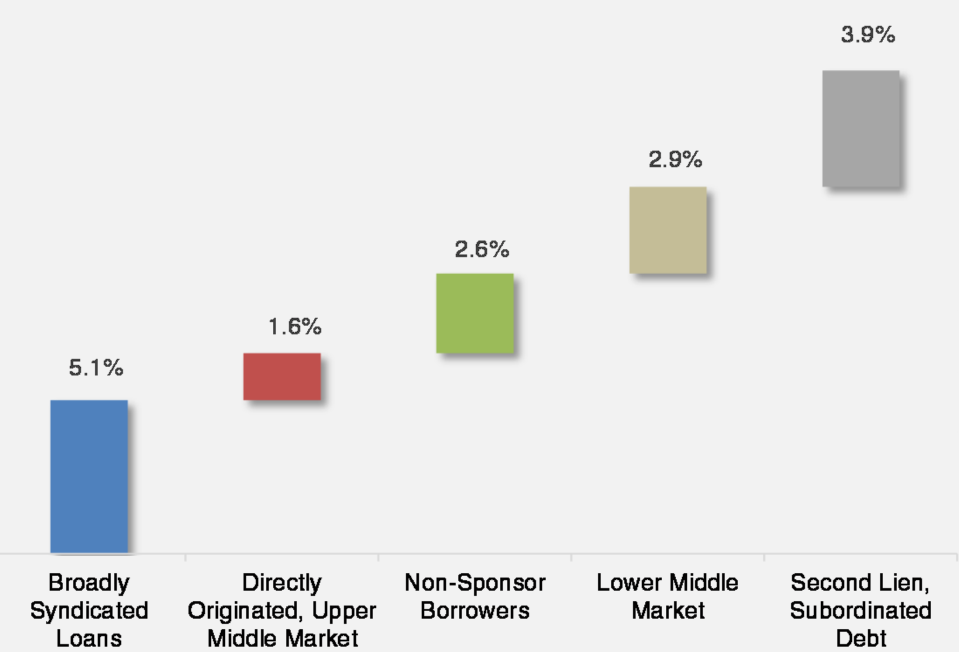
Lenders differ in what risk premiums they capture



[1]Excludes potential deductions for differential credit losses and fees

Source: Cliffwater research based on public information and confidential responses to Cliffwater inquiries. Information may be up to a year old and subject to interpretation by direct lending manager respondents. Risk premiums are estimated using a cross-sectional three-factor regression of public and private BDCs' 12 month gross yields through December 31, 2016 against Cliffwater's best estimates of each manager's loan seniority, expected/actual portfolio company size by average EBITDA and expected/actual share of sponsor vs. non-sponsor lending. Three factor statistical regression reports a 74% R^2. Broadly syndicated loan yield as reported by the interest return of the S&P/LSTA U.S. Leveraged Loan Index through December 31, 2016. See Cliffwater Research Report, "*Risk Premiums in U.S. Middle Market Lending (Part 1: An attribution of yield spread by key risk factors)*," available upon request, for a detailed description of this analysis.

Direct Lending Characteristics and Considerations

Key Characteristics:

- 7-10% annualized expected net total return[1]
- Quarterly cash flow
- Low volatility relative to other asset classes with similar expected returns
- Minimal interest rate risk due to floating rate structures
- Institutional asset management
- Mitigated J-curve effects vs. typical private equity investments

Important Considerations:

- Illiquid, but drawdown/distribution windows are <3 years versus >5 years for private equity
- Lesser known sector of the corporate debt market
- Limited institutional investor history
- Increasing institutional capital flowing into the market

Manager selection is important to favorable outcomes, given dispersion among manager returns

[1] References to expected returns should not be considered a prediction or guarantee that such results will be achieved. Expected returns are based upon assumptions regarding future events and conditions that may prove to be inaccurate. Accordingly, expected returns should not form the primary basis for an investment decision.

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Private Credit Structure

SCERS Private Credit Objectives

The SCERS' private credit allocation is intended to produce attractive risk-adjusted returns and generate current cash flow

- Expect to outperform leveraged loans (large, syndicated bank loans) by 2% annually
  - Recommending the Credit Suisse Leveraged Loan Index + 2% as the Policy Index benchmark
- Expect the majority of the return to be generated by cash flow yield

4% target allocation for private credit

- Represents a long-term target as the private credit allocation takes a few years to prudently implement
  - The expected "ramp up" will be quicker than typical private equity investments
  - Expect to reach 4% target allocation by 2020

Will also implement sub-strategy allocation guidelines for the private credit portfolio

- Targets are most applicable when the private credit portfolio is fully invested
- Below are the recommended sub-strategy targets and ranges

SCERS Private Credit Portfolio
Targets and Allocation Ranges

	Target Range	Target %
Direct Lending	50% - 100%	70%
Opportunistic Credit	0% - 50%	30%
U.S.	75% - 100%	85%
Non-U.S.	0% - 25%	15%

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SCERS Private Credit Portfolio Composition

Direct Lending investments will comprise the majority of the Private Credit portfolio

- Directly originated, non-traded loans to middle market companies
- Expect to focus on U.S. direct lending, though the portfolio will also include non-U.S. investments

Other performing lending-oriented strategies will be considered “Opportunistic Credit”

- Investment types can vary but may include
  - Royalty investments
  - Asset-based lending against receivables, inventories, or other assets
  - Consumer lending
- Real estate debt investments and debt backed by real assets would likely be allocated to the primary Real Estate and Private Real Assets asset classes

SCERS’ current investments include both Direct Lending and Opportunistic Credit

- Summit Credit I & II are Direct Lending strategies
- Athyrium II would be considered Opportunistic Credit

Expect the private credit portfolio to be more concentrated than the private equity portfolio

- Private Credit represents a specific investment strategy previously included in Private Equity
- Relative to Private Equity, expect larger commitment sizes and fewer GP relationships
  - Expect 8 to 12 long-term GP relationships in Private Credit

Defining Direct Lending and Opportunistic Credit

The specific mandate for Private Credit limits the need for additional delineation

– However, SCERS will separate “core” Direct Lending from Opportunistic Credit

SCERS will apply objective criteria to distinguish between Direct Lending and Opportunistic Credit strategies, as shown in the table below

	Profile	
Criteria	Direct Lending	Opportunistic Credit
Seniority	Primarily senior debt, typically secured	More flexibility to include subordinated structures, including structured equity
Collateral	May include general corporate assets or be secured by specific collateral	Typically backed by specific assets such as receivables or inventory (i.e. asset-based lending)
Equity Participation	Loans may include some equity participation, often through warrants	May have meaningful equity participation depending on the structure
Leverage	Common to use 1 to 2.5 times leverage; can also invest unlevered	Little to no leverage
Industry Focus	Broadly diversified	Typically sector specific

Private Direct Lending Vehicle Characteristics

	Private BDCs	Private Commingled Funds	Separate Accounts
Description	Invest in new non-traded regulated BDC with intention to go public after 5-6 years	Like private equity, invest in drawdown partnerships as a limited partner	Ability to customize a direct lending portfolio for large investments
Investor Minimums	$5m	$5m	$50m - $100m
Leverage	Less than 1.0x	0.0x to 2.5x depending on offering	Investor directed
Management Fees	0.75% - 1.00%	1.00% - 2.00%	0.50% - 1.00%
Performance Fees	Most have performance fees between 10% and 15% of profits, after 7-8% preferred return		
Positives	Strong offerings with opportunity to earn additional 10-20% IPO premium	Access to good firms with strategies/terms to match investor objectives	Lowest fees with ability to customize terms and portfolio; co-investment opportunities
Negatives	IPO opportunity may not transpire and fund liquidates	Lack of liquidity, but better than private equity	Large commitment

SCERS is likely to invest through private BDCs, private commingled funds, and separate accounts

- SCERS may also invest in fund-of-funds vehicles

SCERS may make secondary private credit investments; co-investments are not likely

Source: Cliffwater research.

SCERS Private Credit Current Portfolio

SCERS is moving 3 investments into the private credit portfolio

- Summit Credit I & II ($55 million total commitment), and Athyrium II ($32 million commitment)

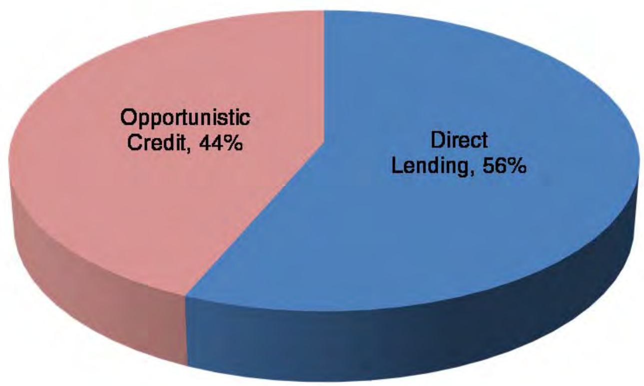
Summit Credit I & II are Direct Lending strategies

- Privately originated loans to U.S. lower-middle market companies
  - Primarily first and second lien secured loans

Athyrium II would be considered Opportunistic Credit

- Focused on structured credit investments in healthcare companies
  - Structured senior loans and notes, convertible debt, royalties and royalty-backed debt, and preferred equity

SCERS Private Credit Sub-Strategy Exposure*



*Portfolio totals $53.8 million as of December 31, 2016, approximately 0.7% of the SCERS total portfolio.

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Private Credit Implementation

Private Credit Capital Budget Projections

	SCERS - Capital Budget Model	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
1	Forecast Plan Total Assets	8,094,141	8,660,731	9,266,982	9,915,670	10,609,767	11,352,451	12,147,123	12,997,421	13,907,241	14,880,747
2	New Commitments		200,000	200,000	220,000	220,000	250,000	250,000	250,000	250,000	250,000
	Private Credit Fair Value by Sector:	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
3	Private Credit	53,801	98,362	198,294	323,329	424,549	491,677	540,474	577,599	600,046	611,811
4	Private Credit Total	53,801	98,362	198,294	323,329	424,549	491,677	540,474	577,599	600,046	611,811
5	Private Credit Fair Value as % of Total Plan Assets	0.7%	1.1%	2.1%	3.3%	4.0%	4.3%	4.4%	4.4%	4.3%	4.1%
6	Private Credit Target Asset Allocation	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Unfunded Commitments and Fair Value	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
7	Private Credit Unfunded Commitments	25,850	177,755	265,826	318,598	342,419	377,497	395,367	402,520	405,382	406,528
8	Unfunded Commitments + FV	79,651	276,117	464,121	641,927	766,969	869,174	935,842	980,120	1,005,428	1,018,339
9	Unfunded Commitments + FV as % of Assets	1.0%	3.2%	5.0%	6.5%	7.2%	7.7%	7.7%	7.5%	7.2%	6.8%
10	Ratio of Unf Com + FV to Target Allocation	0.25x	0.80x	1.25x	1.62x	1.81x	1.91x	1.93x	1.89x	1.81x	1.71x
	Net Cash Flow Requirements		12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
11	Private Credit		(39,746)	(91,698)	(109,819)	(77,454)	(36,615)	(13,923)	1,000	18,275	30,538
12	Total Net Cash Flow to Private Credit		(39,746)	(91,698)	(109,819)	(77,454)	(36,615)	(13,923)	1,000	18,275	30,538
	Annual Commitments by Strategy		12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
13	Existing Commitments		0	0	0	0	0	0	0	0	0
14	Private Credit		200,000	200,000	220,000	220,000	250,000	250,000	250,000	250,000	250,000
15	Total Annual Commitments to Private Credit		200,000	200,000	220,000	220,000	250,000	250,000	250,000	250,000	250,000

Total Plan Assets assumed to grow at 7.0% per annum

Cliffwater completed a capital budget forecast for private credit to determine appropriate pacing plans

– Similar to private equity, though the forecast utilizes different asset class assumptions

– Shown above are the details of the proposed private credit capital budget

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Recommended 2017 Private Credit Annual Investment Plan

The table below shows the recommended 2017 investment plan for the SCERS portfolio

- Recommending a $200 million commitment budget for 2017, with a range of $150 million to $250 million
  - Expect SCERS will make 3 to 5 commitments for 2017, at $25 million to $75 million each
- The investment plan provides additional parameters for the recommended 2017 commitment budget

		Range	
	Target	Min	Max
Commitment Level	$200 MM	$150 MM	$250 MM
Number of Funds	4	3	5
Direct Lending fund(s)	3	2	4
Opportunistic Credit fund(s)	1	0	2
Commitment per Fund	$60 MM	$25 MM	$100 MM

The budget is based upon fund vintage year, not when SCERS makes its commitments

- The expectation is for SCERS to target $200 million for 2017 vintage year funds

SCERS has one pending 2017 Private Credit commitment – $25 million to Athyrium III

- $175 million would be remaining to reach the 2017 target commitment budget

Recommend the Same Implementation Protocol as Private Equity

Delegate the most time intensive elements of the process to Staff and Cliffwater

- Preserve the Board's oversight of the overall Private Credit Program

Board will approve the long-term Private Credit Asset Allocation Structure and Investment Plan

- Will articulate the long-term direction and objectives of the program
- Will also articulate near-term steps needed to achieve the long-term structure
- Approvals will be requested on an annual basis

Implementation is delegated to Staff and Cliffwater

Represents a continuation of the current implementation protocol

- Private credit investments were previously executed within the Private Equity Implementation Protocol

Also recommending maintaining the current Private Equity selection process for Private Credit

- Details provided on the following page

Recommend Same Selection Process as Private Equity

Staff and Cliffwater discuss the forward calendar of funds coming to market in the next 12 months

- Narrow down to funds of particular interest for the SCERS portfolio
- Prioritize highest conviction funds with near-term fundraisings

Cliffwater conducts investment, operations, and legal due diligence on its highest conviction funds

- Provides Staff with written due diligence reports once approved by Cliffwater's Investment Committee

Staff reviews Cliffwater reports and contacts funds to arrange meetings or conference calls

- Staff may contact funds earlier in the process for particularly hard to access opportunities
- Staff then conducts its own assessment of the funds most appropriate for SCERS
- Staff and Cliffwater discuss issues and questions following Staff meetings with funds

Funds are approved by SCERS Investment Committee prior to Board recommendation

Funds passing these screens are identified to the SCERS Board for review and comment

- Staff and Cliffwater reports posted to the Board website
- The SCERS Board has the ability to raise questions on funds targeted for investment

SCERS completes its own legal review of fund documents prior to making commitments

- Utilizes internal and external counsel
- Includes execution of side letters between SCERS and each fund as necessary

The process provides thorough vetting of potential investments while enabling SCERS to move quickly

- Focuses Staff resources on the funds that are most appropriate for the SCERS portfolio
- Could result in funds being removed from consideration
- Process is inclusive of investment opportunities sourced by Staff

SCERS Private Credit Next Steps – IPS

SCERS Staff and Cliffwater will develop a new IPS for Private Credit

- The new IPS will incorporate much of the current Private Equity IPS
- Expected changes for the new IPS include:
  - Benchmark
  - Portfolio objectives
  - Characteristics of permissible investments

SCERS Staff expects to provide the Board with the new Private Credit IPS at the June meeting

General Disclosures

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