MWRA EMPLOYEES' RETIREMENT BOARD MEETING

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	. Meeting called to order
Item 2 i. ii. iii. iii.	Standing Committee Reports By-Laws Committee: Member Kevin McKenna Human Resources Committee: Member Frank Zecha
	NEW BUSINESS
Item 3	Approval of FY24 COLA – VOTE
Item 4	Approval of Minutes – VOTE a) January 26, 2023 Minutes b) January 26, 2023 Executive Session Minutes
Item 5	Approval of Warrants – VOTE a) Warrant 2-2023 b) Warrant 2-2023A – Payroll
Item 6	Approval of Monthly Transfers 2-2023 – VOTE
Item 7	Acknowledgement of retirement applications under G.L. c 32 §5 – VOTE a) John McCarthy, Jr. DOR 12/17/2022 b) Dennis Normant DOR 12/22/2022 c) Caleb Dubois DOR 1/1/2023 d) Andrea Murphy DOR 1/6/2023 e) Allan Casassa DOR 1/6/2023 f) William Sullivan DOR 1/7/2023 g) Stephen Antolics DOR 1/14/2023 h) Mingming Wang DOR 2/4/2023 i) George Bacon DOR 2/5/2023 j) James McGrath DOR 2/7/2023 k) Michael Hammerman DOR 2/11/2023
Item 8	Approval of 12(2)d Survivor Benefit re. Tara Lambert, former spouse of Mark Lambert, DOD 11/27/2022 – VOTE
Item 9	Acceptance of Section 7 Retirement Application re. Anthony Cirelli – VOTE
Item 10	Approval of January 2023 Bank Reconciliation – VOTE
Item 11	5% Local COLA Option for FY2023 – VOTE

Item 12 Approval of attendance by Board Members and Staff at Spring MACRS Conference, Hyannis, MA – no dates available at this time – VOTE Item 13 Manager Due Diligence Presentations Octagon – Paul Maloney 10:30 a.m. a) Polen – Brandon Ladoff & Lisa Rynne 10:50 a.m. b) Garcia Hamilton - Ruby Dang & Gilbert Garcia 11:10 a.m. c) Item 14 **NEPC** Flash Report as of 1/31/23 a)

- Asset Allocation Review & Outlook b)
- Small Cap Growth Search c) Q4 2022 Investment Report d)
- Audit Update Item 15

.....FOR YOUR INFORMATION and REVIEW

PERAC MEMO #5/2023 – PROSPER Cash Books and Annual Statement Item 99-1 Submission Item 99-2 PERAC MEMO #7/2023 – 2023 Interest Rate set at 0.1% Item 99-3 PERAC MEMO #8/2023 - Actuarial Data

The Board reserves the right to consider items on the agenda out of order. The listing of items is those reasonably anticipated by the Chair to be discussed received at least forty-eight (48) hours prior to the meeting. Not all items listed may in fact be discussed and other items not listed may also be brought up for discussion to the extent permitted by law. Items identified for discussion in Executive Session may be conducted in open session, in addition to, or in lieu of discussion in Executive Session.

Date of next scheduled Retirement Board meeting is Thursday, March 30, 2023, 10:00 a.m., Chelsea

MWRA EMPLOYEES' RETIREMENT BOARD MEETING JANUARY 26, 2023

A meeting of the MWRA Employees' Retirement Board was conducted in-person on Thursday, January 26, 2023. Remote access was provided to the public via Zoom, with call-in information provided on the official Meeting Notice posted to www.mwraretirement.com and the MA Secretary of State's website. Participating in the in-person meeting were Board members James Fleming, Thomas Durkin, Kevin McKenna, Andrew Pappastergion, and Frank Zecha, staff members Carolyn Russo, Julie McManus, and Danielle DiRuzza, and Sebastian Grzejka representing NEPC. Members of the public also attended via remote access, Including James Guiod from the MWRA Advisory Board, Gar Chung and others. Mr. Fleming called the meeting to order at 10:04 a.m.

- 1) Call the meeting to order-roll call of members: Mr. Durkin, Mr. McKenna, Mr. Pappastergion, Mr. Zecha, and Mr. Fleming present.
- 2) Standing Committee Reports
 - i. By-Laws Committee: No report
 - ii. Human Resources Committee: No report
 - iii. Special Committee, Stipend: No report
 - iv. Job Review Committee: No report
- 3) Approval of Minutes VOTE
 - a) December 15, 2022 Minutes
 - b) December 15, 2022 Executive Session Minutes

On a motion made by Mr. Pappastergion and seconded by Mr. McKenna: **VOTED**

to approve the minutes of the December 15, 2022 meeting as submitted by the Executive Director. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

On a motion made by Mr. McKenna and seconded by Mr. Pappastergion: **VOTED**

to approve the December 15, 2022 Executive Session minutes as submitted by the Executive Director. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

- 4) Approval of Warrants VOTE
 - a) Warrant 01-2023
 - b) Warrant 01-2023A Payroll

On a motion made by Mr. Zecha and seconded by Mr. McKenna: **VOTED**

to approve Warrant 01-2023. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion Mr. Zecha voting yes, and Mr. Fleming voting yes.

Through the Chair, the Executive Director stated that she had received a Q1 2023 bill from Boston Partners. She stated that she would like permission to add the payment to the payroll warrant, because she did not want to pay the invoice prior to the Small Cap Value selection vote, in the event that the amount may change.

On a motion made by Mr. Zecha and seconded by Mr. Pappastergion: **VOTED**

to approve Warrant 01-2023A – Payroll and to authorize the Executive Director to add the payment to Boston Partners for Q1 Management Fees, if appropriate. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

5) Approval of Monthly Transfers 01-2023 – VOTE

On a motion by Mr. Durkin and seconded by Mr. McKenna:

VOTED

to approve the list of monthly transfers as presented and as recommended by NEPC. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

6) Approval of December 2022 bank reconciliation – VOTE

On a motion made by Mr. Pappastergion and seconded by Mr. Zecha: **VOTED**

to approve the bank reconciliation for the month of December 2022. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

7) Letter from Mass Retirees Association looking for contact information for retirees who have retired after 12/31/2016 to assist in membership recruitment – VOTE

On a motion made by Mr. Pappastergion and seconded by Mr. Durkin: **VOTED**

to approve the release of retirees' names and contact information to Mass Retirees Association. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

8) Vote to Elect a Board Chairman – VOTE

On a motion by Mr. McKenna and seconded by Mr. Pappastergion: **VOTED**

to nominate and duly elect as Chairman Mr. James Fleming. 4-0-1, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, and Mr. Zecha voting yes. Mr. Fleming is recorded as having abstained.

9) 5% Local COLA Option for FY2023

A motion was made by Mr. McKenna and seconded by Mr. Pappastergion to adopt the one-time 5% COLA. Mr. Durkin stated that it would be helpful to know the cost prior to taking a vote. Mr. Zecha estimated that it would cost \$3m-\$4m. Mr. Fleming stated that it would be just adding 2% to the COLA already granted to retirees for FY2023. Mr. Zecha stated that the turnaround for the cost study should be quick and that it will likely mean adding another amortization component to the funding schedule. He added that MWRA retirees who retired from the State System are already receiving the 5% COLA. Through the Chair, the Executive Director informed the Board that she had submitted the 1/1/2023 data for the new valuation roughly three weeks ago.

On a motion made by Mr. Durkin and seconded by Mr. Pappastergion: **VOTED**

to table the matter of the one-time 5% COLA, and to have the Executive Director request that Segal provide a cost estimate to the Board prior to the February 23, 2023 meeting. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

10) Manager Due Diligence Presentations

The following managers underwent an annual investment manager review pursuant to 840 CMR 16.07. The managers presented performance and investment reports detailing the manager's activities, which the Board reviewed.

- a) Loomis Sayles Teresa Woo, Fred Sweeney, Dmitri Raberov
- b) Baillie Gifford Michael Stirling-Aird & Larysa Bemko

Ms. Teresa Woo, Mr. Fred Sweeney and Mr. Dmitri Raberov joined the call on behalf of Loomis Sayles. Mr. Fleming noted that there are members of the public on the call, and reminded the presenters to refrain from disclosing any information which may be considered proprietary. Ms. Woo began by directing the Board to page 3 of the presentation. Loomis Sayles currently has just over \$282bn AUM which is down roughly 22% from peak, although Loomis has recently seen \$8.5bn in new business in recent months. The firm has announced a voluntary separation program, and 30 employees have accepted the severance offer. Mr. Sweeney directed the Board to page 12 which shows YTD 2022 performance. After a tough year, the Fixed Income Trust returned -12.09% gross, ending the year 149 bps ahead of the benchmark which returned -13.58%. 2023 is positive 3.99% YTD as compared with 3.11% for the benchmark, so the year is off to a good start. Historically the fund has been short in duration relative to the benchmark, but is now positioned to be neutral, because interest rate increases appear to be slowing. Page 19 shows the fixed income portfolio structure. Prices are now more attractive. Page 20 shows sector distribution relative to the benchmark. Loomis Sayles' outlook is that inflation has peaked. the job market is tightening, and they expect a few more months of this environment before more opportunities arise. They do not expect spreads to be at recessionary levels. Mr. Zecha asked if interest rates remain the same or go down 25-50bps whether it might be time to add to or withdraw from the portfolio. Mr. Sweeney said if spreads widen, yields will likely remain in the same ranges. and it would be reasonable to add to the investment.

Mr. Raberov addressed the Loomis Small Cap Growth Equity account. Performance is on page 27. The index was down 26.36% for 2022, with the fund at -22.17% for the year. Volatility has been persistent, but Loomis is still outperforming. 2022 saw the 10th largest decline on record for Small Cap Growth. Loomis Sayles has maintained its sell discipline and outperformed due to selection of high quality names with good cash flow. Loomis Sayles continues to have faith in these names moving forward. Mr. Raberov expects the market has already incorporated the majority of the negative outlook. Small Cap tends to do well coming out of a high-inflation environment, and is inexpensive currently relative to Large Cap. Mr. McKenna asked about the top five and bottom five performers, and specifically SiteOne and Rapid7. Mr. Raberov responded that SiteOne is a residential-focused landscape supplier that got ahead of itself and grew too fast, and was adversely affected post-COVID. Rapid7 is an IT company that had been a "high flier" pre-COVID but had lackluster financials and also grew at an unsustainable pace. Mr. McKenna asked if they had over-advertised, reporting having seen Rapid7 ads everywhere, including at a Bruins game. Mr. Raberov stated the Rapid7 is still growing, but that the stock had been sold off for not meeting the market's growth expectations.

Mr. Fleming thanked the representatives from Loomis Sayles, noting the longterm relationship. Mr. Sweeney reported that he is one among the 30 Loomis Sayles employees who has accepted the voluntary separation agreement, and that he will be retiring at the end of the quarter after 35 years. Loomis Sayles signed off at 10:48 a.m. Mr. McKenna asked about the disclosure relative to Loomis' fee structure, and Mr. Grzejka stated that it is his understanding the MWRAERS would be "grandfathered" under their previous agreement.

Mr. Michael Stirling-Aird and Ms. Larysa Bemko joined the meeting on behalf of Baillie Gifford. Mr. Grzejka stated that there are members of the public on the call and cautioned the presenters against disclosing any materials which may be considered proprietary. Ms. Bemko stated that the firm has been very stable, other than having added 7 partners in December, and one retirement from an administrative role. It has been a tough 12 months for growth, driven by market anxiety. There have been no changes to the fund's strategy, and Baillie Gifford remains confident in the philosophy long-term. The investment team has an average of 19 years' experience with the firm. Mr. Stirling-Aird directed the Board to page 3 of the presentation for performance. The fund underperformed significantly, returning -34.34% over the one-year, while the benchmark's return was -15.57%. The rising rates environment hurt long-term growth. Spotify and MercadoLibre are still doing well. MercadoLibre has been a disruptor in the online grocery space. Page 5 demonstrates that the style remains consistent, i.e. bottom-up stock selection with a long-term growth focus. Page 6 shows the hold periods for current names. Only 13% of the portfolio has been held for less than two years. Mr. Grzejka asked about the impact of events in Europe and the ongoing war as headwinds on the portfolio. Mr. Stirling-Aird stated that these events and unspeakable tragedies have certainly contributed to instability and therefore to the volatility of the portfolio. He expects more volatility and that the recovery will be unpredictable. Mr. Fleming thanked the presenters and Baillie Gifford signed off at 11:05 a.m. Mr. McKenna added that international performance has been bad everywhere and asked about overlap of exposure among Baillie Gifford, Axiom, and ABS. Mr. Grzejka responded that Baillie Gifford will have some Emerging Market exposure, predominantly in China. Axiom is an all-cap strategy with a consumer focus, while ABS employs countryspecific specialists in their strategy; both serve as differentiators.

The Board determined each manager continues to operate in a manner represented when retained and outlined in the agreement between the Board and the manager.

11) NEPC

- a) Flash Report as of 12/31/22
- b) Small Cap Value Equity Search Review VOTE
 - i) Boston Partners Presentation
 - ii) Hotchkis and Wiley Presentation
 - iii) Mesirow Presentation
 - iv) Vaughan Nelson Presentation
- c) Fixed Income Structure Review

- d) Small Cap Growth Equity Search Ad VOTE
- e) Lord Abbett Wilmington Trust Update communication

Relative to review of the Flash Report, Mr. Grzejka noted that there have been massive tech layoffs as have been in the news: Amazon, Tesla, Meta, Google, etc. Over the previous fifteen years, tech/growth was profitable, but over the last few years value has been in favor. A typical 60/40 portfolio experienced its second worst year on record last year. The fund returned -12.4% through December, with growth underperforming significantly. Coho and Boston Partners, both value strategies, outperformed. Baillie Gifford has a long-term high growth position. It may benefit the fund to add to the position over the long term. Mr. Zecha asked if the Board should rebalance. Mr. Grzejka responded that the prospect will look better if interest rate growth slows down. On a forward-looking basis, Fixed Income yields and opportunities are expected to be more attractive, assuming we experience deepening recession and large-scale credit downgrades. The Hedge Fund portfolio has benefitted from widening spreads. Mr. Zecha asked about the YTD return disparity. Corbin returned -11.3% while UBS was up 5% over the one-year. Mr. Grzejka explained that Corbin is credit oriented, while UBS remains market-neutral. Mr. Zecha asked if the Board should consider shifting the pairings, and Mr. Grzejka stated that this positioning has provided protection over the long term. Mr. Zecha asked if some money could be taken from UBS and allocated to Corbin, and Mr. Grzejka stated the Board could, and in fact did so last year. Mr. Zecha stated the Board needs to be more attentive to rebalancing. The System may not be #1, but does not want to be #104 either. He reiterated that the Board would be able to convene interim meetings to address any immediate matters. Mr. Grzejka stated that the portfolio should be diversified, but could be simplified. A year ago UBS and Garcia Hamilton were on watch, and now are ahead of their benchmarks, so there needs to be a balance and a consistent discipline. The real question that seems to be coming up is what the Board has for risk tolerance, for example, do the members remain comfortable retaining a concentrated manager that holds only 20 names in the fund? Mr. McKenna stated that some segments of the portfolio could be indexed, but that we could be sacrificing excess performance of active management on behalf of lower fees. Mr. Durkin asked how close the portfolio is to the policy allocation. Mr. Grzejka responded that the System is currently overweight in Private Equity, and slightly underweight in equities, but that can be addressed during the annual February Asset Allocation discussion. Cash is fluid, and about \$4m will be going out in payroll and accounts payable early next week. Being slightly off target benefitted the fund in 2022. Mr. Zecha asked if a 20% target to Fixed Income is too high. Mr. Grzejka stated that in his opinion it is not, from a risk/return perspective. More flexible strategies do an excellent job capturing excess yield.

In regard to the Small Cap Value search, there are four finalists. Boston Partners has been the Board's manager in this space for roughly twenty-five years. The strategy is never going to "shoot the lights out" but will have steady performance

over time. The value manager in the space is intended to provide downside protection. Hotchkis & Wiley's fund offering can hold up to 400 securities and tends to outperform in up markets and move with the benchmark in down markets. The fund has a record of outperforming the bench over the long term. Mr. McKenna noted that they said they have a fund universe of 3000 names which is reduced to 300 for potential selection based on an ESG focus. Mr. McKenna asked if Hotchkis & Wiley has other Massachusetts public fund clients. and Mr. Grzejka responded that they do not. Boston Partners is the only one among the four finalists that does. Mr. Zecha asked what the differentiators would be from a 1 to a 2 ranking. Mr. Grzejka stated that in this case Mesirow was given a 2 because almost half of the fund offering's AUM is due to a single client. Mesirow holds 70-90 names. Hotchkis & Wiley is the most diversified with a range of 350-400 holdings in the portfolio. Vaughn Nelson holds 55-85 and is sector agnostic. Page 7 of the updated search book shows performance, with Mesirow leading over the 1, 3 and 5-year periods. Boston Partners has had steady performance vs. the benchmark over all periods. Mr. Grzejka expressed that in his view the question of selection has two parts:

- 1. Does Boston Partners remain; and
- 2. If not, who is the replacement?

Mr. McKenna asked about the risk presented by the fund's having a single client representing a large portion of the AUM. Mr. Grzejka stated that it would be a matter of whether the revenues and fees would be sufficient in the event that the largest client withdrew all of their assets. Mr. McKenna stated that Vaughn Nelson and Mesirow seem to tweak the index. Mr. Grzejka directed the Board to p.13 for the ten-year risk/return analysis. Hotchkis & Wiley demonstrates a higher beta relative to the benchmark. Mr. Zecha made a motion seconded by Mr. McKenna to terminate Boston Partners. Mr. Durkin asked if the Board was "deselecting" the current manager. Mr. Zecha responded that Mr. Grzejka had posed the questions in two parts, whether Boston Partners would remain and if not, who would be the replacement. Mr. Zecha withdrew the motion to terminate Boston Partners. Mr. McKenna seconded the motion to withdraw. Mr. Pappastergion asked about the NEPC rating system vs. the MWRAERS/PERAC rating system. Mr. Grzejka responded that NEPC's rating was attributable to concerns about the fund's largest client and that they will monitor any significant change in the management team. Vaughn Nelson also has a long-term team, but has more established clients. Mr. Zecha noted that page 4 indicates a 2 rating. Mr. Grzejka stated that the 2 rating is based on PERAC's mandated scale, but that by NEPC's ranking system shown on page 15, Mesirow is a 3, meaning that:

NEPC Research has a constructive view of the strategy and believes the strategy can play an appropriate role in certain client portfolios. Through ongoing research, NEPC has not identified unreasonable risks from an organizational, process, operational, or investment perspective.

Mr. Durkin asked if the fees would be 85bps. Mr. Grzejka responded that Hotchkis Wiley and Boston Partners would be in the same range. Mr. McKenna reminded the Board that Mesirow had offered MWRAERS a fee reduction to 67.5bps as recorded in the December minutes in the Board package. Mr. Zecha offered a replacement motion seconded by Mr. McKenna to hire Mesirow as the Small Cap Value manager. Mr. Durkin asked why, and Mr. Zecha responded that he likes the relative concentration as opposed to a portfolio holding 400+ names. Mr. Grzejka noted that Vaughn Nelson's performance is similar to Mesirow's, with outperformance over the long term. Mr. Zecha stated that all four finalists appear to be good managers, performing within 100bps of the benchmark. Mr. Grzejka directed the Board to page 8, which shows that Vaughn Nelson protected a little better on the downside. Mr. McKenna stated that he prefers Mesirow's sector exposures (page 6) because Vaughn Nelson has sectors in which they will not invest. Mr. Grzejka responded that the approach has not hurt Vaughn Nelson's performance, and noted that both managers have had stable teams. The largest Vaughn Nelson Client in the fund offered holds roughly \$500m of \$2.5bn AUM.

On a motion made by Mr. Zecha and seconded by Mr. McKenna: **VOTED**

to select Mesirow as the Small Cap Value Manager. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

Mr. Grzejka will inform Boston Partners and Mesirow. Mr. Zecha stated that he values the long-term relationship with Boston Partners, but there were better performers out there, and the Board has a fiduciary responsibility to the System's membership and to the Plan Sponsor. He noted that the Board needs to try to minimize delays and to act faster on the search process, and Mr. Grzejka reminded the Board that the timeframe is somewhat inherent in the PERAC-mandated search and acknowledgment process.

Mr. Grzejka began the Fixed Income portfolio review by directing the Board to page 2 of the presentation. The review was intended to demonstrate what, if any, changes are warranted to the structure of the Fixed Income portfolio. Each manager in the System's portfolio plays a specific role. Lord Abbett and Garcia Hamilton focus on high quality names, while Loomis Sayles and Octagon focus on higher yield names. Lord Abbett uses a top-down approach, while Garcia Hamilton's is a bottom-up strategy. Mr. McKenna asked if the current weightings remain appropriate. Mr. Grzejka stated that if the Board wanted a higher-quality tilt, they could re-allocate toward Garcia Hamilton, but he believes the current balance still makes sense. Page 4 shows that credit and high-yield have struggled and NEPC advises use of caution and patience. A longer recovery may lead to more defaults. The Loomis Sayles portfolio is more highly correlated to equities. Mr. Grzejka stated that more diversified strategies may

buy distressed credit in 2023. Mr. Zecha asked about Collateralized Loan Obligations (CLO), and Mr. Grzejka responded that they may have appropriate applications. Page 9 shows the performance of the current Fixed Income mix, as well as hypothetical returns for a passive option, a Garcia/Loomis mix, and a Lord Abbett/Loomis mix. The current allocation has worked well, with higher upside capture and lower downside capture. He continued that the portfolio could be indexed, that the Fixed Income markets are very efficient, and that the System would not be sacrificing significant performance. Mr. McKenna asked if there would be fee savings, and Mr. Grzejka responded that he would expect the savings to be in the 45bps range. Garcia Hamilton has outperformed Loomis Sayles with similar downside protection. The Board could add or replace a current manager with a passive manager, could tilt the current mix toward quality, or could index the whole portfolio. Mr. McKenna noted it would still need to be the right managers, and noted that PRIT has \$400m in a strategy that made over 7% last year, which is better than any manager we have in the portfolio. He asked Mr. Grzejka if we could take a closer look at downside protection. Mr. Grzejka cautioned that if we look at a manager after a long period of outperformance, we may be looking at an extended period of underperformance after they're hired. There are other managers out there, and UBS and Octagon both did very well. Mr. McKenna noted that two years ago Loomis Sayles was our top manager. Mr. Grzejka stated that a recession is possible, and that the decision on the Fixed Income portfolio will be tied to the asset allocation discussion scheduled to take place at the February meeting. Mr. Grzejka expects to have the Small Cap Growth RFP responses by the February meeting as well. Mr. Zecha asked if interest rate increases stabilize, whether Octagon could be adversely affected, and Mr. Grzeika responded that Octagon benefits from a rising rate environment, and stated that in periods of stress, liquidity decreases. Mr. Zecha asked if it is too early to terminate Octagon, and Mr. Grzejka stated that in his view it is premature, and should also be considered during the asset allocation discussion next month. Mr. Zecha asked about the "lock-up" period, and Mr. Grzejka said 30 days. Through the Chair the Executive Director stated that the request for redemption of \$2m from Octagon made November 28, 2022 had a redemption date of December 31, 2022 but the funds will not be released to the custody account until January 30. Mr. Grzejka agreed that it could approach 90 days. Mr. Zecha asked if Octagon were terminated at the February meeting would we have the funds by April 30, and Mr. Grzejka stated it may not be until May.

The Small Cap Growth RFP has similar language to the Small Cap Value RFP with a \$20m-\$22m mandate, and Mr. Grzejka expects to have finalist recommendations for the February meeting.

On a motion made by Mr. Zecha and seconded by Mr. Pappastergion: **VOTED**

to approve the Small Cap Growth RFP as drafted by NEPC. 5 -0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

Mr. Grzejka stated that Lord Abbett now has a new fund administrator, Wilmington Trust, but there has been no change to the management team. He expects to schedule due diligence presentations from Polen, Garcia Hamilton and Octagon for February.

Attorney Gibson joined the call at 12:34 p.m.

12) Legal

John Honan Section 7 application review – Executive Session under Purposes 1 and 7

The Retirement Coordinator attempted to contact Mr. Honan's Attorney. Counsel had difficulty connecting to the meeting, and then lost her audio. The technology issues took several minutes to resolve, whereupon the Board resumed the meeting.

On a motion made by Mr. Zecha and seconded by Mr. Mr. Pappastergion: **VOTED**

to convene in Executive Session under Purposes 1 and 7 to discuss the application for accidental disability retirement filed by John Honan. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes. A breakout room was established and the Board convened in Executive Session at 12:44 p.m.

On a motion made by Mr. Zecha and seconded by Mr. Mr. Pappastergion: **VOTED**

to close the Executive Session convened under Purposes 1 and 7 and return to open session. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes. The breakout room was closed and the Board returned to open session at 12:58 p.m.

Upon returning to open session, the Chair read into the record the vote taken in Executive Session.

On a motion made by Mr. Pappastergion and seconded by Mr. Durkin: **VOTED**

to approve the application for accidental disability retirement filed by John Honan in consideration of the unanimous affirmative findings of the medical panel as supported by the record. 5-0, roll call with Mr. Durkin voting yes,

Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

Attorney Gibson reported that a Worker's Compensation settlement will be forthcoming regarding John Burke. The Veteran's buyback bill will need to be refiled for the current legislative session. Legislation was filed which would abolish CRAB leaving the appeal path from DALA directly to court. Mr. Gibson stated that the 5% COLA would have to be approved prior to June 30, and requires the approval of the Board of Directors. Attorney Gibson signed off at 1:04 p.m.

Mr. McKenna asked that permission to travel to the MACRS conference be added to the February agenda. The Retirement Coordinator noted that she had not yet seen any information about the spring conference, but will add it to the agenda.

On a motion by Mr. Zecha and seconded by Mr. Durkin:

VOTED

to adjourn the January 26, 2023 meeting of the MWRA Employees' Retirement Board. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Pappastergion voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes. The meeting was adjourned at 1:06 p.m.

The following communications were distributed to the Board for their review:

Email from PERAC 1/9/2023 re. Check Scam Alert

PERAC MEMO #33/2022 – Mandatory Retirement Board Member Training – 1st Quarter, 2023

PERAC MEMO #34/2022 – 2022 Disability Data

PERAC MEMO #1/2023 – Reintroduction of Earning and Hour Limitations for All Retirees in the Public Sector

PERAC MEMO #2/2023 – 2023 Limits under Chapter 46 of the Acts of 2002

PERAC MEMO #3/2023 – 2023 Limits under Section 23 of Chapter 131 of the Acts of 2010

PERAC MEMO #4/2023 - COLA Notice

PERAC MEMO #6/2023 – Buyback and Make-up Repayment Worksheets

J.F. Lehman & Company Announces Recent Promotions and New Hires

Park Square Capital 2022 Review, Team Update, and 2023 Outlook

UBS Communication

Email re. Atlanta News Station Runs Series About Ongoing Tenant Problems with Landmark-backed Progress Residential

Octagon Communication re. Personnel Changes

The Board reserves the right to consider items on the agenda out of order. The listing of items is those reasonably anticipated by the Chair to be discussed received at least forty-eight (48) hours prior to the meeting. Not all items listed may in fact be discussed and other items not listed may also be brought up for

discussion to the extent permitted by law. Items identified for discussion in Executive Session may be conducted in open session, in addition to, or in lieu of discussion in Executive Session.

Date of next scheduled Retirement Board meeting is Thursday, February 23, 2023, 10:00 a.m., Chelsea

James M. Fleming, Elected member
Thomas Durkin, Appointed Member
Kevin McKenna, Elected Member
Andrew Pappastergion
Frank Zecha, Fifth Member



Firm: Octagon Credit Investors, LLC

Strategy/Product: Octagon Senior Secured Credit Fund

Client: Massachusetts Water Resource Authority

NEPC Manager Due Diligence Questionnaire - Update

Instructions

In support of our upcoming meeting we ask that you please complete this due diligence questionnaire. Please provide your responses in the form of brief descriptions, lists or tables added directly to this Word document.

Thank you for taking the time to complete this questionnaire. Please note that all materials submitted in relation to MWRA Retirement System may be subject to disclosure consistent with Massachusetts Public Record laws.

Firm/Organization

1. Have there been any changes in ownership or management in the past year?

Octagon periodically offers senior employees the opportunity to purchase an equity ownership stake in the management company. In early 2022, Octagon welcomed several new equity owners (many of whom were not existing partners/owners) and offered the same opportunity to certain senior employees in early 2021. However, the Conning and Octagon ownership percentages of 86% owned by Conning and 14% owned by Octagon employees did not materially change.

Octagon's Head of Collateral Administration retired in June 2022 and has since been succeeded by long time Octagon employee Kimberly Wong Lem serves as the new Managing Director & Head of Collateral Administration. In December of 2022 a Managing Director and Head of Business Development retired. Also in December 2022 Octagon's Chief Financial & Administrative Officer retired and has been succeeded by Octagon's Amy Adar.

2. List firm AUM, net flows and accounts gained/lost for the past 5 years.

	2017	2018	2019	2020	2021	2022*
Firm AUM (\$mm)	\$17,928	\$21,406	\$25,535	\$26,400	\$30,519	\$33,837
Total Firm Accounts**	43	47	59	58	66	75
Net Flows (\$mm)	N/A	N/A	N/A	N/A	N/A	N/A
Account Gained	N/A	N/A	N/A	N/A	N/A	N/A
Accounts Lost	N/A	N/A	N/A	N/A	N/A	N/A



*As of December 31, 2022

**Total Firm Accounts are counted on the basis of funds/accounts managed by Octagon. The count of underlying investors is not available. A Separately Managed Account Program counted as a single account currently includes thirteen different series.

3. Have there been any new or discontinued products in the past year?

Octagon is currently ramping Octagon CLO Opportunity Fund IV, closed-end, drawdown structure commingled fund that primarily invests in CLO debt and CLO equity. Octagon CLO Opportunity Fund IV made its first investments in March 2022. Octagon closed four CLOs in 2022, also in 2022 Octagon onboarded three separately managed accounts.

4. Are any products capacity constrained?

There are no current products or funds that are capacity constrained.

5. Describe any current or pending regulatory, compliance or litigation issues and the expected business impact.

Neither Octagon nor its officers have been involved in any litigation or legal proceedings raised by a client, regulator, government authority, or related to investment advice provided by the Firm or its employees during the past 10 years.

6. Describe your diversity, equity and inclusion efforts with regard to the firm and its employees.

Please refer to the separately attached Exhibit A, (Octagon DEI Mission Statement) for further information on Octagon's DEI efforts. All of the information from this document comes directly from Octagon's website. https://www.octagoncredit.com/about-us/diversity,-equity,-and-inclusion-at-octagon

Portfolio Management Team

- 1. Have there been any changes in the portfolio management team in the past year?

 There have been no changes to the portfolio management team in the past year.
- Are there any expected changes to the team in the future (planned additions or departures)?



There are no expected changes to the Investment Committee. Octagon believes that its business and current personnel are scalable, however, the Firm will hire additional employees as business needs demand.

Process

- 1. Have there been significant changes in any of the areas below in the past year?
 - Identification of investment ideas

No

Process for exploring and vetting ideas

No

Portfolio trading practices including buy/sell rules

Νo

Approach to portfolio monitoring and risk management
 No

Philosophy

1. Describe recent changes in investment philosophy, if any.

There have been no recent material changes to Octagon's investment philosophy.

Portfolio

1. If not included in your meeting presentation, provide portfolio holdings, sector exposure, geographic exposure and common characteristics (yield, duration, market cap, P/E, etc.).

Please refer to the separately attached Exhibits B & C (Portfolio Schedule, and Risk Template) for the Senior Secured Credit Fund.

2. List strategy AUM, net flows and accounts gained/lost for the past 5 years.

	2018	2019	2020	2021	2022*
Fund AUM (\$mm)	\$122.2	\$252.0	\$403.5	\$973.1	\$1,053.1
Net Flows (\$mm)	\$51.1	\$102.4	\$150.3	\$554.2	\$107.4
Accounts Gained	3	7	6	15	6
Accounts Lost	0	1	3	2	6

^{*}Fund AUM is presented as of 12/31/2022. Net Flows, Accounts Gained, and Accounts Lost data is as of 12/31/2022.



3. Describe investor concentration for the strategy and note the percent of AUM attributable to the top five investors.

As of December 31, 2022, the largest five investors in the Octagon Senior Secured Credit Fund comprise 60.4% of total Fund assets under management.

Performance / Market Outlook

1. If not included in your meeting presentation, provide trailing returns as of the most recent quarter-end and calendar year returns for the past 10 years, both relative to benchmark.

Trailing returns & annual returns vs. BB/B Index are included within the monthly presentation.

2. Briefly discuss recent performance trends and identify environments in which the strategy is likely to be in or out of favor.

The Octagon Senior Secured Credit Fund 4Q22 quarterly letter will be distributed ahead of the call next week and will contain the information requested.

3. Describe your market outlook and how strategy positioning is impacted by your views.

The Octagon Senior Secured Credit Fund 4Q22 quarterly letter will be distributed ahead of the call next week and will contain the information requested.

4. Could you please include a slide in your presentation that sows the MWRA's account history, initial contribution, cumulative subsequent contributions, cumulative subsequent distributions, gain/loss and current value.

This slide can be found in the Fund presentation.



GENERAL DISCLOSURES & RISKS

This presentation has been prepared by Octagon Credit Investors, LLC (the "Investment Manager" or "Octagon") solely for information purposes and is not an offer to sell or the solicitation of an offer to buy an interest in any security which can only be made by a private placement memorandum that contains important information about the proposed product's risks, fees and expenses (the "Supplemental Disclosure Documents"). Securities are offered through Conning Investment Products, Inc., an affiliated broker dealer and member of FINRA and SIPC. Conning, Inc., Octagon Credit Investors, LLC., Global Evolution Holding ApS and its group of companies ("Global Evolution"), Goodwin Capital Advisers, Inc., Conning Investment Products, Inc., Conning Asset Management Limited, and Conning Asia Pacific Limited are all direct or indirect subsidiaries of Conning Holdings Limited (collectively, "Conning") which is one of the family of companies owned by Cathay Financial Holding Co., Ltd., a Taiwan-based company. Conning has offices in Hartford, New York, Boston, London, Cologne, Hong Kong and Tokyo.

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predominantly based on investments that use USD LIBOR as a reference rate. LIBOR is currently being phased out, with the syndicated debt and CLO securities markets transitioning to alternative reference rates. There is no quarantee that the performance of individual investments or the syndicated debt and CLO securities markets as a whole during the transition period (or ultimately) will be consistent with performance achieved during the LIBOR era. This document does not constitute investment, tax, legal, regulatory or accounting advice. Under no circumstances should this document be used or considered as an offer to sell or a solicitation of an offer to buy any security, financial instrument or investment vehicle. Investors are advised to make an independent review regarding the economic benefits and risks of purchasing or selling the financial instruments mentioned in this document to determine whether an investment is suitable for them and reach their own conclusions regarding the legal, tax, regulatory, accounting and other aspects of any transaction in the financial instrument in relation to their particular circumstances. Investments described herein carry a risk of loss, which could be significant, and that investors should be prepared to bear.

The Investment Manager and/or its affiliated companies may make a market or deal as principal in the financial instruments mentioned in this document or in related securities, options or other derivative instruments based on them. In addition, the Investment Manager, its affiliated companies, shareholders, directors, officers and/or employees, may from time to time have long or short positions in the financial instruments, including loans, securities or in options, futures or other derivative instruments based on them. Performance information about the investment activities of the Investment Manager is presented solely to illustrate the investment philosophy and history of the Investment Manager. Past performance is not a guarantee, predictor or indication of future results. Similar investments likely would produce different results under different economic and market conditions.

There can be no assurance that any particular individual will be involved in the management of any portfolio for any given period of time, if at all.

These materials contain forward-looking statements. Investors should not place undue reliance on forward-looking statements. Actual results could differ materially from those referenced in forward-looking statements for many reasons. Forward-looking statements are necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying any forward-looking statements will not materialize or will vary significantly from actual results. Variations of assumptions and results may be material. Without limiting the generality of the foregoing, the inclusion of forward-looking statements herein should not be regarded as a representation by the Investment Manager or any of their respective affiliates or any other person of the results that will actually be achieved by the fund. None of the foregoing persons has any obligation to update



or otherwise revise any forward-looking statements, including any revision to reflect changes in any circumstances arising after the date hereof relating to any assumptions or otherwise.

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General Risks related to Alternative Investments: General Economic and Market Conditions, Increased Regulatory Oversight, Use of Borrowed Funds, Complexity of Trading Strategy—Reliance on Technology, Futures, Commodities and Derivatives, Hedging Transactions, Options, Short Sales, and Risk of Global Investing. Risks related to an investment in a fund: Absence of Operating History, Absence of Regulatory Oversight, Nature of Investments, Business and Regulatory Risk of Hedge Funds, Portfolio Turnover, Risk of Varied Performance, Potential Lack of Diversification, Potential Exposure to Prime Brokers, Potential Exposure to Derivative Counterparties, Execution of Transactions, Certain Tax Risks, Reliance on Manager, Absence of Secondary Market, Operating Deficits, Economic Conditions, Calculation of Operational Net Fund Value, Market Risk, Investors not to Participate in Management of the Fund, Illiquidity of Interests, and Distributions In Kind.

LIBOR – CLO debt and bank syndicated loans historically used LIBOR as an interest rate benchmark, which is currently being phased out, with new instruments being issued with an alternative rate and all existing instruments tied to LIBOR required to transition by June 30, 2023. Replacement of LIBOR could adversely affect the market value or liquidity of CLO securities and/or loans, and pose tangential risk for markets and assets that do not rely directly on LIBOR. On July 29, 2021, the Alternative Reference Rates Committee formally recommended CME Group's forward-looking Term SOFR rate as the replacement rate for U.S. dollar LIBOR, however, there is uncertainty with respect to replacement of LIBOR with proposed alternative reference rates, and it is possible that different markets might adopt different rates, resulting in multiple rates at the same time and a potential mismatch between CLO securities and underlying collateral, the effects of which are uncertain at this time, and could include increased volatility or illiquidity. In addition, operational and technology challenges during the transition from LIBOR



as well as inconsistent communication from issuers could result in delayed investment analyses and reduced investment opportunities.

None of the information contained herein has been filed or will be filed with the Securities and Exchange Commission, any regulator under any state securities laws or any other governmental or self-regulatory authority. No governmental authority has passed or will pass on the merits of this offering or the adequacy of this document. Any representation to the contrary is unlawful.

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MASSACHUSETTS WATER RESOURCE AUTHORITY

OCTAGON SENIOR SECURED CREDIT FUND ANNUAL REVIEW – 2022



Octagon Senior Secured Credit Cayman Fund Ltd

Historical Capital Account Detail prepared for MWRA, 2022

• Investor: MWRA Employees' Retirement System

• Share Class: L Acc

Date	Beginning Capital at 1/1	YTD Contributions	YTD Withdrawals	YTD Net Income	YTD Distributions	Ending Capital at 12/31	Annual Return*
12/31/2019	-	\$7,000,000.00	-	\$153,132.10	-	\$7,153,132.10	2.19%
12/31/2020	\$7,153,132.10	\$4,000,000.00	-	\$533,844.50	-	\$11,686,976.60	4.34%
12/31/2021	\$11,686,976.60			\$538,343.03		\$14,225,319.63	4.49%
12/31/2022	\$14,225,319.63	-	-	\$(263,752.70)	-	\$13,961,566.93	-1.85%
Total	<u>-</u>	\$11,000,000.00	-	\$961,566.93	-	\$13,961,566.93	-
						Cumulative Return	9.34%

^{*} Returns are net of fees and information is sourced from the client's own capital account statements via State Street. Annual returns are year-to-date and based on opening and ending balances. Returns are unaudited and mid-month returns are unofficial, estimated, and subject to change. Please note that the information above is provided in response to the investor's request, is confidential, and is not intended for distribution. This information is unaudited and subject to change. Performance information about other investment activities of Octagon, or a certain asset type, is presented solely to illustrate the investment philosophy and history of the investment manager with respect to such activities or asset type. Such information is not necessarily representative of the investment manager's overall performance, due to variation in the investment strategies, restrictions, and investment conditions of various portfolios. Past performance is not a guarantee, predictor, or indication of future results of any portfolio or of the investment manager. Similar investments may produce different results under different economic and market conditions.



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I. FIRM OVERVIEW



OCTAGON CREDIT INVESTORS, LLC

Firm Heritage

- \$33B+1 below investment grade corporate credit manager founded in 1994
- Founded as a business unit within Chemical Bank & spun out from Chase Manhattan Bank (J.P. Morgan predecessors) in 1999
- Since inception, Octagon's sole focus has been managing below investment grade corporate debt, primarily leveraged loans, high yield bonds and structured credit (CLO debt and CLO equity securities).

Firm Culture

- Located in New York City, the Firm currently comprises 85¹ employees, many of whom have spent the majority of their professional careers at Octagon
- Octagon's Investment Committee members have worked together for 19 years (on average)
- Team-based culture built upon communication, trust, accountability, and dedication to client partnership

Firm Investment Style

- Through fundamental credit analysis and active portfolio management, Octagon's Investment Team identifies attractive relative value opportunities across below-investment grade asset classes, sectors and issuers.
- The Firm's investment philosophy integrates risk management into the investment process and has facilitated the Firm's ability to avoid excessive risk and experience lower default rates compared to the leveraged loan index.²
- Over its history, the Firm has developed a disciplined, repeatable and scalable approach in its effort to generate attractive risk-adjusted returns for its investors.

Firm Initiatives

- **ESG Principles:** As a signatory of the Principles for Responsible Investment (PRI), Octagon believes the integration of environmental, social, and corporate governance risk factors enhances our research process and better allows us to adhere to the fiduciary duty we owe each client.
- **Diversity, Equity & Inclusion:** Octagon is committed to building a diverse and inclusive culture that provides the Firm's clients a range of perspectives and experiences.



OCTAGON CREDIT INVESTORS

\$33.8B AUM¹

- Specializing in Below Investment Grade Corporate Credit since 1994
- Entrepreneurial culture & supportive majority owner: 14% employee-owned; 86% owned by Conning
- Global institutional investor base
- Established track record

Strategy	BANK L	OANS	STRUCTURED CREDIT	MULTI-ASSET CLASS CREDIT
AUM	\$30.4B	AUM	\$1.8B AUM	\$1.6B AUM
Assets	Broadly Syndicated Seni	or Secured Bank Loans	CLO Debt, CLO Equity	Bank Loans, CLO Debt, CLO Equity, High Yield Bonds ³
Products	Open-ended funds/accounts \$4.9B AUM	CLOs \$25.4B AUM	 CLOQ (IG tranches)² Third Party Fund 	High Income FundCredit Opportunities
	Senior Secured Credit FundSeparate AccountsSub-Advised Funds	46 outstanding CLOs61 CLOs priced since 1999	 Separate Accounts CLO Opportunity Fund IV Sub-Advised Funds 	Fund XFLT (NYSE-listed) ⁴ Separate Accounts

- Indicates vehicle currently open for investment.
- 1. Octagon AUM as of December 31, 2022. Total AUM may not foot due to rounding.

CLOQ is the Conning Investment Grade CLO Separately Managed Account program, comprising of 13 different active series as of 8/31/22. It is available as a parallel Separately Managed Account sub-advised by Octagon Credit Investors.

^{3.} Multi-Asset Class Credit accounts invest in several but not necessarily all of the asset classes noted above. Certain accounts employ leverage to seek to enhance returns, which may increase the risk of investment loss.

^{4.} For additional information about XFLT, please contact XA Investments LLC or your financial advisor. Securities are not being offered by Octagon or Conning Investment Products.



COHESIVE, CYCLE-TESTED INVESTMENT TEAM

INVESTMENT COMMITTEE

Andrew Gordon Chief Executive Officer 38 years experience; 28 at Octagon					
Michael Nechamkin	Gretchen Lam, CFA	Lauren Law, CFA	Sean Gleason	Maegan Gallagher	
Chief Investment Officer & Senior Portfolio Manager	Senior Portfolio Manager	Portfolio Manager	Portfolio Manager	Head of Trading & Capital Markets	
32 years experience 24 at Octagon	24 years experience 24 at Octagon	19 years experience 19 at Octagon	13 years experience 13 at Octagon	19 years experience 15 at Octagon	

PERFORMING CREDIT INVESTING John Armideo, CFA Principal 15 yrs exp. Business Services, Financials, Software Patrick Barrett Principal 15 yrs exp. Healthcare, Pharmaceuticals Austin Flynn Principal 9 yrs exp. Industrials, Transportation, Retail, Metals & Mining Brad Halsey, CFA Principal 18 yrs exp. Consumer Products, Education, Gaming & Lodging

Ryan McManus, CFA	Principal	13 yrs exp.	Oil & Gas, Po	ower & Utilities, Autos, F	ood & Beverage			
Joe Spinner	Principal	11 yrs exp.	Building Pro	Building Products, Real Estate, Tech Hardware, Healthcare Technology				
Robbie Williams	Principal	9 yrs exp.	Cable, Telec	Cable, Telecom, Defense				
Justin Laurenzo	Vice President	8 yrs exp.	Leisure & Er	ntertainment, Restaurant	s, Aerospace			
Michael Rosenfeld, CFA	Vice President	7 yrs exp.	Packaging, Chemicals					
Kevin Wivell	Vice President	6 yrs exp.	Asset Managers, Insurance & Payment Processors, Media					
	3 Associates 6 Analysts							
CLO STRUCTURING				CLO INVESTING				
Eric Glyck	Head of CLO Struc	cturing 1	4 yrs exp.	Joseph DiCecilia	Principal	12 yrs exp.		

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Caroline O'Connor	Vice President	8 yrs exp.
John Ragusa	Vice President	25 yrs exp.
Marcela Vega	Trader	4 yrs exp.
Daniel Garner	Trading Assistant	5 yrs exp.
Drew Scheier	Trading Assistant	7 yrs exp.

DISTRESSED INVESTING

Jeremy Stern	Principal	17 yrs exp.
James Shearman	Associate	6 yr exp.
Riya Mital	Analyst	1 yr exp.

PORTFOLIO ANALYTICS

		010 1111 2011110						
Eric Glyck	Head of CLO Structuring	14 yrs exp.	Joseph DiCecilia	Principal	12 yrs exp.	Bill Reighley, CFA	Vice President	13 yrs exp.
			Connor Dugan, CFA	Vice President	8 yrs exp.	Hank Tai, CFA	Senior Associate	8 yrs exp.
			Graham Voss	Associate	4 yrs exp.			
		Sabrina Simanoff	Analyst	3 yrs exp.				

^{1.} As of January 9, 2023.

^{2.} There can be no assurance that any particular individual will be involved in the management of any portfolio for any given period of time, if at all.



EXPERIENCED BUSINESS TEAM

• Provides comprehensive Client Service & Investment Team support

BUSINESS DEVELOPMENT

John Dudzik Managing Director 41 yrs exp. 12 at OCI	Doug McDermott Managing Director 29 yrs exp. 7 at OCI
Marielle Bush	Managing Director
Jonathan Lewis	Vice President
Livia Shack	Senior Associate
Brendan McPartland	Associate
Arlene Wang	Associate

COMPLIANCE

Margaret Julian Chief Compliance Officer 17 years experience, 11 at Octagon					
Alexis Cameron	Vice President				
James Minogue	Vice President				
Xuan Zhu	Vice President				
Carolyne Luna Associate					

ACCOUNTING Amy Adar

Chief Financial Officer 15 years experience, 6 at Octagon					
Harry Falconer	Managing Director				
Paul Rosenkrantz	Managing Director				
Conor DuRoss	Vice President				
Joe Maggio	Vice President				
Alex Monteleone	Vice President				
Anna Popova	Vice President				
Dan Peabody	Senior Fund Accountant				
Anthony Tunnero	Senior Fund Accountant				
Anne Liu	Fund Accountant				
Jessica Portela Fund Accountant					

TECHNOLOGY Sean Finn

	ct Manager ience, 4 at Octagon
Alex Kurkov	Principal Software Architect
Majdi Razick	Senior Software Developer
uliia Razumovskaia	Business Systems Analyst
	_

Support from Conning IT Team

INVESTOR RELATIONS

Erin Crawford Managing Director 15 years experience, 12 at Octagon				
Natalie Portanova	Vice President			
Catherine Wright	Associate Director			
Kevin Donnelly, CFA	Senior Associate			
Lulefer Vinca	Senior Associate			
Paul Maloney	Analyst			

LEGAL

Geoffrey Dorment General Counsel 19 years experience, 6 at Octagon			
Oriana Madeira	Deputy General Counsel		
Harvey Butler III	Legal and Compliance Specialist		

COLLATERAL ADMINISTRATION Kimberly Wong Lem

Managing Director, Portfolio Administration 18 years experience, 16 at Octagon					
Benjamin Chung	Assistant Vice President				
Damian Miles	Assistant Vice President				
Gillian Vinal	Assistant Vice President				
Michael Mitchell	Senior Portfolio Administrator				
Logan Barrett	Portfolio Administrator				

HUMAN RESOURCES

Lena Resnick
Head of Human Resources
13 years experience, 2 at Octagon

ADMINISTRATIVE SUPPORT

Crystal Green	Executive Assistant
Susan Lee	Executive Assistant
Zach Mahler	Receptionist ³

- 1. As of January 9, 2023.
- 2. There can be no assurance that any particular individual will be involved in the management of any portfolio for any given period of time, if at all.
- 3. Part-time or contract worker.



CONSISTENT DISCIPLINED PROCESS OVER 25+ YEAR HISTORY

PEOPLE

EXPERIENCED TEAM AND COLLABORATIVE CULTURE

- Cycle-tested Investment Committee
- Investors offered direct access to key firm personnel

PROCESS

ALPHA GENERATION & LOSS MITIGATION

- Disciplined, repeatable, scalable, time-tested investment process based on fundamental credit analysis and relative value optimization
- Systematic continual monitoring facilitates active portfolio and risk management

PERFORMANCE

DEMONSTRATED FUNDAMENTAL CREDIT EXPERTISE

- Octagon has experienced <1/3 of the loan index default average over a 22-year period¹
- Established track record spans over multiple credit cycles

PRESENCE

LEADING PRESENCE IN THE US SENIOR LOAN AND CLO MARKETS

- Active loan trading counterparty to major banks²
- Top 10 US CLO issuer³
- 1. Please refer to the "Historical Loan Default Rate" slide herein for additional information.
- 2. Additional information available upon request.
- 3. On a 1-year, 3-year, 5-year, and 7-year basis as of December 31, 2022, Octagon is among the top ten CLO managers based on new issue US CLO volume by dollar amount (excluding middle market CLOs). Source: S&P Global Intelligence.

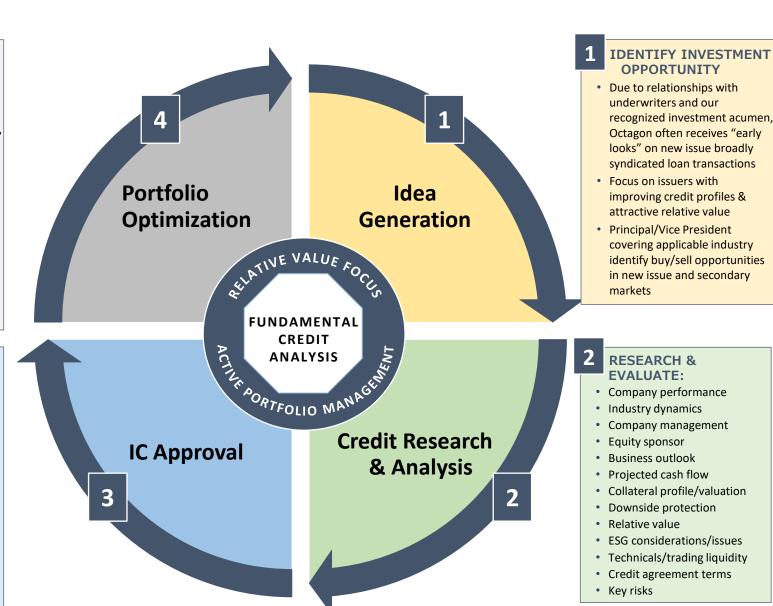


CONTINUAL MONITORING & POSITION MANAGEMENT

- Real-time discussion of latest earnings, news, data/analysis, trading levels & buy/sell recommendations via Investment Team network exchange
- Daily repricing of risk & continuously refreshed internal ratings
- Weekly Watch List report & meeting
- Daily discussions and weekly portfolio reviews to address credit risk

INVESTMENT COMMITTEE REVIEW, APPROVAL & ALLOCATION

- Principal/Vice President presents investment thesis supported by extensive written analysis & financial models
- For new primary & secondary investments, IC approval required before purchase in any account²
- At time of approval, proprietary ratings are assigned and each Portfolio Manager determines position size for each fund/account, subject to client fund/objectives





RISK MANAGEMENT - PROPRIETARY RATINGS SYSTEM²

• Informs position sizing, frequency of asset review, and relative value assessment

CREDIT RATING

Octagon Rating	Moody's / S&P Equivalent	Target Position Size	
5+	Ba1/BB+	Above Average	
5	Ba2 / BB	Above Average	
5-	Ba3 / BB-	Above Average	
6+	B1 / B+	Average	
6	B2 / B	Average	
6-	B3 / B-	Below Average	
7+	Caa1 / CCC+	Below Average	

LIQUIDITY RATING

Scale of 1-5

- Focus on broadly syndicated senior secured loans
- Typically target minimum \$400MM facility size
- · Assess underwriters and trading desks
- Seek loans which are actively traded by multiple dealers
- Octagon total exposure typically limited to 10% of total facility

COLLATERAL RATING

Scale of A-D

Downside valuation analysis of underlying collateral, including:

- Enterprise value
- · Segment values
- Hard assets
- Historical transaction multiples
- Comparable valuations

DOCUMENT RATING

Scale of 1-5

- Initial rating assigned based on term sheet, Covenant Review analysis, and in conjunction with Investment Committee discussion
- Rating is finalized following the release of the credit agreement

- 1. The investment philosophy described above is for illustrative purposes only, and no assurance can be given that it will be applied to any portfolio at any given time.
- 2. Applies to bank loan and high yield bond investments; Octagon does not apply proprietary ratings to investments in primary and secondary CLO debt and equity tranches.



PROACTIVE RISK & PORTFOLIO MANAGEMENT PROCESSES

- Constant communication, systematic reporting and regular meetings to address risks and opportunities
- Various internal committees oversee processes and controls:
 - Investment Committee
 - · Compliance Committee
 - Investment/Trading Oversight Committee
- Valuation Committee
- Counterparty Committee
- Market Outlook Committee
- ESG Committee

All meetings are being held in-person and via Microsoft Teams to support our hybrid work environment

DAILY

Investment Committee Office Hours/Ad Hoc Discussions

- · Review and approve new credits for investment
- Discuss any significant changes in risk profile and/or relative value for individual issuers/positions

Portfolio Monitoring System

- Customized views provide real-time access to portfolio holdings, trading activity and portfolio concentrations
- Direct feeds from ratings agencies and index providers into Octagon systems facilitate compliance with account guidelines

Team Network Exchange

- Virtual forum for sharing real-time updates, including:
 - · Company earnings & news alerts
 - Macro- or market-level data/analysis
 - Trading levels & buy/sell recommendations

Daily Reports

- · Compliance dashboard
- Individual fund/account performance
- Top & bottom-performing assets across entire portfolio

WEEKLY

Investment Team Morning Meeting (3x / week)

- · Address new investment opportunities/forward calendar
- Discuss market dynamics
- Share updates on existing positions
- Identify secondary trade opportunities and "best ideas"
- Discuss individual fund/account needs

Portfolio Reviews (rotate weekly by industry team)

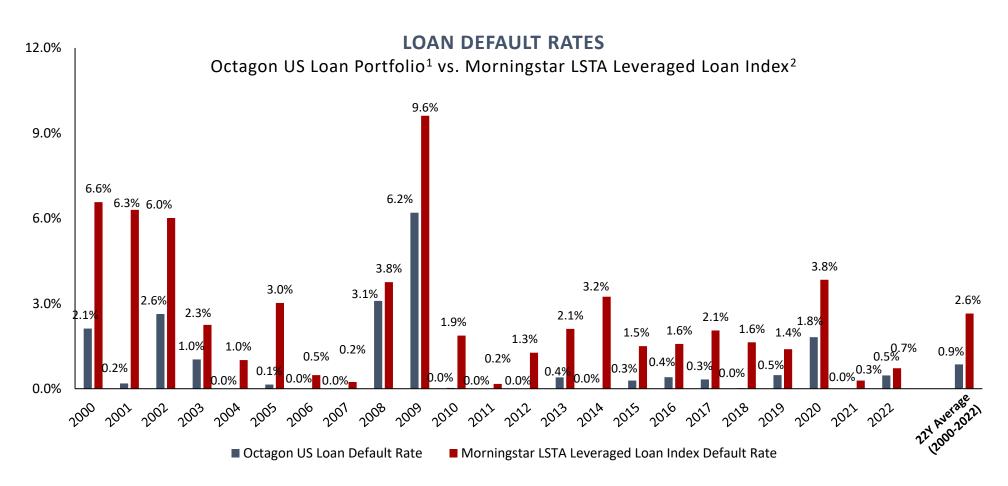
- Formal reviews with Investment Committee to affirm or change investment thesis and/or internal ratings
- Additional reviews of lower-rated positions (Octagon credit rating of 6 or higher) focused on action-oriented recommendations
- Dedicated Stressed/Distressed Investment Team holds weekly update meetings with the Investment Committee on work out situations

Watch List

- For Loans and Bonds: Utilizes asset prices as well as internal and rating agency downgrades to identify deteriorating assets for further review
- For CLO Debt and CLO Equity: Not necessarily based on price declines. Utilizes certain collateral portfolio or coverage test levels, based on underlying CLOs' compliance with certain indenture tests, to determine if any candidate assets should be added to the Watch List



OCTAGON'S HISTORICAL LOAN DEFAULT RATES: <1/3 OF INDEX AVERAGES



^{1.} Annual figures presented represent Octagon's US leveraged loan default rate across all Octagon CLOs, Separately Managed Accounts and Commingled Funds. These figures exclude OCI Euro Fund I B.V., a non USD-denominated fund invested substantially in European senior secured leveraged loans. Octagon transferred management responsibilities of this fund on April 19, 2011 in connection with the sale of Octagon's European business. Octagon's default rate represents the sum of Octagon's US leveraged loan positions that have gone into default over the stated 12-month period divided by the average par amount of Octagon's US leveraged loan portfolio over the same period of time. Past performance is not a guarantee of future results. Market conditions impacting loan default rates vary significantly due to factors outside Octagon's control. Octagon has included in its default statistics any asset held across any of its portfolios that is considered a default in the Morningstar LSTA Leveraged Loan Index. The Morningstar LSTA Leveraged Loan Index considers an asset defaulted if: 1) the company files for bankruptcy; 2) the loan facility is downgraded to D by S&P; or 3) an interest payment is missed without a forbearance.

Source: Morningstar LCD News (December 31, 2022). Morningstar LSTA Leveraged Loan Index (formerly the S&P/LSTA Leveraged Loan Index) default rate represents lagging 12-month default rate by principal amount as of the respective period presented. The Morningstar LSTA Leveraged Loan Index generally mirrors the universe of leveraged loans syndicated in the US. Defaults for the Morningstar LSTA Leveraged Loan Index do not represent the default experience of any particular investment manager or manager peer set. Index default rate is calculated as the amount defaulted over the last 12 months divided by the amount outstanding at the beginning of the 12-month period. Defaults represent all loans including loans not included in the LSTA/Refinitiv mark-to-market service. The vast majority are institutional tranches. When comparing Octagon account default rates to the Morningstar LSTA Leveraged Loan Index, please note that all defaults are reflected in an index, whereas the Octagon accounts represented herein may have held assets in their respective portfolios that eventually defaulted, but were sold prior to such time of default. Such sales are not reflected in the default rate. Loss given default figures for Octagon accounts are available upon request.





Annual	ized V	olati/	lity
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Open-Ended Funds* (Shaded Bars Tie to the	Inception Date	ITD Annualized Returns		Max. Annual Net Return*	Min. Annual Net Return*	ITD Annualized
Respective Funds Below)	miception Bate	Gross ¹	♦ Net²	Since Inception	Since Inception	Volatility
Senior Secured Credit Fund (USD Feeders)	February 2012	5.3%	4.7%	9.8%	-1.9%	4.3%
High Income Fund	February 2011	7.2%	5.6%	22.0%	-11.2%	11.1%
Octagon Credit Opportunities Fund	December 2014	7.1%	5.5%	17.3%	-6.5%	12.1%

The illustrated charts for the Senior Secured Credit Fund (USD Feeders), High Income Fund and Octagon Credit Opportunities Fund shown herein represent experienced returns. Please refer to "Fund Offering Risk & Return Profile - Risk Factors & Disclosures" for additional information.

*Max. and Min. Annual Net Returns are calculated on a calendar year basis, at year end.

Current year-to-date (Jan. 1, 2022 – December 31, 2022) Returns are: Senior Secured Credit Fund -1.99%, High Income Fund -11.17%, and Octagon Credit Opportunities Fund -5.87%.



Please refer to the "General Disclosures & Risks" section of this presentation for important disclosures.

- *Past performance is not a prediction or guarantee of future results. Please refer to the "Fund-Specific Performance Information & Disclosures" section for important performance disclosures and additional information on risks and performance calculations.
- *Additional information for all Funds mentioned in the previous slide is available upon request. Investors should not exclusively use this information towards making an investment decision.
- 1. Total gross returns are presented as of December 31, 2022 and before management and operating expenses but after all trading expenses and withholding taxes for the Senior Secured Credit Fund USD Feeder Funds (both Octagon Senior Secured Credit Fund LLC and Octagon Senior Secured Credit Cayman Fund Ltd, or the "USD Feeder Funds") and High Income Fund. Octagon Credit Opportunities Fund's historical gross performance presented herein reflects Fund terms prior to February 1, 2020. Octagon Credit Opportunities Fund's total gross returns represent the Fund's historical trade date performance and does not reflect the deduction of any fees and expenses associated with an investment in the Fund, with the exception of Interest Expense, which is the cost associated with the Fund's purchases of certain Performing Credit and Opportunistic Credit portfolio assets via Total Return Swap (TRS) financing. Currently, Octagon Credit Opportunities Fund's performance information is derived by dividing the sum of interest and fee income, unrealized and realized profit/loss (net of fees and expenses), by the Fund's NAV at the beginning of the respective month, adjusted for any capital contributions/redemptions. As per the Fund's document, Octagon Credit Opportunities Fund returns are calculated based on pricing all long portfolio holdings on the bid-side and short portfolio holdings on the ask-side. More information regarding performance calculations for all Funds is available by contacting Octagon's Investor Relations Team or Business Development Team.
- 2. Net returns presented herein reflect the deduction of the respective fees and expenses associated per Fund.
 - Senior Secured Credit Fund USD Feeders: Net returns for the USD Feeder Funds (both Octagon Senior Secured Credit Fund LLC and Octagon Senior Secured Credit Cayman Fund Ltd, or the "USD Feeder Funds") since inception reflect the impact of management fees equivalent to 0.50% per annum. Effective November 16, 2018, the USD Feeder Funds are offering Series L Interests/Shares for new investors. The minimum investment amount for Series L Interests/Shares is \$1.0MM. From May 1, 2016 to November 15, 2018, the USD Feeder Funds offered two Series Interests/Shares for investors: Series F and Series L. The minimum investment amount differed for Series F and Series L; the minimum investment amount for Series F was \$2.5MM and the minimum investment amount for Series L was \$5.0MM. Effective May 1, 2016, the management fees were 0.50% per annum for Series F and Series L Interests/Shares. From February 1, 2012 through April 30, 2016, Series F Interests/Shares were subject to management fees of 0.75% per annum. Any Operational Expenses incurred by a Series in excess of its Expense Cap will be borne by Octagon for the benefit of such Series, subject to recapture by Octagon during the same fiscal year. The Octagon Senior Secured Credit (Sterling) Cayman Fund (the "Sterling Feeder") commenced investing on October 1, 2021, as such, a long historical track record is not yet available for this feeder; the impact of hedging may reduce returns.
 - High Income Fund: Net returns represent the levered trade date performance for a Series 2 Interest in the Octagon High Income Master Fund Ltd., based on Series 2 Interest management fees and expenses. Net performance information for the Fund is derived by dividing the sum of interest and fee income, unrealized and realized profit/loss (net of fees and expenses), by the beginning Fund net asset value for the relevant period.
 - Octagon Credit Opportunities Fund: Net returns presented are net of all fees and expenses associated with a Series A Interest, which reflects the impact of management fees equivalent to 1.0% per annum and the retroactive application of an operating expense cap (50 bps). Previously, the net returns of the Fund reflected the deduction of all fees and expenses associated with a Sub Class C Interest or a Sub Class D-1 Interest, each of which incurred management fees equivalent to 1.5% per annum.
 - Current terms of Credit Opportunities Fund have been updated. Returns from inception (December, 1, 2014) through January 31, 2020 were achieved under the applicable investment terms of the Octagon Multi-Strategy Corporate Credit Master Fund LP (the "Fund"), which included utilization of leverage, the ability to enter short transactions, the ability to hedge opportunistically, certain restrictions on investor liquidity, and alternative fee structures. Effective February 1, 2020, the Fund will no longer utilize leverage, short transactions, or opportunistic hedging. The Fund's name was changed to the Octagon Credit Opportunities Master Fund Ltd as of that date. There is no guarantee that the Fund's historical performance would have been replicated if the updated terms had been applied for the duration of the Fund. Past performance has been achieved during a period of relative economic stability and is not necessarily indicative of future results. Please see Credit Opportunities Fund Risk Factors & Disclosures page for information on current management fee and expense cap provisions.



II. SENIOR SECURED CREDIT FUND



SENIOR SECURED CREDIT FUND

Invests predominantly in senior secured floating rate loans on an unlevered basis

TARGETS HIGH INCOME & TOTAL RETURN

- 4.65% average annualized return for the USD Feeder Funds since inception (February 1, 2012)1
- 5.0% LTM Distribution Rate for the USD Feeder Funds as of 12/31/22²

CAPITAL PRESERVATION

- Historical volatility of 4.27%
- 102% upside capture / 83% downside capture ITD (vs. Morningstar LSTA BB/B Loan Index)³
- 108 of the 120 12-month rolling periods since inception have generated positive returns to clients

LOW DURATION

- Average duration of 0.25 years
- Floating rate coupons tied to SOFR / LIBOR⁴

OCTAGON

• Access to Octagon Credit Investors' 25+ year, disciplined, institutional investment process for a low minimum investment

- 1. Represents annualized net return since the USD Feeder Funds' inception through December 31, 2022. Net returns presented herein reflect the deduction of all fees and expenses associated with Series L Interests/Shares in the USD Feeder Funds. Effective November 16, 2018, the USD Feeder Fund is offering Series L Interests/Shares for new investors. The minimum investment amount for Series L Interests/Shares is \$1.0MM. From May 1, 2016 to November 15, 2018, the USD Feeder Funds offered two Series Interests/Shares for investors: Series F and Series L. The minimum investment amount differed for Series F (\$2.5MM) and Series L (\$5.0MM). Effective May 1, 2016, the management fees were 0.50% per annum for Series F and Series L Interests/Shares. From February 1, 2012 through April 30, 2016, Series F Interests/Shares were subject to management fees of 0.75% per annum.
- 2. The USD Feeder Funds' distribution rates are calculated as blended averages (total fund distributions for all Series in which investors are currently invested, reflecting blended averages of fees and expenses) and are not representative of the USD Feeder Funds' highest or lowest fee class. Investors may elect to receive quarterly cash distributions of all realized current income via the Distributing Sub-Series option, or may choose the Accumulating Sub-Series option. The USD Feeder Funds' total return may be lower for investors in the Distributing Sub-Series due to differences in compounding. "LTM" refers to the last twelve month period as of December 31, 2022.
- 3. Upside/downside capture ratio is used to show to what extent a fund has outperformed/underperformed a benchmark index during periods of market strength/weakness. Upside/downside capture ratio is calculated by taking the average of monthly returns for the USD Feeder Funds and dividing it by the average of monthly returns for the benchmark index during months for which the index has had positive/negative returns. "ITD" refers to inception-to-date. Represents the period beginning on February 1, 2012 (Fund's inception date) through December 31, 2022.
- 4. Currently, most loans and CLO securities originated prior to January 2022 use LIBOR as a reference rate while newly issued instruments will use alternative reference rates. Please see additional disclosures regarding the transition from LIBOR in the "General Disclosures & Risks" Section of this document.



SUI	MMARY TERM SHEET- OCTAGON SENIOR SECURED CREDIT FUND ¹ Please refer to the Fund's Offering Memorandum for Further Details
INVESTMENT OBJECTIVE	High current income consistent with capital preservation and low duration.
FUND STRUCTURE	Master/Feeders (US/Offshore USD denominated/Offshore Sterling denominated)
MINIMUM INVESTMENT	\$1,000,000
PORTFOLIO GUIDELINES	 First lien senior secured floating rate loans (90% minimum including cash) High yield bonds & second lien loans (maximum 10%) CCC assets (maximum 5%)
PRIMARY BENCHMARK	Morningstar LSTA BB/B Leveraged Loan Index
HEDGING ²	Sterling denominated Feeder will hedge foreign exchange exposure between USD and Sterling
LEVERAGE	None
LIQUIDITY	Monthly: 15-day notice period prior to month end. Fund distribution generally within 30 days of month-end NAV strike
LOCK UP	None
DISTRIBUTIONS	Net Interest Income: Quarterly Net Realized Gains: Annually
SUB-SERIES (DISTRIBUTION PREFERENCE)	 Accumulating: Quarterly distributions are reinvested in Fund Distributing: Quarterly cash distributions to investor
ANNUAL MANAGEMENT FEE	0.50%
INCENTIVE FEE	None
ANNUAL EXPENSE CAP	0.15% (0.20% for Sterling denominated feeder)
PERIODIC REPORTING	Weekly: Estimated NAV Monthly: Detailed portfolio holdings, fund performance, NAV Quarterly: Investor letter Annually: Audited financial statements
MARK-TO-MARKET	Manager uses nationally recognized independent pricing services to price loans and bonds.
PORTFOLIO MANAGER	Michael Nechamkin

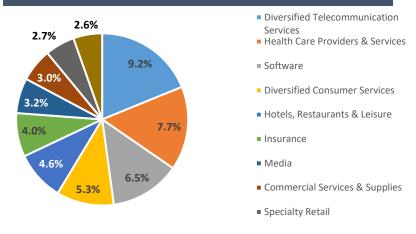
^{1.} Effective November 16, 2018, the USD Feeder Funds are offering Series L Interests/Shares for new investors. The minimum investment amount for Series L Interests/Shares is \$1.0MM. From May 1, 2016 to November 15, 2018, the USD Feeder Funds offered two Series Interests/Shares for investors: Series F and Series L. The minimum investment amount differed for Series F (\$2.5MM) and Series L (\$5.0MM). Effective May 1, 2016, the management fees were 0.50% per annum for Series F and Series L Interests/Shares. From February 1, 2012 through April 30, 2016, Series F Interests/Shares were subject to management fees of 0.75% per annum.

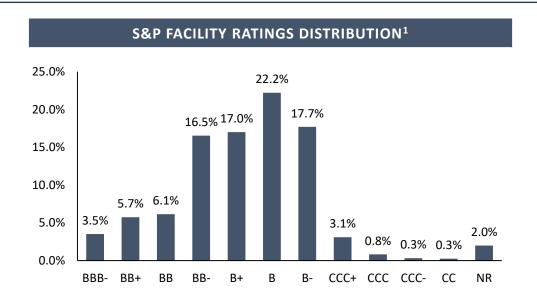
^{2.} Octagon Senior Secured Credit (Sterling) Cayman Fund, Ltd, to the extent determined by the Investment Manager in its sole discretion, will seek to hedge all or a portion of the foreign exchange exposure between the U.S. dollar and Sterling in an attempt to reduce or minimize the risks and potential impact of significant currency fluctuations between Sterling and U.S. dollars.



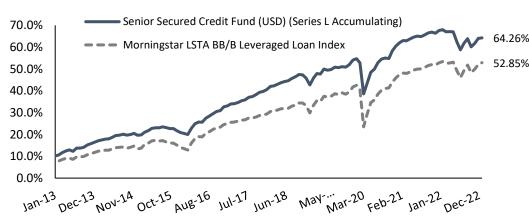
PORTFOLIO STATISTICS	
Fund Net Asset Value	\$1,053MM
Average Coupon (Par Value)	8.08%
Average Current Yield (Coupon / Market Price)	8.68%
Average Yield (Discount Amortized Over 3 Years)	11.20%
Average Moody's/S&P Facility Rating	B2 / B
Weighted Average Maturity	5.05 years
Weighted Average Duration	0.25 years
Floating Rate Assets as % of NAV	96.46%
Non-First Lien Loans as % of NAV	3.17%
Number of Issuers	272
Weighted Average Facility Size	\$1,803MM
Average Mark Price	\$92.84
LTM Turnover (as of latest quarter-end)	0.58x
Largest Issuer Concentration	1.67%

TOP 10 GICS INDUSTRIES IN PORTFOLIO





NET USD FUND CUMULATIVE TOTAL RETURN ITD VS. BENCHMARK



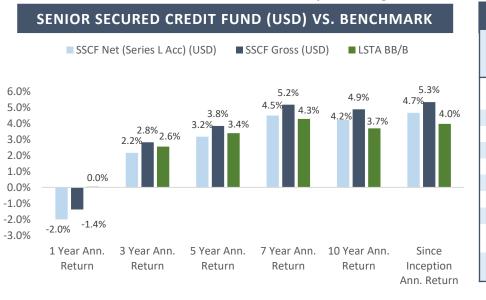
Net returns presented herein reflect the deduction of all fees and expenses associated with Series L Interests/Shares in the USD Feeder Funds. Effective November 16, 2018, the USD Feeder Funds are offering Series L Interests/Shares for new investors. The minimum investment amount for Series F and Series L: the minimum investment amount differed for Series F and Series L; the minimum investment amount for Series F and Series L: the minimum investment amount for Series F and Series L: the minimum investment amount for Series F and Series F and Series L: the minimum investment amount for Series F and Series F and Series L: the minimum investment amount for Series F and Series F and Series L: the minimum investment amount for Series F and Series F and Series L: the minimum investment amount for Series F and Series F





	SENIOR SECURED CREDIT FUND (USD FEEDERS) PERFORMANCE VS. BENCHMARK														
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC*	ANNUAL NET	ANNUAL GROSS	MORNINGSTAR LSTA BB/B INDEX
2022	0.22%	-0.55%	0.02%	-0.05%	-2.78%	-2.22%	1.92%	1.27%	-2.29%	1.01%	1.42%	0.14%	-1.99%	-1.37%	0.05%
2021	0.90%	0.58%	-0.02%	0.54%	0.48%	0.26%	-0.11%	0.45%	0.56%	0.20%	-0.29%	0.74%	4.36%	5.04%	4.67%
2020	0.39%	-1.23%	-9.30%	3.48%	3.55%	0.93%	2.04%	1.07%	0.27%	-0.14%	2.33%	1.41%	4.24%	4.92%	3.00%
2019	2.21%	1.45%	-0.17%	1.51%	-0.31%	0.21%	0.73%	-0.18%	0.32%	-0.16%	0.74%	1.42%	8.00%	8.70%	9.12%
2018	1.07%	0.16%	0.49%	0.53%	0.33%	0.26%	0.71%	0.55%	0.73%	-0.11%	-1.03%	-2.15%	1.51%	2.17%	0.38%
2017	0.34%	0.65%	0.10%	0.38%	0.63%	0.31%	0.88%	0.19%	0.63%	0.81%	0.28%	0.60%	5.96%	6.65%	3.91%
2016	-0.35%	-0.38%	2.40%	1.68%	0.65%	-0.08%	1.43%	0.82%	0.81%	0.77%	0.29%	1.35%	9.78%	10.49%	9.23%
2015	0.22%	0.97%	0.58%	0.88%	0.19%	0.01%	0.40%	-0.33%	-0.36%	0.01%	-0.82%	-0.70%	1.05%	1.70%	0.55%
2014	0.56%	0.29%	0.32%	0.15%	0.62%	0.65%	0.12%	0.40%	-0.38%	0.23%	0.42%	-0.72%	2.68%	3.35%	1.47%
2013	1.22%	0.40%	1.00%	0.64%	0.43%	-0.56%	1.27%	0.04%	0.32%	0.97%	0.52%	0.54%	6.99%	7.68%	4.96%
2012		0.75%	0.87%	0.85%	-0.38%	0.69%	1.04%	1.00%	1.14%	0.93%	0.69%	0.91%	8.83%	9.47%	6.45%

^{*}The Fund's December 2022 return is estimated and subject to change.

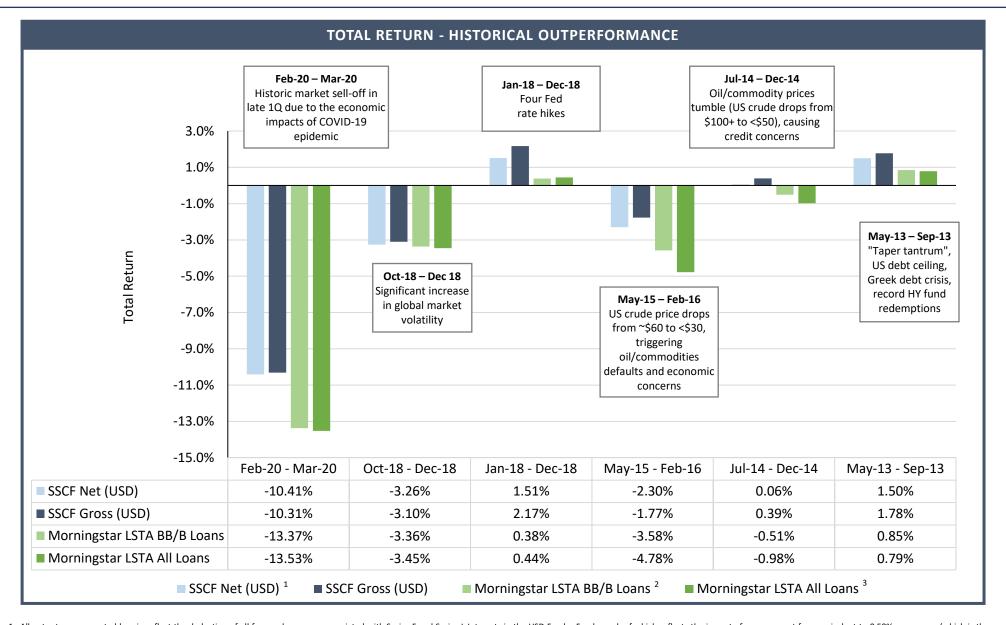


PERFORMANCE STATISTICS									
Performance	SSCF Series L Accumulating Net (USD)	SSCF Gross (USD)	Morningstar LSTA BB/B Index						
ITD ¹ Annualized Volatility (Standard Deviation)	4.27%	4.27%	5.11%						
ITD¹ Sharpe Ratio²	0.92	1.08	0.63						
Percent Positive Months	77.86%	79.39%	77.44%						
Trailing LTM Positive Return Periods	108/120	109/120	108/120						
Average Negative Month	-0.97%	-0.98%	-1.10%						
Maximum Drawdown	-10.41%	-10.31%	-13.37%						
Upside Capture ³ (vs. Morningstar LSTA BB/B)	101.53%	108.62%	N/A						
Downside Capture ³ (vs. Morningstar LSTA BB/B)	83.10%	78.22%	N/A						
Average Annual Distribution Rate ITD ⁴	4.26%								
LTM Distribution Rate as of 9/30/224	4.12%								

Please see the previous page for important disclosures regarding performance for the Octagon Senior Secured Credit Fund (USD Feeders). Past performance is not a prediction or guarantee of future results. This information is supplemental to the Unlevered Liquid Credit GIPS® composite included at the end of this document.

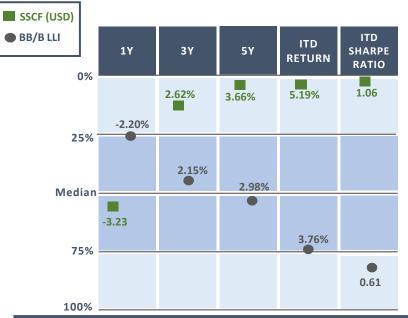
- 1. "ITD" refers to inception-to-date. Represents the period beginning on February 1, 2012 (Fund's inception date) through December 31, 2022.
- 2. Sharpe Ratio is calculated by subtracting the Risk-free Rate from the Fund's annualized return and dividing the result by the Fund's corresponding standard deviation. Risk-free Rate is the annualized return on 3-month US Treasury Bills.
- 3. Upside/downside capture ratio is used to show to what extent a fund has outperformed/underperformed a benchmark index during periods of market strength/weakness. Upside/downside capture ratio is calculated by taking the average of monthly returns for the Fund and dividing it by the average of monthly returns for the benchmark index during months for which the index has had positive/negative returns.
- 4. Represents distribution rates through September 30, 2022. The Fund's distribution rates are calculated as blended averages (total fund distributions for all Series in which investors are currently invested, reflecting blended averages of fees and expenses) and are not representative of the Fund's highest or lowest fee class. Investors may elect to receive quarterly cash distributions of all realized current income via the Distributing Sub-Series option, or may choose the Accumulating Sub-Series option. The Fund's total return may be lower for investors in the Distributing Sub-Series due to differences in compounding. "ITD" represents the period beginning on February 1, 2012 through December 31, 2022. "LTM" refers to the last twelve month period as September 30, 2022.





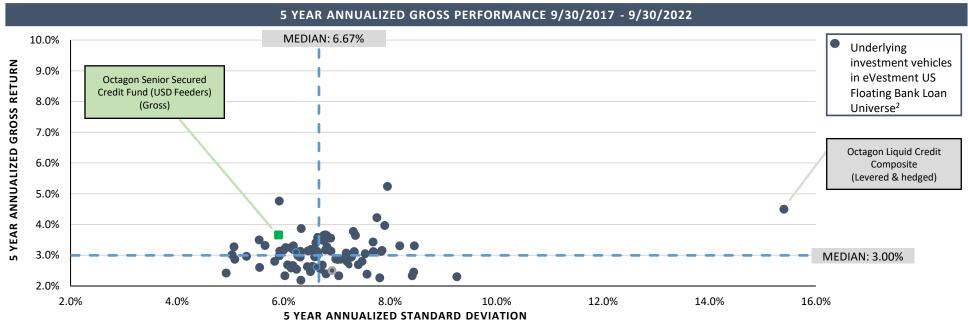
- 1. All net returns presented herein reflect the deduction of all fees and expenses associated with Series F and Series L Interests in the USD Feeder Funds, each of which reflects the impact of management fees equivalent to 0.50% per annum (which is the respective management fee for each Series Interest as of May 1, 2016). The minimum investment amount differs for Series F Interests and Series L Interests. Rates of return reflect the reinvestment of net interest income and gains and are therefore most representative of the Accumulating Sub-Series, but investors may elect to receive quarterly cash distributions of all realized current income via the Distributing Sub-Series option. Due to the lack of compounding, investors in the Distributing Sub-Series will experience different rates of return than the USD Feeder Funds' returns presented herein. Past performance is not a guarantee, predictor, or indication of future results. Benchmark index performance is provided as a comparison to the broader below investment grade corporate credit market. Please refer to the "Fund-specific Performance Information & Disclosures" section of this presentation for important performance disclosures and additional information on risks, benchmarks, and performance
- 2. Represents returns for the Morningstar LSTA BB/B Leveraged Loan Index, which is the USD Feeder Funds' primary benchmark. Please refer to the "Fund-specific Performance Information & Disclosures" section for further information regarding this index. 3. Represents returns for the Morningstar LSTA Leveraged Loan Index, which is the USD Feeder Funds' secondary benchmark. Please refer to the "Fund-specific Performance Information & Disclosures" section for further information regarding this index. 20





GROSS RETURNS AS OF September 30, 2022¹

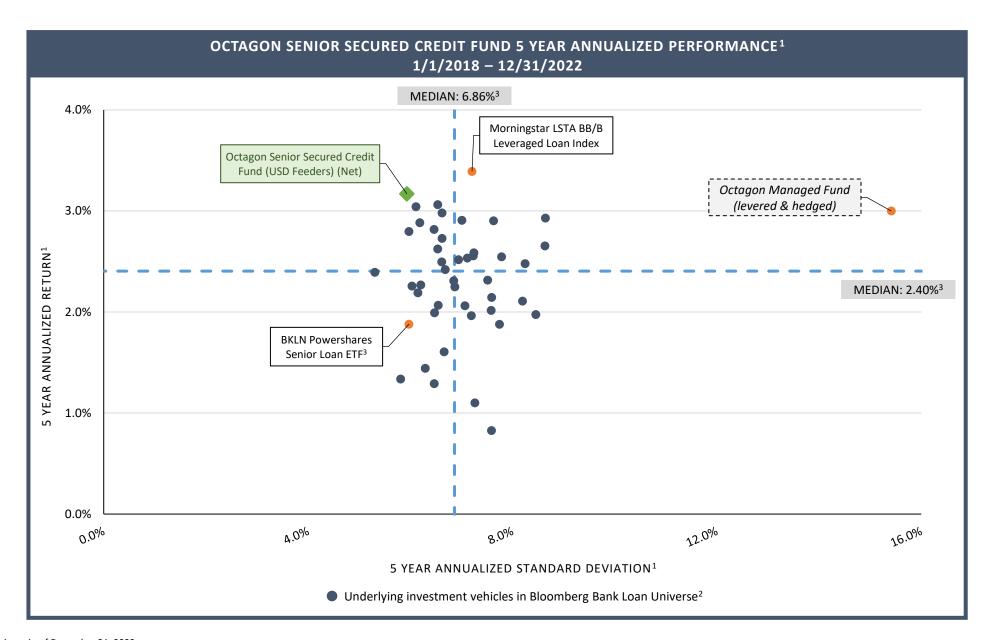
						•					
eVestment US Floating-Rate Bank Loan Fixed Income	1Y		3	3Y		5Y		ITD RETURN (2/1/2012)		ITD SHARPE RATIO	
02/2012-09/2022	RETURN	RANK	RETURN	RANK	RETURN	RANK	RETURN	RANK	SHARPE	RANK	
Octagon Senior Secured Credit Fund ("SSCF") (USD)	-3.23%	57	2.62%	21	3.66%	9	5.19%	9	1.06	4	
# of Observations	9	97		96		94		77		77	
Morningstar LSTA BB/B Leveraged Loan Index ("BB/B LLI")	-2.20%	25	2.15%	35	2.98%	51	3.76%	75	0.61	84	
5th Percentile	-1.14%		3.31%		4.05%		5.47%		0.98		
25th Percentile	-2.15%		2.52%		3.27%		4.63%		0.82		
Median	-3.03%		2.05%		3.00%		4.14%		0.74		
75th Percentile	-3.79%		1.50%		2.59%		3.75%		0.66		
95th Percentile	-6.56%		0.57%		1.74%		3.28%		0.55		



^{1.} Refer to the "Comparative Analysis Disclosures" page for additional information on the eVestment US Floating-Rate Bank Loan Fixed Income Universe. For the purposes of the analysis presented above, the Octagon Senior Secured Credit Fund (USD Feeders) and the eVestment US Floating-Rate Bank Loan Fixed Income universe constituents that report performance gross of fees are presented herein. Gross of fees returns are presented before management and operating expenses but after all trading expenses and withholding taxes. In the eVestment universe, managers report on a voluntary basis and therefore there is often a lag in reporting. In an effort to use the largest data set, updated information is provided quarterly and on a delayed basis.

^{2.} Data presented is calculated by eVestment Analytics. Source: eVestment Analytics.

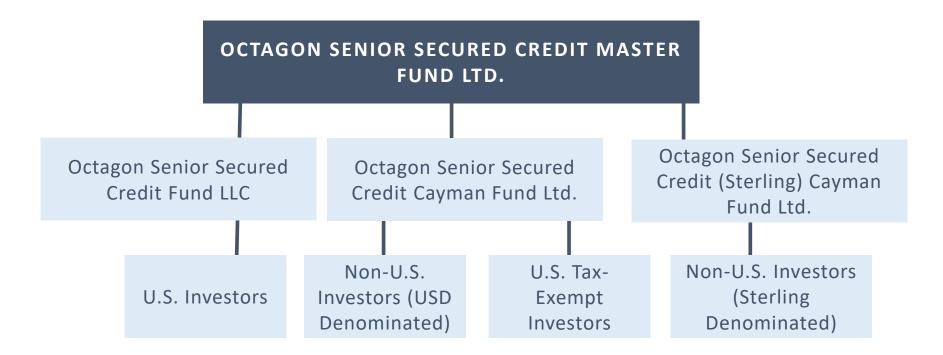




As of December 31, 2022.

Refer to the "Comparative Analysis Disclosures" page for information on the Bloomberg Bank Loan Universe and BKLN Powershares Senior Loan ETF. For the purposes of the analysis presented above, there are 42 constituents comprising the Bloomberg Bank Loan Universe 5-year data set. Source: Bloomberg.





- Based on the nature of Fund's investment strategy, the Fund is not expected to be engaged in business in the United States or subject to material net income tax. Most Fund income is expected to qualify for an exemption from withholding tax.
- Most U.S. taxable investors will likely invest directly in Octagon Senior Secured Credit Fund, LLC.
- Tax-exempt investors generally would invest through Octagon Senior Secured Credit Cayman Fund Ltd.
- Most foreign investors will likely invest in Octagon Senior Secured Credit Cayman Fund Ltd.; UK based investors have the option to invest in the Octagon Senior Secured Credit (Sterling) Cayman Fund Ltd.

IRS CIRCULAR 230 DISCLOSURE: Any discussion of U.S. Federal Income Tax matters herein is not intended or written to be, and cannot be used, by any person for the purpose of avoiding tax penalties that may be imposed on such person. As such, discussion was written to support the promotion or marketing of the transactions or matters addressed within the meaning of IRS Circular 230. You should seek advice based on your particular circumstances from an independent tax advisor.

TAX CONSIDERATIONS: Prospective investors are urged to consult their own tax advisors regarding possible U.S. Federal, state and local and non-U.S. tax consequences of such an investment as well as their own situation and the effect of this investment. There can be no assurance that the structure of the Fund or any investments by the Fund will be tax efficient for any particular investor. There can be no assurance that the Fund will distribute sufficient cash to cover the full tax liabilities of a particular investor arising from an investment in the fund. Furthermore, in general, tax laws, rules and procedures are extremely complex and are subject to change, which in some cases may have retroactive effect.



SENIOR SECURED CREDIT FUND Risk Factors & Disclosures

RISK FACTORS

Any person subscribing for an investment must be able to bear the risks involved and must meet the suitability requirements set forth in the Fund's confidential private placement memorandum. Some or all alternative investment programs may not be suitable for certain investors. No assurance can be given that the investment objectives set forth herein will be achieved. Among the risks we wish to call to the particular attention of prospective investors are the following:

- The Fund is speculative and involves a substantial degree of risk. No guarantee or representation may be made that the Fund will meet its investment objectives, or avoid substantial or total losses.
- The Fund will invest in illiquid securities and will engage in other speculative investment practices that may increase the risk of investment loss.
- The Fund has a limited operating history.
- Past results of the investment manager are not necessarily indicative of future performance of the Fund, and the Fund's performance may be volatile.
- The investment manager has total trading authority over the Fund, and the Fund is dependent upon the services of the investment manager. The use of a single advisor could mean lack of diversification and, consequentially, higher risk.
- An investment in the Fund should be considered illiquid. There is no secondary market for the investors' interest in the Fund and none is expected to develop.
- There are restrictions on transferring interests in the Fund.
- The Fund is dependent on the services of certain key personnel. The death, disability or other unavailability of such personnel could be material and adverse to the Fund.
- The Fund's fees and expenses may offset the Fund's trading and investment profits.
- The instruments in which the Fund invests may involve complex tax structures and there may be delays in distributing important tax information.
- The Fund is not required to provide periodic pricing or valuation information to investors with respect to its individual investments.
- The Fund is not subject to the same regulatory requirements as mutual funds.
- · The Fund is subject to conflicts of interest.

The private offering memorandum or similar materials for the Fund sets forth the terms of an investment in the Fund and other material information, including risk factors, conflicts of interest, fees and expenses, and tax-related information. Such materials must be reviewed prior to any determination to invest in the Fund described herein. Prior to investing, prospective investors should also review Octagon's Form ADV Part 2A for further discussion of risks.

LIBOR – CLO debt and bank syndicated loans historically used LIBOR as an interest rate benchmark, which is currently being phased out, with new instruments being issued with an alternative rate and all existing instruments tied to LIBOR required to transition by June 30, 2023. Replacement of LIBOR could adversely affect the market value or liquidity of CLO securities and/or loans, and pose tangential risk for markets and assets that do not rely directly on LIBOR. On July 29, 2021, the Alternative Reference Rates Committee formally recommended CME Group's forward-looking Term SOFR rate as the replacement rate for U.S. dollar LIBOR, however, there is uncertainty with respect to replacement of LIBOR with proposed alternative reference rates, and it is possible that different markets might adopt different rates, resulting in multiple rates at the same time and a potential mismatch between CLO securities and underlying collateral, the effects of which are uncertain at this time, and could include increased volatility or illiquidity. In addition, operational and technology challenges during the transition from LIBOR as well as inconsistent communication from issuers could result in delayed investment analyses and reduced investment opportunities.

Foreign Exchange Risk - If an investor invests directly in non-U.S. currencies or in obligations of issuers that are denominated in, or receive revenues in, non-U.S. currencies, or in derivatives that provide exposure to non-U.S. currencies, such investor will be subject to the risk that those currencies will decline in value relative to the U.S. dollar, or, in the case of hedging positions, that the U.S. dollar will decline in value relative to the currency being hedged. Changes in foreign currency exchange rates can also affect the value of dividends and interest earned, and the level of gains and losses realized on the sale of such investments. Consequently, an investor's investment in non-U.S. currency-denominated obligations could reduce the returns of such Fund.

COMPARATIVE ANALYSIS DISCLOSURES

- The Bloomberg Bank Loan universe is comprised of bank loan mutual funds actively tracked in Bloomberg's database. Bloomberg's classification system includes over 156,000 open-end fund share classes, and utilizes public documents including prospectuses, fact sheets, and annual reports to determine the intended investment objective of the respective manager. Octagon determined the Bloomberg Bank Loan universe constituents for inclusion in this analysis. For the purposes of this analysis, Octagon is including funds within the Bloomberg Bank Loan universe with the necessary track record for the respective time period presented, and is utilizing the respective fund share class that Octagon believes would be accessed by institutional investors. There are 42 funds comprising the data set for the 5-year comparative period. Expense ratios range from 0.54%-1.07% per annum. Mutual fund performance is shown net of fees and expenses. Mutual funds may have a higher expense ratio than the Fund. Mutual funds are subject to the Investment Company Act of 1940 requirements and restrictions, which can detract from overall performance of the fund. Source: Bloomberg.
- The eVestment US Floating-Rate Bank Loan Fixed Income universe is comprised of US fixed income products that invest primarily in bank loans, including private funds, public funds, composites, and separate accounts. The constituents of the universe are determined by eVestment based on fund information submitted to eVestment by the respective fund manager. The respective investment guidelines for each constituent product in the eVestment universe may vary significantly; for example, some products may employ leverage and may have varying constraints on high yield bonds, structured credit, and distressed credit investments. The benchmarks for the constituents in this universe typically include the Credit Suisse Leveraged Loan Index and Morningstar LSTA Leveraged Loan Index. eVestment provides a database of traditional and alternative strategies to help the institutional investing community identify global investment trends, select and monitor investment managers and assist asset managers in marketing their funds worldwide. eVestment data is reported by the fund manager, and is reported on a delayed basis. The data set fluctuates by quarter, and can change at any time. Source: eVestment Analytics.
- BKLN Powershares Senior Loan ETF is an exchange-traded fund which is designed to track the Morningstar LSTA U.S. Leveraged Loan 100 Index. Returns reflected herein are net of expenses. In conjunction with Morningstar PitchBook/LCD, a Morningstar Company, the LSTA developed the Morningstar LSTA U.S. Leveraged Loan 100 Index ("L100"). The L100 is designed to reflect the largest loan facilities in the leveraged loan market. It mirrors the market-value-weighted performance of the 100 largest institutional leveraged loans based upon actual market weightings, spreads and interest payments. It is not possible to invest directly in the L100.
- Other material differences may exist among constituents of each universe, in addition to those listed above. Return information is limited to that which is available publicly or in the databases noted.
 Octagon and Conning Investment Products have an interest in promoting Octagon managed funds.



SENIOR SECURED CREDIT FUND:

 Total Return is calculated using the Modified Dietz method. Net returns since inception for the USD Feeder Funds reflect the impact of management fees equivalent to 0.50% per annum. Effective November 16, 2018, the Fund is offering Series L Interests/Shares for new investors. The minimum investment amount for Series L Interests/Shares is \$1,0MM. From May 1, 2016 to November 15, 2018, the USD Feeder Funds offered two Series Interests/Shares for investors: Series F and Series L. The minimum investment amount differed for Series F and Series L; the minimum investment amount for Series F was \$2.5MM and the minimum investment amount for Series L was \$5.0MM. Effective May 1, 2016, the management fees were 0.50% per annum for Series F and Series L Interests/Shares. From February 1, 2012 through April 30, 2016, Series F Interests/Shares were subject to management fees of 0.75% per annum. Any Operational Expenses incurred by a Series in excess of its Expense Cap will be borne by Octagon for the benefit of such Series, subject to recapture by Octagon during the same fiscal year. A Series of Interests held by certain Octagon employees does not benefit from the Expense Cap. Such Operational Expenses include, but are not limited to, expenses of the respective fund administrator and professional fees (audit, legal, etc.). Previously, the performance returns of the USD Feeder Funds reflected above for the period prior to the May 1, 2016 implementation of the Expense Cap incorporated all of Operational Expenses incurred by the USD Feeder Funds during the respective period presented. Octagon makes no representation that it would have managed the USD Feeder Funds the same way under different fee structures. Total gross returns are presented before management and operating expenses but after all trading expenses and withholding taxes. Rates of return reflect the reinvestment of net interest income and gains and are therefore most representative of the Accumulating Sub-Series, but investors may elect to receive quarterly cash distributions of all realized current income via the Distributing Sub-Series option. Rates of return presented herein are not necessarily representative of all USD Feeder Funds investors. Due to the lack of compounding, investors in the Distributing Sub-Series will experience different rates of return than the USD Feeder Funds' returns presented herein. An individual investor's rate of return may vary based on the fees and expenses incurred in the series and timing of its investment. Please refer to the USD Feeder Funds' offering documents for further information on fees and expenses. The underlying portfolio assets are accounted for on a trade date basis. More information regarding performance calculations is available by contacting Octagon's Investor Relations Team or Business Development Team. Past performance is not a prediction or guarantee of future results. Prior to investing, prospective investors should review the funds offering documents and Octagon form ADV Part 2A for discussion of risks.

BENCHMARK & COMPARISON INDICES:

• Benchmark and comparison index performance is provided as a comparison to the broader below investment grade corporate credit market. The Investment Manager utilizes the following benchmark/comparison indices with regard to the Octagon Senior Secured Credit Fund: the Morningstar LSTA BB/B Leveraged Loan Index. In conjunction with Morningstar PitchBook/LCD, a Morningstar Company, the Leveraged Syndications & Trading Association ("LSTA") developed the Morningstar LSTA Leveraged Loan Index ("LLI"), a daily total return index that uses LSTA/Refinitiv Mark-to-Market Pricing to calculate market value change. On a real-time basis, the LLI tracks the current outstanding balance and spread over LIBOR and SOFR for fully-funded term loans. The facilities included in the LLI represent a broad cross section of leveraged loans syndicated in the United States, including dollar-denominated loans to overseas issuers. It is not possible to invest directly in the LLI. The Morningstar LSTA Leveraged Loan BB/B Index is a sub-index of the Morningstar LSTA Leveraged Loan Index and is comprised of facilities with a rating of 'BB+' to 'B-' from Standard & Poor's. It is not possible to invest directly in the Morningstar LSTA BB/B Leveraged Loan Index.



III. MARKET OVERVIEW



BANK LOAN MARKET CONDITIONS & OUTLOOK

- U.S. Leveraged loans returned -0.60%¹ in 2022, performing favorably to most other asset classes
 - Floating rate, senior secured features helped the asset class outperform against a volatile macro backdrop
 - · Market is differentiating risk:
 - YTD performance by rating cohort BBs: 2.97%, Bs: -1.10%, CCCs: -12.03%¹
 - Leveraged Loan spread (LIBOR / SOFR +) by rating BBs: 333bps, Bs: 604bps, CCCs: 1694bps²
 - Floating rate instruments should continue to benefit in a rising interest rate environment
- Credit risk likely to increase in a weakening economy
 - Our focus remains on managing risk and positioning defensively
 - Defaults to rise back to / above long-term historical averages of 2.72%³
 - Rolling 3-month downgrade-to-upgrade ratio of 2.77x (86 downgrades, 31 upgrades)¹; we expect rating agencies to remain active;
 - Downgrades to CCCs accelerating
 - Rising interest rates pressuring many borrowers' interest coverage and free cash flow
- Technicals support near term rally
 - Year-end paydowns, high cash balances
 - Loan forward calendar remains light with little appetite for higher risk
 - 2022 new loan issuance (\$252.5bn) fell 70% from 2021 new loan issuance (\$834.9bn)³
 - CLO issuance likely to be focused on higher tier managers
 - Arb is currently challenged but signs of tightening CLO liability prices
- All-in yields for loans benefitting from higher base rates
 - Loan yields of 10.83% near post-GFC highs vs. High Yield Bond YTW of 9.32%(as of 1/3)⁴
 - Loans are trading at an unusually high discount, with the LLI's weighted average bid price at \$92.44, as of 12/311

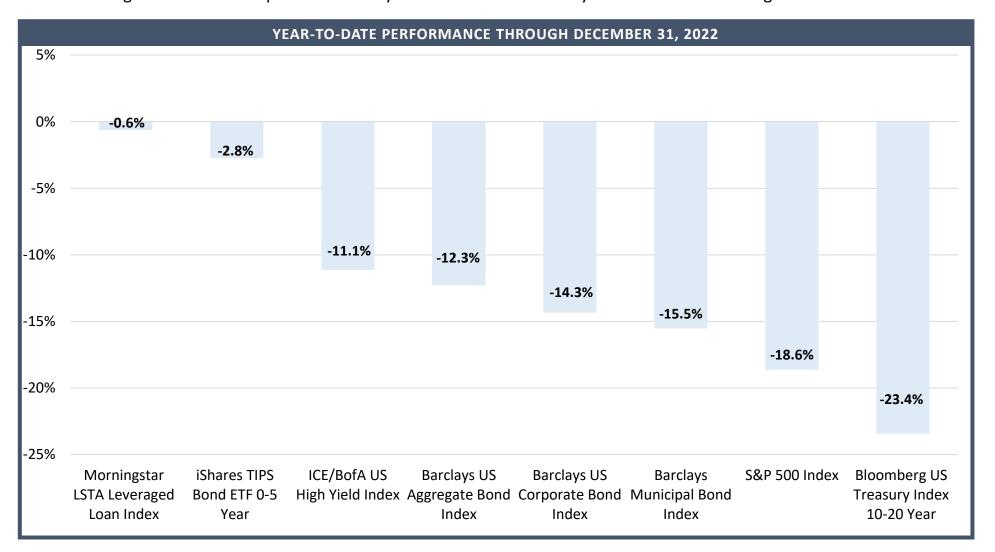
*Please refer to the "General Disclosures & Risks" section for important information regarding forward-looking statements.

- Source: Morningstar LSTA Leveraged Loan Index; Pitchbook LCD (December 31, 2022). Data for loans represents metrics for the Morningstar LSTA Leveraged Loan Index (formerly the S&P/LSTA Leveraged Loan Index) (the "LLI").
- Source: J.P. Morgan North America Credit Research, "JPM High Yield and Leveraged Loan Market Monitor 1.3.23"
- Represents the long-term historical average (beginning in January 1999) of the lagging 12-month default rate for the Morningstar LSTA Leveraged Loan Index by principal amount as of December 31, 2022. Default rate is calculated as the amount of default over the last 12 months divided by the amount outstanding at the beginning of the 12-month period. Represents all loans including loans not included in the Refinitiv/LPC mark-to-market service. Source: LCD News (December 31, 2022). Past defaults are not an indication of future default rates. 27
- Source: J.P. Morgan North America Credit Research, "US High Yield and Leveraged Loan Daily Updates", (January 3, 2023)



YEAR-TO-DATE ASSET CLASS PERFORMANCE

Leveraged loans have outperformed many other asset classes on a year-to-date basis through December 31st



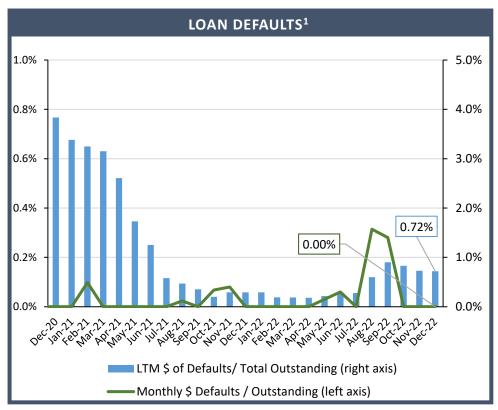
^{1.} Source Bloomberg, JPMorgan Markets from January 1, 2022 to December 31, 2022. Displays year-to-date performance through December 31, 2022. Senior secured loans are represented by the Morningstar LSTA US Leveraged Loan Index, high yield bonds are represented by the Bank of America Merrill Lynch US High Yield Bond Index, TIPS are represented by the Barclays TIPS Index 0-5 Year Index, Aggregate Bonds are represented by the Barclays Corporate Bond Index, Which encompasses Investment Grade, taxable fixed-rate bonds, corporate bonds are represented by Barclays Corporate Bond Index, Municipal Bonds are represented by the Barclays Municipal Bond Index 22+ Yr and U.S. Treasury Bonds are represented by the Barclays U.S. Treasury Bond 10-20 Year Index, the US equities market is being represented by the S&P 500, which is a stock market index tracking the performance of 500 large companies listed on stock exchanges in the United States. An investment cannot be made directly in an index. Past performance is not a guarantee of future results. Holdings in any relevant index may differ materially from holdings in an Octagon-managed account or fund.

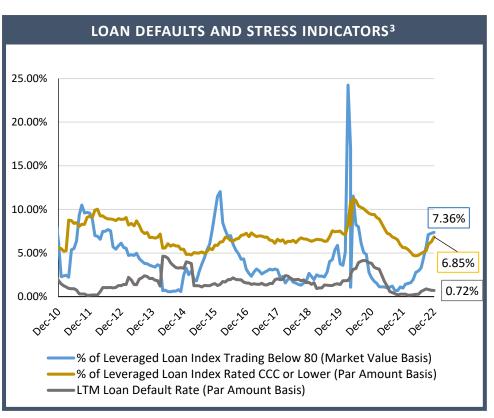
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TRAILING LOAN DEFAULT RATES AND STRESS INDICATORS BEGINNING TO INCREASE

- LTM LLI Default Rate is 0.72% as of 12/31¹
- Loan defaults represent a lagging indicator. Default levels have begun to increase from near 0% and are expected to move towards/over the long-term historical average of 2.73%²





^{**}Please refer to the "General Disclosures & Risks" section for important information regarding forward-looking statements.

^{1.} Source: Pitchbook LCD (December 31, 2022). Morningstar LSTA LLI default rate represents lagging 12-month default rate by principal amount as of the respective period. The Morningstar LSTA LLI generally mirrors the universe of leveraged loans syndicated in the US. Defaults for the Morningstar LSTA LLI do not represent the default experience of any particular investment manager or manager peer set. Defaults represent all loans including loans not included in the Refinitiv/LPC mark-to-market service. Represents the long-term historical average (beginning in January 1999) of the lagging 12-month default rate for the Morningstar LSTA Leveraged Loan Index by principal amount as of December 31, 2022. Default rate is calculated as the amount default over the last 12 months divided by the amount outstanding at the beginning of the 12-month period. Represents all loans including loans not included in the Refinitiv/LPC mark-to-market service. Source: LCD News (December 31, 2022). Past defaults are not an indication of future default rates.

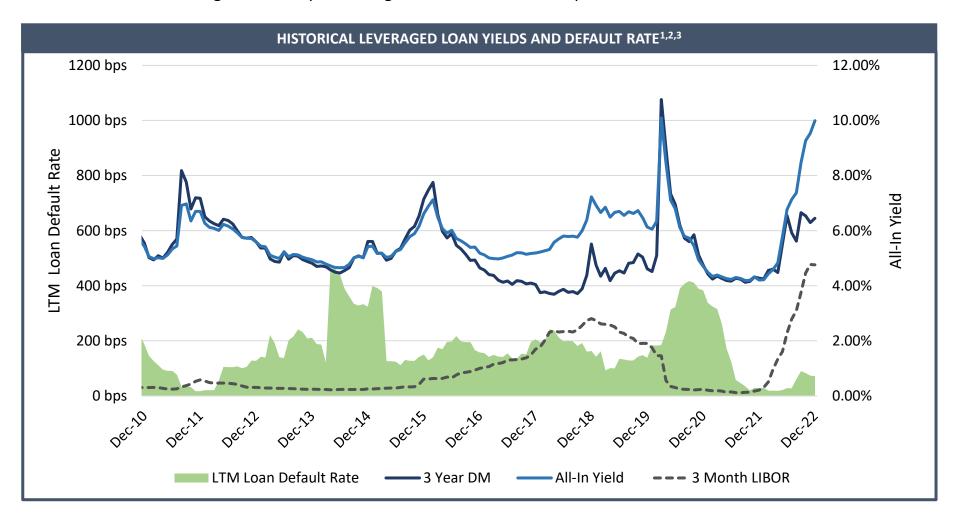
^{2.} Represents the long-term historical average (beginning in January 1999) of the lagging 12-month default rate for the Morningstar LSTA Leveraged Loan Index by principal amount as of December 31, 2022. Default rate is calculated as the amount of default over the last 12 months divided by the amount outstanding at the beginning of the 12-month period. Represents all loans including loans not included in the Refinitiv/LPC mark-to-market service. Source: LCD News (December 31, 2022). Past defaults are not an indication of future default rates.

^{3.} Source: Pitchbook LCD. Represents all loans (excluding defaulted loans) in the Morningstar LSTA LLI marked at an average bid price below 80 or rated CCC or below (December 31, 2022). Morningstar LSTA LLI default rate represents lagging 12 month default rate by principal amount as of the respective period. Historical LTM default rate includes EFH (aka TXU), which was included in the default rate from April 2014-March 2015. The Morningstar LSTA LLI generally mirrors the universe of leveraged loans syndicated in the US. Defaults for the Morningstar LSTA LLI do not represent the default experience of any particular investment manager or manager peer set. Index default rate is calculated as the amount defaulted over the last 12 months divided by the amount outstanding at the beginning of the 12-month period. Defaults represent all loans including loans not included in the Refinitiv/LPC mark-to-market service.



LOAN YIELDS WIDE TO HISTORICAL AVERAGES, TRAILING DEFAULTS REMAIN LOW BUT ARE ON THE RISE

Loan 3Y discount margin = L+645bps³ vs. long-term median of L+508bps³



^{1.} Represents lagging 12-month default rate for the Morningstar LSTA Leveraged Loan Index by principal amount as of December 31, 2022. Default rate is calculated as the amount default over the last 12 months divided by the amount outstanding at the beginning of the 12-month period. Represents all loans including loans not included in the Refinitiv/LPC mark-to-market service. Source: LCD News (December 31, 2022). Past defaults are not an indication of future default rates.

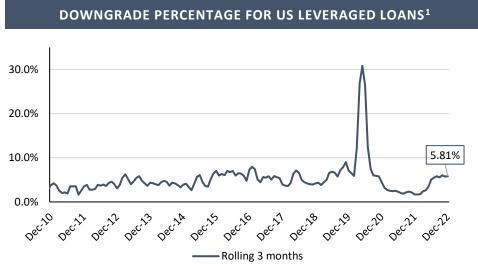
^{2.} Represents the long-term historical average (beginning in January 1999) of the lagging 12-month default rate for the Morningstar LSTA Leveraged Loan Index by principal amount as of December 31, 2022. Default rate is calculated as the amount of default over the last 12 months divided by the amount outstanding at the beginning of the 12-month period. Represents all loans including loans not included in the Refinitiv/LPC mark-to-market service. Source: LCD News (December 31, 2022). Past defaults are not an indication of future default rates.

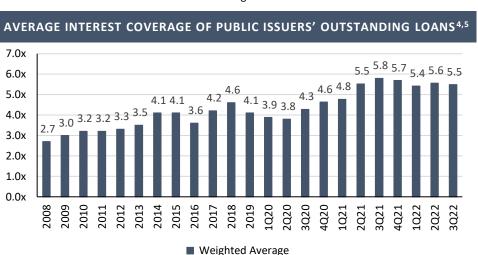
^{3.} As of December 31, 2022. Represents the average 3 Year Discount Margin for the Morningstar LSTA Leveraged Loan Index. "Long Term Median Loan 3 Yr Discount Margin" represents the median of average 3 Year Discount Margins at month-end starting January 31, 2010. Source: S&P Capital IQ/SNL Financial LCD Research.

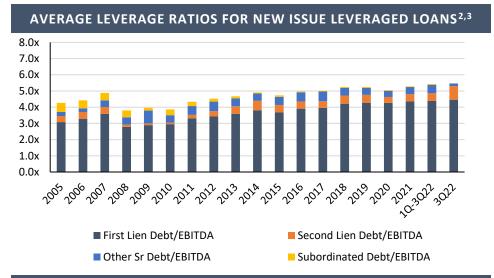


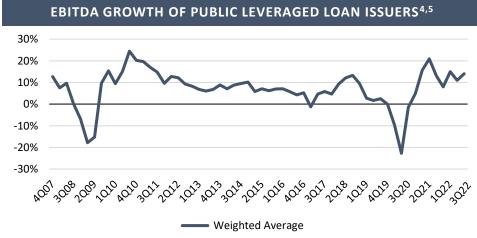
CREDIT FUNDAMENTALS

• Despite still healthy growth and interest coverage on average, increasing number of borrowers are seeing deterioration









- 1. Source: Pitchbook LCD, LLI Default Rates (December 31, 2022). Data for loans represents metrics for the Morningstar LSTA US Leveraged Loan Index (formerly the S&P/LSTA Leveraged Loan Index (the "LLI").
- 2. Source: Pitchbook LCD, "LCD Quarterly Review: Third Quarter 2022, Commentary Charts" (September 30, 2022). Data for loans represents metrics for the Morningstar LSTA US Leveraged Loan Index (formerly the S&P/LSTA Leveraged Loan Index (the "LLI").
- Includes issuers with EBITDA greater than \$50mm.
- Source: Pitchbook LCD, Morningstar LSTA Leveraged Loan Index: Current Credit Statistics (September 30, 2022). Data for loans represents metrics for the Morningstar LSTA US Leveraged Loan Index (formerly the S&P/LSTA Leveraged Loan Index (the "LLI").
- The sample for the latest quarter includes 156 companies within the Morningstar LSTA Leveraged Loan Index that file results publicly, or just over 13% of the Index. For this analysis, LCD draws its performance metrics and total debt levels from S&P Capital IQ.



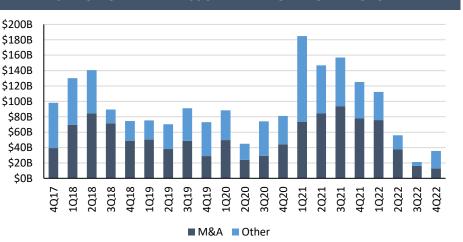
TECHNICAL DYNAMICS



RETAIL LOAN FUND FLOWS² VS. 2-10 Y TREASURY SPREADS³



INSTITUTIONAL NEW ISSUE LEVERAGED LOAN VOLUME¹



*Please refer to the "General Disclosures & Risks" section for important information regarding forward-looking statements

- Source: Pitchbook LCD, LCD Global CLO Databank (December 31, 2022).
- Source: Pitchbook LCD, Lipper, Standard & Poor's Structured Finance Group, JP Morgan, Merrill Lynch, Citigroup, Morningstar LSTA Leveraged Loan Index (December 31, 2022).
- Source: JP Morgan Markets (December 31, 2022).



	2023 THIRD PARTY RESEARCH/STRATEGY TEAM PROJECTIONS*										
Institution	US GDP Growth	10Y UST Yield	Leveraged Loan Default Rate	HY Bond Default Rate	Leveraged Loan Return	HY Bond Return	US Institutional Leveraged Loan New Issuance	US Institutional HY Bond New Issuance	US CLO New Issuance		
2022 ACTUAL	TBD	3.88% ¹⁷	0.72% ¹⁸	1.65% ¹⁹	-0.60% ¹⁸	-11.09% ¹⁹	\$225B ¹⁸	\$107B ¹⁹	\$129B ¹⁸		
Moody's	0.40%1		5.0	5.00% ¹							
Fitch	0.20%2		2.00%-3.00% ³	2.50%-3.50% ³							
JP Morgan	0.40%4	3.40%4	3.50%4	3.00%4	8.00%4	8.00%4	\$300B ⁴	\$200B ⁴	\$120B ⁴		
BofA	-0.40%5	3.25% ⁶	3.50%5	5.00% ⁷	5.10%5	6.70%-7.30% ⁷	\$175B ⁵	\$180B ⁷	\$90B ⁶		
Citi	0.70%8	3.25% ⁹	3.30%10	5.70% ¹⁰	2.50% ¹⁰	4.00%10	\$300B ¹⁰	\$190B ¹⁰	\$120B ¹¹		
Credit Suisse	0.80%12	4.10%12	3.00%13	3.50%-4.00%14	5.50%-6.00% ¹³	7.00%-8.00% ¹⁴	\$250B ¹³	\$185B ⁴	\$95B ¹³		
Barclays	0.50%15		5.00%-6.00% ¹⁵	5.00%-6.00% ¹⁵	5.00%-6.00% ¹⁵	4.00%-5.00% ¹⁵	\$240B-\$280B ¹⁵	\$170B-\$210B ¹⁵	\$90B-\$120B ¹⁵		
Morgan Stanley	0.30%16	3.50% ¹⁶	3.00%16	4.00%16	3.60%16	5.40% ¹⁶	\$250B-\$275B ¹⁶	\$175B-\$200B ¹⁶	\$100B ¹⁶		
2023 Range	-0.40%-0.80%	3.25%-4.10%	2.00%-6.00%	2.50%-6.00%	2.50%-8.00%	4.00%-8.00%	\$175B-\$300B	\$170B-\$210B	\$90B-\$120B		
2023 Average ²⁰	0.36%	3.50%	3.66%	4.40%	5.08%	6.07%	\$258B	\$189B	\$105B		

^{*}Represents information from market participants and does not constitute Octagon's projections.

- 1. Source: Moody's Investors Service CLOs-US, "2023 Outlook- Turning credit cycle will stress leveraged loan issuers and weaken CLO performance." Default projection represents Moody's projection for trailing 12-month US speculative-grade default rate as of October 2023. (November 30, 2022).
- 2. Source: Fitch Ratings, "US Leveraged Finance & CLO Weekly" (December 19, 2022).
- 3. Source: Fitch Ratings, "U.S., Europe Semi-Annual Default Insight (2022-2024 Cumulative Default Rates Expected Well Below 2007-2009 Levels)" (December 15, 2022).
- 4. Source: J.P. Morgan US Fixed Income Strategy, "US Fixed Income Markets 2023 Outlook" (November 22, 2022).
- 5. Source: BofA Global Research, "Collateral Thinking, Loans in 2023: A tale of two halves" (November 20, 2022).
- 6. Source: BofA Global Research, "2023 Year Ahead Outlook (Securitized Products) The end is near: recession, securitized products buy opportunity coming," (November 22, 2022).
- Source: BofA Global Research, "High Yield Strategy: 2023 The Year Ahead" (November 21, 2022).
- 8. Source: Citi, Citi Research, "Global Economic Outlook & Strategy Grim Outlook for 2023—Rolling Recessions and Central Bank Rate Hikes" (November 30, 2022).
- 9. Source: Citi, Citi Research, "US Rates Weekly 2023 Outlook: Go with the Flow" (December 16, 2022).
- 10. Source: Citi, Citi Credit Research, "2023 High Yield and Leveraged Loan Outlook: Taking the Fork in the Road" (December 7, 2022).
- 11. Source: Citi Research, "US CLO Scorecard (December 2022)" (January 9, 2023).
- 12. Source: Credit Suisse, "Investment Outlook 2023" (November 22, 2022).
- 13. Source: Credit Suisse, "CS Credit Strategy Daily (Loan 2022 Recap)" (January 5, 2023).
- 14. Source: Credit Suisse: "CS Credit Strategy Daily (HY 2022 Recap, December CDS Movers)" (January 3, 2023).
- 15. Source: Barclays, Global Credit Outlook, "Walking an unfamiliar path" (December 1, 2022).
- 16. Source: Morgan Stanley, "2023 US Credit Strategy Outlook, Balancing Income with Convexity" (November 18, 2022); "2023 Global Strategy Outlook, The Year of Yield" (November 13, 2022).
- 17. Source: J.P. Morgan US Fixed Income Strategy, "HY Daily Update" (January 3, 2023).
- 18. Source: Pitchbook LCD, "LCD Quarterly Review: Fourth Quarter 2022, Commentary Charts" (January 3, 2023). Data for loans represents metrics for the LLI.
- 19. Source: J.P. Morgan North America Credit Research, "High Yield and Leveraged Loan Market Monitor" (January 3, 2023).
- 20. Represents the straight average of the respective metric presented above.



IV. EXHIBITS



UNLEVERED LIQUID CREDIT COMPOSITE FEBRUARY 1, 2012 THROUGH DECEMBER 31, 2021						
	Primary					
Secondary	Benchmark	Secondary				
Ponchmark	2V St Dov	Ponchmark				

				Primary			Primary						
				Benchmark	Secondary		Benchmark	Secondary					
		Composite	Composite	Return	Benchmark		3Y St Dev	Benchmark				Composite	
		Gross-of-	Net-of-	S&P/LSTA	Return		S&P/LSTA	3Y St Dev			Total	as a	
		Fees	Fees	BB/B Loan	S&P/LSTA	Composite	BB/B Loan	S&P/LSTA	Number	Internal	Composite	Percentage	Total Firm
		Return	Return	Index	Loan Index	3Y St Dev	Index	Loan Index	of	Dispersion	Assets	of Total Firm	Assets
Y	'ear	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Portfolios	(%)	(USD mil)	Assets (%)	(USD mil)
2	012	9.47%	8.37%	6.45%	7.31%	N/A	N/A	N/A	<5	N/A	\$ 175	2.91%	\$ 6,019
2	013	7.68%	6.44%	4.96%	5.29%	N/A	N/A	N/A	<5	N/A	196	2.46%	7,962
2	014	3.35%	2.01%	1.47%	1.60%	N/A	N/A	N/A	<5	N/A	140	1.30%	10,792
2	015	1.70%	0.23%	0.55%	-0.69%	1.81%	1.94%	2.11%	<5	N/A	126	1.04%	12,173
2	016	10.49%	9.49%	9.23%	10.16%	2.34%	2.68%	2.89%	<5	N/A	135	0.92%	14,576
2	017	6.65%	5.96%	3.91%	4.12%	2.24%	2.50%	2.70%	<5	N/A	72	0.40%	17,973
2	018	2.17%	1.51%	0.38%	0.44%	2.57%	2.76%	2.86%	<5	N/A	122	0.58%	20,851
2	019	8.70%	8.00%	9.12%	8.64%	2.50%	2.82%	2.77%	<5	N/A	251	1.00%	25,207
2	020	4.92%	4.24%	3.00%	3.12%	6.89%	8.65%	8.67%	<5	N/A	402	1.53%	26,193
2	021	5.04%	4.36%	4.67%	5.20%	6.69%	8.45%	8.47%	<5	N/A	941	3.13%	30,058

Octagon Credit Investors, LLC ("Octagon") claims compliance with the GIobal Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Octagon has been independently verified for the periods January 1, 2009 through December 31, 2021. The verification report is available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

FIRM AND COMPOSITE INFORMATION

Octagon is an investment management firm that manages leveraged loans, high yield bonds, and structured credit (CLO debt and equity) portfolios. The firm manages these assets across various vehicles, including, but not limited to, cash flow collateralized loan obligations, separately managed accounts, and levered and unlevered liquid credit strategies. The firm serves as sub-advisor for certain accounts, including a diversified, closed-end management investment company registered under the Investment Company Act of 1940. The firm was founded in 1994 as a separate business unit of Chemical Bank. In 1999, Octagon spun out from Chase Manhattan Bank. Since separating from the bank, Octagon has been independently managed by its employee shareholders. From July 2008 until February 2016, CCMP Capital, LLC, the parent company of CCMP Capital Advisors LLC ("CCMP"), a private equity investment firm, and subsequently its affiliate, CCMP Capital Octagon Holdings, LLC, held a majority interest in Octagon. Octagon and CCMP maintained separate investment committees, business development groups and conducted separate fundraising efforts. In February 2016, Conning & Company, ("Conning") a Hartford, CT-based investment management firm, acquired 82% of Octagon. As of December 31, 2021, Conning owns approximately 86% of the firm and employees of Octagon own approximately 14%. Octagon's Investment Committee continues to operate separately from Conning's investment personnel. From July 2007 until April 2011, Octagon's wholly owned subsidiary, Octagon Credit Investors (UK) Limited served as the investment manager of one fund, OCI Euro Fund I, BV (the "Euro Fund") a €300MM cash flow CLO with its reporting currency in Euros. Due to several differences in the investment strategies between the New York and London offices, total return for the Euro Fund is not reported in Octagon's composites and is excluded from the definition of the firm. In April 2011, Octagon sold the management fee contract of the Euro Fund. A list of composite descriptions and a list of limited distribution pooled fund descriptions are available upon request. The Unlevered Liquid Credit Composite was created in October 2013 and commenced operations on February 1, 2012. The composite consists of U.S. dollar-denominated floating rate senior secured loans, but may also invest in other financial instruments, including, but not limited to (i) secured and unsecured corporate debt, credit default swaps, reverse repurchase agreements and synthetic indices; and (ii) cash and cash equivalents (such as money market funds, commercial paper, U.S. government treasury bills, notes, bonds and bank deposits). There is no minimum account size for inclusion in the composite.



UNLEVERED LIQUID CREDIT COMPOSITE INFORMATION

BENCHMARKS

The primary benchmark presented is the S&P/LSTA BB/B Leveraged Loan Index and the secondary benchmark is the broader S&P/LSTA Leveraged Loan Index. The S&P/LSTA BB/B Index is a sub-index of the S&P/LSTA Leveraged Loan Index and is comprised of facilities with a rating of 'BB+' to 'B-' from Standard & Poor's. In conjunction with Standard & Poor's/LCD, the Leveraged Syndications & Trading Association ("LSTA") developed the S&P/LSTA Leveraged Loan Index ("LLI"), a daily total return index that uses LSTA/Refinitiv Mark-to-Market Pricing to calculate market value change. On a real-time basis, the LLI tracks the current outstanding balance and spread over LIBOR for fully funded term loans. The facilities included in the LLI represent a broad cross section of leveraged loans syndicated in the United States, including dollar-denominated loans to overseas issuers. LSTA/Refinitiv Mark-to-Market Pricing, which is based on bid/ask quotes gathered from dealers and is not based upon derived pricing models. Each index uses the average bid for its market value calculation. Each loan facility's total return is calculated by aggregating the interest return, (reflecting the return due to interest paid and accrued interest), and price return (reflecting the gains or losses due to changes in the end of day prices and principal repayments). The return of each loan facility is weighted in the index based upon its market value outstanding, which reflects both the prior period's prices as well as accrued interest. The overall index return is the aggregate of each component loan facility's return multiplied by the market value outstanding from the prior time period. Neither index is assessed a management fee. It is impossible to invest directly in either index. The holdings in the composite may differ materially from the holdings of the indices. For performance periods spanning less than one year, the benchmark is adjusted to reflect the same time period as the composite.

Effective August 29, 2022, all S&P Leveraged Loan Indexes were rebranded to Morningstar® Leveraged Loan Indexes. There were no index methodology changes as a result of the rebranding. Further information is available upon request.

PERFORMANCE CALCULATIONS

Valuations and returns are computed and stated in U.S. dollars. Results reflect the reinvestment of dividends and other earnings. Gross of fees returns are presented before management and operating expenses but after all trading expenses and withholding taxes. Operating expenses include, but are not limited to, expenses of the administrator and trustee. Returns net of fees are presented after management fees, operating expenses, trading expenses and withholding taxes. Management fees for this composite initially ranged from 50bps to 75bps per annum. Effective May 1, 2016, the management fee is 50bps per annum. The total expense ratio was 0.65% at December 31, 2021. Net of fee returns reflect the highest management fee. The underlying fund in this composite uses a master/feeder structure, with three feeder funds. The feeder fund with the highest expenses is used for performance presentation. Due to a change in the treatment of expenses, the feeder fund with the highest expense changed in 2014. As a result, performance for periods prior to 2014 represent the returns of one feeder fund, while returns in 2014 represent the returns of the other feeder fund. As of May 1, 2016, all operating expenses are capped at 15bps per annum. Amounts exceeding this amount are reimbursed to the fund by Octagon. Additional information regarding Octagon's fees is included in Part 2A of its Form ADV. Internal dispersion, using the gross return, is calculated using the asset weighted standard deviation of all accounts included in the composite for the entire year. It is not presented for periods less than one year, or when there were five or fewer portfolios in the composite for the entire year. The three-year annualized standard deviation uses gross returns and measures the variability of the composite and the benchmark returns over the preceding 36-month period. Three full years are required for standard deviation calculations. Presentation of standard deviation commences in 2015, the first year in which three full years of returns

Composite performance is an aggregation of related portfolio performance. It is not possible to invest directly in a composite. There is inherent risk in relying on composite performance when making an investment decision since it is not a representation of the experience of an actual investor. Accordingly, investors should not place undue reliance on composite performance.

Performance achieved prior to December 31, 2021 is predominantly based on investments that use USD LIBOR as a reference rate. LIBOR is currently being phased out, with the syndicated debt and CLO securities markets transitioning to alternative reference rates. There is no guarantee that the performance of individual investments or the syndicated debt and CLO securities markets as a whole during the transition period (or ultimately) will be consistent with performance achieved during the LIBOR era.

Past performance is not a guarantee, predictor, or indication of future results. Investment in the underlying products that comprise the composite carries a risk of loss, which could be significant, and that investors should be prepared to bear.



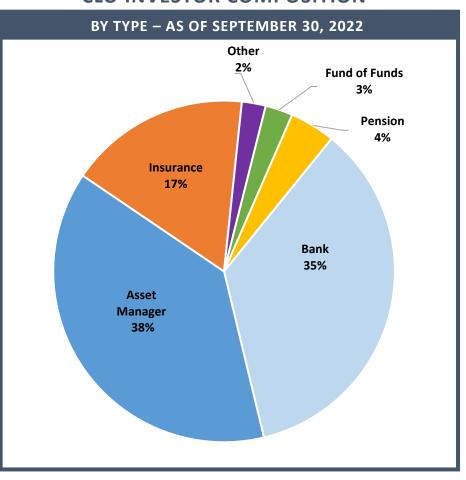
DIVERSE INSTITUTIONAL INVESTOR BASE

Octagon counts major financial institutions, insurance companies and pension funds among its largest investors

NON-CLO INVESTOR COMPOSITION¹

BY TYPE - AS OF SEPTEMBER 30, 2022 Sub-Advised/Third Party-Other **Sponsored** 10% Funds* 10% **Family** Offices / **Pension HNWI** 16% 6% **Bank** 22% **Insurance** 38% *Sub-Advised Funds are pooled investment vehicles for which Octagon serves as the Investment Manager or Trading/Sub-Advisor. Octagon does not sponsor or offer these funds to investors.

CLO INVESTOR COMPOSITION²

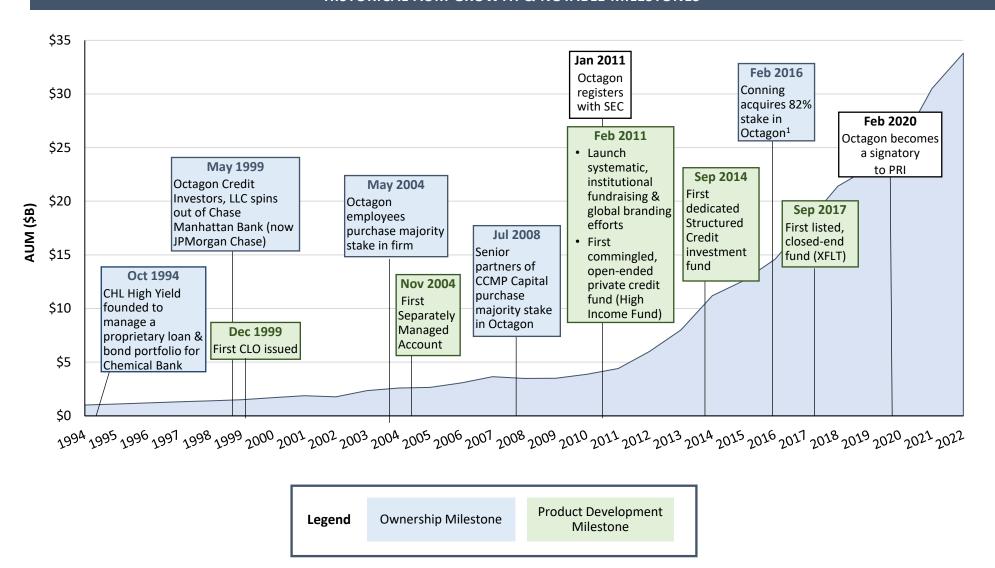


^{1.} Non-CLO Investor Composition – By Type is calculated on a market value NAV basis. Data presented above reflects that which is known to and recorded by Octagon as of September 30, 2022 and excludes investors in Octagon-managed CLOs.

^{2.} CLO Investor Composition – By Type is as of the closing date of the most recent transaction (inclusive of deal resets and refinancings) as confirmed to Octagon by the respective Arranging Bank. As Collateral Manager, Octagon is not necessarily made aware of changes in CLO investor composition due to sales/transfers of interest subsequent to the closing date. Actual current investor composition may differ from that which is presented above. Data presented above reflects that which is known to and recorded by Octagon as of September 30, 2022. This information is estimated, unaudited and subject to change.



HISTORICAL AUM GROWTH & NOTABLE MILESTONES



^{1.} In February 2016, Conning & Company ("Conning"), a Hartford, CT-based investment management firm, acquired 82% of Octagon. As of April 30, 2022, Conning owns 86% of the Firm and Octagon employees own 14% of the Firm. Conning is also the parent company of Conning Investment Products, Inc., Conning, Inc., and Goodwin Capital Advisers, Inc., each of which is a SEC registered investment adviser, primarily for the global insurance industry, and is an indirect subsidiary of Cathay Financial Holding Co., Ltd., a Taiwan-based company. Securities are offered through Conning Investment Products, Inc., an affiliated broker dealer and member of FINRA and SIPC.



ESG CONSIDERATIONS ARE INTEGRATED INTO OUR INVESTMENT PROCESS

Background

PHILOSOPHY

We believe analyzing ESG factors can enhance our ability to assess a borrower's creditworthiness, and thus we have integrated ESG considerations into our credit research and risk monitoring processes

Prior to our adoption of a formalized ESG review process, and given the nature of Octagon's investment activities, we have historically considered ESG factors that pose clear risks or risk mitigants as part of the overall investment process

Our Investment Professionals are organized by sector, which we believe improves the ability to assess the materiality of ESG factors that vary in relevance by industry

Pre-Investment

SCREENING

Octagon does not generally negatively screen investment opportunities, however, we adhere to exclusion criteria for some funds, and for certain separate accounts at the request of the underlying client

Exclusionary criteria varies by specific fund/account; select examples of restricted investments include:²

- Issuers whose industry classification is Tobacco, Oil & Gas, or Energy Equipment services
- Issuers whose businesses derive 50%+ of revenues from the production or trade of:²
 - Oil & gas from tar sands & arctic drilling, thermal coal mining
 - Electricity generation using coal
 - Controversial Weapons³
 - Hazardous chemicals, pesticides & wastes, ozone depleting substances
 - Opioids; Palm Oil; Private Prisons
- Specific companies and/or businesses operating in specific regions, as stipulated in accordance with the client's investment policies

RESEARCH & ANALYSIS

Investment Professionals utilize various information sources to evaluate ESG considerations as part of their credit diligence process for most new loan and bond purchases, and must disclose material ESG considerations in written credit memos when presenting an investment recommendation to the Investment Committee

Octagon contracted with the Value Reporting Foundation in 2021 to license and use the **SASB Standards Disclosure Topics** to help standardize the diligence process when evaluating financially material ESG considerations for issuers across different sectors⁴

Octagon does not assign an ESG rating to issuers, though **S&P ESG Credit Indicators** and **Moody's Credit Impact Scores** are assessed (as available) as part of the diligence process, and reflected in credit memos

Our CLO Team requests the LSTA ESG Diligence Questionnaire for Asset Managers annually to use as part of their diligence efforts when evaluating external collateral managers

Certain legacy and new investments are not subject to a formal ESG review process. Accordingly, portfolios managed by Octagon hold positions that have not been subject to any ESG-focused evaluation

Post-Investment

MONITORING

Octagon's Investment Professionals continuously monitor ESG factors within their issuer universe, and proactively alert the Investment Committee to any significant ESGrelated developments or concerns for further scrutiny

Investment
Professionals are
required to document
significant ESG
considerations and
record ESG-related
developments for
borrowers in their
credit files

- 1. Please note that Octagon does not currently offer funds or products that are "green", ESG-compliant, or otherwise designed or managed to promote ESG and sustainability initiatives.
- 2. Not an exhaustive list. Exclusionary criteria varies by fund/account; not all Octagon-managed funds/accounts adhere to exclusionary criteria.
- 3. "Controversial Weapons" refers to any controversial weapons (such as cluster bombs, antipersonnel mines, chemical or biological weapons) which are prohibited under applicable international treaties or conventions.
- 4. In October 2021, Octagon contracted with the Value Reporting Foundation (the "VRF") to license and use the Sustainability Accounting Standards Board ("SASB") Disclosure Topics to help standardize the diligence process when evaluating ESG considerations for issuers across different industries and sectors. Effective August 1, 2022, the VRF will consolidate with the International Financial Reporting Standards Foundation (the "IFRS" Foundation") to form the International Sustainability Standards Board (the "ISSB"). At that time, the SASB Standards will become materials of the IFRS" Foundation.



OUR ESG INITIATIVES FOCUS ON COLLABORATION AND ACCOUNTABILTY







ENGAGEMENT EFFORTS

Octagon is a member of the **PRI's Global Policy Reference Group**, which seeks to strengthen public policy engagement on RI topics and encourage greater alignment between RI commitments and public policy efforts

Octagon is a member of the Loan Syndications and Trading Association's (LSTA) ESG Committee, comprised of LSTA members and buy-side participants in the loan market

- Octagon was actively involved in the LSTA ESG Committee's efforts to develop standardized ESG disclosure questionnaires for borrowers and asset managers
- Octagon Investment Professionals promote completion of the LSTA ESG questionnaire by issuers in support of enhanced transparency

As an affiliate of Conning,² Octagon participates in various initiatives to share ESG-related knowledge and best practices across the CHL³ organization

OVERSIGHT & ACCOUNTABILITY

Octagon became a signatory to the **Principles for Responsible Investment (PRI)** in February 2020

Octagon's ESG Committee is responsible for overseeing the implementation of the Firm's ESG policy and for evaluating the Firm's progress with respect to ESG matters

- ESG Committee is comprised of senior members of the Investment, Compliance & Investor Relations Teams
 - Sean Gleason (Portfolio Manager & Investment Committee member) and Erin Crawford (Managing Director, Investor Relations) are ESG Committee Co-Chairs

Andrew Gordon (CEO) and Sean Gleason are members of the CHL³ Sustainability Leadership Group ("SLG")

 SLG was formed to deliver "top-down" consistency, governance and leadership on ESGrelated issues and climate-risk efforts across CHL operations (including Octagon and other Conning affiliates)

CarbonNeutral® COMPANY CERTIFICATION

In 2021, Conning Holdings Limited and its subsidiaries (together, "Conning") achieved CarbonNeutral® company certification, in accordance with **The CarbonNeutral Protocol**, the leading global framework for carbon neutrality

 To achieve this certification, Conning worked with leading experts on carbon neutrality and climate finance, Natural Capital Partners

The certification process includes an independent assessment of CHL's greenhouse gas emissions

Conning's carbon offset program is focused on financing sustainable development and emissions reduction projects, supporting the transition to a low carbon future

 All of the projects are independently verified to meet recognized third-party standards

The deployment of carbon credits is an immediate step in a journey as the firm continues to examine how to manage its climate impact

- 1. Please note that Octagon does not currently offer funds or products that are "green", ESG-compliant, or otherwise designed or managed to promote ESG and sustainability initiatives.
- 2. Conning is Octagon's majority shareholder, investment advisory affiliate, and a PRI signatory.
- 3. Conning, Inc., Octagon Credit Investors, LLC, Goodwin Capital Advisers, Inc., Conning Investment Products, Inc., Conning Asset Management Limited, and Conning Asia Pacific Limited are all direct or indirect subsidiaries of Conning Holdings Limited ("CHL" or collectively, "Conning") which is one of the family of companies owned by Cathay Financial Holding Co., Ltd., a Taiwan-based company.



OCTAGON'S ESG-RELATED GOALS

- Strengthening our approach to ESG integration and responsible investment is a priority of Octagon's senior leadership and the Firm's ESG Committee
- As we seek to expand our ESG integration efforts within the investment process and across the organization, we are focused on the following initiatives:
 - Advancing our approach to incorporating, measuring, and recording ESG considerations throughout investment process
 - Exploring ways to effectively integrate ESG matters into investor reporting, client communications, and firm policies
 - Developing our engagement efforts with clients, affiliates, service providers, and our peers
 - Supporting PRI-led collaborative policy engagement efforts
 - Supporting the LSTA ESG Working Group's efforts by continuing to participate in industry dialogues about ESG factors to encourage greater transparency from loan borrowers and fellow CLO managers
 - Promoting ESG and socially responsible behavior across the organization, including:
 - Participating in CHL Sustainability Leadership Group¹
 - Incorporating effective ESG practices into our own operations
 - Providing adequate employee training to reinforce best practices
 - · Actively soliciting feedback from Octagon personnel and our affiliates in an ongoing effort to improve existing framework





ANDREW GORDON Chief Executive Officer

Mr. Gordon is a member of Octagon's Investment Committee and serves as the Firm's Chief Executive Officer. He co-founded Octagon in 1994 and subsequently managed numerous Octagon funds before assuming his current position. He possesses over 30 years of experience in the belowinvestment grade leveraged loan and high yield bond asset classes, in both sell-side and buy-side capacities. Mr. Gordon is also a member of Octagon's ESG Committee.

Prior to co-founding Octagon, Mr. Gordon was a Managing Director at Chemical Securities, Inc., where he focused primarily on the oil and gas industries. Mr. Gordon advised on and arranged below-investment grade loans for corporate clients, while also undertaking special projects in M&A advisory and distressed credit situations. Prior to Chemical, Mr. Gordon served as Vice President in the Acquisition Finance Division of Manufacturers Hanover Trust Company. In this capacity, he structured, syndicated and managed leveraged buyout transactions.

From 2010 to 2015, Mr. Gordon served on the Board of Directors of the Loan Syndications and Trading Association, Inc. ("LSTA") and on the LSTA's Executive Committee. He graduated Cum Laude with an A.B. in Economics from Duke University. Mr. Gordon holds FINRA Series 7 & 63 Registrations.

MICHAEL NECHAMKIN Chief Investment Officer Senior Portfolio Manager

Mr. Nechamkin is a member of and the Firm's Chief Investment Officer. He serves as a Portfolio Manager across CLOs, Separately Managed Accounts and Commingled Funds.

Prior to joining Octagon as Portfolio Manager in 1999, Mr. Nechamkin was a Vice President in the High Yield Research Group at Bankers Trust. Prior to that, he Prior to becoming a Portfolio served as a Convertible Securities Manager, Ms. Lam oversaw Analyst at Mabon Securities and a Octagon's investments in the Financial Consultant at Merrill Lynch.

He earned a Bachelor and a Master of Talmudic Law, and holds an M.B.A. from the University of Baltimore.

GRETCHEN LAM Senior Portfolio Manager

Ms. Lam is a member of and serves as a Portfolio Manager across CLOs, Separately CLOs, Separately Managed Managed Accounts and Commingled Funds. Ms. Lam oversees the Firm's Structured Credit (CLO debt & equity) a member of the Firm's ESG Committee.

software, business services, finance & insurance, paper & packaging, gaming & lodging, homebuilding and real estate industries. She was also responsible for the structured credit exposure held in Octagon's She received her CFA Charter in CLO vehicles.

Prior to joining Octagon in 1999, Ms. Lam attended Babson College where she graduated Summa Cum Laude with a B.S. in Investments. She received her CFA Charter in 2006.

LAUREN LAW Portfolio Manager

Ms. Law is a member of Octagon's Mr. Gleason is a member of Octagon's Investment Committee as a Portfolio Manager across Accounts and Commingled Funds. Ms. Law joined Octagon in 2004. In addition, she helps oversee the Committee. Firm's Structured Credit (CLO debt investment strategies. Ms. Lam is and equity) investment strategies. Mr. Gleason joined Octagon in

> Prior to becoming a Portfolio Manager, Ms. Law was an Investment Team Principal whose coverage areas included healthcare, industrials, financials, business services, and the Firm's CLO debt and equity investments.

She holds a Bachelor of Science from Babson College, where she graduated Magna Cum Laude. 2009.

SEAN GLEASON Portfolio Manager

and serves as a Portfolio Manager across CLOs and a Separately Managed Account. Mr. Gleason is joined Octagon in 2007. Prior to also the Co-Chair of the Firm's ESG joining Octagon, Ms. Gallagher

2010. Prior to becoming a Portfolio Manager, Mr. Gleason was an Investment Team Principal whose coverage areas included the healthcare, retail, gaming, lodging, consumer products, building products and leisure industries. He holds a Bachelor of Science from Babson College, where he graduated Cum Laude.

MAEGAN GALLAGHER Head of Trading & Capital Markets

Ms. Gallagher is a member of and serves as the Head of Trading & Capital Markets. Ms. Gallagher worked in the syndicated and leveraged finance group at J.P. Morgan Securities, Inc. where she primarily covered the technology, media, and telecom sectors.

She has a B.S. in Finance from the McDonough School of Business at Georgetown University.



AMY ADAR
Chief Financial Officer

Ms. Adar joined Octagon in 2016 as a Vice President on the Accounting Team, and was promoted to Managing Director in 2019. She was appointed the Firm's Chief Financial Officer in 2023. Prior to joining Octagon, she was an Assurance Manager in the Alternatives Investments Division at PricewaterhouseCoopers LLP. Ms. Adar received a B.A. in Accounting & Information Systems and a Master of Science in Accounting & Information Systems College. She is also a Certified Public Accountant.

JOHN DUDZIK
Managing Director,
Business & Product
Development

Mr. Dudzik joined Octagon in 2011 and serves as a Managing Director of Business and Product Development, and a Client Portfolio Manager. Together with Octagon's senior officers, he is responsible for developing new products and developing and managing Octagon's investor relationships. He possesses over 30 years of broad institutional asset management and wealth management experience. Prior to joining Octagon, Mr. Dudzik was an Executive Director at FrontPoint Partners where he focused on direct lending and MBS strategies. Prior to joining FrontPoint, Mr. Dudzik was a Principal and Head of Capital Development for Colchis Capital Management. From 2001-2006, Mr. Dudzik was a Managing Director for Deutsche Bank Private Wealth Management where he served as a Board Member for Deutsche Bank Securities, Head of Deutsche Bank Alex Brown Private Client Services, Head of Sales Management for Private Wealth Management and Head of Middle Market Equities. Mr. Dudzik spent two years as Director, National Sales Manager for UBS Warburg Private Client Services and 17 years as a Private Client Advisor with PaineWebber, Lehman Brothers, Drexel Burnham and E.F. Hutton. He received a B.S. in Finance from the Carroll School of Management at Boston College. Mr. Dudzik holds FINRA Series 7 & 63 Registrations.

DOUGLAS MCDERMOTT

Managing Director,
Business Development

Mr. McDermott joined Octagon in 2016 and serves as a Managing Director of Business Development and Client Portfolio Manager. Together with Octagon's senior officers, his responsibilities include developing new products, capital formation and developing and managing investor relationships. Prior to joining Octagon, Mr. McDermott spent 17 years at Deutsche Bank, where he most recently served as Managing Director & Head of Loan Sales, working extensively with a broad array of institutional investors, CLOs, hedge funds and distressed funds. Prior to this, he worked as an investment banker in Deutsche Bank's Financial Sponsors and Leveraged Finance Groups, where has was responsible for originating, structuring and executing leveraged finance transactions. Before joining Deutsche Bank, Mr. McDermott was an Attorney at Simpson Thacher and Bartlett, specializing in Mergers & Acquisitions and Securities transactions. He holds a B.A. in Government & Law from Lafayette College and a Juris Doctor from Boston College Law School, where he graduated Summa Cum Laude. Mr. McDermott holds FINRA Series 7, 63 & 24 Registrations.

GEOFFREY DORMENTGeneral Counsel

Mr. Dorment joined Octagon in 2017 and serves as the firm's General Counsel. Prior to joining Octagon, Mr. Dorment served as a Director and Legal Counsel in the Private Funds Group at Guggenheim Partners. Prior to joining Guggenheim, he was a Senior Vice President and Associate General Counsel at Pinebridge Investments. Mr. Dorment began his career as an associate at Cadwalader, Wickersham & Taft LLP. Mr. Dorment received a B.A. from Fordham University and a J.D. from Fordham University School of Law.

MARGARET JULIAN
Chief Compliance
Officer

Ms. Julian joined Octagon in 2012 as Compliance Officer, and was named Chief Compliance Officer in 2015. Ms. Julian is also a member of the Firm's ESG (environmental, social, and corporate governance) Committee. Prior to joining Octagon, Ms. Julian was Compliance Officer and Assistant General Counsel at Oak Hill Capital Management. Prior to joining Oak Hill in 2010, she worked as a Compliance Officer at Columbia Wanger Asset Management. Ms. Julian received a B.S. in Biology, cum laude, from the University of Notre Dame, and a Juris Doctor from Notre Dame Law School. Ms. Julian holds FINRA Series 7, 63 & 24 Registrations and is a New York Licensed Attorney.

ERIN CRAWFORD

Managing Director,
Investor Relations

Ms. Crawford joined Octagon in 2011 and currently serves as a Managing Director and Head of Investor Relations. Ms. Crawford is also the Co-Chair of the Firm's ESG Committee. Prior to joining Octagon, Ms. Crawford was an Associate at CCMP Capital Advisors. Prior to joining CCMP in 2007, she worked in operations and marketing at Eberhart Brothers, Inc., a property management and engineering firm. Ms. Crawford received a B.A. in English and in French from Hamilton College.

LENA RESNICK
Head of Human
Resources

Ms. Resnick joined Octagon in 2021 and currently serves as the Head of Human Resources. Prior to joining Octagon, Ms. Resnick worked as a Senior Manager of Human Resources at The Durst Organization. Prior to joining Durst, she worked in Human Resources roles at both Alvarez and Marsal, and PricewaterhouseCoopers. Ms. Resnick graduated Magna Cum Laude from Adelphi University with a B.B.A. in Accounting, and she also graduated Summa Cum Laude from her Master's program at Adelphi University in Human Resources Management.



GENERAL DISCLOSURES & RISKS

This presentation has been prepared by Octagon Credit Investors, LLC (the "Investment Manager" or "Octagon") solely for information purposes and is not an offer to sell or the solicitation of an offer to buy an interest in any security which can only be made by a private placement memorandum that contains important information about the proposed product's risks, fees and expenses (the "Supplemental Disclosure Documents"). Securities are offered through Conning Investment Products, Inc., an affiliated broker dealer and member of FINRA and SIPC. Conning, Inc., Octagon Credit Investors, LLC., Global Evolution Holding ApS and its group of companies ("Global Evolution"), Goodwin Capital Advisers, Inc., Conning Investment Products, Inc., Conning Asset Management Limited, and Conning Asia Pacific Limited are all direct or indirect subsidiaries of Conning Holdings Limited (collectively, "Conning") which is one of the family of companies owned by Cathay Financial Holding Co., Ltd., a Taiwan-based company. Conning has offices in Hartford, New York, Boston, London, Cologne, Hong Kong and Tokyo.

Octagon Credit Investors, LLC, Conning, Inc., Conning Investment Products, Inc., and Goodwin Capital Advisers, Inc. are registered with the Securities and Exchange Commission ("SEC") under the Investment Advisers Act of 1940 and have noticed other jurisdictions they are conducting securities advisory business when required by law. In any other jurisdictions where they have not provided notice and are not exempt or excluded from those laws, they cannot transact business as an investment adviser and may not be able to respond to individual inquiries if the response could potentially lead to a transaction in securities.

This presentation should be considered confidential and may not be reproduced in whole or in part, and may not be circulated or redelivered to any person without the prior written consent of Conning Investment Products, Inc. (a FINRA registered broker-dealer). Strategies may involve investments in less liquid securities as well as leverage. Products offered by Octagon and Conning are intended for sophisticated investors and the information in these materials is intended solely for "Accredited Investors" within the meaning of rule 501 of Regulation D under the U.S. Securities Act of 1933, as amended, and for certain strategies, only for "Qualified Purchasers." Any products or service referred to herein may not be suitable for any or all persons.

This presentation contains only summary information about the proposed offering, its sponsors and the investment opportunity presented and should be read in conjunction with the Supplemental Disclosure Documents (when available). The Supplemental Disclosure Documents should be read carefully, including the risk factors and potential conflicts of interest specifically described in the private placement memorandum before investing. Some information in this presentation reflects proprietary research based upon various data sources. In addition, some information in this presentation has been taken from third-party sources. Neither Octagon nor Conning is responsible for errors or omissions from these sources. No representation is made with respect to the accuracy, completeness or timeliness of information and Octagon and Conning assume no obligation to update or otherwise revise such information. Prospective clients, including those subject to ERISA, should note that this presentation is being furnished to you on the condition that it will not form a primary basis for any investment decision.

The Investment Manager and/or its affiliated companies may make a market or deal as principal in the financial instruments mentioned in this document or in related securities, options or other derivative instruments based on them. In addition, the Investment Manager, its affiliated companies, shareholders, directors, officers and/or employees, may from time to time have long or short positions in the financial instruments, including loans, securities or in options, futures or other derivative instruments based on them. One or more directors, officers and/or employees of the Investment Manager or its affiliated companies may be a director of the issuers mentioned in this document. The Investment Manager or its predecessors and/or its affiliated companies may have acted as agent or arranger with respect to the loans of the borrowers underlying the financial instruments mentioned in this material, and may have managed or co-managed a public offering of or acted as initial purchaser or placement agent for a private placement of any of the securities of any issuer mentioned in this document within the last three years, or may, from time to time perform investment banking, lending or other services for, or solicit investment banking or other business from any issuer of the securities mentioned in this document. Performance information about the other investment activities of the Investment Manager is presented solely to illustrate the investment philosophy and history of the Investment Manager. Similar investments likely would produce different results under different economic and market conditions.

These materials contain forward-looking statements. Investors should not place undue reliance on forward-looking statements. Actual results could differ materially from those referenced in forward-looking statements for many reasons. Forward-looking statements are necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying any forward-looking statements will not materialize or will vary significantly from actual results. Variations of assumptions and results may be material. Without limiting the generality of the foregoing, the inclusion of forward-looking statements herein should not be regarded as a representation by the Investment Manager or any of their respective affiliates or any other person of the results that will actually be achieved by the fund. None of the foregoing persons has any obligation to update or otherwise revise any forward-looking statements, including any revision to reflect changes in any circumstances arising after the date hereof relating to any assumptions or otherwise.

Views expressed herein are subject to change without notice. All data concerning returns and satisfaction of performance tests are historical and based on the Investment Manager's knowledge; as such, they do not represent current performance levels, some or all of which may have changed since the dates referenced herein. Performance achieved prior to December 31, 2021 is predominantly based on investments that use USD LIBOR as a reference rate. LIBOR is currently being phased out, with the syndicated debt and CLO securities markets transitioning to alternative reference rates. There is no guarantee that the performance of individual investments or the syndicated debt and CLO securities markets as a whole during the transition period (or ultimately) will be consistent with performance achieved during the LIBOR era. Past performance is not a guarantee, predictor or indication of future results. Investment in the products described herein carries a risk of loss, which could be significant, and that investors should be prepared to bear.

There can be no assurance that any particular individual will be involved in the management of any portfolio for any given period of time, if at all.

Historic market trends are not reliable indicators of actual future market behavior or future performance of any particular investment which may differ materially, and should not be relied upon as such.

Hypothetical or simulated performance results have certain inherent limitations. Unlike an actual performance record, simulated results do not represent actual trading. Also, since the portfolios represented do not represent actual investment portfolios, the results may have under- or over-compensated for the impact, if any, of certain market factors, such as lack of liquidity or market disruptions. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown.

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United Kingdom: With respect to the Octagon High Income Fund Cayman Fund, Ltd., Octagon Senior Secured Credit (Sterling) Cayman Fund, Ltd., these funds are Alternative Investment Funds for the purposes of the Financial Services and Markets Act 2000 of the United Kingdom ("FSMA") and intend to be qualified under Regulation 59(1) of the Alternative Investment Fund Managers Regulations 2013 of the United Kingdom. On that basis, the funds may be marketed in the United Kingdom to EEA Persons who qualify as "professional investors", as defined under the FSMA. As regards prospective investors in the United Kingdom who are not EEA Persons or who do not qualify as professional investors ("Other Persons"), the Fund is a collective investment scheme and is not a recognized scheme for the purposes of FSMA. Any offer directed at Other Persons in the United Kingdom may lawfully be communicated if the information contained herein is directed only at persons who (1) have professional experience in matters relating to investments and of participating in unregulated collective investment schemes or (2) are persons falling within Article 49(2)(a) to (d) of the Financial Services and Markets Act 2000 (Fromotion) Order 2005 or Article 22(2)(a) to (d) of the Financial Services and Markets Act 2000 (Promotion of Collective Investment Schemes) (Exemptions) Order 2001; it must not be acted on or relied upon by other persons. The Octagon Credit Opportunities Fund Ltd., and Octagon CLO Opportunity Fund IV are not compliant with European Union Risk Retention Rules and as such are not being marketed or offered to investors within the United Kingdom or elsewhere within the EEA Due to European Union Risk Retention rules, prospective investors in the United Kingdom and EEA may not be eligible to invest in CLO debt or equity securities. Fund-specific materials are provided on the basis of the prospective investor's reverse inquiry.





Switzerland: With respect to the Octagon High Income Fund Cayman Fund, Ltd., Octagon Senior Secured Credit Cayman Fund, Ltd., Octagon Credit Opportunities Fund Ltd, and the Octagon CLO Opportunity Fund IV, the Funds have appointed Reyl & Cie Ltd, 62 rue du Rhône, 1204 Geneva, Switzerland, as their Swiss Representative AND Swiss Paying Agent. (Tel.: +41 22 816 80 00, email: frs@reyl.com). In Switzerland shares shall be distributed exclusively to qualified investors. The Fund offering documents, the articles of association and audited financial statements can be obtained free of charge from the Representative. In respect of shares distributed in Switzerland the place of performance and jurisdiction is the registered office of the Representative.

People's Republic of China: No invitation to offer, or offer for, or sale of any security will be made to the public in China (which, for such purposes, does not include the Hong Kong or Macau Special Administrative Regions or Taiwan) or by any means that would be deemed public under the laws of China. The information contained herein has not been submitted to or approved by the China Securities Regulatory Commission or other relevant governmental authorities in China. Securities may only be offered or sold to Chinese investors that are authorized to buy and sell securities denominated in foreign exchange. Prospective investors resident in China are responsible for obtaining all relevant approvals from the Chinese government authorities, including but not limited to the State Administration of Foreign Exchange, before purchasing an interest in the subject fund(s).

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Israel: With respect to the Octagon Senior Secured Credit Cayman Fund Ltd., these materials are intended only for those categories of Israeli residents who are qualified investors listed in the First Addendum to the Israel Securities Law ("Securities Law") and who are also qualified clients listed on the First Addendum to Israel's Regulation of Investment Advising, Investment Marketing and Portfolio Management Law ("Advice Law"); in all cases under circumstances that will fall within the exemptions from the license requirement under the Advice Law and the private placement or other exemptions of the Joint Investment Trusts. This document and the Fund mentioned herein have not been approved by the Israeli Securities Authority (the "ISA"). In addition, the Fund is not regulated under the provisions of Israel's Joint Investment Trusts law (the "Joint Investment Trusts Law"). This document and the Fund will only be distributed to Israeli residents in reliance on an exemption from the prospectus requirements under the Securities Law or the Joint Investment Trusts Law, and any guidelines, pronouncements or rulings issued from time to time by the ISA as applicable. The Fund may be offered in Israel by Tandem Capital Asset Management Limited.

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General Risks related to Alternative Investments: General Economic and Market Conditions, Increased Regulatory Oversight, Use of Borrowed Funds, Complexity of Trading Strategy—Reliance on Technology, Futures, Commodities and Derivatives, Hedging Transactions, Options, Short Sales, and Risk of Global Investing. Risks related to an investment in a fund: Absence of Operating History, Absence of Regulatory Oversight, Nature of Investments, Business and Regulatory Risk of Hedge Funds, Portfolio Turnover, Risk of Varied Performance, Potential Lack of Diversification, Potential Exposure to Prime Brokers, Potential Exposure to Derivative Counterparties, Execution of Transactions, Certain Tax Risks, Reliance on Manager, Absence of Secondary Market, Operating Deficits, Economic Conditions, Calculation of Operational Net Fund Value, Market Risk, Investors not to Participate in Management of the Fund, Illiquidity of Interests, and Distributions In Kind.

LIBOR – CLO debt and bank syndicated loans historically used LIBOR as an interest rate benchmark, which is currently being phased out, with new instruments being issued with an alternative rate and all existing instruments tied to LIBOR required to transition by June 30, 2023. Replacement of LIBOR could adversely affect the market value or liquidity of CLO securities and/or loans, and pose tangential risk for markets and assets that do not rely directly on LIBOR. On July 29, 2021, the Alternative Reference Rates Committee formally recommended CME Group's forward-looking Term SOFR rate as the replacement rate for U.S. dollar LIBOR, however, there is uncertainty with respect to replacement of LIBOR with proposed alternates, and it is possible that different markets might adopt different rates, resulting in multiple rates at the same time and a potential mismatch between CLO securities and underlying collateral, the effects of which are uncertain at this time, and could include increased volatility or illiquidity. In addition, operational and technology challenges during the transition from LIBOR as well as inconsistent communication from issuers could result in delayed investment analyses and reduced investment opportunities.

The foregoing is only a summary of certain general risks associated with this investment. Before making any investment, prospective investors are advised to make an independent review regarding the economic benefits and risks of purchasing or selling the financial instruments mentioned in this document and reach their own conclusions regarding the legal, tax, regulatory, accounting and other aspects of any transaction in the financial instrument in relation to their particular circumstances.

None of the information contained herein has been filed or will be filed with the Securities and Exchange Commission, any regulator under any state securities laws or any other governmental or self-regulatory authority. No governmental authority has passed or will pass on the merits of this offering or the adequacy of this document.

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MASSACHUSETTS WATER RESOURCE AUTHORITY

OCTAGON SENIOR SECURED CREDIT FUND ANNUAL REVIEW – 2023 (EXHIBITS A-C)

Diversity, Equity, and Inclusion at Octagon

Octagon's DEI Mission Statement

Our mission is to strive to create an organizational culture where a diversity of voices is valued, people have a sense of connection with one another and to the organization, and all employees feel empowered to contribute their best work. We believe our diverse perspectives and experiences enable us to best serve our clients with customized solutions and optimal investment results.

Octagon is committed to building a diverse and inclusive culture that provides the Firm's clients a range of perspectives and experiences.

Click **here** to learn about our commitment to address injustice, prejudice, and racism.

Octagon has zero tolerance for violence, racism, or discrimination against any group and in any form.

Click <u>here</u> to read about our inclusive policies that demonstrate zero tolerance for hatred or exclusion in our workplace.

GLOBAL DIVERSITY, EQUITY, & INCLUSION COUNCIL

The CHL (Conning Holdings Limited*) Global Diversity, Equity, & Inclusion Council promotes the diverse representation of our workforce and leads actions to make Octagon a more inclusive and equitable workplace by providing strategic direction and recommendations to senior management with respect to ongoing DEI efforts. Jeremy Stern (Principal) and Connor Dugan (Vice President) are members of the DEI Council. Mr. Stern and Mr. Dugan regularly confer with Andrew Gordon (Chief Executive Officer and Investment Committee Member) and Amy Adar (Chief Financial Officer) to evaluate Octagon's progress on DEI-related initiatives and oversee the implementation of such initiatives at the Firm.



OUR INCLUSIVE CULTURE

We are committed to promoting a culture of diversity, equity, and inclusion through policy recommendations and initiatives in our organization.

GIVING BACK

Through the Firm's Volunteer Group Program, Octagon seeks to partner with organizations that provide professional development for underrepresented groups as well as provide volunteer opportunities for employees to give back to the communities where we live and work.

PROFESSIONAL DESIGNATION ASSISTANCE

Octagon encourages its employees to pursue professional designations for both personal and career development. We provide reimbursement and paid study time for sponsored designation programs upon successful completion of select exams.

WELLNESS INITIATIVES & BENEFITS

We advocate healthy lifestyle choices by offering:

- **Annual Flu Shots:** When in office, we offer in-office annual flu shots to all employees.
- **Healthy Snacks:** When in office, we have deliveries of fresh fruit or vegetables from local farms/vendors.
- **Commuter Benefits:** Octagon offers commuter benefits which allows employees to use pre-tax money to pay for qualified transit and parking expenses.
- **Benefits:** Octagon offers significant medical, prescription, dental, and vision benefits to all employees. Octagon also offers additional resources and discounts to support employees' physical, emotional, financial, and social health through Insperity (Octagon's benefits and human resources administrative services provider).
- **Established Employee Resource Groups ("ERGs")** through our parent company, Conning:

- The Young Professionals ("YP") Group
- The Women's Initiative Network ("WIN")
- SPECTRUM, LGBTQIA+ and Allies Network
- **Family Friendly Programs:** Octagon understands the importance of work-life balance and a healthy family life. The efforts below reflect our initiative to provide our employees the tools to fulfill their duties at work and at home.
 - 12 weeks of paid time off for the birth, adoption, or placement of a new child for primary care givers
 - Parental leave for secondary caregivers in connection with the birth, adoption or placement of a new child
 - A dedicated one-on-one support guide through the service 'Cleo' for expecting or recent parents
 - "Welcome baby" gifts
 - On-site mother's room
 - Flexible arrangements for family planning, including time for doctor appointments, etc.

RECOGNITION

Gretchen Lam (Senior Portfolio Manager, Investment Committee Member) was featured in the Wall Street Journal article, "Women Claim New Turf on Wall Street," published on February 2, 2019.



TALENT

We are committed to a recruiting and hiring strategy that supports diversity, equity, and inclusion.

RECRUITMENT PRACTICES

- Octagon recruits with a focus on diversity, equity, and inclusion, and we have taken steps to proactively seek out diverse pools of candidates.
- We endeavor to recruit from a wide range of colleges and universities.
- Octagon believes that providing a challenging and rewarding career, combined with a supportive work environment, incents employees to remain at the Firm.



TRAINING AND DEVELOPMENT

Octagon is focused on developing skills and competencies supportive of diversity, equity, and inclusion principles.

MENTORSHIP PROGRAM

Octagon has a mentorship program for all junior employees, which is designed to support the personal growth and career development of junior employees through selective one-to-one pairing with more senior, experienced employees. Mentoring competencies include guiding, coaching, skill gap identification, listening skills, interpersonal skills, and leadership.

*Octagon Credit Investors, LLC, Conning, Inc., Goodwin Capital Advisers, Inc., Conning Investment Products, Inc., Conning Asset Management Limited, Conning Asia Pacific Limited, and Global Evolution Holding ApS and its group of companies ("Global Evolution") are all direct or indirect subsidiaries of Conning Holdings Limited (collectively, "Conning") which is one of the family of companies owned by Cathay Financial Holding Co., Ltd., a Taiwan based company.

		Non-First Lien Floating Rate		Position as %	Weighted Average		Nominal Spread	Current	3-Year Yield ^{4,6}	S&P Facility		Manual	Unrealized	i con la distanti di californi la
Issuer 19th Holdings Golf, LLC (TaylorMade Golf Company)	Asset Initial Term Loans	Loans'	\$2,988,741	of Portfolio ¹ 0.27%	Purchase Price 92.87	Market Price ² 92.00	(bps) ^{3,6} 300	7.28%	Yield*,5	Rating	Facility Rating ⁶	Maturity Date ⁶ 2/7/29	Gain/(Loss) (\$26,086	GICS Industry Classification Hotels, Restaurants & Leisure
AAdvantage Loyalty IP Ltd. and American Airlines Inc	Initial Term Loans		4,622,152	0.46%	101.75	99.73	475	8.99%	9.11%	NR	Ba2	4/20/28		Diversified Consumer Services
ABG Intermediate Holdings 2 LLC (aka Authentic Brands Group)	2021 Refinancing Term Loans		5,024,878	0.50%	99.36	99.49	325	7.63%	7.84%	В	B1	9/27/24		Textiles, Apparel & Luxury Goods
ABG Intermediate Holdings 2 LLC (aka Authentic Brands Group)	Tranche TLB-1 Term Loans (eff 12/21/2021)		2,191,088	0.21%	99.25	97.06	350	7.92%	9.17%	В	B1	12/21/28		Textiles, Apparel & Luxury Goods
Accelerated Health Systems, LLC and Athletico Management, LLC Acrisure LLC	Initial Term B Loans 2022 Additional Term Loans		995,000 2,714,509	0.08%	94.83 95.00	81.94 99.46	425 575	8.98% 9.92%	18.31% 10.15%	B	B3 B2	2/15/29 2/12/27	121,026	Health Care Providers & Services Insurance
Acrisure LLC	6.000 % - 08/01/2029 - 00489LAH6 - 144A	Y	1,000,000	0.08%	92.25	80.13	N/A	6.00%	15.76%	CCC+	Caa2	8/1/29		Insurance
Acrisure LLC	B-1 (2020 Refinancing Term Loans)		4,805,261	0.45%	99.20	94.08	350	7.88%	10.48%	В	B2	2/15/27	(246,180	Insurance
Acrisure LLC	B-2 (2021-1 Additional Term Loans)		2,386,017	0.23%	99.00	95.25	375	8.13%	10.20%	В	B2	2/15/27		Insurance
Acrisure LLC	B-3 (2021-2 Additional Term Loans)		2,867,033	0.28%	99.53	97.04	425	8.63%	9.91%	В	B2	2/15/27		Insurance
ADMI Corp. (Aspen Dental Management, Inc) ADMI Corp. (Aspen Dental Management, Inc)	TL- B2 (Amendment No. 4 Refinancing Term Loans (eff 2/2/2021)) TL- B3 (Amendment No. 5 Term Loans)		5,780,159 1,231,186	0.52%	99.01 99.68	90.98 91.34	338 375	7.76% 8.13%	11.84%	B	B3 B3	12/23/27 12/23/27		Health Care Providers & Services Health Care Providers & Services
AEA International Holdings (International SOS)	Initial Term Loans		4,810,354	0.47%	98.69	99.25	375	8.50%	8.82%	BB	Ba3	9/7/28		Health Care Providers & Services
AL GCX Holdings LLC	Initial Term Loans		649,987	0.06%	99.50	99.28	375	7.57%	7.86%	B+	Ba3	5/17/29	(1,462	Oil, Gas & Consumable Fuels
AlixPartners LLP	Initial Dollar Term Loans		2,493,655	0.25%	97.38	99.33	275	7.13%	7.41%	B+	B1	2/4/28		Diversified Financial Services
Allied Universal Holdco LLC (fka USAGM Holdco, LLC) Allied Universal Holdco LLC (fka USAGM Holdco, LLC)	4.625 % - 06/01/2028 - 019579AA9 - 144A Initial U.S. Dollar Term Loans	Y	1,195,000 8,272,405	0.10%	100.00	83.00 95.20	N/A 375	4.63% 8.17%	12.40%	В в	B2 B2	6/1/28 5/12/28		Commercial Services & Supplies Commercial Services & Supplies
Altice Financing S.A.	5.750 % - 08/15/2029 - 02154CAH6 - 144A	Y	330.000	0.03%	100.00	78.88	N/A	5.75%	16.22%	В	B2 B2	8/15/29		Diversified Telecommunication Services
Altice Financing S.A.	Term Loan B (2022 Dollar Loans)		4,848,431	0.46%	97.55	96.00	500	9.57%	11.35%	В	B2	10/29/27	(75,358	Diversified Telecommunication Services
Altice France SA	5.500 % - 10/15/2029 - 02156LAH4 - 144A	Y	888,000	0.07%	100.00	77.25	N/A	5.50%	16.94%	В	B2	10/15/29		Diversified Telecommunication Services
Alvogen Pharma US, Inc.	New Extended Loans (eff 7/8/2022)		3,058,409 1,000,000	0.27%	88.00 99.38	88.00 92.25	750 875	12.23%	18.44% 17.41%	B-	B3	6/30/25		Pharmaceuticals
Amentum Government Services Holdings LLC / Amentum N&E Holdings LLC (AECOM) Amentum Government Services Holdings LLC / Amentum N&E Holdings LLC (AECOM)	Second Lien Term Loan Tranche 2 Term Loan (2nd lien) (2022)	Y	1,000,000	0.09%	99.38	92.25	750	13.48% 12.18%	16.36%	NR NR	NR NR	1/31/28 2/15/30	(71,250	Aerospace & Defense Aerospace & Defense
Amentum Government Services Holdings LLC / Amentum N&E Holdings LLC (AECOM)	Tranche 3 Term Loan (2022)		1,990,000	0.19%	99.50	97.69	400	8.12%	9.10%	В	B1	2/15/29	(36,069	Aerospace & Defense
American Axle & Manufacturing Inc	New Tranche B Term Loan		2,064,087	0.20%	97.55	98.08	350	7.90%	8.70%	BB+	Ba1	12/13/29	11,114	Automobiles
American Tire Distributors, Inc.	Initial Term Loan (2021)		3,744,353	0.34%	98.42	92.00	625	10.61%	14.43%	B-	Caa1	10/20/28		Distributors
AmWINS Group, Inc.	Term Loan (1st Lien 2021)	+	1,979,810	0.19%	98.75	98.35	225	6.63%	7.30%	B+	Ba3	2/19/28		Insurance
API Group DE, Inc. AppLovin Corporation (AppLovin)	2021 Incremental Term Loan Commitment Amendment No. 6 New Term Loans		3,067,264 4,408,436	0.30%	99.50 98.06	99.34 95.25	275 300	7.13% 9.50%	7.40%	BB- BB-	Ba1 Ba3	1/3/29	(4,984	Industrial Conglomerates Media
AQ Carver Buyer, Inc. (CoAdvantage)	Initial Term Loan (First Lien)		452,684	0.42%	99.00	99.94	500	9.38%	9.41%	B	B1	9/23/25		Professional Services
Array Technologies	Initital Term Loans		2,108,153	0.20%	98.94	95.94	325	7.94%	9.69%	B+	B1	10/14/27	(63,264	Independent Power/Renewable Electricity Producers
Ascend Performance Materials LLC	2021 Refinancing Term Loan		1,199,602	0.11%	98.57	94.46	475	8.83%	11.30%	BB-	Ba3	8/27/26	(49,309	Chemicals
AssuredPartners, Inc.	2020 February Refinancing Term Loans (eff 2/13/2020)		1,662,382	0.16%	95.75	97.35	350	7.88%	9.00%	В	B2	2/3/27		Insurance
AssuredPartners, Inc. AssuredPartners. Inc.	2021 Add-On Incremental Term Loans 2022-2 Term Loans	+	1,329,958 447.961	0.13%	95.25 96.50	97.10 99.50	350 425	7.88%	9.11%	B	B2 B2	2/13/27 2/12/27		Insurance Insurance
Assured Partners, Inc. Astra Acquisition Corp. (aka Anthology) (Blackboard, Inc.)	ZUZZ-Z TERM LOANS TERM B LOANS		1,709,157	0.04%	96.50	99.50 88.75	425 525	9.63%	15.08%	R	B2 B1	10/25/28		Insurance Software
Asurion, LLC	New B-10 Term Loans		2,557,648	0.23%	96.41	89.48	400	8.68%	13.62%	B+	Ba3	8/19/28		Insurance
Asurion, LLC	New B-4 Term Loans (2nd Lien)	Y	4,000,000	0.31%	99.30	78.32	525	9.63%	21.53%	В	B3	1/20/29	(839,015	Insurance
Asurion, LLC	New B-7 Term Loans		2,529,534	0.24%	99.01	97.38	300	7.38%	8.48%	B+	Ba3	11/3/24		Insurance
Asurion, LLC	New B-8 Term Loans New B-9 Term Loans		1,999,733 9.020.122	0.18%	99.12 98.40	89.40 87.81	325	7.63%	12.49%	B+	Ba3 Ba3	12/23/26 7/31/27		Insurance
Asurion, LLC At Home Group Inc. (At Home Holding III Inc. / Ambience)	New B-9 Term Loans Initial Term Loan		3.041.698	0.79%	98.40	79.14	325 425	8.98%	20.13%	B+	Caa1	7/31/27		Insurance Household Durables
Athenahealth Group, Inc. (VVC Holding Corp)	6.500 % - 02/15/2030 - 60337JAA4 - 144A	Y	1,765,000	0.13%	100.00	74.50	N/A	6.50%	20.13%	ccc	Caa2	2/15/30		Health Care Technology
Athenahealth Group, Inc. (VVC Holding Corp)	Initial DDTL Commitment		2,111,528	0.03%	99.82	90.54	350	4.58%	8.54%	B-	B2	2/15/29		Health Care Technology
Athenahealth Group, Inc. (VVC Holding Corp)	Initial Term Loan		12,395,725	1.12%	99.38	90.54	350	7.82%	12.12%	B-	B2	2/15/29		Health Care Technology
Avantor Funding, Inc. (Avantor, Inc.) (Avantor Performance Materials)	Incremental B-5 Dollar Term Loans		1,396,542	0.14%	99.88	99.69	225	6.63%	6.76%	BB+	Ba1	11/8/27		Chemicals
Avaya Inc. Avaya Inc.	6.125 % - 09/15/2028 - 053499AL3 - 144A Tranche B-1 Term Loan (eff 9/25/2020)	Y	675,000 3,115,812	0.02%	100.00 97.60	31.00 34.68	N/A 425	6.13% 8.57%	93.95% 87.49%	cc	Caa2 Caa2	9/15/28 12/15/27		IT Services IT Services
Avaya Inc.	Tranche B-2 Term Loans		3,000,000	0.10%	98.48	35.10	400	8.32%	85.33%	cc	Caa2	12/15/27		IT Services
Avaya Inc.	Tranche B-3 Term Loans		521,739	0.03%	90.00	61.75	1000	14.34%	43.86%	CC	Caa2	12/15/27	(147,391	IT Services
Aventiv Technologies, LLC (fka Securus Technologies Holdings, Inc)	Initial Term Loan (First Lien)		2,961,039	0.22%	95.50	75.51	450	9.23%	23.04%	CCC+	B2	11/1/24		Diversified Telecommunication Services
Avis Budget Car Rental, LLC (AE Escrow Corp) Avolon TLB Borrower 1 (US) LLC	Tranche C Term Loan (2022) Repriced Term B-5 Loans		4,016,923 1,958,677	0.39%	97.61 99.00	98.75 99.96	350 225	7.92%	8.45% 6.62%	BB+ BBB-	Ba1 Baa2	3/16/29 12/1/27		Automobiles Airlines
AVSC Holding Corp.	2020 B-2 Term Loan		1,496,643	0.19%	91.07	92.54	450	9.23%	12.66%	CCC+	Caa1	10/15/26		Commercial Services & Supplies
AVSC Holding Corp.	2020 B-3 Term Loan	Y	1,646,754	0.17%	97.63	103.10	N/A	15.00%	13.55%	CCC+	Caa1	10/15/26		Commercial Services & Supplies
Badger Finance, LLC (Trilliant Food, Beverage and Nutrition)	2018 Refinancing Term Loan		451,014	0.04%	98.75	82.29	350	7.88%	16.75%	B-	B3	9/30/24		Food Products
Bally's Corporation	Term B Facility Loans		4,613,381	0.43%	99.00 98.25	92.80	325	7.54%	10.71%	BB-	Ba2	10/2/28	(286,030	Hotels, Restaurants & Leisure
Bausch & Lomb Corporation BCP Renaissance Parent LLC	Initial Term Loans Initial Term B-3 Loans		3,311,545 5,107,123	0.51%	98.25	95.39 99.23	325 350	7.84%	9.83%	B+	B1 B2	5/10/27 11/2/26	(94,688	Health Care Equipment & Supplies Oil. Gas & Consumable Fuels
BCPE Empire Holdings, Inc. (Imperial Dade)	Amendment No. 3 Term Loans		834,693	0.08%	96.50	97.50	463	9.05%	10.13%	B-	B3	6/11/26		Distributors
Belfor USA Group, Inc. (Belfor Holdings, Inc.)	2022 Incremental Term Loans (Tranche B-2)		3,961,654	0.39%	97.53	99.50	425	8.57%	8.78%	В	B1	4/6/26		Commercial Services & Supplies
Belfor USA Group, Inc. (Belfor Holdings, Inc.)	Initial Term Loans (2019)		593,846	0.06%	98.88	99.50	400	8.38%	8.59%	В	B1	4/6/26	3,712	Commercial Services & Supplies
BELRON FINANCE US LLC	Dollar Third Incremental Loans		4,377,273	0.43%	99.76	99.30 97.78	250	7.06%	7.35% 8.59%	BB+	Ba2	4/13/28	(20,242	Automobiles
Birkenstock Group B.V & CO KG. and Birkenstock US Bidco Inc.(BK LC US BidCo Inc) Blackstone Mortgage Trust Inc.	Facility B (USD) Term B-4 Loans		2,811,915 5,630,792	0.27%	100.06 98.27	97.78	325 350	7.66%	8.59%	B RR-	B1 Ba2	4/28/28 5/9/29	(64,011	Textiles, Apparel & Luxury Goods Banks
Brand Energy & Infrastructure Services	Initial Term Loan (2017)		1,733,569	0.55%	98.27 89.69	89.88	425	8.49%	13.21%	CCC+	B3	6/21/24	3.283	Construction & Engineering
Brazos Delaware II, LLC	Initial Term Loan		3,661,817	0.36%	96.14	99.69	400	8.35%	8.48%	B+	B2	5/21/25	129,936	Oil, Gas & Consumable Fuels
BrightView Landscapes, LLC (fka The Brickman Group LTD. LLC)	Initial Term Loans (2022)		8,941,051	0.86%	98.92	96.63	325	7.57%	9.00%	BB-	B2	4/21/29		Commercial Services & Supplies
Brookfield Retail Holdings VII Sub 3 LLC (GGP)	Initial Term B Loan	+	4,078,161	0.40%	96.77	98.61	250	6.92%	7.49%	BB+	B1	8/27/25		Real Estate Management & Development
Brown Group Holding, LLC (Signature Aviation) Brown Group Holding, LLC (Signature Aviation)	2022 Incremental Term Loan B-2 Initial Term Loan	+	684,320 4,350,831	0.07%	97.50 98.18	99.84 98.35	375 250	7.93% 6.88%	7.99%	B+ B+	B1 B1	7/2/29 6/7/28		Air Freight & Logistics Air Freight & Logistics
Bulldog Purchaser Inc. (Bay Club)	Initial Term Loan (First Lien)		1,354,783	0.12%	95.15	87.21	375	8.17%	14.26%	B-	B3	9/5/25		Hotels, Restaurants & Leisure
Burgess Point Purchaser Corporation (BBB Industries)	Initial Term Loans		3,429,361	0.31%	92.72	91.25	525	9.67%	13.80%	B-	B2	7/25/29	(50,264	Auto Components
Callaway Golf Company	Term Loan		1,928,061	0.19%	100.39	99.92	450	8.88%	8.92%	B+	B1	1/2/26		Hotels, Restaurants & Leisure
Carnival Corporation (Carnival Finance, LLC) Catalent Pharma Solutions. Inc.	2021 Incremental Term B Advance Dollar Term B-3 Loan	+	3,428,885 2,493,655	0.32%	98.78 98.56	93.90 98.64	325 200	7.63%	10.29%	BB- BBB-	Ba3 Ba1	10/18/28 2/22/28		Hotels, Restaurants & Leisure Life Sciences Tools & Services
CDK Global, Inc. (Central Parent)	Initial Term Loans		6,285,024	0.62%	97.51	99.27	450	9.08%	9.39%	B+	B1	7/6/29		Software
CEC Brands, LLC ⁶	Exit TL Equity	Y	10,453	0.02%	3.30	20.50	N/A	N/A	N/A	N/A	N/A	N/A		Food & Staples Retailing
Centuri Group, Inc	Initial Term Loan		5,248,732	0.51%	97.94	98.56	250	7.21%	7.80%	B+	Ba2	8/27/28		Construction & Engineering
CenturyLink Escrow, LLC (CenturyLink, Inc.)	Term B Loan		3,107,753	0.29%	97.36	95.15	225	6.63%	8.67%	BB+	Ba3	3/15/27	(68,655	Diversified Telecommunication Services
Charlot Buyer LLC (Chamberlain)	Initial Term Loans	1	4,179,864	0.39%	99.75	94.50	325	7.63%	10.02%	В	B2	11/3/28		Building Products
Chart Industries Inc. Chart Industries Inc.	7.500 % - 01/01/2030 - 16115QAF7 - 144A 9.500 % - 01/01/2031 - 16115QAG5 - 144A	Y	708,000 394,000	0.07%	98.66 97.95	101.00 102.63	N/A N/A	7.50% 9.50%	7.10% 8.40%	B+	Ba3 B3	1/1/30 1/1/31		Machinery Machinery
Chart Industries Inc.	9.500 % - 01/01/2031 - 16115QAG5 - 144A Amendment No. 2 Term Loans (eff 3/31/2023)	+ ' +	3,966,091	0.04%	97.85	99.13	375	4.25%	4.58%	B+	Ba3	3/31/30		Machinery
Charter Communications Operating LLC	Term B-2 Loan		5,745,661	0.56%	96.68	97.80	175	6.14%	7.03%	BBB-	Ba1	2/1/27	64,578	Diversified Telecommunication Services
Cimpress USA Incorporated, Vistaprint Netherlands B.V. (fka Vistaprint)	Tranche B-1 Term Loans		2,042,573	0.18%	99.99	90.25	350	7.88%	12.34%	BB-	B1	5/17/28	(198,917	Media
CIRCOR International, Inc.	Initial Term Loan (2021)		3,237,146	0.31%	98.95	97.06	550	9.88%	11.19%	B-	B2	12/20/28		Industrial Conglomerates
Citadel Securities LP	2021 Term Loan Term B-1 Loan		4,878,124 3,633,363	0.48%	99.82 98.00	98.35 99.22	250 300	6.94% 7.44%	7.61%	BBB- BBB-	Baa3 Baa3	2/2/28		Capital Markets
Citadel Securities LP CITGO Holding, Inc.	9.250 % - 08/01/2024 - 17302WAB4 - 144A	У	3,633,363 1,162,000	0.36%	98.00 100.22	99.22 100.50	300 N/A	9.25%	9.04%	BBB-	Baa3 Caa1	2/2/28 8/1/24	44,273 3,310	Capital Markets Oil, Gas & Consumable Fuels
ClubCorp Holdings, Inc. (fka ClubCorp Club Operations, Inc.)	Term B Loan (First Lien)	+ ' +	3,906,275	0.12%	92.30	90.53	275	7.48%	11.75%	B-	B2	9/18/24	(69,307	Hotels, Restaurants & Leisure
Clydesdale Acquisition Holdings, Inc. (Novolex)	8.750 % - 04/15/2030 - 18972EAB1 - 144A	Y	842,000	0.07%	93.87	86.25	N/A	8.75%	15.46%	CCC+	Caa2	4/15/30	(64,160	Containers & Packaging
Clydesdale Acquisition Holdings, Inc. (Novolex)	Term B Loans		6,789,237	0.64%	97.50	95.49	393	8.60%	10.58%	В	B2	4/13/29	(136,633	Containers & Packaging
Cogeco Financing 2 LP (Atlantic Broadband)	Amendment No. 5 Incremental Term B Loans		3,754,452	0.36%	99.75	97.44	250	6.88%	7.94%	BB	B1	9/1/28	(86,822	Diversified Telecommunication Services
Conair Holdings LLC	Initial Term Loans 6.000 % - 11/01/2029 - 20679LAB7 - 144A	Y	5,323,542 2,500,000	0.45%	100.08	84.63 82.25	375 N/A	8.48%	16.08%	B- BB-	B3 B1	5/17/28 11/1/29	(822,751	Household Durables
Conduent Business Services, LLC (f/k/a Xerox Business Services, LLC) Conduent Business Services, LLC (f/k/a Xerox Business Services, LLC)	6.000 % - 11/01/2029 - 20679LAB7 - 144A Initial Term B Loans	1	2,500,000 7,770,123	0.20%	100.00	82.25 95.88	N/A 425	8.64%	14.49%	BB- BB-	B1 B1	11/1/29		Professional Services Professional Services
Consolidated Communications, Inc.	5.000 % - 10/02/2028 - 20903XAH6 - 144A	Y	1,875,000	0.74%	100.00	73.75	N/A	5.00%	18.64%	B-	B2	10/2/28		Diversified Telecommunication Services
					100.00		350	7.88%	13.16%		B2	10/2/27		Diversified Telecommunication Services

		Non-First Lien	/	Position as %			Nominal Spread	Current	3-Year	S&P Facility	y Moody's		Unrealized
Issuer	Asset	Floating Rate Loans ⁷		of Portfolio ¹	Weighted Average Purchase Price	Market Price ²	(bps) ^{3,6}	Coupon ^{3,6}	3-Tear Yield ^{4,6}	S&P Facility Rating	y Woody's Facility Rating	6 Maturity Date 6	Gain/(Loss) ⁵ GICS Industry Classification
CoreLogic, Inc.	Initial Term Loan		5,966,910	0.50%	97.68	83.78	350	7.94%	15.93%	B-	B2	6/2/28	(829,470) Diversified Financial Services
Cornerstone OnDemand, Inc	Initial Term Loans		2,833,461	0.25%	99.50	89.75	375	8.13%	12.87%	B-	B2	10/16/28	(276,262) Software
Corporation Service Company (CSC)	Tranche B USD Term Loans (eff 11/3/22)		4,733,275	0.47%	98.36	99.13	325	7.67%	8.04%	BB-	B1	11/2/29	36,436 Professional Services
Covetrus Inc. (CVET MIDCO 2, L.P.) CP Iris Holdco I, Inc. and CP Iris Holdco II, Inc. (IPS Corporation)	Initial Term Loans Initial Term Loans (2nd Lien)	Y	4,404,750 285,880	0.41%	94.00 99.00	93.95 86.00	500 700	9.58% 11.38%	12.34% 18.66%	CCC	B1 Caa1	10/13/29 10/1/29	(2,202) Health Care Providers & Services (37,164) Chemicals
Creative Artists Agency, LLC	Incremental Term B-1 Loan	1	805 382	0.02%	99.00	99.53	425	8.63%	8.83%	B	B2	11/27/26	72,157 Media
Crocs Inc.	Term Loans		4,279,568	0.42%	98.86	98.25	350	7.73%	8.46%	BB-	Ba2	2/20/29	(26,255) Textiles, Apparel & Luxury Goods
Crown Finance US, Inc. (Cineworld)	DIP Term Loan (Loans)		2,967,973	0.29%	94.54	98.48	1000	10.00%	10.67%	В	B1	9/8/23	116,879 Media
Crown Finance US, Inc. (Cineworld) ⁶	Initial Dollar Tranche Term Loan		1,278,698	0.02%	82.77	18.90	N/A	N/A	N/A	D	NR	2/28/25	(816,725) Media
Crown Finance US, Inc. (Cineworld) ⁶	Initial Warrant	Y	307,760	0.00%	0.00	0.06	N/A	N/A	N/A	N/A	N/A	N/A	18,510 Media
Crown Finance US, Inc. (Cineworld) ⁶	Second Amendment Dollar Tranche Term Loan		415,344	0.01%	86.56	18.51	N/A	N/A	N/A	D	NR	9/30/26	(282,615) Media
CSC Holdings, LLC (Escrow: Neptune Finco Corp.) (Cablevision)	B-5 Term Loan (September 2019 Term Loans)		13,652,451	1.22%	98.38	89.63	250	6.82%	11.47%	B+	B1	4/15/27	(1,194,754) Diversified Telecommunication Services
CT Technologies Intermediate Holdings, Inc. (Smart Holdings) (Healthport)	New Term Loans (eff 7/7/2021)		2,407,838 1.449.723	0.22%	100.11 98.75	92.02 97.75	425 425	8.63% 8.98%	12.28% 9.95%	B B	B3 B3	12/16/25 12/2/27	(194,952) Software
Curium BidCo S.a.r.I, Curium Netherlands B.V., Currium US Holdings LLC] CWGS Group, LLC (Camping World)	Additional Senior Facility (1st Lien) Initial Term Loans		6,664,144	0.14%	97.51	93.02	250	6.80%	9.95%	BB-	Ba3	6/3/28	(14,497) Health Care Equipment & Supplies (299,250) Automobiles
DaVita, Inc.	4.625 % - 06/01/2030 - 23918KAS7 - 144A	Y	1,000,000	0.08%	78.03	81.00	N/A	4.63%	13.53%	B+	B1	6/1/30	29,744 Health Care Providers & Services
Dealer Tire, LLC	Term B-2 Loans		1,011,561	0.10%	97.50	99.15	450	8.82%	9.18%	B-	B1	12/14/27	16,691 Auto Components
Delek US Holdings, Inc.	Initial Loans		3,855,626	0.37%	95.90	96.45	350	7.92%	9.44%	BB+	B1	11/19/29	21,187 Oil, Gas & Consumable Fuels
Delta 2 (Lux) Sàrl (Formula One, Alpha Topco Limited, and Alpha D2 Limited)	Term Facility B Loan (eff 11/23/22)		2,520,484 1,496,203	0.25%	99.00 91.47	100.08 92.70	325	7.57% 8.15%	7.54% 11.42%	BB	NR B2	1/15/30	27,095 Media
Delta Topco, Inc (Infoblox) DG Investment Intermediate Holdings 2, Inc. (Gopher Sub Inc.) (Convergint)	Term Loan (First Lien) 2022 Incremental Term Loan		8,944,744	0.14%	98.91	96.25	375 475	9.07%	10.73%	B-	B2	12/1/27 3/31/28	18,400 Software (237,652) Construction & Engineering
DG Investment Intermediate Holdings 2, Inc. (Gopher Sub Inc.) (Convergint)	Closing Date Initial Term Loan (2021)		1,724,646	0.16%	99.78	95.88	375	8.07%	9.85%	B	B2	3/31/28	(67,390) Construction & Engineering
DG Investment Intermediate Holdings 2, Inc. (Gopher Sub Inc.) (Convergint)	Second Lien Initial Term Loan (2021)	Y	439,206	0.04%	99.50	88.83	675	11.07%	16.66%	ccc	Caa2	3/30/29	(46,850) Construction & Engineering
DIAMOND SPORTS GROUP, LLC (Sinclair Broadcast Group Inc)	Second Lien Term Loan	Y	1,802,793	0.02%	35.78	12.83	325	7.57%	285.37%	CCC-	Caa2	8/24/26	(413,632) Media
DIAMOND SPORTS GROUP, LLC (Sinclair Broadcast Group Inc)	Superpriority Term Loan (eff Mar '2022)		861,595	0.08%	93.00	95.02	800	12.32%	14.71%	CCC+	B2	5/25/26	17,413 Media
DIRECTV Financing, LLC	Closing Date Term Loans		6,317,876	0.61%	98.97	97.57	500	9.38%	10.45%	BB	Ba3	8/2/27	(88,266) Diversified Telecommunication Services
Discovery Purchaser Corporation (BES / Bayer Environmental Science)	Initial Term Loans (eff 10/04/2022) Term Loans 2021		3,000,000 631,414	0.27%	92.00 99.68	91.48 95.25	438 300	7.97%	11.82% 9.79%	B- BB-	B3 B3	10/4/29 12/17/28	(15,750) Chemicals (27,981) Automobiles
Driven Brands, LLC Eagle Parent Corp (Restaurant Technologies, Inc)	Initial Term Loans (2022)		5.857.389	0.06%	99.68	95.25	425	8.83%	9.79%	R R	B3 B2	4/2/29	(27,981) Automobiles 42,611 Food Products
EIG Management Company, LLC	Initial Term Loans		161,260	0.02%	98.07	98.38	375	8.13%	8.82%	BB	Ba2	2/21/25	490 Capital Markets
Elevate Textiles, Inc. (fka International Textile Group, Inc.)	Initial Term Loans		1,404,617	0.10%	96.45	70.08	500	8.86%	26.87%	CCC+	Caa1	5/1/24	(370,338) Textiles, Apparel & Luxury Goods
Endo Pharmaceuticals Holdings Inc. ⁶	2021 Term Loans		2,309,798	0.19%	96.63	80.70	N/A	N/A	N/A	NR	NR	3/27/28	(367,970) Pharmaceuticals
Endure Digital, Inc. (ENDURANCE INTERNATIONAL GROUP HOLDINGS, INC)	Initial Term Loans		3,361,345	0.30%	97.50	90.25	350	7.72%	12.15%	В	B2	2/10/28	(243,765) IT Services
Energy Acquisition Company Inc. (Electrical Components International, Inc.)	Initial Term Loans		2,094,158	0.19%	99.28	90.17	425	8.63%	13.21%	B-	B2	6/26/25	(190,827) Electrical Equipment
Energy Acquisition Company Inc. (Electrical Components International, Inc.)	Tranche B Term Loans Facility B2 (USD)	Y	309,858 2.229.784	0.03%	98.52 98.05	90.25 99.69	N/A 350	7.50% 8.18%	11.91% 8.31%	B- BB	B2 Ba1	6/26/25 10/31/29	(25,636) Electrical Equipment 36,504 Hotels Restaurants & Leisure
Entain plc (fka GVC Holdings PLC) Entain plc (fka GVC Holdings PLC)	Facility B2 (USD) Facility B4 (USD) Loan		2,229,784 1.492.424	0.22%	98.05	99.69	350 250	8.18% 7.23%	8.31% 7.47%	BB BB	Ba1 Ba1	10/31/29 3/29/27	36,504 Hotels, Restaurants & Leisure 84,650 Hotels, Restaurants & Leisure
Entegris, Inc.	Tranche B Term Loans		10,351,232	1.03%	99.00	99.86	300	7.38%	7.44%	BB+	Baa3	7/6/29	88,710 Semiconductors & Semiconductor Equipment
Envision Healthcare Corp. (f/k/a Emergency Medical)	Second Out Term Loan		3,475,494	0.12%	68.59	35.00	425	8.83%	87.13%	ccc	С	3/31/27	(1,167,536) Health Care Providers & Services
Equinox Holdings, Inc.	New Initial Term Loan (Second Lien) (New)	Y	391,971	0.03%	100.94	68.50	700	11.73%	32.45%	С	Ca	9/8/24	(127,173) Hotels, Restaurants & Leisure
Equinox Holdings, Inc.	Term B-1 Loans		2,234,527	0.17%	97.16	75.84	300	7.73%	20.81%	CCC-	Caa2	3/8/24	(476,471) Hotels, Restaurants & Leisure
Equinox Holdings, Inc.	Term B-2 Loans Amendment No. 1 Term Loans		1,477,273 3.854.953	0.12%	100.50 99.85	80.50 84.95	900 375	13.73% 8.48%	25.13% 15.89%	NR R-	Caa2 B2	3/8/24 11/15/28	(295,455) Hotels, Restaurants & Leisure
EyeCare Partners, LLC EyeCare Partners, LLC	Initial Term Loan		1,234,893	0.33%	99.85	84.95 81.33	375	8.48%	15.89%	B-	B2 B2	2/18/27	(574,446) Health Care Providers & Services (181,973) Health Care Providers & Services
EyeCare Partners, LLC EyeCare Partners, LLC	Initial Term Loan (2nd Lien)	Y	888,889	0.10%	99.50	83.50	675	11.48%	20.34%	CCC	Caa2	11/15/29	(142,222) Health Care Providers & Services
Fertitta Entertainment, LLC (fka Golden Nugget, LLC/Golden Nugget, Inc.)	6.750 % - 01/15/2030 - 31556TAC3 - 144A	Y	491,000	0.04%	100.00	81.00	N/A	6.75%	16.15%	CCC+	Caa2	1/15/30	(93,290) Hotels, Restaurants & Leisure
Fertitta Entertainment, LLC (fka Golden Nugget, LLC/Golden Nugget, Inc.)	Initial B Term Loans		5,506,235	0.52%	93.98	95.28	400	8.32%	10.39%	В	B2	1/27/29	71,513 Hotels, Restaurants & Leisure
First Brands Group, LLC (f/k/a Trico Group, LLC)	2022-II Incremental Term Loans (eff 12/15/2022)		504,363	0.05%	93.50	94.75	500	9.79%	12.18%	B+	B1	3/30/27	6,305 Auto Components
First Brands Group, LLC (f/k/a Trico Group, LLC)	Refinanced Term Loans (2021 Term Loans)		4,191,807	0.40%	98.81	95.15 97.71	500	8.37%	10.49%	B+	B1	3/30/27	(153,504) Auto Components
First Eagle Holdings, Inc. (fka Arnhold and S. Bleichroeder Holdings, Inc.) Fitness International, LLC (LA Fitness)	Refinancing Term Loans (Initial Term Loans) Term A Loan		1,744,656 2,382,768	0.17% 0.22%	97.22 93.15	97.71 92.89	250 250	7.23% 6.94%	8.18% 10.02%	BB-	Ba2 B2	2/1/27 1/8/25	8,613 Diversified Financial Services
Fitness International, LLC (DA Fitness) Fitness International, LLC (LA Fitness)	Term B Loans (2018)		833,333	0.08%	74.25	92.81	325	7.49%	10.66%	В	B2	4/18/25	(6,043) Hotels, Restaurants & Leisure 154,637 Hotels, Restaurants & Leisure
Fleet U.S. Bidco Inc. (Argus Media)	Facility B Loan		2,982,860	0.29%	99.99	99.50	300	7.93%	8.14%	B+	B1	10/7/26	(14,711) Oil, Gas & Consumable Fuels
Focus Financial Partners	Tranche B-4 Term Loans		988,903	0.10%	99.39	98.31	250	6.82%	7.51%	BB-	Ba3	6/30/28	(10,664) Diversified Financial Services
Franchise Group, Inc.	Initial Term Loans		2,700,581	0.26%	100.24	96.47	475	8.69%	10.23%	BB-	B1	3/10/26	(101,802) Specialty Retail
Froneri US, Inc.	Facility B2 Loan (1st Lien)		2,365,064	0.23%	99.07	97.51	225	6.63%	7.65%	B+	B1	1/29/27	(36,812) Food Products
Gainwell Acquisition Corp. Galaxy US Opco Inc. (Vialto Partners)	Term B Loans Initial Term Loans		7,142,644 821,893	0.67%	98.91 97.50	94.13 90.75	400 475	8.73% 9.07%	11.36%	B+	B2 B3	10/1/27 4/27/29	(341,991) Health Care Technology (55,478) Diversified Financial Services
Garda World Security Corporation (aka Crepax Holdco 2 Corp.)	Fourth Additional Term Loans		6.202.954	0.59%	99.03	96.50	425	8.53%	10.05%	В	B2	2/1/29	(156,918) Commercial Services & Supplies
Garrett Motion Holdings, Inc.	Dollar Term Loan		3,456,250	0.34%	99.52	98.38	325	7.67%	8.35%	B+	Ba2	4/30/28	(39,500) Auto Components
GBT Group Services B.V. (Amex GBT)	Initial Term Loan		273,903	0.03%	100.54	92.92	250	6.88%	9.95%	B-	NR	8/13/25	(20,882) Commercial Services & Supplies
Generation Bridge, LLC	Term B Loans		1,032,718	0.10%	98.00	99.38	500	9.73%	10.00%	BB	Ba2	12/1/28	14,200 Electric Utilities
Generation Bridge, LLC	Term C Loans		22,687	0.00%	98.00	99.38	500	9.73%	10.00%	BB	Ba2	12/1/28	312 Electric Utilities
Global Medical Response, Inc. (f/k/a Air Medical Group Holdings, Inc.) Global Tel Link Corp	2018 NEW Term Loans (2017-2 Incremental Term Loan) Loan (Second Lien)		2,593,002 1.625.000	0.18% 0.12%	94.93 98.02	71.46 77.00	425 1000	8.63% 14.09%	25.40% 28.26%	B- CCC+	B3 Caa2	3/14/25 11/29/26	(608,636) Health Care Providers & Services
Global Tel Link Corp Global Tel Link Corp	Loan (Second Lien) Term Loan (First Lien) (2018)	Y	1,625,000 811,186	0.12%	98.02 96.04	77.00 86.72	1000 425	14.09% 8.49%	28.26% 14.90%	R CCC+	Caa2 B1	11/29/26	(341,563) Communications Equipment (75,619) Communications Equipment
GoodRx, Inc.	Initial Term Loans		2,986,904	0.07%	97.09	97.63	275	7.13%	8.12%	BB-	B1	10/14/25	16,071 Health Care Providers & Services
Great Outdoors Group, LLC (fka Bass Pro Group, LLC)	Term B-2 Loans		2,637,550	0.25%	98.62	96.31	375	8.13%	9.72%	BB-	B1	3/6/28	(60,983) Specialty Retail
Griffon Corporation	Term B Loans		2,237,718	0.22%	100.27	98.47	250	9.37%	10.03%	BB	Ba2	1/24/29	(40,197) Building Products
Harbor Freight Tools USA, Inc.	Initial Loan (Refinancing Loans)		9,713,307	0.92%	99.17	95.52	275	7.13%	9.03%	BB-	B2	10/19/27	(354,582) Specialty Retail
Heartland Dental, LLC	2021 Incremental Term Loans		1,266,586 4,940,577	0.12%	99.27	93.18 92.68	400 375	8.39%	11.44%	B-	B2	4/30/25	(77,172) Health Care Providers & Services
Heartland Dental, LLC Herens US HoldCo Corp (Lonza Specialty Ingredients)	Initial Term Loans Facility B (USD) Loans		4,940,577 2,684,284	0.45%	98.70 99.15	92.68 92.15	375 400	8.13% 8.73%	11.41% 12.31%	B-	B2 B2	4/30/25 7/3/28	(297,531) Health Care Providers & Services (187,936) Chemicals
Herens us Holdco Corp (Lonza specialty Ingredients) Hexion Holdings Corporation	Initial Term Loans		4,719,698	0.25%	97.26	86.35	450	8.93%	15.62%	В-	B2 B2	3/15/29	(515,070) Chemicals
Hilton Grand Vacations Borrower LLC	Initial Term Loans		1,863,529	0.18%	99.50	99.46	300	7.38%	7.60%	BB+	Ba1	8/2/28	(699) Hotels, Restaurants & Leisure
HLF Financing US, LLC (Herbalife)	4.875 % - 06/01/2029 - 40390DAC9 - 144A	Y	2,436,000	0.17%	100.00	68.50	N/A	4.88%	22.45%	B+	B1	6/1/29	(767,340) Pharmaceuticals
HLF Financing US, LLC (Herbalife)	Term Loan B		1,953,906	0.19%	99.89	97.16	250	6.88%	8.06%	BB	Ba1	8/18/25	(53,456) Pharmaceuticals
Hub International Limited	2022 Incremental Term Loans Term Loan		1,080,494 7,934,540	0.11%	96.00 98.76	99.08 94.81	400 300	8.22% 7.44%	8.60% 9.67%	B BB-	B2 Ba3	11/9/29 3/20/28	33,317 Insurance (313,277) Capital Markets
Hudson River Trading LLC Hunter Douglas Inc.	Term Loan Tranche B-1 Term Loans		7,934,540 7,637,509	0.75%	98.76	94.81 88.49	300	7.44%	9.67%	BB- B+	Ba3 B1	3/20/28 2/28/29	(313,277) Capital Markets (808,476) Household Durables
Hunter Douglas Inc. Hunter Holdco 3 Limited (UDG Healthcare)	Initial Dollar Term Loans		7,637,509 3.360.085	0.67%	99.08	98.38	425	7.86% 8.98%	9.68%	R R	B1	2/28/29 8/19/28	(22,292) Health Care Providers & Services
Icon plc (Icon US Holdings Inc. / Icon Luxembourg, S.à r.l.)	Lux Term Loans		3,109,423	0.33%	99.50	99.83	225	7.00%	7.07%	BB+	Ba1	7/3/28	10,121 Health Care Providers & Services
Icon plc (Icon US Holdings Inc. / Icon Luxembourg, S.à r.l.)	U.S. Term Loans		774,715	0.08%	99.50	99.83	225	7.00%	7.07%	BB+	Ba1	7/3/28	2,522 Health Care Providers & Services
II-VI Incorporated	Initial Term B Loans		3,764,159	0.37%	98.84	99.20	275	7.13%	7.46%	BB-	Ba2	7/1/29	13,651 Electronic Equipment, Instruments & Components
Ineos US Finance LLC	2027-II Dollar Term Loans (eff 11/8/22)		1,024,699	0.10%	96.50	98.63	375	8.17%	8.75%	BB	Ba2	11/8/27	21,775 Chemicals
Informatica Corporation	Initial Term Loan Initial Term Loans		9,143,488 3,930,000	0.89%	99.88 99.50	98.35 95.42	275 375	7.19% 8.14%	7.87% 10.13%	BB-	B1 B2	10/27/28 3/6/28	(139,438) Software (160,482) Health Care Providers & Services
Ingenovis Health, Inc. (fka CCRR Parent, Inc. / Trustaff Management, Inc.) Ingram Micro Inc.	Initial Term Loans Initial Term Loans		3,930,000 4.048.359	0.37%	99.50	95.42 98.75	375 350	8.14%	10.13% 8.76%	B BB-	B2 B1	3/6/28 6/30/28	(160,482) Health Care Providers & Services (26,127) Distributors
Ingram Micro Inc. Intelsat Jackson Holdings S.A.	Term B Loans		11.046.136	1.06%	98.83	96.75	425	7.44%	8.81%	R+	B3	2/1/29	(229,777) Distributors (229,777) Diversified Telecommunication Services
Intrado Corporation (fka West Corp)	Incremental Term B-1 Loan		1,247,340	0.11%	89.24	92.34	350	7.91%	11.33%	CCC+	B1	10/10/24	38,686 IT Services
Intrado Corporation (fka West Corp)	Term B Loans		127,660	0.01%	91.50	92.39	400	8.41%	11.85%	CCC+	B1	10/10/24	1,135 IT Services
Iridium Satellite LLC	Term B-2 Loans		4,603,541	0.45%	99.65	99.24	250	6.92%	7.23%	BB-	Ba3	11/4/26	(18,745) Wireless Telecommunication Services
IXS Holdings, Inc. (Ignition Merger, Inc.)	Initial Term Loan		2,559,715	0.20%	100.06	79.51	425	7.82%	18.42%	CCC+	Caa1	3/5/27	(525,900) Auto Components
Jane Street Group, LLC	2021 Dollar Term Loan		6,106,663 1,579,199	0.59%	99.73 97.66	97.23 97.14	275	7.13% 7.98%	8.29% 9.20%	BB- B+	Ba2	1/26/28	(153,117) Capital Markets
Janus International Group, LLC Jo-Ann Stores, LLC (fka Jo-Ann Stores, Inc)	Amendment No. 3 Refinancing Term Loans Term B-1 Loan		1,579,199 2 993 451	0.15%	97.66	97.14 68.58	325 475	7.98%	9.20%	B+	B2 B3	2/12/25 7/7/28	(8,348) Building Products (926,844) Specialty Retail
Jo-Ann Stores, LLC (TKB JO-Ann Stores, Inc.) LABL, Inc. (Multi-Color Corporation)	Initial Dollar Term Loan		5 478 235	0.20%	99.55	95.19	500	9.08%	11.54%	B-	B3	10/29/28	(173,888) Containers & Packaging
Lasership, Inc. (ASP LS Acquisition Corp.)	Initial Loans (Second Lien)	Y	621,418	0.04%	98.70	61.00	750	12.23%	41.36%	ccc	Caa2	5/7/29	(234,276) Air Freight & Logistics
	Initial Term Loans (First Lien)		6,274,908	0.45%	99.86		450	9.23%	25.41%		B2	5/7/28	
Lasership, Inc. (ASP LS Acquisition Corp.)	Illitial Terrii Coalis (First Cieri)			0.4376		72.46		5.23/0	25.41%	Б-	DZ.	3/1/20	(1,719,329) Air Freight & Logistics
Lasership, Inc. (ASP LS Acquisition Corp.) Lealand Finance Company B.V. (McDermott International) ⁶	Common Stock - Accredited Investor (December 2020) Make-Whole Term Facility (eff 6/30/2020)	Y	39,263		0.50 97.87	0.35 65.00	N/A 300	N/A 7.38%	25.41% N/A	N/A	N/A B3	N/A 6/30/24	(1,719,329) Air Freight & Logistics (5,791) Energy Equipment & Services

		Non-First Lien Floating Rate	Par Value/ Position as %	Weighted Average	N	Iominal Spread	Current		S&P Facility			Unrealized	
Issuer	Asset Take-Back Term Facility (eff 6/30/2020)	Loans ⁷	Shares of Portfolio ¹ 1,151,918 0.06%	Purchase Price 80.96	Market Price ² 53.68	(bps) ^{3,6}	Coupon ^{3,6} 5.38%	Yield ^{4,6} 38.79%	Rating	Facility Rating ⁶	Maturity Date ⁶ 6/30/25	Gain/(Loss) ⁵	GICS Industry Classification
Lealand Finance Company B.V. (McDermott International) Learning Care Group (US) No. 2 Inc.	2020 Incremental Term Loans (eff 5/26/2020)		1,151,918 0.06% 812.698 0.08%	101.65	98.00	850	12.99%	13.93%	B-	B3 B2	3/13/25	(314,249)	Energy Equipment & Services Diversified Consumer Services
Level 3 Financing, Inc.	Tranche B 2027 Term Loan		3,287,849 0.31%	97.84	96.08	175	6.13%	7 74%	BB+	Ba1	3/13/23		Diversified Consumer services Diversified Telecommunication Services
LHS Borrower, LLC (Leaf Home)	Initial Term Loans		2,850,487 0.23%	95.71	82.06	475	9.17%	18.46%	B	B1	2/16/29	(388.915)	Building Products
Liberty Communications of Puerto Rico LLC and LCPR Loan Financing LLC (Liberty Cablevision of Puerto Rico LLC)	5.125 % - 07/15/2029 - 50201DAD5 - 144A	Y	1,605,000 0.13%	100.00	83.50	N/A	5.13%	12.72%	B+	B1	7/15/29		Diversified Telecommunication Services
LifeMiles Ltd. and LifeMiles US Finance LLC (fka LifeMiles Finance LLC)	Initial Term Loans		967,898 0.09%	99.00	93.35	525	9.98%	13.07%	B-	B3	8/30/26	(54,686)	Diversified Consumer Services
Lifepoint Health, Inc. (Regionalcare Hospital Partners Holdings, Inc.)	Term B Loan (First Lien)		3,717,143 0.35%	91.20	94.51	375	8.16%	10.57%	В	B1	11/16/25	123,202	Health Care Providers & Services
LSF11 A5 HoldCo LLC (AOC)	Term Loans		2,502,672 0.24%	99.50	96.85	350	7.94%	9.28%	В	B1	10/15/28		Chemicals
M6 ETX Holdings II Midco, LLC	Initial Term Loans (eff 9/19/2022)		1,428,711 0.14%	97.50	100.11	450	9.16%	9.11%	B+	B1	9/19/29		Oil, Gas & Consumable Fuels
Magenta Buyer LLC (McAfee)	Initial Term Loans (1st Lien)		6,388,353 0.55%	98.56	86.09	475	9.17%	16.04%	B-	B2	7/27/28	(796,154)	
MajorDrive Holdings IV, LLC (Club Car)	2022 Incremental Term Loans Initial Term Loans		1,832,533 0.17% 1,989,899 0.19%	92.00 96.47	96.00 94.35	550 400	10.05% 8.81%	11.86% 11.34%	B	B2 B2	6/1/29 6/1/28		Industrial Conglomerates Industrial Conglomerates
MajorDrive Holdings IV, LLC (Club Car) Match Group, Inc.	2020 Refinancing Term Loan		1,772,493 0.17%	99.68	98.31	175	6.49%	7.17%	BBB-	Ba1	2/13/27		Industrial Conglomerates Internet and Catalog Retail
Mattress Firm, Inc.	Term Loans (2021)		4,787,296 0.41%	99.23	85.50	425	8.43%	15.52%	B+	B1	9/25/28		Household Durables
Maxar Technologies Inc. (fka Macdonald, Dettwiler & Associates Ltd (MDA), SSL Robotics LLC)	Initial Term Loans		4,887,710 0.49%	95.50	100.04	425	8.67%	8.65%	B+	B2	6/14/29	222,122	Aerospace & Defense
McAfee Corp.	7.375 % - 02/15/2030 - 579063AB4 - 144A	Y	344,000 0.03%	100.00	81.25	N/A	7.38%	16.77%	CCC+	Caa2	2/15/30		Software
McAfee Corp.	Tranche B-1 Term Loans		9,005,746 0.84%	99.44	93.36	375	7.97%	10.91%	B-	B2	3/1/29	(547,626)	
Medline Borrower, LP (fka Mozart Debt Merger Sub Inc. and Medline Industries)	Initial Dollar Term Loans		11,663,955 1.10%	98.95	95.21	325	7.63%	9.69%	B+	B1	10/23/28		Health Care Equipment & Supplies
Midwest Physician Administrative Services, LLC (DuPage)	Incremental Term Loans		6,915,331 0.63%	95.33	92.38	325	7.98%	11.39%	В	B2	3/12/28		Health Care Providers & Services
Midwest Veterinary Partners, LLC (Mission Veterinary Partners)	Initial Term Loans Initial Term Loan		3,716,547 0.33% 10.644.687 1.09%	99.82 102.63	90.50	400 525	7.87%	12.19% 8.72%	B- NR	B3 Baa3	4/27/28 6/21/27		Health Care Providers & Services
Mileage Plus Holdings, LLC and Mileage Plus Intellectual Property Assets, Ltd. MKS Instruments, Inc	Initial Dollar Term B Loan		6,939,902 0.68%	98.00	99.05	275	7.17%	7.56%	BB	Ba1	8/17/29	73 112	Diversified Consumer Services Semiconductors & Semiconductor Equipment
MIN US HoldCo LLC (MITEL)	Term B-1 Loans (2nd Lien)	Y	2,994,311 0.24%	92.50	81.00	670	11.15%	21.59%	CCC+	Caa3	10/20/27	(344 346)	Communications Equipment
National Intergovernmental Purchasing Alliance Company AKA Omnia Partners	Initial Term Loans (1st Lien)		287.202 0.03%	97.50	98.88	350	8.08%	8.55%	В	B2	5/23/25		Professional Services
National Intergovernmental Purchasing Alliance Company AKA Omnia Partners	Initial Term Loans (2nd Lien)	Y	1,014,171 0.10%	98.55	99.00	750	12.08%	12.54%	CCC+	Caa2	5/26/26		Professional Services
NCR Corporation	Initial Term Loans		6,267,927 0.61%	99.22	97.38	250	6.92%	8.01%	BB	Ba3	8/28/26	(115,736)	Technology Hardware, Storage & Peripherals
Neptune Bidco US Inc. (VNU/Nielsen Finance LLC)	9.290 % - 04/15/2029 - 640695AA0 - 144A	Y	1,500,000 0.14%	92.29	94.75	N/A	9.29%	11.65%	В	B2	4/15/29	36,840	Media
New Constellis Holdings Inc. ⁶	Common Shares	Y	6,689 0.00%	13.27	0.38	N/A	N/A	N/A	N/A	N/A	N/A	(86,244)	Aerospace & Defense
New Constellis Holdings Inc.	New First Lien Term Loans (eff 3/27/2020)		117,888 0.01%	92.00	83.75	750	11.88%	20.66%	CCC+	Caa1	3/27/24		Aerospace & Defense
New Constellis Holdings Inc.	New Second Lien Term Loans (eff 3/27/2020)	Y	106,066 0.01%	87.50	50.08	1100	15.38%	63.94%	CCC-	Caa2	3/27/25	(39,686)	Aerospace & Defense
Nexus Buyer, LLC (Promontory Interfinancial Network)	Initial Term Loans		2,297,433 0.22%	99.21	95.98	375	8.13%	9.87%	B-	B2	11/9/26		Diversified Financial Services
Nexus Buyer, LLC (Promontory Interfinancial Network)	Second Lien Initial Term Loans Tranche B Term Loans (eff 9/12/2022)	Y	991,071 0.09% 4.245.825 0.42%	99.76 99.50	92.92 98.52	625 200	10.63%	13.99% 7.02%	CCC	Caa2 Ba1	11/5/29 9/12/29		Diversified Financial Services Software
NortonLifeLock Inc Numericable US LLC	USD TLB-12 Term Loans (eff 9/12/2022)		4,245,825 U.42% 1.979.126 0.18%	99.50	98.52	369	7.77%	10.90%	BB R	B2	1/31/26		Software Diversified Telecommunication Services
Numericable US LLC Numericable US LLC	USD TLB-13 Incremental Term Loans		8,204,102 0.76%	96.06	93.29	400	8.65%	11.67%	В	B2	8/14/26	(227.367)	Diversified Telecommunication Services Diversified Telecommunication Services
Olaplex, Inc	Initial Term Loans		4,961,826 0.46%	99.84	93.75	350	7.92%	10.67%	BB-	B1	2/23/29		Household Products
Olympus Water US Holding Corporation (Solenis)	2022 Incremental Term Loans		1,990,465 0.19%	99.03	97.30	450	9.18%	10.36%	B-	B2	11/9/28		Chemicals
Olympus Water US Holding Corporation (Solenis)	Initial Dollar Term Loans		2,075,393 0.20%	97.67	96.26	375	8.50%	10.12%	B-	B2	11/9/28	(29,263)	Chemicals
OneDigital Borrower LLC	2021 Refinancing Term Loans		5,543,159 0.52%	98.75	94.75	425	8.49%	10.81%	В	B3	11/22/27	(221,513)	Insurance
Open Text Corporation (GXS Inc)	2022 Term Loan (eff 3/31/2023)		5,192,587 0.51%	97.00	97.91	350	4.00%	4.80%	BBB-	Ba1	3/31/30		Software
Open Text Corporation (GXS Inc)	6.900 % - 12/01/2027 - 683715AF3 - 144A	Y	122,000 0.01%	100.00	100.38	N/A	6.90%	6.75%	BBB-	Ba1	12/1/27		Software
Oravel Hotels LLC (Oravel Stays Private Limited, Oravel Stays Singapore PTE. Ltd., OYO Hospitality Netherlands B.V.)	Initial Term Loans		827,400 0.07%	97.00 98.87	87.63	825	12.98%	19.52%	NR	B3	6/23/26	(77,569)	Hotels, Restaurants & Leisure
Organon & Co.	Dollar Term Loan Initial Term Loans (2021)		4,133,831 0.41% 6.410.602 0.63%	98.87	99.28 98.98	300 325	7.75% 7.92%	8.05% 8.35%	BB BB-	Ba2 Ba3	6/2/28 10/5/28		Health Care Providers & Services Oil, Gas & Consumable Fuels
Oryx Midstream Services Permian Basin LLC Par Pacific Holdings, Inc. (Par Petroleum, LLC and Par Petroleum Finance Corp.)	7.750 % - 12/15/2025 - 69889MAA0 - 144A	V	500,000 0.05%	99.25	96.50	N/A	7.75%	9.24%	BB-	B1	12/15/25		Energy Equipment & Services
Pair Pacific Holdings, Inc. (Par Petroleum, LLC and Par Petroleum Finance Corp.)	Initial Term Loan		2,522,222 0.23%	99.17	90.50	425	8.71%	13.12%	B-	B2	12/29/28	(218 776)	Containers & Packaging
Peraton Corp (Peraton Inc.)	Term B Loan (ITL)		7.068.104 0.69%	99.77	97.83	375	8.13%	9.05%	B+	B1	2/1/28		Aerospace & Defense
Perrigo Investments LLC	Initial Term B Loans		2,275,415 0.23%	99.25	99.63	250	6.92%	7.07%	BB+	Baa3	4/20/29		Pharmaceuticals
PG&E CORPORATION	Loan		5,224,647 0.52%	98.39	99.38	300	7.44%	7.69%	BB-	B1	6/23/25	51,246	Electric Utilities
Pike Corporation	2028-B Term Loans		2,992,500 0.30%	98.75	99.29	350	7.82%	8.12%	В	Ba3	1/21/28		Construction & Engineering
Playtika Holding Corp.	Term B-1 Loan		3,500,000 0.33%	97.40	95.69	275	7.13%	8.96%	BB+	Ba2	3/13/28		Software
PMHC II, Inc. (Prince Minerals)	Initial Term Loans Initial Term Loan		2,104,221 0.18% 2.861.387 0.27%	99.50	85.03 96.40	425	8.49%	15.86%	B-	B3	4/21/29		Chemicals
Proofpoint Inc Quikrete Holdings, Inc.	B-1 Fourth Amendment Loans		2,861,387 0.27% 3.375.868 0.33%	99.52 99.25	96.40	325 300	7.98% 7.38%	9.53% 7.65%	B- BB-	B2 Ba2	8/31/28 3/18/29		Software Building Products
Quikrete Holdings, Inc. Quikrete Holdings, Inc.	Initial Loan (First Lien)		1,979,592 0.19%	99.25	99.33	263	7.01%	7.05%	BB-	Ba2	2/1/27		Building Products Building Products
r21 Holdings, Inc. ⁶	Class A Common Stock	Y	900 0.00%	0.00	2.00	N/A	N/A	N/A	N/A	N/A	N/A	1,800	Specialty Retail
Rackspace Technology Global, Inc (fka Rackspace Hosting, Inc and Inception Merger Sub, Inc.)	Term B Loans (2021 Term B Loans)		5,598,343 0.35%	97.59	63.01	275	7.38%	31.29%	B-	B1	2/15/28	(1,935,887)	
RADIATE HOLDCO, LLC, (RCN Grande)	Amendment No. 6 Term Loans		10,778,240 0.87%	98.88	81.69	325	7.63%	16.81%	CCC+	B1	9/25/26	(1.852.811)	Diversified Telecommunication Services
Rent-A-Center Inc	6.375 % - 02/15/2029 - 76009NAL4 - 144A	Y	1,250,000 0.10%	100.00	80.31	N/A	6.38%	16.11%	В	B1	2/15/29		Food & Staples Retailing
Rent-A-Center Inc	Initial Term Loans (2021)		3,934,811 0.38%	99.30	96.63	325	7.69%	9.12%	BB-	Ba2	2/17/28		Food & Staples Retailing
Restoration Hardware, Inc.	2022 Incremental Term Loan B-2 (eff 5/11/2022)		2,676,727 0.25%	95.00	94.09	325	7.67%	10.25%	BB	Ba3	10/20/28		Specialty Retail
Restoration Hardware, Inc.	Initial Term Loan		4,757,170 0.44%	99.45	92.28	250	6.88%	10.25%	BB	Ba3	10/20/28		Specialty Retail
Rising Tide Holdings, Inc. (Marine One Merger Sub, Inc. and West Marine)	Initial Term Loans		3,242,568 0.15%	100.29	47.50	475	9.48%	56.81%	CCC	Caa3	6/1/28		Specialty Retail
RLG Holdings, LLC (Rhythm Merger Sub, LLC and Resource Label Group)	2022 Incremental Term Loan (First Lien) Closing Date Initial Term Loans (1st Lien)		384,020 0.04% 6,933,687 0.65%	94.00	94.50 94.42	500 400	8.83% 8.38%	11.28% 10.85%	B- B-	B2 B2	7/7/28 7/7/28	(207.146)	Containers & Packaging
RLG Holdings, LLC (Rhythm Merger Sub, LLC and Resource Label Group) RVR Dealership Holdings, LLC (RV Retailer, LLC)	Term Loans		3,579,410 0.33%	99.68	92.50	375	8.17%	11.54%	BB-	B1	2/8/28	(257 151)	Containers & Packaging Automobiles
Sable Int'l Finance Ltd and Coral-US-Co-Borrower LLC (Cable & Wireless)	Term B-5 Loan		2,599,877 0.25%	96.89	97.03	225	6.57%	7.79%	BB-	Ba3	1/31/28		Wireless Telecommunication Services
Sable Int'l Finance Ltd and Coral-US-Co-Borrower LLC (Cable & Wireless)	Term B-6 Loan		10,133,825 0.98%	99.44	97.20	300	7.32%	8.49%	BB-	Ba3	10/15/29		Wireless Telecommunication Services
Sabre GLBL Inc	11.250 % - 12/15/2027 - 78573NAH5 - 144A	Y	615,000 0.06%	98.13	103.13	N/A	11.25%	9.90%	В	Ba3	12/15/27	30,695	Diversified Consumer Services
Sabre GLBL Inc	2021 Other Term B-1 Loans		382,583 0.03%	94.25	91.38	350	7.88%	11.77%	В	Ba3	12/17/27		Diversified Consumer Services
Sabre GLBL Inc	2021 Other Term B-2 Loans		609,860 0.06%	94.25	91.38	350	7.88%	11.77%	В	Ba3	12/17/27	(17,533)	Diversified Consumer Services
Sabre GLBL Inc	2022 Term B Loans 2022 Term B-2 Loans		7,935,013 0.72% 943,678 0.09%	99.00 95.00	91.81 92.69	425 500	8.67% 9.42%	12.42% 12.80%	B	Ba3 Ba3	6/30/28 6/30/28		Diversified Consumer Services Diversified Consumer Services
Sabre GLBL Inc Savage Enterprises, LLC	2022 Term B-2 Loans Initial Loan		2.954.047 0.29%	95.00	92.69	325	7.64%	7.86%	BB-	Ba3 B1	9/15/28		Diversified Consumer Services Road & Rail
Savage Enterprises, LLC. Scientific Games Holdings LP (Sci Games Lotto)	Initial Coan		2,954,047 0.29%	99.50	95.61	350	7.04%	8.95%	B+	B2	4/4/29		Hotels, Restaurants & Leisure
SeaWorld Parks & Entertainment, Inc.	Term B Loan (2021)		2,968,349 0.29%	97.71	98.44	300	7.44%	8.08%	BB	Ba3	8/25/28	21,630	Hotels, Restaurants & Leisure
Seren BidCo AB (Anticimex Inc.)	Facility B4 Loan		1,000,000 0.10%	97.26	97.25	400	8.73%	9.92%	В	B2	11/16/28	(69)	Diversified Consumer Services
Seren BidCo AB (Anticimex Inc.)	Facility B5 Loan		2,570,084 0.25%	95.00	96.75	475	9.25%	10.68%	В	B2	11/16/28		Diversified Consumer Services
Shape Technologies Group, Inc.	Initial Term Loan		1,464,233 0.13%	81.02	92.15	300	7.38%	10.85%	B-	B3	4/20/25		Industrial Conglomerates
Shutterfly, LLC. (fka Shutterfly, Inc.)	2021 Refinancing Term B Loan		3,404,153 0.19%	99.50	57.23	500	9.38%	41.31%	ccc	B2	9/25/26		Internet and Catalog Retail
Skillsoft Finance II, Inc.	Initial Term Loans (Term B-1 Loans)		6,866,425 0.57%	98.49	83.93	525	9.58%	17.80%	B-	B2	7/14/28	(999,945)	
SkyMiles IP Ltd. (Delta)	Initial Term Loan Initial Term Loans (2022)		1,679,022 0.17% 2,444,713 0.24%	101.21 97.36	102.12 98.25	375 425	7.99% 8.67%	7.14% 9.42%	NR B+	Baa1 Ba3	10/20/27 4/1/29		Diversified Consumer Services
Smyrna Ready Mix Concrete, LLC Snap One Holdings Corp	Initial Term Loans (2022)		2,444,713 0.24%	97.36	98.25	425	8.88%	9.42%	B R	B33 B2	12/8/28	(202 838)	Construction Materials Building Products
Solarwinds Holdings, Inc	Initial Term Loan		1,079,867 0.11%	97.50	99.17	400	8.32%	8.67%	B+	B1	2/5/27		Software
Sotheby's (BidFair Mergeright Inc.)	2021 Second Refinancing Term Loans		4,637,534 0.45%	99.03	97.83	450	8.58%	9.51%	B+	B2	1/15/27		Diversified Consumer Services
Southcross Energy Partners LLC ⁶	Common Units Held at Blockers	Y	7,591 0.00%	0.00	0.01	N/A	N/A	N/A	N/A	N/A	N/A		Oil, Gas & Consumable Fuels
Southcross Energy Partners LLC ⁶	Series A Preferred Units Held at Blockers	Y	35,732 0.00%	0.82	0.06	N/A	N/A	N/A	N/A	N/A	N/A		Oil, Gas & Consumable Fuels
Southern Veterinary Partners, LLC	Initial Term Loan		3,150,410 0.30%	99.17	96.04	400	8.38%	10.10%	B-	B2	10/5/27		Health Care Providers & Services
Spin Holdco Inc. and Air-Serv Canada Inc. (aka CSC SW Holdco and Coinmach)	Initial Term Loan		2,959,937 0.25%	97.27	84.85	400	8.77%	16.28%	B-	B3	3/4/28	(367,530)	Diversified Consumer Services
Spirit Aerosystems Inc	Initial Term Loans		4,347,815 0.43%	97.00	99.34	450	8.45%	8.73%	BB-	Ba2	1/15/27	101,913	Aerospace & Defense
SPX Flow, Inc.	Term Loans		3,984,276 0.37%	95.25	93.66	450	8.92%	11.78%	B-	B2	4/5/29	(63,350)	Industrial Conglomerates
SS&C Technologies, Inc. (SS&C Technologies Holdings Europe S.A.R.L.)	Term B-6 Loan (eff 3/22/2022)		1,093,785 0.11%	97.50	98.41	225	6.67%	7.32%	BB+	Ba2	3/22/29	9,915	Software
	Term B-7 Loan (eff 3/22/2022)		1,648,083 0.16%	97.50	98.41	225	6.67%	7.32%	BB+	Ba2	3/22/29	14,940	Software
SS&C Technologies, Inc. (SS&C Technologies Holdings Europe S.A.R.L.)	Initial Term Loans		4,322,131 0.42%	99.00	98.91	225	6.43%	6.86%	BBB-	Baa3	9/22/28		Building Products
SS&C Technologies, Inc. (SS&C Technologies Holdings Europe S.A.R.L.) Standard Industries Inc.				97.34	92.74	500	9.44%	12.79%	В	B3	4/16/26	(268 827)	Diversified Consumer Services
SS&C Technologies, Inc. (SS&C Technologies Holdings Europe S.A.R.L.) Standard Industries Inc. Staples Inc.(IArch Merger Sub Inc.)	2019 Refinancing New Term B-1 Loan		5,834,369 0.54%			***			-		0.6		
SS&C Technologies, Inc. (SS&C Technologies Holdings Europe S.A.R.L.) Standard Industries Inc. Staples Inc. (Arch Merger Sub Inc.) Staples Inc. (Standyne)	2019 Refinancing New Term B-1 Loan Initial Term Loan		1,366,425 0.13%	94.49	95.50	425	8.98%	10.97%	B-	B2	3/17/27	13,771	Industrial Conglomerates
SSAC Technologies, Inc. (SSAC Technologies Holdings Europe S.A.R.L.) Standard Industries Inc. Staples Inc.(Arch Merger Sub Inc.) Star US Blado LLC (Sundyine) Star US Blado LLC (Sundyine)	2019 Refinancing New Term B-1 Loan Initial Term Loan Third Amendment 2028-B Term Loans		1,366,425 0.13% 1,824,935 0.18%	94.49 97.75	95.50 99.71	325	8.09%	10.97% 8.21%	B- BBB-	B2 Ba1	7/21/28	13,771 35,741	Industrial Conglomerates Hotels, Restaurants & Leisure
SS&C Technologies, Inc. (SS&C Technologies Holdings Europe S.A.R.L.) Standard Industries Inc. Staples Inc. (Arch Merger Sub Inc.) Staples Inc. (Standyne)	2019 Refinancing New Term B-1 Loan Initial Term Loan		1,366,425 0.13%	94.49	95.50			10.97%	B-	B2		13,771 35,741 63	Industrial Conglomerates

Octagon Senior Secured Credit Fund

Portfolio Detail and Total Net Asset Value as of December 31, 2022

		Non-First Lien Floating Rate	Par Value/	Position as %	Weighted Average		Nominal Spread	Current	3-Year	S&P Facility	y Moody's		Unrealized
SUP	Asset	Loans ⁷		of Portfolio ¹	Purchase Price	Market Price ²	(bps) ^{3,6}	Coupon ^{3,6}	Yield ^{4,6}	Rating		⁶ Maturity Date ⁶	Gain/(Loss) ⁵ GICS Industry Classification
ubHub Holdco Sub, LLC (fka PUG LLC and viagogo, Inc.)	USD Term B Loan		2,116,061	0.18%	96.45	83.25	350	7.88%	16.18%	B-	B3	2/12/27	(279,378) Diversified Consumer Services
mmit Behavioral Health, LLC	Initial Term Loan (1st Lien)		2,267,508	0.21%	97.00	94.50	475	9.45%	11.94%	B-	B2	11/24/28	(56,688) Health Care Providers & Services
nmit Materials, LLC	Term B-1 Loan		1.245.652	0.12%	99.60	100.06	300	7.61%	7.58%	BBB-	Ba1	12/14/27	5,735 Construction Materials
shine Luxembourg VII SARL (Nestle Skin Health)	Facility B3		4,431,268	0.42%	95.90	96.01	375	8.48%	10.22%	B-	B2	10/1/26	4,860 Household Products
IVERSE HOLDINGS, INC.	Initial Term Loans (eff 5/13/2022)		2,588,138	0.23%	95.42	87.75	700	11.58%	17.85%	B-	B3	5/13/27	(198,559) Diversified Telecommunication Services
vind Smith Cooper Intermediate Corporation (Anvil International)	Initial Term Loan		2,298,222	0.21%	88.97	90.94	500	9.42%	13.68%	B-	B3	5/28/26	45,136 Construction Materials
net Financing USD LLC	Term Loan AR Facility		1,200,000	0.12%	97.11	97.58	200	6.32%	7.30%	BB-	Ba3	4/30/28	5,567 Diversified Telecommunication Services
i TS Acquisition Company (ELO Touch Solutions, Inc.)	Term B Loan		601,799	0.06%	98.76	98.50	650	10.88%	11.56%	B	B2	12/14/25	(1,571) Technology Hardware, Storage & Peripherals
Edelman Financial Engines Center, LLC (fka THE EDELMAN FINANCIAL CENTER, LLC)	Initial Term Loan (2021)		6,351,926	0.59%	100.02	93.58	350	7.88%	10.71%	В	B2	4/7/28	(409,679) Diversified Financial Services
Hertz Corporation	Initial Term B Loan		6,326,990	0.62%	98.91	98.22	325	7.63%	8.37%	BB+	Ba3	6/30/28	(43,246) Automobiles
Hertz Corporation	Initial Term C Loan		1,209,758	0.12%	98.90	98.22	325	7.63%	8.37%	BB+	Ba3	6/30/28	(8,255) Automobiles
	Amendment No. 3 Term Loans		1,209,758	0.12%	96.78	99.00	450	8.92%	9.35%	BB+	Ba3 B2	12/19/25	
Knot Worldwide Inc. (f/k/a WeddingWire, Inc.)	Term B Loans		3.021.007	0.18%	93.57	86.69	425	8.98%	15.47%	B-	B1	4/15/28	41,505 Diversified Consumer Services
Michaels Companies, Inc. (Magic Mergeco, Inc. and Michaels Stores, Inc.)			3,021,007	0.26%	93.57	96.48	425 350	6.87%	8.34%	B+	B1	7/14/27	(207,609) Specialty Retail
LEVATOR MIDCO GMBH (fka Vertical U.S. Newco Inc. (Thyssenkrupp))	Facility B1 Loan (eff August 2021)										B1		(58,769) Industrial Conglomerates
golf International, Inc.	Initial Term Loan		1,285,801	0.13%	99.08	100.09	625	10.58%	10.54%	В		2/9/26	12,981 Hotels, Restaurants & Leisure
id LLC	Closing Date Term Loans		1,400,183	0.11%	99.28	82.25	550	8.87%	17.98%	В	B1	6/14/28	(238,404) Specialty Retail
Burch LLC	Initial Term B Loans		2,634,086	0.24%	98.76	92.67	350	7.88%	11.15%	BB-	Ba2	4/16/28	(160,605) Textiles, Apparel & Luxury Goods
s Union LLC	2021 Incremental Term B-6 Loans		4,048,274	0.40%	99.75	99.19	225	6.63%	6.96%	BBB-	Ba2	12/1/28	(22,772) Consumer Finance
sdigm, Inc.	Tranche F Refinancing Term Loans		3,670,721	0.36%	96.56	98.98	225	6.98%	7.40%	B+	Ba3	12/9/25	88,537 Aerospace & Defense
sdigm, Inc.	Tranche H Term Loan		116,022	0.01%	98.00	99.78	325	7.57%	7.66%	B+	Ba3	2/22/27	2,067 Aerospace & Defense
el + Leisure Co. (f/k/a Wyndham Destinations, Inc. (Wyndham Worldwide Corporation))	2022 Incremental Term Loans		1,230,897	0.12%	97.50	98.75	400	8.61%	9.14%	BB-	Ba3	12/14/29	15,386 Hotels, Restaurants & Leisure
ELPORT FINANCE (LUXEMBOURG) S.A.R.L.	2021 Consented Term Loans	Y	1,962,278	0.13%	90.13	68.75	500	9.73%	29.30%	CCC-	Caa3	5/26/26	(419,481) Diversified Consumer Services
ELPORT FINANCE (LUXEMBOURG) S.A.R.L.	Superpriority Term Loan		4,377,192	0.44%	100.02	100.35	150	6.23%	6.09%	B-	B3	2/28/25	14,706 Diversified Consumer Services
eo Materials Operating S.C.A. (Styron S.A.R.L.)	2021 Incremental Term Loans		2,549,976	0.24%	99.43	93.44	250	6.88%	9.71%	B+	Ba2	5/3/28	(152,745) Chemicals
n Water Holdings, Inc.	Initial Term Loans		3,495,573	0.32%	95.86	93.34	350	8.23%	11.20%	В	B1	3/31/28	(88,092) Beverages
Technologies, Inc.	2021 Refinancing Term Loan		1.989.390	0.20%	97.75	99.95	350	8.23%	8.26%	B+	Ba3	2/25/27	43,697 Transportation Infrastructure
Holdings LLC	Term B-3 Loans (eff 1/27/2021)		1,953,633	0.19%	97.43	98.88	275	7.11%	7.57%	B	B2	4/29/26	28,219 Media
	2021-2 Incremental First Lien Term Loans		809.912	0.15%	100.00	95.38	325	7.00%	8.95%	R-	B2	5/4/26	
Inc. (f/k/a The Ultimate Software Group, Inc.)			989,823	0.08%	95.50	95.38		8.73%	18 32%		B1 B2		(37,458) Software
ed PF Holdings, LLC	Initial Term Loan (2020)						400			CCC+		12/30/26	(139,194) Hotels, Restaurants & Leisure
d PF Holdings, LLC	Initial Term Loan (First Lien)		703,800	0.06%	98.00	90.00	850	13.23%	18.40%	CCC+	B2	12/30/26	(56,304) Hotels, Restaurants & Leisure
d Talent Agency, LLC	Term B Loans		2,952,575	0.29%	99.00	98.81	400	8.44%	8.94%	B+	B2	7/7/28	(5,536) Media
sion Communications Inc	2021 Replacement New First-Lien Term Loans		1,890,952	0.19%	94.96	98.63	325	7.63%	8.20%	B+	B1	3/15/26	69,367 Media
sion Communications Inc	2022 Incremental First-Lien Term Loan		1,182,518	0.12%	97.00	99.05	425	8.83%	9.23%	B+	B1	6/22/29	24,242 Media
sion Communications Inc	Initial First-Lien Term Loans		3,151,697	0.30%	98.69	97.34	325	7.63%	8.75%	B+	B1	1/31/29	(42,267) Media
Broadband Holding B.V. (UPC Financing Partnership)	Facility AX		3,883,858	0.38%	97.14	97.92	293	7.24%	8.11%	BB-	B1	1/31/29	30,017 Diversified Telecommunication Services
o Holdings LLC	Initial Term Loan		2,689,319	0.26%	98.20	96.79	500	9.73%	11.16%	В	B2	1/21/29	(37,826) Professional Services
Fone Systems, Inc.	Term Loans (First Lien)		6,551,924	0.60%	97.86	92.14	400	8.36%	11.91%	B-	B3	8/20/25	(374,433) Diversified Financial Services
scend Holding Corp.	Term B-1 Loans		8,172,557	0.81%	99.89	99.56	400	8.38%	8.57%	B+	B2	8/27/25	(26,398) Health Care Providers & Services
tex Aerospace Services Corporation	2022 Incremental Term Loan		3,184,652	0.31%	95.00	99.34	400	8.42%	8.70%	B+	B1	12/6/28	138,341 Aerospace & Defense
I Corp	Initial Term Loan		765.894	0.07%	98.00	94.84	500	9.38%	11.71%	B+	B3	7/30/28	(24,172) Commercial Services & Supplies
at Inc	Initial Term Loans		3,029,554	0.29%	97.01	97.55	450	8.94%	10.00%	BB	Ba3	3/4/29	16,407 Diversified Telecommunication Services
ory Capital Holdings, Inc.	2021 Incremental Term Loans		1,032,050	0.10%	99.50	98.88	225	5.96%	6.41%	BB-	Ba2	12/29/28	(6,445) Capital Markets
in Media Bristol LLC	Facility Q Advance		4,000,000	0.39%	98.55	99.28	325	7.57%	7.87%	BB-	Ba3	1/31/29	29,000 Diversified Telecommunication Services
				0.39%	99.98	96.80	375			B R	B23		
usa Corporation (Austin Bidco Inc.)	Closing Date Term Loans		974,262 3.045.085	0.09%	99.98	96.80		8.13% 8.17%	9.51%		B2 B2	2/11/28	(30,977) IT Services
isa Corporation (Austin Bidco Inc.)	Incremental Term B-1 Loans		0,0.0,000	0.00.0	50.20		375			В		2/15/29	(42,376) IT Services
erbridge Midstream Operating LLC	Initial Term Loans		1,781,364	0.17%	95.14	96.39	575	9.13%	10.72%	B-	B3	6/22/26	22,352 Energy Equipment & Services
er-Stephen Products LLC (Weber Grills)	2022 Incremental Term B Loans		3,889,999	0.33%	97.63	86.00	425	8.67%	15.51%	CCC+	Caa1	10/30/27	(452,224) Household Durables
BMD HEALTH CORP. and MH SUB I, LLC (fka Internet Brands and Micro Holding Corp)	2020 June New Term Loans		4,358,392	0.42%	97.98	97.39	375	8.13%	9.24%	В	B2	9/13/24	(25,397) Software
MD HEALTH CORP. and MH SUB I, LLC (fka Internet Brands and Micro Holding Corp)	Amendment No. 2 Initial Term Loan (First Lien)		1,000,000	0.10%	97.35	97.36	375	8.13%	9.26%	В	B2	9/13/24	69 Software
tabrands LLC (Whataburger)	Initial Term B Loan		1,928,372	0.19%	99.50	96.88	325	7.63%	8.96%	В	B2	8/3/28	(50,620) Hotels, Restaurants & Leisure
e Cap Buyer, LLC	Initial Term Loan (White Cap)		3,900,168	0.38%	98.53	96.88	375	8.07%	9.41%	В	B2	10/19/27	(64,509) Building Products
le Earth Brands Inc	Term Loans		3,930,000	0.36%	99.00	92.38	450	9.23%	12.74%	В	B2	2/5/28	(260,363) Food Products
Open West Finance, LLC	Term B Loans		2,234,020	0.22%	99.51	97.00	300	7.58%	8.85%	BB	B1	12/20/28	(56,137) Diversified Telecommunication Services
iam Morris Endeavor Entertainment, LLC and IMG Worldwide Holdings, LLC	Term B-1 Loan (First Lien)		5,418,985	0.53%	93.18	98.10	275	7.14%	7.92%	В	B3	5/18/25	266,708 Media
dstream Services, LLC (Windstream Corporation)	Initial Term Loan		3,184,596	0.29%	98.36	90.95	625	10.67%	15.05%	B-	B3	9/21/27	(235,834) Diversified Telecommunication Services
G Acquisition Corn (Warner Music)	Tranche G Term Loan		3,000,000	0.30%	97.41	99.00	213	6.51%	6.91%	RR+	Ba3	1/20/28	47,763 Media
CityMD Bidco, LLC (CityMD)	Second Amendment Incremental Term Loans		5,849,297	0.58%	98.83	99.92	325	7.63%	7.67%	B.	B1	12/22/28	63,908 Health Care Providers & Services
				0.30%	\$1.062.264.133	\$1.006.464.571	373bps	8.08%	11.20%		2380	5.05 vrs	
al Portfolio Assets ⁶			\$1,085,877,189 Weighted A	erage Price		\$1,006,464,571 92.84	3/30ps	8.08%	11.20%		2380	5.05 yrs	(\$54,215,917)
Asset Value Detail as of December 31, 2022													
(settle date basis)					63,989,707								
rket Value of Loan, Bond & Equity Portfolio Assets ⁸					1,006,464,557								
rued Interest Receivable					14,091,346								
to Brokers (unsettled trades)					(31,288,768)								
scriptions Received in Advance													
rued Expenses					(126,653)								
The second secon					(3.163.074)								
ributions (Income/Net capital gains) Payable to Distributing Sub-Series Interests/Share	5												
otal Portfolio Net Asset Value as of December 31, 2022					\$1,049,967,116								

*This communication is (i) intended only for the person or entity to which it is addressed, (ii) confidential and may not be copied or retransmitted without permission and (iii) does not constitute an offer to sell securities or the solicitation of an offer to invest in the Fund or any investment product. Any such offer or solicitation may only be made by means of delivery of any approved offering memorandum. The information above sets forth the portfolio details as of December 31, 2022. In the future, the Fund may invest in different issuers at different positions sizes than as set forth above. Additionally, the Fund's portfolio will vary over time. Returns are stated in US dollars. Past performance is not necessarily indicative of future results.

- 1) Amount is calculated by dividing the Market Value of each position by the total Market Value of the Fund's loan, bond, and equity portfolio as of the reporting date. Market Value represents the par value of a position multiplied by the Market Price (as defined in Note 2 below).
 2) Source: Markit. Market Price represents the mean of bid/ask prices.
- 3) For floating-rate assets, Nominal Spread represents the interest, rate paid in excess of the base rate (does not account for base rate (loors). Total Portfolio Average (Nominal) Spread calculation excludes non-floating-rate assets. For any loan positions paying PIK (payment-in-kind) interest, Nominal Spread and Current Coupon reflect only the cash-pay interest portion. Current Coupon calculations reflect the impact of base rate floors.
- 4) 3-Year Yield is calculated by dividing the position's discount/premium (equal to 100 less the position's Market Price) by three and adding the discount/premium to the Current Coupon. The resulting amount is then divided by the Market Price (as defined in Note 2 above).
- 5) Unrealized Gain/(Loss) is calculated by multiplying the par value by the result of subtracting the purchase price, unadjusted for any amortization of premium or discount, from the Market Price (as defined in Note 2 above).
 6) Equity positions (CEC Brands, LLC, Crown Finance US, Inc. (Cineworld), Lealand Finance Company B.V. (McDermott International), New Constellis Holdings Inc., and Southcross Energy Partners LLC) and three defaulted assets (Crown Finance US, Inc. (Cineworld) and Endo Pharmaceuticals Holdings Inc.) are excluded from the total portfolio calculations for Nominal Spread, Current Coupon, 3-Year Yield, Moody's WARF and Maturity Date.
 7) Non-First Lien Floating Rate Loans include second lien loans, fixed rate loans, unsecured loans, bonds, and equity positions.

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Fund Name	Octagon Senior Secured Credit Fund
As of Date	31-Dec-22

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Information below is based on the Market Value NAV of the Fund's portfolio (inclusive of trade date cash) on a trade date basis, unless otherwise noted. Information below includes any defaulted assets in the portfolio, unless otherwise noted. Please refer to the Fund's portfolio & NAV detail schedule (separately provided) for further information on the Fund's underlying assets.

Summary Portfolio Statistics	
Number of Issuers (inclusive of trade date cash)	274
Number of Instruments (inclusive of trade date cash)	359
Average Price ¹	92.84
% Floating Rate Assets (Market value) ⁴	96.75%
Average (Nominal) Spread ^{2,4}	373bps
Average Coupon (Par Value) ^{2,4}	8.08%
Current Yield (Coupon/Market Price) ⁴	8.68%
Discount Margin 3 year ^{3,4}	11.20%
Average Maturity (excludes trade date cash) ⁴	5.05 years
Average Rating	В
Par Value (of Loan, Bond, and Equity Positions)	\$1,085,877,189
Market Value (of Loan, Bond, and Equity Positions)	\$1,006,464,571
Fund Net Asset Value	\$1,049,967,116

- 1) Represents average market price (excluding equity positions), which is presented as the mean of bid/ask prices. Source: Markit.
- 2) For floating rate assets, Average (Nominal) Spread represents the interest rate paid in excess of the base rate (does not account for base rate floors). Average (Nominal) Spread calculation excludes non-floating rate assets. For any loan positions paying PIK (payment-in-kind) interest, Nominal Spread and Current Coupon reflect only the cash-pay interest portion. Current Coupon calculations reflect the impact of base rate floors.
- 3) Discount Margin 3-Year (also referred to as 3-Year Yield) is calculated by dividing the position's discount/premium (equal to 100 less the position's Market Price) by three and adding the discount/premium to the Current Coupon. The resulting amount is then divided by the Market Price (as defined in Note 1 above).
- 4) Calculation excludes defaulted assets and equity holdings in the Fund's portfolio.

Maturity Distribution (excludes defaulted assets and equity holdings)	
Trade Date Cash	3.11%
0-1	0.28%
1-2	2.58%
2-3	7.30%
3-4	7.97%
4-5	17.13%
5-6	35.99%
6-7	22.74%
7-8	1.59%
8-9	0.04%
9-10	0.00%
10+	0.00%
Spread Distribution (Base Rate + Bps) (excludes defaulted assets and equity holdings	s)
0-50	0.00%
51-100	0.06%
101-150	0.42%
151-200	1.75%
201-250	10.57%
251-300	12.85%
301-350	23.35%
351-400	16.96%
401-450	14.05%
451-500	7.34%
501-550	3.00%
551-600	0.42%
601-650	0.87%
651-700	0.60%
700+	1.40%
Fixed Rate Assets	1.99%
Trade Date Cash	3.11%

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Rating Distribution (S&P / Moody's) (excludes defaulted assets and equity holdings)	
AAA / Aaa	0.00% / 0.00%
AA+ / Aa1	0.00% / 0.00%
AA / Aa2	0.00% / 0.00%
AA- / Aa3	0.00% / 0.00%
A+ / A1	0.00% / 0.00%
A / A2	0.00% / 0.00%
A- / A3	0.00% / 0.00%
BBB+ / Baa1	0.00% / 0.16%
BBB / Baa2	0.00% / 0.19%
BBB- / Baa3	3.52% / 3.45%
BB+ / Ba1	5.75% / 5.17%
BB / Ba2	6.15% / 7.81%
BB- / Ba3	16.59% / 13.20%
B+ / B1	17.05% / 22.00%
B / B2	22.28% / 30.45%
B-/B3	17.75% / 9.17%
CCC+ / Caa1	3.10% / 1.60%
CCC / Caa2	0.83% / 1.34%
CCC- / Caa3	0.32% / 0.51%
CC / Ca	0.25% / 0.03%
C/C	0.03% / 0.12%
D/D	0.00% / 0.00%
NR	2.01% / 0.44%
WR	0.00% / 0.00%
Trade Date Cash	3.11% / 3.11%
Asset Class Distribution	
1st Lien Floating Rate Loans¹	92.28%
2nd Lien Floating Rate Loans ²	1.36%
Fixed Rate Loans	0.19%
Bonds	1.80%
Defaulted Assets	0.21%
Equity	0.02%
Cash (Trade Date)	3.11%
1) Excludes cash.	
2) Also includes unsecured loans.	

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Industry Distribution (by GICS Industry Classification)	
Aerospace & Defense	2.57%
Air Freight & Logistics	0.94%
Airlines	0.19%
Auto Components	1.34%
Automobiles	2.65%
Banks	0.53%
Beverages	0.31%
Building Products	2.47%
Capital Markets	2.19%
Chemicals	2.25%
Commercial Services & Supplies	3.06%
Communications Equipment	0.42%
Construction & Engineering	1.94%
Construction Materials	0.55%
Consumer Finance	0.38%
Containers & Packaging	2.06%
Distributors	0.79%
Diversified Consumer Services	5.29%
Diversified Consumer Services Diversified Financial Services	2.48%
	== 10.70
Diversified Telecommunication Services	9.24%
Electric Utilities	0.59%
Electrical Equipment	0.21%
Electronic Equipment, Instruments & Components	0.36%
Energy Equipment & Services	0.27%
Food & Staples Retailing	0.48%
Food Products	1.15%
Health Care Equipment & Supplies	1.49%
Health Care Providers & Services	7.73%
Health Care Technology	1.87%
Hotels, Restaurants & Leisure	4.58%
Household Durables	2.01%
Household Products	0.85%
Independent Power/Renewable Electricity Producers	0.19%
Industrial Conglomerates	1.83%
Insurance	4.03%
Internet and Catalog Retail	0.35%
IT Services	1.37%
Life Sciences Tools & Services	0.23%
Machinery	0.48%
Media	3.27%
Oil, Gas & Consumable Fuels	2.38%
Pharmaceuticals	0.99%
Professional Services	1.77%
Real Estate Investment Trusts (REITs)	0.12%
Real Estate Management & Development	0.38%
Road & Rail	0.28%
Semiconductors & Semiconductor Equipment	1.64%
Software	6.49%
Specialty Retail	2.73%
Technology Hardware, Storage & Peripherals	0.64%
Textiles, Apparel & Luxury Goods	1.67%
Transportation Infrastructure	0.19%
Wireless Telecommunication Services	1.61%
Trade Date Cash	3.11%
2 200	

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Country Allocation	
US (includes cash)	95.82%
Canada	0.79%
UK (includes Bermuda)	0.24%
Europe ex UK	2.12%
Asia	0.00%
Other	0.00%
Currency Allocation	
USD	100.00%
CAD	0.00%
GBP ¹	0.00%
EUR	0.00%
JPY	0.00%
Other	0.00%
1) One GBP denominated equity position accounts for 0.002% of the Fund's NAV.	
20 Largest Issuers	
Asurion, LLC	1.68%
Acrisure LLC	1.25%
Athenahealth Group, Inc. (VVC Holding Corp)	1.23%
Sable Int'l Finance Ltd and Coral-US-Co-Borrower LLC (Cable & Wireless)	1.18%
CSC Holdings, LLC (Escrow: Neptune Finco Corp.) (Cablevision)	1.17%
Medline Borrower, LP (fka Mozart Debt Merger Sub Inc. and Medline Industries)	1.06%
Mileage Plus Holdings, LLC and Mileage Plus Intellectual Property Assets, Ltd.	1.04%
Intelsat Jackson Holdings S.A.	1.02%
DG Investment Intermediate Holdings 2, Inc. (Gopher Sub Inc.) (Convergint)	1.01%
Entegris, Inc.	0.98%
Sabre GLBL Inc	0.92%
Conduent Business Services, LLC (f/k/a Xerox Business Services, LLC)	0.91%
Numericable US LLC	0.90%
Harbor Freight Tools USA, Inc.	0.88%
Informatica Corporation	0.86%
Allied Universal Holdco LLC (fka USAGM Holdco, LLC)	0.84%
RADIATE HOLDCO, LLC, (RCN Grande)	0.84%
McAfee Corp.	0.83%
BrightView Landscapes, LLC (fka The Brickman Group LTD. LLC)	0.82%
Citadel Securities LP	0.80%
Issuers with Rating below Caa2 / CCC	

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Moody's

- 1) Envision Healthcare Corp. (f/k/a Emergency Medical) Second Out Term Loan (C)
- 2) Equinox Holdings, Inc. New Initial Term Loan (Second Lien) (New) (Ca)
- 3) MLN US HoldCo LLC (MITEL) Term B-1 Loans (2nd Lien) (Caa3)
- 4) Rising Tide Holdings, Inc. (Marine One Merger Sub, Inc. and West Marine) Initial Term Loans (Caa3)
- 5) TRAVELPORT FINANCE (LUXEMBOURG) S.A.R.L. 2021 Consented Term Loans (Caa3)

S&P

- 1) Avaya Inc. 6.125 % 09/15/2028 053499AL3 144A (CC)
- 2) Avaya Inc. Tranche B-1 Term Loan (eff 9/25/2020) (CC)
- 3) Avaya Inc. Tranche B-2 Term Loans (CC)
- 4) Avaya Inc. Tranche B-3 Term Loans (CC)
- 5) DIAMOND SPORTS GROUP, LLC (Sinclair Broadcast Group Inc) Second Lien Term Loan (CCC-)
- 6) Equinox Holdings, Inc. New Initial Term Loan (Second Lien) (New) (C)
- 7) Equinox Holdings, Inc. Term B-1 Loans (CCC-)
- 8) New Constellis Holdings Inc. New Second Lien Term Loans (eff 3/27/2020) (CCC-)
- 9) TRAVELPORT FINANCE (LUXEMBOURG) S.A.R.L. 2021 Consented Term Loans (CCC-)

Please refer to the Defaulted Issuers section below for the remaining assets rated below CCC by S&P.

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Defaulted Issuers

- 1) Crown Finance US, Inc. (Cineworld) Initial Dollar Tranche Term Loan (D / NR)
- 2) Crown Finance US, Inc. (Cineworld) Second Amendment Dollar Tranche Term Loan (D / NR)
- 3) Endo Pharmaceuticals Holdings Inc. 2021 Term Loans (NR / NR)

Summary Index Statistics	
Morningstar LSTA BB/B Leveraged Loan Index ¹	
Average Rating (Par)	B+ / B
Weighted Average Nominal Spread ²	354bps
Discounted Spread (3-year life) ²	5.91%
Yield to Maturity	9.52%
Years to Maturity	4.56 years
Weighted Average Bid Price	93.96
Number of Facilities	1,211
Morningstar LSTA Leveraged Loan Index ¹	
Average Rating (Par)	B+ / B
Weighted Average Nominal Spread ²	358bps
Discounted Spread (3-year life) ²	645bps
Yield to Maturity	9.99%
Years to Maturity	4.48 years
Weighted Average Bid Price	92.44
Number of Issuers	1.175

1. Source: The Morningstar LSTA US Leveraged Loan Index (formerly the S&P/LSTA Leveraged Loan Index) (the "LLI") is a market-value weighted index designed to measure the performance of the US leveraged loan market, the index universe comprises syndicated, senior secured, US-dollar denominated leveraged loans covered by Morningstar PitchBook/LCD, a Morningstar Company. Loan facilities included in the LLI must have a one year (at inception) minimum term, an initial minimum spread of L/S+125 bps, and a minimum size of \$50mm (initially funded). Refinitiv/LPC Mark-to-Market Pricing is based on bid/ask quotes gathered from dealers and is not based upon derived pricing models. The index uses the average bid for its market value calculation. It is not possible to invest directly in this index. The Morningstar LSTA BB/B Leveraged Loan Index is a sub-index of the LLI and is comprised of facilities with a rating of 'BB+' to 'B-' from Standard & Poor's. It is impossible to invest directly in the Morningstar LSTA BB/B Leveraged Loan Index. Performance for the recent year has been achieved during a period of extreme economic instability; Past performance is not a prediction or guarantee of future results.

2. Quoted as spread over the base rate.

FUND PERFORMANCE

- For the quarter ended December 31, 2022, the Fund returned 2.59% to investors (net of expenses and fees for the highest fee class)¹ and 2.76% gross¹ compared to 3.12% for the Fund's primary benchmark, the Morningstar LSTA BB/B Leveraged Loan Index ("BB/B Index")² and 2.74% for the Fund's secondary benchmark, the Morningstar LSTA US Leveraged Loan Index ("LLI").³
 - The Fund's inception-to-date ("ITD") Sharpe Ratio ranks in the top fourth percentile and its ITD gross return ranks in the top ninth percentile of the eVestment US Floating-Rate Bank Loan Fixed Income Universe as of September 30, 2022.^{4,5}
- Since its February 2012 inception through December 31, 2022, the Fund has returned 4.40% (net)¹ on an annualized basis, outperforming both the BB/B Index² (3.96%) and the LLI³ (4.03%) over the same period, while demonstrating significantly lower volatility than either benchmark.⁵
 - ITD as of December 31, 2022, the Fund has captured 85.6% of the downside of the BB/B Index², while capturing 99.1% of the upside.^{5,6}
- The Fund generated robust cash distribution rates of 1.71% and 5.03% for the fourth quarter and year-ended December 31, 2022, respectively, benefitting from rising LIBOR and SOFR base rates over the course of 2022.⁷
 - The Fund's average all-in coupon rate of 8.08% as of December 31, 2022 represents the highest in the Fund's history and translates to a current yield of 8.68%.
- The weighted average price of holdings in the Fund's portfolio was 92.84 as of December 31, 2022, indicating the potential for meaningful capital appreciation in the underlying portfolio.
- The Fund has maintained its very short interest rate duration profile (0.25 years), with floating rate assets comprising 96.8% of the portfolio as of December 31, 2022.8
- In January 2023, the Fund returned 2.49% net¹; the Fund has produced a positive 0.23% return (net)¹ in the trailing twelve month period through January 31, 2023.

HISTORICAL FUND PERFORMANCE VS. BENCHMARK INDICES as of December 31, 2022 2016 2018 2019 1Q22 2Q22 3Q22 4Q22 2022 ITD⁵ Senior Secured Credit 0.86% 59.93% 8.37% 6.44% 2.01% 0.23% 9.49% 5.96% 1.51% 8.00% 4.24% 4.36% 4.98% 1.01% 1.42% 0.14% 2.59% -1.99% Fund Net Returns1 Senior Secured Credit 9.47% 7.68% 3.35% 1.70% 10.49% 6.65% 2.17% 8.70% 4.92% 5.04% 1.01% 76.25% Fund Gross Returns¹ LSTA BB/B Leveraged -0.03% -4.41% 1.53% 3.12% 0.05% 52.85% 6.45% 4.96% 1.47% 0.55% 9.23% 3.91% 0.38% 9.12% 3.00% 4.67% Loan Index "BB/B"2 LSTA Leveraged 7.31% 5.29% 1.60% -0.69% 10.16% 4.12% 0.44% 8.64% 3.12% 5.20% | -0.10% | -4.45% | 1.37% | 1.03% Loan Index "LLI"3

Loan maex LLi				
HISTORICAL FUND RI	SK VS. RETURN	SUMMARY as	of December	31, 2022
	Fund Net	Fund Gross		
Performance	Performance ¹	Performance ¹	BB/B Index ²	LLI ³
5Y Annualized Return	3.17%	3.84%	3.39%	3.31%
5Y Annualized Volatility (Standard Deviation)	5.93%	5.93%	7.21%	7.20%
10Y Annualized Return	3.97%	4.88%	3.68%	3.67%
10Y Annualized Volatility (Standard Deviation)	4.43%	4.43%	5.31%	5.35%
ITD ⁵ Annualized Return	4.40%	5.33%	3.96%	4.03%
ITD ⁵ Annualized Volatility (Standard Deviation)	4.27%	4.27%	5.11%	5.15%
ITD ⁵ Sharpe Ratio ¹⁰	0.86	1.08	0.63	0.64
Upside Capture ⁶ (vs. LSTA BB/B Index)	99.13%	108.62%	N/A	N/A
Downside Capture ⁶ (vs. LSTA BB/B Index)	85.61%	78.22%	N/A	N/A
		P	lease refer to the l	last four pages o

PORTFOLIO STATISTIOns of December 31, 202	
Fund Net Asset Value	\$1.05bn
Nominal Spread ¹¹	373 bps
Average Yield (Discount Amortized Over 3 Years)	11.20%
Average Mark Price	92.84
Average Moody's/S&P Facility Rating	B2 / B
Weighted Average Duration ⁸	0.25 years
Floating-Rate Assets as % of NAV	96.8%
Number of Issuers	272
Weighted Average Facility Size	\$1.80bn
Largest Issuer Concentration	1.68%

4Q22 FUND THEMES & PERFORMANCE:

- After a soft September, the loan market rally resumed in the fourth quarter as "better-than-feared" corporate earnings, signs of falling inflation rates, and the expectation that the Fed has neared the end of its rate hikes buoyed investor sentiment. Loans benefited further from limited new issue volumes pushing secondary market prices higher. The Fund produced net returns¹ of 1.01%, 1.42%, and 0.14% in October, November, and December 2022, respectively. With its strong fourth quarter performance, the Fund nearly recouped the entirety of the losses sustained in the first half of 2022, and the 2.59% 4Q 2022 net return¹ marked the Fund's highest since 4Q 2020.
 - In the fourth quarter of 2022, the Fund (on a gross basis¹) lagged the BB/B Index² by 36 bps and outperformed the broader LLI³ by 2 bps. Relative to the BB/B Index², the Fund's performance was negatively impacted by an allocation to assets rated CCC+ or lower. The Fund has always maintained exposure to CCC assets, though our average weighting (3.8%) was well below that of the broader LLI³ (5.2%) in the quarter. Despite the modest allocation, a few of the Fund's CCC rated holdings had outsized negative impacts on performance. Investors remain acutely focused on increasing credit risk and changing outlooks, and lackluster financial results or negative ratings actions continue to drive steep price declines of affected issues. Broadly, we continued to upgrade the credit quality of the portfolio in the fourth quarter and used our research focus to avoid many credit problems; in the sixty-day period ending December 31, 2022, the Fund avoided 24 of the 25 largest price decliners in the loan market.¹² We have, however, taken some higher risk positions when our bottom-up credit work has afforded us confidence that the asset will recover in price and that our patience and conviction will be rewarded.
 - As described in recent quarterly communications dating back to our 2021 updates we have been thematically curbing the Fund's risk profile in recent periods, paring our CCC exposure where appropriate and reducing the Fund's second lien allocation to 1.4% by year-end. In an effort to proactively manage risk, we have additionally reduced the Fund's B- exposure to 17.8% (vs. 24.5% in the LLI³). Despite our efforts, allocations to CCC assets and second lien loans had a meaningfully negative impact on returns in 2022. The Fund's small allocation in high yield bonds (averaging 2.0% in 2022) was also an impactful headwind in a year when high yield bonds drastically underperformed loans.
- Consistent with prior periods, in the fourth quarter we endeavored to position the portfolio more defensively in the face of a softening credit outlook and elevated market volatility. We increased the Fund's exposure to more defensive, higher quality businesses that we believe will remain relatively insulated from the pressures of higher interest rates and slowing growth, such as insurance brokerages and borrowers in the telecommunications and cable industries. We recognized ample opportunities to source high quality paper at relative discounts via both the new issue market and secondary trading, purchasing \$54mm of assets rated BB- or higher (54% of \$100mm of total purchases) at a weighted average price of 97.63. Meanwhile, the Fund sold \$61mm of assets in the quarter, more than half of which were rated B or lower. Selectively, we realized losses on sales of lower quality assets with the intention of minimizing downside and mitigating portfolio tail risk.
- Neither the Fund nor the broader loan market experienced any new defaults in the fourth quarter. The Fund ended 2022 at a trailing 12-month default rate of 0.38%¹³, just over half of the LLI's LTM default rate of 0.72%.¹⁴ The Fund's average calculated recovery on defaulted assets was 59% in 2022.¹⁵ As of year-end, defaulted assets comprised 0.21% of the Fund's portfolio. It is worth noting that the Fund's net asset value as of December 31, 2022 reflects the marked down trading prices of defaulted assets, which carried a weighted average mark of 54.51 as of quarter-end.
- While 2022 marked the first year the Fund's annual return has lagged that of the BB/B Index² on a gross basis, we were pleased with the relative stability of loans in an incredibly volatile year for most markets. Looking to 2023, we believe that sustained market dispersion should reveal attractive investment opportunities for bottom-up credit pickers like Octagon. We continue to focus on improving credit quality and reducing tail risks, but are also taking advantage of opportunities created by an environment of fear and panic in markets by selectively adding exposure where we have well-grounded, fundamental conviction. With relatively depressed loans prices and historically high yields, we believe that the Fund has potential for strong performance in 2023. Historically, the loan market has performed well following years of negative returns, and the Fund is off to a strong start with a 2.49% net return¹ in January 2023.

MARKET UPDATE & OUTLOOK:

- The leveraged loan market ended a volatile year on a positive note, with the LLI returning 2.74% in the fourth quarter of 2022 the index's highest quarterly return in two years. Driven by rebounding trading levels, loans returned 1.03% in October, 1.24% in November, and 0.44% in December. Loan prices peaked in mid-November (at 93.06 on November 15, 2022) before retreating to 92.44 at year-end. It was encouraging to see loan prices increase quarter-over-quarter in 4Q after sequentially declining in the three preceding quarters, though the LLI's average bid price remained meaningfully below the 2021 year-end level of 98.64. All told, loans produced an annual total return of -0.60% in 2022, significantly outperforming most other asset classes in a challenging year. Loans benefited from their floating-rate nature and senior secured status in a year which saw a dramatic increase in interest rates. 16
 - Loans lagged high yield bonds, investment grade credit, and equities in the fourth quarter as markets bounced in October and November. For the full-year 2022, however, loans drastically outperformed other asset classes, as summarized below:

Performance by Asset Class as of December 31, 2022								
Oct-22 Nov-22 Dec-22 4Q22 202								
Loans (Morningstar LSTA LLI)	1.03%	1.24%	0.44%	2.74%	-0.60%			
HY Bonds (ICE BofA HY Index)	2.85%	1.87%	-0.75%	3.98%	-11.22%			
IG Bonds (ICE BofA US Corp Index)	-1.11%	4.92%	-0.21%	3.53%	-15.44%			
S&P 500 Index	7.99%	5.38%	-5.90%	7.08%	-19.44%			
10Y UST Bonds	-1.88%	3.74%	-1.12%	0.65%	-16.28%			

- As volatility roiled financial markets particularly in the second half of 2022 a flight-to-quality among investors drove substantial performance dispersion across the loan market. By and large, higher rated loans remained well-bid; for the full-year 2022, BBB rated loans returned 3.25% and BB loans returned 2.99%. Meanwhile, CCC rated loans languished in a risk-averse environment, returning -12.00% in 2022. In our third quarter update, we noted that investors had become intently focused on differentiating risk. In the fourth quarter, investors' heightened risk sensitivity was evidenced by the bifurcated performance in the loan market. At year-end, BB rated loans traded at an average bid of 97.61, nearly 24 points above CCC rated loans wides not reached since April 2020. Further, loans within the single-B cohort experienced vastly different outcomes in 2022. Loans rated B+ produced a positive annual return of 1.96%, but B- loans (i.e., with generally weaker credit profiles and a greater risk of downgrade to CCC) failed to find investor support and declined -3.23% in 2022. As of December 31, the average bid price for B+ rated loans was nearly 7 points higher than the average B- loan price. ¹⁶
- In the wake of a default-free fourth quarter, the trailing 12-month loan default rate ended the year at 0.72%, well below the historical long-term average of 2.7% and inside most sell-side forecasts for 2022. Meanwhile, indicators of credit stress continue to rise; as of December 31, 2022, 7.4% of performing loans in the LLI were bid below 80, up from 5.8% as of September 30. With two new defaults in January, the loan market's default rate has ticked up 8, and loan defaults are widely anticipated by Octagon and others to move closer to the long-term market average of 2.7% in 2023 and 2024, however, ratings downgrades may more acutely pressure the loan market in the near-term. In the fourth quarter, S&P downgraded 86 facilities in the LLI against 31 upgrades, resulting in a 3-month downgrade-to-upgrade ratio of 2.77x the highest since September 2020. Though we are early on into earnings season, we expect ratings downgrades to increase in the first half of 2023 as more companies miss earnings expectations. Elevated downgrade activity may put further downward pressure on lower rated asset prices as loan investors especially CLOs seek to proactively manage their CCC allocations.
- Firmer market conditions in October and November supported a modest resurgence of loan issuance. Following a subdued third quarter, \$35.7B of primary loan supply entered the market in the fourth quarter (vs. \$21.2B in 3Q), largely in the form of opportunistic transactions from high quality issuers seeking to push out near-term maturities. Borrowers rated BB- or higher accounted for 49% of new loan volume in 4Q, the highest such percentage since the GFC and indicative of investors' preference for higher quality assets.¹⁹
 - Annual new loan issuance totaled \$225.1B in 2022, a 12-year low and a 63% decline from 2021's record high of \$614.6B.¹⁹ The current forward calendar remains light, and attractive new issue opportunities are limited.

MARKET UPDATE & OUTLOOK, continued:

- eight consecutive months of outflows, with total withdrawals of -\$11.4B in 2022.²⁰ New issuance of CLOs recently the dominant buyers in the loan market declined to \$22.6B in the fourth quarter from \$33.6B of new issuance in the third quarter.¹⁹ In many instances, the slower pace CLO issuance in 4Q was indicative of challenging deal economics. The uncertain economic outlook, in tandem with a less active CLO AAA investor base, pushed liability spreads wider across the CLO capital structure; CLO AAA spreads widened to Sofr+227 bps in 4Q, 90 bps wide of levels in the first quarter of 2022.¹⁹ Despite rising liability costs squeezing the CLO arbitrage opportunity as the year progressed, \$129B of new CLO formation for the full year 2022 marked the second busiest calendar year on record, behind only \$187B in 2021.¹⁹ Thus far in 2023, broadly tighter liability spreads have given way to a new wave of issuance, with \$10.5bn of new CLOs pricing YTD through February 6, 2023.²¹
- The loan market is off to a strong start thus far in 2023. Through February 13, 2023, loan prices have climbed 2.22 points from year-end levels and the LLI has gained 3.56% year to-date, yet loan yields remain very compelling. We believe the rally in the opening weeks of 2023 is attributable to a few key factors: year-end prepayments, a very light new issue calendar, and lower loan prices offering attractive relative value vs. high yield bonds. We anticipate that continued deterioration in credit fundamentals will drive an increase in loan downgrades and defaults. In the near-term, we favor continuing a relatively defensive posturing in our portfolios, and remain acutely focused on proactively managing credit risk. Given high LIBOR & SOFR base rates, absolute yields for loans are quite attractive (9.00% average 3-year yield as of February 3, 2023). While past performance is not an indication of future results, historically, loans have produced a strong annual return following a year of negative annual performance. We believe that a prudent investment approach can generate healthy returns without assuming excessive credit risk, despite expectations for continued volatility in 2023.

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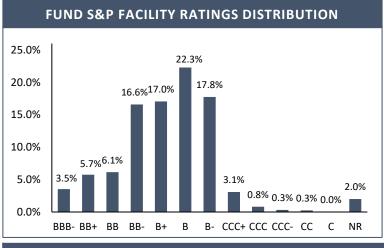
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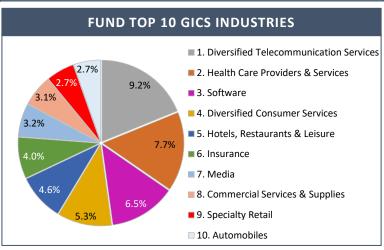
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2023 THIRD PARTY RESEARCH/STRATEGY TEAM PROJECTIONS as of January 3 rd , 2023*										
Institution	US GDP Growth	10Y UST Yield	Lev. Loan Default Rate	HY Bond Default Rate	Leveraged Loan Return	HY Bond Return	US Inst. LL New Issuance	US Inst. HY New Issuance	US CLO New Issuance	
2022 Actual	TBD	3.88% ³⁹	0.72% ¹⁹	1.65% ²⁰	-0.60% ¹⁹	-11.09% ²⁰	\$225B ¹⁹	\$107B ²⁰	\$129B ¹⁹	
Moody's ²³	0.40%		5.0	0%						
Fitch ^{24,25}	0.20%		2.00%-3.00%	2.50%-3.50%						
JP Morgan ²⁶	0.40%	3.40%	3.50%	3.00%	8.00%	8.00%	\$300B	\$200B	\$120B	
BofA ^{27,28,29}	-0.40%	3.25%	3.50%	5.00%	5.10%	6.70%-7.30%	\$175B	\$180B	\$90В	
Citi ^{30,31,32,33}	0.70%	3.25%	3.30%	5.70%	2.50%	4.00%	\$300B	\$190B	\$120B	
CS ^{34,35,36}	0.80%	4.10%	3.00%	3.50%-4.00%	5.50%-6.00%	7.00%-8.00%	\$250B	\$185B	\$95B	
Barclays ³⁷	0.50%		5.00%-6.00%	5.00%-6.00%	5.00%-6.00%	4.00%-5.00%	\$240B-\$280B	\$170B-\$210B	\$90B-\$120B	
MS ³⁸	0.30%	3.50%	3.00%	4.00%	3.60%	5.40%	\$250B-\$275B	\$175B-\$200B	\$100B	
2023 Range	-0.40%-0.80%	3.25%-4.10%	2.00%-6.00%	2.50%-6.00%	2.50%-8.00%	4.00%-8.00%	\$175B-\$300B	\$170B-\$210B	\$90B-\$120B	
2023 Avg. ⁴⁰	0.36%	3.50%	3.66%	4.40%	5.08%	6.07%	\$258B	\$189B	\$105B	

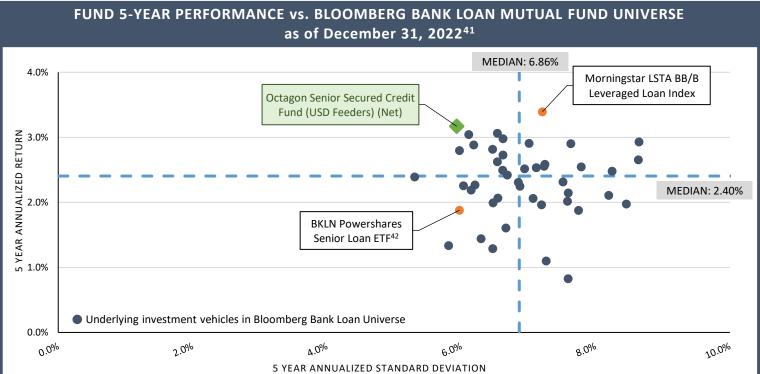
 $^{{\}it *Represents information from market participants and does not constitute Octagon's projections.}\\$





10 LARGEST FUND ALLOCATIONS by ISSUER*							
Issuer Name	GICS Industry Classification	Market Value,	Weight, % of				
issuel Ivallie	GICS IIIuusti y Classiiicatioii	12/31/22	Fund NAV				
Asurion, LLC	Insurance	\$17.6mm	1.68%				
Acrisure LLC	Insurance	\$13.1mm	1.25%				
Athenahealth Group, Inc.	Health Care Technology	\$12.9mm	1.23%				
Sable Int'l Finance Ltd and Coral-US-Co-Borrower LLC	Wireless Telecommunication Services	\$12.4mm	1.18%				
CSC Holdings, LLC (Cablevision)	Diversified Telecommunication Services	\$12.2mm	1.17%				
Medline Borrower, LP	Health Care Equipment & Supplies	\$11.1mm	1.06%				
Mileage Plus Holdings, LLC	Diversified Consumer Services	\$11.0mm	1.04%				
Intelsat Jackson Holdings S.A.	Diversified Telecommunication Services	\$10.7mm	1.02%				
DG Investment Intermediate Holdings 2, Inc. (Convergint)	Construction & Engineering	\$10.7mm	1.01%				
Entegris, Inc.	Semiconductors & Semiconductor Equipment	\$10.3mm	0.98%				

^{*}The above list does not represent all of the positions held or recommended for the Fund. Octagon can provide a full list of the Fund's positions for the period upon request.



Please refer to the last four pages of the letter for all corresponding footnotes and important disclosures

SENIOR SECURED CREDIT FUND PERFORMANCE VS. EVESTMENT US FLOATING-RATE BANK LOAN FIXED INCOME UNIVERSE*

GROSS RETURNS AS OF SEPTEMBER 30, 2022^{4,43}

eVestment US Floating-Rate Bank Loan Fixed Income	31		Y 5Y		ITD RETURN (2/1/2012)		ITD SHARPE RATIO			
02/2012-09/2022	RETURN	RANK	RETURN	RANK	RETURN	RANK	RETURN	RANK	SHARPE	RANK
Octagon Senior Secured Credit Fund ("SSCF") (USD)	-3.23%	57	2.62%	21	3.66%	9	5.19%	9	1.06	4
# of Observations	9	7	9	6	9.	4	7	7	7	7
Morningstar LSTA BB/B Leveraged Loan Index ("BB/B LLI")	-2.20%	25	2.15%	35	2.98%	51	3.76%	75	0.61	84
5th Percentile	-1.14%		3.31%		4.05%		5.47%		0.98	
25th Percentile	-2.15%		2.52%		3.27%		4.63%		0.82	
Median	-3.03%		2.05%		3.00%		4.14%		0.74	
75th Percentile	-3.79%		1.50%		2.59%		3.75%		0.66	
95th Percentile	-6.56%		0.57%		1.74%		3.28%		0.55	

5 YEAR ANNUALIZED GROSS PERFORMANCE 9/30/2017 - 9/30/2022 MEDIAN: 6.67% 10.0% Underlying investment vehicles in 9.0% eVestment US **5 YEAR ANNUALIZED GROSS RETURN** Floating Bank 8.0% Loan Universe^{4,43} 7.0% 6.0% Octagon Senior Secured Credit Fund (USD Feeders) 5.0% (Gross) 4.0% MEDIAN: 3.00% 3.0% 2.0% 4.0% 6.0% 8.0% 10.0% 12.0% 14.0% 16.0% 2.0% **5 YEAR ANNUALIZED STANDARD DEVIATION**

Please refer to the last four pages of the letter for all corresponding footnotes and important disclosures

^{*} The eVestment US Floating-Rate Bank Loan Fixed Income universe is comprised of US fixed income products that invest primarily in bank loans, including private funds, public funds, composites, and separate accounts. The constituents of the universe are determined by eVestment based on fund information submitted to eVestment by the respective fund manager. The respective investment guidelines for each constituent product in the eVestment universe may vary significantly; for example, some products may employ leverage and may have varying constraints on high yield bonds, structured credit, and distressed credit investments. The benchmarks for the constituents in this universe typically include the Credit Suisse Leveraged Loan Index and the Morningstar LSTA Leveraged Loan Index (formerly the S&P/LSTA Leveraged Loan Index). eVestment provides a database of traditional and alternative strategies to help the institutional investing community identify global investment trends, select and monitor investment managers and assist asset managers in marketing their funds worldwide. eVestment data is reported by the fund manager, and is reported on a delayed basis. The data set fluctuates by quarter, and can change at any time. Source: eVestment Analytics.

OCTAGON SENIOR SECURED CREDIT FUND 4Q 2022 Update

- 1. Total Return is calculated using the Modified Dietz method. Net returns for the Fund reflect the deduction of all fees and expenses associated with the Fund's highest fee class (historically, Series F Interests/Shares). From May 1, 2016 to November 15, 2018, the Fund offered two Series Interests/Shares for investors: Series F and Series L. The minimum investment amount differed for Series F (\$2.5MM) and Series L (\$5.0MM). Effective November 16, 2018, the Fund is only offering Series L Interests/Shares for new investors, the minimum investment amount is \$1.0MM. As of May 1, 2016, the annual management fee for Series F and Series L Interests/Shares is 0.50% per annum, accordingly, effective May 1, 2016, the Fund's net returns are presented net of 0.50% management fees per annum. For the period from February 1, 2012 through April 30, 2016, net returns for the Fund are presented net of all fees and expenses associated with a Series F Interest during that period. From February 1, 2012 (the Fund's inception date) through April 30, 2016, Series F Interests were subject to management fees of 0.75% per annum. As of May 1, 2016, Operational Expenses (excluding certain fees and expenses described in the Fund's Offering Memorandum) allocable to Series F Interests and Series L Interests are subject to a cap calculated monthly and paid quarterly (the "Expense Cap") equal to ¼ of 0.15% of the Net Asset Value of the respective Series. Any Operational Expenses incurred by a Series in excess of its Expense Cap will be borne by Octagon for the benefit of such Series, subject to recapture by Octagon during the same fiscal year. A Series of Interests held by certain Octagon employees does not benefit from the Expense Cap. Such Operational Expenses include, but are not limited to, expenses of the respective fund administrator and professional fees (audit, legal, etc.). The performance returns of the Fund reflected above for the period prior to the May 1, 2016 implementation of the Expense Cap (February 1, 2012 through April 30, 2016) incorporated all of Operational Expenses incurred by the Fund during the respective period presented. Octagon makes no representation that it would have managed the Fund the same way under different fee structures. Total gross returns are presented before management and operating expenses but after all trading expenses and withholding taxes. Rates of return reflect the reinvestment of gains and are therefore most representative of the Accumulating Sub-Series, but investors may elect to receive quarterly cash distributions of all realized current income via the Distributing Sub-Series option. Rates of return presented herein are not necessarily representative of all Fund investors. Due to the lack of compounding, investors in the Distributing Sub-Series will experience different rates of return than the Fund returns presented herein. An individual investor's rate of return may vary based on the fees and expenses incurred in the series and timing of its investment. Please refer to the Fund's offering documents for further information on fees and expenses. The underlying portfolio assets are accounted for on a trade date basis. More information regarding performance calculations is available by contacting Octagon's Investor Relations Team or Business Development Team. Performance for the recent year has been achieved during a period of extreme economic instability; past performance is not a prediction or guarantee of future results.
- 2. The Morningstar LSTA "BB/B" Index ("LSTA BB/B") is a sub-index of the Morningstar LSTA US Leveraged Loan Index and is comprised of facilities with a rating of 'BB+' to 'B-' from Standard & Poor's. It is impossible to invest directly in the Morningstar LSTA BB/B Index.
- 3. The Morningstar LSTA US Leveraged Loan Index (formerly the S&P/LSTA Leveraged Loan Index) (the "LLI") is a market-value weighted index designed to measure the performance of the US leveraged loan market, the index universe comprises syndicated, senior secured, US-dollar denominated leveraged loans covered by Morningstar PitchBook/LCD, a Morningstar Company. Loan facilities included in the LLI must have a one year (at inception) minimum term, an initial minimum spread of L/S+125 bps, and a minimum size of \$50mm (initially funded). Refinitiv/LPC Mark-to-Market Pricing is used to price each loan in the index. Refinitiv/LPC Mark-to-Market Pricing is based on bid/ask quotes gathered from dealers and is not based upon derived pricing models. The index uses the average bid for its market value calculation. It is not possible to invest directly in this index.
- 4. For the purposes of the analysis presented herein, the Octagon Senior Secured Credit Fund and the eVestment US Floating-Rate Bank Loan Fixed Income universe constituents that report performance gross of fees are presented herein. Gross of fees returns are presented before management and operating expenses but after all trading expenses and withholding taxes. In the eVestment universe, managers report on a voluntary basis and therefore there is often a lag in reporting. In an effort to use the largest data set, updated information is provided quarterly and on a delayed basis.
- 5. "ITD" refers to inception-to-date. The Fund's ITD return represents the total return for all investors taken as a whole for the period from February 1, 2012 through December 31, 2022.
- 6. Upside/downside capture ratio is used to show to what extent a fund has outperformed/underperformed a benchmark index during periods of market strength/weakness. Upside/downside capture ratio is calculated by taking the average of monthly returns for the Fund and dividing it by the average of monthly returns for the benchmark index during months for which the index has had positive/negative returns.
- 7. The Fund's distribution rates are calculated as blended averages (total fund distributions for all Series in which investors are currently invested, reflecting blended averages of fees and expenses) and are not representative of the Fund's highest or lowest fee class; an individual investor's distribution rate may be higher or lower than the presented rate. Investors may elect to receive quarterly cash distributions of all realized current income via the Distributing Sub-Series option, however, many investors have chosen the Accumulating Sub-Series option. The Fund's total return may be lower for investors in the Distributing Sub-Series due to differences in compounding.
- 8. Duration for floating rate bank loans is roughly equal to the time to the next reset date, approximately 3 months or 0.25 years for a loan that resets quarterly. Typically, bank loans reset either monthly, quarterly or semi-annually. Duration for fixed rate bonds is roughly equal to the time to the maturity of the bond. The duration calculations for floating rate loans and fixed rate bonds take into account the current coupon and current yield of the respective loan or bond.
- 9. The Fund's 2012 compounded returns and the returns for the comparison indices represent the period beginning on February 1, 2012 through December 31, 2012.
- 10. Sharpe Ratio is calculated by subtracting the Risk-free Rate from the Fund's annualized return and dividing the result by the Fund's corresponding standard deviation.

 Risk-free Rate is the annualized return on 3-month US Treasury Bills.
- 11. For floating-rate assets, Nominal Spread represents the interest rate paid in excess of the base rate (does not account for base rate floors). Total Portfolio Average (Nominal) Spread calculation excludes non-floating-rate assets. For any loan positions paying PIK (payment-in-kind) interest, Nominal Spread reflects only the cash-pay interest portion.
- 12. Reflects Octagon's analysis of facility price movements using data sourced from Markit Partners for the period from October 31, 2022 to December 30, 2022. The analyzed sample includes any term loan facility for which offer prices were available as of October 31, 2022 and December 30, 2022. The analysis included 3,397 facilities.
- 13. The Fund's default rate represents the sum of the par of the Fund's US leveraged loan positions that have gone into default over the stated 12-month period divided by the average par amount of the Fund's US leveraged loan portfolio over the same period of time. Past performance is not a guarantee of future results. Market conditions impacting loan default rates vary significantly due to factors outside Octagon's control. Octagon has included in its default statistics any asset held across any of its portfolios that is considered a default in the Morningstar LSTA Leveraged Loan Index (formerly the S&P/LSTA Leveraged Loan Index). The Morningstar LSTA Leveraged Loan Index considers an asset defaulted if: 1) the company files for bankruptcy; 2) the loan facility is downgraded to D by S&P; or 3) an interest payment is missed without a forbearance.
- 14. Represents lagging 12-month default rate for the Morningstar LSTA Leveraged Loan Index by principal amount as of December 31, 2022. Default rate is calculated as the amount default over the last 12 months divided by the amount outstanding at the beginning of the 12-month period. Represents all loans including loans not included in the LSTA/LPC mark-to-market service. Source: Pitchbook LCD (December 31, 2022). Past defaults are not an indication of future default rates.
- 15. The Fund's recovery rate is calculated as proceeds received in the aftermath of default divided by the purchase cost of defaulted assets.
- 16. Source: Pitchbook LCD (www.lcdcomps.com). Represents metrics for the Morningstar LSTA US Leveraged Loan Index ("Morningstar LSTA LLI") as of December 31, 2022, unless otherwise noted. Please refer to footnote 3 above for a description of the Morningstar LSTA US Leveraged Loan Index.
- 17. Source: Pitchbook LCD, "US loan default rate ends 2022 at 0.72%; downgrades, distressed volume in focus" (January 3, 2023).

OCTAGON SENIOR SECURED CREDIT FUND 4Q 2022 Update

- 18. Source: Pitchbook LCD, "Leveraged loan default rate rises to 0.83% in January on pair of Ch. 11 filings" (February 1, 2023).
- 19. Source: Pitchbook LCD, "LCD Quarterly Review Fourth Quarter 2022" (January 3, 2023).
- 20. Source: J.P. Morgan North America Credit Research, "High Yield Bond and Leveraged Loan Market Monitor" (January 3, 2023).
- 21. Source: Pitchbook LCD, "CLO Weekly Review: CLO market rejuvenated as investor base diversifies" (February 7, 2023).
- 22. Source: J.P. Morgan North America Credit Research, "High Yield Bond and Leveraged Loan Market Monitor" (February 3, 2023).
- 23. Source: Moody's Investors Service CLOs-US, "2023 Outlook- Turning credit cycle will stress leveraged loan issuers and weaken CLO performance." Default projection represents Moody's projection for trailing 12-month US speculative-grade default rate as of October 2023. (November 30, 2022).
- 24. Source: Fitch Ratings, "US Leveraged Finance & CLO Weekly" (December 19, 2022).
- 25. Source: Fitch Ratings, "U.S., Europe Semi-Annual Default Insight (2022-2024 Cumulative Default Rates Expected Well Below 2007-2009 Levels)" (December 15, 2022).
- 26. Source: J.P. Morgan US Fixed Income Strategy, "US Fixed Income Markets 2023 Outlook" (November 22, 2022).
- 27. Source: BofA Global Research, "Collateral Thinking, Loans in 2023: A tale of two halves" (November 20, 2022).
- 28. Source: BofA Global Research, "2023 Year Ahead Outlook (Securitized Products) The end is near: recession, securitized products buy opportunity coming," (November 22, 2022).
- 29. Source: BofA Global Research, "High Yield Strategy: 2023 The Year Ahead" (November 21, 2022).
- 30. Source: Citi, Citi Research, "Global Economic Outlook & Strategy Grim Outlook for 2023—Rolling Recessions and Central Bank Rate Hikes" (November 30, 2022).
- 31. Source: Citi, Citi Research, "US Rates Weekly 2023 Outlook: Go with the Flow" (December 16, 2022).
- 32. Source: Citi, Citi Credit Research, "2023 High Yield and Leveraged Loan Outlook: Taking the Fork in the Road" (December 7, 2022).
- 33. Source: Citi Research, "US CLO Scorecard (December 2022)" (January 9, 2023).
- 34. Source: Credit Suisse, "Investment Outlook 2023" (November 22, 2022).
- 35. Source: Credit Suisse, "CS Credit Strategy Daily (Loan 2022 Recap)" (January 5, 2023).
- 36. Source: Credit Suisse: "CS Credit Strategy Daily (HY 2022 Recap, December CDS Movers)" (January 3, 2023).
- 37. Source: Barclays, Global Credit Outlook, "Walking an unfamiliar path" (December 1, 2022).
- 38. Source: Morgan Stanley, "2023 US Credit Strategy Outlook, Balancing Income with Convexity" (November 18, 2022); "2023 Global Strategy Outlook, The Year of Yield" (November 13, 2022).
- 39. Source: J.P. Morgan US Fixed Income Strategy, "HY Daily Update" (January 3, 2023).
- 40. Represents the straight average of the respective metric presented above.
- 41. The Bloomberg Bank Loan universe is comprised of bank loan mutual funds actively tracked in Bloomberg's database. Bloomberg's classification system includes over 156,000 open-end fund share classes, and utilizes public documents including prospectuses, fact sheets, and annual reports to determine the intended investment objective of the respective manager. Octagon determined the Bloomberg Bank Loan universe constituents for inclusion in this analysis. For the purposes of this analysis, Octagon is including funds within the Bloomberg Bank Loan universe with the necessary track record for the respective time period presented (5 years), and is utilizing the respective fund share class that Octagon believes would be accessed by institutional investors. There are 42 funds comprising the dataset for the 5-year comparative period. Expense ratios range from 0.55%-1.45% per annum. Mutual fund performance is shown net of fees and expenses. Mutual funds may have a higher expense ratio than the Fund. Mutual funds are subject to the Investment Company Act of 1940 requirements and restrictions, which can detract from overall performance of the fund. Source: Bloomberg. As of December 31, 2022.
- 42. BKLN Powershares Senior Loan ETF is an exchange-traded fund which is designed to track the Morningstar LSTA U.S. Leveraged Loan 100 Index. Returns reflected herein are net of expenses. In conjunction with Morningstar PitchBook/LCD, a Morningstar Company, the LSTA developed the Morningstar LSTA U.S. Leveraged Loan 100 Index ("L100"). The L100 is designed to reflect the largest loan facilities in the leveraged loan market. It mirrors the market-value-weighted performance of the 100 largest institutional leveraged loans based upon actual market weightings, spreads and interest payments. It is not possible to invest directly in the L100.
- 43. Data presented is calculated by eVestment Analytics. Source: eVestment Analytics.

OCTAGON SENIOR SECURED CREDIT FUND 4Q 2022 Update

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OCTAGON SENIOR SECURED CREDIT FUND 4Q 2022 Update

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General Risks related to Alternative Investments: General Economic and Market Conditions, Increased Regulatory Oversight, Use of Borrowed Funds, Complexity of Trading Strategy—Reliance on Technology, Futures, Commodities and Derivatives, Hedging Transactions, Options, Short Sales, and Risk of Global Investing. Risks related to an investment in a fund: Absence of Operating History, Absence of Regulatory Oversight, Nature of Investments, Business and Regulatory Risk of Hedge Funds, Portfolio Turnover, Risk of Varied Performance, Potential Exposure to Prime Brokers, Potential Exposure to Derivative Counterparties, Execution of Transactions, Certain Tax Risks, Reliance on Manager, Absence of Secondary Market, Operating Deficits, Economic Conditions, Calculation of Operational Net Fund Value, Market Risk, Investors not to Participate in Management of the Fund, Illiquidity of Interests, and Distributions In Kind.

LIBOR – CLO debt and bank syndicated loans historically used LIBOR as an interest rate benchmark, which is currently being phased out, with new instruments being issued with an alternative rate and all existing instruments tied to LIBOR required to transition by June 30, 2023. Replacement of LIBOR could adversely affect the market value or liquidity of CLO securities and/or loans, and pose tangential risk for markets and assets that do not rely directly on LIBOR. On July 29, 2021, the Alternative Reference Rates Committee formally recommended CME Group's forward-looking Term SOFR rate as the replacement rate for U.S. dollar LIBOR, however, there is uncertainty with respect to replacement of LIBOR with proposed alternative reference rates, and it is possible that different markets might adopt different rates, resulting in multiple rates at the same time and a potential mismatch between CLO securities and underlying collateral, the effects of which are uncertain at this time, and could include increased volatility or illiquidity. In addition, operational and technology challenges during the transition from LIBOR as well as inconsistent communication from issuers could result in delayed investment analyses and reduced investment opportunities.

The foregoing is only a summary of certain general risks associated with this investment. Before making any investment, prospective investors are advised to make an independent review regarding the economic benefits and risks of purchasing or selling the financial instruments mentioned in this document and reach their own conclusions regarding the legal, tax, regulatory, accounting and other aspects of any transaction in the financial instrument in relation to their particular circumstances.

None of the information contained herein has been filed or will be filed with the Securities and Exchange Commission, any regulator under any state securities laws or any other governmental or self-regulatory authority. No governmental authority has passed or will pass on the merits of this offering or the adequacy of this document.

Octagon Credit Investors, LLC. 250 Park Avenue, 15th Floor New York, NY 10177 Conning Investment Products, Inc. One Financial Plaza Hartford, CT 06103 Conning Investment Products, Inc. 100 Federal Street, 19th Floor Boston, MA 02110 Conning Investment Products, Inc. 250 Park Avenue, 15th Floor New York, NY 10177



Firm: Polen Capital Management, LLC **Strategy/Product:** Focus Growth strategy **Client:** MWRA Employees Retirement Board

NEPC Manager Due Diligence Questionnaire - Update

Instructions

In support of our upcoming meeting we ask that you please complete this due diligence questionnaire. Please provide your responses in the form of brief descriptions, lists or tables added directly to this Word document.

Thank you for taking the time to complete this questionnaire. Please note that all materials submitted in relation to MWRA Retirement System may be subject to disclosure consistent with Massachusetts Public Record laws.

Firm/Organization

1. Have there been any changes in ownership or management in the past year?

As of December 31, 2022:

Ownership Changes

No changes for the past 12 months.

Senior Management Changes

In January 2022, Rayna Lesser Hannaway was promoted to Head of Small Company Growth Team and lead portfolio manager of our U.S. Small Company Growth strategy. Rayna has been a Portfolio Manager & Analyst on our U.S. Small Company Growth strategy since 2018 and has been instrumental in hiring, mentoring, and developing the Small Company Growth team. Rayna launched our U.S. SMID Company Growth strategy as its sole portfolio manager in 2019. Tucker Walsh, Head of the Small Company Growth Team, left Polen Capital for a CIO position at a tech entrepreneur's family office.

In February 2022, in connection with the acquisition of DDJ Capital Management, David Breazzano, Head of Team, Portfolio Manager (U.S. High Yield Team) joined Polen Capital's Operating Committee.

In April 2022, Diana Downey joined Polen Capital as Chief Marketing Officer.

In July 2022, Karl Dasher joined Polen Capital as President with a focus on developing our new Credit platform and supporting our existing investment franchises.

In July 2022, Jeb Doggett was promoted to Chief Administrative Officer.



Organizational Changes

In January 2022, Polen Capital acquired DDJ Capital Management (n/d/b as Polen Capital Credit), a boutique high yield, bank loan, private credit, and special situations manager. The acquisition marks Polen's expansion into the high yield market and broadens Polen's objective of delivering attractive active returns to preserve and grow clients' assets with offerings that meet the increased demand for sustainable income.

2. List firm AUM, net flows and accounts gained/lost for the past 5 years.

	AUM (\$millions)	Net Flows (\$millions)	Accounts Gained (# / \$millions)	Accounts Lost (# / \$millions)
2022	54,833.42	-4,205.65	679 / 14,301.84	1,122 / 18,507.49
2021	82,789.87	10,552.08	1,293 / 18,595.66	485 / 8,043.58
2020	59,270.63	10,653.75	1,752 / 16,990.87	333 / 6,337.12
2019	34,784.43	5,5671.74	780 / 8,940.12	263 / 3,268.38
2018	20,591.32	1,789.88	581 / 5,388.77	122 / 3,598.89

3. Have there been any new or discontinued products in the past year?

No discontinued products in the past year.

Emerging Markets ex-China Growth Strategy

We launched the Emerging Markets ex-China Growth strategy in 2022, which is available in an SMA and a UCITS fund.

4. Are any products capacity constrained?

We manage capacity for each of our strategies individually, taking a conservative approach that considers, among other things, total assets under management, the speed of asset growth and the mix of business across distribution channels, platforms, regions, and client types.

As of December 31, 2022, Focus Growth strategy assets were approximately \$41.48 billion. While our Focus Growth portfolio management team believes the strategy has additional capacity for growth, we have concluded that it is prudent to begin selectively closing certain vehicles and raising account minimums within the strategy to better manage the pace of new asset growth and the diversification of assets across the Large Company Growth Team's three investment strategies. Significant capacity remains in the team's Global Growth strategy (typically 50% overlap with Focus Growth in terms of holdings) and International Growth strategy.

The soft close is meant to preserve adequate liquidity in our investments, provide cash flow flexibility for our existing clients, provide capacity for strategic opportunities, and allow us to continue to seek exceptional returns for our clients over the long term.



5. Describe any current or pending regulatory, compliance or litigation issues and the expected business impact.

No issues to report.

6. Describe your diversity, equity and inclusion efforts with regard to the firm and its employees.

We view a diverse workforce as essential to fostering a culture of empathy and open-minded collaboration—a culture that supports personal growth and better results. We welcome the diversity that comes from the perspectives of people with different backgrounds and life experiences. We define diversity and inclusion as underrepresentation in our industry which includes women, people of color, the LGBTQ+community, people with disabilities and veterans.

Polen Capital's Diversity and Inclusion Strategic Plan is focused on four key concepts:

- (1) Empower all voices, which focuses on our minority recruitment and leadership efforts
- (2) Enhance our workplace, which works on fostering a culture of belonging and delivering resources to advance allyship and inclusion
- (3) Engage our communities, which supports our local communities in Boca, Boston, and London through corporate partnership, volunteerism, and charitable giving
- (4) Expand our reach to work with diverse vendors and companies.

Polen maintains a donor advised fund for charitable giving to organizations that promote diversity & inclusion. Roland Cole, Research Analyst and Toigo alum, manages this fund.

Please see Appendix 1 - Polen Capital Diversity and Inclusion Policy and Appendix 2 - Diversity and Inclusion Addendum, for additional information.

Portfolio Management Team

1. Have there been any changes in the portfolio management team in the past year?

Large Company Growth Team Updates (as of December 31, 2022)

In January 2022, Lauren Harmon was promoted to ESG & Research Analyst, Bryan Power was promoted to Director of Research & Analyst, and Brandon Ladoff was promoted to Portfolio Manager & Director of Sustainable Investing.

2. Are there any expected changes to the team in the future (planned additions or departures)?

As of December 31, 2022, there are no expected changes to the Large Company Growth Team in the future.



Process

- 1. Have there been significant changes in any of the areas below in the past year?
 - Identification of investment ideas
 - Process for exploring and vetting ideas
 - Portfolio trading practices including buy/sell rules
 - Approach to portfolio monitoring and risk management

There have been no material changes to our process over the past year.

Philosophy

1. Describe recent changes in investment philosophy, if any.

There have been no recent changes made to our investment philosophy.

Portfolio

1. If not included in your meeting presentation, provide portfolio holdings, sector exposure, geographic exposure and common characteristics (yield, duration, market cap, P/E, etc.).

This information is included in our meeting presentation.

2. List strategy AUM, net flows and accounts gained/lost for the past 5 years.

0,	AUM (\$millions)	Net Flows (\$millions)	Accounts Gained (#/ \$millions)	Accounts Lost (# / \$millions)
2022	41,483.15	-2,541.74	478 / 11,340.58	766 / 13,882.32
2021	71,754.11	7,354.79	715 / 14,085.65	398 / 6,730.85
2020	52,365.01	6,267.19	1,260 / 11,553.93	201 / 5,286.74
2019	33,185.74	4,659.98	568 / 7,834.65	229 / 3,174.67
2018	20,230.16	1,604.46	466 / 5,152.47	108 / 3,548.01



3. Describe investor concentration for the strategy and note the percent of AUM attributable to the top five investors.

Focus Growth Strategy Assets

As of December 31, 2022:

Client type	# of Accounts	Assets in \$millions	
Separate Accounts:			
Corporate	154	3,908.67	
Endowment & Foundations	126	849.32	
Healthcare	17	875.10	
HNW	2,508	2,031.36	
Insurance	6	16.57	
Public Fund	76	2,191.90	
Taft-Hartley	32	1,152.71	
Sovereign Wealth	6	1,525.99	
Mutual Fund	1	6,376.35	
UMA	30	15,169.61	
UCITS	1	2,862.50	
Commingled Funds (CIT &	2	1,110.68	
Other)			
Wrap Platform	71	3,412.39	
Total Strategy Assets	3,030	41,483.15	

The top five institutional separate accounts total 7.02% of the strategy assets as of December 31, 2022.

Performance / Market Outlook

1. If not included in your meeting presentation, provide trailing returns as of the most recent quarter-end and calendar year returns for the past 10 years, both relative to benchmark.

This information is included in our meeting presentation.

2. Briefly discuss recent performance trends and identify environments in which the strategy is likely to be in or out of favor.

Please see attached commentary.

3. Describe your market outlook and how strategy positioning is impacted by your views.

Please see attached commentary.

4. Could you please include a slide in your presentation that sows the MWRA's account history, initial contribution, cumulative subsequent contributions, cumulative subsequent distributions, gain/loss and current value.

This information is included in our meeting presentation.

Going beyond.

Massachusetts Water Resource Authority Employees' Retirement System (MWRA)

Focus Growth

February 23, 2023



Today's Presenters

Brandon Ladoff

Portfolio Manager & Director of Sustainable Investing

Lisa Rynne, CFA

Senior Client Service Manager

Background

- Joined Polen Capital: 2013
- Education: B.S. in Accounting (summa cum laude)
 from University of Florida, Certificate in Business
 Policy at the Wharton School of Business, and J.D.
 (cum laude) from University of Pennsylvania Law
 School
- Years of Industry Experience: 10
- **Special Interests:** Enjoys spending time with his wife and two daughters, running, and warm weather

Background

- Joined Polen Capital: 2018
- **Education:** B.S. in Marketing and Economics from Boston College
- Years of Industry Experience: 35
- **Special Interests:** Spending time with family and friends, travel, winter sports, and water skiing

Q4 Update - Portfolio Review

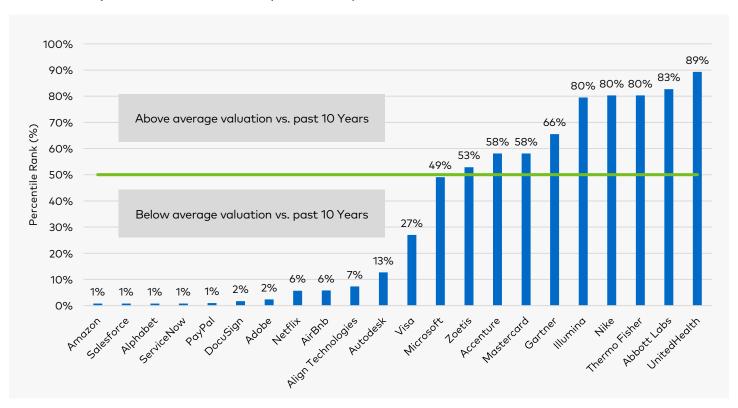
- Based on consensus sell-side estimates, portfolio-weighted EPS growth for 2023 is currently forecast at 24%. Even accounting for the pronounced effect from Amazon, median EPS growth is forecast at 13%, according to consensus estimates.
- Current estimates for the S&P 500 are for low double-digit EPS growth.
- Even with the potential for macroeconomic weakness in 2023, many of our Portfolio companies will be lapping relatively low growth this year.
- For example, Amazon's e-commerce business, as well as Google's ad business, but even companies such as Illumina and Nike, will be lapping low-single digit (or lower) revenue growth at some point during 2023.
- As a result, many of our holdings should have much easier growth comparisons relative to 2022, when many of these same companies were lapping 30-40% revenue growth rates.
- Despite the volatility in growth rates over the past year, the three-year revenue growth CAGRs for many of our companies remain very attractive, and we believe this is indicative of healthy businesses and strong long-term growth trajectories. Ex: Amazon 22% CAGR, Alphabet 19% CAGR, PayPal 16% CAGR, Netflix 15% CAGR (based on 3-year quarterly revenue growth CAGR from Q319-Q322)
- As of 12/31/2022, more than half of the holdings (by number of holdings) are trading in the bottom half of their 10-year valuation range based on forward NTM P/E.
- As of 12/31/2022, roughly half of the portfolio, by weight, are trading in the bottom decile of their 10-year valuation range based on forward NTM P/E.

^{*} Based on consensus sell-side estimates. Source: Bloomberg. Data as of 12-31-2022. Forward NTM P/E = forward next twelve months price-to-earnings ratio. CAGR = compounded annual growth rate. The calculation methodology for CAGR is as follows: [(1+% Change in P/E Multiple)*[(1+EPS CAGR)t]^{1/t}. This information is not intended to be construed to equate to the expected or projected future performance/returns of a Polen Capital investment or portfolio. There are numerous other factors that have not been fully accounted for in the preparation of these results which could adversely affect actual results. There is no guarantee that performance will follow earnings growth. Examples chosen are for illustrative purposes only and represent top weights and clear examples of the dynamic described regarding Portfolio holdings.

Q4 Update - Company Valuations

Many of the holdings in the portfolio today are trading near their lowest valuations over the past decade. Ten holdings are in the bottom decile of valuations, representing almost 50% of the portfolio's market value.

Fwd 1-Yr P/E, Current vs. Past 10 Yrs (or IPO date)—Percentile Rank

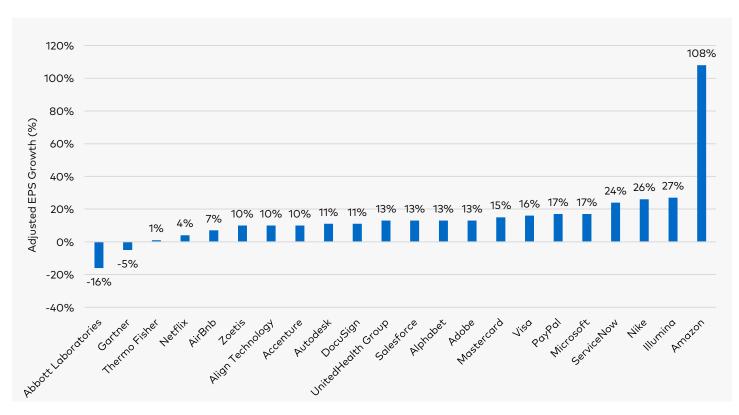


Source: Polen Capital, Bloomberg. Reflects all Focus Growth portfolio holdings as of 12-31-2022. Chart shows how Fwd 1-Yr P/E on 12-31-2022 compares to monthly observations going back 10 yrs, or to a given company's IPO date. Data is expressed as a percentile rank, where 0% would indicate the least expensive a company has been vs the past 10 years and 100% is the most expensive. Please note AirBnb goes back to 9-30-2021; Paypal goes back to when it was spun out of eBay, 7-31-2015; Zoetis goes back to 3-31-2013; and DocuSign goes back to 6-30-2018. All other securities go back 10 years. Please see Disclosures page for additional information.

Q4 Update - Company Earnings Growth Expectations

As investors worry about the potential for recession in 2023, the median expectation for earnings growth in 2023 is 13%, according to consensus estimates.

Bloomberg Consensus Estimated 2023 Adjusted EPS Growth (%)



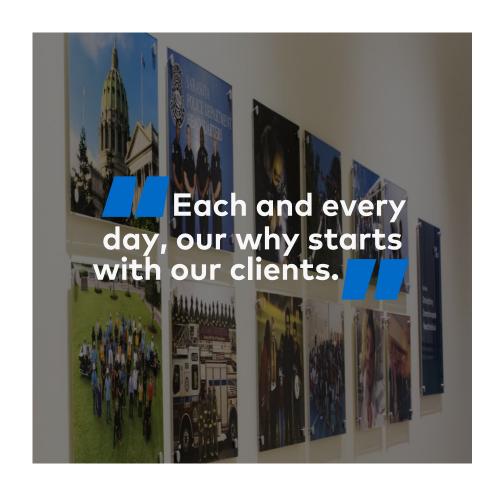
Source: Polen Capital, Bloomberg. Reflects all Focus Growth portfolio holdings as of 12-31-2022. Chart shows Bloomberg analyst consensus EPS growth forecasts for 2023. EPS growth is calculated dividing Bloomberg analyst consensus adjusted earnings per share for 2023 by the 2022 estimate. Earnings estimates always have the potential to be revised up or down. This is for illustrative purposes only. Please see Disclosures page for additional information.

Our mission is to preserve and grow client assets to protect their present and enable their future.

Going Beyond Expectations

Polen Capital is a team of experienced investment industry professionals who share an unwavering commitment to our clients, investors, community and each other. For more than three decades, we have been dedicated to serving investors by providing active, high-conviction portfolios. At Polen Capital, we have built a culture of results, and in this, an inherent belief in going beyond what's expected for the people and communities we serve.

- We adhere to a time-tested process of researching and analyzing what we see as the highest-quality companies around the globe
- We invest for the long haul and with a business owner's mindset—giving these companies time to grow
- We remain passionate about our mission to protect and grow capital



Independent, High-Conviction Investing

Employee Owned & Aligned with Our Clients

- 72% Employees
- 8% Polen Family Trust (Passive)
- 20% iM Global Partner (Passive)

High Conviction, Growth and Income Solutions

Total Firm Assets: \$55.0B

- Focus Growth \$41.6B
- Global Growth \$4.3B
- International Growth \$1.7B
- U.S. Small Company Growth \$344.9M
- International Small Company Growth \$17.5M
- Global Emerging Markets Growth \$21.5M
- U.S. SMID Company Growth \$66.9M
- Global SMID Company Growth \$49.5M
- Emerging Markets ex-China Growth \$3.5M
- U.S. Opportunistic High Yield \$4.4B
- Upper Tier U.S. High Yield \$831.5M
- Total Return Credit \$307.5M
- Bank Loan \$138.4M

An ESG Friendly Investment Approach

- UN PRI Signatory
- ESG integration inherent within our stakeholder-centric investment approach that considers:
- · Employee relationships
- Customer relationships
- · Environmental initiatives
- · Governance issues

Team-Based Outlook with Global Reach

- Headquarters and Large Company Growth Team: Boca Raton, FL
- Small Company Growth and High Yield Teams: Boston, MA
- Emerging Markets Growth Team: London, UK

A Range of Investment Vehicles

 Strategies available across SMAs, Mutual Funds, CITs, UCITS, Private Funds

Institutional Assets by Client Type

\$19,148M	100%
\$5,199M	27%
\$4,228M	22%
\$3,174M	17%
\$1,883M	10%
\$1,723M	9%
\$1,186M	6%
\$1,141M	6%
\$616M	3%
	\$5,199M \$4,228M \$3,174M \$1,883M \$1,723M \$1,186M \$1,141M

\$2,771M

14%

Defined Contribution²



A Collaborative & Research-Driven Team

Large Company Growth

Rana Pritanjali, CFA Research Analyst





Stephen Atkins, CFA Portfolio Strategist & Analyst

Bryan Power, CFA Director of Research & Analyst







Roland Cole Research Analyst

Jeff Mueller Portfolio Manager & Analyst



Focus Growth Global Growth International



Portifolios

Dan Davidowitz, CFA Portfolio Manager & Analyst

Todd Morris Portfolio Manager & Analyst

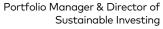


Considern Cocus



Damon Ficklin Head of Team, Portfolio Manager & Analyst

Brandon Ladoff







Daniel Fields, CFA Portfolio Manager & Analyst

Lauren Harmon, CFA ESG & Research Analyst

How Polen Capital Goes Beyond for Our Clients

Investment Philosophy



Concentrated Portfolio: "High Active Share"

- Portfolios constructed with a select group of high-quality companies that we believe effectively balance stakeholder interests
- Use the guardrails of strong balance sheets, abundant free cash flow, strong ROE (> 20%), stable to improving margins, and real-organic revenue growth
- Best ideas portfolio—impartial to index sector and position weightings
- Strategies invest in a range of 20-30 companies



Long Holding/Compounding Period: "Time Arbitrage"

- Long-term focus on company fundamentals and competitive advantages
- Portfolio returns are generated through the compound earnings growth of competitively advantaged companies owned for many years we believe share prices follow earnings growth
- The flagship Focus Growth portfolio has only invested in ~125 companies since inception
- · Average holding period is about five years



Risk Management: "Don't Lose Mentality"

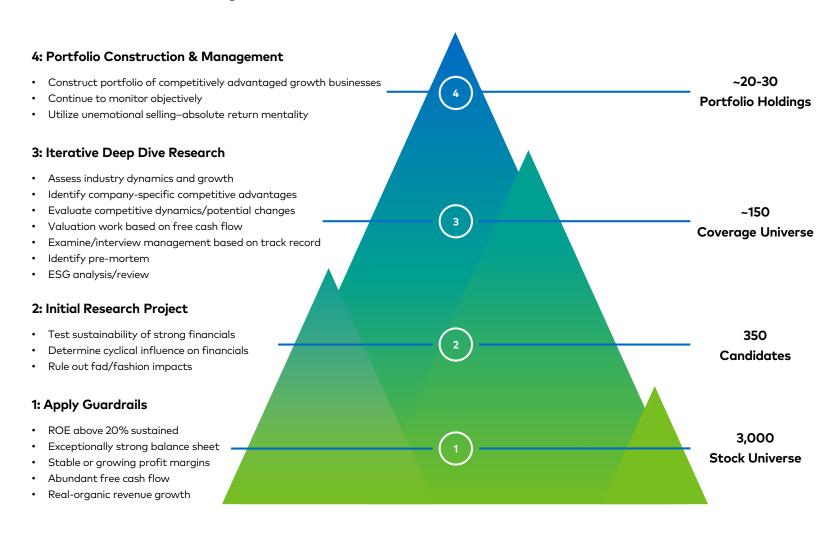
- Seek to only invest in companies with unique value propositions that are competitively advantaged and financially robust— Margin of Safety
- Focus on long-term preservation of capital
- Portfolio construction parameters include position size limits and sector weight limits
- Currency, policy and political risks are considered regarding investment outside of the United States



Outcome Orientation: "Weighing Machine vs. Voting Machine"

- Seeking compelling returns with lower levels of risk
- More than 30 years of evidenced success through consistent application of our investment process
- · No market predictions, always fully invested
- Unemotional selling with an absolute return mentality

The Polen Capital Investment Process



Portfolio Characteristics

Company Name	Percentage of Market Cap P/E Forward Portfolio (%) (\$Millions) 12 Months (x)		Net Debt/Free Cash Flow ex lease	Polen Long-Term EPS Growth Estimates (%)	Return on Total Capital (Total Debt) (%)	Return on Total Capital (Net Debt) (%)	
Abbott Laboratories	4.6	191,427	26.8	0.6	12.0	15.8	19.5
Accenture	4.1	175,940	23.0	-0.7	12.0	27.7	35.8
Adobe Systems	6.4	156,453	22.7	-0.2	20.0	25.4	37.0
Airbnb	3.3	54,923	29.6	-2.3	30.0	23.9	NMF
Align Technology	0.9	16,474	28.7	-3.3	25.0	14.5	21.3
Alphabet	7.9	1,145,225	15.0	-1.6	18.0	24.5	45.8
Amazon.com	9.8	856,939	31.7	NMF	30.0	3.8	5.2
Autodesk	4.3	40,320	26.1	0.4	15.0	17.5	31.4
DocuSign	1.5	11,144	26.7	-0.8	25.0	NMF	NMF
Gartner	3.1	26,563	36.2	1.9	16.0	22.8	28.2
Illumina	3.3	31,806	74.9	2.7	20.0	NMF	NMF
Mastercard	5.4	334,328	30.2	0.5	18.0	47.9	74.7
Microsoft	6.4	1,787,732	24.3	-0.7	15.0	29.0	57.3
Netflix	6.7	131,228	31.0	10.8	16.0	12.3	15.3
Nike	2.5	183,073	38.0	-0.7	15.0	20.3	37.6
PayPal Holdings	2.8	81,193	15.5	-0.1	18.0	10.2	16.7
salesforce.com	4.6	132,590	24.2	-0.1	22.0	0.3	0.3
ServiceNow	5.2	78,431	45.2	-1.3	22.0	3.6	8.1
Thermo Fisher Scientific	3.7	215,978	25.1	4.4	13.0	11.7	13.1
UnitedHealth Group	4.6	495,373	22.2	0.1	14.0	15.3	20.8
Visa	5.0	442,217	25.1	0.0	18.0	27.1	44.1
Zoetis	2.6	68,303	28.2	3.2	14.0	19.3	25.8
Cash	1.3						
Polen Focus Growth (weighted	average)	425,038	25.9	0.9	18.8	18.5	
Russell 1000 Growth		626,881	21.8	1.5 ¹	8.0 ²	23.4	
S&P 500		417,282	17.2	2.61	7.0 ²	18.9	

Reflects all Focus Growth portfolio holdings as of 12-31-2022. ¹Net Debt/Free Cash Flow ratio excludes companies in the benchmark with negative FCF over the TTM period. ²Our estimates for the market indices are approximate and based on long-term historical data which captures different market cycles. NMF (No Meaningful Figure) is a designation used when an individual financial ratio has a negative denominator or an outlier value (e.g., greater than 100x or 100%, less than 0%) which we view as not representative of the ongoing underlying economics of the business, likely due to transitory issues or GAAP accounting limitations. This figure is also excluded from the weighted average portfolio calculation in an effort to avoid distorting aggregate portfolio characteristics, but remains included in the benchmark calculation unless otherwise noted. Additional information is available upon request. Source: Bloomberg, Polen Capital. Please see Disclosures page for disclosure #1, #2 & #4.

Investing Across the Growth Spectrum

Safety Growth

Low-teens EPS Growth, slower but steadier growth

20%+ EPS Growth, faster growth

∅ UnitedHealthcare	Microsoft	AUTODESK.	Alphabet	P PayPal	
Thermo Fisher	zoetis	Gartner	mastercard.	salesforce	amazon.com
accenture	MIKE	NETFLIX	VISA	illumına	servicenow.
Abbott				Adobe	align
					DocuSign

Account Performance

As of December 31, 2022

MWRA Employees Retirement Board

	Currency: USD
Beginning Net Assets (02-01-2016)	19,397,880
Cash Flows	2,398,165
Appreciation	14,913,602
Ending Net Assets (12-31-2022)	36,709,647

	MTD	QTD	YTD	1Y	ЗҮ	5Y	Since Inception (02/01/2016)
Portfolio Return (Gross)	-6.54	-0.17	-37.58	-37.58	1.50	9.65	11.57
Portfolio Return (Net)	-6.54	-0.34	-37.99	-37.99	0.84	8.95	10.88
Russell 1000 Growth	-7.66	2.20	-29.14	-29.14	7.78	10.96	14.06
Excess Return (Net)	1.12	-2.54	-8.85	-8.85	-6.94	-2.01	-3.18
S&P 500	-5.76	7.56	-18.11	-18.11	7.66	9.42	12.45
Excess Return (Net)	-0.78	-7.90	-19.88	-19.88	-6.82	-0.47	-1.57

Risk and Return Rankings

Focus Growth

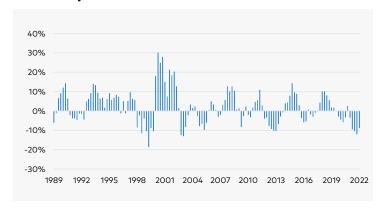
Focus Growth / R1000G	Retu (Ne			Return (Gross		Alp	ha	Ве	ta		ırpe tio	Stan Devid		Dowi Cap Ra	ture	Ups Cap Ra			nation Itio
Time Period	Value	Rank	Value	Rank	# of Observ.	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank
1 Year	-38.02	88	-37.51	89	217	-12.06	94	0.98	54	-1.52	96	25.66	53	106.90	86	71.25	94	-2.34	100
3 Years	1.00	92	1.62	92	216	-5.52	92	0.98	59	0.04	91	23.80	62	101.94	81	82.80	75	-1.23	95
5 Years	9.08	54	9.68	58	206	-0.76	61	0.96	49	0.41	61	20.65	54	97.74	49	92.88	44	-0.28	62
7 Years	10.31	67	10.90	69	191	-1.34	69	0.96	50	0.55	68	18.01	52	98.40	49	91.17	58	-0.48	73
10 Years	12.67	45	13.28	46	179	-0.10	45	0.96	42	0.77	49	16.18	48	94.64	32	92.47	61	-0.18	47
15 Years	10.60	7	11.29	5	155	1.79	8	0.91	22	0.64	7	16.62	26	87.26	10	90.87	74	0.18	7
20 Years	10.25	46	11.00	43	124	1.29	21	0.90	19	0.66	22	14.94	24	85.40	9	88.10	86	0.05	45
25 Years	9.37	21	10.19	19	83	4.09	11	0.76	13	0.55	12	15.09	16	71.80	9	80.03	84	0.32	18
Since Inception	12.86	7	13.82	4	24	5.27	1	0.78	1	0.69	1	16.05	5	66.27	1	95.25	87	0.42	4

As of 12-31-2022. Source: eVestment, LLC. Polen Capital compensates eVestment with a subscription fee that enables Polen Capital to access the eVestment database; however, Polen Capital does not specifically pay eVestment to obtain the rankings set forth above.

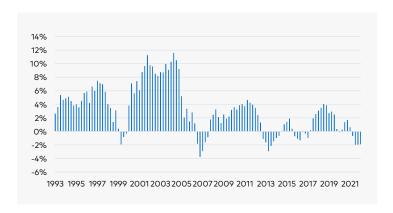
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Quarterly Excess Returns

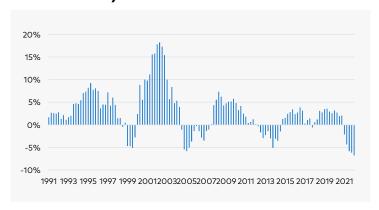
Trailing 1-Year Net Excess Returns on a Quarterly Basis vs. R1000G¹



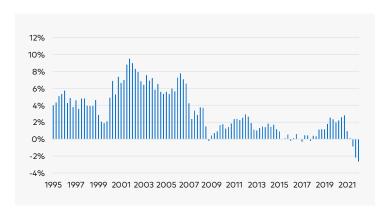
Trailing 5-Year Annualized Net Excess Returns on a Quarterly Basis vs. R1000G³



Trailing 3-Year Annualized Net Excess Returns on a Quarterly Basis vs. R1000G²



Trailing 7-Year Annualized Net Excess Returns on a Quarterly Basis vs. R1000G⁴



Appendix

Portfolio Activity

1Q 2022	2Q 2022	3Q 2022	4Q 2022
New Buys	New Buys	New Buys	New Buys
			Thermo Fisher Scientific
Additions	Additions	Additions	Additions
Visa	Amazon.com	Netflix	Salesforce
Autodesk	DocuSign		ServiceNow
Airbnb	Adobe Systems		Illumina
Netflix			
Meta Platforms			
PayPal Holdings			
Complete Sells	Complete Sells	Complete Sells	Complete Sells
Starbucks	MSCI	Intuitive Surgical	Meta Platforms
Trims	Trims	Trims	Trims
Alphabet	Abbott Laboratories		Mastercard
Zoetis	United Healthcare		Visa
Accenture	Gartner		
MSCI			
Gartner			

The Polen Capital Heat Map

Factors in Degrees of Expected Return

5 Year Annualized Return Scenarios¹

P/E Multiple: Contraction (-), E	xpansion (+)
----------------------------------	------------	----

				1 / = 1-10	icipie. Conti ac	cion (-), Expun	31011 (+)		
		-67%	-50%	-33%	-25%	-10%	0%	10%	25%
	0%	-20%	-13%	-8%	-6%	-2%	0%	2%	5%
	1%	-19%	-12%	-7%	-4%	-1%	1%	3%	6%
3R)	3%	-18%	-11%	-5%	-3%	0%	2%	4%	7%
CAGR)	4%	-17%	-10%	-4%	-2%	2%	4%	6%	8%
PS	5%	-16%	-9%	-3%	-1%	3%	5%	7%	10%
Ē	6%	-15%	-8%	-2%	0%	4%	6%	8%	11%
5¥e	8%	-14%	-6%	-1%	1%	5%	8%	10%	12%
8	9%	-13%	-5%	0%	3%	6%	9%	11%	14%
Compounded Earnings Growth Rate (% 5 Year EPS	10%	-12%	-4%	2%	4%	8%	10%	12%	15%
유	11%	-11%	-3%	3%	5%	9%	11%	13%	16%
0	13%	-10%	-2%	4%	6%	10%	13%	15%	18%
S. G.	14%	-9%	-1%	5%	7%	11%	14%	16%	19%
ing	15%	-8%	0%	6%	9%	13%	15%	17%	20%
Ē	16%	-7%	1%	7%	10%	14%	16%	18%	22%
ed	18%	-6%	2%	8%	11%	15%	18%	20%	23%
Š	19%	-5%	3%	10%	12%	16%	19%	21%	24%
ם	20%	-4%	4%	11%	13%	17%	20%	22%	25%
ပိ	21%	-3%	6%	12%	14%	19%	21%	24%	27%
	23%	-2%	7%	13%	16%	20%	23%	25%	28%
	24%	-1%	8%	14%	17%	21%	24%	26%	29%
	25%	0%	9%	15%	18%	22%	25%	27%	31%



The **y-axis:**Compounded earnings growth rate of a company over a five-year period.

2

The x-axis: % change in P/E multiple over a five-year period. The P/E multiple is the price investors are willing to pay per dollar of earnings.



¹Excludes dividends.

Source: Polen Capital. This page is not intended as a guarantee of profitable outcomes. Any forward-looking estimates are based on certain expectations and assumptions that are susceptible to changes in circumstances. The y-axis = EPS CAGR over five-year period. EPS (earnings per share) measures a company's profits per share of stock. CAGR (compounded annual growth rate) is the average annual growth rate over time. Together, the EPS CAGR is the annual rate at which a company grows it earnings per share. The x-axis = % change in P/E multiple for a five-year period. The P/E multiple or ratio measures the price investors are willing to pay per dollar of earnings. It can be used to determine a company's valuation. In times of multiple expansion, investors pay more per dollar of earnings and the reverse is true in times of multiple contraction. This affects expected returns for a particular investment. Methodology and Assumptions: The calculation methodology assumes that the 5-year EPS CAGR will match 5-year annualized return excluding dividends if there no change in the P/E multiple. The calculation is as follows: [(1+% Change in PE Multiple)*[(1+EPS CAGR)⁵]^{1/5}. There are numerous other factors which have not been fully accounted for in the preparation of these results which could adversely affect actual results. There is no guarantee that performance will follow earnings growth. This example is for illustrative purposes only and has been prepared based on assumptions believed to be reasonable; however, there is no guarantee that any forecasts made will come to pass. There may be several unexpected developments and market factors which may affect these scenarios, potentially adversely. There are certain inherent limitations. No representation is being made that any investment will or is likely to achieve future results similar to those shown. This information is not intended to be construed to equate to the expected or projected future performance/returns of a Polen Capital investment or portfolio.

Account Holdings

As of December 31, 2022 **MWRA Employees Retirement Board**

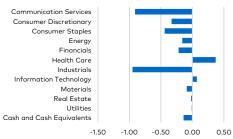
Security Name	Ticker	ISIN	Quantity	Current Price (USD)	Market Value (USD)	Accrued Income (USD)	Portfolio Weight (%)	Russell 1000 Growth Weight (%)
Abbott Laboratories	ABT	US0028241000	14,879	109.79	1,633,565	-	4.5	0.1
Accenture PLC CI A	ACN	IE00B4BNMY34	5,616	266.84	1,498,573	-	4.1	1.0
Adobe Inc	ADBE	US00724F1012	6,988	336.53	2,351,672	-	6.4	0.9
Airbnb Inc-Class A	ABNB	US0090661010	13,967	85.50	1,194,179	-	3.3	0.2
Align Technology Inc	ALGN	US0162551016	1,641	210.90	346,087	-	0.9	0.1
Alphabet Inc CI C	GOOG	US02079K1079	32,640	88.73	2,896,147	-	7.9	2.4
Amazon.com Inc	AMZN	US0231351067	42,899	84.00	3,603,516	-	9.8	4.4
Autodesk Inc	ADSK	US0527691069	8,464	186.87	1,581,668	-	4.3	0.2
DocuSign Inc	DOCU	US2561631068	10,168	55.42	563,511	-	1.5	0.1
Gartner Inc	IT	US3666511072	3,412	336.14	1,146,910	-	3.1	0.2
Illumina Inc	ILMN	US4523271090	5,680	202.20	1,148,496	-	3.1	-
Mastercard Inc A	MA	US57636Q1040	5,696	347.73	1,980,670	-	5.4	1.7
Microsoft Corp	MSFT	US5949181045	9,861	239.82	2,364,865	-	6.4	10.5
Netflix Inc	NFLX	US64110L1061	8,252	294.88	2,433,350	-	6.6	0.3
Nike Inc CI B	NKE	US6541061031	7,804	117.01	913,146	-	2.5	8.0
PayPal Holdings Inc	PYPL	US70450Y1038	14,297	71.22	1,018,232	-	2.8	0.1
Salesforce.com Inc	CRM	US79466L3024	12,675	132.59	1,680,578	-	4.6	0.2
ServiceNow Inc	NOW	US81762P1021	4,950	388.27	1,921,937	-	5.2	0.5
Thermo Fisher Scientific Inc	TMO	US8835561023	2,459	550.69	1,354,147	738	3.7	0.2
UnitedHealth Group Inc	UNH	US91324P1021	3,131	530.18	1,659,994	-	4.5	2.6
Visa Inc Class A Shares	V	US92826C8394	8,862	207.76	1,841,169	-	5.0	2.0
Zoetis Inc	ZTS	US98978V1035	6,537	146.55	957,997	-	2.6	0.4
US Dollars	USD	-	618,502	1.00	618,502	-	1.7	-
Total					36,708,910	738	100.0	28.9

Polen Capital

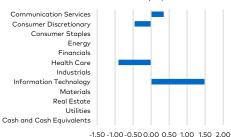
Performance Attribution – Quarter

GICS Sector	Avg. Portfolio Weight (%)	Avg. Russell 1000 Growth Weight (%)	Active Weight (%)	Gross Portfolio Return (%)	Russell 1000 Growth Return (%)	Portfolio Contribution (%)	Russell 1000 Growth Contribution (%)	Allocation Effect (%)	Selection Effect (%)	Total Effect (%)
Communication Services	15.81	7.11	8.70	-4.41	-6.39	-0.71	-0.44	-0.91	0.35	-0.56
Consumer Discretionary	17.07	15.31	1.76	-17.95	-15.65	-3.25	-2.60	-0.33	-0.46	-0.79
Consumer Staples	-	5.84	-5.84	-	10.01	-	0.56	-0.44	0.00	-0.44
Energy	-	1.73	-1.73	-	12.84	-	0.20	-0.16	0.00	-0.16
Financials	-	3.16	-3.16	-	9.48	-	0.29	-0.22	0.00	-0.22
Health Care	16.14	12.81	3.33	6.27	13.07	0.89	1.55	0.37	-0.91	-0.54
Industrials	-	7.74	-7.74	-	15.41	-	1.09	-0.95	0.00	-0.95
Information Technology	47.84	43.24	4.60	6.64	3.30	2.88	1.36	0.07	1.48	1.55
Materials	-	1.43	-1.43	-	8.93	-	0.12	-0.09	0.00	-0.09
Real Estate	-	1.57	-1.57	-	3.55	-	0.06	-0.02	0.00	-0.02
Utilities	-	0.05	-0.05	-	16.56	-	0.01	-0.01	0.00	-0.01
Cash and Cash Equivalents	3.15	0.00	3.15	0.00	-	0.00	-	-0.14	0.00	-0.14
Total	100.00	100.00	0.00	-0.19	2.20	-0.19	2.20	-2.84	0.46	-2.39





Selection Effect (%)



Total Effect (%)



-1.50 -1.00 -0.50 0.00 0.50 1.00 1.50 2.00
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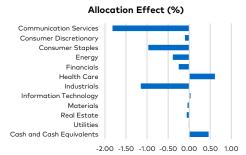
Top 5 Contributors	Avg. Portfolio Weight (%)	Total Return (%)	Contribution to Active Return (%)
Netflix Inc	6.13	25.25	1.18
Adobe Inc	5.92	22.29	0.97
Mastercard Inc A	4.97	22.49	0.63
Abbott Laboratories	4.09	13.99	0.52
Gartner Inc	2.92	21.49	0.50

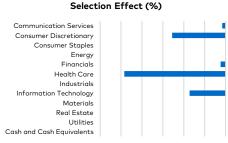
Bottom 5 Contributors	Avg. Portfolio Weight (%)	Total Return (%)	Contribution to Active Return (%)
Amazon.com Inc	11.25	-25.66	-1.79
Meta Platforms Cl A	1.41	-27.82	-1.29
Airbnb Inc-Class A	3.74	-18.60	-0.67
PayPal Holdings Inc	3.04	-17.25	-0.53
Alphabet Inc CI C	8.27	-7.72	-0.42

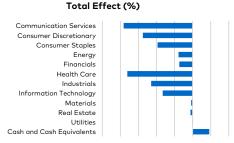
Source: Bloomberg. Data above pertains to the MWRA Employees Retirement Board vs. Russell 1000 Growth. Gross portfolio returns and contribution data are calculated based on end of day holdings and Bloomberg pricing. These returns may differ from individual client portfolio returns (calculated using cash flows, client restrictions or other transactions), composite returns or the returns of various mutual fund share classes. The performance information shown has been calculated using a representative account managed by the firm; however, the firm manages other accounts that are not presented. Full performance of the representative account is available upon request. These returns may differ from portfolio returns that are calculated using cash flows and other transactions. Returns net of fees will be lower. Please see Disclosures page for disclosure #1 . For Period September 30, 2022 - December 31, 2022.

Performance Attribution - One Year

GICS Sector	Avg. Portfolio Weight (%)	Avg. Russell 1000 Growth Weight (%)	Active Weight (%)	Gross Portfolio Return (%)	Russell 1000 Growth Return (%)	Portfolio Contribution (%)	Russell 1000 Growth Contribution(%)	Allocation Effect (%)	Selection Effect (%)	Total Effect (%)
Communication Services	17.31	9.04	8.27	-49.31	-48.77	-9.63	-5.41	-1.82	-0.08	-1.91
Consumer Discretionary	16.35	16.96	-0.61	-48.18	-41.84	-8.72	-7.97	-0.10	-1.28	-1.38
Consumer Staples	-	5.13	-5.13	-	-4.30	-	-0.15	-0.97	0.00	-0.97
Energy	-	1.05	-1.05	-	54.03	-	0.28	-0.39	0.00	-0.39
Financials	0.36	2.78	-2.42	-21.45	-16.88	-0.24	-0.36	-0.25	-0.12	-0.37
Health Care	16.17	10.66	5.51	-29.66	-12.00	-5.00	-0.65	0.61	-2.42	-1.81
Industrials	-	6.83	-6.83	-	-9.56	-	-0.44	-1.15	0.00	-1.15
Information Technology	46.83	44.59	2.25	-32.16	-30.25	-14.01	-13.72	0.03	-0.86	-0.83
Materials	-	1.21	-1.21	-	-27.21	-	-0.28	-0.04	0.00	-0.04
Real Estate	-	1.71	-1.71	-	-26.03	-	-0.44	-0.06	0.00	-0.06
Utilities	-	0.04	-0.04	-	2.87	-	0.00	-0.01	0.00	-0.01
Cash and Cash Equivalents	2.98	0.00	2.98	0.00	-	0.00	-	0.46	0.00	0.46
Total	100.00	100.00	0.00	-37.59	-29.14	-37.59	-29.14	-3.69	-4.77	-8.46







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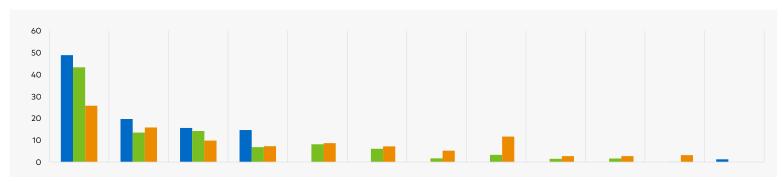
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Top 5 Contributors	Avg. Portfolio Weight (%)	Total Return (%)	Contribution to Active Return (%)	Bottom 5 Contributors	Avg. Portfolio Weight (%)	Total Return (%)	Contribution to Active Return (%)
Microsoft Corp	6.13	-28.02	1.34	Meta Platforms CI A	4.72	-70.88	-3.43
Alphabet Inc CI A	0.17	-3.76	1.23	Amazon.com Inc	10.21	-49.62	-2.39
UnitedHealth Group Inc	4.05	6.95	0.05	Salesforce.com Inc	4.56	-47.83	-2.18
Gartner Inc	2.52	0.54	0.01	Airbnb Inc-Class A	3.92	-48.65	-2.13
Thermo Fisher Scientific Inc	0.25	-2.41	-0.02	Alphabet Inc CI C	8.49	-38.67	-2.06

Source: Bloomberg. Data above pertains to the MWRA Employees Retirement Board vs. Russell 1000 Growth. Portfolio returns presented are gross of fees and are calculated based on end of day holdings and Bloomberg pricing. The performance information shown has been calculated using a representative account managed by the firm; however, the firm manages other accounts that are not presented. These returns may differ from the portfolio returns on the previous pages that are calculated using cash flows and other transactions. Returns net of fees will be lower. Please see Disclosures page for disclosure #1 . For Period December 31, 2021 - December 31, 2022.

GICS Sector Allocation

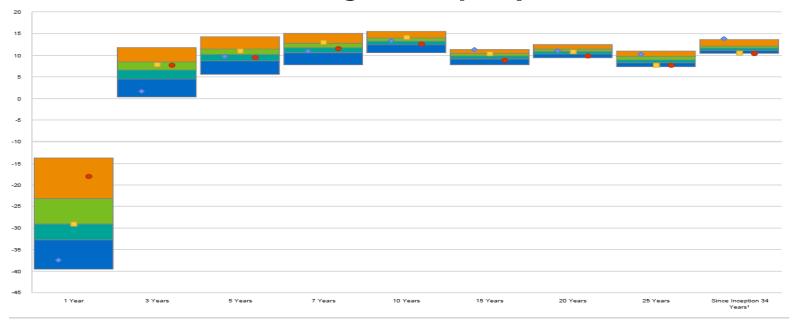
Our Focus is on Companies with Long-Term Staying Power



%	Info. Technology	Health Care	Consumer Discret.	Comm. Services	Industrials	Consumer Staples	Energy	Financials	Materials	Real Estate	Utilities	Cash
Polen Focus Growth	48.8	19.7	15.6	14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Russell 1000G	43.3	13.5	14.2	6.8	8.1	6.1	1.7	3.3	1.5	1.6	0.1	0.0
S&P 500	25.7	15.8	9.8	7.3	8.7	7.2	5.2	11.7	2.7	2.7	3.2	0.0

Info.	Health	Consumer	Comm.
Technology	Care	Discret.	Services
 Accenture Adobe Systems Autodesk DocuSign Gartner Mastercard Microsoft PayPal Holdings Salesforce.com ServiceNow Visa 	 Abbott Laboratories Align Technology Illumina Thermo Fisher Scientific UnitedHealth Group Zoetis 	AirbnbAmazon.comNike	AlphabetNetflix

Focus Growth vs. Large Company Growth Universe



	-1/	110			C		(D	
universe.	evestment	US.	Large	Cap	Growth	Equity	(Percentile)	

	1 Ye	ar	3 Ye	ars	5 Ye	ears	7 Ye	ars	10 Ye	ears	15 Ye	ears	20 Y	ears	25 Ye	ars	Since Incer Year	
		Rk		Rk		Rk		Rk		Rk		Rk		Rk		Rk		Rk
5th percentile	-13.81		11.72		14.26		15.03		15.49		11.30		12.45		10.93		13.62	
25th percentile	-23.26		8.42		11.39		12.70		13.95		10.36		11.38		9.72		12.08	
Median	-29.13		6.54		10.13		11.70		13.18		9.78		10.82		8.87		11.63	
75th percentile	-32.83		4.42		8.64		10.54		12.41		9.08		10.25		8.20		11.08	
95th percentile	-39.59		0.30		5.54		7.77		10.55		7.75		9.37		7.31		10.40	
# of Observations	228		227		216		201		188		164		130		87		26	
Polen Capital Management, LLC: Polen Focus Growth	-37.51	89	1.62	92	9.68	57	10.90	69	13.28	45	11.29	5	11.00	41	10.19	18	13.82	4
Russell Index: Russell 1000 Growth	-29.14	50	7.79	34	10.96	32	12.95	23	14.10	22	10.32	26	10.76	53	7.67	91	10.49	93
Standard & Poors Index: S&P 500	-18.11	12	7.66	36	9.42	62	11.48	57	12.56	69	8.81	82	9.80	88	7.64	91	10.34	96

Results displayed in USD using Spot Rate (SR).

1Q1 1989 - Q4 2022

Reflects composite returns net of fees as of 12-31-2022. Source: eVestment, LLC. Polen Capital compensates eVestment with a subscription fee that enables Polen Capital to access the eVestment database, however, Polen capital does not specifically pay eVestment to obtain the ranking set forth above. Since Inception results are from 03-31-1989. Periods over one year are annualized. Please see Disclosures page for disclosure #2, #3, #4 & #6.

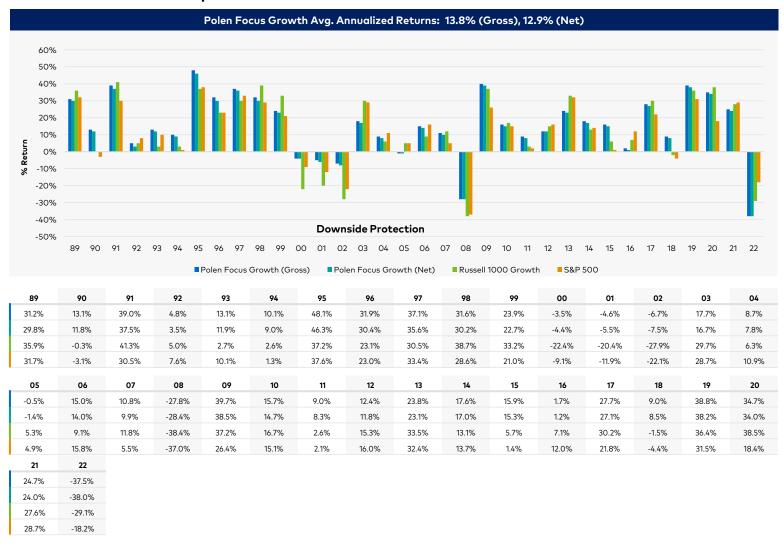
Historical Performance—A Culture of Results

Polen Focus Growth - Composite Performance

	Polen (Gross) (%)	Polen (Net) (%)	R1000G (%)	S&P 500 (%)
4Q 2022	-0.07	-0.28	2.20	7.41
YTD	-37.51	-38.02	-29.14	-18.22
1 Year	-37.51	-38.02	-29.14	-18.22
3 Years	1.62	1.00	7.79	7.62
5 Years	9.68	9.08	10.96	9.40
7 Years	10.90	10.31	12.95	11.46
10 Years	13.28	12.67	14.11	12.55
15 Years	11.29	10.61	10.32	8.80
20 Years	11.01	10.25	10.76	9.79
25 Years	10.19	9.37	7.68	7.63
30 Years	12.86	11.96	9.39	9.64
Since Inception (01/01/1989)	13.82	12.86	10.49	10.34

Annual Rates of Return

Polen Focus Growth Composite vs. Russell 1000 Growth & S&P 500



As of 12-31-2022. Returns from 01-01-1989 through 12-31-2022. **Past performance is not indicative of future results.** Returns are presented gross and net of fees and have been calculated after the deduction of all transactions costs and commissions, and include the reinvestment of all income. Please see Disclosures page for disclosure #3 & #4.

Large Company Growth Team Biographies

Dan Davidowitz, CFA – Portfolio Manager & Analyst

Dan joined Polen Capital in 2005. Dan is the lead portfolio manager of the firm's flagship Focus Growth strategy. Prior to joining Polen Capital, Dan spent five years as Vice President and Research Analyst at Osprey Partners Investment Management. Before joining Osprey Partners, Dan spent one year as a Research Analyst at Value Line, Inc. and five years in the health care sector, holding various analytical positions at Memorial Sloan-Kettering Cancer Center. Dan received a B.S. with high honors in Public Health from Rutgers University and an M.B.A. from the City University of New York, Baruch College Zicklin School of Business. Dan is a CFA® charterholder and a member of the CFA Institute and the CFA Society of South Florida.

Damon Ficklin – Head of Team, Portfolio Manager & Analyst

Damon Ficklin is the Head of Team for the Large Company Growth Team at Polen Capital and Portfolio Manager of the firm's Global Growth product. Damon joined the firm in 2003, serving initially as a Research Analyst. He was promoted to Portfolio Manager in 2012 co-managing the firm's flagship Focus Growth Portfolio. He took over management of the Global Growth portfolio in 2017 and then relinquished responsibilities for managing the Focus Growth portfolio in 2019. In 2020 he was promoted to Head of Team and is responsible for leading the Large Company Growth team and maintaining the investment philosophy. Prior to joining Polen Capital, Damon was an equity analyst at Morningstar covering the healthcare sector and a tax consultant at Price Waterhouse helping Fortune 500 companies implement tax strategies. Damon graduated Magna Cum Laude from the University of South Florida with a B.S. in Accounting, earned a M.S. in Accounting from Appalachian State University and earned an MBA with high honors from The University of Chicago Booth School of Business with concentrations in Finance and Economics. Damon is also a member of the Investment Committee of Make-A-Wish Southern Florida.

Daniel Fields, CFA – Portfolio Manager & Analyst

Daniel joined Polen Capital in 2017. He is co-portfolio manager of the firm's International Growth strategy. Prior to joining Polen Capital, Daniel spent eight years in Hong Kong where he worked for GaveKal Capital and Marshall Wace LLP as a Research Analyst evaluating Asian growth companies. He began his career at Fisher Investments as a Junior Analyst analyzing Emerging Markets companies. Daniel received a B.S. in Finance from the University of Idaho and M.S. in Global Finance from the NYU Stern School of Business and HKUST Business School. Daniel is a CFA® charterholder.

Brandon Ladoff - Portfolio Manager & Director of Sustainable Investing

Brandon joined Polen Capital in 2013. Brandon is a co-portfolio manager of the firm's Focus Growth strategy and is responsible for managing the team's research and investment process. Prior to joining Polen Capital, Brandon spent over four years as a corporate lawyer at Willkie Farr & Gallagher, LLP. Prior to that, he spent a year as a Tax Associate at PricewaterhouseCoopers, LLP. Brandon received his B.S. in Accounting from the University of Florida, where he graduated summa cum laude. He also completed a Certificate in Business Policy at the Wharton School of Business and earned a J.D. from the University of Pennsylvania Law School, where he graduated cum laude.

Todd Morris – Portfolio Manager & Analyst

Todd joined Polen Capital in 2011. Todd is lead portfolio manager of the firm's International Growth strategy. He also works as an analyst, identifying and researching investments for the strategy. During his time at Polen Capital, he has served as a Research Analyst and the Director of Research. Prior to joining Polen Capital, Todd worked in research and marketing roles with Prudential Insurance and Millennium Global Asset Management, respectively, and served for seven years in the U.S. Navy. During his naval career, Todd navigated a warship on three deployments, taught at the U.S. Merchant Marine Academy, and served with the U.S. Army in Iraq. Todd received a B.S. in History from the U.S. Naval Academy where he was a student-athlete and an M.B.A. from Columbia Business School.

Large Company Growth Team Biographies

Jeff Mueller - Portfolio Manager & Analyst

Jeff joined Polen Capital in 2013. He is co-portfolio manager of the firm's Global Growth strategy. Prior to joining Polen Capital, Jeff spent 10 years in the U.S. Marine Corps, during which he flew over 200 combat missions in F/A-18s. Jeff received his B.A. in Communications and Business Administration from Trinity University in San Antonio, where he was Captain of the Men's Tennis Team, an All American, and NCAA Champion. Jeff is a Tillman Scholar and earned his M.B.A. with honors and distinction from Columbia Business School, where he was a graduate of the Value Investing Program. Jeff serves as an adjunct faculty member at Columbia Business School, where he teaches the Compounders course within the Value Investing Program. Jeff is a member of the Board of Trustees at Trinity University in San Antonio, where he serves on the investment committee.

Stephen Atkins, CFA - Portfolio Strategist & Analyst

Stephen joined Polen Capital in 2012. Prior to joining Polen Capital, Stephen spent 12 years as a portfolio manager at Northern Trust Investments, including eight years as a mutual fund co-manager. Before joining Northern Trust, Stephen spent two years as a portfolio manager at Carl Domino Associates, LP. Stephen received his B.S. in Business Administration from Georgetown University and a General Course degree from the London School of Economics. Stephen is a CFA® charterholder and a member of the CFA Institute and the CFA Society of South Florida.

Lauren Harmon, CFA - ESG & Research Analyst

Lauren joined Polen Capital in 2016. Prior to joining Polen Capital, Lauren spent almost three years as a performance and risk analyst at GE Asset Management. Prior to that, she spent more than two years as an investment analyst at Rocaton Investment Advisors. Lauren received a B.A. in Business and Psychology from Wake Forest University and an M.B.A. from Columbia Business School, where she was a graduate of the Value Investing Program. Lauren is a CFA® charterholder and a member of the CFA Institute.

Bryan Power, CFA - Director of Research & Analyst

Bryan joined Polen Capital in 2016. Prior to joining the firm, Bryan spent two years as an Associate in equity research and institutional equity sales at Oppenheimer & Co. Prior to that, he spent almost three years working in various equity-related analytical roles at Bloomberg LP. Bryan received a B.A. in Economics and Business (cum laude) from Johns Hopkins University, where he was a student-athlete, and earned an M.B.A. from The University of Chicago Booth School of Business. Bryan is a CFA® charterholder and member of the CFA Society of South Florida.

Roland Cole – Research Analyst

Roland joined Polen Capital Management in July 2018. Prior to joining Polen Capital, Roland spent two years as an Investment Consultant in asset allocation and financial advisory at Duncan-Williams, Inc. He spent nearly three years working in various equity-related analytical roles that included the co-launch of Duncan Williams Asset Management, a private wealth advisory firm focusing on multi-manager investments for high net worth individuals and non-profit organizations. Roland received a B.S. in Economics and History from Vanderbilt University and an M.B.A. in Accounting and Analytic Finance from the University of Chicago Booth School of Business.

Rana Pritanjali, CFA – Research Analyst

Rana joined Polen Capital in 2021. Prior to joining Polen Capital, Rana was a Global Consumer Analyst at Causeway Capital Management. Prior to that, Rana held positions at The Motley Fool, covering the consumer, media, and auto sectors, as well as Arkanis Capital in India, and Credit Suisse in Singapore. Rana received a B.S. in Civil Engineering from IIT Delhi and an M.B.A. from Columbia Business School, where she was a member of the Value Investing program. Rana is a CFA® charterholder.

GIPS Report

Focus Growth Composite—GIPS Composite Report

		UMA	Firm	Composit	e Assets		Annual Performance Results					3 Year Standard Deviation		
Year End	Total (\$Millions)	Assets (\$Millions)	Assets (\$Millions)	U.S. Dollars (\$Millions)	Number of Accounts	Composite Gross (%)	Composite Net (%)	S&P 500 (%)	Russell 1000 G (%)	Composite Dispersion (%)	Composite Gross (%)	S&P 500 (%)	Russell 1000 G (%)	
2021	82,789	28,884	53,905	14,809	2387	24.71	24.04	28.71	27.61	0.3	17.25	17.17	18.17	
2020	59,161	20,662	38,499	12,257	1904	34.64	34.00	18.40	38.49	0.4	18.16	18.53	19.64	
2019	34,784	12,681	22,104	8,831	939	38.80	38.16	31.49	36.40	0.3	12.13	11.93	13.07	
2018	20,591	7,862	12,729	6,146	705	8.99	8.48	-4.38	-1.51	0.2	11.90	10.95	12.12	
2017	17,422	6,957	10,466	5,310	513	27.74	27.14	21.83	30.22	0.3	10.66	10.07	10.54	
2016	11,251	4,697	6,554	3,212	426	1.72	1.22	11.96	7.09	0.2	11.31	10.74	11.31	
2015	7,451	2,125	5,326	2,239	321	15.89	15.27	1.38	5.68	0.1	10.92	10.62	10.85	
2014	5,328	1,335	3,993	1,990	237	17.60	16.95	13.69	13.06	0.2	10.66	9.10	9.73	
2013	5,015	1,197	3,818	1,834	245	23.77	23.07	32.39	33.49	0.3	11.91	12.11	12.35	
2012	4,527	889	3,638	1,495	325	12.43	11.75	16.00	15.26	0.1	16.01	15.30	15.88	

Performance % as of 12-31-2022:

(Annualized returns are presented for periods greater than one year)

	1 Yr	5 Yr	10 Yr	Inception
Polen Focus Growth (Gross)	-37.51	9.68	13.28	13.82
Polen Focus Growth (Net)	-38.02	9.08	12.67	12.86
Russell 1000 Growth	-29.14	10.96	14.11	10.49
S&P 500	-18.22	9.40	12.55	10.34

The Focus Growth Composite created on January 1, 2006 with inception date April 1, 1992 contains fully discretionary large cap equity accounts that are not managed within a wrap fee structure and for comparison purposes is measured against the S&P 500 and the Russell 1000 Growth indices. Effective January 2022, fully discretionary large cap equity accounts managed as part of our Focus Growth strategy that adhere to the rules and regulations applicable to registered investment companies subject to the U.S. Investment Company Act of 1940 and the Polen Focus Growth Collective Investment Trust were included in the Focus Growth Composite. Prior to March 22, 2021, the composite was named Large Capitalization Equity Composite. The accounts comprising the portfolios are highly concentrated and are not constrained by EU diversification regulations.

Polen Capital Management claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Polen Capital Management has been independently verified for the periods April 1, 1992 through June 30, 2022. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. The Focus Growth Composite has had a performance examination for the periods April 1, 1992 through December 31, 2021. The verification and performance examination reports are available upon request.

Polen Capital Management is an independent registered investment adviser. Polen Capital Management invests exclusively in equity portfolios consisting of high-quality companies but also has a subsidiary, Polen Capital Credit, LLC, that specializes in high yield securities and special situations investing. A list of all composite and pooled fund investment strategies offered by the firm, with a description of each strategy, is available upon request. In July 2007, the firm was reorganized from an S-corporation into an LLC and changed names from Polen Capital Management. ILC.

Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. Effective January 1, 2022, composite policy requires the temporary removal of any portfolio incurring a client initiated significant net cash inflow or outflow of 10% or greater of portfolio assets.

From July 1, 2002 through April 30, 2016, composite policy required the temporary removal of any portfolio incurring a client initiated significant cash outflow of 10% or greater of portfolio assets. The temporary removal of such an account occurred at the beginning of the month in which the significant cash flow occurred and the account re-entered the composite the first full month after the cash flow. The U.S. Dollar is the currency used to express performance. Certain accounts included in the composite may participate in a zero-commission program. Returns are presented gross and net of management fees and include the reinvestment of all income. Net of fee performance was calculated using either actual management fees or highest fees for fund structures. The annual composite dispersion presented is an asset-weighted standard deviation using returns presented gross of management fees calculated for the accounts in the composite the entire year. Policies for valuing investments, calculating performance, and preparing GIPS Reports are available upon request.

The separate account management fee schedule is as follows:

Institutional: Per annum fees for managing accounts are 75 basis points (.75%) on the first \$50 Million and 55 basis points (.55%) on all assets above \$50 Million of assets under management. HNW: Per annum fees for managing accounts are 150 basis points (1.5%) of the first \$500,000 of assets under management and 100 basis points (1.0%) of amounts above \$500,000 of assets under management. Actual investment advisory fees incurred by clients may vary.

The per annum fee schedule for managing the Polen Growth Fund, which is included in the Focus Growth Composite, is 85 basis points (.85%). The total annual fund operating expenses are up to 125 basis points (1.25%). As of 4/30/2022, the mutual fund expense ratio goes up to 1.21%. This figure may vary from year to year. The per annum all-in fee* schedule for managing the Polen Focus Growth Collective Investment Trust, which is included in the Focus Growth Composite, goes up to 60 basis points (.60%). The per annum all-in fee* schedule for managing the Polen Capital Focus Growth Fund, which is included in the Focus Growth Composite, goes up to 65 basis points (.65%). *The all-in fee (which is similar to a total expense ratio) includes all administrative and operational expenses of the fund as well as the Polen Capital management fee.

Past performance does not guarantee future results and future accuracy and profitable results cannot be guaranteed. Performance figures are presented gross and net of management fees and have been calculated after the deduction of all transaction costs and commissions. Polen Capital is an SEC registered investment advisor and its investment advisory fees are described in its Form ADV Part 2A. The advisory fees will reduce clients' returns. The chart below depicts the effect of a 1% management fee on the growth of one dollar over a 10 year period at 10% (9% after fees) and 20% (19% after fees) assumed rates of return.

The Russell 1000° Growth Index is a market capitalization weighted index that measures the performance of the large-cap growth segment of the U.S. equity universe. It includes Russell 1000° Index companies with higher price-to-book ratios and higher forecasted growth values. The index is maintained by the FTSE Russell, a subsidiary of the London Stock Exchange Group. The S&P 500° Index is a market capitalization weighted index that measures 500 common equities that are generally representative of the U.S. stock market. The index is maintained by S&P Dow Jones Indices. The volatility and other material characteristics of the indices referenced may be materially different from the performance achieved. In addition, the composite's holdings may be materially different from those within the index. Indices are unmanaged and one cannot invest directly in an index.

The information provided in this document should not be construed as a recommendation to purchase or sell any particular security. There is no assurance that any securities discussed herein will remain in the composite or that the securities sold will not be repurchased. The securities discussed do not represent the composites' entire portfolio. Actual holdings will vary depending on the size of the account, cash flows, and restrictions. It should not be assumed that any of the securities transactions or holdings discussed will prove to be profitable, or that the investment recommendations or decisions we make in the future will be profitable or will equal the investment performance of the securities discussed herein. A complete list of our past specific recommendations for the last year is available upon request.

Return	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years	10 Years
10%	1.10	1.21	1.33	1.46	1.61	1.77	1.95	2.14	2.36	2.59
9%	1.09	1.19	1.30	1.41	1.54	1.68	1.83	1.99	2.17	2.37
20%	1.20	1.44	1.73	2.07	2.49	2.99	3.58	4.30	5.16	6.19
19%	1.19	1.42	1.69	2.01	2.39	2.84	3.38	4.02	4.79	5.69

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Disclosures

- 1. The information provided in this document should not be construed as a recommendation to purchase or sell any particular security. There is no assurance that any securities discussed herein will be in the composite at the time you receive this document or that any securities sold have not been repurchased. The securities discussed do not necessarily represent the composite's entire portfolio. Actual holdings will vary depending on the size of the account, cash flows, restrictions, and any trade orders in progress on the date as of when holdings are shown. It should not be assumed that any of the securities transactions or holdings discussed were or will prove to be profitable or that any investment recommendations we make in the future will equal the investment performance of the securities discussed herein. For a complete list of Polen's past specific recommendations holdings and current holdings as of the current quarter end, please contact info@polencapital.com.
- 2. Portfolio characteristics are shown as of December 31, 2022. There can be no guarantee that the portfolio will exhibit identical or similar characteristics to those shown at any future time of investment. Investments are subject to risks, including the possibility that the value of any investment (and income derived thereof (if any)) can increase, decrease or in some cases, be entirely lost and investors may not get back the amount originally invested. This document does not identify all the risks (direct or indirect) or other considerations which might be material to you when entering any financial transaction. The views and strategies described may not be suitable for all clients.
- 3. Supplemental information to the fully compliant composite performance which accompanies this presentation. Past performance is not indicative of future results.
- 4. The volatility and other material characteristics of the indices referenced may be materially different from the performance achieved. In addition, the composite's holdings may be materially different from those within the Index. Indices are unmanaged and one cannot invest directly in an index. The Russell 1000° Growth Index is a market capitalization weighted index that measures the performance of the large-cap growth segment of the U.S. equity universe. It includes Russell 1000° Index companies with higher price-to-book ratios and higher forecasted growth values. The index is maintained by the FTSE Russell, a subsidiary of the London Stock Exchange Group. The S&P 500° Index is a market capitalization weighted index that measures 500 common equities that are generally representative of the U.S. stock market. The index is maintained by S&P Dow Jones Indices.





Polen Capital Diversity and Inclusion Policy February 2022

Polen Capital is guided by three Core Values geared toward both honoring our commitment to our clients and creating a positive culture and a fair and productive professional environment:

Do the right thing: Our clients are the reason we are in business; we make every decision with their best interests in mind.

Do more than expected: Excellence is the base; unexpected service and performance is the goal.

Respect the individual: Build trust with both clients and colleagues by acting with integrity and respect.

Our approach to diversity and inclusion is reflected in these Core Values. Our management team is dedicated to ensuring the fulfillment of this policy with respect to recruitment, hiring, placement, promotion, learning, compensation, benefits, and access to facilities and programs.

Employees with questions or concerns about the policies are encouraged to bring these issues to the attention of Human Resources.

Discrimination

Polen Capital is an equal opportunity employer. The firm does not tolerate and prohibits discrimination against or harassment of our employees, job applicants, contractors, interns, volunteers, or by another employee, supervisor, vendor, customer, or any third party on the basis of race, color, creed, religion, national origin, ancestry, citizenship status, age, sex or gender, gender identity or gender expression, sexual orientation, marital status, military service and veteran status, and physical or mental disability. Employees participate in training annually around Workplace Harassment and Diversity and Inclusion. The Head of Human Resources has ombudsman responsibilities and employees are aware that they can escalate any harassment, discrimination, or retaliation complaint.

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We will endeavor to make a reasonable accommodation to employees if requested. The Employee Handbook provides employees with additional information on our harassment, discrimination, and retaliation prevention measures.

Fair Remuneration

Polen Capital is committed to fair and equal employment opportunities and compensation for all employees. The firm has implemented practices and measures to ensure all employees are compensated fairly for their roles, skill level, and performance and that no employee is disadvantaged based on personal characteristics.

Performance-focused compensation provides alignment with the business

Polen Capital is privately owned: 72% by employees, 20% by iM Global Partner (an investment and distribution platform) and 8% by Polen Family Holdings. Polen Capital employees control 100% of the firm. Employees receive competitive salaries and bonuses, along with generous benefit offerings including 100% employer-paid health insurance. The firm typically funds employee 401k profit-sharing plans, which can be invested in our mutual funds to strengthen client alignment. All employees share in upside firm performance either through equity ownership, long-term incentive plans (phantom equity), distribution pools, or a firm bonus tied to asset growth and client retention. Future equity participation through our phantom equity plan and equity ownership is evaluated annually.

Fair and equal compensation

Compensation is market-based and designed to fairly reflect an employee's skill, education, and experience without bias based on gender, ethnicity, or any other grounds. McLagan compensation surveys are reviewed every two years for industry compensation benchmarks. The Compensation Committee reviews employee compensation annually, with input from managers, and seeks to ensure fair balance across teams.

Transparency and communication

On an annual basis, employees set individual goals and learning plans in consultation with their immediate managers. Performance reviews are conducted twice annually in an effort to ensure that employees are delivering on these goals and training plans. Managers work to identify strengths and

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areas of development. Overall, performance is evaluated against a Role Matrix and Balanced Scorecard model. The Role Matrix details key priorities for each position across three categories: Culture, Core Skills, and Client. The Balanced Scorecard provides a framework to tie performance across the three categories to individual year-end compensation.

We are committed to career development and mobility. Promotions may occur at any point throughout the year. Employees are also encouraged to apply for open positions which are posted on internal message boards.

Flexible Working Practices and Supportive Policies

Polen Capital is a results-only work environment (ROWE) which allows for flexibility to meet personal, childcare, and family needs. Polen Capital provides up to 12 weeks of paid leave to run concurrently with any FMLA leave taken to care for an employee's child after birth, or placement for adoption or foster care to any employee who is the primary caregiver for the child. Non-primary caregivers will be provided with up to 2 weeks of paid leave taken to care for an employee's child after birth, or placement for adoption or foster care to any employee. In addition, Polen offers unlimited PTO to all employees which allows for leave in a variety of life circumstances. We have also worked to eliminate gender bias in our job descriptions by utilizing more inclusive language and highlighting gender-neutral company benefits, such as our 12-week paid parental leave and, family planning benefits such as fertility treatments for employees who wish to become parents.

Additional Information

Polen Capital's Diversity and Inclusion Strategic plan is focused on four key concepts: (1) Empower all voices, which focuses on our minority recruitment and leadership efforts; (2) Enhance our workplace, which works on fostering a culture of belonging and delivering resources to advance allyship and inclusion; (3) Engage our communities, which supports our local communities in Boca, Boston and London through corporate partnership, volunteerism, and charitable giving; and (4) Expand our reach to work with diverse vendors and companies.

Please see the Addendum for a current snapshot of our Diversity and Inclusion Strategic Plan, including our diversity composition and targets.

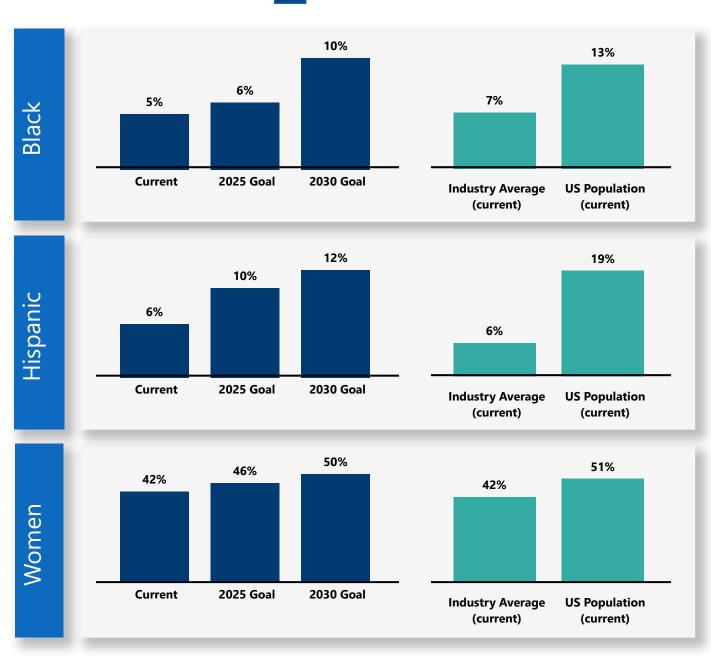
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Going beyond.

Polen Capital Top 5 Goal for 2021: Develop and implement Diversity & Inclusion strategy to increase minority representation within the asset management industry and to enhance our ability to deliver to clients.

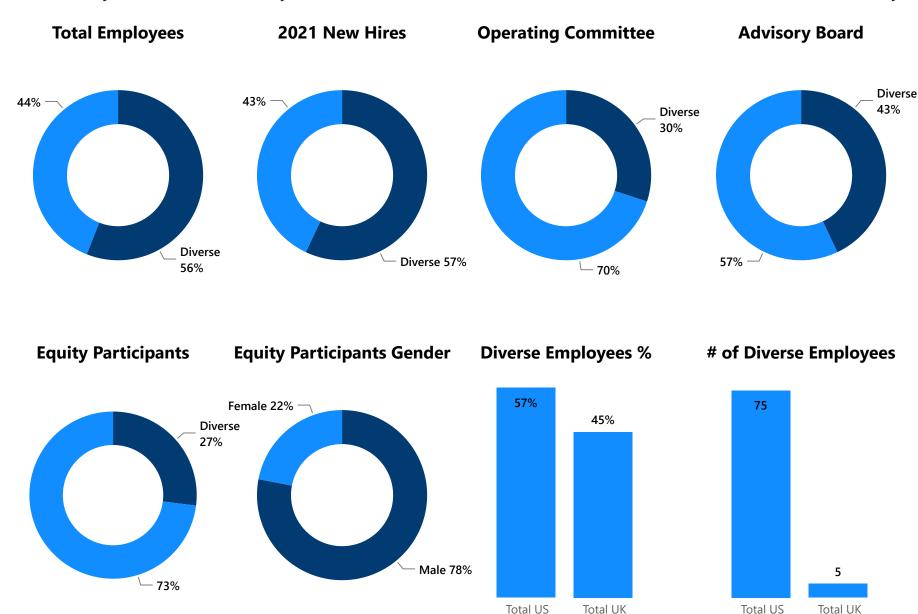
Aspirational Targets at Polen

% of Total Polen FTEs



By The Numbers

Diversity at Polen is defined by women, ethnic minorities, veterans, or members of the LGTBQ+ community



Recruitment Partnerships

Full Time Employees



Works to foster career advancement and increased leadership presence of underrepresented talent in the financial service industry



Identifies remarkable military service members, veterans, and spouses, empowering them with academic scholarships, leadership development opportunities and a diverse, global community of mentors and peers



Focuses on uniting individuals across the financial services industry to drive LGBTQ+ inclusion and equality

Interns











Works to foster career advancement and increased leadership presence of underrepresented talent in the financial service industry

Expands access to careers in finance and entrepreneurship for undergraduate students from underrepresented backgrounds

Provides rising sophomores and juniors from underrepresented communities with an introduction to career possibilities in financial services

Provides young women online resources and a network of female role models delivering compelling and high-impact messages on the many benefits of investing as a career

FAMU in partnership with Adaptive Growth Leadership

Making a Difference

Firmwide Training: Conscious Inclusion (2019), Implicit Bias (2020), Behaviors of Inclusion (2021)

Polen Capital Diversity Charitable Fund: Donor Advised Fund with grants for minority-focused organizations managed by Roland Cole, Large Company Growth Team Research Analyst and Toigo alum

Employee Resources Groups: Women's ERG and Multicultural ERG established in 2021

The George Snow Scholarship Fund: Polen Capital will be funding a \$40,000 scholarship for a diverse rising college student who is interested in business or finance

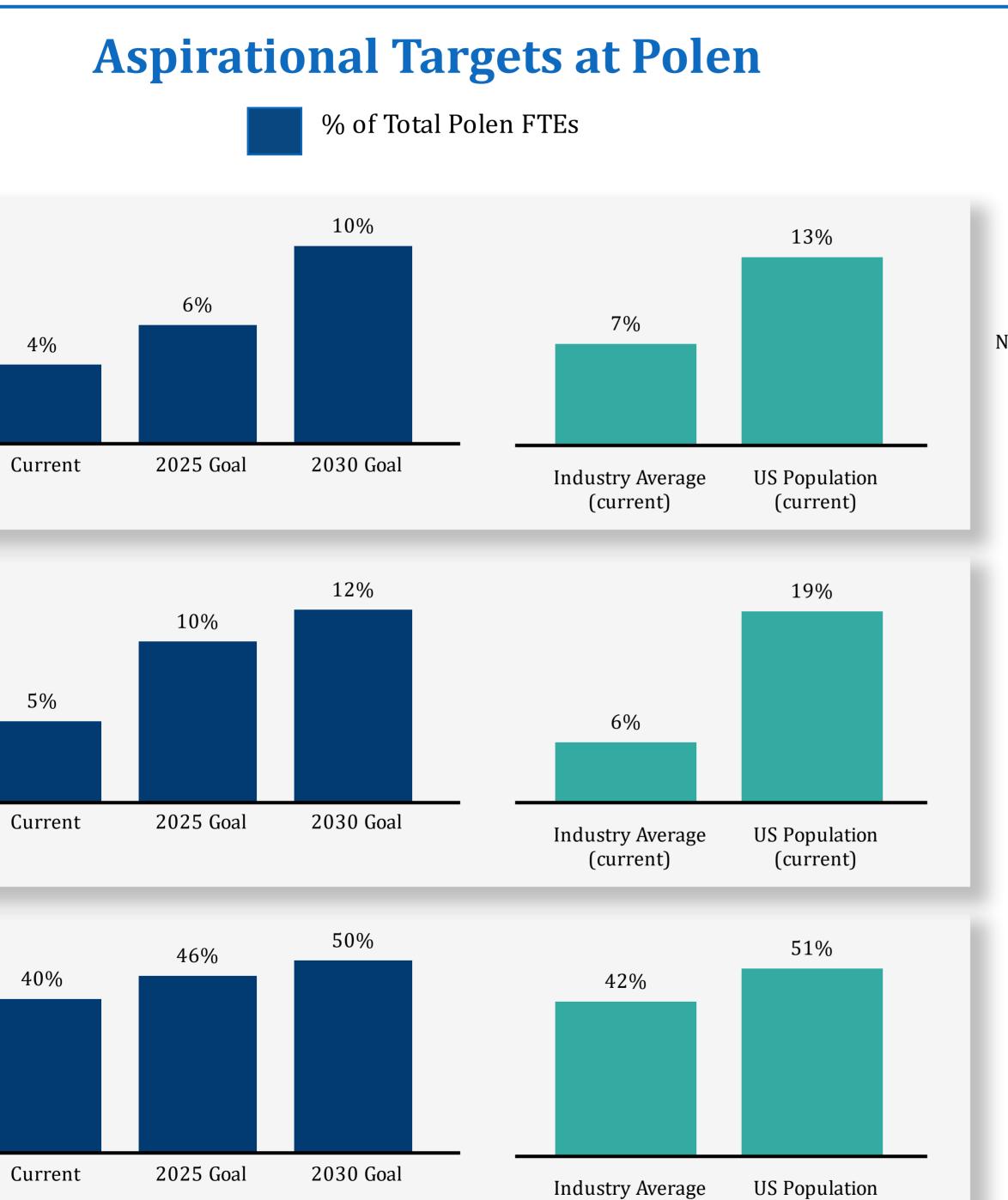
The Diversity Project North America: An organization focused on diverse best practices that allows Polen to network with other finance institutions

Polen Capital Diversity & Inclusion Addendum

Black

Hispanic

Women

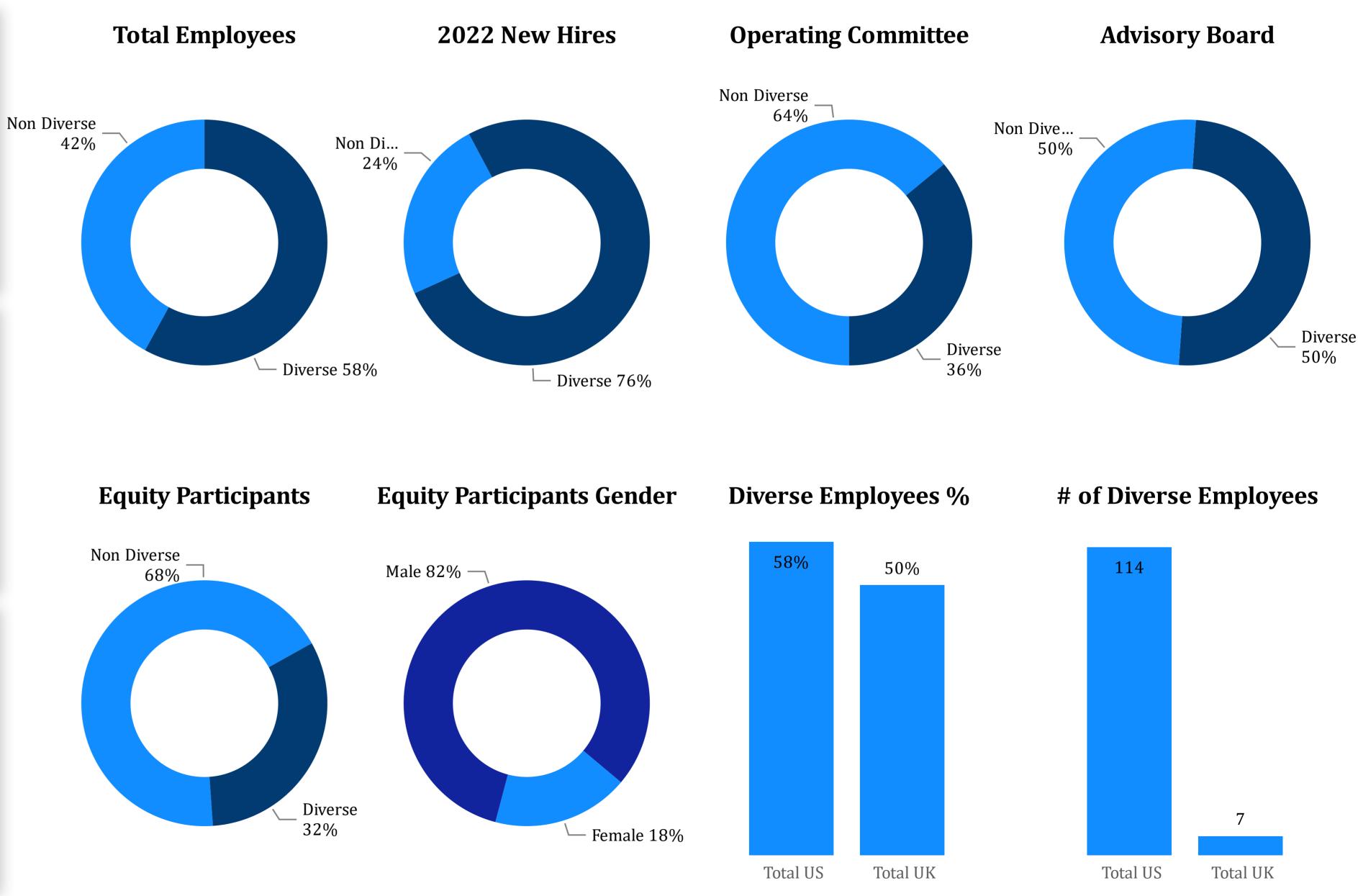


(current)

(current)

By The Numbers

Diversity at Polen is defined by women, people of color, veterans, or members of the LGBTQ+ community



Recruitment Partnerships

Full Time Employees



Works to foster career advancement and increased leadership presence of underrepresented talent in the financial services industry



Identifies remarkable military service members, veterans, and spouses, empowering them with academic scholarships, leadership development opportunities and a diverse, global community of mentors and peers



Focuses on uniting individuals across the financial services industry to drive LGBTQ+ inclusion and equality

Interns



Provides young women online resources and a network of female role models delivering compelling and high-impact messages on the many benefits of investing as a career



Our relationship with FAMU is furthered by our partnership with Adaptive Growth Leadership, a people of color-owned consultancy group. This organization provides a pipeline of talented, diverse candidates for full-time and internship opportunities

Making a Difference

Firmwide Training: Conscious Inclusion (2019), Implicit Bias (2020), Behaviors of Inclusion (2021), Inclusion escape room (2022)

Polen Capital Diversity Charitable Fund: Donor Advised Fund with grants for organizations focused on diversity managed by Roland Cole, Large Company Growth Team Research Analyst and Toigo alum

Employee Resources Groups: Women's ERG and Multicultural ERG established in 2021, Polen Pride launched in March 2022

The George Snow Scholarship Fund: Polen Capital will be funding a \$40,000 scholarship for a diverse rising college student who is interested in business or finance

The Diversity Project North America: An organization focused on diverse best practices that allows Polen to network with other finance institutions



Firm: Garcia Hamilton & Associates, L.P.

Strategy/Product: Fixed Income - Aggregate

Client: MWRA Employees' Retirement System

NEPC Manager Due Diligence Questionnaire - Update

Instructions

In support of our upcoming meeting we ask that you please complete this due diligence questionnaire. Please provide your responses in the form of brief descriptions, lists or tables added directly to this Word document.

Thank you for taking the time to complete this questionnaire. Please note that all materials submitted in relation to MWRA Retirement System may be subject to disclosure consistent with Massachusetts Public Record laws.

Firm/Organization

1. Have there been any changes in ownership or management in the past year?

Yes, GH&A is proud to announce our newest partner, Connie Falcon Davis. Ms. Davis was named partner in December 2022 and is a 10-year veteran of the firm. We also had a few minor ownership adjustments among a few existing partners and are happy to discuss the details at any time. With these changes, our minority ownership is 62% and our women and minority ownership is 87%. Ownership changes were effective January 1, 2023.

GARCIA HAMILTON & ASSOCIATES, L.P. – FIRM OWNERSHIP AS OF JANUARY 1, 2023					
NAME	PERCENTAGE				
Gilbert Andrew Garcia, CFA	Managing Partner	29.2%			
Janna Hamilton	Partner, Marketing and Client Services	15.0%			
Ruby Muñoz Dang	Partner, Director of Marketing and Client Services	14.9%			
Stephanie Roberts	Partner, Marketing and Client Services	5.8%			
Kevin Lunday	Partner, Chief Operating Officer	5.7%			
Nancy Rodriguez	Partner, Portfolio Manager	5.6%			
Karen Tass, CFA	Partner, Portfolio Manager	4.4%			
Jeffrey Detwiler, CFA	Partner, Portfolio Manager	4.2%			
Benjamin Monkiewicz	Partner, Portfolio Manager	2.5%			
Gary Montgomery	Partner, Systems Manager	2.0%			



Don Elsenbrock	Partner, Portfolio Manager/Strategist	1.9%
Yvette Dueñas	Partner, Portfolio Manager	1.9%
Morgan Doyle	Partner, Client Relations Manager	1.8%
Beth L. McWilliams	Partner, Chief Compliance Officer	1.7%
Mark R. Delaney, CFA	Partner, Senior Portfolio Manager/Strategist	1.3%
Marcus Smith	Partner, Vice President of Marketing and Client Services	1.1%
Connie Falcon Davis	Partner, Investment Analyst	1.0%

2. List firm AUM, net flows and accounts gained/lost for the past 5 years.

Year	AUM (\$ MM)	Net Flow (\$ MM)	Clients Gained	Clients Lost
2022	\$16,764	\$343	29	29
2021	\$18,740	\$1,828	38	17
2020	\$16,726	\$786	16	11
2019	\$14,997	\$1,073	56	11
2018	\$12,590	\$1,545	36	7

3. Have there been any new or discontinued products in the past year?

The Firm launched the Collective Investment Trust (CIT) vehicle within the Fixed Income – Aggregate strategy in January 2022.

4. Are any products capacity constrained?

The Firm does not have a policy limiting accounts or assets under management. We presently have ample capacity from an investment management standpoint, and we continually review this from an organizational, management, and client service standpoint. We feel we are positioned to continue to grow at a steady pace over the next several years and are committed to adding the resources required to provide the quality of investment and client services to exceed our clients' expectations.

5. Describe any current or pending regulatory, compliance or litigation issues and the expected business impact.

There are no current or pending regulatory, compliance or litigation issues.

6. Describe your diversity, equity and inclusion efforts with regard to the firm and its employees.

Diversity is very important to GH&A and permeates everything we do from the



management of the Firm to the way we manage investments. Diversity is reflected in our ownership, staff, vendors, and the community organizations we are involved in. We believe the success of our diversity efforts speak for themselves, as we are MBE/HUB certified and are a 100% employee-owned and operated firm, with 88% of the Firm held by women and minority Partners.

FIRM WIDE DIVERSITY

GH&A promotes from within the Firm. We train and prepare women and minorities for promotion through mentorship with senior team members of the investment team who educate them on the industry and serve as a sounding board and extra layer of support. Many of our Partners started at GH&A as junior team members and were mentored and developed for senior level positions. We challenge junior team members by assigning them a diverse set of both client and investment-facing projects. Furthermore, we encourage all our team members to participate in client and consultant outreach and meetings to build confidence in their role as a representative of GH&A. When the Firm conducts interviews to fill positions, we intentionally include several diverse candidates in the interview pool.

We believe diverse backgrounds lead to better solutions, and there is no greater testament to this than the Firm's diversity reflected at all levels of the organization and across all departments. The Firm has promoted women and minorities into leadership and executive management roles across the investment, client services, and operations teams including Named Partner, Portfolio Manager, Director of Marketing and Client Services, Chief Compliance Officer, Operations Manager, and Client Relations Manager. Additionally, five of the investment team's eight portfolio managers are women and/or minority.

Portfolio Management Team

1. Have there been any changes in the portfolio management team in the past year?

There have been no changes to the portfolio management team in the past year.

2. Are there any expected changes to the team in the future (planned additions or departures)?

There are no expected changes to the portfolio management team in the future.

Process

- 1. Have there been significant changes in any of the areas below in the past year?
 - · Identification of investment ideas



- Process for exploring and vetting ideas
- Portfolio trading practices including buy/sell rules
- · Approach to portfolio monitoring and risk management

There have been no significant changes in any of the listed areas within the last year.

Philosophy

1. Describe recent changes in investment philosophy, if any.

There have been no recent changes to the investment philosophy. Since GH&A's inception, the firm has followed a consistent fixed income investment philosophy that focuses on the preservation of principal while maintaining high current income. GH&A's goal is to outperform our benchmark indices net of fees with higher credit quality and lower risk.

Portfolio

1. If not included in your meeting presentation, provide portfolio holdings, sector exposure, geographic exposure and common characteristics (yield, duration, market cap, P/E, etc.).

Portfolio holdings are included in the table below, and sector exposure/characteristics are included in the meeting presentation. GH&A only invests in US domiciled securities.



	Original			Market Value	Pct.
Cusip	Face	Quantity	Security	+Accr.Int.	Assets
38141GWV2		645,000	Goldman Sachs 3.814% Due 04-23-29	593,805.85	1.88
06051GHQ5		1,070,000	Bank America Corp 3.974% Due 02-07-30	988,814.82	3.13
172967ME8		395,000	Citigroup Inc 3.980% Due 03-20-30	360,655.58	1.14
001055BJ0		745,000	Aflac Inc 3.600% Due 04-01-30	681,015.67	2.16
46647PBE5		1,665,000	JP Morgan 2.739% Due 10-15-30	1,405,923.22	4.46
254687FX9		580,000	Walt Disney Company 2.650% Due 01-13-31	502,239.79	1.59
172967MP3		1,100,000	Citigroup Inc 4.412% Due 03-31-31	1,022,259.70	3.24
912828YS3		420,000	U S Treasury 1.750% Due 11-15-29	367,072.34	1.16
912828Z94		710,000	U S Treasury 1.500% Due 02-15-30	609,047.23	1.93
91282CBL4		2,370,000	U S Treasury 1.125% Due 02-15-31	1,941,640.87	6.15
91282CCS8		630,000	U S Treasury 1.250% Due 08-15-31	513,794.29	1.63
91282CDY4		1,830,000	U S Treasury 1.875% Due 02-15-32	1,565,292.79	4.96
912810QS0		3,955,000	U S Treasury 3.750% Due 08-15-41	3,806,531.28	12.07
912810RS9		2,550,000	U S Treasury 2.500% Due 05-15-46	1,910,342.18	6.06
3140QKQ84	1,625,000	1,341,969	FNMA Pool #CB0478 2.000% Due 05-01-36	1,199,163.27	3.80
3140XJKC6	1,150,000	1,127,177	FNMA Pool #FS2990 2.000% Due 11-01-36	1,006,963.21	3.19
3140XAXT4	1,510,000	779,075	FNMA Pool #FM6989 3.000% Due 09-01-40	707,937.40	2.24
31418ECH1	770,000	726,943	FNMA Pool #MA4571 2.500% Due 03-01-42	633,673.68	2.01
3140XAW32	1,375,000	1,197,517	FNMA Pool #FM6965 2.500% Due 04-01-51	1,016,943.85	3.22
3140KYDD3	1,315,000	1,204,873	FNMA Pool #BR0999 2.500% Due 05-01-51	1,023,118.16	3.24
3140XGU98	1,215,000	1,171,319	FNMA Pool #FS1507 3.000% Due 02-01-52	1,031,211.55	3.27
31418EBS8	845,000	798,246	FNMA Pool #MA4548 2.500% Due 02-01-52	678,389.35	2.15
3140XHCP0	1,205,000	1,168,141	FNMA Pool #FS1877 3.000% Due 05-01-52	1,028,235.15	3.26
31418ED56	1,245,000	1,215,296	FNMA Pool #MA4623 2.500% Due 06-01-52	1,032,297.67	3.27
3140QQQL2	1,205,000	1,199,497	FNMA Pool #CB4958 4.000% Due 10-01-52	1,129,175.24	3.58
31418EJ43	940,000	931,253	FNMA Pool #MA4782 3.500% Due 10-01-52	849,026.18	2.69
31418EJ50	1,095,000	1,081,984	FNMA Pool #MA4783 4.000% Due 10-01-52	1,018,548.56	3.23
3132CWZ31	1,125,000	1,105,633	FHLMC Pool #SB0762 2.500% Due 04-01-37	1,015,372.31	3.22
3132DNZX4	1,015,000	1,005,901	FHLMC Pool #SD1658 2.500% Due 04-01-52	855,622.93	2.71
3132DNRN5	1,160,000	1,118,742	FHLMC Pool #SD1393 3.500% Due 06-01-52	1,019,851.50	3.23
			CASH Total	35,668.24	0.11
			TOTAL PORTFOLIO	31,549,633.83	100.00

2. List strategy AUM, net flows and accounts gained/lost for the past 5 years.

Year	AUM (\$ MM)	Net Flow (\$ MM)	Clients Gained	Clients Lost
2022	\$10,176	\$116	21	8
2021	\$11,634	\$694	27	12
2020	\$11,385	\$199	10	8
2019	\$10,682	\$648	32	9
2018	\$9,522	\$1,334	25	4



3. Describe investor concentration for the strategy and note the percent of AUM attributable to the top five investors.

Client Type	% AUM		
Corporation/Pensions	15.41%		
Public Pensions	57.68%		
Endowments/Foundations	8.83%		
Insurance	2.75%		
High Net Worth Individuals	0.04%		
Other*	15.29%		
Total	100.00%		

^{*}Other includes Collective Investment Trust, Commingled Fund, and Mutual Fund

Client Type	% AUM
Public	9.35%
Union	8.15%
Public	6.04%
Mutual Fund	3.70%
Public	3.62%
Top 5 Investors Total	30.85%

Performance / Market Outlook

1. If not included in your meeting presentation, provide trailing returns as of the most recent quarter-end and calendar year returns for the past 10 years, both relative to benchmark.

TRAILING RETURNS								
	FIXED INCOME - AGGREGATE COMPOSITE							
		AS O	F DECEME	BER 31, 202	22			
1 Year 3 Year 5 Year 7 Year 10 Year 15 Year Inceptio							Gilbert Garcia Inception to Date*	
Fixed Income - Aggregate Composite	-11.25%	-2.09%	0.33%	1.23%	1.73%	3.90%	4.55%	
Bloomberg US Aggregate Index	-13.01%	-2.71%	0.02%	0.89%	1.06%	2.66%	3.47%	

Periods longer than 12 months are annualized.

^{*}Gilbert Garcia's management inception is March 31, 2002



CALENDAR YEAR RETURNS											
	2013 - 2022										
Year	MWRA Employees'	Fixed Income –	Bloomberg US								
Teal	Retirement System	Aggregate Composite	Aggregate Index								
2022	-11.09%	-11.25%	-13.01%								
2021	-2.22%	-2.12%	-1.54%								
2020	8.03%	8.10%	7.51%								
2019	7.37%	7.27%	8.72%								
2018	-	0.98%	0.01%								
2017	-	3.82%	3.54%								
2016	-	3.18%	2.65%								
2015	-	0.85%	0.55%								
2014	-	8.02%	5.97%								
2013	-	0.09%	-2.02%								

2. Briefly discuss recent performance trends and identify environments in which the strategy is likely to be in or out of favor.

Our portfolio strategies are adaptable to the investment environment as we formulate strategies based on our assessment of top-down factors for setting duration, yield curve positioning and sector allocation. Although we tend to have a longer-term investment outlook, we actively manage all strategies. If the rationale for the strategy changes, thereby changing our conviction, we will then change our positioning.

Recent performance trends have been positive relative to the benchmark both for the full year 2022 as well as during January of 2023. Duration, yield curve and our defensive positioning in the credit and MBS sectors all contributed to performance during 2022. For January 2023, our relative outperformance was due to an overweight in the MBS sector combined with the portfolio's longer duration and the portfolio earning more income than the benchmark. There is no broad investment environment where our strategies will be out of favor but given our focus on only high-quality investments (Single A- or better credit rating), there may be brief periods where lower quality tends to outperform.

Describe your market outlook and how strategy positioning is impacted by your views.

We believe the bulk of the move higher in rates is largely behind us and inflationary pressures have peaked. Our 6-to-12-month outlook for the bond market is bullish, and we are maintaining a portfolio duration longer than that of the benchmark. Our positioning in the credit sector is defensive, as our outlook calls for wider credit spreads, particularly low-quality credit spreads. Our strategic outlook for the MBS sector has turned positive. Given significantly improved valuation within the MBS sector during the past few months, we look to take advantage of opportunities within the sector to go overweight and optimally position portfolios for declining yields.



4. Could you please include a slide in your presentation that sows the MWRA's account history, initial contribution, cumulative subsequent contributions, cumulative subsequent distributions, gain/loss and current value.

We have included the requested information in the meeting presentation.

MWRA Employees' Retirement System

February 23, 2023

Presented by:

Gilbert A. Garcia, CFAManaging Partner

Ruby Muñoz Dang

Partner

Five Houston Center 1401 McKinney Street, Suite 1600 Houston, TX 77010 Tel: (713) 853-2359

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GARCIA HAMILTON & ASSOCIATES

Agenda

Performance

Market Update

Portfolio

Firm Initiatives



Marshall Gerometta/CTBUH

Performance



- January Performance
- 4Q22 Performance

January Performance

MWRA Employees' Retirement System

PORTFOLIO COMPOSITION

CHANGE IN PORTFOLIO

	Market <u>Value</u>	Pct. <u>Assets</u>		
FIXED INCOME	32,859,002.86	99.9	Portfolio Value on 12-31-22	31,352,856.01
CASH	33,363.59	0.1	Accrued Interest	196,777.82
			Net Additions/Withdrawals	0.00
			Realized Gains/Losses	93,638.84
			Unrealized Gains/Losses	1,164,606.92
			Income Received	50,518.39
			Change in Accrued Interest	33,968.47
			Portfolio Value on 01-31-23	32,661,620.16
			Accrued Interest	230,746.30
Total	32,892,366.45	100.0		32,892,366.45

TIME WEIGHTED RETURN

	Month <u>To Date</u>	One <u>Year</u>	Annualized Last 2 <u>Years</u>	Annualized Last 3 <u>Years</u>	Annualized Inception 04-30-18 <u>To Date</u>
Gross of Fees	4.26	-5.94	-4.40	-1.26	1.47
Net of Fees	4.26	-6.17	-4.62	-1.49	1.25
Bloomberg US Aggregate	3.08	-8.36	-5.70	-2.35	1.13

Our Form ADV disclosure document is available upon request. We urge you to compare account statements that you receive from us with the account statements that you receive from your custodian. Past performance is no guarantee of future results. See disclosures for other relevant information. Client Use Only.

4Q22 Performance

MWRA Employees' Retirement System

PORTFOLIO COMPOSITION

CHANGE IN PORTFOLIO

	Market <u>Value</u>	Pct. <u>Assets</u>		
FIXED INCOME CASH	31,513,965.59 35,668.24	99.9 0.1	Portfolio Value on 09-30-22 Accrued Interest	33,735,073.76 187,503.92
CASIT	33,000.24	0.1	Net Additions/Withdrawals Realized Gains/Losses	-3,000,000.00 41,597.67
			Unrealized Gains/Losses	311,707.99
			Income Received Change in Accrued Interest	264,476.59 9,273.90
			Portfolio Value on 12-31-22	31,352,856.01
			Accrued Interest	196,777.82
Total	31,549,633.83	100.0		31,549,633.83

TIME WEIGHTED RETURN

	<u>Quarter</u>	One <u>Year</u>	Annualized Last 2 <u>Years</u>	Annualized Last 3 <u>Years</u>	Annualized Inception 04-30-18 <u>To Date</u>
Gross of Fees	1.84	-11.09	-6.76	-2.07	0.60
Net of Fees	1.78	-11.30	-6.98	-2.30	0.38
Bloomberg US Aggregate	1.87	-13.01	-7.45	-2.71	0.50

Our Form ADV disclosure document is available upon request. We urge you to compare account statements that you receive from us with the account statements that you receive from your custodian. Past performance is no guarantee of future results. See disclosures for other relevant information. Client Use Only.

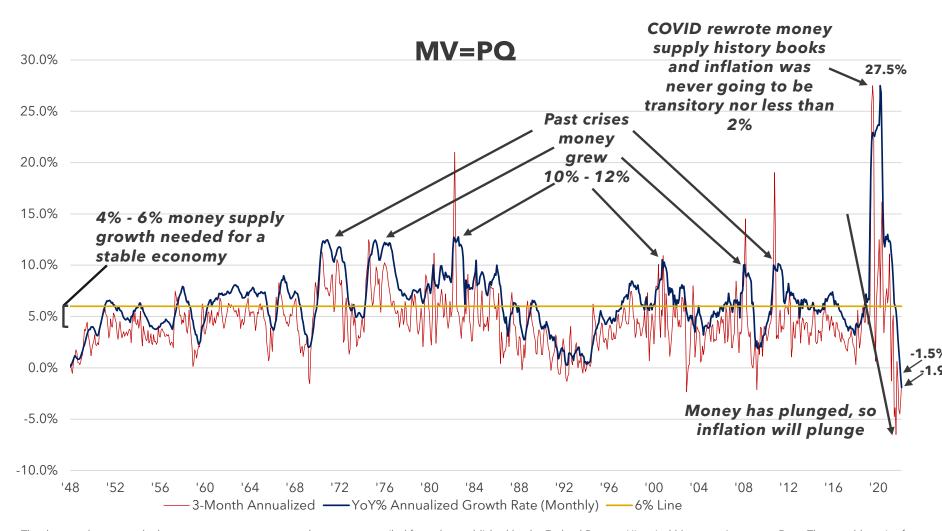
Market Update



- Money Supply
- Lower Inflation
- Inflationary Pressures
- Housing Market
- Option Adjusted Spreads (OAS)

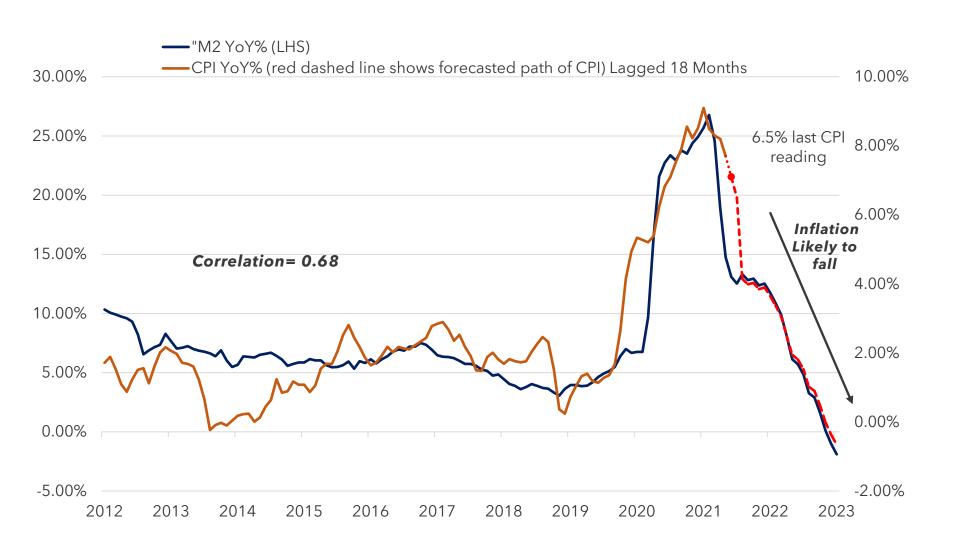
MBS

Money Supply Long Term Growth

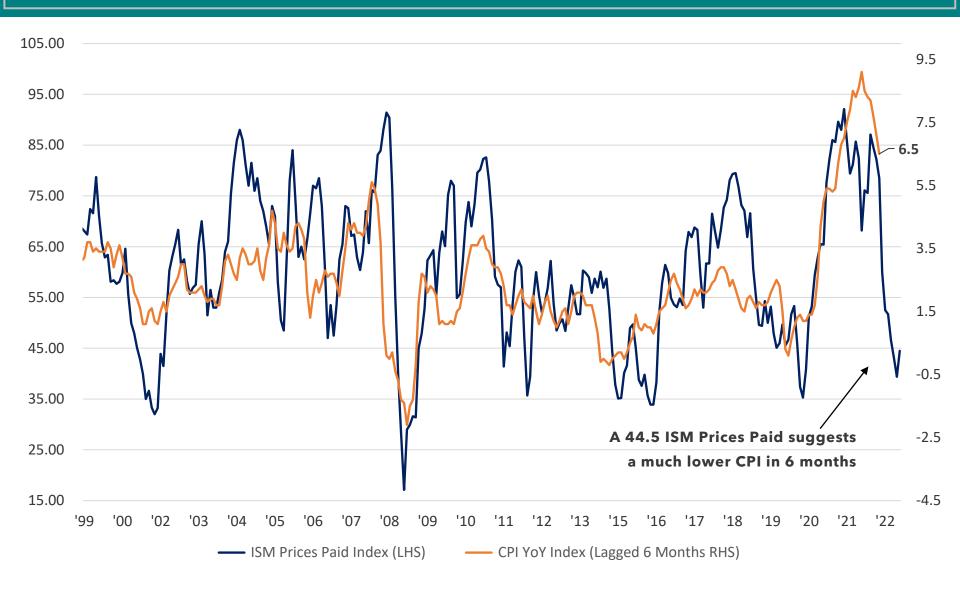


The data used to create the long-term year over year growth rate was compiled from data published by the Federal Reserve Historical Monetary Aggregate Data. The monthly series from Jan 1948 until November 1980 was compiled from the M2SA and M2SL series and is used to calculate the year over year annualized growth rate. After November 1980, the weekly data series for M2 is used to calculate the year over year annual growth rate.

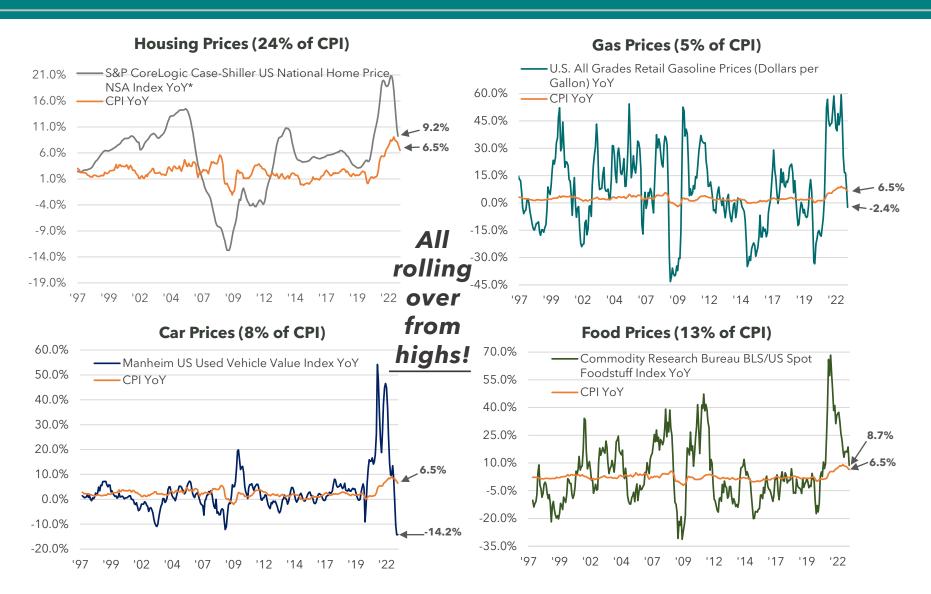
Low Money Supply growth suggests Lower CPI/Rates



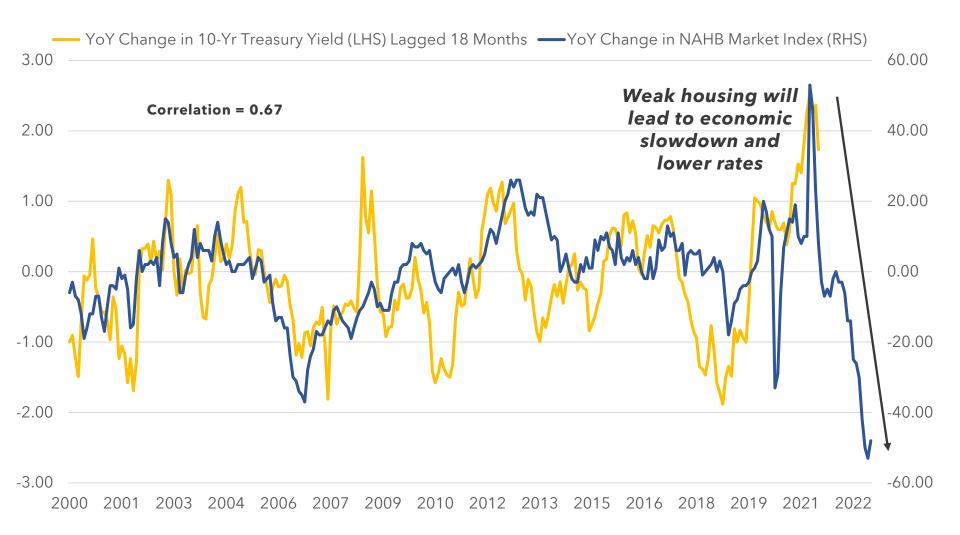
ISM Prices Paid Index Suggests Inflation Will Fall



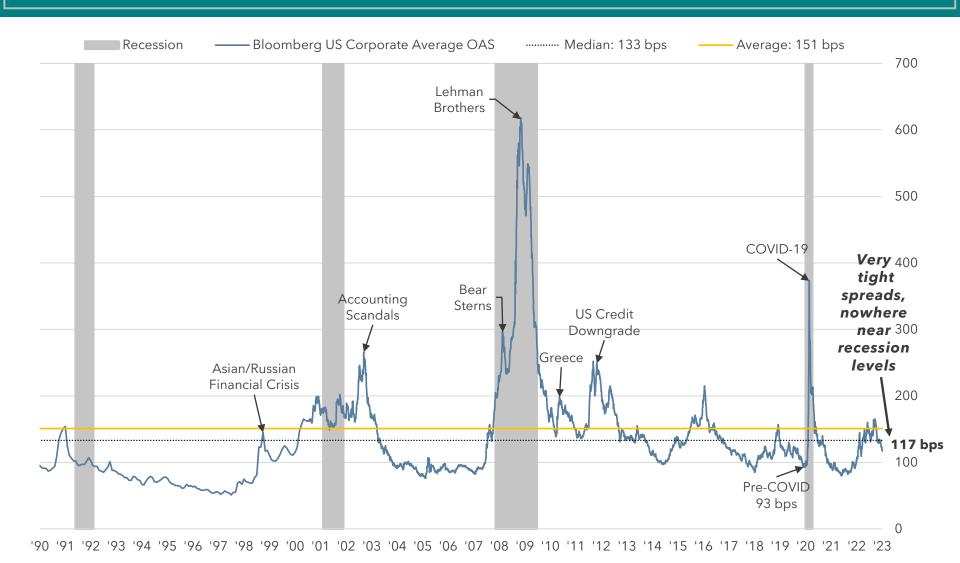
Inflationary Pressures Moderating



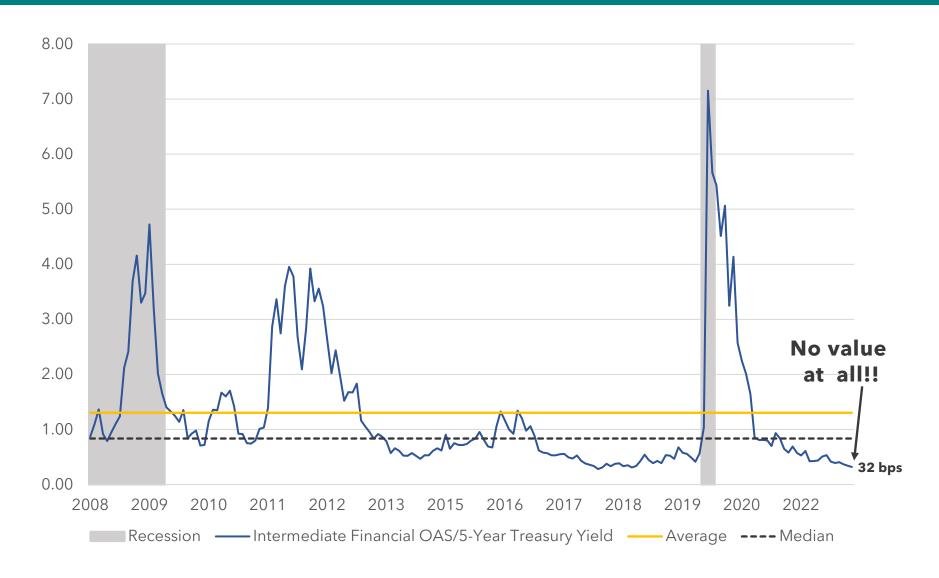
YoY Change in NAHB Index vs. 10-Year U.S. Treasury Yields



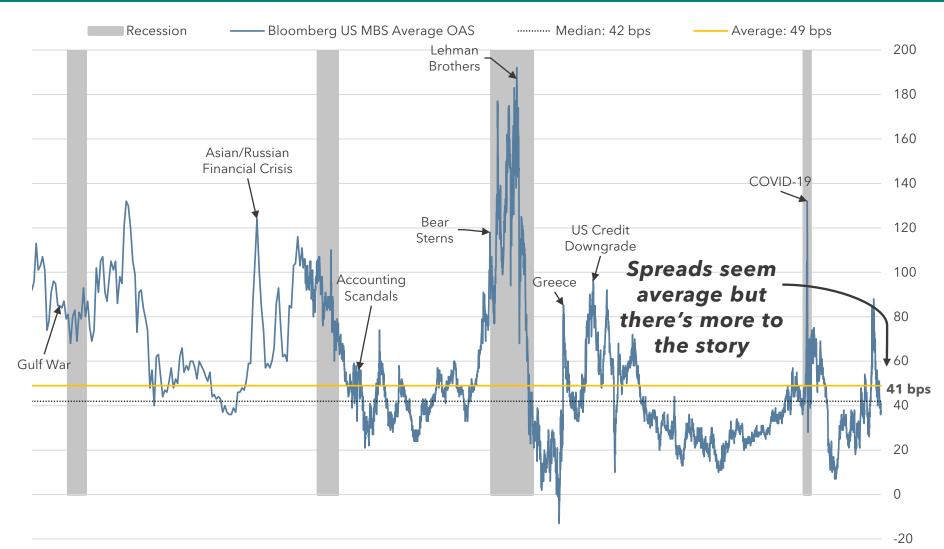
Average Option Adjusted Spreads (OAS)



Intermediate Financial Option Adjusted Spreads (OAS) Ratio to Treasuries

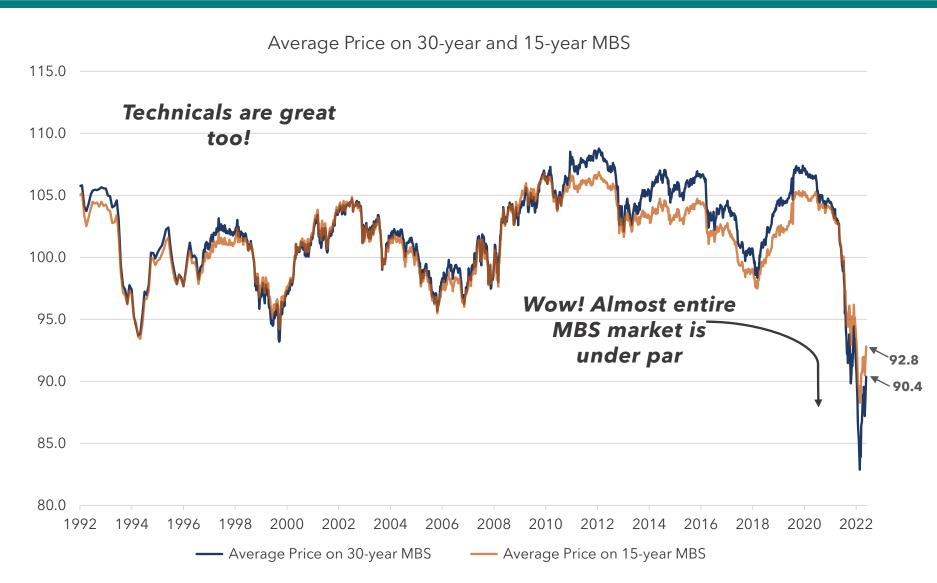


Mortgage Option Adjusted Spreads (OAS)

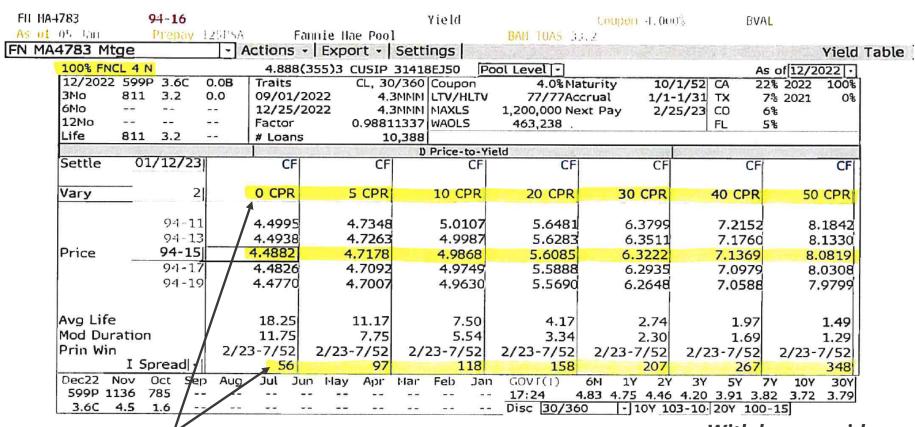


'90 '91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15 '16 '17 '18 '19 '20 '21 '22 '23

MBS Market is Trading at Historically Low Prices



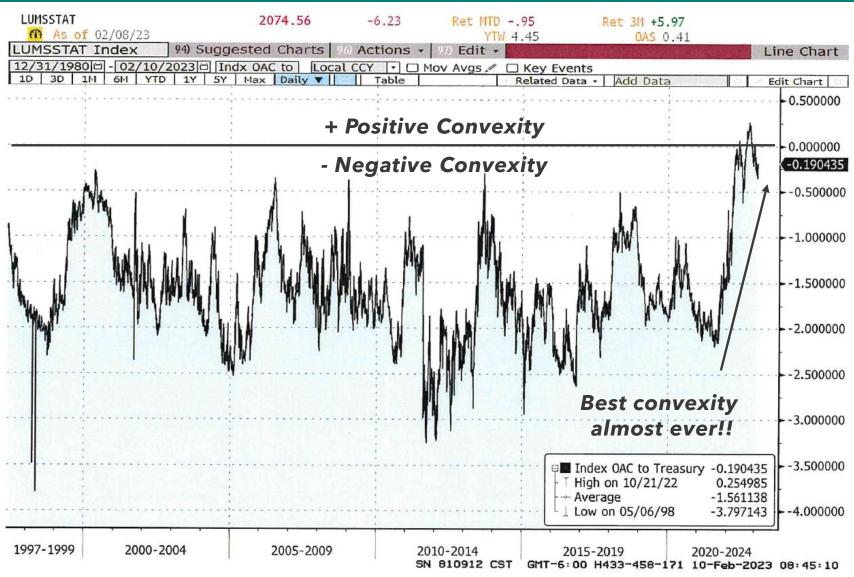
Yield Table Analysis



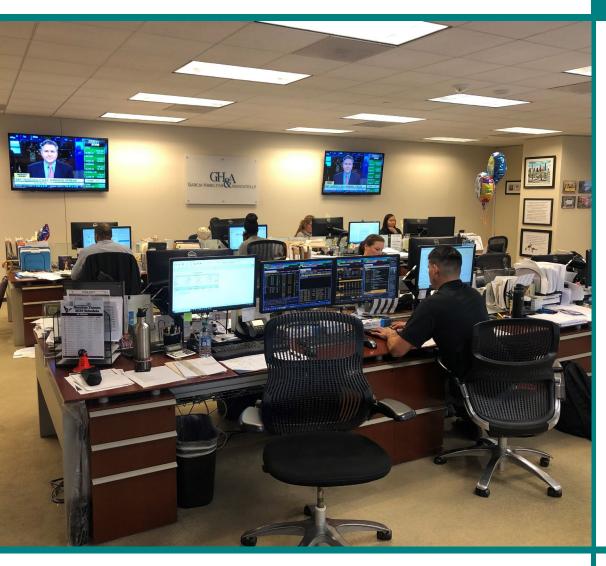
Spread is positive (56) to treasuries at a worst case prepayment - 0 (zero)

With huge upside potential if rates decline and prepayments accelerate

MBS Convexity



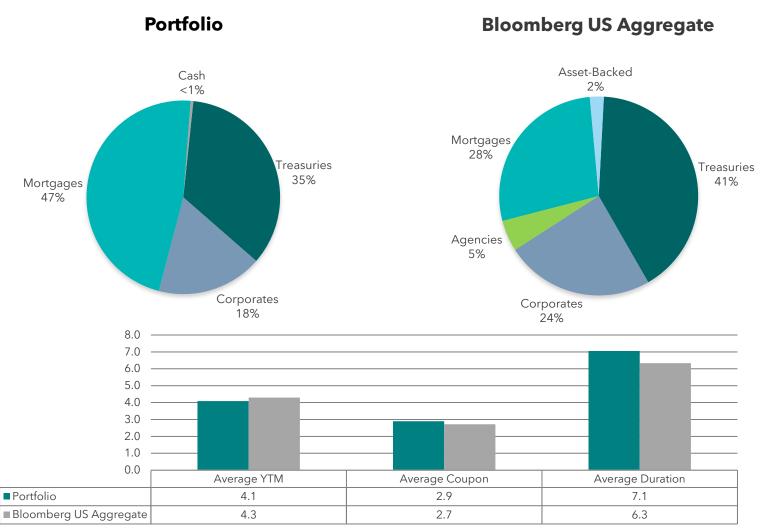
Portfolio



- Portfolio Characteristics
- Risk Tools
- Account History

Fixed Income Portfolio Characteristics

MWRA Employees' Retirement System



The characteristics shown are those of an actual portfolio that is representative of this strategy at a particular point in time. Individual portfolio characteristics may vary depending on the date shown as well as client-imposed restrictions, cash flows, etc. This information is supplemental to the Fixed Income Aggregate Composite Disclosure Statement.

Risk Tools

	Duration Contribution	Treasury	Agency	Corp	MBS	ABS	Sum
Dec '21	Portfolio	3.13	0.00	1.31	0.70	0.00	5.14
),2	Bloomberg US Aggregate	2.75	0.34	2.20	1.29	0.11	6.69
<u>د</u> 8	Portfolio	3.68	0.00	1.01	2.36	0.00	7.05
Jan '23	Bloomberg US Aggregate	2.52	0.28	1.77	1.61	0.09	6.27

MWRA Employees' Retirement System Account History

- Initial contribution: \$28 million on 4/2/2018
- Cumulative subsequent contributions: \$20.5 million
- Cumulative subsequent distributions: \$18.0 million
- Realized gains/losses: \$(1.2 million)
- Unrealized gains/losses: \$(2.4 million)
- Current value: \$31.5 million

Firm Initiatives



- GH&A Community Engagement
- Organization
- Asset Breakdown
- GH&A Giving Back
- ESG Stewardship

nger May Live Next Door houstonfoodbank

GH&A Community Engagement

We are proud to have donated over 35,000 masks, boxes of hand sanitizers and cleaning supplies, and over \$100,000 to underserved and underrepresented communities during the COVID-19 pandemic and Texas winter storms.

We partnered twice with the Houston Food Bank and Texas State Representatives
Christina Morales and Mary Ann Perez to provide free food, water, CO2 detectors, pet food, diapers, fresh local produce, hand sanitizers and \$25,000 in food gift cards to those most in need in our local community.

We are Garcia Hamilton, and we are Houston strong!

GH&A Community Engagement

We also partnered with HEB and The Baptist Ministers Association to donate \$30,000 in HEB gift cards for food to 120 families from 24 churches.







We are Garcia Hamilton, and we are Houston strong!





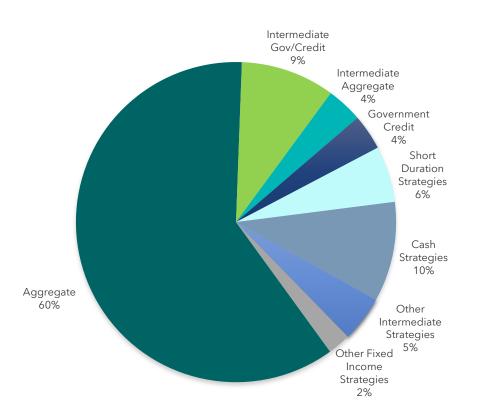
Garcia Hamilton & Associates

Organization

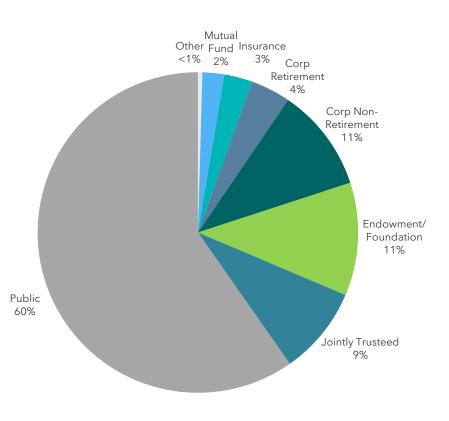
- Founded in 1988
- 100% employee-owned and operated MBE firm
- ESG/RI Manager, Principles for Responsible
 Investment (PRI) signatory, and Task Force on
 Climate-related Financial Disclosures (TCFD)
 supporter
- 37 employees in Houston, Texas
- 12-member investment team has over 280 years of industry experience and over 125 years combined firm experience
- Over \$16.7 billion in assets under management
- High-quality fixed income strategies designed to prevent "negative surprises"
- No Debt

Asset Breakdown

By Type



By Client



26

Garcia Hamilton & Associates

As of December 31, 2022

GH&A Giving Back

























Over



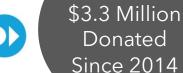


















KINGWOOD FALLEN HEROES



FOUNDATION



CITRUS CENTER

BOYS & GIRLS CLUBS Serving East Polk County

















Houston Area

Urban League



















ESG Stewardship

GH&A became a **Principles for Responsible Investment (PRI)** signatory in 2019.

Our most recent Transparency Report was filed May 2021 for the 2020 reporting year.

We scored higher than the median scores across all modules.

Copies of our most recent PRI Public Transparency report and PRI Assessment Report are available upon request.

Signatory of:



GH&A became a **Task Force on Climaterelated Financial Disclosures (TCFD)** supporter in 2021.

As an investment management firm with a long-standing commitment to responsible investment, GH&A supports the TCFD framework. We utilize the third-party research of industry experts in our ESG evaluation including Bloomberg ESG disclosure metrics, which incorporate TCFD disclosures. The reports from these third-party providers assist the investment team in its overall evaluation process and provides a base to further study/research these securities for continued inclusion in our portfolio. TCFD disclosures increase transparency around climate-related risks, which are incorporated considerations in our investment process.



Client Report Disclosure

PERFORMANCE DATA

Performance data represents historically achieved results for a client's portfolio(s) and is no guarantee of future performance. The market or economic conditions during this period may or may not be repeated. There may be differences between the performance shown and the performance results achieved by any other client retaining Garcia Hamilton for the same investment strategy. Benchmark results are shown for comparison purposes only. The benchmark represents an unmanaged portfolio with characteristics which are similar to the portfolio(s). The returns of the benchmark do not include any transaction costs, management fees or other costs. The holdings in the client's portfolio(s) may differ significantly from the securities that comprise the benchmark shown. The benchmark has been selected by the client as an appropriate benchmark with which to compare the performance of the portfolio(s).

Award Disclosure

GARCIA HAMILTON & ASSOCIATES, L.P. AWARD METHODOLOGIES & DISCLOSURES

Each third-party award and/or ranking about Garcia Hamilton & Associates, L.P. (GH&A) or its representatives was given based upon various criteria and methodologies. No direct or indirect compensation was provided by the Firm to participate in or distribute the results of any of the awards below. Any information contained in this correspondence is for informational purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security. Awards and/or rankings may not be representative of actual client experiences, are not indicative of past or future performance. Rankings and recognitions by unaffiliated publications should not be construed by a client or prospective client as a guarantee that GH&A will provide a certain level of results in client accounts, nor should they be construed as current or past endorsements of GH&A by clients. Such publications base their selections on information prepared and/or submitted by the sponsor organization. Investments in securities involve the risk of loss. Past performance is no guarantee of future results. Do not rely upon this information to predict future investment performance or market conditions. This information is not a substitute for consultation with a competent financial, legal, or tax adviser and should only be used in conjunction with their advice.

Pensions & Investments "Best Places to Work"

Pensions & Investments works with Best Companies Group in Harrisburg, PA to produce the Best Places to Work in Money Management awards. To participate, a firm had to have at least \$100 million of discretionary income, at least 20 employees in the U.S., institutional assets under management or advisement, and be in business for at least one year. Anonymous employee survey responses accounted for 75% of the total company score and employer responses account for the remaining 25%. Unless otherwise noted, all awards are based on AUM as of June 30 of the awarded year.

2016 "Best Places to Work" in Money Management | Companies with 20-49 Employees | Awarded to GH&A December 12, 2016

Houston Business Journal Diversity in Business

The Houston Business Journal's Diversity in Business Awards program recognizes organizations and individuals that have shown exceptional commitment to promoting practices that advance diversity and inclusion in the workplace. Awardees do not apply to be recognized. All company honorees are for-profit and nonprofit organizations local to the Houston business community and are split into three categories: Outstanding Diverse Organization, Outstanding Supplier Diversity, and Outstanding Diversity Helping Hand. All individual honorees are active in the Houston community and are split into two categories: Outstanding Diversity Champion and Outstanding Head of Diversity. Awards are based on activities of the previous calendar year (May to May).

2022 Outstanding Diverse Organization | Small Organization (10-99 Employees) | Awarded to GH&A May 6, 2022

2021 Outstanding Diversity Champion | Awarded to Gilbert Andrew Garcia, CFA, Managing Partner, February 24, 2021

Emerging Manager Monthly "Fixed Income Manager of the Year"

Presented by Emerging Manager Monthly, Emerging Manager Awards are awarded annually to firms across seven categories: large-cap equity, small-cap equity, small-to mid-cap equity, all-cap equity, international equity, and core fixed income. Nominees are ranked on the following criteria: excess returns over benchmark, performance versus peers, asset growth, asset percentage growth, and standard deviation. The top three managers in each category are then judged by a committee comprised of highly respected industry experts. The committee remains anonymous and evaluates the merits of each firm on qualitative and quantitative measures. To be eligible for the 2019 awards, managers must have submitted year end 2018 data to PSN Informa by January 25th, have had at least \$10 million in product assets, and have full year 2018 performance figures as well as 2018 year-end product asset information. Firm-wide assets for non-minority and women-owned firms were capped at \$2 billion, and all MWBE fixed-income managers were considered. To be eligible for the 2018 awards, managers must have submitted year end 2017 performance figures as well as 2017 year-end product assets for non-minority and women-owned firms were capped at \$2 billion, and all MWBE fixed-income managers were considered. The 2010 Emerging Manager Awards were presented by Emerging Manager Monthly, in association with eVestment. To be eligible, managers must have submitted 2009 year-end data to eVestment Alliance, have had less than \$2 billion in assets under management and have had full-year performance figures. Only separately managed accounts were considered.

2019 "Fixed Income Manager of the Year" Award | Awarded to GH&A April 3, 2019

2018 "Fixed Income Manager of the Year" Award | Awarded to GH&A April 5, 2018

2010 "Core Fixed Income Manager of the Year" Award | Awarded to GH&A April 1, 2010

Institutional Asset Management

Sponsored by FundMAP, the 2018 Institutional Asset Management Awards constitute a vote of recognition from U.S. peers and a significant achievement for asset managers. Award winners are selected by majority vote, through an online poll of the entire Institutional Asset Management readership including key industry professionals based on the previous calendar year.

2018 U.S. Fixed Income Manager of the Year | Awarded to GH&A November 13, 2018

Houston Business Journal "Best Places to Work"

This award from the Houston Business Journal celebrates companies in the Houston area with the most satisfied employees. Companies are ranked by the results of an anonymous employee survey covering the current employee sentiment, which aims to evaluate employee engagement and satisfaction.

2018 "Best Places to Work" | Awarded to GH&A October 24, 2018

Institutional Investor U.S. Investment Management

Manager of the Year awards are part of Institutional Investor's U.S. Investment Management Awards. Awardees are recognized by endowments, foundations, pension funds, and other institutional investors for innovation and impressive returns during the previous calendar year. Following a public call for nominations, the editorial staff of Institutional Investor selects award nominees based on the staff's analysis of data collected. Once the nominees are publicly announced, the group then conducts a wide survey of U.S. institutional investors and invites them to vote for the manager nominees.

2016 "Intermediate-Term Manager of the Year" | Awarded to GH&A May 10, 2016

2015 "Intermediate-Term Manager of the Year" | Awarded to GH&A May 4, 2015

2014 "Intermediate-Term Manager of the Year" | Awarded to GH&A May 8, 2014



GOALS & OBJECTIVES

Investment Return Objective

"Its primary goal is to provide promised benefits to participants and beneficiaries of the MWRA Employees' Retirement system. Plan assets should be equal to or greater than the present value of the projected benefit obligations ("fully funded"). When Plan assets are less than the present value of projected benefit obligations, a schedule will be established and a plan will be in place to meet a fully funded status. When achieving return objectives required to fully fund the system, the Board is intent on controlling risk. Consistency of returns and risk of loss are primary considerations. The Board has also determined that the annual performance of plan assets should not vary substantially from returns achieved by other public pension funds with similar goals and objectives."

Return Expectations

The investment growth should be maintained in such a manner that the minimum nominal rate of return does not cause a negative real rate of return over a full market cycle:

- <u>Time Horizon</u>: Return assumptions will be based on a ten-year time horizon with a detailed review and analysis to be made at least annually to monitor allocations and assumptions. Should a manager deviate from proscribed mandate or expected risk and return profile by a consequential degree, that manager may be reevaluated at any time.
- <u>Liquidity Needs:</u> Presently contributions exceed plan withdrawals to provide benefits, payouts, and/or plan expenses. Portfolio liquidity will be managed based on the cash flow needs of the System.
- Regulatory Considerations: Assets of this Fund shall be invested in a manner consistent with the fiduciary standards established under Code of Massachusetts Regulations 840 ("840 CMR"). The Board shall also use as precedent the Employee Retirement Income Security Act (ERISA).



EXECUTIVE SUMMARY

	Market Value (\$)	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Composite	657,289,819	4.3	-5.2	5.6	5.0	6.6
Allocation Index		4.2	-4.2	6.1	5.4	7.0
Policy Index		4.4	-4.8	6.5	5.9	7.2

20 Years As of January 31, 2023								
Return Standard Sharpe Sor Deviation Ratio Ra								
Composite	7.5	8.5	0.7	1.1				
Allocation Index	6.9	8.0	0.7	1.1				
Policy Index	7.3	8.6	0.7	1.1				

Performance

- The Composite had a return of 4.3% (net) for the month, outpacing the Allocation Index (4.2%) and trailing the Policy Index (4.4%).
- Emboldened investors fueled gains of 6.3% in the S&P 500 Index in January. The risk-on sentiment was further bolstered by growth outperforming value stocks for the first time since July 2022, with the Russell 1000 Growth and Value Index up 8.3% and 5.2%, respectively. Outside the U.S., weakness in the dollar boosted equities with the MSCI EAFE and MSCI Emerging Market indexes up 8.1% and 7.9%, respectively. The portfolio's Domestic Equity composite returned 7.0% (net) and the Non-US Equity composite was up 9.3% (net).
- In fixed income, the U.S. Treasury yield curve shifted lower as slowing headline inflation numbers fueled optimism. Two- and 10-year Treasury yields declined 21 and 35 basis points, respectively, pushing the spread further into negative territory at 0.7%. As a result, the Bloomberg U.S Long Treasury Index outperformed and rose 6.4% last month. The Fixed Income composite gained 3.6% (net) for the month while the Bloomberg Agg and the Bloomberg US HY returned 3.1% and 3.8% respectively.
- This brings the total plan return for the trailing one-year period to -5.2% (net), while the Allocation Index and Policy Index returned -4.2% and -4.8%, respectively.

Returns for 20 years Risk/Return and Statistics Summary are gross of fees. Since inception return is 8.3% gross of fees. Prior to 1999, performance history does not capture separate net and gross returns.



TOTAL FUND PERFORMANCE DETAIL (NET)

		Allocation			Performance (%)					
	Market Value (\$)	% of Portfolio	Policy(%)	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Composite	657,289,819	100.0	100.0	4.3	-5.2	5.6	5.0	6.6	6.7	Jan-86
Allocation Index				4.2	-4.2	6.1	5.4	7.0		
Policy Index				4.4	-4.8	6.5	5.9	7.2		
Total Balanced	4,861,106	0.7	0.0	0.0	-8.9	6.0	3.6	4.0	4.4	Dec-10
PRIT Core Fund	4,861,106	0.7		0.0	-8.9	6.1	5.6	7.6	6.7	Apr-99
60% S&P 500 / 40% Bloomberg Aggregate				5.0	-7.9	5.3	6.4	8.3	6.1	
Total Domestic Equity	202,379,856	30.8	31.0	7.0	-8.3	8.5	8.9	11.6	7.4	May-99
Russell 3000 Index				6.9	-8.2	9.5	9.1	12.3	7.1	
Large Cap	154,960,625	23.6	24.0	6.4	-10.1	8.4	9.4	12.0	12.2	Dec-10
Rhumbline Advisors S&P 500 Index Fund	63,799,379	9.7	10.0	6.3	-8.2	9.8	9.5	12.6	8.8	Apr-97
S&P 500 Index				6.3	-8.2	9.9	9.5	12.7	8.7	
Coho Relative Value Equity	50,127,739	7.6	7.0	2.5	1.3	10.2	8.2		10.9	Mar-16
Russell 1000 Value Index				5.2	-0.4	8.5	6.9		10.9	
Polen Focused Growth	41,033,506	6.2	7.0	11.7	-23.9	3.7	9.7		12.5	Feb-16
Russell 1000 Growth Index				8.3	-16.0	9.9	11.2		15.2	
Small Cap	47,419,231	7.2	7.0	9.0	-1.8	8.5	7.7	10.7	11.3	Dec-10
Boston Partners Small Cap Value	24,464,420	3.7	3.5	10.0	0.1	9.1	6.0	8.8	10.3	Feb-97
Russell 2000 Value Index				9.5	-0.5	9.9	5.8	8.8	8.9	
Loomis Sayles Small Cap Growth	22,954,810	3.5	3.5	7.9	-3.7	7.2	8.8	12.1	6.8	Jan-97
Russell 2000 Growth Index				9.9	-6.5	4.3	4.7	9.5	6.7	
Total Non-US Equity	110,011,366	16.7	19.0	9.3	-12.3	0.6	-0.6	3.5	3.9	Mar-99
International Equity	73,084,187	11.1	12.0	10.4	-9.4	2.6	1.6	4.6	3.6	Sep-05
SEG Baxter Street	30,929,426	4.7	5.0	10.1	-7.5	1.4	2.9		6.8	May-16
MSCI AC World ex USA (Net)				8.1	-5.7	3.6	1.4		5.9	
Schroder International Alpha Trust Class 1	27,817,318	4.2	4.0	8.8	-8.0	7.8	4.3	6.3	6.6	Mar-12
MSCI AC World ex USA (Net)				8.1	-5.7	3.6	1.4	4.2	4.6	
Baillie Gifford International Growth Fund Class K	14,337,444	2.2	3.0	14.4	-15.6				-8.1	Oct-20
MSCI AC World ex USA (Net)				8.1	-5.7				6.0	
Emerging Markets Equity	36,927,178	5.6	7.0	7.2	-17.5				-15.0	Mar-21
Axiom Emerging Markets Trust Class 2	17,331,717	2.6	7.0	8.0	-20.8				-17.3	Mar-21
MSCI Emerging Markets (Net)				7.9	-12.1				-10.5	
ABS Emerging Markets MA Fund	19,595,462	3.0		6.5	-14.4				-14.2	Dec-21
MSCI Emerging Markets (Net)				7.9	-12.1				-10.5	

Since inception return is 8.3% gross of fees. Prior to 1999, performance history does not capture separate net and gross returns.

In November 2019, Loomis Sayles and Schroders transitioned from a mutual fund to a CIT structure. Performance prior to the transition to the CIT investment vehicle is linked to mutual fund performance history.

Preliminary performance is subject to change once finalized.



TOTAL FUND PERFORMANCE DETAIL (NET)

	A	Allocation					Perform	nance (%)		
	Market Value (\$)	% of Portfolio	Policy(%)	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fixed Income	129,113,125	19.6	20.0	3.6	-6.1	0.1	1.9	2.7	5.8	Mar-99
Garcia Hamilton Fixed Income Aggregate	32,821,267	5.0	6.0	3.7	-6.9	-1.7			1.0	Apr-18
Blmbg. U.S. Aggregate Index				3.1	-8.4	-2.3			1.0	
Lord Abbett Core Fixed Income	35,407,960	5.4	4.0	3.4	-8.7	-1.9			1.2	Apr-18
Blmbg. U.S. Aggregate Index				3.1	-8.4	-2.3			1.0	
Loomis Sayles Multisector Full Discretion Trust	48,607,418	7.4	8.0	4.1	-6.6	0.7	2.3	3.3	6.9	Mar-99
Blmbg. U.S. Aggregate Index				3.1	-8.4	-2.3	0.9	1.4	4.0	
Blmbg. U.S. Corp: High Yield Index				3.8	-5.2	1.3	3.0	4.3	6.2	
Octagon Senior Secured Credit Cayman Fund Ltd Class L Acc, Series 1	12,261,432	1.9	2.0	2.5	0.0	2.6			2.9	Aug-19
Credit Suisse Leveraged Loan				2.6	1.1	3.0			3.3	
Invesco Mortgage Recovery Loans Feeder Fund	15,048	0.0		0.0	-0.7	-0.6	2.6	6.1	9.9	Apr-10
Blmbg. U.S. Aggregate Index				3.1	-8.4	-2.3	0.9	1.4	2.3	
Total Hedge Fund	41,936,687	6.4	6.0	0.7	-2.3	4.0	3.2	3.5	3.3	Oct-06
PRIM Portfolio Completion Strategies	15,032,294	2.3		0.0	-1.9	2.8	2.5	4.0	3.7	Oct-06
Corbin Pinehurst Partners	12,724,753	1.9		1.6	-7.1	3.9			4.4	Nov-18
HFRI Fund of Funds Composite Index				2.5	-0.4	4.4			4.6	
UBS Neutral Alpha Strategies	14,114,020	2.1		0.7	6.1	7.6			6.6	Nov-18
HFRI Fund of Funds Composite Index				2.5	-0.4	4.4			4.6	
Entrust Peru Wind Down	65,621	0.0		-0.4	-91.2	-55.7	-40.1		-39.2	Dec-17
HFRI Fund of Funds Composite Index				2.5	-0.4	4.4	3.0		3.6	
Other	10,938,697	1.7	0.0	0.2	1.6	0.7	1.3	0.8	0.7	Dec-10
Cash Account	10,938,697	1.7		0.2	1.6	0.7	1.3	0.8	1.7	Feb-00
90 Day U.S. Treasury Bill				0.3	1.8	0.8	1.3	0.8	1.6	

Importantly, all returns in this report, including those of the private markets managers, are based on a time weighted return calculation and not based on IRRs, which can result in return differences.

Preliminary performance is subject to change once finalized.



TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)						
	Market Value (\$)	% of Portfolio	Policy(%)	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Real Estate	72,138,497	11.0	12.0	0.0	11.4	12.2	10.4	11.0	8.5	Apr-99
NCREIF Property Index				0.0	5.5	8.1	7.5	8.8	8.7	
Morgan Stanley Prime Property (\$2.8m commitment in '95)	25,979,519	4.0		0.0	6.1	9.3	8.4	10.5	8.7	Sep-95
TA Realty Core Property Fund, LP (\$15m commitment in '19)	28,358,966	4.3		0.0	15.3	16.4			14.5	Jun-19
Invesco Mortgage Recovery II (\$3M commitment in '15)	921,638	0.1		0.0	-6.0	-20.0	-7.3		-1.9	Oct-15
Landmark VI (\$2m commitment in '11)	6,499	0.0		0.0	-16.4	-6.3	-8.7	-0.2	2.2	Jul-11
Landmark VIII (\$4m commitment in '17)	2,136,606	0.3		0.0	20.1	17.9	12.2		19.5	Nov-17
StepStone Real Estate Fund II (\$2m commitment in '11)	367,525	0.1		0.0	-1.7	-2.0	-1.5	5.1	2.0	May-12
Cerberus Institutional Real Estate Partners III (\$1.5m commitment in '12)	569,979	0.1		0.0	-5.3	20.7	16.5		15.1	May-13
TA Realty Fund X LP (\$3.5m commitment in '12)	4,086	0.0		0.0	24.1	5.1	9.2		9.6	May-13
TerraCap Partners III, LP (\$2.6m commitment in '15)	1,382,202	0.2		0.0	6.7	4.2	4.3		9.0	Jul-15
TerraCap Partners IV, LP (\$4m commitment in '17)	3,565,886	0.5		0.0	3.0	8.3	10.0		10.0	Nov-17
TerraCap Partners V, LP (\$8m commitment in '22)	8,845,592	1.3		0.0					14.5	Jun-22
Total Private Equity and Debt	85,910,484	13.1	12.0	0.0	2.4	18.0	14.2	14.5	10.3	Apr-99
CJA US AII PE				0.0	-2.7	18.1	15.7	14.7	13.1	
NASDAQ W/O Income				10.7	-18.6	8.2	9.3	13.9	6.7	
PRIM Vintage Year 2008 (\$3m commitment in '08)	801,810	0.1		0.0	1.1	14.5	13.9	17.8	9.8	Jun-08
PRIM Vintage Year 2009 (\$1m commitment in '09)	73,681	0.0		0.0	-12.0	35.7	32.0	26.0	14.2	Nov-09
PRIM Vintage Year 2010 (\$1m commitment in '10)	460,062	0.1		0.0	-42.1	23.0	16.8	18.7	10.8	Jun-10
PRIM Vintage Year 2011 (\$1.5m commitment in '11)	837,642	0.1		0.0	-5.6	31.6	25.0	22.5	9.9	May-11
PRIM Vintage Year 2012 (\$1m commitment in '12)	472,161	0.1		0.0	-25.9	14.4	12.5	12.4	-9.3	Jun-12
PRIM Vintage Year 2014 (\$2m commitment in '14)	2,158,189	0.3		0.0	-0.9	24.2	24.5		8.4	Jun-14
PRIM Vintage Year 2017 (\$2m commitment in '17)	2,559,371	0.4		0.0	4.8	25.0	17.5		16.0	May-17
PRIM Vintage Year 2020 (\$5m commitment in '20)	3,546,500	0.5		0.0	4.6				16.2	Mar-20
PRIM Vintage Year 2021 (\$5m commitment in '21)	2,731,766	0.4		0.0	-5.5				-1.1	Dec-20
PRIM Vintage Year 2022 (\$7.5m commitment in '22)	966,325	0.1		0.0					-5.8	Apr-22
Alcentra European DLF (\$5m commitment in '14)	197,301	0.0		0.0	9.2	23.1	13.8		11.8	Jan-15
Ascent Fund IV-B (\$1m commitment in '16)	40,322	0.0		0.0	-14.7	-21.7	-20.1		-14.7	Jul-16
Ascent Fund V (\$2m commitment in '08)	1,250,422	0.2		0.0	-14.6	-2.0	-2.3	1.9	3.8	Oct-08
Ascent VI (\$3m commitment in '15)	3,453,769	0.5		0.0	2.6	2.6	3.2		2.3	Dec-15
CVI Credit Value Fund IV A LP (\$6m commitment in '17)	5,527,001	0.8		0.0	6.8	6.9	6.7		6.5	Dec-17
Invesco Fund VI (\$5m commitment in '13)	837,127	0.1		0.0	-34.2	23.8	18.0		16.4	Jul-13

Importantly, all returns in this report, including those of the private real estate managers, are based on a time weighted return calculation and not based on IRRs, which can result in return differences.

Preliminary performance is subject to change once finalized.



TOTAL FUND PERFORMANCE DETAIL (NET)

	A	Illocation					Perform	nance (%)		
	Market Value (\$)	% of Portfolio	Policy(%)	1 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Kayne Energy Fund VII (\$5m commitment in '15)	2,857,362	0.4		0.0	35.5	-14.5	-15.5		-4.3	Jan-16
Foundry 2007 (\$3m commitment in '07)	484,034	0.1		0.0	-3.5	30.2	4.2	12.1	19.7	Dec-07
Foundry 2010 (\$3m commitment in '10)	5,956,413	0.9		0.0	-1.0	34.0	22.0	15.1	14.2	Feb-11
Foundry 2010 Annex (\$0.4m commitment in '15)	1,105,234	0.2		0.0	-0.9	91.2	63.3		41.4	Sep-15
Pinebridge PEP V (\$6m commitment in '07)	449,779	0.1		0.0	-5.6	8.6	2.9	8.6	7.9	Dec-10
Pinebridge (AIG) PEP V Asia (\$6m commitment in '07)	32,657	0.0		0.0	-5.0	-12.9			-13.9	Oct-18
Pinebridge (AIG) PEP V Co-Investment (\$6m commitment in '07)	90,621	0.0		0.0	1.5	14.9			6.1	Oct-18
Pinebridge (AIG) PEP V Europe (\$6m commitment in '07)	16,190	0.0		0.0	-22.2	192.9			118.1	Oct-18
Pinebridge (AIG) PEP V Large Market US Buyout (\$6m commitment in '07)	74,199	0.0		0.0	-17.7	11.7			5.9	Oct-18
Pinebridge (AIG) PEP V Preferred Participation Fund (\$6m commitment in '07)	75,737	0.0		0.0	-23.4	-0.7			-3.8	Oct-18
Pinebridge (AIG) PEP V Secondary (\$6m commitment in '07)	23,017	0.0		0.0	-12.1	-12.6	-12.1		-10.1	Jan-17
Pinebridge (AIG) PEP V Small-Mid Market US Buyout (\$6m commitment in '07)	90,000	0.0		0.0	-6.3	18.6			15.4	Oct-18
Pinebridge (AIG) PEP V US Venture (\$6m commitment in '07)	47,358	0.0		0.0	-2.2	3.3			-2.6	Oct-18
Landmark XV (\$3m commitment in '13)	649,744	0.1		0.0	-15.7	4.5	7.3		10.7	Nov-13
JFL Equity Investors IV, L.P. (\$6m commitment in '16)	1,723,874	0.3		0.0	9.8	34.1	41.7		36.7	Jan-17
Private Advisors Small Co. Coinvestment Fund, LP (\$4m commitment in '17)	4,695,956	0.7		0.0	0.5	23.1	21.7		19.1	Feb-17
Park Square Credit Opportunities III (\$3m commitment in '17)	2,775,654	0.4		0.0	3.3	6.8	6.4		6.4	Feb-18
Ironsides Constitution Opportunities (\$3m commitment in '18)	2,231,077	0.3		0.0	2.3	10.6			10.8	Oct-18
HarbourVest Dover Street X (\$9m commitment in '20)	6,689,436	1.0		0.0	4.4				60.9	Jun-20
Hamilton Lane Secondary Fund V LP (\$9m commitment in '20)	7,553,174	1.1		0.0	1.9				32.5	Jul-20
Constitution Ironsides Co-Investment Fund VI (\$12m commitment in '21)	13,189,202	2.0		0.0	3.7				2.9	Nov-21
HarbourVest Co-Investment Fund VI (\$8m commitment in '21)	1,848,598	0.3		0.0						Jan-22
JFL Equity Investors V, L.P. (\$9m commitment in '20)	7,787,501	1.2		0.0	11.7				1.3	Sep-20

Importantly, all returns in this report, including those of the private markets managers, are based on a time weighted return calculation and not based on IRRs, which can result in return differences.



FEE SCHEDULE

Account Name	Fee Schedule	Market Value (\$)	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
PRIT Core Fund	0.5 % of Assets	4,861,106	0.7	23,819	0.5
Rhumbline Advisors S&P 500 Index Fund	0.1 % of Assets	63,799,379	9.7	31,900	0.1
Coho Relative Value Equity	0.5 % of First \$75 M 0.4 % of Next \$75 M 0.4 % Thereafter	50,127,739	7.6	250,639	0.5
Polen Focused Growth	0.7 % of Assets	41,033,506	6.2	266,718	0.6
Boston Partners Small Cap Value	1.0 % of Assets	24,464,420	3.7	244,644	1.0
Loomis Sayles Small Cap Growth	0.5 % of Assets Minimum Fee: \$45,000	22,954,810	3.5	103,297	0.5
SEG Baxter Street	1.0 % of Assets	30,929,426	4.7	309,294	1.0
Schroder International Alpha Trust Class 1	0.6 % of Assets	27,817,318	4.2	152,995	0.6
Baillie Gifford International Growth Fund Class K	0.6 % of Assets	14,337,444	2.2	86,025	0.6
Axiom Emerging Markets Trust Class 2	0.7 % of Assets	17,331,717	2.6	126,522	0.7
ABS Emerging Markets MA Fund	0.8 % of Assets	19,595,462	3.0	146,966	0.7
Garcia Hamilton Fixed Income Aggregate		32,821,267	5.0	41,027	0.1
Lord Abbett Core Fixed Income	0.2 % of Assets	35,407,960	5.4	67,275	0.2
Loomis Sayles Multisector Full Discretion Trust	0.5 % of First \$20 M 0.4 % of Next \$20 M 0.3 % Thereafter	48,607,418	7.4	205,822	0.4
Octagon Senior Secured Credit Cayman Fund Ltd Class L Acc, Series 1	0.4 % of Assets	12,261,432	1.9	49,046	0.4
Invesco Mortgage Recovery Loans Feeder Fund		15,048	0.0		
PRIM Portfolio Completion Strategies		15,032,294	2.3		
Corbin Pinehurst Partners	0.9 % of Assets	12,724,753	1.9	108,160	0.9
UBS Neutral Alpha Strategies	0.9 % of Assets	14,114,020	2.1	127,026	0.9
Entrust Peru Wind Down	0.5 % of Assets	65,621	0.0	328	0.5
Cash Account		10,938,697	1.7		
Morgan Stanley Prime Property (\$2.8m commitment in '95)		25,979,519	4.0		
TA Realty Core Property Fund, LP (\$15m commitment in '19)		28,358,966	4.3		
Invesco Mortgage Recovery II (\$3M commitment in '15)		921,638	0.1		
Landmark VI (\$2m commitment in '11)		6,499	0.0		
Landmark VIII (\$4m commitment in '17)		2,136,606	0.3		
StepStone Real Estate Fund II (\$2m commitment in '11)		367,525	0.1		
Cerberus Institutional Real Estate Partners III (\$1.5m commitment in '12)		569,979	0.1		
TA Realty Fund X LP (\$3.5m commitment in '12)		4,086	0.0		



FEE SCHEDULE

Account Name	Fee Schedule	Market Value (\$)	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
TerraCap Partners III, LP (\$2.6m commitment in '15)		1,382,202	0.2		
TerraCap Partners IV, LP (\$4m commitment in '17)		3,565,886	0.5		
TerraCap Partners V, LP (\$8m commitment in '22)		8,845,592	1.3		
PRIM Vintage Year 2008 (\$3m commitment in '08)		801,810	0.1		
PRIM Vintage Year 2009 (\$1m commitment in '09)		73,681	0.0		
PRIM Vintage Year 2010 (\$1m commitment in '10)		460,062	0.1		
PRIM Vintage Year 2011 (\$1.5m commitment in '11)		837,642	0.1		
PRIM Vintage Year 2012 (\$1m commitment in '12)		472,161	0.1		
PRIM Vintage Year 2014 (\$2m commitment in '14)		2,158,189	0.3		
PRIM Vintage Year 2017 (\$2m commitment in '17)		2,559,371	0.4		
PRIM Vintage Year 2020 (\$5m commitment in '20)		3,546,500	0.5		
PRIM Vintage Year 2021 (\$5m commitment in '21)		2,731,766	0.4		
PRIM Vintage Year 2022 (\$7.5m commitment in '22)		966,325	0.1		
Alcentra European DLF (\$5m commitment in '14)		197,301	0.0		
Ascent Fund IV-B (\$1m commitment in '16)		40,322	0.0		
Ascent Fund V (\$2m commitment in '08)		1,250,422	0.2		
Ascent VI (\$3m commitment in '15)		3,453,769	0.5		
CVI Credit Value Fund IV A LP (\$6m commitment in '17)		5,527,001	0.8		
Invesco Fund VI (\$5m commitment in '13)		837,127	0.1		
Kayne Energy Fund VII (\$5m commitment in '15)		2,857,362	0.4		
Foundry 2007 (\$3m commitment in '07)		484,034	0.1		
Foundry 2010 (\$3m commitment in '10)		5,956,413	0.9		
Foundry 2010 Annex (\$0.4m commitment in '15)		1,105,234	0.2		
Pinebridge (AIG) PEP V Asia (\$6m commitment in '07)		32,657	0.0		
Pinebridge (AIG) PEP V Co-Investment (\$6m commitment in '07)		90,621	0.0		
Pinebridge (AIG) PEP V Europe (\$6m commitment in '07)		16,190	0.0		
Pinebridge (AIG) PEP V Large Market US Buyout (\$6m commitment in '07)		74,199	0.0		
Pinebridge (AIG) PEP V Preferred Participation Fund (\$6m commitment in '07)		75,737	0.0		
Pinebridge (AIG) PEP V Secondary (\$6m commitment in '07)		23,017	0.0		
Pinebridge (AIG) PEP V Small-Mid Market US Buyout (\$6m commitment in '07)		90,000	0.0		
Pinebridge (AIG) PEP V US Venture (\$6m commitment in '07)		47,358	0.0		
Landmark XV (\$3m commitment in '13)		649,744	0.1		
JFL Equity Investors IV, L.P. (\$6m commitment in '16)		1,723,874	0.3		
Private Advisors Small Co. Coinvestment Fund, LP (\$4m commitment in '17)		4,695,956	0.7		



FEE SCHEDULE

Account Name	Fee Schedule	Market Value (\$)	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Park Square Credit Opportunities III (\$3m commitment in '17)		2,775,654	0.4		
Ironsides Constitution Opportunities (\$3m commitment in '18)		2,231,077	0.3		
HarbourVest Dover Street X (\$9m commitment in '20)		6,689,436	1.0		
Hamilton Lane Secondary Fund V LP (\$9m commitment in '20)		7,553,174	1.1		
Constitution Ironsides Co-Investment Fund VI (\$12m commitment in '21)		13,189,202	2.0		
JFL Equity Investors V, L.P. (\$9m commitment in '20)		7,787,501	1.2		
HarbourVest Co-Investment Fund VI (\$8m commitment in '21)		1,848,598	0.3		
Investment Management Fee		657,289,819	100.0	2,341,502	0.4

The estimated fee for private markets, inclusive of carried interest, is ~\$3,541,145 annually, which brings the total expense ratio for privates to ~53 bps. This brings the total estimated expense ratio for MWRA to ~93 bps.



NOTES

- 1 Results for periods longer than one year are annualized.
- 2 Total Balances, Large Cap, Small Cap, and Other Composite performance starts 12/1/2010.
- 3 Preliminary Total Composite net of fee since inception return is 6.7% for the current month.
- 4 Preliminary Total Composite gross of fee since inception return is 8.3% for the current month.
- 5 Targets, Allocation Index, and Policy Index have been updated to reflect new allocation of 02/01/2022.
- 6 Policy Index changed from Nasdaq to Cambridge All PE to reflect as of 5/1/2012.
- 7 Policy Index Consists of: 24% S&P 500, 7% Russell 2000, 12% MSCI ACWI IMI, 7% MSCI Emerging Markets, 12% Bloomberg US Aggregate TR, 8% Bloomberg US Universal TR, 6% HFRI Fund of Funds Composite Index, 12% NCREIF Property Index, 12% CIA US All PE.
- 8 Allocation index consists of: Weighted index of underlying managers to their respective benchmark.
- 9 PRIM is valued as of 12/31/22. All Private Market managers are final as of 9/30/22, except for CVI, Kayne VII, Cerberus, and Morgan Stanley, which are final as of 12/31/22.



DISCLAIMERS & DISCLOSURES

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A "since inception" return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

NEPC's preferred data source is the plan's custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.

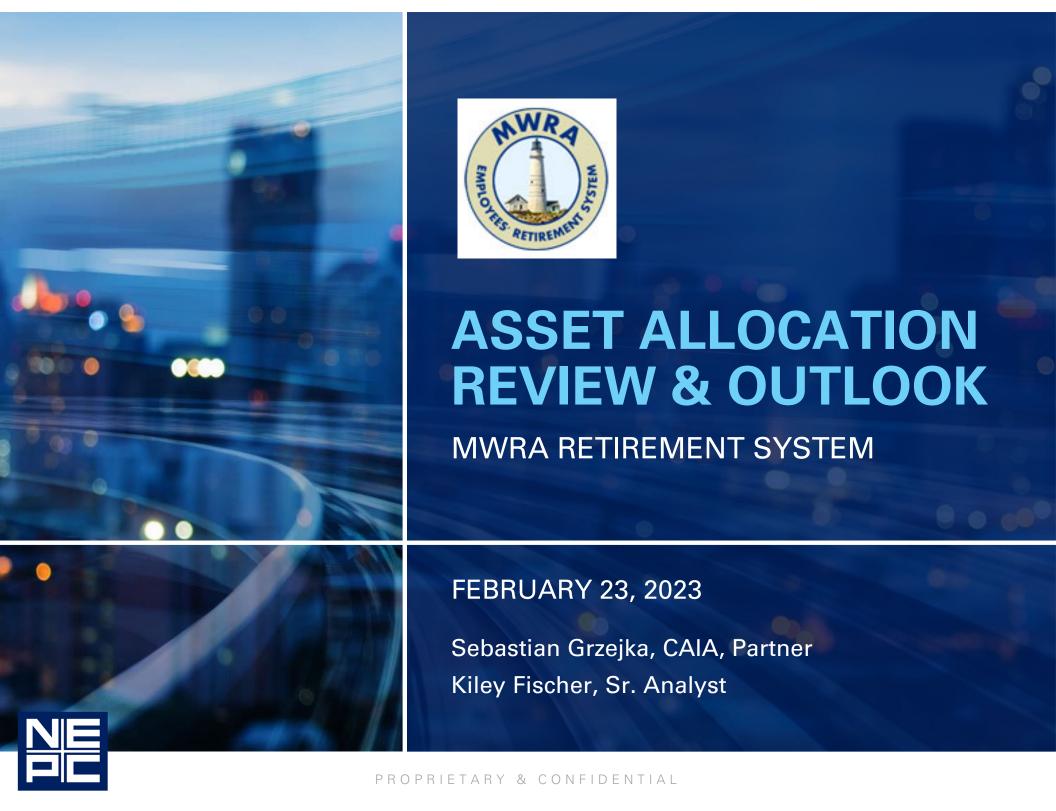
All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.

The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.

This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv





INTRODUCTION

- NEPC and MWRAERS conduct an annual asset allocation to reaffirm policy targets
 - The goal is to ensure the strategy meets the System's needs, and is positioned to take advantage of market opportunities in a risk controlled manner
- The current approach is structured to support the long term goals of the System:
 - The primary goal is to provide benefits to participants and beneficiaries of the System, with the goal of becoming fully funded. In order to achieve this goal, consistency of returns and risk of loss are primary considerations
 - The 30-year assumed rate of return for the Plan is currently 7.6%
- Today, we want to focus on ongoing implementation of the portfolio, specifically:
 - Strategic Allocation: Reaffirm the current long-term strategic targets. NEPC is not recommending changes at this time
 - Fixed Income: Finalize discussion around fixed income allocation and implementation
 - Equity: The equity allocation is currently being reviewed. The small cap growth RFP has been completed, and NEPC has provided summary results
- We have provided an updated asset allocation analysis to review these topics



2023 MARKS THE START OF A NEW REGIME

NEPC MARKET OUTLOOK

Elevated Inflation and Monetary Policy

Central banks have transitioned from supporting investor sentiment and market liquidity to suppressing inflation as their primary policy objective

Interest Rate Super Cycle

The forty-year interest rate super cycle has ended, and capital markets are only beginning to reflect an environment of higher discount rates and an increased cost of capital

Portfolio Construction

Higher volatility in inflation and economic factors have increased stock-bond correlations and diversifying assets offer greater value to a portfolio relative to the last decade

Geopolitical Trends

New geopolitical trends in Europe and the Middle East are straining commodity markets and supply chains while inciting macro-economic stagflation trends



THE END OF THE INTEREST RATE SUPER CYCLE

HIGHER DISCOUNT RATES HAVE A PROLONGED LAG EFFECT



- The transition to higher levels of interest rates continues to progress with the effects rippling from the public markets to consumer finance, real estate, private markets, and the overall cost of capital
 - The economic effect has yet to be felt as debt issuance and refinancings slow and weak balance sheets buckle from the pressure of higher interest rates

LOOKING FORWARD

We have transitioned to an investment regime characterized by higher interest rates with central banks focused on managing inflation not investor sentiment

The **outlook for investment-grade bonds has improved** and is additive relative to existing strategic allocation targets for safe-haven fixed income exposure

Diversification and portfolio balance are critical and shifts in stock-bond correlation dynamics increase the relative benefit of diversifying asset classes

The **emergence of stagflationary trends** challenges the behavioral biases investors have been conditioned to expect over the last decade



ASSET ALLOCATION OVERVIEW

The current strategic allocation is structured to utilize a balanced, total return approach. At this time, we are not recommending changes to the strategic targets.

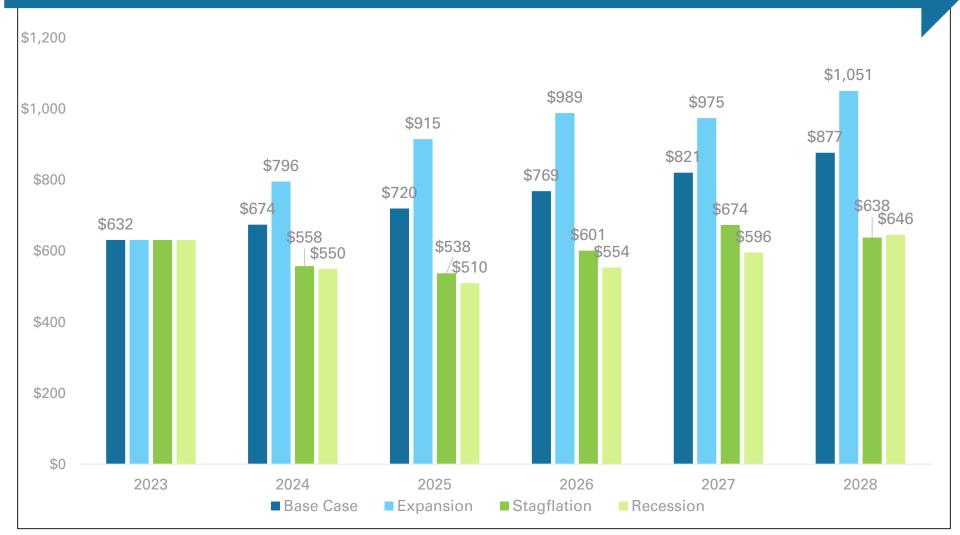
	Current Policy	Current Policy Ranges
Large Cap	24%	18% - 35%
Small Cap	7%	4% - 10%
Non US Equity	12%	8% - 16%
Emerging Equity	7%	4% - 10%
Private Equity	12%	0% – 18%
Total Equity	62%	
Core Bonds	12%	8% - 16%
Multi Sector Credit	8%	4% - 10%
Total Debt	20%	
Real Estate	12%	0% - 18%
Total Real Estate	12%	
Hedge Funds	6%	0% – 10%
Total Multi Asset	6%	
Measure*		
Expected Return (10 Years)	6.8%	
Expected Return (30 Years)	7.6%	
Standard Deviation	14.5%	
Sharpe Ratio (10 Years)	0.19	



^{*}Expected return is net of fee and beta only

SCENARIO ANALYSIS – STRATEGIC ALLOCATION

The strategic target is well positioned in growth regimes, and protects over time in drawdown scenarios. Given the annual review of the asset allocation, its likely adjustments would be made along the way.





CORE ASSET CLASS RETURN ASSUMPTIONS

	Asset Class	12/31/22 10-Year Return	12/31/21 10-Year Return	Delta
	Cash	4.0%	1.5%	+2.5%
	U.S. Inflation	2.5%	2.4%	+0.1%
	U.S. Large-Cap Equity	5.4%	4.3%	+1.1%
	Non-U.S. Developed Equity	5.6%	5.2%	+0.4%
Equity	Emerging Market Equity	9.6%	8.3%	+1.3%
	Global Equity*	6.3%	5.4%	+0.9%
	Private Equity*	9.2%	9.0%	+0.2%
	US Treasury Bond	4.2%	1.5%	+2.7%
	US Municipal Bond	4.4%	1.6%	+2.8%
Fixed	US Aggregate Bond*	4.8%	2.0%	+2.8%
Income	US TIPS	4.4%	1.4%	+3.0%
	US High Yield Corporate Bond	7.1%	3.2%	+3.9%
	Private Debt*	8.8%	6.6%	+2.2%
	Commodity Futures	4.2%	0.4%	+3.8%
Pool	REIT	6.2%	4.5%	+1.7%
Real Assets	Gold	5.1%	3.3%	+1.8%
Assets	Real Estate - Core	4.0%	4.7%	-0.7%
	Private Real Assets - Infrastructure	6.6%	5.3%	+1.3%
N/I	60% S&P 500 & 40% U.S. Aggregate	5.4%	3.7%	+1.7%
Multi- Asset	60% MSCI ACWI & 40% U.S. Agg.	6.0%	4.4%	+1.6%
ASSGL	Hedge Fund*	6.5%	4.2%	+2.3%



^{*}Calculated as a blend of other asset classes



INFLATION ASSUMPTIONS

OVERVIEW

- Inflation is a key building block to develop asset class assumptions
- Inflation assumptions are model-driven and informed by multiple inputs for both the U.S. and global assets
 - Includes forecasts from international organizations (e.g. IMF), local consumer and producer price indices, global interest rate curves, and break-even inflation expectations
- NEPC's U.S. inflation expectations reflect stickier inflation over the near-term, but a stable inflation outlook over the long-term
 - We anticipate continued volatility among inflation measures as market-based inflation expectations diverge from current consumer inflation metrics

Region	10-Year Inflation Assumption	30-Year Inflation Assumption
United States	2.5%	2.6%



PUBLIC EQUITY ASSUMPTIONS

BUILDING BLOCKS

Illiquidity Premium	The return expected for assets with illiquidity risk
Valuation	Represents P/E multiple contraction or expansion relative to long-term trend
Inflation	Market-specific inflation based on country-level revenue exposure
Real Earnings Growth	Market-specific real growth based on a weighted-average of country revenue exposure and GDP growth
Dividend Yield	Income distributed to shareholders adjusted to reflect market trends

Asset Class	12/31/22 10-Yr Return	12-Month Change
U.S. Large-Cap Equity	5.4%	+1.1%
U.S. Small/Mid-Cap Equity	6.5%	+0.9%
Non-U.S. Developed Equity	5.6%	+0.4%
Non-U.S. Developed Small-Cap Equity	6.7%	+0.8%
Emerging Market Equity	9.6%	+1.3%
Emerging Market Small-Cap Equity	9.3%	+1.7%
China Equity	8.7%	-0.1%
Hedge Fund - Equity	6.0%	+1.9%
Global Equity*	6.3%	+0.9%
Private Equity*	9.2%	+0.2%



Source: NEPC

^{*}Calculated as a blend of other asset classes

FIXED INCOME ASSUMPTIONS

BUILDING BLOCKS

Illiquidity Premium	The return expected for assets with illiquidity risk
Government Rates Price Change	Change due to shifts in current yields relative to forecasted rates
Credit Deterioration	The average loss for credit assets due to defaults and recovery rates
Spread Price Change	Valuation change due to changes in credit spreads relative to long-term targets
Credit Spread	Yield premium provided by securities with credit risk
Government Rates	The yield attributed to sovereign bonds that do not have credit risk

Asset Class	12/31/22 10-Yr Return	12-Month Change
U.S. TIPS	4.4%	+3.0%
U.S. Treasury Bond	4.2%	+2.7%
U.S. Corporate Bond	5.9%	+3.1%
U.S. MBS	4.5%	+2.7%
U.S. High Yield Corporate	7.1%	+3.9%
U.S. Leveraged Loan	7.8%	+3.1%
EMD External Debt	7.1%	+3.0%
EMD Local Currency Debt	7.2%	+1.5%
Non-U.S. Govt. Bond	2.6%	+1.5%
U.S. Muni Bond (1-10 Year)	3.2%	+2.0%
U.S. High Yield Muni Bond	5.7%	+3.6%
Hedge Fund – Credit	7.1%	+2.9%
U.S. Aggregate Bond*	4.8%	+2.8%
Private Debt*	8.8%	+2.2%



Source: NEPC

*Calculated as a blend of other asset classes

REAL ASSET ASSUMPTIONS

BUILDING BLOCKS

Illiquidity Premium	The return expected for assets with illiquidity risk
Valuation	The change in price of the asset moving to a terminal value or real average level
Inflation	Based on the inflation path as defined by breakeven-inflation rates and NEPC assumptions
Growth	Market-specific real growth based on a weighted-average of country- level revenue exposure and GDP growth
Real Income	The inflation-adjusted income produced by the asset

Asset Class	12/31/22 10-Yr Return	12-Month Change
Commodity Futures	4.2%	+3.8%
Midstream Energy	6.0%	-0.7%
REIT	6.2%	+1.7%
Global Infrastructure Equity	5.6%	-
Global Natural Resources Equity	5.5%	-
Gold	5.1%	+1.8%
Real Estate - Core	4.0%	-0.7%
Real Estate – Non-Core	5.3%	-0.6%
Private Debt - Real Estate	5.8%	+1.2%
Private Real Assets - Natural Resources	8.1%	+1.0%
Private Real Assets - Infrastructure	6.6%	+1.3%

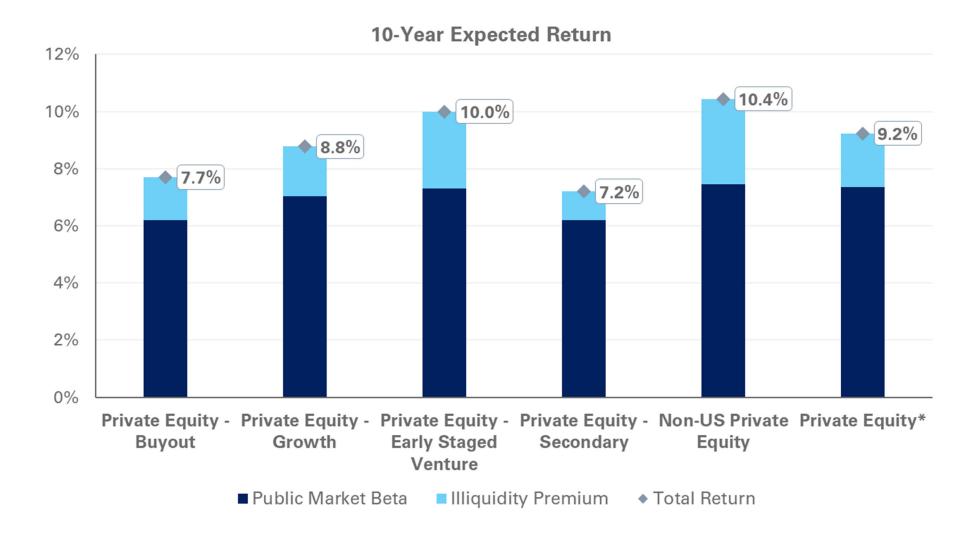


Source: NEPC

^{*}Calculated as a blend of other asset classes

PRIVATE EQUITY

BUILDING BLOCKS



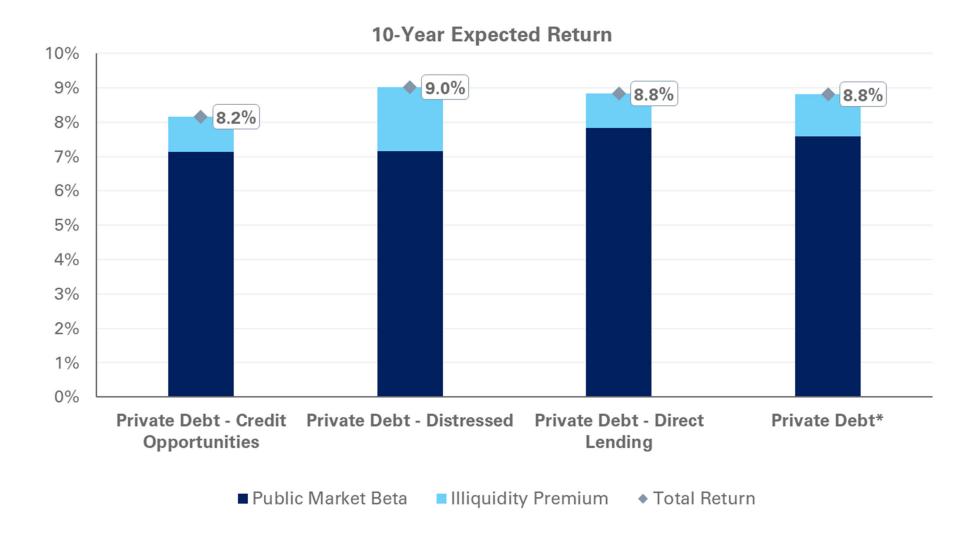


Source: NEPC

*Private Equity is a derived composite of 34% U.S. Buyout, 34% U.S. Growth, 8.5% U.S. Secondary, 8.5% U.S. Venture, 15% Non-U.S. PE

PRIVATE DEBT

BUILDING BLOCKS



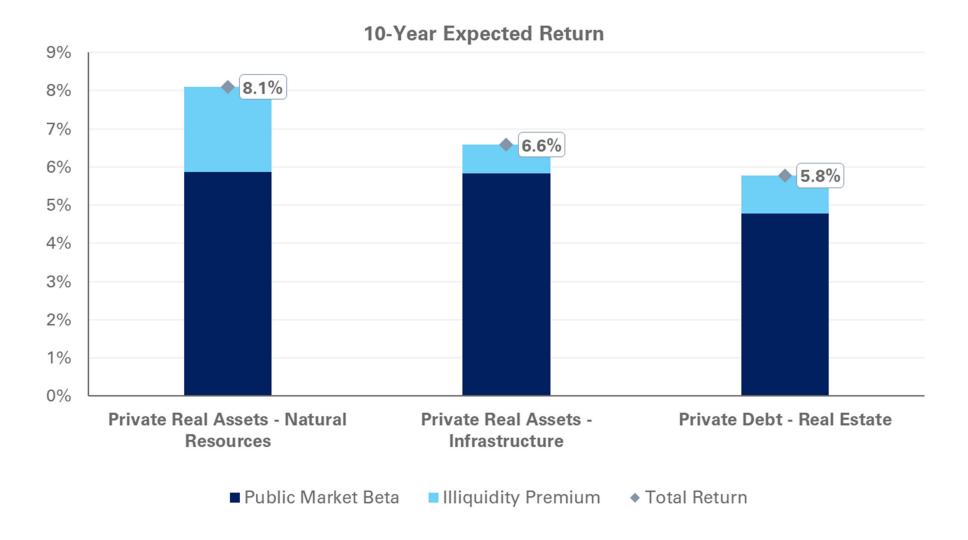


Source: NEPC

*Private Debt is a derived composite of 25% Mezzanine, 25% Distressed, 50% Direct Lending

PRIVATE REAL ASSET

BUILDING BLOCKS

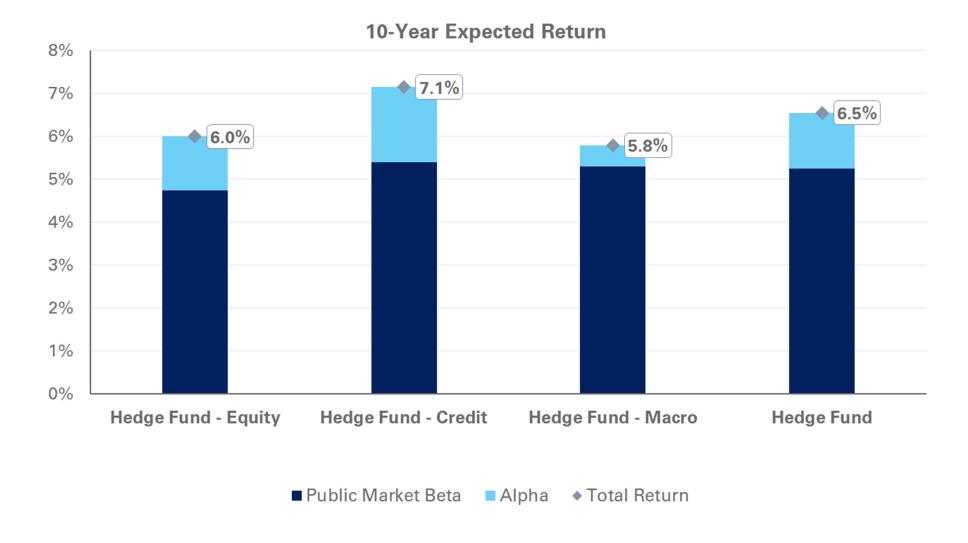




Source: NEPC

HEDGE FUND

BUILDING BLOCKS





Source: NEPC

*Hedge Funds is a derived composite of 40% Long/Short, 40% Credit, 20% Macro



INFORMATION DISCLAIMER

Past performance is no guarantee of future results.

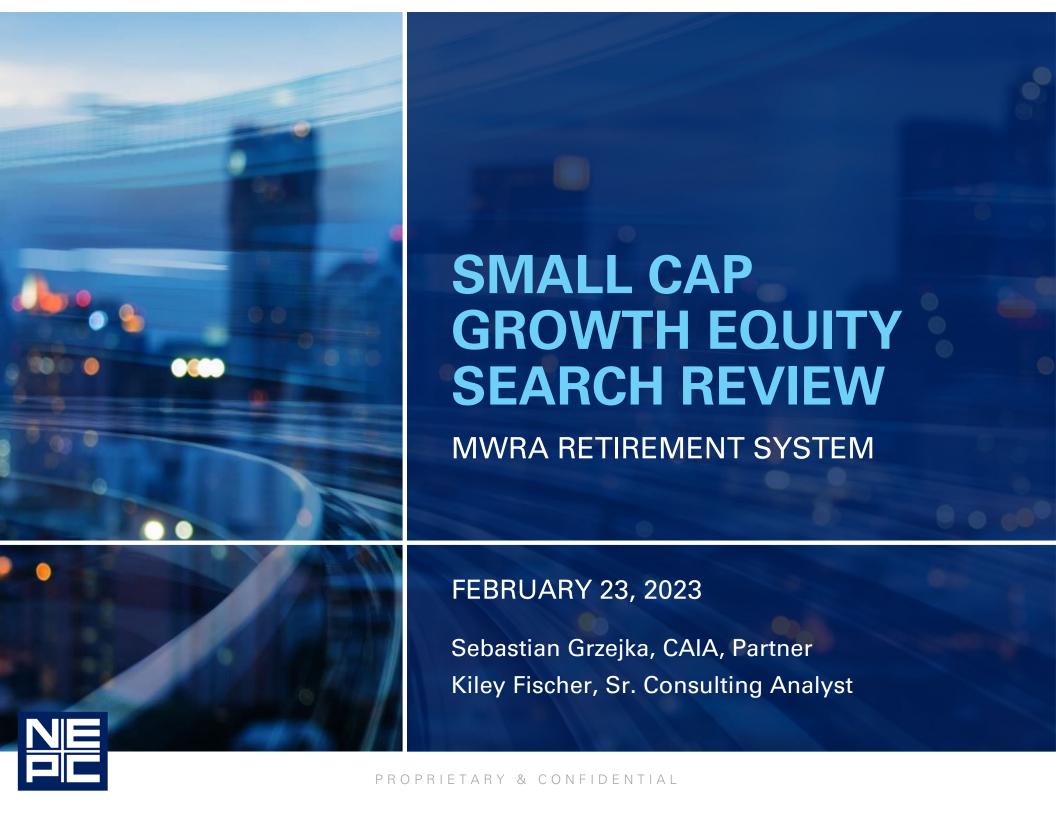
The goal of this report is to provide a basis for substantiating asset allocation recommendations. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.

Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

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SUMMARY OF SMALL CAP GROWTH EQUITY SEARCH

Target fund strategy

U.S. Small Cap Growth strategy

• Advertised requirements for the search:

- Candidates must have familiarity with and agree to comply (in writing) with Massachusetts G.L. Chapter 32 and Chapter 176 of the Acts of 2011. Additionally, candidates must have familiarity and agree to comply with the reporting and investment guidelines administered by PERAC.
- 2. Candidates must read and agree to the attached side letter pertaining to mandatory contractual language, based on the guidelines above.
- 3. Candidates must be registered with the SEC or Massachusetts Secretary of State.
- 4. Preference will be given to candidates who have at least \$500 million in assets in the fund that is being suggested, however, this is subject to the Board's discretion.
- 5. Preference will be given to Funds that have a live track record of at least three years, however, this is subject to the Board's discretion
- Responses were due on February 13, 2023 by 2:00 PM EST.
 - A total of 53 managers responded



SMALL CAP GROWTH EQUITY SEARCH RESPONSES

Firm	Fund	Vehicle	Fund AUM (MM)	Firm AUM (MM)	Track Record (Yrs)	Approach & Style	Proposed Fee *	Side Letter
Axiom	US Small Cap Equity	CIT	\$204	\$16,581	17	Fundamental, Bottom-up	0.55%	Yes*
Brown Advisory	Small-Cap Growth	SMA	\$6,196	\$121,600	30	Fundamental, Bottom-Up	0.70%	Yes
Buffalo Funds	Buffalo Small Cap Fund	MF	\$804	\$6,200	28	Fundamental, Bottom-Up	0.86%	Yes
Congress	Small Cap Growth	SMA	\$765	\$16,885	10	Fundamental	0.75%	Yes
Driehaus	Driehaus Small Cap Growth	SMA	\$2,272	\$12,672	43	Fundamental, Bottom-Up	0.60%	Yes
EAM	EAM US Small Cap	SMA	\$437	\$2,368	15	Systematic	0.75%	Yes
Emerald Advisers	Diversified Small Cap Growth	SMA	\$3,544	\$3,746	30	Fundamental, Bottom-Up	0.70%	Yes
Frontier Capital	Frontier Small Cap Growth	SMA	\$1,357	\$9,292	38	Fundamental, Bottom-Up	1.0%	Yes*
Geneva	US Small Cap Growth	SMA	\$2,774	\$5,027	24	Fundamental, Bottom-Up	0.75%	Yes
Granahan IM	Small Cap Core Growth	SMA	\$869	\$3,327	29	Fundamental, Bottom-up	0.95%	Yes
Granahan IM	SC Focused Growth	SMA	\$1,471	\$3,327	14	Fundamental, Bottom-up	0.95%	Yes
GW&K	Small Cap Growth	SMA / CIT	\$554	\$46,804	14	Active, Bottom-Up	SMA: 0.60% CIT: 0.50%	Yes
Hood River	Small-Cap Growth	SMA	\$2,673	\$2,781	20	Fundamental, Bottom-Up	0.90%	Yes
Kayne Anderson	Small Cap Sustainable Growth	SMA	\$5,049	\$47,510	25	Fundamental, Bottom-Up	0.80%	Yes
Kornitzer	Small Cap Equity	SMA	\$804	\$6,200	28	Fundamental, Bottom-Up	0.70%	Yes
Lisanti Capital Growth	Small Cap Growth	SMA	\$484	\$758	19	Fundamental, Bottom-Up	0.85%	Yes
Loomis Sayles	Small Cap Growth	SMA	\$3,675	\$282,060	18	Fundamental, Bottom-Up	0.45%	Yes
Neuberger Berman	Small Cap Growth	SMA	\$348	\$427,269	24	Fundamental, Bottom-Up	0.80%	Yes*



Proposed Fee: The effective fee proposed for a \$20 million investment

Yes* = Yes with Modifications

SMALL CAP GROWTH EQUITY SEARCH RESPONSES

Firm	Fund	Vehicle	Fund AUM (MM)	Firm AUM (MM)	Track Record (Yrs)	Approach & Style	Proposed Fee *	Side Letter
Nicholas	US Small Cap	SMA	\$386	\$1,203	15	Fundamental, Bottom-Up	0.65%	Yes
Peregrine	Small Cap Growth	SMA/CF	\$1,469	\$4,361	34	Bottom-up	SMA: 0.90% CF: 0.80%	Yes
Pier Capital	Small Cap Growth	SMA	\$553	\$628	16	Bottom-Up	0.75%	Yes*
Polen	U.S. Small Company Growth	SMA	\$344	\$54,833	6	Fundamental, Bottom-up	0.50%	Yes
Ranger	RIM Small Cap Growth	SMA	\$1,170	\$1,404	20	Fundamental, Bottom-Up	0.80%	Yes
Rice Hall James & Assoc.	RHJ Small Cap Opportunities	SMA	\$1,012	\$2,051	28	Fundamental, Bottom-Up	0.85%	Yes
Riverbridge	Small Cap Growth	SMA	\$2,774	\$10,172	34	Fundamental, Bottom-Up	0.97%	Yes*
Silvercrest	U.S. Small Cap Growth	SMA	\$528	\$19,395	18	Bottom-up	0.80%	Yes
Summit Creek	Small Cap Growth	SMA or CIT	\$733	\$754	16	Fundamental	1.00%	Yes
TimesSquare	Small Cap Growth	SMA	\$2,368	\$8,810	22	Fundamental Bottom-Up	1%	Yes
UBS	US Equity Small Cap Growth	SMA	\$837	\$1,064,184	29	Bottom-up (80-90%); Top- Down (10-20%)	0.59%	Yes*
Voya	Small Cap Growth	CIT	\$1,144	\$315,613	10	Fundamental, Bottom-Up	0.80%	Yes
Wasatch	Small Cap Core Growth	CIT	\$4,923	\$22,348	36	Fundamental, Bottom-Up	0.85%	Yes*
Wasatch	Small Cap Growth	CIT	\$3,152	\$22,348	36	Fundamental, Bottom-Up	0.85%	Yes*
Wasatch	Small Cap Ultra Growth	SMA	\$1,381	\$22,348	31	Fundamental, Bottom-Up	0.85%	Yes*
Westfield Capital	Small Cap Growth Equity	SMA	\$1,765	\$13,315	33	Fundamental, Bottom-Up, GARP	1.00%	Yes*
William Blair	Small Cap Growth	SMA	\$1,852	\$55,930	35	Fundamental, Bottom-Up	0.98%	Yes



Proposed Fee: The effective fee proposed for a \$20 million investment

Yes* = Yes with Modifications

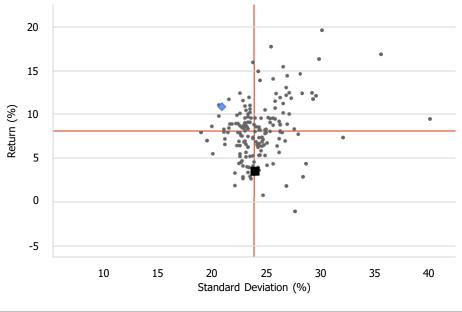




Axiom InvestorsAxiom US Small Cap Equity Strategy

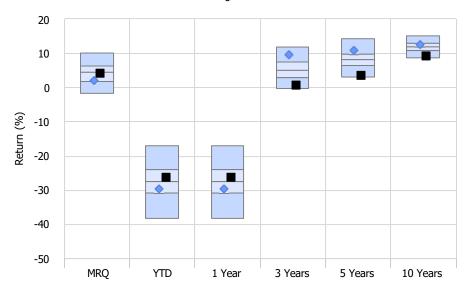
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	17.45
Product Inception Date	09/01/2006	Tracking Error 10 Years	7.27
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	4.58 0.82
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.67
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	0.45 92.26
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	82.57
Default Reporting Method Current # of Holdings	Gross of Fees 52	Max Drawdown Since Inception 16.33 Years 09/2006 - 12/2022	43.11
% Holdings In 10 Largest Stocks	41.69%		
Active Share	89.57%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Axiom US Small Cap Equity Strategy	GF	10.86	20.96
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Axiom US Small Cap Equity Strategy	Russell 2000 Growth
MRQ	1.99	4.13
Returns YTD	-29.72	-26.36
1 Year	-29.72	-26.36
3 Years	9.56	0.65
5 Years	10.86	3.51
10 Years	12.50	9.20

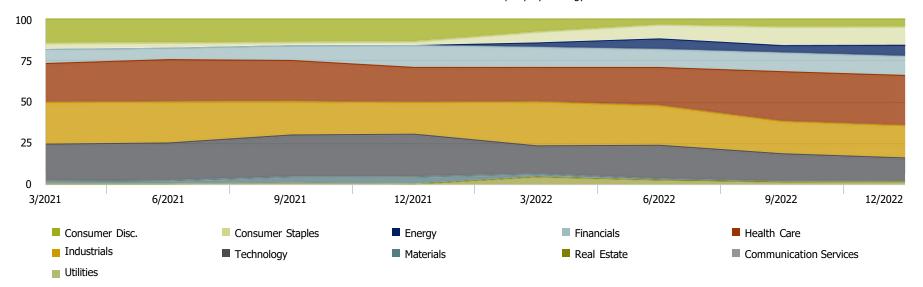
Calendar Year Returns

Product Name	Axiom US Small Cap Equity Strategy	Russell 2000 Growth
Returns 2016	5.52	11.32
Returns 2017	21.02	22.17
Returns 2018	-2.69	-9.31
Returns 2019	30.87	28.48
Returns 2020	48.96	34.63
Returns 2021	25.61	2.83
Returns 2022	-29.72	-26.36

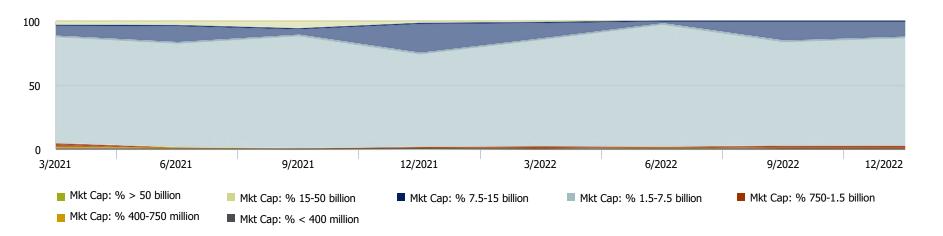


Historical Sector Allocation





Historical Market Cap Allocation

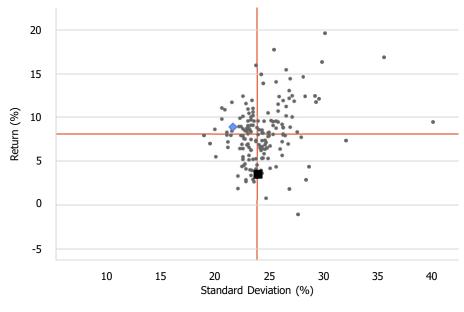




Brown Advisory, LLCBrown Advisory Small Cap Growth

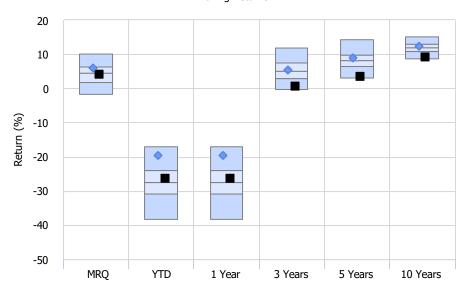
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	17.56
Product Inception Date	03/31/1993	Tracking Error 10 Years	6.52
	Russell 2000	Annualized Alpha 10 Years	4.22
Preferred Benchmark	Growth	Beta 10 Years	0.84
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.66
Primary Equity Style Emphasis	Growth	Information Ratio 10 Years	0.48
Primary Investment Approach	Fundamental	Upside Market Capture 10 Years	88.86
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	79.92
Default Reporting Method	Gross of Fees	Max Drawdown Since Inception 29.75 Years 04/1993 - 12/2022	69.95
Current # of Holdings	80		
% Holdings In 10 Largest			
Stocks	25.73%		
Active Share	93.14%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Brown Advisory Small Cap Growth	GF	8.89	21.70
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Brown Advisory Small Cap Growth	Russell 2000 Growth
MRQ	5.95	4.13
Returns YTD	-19.62	-26.36
1 Year	-19.62	-26.36
3 Years	5.29	0.65
5 Years	8.89	3.51
10 Years	12.30	9.20

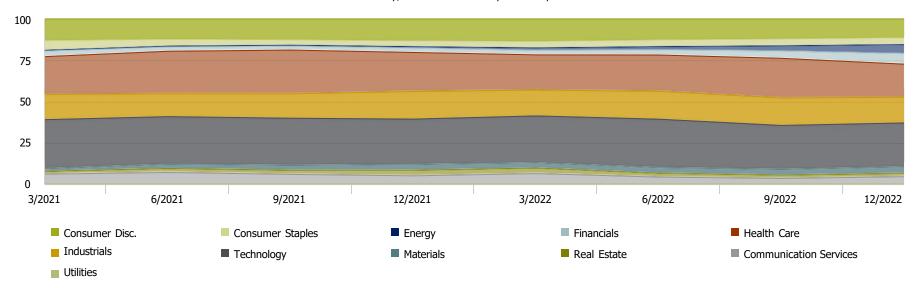
Calendar Year Returns

	Product Name	Brown Advisory Small Cap Growth	Russell 2000 Growth
	Returns 2016	11.37	11.32
-	Returns 2017	18.84	22.17
	Returns 2018	-3.29	-9.31
	Returns 2019	35.63	28.48
	Returns 2020	33.48	34.63
	Returns 2021	8.81	2.83
	Returns 2022	-19.62	-26.36

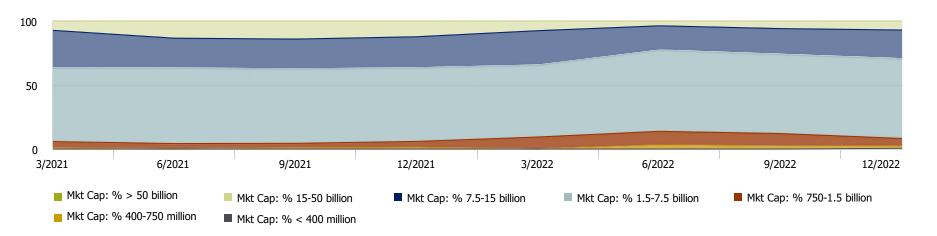


Historical Sector Allocation

Brown Advisory, LLC: Brown Advisory Small Cap Growth



Historical Market Cap Allocation

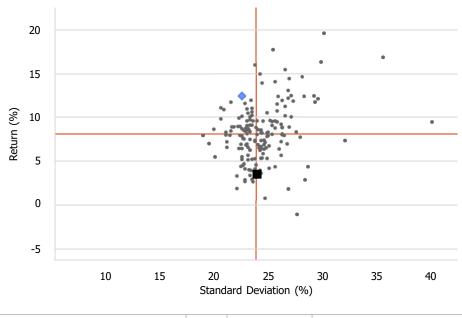




Congress Asset Management Company, LLP Small Cap Growth

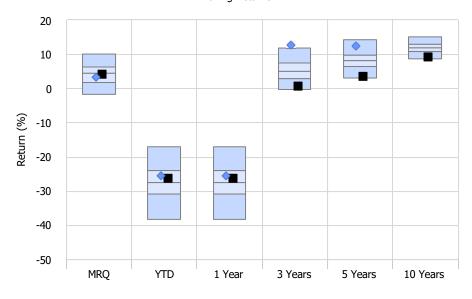
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	
Product Inception Date	07/01/2013	Tracking Error 10 Years	
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	
Primary Equity Style Emphasis Primary Investment Approach	GARP Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	
Default Reporting Method Current # of Holdings	Gross of Fees 40	Max Drawdown Since Inception 9.5 Years 07/2013 - 12/2022	27.96
· ·	10		
% Holdings In 10 Largest Stocks	32.85%		
Active Share	93.27%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth	GF	12.41	22.62
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



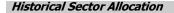
	Small Cap Growth	Russell 2000 Growth
MRQ	3.24	4.13
Returns YTD	-25.63	-26.36
1 Year	-25.63	-26.36
3 Years	12.68	0.65
5 Years	12.41	3.51
10 Years		9.20

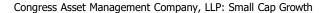
Calendar Year Returns

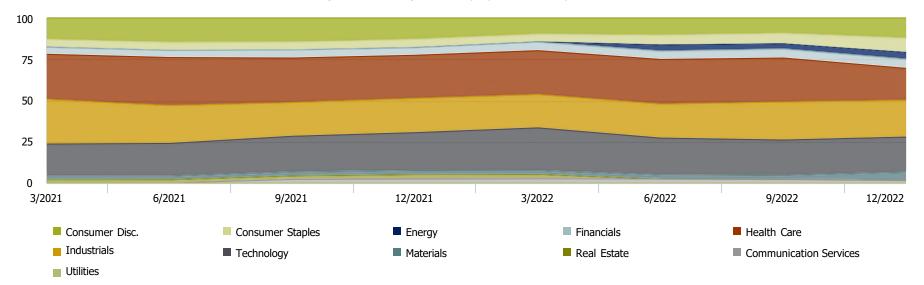
Product Name	Small Cap Growth	Russell 2000 Growth
Returns 2016	17.28	11.32
Returns 2017	22.43	22.17
Returns 2018	2.09	-9.31
Returns 2019	22.90	28.48
Returns 2020	35.75	34.63
Returns 2021	41.71	2.83
Returns 2022	-25.63	-26.36



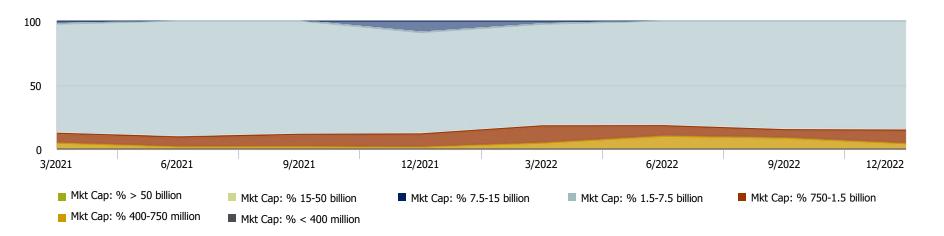
Congress Asset Management Company, LLP Small Cap Growth







Historical Market Cap Allocation

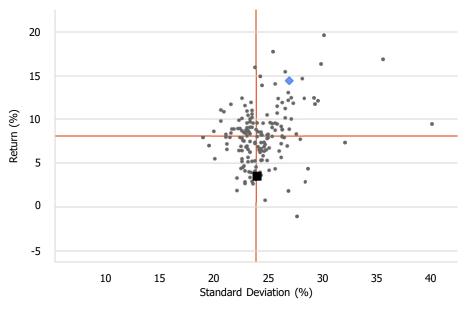




Driehaus Capital Management LLCDriehaus Small Cap Growth

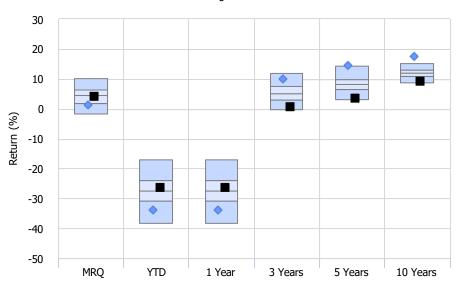
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	22.28
Product Inception Date	01/01/1980	Tracking Error 10 Years	7.50
	Russell 2000	Annualized Alpha 10 Years	7.52
Preferred Benchmark	Growth	Beta 10 Years	1.06
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.75
Primary Equity Style	Growth	Information Ratio 10 Years	1.11
Emphasis	Fundamental	Upside Market Capture 10 Years	123.84
Primary Investment Approach		Downside Market Capture 10 Years	93.95
Primary Screening Approach	Bottom-Up	Max Drawdown Since Inception 43 Years	
Default Reporting Method	Gross of Fees	01/1980 - 12/2022	74.44
Current # of Holdings	109	, , , , , ,	
% Holdings In 10 Largest			
Stocks	21.08%		
Active Share	77.99%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Driehaus Small Cap Growth	GF	14.40	26.97
Russell 2000 Growth	IX	3.51	23.98
+ US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Driehaus Small Cap Growth	Russell 2000 Growth
MRQ	1.24	4.13
Returns YTD	-33.93	-26.36
1 Year	-33.93	-26.36
3 Years	9.88	0.65
5 Years	14.40	3.51
10 Years	17.50	9.20

Calendar Year Returns

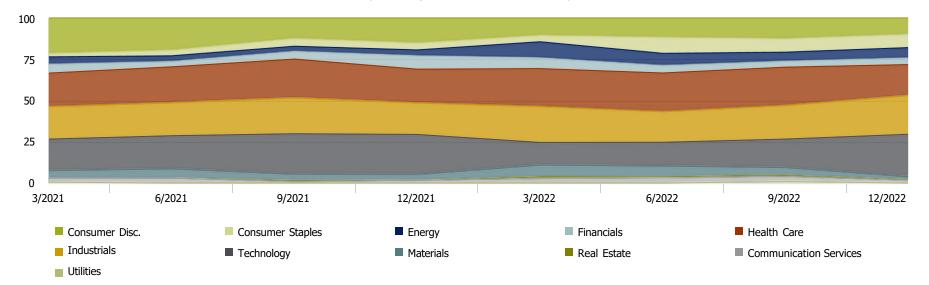
Product Name	Driehaus Small Cap Growth	Russell 2000 Growth
Returns 2016	12.60	11.32
Returns 2017	32.62	22.17
Returns 2018	4.12	-9.31
Returns 2019	41.83	28.48
Returns 2020	64.04	34.63
Returns 2021	22.43	2.83
Returns 2022	-33.93	-26.36



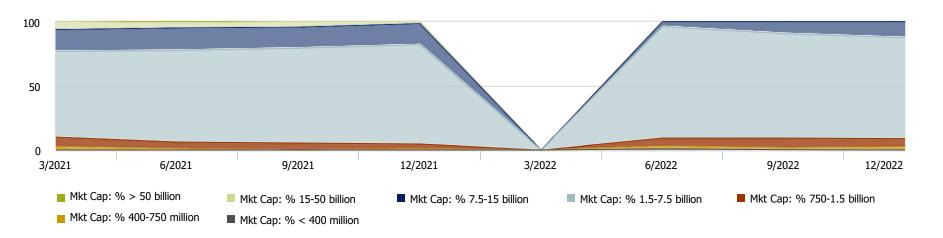
Driehaus Capital Management LLC Driehaus Small Cap Growth







Historical Market Cap Allocation

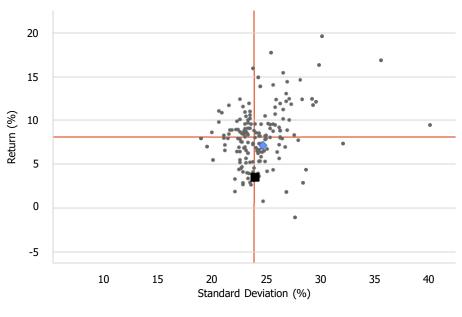




EAM Investors, LLC EAM US Small Cap

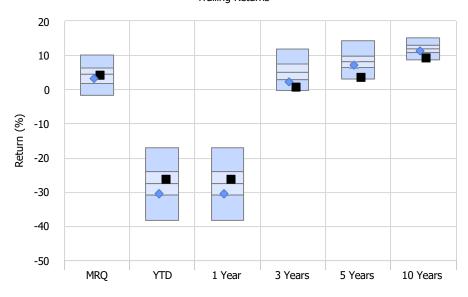
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	20.94
Product Inception Date	10/02/2007	Tracking Error 10 Years	6.96
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	2.18 1.00
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.50
Primary Equity Style Emphasis Primary Investment Approach Primary Screening Approach	Growth Combined Bottom-Up	Information Ratio 10 Years Upside Market Capture 10 Years Downside Market Capture 10 Years	0.30 104.14 97.05
Default Reporting Method Current # of Holdings	Gross of Fees	Max Drawdown Since Inception 15.25 Years 10/2007 - 12/2022	52.61
% Holdings In 10 Largest Stocks	11.63%		
Active Share	82.49%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
EAM US Small Cap	GF	7.14	24.74
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	EAM US Small Cap	Russell 2000 Growth
MRQ	3.16	4.13
Returns YTD	-30.60	-26.36
1 Year	-30.60	-26.36
3 Years	2.20	0.65
5 Years	7.14	3.51
10 Years	11.27	9.20

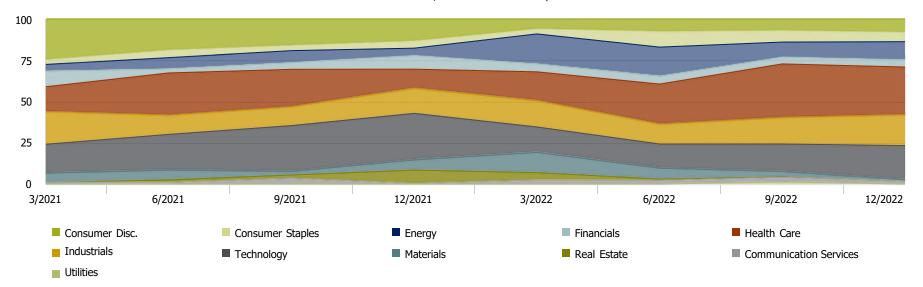
Calendar Year Returns

Product Name	EAM US Small Cap	Russell 2000 Growth
Returns 2016	5.49	11.32
Returns 2017	23.62	22.17
Returns 2018	-0.80	-9.31
Returns 2019	33.29	28.48
Returns 2020	46.35	34.63
Returns 2021	5.11	2.83
Returns 2022	-30.60	-26.36

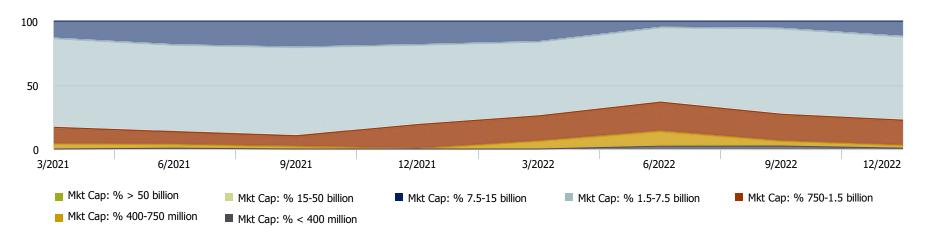


Historical Sector Allocation





Historical Market Cap Allocation

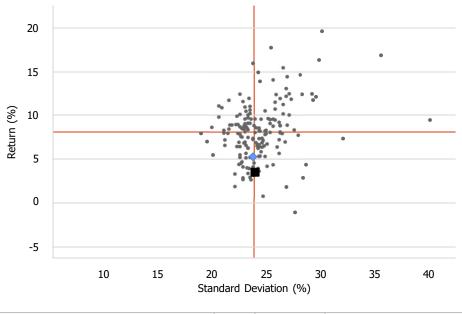




Emerald Advisers, LLC Emerald Diversified Small Cap Growth

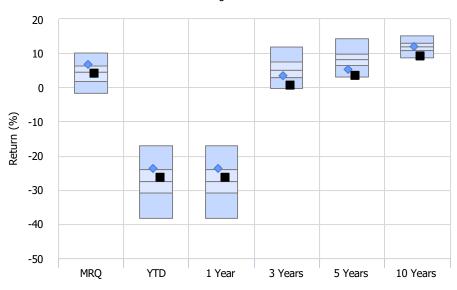
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	20.04
Product Inception Date	10/01/1992	Tracking Error 10 Years	5.62
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	2.91 0.97
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.56
Primary Equity Style Emphasis Primary Investment Approach Primary Screening Approach	Growth Fundamental Bottom-Up	Information Ratio 10 Years Upside Market Capture 10 Years Downside Market Capture 10 Years	0.49 105.06 95.67
Default Reporting Method Current # of Holdings	Gross of Fees	Max Drawdown Since Inception 30.25 Years 10/1992 - 12/2022	62.77
% Holdings In 10 Largest Stocks	18.21%		
Active Share	86.16%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Emerald Diversified Small Cap Growth	GF	5.27	23.78
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns

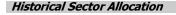


	Emerald Diversified Small Cap Growth	Russell 2000 Growth
MRQ	6.72	4.13
Returns YTD	-23.78	-26.36
1 Year	-23.78	-26.36
3 Years	3.42	0.65
5 Years	5.27	3.51
10 Years	11.96	9.20

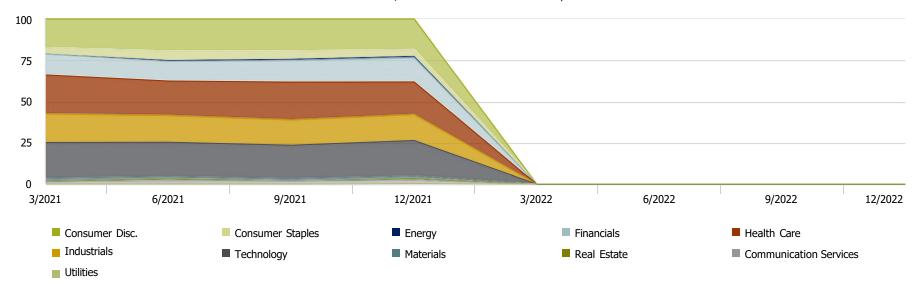
Calendar Year Returns

Product Name	Emerald Diversified Small Cap Growth	Russell 2000 Growth	
Returns 2016	10.12	11.32	
Returns 2017	28.44	22.17	
Returns 2018	-10.59	-9.31	
Returns 2019	30.72	28.48	
Returns 2020	38.25	34.63	
Returns 2021	4.96	2.83	
Returns 2022	-23.78	-26.36	

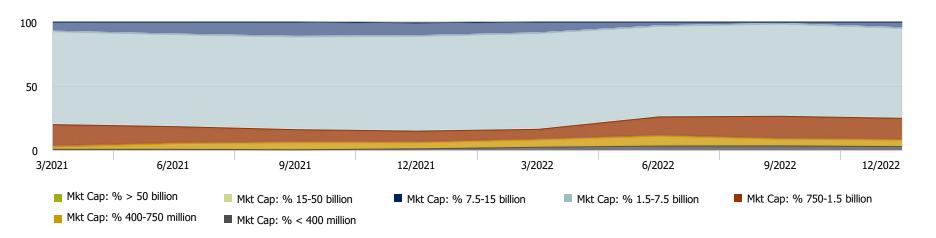








Historical Market Cap Allocation

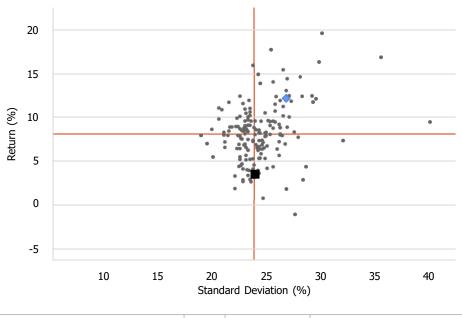




Frontier Capital Management Company, LLC Frontier Small Cap Growth

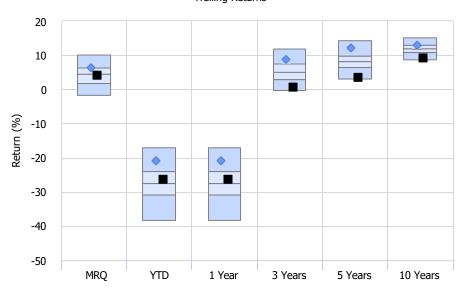
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	21.44
Product Inception Date	01/01/1985	Tracking Error 10 Years	6.12
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	3.37 1.04
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.57
Primary Equity Style Emphasis Primary Investment Approach		Information Ratio 10 Years Upside Market Capture 10 Years	0.61 108.27
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	95.30
Default Reporting Method Current # of Holdings	Gross of Fees 117	Max Drawdown Since Inception 31 Years 01/1992 - 12/2022	47.78
% Holdings In 10 Largest Stocks	33.36%		
Active Share	93.40%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Frontier Small Cap Growth	GF	12.17	26.87
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



Frontier Small Cap Growth	Russell 2000 Growth
6.32	4.13
-21.00	-26.36
-21.00	-26.36
8.78	0.65
12.17	3.51
12.94	9.20
	6.32 -21.00 -21.00 8.78 12.17

Calendar Year Returns

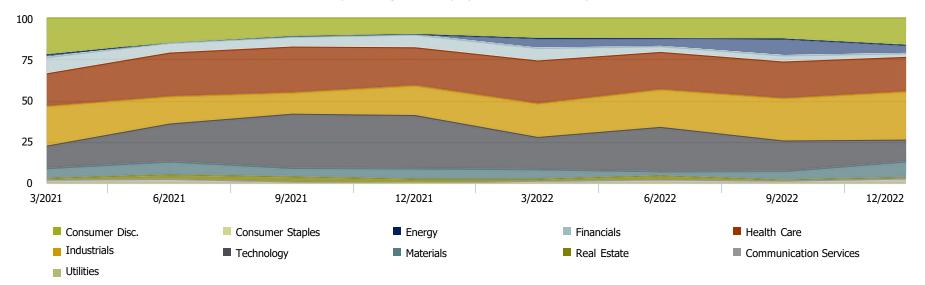
Product Name	Frontier Small Cap Growth	Russell 2000 Growth
Returns 2016	7.16	11.32
Returns 2017	22.11	22.17
Returns 2018	2.69	-9.31
Returns 2019	34.33	28.48
Returns 2020	40.33	34.63
Returns 2021	16.11	2.83
Returns 2022	-21.00	-26.36



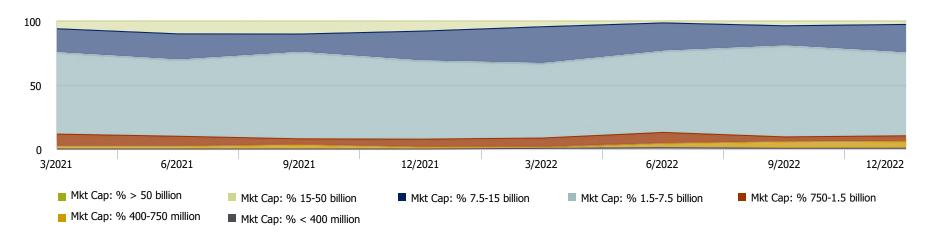
Frontier Capital Management Company, LLC Frontier Small Cap Growth

Historical Sector Allocation





Historical Market Cap Allocation

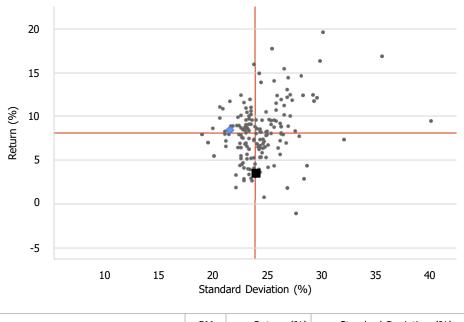




Geneva Capital Management US Small Cap Growth

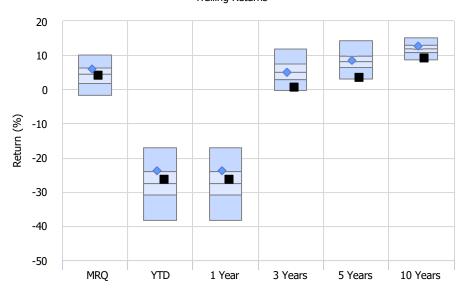
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	17.44
Product Inception Date	01/01/1999	Tracking Error 10 Years	6.74
Preferred Benchmark	nark Growth Beta 10 Years	Annualized Alpha 10 Years Beta 10 Years	4.64 0.83
Primary Equity Capitalization		Sharpe Ratio 10 Years	0.68
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years Downside Market Capture 10 Years	0.52 90.54
Primary Screening Approach Default Reporting Method Current # of Holdings	Bottom-Up Gross of Fees 56	Max Drawdown Since Inception 24 Years 01/1999 - 12/2022	80.30 48.83
% Holdings In 10 Largest Stocks Active Share	33.30% 91.20%		

Risk vs. Reward - 5 Years



	Standar	rd Deviation (%)	
	RM	Return (%)	Standard Deviation (%)
US Small Cap Growth	GF	8.44	21.61
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	US Small Cap Growth	Russell 2000 Growth
MRQ	5.97	4.13
Returns YTD	-23.85	-26.36
1 Year	-23.85	-26.36
3 Years	4.96	0.65
5 Years	8.44	3.51
10 Years	12.68	9.20

Calendar Year Returns

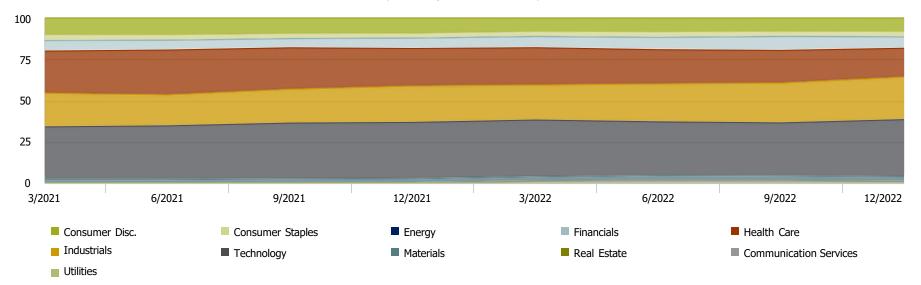
Product Name	US Small Cap Growth	Russell 2000 Growth
Returns 2016	11.85	11.32
Returns 2017	23.47	22.17
Returns 2018	0.01	-9.31
Returns 2019	29.63	28.48
Returns 2020	34.03	34.63
Returns 2021	13.30	2.83
Returns 2022	-23.85	-26.36



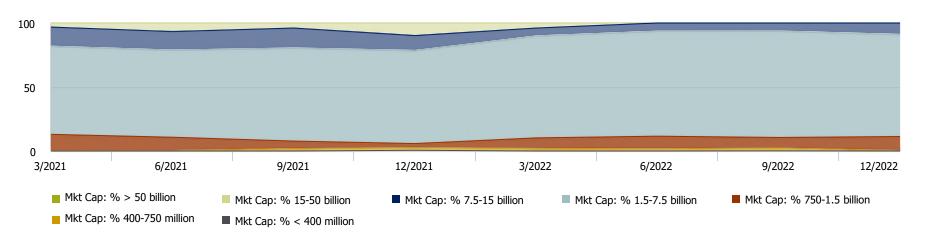
Geneva Capital Management US Small Cap Growth

Historical Sector Allocation





Historical Market Cap Allocation

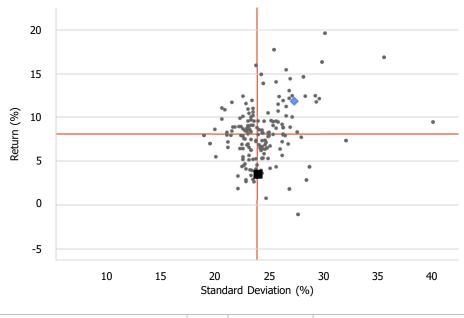




Granahan Investment Management, Inc. Small Cap Core Growth

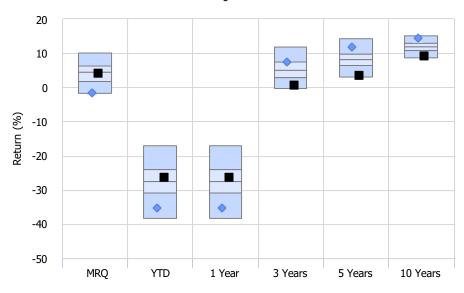
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	21.88
Product Inception Date	04/30/1993	Tracking Error 10 Years	5.65
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	4.41 1.07
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.62
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	0.91 118.69
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	99.26
Default Reporting Method Current # of Holdings	Gross of Fees 149	Max Drawdown Since Inception 29.67 Years 05/1993 - 12/2022	50.60
% Holdings In 10 Largest Stocks	22.00%		
Active Share	89.38%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Core Growth	GF	11.84	27.34
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



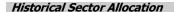
	Small Cap Core Growth	Russell 2000 Growth
MRQ	-1.60	4.13
Returns YTD	-35.37	-26.36
1 Year	-35.37	-26.36
3 Years	7.45	0.65
5 Years	11.84	3.51
10 Years	14.36	9.20

Calendar Year Returns

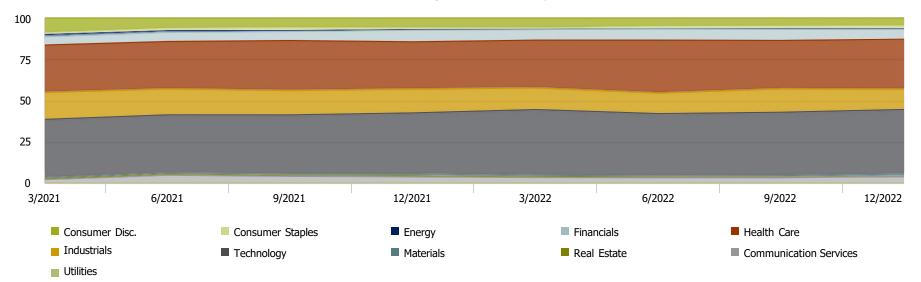
Product Name	Small Cap Core Growth	Russell 2000 Growth
Returns 2016	15.93	11.32
Returns 2017	32.32	22.17
Returns 2018	0.80	-9.31
Returns 2019	39.91	28.48
Returns 2020	73.43	34.63
Returns 2021	10.70	2.83
Returns 2022	-35.37	-26.36



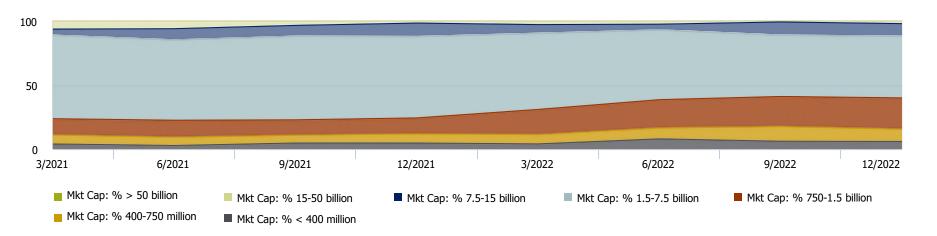
Granahan Investment Management, Inc. Small Cap Core Growth







Historical Market Cap Allocation

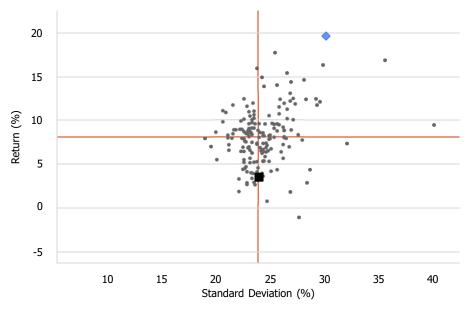




Granahan Investment Management, Inc. Small Cap Focused Growth

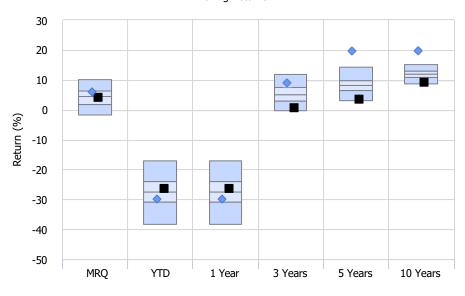
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	24.52
Product Inception Date	08/01/2007	Tracking Error 10 Years	11.47
	Russell 2000	Annualized Alpha 10 Years	9.60
Preferred Benchmark	Growth	Beta 10 Years	1.10
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.77
Primary Equity Style	Growth	Information Ratio 10 Years	0.91
Emphasis	Fundamental	Upside Market Capture 10 Years	132.65
Primary Investment Approach		Downside Market Capture 10 Years	94.33
Primary Screening Approach	Bottom-Up	Max Drawdown Since Inception 15.42	
Default Reporting Method	Gross of Fees	Years 08/2007 - 12/2022	53.04
Current # of Holdings	37		
% Holdings In 10 Largest			
Stocks	57.28%		
Active Share	97.46%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Focused Growth	GF	19.62	30.15
Russell 2000 Growth	IX	3.51	23.98
+ US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Focused Growth	Russell 2000 Growth
MRQ	5.95	4.13
Returns YTD	-29.93	-26.36
1 Year	-29.93	-26.36
3 Years	8.95	0.65
5 Years	19.62	3.51
10 Years	19.67	9.20

Calendar Year Returns

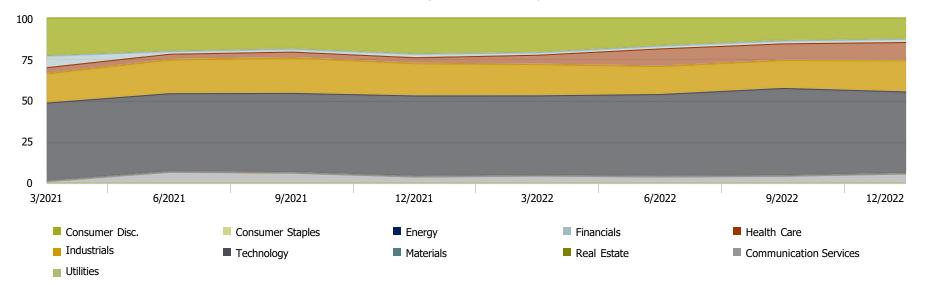
Product Name	Small Cap Focused Growth	Russell 2000 Growth
Returns 2016	18.06	11.32
Returns 2017	35.44	22.17
Returns 2018	25.58	-9.31
Returns 2019	50.81	28.48
Returns 2020	84.04	34.63
Returns 2021	0.29	2.83
Returns 2022	-29.93	-26.36



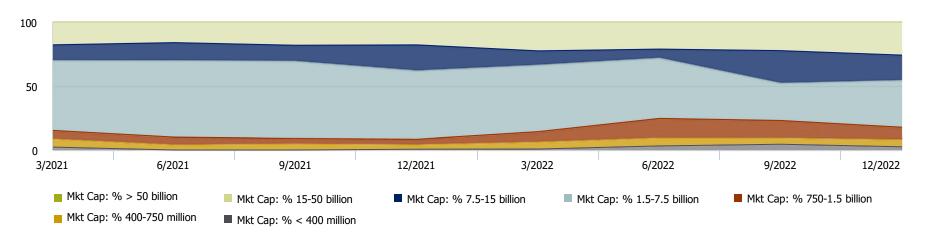
Granahan Investment Management, Inc. Small Cap Focused Growth

Historical Sector Allocation





Historical Market Cap Allocation

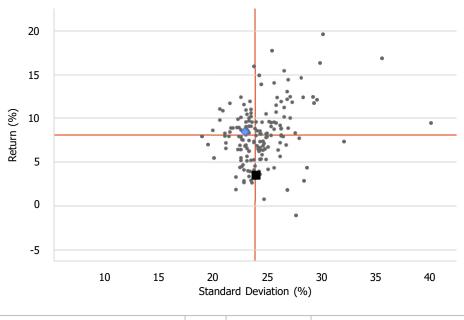




GW&K Investment Management Small Cap Growth Strategy

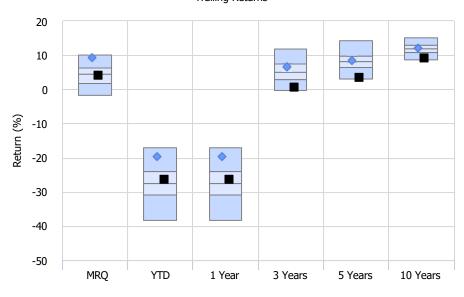
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	18.63
Product Inception Date	04/01/2008	Tracking Error 10 Years	5.42
	Russell 2000 Growth	Annualized Alpha 10 Years	3.46
Preferred Benchmark		Beta 10 Years	0.90
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.61
Primary Equity Style Emphasis	Growth	Information Ratio 10 Years	0.53
Primary Investment Approach	Fundamental	Upside Market Capture 10 Years	97.99
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	89.26
Default Reporting Method	Gross of Fees	Max Drawdown Since Inception 14.75 Years 04/2008 - 12/2022	37.45
Current # of Holdings	76		
% Holdings In 10 Largest			
Stocks	20.18%		
Active Share	90.31%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth Strategy	GF	8.46	22.93
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



Small Cap Growth Strategy	Russell 2000 Growth
9.29	4.13
-19.66	-26.36
-19.66	-26.36
6.58	0.65
8.46	3.51
12.08	9.20
	9.29 -19.66 -19.66 6.58 8.46

Calendar Year Returns

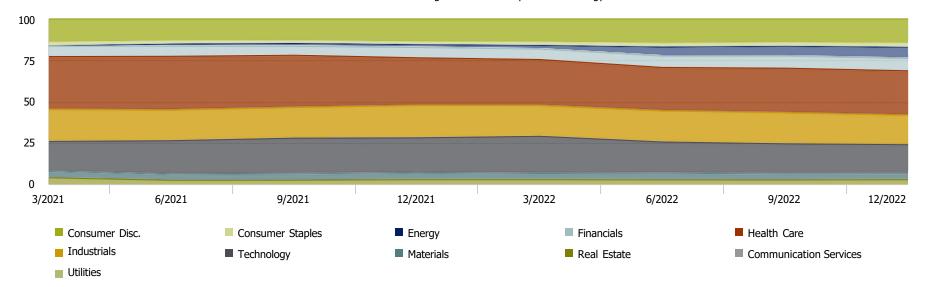
	Product Name	Small Cap Growth Strategy	Russell 2000 Growth
	Returns 2016	11.42	11.32
-	Returns 2017	26.16	22.17
	Returns 2018	-9.09	-9.31
	Returns 2019	36.36	28.48
	Returns 2020	30.33	34.63
	Returns 2021	15.63	2.83
	Returns 2022	-19.66	-26.36



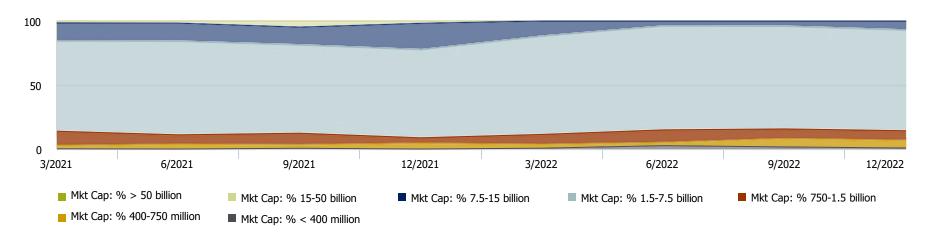
GW&K Investment Management Small Cap Growth Strategy

Historical Sector Allocation





Historical Market Cap Allocation

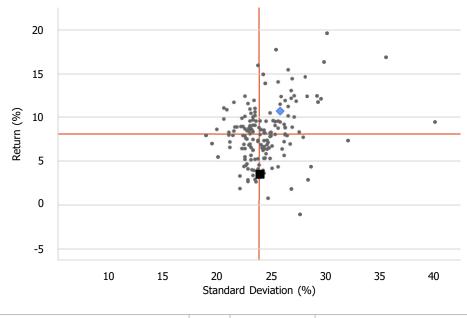




Hood River Capital Management LLC Small Cap Growth

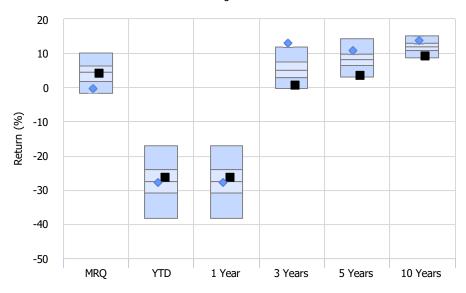
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	20.45
Product Inception Date	06/30/2002	Tracking Error 10 Years	6.28
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	4.49 0.98
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.64
Primary Equity Style Emphasis Primary Investment Approach Primary Screening Approach	Growth Fundamental Bottom-Up	Information Ratio 10 Years Upside Market Capture 10 Years Downside Market Capture 10 Years	0.72 104.99 90.10
Default Reporting Method Current # of Holdings	Net of Fees 82	Max Drawdown Since Inception 20.5 Years 07/2002 - 12/2022	52.92
% Holdings In 10 Largest Stocks Active Share	30.83% 90.68%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth	NF	10.71	25.84
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



Small Cap Growth	Russell 2000 Growth
-0.36	4.13
-27.88	-26.36
-27.88	-26.36
12.94	0.65
10.71	3.51
13.73	9.20
	-0.36 -27.88 -27.88 12.94 10.71

Calendar Year Returns

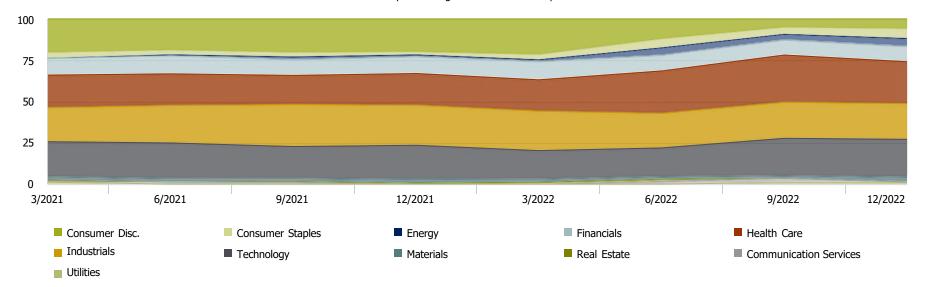
Product Name	Small Cap Growth	Russell 2000 Growth
Returns 2016	13.71	11.32
Returns 2017	21.06	22.17
Returns 2018	-6.97	-9.31
Returns 2019	24.10	28.48
Returns 2020	61.17	34.63
Returns 2021	23.94	2.83
Returns 2022	-27.88	-26.36



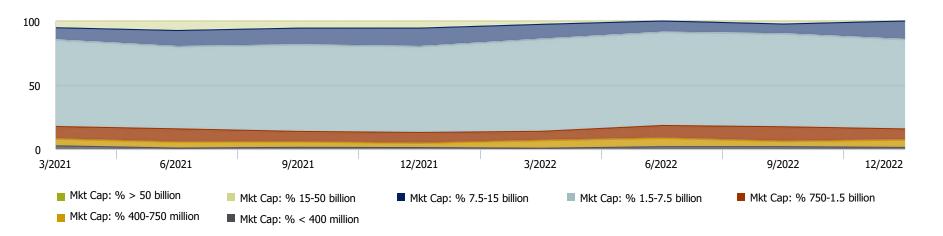
Hood River Capital Management LLC Small Cap Growth

Historical Sector Allocation





Historical Market Cap Allocation

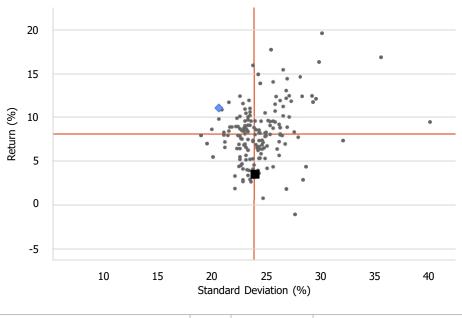




Kayne Anderson Rudnick Investment Management, LLC Small Cap Sustainable Growth

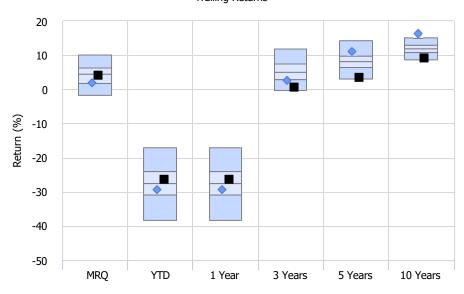
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	17.03
Product Inception Date	01/01/1998	Tracking Error 10 Years	9.23
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	8.75 0.76
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.91
Primary Equity Style Emphasis Primary Investment Approach Primary Screening Approach	Growth Fundamental Bottom-Up	Information Ratio 10 Years Upside Market Capture 10 Years Downside Market Capture 10 Years	0.77 94.35 71.44
Default Reporting Method Current # of Holdings	Gross of Fees 32	Max Drawdown Since Inception 25 Years 01/1998 - 12/2022	47.77
% Holdings In 10 Largest Stocks	54.90%		
Active Share	97.77%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Sustainable Growth	GF	11.07	20.65
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Sustainable Growth	Russell 2000 Growth
MRQ	1.90	4.13
Returns YTD	-29.37	-26.36
1 Year	-29.37	-26.36
3 Years	2.60	0.65
5 Years	11.07	3.51
10 Years	16.30	9.20

Calendar Year Returns

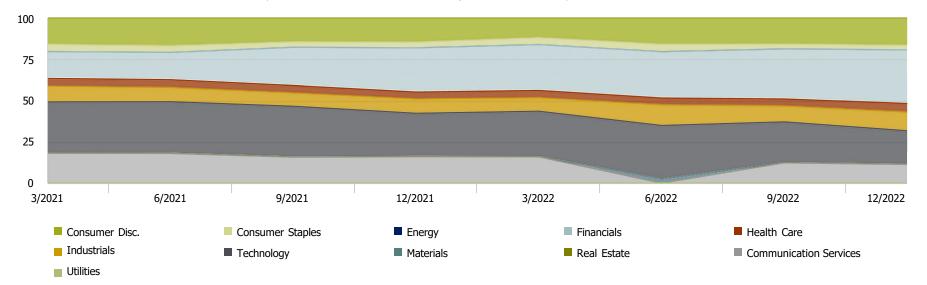
Product Name	Small Cap Sustainable Growth	Russell 2000 Growth
Returns 2016	26.11	11.32
Returns 2017	39.03	22.17
Returns 2018	10.69	-9.31
Returns 2019	41.37	28.48
Returns 2020	44.70	34.63
Returns 2021	5.69	2.83
Returns 2022	-29.37	-26.36



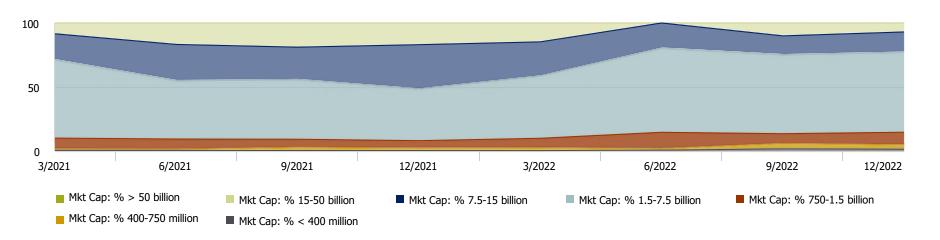
Kayne Anderson Rudnick Investment Management, LLC Small Cap Sustainable Growth







Historical Market Cap Allocation

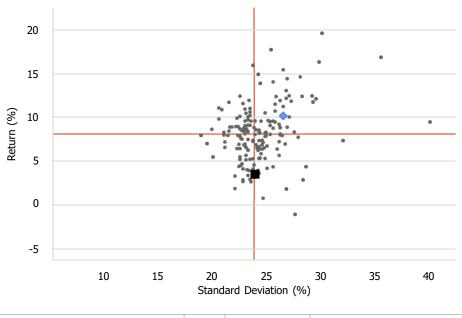




Kornitzer Capital Management, Inc. Buffalo Small Cap Fund

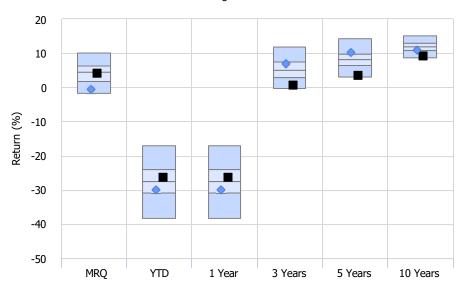
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	21.11
Product Inception Date	04/14/1998	Tracking Error 10 Years	6.17
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	1.62 1.02
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.48
Primary Equity Style Emphasis Primary Investment Approach Primary Screening Approach	Growth Fundamental Bottom-Up	Information Ratio 10 Years Upside Market Capture 10 Years Downside Market Capture 10 Years	0.28 105.61 99.30
Default Reporting Method Current # of Holdings	Net of Fees	Max Drawdown Since Inception 24.67 Years 05/1998 - 12/2022	43.75
% Holdings In 10 Largest Stocks Active Share	23.98% 89.92%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Buffalo Small Cap Fund	NF	10.16	26.55
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Buffalo Small Cap Fund	Russell 2000 Growth
MRQ	-0.66	4.13
Returns YTD	-30.00	-26.36
1 Year	-30.00	-26.36
3 Years	6.88	0.65
5 Years	10.16	3.51
10 Years	10.92	9.20

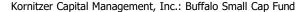
Calendar Year Returns

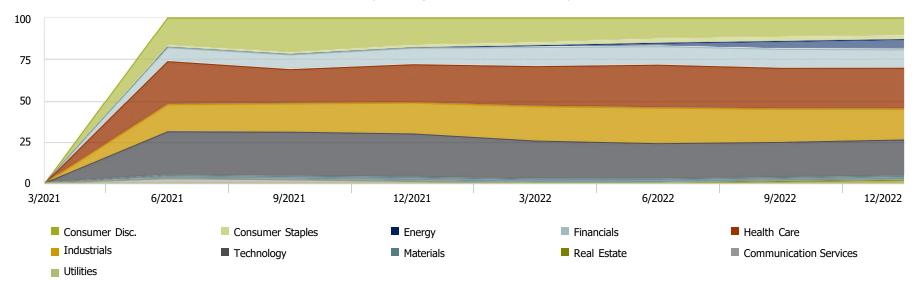
Product Name	Buffalo Small Cap Fund	Russell 2000 Growth
Returns 2016	6.21	11.32
Returns 2017	27.08	22.17
Returns 2018	-5.76	-9.31
Returns 2019	40.99	28.48
Returns 2020	66.38	34.63
Returns 2021	4.85	2.83
Returns 2022	-30.00	-26.36



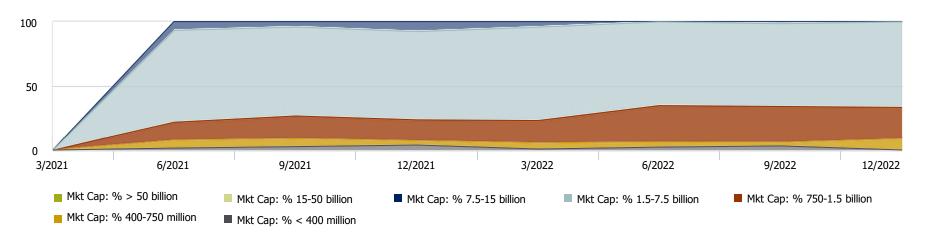
Kornitzer Capital Management, Inc. Buffalo Small Cap Fund

Historical Sector Allocation





Historical Market Cap Allocation

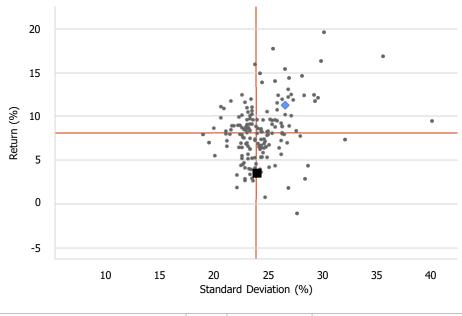




Kornitzer Capital Management, Inc. Kornitzer Small Cap Equity

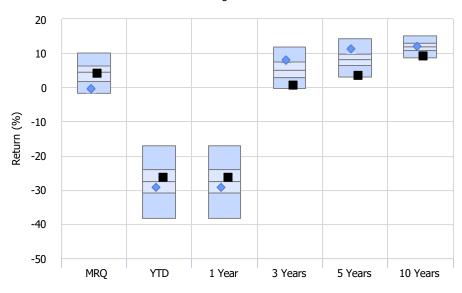
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	21.11
Product Inception Date	08/30/1994	Tracking Error 10 Years	6.17
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years	2.63
		Beta 10 Years	1.02
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.53
Primary Equity Style Emphasis	Growth	Information Ratio 10 Years	0.46
Primary Investment Approach	Fundamental	Upside Market Capture 10 Years	108.15
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	98.03
Default Reporting Method	Gross of Fees	Max Drawdown Since Inception 28.33 Years 09/1994 - 12/2022	42.65
Current # of Holdings	79		
% Holdings In 10 Largest			
Stocks	23.98%		
Active Share	89.92%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Kornitzer Small Cap Equity	GF	11.23	26.57
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Kornitzer Small Cap Equity	Russell 2000 Growth
MRQ	-0.42	4.13
Returns YTD	-29.31	-26.36
1 Year	-29.31	-26.36
3 Years	7.96	0.65
5 Years	11.23	3.51
10 Years	12.01	9.20

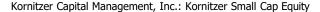
Calendar Year Returns

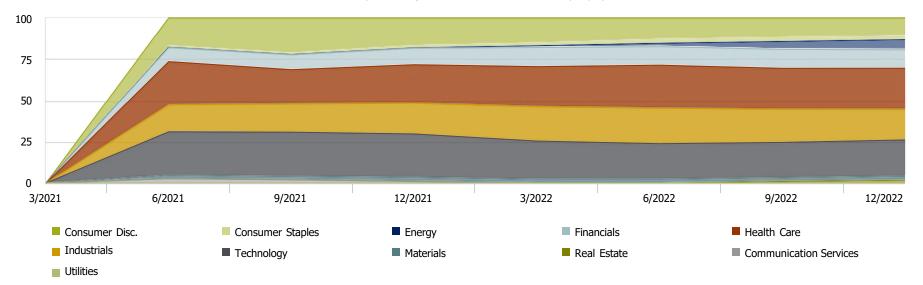
Product Name	Kornitzer Small Cap Equity	Russell 2000 Growth
Returns 2016	7.32	11.32
Returns 2017	28.22	22.17
Returns 2018	-4.87	-9.31
Returns 2019	42.28	28.48
Returns 2020	68.06	34.63
Returns 2021	5.90	2.83
Returns 2022	-29.31	-26.36



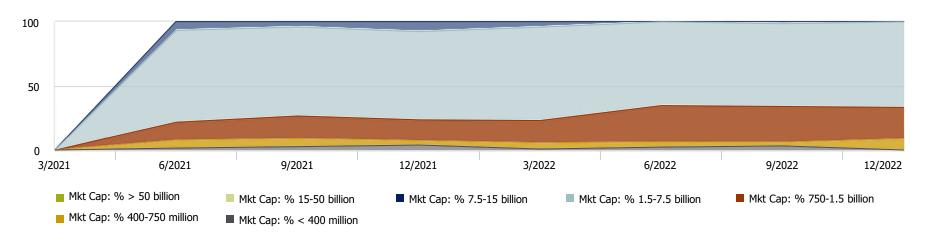
Kornitzer Capital Management, Inc. Kornitzer Small Cap Equity

Historical Sector Allocation





Historical Market Cap Allocation

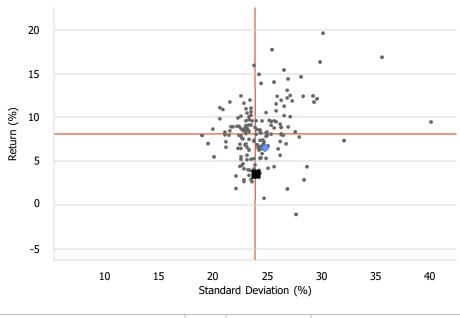




Lisanti Capital Growth, LLC Lisanti Small Cap Growth

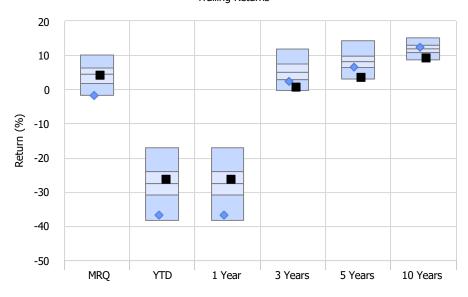
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	20.49
Product Inception Date	01/01/2004	Tracking Error 10 Years	6.25
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	3.18 0.99
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.56
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years Downside Market Capture 10 Years	0.50 106.11 95.46
Primary Screening Approach Default Reporting Method Current # of Holdings	Bottom-Up Gross of Fees 100	Max Drawdown Since Inception 19 Years 01/2004 - 12/2022	54.16
% Holdings In 10 Largest Stocks	19.40% 82.90%		
Active Share	02.3070		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
 Lisanti Small Cap Growth 	GF	6.50	24.81
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



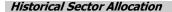
	Lisanti Small Cap Growth	Russell 2000 Growth
MRQ	-1.82	4.13
Returns YTD	-36.82	-26.36
1 Year	-36.82	-26.36
3 Years	2.33	0.65
5 Years	6.50	3.51
10 Years	12.31	9.20

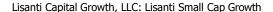
Calendar Year Returns

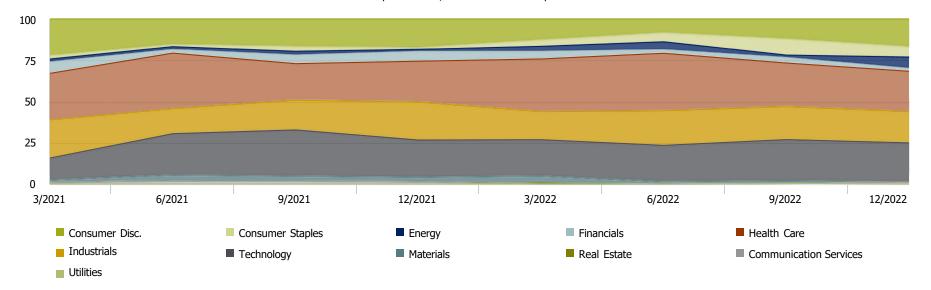
Product Name	Lisanti Small Cap Growth	Russell 2000 Growth
Returns 2016	9.85	11.32
Returns 2017	29.07	22.17
Returns 2018	-0.47	-9.31
Returns 2019	28.49	28.48
Returns 2020	52.48	34.63
Returns 2021	11.23	2.83
Returns 2022	-36.82	-26.36



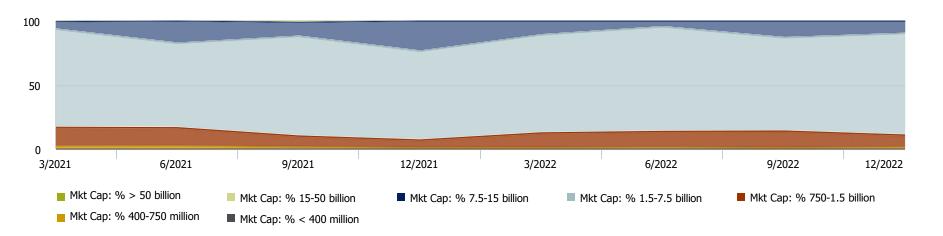
Lisanti Capital Growth, LLC Lisanti Small Cap Growth







Historical Market Cap Allocation

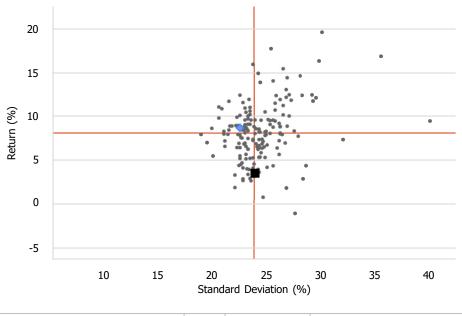




Loomis, Sayles & Company, L.P. Small Cap Growth

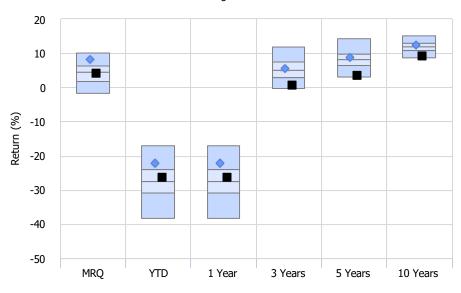
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	18.84
Product Inception Date	04/01/2005	Tracking Error 10 Years	5.25
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	3.67 0.92
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.62
Primary Equity Style Emphasis Primary Investment Approach Primary Screening Approach	Growth Fundamental Bottom-Up	Information Ratio 10 Years Upside Market Capture 10 Years Downside Market Capture 10 Years	0.61 100.40 90.37
Default Reporting Method Current # of Holdings % Holdings In 10 Largest	Gross of Fees 94	Max Drawdown Since Inception 17.75 Years 04/2005 - 12/2022	50.78
Stocks	18.48%		
Active Share	83.94%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth	GF	8.69	22.56
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Growth	Russell 2000 Growth
MRQ	8.12	4.13
Returns YTD	-22.25	-26.36
1 Year	-22.25	-26.36
3 Years	5.47	0.65
5 Years	8.69	3.51
10 Years	12.39	9.20

Calendar Year Returns

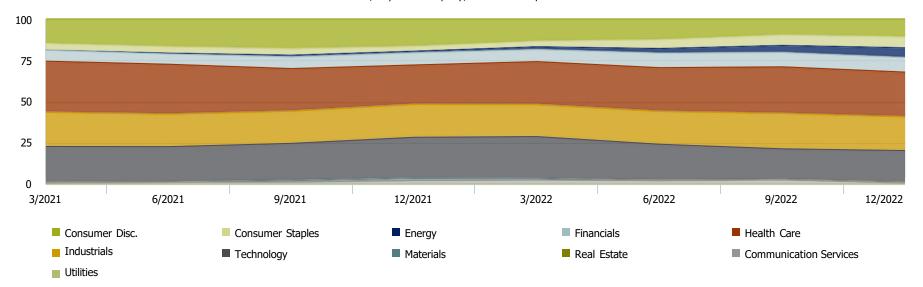
Product Name	Small Cap Growth	Russell 2000 Growth
Returns 2016	6.91	11.32
Returns 2017	27.89	22.17
Returns 2018	1.26	-9.31
Returns 2019	27.67	28.48
Returns 2020	35.85	34.63
Returns 2021	11.07	2.83
Returns 2022	-22.25	-26.36



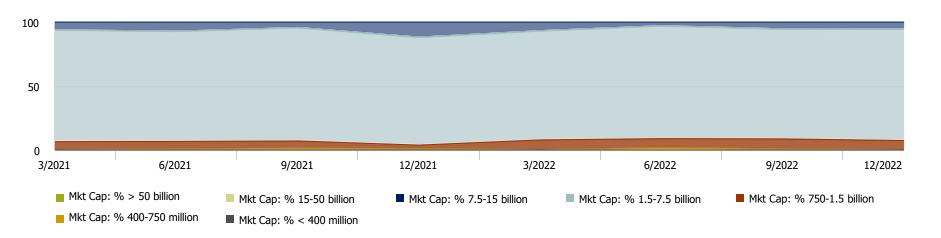
Loomis, Sayles & Company, L.P. Small Cap Growth

Historical Sector Allocation





Historical Market Cap Allocation

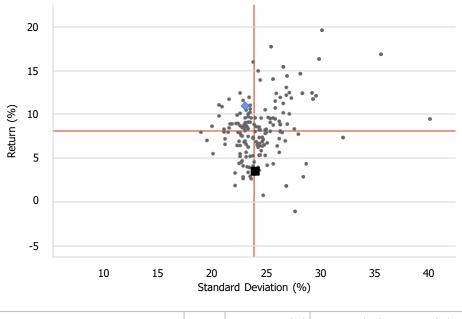




Neuberger Berman Group LLC Small Cap Growth

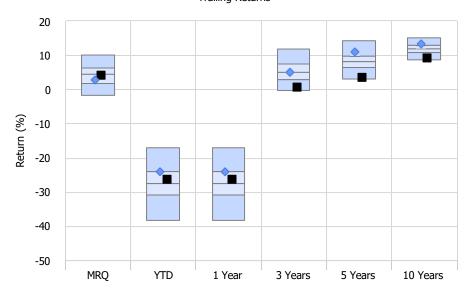
	Product Characteristics		Risk (10-Yrs.)	
	Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	19.62
	Product Inception Date	11/01/1998	Tracking Error 10 Years	6.40
	Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years	4.40
		Glowul	Beta 10 Years	0.94
	Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.64
	Primary Equity Style Emphasis	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	0.64
	Primary Investment Approach			108.89
-	Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	94.75
	Default Reporting Method	Gross of Fees	Max Drawdown Since Inception 24.17 Years 11/1998 - 12/2022	72.10
	Current # of Holdings	81		
	% Holdings In 10 Largest			
	Stocks	24.23%		
	Active Share	85.44%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth	GF	10.94	23.05
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Growth	Russell 2000 Growth
MRQ	2.76	4.13
Returns YTD	-24.14	-26.36
1 Year	-24.14	-26.36
3 Years	4.96	0.65
5 Years	10.94	3.51
10 Years	13.28	9.20

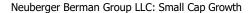
Calendar Year Returns

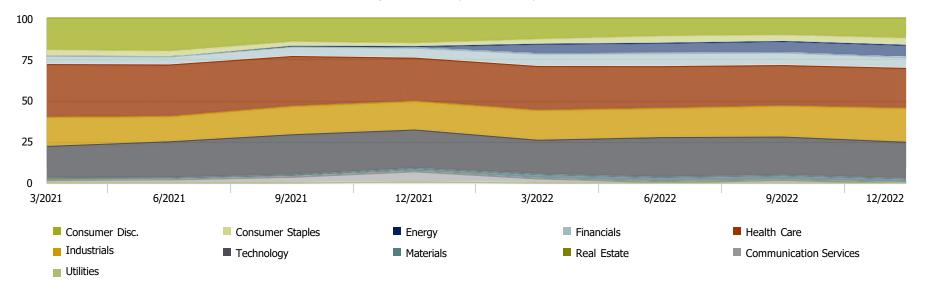
Product Name	Small Cap Growth	Russell 2000 Growth
Returns 2016	7.44	11.32
Returns 2017	29.62	22.17
Returns 2018	6.81	-9.31
Returns 2019	36.08	28.48
Returns 2020	44.47	34.63
Returns 2021	5.51	2.83
Returns 2022	-24.14	-26.36



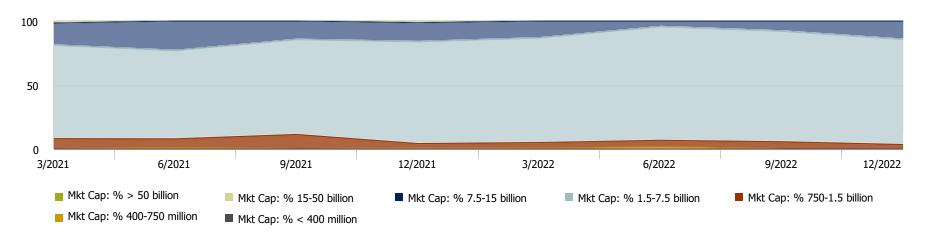
Neuberger Berman Group LLC Small Cap Growth

Historical Sector Allocation





Historical Market Cap Allocation

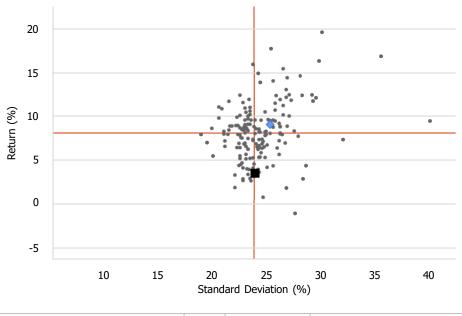




Nicholas Investment Partners US Small Cap

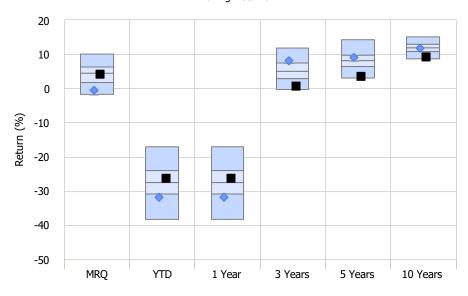
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	21.05
Product Inception Date	07/01/2007	Tracking Error 10 Years	6.74
	Russell 2000	Annualized Alpha 10 Years	2.52
Preferred Benchmark	Growth	Beta 10 Years	1.01
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.52
Primary Equity Style Emphasis	Growth	Information Ratio 10 Years	0.38
Primary Investment Approach	Combined	Upside Market Capture 10 Years	105.30
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	96.52
Default Reporting Method	Net of Fees	Max Drawdown Since Inception 15.5 Years 07/2007 - 12/2022	60.49
Current # of Holdings	69	, ,	
% Holdings In 10 Largest			
Stocks	30.46%		
Active Share	90.71%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
US Small Cap	NF	9.07	25.35
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



US Small Cap	Russell 2000 Growth
-0.57	4.13
-31.96	-26.36
-31.96	-26.36
8.06	0.65
9.07	3.51
11.75	9.20
	-31.96 -31.96 8.06 9.07

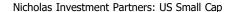
Calendar Year Returns

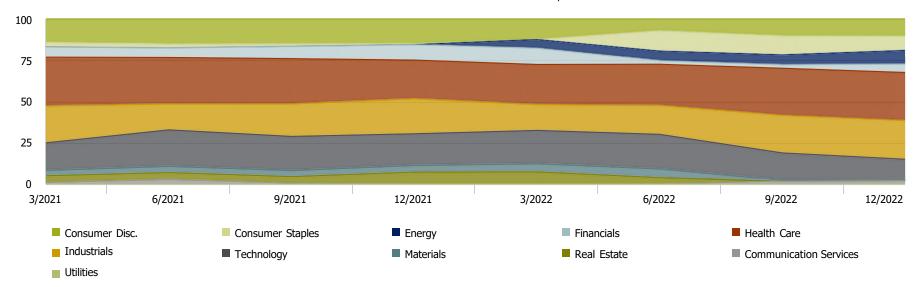
US Small Cap	Russell 2000 Growth
2.50	11.32
26.11	22.17
-10.55	-9.31
36.74	28.48
68.52	34.63
10.05	2.83
-31.96	-26.36
	2.50 26.11 -10.55 36.74 68.52 10.05



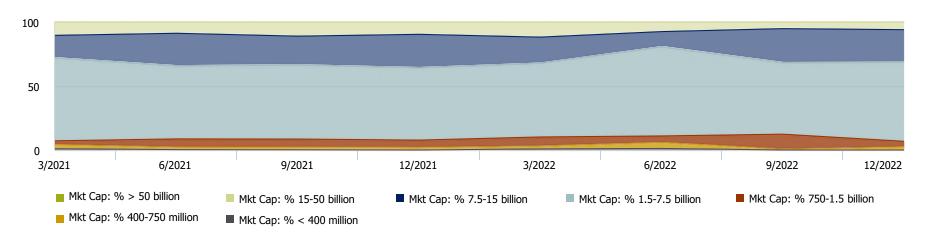
Nicholas Investment Partners US Small Cap

Historical Sector Allocation





Historical Market Cap Allocation

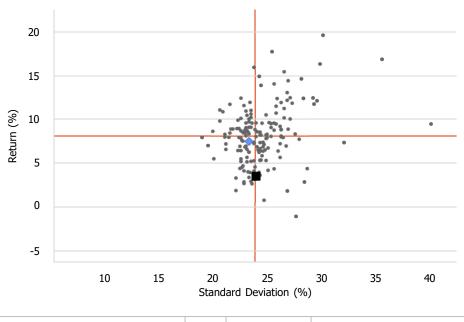




Peregrine Capital Management, LLC Small Cap Growth

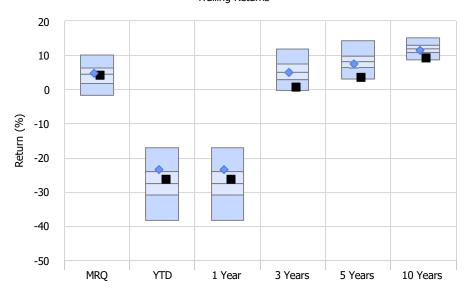
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	19.41
Product Inception Date	01/01/1976	Tracking Error 10 Years	4.81
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	2.52 0.95
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.55
Primary Equity Style Emphasis Primary Investment Approach Primary Screening Approach	Growth Fundamental Bottom-Up	Information Ratio 10 Years Upside Market Capture 10 Years Downside Market Capture 10 Years	0.46 99.70 92.85
Default Reporting Method Current # of Holdings	Gross of Fees	Max Drawdown Since Inception 22 Years 01/2001 - 12/2022	55.50
% Holdings In 10 Largest Stocks Active Share	14.70% 88.50%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth	GF	7.47	23.35
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Growth	Russell 2000 Growth
MRQ	4.70	4.13
Returns YTD	-23.51	-26.36
1 Year	-23.51	-26.36
3 Years	4.94	0.65
5 Years	7.47	3.51
10 Years	11.42	9.20

Calendar Year Returns

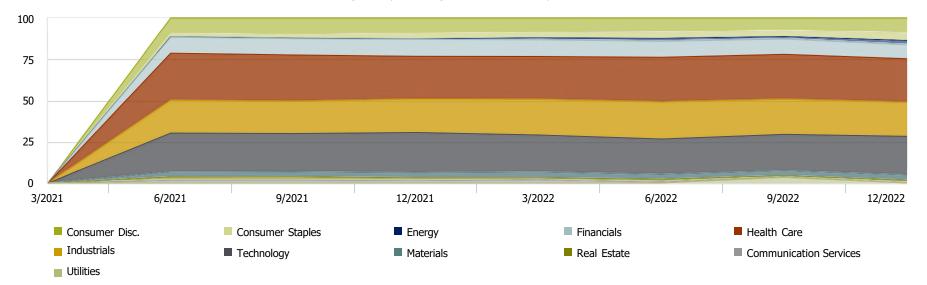
Product Name	Small Cap Growth	Russell 2000 Growth
Returns 2016	8.62	11.32
Returns 2017	21.51	22.17
Returns 2018	-2.80	-9.31
Returns 2019	27.66	28.48
Returns 2020	29.70	34.63
Returns 2021	16.49	2.83
Returns 2022	-23.51	-26.36



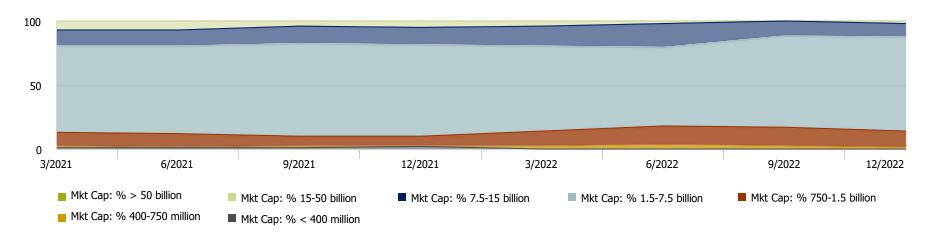
Peregrine Capital Management, LLC Small Cap Growth

Historical Sector Allocation





Historical Market Cap Allocation

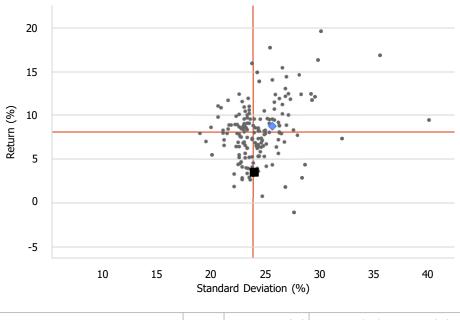




Pier Capital, LLC Pier Small Cap Growth

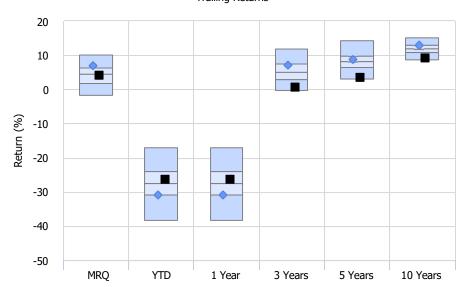
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	20.76
Product Inception Date	07/01/1987	Tracking Error 10 Years	6.37
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	3.60 1.00
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.58
Primary Equity Style Emphasis Primary Investment Approach Primary Screening Approach	Growth Fundamental Bottom-Up	Information Ratio 10 Years Upside Market Capture 10 Years Downside Market Capture 10 Years	0.58 107.39 94.78
Default Reporting Method Current # of Holdings	Gross of Fees	Max Drawdown Since Inception 16 Years 01/2007 - 12/2022	47.16
% Holdings In 10 Largest Stocks	17.00% 88.30%		
Active Share	00.30%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Pier Small Cap Growth	GF	8.76	25.62
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Pier Small Cap Growth	Russell 2000 Growth
MRQ	6.92	4.13
Returns YTD	-30.96	-26.36
1 Year	-30.96	-26.36
3 Years	7.04	0.65
5 Years	8.76	3.51
10 Years	12.87	9.20

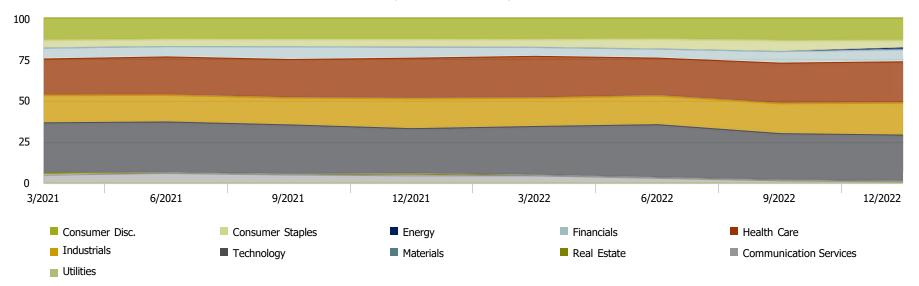
Calendar Year Returns

Product Name	Pier Small Cap Growth	Russell 2000 Growth
Returns 2016	7.07	11.32
Returns 2017	30.81	22.17
Returns 2018	-3.09	-9.31
Returns 2019	28.04	28.48
Returns 2020	61.70	34.63
Returns 2021	9.88	2.83
Returns 2022	-30.96	-26.36

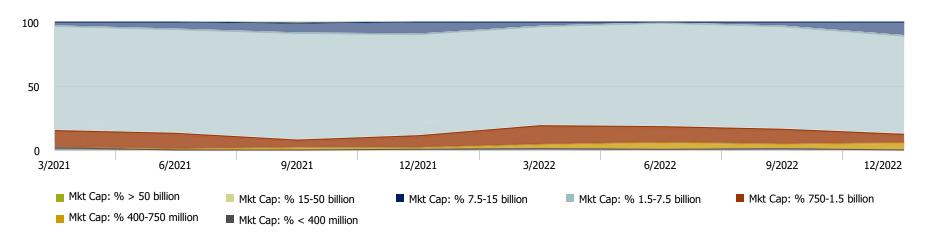


Historical Sector Allocation

Pier Capital, LLC: Pier Small Cap Growth



Historical Market Cap Allocation

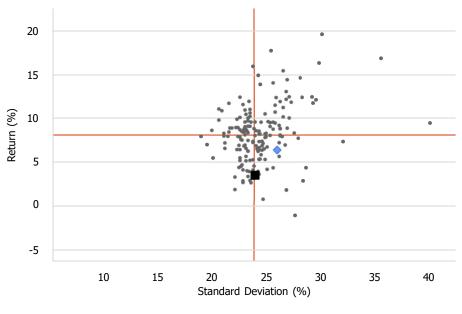




Polen Capital Management, LLC Polen U.S. Small Company Growth

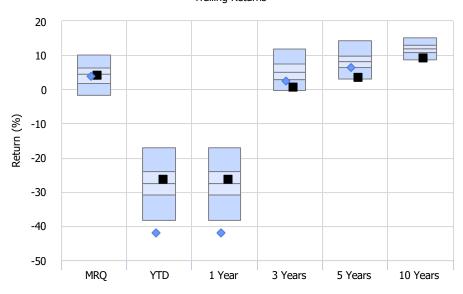
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	
Product Inception Date	03/09/2017	Tracking Error 10 Years	
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	
Default Reporting Method	Gross of Fees	Max Drawdown Since Inception 5.83 Years 03/2017 - 12/2022	46.88
Current # of Holdings	32		
% Holdings In 10 Largest Stocks	45.82%		
Active Share	96.10%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Polen U.S. Small Company Growth	GF	6.38	25.98
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Polen U.S. Small Company Growth	Russell 2000 Growth
MRQ	3.80	4.13
Returns YTD	-42.10	-26.36
1 Year	-42.10	-26.36
3 Years	2.43	0.65
5 Years	6.38	3.51
10 Years		9.20

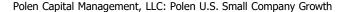
Calendar Year Returns

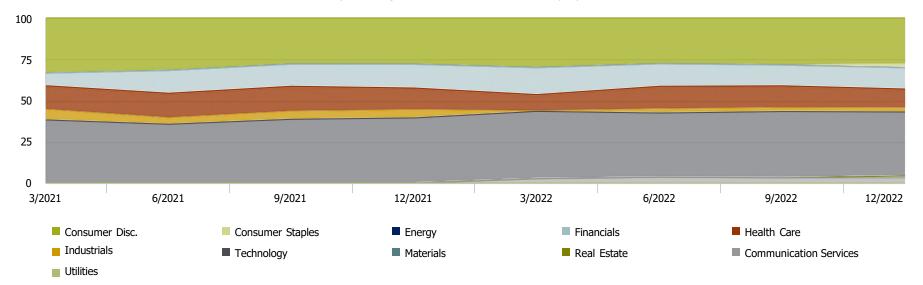
	Product Name	Polen U.S. Small Company Growth	Russell 2000 Growth
	Returns 2016		11.32
-	Returns 2017		22.17
	Returns 2018	3.31	-9.31
	Returns 2019	22.73	28.48
	Returns 2020	56.41	34.63
	Returns 2021	18.67	2.83
	Returns 2022	-42.10	-26.36



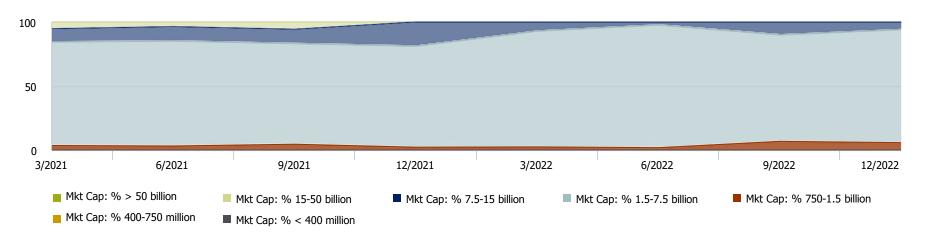
Polen Capital Management, LLC Polen U.S. Small Company Growth

Historical Sector Allocation





Historical Market Cap Allocation

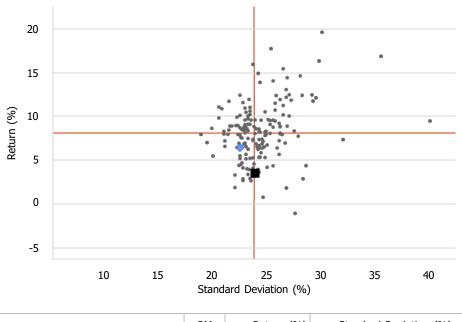




Ranger Investment Management, L.P. Ranger Small Cap Growth

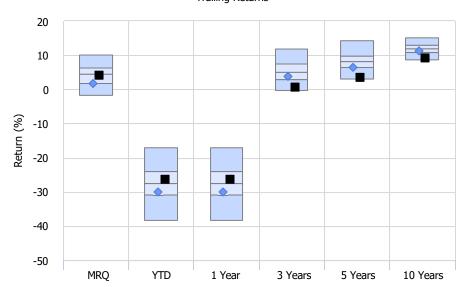
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	18.54
Product Inception Date	07/01/2003	Tracking Error 10 Years	6.29
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	2.87 0.89
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.57
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	0.33 93.03
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	87.47
Default Reporting Method Current # of Holdings	Gross of Fees 48	Max Drawdown Since Inception 19.5 Years 07/2003 - 12/2022	55.76
% Holdings In 10 Largest Stocks	36.15%		
Active Share	94.16%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Ranger Small Cap Growth	GF	6.43	22.59
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Ranger Small Cap Growth	Russell 2000 Growth
MRQ	1.71	4.13
Returns YTD	-30.03	-26.36
1 Year	-30.03	-26.36
3 Years	3.78	0.65
5 Years	6.43	3.51
10 Years	11.25	9.20

Calendar Year Returns

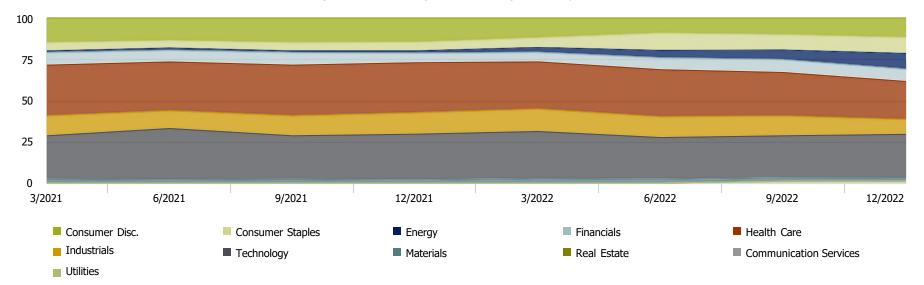
Product Na	me Ranger Small Cap Growth	Russell 2000 Growth
Returns 2016	21.18	11.32
Returns 2017	16.68	22.17
Returns 2018	-6.66	-9.31
Returns 2019	30.93	28.48
Returns 2020	34.48	34.63
Returns 2021	18.78	2.83
Returns 2022	-30.03	-26.36



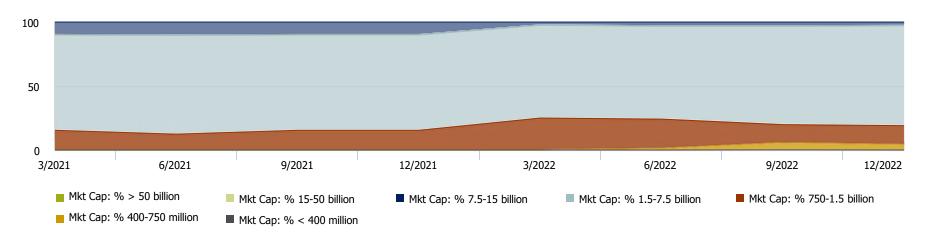
Ranger Investment Management, L.P. Ranger Small Cap Growth

Historical Sector Allocation





Historical Market Cap Allocation

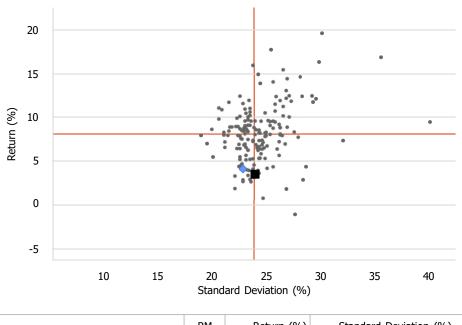




Rice Hall James & Associates, LLC Small Cap Opportunities

Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	18.96
Product Inception Date	10/10/1994	Tracking Error 10 Years	6.63
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years	3.09
Primary Equity Capitalization	Small Cap	Beta 10 Years Sharpe Ratio 10 Years	0.90 0.57
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	0.36 91.66
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	85.17
Default Reporting Method Current # of Holdings	Gross of Fees 65	Max Drawdown Since Inception 28.25 Years 10/1994 - 12/2022	71.30
% Holdings In 10 Largest Stocks	37.12%		
Active Share	95.73%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Opportunities	GF	4.12	22.85
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Opportunities	Russell 2000 Growth
MRQ	3.29	4.13
Returns YTD	-23.86	-26.36
1 Year	-23.86	-26.36
3 Years	3.25	0.65
5 Years	4.12	3.51
10 Years	11.56	9.20

Calendar Year Returns

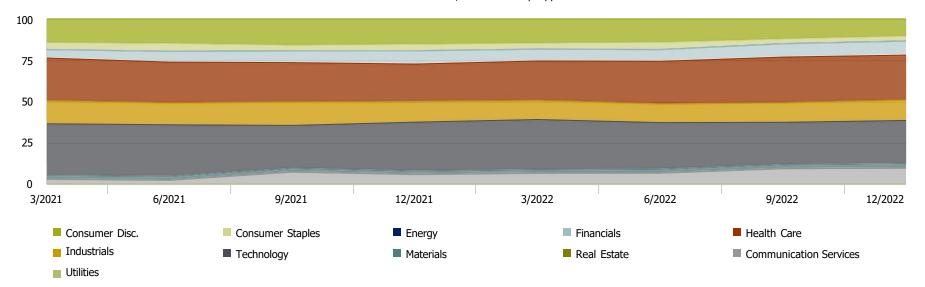
Product Name	Small Cap Opportunities	Russell 2000 Growth
Returns 2016	11.93	11.32
Returns 2017	28.71	22.17
Returns 2018	-6.49	-9.31
Returns 2019	18.85	28.48
Returns 2020	24.51	34.63
Returns 2021	16.12	2.83
Returns 2022	-23.86	-26.36



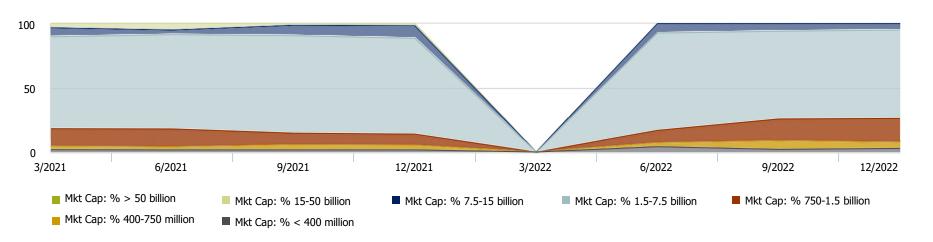
Rice Hall James & Associates, LLC Small Cap Opportunities

Historical Sector Allocation





Historical Market Cap Allocation

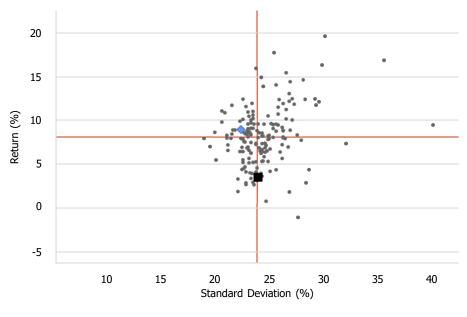




Riverbridge Partners, LLC Small Cap Growth

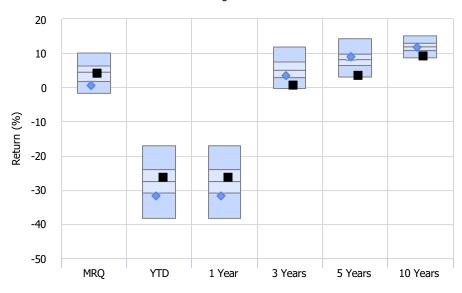
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	18.44
Product Inception Date	07/01/1988	Tracking Error 10 Years	7.31
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	3.55 0.87
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.60
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	0.35 93.17
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	86.00
Default Reporting Method Current # of Holdings	Gross of Fees 50	Max Drawdown Since Inception 34.5 Years 07/1988 - 12/2022	49.18
% Holdings In 10 Largest Stocks	36.24%		
Active Share	94.58%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth	GF	8.95	22.40
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Growth	Russell 2000 Growth
MRQ	0.52	4.13
Returns YTD	-31.79	-26.36
1 Year	-31.79	-26.36
3 Years	3.43	0.65
5 Years	8.95	3.51
10 Years	11.73	9.20

Calendar Year Returns

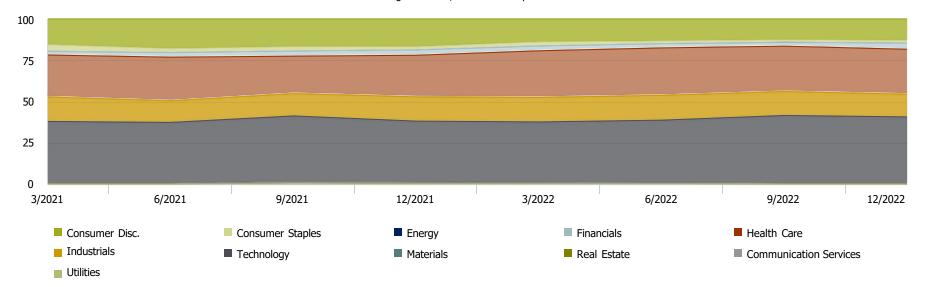
Product Name	Small Cap Growth	Russell 2000 Growth
Returns 2016	14.23	11.32
Returns 2017	24.09	22.17
Returns 2018	8.14	-9.31
Returns 2019	28.32	28.48
Returns 2020	55.10	34.63
Returns 2021	4.58	2.83
Returns 2022	-31.79	-26.36



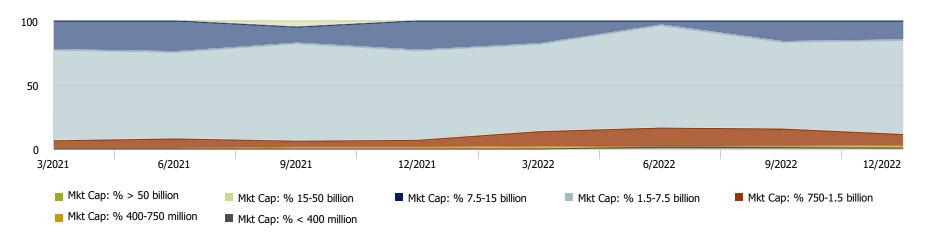
Riverbridge Partners, LLC Small Cap Growth

Historical Sector Allocation





Historical Market Cap Allocation

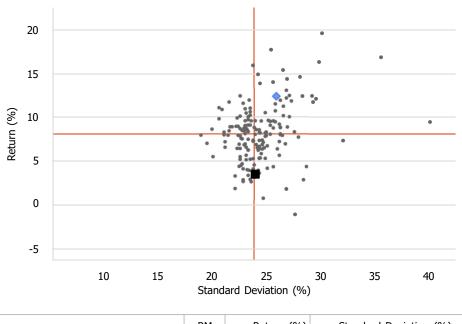




Silvercrest Asset Management Group LLC U.S. Small Cap Growth

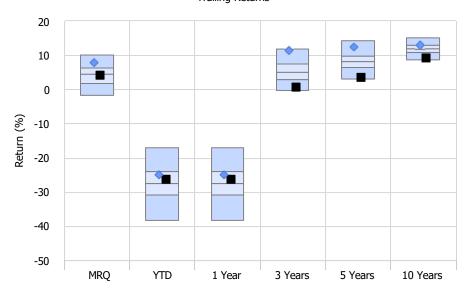
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	20.85
Product Inception Date	06/30/2004	Tracking Error 10 Years	6.31
	Russell 2000	Annualized Alpha 10 Years	3.59
Preferred Benchmark	Growth	Beta 10 Years	1.00
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.58
Primary Equity Style Emphasis	Growth	Information Ratio 10 Years	0.59
Primary Investment Approach	Fundamental	Upside Market Capture 10 Years	105.69
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	93.25
Default Reporting Method	Gross of Fees	Max Drawdown Since Inception 18.5 Years 07/2004 - 12/2022	56.33
Current # of Holdings	94		50.55
% Holdings In 10 Largest			
Stocks	15.50%		
Active Share	89.83%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
U.S. Small Cap Growth	GF	12.37	25.91
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	U.S. Small Cap Growth	Russell 2000 Growth
MRQ	7.80	4.13
Returns YTD	-25.03	-26.36
1 Year	-25.03	-26.36
3 Years	11.40	0.65
5 Years	12.37	3.51
10 Years	12.91	9.20

Calendar Year Returns

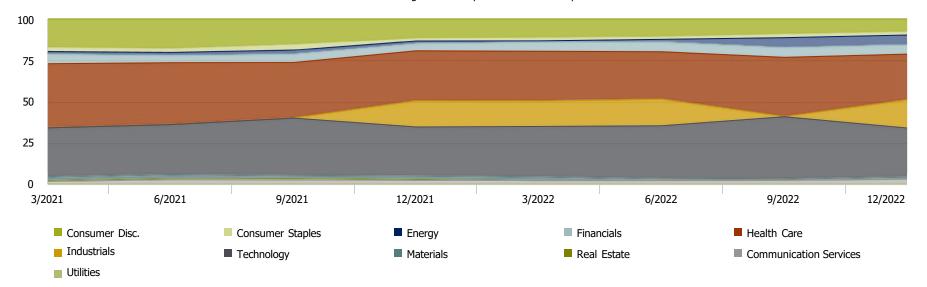
Product Name	U.S. Small Cap Growth	Russell 2000 Growth
Returns 2016	23.90	11.32
Returns 2017	15.28	22.17
Returns 2018	5.34	-9.31
Returns 2019	23.02	28.48
Returns 2020	53.08	34.63
Returns 2021	20.46	2.83
Returns 2022	-25.03	-26.36



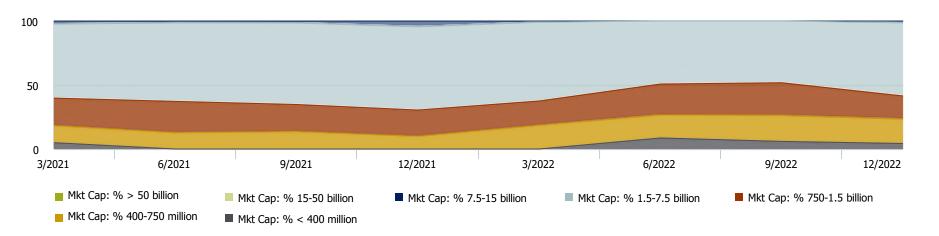
Silvercrest Asset Management Group LLC U.S. Small Cap Growth

Historical Sector Allocation





Historical Market Cap Allocation

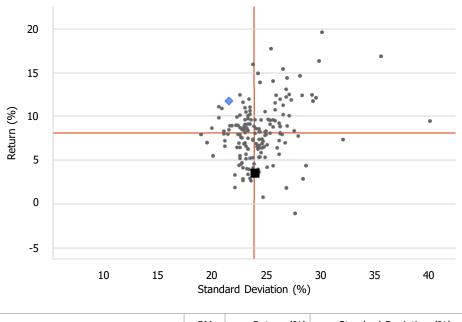




Summit Creek Advisors, LLC Small Cap Growth

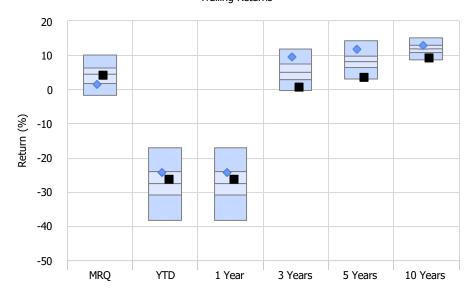
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	17.56
Product Inception Date	12/01/2006	Tracking Error 10 Years	6.69
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	4.70 0.84
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.69
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	0.54 89.99
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	79.35
Default Reporting Method Current # of Holdings	Gross of Fees 54	Max Drawdown Since Inception 16.08 Years 12/2006 - 12/2022	46.19
% Holdings In 10 Largest Stocks	32.40%		
Active Share	95.30%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth	GF	11.71	21.58
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



Small Cap Growth	Russell 2000 Growth
1.43	4.13
-24.38	-26.36
-24.38	-26.36
9.44	0.65
11.71	3.51
12.79	9.20
	1.43 -24.38 -24.38 9.44 11.71

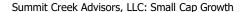
Calendar Year Returns

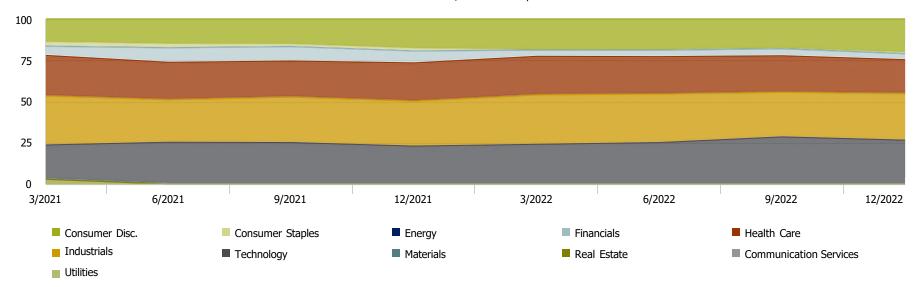
Product Name	Small Cap Growth	Russell 2000 Growth
Returns 2016	0.80	11.32
Returns 2017	29.14	22.17
Returns 2018	4.37	-9.31
Returns 2019	27.18	28.48
Returns 2020	43.45	34.63
Returns 2021	20.83	2.83
Returns 2022	-24.38	-26.36



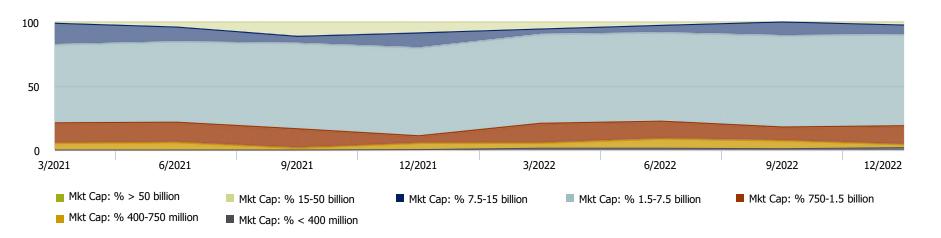
Summit Creek Advisors, LLC Small Cap Growth

Historical Sector Allocation





Historical Market Cap Allocation

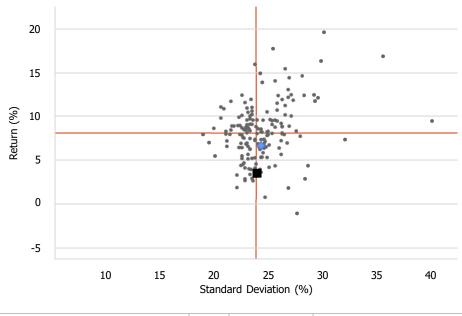




TimesSquare Capital Management, LLC Small Cap Growth Composite

Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	19.47
Product Inception Date	09/30/2000	Tracking Error 10 Years	4.67
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	1.86 0.96
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.51
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	0.33 98.94
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	94.29
Default Reporting Method Current # of Holdings	Gross of Fees 80	Max Drawdown Since Inception 22.25 Years 10/2000 - 12/2022	43.62
% Holdings In 10 Largest Stocks	22.79%		
Active Share	88.59%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth Composite	GF	6.66	24.39
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Growth Composite	Russell 2000 Growth
MRQ	5.27	4.13
Returns YTD	-25.38	-26.36
1 Year	-25.38	-26.36
3 Years	3.07	0.65
5 Years	6.66	3.51
10 Years	10.76	9.20

Calendar Year Returns

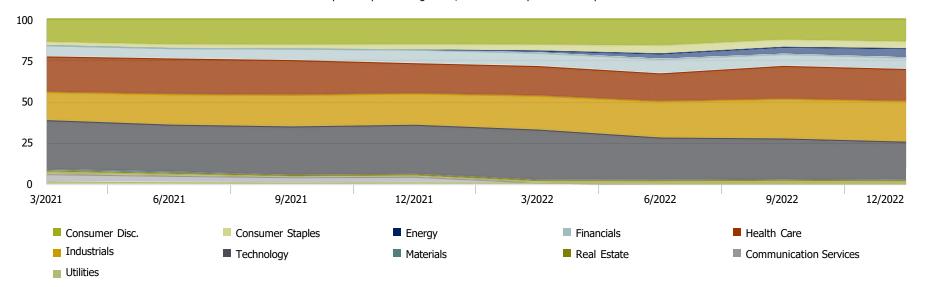
	Product Name	Small Cap Growth Composite	Russell 2000 Growth
Re	eturns 2016	10.14	11.32
Re	eturns 2017	22.08	22.17
Re	eturns 2018	-2.99	-9.31
Re	eturns 2019	29.95	28.48
Re	eturns 2020	36.73	34.63
Re	eturns 2021	7.31	2.83
Re	eturns 2022	-25.38	-26.36



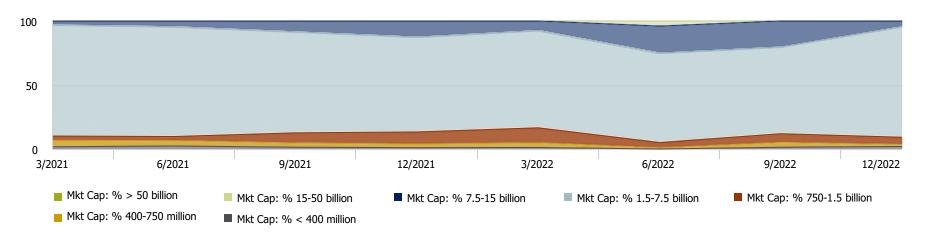
TimesSquare Capital Management, LLC Small Cap Growth Composite







Historical Market Cap Allocation

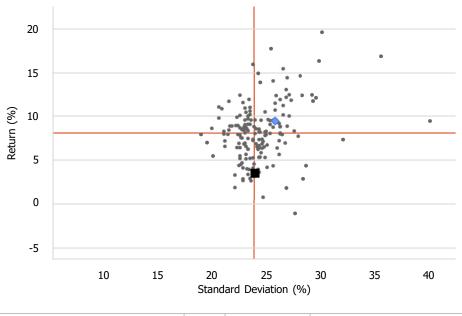




UBS Asset ManagementUS Equity Small Cap Growth

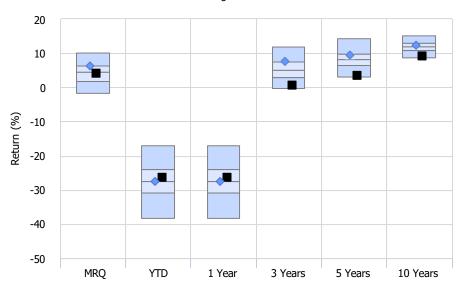
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	21.29
Product Inception Date	07/31/1994	Tracking Error 10 Years	6.23
	Russell 2000	Annualized Alpha 10 Years	2.88
Preferred Benchmark	Growth	Beta 10 Years	1.03
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.54
Primary Equity Style Emphasis	Growth	Information Ratio 10 Years	0.50
Primary Investment Approach	Fundamental	Upside Market Capture 10 Years	112.13
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	100.20
Default Reporting Method	Gross of Fees	Max Drawdown Since Inception 28.42 Years 08/1994 - 12/2022	55.24
Current # of Holdings	85		
% Holdings In 10 Largest			
Stocks	21.38%		
Active Share	89.97%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
US Equity Small Cap Growth	GF	9.47	25.80
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	US Equity Small Cap Growth	Russell 2000 Growth
MRQ	6.28	4.13
Returns YTD	-27.56	-26.36
1 Year	-27.56	-26.36
3 Years	7.58	0.65
5 Years	9.47	3.51
10 Years	12.33	9.20

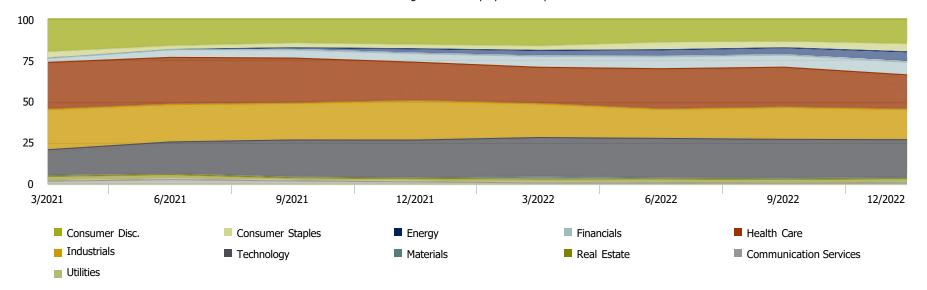
Calendar Year Returns

Product Name	US Equity Small Cap Growth	Russell 2000 Growth
Returns 2016	7.84	11.32
Returns 2017	20.53	22.17
Returns 2018	-3.83	-9.31
Returns 2019	31.25	28.48
Returns 2020	62.02	34.63
Returns 2021	6.09	2.83
Returns 2022	-27.56	-26.36

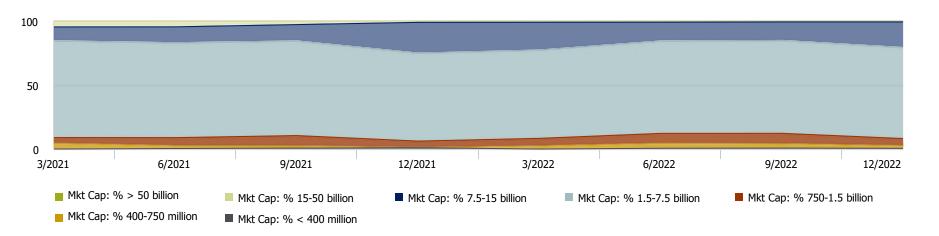


Historical Sector Allocation





Historical Market Cap Allocation

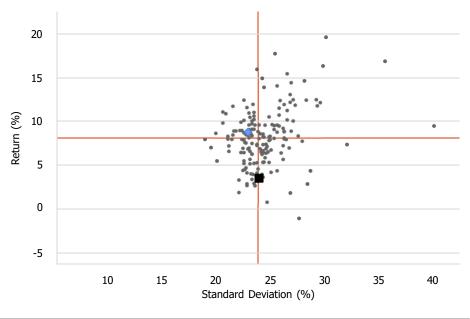




Voya Investment Management Co. LLC Voya Small Cap Growth (Portland)

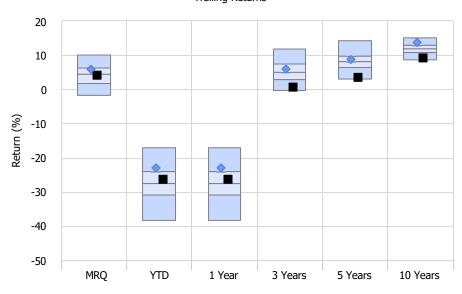
	Product Characteristics		Risk (10-Yrs.)		
	Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	18.78	
	Product Inception Date	07/30/2004	Tracking Error 10 Years	5.13	
		Russell 2000	Annualized Alpha 10 Years	4.94	
	Preferred Benchmark	Growth	Beta 10 Years	0.92	
	Primary Equity Capitalization	Small Cap Growth Fundamental	Sharpe Ratio 10 Years	0.69	
	Primary Equity Style Emphasis		Information Ratio 10 Years	0.89	
	Primary Investment Approach		Upside Market Capture 10 Years	101.36	
	Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	86.82	
	Default Reporting Method	Gross of Fees	Max Drawdown Since Inception 18.5 Years 07/2004 - 12/2022	52.20	
	Current # of Holdings	91	100.0 07,200 1 12,2022		
	% Holdings In 10 Largest				
	Stocks	22.35%			
	Active Share	84.21%			

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Voya Small Cap Growth (Portland)	GF	8.77	23.00
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



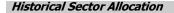
	Voya Small Cap Growth (Portland)	Russell 2000 Growth
MRQ	5.88	4.13
Returns YTD	-22.97	-26.36
1 Year	-22.97	-26.36
3 Years	5.93	0.65
5 Years	8.77	3.51
10 Years	13.75	9.20

Calendar Year Returns

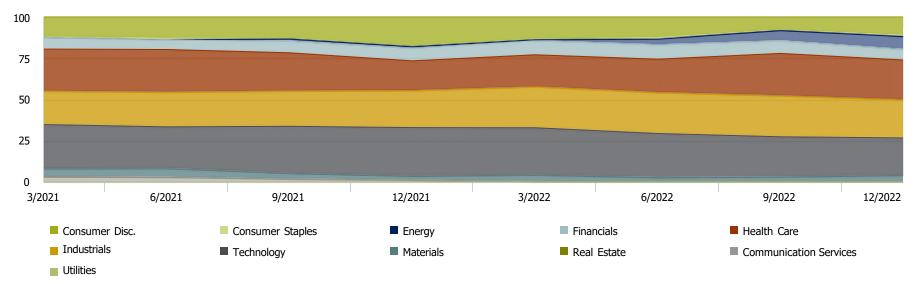
Product Name	Voya Small Cap Growth (Portland)	Russell 2000 Growth	
Returns 2016	16.96	11.32	
Returns 2017	25.92	22.17	
Returns 2018	-4.69	-9.31	
Returns 2019	34.38	28.48	
Returns 2020	29.27	34.63	
Returns 2021	19.38	2.83	
Returns 2022	-22.97	-26.36	



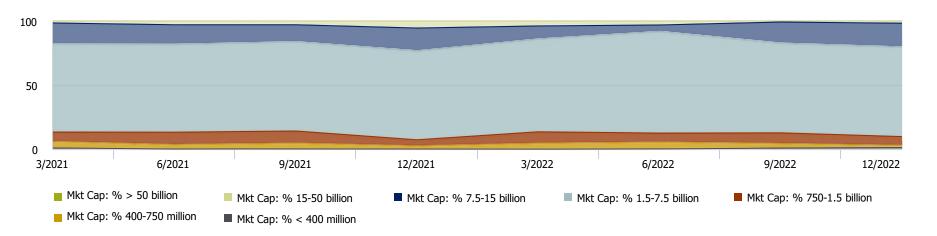
Voya Investment Management Co. LLC Voya Small Cap Growth (Portland)







Historical Market Cap Allocation

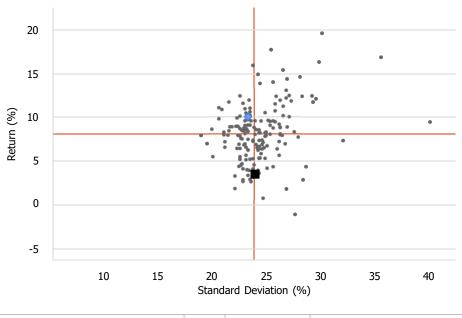




Wasatch Global Investors Small Cap Core Growth

Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	18.54
Product Inception Date	12/06/1986	Tracking Error 10 Years	6.34
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	4.41 0.89
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.66
Primary Equity Style Emphasis Primary Investment Approach	GARP Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	0.58 97.98
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	86.58
Default Reporting Method Current # of Holdings	Gross of Fees 51	Max Drawdown Since Inception 36 Years 01/1987 - 12/2022	49.24
% Holdings In 10 Largest Stocks	30.95%		
Active Share	93.90%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Core Growth	GF	10.04	23.35
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Core Growth	Russell 2000 Growth
MRQ	7.12	4.13
Returns YTD	-29.56	-26.36
1 Year	-29.56	-26.36
3 Years	6.18	0.65
5 Years	10.04	3.51
10 Years	12.89	9.20

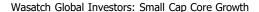
Calendar Year Returns

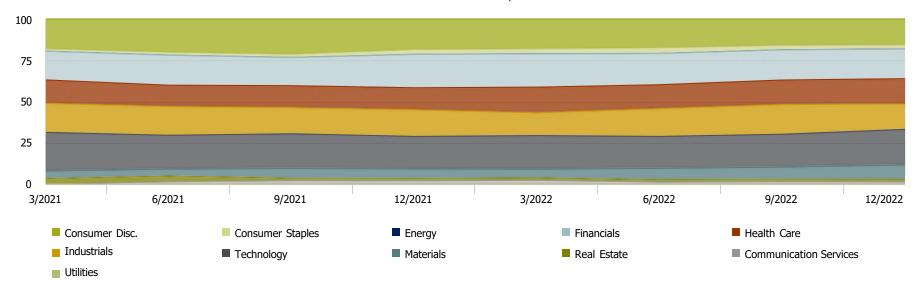
Product Name	Small Cap Core Growth	Russell 2000 Growth
Returns 2016	12.44	11.32
Returns 2017	25.82	22.17
Returns 2018	-1.19	-9.31
Returns 2019	36.42	28.48
Returns 2020	39.96	34.63
Returns 2021	21.41	2.83
Returns 2022	-29.56	-26.36



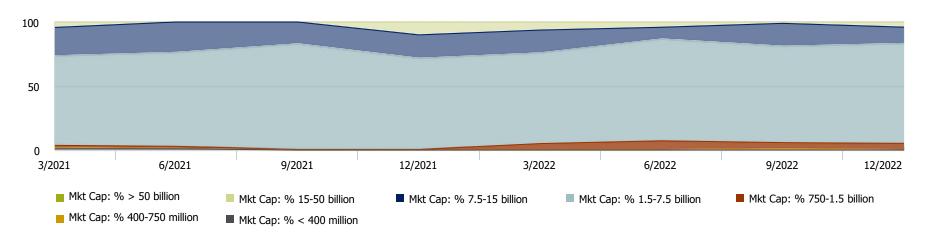
Wasatch Global Investors Small Cap Core Growth

Historical Sector Allocation





Historical Market Cap Allocation

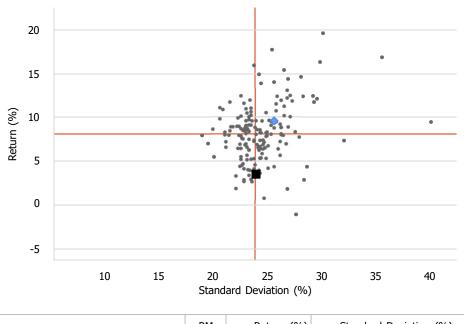




Wasatch Global Investors Small Cap Growth

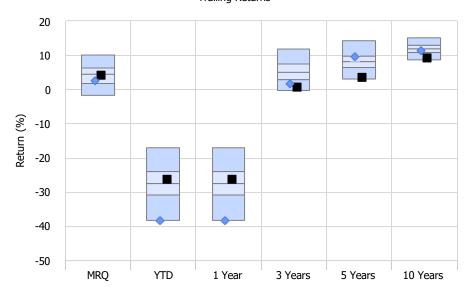
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	20.09
Product Inception Date	12/06/1986	Tracking Error 10 Years	6.33
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	2.42 0.96
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.53
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	0.34 97.73
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	91.43
Default Reporting Method Current # of Holdings	Gross of Fees 59	Max Drawdown Since Inception 28 Years 01/1995 - 12/2022	46.84
% Holdings In 10 Largest Stocks	30.99%		
Active Share	93.71%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth	GF	9.57	25.68
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Growth	Russell 2000 Growth
MRQ	2.49	4.13
Returns YTD	-38.42	-26.36
1 Year	-38.42	-26.36
3 Years	1.61	0.65
5 Years	9.57	3.51
10 Years	11.33	9.20

Calendar Year Returns

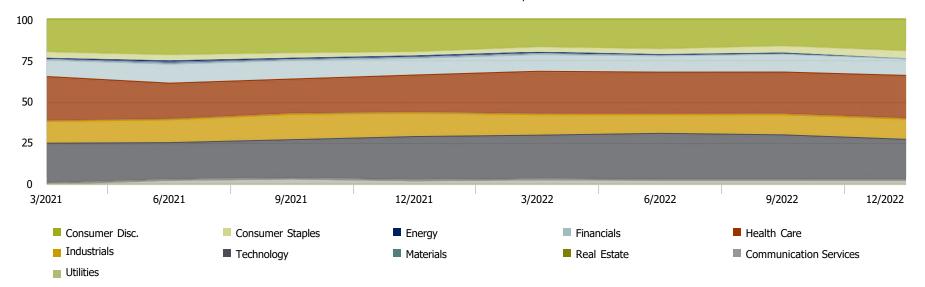
Product Name	Small Cap Growth	Russell 2000 Growth
Returns 2016	8.86	11.32
Returns 2017	20.02	22.17
Returns 2018	5.32	-9.31
Returns 2019	42.93	28.48
Returns 2020	56.16	34.63
Returns 2021	9.08	2.83
Returns 2022	-38.42	-26.36



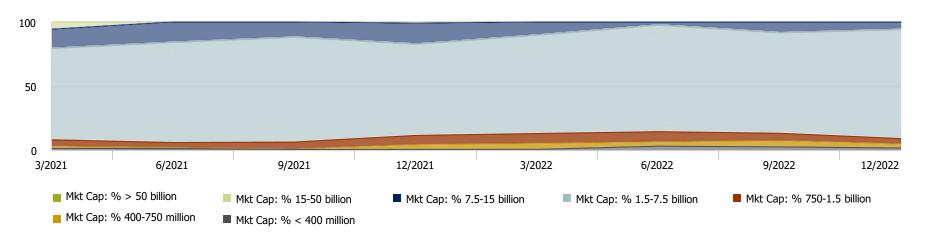
Wasatch Global Investors Small Cap Growth

Historical Sector Allocation





Historical Market Cap Allocation

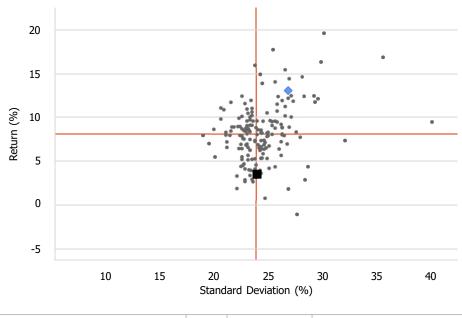




Wasatch Global Investors Small Cap Ultra Growth

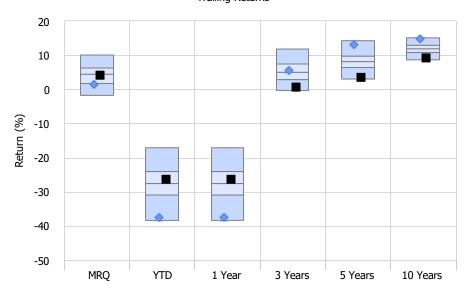
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	21.99
Product Inception Date	08/16/1992	Tracking Error 10 Years	7.80
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	5.09 1.04
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.63
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years Downside Market Capture 10 Years	0.71 117.22
Primary Screening Approach	Bottom-Up	•	97.11
Default Reporting Method Current # of Holdings	Gross of Fees 69	Max Drawdown Since Inception 30.33 Years 09/1992 - 12/2022	57.80
% Holdings In 10 Largest Stocks	31.77%		
Active Share	94.51%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Ultra Growth	GF	13.05	26.85
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Ultra Growth	Russell 2000 Growth
MRQ	1.44	4.13
Returns YTD	-37.53	-26.36
1 Year	-37.53	-26.36
3 Years	5.49	0.65
5 Years	13.05	3.51
10 Years	14.71	9.20

Calendar Year Returns

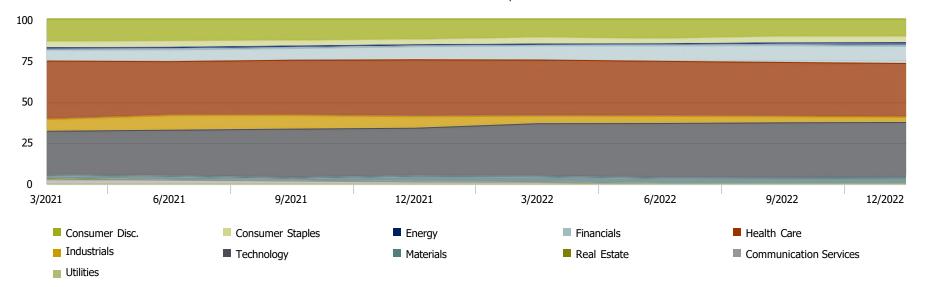
Product Name	Small Cap Ultra Growth	Russell 2000 Growth
Returns 2016	8.59	11.32
Returns 2017	31.30	22.17
Returns 2018	10.50	-9.31
Returns 2019	42.32	28.48
Returns 2020	74.90	34.63
Returns 2021	7.46	2.83
Returns 2022	-37.53	-26.36



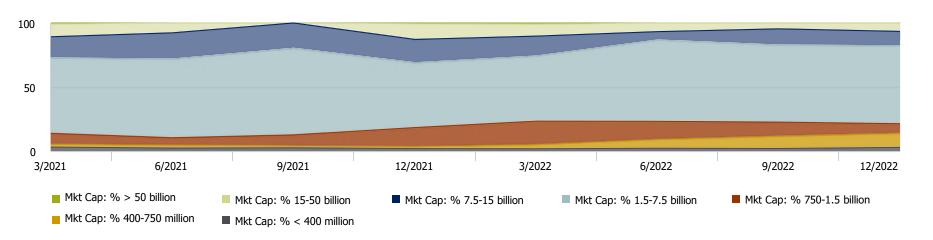
Wasatch Global Investors Small Cap Ultra Growth

Historical Sector Allocation





Historical Market Cap Allocation

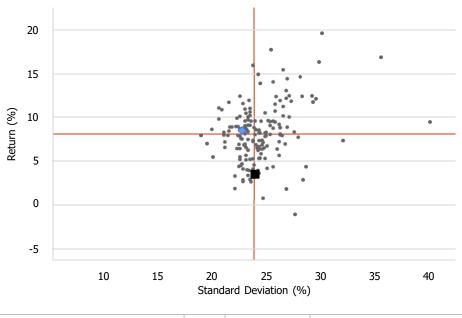




Westfield Capital Management Company, L.P. Small Cap Growth Equity

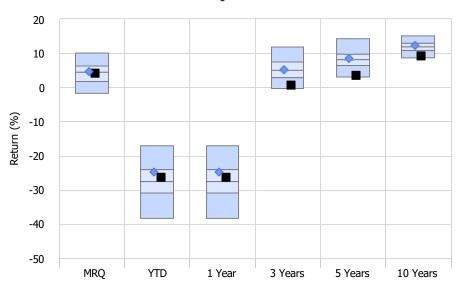
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	18.86
Product Inception Date	07/01/1989	Tracking Error 10 Years	5.49
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	3.59 0.91
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.61
Primary Equity Style Emphasis Primary Investment Approach	GARP Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	0.56 100.88
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years	91.18
Default Reporting Method Current # of Holdings	Gross of Fees 60	Max Drawdown Since Inception 33.5 Years 07/1989 - 12/2022	48.69
% Holdings In 10 Largest Stocks	27.00%		
Active Share	93.14%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth Equity	GF	8.49	22.82
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Growth Equity	Russell 2000 Growth
MRQ	4.60	4.13
Returns YTD	-24.83	-26.36
1 Year	-24.83	-26.36
3 Years	5.16	0.65
5 Years	8.49	3.51
10 Years	12.27	9.20

Calendar Year Returns

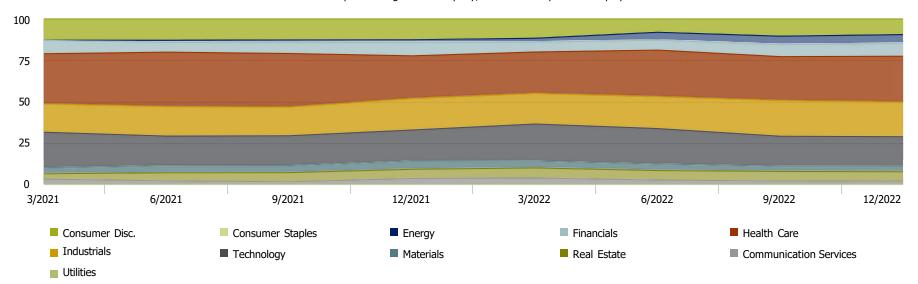
Proc	duct Name	Small Cap Growth Equity	Russell 2000 Growth
Returns 2	2016	6.93	11.32
Returns 2	2017	25.74	22.17
Returns 2	2018	-9.88	-9.31
Returns 2	2019	43.40	28.48
Returns 2	2020	39.68	34.63
Returns 2	2021	10.76	2.83
Returns 2	2022	-24.83	-26.36



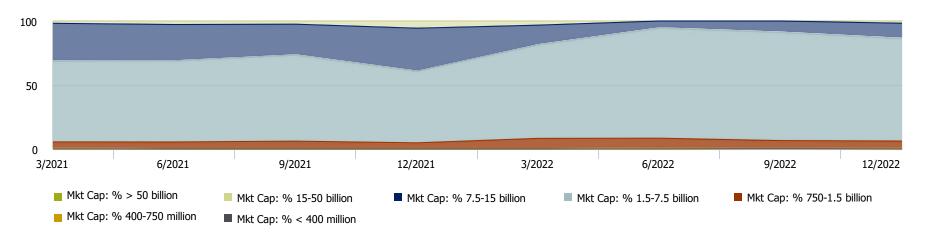
Westfield Capital Management Company, L.P. Small Cap Growth Equity

Historical Sector Allocation

Westfield Capital Management Company, L.P.: Small Cap Growth Equity



Historical Market Cap Allocation

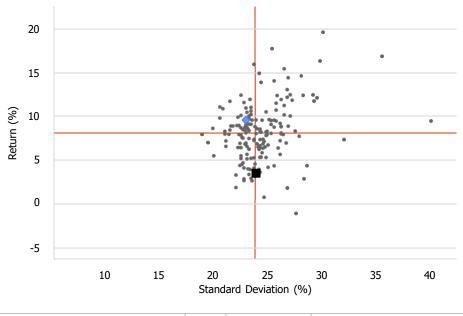




William Blair Investment Management, LLC Small Cap Growth

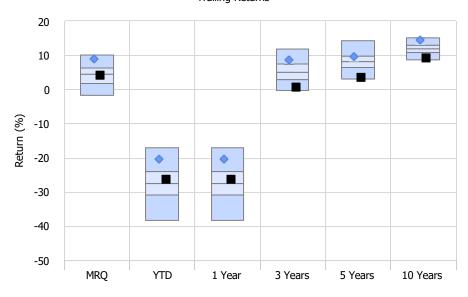
Product Characteristics		Risk (10-Yrs.)	
Portfolio Mgmt Strategy	Active	Standard Deviation 10 Years	18.80
Product Inception Date	01/01/1994	Tracking Error 10 Years	5.17
Preferred Benchmark	Russell 2000 Growth	Annualized Alpha 10 Years Beta 10 Years	5.53
Primary Equity Capitalization	Small Cap	Sharpe Ratio 10 Years	0.92 0.73
Primary Equity Style Emphasis Primary Investment Approach	Growth Fundamental	Information Ratio 10 Years Upside Market Capture 10 Years	1.00 101.28
Primary Screening Approach	Bottom-Up	Downside Market Capture 10 Years Max Drawdown Since Inception 29 Years	84.69
Default Reporting Method Current # of Holdings	Gross of Fees 91	01/1994 - 12/2022	56.38
% Holdings In 10 Largest Stocks	20.78%		
Active Share	90.18%		

Risk vs. Reward - 5 Years



	RM	Return (%)	Standard Deviation (%)
Small Cap Growth	GF	9.58	23.10
Russell 2000 Growth	IX	3.51	23.98
—US Small Cap Growth Equity		8.11	23.94

Trailing Returns



	Small Cap Growth	Russell 2000 Growth
MRQ	8.87	4.13
Returns YTD	-20.42	-26.36
1 Year	-20.42	-26.36
3 Years	8.61	0.65
5 Years	9.58	3.51
10 Years	14.38	9.20

Calendar Year Returns

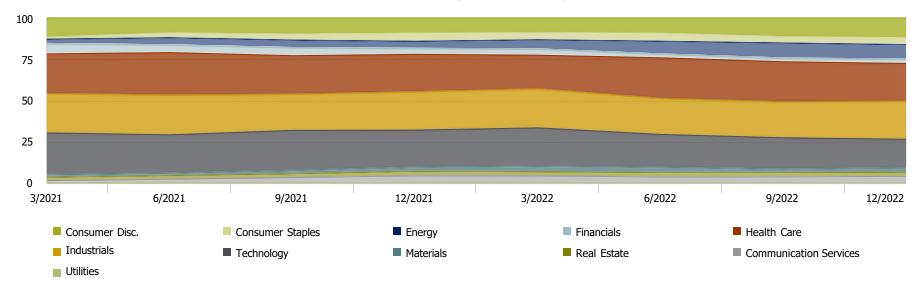
Product Name	Small Cap Growth	Russell 2000 Growth
Returns 2016	20.67	11.32
Returns 2017	28.63	22.17
Returns 2018	-0.54	-9.31
Returns 2019	24.00	28.48
Returns 2020	40.58	34.63
Returns 2021	14.52	2.83
Returns 2022	-20.42	-26.36



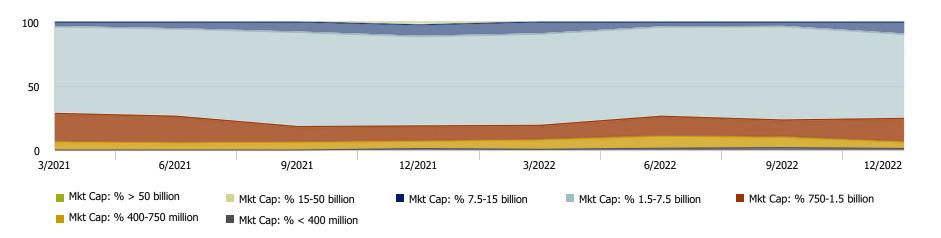
William Blair Investment Management, LLC Small Cap Growth







Historical Market Cap Allocation







STRATEGIES NOT INCLUDED FOR CONSIDERATION

Firm	Fund	Vehicle	Fund AUM (MM)	Firm AUM (MM)	Track Record (Yrs)	Approach & Style	Proposed Fee *	Side Letter
Allspring	Discovery Small Cap Growth	CIT	\$54	\$465,895	4	Bottom-Up	0.70%	Yes*
AMI	Small Cap Growth Equity	SMA	\$91	\$1,597	15	Fundamental, Bottom-Up, GARP	0.85%	Yes
Bridge City	Small Cap Growth	SMA	\$200	\$203	14	Fundamental, Bottom-Up	0.50%	Yes*
Calamos Advisors	Timpani Small Cap Growth	SMA	\$490	\$35,372	14	Fundamental, Bottom-Up	0.75%	Yes*
DF Dent	DF Dent Small Cap Growth	SMA	\$588	\$7,825	13	Fundamental, Bottom-Up	0.88%	Yes
EFG	New Capital US Small Cap Growth	SMA	\$114	\$24,532	6	Fundamental, Bottom-Up	0.75%	Yes
Harbor Capital	Harbor Small Cap Growth Fund	MF	\$899	\$37,248	22	Fundamental, Bottom-Up	0.79%	No
Janus Henderson	US Small Cap Growth	CIT / MF	\$3,008	\$287,290	30	Fundamental	CIT: 0.50% MF: 0.66%	No
Newton	US Small Cap Growth Equity	MF (SSETX)	\$311	\$1,000	22	Fundamental, Growth	1%	Yes
Newton	US Small Cap Growth Equity	MF (SSYGX)	\$311	\$1,000	9	Fundamental, Growth	1%	Yes
Newton	US Small Cap Growth Equity	SMA / CIT	N/A	\$1,000	N/A	Fundamental, Growth	SMA: 0.70% CIT: 0.50%	Yes
Next Century Growth	Small Cap Growth	SMA	\$356	\$861	23	Growth	1.0%	Yes*
Oak Associates	Oak Small Cap Growth	SMA	\$33	\$1,341	17	Top-down & bottom-up	75%	Yes
Pembroke Mgmt.	Concentrated Strategy	SMA	\$80	\$1,774	5	Fundamental, Bottom-Up	0.925%	Yes
Putnam	U.S. Small Cap Growth Equity	SMA	\$905	\$164,944	22	Fundamental, Bottom-Up	0.80%	No
Scout	Small Cap Equity	SMA	\$559	\$26,351	22	Fundamental, Top-Down & Bottom-Up	0.75%	Yes
Shaker Investments	Small Cap Growth	SMA	\$47	\$197	18	Fundamental, bottom-up	0.40%	Yes
Sit Investment Assoc.	Sit Small Cap Growth	SMA	\$119	\$15,223	28	Fundamental, Bottom-Up	0.85%	Yes
Spouting Rock	Small Cap Growth	SMA	\$34	\$2,631	6	Fundamental	0.75%	Yes
StoneRidge	Dynamic Small Cap Equity	SMA or CF	\$3	\$188	15	Bottom-Up; Quantitative; Fundamental	0.85%	Yes
Weatherbie	Specialized Growth	SMA	\$2,378	\$21,698	27	Fundamental, Bottom-Up	0.85%	Yes*



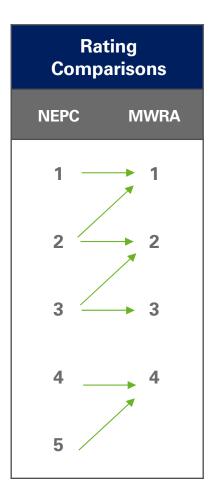
Proposed Fee: The effective fee proposed for a \$20 million investment

Yes* = Yes with Modifications

RATINGS SYSTEM COMPARISON

NEPC Research			
1	NEPC Research views 1-rated strategies as best ideas. The strategy has a clear investment thesis, and the manager is sufficiently resourced and incentivized to execute on the thesis. NEPC Research has high conviction that 1-rated strategies are positioned to deliver on a stated investment thesis and target return over a full investment cycle.		
2	NEPC Research has a positive view of the strategy. The strategy has a clear investment thesis, and the manager is sufficiently resourced and incentivized to execute on the thesis. A single factor or mosaic of factors may lead to a 2 rating rather than a 1 rating.		
3	NEPC Research has a constructive view of the strategy and believes the strategy can play an appropriate role in certain client portfolios. Through ongoing research, NEPC has not identified unreasonable risks from an organizational, process, operational or investment perspective.		
4	NEPC has conducted a reasonable level of due diligence and has an unfavorable view of the strategy due to issues, weaknesses or risks that would challenge the manager's ability to execute on a stated investment thesis.		
5	NEPC has conducted a reasonable level of due diligence and has significant concerns about the effectiveness or viability of the strategy. Through the due diligence process, NEPC has uncovered serious issues, weaknesses or risks that would challenge the manager's ability to execute on a stated investment thesis.		

MWRA Searches (for PERAC)			
1	NEPC views these strategies as the best ideas and have high conviction in these firms and investment teams. These strategies meet all manager search requirements and are compatible with the client's portfolio.		
2	Strategies that are positively viewed by NEPC and/or are existing managers for BRS. These strategies meet all search requirements.		
3	NEPC has a positive or neutral view of these strategies. Client and search specific factors may result in a three rating.		
4	Strategies that are not applicable for the current search. These strategies do not fit the search description or qualify based on the search guidelines. Strategies that demonstrate serious weaknesses or risks will also receive a 4 rating.		





NEPC DISCLOSURES

Past performance is no guarantee of future results.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

Some of the information presented herein has been obtained from external sources NEPC believes to be reliable. While NEPC has exercised reasonable professional care in preparing this content, we cannot guarantee the accuracy of all source information contained within.

The opinions presented herein represent the good faith views of NEPC as of the publication date and are subject to change at any time.

This presentation contains summary information regarding the investment management approaches described herein but is not a complete description of the investment objectives, portfolio management and research that supports these approaches. This analysis does not constitute a recommendation to implement any of the aforementioned approaches.







Q4 2022 INVESTMENT REPORT

MWRA EMPLOYEES' RETIREMENT SYSTEM



FEBRUARY 23, 2022

Sebastian Grzejka, CAIA, Partner Kiley Fischer, Sr. Consulting Analyst

GOALS & OBJECTIVES

Investment Return Objective

"Its primary goal is to provide promised benefits to participants and beneficiaries of the MWRA Employees' Retirement system. Plan assets should be equal to or greater than the present value of the projected benefit obligations ("fully funded"). When Plan assets are less than the present value of projected benefit obligations, a schedule will be established, and a plan will be in place to meet a fully funded status. When achieving return objectives required to fully fund the system, the Board is intent on controlling risk. Consistency of returns and risk of loss are primary considerations. The Board has also determined that the annual performance of plan assets should not vary substantially from returns achieved by other public pension funds with similar goals and objectives."

Return Expectations

The investment growth should be maintained in such a manner that the minimum nominal rate of return does not cause a negative real rate of return over a full market cycle:

<u>Time Horizon</u>: Return assumptions will be based on a ten-year time horizon with a detailed review and analysis to be made at least annually to monitor allocations and assumptions. Should a manager deviate from proscribed mandate or expected risk and return profile by a consequential degree, that manager may be reevaluated at any time

<u>Liquidity Needs</u>: Presently contributions exceed plan withdrawals to provide benefits, payouts, and/or plan expenses. Portfolio liquidity will be managed based on the cash flow needs of the System.

<u>Regulatory Considerations</u>: Assets of this Fund shall be invested in a manner consistent with the fiduciary standards established under Code of Massachusetts Regulations 840 ("840 CMR"). The Board shall also use as precedent the Employee Retirement Income Security Act (ERISA).



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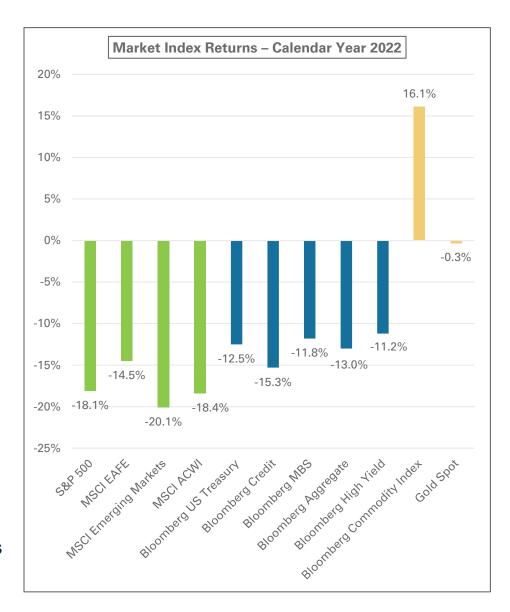
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2022 YEAR IN REVIEW

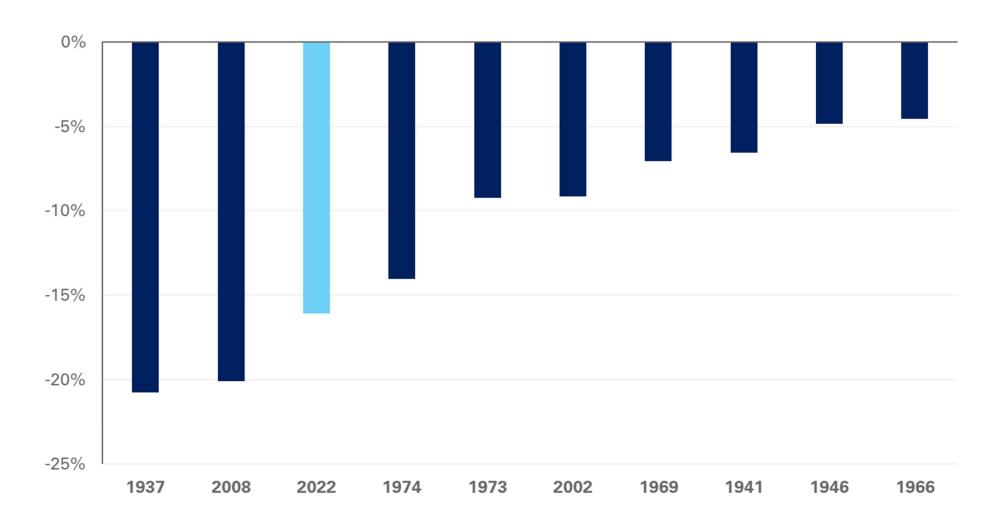
- Global equities delivered negative returns in 2022, due to central banks around the globe tightening monetary policies amid persisting inflationary pressures despite softening economic growth
 - Domestic stocks had one of the worst years on record, with the S&P 500 returning -18.1%
 - International developed-market equities fell
 -14.5%, while emerging markets had the
 largest drawdown at -20.1%
- The Federal Reserve raised the federal funds rate seven times in 2022 to combat inflation, ending the year at a range of 4.25% - 4.50%
 - Returns across investment grade bonds were negative for the year, as interest rates began to climb
- Commodity prices surged during the calendar year, fueled by supply constraints due to the war in Ukraine





MOST ASSET CLASS RETURNS WERE CHALLENGED

WORST ANNUAL RETURNS: 60/40 PORTFOLIO





60/40 Portfolio represents 60% S&P 500 and 40% U.S. Aggregate Bonds (post 1975) and 40% Treasury (prior to 1974) Data calculated from 12/31/1936

THE S&P 500 INDEX REMAINS IN A BEAR MARKET

LENGTH AND DEPTH OF S&P 500 BEAR MARKETS

Start	End	Length of Bear Market (Months)	Length of Recovery* (Months)	S&P 500 Decline
01/03/2022	?	12*	?	-18%
02/19/2020	03/23/2020	1	5	-34%
10/09/2007	03/09/2009	17	59	-57%
03/24/2000	10/09/2002	31	80	-49%
08/25/1987	12/04/1987	3	20	-34%
11/28/1980	08/12/1982	21	3	-27%
01/11/1973	10/03/1974	21	69	-48%

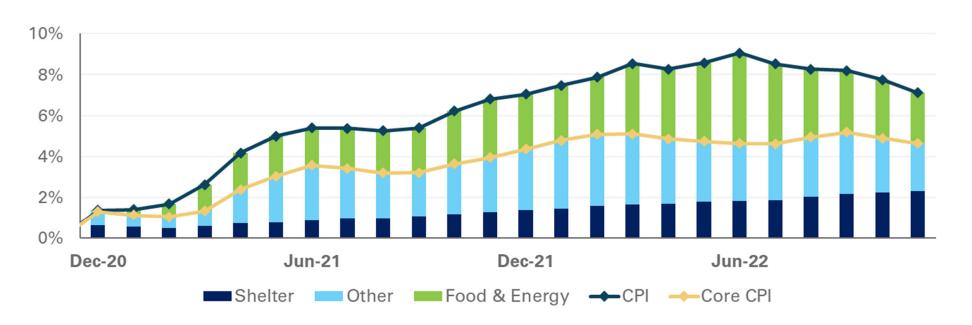
Notes: 2022 bear market is ongoing; represents historical bear markets since 1970. *Length of Recovery represents time to recoup losses from the start of the bear market.

Sources: S&P, FactSet, NEPC



U.S. HEADLINE AND CORE CPI REMAIN ELEVATED

ANNUAL U.S. CPI-U CHANGES



Annual Change in U.S. CPI-U Subcategories











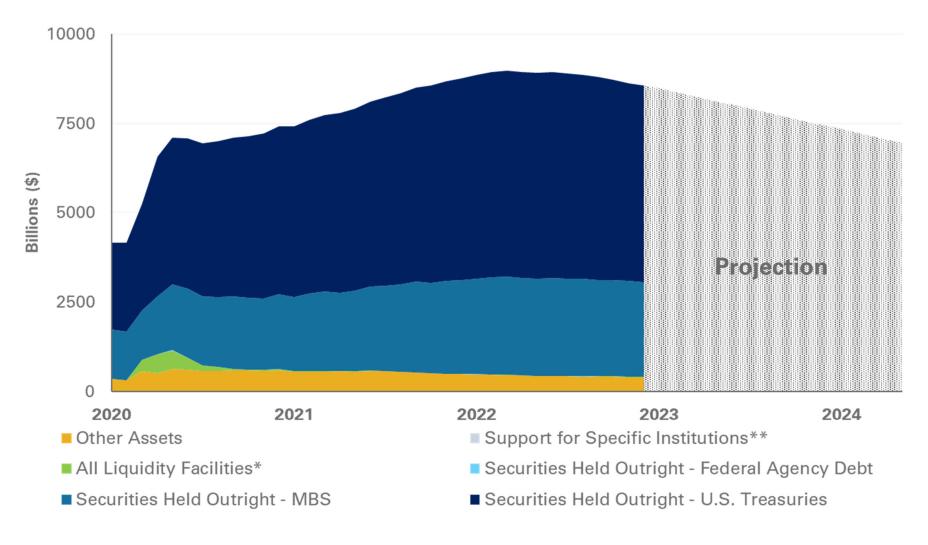




Sources: Bureau of Labor Statistics, FactSet

FED LIGHTENING BOOKS TO COMBAT INFLATION

FEDERAL RESERVE TOTAL ASSETS



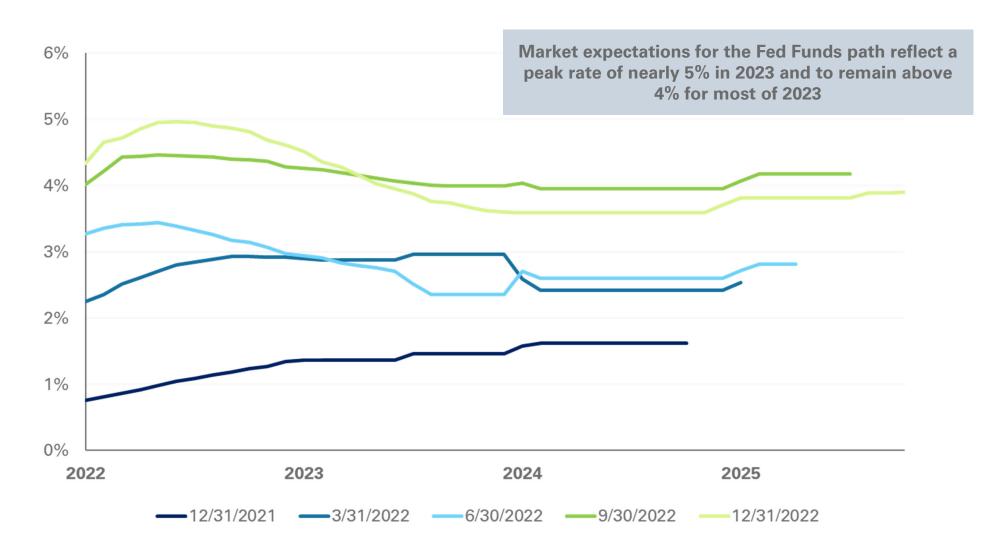


Notes: *All Liquidity Facilities includes term auction credit, primary credit, secondary credit, seasonal credit, Primary Dealer Credit Facility, Asset-Backed Commercial Paper, Money Market Mutual Fund Liquidity Facility, and central bank liquidity swaps

Sources: Federal Reserve, FactSet, NEPC161616

FED FUNDS EXPECTATIONS CONTINUE TO RISE

FED FUNDS FUTURES





Source: FactSet

2023 KEY INVESTMENT THEMES

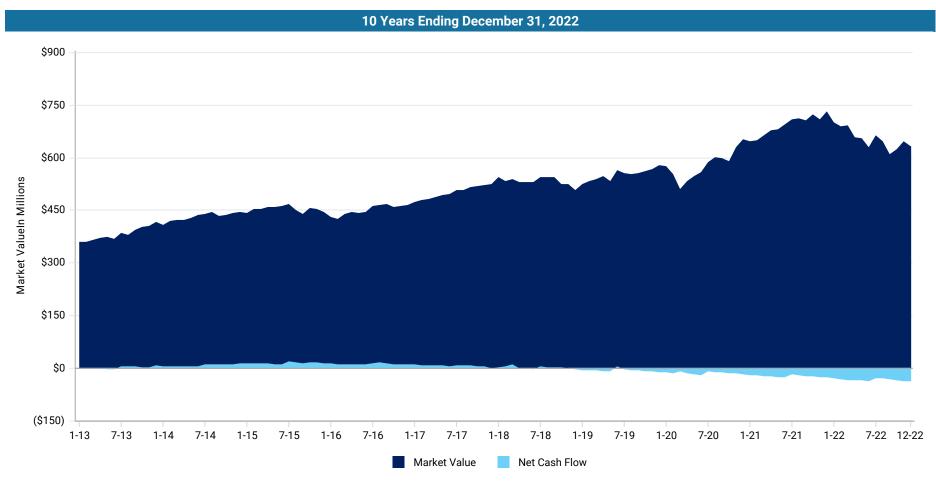
NEPC MARKET OUTLOOK

Stagflation Trends	Stagflation trends challenge the investment landscape and are the driving force for market dynamics
Recession Outlook	Changes in unemployment, wages, and service secto inflation will inform the likelihood and potential severity of a U.S. recession
European Energy Transition	Europe is on the clock to secure new sources of natural gas supply or face severe energy shortages
China Reopening	China's reopening will have global implications for growth, trade, and inflation and may drive a consumer resurgence in China
\$ U.S. Dollar Trajectory	U.S. Dollar strength reveals risks in the global financial system and is a tightening of financial conditions





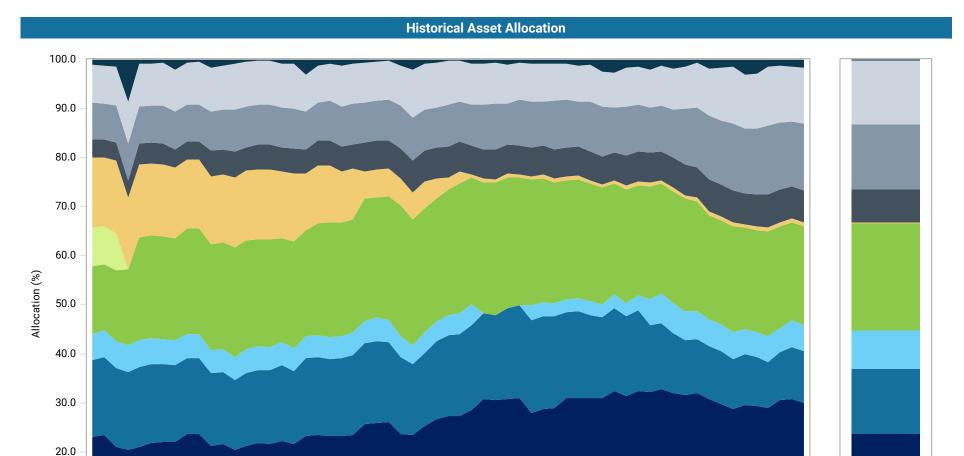
TOTAL FUND ASSET GROWTH SUMMARY



	1 Quarter	1 Year	3 Years	5 Years	7 Years	10 Years
Beginning Market Value	611,266,157	731,202,570	579,228,207	525,597,128	444,744,803	351,050,803
Net Cash Flow	-6,437,693	-11,215,037	-27,374,232	-37,269,191	-52,305,568	-37,707,288
Net Investment Change	26,676,482	-88,482,586	79,650,971	143,177,010	239,065,712	318,161,431
Ending Market Value	631,504,946	631,504,946	631,504,946	631,504,946	631,504,946	631,504,946
Net Change	20,238,789	-99,697,623	52,276,739	105,907,818	186,760,143	280,454,143



TOTAL FUND ASSET ALLOCATION HISTORY





10.0

0.0

Balanced

12/17

Equity - Domestic

6/18

6/19

12/19

Emerging Equity

Private Equity

12/18

Hedge Funds

Equity - International

6/20

12/20

Fixed Income

Real Estate

6/21

12/21

Cash

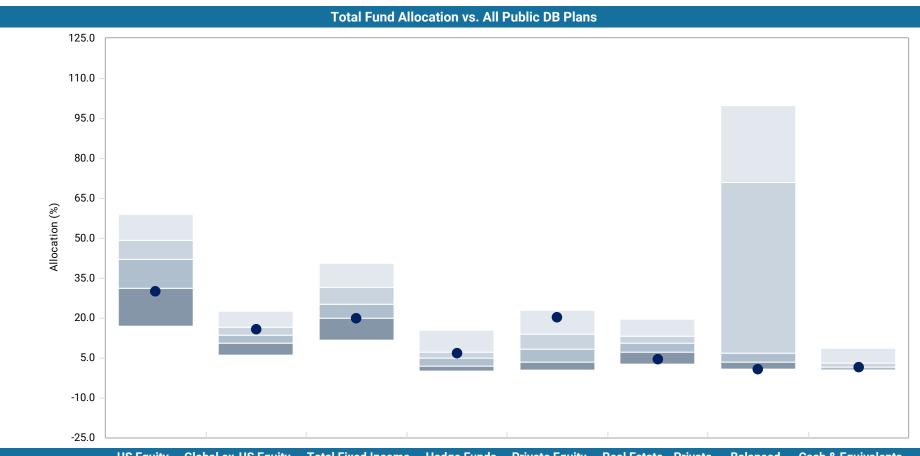
6/22

Fixed Income - Domestic

12/22

Policy

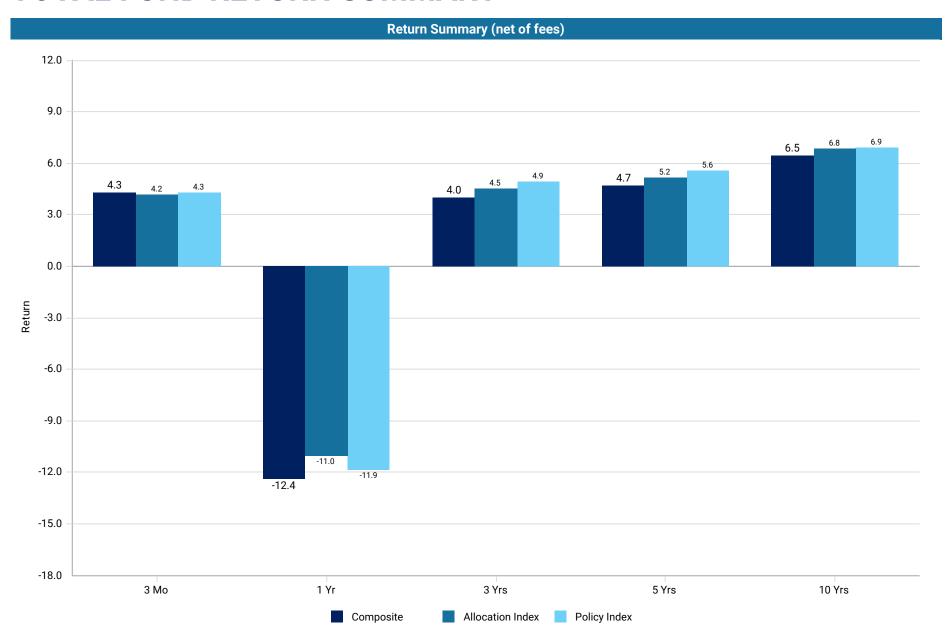
TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE



	US Equity	Global ex-US Equity	Total Fixed Income	Hedge Funds	Private Equity	Real Estate - Private	Balanced	Cash & Equivalents
Composite	30.0 (78)	15.9 (29)	20.0 (74)	6.7 (28)	20.4 (10)	4.6 (91)	0.8 (98)	1.6 (48)
5th Percentile	59.0	22.5	40.5	15.6	22.8	19.4	100.0	8.9
1st Quartile	49.2	16.7	31.4	7.2	14.0	13.3	71.0	3.0
Median	42.3	13.7	25.2	4.9	8.4	10.7	7.0	1.5
3rd Quartile	31.3	10.6	19.9	2.1	3.5	7.3	3.5	0.7
95th Percentile	17.2	6.1	11.6	0.1	0.6	2.6	0.8	0.1
Population	541	517	596	112	177	317	41	466

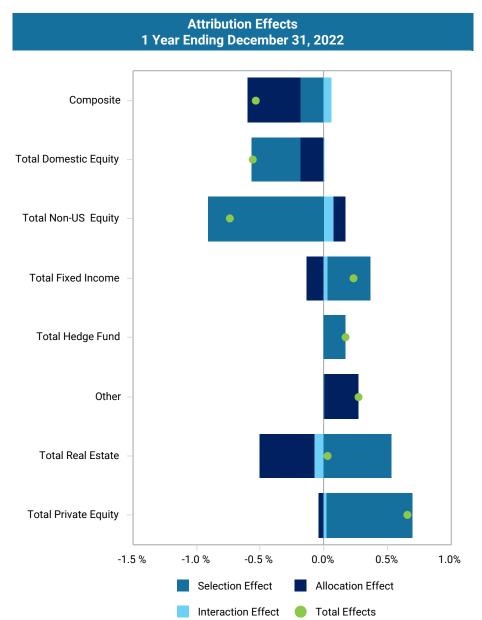


TOTAL FUND RETURN SUMMARY





TOTAL FUND ATTRIBUTION



Attribution Summary 1 Year Ending December 31, 2022											
	Wtd. Actual Return (%)	Wtd. Index Return (%)	Excess Return (%)	Selection Effect (%)	Allocation Effect (%)	Interaction Effects (%)	Total Effects (%)				
Total Domestic Equity	-19.6	-18.6	-1.0	-0.4	-0.2	0.0	-0.6				
Total Non-US Equity	-23.3	-18.8	-4.5	-0.8	0.1	0.1	-0.7				
Total Fixed Income	-11.1	-12.7	1.6	0.4	-0.1	0.0	0.2				
Total Hedge Fund	-2.3	-5.3	3.0	0.2	0.0	0.0	0.2				
Other	1.4	1.5	0.0	0.0	0.3	0.0	0.3				
Total Real Estate	10.9	5.5	5.3	0.5	-0.4	-0.1	0.0				
Total Private Equity	3.6	-2.7	6.3	0.7	0.0	0.0	0.7				
Composite	-12.4	-11.9	-0.5	0.5	-0.4	0.1	-0.5				

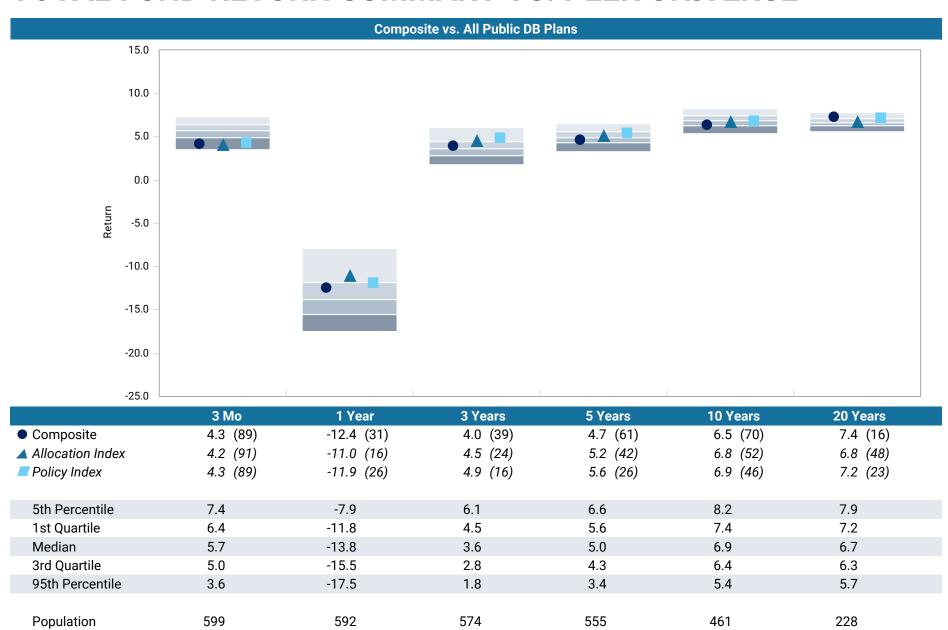
Note: Policy weights reflect the beginning of the period target weights.

Note: Plan attribution is a static, return based calculation and the results reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance summary.

^{*}Total Actual and Index returns are weighted average calculations.

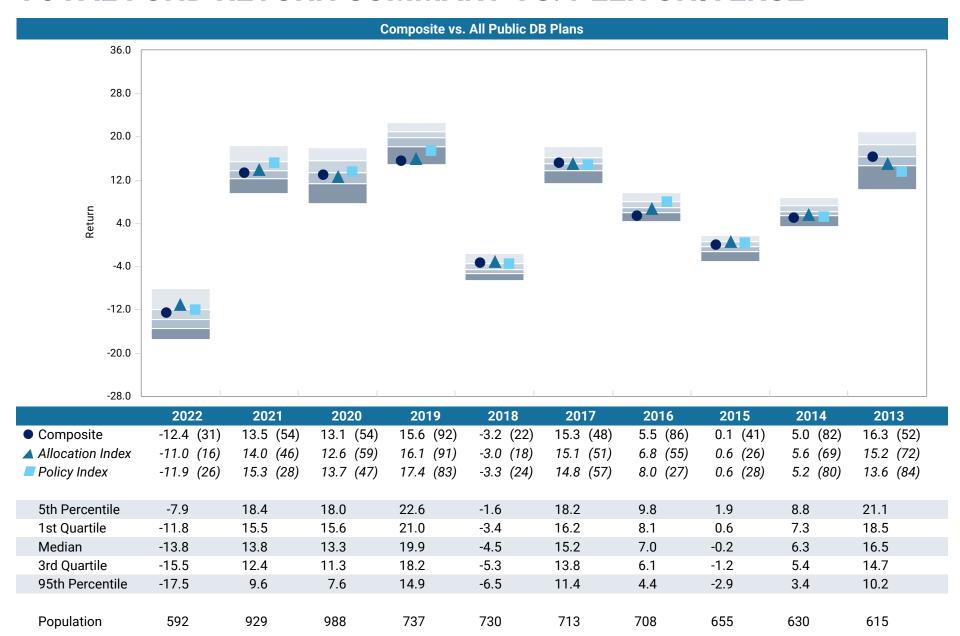


TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE



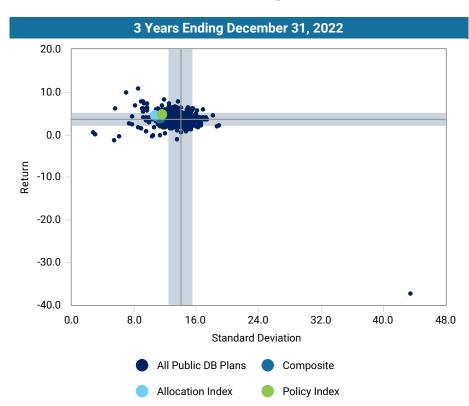


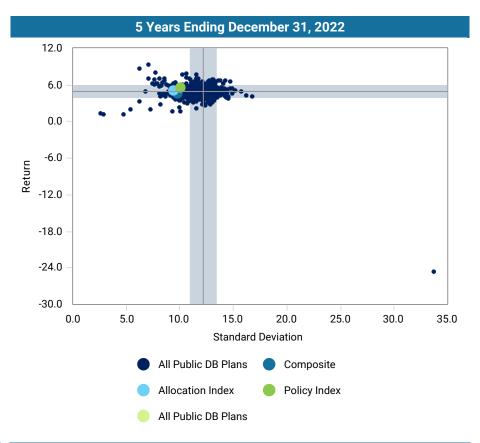
TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE





TOTAL FUND RISK/RETURN - 3 YEARS & 5 YEARS





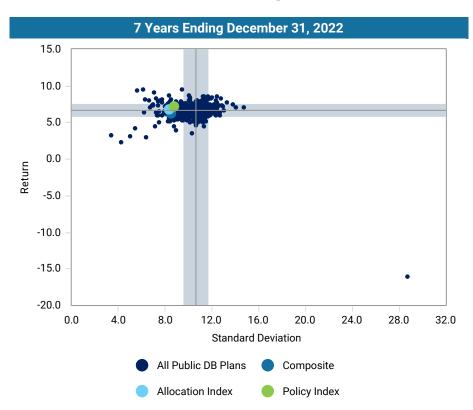
3 Years Ending December 31, 2022									
	Return	Standard Deviation	Sharpe Ratio						
Composite	4.0 (39)	11.3 (10)	0.3 (26)						
Allocation Index	4.5 (24)	10.7 (7)	0.4 (13)						
Policy Index	4.9 (16)	11.6 (13)	0.4 (11)						
Population	574	574	574						

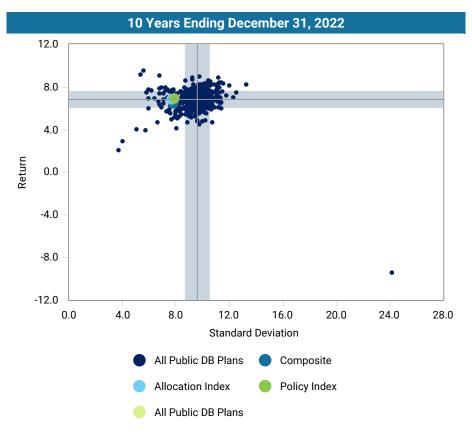
All Public DB Plans

5 Years Ending December 31, 2022									
	Return	Standard Deviation	Sharpe Ratio						
Composite	4.7 (61)	9.7 (10)	0.4 (33)						
Allocation Index	5.2 (42)	9.4 (7)	0.4 (13)						
Policy Index	5.6 (26)	10.0 (12)	0.5 (11)						
Population	555	555	555						



TOTAL FUND RISK/RETURN - 7 YEARS & 10 YEARS





7 Years Ending December 31, 2022									
	Return	Standard Deviation	Sharpe Ratio						
Composite	6.3 (71)	8.5 (9)	0.6 (22)						
Allocation Index	6.8 (45)	8.3 (7)	0.7 (9)						
Policy Index	7.2 (25)	8.8 (11)	0.7 (9)						
Population	533	533	533						

All Public DB Plans

10 Years Ending December 31, 2022									
	Return	Standard Deviation	Sharpe Ratio						
Composite	6.5 (70)	7.8 (9)	0.7 (21)						
Allocation Index	6.8 (52)	7.7 (7)	0.8 (9)						
Policy Index	6.9 (46)	7.9 (10)	0.8 (10)						
Population	461	461	461						



	Allocation			Performance (%)						
	Market Value (\$)	% of Portfolio	Policy(%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Composite	631,504,946	100.0	100.0	4.3 (89)	-12.4 (31)	4.0 (39)	4.7 (61)	6.5 (70)	6.6 (93)	Jan-86
Allocation Index				4.2 (91)	-11.0 (16)	4.5 (24)	5.2 (42)	6.8 (52)		
Policy Index				4.3 (89)	-11.9 (26)	4.9 (16)	5.6 (26)	6.9 (46)		
All Public DB Plans Median				5.7	-13.8	3.6	5.0	6.9	7.9	
Total Balanced	4,861,106	0.8	0.0	4.1	-11.4	5.5	4.1	4.2	4.4	Dec-10
PRIT Core Fund	4,861,106	0.8		4.1	-11.4	6.0	6.2	7.8	6.7	Apr-99
60% S&P 500 / 40% Bloomberg Aggregate				5.4	-15.8	3.8	6.0	8.1	5.9	
Total Domestic Equity	189,135,783	30.0	31.0	7.0 (66)	-19.6 (63)	5.9 (59)	8.6 (33)	11.4 (39)	7.1 (72)	May-99
Russell 3000 Index				7.2 (64)	-19.2 (61)	7.1 (41)	8.8 (30)	12.1 (26)	6.8 (77)	
eV All US Equity Median				8.7	-17.0	6.4	7.4	10.9	8.2	
Large Cap	145,639,066	23.1	24.0	6.6 (83)	-20.3 (83)	6.1 (71)	9.4 (35)	11.9 (45)	11.7 (49)	Dec-10
eV US Large Cap Core Equity Median				8.5	-16.5	7.1	8.6	11.7	11.7	
Rhumbline Advisors S&P 500 Index Fund	60,033,275	9.5	10.0	7.5 (67)	-18.1 (65)	7.6 (38)	9.4 (35)	12.5 (27)	8.5 (57)	Apr-97
S&P 500 Index				7.6 (67)	-18.1 (65)	7.7 (38)	9.4 (34)	12.6 (22)	8.5 (60)	
eV US Large Cap Core Equity Median				8.5	-16.5	7.1	8.6	11.7	8.7	
Coho Relative Value Equity	48,892,880	7.7	7.0	11.1 (79)	-4.2 (35)	7.9 (39)	9.0 (20)		10.6 (57)	Mar-16
Russell 1000 Value Index				12.4 (56)	-7.5 (66)	6.0 (77)	6.7 (70)		10.2 (66)	
eV US Large Cap Value Equity Median				12.8	-5.8	7.4	7.5		10.9	
Polen Focused Growth	36,712,911	5.8	7.0	-0.3 (88)	-38.0 (90)	0.8 (94)	8.9 (55)		10.8 (81)	Feb-16
Russell 1000 Growth Index				2.2 (70)	-29.1 (48)	7.8 (23)	11.0 (19)		14.1 (14)	
eV US Large Cap Growth Equity Median				3.6	-29.5	5.8	9.1		12.0	
Small Cap	43,496,717	6.9	7.0	8.7 (77)	-17.1 (85)	5.0 (67)	6.6 (24)	10.4 (22)	10.6 (16)	Dec-10
eV US Small Cap Value Equity Median				10.8	-11.7	6.2	4.7	9.3	9.3	
Boston Partners Small Cap Value	22,229,854	3.5	3.5	9.4 (70)	-11.7 (51)	4.5 (76)	4.3 (60)	8.4 (67)	9.9 (39)	Feb-97
Russell 2000 Value Index				8.4 (80)	-14.5 (73)	4.7 (72)	4.1 (66)	8.5 (67)	8.5 (91)	
eV US Small Cap Value Equity Median				10.8	-11.7	6.2	4.7	9.3	9.6	
Loomis Sayles Small Cap Growth	21,266,863	3.4	3.5	7.9 (13)	-22.5 (15)	4.9 (41)	8.2 (38)	11.9 (29)	6.5 (99)	Jan-97
Russell 2000 Growth Index				4.1 (54)	-26.4 (38)	0.6 (91)	3.5 (88)	9.2 (91)	6.3 (99)	
eV US Small Cap Growth Equity Median				4.4	-28.2	4.3	7.7	11.0	9.1	

Since inception return is 8.2% gross of fees. Prior to 1999, performance history does not capture separate net and gross returns.

In November 2019, Loomis sayles and Schroders transitioned from a mutual fund to a CIT structure. Performance prior to the transition to the CIT investment vehicle is linked to mutual fund performance history.

Importantly, all returns in this report, including those of the private market managers, are based on a time weighted return calculation and not based on IRRs, which can result in return differences.



	Allocation			Performance (%)						
	Market Value (\$)	% of Portfolio	Policy(%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Non-US Equity	100,617,712	15.9	19.0	11.7 (87)	-23.3 (70)	-3.4 (92)	-1.2 (92)	3.0 (93)	3.6 (99)	Mar-99
eV All ACWI ex-US Equity Median				14.5	-18.7	0.8	1.4	5.0	5.7	
International Equity	66,194,604	10.5	12.0	14.7 (78)	-21.3 (77)	-1.5 (85)	0.6 (67)	4.0 (83)	3.0 (96)	Sep-05
eV All EAFE Equity Median				16.5	-15.8	1.0	1.4	4.9	4.5	
SEG Baxter Street	28,091,632	4.4	5.0	13.7 (65)	-22.3 (67)	-2.4 (87)	1.9 (39)		5.4 (48)	May-16
MSCI AC World ex USA (Net)				14.3 (56)	-16.0 (36)	0.1 (64)	0.9 (64)		4.7 (69)	
eV All ACWI ex-US Equity Median				14.5	-18.7	0.8	1.4		5.2	
Schroder International Alpha Trust Class 1	25,566,311	4.0	4.0	16.7 (20)	-19.0 (53)	3.9 (12)	3.8 (14)	5.8 (29)	5.8 (33)	Mar-12
MSCI AC World ex USA (Net)				14.3 (56)	-16.0 (36)	0.1 (64)	0.9 (64)	3.8 (82)	3.8 (87)	
eV All ACWI ex-US Equity Median				14.5	-18.7	0.8	1.4	5.0	5.1	
Baillie Gifford International Growth Fund Class K	12,536,661	2.0	3.0	13.0 (76)	-34.4 (94)				-13.7 (98)	Oct-20
MSCI AC World ex USA (Net)				14.3 (56)	-16.0 (36)				2.6 (42)	
eV All ACWI ex-US Equity Median				14.5	-18.7				1.7	
Emerging Markets Equity	34,423,108	5.5	7.0	6.4 (87)	-27.0 (87)				-18.7 (81)	Mar-21
eV Emg Mkts Equity Median				10.3	-20.0				-13.4	
Axiom Emerging Markets Trust Class 2	16,040,874	2.5	7.0	5.8 (90)	-31.0 (94)				-21.4 (94)	Mar-21
MSCI Emerging Markets (Net)				9.7 (61)	-20.1 (52)				-14.5 (58)	
eV Emg Mkts Equity Median				10.3	-20.0				-13.4	
ABS Emerging Markets MA Fund	18,382,234	2.9		6.8 (85)	-23.1 (71)				-20.0 (69)	Dec-21
MSCI Emerging Markets (Net)				9.7 (61)	-20.1 (52)				-17.3 (54)	
eV Emg Mkts Equity Median				10.3	-20.0				-16.7	

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			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy(%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fixed Income	126,614,522	20.0	20.0	2.0 (27)	-11.1 (9)	-0.5 (1)	1.2 (2)	2.4 (1)	5.6 (1)	Mar-99
eV US Core Fixed Inc Median				1.8	-13.1	-2.4	0.2	1.3	4.1	
Garcia Hamilton Fixed Income Aggregate	31,643,672	5.0	6.0	1.5 (82)	-11.5 (12)	-2.3 (47)			0.3 (80)	Apr-18
Blmbg. U.S. Aggregate Index				1.9 (43)	-13.0 (45)	-2.7 (80)			0.3 (75)	
eV US Core Fixed Inc Median				1.8	-13.1	-2.4			0.5	
Lord Abbett Core Fixed Income	34,259,229	5.4	4.0	1.7 (61)	-13.3 (63)	-2.3 (40)			0.5 (58)	Apr-18
Blmbg. U.S. Aggregate Index				1.9 (43)	-13.0 (45)	-2.7 (80)			0.3 (75)	
eV US Core Fixed Inc Median				1.8	-13.1	-2.4			0.5	
Loomis Sayles Multisector Full Discretion Trust	46,735,006	7.4	8.0	2.6 (3)	-12.5 (27)	0.1 (1)	1.6 (1)	3.1 (1)	6.8 (1)	Mar-99
Blmbg. U.S. Aggregate Index				1.9 (43)	-13.0 (45)	-2.7 (80)	0.0 (75)	1.1 (74)	3.9 (74)	
Blmbg. U.S. Corp: High Yield Index				4.2 (1)	-11.2 (9)	0.0 (1)	2.3 (1)	4.0 (1)	6.0 (1)	
eV US Core Fixed Inc Median				1.8	-13.1	-2.4	0.2	1.3	4.1	
Octagon Senior Secured Credit Cayman Fund Ltd Class L Acc, Series 1	13,961,567	2.2	2.0	2.5 (3)	-2.2 (1)	1.9 (1)			2.2 (1)	Aug-19
Credit Suisse Leveraged Loan				2.3 (7)	-1.1 (1)	2.3 (1)			2.6 (1)	
eV US Core Fixed Inc Median				1.8	-13.1	-2.4			-1.5	
Invesco Mortgage Recovery Loans Feeder Fund	15,048	0.0		0.0 (100)	-0.7 (1)	-0.6 (12)	2.6 (1)	6.1 (1)	9.9 (1)	Apr-10
Blmbg. U.S. Aggregate Index				1.9 (57)	-13.0 (36)	-2.7 (86)	0.0 (88)	1.1 (96)	2.1 (97)	
eV US Core Plus Fixed Inc Median				2.0	-13.4	-2.1	0.4	1.6	2.9	
Total Hedge Fund	42,302,668	6.7	6.0	1.5	-2.3	4.4	3.7	3.8	3.4	Oct-06
PRIM Portfolio Completion Strategies	15,032,294	2.4		1.5	-2.0	2.8	2.9	4.2	3.7	Oct-06
Corbin Pinehurst Partners	12,524,363	2.0		1.2	-11.3	3.5			4.1	Nov-18
HFRI Fund of Funds Composite Index				1.7	-5.3	3.7			4.1	
UBS Neutral Alpha Strategies	14,017,300	2.2		2.1	6.2	7.6			6.6	Nov-18
HFRI Fund of Funds Composite Index				1.7	-5.3	3.7			4.1	
Entrust Peru Wind Down	728,711	0.1		-0.4	-2.2	-1.2	-3.1		-3.2	Dec-17
HFRI Fund of Funds Composite Index				1.7	-5.3	3.7	3.0		3.1	
Other	9,964,285	1.6	0.0	0.9	1.4	0.7	1.3	8.0	0.7	Dec-10
Cash Account	9,964,285	1.6		0.9 (48)	1.4 (52)	0.7 (38)	1.3 (28)	0.8 (41)	1.7 (26)	Feb-00
90 Day U.S. Treasury Bill				0.8 (70)	1.5 (51)	0.7 (26)	1.3 (35)	0.8 (53)	1.6 (58)	
eV US Cash Management Median				0.9	1.5	0.7	1.2	0.8	1.6	

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		Allocation		Performance (%)							
	Market Value (\$)	% of Portfolio	Policy(%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date	
Total Real Estate	72,052,368	11.4	12.0	-0.3	10.9	12.0	10.3	11.0	8.5	Apr-99	
NCREIF Property Index				-3.5	5.5	8.1	<i>7</i> .5	8.8	8.7		
Morgan Stanley Prime Property (\$2.8m commitment in '95)	25,979,519	4.1		-3.7	6.1	9.3	8.4	10.5	8.8	Sep-95	
TA Realty Core Property Fund, LP (\$15m commitment in '19)	28,358,966	4.5		0.0	15.3	16.4			14.9	Jun-19	
Invesco Mortgage Recovery II (\$3M commitment in '15)	921,638	0.1		0.0	-6.0	-20.0	-7.3		-1.9	Oct-15	
Landmark VI (\$2m commitment in '11)	6,499	0.0		0.0	-16.4	-6.3	-8.7	-0.2	2.2	Jul-11	
Landmark VIII (\$4m commitment in '17)	2,136,606	0.3		0.0	20.1	17.9	12.2		19.8	Nov-17	
StepStone Real Estate Fund II (\$2m commitment in '11)	367,525	0.1		0.0	-1.7	-2.0	-1.5	5.1	2.0	May-12	
Cerberus Institutional Real Estate Partners III (\$1.5m commitment in '12)	483,850	0.1		0.0	-19.6	14.3	12.7		13.3	May-13	
TA Realty Fund X LP (\$3.5m commitment in '12)	4,086	0.0		0.0	24.1	5.1	9.2		9.6	May-13	
TerraCap Partners III, LP (\$2.6m commitment in '15)	1,382,202	0.2		0.0	6.7	4.2	4.3		9.1	Jul-15	
TerraCap Partners IV, LP (\$4m commitment in '17)	3,565,886	0.6		0.0	3.0	8.3	10.0		10.1	Nov-17	
TerraCap Partners V, LP (\$8m commitment in '22)	8,845,592	1.4		8.9					14.5	Jun-22	
Total Private Equity and Debt	85,956,502	13.6	12.0	-0.2	3.6	18.4	14.5	14.6	10.4	Apr-99	
C A US All PE				0.0	-2.7	18.1	15.7	14.7	13.1		
NASDAQ W/O Income				-1.0	-33.1	5.3	8.7	13.2	6.3		
PRIM Vintage Year 2008 (\$3m commitment in '08)	801,810	0.1		-0.7	1.0	14.5	14.0	17.9	9.9	Jun-08	
PRIM Vintage Year 2009 (\$1m commitment in '09)	73,681	0.0		0.5	-12.0	35.7	32.0	26.0	14.3	Nov-09	
PRIM Vintage Year 2010 (\$1m commitment in '10)	460,062	0.1		-7.1	-42.2	23.0	16.9	18.7	10.9	Jun-10	
PRIM Vintage Year 2011 (\$1.5m commitment in '11)	837,642	0.1		-2.9	-4.5	31.5	25.0	22.4	10.0	May-11	
PRIM Vintage Year 2012 (\$1m commitment in '12)	472,161	0.1		5.9	-26.3	14.2	12.9	12.5	-9.4	Jun-12	
PRIM Vintage Year 2014 (\$2m commitment in '14)	2,158,189	0.3		-2.2	-1.0	24.1	24.5		8.5	Jun-14	
PRIM Vintage Year 2017 (\$2m commitment in '17)	2,559,371	0.4		2.3	4.4	24.6	17.8		16.2	May-17	
PRIM Vintage Year 2020 (\$5m commitment in '20)	3,546,500	0.6		-0.2	5.2				16.8	Mar-20	
PRIM Vintage Year 2021 (\$5m commitment in '21)	2,731,766	0.4		-4.2	-5.7				-1.1	Dec-20	
PRIM Vintage Year 2022 (\$7.5m commitment in '22)	966,325	0.2		-0.6					-5.8	Apr-22	
Alcentra European DLF (\$5m commitment in '14)	197,301	0.0		0.0	9.2	23.1	13.8		11.9	Jan-15	
Ascent Fund IV-B (\$1m commitment in '16)	40,322	0.0		0.0	-14.7	-21.7	-20.1		-14.9	Jul-16	
Ascent Fund V (\$2m commitment in '08)	1,250,422	0.2		0.0	-14.6	-2.0	-2.3	1.9	3.9	Oct-08	
Ascent VI (\$3m commitment in '15)	3,453,769	0.5		0.0	2.6	2.6	3.2		2.4	Dec-15	
CVI Credit Value Fund IV A LP (\$6m commitment in '17)	5,402,590	0.9		0.0	4.4	6.1	6.2		6.1	Dec-17	
Invesco Fund VI (\$5m commitment in '13)	1,068,293	0.2		0.0	-21.3	31.4	22.3		18.7	Jul-13	

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			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy(%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Kayne Energy Fund VII (\$5m commitment in '15)	2,766,350	0.4		0.0	31.2	-15.4	-16.1		-4.8	Jan-16
Foundry 2007 (\$3m commitment in '07)	484,034	0.1		0.0	-3.5	30.2	4.2	12.1	19.8	Dec-07
Foundry 2010 (\$3m commitment in '10)	5,956,413	0.9		0.0	-1.0	34.0	22.0	15.1	14.3	Feb-11
Foundry 2010 Annex (\$0.4m commitment in '15)	1,105,234	0.2		0.0	-0.9	91.2	63.3		42.0	Sep-15
Pinebridge PEP V (\$6m commitment in '07)	449,779	0.1		0.0	-0.1	10.7	4.0	9.2	8.5	Dec-10
Pinebridge (AIG) PEP V Asia (\$6m commitment in '07)	32,657	0.0		0.0	-5.0	-12.9			-14.1	Oct-18
Pinebridge (AIG) PEP V Co-Investment (\$6m commitment in '07)	90,621	0.0		0.0	1.5	14.9			6.3	Oct-18
Pinebridge (AIG) PEP V Europe (\$6m commitment in '07)	16,190	0.0		0.0	-22.2	192.9			121.4	Oct-18
Pinebridge (AIG) PEP V Large Market US Buyout (\$6m commitment in '07)	74,199	0.0		0.0	-17.7	11.7			6.0	Oct-18
Pinebridge (AIG) PEP V Preferred Participation Fund (\$6m commitment in '07)	75,737	0.0		0.0	-23.4	-0.7			-3.9	Oct-18
Pinebridge (AIG) PEP V Secondary (\$6m commitment in '07)	23,017	0.0		0.0	-12.1	-12.6	-12.1		-10.2	Jan-17
Pinebridge (AIG) PEP V Small-Mid Market US Buyout (\$6m commitment in '07)	90,000	0.0		0.0	-6.3	18.6			15.7	Oct-18
Pinebridge (AIG) PEP V US Venture (\$6m commitment in '07)	47,358	0.0		0.0	-2.2	3.3			-2.7	Oct-18
Landmark XV (\$3m commitment in '13)	649,744	0.1		0.0	-15.7	4.5	7.3		10.8	Nov-13
JFL Equity Investors IV, L.P. (\$6m commitment in '16)	1,723,874	0.3		0.0	9.8	34.1	41.7		37.3	Jan-17
Private Advisors Small Co. Coinvestment Fund, LP (\$4m commitment in '17)	4,695,956	0.7		0.0	0.5	23.1	21.7		19.4	Feb-17
Park Square Credit Opportunities III (\$3m commitment in '17)	2,775,654	0.4		0.0	3.3	6.8			6.6	Feb-18
Ironsides Constitution Opportunities (\$3m commitment in '18)	2,261,352	0.4		0.0	2.3	10.6			11.1	Oct-18
HarbourVest Dover Street X (\$9m commitment in '20)	6,689,436	1.1		0.0	4.4				63.4	Jun-20
Hamilton Lane Secondary Fund V LP (\$9m commitment in '20)	7,553,174	1.2		0.0	1.9				33.8	Jul-20
Constitution Ironsides Co-Investment Fund VI (\$12m commitment in '21)	13,189,202	2.1		0.0	3.7				3.2	Nov-21
HarbourVest Co-Investment Fund VI (\$8m commitment in '21)	1,848,598	0.3		0.0						Jan-22
JFL Equity Investors V, L.P. (\$9m commitment in '20)	7,787,501	1.2		0.0	11.7				1.4	Sep-20



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