

MWRA EMPLOYEES' RETIREMENT BOARD MEETING

AGENDA

Thursday, December 15, 2022 10:00 a.m.
MWRA, 2 Griffin Way
Chelsea, MA 02150

Item 1 10:00 a.m. Meeting called to order

OLD BUSINESS

Item 2 Standing Committee Reports

- i. By-Laws Committee: Member Kevin McKenna
- ii. Human Resources Committee: Member Thomas J. Durkin, Member Frank Zecha
- iii. Special Committee, Stipend: Chair James M. Fleming, Member Kevin McKenna
- iv. Job Review Committee: Member James M. Fleming, Member Thomas J. Durkin

Item 3 Discussion requested by Mr. Zecha regarding amounts and types of retiree data published – Executive Session under Purpose 4, Security

NEW BUSINESS

Item 4 David Stokes – Cyber Security – Executive Session under Purpose 4, Security

Item 5 Approval of Minutes – VOTE

- a) November 17, 2022 Minutes
- b) December 1, 2022 Minutes
- c) July 27, 2017 Executive Session Minutes
- d) November 16, 2017 Executive Session Minutes

Item 6 Approval of Warrants – VOTE

- a) Warrant 12-2022
- b) Warrant 12-2022A – Payroll

Item 7 Approval of Monthly Transfers 12-2022 – VOTE

Item 8 Acknowledgement of retirement applications under G.L. c 32 §5 – VOTE

- a) Angelo Salamone DOR 11/17/2022
- b) Robert Murphy DOR 11/26/2022

Item 9 Approval of November 2022 Bank Reconciliation – VOTE

Item 10 Approval of Election Officer for Election of the Second Elected Member of the MWRA Employees' Retirement Board – VOTE

Item 11 Small Cap Value Equity Search Finalists Presentations

- 10:30 a.m. a) Boston Partners/Elizabeth Sheerin, John Forelli, William Supple, George Gumpert
- 10:50 a.m. b) Mesirov/Kathryn Vorisek, Leo Harmon, Thomas Hynes
- 11:10 a.m. c) Vaughan Nelson/Chris Wallis, Mark Farrell
- 11:30 a.m. d) Hotchkis & Wiley/Ryan Thomas, Pat McMenamin

- Item 12 NEPC
- a) Flash Report as of 11/30/22
 - b) Asset Allocation Rebalance Recommendation – VOTE
 - c) Small Cap Value Equity Search Review
 - d) Fixed Income Structure Review
- Item 13 Legal

.....**FOR YOUR INFORMATION and REVIEW**

- Item 99-1 PERAC MEMO #29/2022 – 5% Local COLA Option
- Item 99-2 PERAC MEMO #30/2022 – Proposed Regulations Regarding Compliance with the IRS Code
- Item 99-3 PERAC MEMO #31/2022 – 840 CMR 10:10(3) & 10:15(1)(c) – Annual Review of Medical Testing Fee
- Item 99-4 PERAC MEMO #32/2022 – Tobacco Company List
- Item 99-5 Launch of Kayne Private Energy Income Fund III

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, January 26, 2023, 10:00 a.m., Chelsea

**MWRA EMPLOYEES' RETIREMENT BOARD MEETING
NOVEMBER 17, 2022**

A meeting of the MWRA Employees' Retirement Board was conducted in-person on Thursday, November 17, 2022. 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, and Frank Zecha, staff members Carolyn Russo, Julie McManus, and Danielle DiRuzza, and Sebastian Grzejka representing NEPC. Members of the public attended via remote access. Mr. Pappastergion was absent due to medical issues. Mr. Fleming called the meeting to order at 10:06 a.m.

- 1) Call the meeting to order-roll call of members: Mr. Durkin, Mr. McKenna, 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 of October 27, 2022 – VOTE
 - a) September 29, 2022 Minutes
 - b) September 29, 2022 Executive Session Minutes

Mr. Durkin noted that on Items #4 and #5 of the regular session Minutes, the text erroneously reads that Mr. Pappastergion participated in the vote, but was recorded as absent from the meeting.

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

VOTED

to approve the Minutes of the October 27, 2022 meeting, with the amendment to the recording of the votes on Items #4 and #5. 4-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

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

VOTED

to approve the Executive Session Minutes of the October 29, 2022 meeting as submitted by the Executive Director. 4-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

4) Approval of Warrants – VOTE

- a) Warrant 11-2022
- b) Warrant 11-2022A-payroll

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

VOTED

to approve Warrant 11-2022. 4-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

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

VOTED

to approve Warrant 11-2022A. 4-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

5) Approval of Monthly Transfers 11-2022 – VOTE

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

VOTED

to approve the list of monthly transfers as presented and as recommended by NEPC. 4-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

6) Approval of October 2022 bank reconciliation – VOTE

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

VOTED

to approve the bank reconciliation for the month of October 2022. 4-0, roll call with Mr. Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Zecha and Mr. Fleming voting yes.

Mr. McKenna asked whether we have passed the 60-day window to begin enforcing the uncashed retirement check policy. The Retirement Coordinator stated that she believes we are approaching the 60-day mark, but will verify that.

7) Approval of the Calendar Year 2023 Retirement System Budget (\$3,980,693) – VOTE

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

VOTED

to approve the Calendar Year 2023 Retirement System Budget (\$3,980,693) as submitted by the Executive Director. 4-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes.

- 8) NEPC
- a) Flash Report as of 10/31/22
 - b) Asset Allocation Rebalance Summary – VOTE
 - c) Q3 2022 Investment Report
 - d) Q2 Private Equity Performance Report
 - e) Q2 Real Estate Performance Report

Mr. Grzejka began with Item (c), Investment Report. There were roughly fifty responses to the Small Cap Value RFP. Mr. Grzejka anticipates recommending finalists at the December 1, 2022 Investment Meeting, with finalist interviews to be conducted at the regularly scheduled meeting December 15, 2022. Mr. Grzejka referred the Board to page 6 of the report, detailing the five key themes driving performance downward. There has been an unprecedented correlation of Equity and Fixed Income, driven by supply and demand issues, particularly in the US. Rising rates and higher inflation will drive downward performance and consumer sentiment. Higher rates are expected to trickle down to lower earnings. Amazon, Meta, and FedEx, for example, are all experiencing higher costs, which is expected to decrease demand for their services. Target has reported that they have experienced \$400m in lost profits due to theft year-to-date. Increased theft has been viewed historically as an indicator of a slowing economy. The Russia/Ukraine conflict is driving EU performance to a large degree due to increased energy costs. China's zero-tolerance Covid policy is negatively impacting supply chains globally. The shrinking US dollar is making US goods less competitive globally, and also impacts earnings. The bear market officially began in January 2022. Page 7 details the length and severity of bear markets, and the time to full recovery, over the last 50 years. Inflation has proved to be entrenched rather than transitory. The question as to what the peak rate will be for the Fed remains unanswered, but the point at which the Fed Rates and the CPI converge is commonly viewed as the point at which Fed policy can ease.

Mr. McKenna asked Mr. Grzejka about correlations between the current market environment and the 1970's conditions. Mr. Grzejka agreed that there were some similarities, such as the oil embargo, but each began with varied factors, there was too much money pumped into the economy too quickly, Covid, etc. Mr. McKenna asked if it is even possible to cut the recovery time. Mr. Grzejka responded that there is not a corollary we can point to for the answer. Government has increased taxes and spending, but is also increasing rates. There will be a delayed effect, and the lag before we will see the full impact of these actions is why NEPC is not "all-in" on immediately rebalancing to target. Mr. McKenna asked about the possible impact of FTX. Mr. Grzejka stated that type of exposure would be more commonly seen within the private equity space. He will check what, if any, underlying crypto exposure is in the portfolio. The traditional 60/40 portfolio structure is having its worst year ever. Mr. McKenna asked whether food and energy are taken out of the inflation calculation, and if so, whether the severity is being understated. Mr. Grzejka confirmed that they

are excluded, since they are considered too volatile. The impact of Fed action on Real Estate will tend to lag, and upward pressure on rates is expected to normalize real estate valuations somewhat. The impact of the Russia/Ukraine conflict is expected to be amplified over the winter. Mr. Grzejka stated that a significant portion of the portfolio is not liquid. In February 2023 when the annual asset allocation review is performed, we will look at Fixed Income. There are currently opportunities in short-term credit. Mr. McKenna asked if there is a maximum percent of the portfolio which may be illiquid. Mr. Grzejka stated that there is a large enough proportion of the portfolio which is available within days that he does not have liquidity concerns. NEPC and the Executive Director are regularly in communication regarding cash flow needs, and will recommend that the Board take action when outflows exceed, or are expected to exceed, available cash, for instance, due to larger than anticipated capital calls. Mr. McKenna asked if we have ever missed a call, and Mr. Grzejka responded in the negative. Mr. McKenna noted that in future RFP's perhaps the Board should require a clear statement of length and amount of the commitment. Mr. Grzejka stated that even under normal circumstances between the commitment period, investment period, and win-down, a fund's lifecycle could be sixteen years. Mr. Grzejka referred the Board to page 20 for peer comparisons. Over all 1, 3 and 5-year trailing periods, MWRAERS is outperforming its peers with lower relative risk. Coming out of the 2008 recession, the fund was more conservatively positioned in comparison to its peers. MWRAERS is in the top 13% for performance over the 20-year, but in the bottom 10% for risk.

In regard to Item 8(a), Mr. Grzejka reported that October was a positive month overall. Value is outperforming growth. November is still positive to date as well. Fixed Income has had variable results, with the portfolio down .8% overall. Hedge Funds were up .3%. On December 1, NEPC will present the Small Cap RFP response analysis, as well as a Fixed Income structural review. Mr. Fleming asked what the portfolio has lost since the start of the recession, and Mr. Grzejka responded that the fund is down 13.8% year-to-date through October. Mr. McKenna asked the expected impact of the October gains, and Mr. Grzejka stated that we don't have enough of the numbers yet to make that assessment. The October Flash is still preliminary due to the early meeting.

In regard to Item 8(b), Mr. Grzejka stated that due to some large capital calls and the fact that the retirement payroll is now at \$3m per month, NEPC is making some recommendations to increase cash, and will do so again at the regular December meeting. Mr. McKenna asked if the current recommendations will put us at \$12m cash, and Mr. Grzejka responded that they will not, since the \$3m retirement payroll has not yet gone out. The cash will more likely be roughly \$8m after the payroll and calls.

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

VOTED

to approve the list of rebalance transfers as presented and as recommended by NEPC. 4-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Zecha voting yes, and Mr. Fleming voting yes. The approved transfers were as follows:

Lord Abbett	(1,000,000)
Loomis Sayles Multisector Bonds	(3,000,000)
Octagon	(2,000,000)
PRIM Absolute Return	(2,000,000)
Coho	3,000,000
Cash	5,000,000

In regard to items 8(d) and (e), Mr. Grzejka reported that both the PE and RE valuations have shown some resiliency. Both have a one to two quarter lag, but the managers have shown relatively lower price volatility. Mr. Grzejka expects an overall 8-10% adjustment to pricing moving forward, but that also represents buying opportunities. Mr. McKenna stated that Alcentra previously reported zero defaults and asked whether that is still true. Mr. Grzejka stated that there is very little remaining in the Alcentra account (roughly \$195,000) but noted that both Alcentra and Park Square are top-tier creditors, meaning they can take the collateral first in the vent of a default. Both are in the wind-down phase. Certain segments within credit will be more attractive in 2023. Mr. Grzejka concluded NEPC's presentation.

Mr. Zecha updated the Board on the PERAC Administrators' Training held on November 15, 2022 at the Ferncroft in Danvers. Mr. Zecha stated that although the session was intended for beginners, some of the material was more advanced than he would have expected. PERAC discussed proper conduct for Board meetings, minutes, benefit calculations, etc. Because of the seminar and because of the ongoing Brookline Audit, Mr. Zecha reviewed the MWRAERS bylaws. Mr. Zecha recommended that each Board member be provided with a copy of Open Meeting Law as well as Ethics and Conflict of Interests laws each January. According to the bylaws, a vote for Chair should be taken in January as well. PERAC discussed, but reached no conclusion on, order of votes in a roll call, and whether the Chair may make a motion. MWRAERS bylaws do not address the order. The Chair noted that the Board normally conducts the roll call in alphabetical order with the Chair voting last, unless another member asks specifically to vote last. Mr. Zecha asked the Board to take under consideration whether they want to implement an order for roll call votes moving forward. Mr. McKenna noted that for certain votes, such as regarding the funding schedule, a member may be affected by how other members vote. Mr. Zecha noted that under limited circumstances, *Robert's Rules* permits a Chair to make a motion, provided that no other voting member objects. Mr. Fleming stated that he has never seen it done. The Chair requested that the Retirement Coordinator

Schedule a vote for the Chair for the January meeting. Mr. Zecha stated that PERAC's Legal Unit advised that IRS rules prohibit a retiree from being immediately re-hired, unless they are at 80%, or at the maximum age for their group, and then only under emergency situations, such as an inability to fill a vacant position. Overall Mr. Zecha thought the handouts were good, and expects that they will be made available on PERAC's site. Mr. Zecha stated that the PERAC Auditors began in Brookline in September, and have asked for an extension into December. He stressed the importance of Cash reconciliations. The Chair noted that PERAC has begun off-site work on the MWRAERS Audit, and is currently reading the meeting minutes.

Mr. McKenna asked that two additional items be addressed. First, in an effort to become a better Board member, Mr. McKenna asked how he should guide family members in claiming burial insurance, asked how the member is notified, and whether the Board notifies HR. Through the Chair, the Executive Director responded that we may not disclose the identity of beneficiaries to anyone other than the person or persons designated. Neither Retirement Staff nor HR have access to up-to-date beneficiary information for the Life Insurance. That is maintained solely and confidentially by GIC. The Retirement Coordinator will inform the family contact person to submit a certified death certificate (or copy thereof) to the Retirement Office. The Retirement Coordinator submits the Death Certificate to our GIC contact, and GIC then sends claim information only to the designated beneficiary or beneficiaries of the Life Insurance. GIC will provide beneficiary or claim information to no other person or entity. Second, Mr. McKenna asked that the Open Checkbook/disclosure of retiree information be added to the December regular meeting for discussion, so it does not "fall off" the agenda.

Mr. Durkin stated that he applied for and received the PPSA (Public Pension Standards Award) from the Public Pension Coordinating Council. Mr. Zecha reported that he and the Member Services Coordinator had received certificates for their attendance at the PERAC Board Administrators' Training.

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

VOTED

to adjourn the November 17, 2022 meeting of the MWRA Employees' Retirement Board. 4-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Zecha voting yes and Mr. Fleming voting yes. The meeting was adjourned at 10:55 a.m.

The following communications were distributed to the Board for their review:
 PERAC MEMO #28/2022 – 840 CMR 28.00 Electronic Signatures
 Alcentra Memo Regarding Franklin Templeton's Acquisition

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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.

A special meeting convened for the purpose of an Investment Review will be held Thursday December 1, 2022, 10:00 a.m., Chelsea, MA. The date of the next regularly scheduled Retirement Board meeting is Thursday, December 15, 2022, 10:00 a.m., Chelsea, MA.

James M. Fleming, Elected Member

Thomas Durkin, Appointed Member

Kevin McKenna, Elected Member

Andrew Pappastergion, Ex-Officio Member

Frank Zecha, Fifth Member

**MWRA EMPLOYEES' RETIREMENT BOARD SPECIAL MEETING
DECEMBER 1, 2022**

A special meeting of the MWRA Employees' Retirement Board was conducted in-person on Thursday, December 1, 2022 for the purpose of an investment review. 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, and Frank Zecha, staff members Carolyn Russo, Julie McManus, and Danielle DiRuzza, and Sebastian Grzejka representing NEPC. Mr. Pappastergion participated via remote access. Members of the public also attended via remote access. Mr. Fleming called the meeting to order at 10:05 a.m.

NEPC

- a) Monthly Performance Report 10/31/2022
- b) Small Cap Value RFP Responses

Mr. Grzejka stated that the Flash (Performance) Report had been updated with the PRIT numbers through October 31, 2022. The PRIT Core Fund has returned 2.1% for the month, while MWRAERS's return was 2.5%. November closed in positive territory. Mr. Grzejka will update the Flash for the December 15, 2022 meeting. He expects to make additional recommendations to rebalance to get cash to preferred levels to meet payroll and other obligations. Mr. Zecha expressed concerns about Baillie Gifford's poor performance. Mr. Grzejka compared Baillie Gifford's strategy to Polen's. They are a long-term growth fund, with high tech and consumer cyclicals exposure, only they operate in the Non-US space. Because of their long-term focus, Baillie Gifford has low turnover, investing in securities with high long-term conviction. The current market environment has hurt them in a similar manner. Mr. Zecha asked then if it would be advisable to add to the mandate in order to capture some upside. Mr. Grzejka stated that in his view doing so would be premature, and that he would sooner add to the value side. Mr. Zecha asked to return to the discussion after the Small Cap Value RFP discussion.

Mr. Grzejka stated that the Small Cap RFP was sent out due to the current manager's having reached the seven-year contract limit. He stated that he expects to have the Fixed Income Review completed in time for the December 15, 2022 meeting, and the Board should consider restructuring moves in early 2023. Boston Partners has been managing the Small Cap Value portfolio for over 20 years and is a seasoned manager. Their approach has remained consistent. They may not hit the highs, but they provide downside protection, and NEPC suggests that they be included among the finalists. There were fifty-five proposed funds from 53 managers received in response to the RFP. Twenty funds were eliminated for reasons including but not limited to: the \$21m

proposed allocation as a percent of the total fund offering was too high, they could not agree to the PERAC-required compliance terms (side letter), and one response was disqualified because it was hedge fund strategy. Thirty-five strategies remain. There are only so many ways to do Small Cap Value. Differentiators will include quality, cash flow, financials, industries, etc. Relative Value will include some traditional sectors, but some core/growth exposure. Deep value will have traditional names (cyclicals) and less exposure to other sectors. Quantitative strategies tend to have a larger number of holdings. The question becomes how to differentiate. Mr. Grzejka referred the Board to page 6 of the presentation, which shows a summary for Boston Partners, the incumbent, including strategy, fund information, and performance data. The analysis was provided for each of the 35 remaining funds. Boston Partners Small Cap Equity Fund is a bottom-up strategy with 140 holdings currently. The fund provides downside protection but only some upside capture. Mr. Grzejka would like to see at least one concentrated, one diversified strategy, and one in the middle selected for interviews. Mr. Grzejka stated that it would be advantageous to see the differentiators. Mr. Grzejka recommended that Boston Partners be permitted to present given their 20+ year track record with the Board. Other names with a similar strategy would be Segall, Westwood, and Mesiraw. More diversified strategies would include Hotchkis, which currently holds 398 names. Channing is a concentrated strategy with 42 holdings. Mr. Zecha asked which would be "classic small cap," and Mr. Grzejka responded that LSV, Dimensional, Goldman Sachs, and Systematic are examples, but that about 2/3 of the respondents are "classic qualitative value." Mr. McKenna asked about Vaughan Nelson. Mr. Grzejka responded that they are classic value, but target 50% growth from their companies over the 3-5 year. They have outperformed significantly at times, but have also underperformed significantly at times. They will offer downside protection but will not fully capture the upside. Mr. McKenna compared them to Coho in the Large Cap space, and Mr. Grzejka concurred. Mr. McKenna stated he is focusing on the managers that appear on the top left quadrant (relatively lower risk/higher returns in comparison to peers). Mr. Grzejka referred the Board to page 17, Port Capital's summary. Port's Small Cap Equity holds 17 names, concentrated in sectors such as industrials, but it is a long-term play. Mr. Zecha stated we are not looking to knock it out of the park, but the returns 2016-2021 look great. Mr. Grzejka cautioned against simply defaulting to the "hot-dot" and stated the Board needs to ask whether there is any reason to believe this outperformance is sustainable. The fund doesn't fit the risk profile due to concentration. Mr. Durkin commented that Dimensional is on one end with nearly 1000 names, and Port's on the other with 17, and asked then where in between is the right number. Mr. Grzejka responded that it is subjective, but above a certain number it is not beneficial. Dimensional specifically excludes certain strategies, then rebalances the remaining securities to mimic the index. The fee structure is very attractive, and returns are very close to the benchmark. If the Board is seeking greater diversification than we currently have with Boston Partners, then NEPC recommends that Hotchkis be among those interviewed. 60 or fewer holdings

would be considered concentrated. The core group would be in the 70-100+ holdings range. Mr. McKenna said we need to ask whether as much risk as possible has been taken off the table. Mr. Grzejka stated that with the volatility and the economic slowdown, you want a more diversified strategy. Small Cap Value is not where you want to assume additional risk. Mr. Fleming stated he wanted the mandate to be Value only. Mr. McKenna agreed the Board should play it safe in this area, and assume greater risk in other areas of the portfolio such as PE. Mr. Grzejka stated that is the benefit of the Board's experience. On the Small Cap side you can tolerate a bit of concentration. Markets can be more inefficient, so managers can add value, but are also more sensitive to economic factors. The Value side of the portfolio should buoy performance. Boston Partners has performed as expected based on their strategy, but other firms have outperformed them with similar strategies. Mr. Fleming noted that Boston Partners has had a 25-year run. Mr. Grzejka stated that the markets have changed significantly in that time, and data access is almost immediate, narrowing any inefficiencies. Mr. Zecha noted that over the 3-5-10 year periods Boston Partners' performance does not measure up. Fiduciary's and Mesirow's numbers look better. Mr. Grzejka noted that Fiduciary would be a straight substitute for Boston Partners, since they take a similar approach. Mr. Grzejka stated that The Board has traditionally brought in the incumbent but there are several other options. Mr. McKenna stated that out of respect Boston Partners should be given the opportunity to present. Mr. McKenna stated it would be helpful to see underlying industries, and Mr. Grzejka stated that the presentations will contain more specific information in the next round. Mr. Durkin asked about the apparent differences in the scatter graphs for Southern Sun and London, and Mr. Grzejka stated they are attributable to the use of the Russel 2000 benchmark as opposed to the Russel 2000 Value. Mr. Grzejka recommended including Boston Partners, and the Chair agreed. Mr. Grzejka then stated Mesirow is a more diverse fund, as is Hotchkis, with attractive fees. Mr. McKenna asked how they are different from Systematic. Mr. Grzejka responded that all take a quantitative approach. Mr. Zecha stated he would like to see Boston Partners and Mesirow. Mr. Fleming added Hotchkis, and Mr. Grzejka recommended Vaughan Nelson. Mr. Zecha asked who has MA clients, and Mr. Grzejka stated that was not asked in the RFP, but all agreed to a side letter. Boston Partners, Channing, Mesirow and Hotchkis offered separate accounts. Mr. McKenna asked who had the lowest fees, and Mr. Grzejka responded Dimensional, at 30bps. Mr. Zecha noted that Vaughan has outperformed Port long-term, and asked about Boston Partners' fee. Mr. Grzejka stated it is 80bps, and that Port's is 100bps, and noted that Vaughan is still out ahead net of fees. Mr. McKenna asked how Hotchkis is staying above with 400 securities. Mr. Grzejka stated it is weightings, and that Hotchkis manages it well. Mr. Zecha asked Mr. Grzejka to direct the selected candidates to bring 11/30 returns. Mr. Fleming asked Mr. Grzejka for NEPC's recommendations. Mr. Grzejka listed Boston Partners, Mesirow, Hotchkis and Vaughan Nelson. Mr. McKenna asked if Vaughan is similar to Segall, and Mr. Grzejka responded affirmatively. Mr. Zecha asked about Channing, and Mr. Grzejka noted that they are struggling of late,

and that their 3,5,10 year numbers are not as compelling as some others'. Mr. Zecha moved that the Board select as finalists Boston Partners, Mesirow, Hotchkis and Vaughan Nelson, and Mr. Durkin offered a second. Mr. McKenna asked about Heartland. Mr. Grzejka stated that they are concentrated at 47 names, and \$500m of their assets are in retail mutual funds, so they are not strictly an institutional investor, like Columbia. Mr. Durkin asked for Mr. Pappastergion's input. Mr. Pappastergion concurred with the list of finalists.

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

VOTED

to select as finalists in the RFP search Boston Partners, Mesirow, Hotchkis and Vaughan Nelson, and to request that the finalists make presentations for the Board's consideration at the December 15, 2022 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.

Mr. Grzejka stated that he would tell them to be prepared to present on the 15th, and to include November returns. Mr. Zecha asked if the information would be proprietary if we get the numbers ahead of the meeting and ahead of the broader release, and Mr. Grzejka responded in the negative. Mr. McKenna asked if we will get the customary Highly Advantageous, Advantageous, Not Advantageous ratings, and Mr. Grzejka answered that we would.

Mr. Zecha asked that it be stated for the record that the MWRA Employees' Retirement Board wishes PERAC's Compliance Officer Tom O'Donnell a happy and healthy retirement.

Mr. Durkin stated that he Board was fortunate to receive so many responses to select from. Managers can develop fatigue and assume the Board will automatically choose the incumbent.

Mr. Zecha stated he wants to address Fixed Income, and in particular, Octagon. He asked whether the anticipated rate environment changes will help or hurt Octagon. Mr. Grzejka stated they are in bank loans, and that the strategy can provide protection in a rising-rate environment. Now with the rate uncertainty, they can buy securitized loans. The question is whether we will still be in a rising rate environment 6 months from now. Octagon can still find pools of advantageous assets. Covid certainly hurt them disproportionately, and the Board can find bank loan exposure elsewhere. Mr. Zecha informed the Board that at their meeting PRIM increased the PRIT Fund's exposure to Alternative Fixed Income. Mr. Zecha would like to see Octagon's mandate eliminated or reduced by half, so there will be cash ready to deploy. Mr. Grzejka reminded the Board that at the November meeting the allocation to Octagon was reduced by \$2m. He will have a complete Fixed Income review prepared for the meeting on the 15th and will include an assessment of where opportunities might be in

2023 and beyond. Some are expected to be on the shorter end, possible high quality corporate debt, rather than traditional high-yield or traditional credit. Mr. Durkin asked if that is because of inflation, and Mr. Grzejka stated that it is. Mr. McKenna asked how we know where the bottom is, and how do we come out of it. Mr. Grzejka stated that we have never had a soft landing in this environment. If layoffs normalize, if demand drops, if real estate prices fall, that is where a buy point will be. The liquidity of the past few years has been largely spent down, and people are tightening. The Fed will continue to increase rates if demand persists. Mr. Zecha noted that although there were record Black Friday sales, there were actually fewer purchases, but at higher dollar amounts due to inflation. Fewer people are actually buying big-ticket items. Mr. Zecha expects that Fixed Income will be the next to get hit hard, and Mr. Fleming stated that we can't time the market. Mr. Zecha stated his intention is not timing, it is forecasting. There is a transition happening in the Fixed Income arena, and it may be appropriate to reallocate assets that have done well. Mr. McKenna recalled that UBS was called in and given a warning by the Board and they are among the portfolio's best managers now. Mr. Zecha commented that Baillie Gifford is down roughly 40% while another manager in their universe, Lazard, is down 26%. He noted that Octagon is halfway through their cycle, the System has had them about 3 ½ years now, and they've done well. Mr. McKenna asked when do you get out, and stated his goal is to be in a better place moving forward, with lower risk. Mr. Grzejka stated this needs to be a long-term discipline. No one can predict what will happen and when, and the Board should not just implement changes just for the sake of it. They need to be part of a long-term strategy. NEPC will be examining forward-looking opportunities prior to the asset allocation discussion in February. Mr. Durkin mentioned the psychological "action response" phenomenon, and stated the impulse to do something in response needs to be resisted until it can be incorporated into a long-term discipline. Mr. McKenna stated that it is healthy to look at the universe not just at the seven-year RFP requirement mark, and suggested it be done at least every three years. Mr. Grzejka reminded the Board that the hiring cycle does not necessarily sync with the economic cycle. The market cycle is roughly 7 years, but an individual manager may have been hired mid-cycle. Mr. Zecha questioned how to create returns in the current environment. Mr. Grzejka responded that it is in positioning and asset allocation. Active management will add value. Mr. Zecha stated the Board is not market timing but is not a risk-taker either. Mr. Grzejka reminded the Board that relative to its peers, the System has more conservative positioning and a higher funded ratio. Mr. Fleming stated that the correlations between the Equities and Fixed Income markets this year are unprecedented. Mr. Grzejka concurred that there is not much premium between Equities and Fixed Income right now.

Mr. Zecha asked that for the January meeting the Board members be provided with the Conflict of Interest Law and the Open Meeting Law, and that the matters of Rules of Order, Roll Call votes, and a vote for Chair be added to the agenda. Mr. Zecha expects no changes, but after attending recent seminars thinks the

matters should be discussed.

Mr. McKenna asked about the election. The Retirement Coordinator said that the timeline for the election is on the December agenda.

Mr. Fleming asked that the matter of the one-time 5% COLA be added to the January agenda. Mr. McKenna stated he thought that applied only to MTRS and the State Board, and Mr. Zecha stated that PERAC memo #29 addresses the local option approval process. It would need the approval of the Board of Directors.

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

VOTED

to adjourn the December 1, 2022 meeting of the MWRA Employees' Retirement Board. 5-0, roll call with Mr. Durkin voting yes, Mr. McKenna voting yes, Mr. Zecha voting yes and Mr. Fleming voting yes. The meeting was adjourned at 11:25 a.m.

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.

The date of the next regularly scheduled Retirement Board meeting is Thursday, December 15, 2022, 10:00 a.m., Chelsea, MA.

James M. Fleming, Elected Member

Thomas Durkin, Appointed Member

Kevin McKenna, Elected Member

Andrew Pappastergion, Ex-Officio Member

Frank Zecha, Fifth Member

Massachusetts Water Resources Authority Retirement System



George Gumpert, CFA
Senior Portfolio Manager
ggumpert@boston-partners.com
+1 (415) 464-2897



William J. Supple
Head of Taft-Hartley and Public Funds
Investor Relations
bsupple@boston-partners.com
+1 (617) 832-8193



John C. Forelli, CFA
Director of Portfolio Research
jforelli@boston-partners.com
+1 (617) 832-8272



Elizabeth Sheerin
Relationship Manager
esheerin@boston-partners.com
+1 (617) 832-8103

Your Boston Partners Team



George Gumpert, CFA
Senior Portfolio Manager

Mr. Gumpert is a senior portfolio manager for the Boston Partners Small Cap Value, Small Cap Value II, and Small/Mid Cap Value portfolios. Prior to managing Boston Partners small cap value portfolios, he was a research analyst and specialized in the small capitalization sectors of the equity market. Mr. Gumpert holds a B.A. degree in economics from Amherst College. He holds the Chartered Financial Analyst® designation. He has twenty-three years of investment experience.



David C. Hinton, CFA
Equity Analyst

Mr. Hinton is an equity analyst with Boston Partners, specializing in the small capitalization sector of the equity market. He joined the firm from positions at Metcalf & Eddy, Inc. and LTV Steel Co. Inc. Mr. Hinton holds a B.S. degree in chemical engineering from Northwestern University and an M.B.A. degree from the Amos Tuck School of Business at Dartmouth College. He holds the Chartered Financial Analyst® designation. He has twenty years of investment experience.



Volkan Gulen, CFA
Equity Analyst

Mr. Gulen is an equity analyst with Boston Partners, specializing in the small capitalization sector of the equity market. Prior to this, he specialized in the consumer products, tobacco, agriculture, business services, energy, media and advertising sectors of the equity market. He joined the firm from Fidelity Investments where he was a research analyst with coverage of the consumer, industrials, media and advertising sectors with roles spanning equity and high yield securities. Mr. Gulen holds a B.B.A. degree in finance from the University of Massachusetts, Amherst. He holds the Chartered Financial Analyst® designation and has sixteen years of investment experience.



Carolyn M. Margiotti, CFA
Portfolio Analyst

Ms. Margiotti is a senior portfolio analyst for Boston Partners and has extensive experience with all of the firm's strategies. Ms. Margiotti also serves as a member of the relationship management team managing a number of the firm's key relationships. Prior to joining the firm in 2005, Ms. Margiotti was the manager of investments for PG&E Corporation where she managed over \$12 billion in pension, 401(k) and taxable trust assets. Her primary responsibilities included strategic asset allocation, investment strategy recommendations and investment manager selection and oversight. Ms. Margiotti is a former member of the Financial Women of San Francisco, served as Scholarship Committee team leader for many years. She has been an adjunct professor at the University of San Francisco and an instructor for the CFA review program. Ms. Margiotti holds a B.S. degree in industrial management and finance from Purdue University and an M.B.A. degree from the McLaren School of Business at the University of San Francisco. She holds the Chartered Financial Analyst® designation, FINRA licenses 7 and 63, and has twenty-eight years of industry experience.

Your Boston Partners Team

John C. Forelli, CFA
Director of Portfolio Research
jforelli@boston-partners.com
+1 (617) 832-8272

Mr. Forelli is the Director of Portfolio Research for Boston Partners. In this position, he directs our team of investment professionals in formulating, developing, and communicating the investment narrative for Boston Partners. Prior to this role, he was a senior portfolio analyst and has extensive experience with all of the firm's strategies. Mr. Forelli has 12 years of experience as a portfolio manager focused on large cap equities. He joined the firm from Independence Investments where he was large cap core portfolio manager, senior partner and member of the investment committee. Mr. Forelli was also a research analyst specializing in health care, chemical, capital goods and industrial companies. He began his career as an investment banker with Prudential Securities focusing on raising capital for emerging growth companies and merger and acquisition transactions. Mr. Forelli holds a B.A. degree in economics from Dartmouth College and an M.B.A. degree from the Tuck School of Business at Dartmouth College. He holds the Chartered Financial Analyst® designation and FINRA licenses 7 and 66. He has thirty-eight years of industry experience.

Elizabeth Sheerin
Relationship Manager
esheerin@boston-partners.com
+1 (617) 832-8103

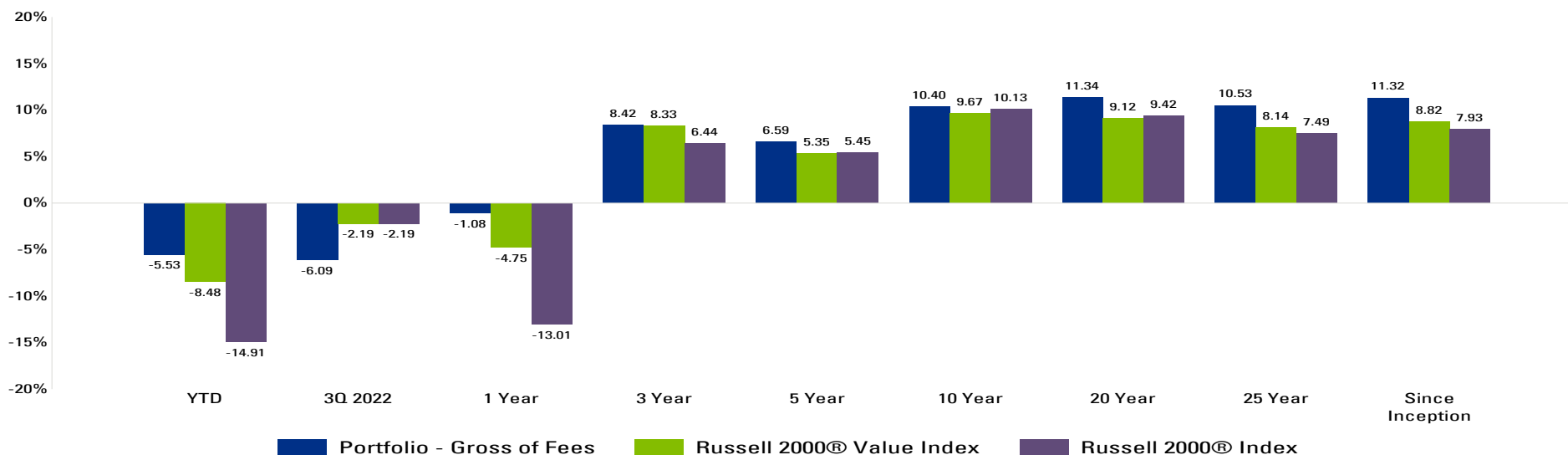
Ms. Sheerin is a member of the Relationship Management team at Boston Partners and she joined this team in 2011. She works with many of our key domestic and international clients in a client service and relationship manager capacity. Prior to joining our firm, she was a Client Service Representative at Putnam Investments. She also held several financial services related internships including working for Merrill Lynch Global Wealth Management and State Street Global Advisors. She holds a B.S. degree in business management from Babson College. Ms. Sheerin has twelve years of industry experience.

William J. Supple
Head of Taft-Hartley and
Public Funds Investor Relations
wsupple@boston-partners.com
+1 (617) 832-8193

Mr. Supple is in his twenty-first year with the firm, and has national Marketing and Relationship Management oversight responsibility for all Taft-Hartley and Public Sector clients. He joined the firm from Mellon Institutional Asset Management, where he was a Vice President with responsibility for Taft-Hartley clients in the Northeast and Midwest. Previously, he was Managing Director and Chief Operating Officer of the Leveraged Finance and Fixed Income Groups, and was also National Sales Manager, with BankBoston. Prior to his thirteen years at BankBoston, Mr. Supple was with Chase in New York City for six years. Mr. Supple is a former member of the Amalgamated Meatcutters and Butcher Workmen of North America, Local 2, AFL-CIO and the Service Employees International Union, Local 254 (Fenway Park Ushers). He served for seven years as a founding Trustee of the Commonwealth of Massachusetts Health Care Security Trust (Tobacco Settlement Funds). He has been elected to public office six times in Needham, MA, serving two terms as Chairman of the Trust Funds Commission, and served twelve years as an elected Town Meeting Member. Mr. Supple is a Member of the Sponsor Council of the Christian Brothers Institute of Massachusetts and is a past Chair of the Board of Directors at Catholic Memorial School. He is a Trustee of Newton Country Day School of the Sacred Heart and also served on the Finance Committee for the Jesuit's USA Northeast Province. He is a member of the Board of Advisors of the College of the Holy Cross, past Chair of the President's Council, and served as a member of the Institutional Advancement Committee of the Holy Cross Board of Trustees. Mr. Supple holds a B.A. degree (Cum Laude) from the College of the Holy Cross, an M.B.A. degree in finance from New York University, and FINRA licenses 7 and 63. Mr. Supple has over forty years of industry experience.

Investment Performance

As of November 30, 2022



Annualized Performance (%)

	YTD 2022	3Q 2022	1 Year	3 Year	5 Year	10 Year	15 Year	20 Year	Since Inception*
MWRA Employees Retirement System - Gross of Fees	-5.53	-6.09	-1.08	8.42	6.59	10.40	9.64	11.34	11.32
MWRA Employees Retirement System - Net of Fees	-6.38	-6.33	-2.06	7.34	5.53	9.31	8.55	10.24	10.22
Russell 2000 Value Index	-8.48	-4.61	-4.75	8.33	5.35	9.67	7.23	9.12	8.82
Russell 2000 Index	-14.91	-2.19	-13.01	6.44	5.45	10.13	7.64	9.42	7.93

*Inception date is February 1, 1997.

Data are preliminary, unaudited for MWRA Employees Retirement System as of November 30, 2022.

Past performance is not an indication of future results. Performance for periods over one year are annualized. Please refer to the back for other important disclosures.

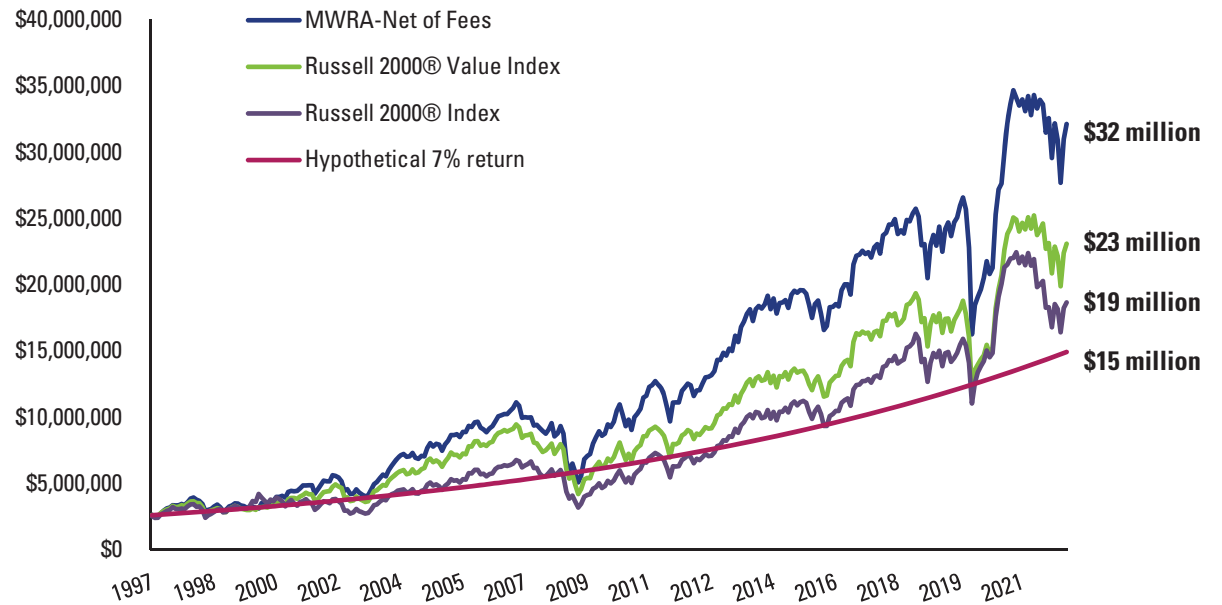
Massachusetts Water Resources Authority Retirement System

As of November 30, 2022

Statement of Changes

Beginning Assets (2/1/97)	\$2.6 M
Net Cash Flows	(\$16.8 M)
Investment Returns	\$37.7 M
Current Assets (11/30/22)	\$23.5 M

Proposed Cumulative Growth of \$2.6 Million Investment as of November 30, 2022*



Inception date is February 1, 1997.

* Data as of November 30, 2022. This is a hypothetical illustration of the growth of \$2.6 million had it been invested in the Boston Partners Small Cap Value strategy on February 1, 1997. The results of this illustration may be changed depending on investment guidelines and cash flow. It assumes reinvestment of dividends and capital gains, and does not reflect sales loads, redemption fees or the effects of taxes on any capital gains and/or distributions. Past performance is not an indication of future results. A GIPS® compliant report is contained herein. 7% is a representative actuarial rate. Use of 7% is an arbitrary assumption. Results will be different with a different assumption. 7% is based on a study by Milliman Consulting in 2015 of approximately 1,300 multi-employer plans based on form 5,500 filings. Based on the conclusions of the study, 7% is a reasonable assumption for this comparison. Past performance is not an indication of future results.

Boston Partners At a Glance

As of November 30, 2022

Firm Profile

- Founded in 1995; offices in Boston, New York, Los Angeles, Greenbrae and London
- One investment philosophy and process across all strategies
- All established strategies have outperformed their benchmark since inception*

Distinguishing Characteristics

- A thriving investment ecosystem that forms a merit-based culture with common purpose and low employee turnover
- A clear alpha thesis: we consistently embed attractive value, fundamentals/quality, and momentum characteristics in portfolios
- A disciplined, time-tested investment process that utilizes comprehensive fundamental analysis combined with robust quantitative tools

\$92.5 Billion Assets Under Management - Details

Investment Strategies	Assets(\$ Millions)
Large Cap Value, Concentrated Large Cap Value	\$31,478
Premium Equity (U.S. All-Cap Value)	\$12,529
Mid Cap Value	\$29,150
Small/Mid Cap Value	\$2,176
Small Cap Value	\$2,633
Small Cap Value II	\$944
U.S. Long/Short	\$1,180
Global, International, Concentrated International	\$10,876
Global Long/Short, International Long/Short	\$218
Emerging Markets Dynamic Equity, Emerging Markets	\$187
WPG Small Cap Value, Micro Cap Value	\$1,107
Sustainable and Socially Screened Investments**	\$18,581

*Boston Partners' established long-only strategies have a minimum track record of 5 years. Results are net of fees. Past performance is not an indication of future results. **Sustainable and Socially Screened Investments are a subset of the Assets Under Management table above, comprised of Global Sustainability; Sustainable Investment mandates; and socially screened portfolios. Organizational information can be found in the appendix.

Boston Partners

Representative institutional client list

Public

Arkansas Judicial Retirement System
California Department of Human Resources
Charlotte Firefighters' Retirement System
City of Clearwater Employees' Pension Fund
City of Miami Firefighters' & Police Officers' Retirement Trust
City of North Miami Beach General Employees, Police Officers & Firefighters
Dallas Police & Fire Pension System
Government of Guam Retirement Fund
Joint Investment Committee as Trustees of the Wichita Retirement Systems
Los Angeles City Department of Fire & Police Pensions
Los Angeles Water & Power Employees' Retirement Plan

Massachusetts Bay Transportation Authority Retirement Fund

Metropolitan Atlanta Rapid Transit Authority (MARTA)
Miami Fire Fighters' Relief & Pension Fund
Milwaukee County Employees' Retirement System

MWRA Employees Retirement System

Norfolk County Retirement System

Oklahoma Police Pension and Retirement System
Phoenix City Employees' Retirement System
Sacramento Regional Transit District
San Luis Obispo County

Taunton Contributory Retirement System

Texas Emergency Services Retirement System
The Army & Air Force Exchange Service
Town of Darien Pension Funds
Tulare County Employees' Retirement Association

Taft-Hartley

Electrical Workers Pension Plan, Local 103, IBEW

Georgia Stevedore Association - ILA
Heavy & General Laborers Locals 172 & 472
IBEW Local 769 Management Pension Trust Fund

IUOE Local 4 - Pension Fund

IUOE Local 30 Pension Trust Fund
IUOE Local 132 Pension Fund

Iron Workers District Council New England

Iron Workers Locals 40, 361 & 417
Ironworkers National Pension Plan
Mason Tenders' District Council Trust Funds
Metal Trades Pension Fund
N.R.A. – I.A.T.S.E. Local 720 Retirement Plan
National Roofing Industry Pension Fund
North Central States Council of Carpenters'
PAMCAH-UA Local 675 Trust Funds

Pipefitters Local Union 537 Annuity & Pension Funds

Plumbers and Steamfitters Local 7
Producer-Writers Guild of America Pension Plan
Radio, Television & Recording Arts Pension Fund
Steamfitters' Industry Security Benefit & Pension Funds
Teamsters Pension Trust Funds of Philadelphia
UA Local Union 373
UFCW - So. CA Drug Fund
UFCW Unions & Employers Pension Plan
Western Pennsylvania Laborers District Council

As of October 3, 2022, this list is made up of clients who have consented to disclosing their name. It is not known whether all the listed clients approve or disapprove of Boston Partners or the advisory services provided.

Equity Investment Team

Long tenured investment team employing the same process across all strategies

Portfolio Management and Portfolio Research

Joseph Feeny, Jr., CFA
CEO, CIO, Long/Short Research
37 years experience

David Cohen, CFA
Large Cap Value
18 years experience

Mark Donovan, CFA
Large Cap Value
41 years experience

Stephanie McGirr
Large Cap Value
20 years experience

David Pyle, CFA
Large Cap Value
27 years experience

Joshua White, CFA
Large Cap Value
16 years experience

Duilio Ramallo, CFA
Premium Equity
27 years experience

George Gumpert, CFA
Small/SMID Value
23 years experience

Steven Pollack, CFA
Mid Cap Value
38 years experience

Christopher Hart, CFA
Global, International,
Global Long/Short
31 years experience

Joshua Jones, CFA
Global, International,
Global Long/Short
18 years experience

Soyoun Song
Global Sustainability
17 years experience

Paul Korngiebel, CFA
Emerging Markets,
Emerging Markets Dynamic
22 years experience

David Kim
Emerging Markets,
Emerging Markets Dynamic
7 years experience

Robert Jones, CFA
Long/Short Equity
34 years experience

Patrick Regan, CFA
Long/Short Equity
27 years experience

John Forelli, CFA
Director of Portfolio Research
38 years experience

Carolyn Margiotti, CFA
Portfolio Research
28 years experience

Michael McCune, CFA
Portfolio Research
28 years experience

Brandon Smith, CFA, CAIA
Portfolio Research
16 years experience

Michael Mullaney
Director of Global
Markets Research
41 years experience

Christopher Eagan
Global Markets Analyst
37 years experience

Harry Rosenbluth, CFA
Senior Advisor
41 years experience

Fundamental and Quantitative Research

Todd Knightly
Director of Fundamental Research
33 years experience

Jack Anton, CFA
Long/Short Equity Generalist
5 years experience

Brian Boyden, CFA, FRM, CAIA
Emerging Markets Equities
24 years experience

Scott Burgess, CFA
Technology, Electronics
23 years experience

Charles Clapp, CFA
Developed Non-U.S. Consumer
7 years experience

Tim Collard
Aerospace & Defense, Transportation,
Housing & Autos
17 years experience

Aaron DeCoste
Energy, Engineering & Construction,
Metals & Mining
17 years experience

Matthew Donovan
Emerging Markets Generalist
1 year experience

Paul Donovan, CFA
Paper & Packaging, Cable & Telecom,
Gaming & Lodging, Chemicals
11 years experience

Kevin Duggan, CFA
Banks, Money Center
27 years experience

Colin Egan, CFA
Developed Non-U.S. Technology
Media, Telecom, Autos
7 years experience

Jonah Frank
Equity Generalist
1 year experience

Trevor Frankel, CFA
Emerging Markets Equities
12 years experience

Volkan Gulen, CFA
Small Cap Equities
16 years experience

Jacklyn Y. Hall
Retail, Property & Casualty
Insurance, REITs
14 years experience

Andrew Hatem, CFA
Healthcare
27 years experience

David Hinton, CFA
Small Cap Equities
20 years experience

Tim Horan
Industrials & Manufacturing,
Home & Office Furnishings, Utilities
25 years experience

Jennifer Mace, CFA
Restaurants
4 years experience

Edward Odre, CFA
Financial Services, Life Insurance
13 years experience

Soyoun Song
Developed Non-U.S. Industrials
17 years experience

Edward Stansky
Equity Generalist
6 years experience

John Zhao
Emerging Markets Equities
7 years experience

Eric Connerly, CFA
Director of Quantitative Research
29 years experience

Carissa Wong, CFA
Director of Portfolio Risk
Quantitative Strategies
21 years experience

Jason Bartlett, CFA
Quantitative Strategies
20 years experience

Pete Cady, CFA
Quantitative Strategies
7 years experience

Mark LeVie, CFA
Quantitative Strategies
26 years experience

Martin MacDonnell, CFA
Quantitative Strategies
31 years experience

Rubina Moin
Quantitative Strategies
22 years experience

Maggy Pietropaolo, CFA
Quantitative Strategies
32 years experience

Joseph Urick
Quantitative Strategies
33 years experience

Trading

Mark Kuzminskas
Chief Operating Officer
32 years experience

Matthew Ender
Equity Trader
13 years experience

Christopher Bowker
Director of Equity Trading
23 years experience

Christopher Spaziani, CFA
Equity Trader
9 years experience

Thomas Walsh
Senior Equity Trader
28 years experience

Marlon Thompson
Equity Trading Assistant
11 years experience

Sustainability and Engagement Research

William Butterly, Esq.
Director of Sustainability.
38 years experience

Jonathan Corning
Research Analyst
1 year experience

Marissa Rego, Esq.
Research Analyst
8 years experience

Jason Reid
Research Analyst
18 years experience

Katie Zona
Research Analyst
1 year experience

Three Circle Stock Selection Process

In our experience, portfolios with all three characteristics tend to outperform over time

We buy stocks where we find the intersection of the three circles

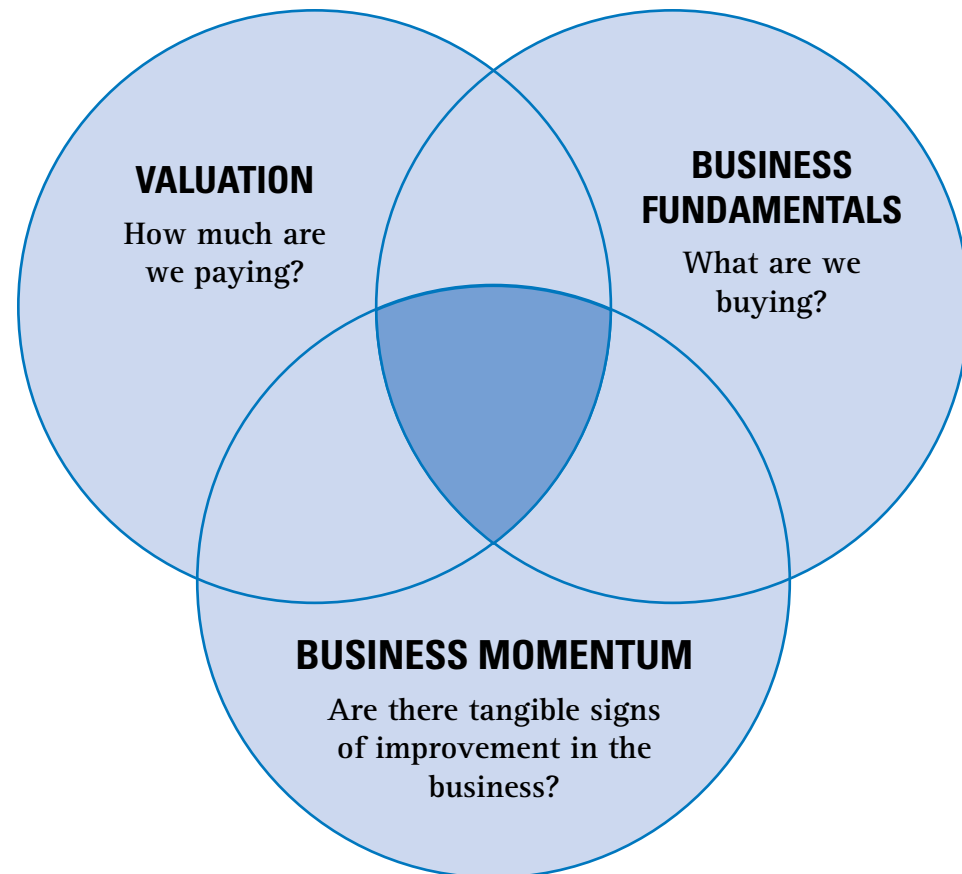


We sell stocks due to:

- Appreciation to target price
- Weakening business fundamentals
- A deterioration in business momentum

Risk management begins with:

- A value driven approach
- A well-defined sell discipline
- Portfolio diversification



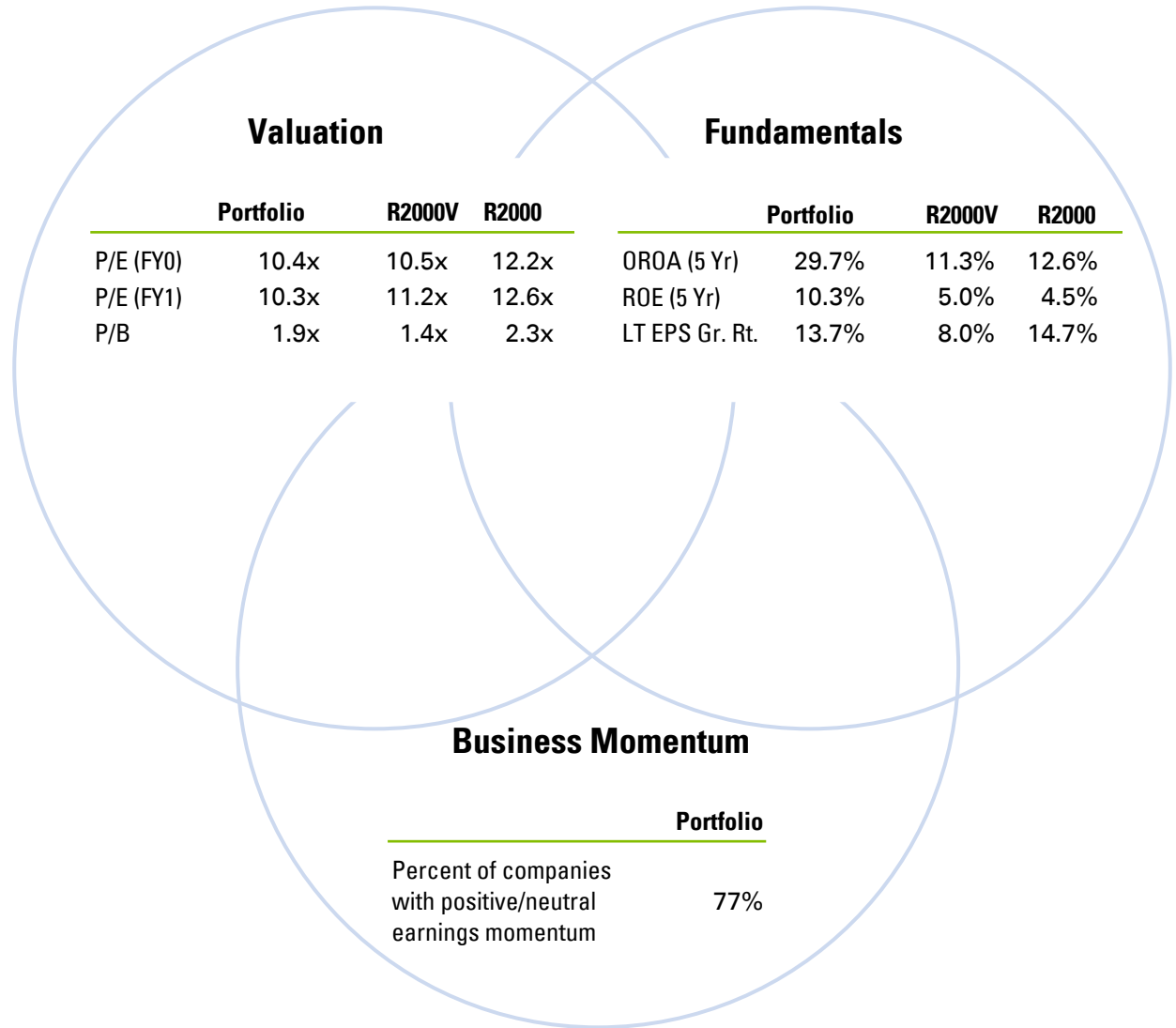
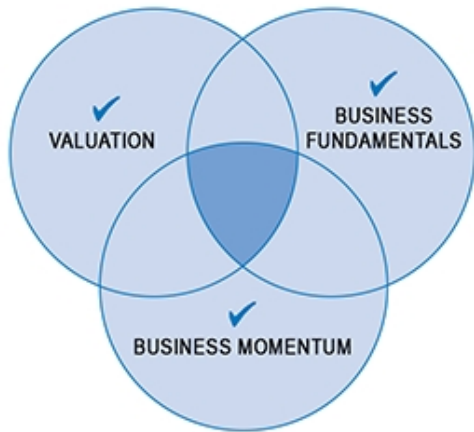
Past performance is not an indication of future results.

Portfolio Characteristics - Small Cap Value

A proof statement that the stock selection process results in a 'three-circle' portfolio

"Three Circles"

An attractive valuation, strong business fundamentals, and positive business momentum. In our experience, portfolios with all three characteristics tend to outperform over time.



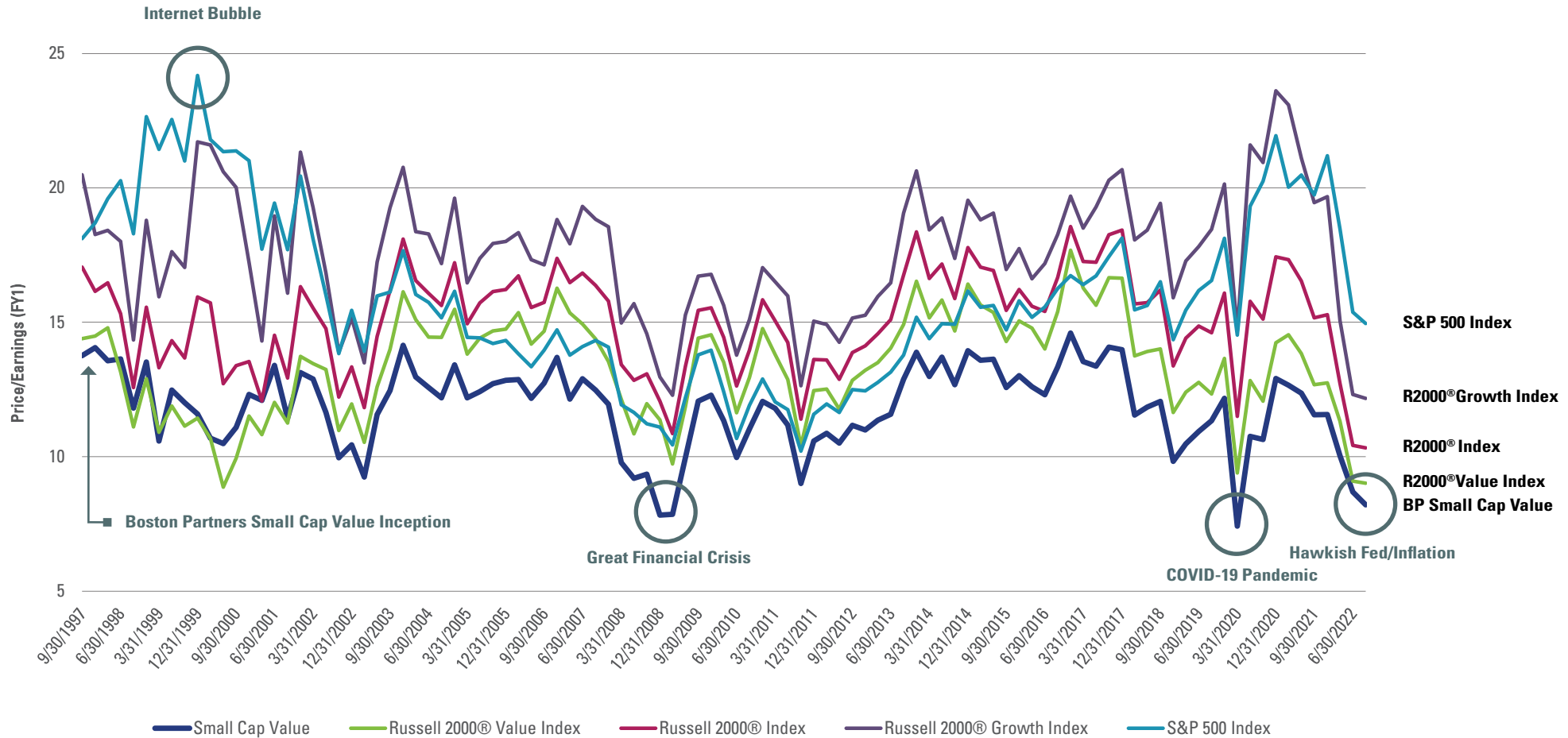
Data are for MWRA Employees Retirement System as of November 30, 2022.

FY0: current year; FY1: projected 12 months; LT EPS Growth: projected 3-5 year estimate. Earnings growth is not a measure of future performance. Past performance is not an indication of future results. Please refer to the back for other important disclosures.

Small Cap Value Strategy Maintains a Discount

Versus the Russell 2000® Value and Russell 2000® Indices

Price/Earnings



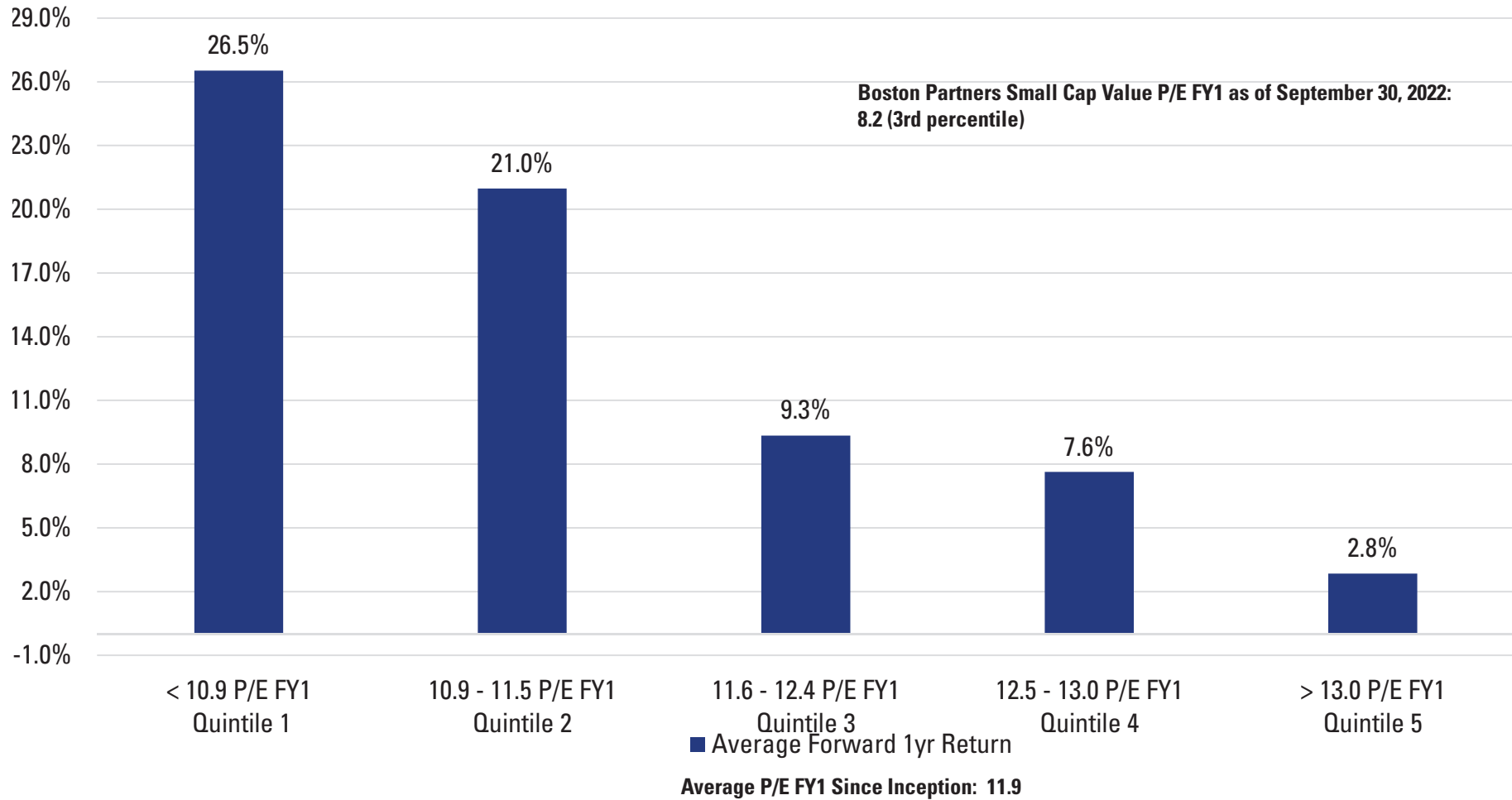
Data as of September 30, 2022. Inception date: July 1, 1995.

Portfolio characteristics are from a representative account in the Boston Partners Small Cap Value composite. Individual portfolio characteristics may vary. A GIPS® compliant report is contained herein. Please refer to the appendix for other important disclosures.

093022 SC PR-008

Small Cap Value Strategy: Portfolio Valuation at Historic Lows

Valuation levels historically for the strategy and subsequent one year performance



Source: Boston Partners.

Data as of September 30, 2022. Inception date: July 1, 1995.

Returns are for the composite and are net of fees. P/E characteristics are for a representative account in the composite. Individual portfolio characteristics may vary. A GIPS® compliant report is contained herein. Past performance is not an indication of future results. Please refer to the appendix for other important disclosures.

093022 SC PR-007

Portfolio Positioning - Small Cap Value

Our assessment of where the opportunities exist

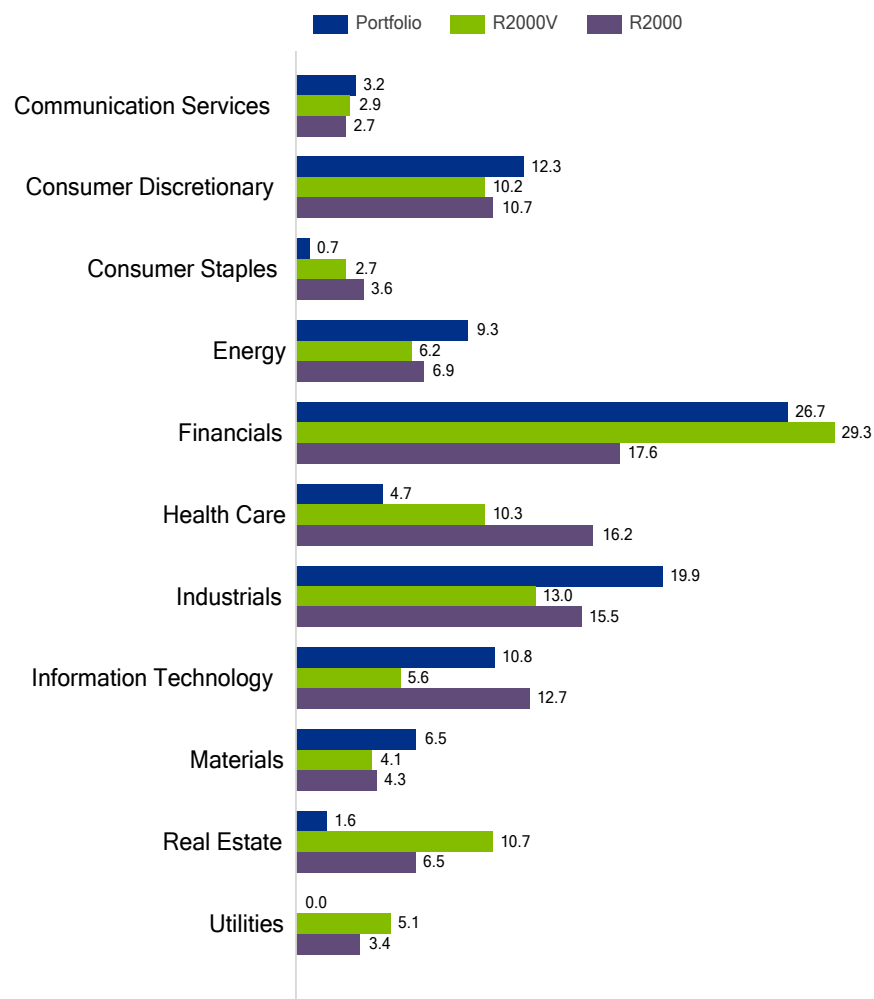
Largest Holdings (%)

Graphic Packaging Holding Co	2.8
WESCO International Inc	2.5
SLM Corp	2.2
ABM Industries Inc	2.1
Harley-Davidson Inc	2.1
Stride Inc	1.9
Belden Inc	1.9
Insight Enterprises Inc	1.9
Nexstar Media Group Inc	1.7
Curtiss-Wright Corp	1.6
Total	20.7

Portfolio Statistics

	Portfolio	R2000V
Number of Securities	130	1,385
Wtd. Avg. Mkt. Cap (\$M)	\$4,095	\$2,481
Dividend Yield	1.6%	2.1%
Turnover (Trailing 1 Year)	32.2%	-
Active Share	91.1%	-

Sector Weightings (% of Portfolio)

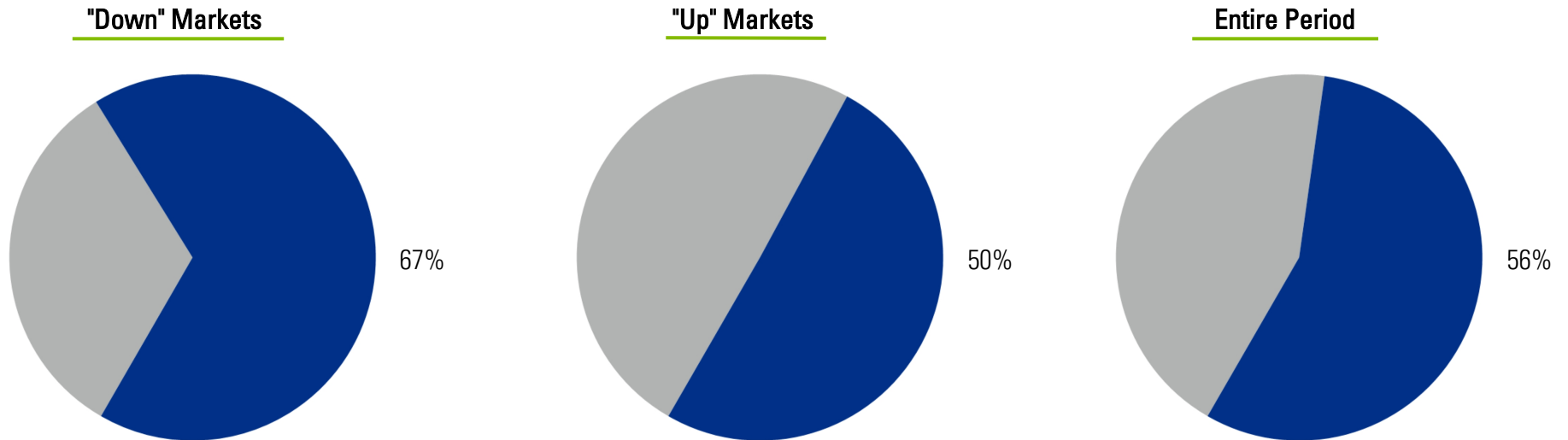


Data are for MWRA Employees Retirement System as of November 30, 2022.

Specific securities identified and described do not represent all securities purchased, sold or recommended for advisory clients. It should not be assumed that investments in these sectors or securities were or will be profitable. Please refer to the back for other important disclosures.

Performance Through Market Cycles

Preserved capital and compounded returns for favorable long-term performance



■ Percentage of the time that Small Cap Value composite has outperformed the Russell 2000® Value Index.

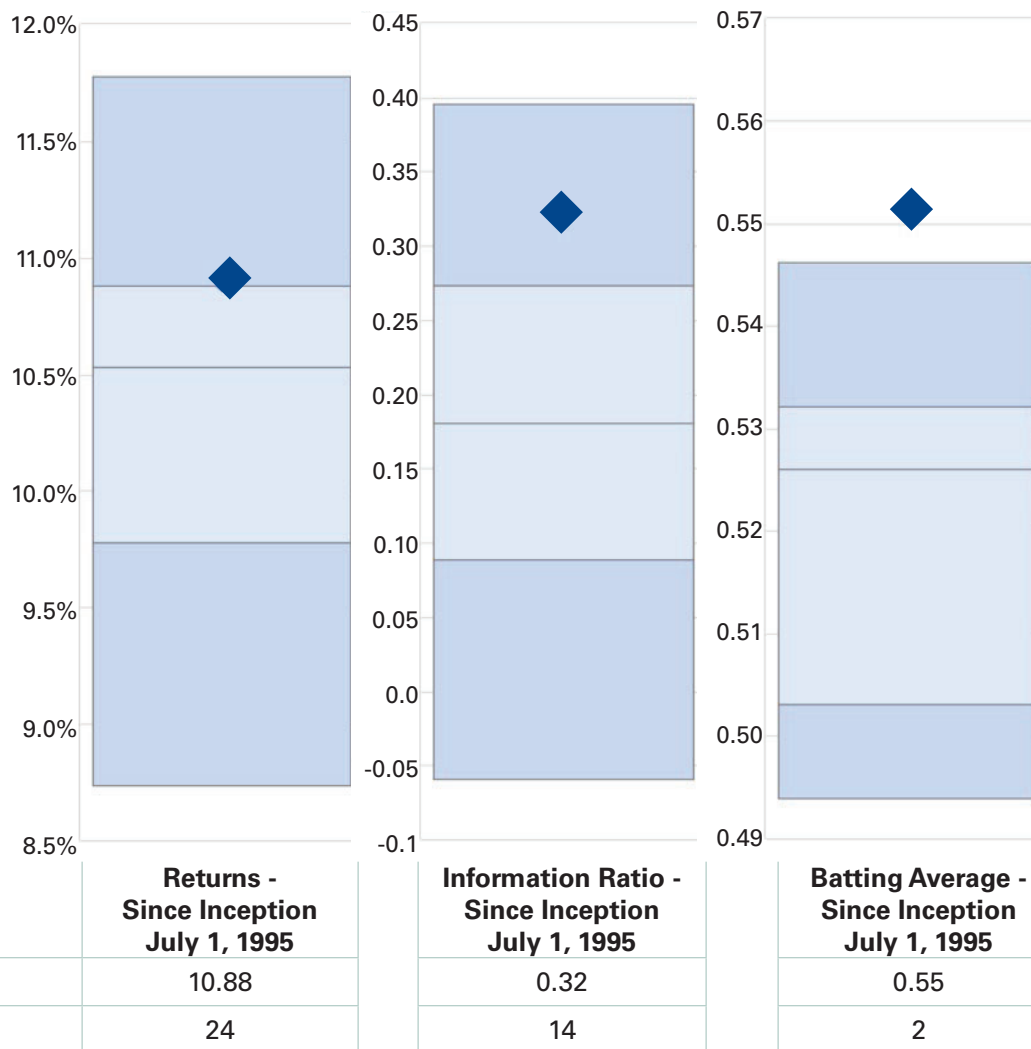
- There have been 67 months in which the Index has produced a negative return
- Composite has outperformed the Index 67% of the time
- There have been 113 months in which the Index has produced a positive return
- Composite has outperformed the Index 50% of the time
- The entire period is 180 months
- Composite has outperformed the Index 56% of the time

Data is for Small Cap Value as of September 30, 2022, for 15-year period, 180 months.

Returns reflect composite results net of fees and individual portfolio results may vary. A GIPS® compliant report is contained herein. Past performance is not an indication of future results. Please refer to the appendix for other important disclosures.

Small Cap Value Performance and Efficiency Rankings

◆ Boston Partners Small Cap Value - Net of Fees



Data as of September 30, 2022. Source: eVestment U.S. Small Cap Value Equity Universe peer group rankings and quarterly observations compared to the Russell 2000® Value Index. Rankings are from 1 to 100, with 1 being the best and 100 being the worst. There are 35 strategies in the U.S. Small Cap Value Equity Universe over this Since Inception period. Batting average measures a manager's ability to meet or beat an index; it is preferable to have a higher batting average. Information ratio is defined as excess return over the benchmark divided by tracking error. Boston Partners compensates eVestment with a subscription fee that enables Boston Partners to access the eVestment database; however, Boston Partners does not specifically pay eVestment to obtain the rankings set forth above. Returns reflect composite results, are net of fees and individual portfolio results may vary. A GIPS® compliant report is contained herein. Past performance is not an indication of future results. Please refer to the appendix for other important disclosures.

MWRA Return and Consistency Rankings

As of September 30, 2022

Performance Returns							
	YTD	3 Year	5 Year	10 Year	15 Year	20 Year	Since Inception*
MWRA Employees Retirement System - Gross of Fees	-18.70	4.91	4.18	8.93	8.10	10.96	10.75
MWRA Employees Retirement System - Net of Fees	-19.30	3.87	3.14	7.85	7.03	9.87	9.65
Russell 2000® Value Index	-21.12	4.72	2.87	7.94	5.70	8.81	8.25
<i>Relative Return – Gross of Fees</i>	2.42	0.18	1.30	0.98	2.40	2.15	2.50

Return Ranking							
	YTD	3 Year	5 Year	10 Year	15 Year	20 Year	Since Inception*
MWRA Employees Retirement System	38	65	50	61	27	40	30

Consistency Ranking							
	YTD	3 Year	5 Year	10 Year	15 Year	20 Year	Since Inception*
MWRA Employees Retirement System	14	46	9	29	28	14	23

Data as of September 30, 2022. Inception date is February 1, 1997. Source: eVestment U.S. Small Cap Value Equity Universe peer group rankings and quarterly observations compared to the Russell 2000® Value Index. Rankings are from 1 to 100, with 1 being the best and 100 being the worst. There are 35 strategies in the U.S. Small Cap Value Equity Universe over this Since Inception period. Consistency is Batting Average and is the percentage of time monthly returns are ahead of the index. Boston Partners compensates eVestment with a subscription fee that enables Boston Partners to access the eVestment database; however, Boston Partners does not specifically pay eVestment to obtain the rankings set forth above. Past performance is not an indication of future results. Performance is gross of fees and for periods over one year are annualized. Please refer to the back for other important disclosures.



Boston Partners

Appendix

Performance Attribution - Small Cap Value

Year to Date as of November 30, 2022

GICS SECTOR	Portfolio			Russell 2000® Value Index			Attribution Analysis		
	Average Weight	Total Return	Contribution To Return	Average Weight	Total Return	Contribution To Return	Sector Allocation	Stock Selection	Total Effect
Communication Services	3.38	4.41	0.11	3.18	-35.79	-1.46	0.01	1.44	1.45
Consumer Discretionary	13.93	-17.55	-2.29	8.47	-21.74	-1.51	-0.86	0.69	-0.17
Consumer Staples	3.14	-31.73	-1.43	2.91	-1.27	-0.03	0.01	-1.13	-1.12
Energy	8.91	56.07	3.62	7.51	70.00	2.84	0.87	-0.58	0.29
Financials	25.58	-5.11	-1.02	27.58	-5.29	-0.81	-0.08	0.10	0.01
Health Care	4.92	-40.08	-2.52	9.78	-24.75	-2.13	0.88	-1.11	-0.23
Industrials	18.69	-0.63	0.25	13.82	-9.68	-1.58	0.06	1.64	1.70
Information Technology	13.30	-12.22	-2.00	5.85	-17.68	-1.08	-0.69	0.73	0.03
Materials	6.20	4.53	0.35	4.34	-7.56	-0.43	0.01	0.72	0.73
Real Estate	1.95	-34.98	-0.89	11.33	-19.16	-2.47	1.07	-0.41	0.66
Utilities	0.00	0.00	0.00	5.24	3.40	0.10	-0.64	0.00	-0.64
Total	100.00	-5.82	-5.82	100.00	-8.54	-8.54	0.64	2.08	2.73

Data are for MWRA Employees Retirement System, are gross of fees and are shown as a percentage.
 Attribution is calculated by Factset using end of day security prices. Returns shown reflect equities only and exclude cash.
 Past performance is not an indication of future results. Please refer to the back for other important disclosures.

Portfolio Holdings - Small Cap Value

Position changes over time: November 2022

Key: ◆ = New Holding | ↑ = Increased Position | ↓ = Decreased Position | ⊗ = Liquidated | Unchanged

Communication Services	3.2
↑ TEGNA Inc	0.9
Gray Television Inc	0.3
John Wiley & Sons Inc	0.3
Nexstar Media Group Inc	1.7
⊗ Yelp Inc	0.0
Consumer Discretionary	12.3
↑ Buckle Inc/the	0.4
↑ Foot Locker Inc	0.6
↑ International Game Technology	0.7
↑ Petco Health & Wellness Co Inc	0.3
↓ Skechers USA Inc Cl A	0.3
Harley-Davidson Inc	2.1
LCI Industries	0.9
Standard Motor Products Inc	0.3
Steven Madden Ltd	1.0
Stride Inc	1.9
Tempur Sealy International Inc	1.0
Topgolf Callaway Brands Corp	1.6
Travel + Leisure Co	0.7
Victoria's Secret & Co	0.6
⊗ American Eagle Outfitters Inc	0.0
⊗ Carter's Inc	0.0
⊗ Hanesbrands Inc	0.0
⊗ Six Flags Entertainment Corp	0.0
⊗ Thor Industries Inc	0.0
Consumer Staples	0.7
Fresh Del Monte Produce Inc	0.7
⊗ Energizer Holdings Inc	0.0
⊗ Spectrum Brands Holdings Inc	0.0
Energy	9.3
Cactus Inc	0.6
ChampionX Corp	0.9

Energy (cont...)	
Chord Energy Corp	0.8
Delek US Holdings Inc	0.3
Enerplus Corp	1.2
Kosmos Energy Ltd	0.8
National Energy Services Reunited	0.2
NexTier Oilfield Solutions Inc	0.6
Par Pacific Holdings Inc	0.4
PDC Energy Inc	0.4
ProPetro Holding Corp	0.4
Viper Energy Partners Lp	1.3
World Fuel Services Corp	1.4
Financials	26.7
◆ Bgc Partners Inc	0.3
◆ Blucora Inc	0.3
↑ Hancock Whitney Corp	0.5
↑ Heritage Commerce Corp	0.3
↑ Veritex Holdings Inc	0.4
↓ Artisan Partners Asset Mgmt	0.0
Ameris Bancorp	0.3
Ares Commercial Real Estate Corp	0.2
Assured Guaranty Ltd	1.1
AXIS Capital Holdings Ltd	1.3
BankUnited Inc	0.7
Berkshire Hills Bancorp Inc	0.4
Blackstone Mortgage Trust Inc	0.8
Employers Holdings Inc	0.4
Essent Group Ltd	0.7
Evercore Inc	1.0
Federal Agric Mortgage Corp Cl C	0.8
First Hawaiian Inc	0.4
First Merchants Corp	0.8
Firstcash Holdings Inc	0.4
Hanover Insurance Group Inc	1.4

Financials (cont...)	
Nelnet Inc	0.7
Oceanfirst Financial Corp	0.3
PacWest Bancorp	0.8
Peapack-Gladstone Financial Co	0.5
PennyMac Financial Services Inc	0.4
PRA Group Inc	0.5
Preferred Bank	0.5
RenaissanceRe Holdings Ltd	0.5
SLM Corp	2.2
Southstate Corp	0.6
Starwood Property Trust Inc	0.8
Stonex Group Inc	0.4
Synovus Financial Corp	1.0
Umpqua Holdings Corp	0.3
Univest Financial Corp	0.3
Valley National Bancorp	0.9
Voya Financial Inc	0.5
Walker & Dunlop Inc	0.8
White Mountains Insurance Grp Ltd	1.4
Wintrust Financial Corp	1.0
Health Care	4.7
◆ R1 Rcm Inc	0.4
↑ AMN Healthcare Services Inc	0.5
↑ Haemonetics Corp	0.6
Amedisys Inc	0.5
Envista Holdings Corp	0.9
PetIQ Inc	0.3
Quidelortho Corp	0.2
Sotera Health Co	0.4
Syneos Health Inc	0.8
⊗ Owens & Minor Inc	0.0
Industrials	19.9

Industrials (cont...)	
◆ Acuity Brands Inc	0.4
↑ FTI Consulting Inc	0.9
ABM Industries Inc	2.1
Allison Transmission Holdings	0.6
Altra Industrial Motion Corp	0.7
ASGN Inc	1.1
Brink's Co	0.7
BWX Technologies Inc	0.7
Curtiss-Wright Corp	1.6
EMCOR Group Inc	0.9
EnerSys	0.6
Hillenbrand Inc	0.8
Hub Group Inc	0.6
Korn Ferry	0.8
Landstar Systems Inc	0.3
Masonite International Corp	0.3
Now Inc	0.4
Resideo Technologies Inc	0.9
Science Applications Intl Corp	1.5
Terex Corp	0.4
Viad Corp	0.2
Wabash National Corp	0.6
Werner Enterprises Inc	0.4
WESCO International Inc	2.5
⊗ GrafTech International Ltd	0.0
⊗ KAR Auction Services Inc	0.0
Information Technology	10.8
◆ Osi Systems Inc	0.4
↑ Avnet Inc	0.7
↓ Insight Enterprises Inc	1.9
↓ Unisys Corp	0.0
Belden Inc	1.9
CommScope Holding Co Inc	0.5

Data are for MWRA Employees Retirement System.

Values are percent of portfolio. It should not be assumed that an investment in these securities was or will be profitable.

Portfolio Holdings - Small Cap Value

Position changes over time: November 2022

Key: ◆ = New Holding | ⬆ = Increased Position | ⬇ = Decreased Position | ∅ = Liquidated | Unchanged

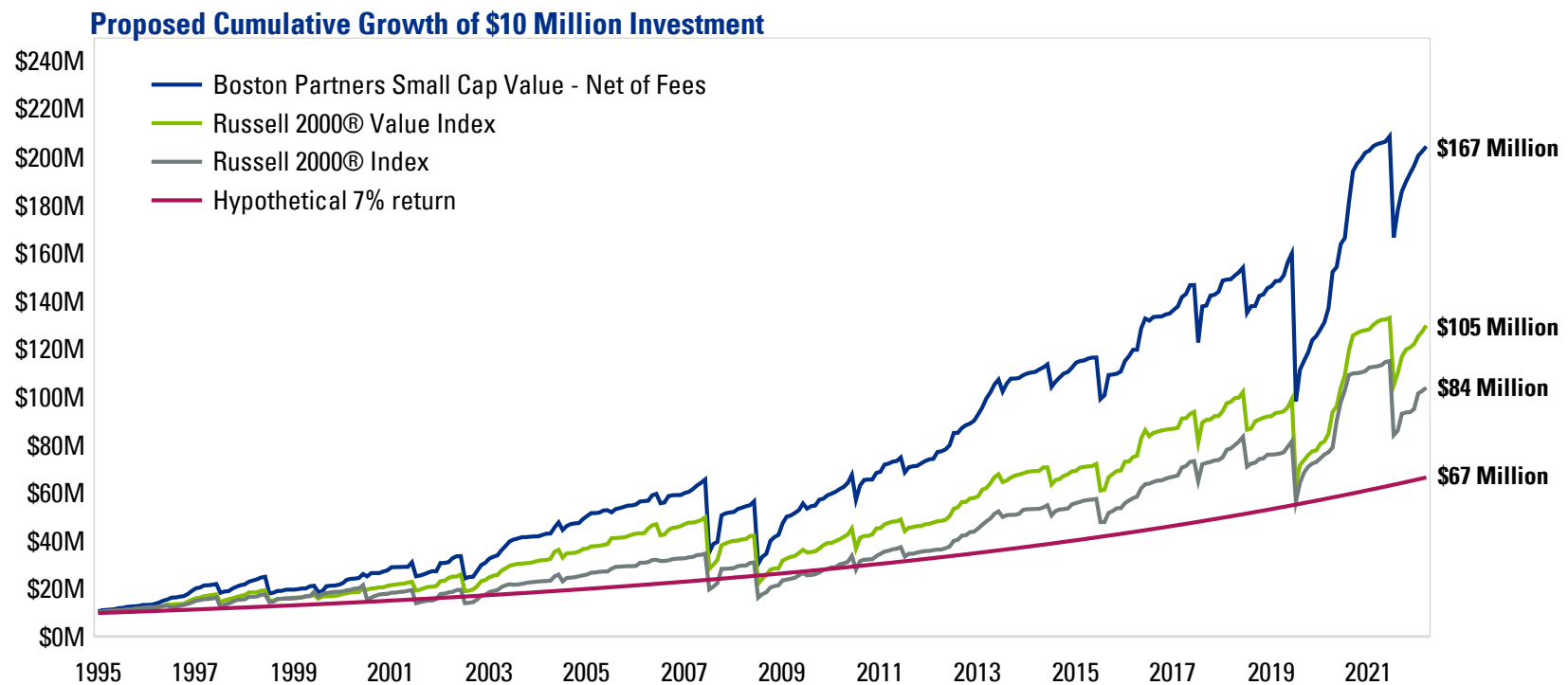
Information Technology (cont...)	
Concentrix Corp	1.4
InterDigital Inc	0.7
MAXIMUS Inc	0.3
NCR Corp	0.6
SMART Global Holdings Inc	0.4
SYNNEX Corp	0.8
TTEC Holdings Inc	0.6
Ultra Clean Holdings Inc	0.6
Materials	6.5
◆ Ashland Inc	0.4
Cabot Corp	0.6
Ecovyst Inc	0.5
Graphic Packaging Holding Co	2.8
Ingevity Corp	0.7
Minerals Technologies Inc	0.2
Valvoline Inc	1.3
Real Estate	1.6
Cousins Properties Inc	0.8
Kennedy-Wilson Holdings Inc	0.3
Spirit Realty Capital Inc	0.5
∅ Realogy Holdings Corp	0.0

Data are for MWRA Employees Retirement System.

Values are percent of portfolio. It should not be assumed that an investment in these securities was or will be profitable.

Benefits of Active Management

Selecting the right manager can lead to higher growth of capital



Data is for as of September 30, 2022.

This is a hypothetical illustration of the growth of \$10 million had it been invested to the Small Cap Value strategy on July 1, 1995 which assumes the reinvestment of dividends, capital gains, and a 7% representative actuarial rate. 7% is based on a 2015 Milliman Consulting study of approximately 1,300 multi-employer plan Form 5500 filings. Results would vary depending on investment guidelines, cash flow, and the assumptions mentioned. A GIPS® compliant report is contained herein.

Massachusetts Water Resources Authority Retirement System

Proposed Annual Fee Schedule

Massachusetts Water Resources Authority Retirement System - Small Cap Value

0.80%	On all assets
-------	---------------

Small Cap Value, Small Cap Value II & Small/Mid Cap Value

1.00%	First \$25 million of assets
0.80%	Thereafter

Risk Management

A clear definition with tools designed to measure intended and unintended risks

"True investment risk" is a permanent impairment or loss of capital

- True investment risk is not a statistical measure of volatility, variance or estimated tracking error
- Minimize capital losses because it takes a 100% capital gain to fully recoup a 50% loss

Capital impairments stem from three sources, all of which are best evaluated bottom-up, stock by stock

- Valuation Risk – overpaying for an investment
- Balance Sheet Risk – solvency risk of the business
- Earnings Risk – earnings ultimately drive stock prices

We employ a multi-layered set of checks & balances designed to buffer against capital losses

- Quantitative ranking codes of all securities have helped create portfolios with better-than-benchmark valuation, momentum and quality attributes
- Target prices for all owned stocks (upside vs. downside risk)
- Fundamental research creates a layer of objectivity for portfolio management Buy/Hold/Sell decisions
- Portfolio analysts provide monthly attribution feedback loop to portfolio managers
- Independent risk manager conducts quarterly portfolio review
- Northfield analytics utilized to monitor common factor risks
- Quantitative codes capture subtle changes in portfolio characteristics

There are no substitutes for Diversification and a Sell Discipline

- The very best fundamental research and analysis will be wrong on occasion so you must *diversify*
- Keep your winners until valuation, momentum or fundamentals breakdown; when this happens cut losses quickly and *sell*

Sustainability and Engagement at Boston Partners:

- Dedicated Sustainability and Engagement research team
- Total return orientation supplemented by original ESG research
- Risk avoidance and robust engagement philosophy
- Dedicated ESG Global and Global Long/Short strategies

Boston Partners Sustainability and Engagement Process:

- The Boston Partners Sustainability and Engagement team produces original research and engages with our analysts and companies where we invest to address issues of concern
- Original, internal research utilized by Portfolio Managers and fundamental analyst team
- Internally developed, comprehensive proxy policy implemented by Governance Committee
- Engaged with 783 companies and voted against management in 11% of proxy votes in 2021

Expectations of companies we own:

- Corporate Responsibility Report prepared using industry recognized standards such as GRI (or similar website disclosure) that provides disclosure on all material topics
- Supply chain management policy that sets standards, provides for audits, and details results
- Environmental disclosure including disclosure of GHG emissions, waste reduction efforts and water use and environmental initiatives; preferably participate in the CDP or equivalent industry reporting function
- Good corporate governance including Code of Ethics; independent chairman; rights of shareholders to call special meetings and act by written consent; recognition of diversity in its workforce; independent directors; absence of excessive compensation; equal voting rights
- Absence of recent material litigation/regulatory actions that suggest a deficient compliance, risk management or supervisory function

Boston Partners Sustainable Portfolios

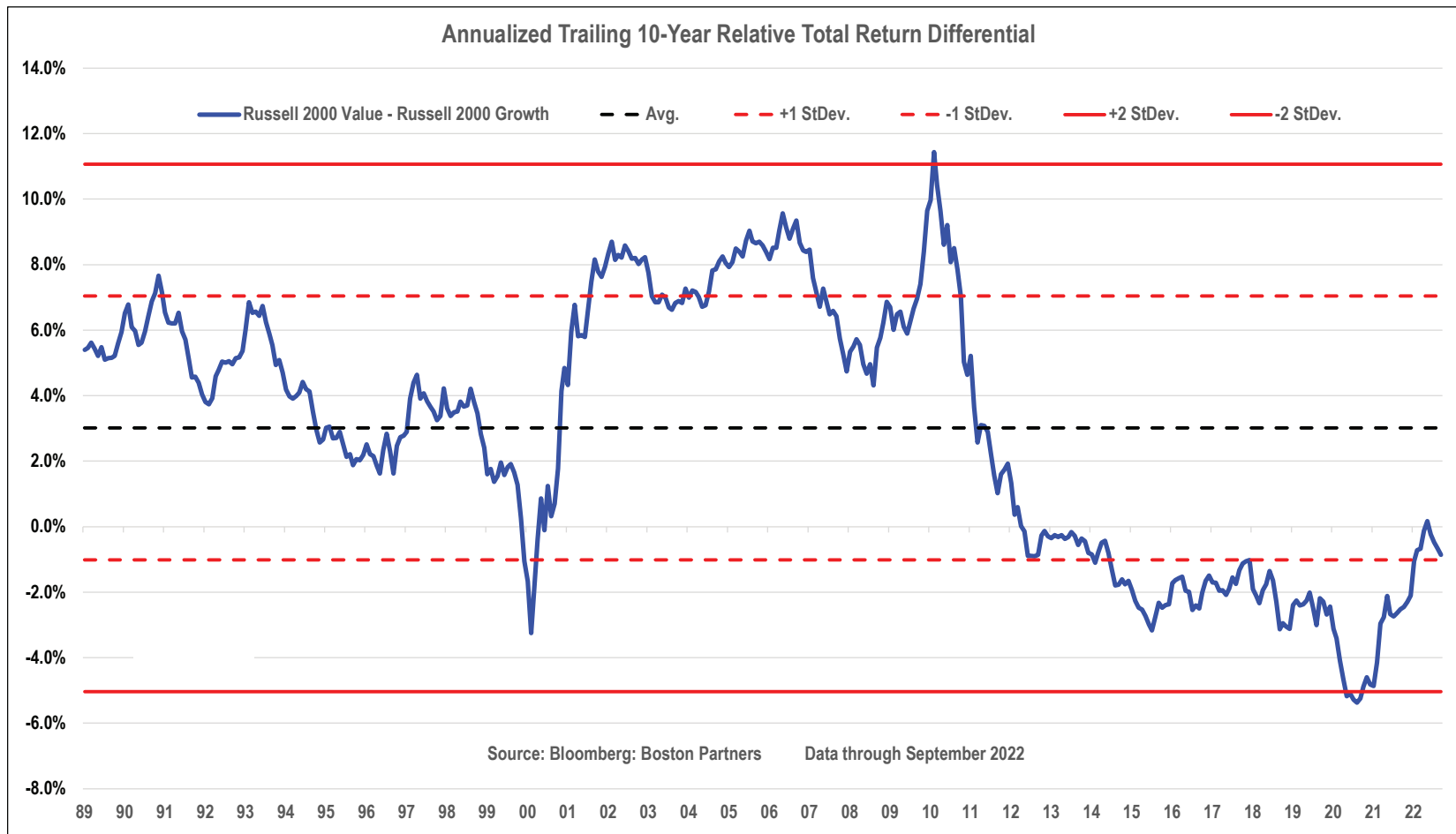
As of September 30, 2022

Assets Under Management and Investment Vehicles

Classification	Assets	Description	Vehicle	Investment Category
Global Sustainability	\$18 mm	Total return oriented Value Style Original ESG Research	U.S. Mutual Fund Separate Account Model Delivery	Global Equity
Long/Short Global Sustainability	\$9 mm	Variable Long/Short Value style Original ESG Research	Separate Account	Global Equity Long/Short
Sustainable Investments	\$859 mm	Exclusion List ESG Research Override Client Approval	Custom Separate Account	Global Equity
UCITs Funds	\$12.5 B	Article 8 Designation Classifies as ESG Integration 3% Limit on Severe Risk Investments UN Global Governance Compact Compliant Net Zero Carbon Emissions by 2050 Exclusion List of 800+ names Moving towards 50% of portfolios to be classified as sustainable per Advisor	UCITs Custom Separate Account	U.S. Large Cap U.S. All Cap U.S. Mid Cap Global Equity
Socially Screened	\$2.4 B	Client Specific Mandate	Custom Separate Account	U.S. Large Cap U.S. All Cap U.S. Mid Cap U.S. Small Cap U.S. Small/Mid Cap Global Equity Global Equity Long/Short International ADR
Total	\$15.8 B			

Small Cap Value Stocks are Compelling Versus Small Cap Growth Stocks

Record return differential between Small Cap Value and Small Cap Growth



Data as of September 30, 2022.

Source: Bloomberg; Boston Partners.

Past performance is not an indication of future results. Please refer to the appendix for other important disclosures.

093022 SC PR-005

Smaller Caps are Compelling Versus Large Cap Stocks

Small caps are selling at a 27% valuation discount to large caps

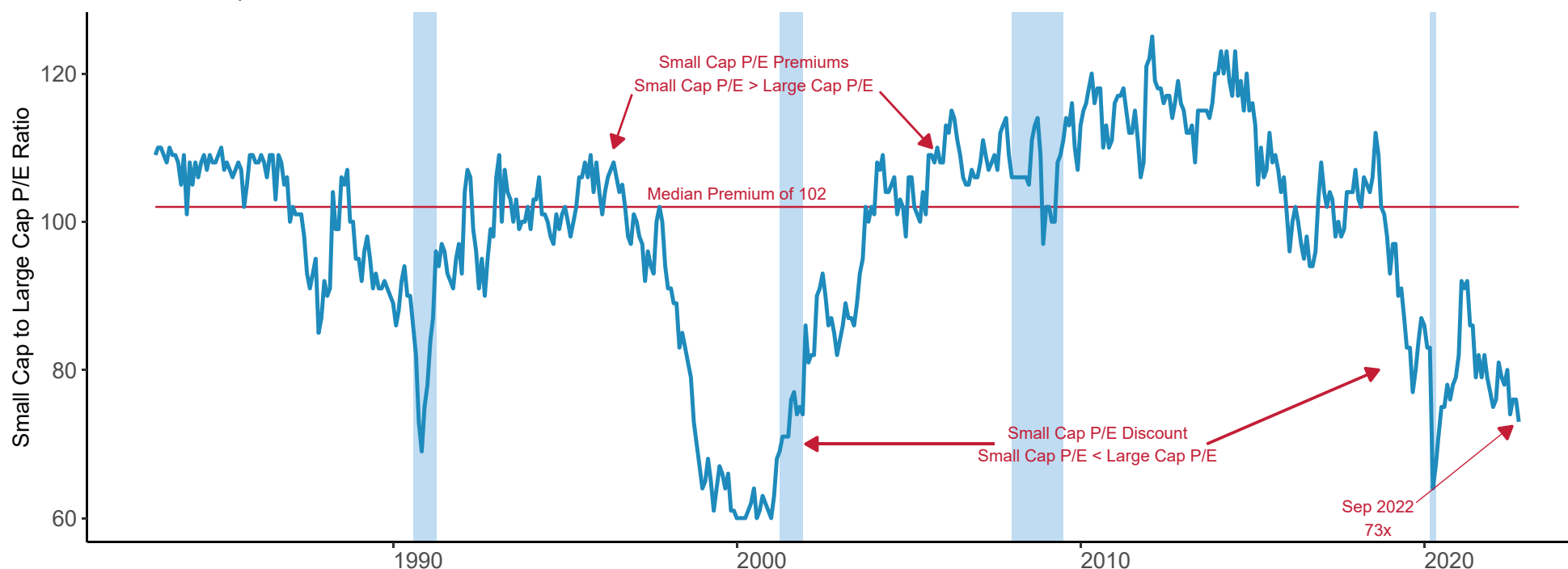
Small Cap to Large Cap Historical P/E Ratio (x100)

Based on Non-normalized trailing operating earnings

Small Cap: Leuthold 3000 Small Cap: 15.04x

Large Cap: Leuthold 3000 Large Cap: 20.69x

Vertical bars represent recessions.



Small caps are selling at a 27% valuation discount to large caps based on trailing operating earnings. That is the lowest relative valuation registered for Small Caps since May 2020.

Based on full year 2023 earnings estimates, small caps are selling at a smaller 20% discount to large caps

Data as of September 2022.

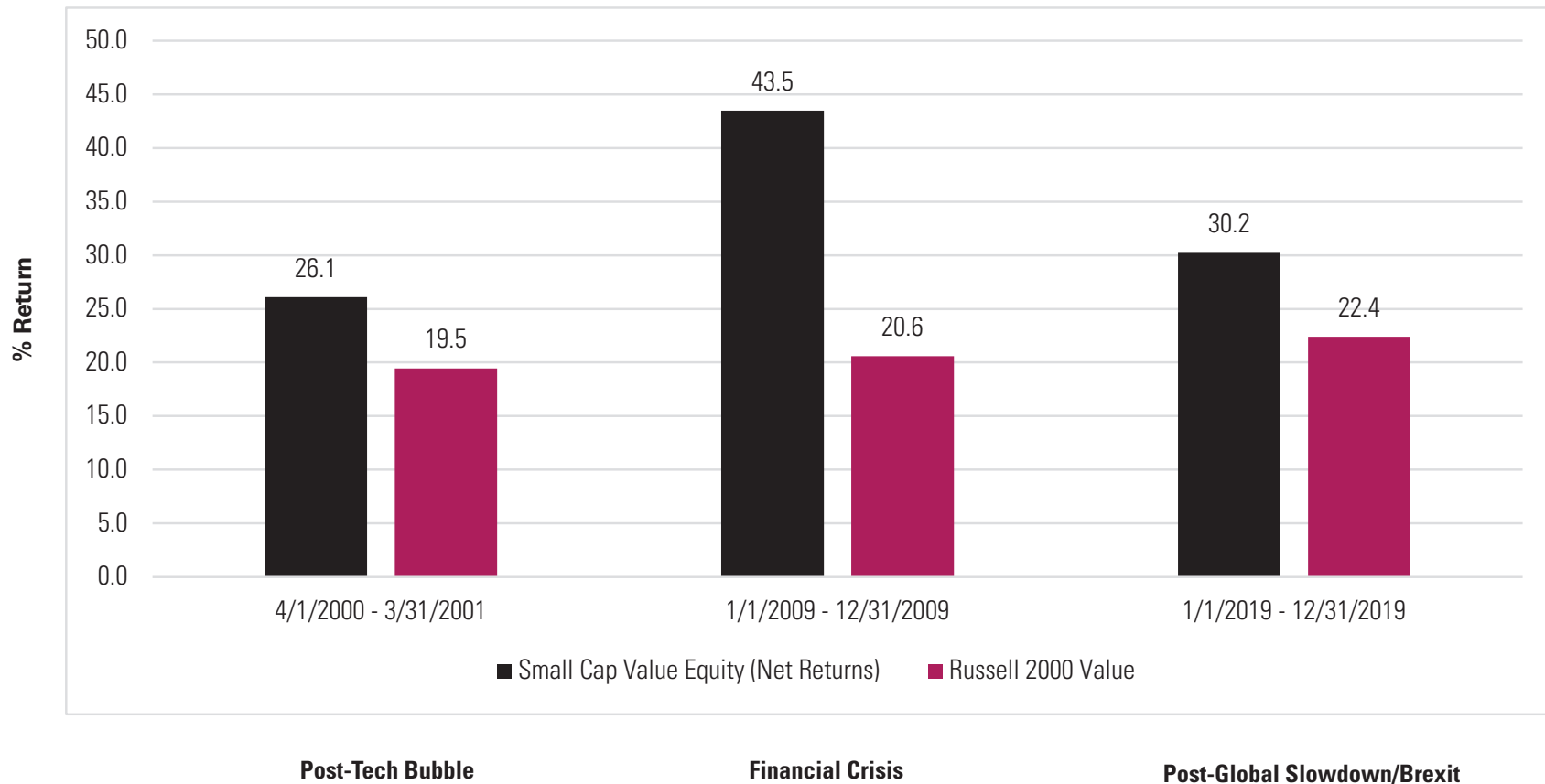
Source: The Leuthold Group.

Past performance is not an indication of future results. Please refer to the appendix for other important disclosures.

093022 SC PR-006

Sticking to our Process has Paid Off After Extreme Market Environments

Boston Partners Small Cap Value Equity Composite (Net of Fee) and Russell 2000® Value Index



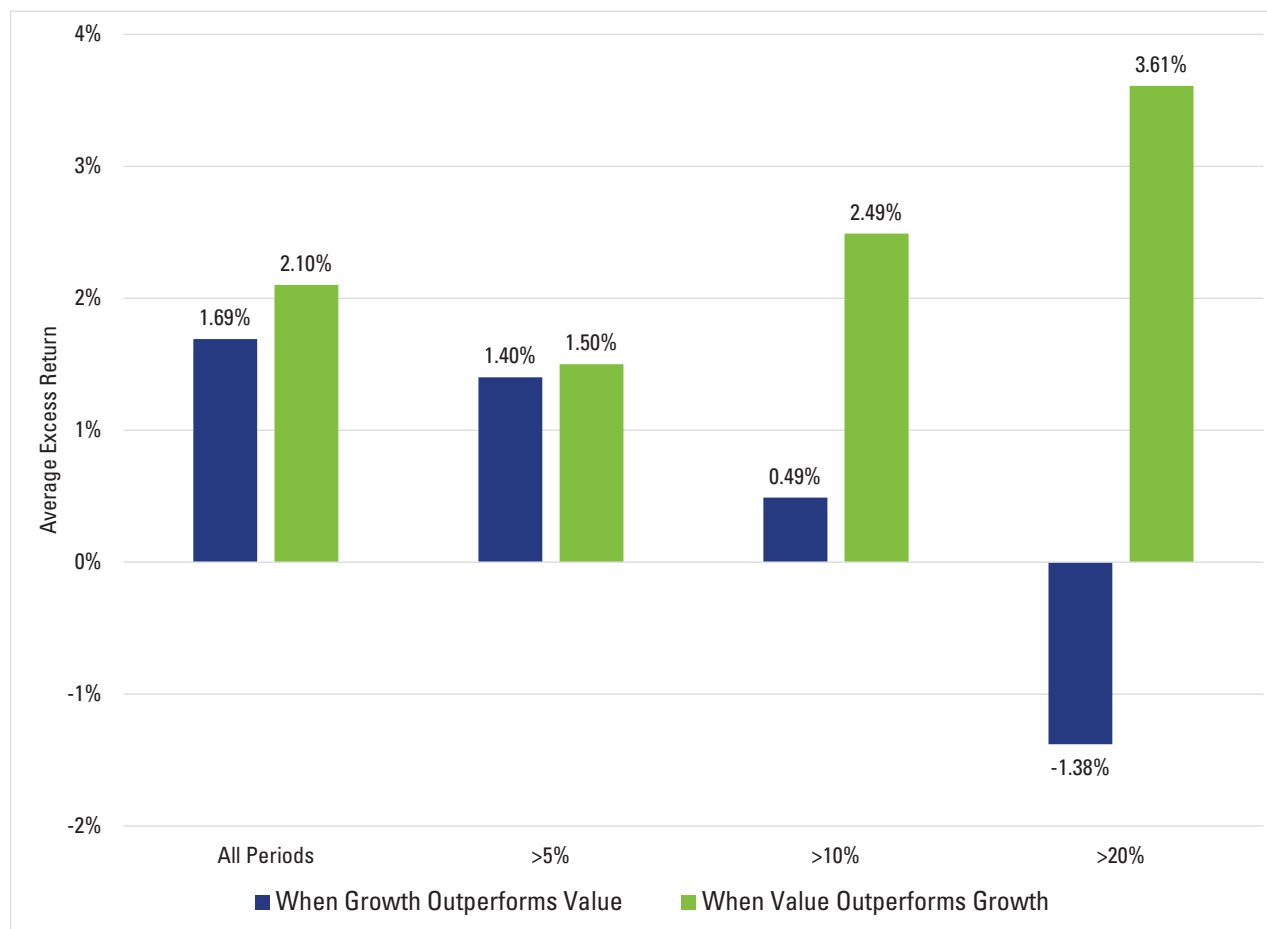
Source: Boston Partners and FactSet.

Returns reflect composite results. Past performance is not an indication of future results. A GIPS® compliant report is contained herein. Please refer to the appendix for other important disclosures.

093020 SC PR-010

Does Boston Partners Offer Genuine Value?

Average Annual Excess Returns of Boston Partners Small Cap Value vs. Russell 2000® Value Index
July 1995 – September 2022



Data as of September 30, 2022. Returns for the 1-year period as of September 30, 2022 are preliminary and unaudited.

Source: Morningstar Direct; Boston Partners.

Russell 2000® Growth Index and Russell 2000® Value Index were used to measure growth versus value in the chart above.

The data above includes all monthly rolling 1-year periods from July 1, 1995 through September 30, 2022. Timeline returns, other than those noted, reflect composite results, net of fees and individual portfolio results will vary. A GIPS® compliant report is contained herein. Past performance is not an indication of future results. Performance for periods over one year are annualized. Please refer to the appendix for other important disclosures.

093022 SC PR-010

Investment Performance - Small Cap Value

As of November 30, 2022

Annualized Performance (%)

	3Q 2022	YTD 2022	1 Year	3 Year	5 Year	10 Year	20 Year	25 Year	Since Inception*
Small Cap Value - Gross of Fees	-6.22	-5.85	-1.38	8.06	6.39	10.26	11.12	10.05	12.28
Small Cap Value - Net of Fees	-6.37	-6.43	-2.04	7.34	5.67	9.47	10.26	9.18	11.41
Russell 2000® Value Index	-4.61	-8.48	-4.75	8.33	5.35	9.67	9.12	8.14	9.55

Calendar Year Performance (%)

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Small Cap Value - Gross of Fees	26.90	3.12	31.15	-15.69	11.29	25.63	-3.77	4.76	35.27	22.85
Small Cap Value - Net of Fees	26.12	2.41	30.22	-16.27	10.49	24.69	-4.53	3.93	34.21	21.85
Russell 2000® Value Index	28.27	4.63	22.39	-12.86	7.84	31.74	-7.47	4.22	34.52	18.05

*Inception date is July 1, 1995.

Boston Partners has prepared and presented this report in compliance with the GIPS®. Returns reflect composite results and individual portfolio results will vary. Performance for periods over one year are annualized. Past performance is not an indication of future results. Please refer to the appendix for other important disclosures.

Performance (%)																		
	3Q 2022	YTD 2022	1 Year	3 Year	5 Year	10 Year	15 Year	Since Inception*	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Large Cap Value - Gross of Fees	-4.84	0.61	7.48	11.70	9.37	12.26	9.03	10.87	31.03	2.59	24.18	-8.70	20.07	14.74	-4.08	11.85	37.14	21.27
Large Cap Value - Net of Fees	-4.92	0.32	7.14	11.35	9.03	11.91	8.65	10.50	30.63	2.27	23.79	-8.99	19.71	14.40	-4.37	11.49	36.64	20.66
Russell 1000® Value Index	-5.62	-3.65	2.42	8.40	7.86	10.97	7.18	9.31	25.16	2.80	26.54	-8.27	13.66	17.34	-3.83	13.45	32.53	17.51
S&P 500® Index	-4.88	-13.10	-9.21	10.91	10.98	13.34	9.19	9.72	28.71	18.40	31.49	-4.38	21.83	11.96	1.38	13.69	32.39	16.00
Concentrated Large Cap Value - Gross of Fees	-3.85	5.04	12.34	14.21	11.12	-	-	12.42	33.67	2.74	26.11	-8.86	13.71	-	-	-	-	-
Concentrated Large Cap Value - Net of Fees	-4.01	4.44	11.63	13.48	10.38	-	-	11.67	32.87	2.03	25.23	-9.51	13.32	-	-	-	-	-
Russell 1000® Value Index	-5.62	-3.65	2.42	8.40	7.86	-	-	8.59	25.16	2.80	26.54	-8.27	8.61	-	-	-	-	-
Premium Equity - Gross of Fees	-4.54	2.48	9.18	12.19	9.71	13.51	10.46	12.78	26.81	5.38	28.88	-11.06	18.91	15.73	1.71	13.22	39.73	16.27
Premium Equity - Net of Fees	-4.70	1.85	8.46	11.50	9.04	12.86	9.85	12.20	26.05	4.78	28.12	-11.60	18.22	15.08	1.15	12.65	39.04	15.72
Russell 3000® Value Index	-5.56	-3.96	1.95	8.39	7.68	10.88	7.19	9.32	25.37	2.87	26.26	-8.58	13.19	18.40	-4.13	12.70	32.69	17.55
S&P 500® Index	-4.88	-13.10	-9.21	10.91	10.98	13.34	9.19	9.72	28.71	18.40	31.49	-4.38	21.83	11.96	1.38	13.69	32.39	16.00
Mid Cap Value - Gross of Fees	-4.30	-2.20	4.53	11.08	8.68	13.36	11.17	12.98	28.03	6.55	31.26	-14.03	16.55	16.29	2.84	14.37	41.04	19.78
Mid Cap Value - Net of Fees	-4.38	-2.47	4.21	10.72	8.32	12.97	10.65	12.35	27.63	6.18	30.80	-14.33	16.16	15.90	2.49	14.00	40.48	18.90
Russell Midcap® Value Index	-4.93	-7.32	-1.50	8.76	7.09	10.97	8.26	10.82	28.34	4.96	27.06	-12.29	13.34	20.00	-4.78	14.75	33.46	18.51

* Inception dates are as follows: Large Cap Value is June 1, 1995; Concentrated Large Cap Value is July 1, 2017; Premium Equity is June 1, 1995; and Mid Cap Value is May 1, 1995. Boston Partners has prepared and presented this report in compliance with the GIPS®. Returns reflect composite results and individual portfolio results will vary. Performance for periods over one year are annualized. Past performance is not an indication of future results. Please refer to the back for other important disclosures.

Boston Partners

Investment Performance as of November 30, 2022 (continued)

Performance (%)																		
	3Q 2022	YTD 2022	1 Year	3 Year	5 Year	10 Year	15 Year	Since Inception*	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Small/Mid Cap Value - Gross of Fees	-6.03	-3.97	1.02	9.64	6.70	10.71	9.42	10.82	27.64	4.49	31.79	-18.56	13.64	25.35	-3.06	5.34	35.33	23.97
Small/Mid Cap Value - Net of Fees	-6.16	-4.49	0.43	9.00	6.06	10.01	8.66	10.04	26.90	3.87	31.01	-19.08	12.90	24.51	-3.71	4.65	34.37	23.08
Russell 2500™ Value Index	-4.50	-7.59	-2.78	8.46	6.13	9.94	7.79	9.58	27.78	4.88	23.56	-12.36	10.36	25.20	-5.49	7.11	33.32	19.21
Russell 2500™ Index	-2.82	-13.21	-10.36	7.92	7.27	10.99	8.50	9.45	18.18	19.99	27.77	-10.00	16.81	17.59	-2.90	7.07	36.80	17.88
Small Cap Value - Gross of Fees	-6.22	-5.85	-1.38	8.06	6.39	10.26	9.48	12.28	26.90	3.12	31.15	-15.69	11.29	25.63	-3.77	4.76	35.27	22.85
Small Cap Value - Net of Fees	-6.37	-6.43	-2.04	7.34	5.67	9.47	8.64	11.41	26.12	2.41	30.22	-16.27	10.49	24.69	-4.53	3.93	34.21	21.85
Russell 2000® Value Index	-4.61	-8.48	-4.75	8.33	5.35	9.67	7.23	9.55	28.27	4.63	22.39	-12.86	7.84	31.74	-7.47	4.22	34.52	18.05
Russell 2000® Index	-2.19	-14.91	-13.01	6.44	5.45	10.13	7.64	8.59	14.82	19.96	25.52	-11.01	14.65	21.31	-4.41	4.89	38.82	16.35
Small Cap Value II - Gross of Fees	-5.26	-5.54	-0.96	8.01	6.15	10.48	9.40	11.59	26.95	2.37	29.43	-15.38	11.05	27.35	-3.27	5.35	36.53	24.54
Small Cap Value II - Net of Fees	-5.50	-6.39	-1.93	6.98	5.14	9.45	8.34	10.45	25.70	1.45	28.18	-16.19	10.05	26.21	-4.19	4.37	35.28	23.42
Russell 2000® Value Index	-4.61	-8.48	-4.75	8.33	5.35	9.67	7.23	8.00	28.27	4.63	22.39	-12.86	7.84	31.74	-7.47	4.22	34.52	18.05
Long/Short Equity - Gross of Fees	-5.26	9.19	19.64	13.33	7.18	8.31	11.61	12.22	35.18	-4.03	11.75	-13.34	5.41	25.71	1.15	7.16	10.37	15.40
Long/Short Equity - Net of Fees	-5.33	8.53	18.83	12.36	6.19	7.22	10.18	9.94	33.92	-4.94	10.70	-14.22	4.30	24.03	0.17	6.04	9.17	14.06
S&P 500® Index	-4.88	-13.10	-9.21	10.91	10.98	13.34	9.19	7.89	28.71	18.40	31.49	-4.38	21.83	11.96	1.38	13.69	32.39	16.00
Long/Short Research - Gross of Fees	-2.66	8.53	14.17	9.02	5.90	7.67	7.48	7.65	25.45	-6.79	14.16	-9.37	11.63	5.21	3.02	8.68	19.70	14.73
Long/Short Research - Net of Fees	-3.01	7.13	12.56	7.55	4.52	6.31	6.13	6.31	23.67	-7.92	12.75	-10.50	10.27	3.91	1.74	7.34	18.23	13.32
S&P 500® Index	-4.88	-13.10	-9.21	10.91	10.98	13.34	9.19	8.45	28.71	18.40	31.49	-4.38	21.83	11.96	1.38	13.69	32.39	16.00
HFRI Equity Hedge Total Index	-2.34		-	-	-	-	-	-	11.67	17.90	13.69	-7.14	13.29	5.47	-0.97	1.81	14.27	7.41

* Inception dates are as follows: Small/Mid Cap Value is April 1, 1999; Small Cap Value is July 1, 1995; Small Cap Value II is July 1, 1998; Long/Short Equity is August 1, 1997; and Long/Short Research is April 1, 2002. Boston Partners has prepared and presented this report in compliance with the GIPS®. Returns reflect composite results and individual portfolio results will vary. Performance for periods over one year are annualized. Past performance is not an indication of future results. Please refer to the back for other important disclosures.

Performance (%)																	
	3Q 2022	YTD 2022	1 Year	3 Year	5 Year	10 Year	Since Inception*	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Global Equity - Gross of Fees	-6.92	-0.42	6.39	10.29	6.73	10.45	8.18	23.27	5.88	20.07	-12.50	21.53	9.47	1.89	5.54	35.12	17.26
Global Equity - Net of Fees	-7.04	-0.90	5.83	9.67	6.08	9.70	7.41	22.63	5.23	19.27	-13.10	20.67	8.65	1.11	4.74	34.11	16.37
MSCI World Index - Net	-	-14.51	-10.86	7.53	7.35	9.53	6.77	21.82	15.90	27.67	-8.71	22.40	7.51	-0.87	4.94	26.68	15.83
MSCI World Value Index - Net	-	-4.16	2.14	5.98	4.94	7.80	5.47	21.94	-1.16	21.75	-10.78	17.10	12.33	-4.82	3.69	26.62	15.51
International Equity - Gross of Fees	-9.95	-4.52	1.95	6.28	2.24	6.56	4.30	14.09	5.46	16.69	-18.07	26.38	0.76	3.54	-3.65	31.47	18.67
International Equity - Net of Fees	-10.11	-5.14	1.23	5.54	1.52	5.79	3.52	13.29	4.74	15.86	-18.67	25.48	0.01	2.77	-4.37	30.51	17.79
MSCI EAFE Index - Net	-	-14.52	-10.14	1.92	1.85	4.99	2.70	11.26	7.82	22.01	-13.79	25.03	1.00	-0.81	-4.90	22.78	17.32
MSCI EAFE Value Index - Net	-	-6.76	-1.21	1.43	0.22	3.79	1.81	10.89	-2.63	16.09	-14.78	21.44	5.02	-5.68	-5.39	22.95	17.69
Global Long/Short - Gross of Fees	-1.91	17.21	23.99	13.49	7.29	-	7.61	20.58	1.75	6.29	-7.68	9.60	4.34	8.73	4.36	8.96	-
Global Long/Short - Net of Fees	-2.40	15.10	21.56	11.26	5.17	-	5.53	18.22	-0.25	4.19	-9.53	7.44	2.28	6.59	2.55	8.02	-
MSCI World Index - Net	-	-14.51	-10.86	7.53	7.35	-	8.99	21.82	15.90	27.67	-8.71	22.40	7.51	-0.87	4.94	16.83	-
MSCI World Value Index - Net	-	-4.16	2.14	5.98	4.94	-	6.96	21.94	-1.16	21.75	-10.78	17.10	12.33	-4.82	3.69	15.74	-
HFRI Equity Hedge Total Index	-		-	-	-	-		11.67	17.90	13.69	-7.14	13.29	5.47	-0.97	1.81	8.98	-

* Inception dates are as follows: Global Equity is July 1, 2008; International Equity is July 1, 2008; and Global Long/Short is July 1, 2013. Boston Partners has prepared and presented this report in compliance with the GIPS®. Returns reflect composite results and individual portfolio results will vary. Performance for periods over one year are annualized. Past performance is not an indication of future results. Please refer to the back for other important disclosures.

Performance (%)													
	3Q 2022	YTD 2022	1 Year	3 Year	5 Year	Since Inception*	2021	2020	2019	2018	2017	2016	2015
Emerging Markets Dynamic Equity - Gross of Fees	8.54	-1.54	-1.44	3.61	1.79	4.62	-4.25	13.43	19.53	-16.64	27.89	8.08	-3.67
Emerging Markets Dynamic Equity - Net of Fees	8.22	-2.59	-2.58	2.39	0.48	2.98	-5.37	12.08	17.82	-17.87	25.69	5.69	-5.47
MSCI Emerging Markets Index - Net	-11.57	-18.95	-17.43	0.14	-0.42	2.20	-2.54	18.31	18.42	-14.57	37.28	11.19	-17.97
HFRI Equity Hedge Total Index	-2.34		-	-	-		11.67	17.90	13.69	-7.14	13.29	5.47	-2.60
Emerging Markets - Gross of Fees	-6.20	-16.15	-14.19	0.59	0.25	2.12	-2.51	15.69	29.91	-20.32	14.45	-	-
Emerging Markets - Net of Fees	-6.42	-16.88	-15.00	-0.31	-0.67	1.18	-3.43	14.73	28.69	-21.09	13.33	-	-
MSCI Emerging Markets Index - Net	-11.57	-18.95	-17.43	0.14	-0.42	1.70	-2.54	18.31	18.42	-14.57	15.92	-	-

* Inception dates are as follows: Emerging Markets Dynamic Equity is March 1, 2015; Emerging Markets Equity is July 1, 2017. Boston Partners has prepared and presented this report in compliance with the GIPS®. Returns reflect composite results and individual portfolio results will vary. Performance for periods over one year are annualized. Past performance is not an indication of future results. Please refer to the back for other important disclosures.

Boston Partners Global Investors, Inc. ("Boston Partners") is an Investment Adviser registered with the Securities and Exchange Commission under the Investment Advisers Act of 1940. Registration does not imply a certain level of skill or training. Boston Partners is an indirect, wholly owned subsidiary of ORIX Corporation of Japan ("ORIX"). Boston Partners updated its firm description as of November 2018 to reflect changes in its divisional structure. Boston Partners is comprised of two divisions, Boston Partners and Weiss, Peck & Greer Partners ("WPG").

Boston Partners claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS®. Boston Partners has been independently verified for the periods 2007 through 2020. Before then, Boston Partners Asset Management ("BPAM"), the previous entity name, and WPG were independently verified on an annual basis from 1995 through 2006 and 1993 through 2006, respectively. A firm that claims compliance with the GIPS® must establish policies and procedures for complying with all the applicable requirements of the GIPS®. Verification provides assurance on whether a 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® and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report.

The composites have had a performance examination for the following periods: Boston Partners Large Cap Value Equity, 1995 to 2020; Boston Partners Premium Equity, 1995 to 2020; Boston Partners Mid Cap Value Equity, 1995 to 2006 and 2010 to 2020; Boston Partners Small/Mid Cap Value Equity, 1999 to 2020; Boston Partners Small Cap Value Equity, 1995 to 2020; Boston Partners Small Cap Value II Equity, 1998 to 2020; Boston Partners Long/Short Research, 2011 to 2020; Boston Partners Global Equity II, 2012 to 2020; Boston Partners International Equity II, 2008 to 2020; Boston Partners Global Long/Short, 2013 to 2020; Boston Partners Emerging Markets Dynamic Equity, 2016 to 2020; Boston Partners Emerging Markets Equity, 2020; and Boston Partners Global Sustainability composite, 2020. The verification and performance examination reports are available upon request. A list of composite descriptions is available upon request. GIPS® is a registered trademark of the CFA Institute. CFA Institute does not endorse or promote this

organization, nor does it warrant the accuracy or quality of the content contained herein.

Past performance is not indicative of future results. This document is not an offering of securities nor is it intended to provide investment advice. It is intended for informational purposes only.

Composite Construction(s)

Performance results attained at Boston Partners are linked to the results achieved at BPAM beginning on January 1, 2007 in compliance with the GIPS® standards on performance record portability. Composites include all separately managed and commingled vehicles, fully discretionary, fee-paying accounts under management with a similar investment mandate. Prior to January 1, 2007 the minimum account size for inclusion in all the composites in existence noted above was \$5 million. After January 1, 2007, the minimum account size for composite inclusion was lowered to \$1 million for all composites, except for the Boston Partners Small Cap Value Equity and Small Cap Value II Equity composites; the account minimum for inclusion remained at \$5 million for those composites. No composites have a minimum account size for inclusion as of June 1, 2019. Some composites contain proprietary assets.

The inception and creation date of the Boston Partners Large Cap Value Equity composite is June 1, 1995. The strategy is composed of securities with market capitalizations primarily greater than \$3 billion and is benchmarked against Russell 1000® Value Index and the S&P 500 Index (secondary). Prior to December 1, 1995, there was no minimum market value requirement for inclusion in the Boston Partners Large Cap Value Equity composite. Accounts that did not meet the established minimum balance requirement on that date were removed.

The inception and creation date of the Boston Partners Large Cap Concentrated Equity composite is July 1, 2017. Under normal market conditions, the strategy is composed of 35 – 40 securities with market capitalizations primarily in the same capitalization range as the Russell 1000® Value Index. The composite is benchmarked against the Russell 1000® Value Index.

The inception and creation date of the Boston Partners Premium Equity composite is June 1, 1995. The strategy is a hybrid of Boston Partners' other equity products. It has the flexibility to invest across the capitalization spectrum and to invest in securities with equity-like return and risk profiles.

Boston Partners Premium Equity is benchmarked against the Russell 3000® Value Index and the S&P 500 Index (secondary). The inception and creation date of the Boston Partners Mid Cap Value Equity composite is May 1, 1995. Effective March 1, 2006, the Mid Cap Value Equity strategy is composed of securities primarily in the same market capitalization range, at time of purchase, as the Russell Midcap® Value Index. Effective January 1, 2005, the Boston Partners Mid Cap Value composite revised its benchmark from the Russell 2500™ Value Index to the Russell Midcap® Value Index. The Russell Midcap® Value Index has less of a bias toward smaller capitalization stocks and thus more accurately reflects the composition of Boston Partners holdings.

The inception and creation date of the Boston Partners Small/Mid Cap Value Equity composite is April 1, 1999. The strategy is generally composed of securities with market capitalizations, at the time of purchase, in the same market capitalization range as the Russell 2500™ Index. The composite is benchmarked against the Russell 2500™ Value Index. The Russell 2500™ Index is presented as supplemental information.

The inception and creation date of the Boston Partners Small Cap Value Equity composite is July 1, 1995. The strategy is generally composed of securities with market capitalizations, at the time of purchase, in the same market capitalization range as the Russell 2000® Index. The composite is benchmarked against the Russell 2000® Value Index. The Russell 2000® Index is presented as supplemental information. The inception date of the Boston Partners Small Cap Value II Equity composite is July 1, 1998. The composite was created in 2000. The strategy is generally composed of securities with market capitalizations, at the time of purchase, in the same market capitalization range as the Russell 2000® Index and in accordance with the product's selective investment in micro cap companies. The composite is benchmarked against the Russell 2000® Value Index.

The inception date and creation date of the Boston Partners Long/Short Equity composite is August 1, 1997. The strategy is an absolute return product that balances long and short portfolio strategies and seeks to achieve stable absolute returns with approximately half the risk of the S&P 500. However, this product is not risk neutral. It is exposed to style, capitalization, sector and short-implementation risks. Prior to October 1, 1998, the composite was managed on a non-fee paying basis. Participant results would have been

substantially different if fee waivers were not applied. The composite is benchmarked against the S&P 500 Index and the Russell 3000® Value/Russell 3000® Growth for comparative purposes only since the strategy is not correlated to equity market returns.

The inception and creation date of the **Boston Partners Long/Short Research Equity** composite is April 1, 2002. This strategy is an absolute return product that balances long and short portfolio strategies and seeks to achieve stable absolute returns with approximately half the risk of the S&P 500 Index. The strategy is benchmarked against the S&P 500 Index. The HFRI Equity Hedge (Total) Index is presented as supplemental information.

The inception and creation date of the **Boston Partners Global Equity II** composite is July 1, 2008. This strategy is unconstrained and primarily invests in equity securities in the global market without using hedges on currency. The strategy is benchmarked against the MSCI World Index-Net. Prior to August 1, 2017, the strategy was benchmarked to the MSCI World Index. Non-performance related statistics are measured against the MSCI World Index. The MSCI World Value Index-Net and the MSCI ACWI Index-Net are presented as supplemental information.

The inception date and creation date of the **Boston Partners International Equity II** composite is July 1, 2008. This strategy is unconstrained and primarily invests in non-U.S. markets without using currency hedges. The strategy is benchmarked against the MSCI EAFE Index-Net as of August 1, 2017. From July 1, 2008 to June 30, 2010 the primary benchmark was MSCI EAFE Value Index and on July 1, 2010 the primary benchmark changed to the MSCI EAFE Index. This change to the MSCI EAFE Index was made retroactively to July 1, 2008. Non-performance related statistics are measured against the MSCI EAFE Index. The MSCI EAFE Value Index-Net and the MSCI ACWI ex U.S. Index-Net are presented as supplemental information.

The inception and creation date of the **Boston Partners Global Long/Short Equity** composite is July 1, 2013. The strategy is composed of securities with market capitalizations primarily greater than \$50 million and is benchmarked against the MSCI World Index-Net. Non-performance related statistics are measured against the MSCI World Index. Prior to August 1, 2017, the strategy was benchmarked to the MSCI World Index. The MSCI World Value Index-Net and the HFRI Equity Hedge (Total) Index are presented as supplemental information.

The inception and creation of the **Boston Partners Emerging Markets Dynamic Equity** composite is March 1, 2015. The strategy is composed of securities with market capitalizations primarily greater than \$250 million and is benchmarked against the MSCI Emerging Markets Index-Net. Non-performance related statistics are measured against the MSCI Emerging Markets Index. Prior to August 1, 2017, the strategy was benchmarked to the MSCI Emerging Markets Index. The HFRI Equity Hedge (Total) Index is presented as supplemental information.

The inception and creation of the **Boston Partners Emerging Markets Equity** composite is July 1, 2017. The strategy is composed of securities with market capitalizations primarily greater than \$250 million and is benchmarked against the MSCI Emerging Markets Index-Net. Prior to August 1, 2017, the strategy was benchmarked to the MSCI Emerging Markets Index. Non-performance related statistics are measured against the MSCI Emerging Markets Index.

The inception date and creation date of the **Boston Partners Global Sustainability Composite** is November 1, 2019. This strategy is unconstrained and primarily invests in equity securities in the global market without using hedges on currency. The strategy is benchmarked against the MSCI World Index-Net. Non-performance related statistics are against MSCI World Index. The MSCI ACWI Index-Net is presented as supplemental information.

Benchmarks

Index returns are provided for comparison purposes only to show how the composite's returns compare to a broad-based index of securities, as the indices do not have costs, fees, or other expenses associated with their performance. In addition, securities held in indices may not be similar to securities held in the composite's accounts.

The S&P 500® Index is an unmanaged index of the common stocks of 500 widely held U.S. companies.

All Russell® Indices are registered trademarks of the Frank Russell Company. The Russell® Value Indices typically measure the performance of universes of stocks displaying low price-to-book ratios and low forecasted growth values. The Russell® Growth Indices typically measure the performance of universes of stocks displaying high price-to-book ratios and high forecasted growth values. The Russell 1000® Index measures the performance of the large-cap segment of the U.S. equity universe. It includes the 1,000 largest companies in the Russell 3000® Index. The Russell 3000® Index measures

performance of the 3,000 largest U.S. companies based on total market capitalization. The Russell 2500™ and 2000® Indices measure performance of the 2,500 and 2,000 smallest companies in the Russell 3000® Index respectively. The Russell Midcap® Index measures the performance of the 800 smallest companies in the Russell 1000® Index.

The MSCI Indices cover the full range of developed, emerging and All Country MSCI International Equity Indices across all size segmentations. MSCI style indices use a multi-factor approach, which uses three variables (book value to price, 12-month forward earnings to price and dividend yield) to define the value investment style characteristics and five variables (long-term forward earnings per share ("EPS") growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend) to define the growth investment style characteristics. The MSCI EAFE Index captures large and mid-cap equities across developed markets around the world, excluding the U.S. and Canada. The MSCI World Index represents large and mid-cap equity performance across 23 developed markets countries, covering approximately 85% of the free float-adjusted market capitalization in each. The MSCI Emerging Markets Index captures large and mid cap representation across 27 emerging market countries covering approximately 85% of the free float-adjusted market capitalization in each country. The MSCI ACWI (All Country World Index) captures both the MSCI World and MSCI Emerging Markets Index covering approximately 85% of the global investable equity opportunity set. The MSCI ACWI ex-U.S. Index excludes the equity opportunity set within the U.S. The HFRI Equity Hedge (Total) Index constituent funds typically maintain at least 50% exposure to, and may in some cases be entirely invested in, equities or equity derivative securities, both long and short. Constituents use a wide variety of investment processes and techniques, net exposure levels, leverage employed, holding periods, market capitalizations concentrations, and valuation ranges. Data cannot be shared or distributed without written consent.

Net total return indexes reinvest dividends after the deduction of withholding taxes, using (for international indexes) a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

Boston Partners

Performance disclosures (continued)

Calculation Methodology

Composite account returns are asset value weighted using beginning of month asset values and composite account returns are calculated on a total return, time-weighted basis using trade date valuations. Composite returns are geometrically linked on a monthly basis. Effective January 1, 2011, Boston Partners adopted a significant cash flow policy. Accounts are temporarily removed from the composite when a significant external cash flow occurs, which is typically defined as a flow that is greater than or equal to 10% of the beginning market value of an account on the day of the flow; and greater than or equal to 10% of the beginning market value of the composite for that month. An account is generally added back to the composite as of the first full month following the significant cash flow. Returns reflect the reinvestment of dividends and other earnings and are expressed in U.S. Dollars unless otherwise noted. Additional information regarding policies for valuing accounts, calculating performance, and preparing compliant reports is available upon request.

Fees and Expenses

Composite returns are provided on a gross and net of fee basis. Composite account returns will be reduced by any fees and expenses incurred in the management of the account. Net of fee composite returns are asset weighted and reflect the deduction of management fees, which may include performance-based fees, commissions and transaction costs, and are calculated by deducting actual fees charged to the accounts in a composite. Gross composite returns are calculated by deducting commissions and transaction costs charged to accounts in a composite. Fees are applied to gross returns at month end. Actual fees may vary depending on the applicable fee schedule and account size. Additional information regarding policies for valuing accounts, calculating performance, and preparing compliant reports is available upon request. Investment advisory fees are listed herein and are fully described in Boston Partners' Form ADV, Part 2.

Composite Dispersion

The measurement of composite dispersion is calculated by the weighted average standard deviation of the annual account gross-of-fee returns within the composite. Dispersion in composites with less than five accounts included for the entire year is not considered meaningful and is denoted with "N/A". Prior to January 1, 2007, the measurement of composite

dispersion was calculated by determining the difference between the highest and lowest annual account returns within the composite. The three-year annualized standard deviation measures the variability of the composite and the benchmark returns over the preceding 36-month period. This calculation has been adopted effective with the period ended December 31, 2011.

Large Cap Value:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev. ¹	Bench. 3-Yr. Std. Dev. ²	% of Firm AUM
2020:	105	\$ 20.7 bn	0.27%	20.91%	19.62%	18.53%	27%
2019:	133	\$ 25.3 bn	0.29%	12.48%	11.85%	11.94%	28%
2018:	142	\$ 22.4 bn	0.19%	12.16%	10.82%	10.80%	27%
2017:	141	\$ 25.4 bn	0.33%	11.57%	10.20%	9.92%	26%
2016:	156	\$ 25.3 bn	0.23%	11.95%	10.77%	10.59%	29%
2015:	167	\$ 24.6 bn	0.16%	11.28%	10.68%	10.47%	31%
2014:	151	\$ 25.2 bn	0.11%	9.83%	9.20%	8.98%	34%
2013:	129	\$ 16.5 bn	0.62%	13.77%	12.70%	11.94%	32%
2012:	105	\$ 8.6 bn	0.24%	16.50%	15.51%	15.09%	30%
2011:	99	\$ 5.1 bn	0.23%	20.03%	20.69%	18.71%	24%

¹Russell 1000[®] Value Index ²S&P 500 Index

Concentrated Large Cap Value:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	2	\$ 23 mm	n/a	20.77%	19.62%	0%
2019:	1	\$ 8 mm	n/a	n/a	n/a	0%
2018:	1	\$ 4 mm	n/a	n/a	n/a	0%
2017*:	1	\$ 3 mm	n/a	n/a	n/a	0%

* 2017 performance period is from July 1.

Premium Equity:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev. ¹	Bench. 3-Yr. Std. Dev. ²	% of Firm AUM
2020:	30	\$ 3.6 bn	0.32%	21.45%	19.95%	18.53%	5%
2019:	37	\$ 4.1 bn	0.12%	13.35%	12.01%	11.94%	5%
2018:	36	\$ 3.7 bn	0.11%	12.58%	11.06%	10.80%	5%
2017:	35	\$ 4.3 bn	0.17%	11.47%	10.33%	9.92%	4%
2016:	35	\$ 3.4 bn	0.10%	12.30%	10.97%	10.59%	4%
2015:	35	\$ 3.3 bn	0.09%	11.46%	10.74%	10.47%	4%
2014:	29	\$ 3.1 bn	0.14%	9.92%	9.36%	8.98%	4%
2013:	29	\$ 2.7 bn	0.53%	13.76%	12.90%	11.94%	5%
2012:	26	\$ 2.2 bn	0.17%	16.17%	15.81%	15.09%	7%
2011:	24	\$ 2.0 bn	0.19%	19.37%	21.04%	18.71%	9%

¹Russell 3000[®] Value Index ²S&P 500 Index

Mid Cap Value:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	36	\$ 17.8 bn	0.05%	22.45%	22.62%	23%
2019:	40	\$ 20.1 bn	0.04%	13.25%	12.79%	22%
2018:	41	\$ 16.0 bn	0.16%	13.26%	11.96%	20%
2017:	36	\$ 20.9 bn	0.09%	11.56%	10.33%	21%
2016:	35	\$ 18.5 bn	0.09%	12.45%	11.30%	21%
2015:	37	\$ 15.3 bn	0.01%	10.97%	10.71%	20%
2014:	29	\$ 11.6 bn	0.12%	10.27%	9.81%	16%
2013:	16	\$ 7.6 bn	0.24%	14.83%	13.69%	15%
2012:	9	\$ 2.9 bn	0.01%	17.76%	16.76%	10%
2011:	4	\$ 1.0 bn	n/a	21.35%	22.78%	5%

Small/Mid Cap Value:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	21	\$ 1.7 bn	0.11%	27.83%	25.05%	2%
2019:	19	\$ 1.5 bn	0.08%	15.66%	14.23%	2%
2018:	20	\$ 1.1 bn	0.19%	14.64%	13.58%	1%
2017:	18	\$ 1.3 bn	0.30%	12.72%	11.81%	1%
2016:	18	\$ 1.0 bn	0.14%	13.90%	13.17%	1%
2015:	13	\$ 814 mm	0.14%	12.21%	12.02%	1%
2014:	10	\$ 499 mm	0.08%	11.65%	11.25%	1%
2013:	7	\$ 481 mm	0.13%	15.30%	15.07%	1%
2012:	7	\$ 367 mm	0.08%	18.30%	18.41%	1%
2011:	7	\$ 327 mm	0.10%	23.85%	24.23%	2%

Small Cap Value:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	18	\$ 1.5 bn	0.52%	27.43%	26.12%	2%
2019:	20	\$ 1.6 bn	0.34%	15.31%	15.68%	2%
2018:	20	\$ 1.3 bn	0.24%	14.79%	15.76%	2%
2017:	20	\$ 1.4 bn	0.14%	13.46%	13.97%	1%
2016:	19	\$ 1.2 bn	0.21%	14.71%	15.50%	1%
2015:	19	\$ 1.0 bn	0.19%	13.03%	13.45%	1%
2014:	18	\$ 1.1 bn	0.26%	12.36%	12.79%	2%
2013:	16	\$ 1.1 bn	0.56%	15.69%	15.82%	2%
2012:	16	\$ 957 mm	0.20%	18.66%	19.89%	3%
2011:	17	\$ 923 mm	0.08%	24.94%	26.05%	4%

Boston Partners

Performance disclosures (continued)

Small Cap Value II:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	2	\$754 mm	n/a	27.47%	26.12%	1%
2019:	3	\$720 mm	n/a	15.37%	15.68%	1%
2018:	3	\$597 mm	n/a	14.78%	15.76%	1%
2017:	4	\$935 mm	n/a	13.21%	13.97%	1%
2016:	4	\$878 mm	n/a	14.36%	15.50%	1%
2015:	3	\$478 mm	n/a	12.78%	13.45%	1%
2014:	4	\$444 mm	n/a	12.11%	12.79%	1%
2013:	4	\$370 mm	n/a	15.63%	15.82%	1%
2012:	4	\$304 mm	n/a	18.46%	19.89%	1%
2011:	5	\$272 mm	0.10%	25.12%	26.05%	1%

Long/Short Equity:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	2	\$169 mm	n/a	12.81%	18.53%	0%
2019:	2	\$311 mm	n/a	9.53%	11.93%	0%
2018:	2	\$515 mm	n/a	9.81%	10.80%	1%
2017:	2	\$1.1 bn	n/a	9.09%	9.92%	1%
2016:	2	\$1.1 bn	n/a	9.68%	10.77%	1%
2015:	2	\$687 mm	n/a	8.41%	10.47%	1%
2014:	2	\$958 mm	n/a	6.77%	8.98%	1%
2013:	2	\$965 mm	n/a	5.46%	11.94%	2%
2012:	2	\$829 mm	n/a	11.93%	15.09%	3%
2011:	2	\$626 mm	n/a	19.85%	18.71%	3%

Long/Short Research:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	2	\$967 mm	n/a	11.98%	18.53%	1%
2019:	2	\$3.1 bn	n/a	7.57%	11.94%	4%
2018:	2	\$4.9 bn	n/a	7.11%	10.80%	6%
2017:	2	\$7.4 bn	n/a	6.40%	9.92%	7%
2016:	2	\$6.9 bn	n/a	6.64%	10.59%	8%
2015:	1	\$7.2 bn	n/a	6.13%	10.47%	9%
2014:	1	\$6.0 bn	n/a	5.52%	8.98%	8%
2013:	1	\$2.9 bn	n/a	7.95%	11.94%	6%
2012:	1	\$492 mm	n/a	9.86%	15.09%	2%
2011:	1	\$97 mm	n/a	10.70%	18.71%	0%

Global Equity:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	11	\$1.6 bn	0.28%	20.80%	18.27%	2%
2019:	9	\$1.7 bn	0.15%	11.28%	11.14%	2%
2018:	9	\$1.5 bn	0.09%	11.02%	10.38%	2%
2017:	8	\$1.5 bn	0.11%	10.49%	10.23%	2%
2016:	4	\$699 mm	n/a	11.28%	10.94%	1%
2015:	3	\$438 mm	n/a	10.76%	10.80%	1%
2014:	1	\$27 mm	n/a	10.48%	10.22%	0%
2013:	2	\$66 mm	n/a	13.73%	13.52%	0%
2012:	2	\$18 mm	n/a	17.23%	16.72%	0%
2011:	1	\$8 mm	n/a	20.11%	20.15%	0%

International Equity:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	n/a	\$2.4 bn	0.08%	19.90%	17.90%	3%
2019:	n/a	\$1.8 bn	0.13%	11.41%	10.81%	2%
2018:	6	\$1.4 bn	0.05%	11.98%	11.24%	2%
2017:	5	\$1.2 bn	0.10%	11.31%	11.83%	1%
2016:	3	\$603 mm	n/a	11.81%	12.48%	1%
2015:	1	\$261 mm	n/a	11.07%	12.47%	0%
2014:	2	\$33 mm	n/a	11.77%	12.99%	0%
2013:	2	\$20 mm	n/a	14.28%	16.21%	0%
2012:	2	\$18 mm	n/a	18.16%	19.34%	0%
2011:	1	\$6 mm	n/a	21.73%	22.40%	0%

Global Long/Short:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	1	\$121 mm	n/a	10.97%	18.27%	0%
2019:	1	\$558 mm	n/a	5.24%	11.14%	1%
2018:	1	\$861 mm	n/a	5.09%	10.38%	1%
2017:	1	\$1.0 bn	n/a	4.92%	10.23%	1%
2016:	1	\$868 mm	n/a	5.33%	10.94%	1%
2015:	1	\$629 mm	n/a	n/a	n/a	1%
2014:	1	\$125 mm	n/a	n/a	n/a	0%
2013*:	1	\$3 mm	n/a	n/a	n/a	0%

* 2013 performance period is from July 1.

Emerging Markets Dynamic Equity:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	2	\$205 mm	n/a	12.51%	19.60%	0%
2019:	2	\$210 mm	n/a	10.80%	14.17%	0%
2018:	1	\$177 mm	n/a	9.48%	14.60%	0%
2017:	1	\$211 mm	n/a	n/a	n/a	0%
2016:	1	\$11 mm	n/a	n/a	n/a	0%
2015*:	1	\$3 mm	n/a	n/a	n/a	0%

* 2015 performance period is from March 1.

Emerging Markets Equity:

	# of Accts. in Comp.	Total Assets in Comp.	Comp. Dispersion	Comp. 3-Yr. Std. Dev.	Bench. 3-Yr. Std. Dev.	% of Firm AUM
2020:	1	\$19 mm	n/a	20.56%	19.60%	0%
2019:	1	\$10 mm	n/a	n/a	n/a	0%
2018:	1	\$4 mm	n/a	n/a	n/a	0%
2017*:	1	\$3 mm	n/a	n/a	n/a	0%

* 2017 performance period is from July 1.

Firm Assets:

Year	Assets (mm)	Year	Assets (mm)
2020:	\$77,120	2015:	\$78,363
2019:	\$89,368	2014:	\$73,250
2018:	\$81,550	2013:	\$52,334
2017:	\$99,241	2012:	\$29,023
2016:	\$87,222	2011:	\$21,098

Other Disclosures

GICS (Global Industry Classification Standard) sector classification is used. All product characteristics and sector weightings are calculated using a representative account. Risk statistics are calculated using composite data. Account composition is subject to change and information contained in this publication may not be representative of the current account. Foreign investors may have taxes withheld. Investing involves risk including the risk of loss of principal. Value investing involves buying the stocks of companies that are out of favor or are undervalued. This may adversely affect an account's value and return. Stock values fluctuate in response to issuer, political, regulatory, market or economic developments. The value of small and mid-capitalization securities may be more volatile than those of larger issuers, but larger issuers could fall out of favor. Investments in foreign issuers may be more volatile than in the U.S. market, and international investing is subject to special risks including, but not limited to, currency risk associated with non - U.S. dollar denominated securities, which may be affected by fluctuations in currency exchange rates, political, social or economic instability, and differences in taxation, auditing and other financial practices. Investments in emerging markets may increase risks.

For those composites that utilize short selling, short sales theoretically involve unlimited loss potential since the market price of securities sold short may continuously increase. This may have the effect of increased leverage and constitutes the use of leverage. For those composites that utilize derivatives, derivative investments may involve risks such as potential

illiquid markets and additional risk of loss of principal. For those composites that utilize a sustainability criterion, that criterion may cause avoidance of certain industries or issuers causing over (under)weights relative to the benchmark and varying sensitivities to such industries and issuers.

Boston Partners participates in Initial Public Offerings (IPOs) as described in its Form ADV, Part 2. IPO contributions to performance vary from year to year depending on availability and prevailing market conditions. IPO contributions may have a significant positive effect on performance when initially purchased. Such positive performance should not be expected for future performance periods.

Annual Fee Schedules

Large Cap: 70 basis points ("bp") on the first \$10 million in assets; 50 bp on the next \$40 million; 40 bp on the next \$50 million; 30 bp thereafter. **Concentrated Large Cap:** 70 bp on the first \$10 million in assets; 50 bp on the next \$40 million; 40 bp on the next \$50 million; 30 bp thereafter. **Premium Equity:** 80 bp on the first \$25 million of assets; 60 bp on the next \$25 million; 50 bp on the next \$50 million; 40 bp thereafter. **Mid Cap:** 80 bp on the first \$25 million of assets; 60 bp thereafter. **Small/Mid Cap, Small Cap, and Small Cap II:** 100 bp on the first \$25 million of assets; 80 bp thereafter. **Long/Short:** 100 bp on total assets under management; plus 20% profit participation. **Long/Short Research:** 150 bp on total assets under management. **Global Equity, International Equity, and Global Sustainability:** 75 bp on the first \$25 million in assets; 65 bp on the next \$25 million; 55 bp on the next \$50 million; 50 bp thereafter. **Global Long/Short:** 200 bp on total assets under management. **Emerging Markets Dynamic Equity:** 150 bp on total assets under management. **Emerging Markets Equity:** 95 bp on the first \$25 million in assets; 85 bp on the next \$25 million; 75 bp on the next \$50 million; 70 bp thereafter.

Corporate Information

Boston Partners is affiliated with listed corporations through common ownership. ORIX Corporation Europe N.V. services may be offered in the U.S. through Robeco Institutional Asset Management, U.S., an SEC Registered Investment Adviser registered under the Investment Advisers Act of 1940. Transtrend products may be offered in the U.S. through Boston Partners Securities, LLC, member FINRA, SiPC. Boston Partners is authorized to transact as an Investment Adviser and maintains a Securities License by the Government of Guam Department of Revenue and Taxation. It also maintains a Certificate of Authority to transact business in Guam as a Foreign Corporation. In addition, Boston Partners is registered in Korea with the Financial Services Commission (FSC).

MESIROW EQUITY MANAGEMENT

MWRA Retirement System December 2022

Kathryn Vorisek
Head of Equity Management
& Portfolio Manager

Leo Harmon, CFA, CAIA
CIO & Portfolio Manager

Thomas F. Hynes
Senior Managing Director

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Mesirow Equity Management (MEM)

1. Firm overview
2. MEM equity
3. Small Cap Value performance and characteristics
4. MEM fee proposal
5. Appendix
6. Bios

Firm overview

About Mesirow

Mesirow is an independent financial services firm founded in 1937 and owned by employees.¹

- Global headquarters in Chicago with offices worldwide; 510 employees
- Strong balance sheet with \$370M in capital² and no debt
- Institutional investment teams with specialized expertise across global asset classes
- Experience investing on behalf of MA Public Funds³:
 - We manage over \$70 million in assets across six public clients in Massachusetts

CLIENT-ALIGNED OWNERSHIP

ensures we think and act as owners

100% of voting shares are held by active employees

DIVERSIFIED INVESTMENT STRATEGIES

customized by specialist teams

\$14.6B in institutional assets under management

CORPORATE RESPONSIBILITY

reflects our clients' values

5K+ hours volunteering in Chicago neighborhoods over the last decade (2013-2022)

WE INVEST IN WHAT MATTERS



OUR
CLIENTS



OUR
COMMUNITIES



OUR
CULTURE

As of 9.30.22 unless otherwise noted. | 1. Mesirow Financial Investment Management, Inc. ("MFIM") is an investment advisory and management services firm and is an SEC-registered investment adviser, CFTC-registered commodity trading advisor ("CTA") and member of the NFA. Investment management services are provided through MFIM, Mesirow Institutional Investment, Inc. ("MIIM"), and Mesirow Financial Private Equity Advisors, Inc. ("MFPEA"), all SEC-registered investment advisors. Currency-related services are provided through MFIM (Currency Division), in its capacity as a registered CTA. | 2. As of 3.31.22 (updated annually in June). | 3. References to current clients do not imply, directly or indirectly, any recommendation of Mesirow or MEM by such entity. Please refer to the disclosure page at the end of this presentation for additional, important information.

Corporate responsibility

Corporate responsibility has been a core value of the firm since its founding in 1937. Today, Mesirow aligns with United Nations Global Goals for Sustainable Development (SDGs) while acting as a force for social good.



SUSTAINABILITY

Strategies that seek to help investors prosper while doing good

- Signatory, Principles for Responsible Investment (PRI)
- Signatory, FX Global Code of Conduct
- Offerings across the capital structure and investment vehicles
- LEED Platinum certified headquarters; environmental improvement initiatives



COMMUNITY ENGAGEMENT

Investment of time, talent and financial support

- Neighborhoods: Family services, youth guidance, wrap-around support
- Education & Opportunity: Scholarship, opportunity, financial literacy
- Social justice: Tolerance, anti-gun violence, racial equity



DIVERSITY, EQUITY AND INCLUSION

Within a collaborative, entrepreneurial culture

- Mesirow Diversity, Equity and Inclusion Council leads a Six-Point DEI Commitment
- WomenConnect, PeerConnect, PrideConnect and ParentsConnect Employee Resource Groups

MESIROW CAUSE PILLARS ¹



ENVIRONMENT



COMMUNITY IMPROVEMENT



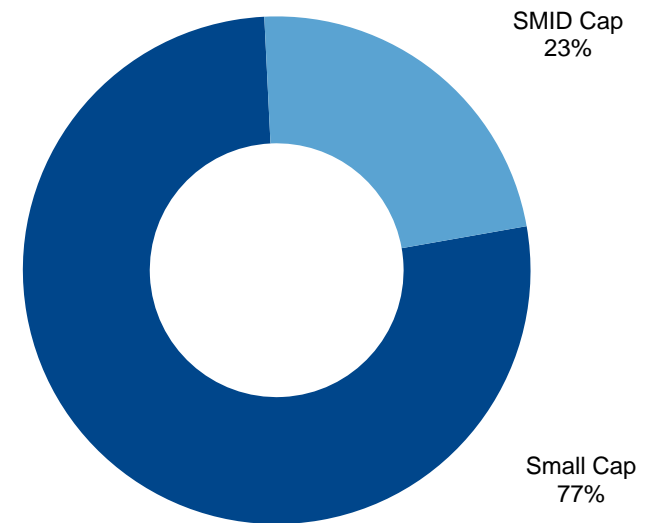
HUMAN RIGHTS & EQUALITY

1. For more information on how our cause pillars align with the United Nations Sustainable Development Goals, please visit <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

MEM equity

Mesirow Equity Management commitment

- As a division of an independent, primarily employee-owned firm, our interests are aligned with our clients which has helped us build long-term relationships
 - Average client tenure of 13 years
 - MEM investment team members are all investors in MEM strategies*
- A proven relative value investment philosophy and a consistent approach to small and SMID cap value investing
 - Portfolio management team has worked together for almost 20 years
 - MEM Small Cap Value composite generated over 200 bps of alpha with a beta 12% lower than the benchmark since 2004¹
 - All investment strategies incorporate ESG factors into our analysis
- Strong team of professionals, averaging more than 25 years of industry experience
- A sincere commitment to providing customized service to our clients
- As of November 2019, Mesirow is a Signatory for the Principles for Responsible Investment (PRI)



Total Assets Under Management
\$836.9 Million*

* As of 11.30.22.

Assets include Mesirow Small Company Sustainability Fund, MEM Small Company Sustainable Equity Strategy, and MEM SMID Company Sustainable Equity Strategy.

¹ As of 9.30.22. Past performance is not necessarily indicative of future results. The information provided above is supplemental. Please see GIPS Reports at the end of this presentation for complete performance information, including net performance and for benchmark/index definitions.

Clients benefit from our team's deep experience



Kathryn A. Vorisek*
Head of Equity Management,
Portfolio Manager

- 36 years industry experience
- Joined in 1996



Leo Harmon*, CFA, CAIA
Chief Investment Officer,
Portfolio Manager

- Financial Services
- 26 years industry experience
- Joined in 2003



Andrew S. Hadland*, CFA
Director of Research,
Portfolio Manager

- Technology
- 26 years industry experience
- Joined in 2002



**John L. Nelson*, CFA,
FSA Credential Holder**
Sustainability Portfolio Specialist,
Research Analyst

- Financial Services
- 20 years industry experience
- Joined in 2014



**Eric Jacobsohn*, CFA,
FSA Credential Holder**
Sustainability Portfolio Specialist,
Research Analyst

- Capital Goods, Materials, Energy
- 18 years industry experience
- Joined in 2017



Bashir Ahmad
Research Analyst

- Consumer
- 23 years industry experience
- Joined in 2021



Caleb Ezell
Research Analyst

- Healthcare
- 8 years industry experience
- Joined in 2022



Lisa Carriere Jackson*
Research Analyst

- Utilities
- 26 years industry experience
- Joined in 2011

As of 9.30.22.
*Current Mesirow shareholder.

MEM's relative value equity philosophy

Our Investment Philosophy

We believe the key to generating consistent investment returns is the selection of investment opportunities that possess attractive valuations and demonstrate identifiable catalysts that are expected to generate accelerating earnings and cash flow growth.

We actively incorporate environmental, social, and governance factors into our investment decisions to derive favorable performance and risk characteristics for our portfolios.

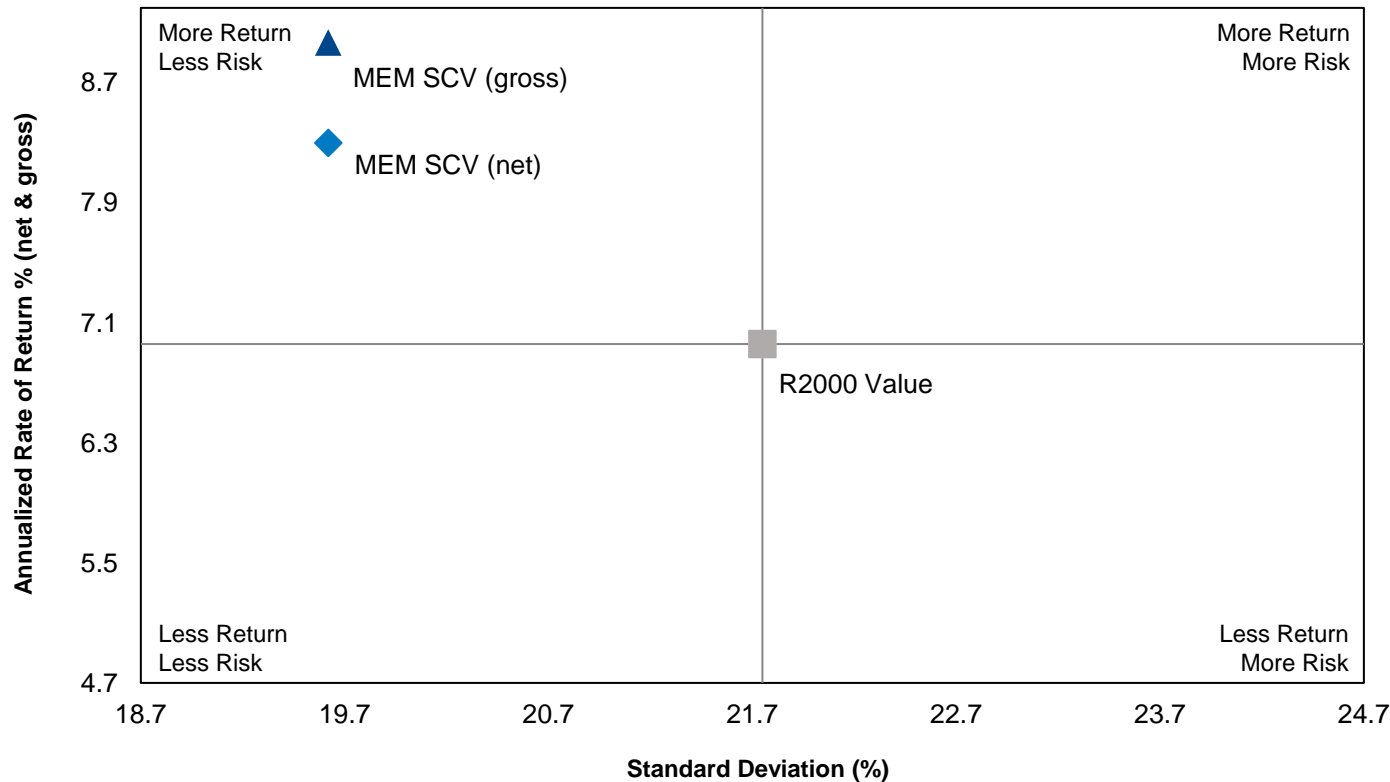
Investment Objectives

- Generate attractive risk-adjusted returns
 - Goal is to generate 200-250bps of alpha with 80-90% of market risk
- Consistently outperform the benchmark over a market cycle
 - Outperformed in 13 of 16 years, including through 11.30.2022
- Participate in rising markets and protect capital in down markets
 - Expectation of greater than 90% upside capture combined with 80-90% downside capture

Past performance is not necessarily indicative of future results. Please see GIPS Reports at the end of this presentation for complete performance information, including net performance and for benchmark/index definitions.

MEM Small Cap Value

Attractive risk-adjusted returns portfolio team tenure



SCV VS. R2000 VALUE

Alpha	2.56
Beta	0.88
Info Ratio	0.51

Data from 1.1.04 – 9.30.22.

Source: eVestment. | Performance is annualized and shown gross and net of fees. Past performance is not necessarily indicative of future results. The information provided above is supplemental. Please see GIPS Reports at the end of this presentation for complete performance information, including benchmark/index definitions.

Lower risk strategy has provided upside participation and downside protection

As of September 30, 2022

MEM Small Cap Value eVestment universe rankings	QTD	YTD	ANNUALIZED			
			ONE YEAR	THREE YEARS	FIVE YEARS	TEN YEARS
Return percentile (gross) ranking	5	5	7	12	16	36
Information ratio percentile ranking	10	2	1	5	6	29

Risk metrics	STANDARD DEVIATION	RANK VS. SCV UNIVERSE	BETA	RANK VS. SCV UNIVERSE
MEM Small Cap Value Equity (net of fees)	19.60%	15	0.88	24
Russell 2000 Value Index	21.75%	59	1.00	73

Downside performance characteristics	DOWNSIDE CAPTURE	RANK VS. SCV UNIVERSE	DOWN PERIOD OUTPERFORMANCE BATTING AVERAGE	RANK VS. SCV UNIVERSE
MEM Small Cap Value Equity (net of fees)	83.11%	18	75%	20
Russell 2000 Value Index	100.00%	81	–	–

Note: Lower ranking versus Small Cap Universe represents lower risk profile (1=Best, 100=Worst)

For the period starting 1.1.04. Periods over 1 year are annualized.

Source: eVestment.

Past performance is not indicative of future results. eVestment percentile rankings are calculated gross of fees basis and includes reinvestment of all income. Performance information used to calculate risk & downside statistics is net of fees and includes reinvestment of all income. This is supplemental information only and compliments the composite presentation. Please see GIPS Reports at the end of this presentation for complete performance information, including net performance and for benchmark/index definitions.

Investment process | a consistent, repeatable discipline



- **Fundamental analysis** identifies company-specific catalysts
- **Macro/sector catalysts** provide compass across sectors and industries
- **Construction of well diversified portfolio**

- **Selection criteria:**
 - Attractive valuation
 - Impending catalysts and strong fundamentals
 - Accelerating earnings and cash flow growth
- **Focused universe**
- **Extensive due diligence**
- **Quantitative and qualitative analysis**

- **70-90 holdings**
- Within the **market cap range** of the Russell 2000 or Russell 2500
- **Sector constraints:**
 - Greater of 2x the benchmark or 15% of portfolio
- **Security constraints:**
 - Limited to 3% of portfolio
 - Most holdings between 1-2%
- **High quality emphasis:**
 - High or improving ROIC
 - Strong financial flexibility
 - Strong management

- Proactively communicate with management teams to build awareness
- Encourage management to make incremental positive changes
- Discuss the importance of disclosure
- Routine follow up on progress and improvement

Trends provide guidance for portfolio strategy

As of September 30, 2022

Macro Overview

Economic cycle

- Global economic activity is slowing
- US is marginally softer; Europe in more distress
- China activity stabilizes at lower levels
- Russia/Ukraine conflict creates risks to growth

Monetary policy

- FED beginning to accelerate tapering process
- Fed Funds expected to increase to over 400bps
- EU/ECB balance sheet growth slowing
- Global central banks raise rates to fight inflation

Fiscal/regulatory issues

- Fiscal spending slowing dramatically
- Odds for incremental infrastructure spending are extremely low
- No expected change in tax structure before mid-terms

Portfolio positioning

- Looking for opportunities in more cyclical areas
- Removing/reducing European exposure with more U.S. concentration
- Rising \$USD could slow other economies
- Fundamentals more important as earnings slow
- Identifying opportunities beyond cyclical bounce
- Highlighting self-help strategies
- Emphasis on pricing power to offset incremental cost pressures

Trends

Industrial trends

- US industrial activity has slowed more meaningfully
- Supply chain gridlock exacerbated by war and COVID
- Input cost impact varies by end market
- Balance of early cycle cost beneficiaries and late cycle visibility

Consumer trends

- Employment trends still positive
- Low-income workers spent savings
- Wage growth helps spending but trails inflation
- Spending shifting from hard goods to experiences
- Housing headwinds as rates and prices increase
- Bounce in autos as inventory is right-sized

Secular trends

- Government funding for broadband and educational technology bridging the digital divide.
- Emphasis on healthcare companies that help reduce overall cost of care
- Increased electronic content in autos, capital equipment and medical devices drives demand for analog semiconductors.
- Cloud adoption driving investment in data center technologies
- Regulatory risk muted

Other trends

- EPS revisions turning negative for 2H 2022 and 2023
- Multiples compression already reflects higher expected interest rates
- Moderation of inflation pushed into 2023

Company Specific Drivers

- New product cycle or extensions
- New markets for existing products
- Internal restructuring
- Strength to execute through cycles
- Management changes
- Regulatory changes

The information above has been obtained from sources believed to be reliable but is not necessarily complete and its accuracy cannot be guaranteed. Any opinions expressed are subject to change without notice. Past performance is not indicative of future results. Please see the disclosures at the end of this presentation for additional, important information and for benchmark/index definitions.

Consistent sell discipline

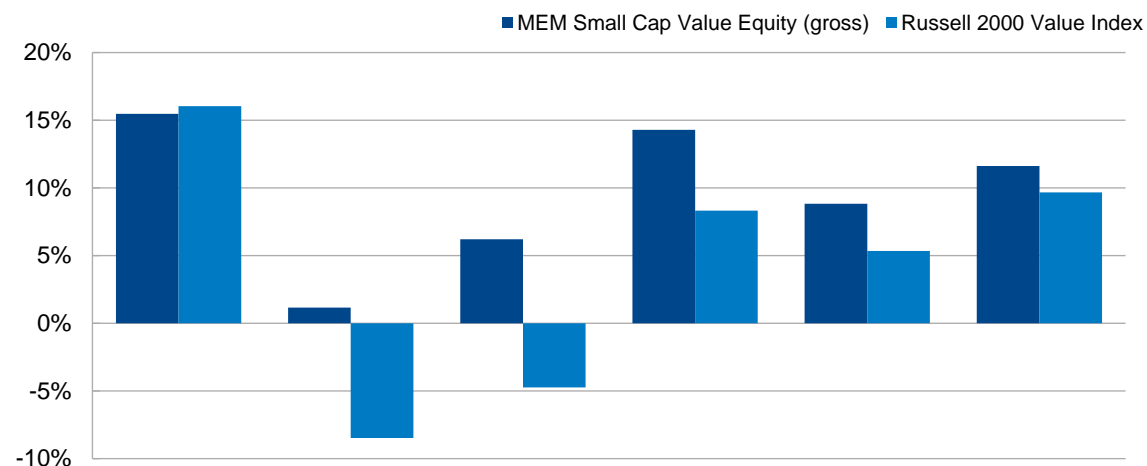
- **Price Derived**
 - Company meets specified price target with no new catalysts
 - Company exceeds product-defined market cap
- **Fundamentally Derived**
 - Catalysts fail or are extended beyond investment horizon
 - Material changes in industry/sector fundamentals
 - Stronger investment opportunity exists elsewhere
- **Risk Derived**
 - Monitor real-time macro/sector/company developments
 - Analyze performance of holdings in different environments
 - Adjust allocations to leverage portfolio strategy

The above-referenced securities and or companies have been included to illustrate the investment process utilized by MEM in the selection and liquidation of individual securities. The inclusion of these securities and or companies is not designed to convey a past specific security or company selected by MEM would have been profitable to any person. It should not be assumed that securities transactions made in the future will be profitable or will equal the performance of the securities described above. There can be no assurance that any expected returns mentioned will be achieved and materially different returns may be achieved.

Small Cap Value performance and characteristics

MEM Small Cap Value Equity strategy | Performance

For the period ending November 30, 2022



Returns (%)

	QTD	YTD	ONE YEAR	THREE YEARS	FIVE YEARS	TEN YEARS
MEM Small Cap Value Equity (gross)	15.47	1.15	6.20	14.28	8.83	11.61
MEM Small Cap Value Equity (net)	15.38	0.70	5.68	13.71	8.28	11.02
Russell 2000 Value Index	16.03	-8.48	-4.75	8.32	5.34	9.66
Relative performance (gross)	-0.56	9.63	10.95	5.96	3.49	1.95
Relative performance (net)	-0.65	9.18	10.43	5.39	2.94	1.36

Performance characteristics (gross)

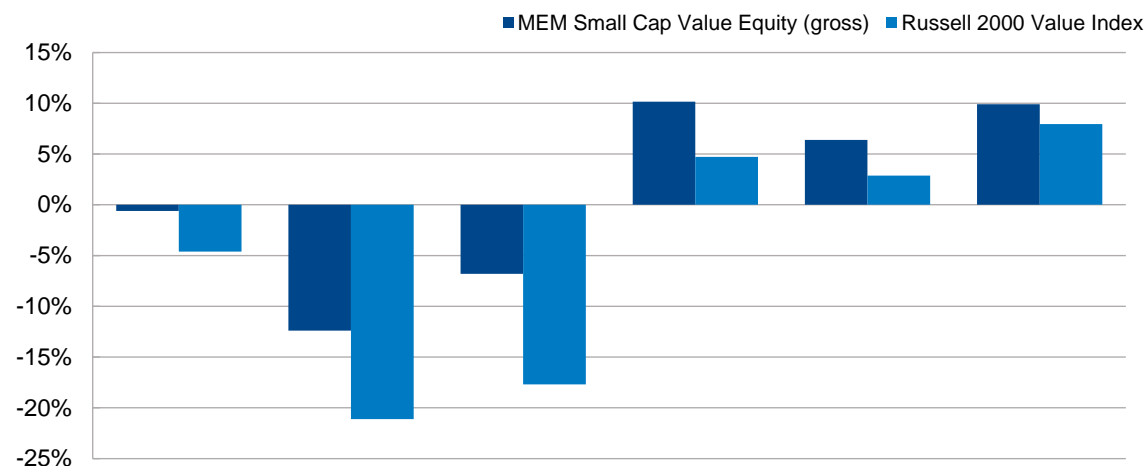
	FIVE YEARS	TEN YEARS
Alpha	3.57	2.73
Beta	0.91	0.89
Information ratio	0.82	0.58

Note: Periods over 1 year are annualized.

Source: MEM, eVestment and Bloomberg. | Performance characteristics data based on quarterly observations and gross returns. | Performance results are shown gross and net of fees. Past performance is not necessarily indicative of future results. The information provided above is supplemental. Please see GIPS Reports at the end of this presentation for complete performance information, including benchmark/index definitions.

MEM Small Cap Value Equity strategy | Performance

For the period ending September 30, 2022



Returns (%)	QTD	YTD	ONE YEAR	THREE YEARS	FIVE YEARS	TEN YEARS
MEM Small Cap Value Equity (gross)	-0.61	-12.40	-6.81	10.16	6.38	9.90
MEM Small Cap Value Equity (net)	-0.73	-12.72	-7.26	9.60	5.83	9.32
Russell 2000 Value Index	-4.61	-21.12	-17.69	4.72	2.87	7.94
Relative performance (gross)	4.00	8.72	10.88	5.44	3.51	1.96
Relative performance (net)	3.88	8.40	10.43	4.88	2.96	1.38

MEM Small Cap Value eVestment universe ranking	QTD	YTD	ONE YEAR	THREE YEARS	FIVE YEARS	TEN YEARS
Returns percentile ranking (gross)	5	5	7	12	16	36
Information ratio percentile ranking	10	2	1	5	6	29

Note: Periods over 1 year are annualized.

Source: MEM, eVestment and Bloomberg. | Performance characteristics data based on quarterly observations and gross returns. | Performance results are shown gross and net of fees. Past performance is not necessarily indicative of future results. The information provided above is supplemental. Please see GIPS Reports at the end of this presentation for complete performance information, including benchmark/index definitions.

Sector weights & portfolio characteristics

As of September 30, 2022

Sector %	MEM SMALL CAP VALUE	RUSSELL 2000 VALUE INDEX
Financial Services	33.6	39.8
Financials	22.0	29.1
Real Estate	11.6	10.8
Industrial Cyclicals	24.3	21.9
Industrials	14.5	12.4
Energy	6.1	5.8
Materials	3.8	3.7
Secular Growth	20.4	17.9
Healthcare	13.2	12.1
Information Technology	7.2	5.8
Consumer Groups	11.4	15.3
Consumer Discretionary	8.3	9.6
Communication Services	1.5	3.0
Consumer Staples	1.6	2.7
Utilities	5.8	5.1
Cash / Other	4.6	--

Portfolio characteristics	MEM SMALL CAP VALUE	RUSSELL 2000 VALUE INDEX
Number of holdings	77	1,394
Forward price/earnings (median)	12.1x	12.2x
Year 2 EPS growth	13.0%	8.0%
Wtd. median market cap.	\$2.8 bn	\$1.8 bn
% of portfolio in Top 10	16.7%	4.7%

Source: MEM, BNY Mellon and Bloomberg.

Past performance is not necessarily indicative of future results. MEM sector weightings and portfolio characteristics are calculated from a representative account invested in the MEM Small Cap Value Equity mandate. The information provided above is supplemental. Please see GIPS Reports at the end of this presentation for complete performance information, including net performance and for benchmark/index definitions.

MEM fee proposal

MEM fee proposal for Massachusetts Water Resources Authority

Standard fee schedule

SEPARATE ACCOUNT

0.85%	On the first \$25 million
0.75%	On the next \$25 million
0.60%	On the next \$50 million
0.55%	On the balance

\$20 million @ 0.85% \$170,000 total

Proposed fee schedule

SEPARATE ACCOUNT

0.70%	On the first \$10 million
0.65%	On the balance

\$20 million @ 0.675% \$135,000 total

Fee discount
relative to standard fee **\$35,000**

COLLECTIVE INVESTMENT TRUST

0.45%	Founders Class (First \$100 million)
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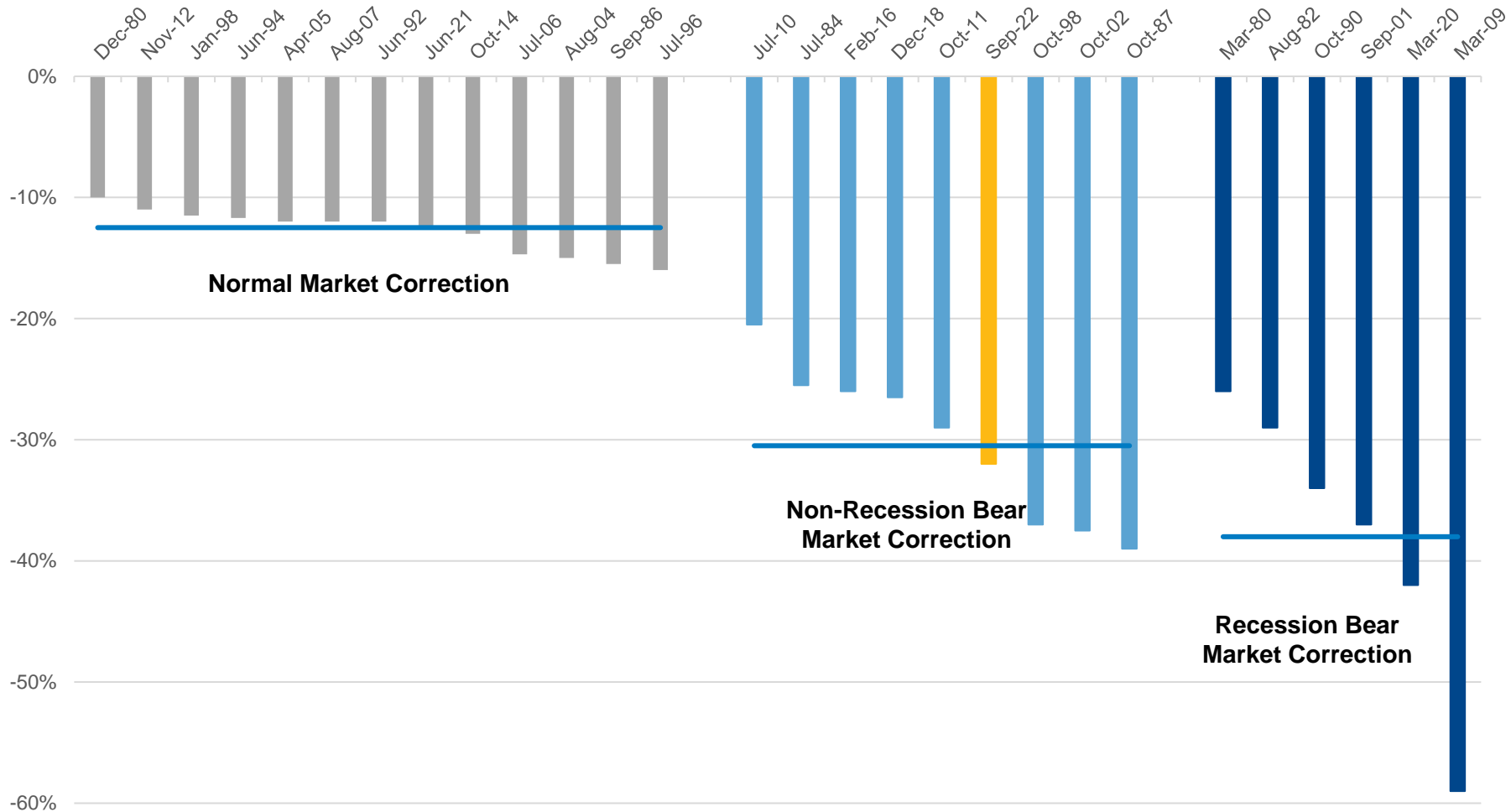
\$20 million @ 0.45% \$90,000 total

Fee discount
relative to standard fee **\$80,000**

Appendix

Small caps down more than 30% have mostly discounted a recession

As of September 30, 2022



Source: MEM and Furey Research Partners.
 Past performance is not indicative of future results. Please see the disclosures at the end of this presentation for additional, important information and for benchmark/index definitions.

Small cap value | Relatively attractive vs large cap & growth

As of September 30, 2022

10-Year Annualized Returns	Value	Core	Growth
Large	9.2%	11.7%	13.7%
Mid	9.4%	10.3%	10.9%
Small	7.9%	8.6%	8.8%

Current P/E as % of 20-Year Average	Value	Core	Growth
Large	89%	98%	110%
Mid	82%	85%	97%
Small	78%	79%	67%

Relative P/E Russell 2000 vs. S&P 500



Source: MEM, FactSet, FTSE Russell, JP Morgan Asset Management, Bloomberg, and CSFB. The S&P 500 is a stock market index that tracks the stocks of 500 large-cap U.S. companies. Past performance is not indicative of future results. Please see the disclosures at the end of this presentation for additional, important information.

Investment process | example

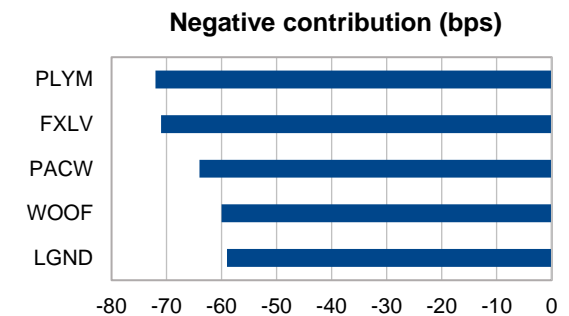
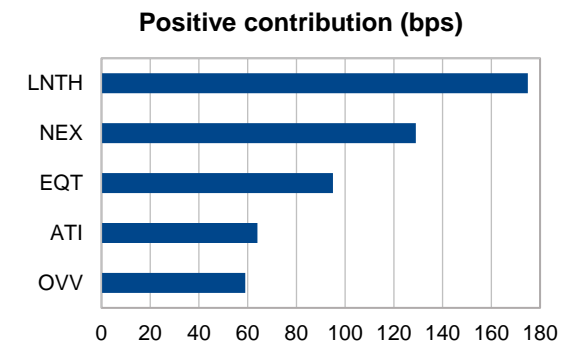
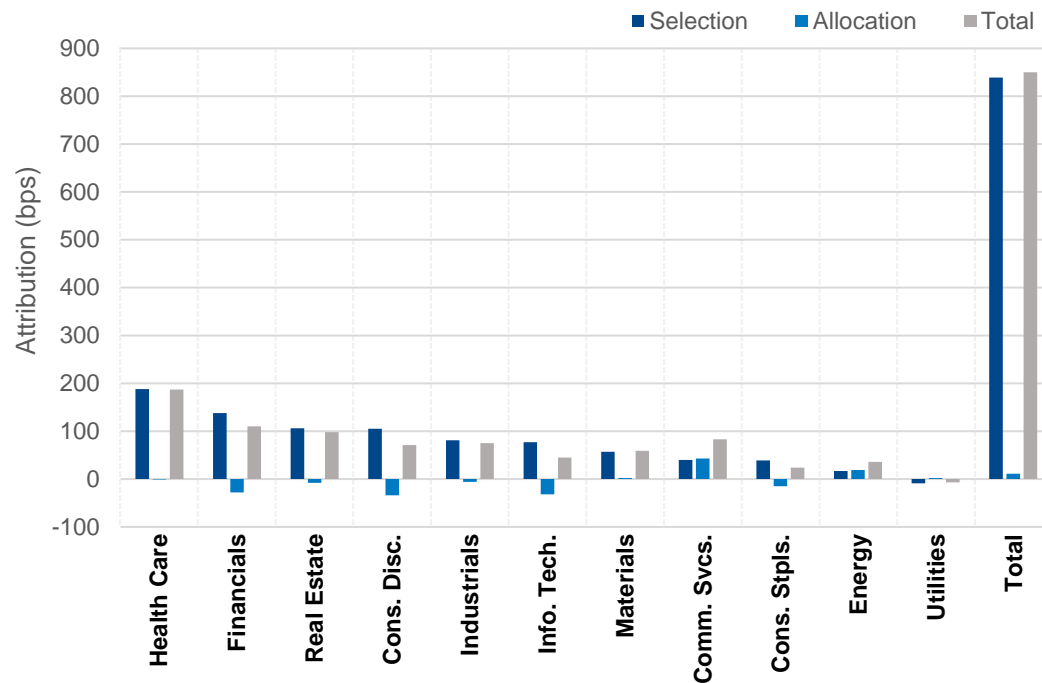
Green Plains | GPRE

<p>Business Description</p>	<p>Traditionally, a leading commodity corn processing business (ethanol producer with dried distiller grain byproduct), GPRE is transitioning into a value-added corn agriculture derivative products company focused on innovative high-protein food ingredients and other less cyclical products (specialty alcohols and renewable diesel) that command higher margins.</p>
<p>Purchase Price Initial Target Price</p>	<p>\$23.60 \$55.00 – Driven by both higher levels of EBITDA and a higher multiple from added stability</p>
<p>Micro-Level Catalysts</p>	<ul style="list-style-type: none"> • New product initiatives changes the organic growth profile from 0% to ~7% • Step-up in production of high-protein ingredients create significant EBITDA growth with EBITDA margins moving from low single digits to mid double digits by 2024 • Opportunity to sell protein feed into higher-value markets (pet, aqua, & dairy) increasing price/ton realization and adding incremental upside to EBITDA projections • Converting 2 of 13 ethanol plants to produce corn sugar technologies at higher price/gallon potentially driving an extra \$100MM of EBITDA • Minority ownership of Fluid Quip technology expected to increase yields for both corn oil and protein feed
<p>Macro-Level Drivers</p>	<ul style="list-style-type: none"> • General recovery in energy prices as demand improves and inflation expectations rise • Higher corn and soybean oil prices driven by increased demand for renewable diesel • Increased demand for protein-based products driven sourced from sustainable, animal-free methods • Business reclassification from commodity ethanol to agriculture technology & food ingredients • Increased demand for clean burning energy
<p>Return Expectations</p>	<p>Expected return of 133% far exceeds minimum return requirements of 20%. Bear-case price target of mid-teens and best-case price target in the mid-70s creates dramatically positive risk/return trade-off.</p>

The above-referenced securities and or companies have been included to illustrate the investment process utilized by MEM in the selection and liquidation of individual securities. The inclusion of these securities and or companies is not designed to convey a past specific security or company selected by MEM would have been profitable to any person. It should not be assumed that securities transactions made in the future will be profitable or will equal the performance of the securities described above. There can be no assurance that any expected returns mentioned will be achieved and materially different returns may be achieved.

MEM Small Cap Value Equity

Attribution analysis vs Russell 2000 Value Index as of September 30, 2022 | YTD



Return (%)

Small Cap Value	-4.6	-11.1	-21.8	-26.4	-19.8	-19.8	-16.0	-18.3	-7.4	38.1	-10.5	-12.4
Russell 2000 Value	-26.1	-18.2	-29.7	-35.9	-24.5	-30.1	-27.6	-42.9	-16.3	36.4	-9.1	-21.1

Sector weights (%)

Small Cap Value	10.7	20.9	11.1	9.3	15.2	7.8	4.4	1.8	1.5	7.3	5.6	--
Russell 2000 Value	9.8	27.0	11.5	8.2	14.3	5.5	4.3	3.3	3.0	7.9	5.3	--

Source: MEM and Bloomberg.

Past performance is not necessarily indicative of future results. Please see GIPS Reports at the end of this presentation for complete performance information, including net performance and for benchmark/index definitions.

Bios

Investment team



Kathy A. Vorisek
Senior Managing Director, Head of Equity Management & Portfolio Manager

As Head of Equity Management, Kathryn Vorisek directs the business and operations of Mesirow Equity Management. Kathy is a Portfolio Manager for the Small Cap Value and SMID Cap Value strategies, a role she has held since 1998. Kathy has over 35 years of industry experience. She joined Mesirow when the firm acquired Fiduciary Management Associates in 2016. At FMA, Kathy was also Senior Managing Director, Chief Investment Officer and Portfolio Manager for the Small Cap Value and SMID Cap Value strategies. Prior to joining FMA, she worked for Duff & Phelps Investment Research in Chicago. Kathy is a member of Mesirow's Board of Directors, which is responsible for overseeing the strategic direction of the firm. She is also a member of the CFA Institute, the Economics Club of Chicago, the Marquette University Finance Department Advisory Board, Women Investment Professionals, and a former board member of the CFA Society of Chicago. Kathy guides the firm's participation in the Big Shoulders Fund's "Stock Market Program" which provides education on the concepts of investing to eighth grade students in the neediest areas of inner-city Chicago and was named one of Crain's 2019 Notable Women Executives over 50. Kathy earned a BS in Finance from Marquette University and an MBA with dual concentration in Finance and International Business from the Kellogg Graduate School of Management at Northwestern University.



Leo Harmon, CFA, CAIA
Senior Managing Director, Chief Investment Officer, Portfolio Manager & Chairman Emeritus of the Inclusion Council

Leo Harmon is Senior Managing Director of Mesirow Equity Management. As Chief Investment Officer, he oversees all aspects of the investment process. Leo is a Portfolio Manager for the Small Cap Value and SMID Cap Value strategies, directing the firm's research efforts. He also has analyst responsibility for bank-related companies within the Financial Services sector. Additionally, Leo serves as Chairman Emeritus of Mesirow's Diversity, Equity, and Inclusion Council which helps direct DE&I initiatives, policies, and practices for the firm. Leo has more than 25 years of industry experience. He joined Mesirow when the firm acquired Fiduciary Management Associates in 2016. At FMA Leo was Director of Research, Portfolio Manager for the Small Cap Value and SMID Cap Value strategies and a Research Analyst covering the Financial Services sector. Prior to joining FMA in 2003, he was a Portfolio Manager at Allstate Insurance, Allstate Investments LLC. Leo is a member of the National Association of Securities Professionals and the Economics Club of Chicago. He is also a member of the CFA Society of Chicago where he was appointed to the board of directors and served as Chairman. Leo has served as Chairman on the External Investment Committee for the Office of the Illinois State Treasurer. He facilitates the firm's curriculum in the Big Shoulders Fund's "Stock Market Program" which provides education on the concepts of investing to eighth grade students in the neediest areas of inner-city Chicago. Leo earned a Bachelor of Science in finance from Bradley University and a Master of Business Administration with a concentration in finance from the Fuqua School of Business at Duke University. He is a CFA® charterholder and a member of the CFA Institute.



Andrew S. Hadland, CFA
Managing Director, Portfolio Manager, Director of Research

Andrew Hadland is a Managing Director in Mesirow's Equity Management group. He serves as Director of Research and Research Analyst for the small cap value and small-mid cap value strategies and provides coverage for the technology and consumer sectors. Andrew has more than 25 years of industry experience. Prior to joining Mesirow in 2016, he was a Managing Director and Research Analyst for Fiduciary Management Associates, LLC, which was acquired by Mesirow. Before that, he served as a Senior Equity Analyst at The Northern Trust Company and a Senior Analyst and Co-Portfolio manager at Consec Capital Management. Andrew is a CFA® charterholder and member of the CFA Society of Chicago and the CFA Institute. In addition, he provides significant contribution to the firm's participation in the Big Shoulders Fund's "Stock Market Program" which provides education on the concepts of investing to eighth grade students in the neediest areas of inner-city Chicago. Andrew earned a BS in finance from Miami of Ohio University and an MBA with dual concentration in finance and equity valuation from the Kelley School of Business at Indiana University.

Investment team



John L. Nelson, CFA,
FSA Credential Holder
Managing Director, Research Analyst, Sustainability Portfolio Specialist

John Nelson is a Managing Director in Mesirow’s Equity Management group. He serves as a Research Analyst and sustainability Portfolio Specialist for the small cap value & small-mid cap value strategies and provides coverage for the financial services sector. John has more than 19 years of industry experience. Prior to joining Mesirow in 2016, he was a Director and Research Analyst for Fiduciary Management Associates, LLC, which was acquired by Mesirow. Before that, he served as an equity Research Analyst and Portfolio Manager at Gofen and Glossberg as well as an equity Research Analyst at William Blair & Company. John is a CFA® charterholder, member of the CFA Society of Colorado and the CFA Institute, and earned the FSA Credential from the Sustainability Accounting Standards Board. In addition, he provides significant contribution to the firm’s participation in the Big Shoulders Fund’s “Stock Market Program” which provides education on the concepts of investing to eighth grade students in the neediest areas of inner-city Chicago. John earned a BA in political science and international affairs from the University of Nebraska and an MBA with dual concentration in finance and accounting from the Kelley School of Business at Indiana University.



Eric M. Jacobsohn, CFA
FSA Credential Holder
Managing Director, Research Analyst, Sustainability Portfolio Specialist

Eric Jacobsohn is a Managing Director in Mesirow’s Equity Management group. He serves as a Research Analyst and sustainability Portfolio Specialist for the small cap value and small-mid cap value strategies and provides coverage for materials and industrial-related companies. Eric has more than 17 years of industry experience. Prior to joining Mesirow in 2017, he was at Calamos Investments where he was responsible for leading the research effort for U.S. cyclicals. In this capacity, he conducted top-down and fundamental analysis on applicable sectors and made portfolio recommendations for potential investments. Before that, he was a buy-side senior equity Research Analyst at Columbia Wanger Investment Management and has also held analyst roles at William Blair & Company and Robert W. Baird & Company. Eric is a CFA® charterholder, a member of the CFA Society of Chicago and the CFA Institute and earned the FSA Credential from the Sustainability Accounting Standards Board. Eric earned a BBA in finance and real estate from the University of Wisconsin, and an MBA from the University of Chicago Booth School of Business.



Bashir Ahmad
Managing Director, Research Analyst

Bashir Ahmad is a Managing Director in Mesirow Equity Management. He serves as a Research Analyst for the small cap value and small-mid cap value strategies and provides coverage for the consumer sector. Bashir has more than 20 years of industry experience. Prior to joining Mesirow in 2021, he was the Consumer Sector Head and a Senior Consumer Equity Analyst at Concentric Capital Strategies and Millennium Management, respectively. Before that, he served as a Senior Equity Analyst at Cupps Capital Management. He also previously worked in Private Equity at CapitalSpring, and in Investment Banking at Morgan Stanley and JPMorgan. Bashir earned a Bachelor of Arts, cum laude in biochemistry and geology with a minor in economics from Vassar College, and a Master of Business Administration from The Wharton School at the University of Pennsylvania.

Investment team



Caleb Ezell
Senior Vice President, Research Analyst

Caleb Ezell is a Senior Vice President in Mesirow Equity Management. Caleb has more than 5 years of financial industry experience and over 8 years of experience in the health care industry. Prior to joining Mesirow in 2022, Caleb was a Specialty Pharmaceuticals Analyst at Jefferies. Before that, he was at Stephens Inc. where he served as an Equity Research Associate covering Healthcare Services. Prior to that role he served as Director of Business Development at Claris Healthcare Inc, a digital healthcare startup, based out of Vancouver. He also previously worked at Serco Inc. while on contract with the US Patent and Trademark Office and was a Pre-Doctoral Fellow at the Center of Biomedical Research Excellence in Natural Product Neuroscience. Caleb earned a Bachelor of Arts in biochemistry and philosophy from the University of Mississippi.



Lisa Carriere Jackson
Vice President, Research Analyst

Lisa Carriere Jackson is a Vice President and Research Analyst in Mesirow's Equity Management group. She has more than 21 years of industry experience. Prior to joining Mesirow in 2016, Lisa was employed at Fiduciary Management Associates, LLC, which was acquired by Mesirow. Before that, she served as a Vice President at Northern Trust Global Investments. She also previously worked at Chicago Equity Partners and SEI Investments. Lisa earned a BBA in finance from Loyola University and an MBA from DePaul University – Kellstadt Graduate School of Business.

Global investment management distribution



Thomas F. Hynes
Senior Managing Director

Tom Hynes is a senior managing director on Mesirow's Global Investment Management Distribution team. He leads the team responsible for marketing and distribution of the firm's investment capabilities to institutional investors and investment consultants in North America. Prior to his current position, Tom worked as an Investment Associate in Mesirow Private Equity, where he was responsible for due diligence and valuation analysis on direct investment opportunities. Prior to joining Mesirow in 1997, he worked in the Real Estate Asset Management division at the First National Bank of Chicago. Tom is a board member of Link Unlimited Scholars and serves on the Finance Committee for CURE (Citizens United for Research in Epilepsy). Tom earned a Juris Doctor, cum laude, from the University of Chicago Law School, a Bachelor of Arts with honors from the University of Notre Dame and an Master of Business Administration from The Kellogg School of Management at Northwestern University.

Mesirow Financial Investment Management, Inc.

MEM Small Cap Value Equity Composite – GIPS report

Gross and Net of Fees Total Returns from January 1, 2012 – September 30, 2022

Year	Year End			Annual Performance Results					3-yr Annualized Dispersion		
	No. of portfolios	Composite Asset at end of period (\$MM)	Total Firm Assets ⁽¹⁾ (\$MM)	MEM (gross) Composite (%)	MEM (net) Composite (%)	Russell 2000 Value Index (%)	Russell 2000 Index ⁽²⁾ (%)	Composite Dispersion (%)	MEM (gross) Composite (%)	Russell 2000 Value Index (%)	Russell 2000 Index (%)
2012	23	1,060	n/a	11.71	11.07	18.05	16.35	0.03	19.19	19.89	20.20
2013	20	1,243	n/a	36.27	35.54	34.52	38.82	0.04	15.62	15.82	16.45
2014	21	1,259	n/a	6.51	5.93	4.22	4.89	0.04	11.54	12.79	13.12
2015	20	1,077	n/a	0.27	-0.26	-7.47	-4.41	0.05	12.57	13.46	13.96
2016	18	1,091	1,684	15.76	15.13	31.74	21.31	0.05	14.37	15.50	15.76
2017	15	976	1,477	14.51	13.88	7.84	14.65	0.03	12.60	13.97	13.91
2018	15	659	789	-14.96	-15.42	-12.86	-11.01	0.04	15.00	15.76	15.79
2019	11	516	678	24.37	23.73	22.39	25.52	0.05	14.86	15.68	15.71
2020	7	501	722	8.46	7.89	4.63	19.96	0.06	23.99	26.12	25.27
2021	9	646	886	30.39	29.74	28.27	14.82	0.09	22.60	25.00	23.35
2022 YTD	6	493	724	-12.40	-12.72	-21.12	-25.10	n/a	23.30	26.11	25.11

Current Performance Results - PRELIMINARY

Mesirow Equity Management ("MEM") claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. MEM has been independently verified for the periods 01.01.1996 - 12.31.2021. 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 Small Cap Value Equity Composite has had a performance examination for the periods 01.01.2016 - 12.31.2021. The verification and performance examination reports are available upon request.

Benchmark returns are not covered by the report of independent verifiers.

Effective 07.01.2022, MEM transferred its assets and associated composites to Mesirow Institutional Investment Management, Inc. ("MIIM"), a registered investment advisor (RIA) registered with the Securities and Exchange Commission under the Investment Advisors Act of 1940. Prior to 07.01.2022, MEM's assets and associated composites were part of Mesirow Financial Investment Management, Inc. ("MFIM"). The historical performance presented prior to the creation of MFIM was managed by MFIM or its predecessor firms prior to 01.01.2005. For purposes of claiming GIPS compliance, as of 01.01.2010 the "Firm" was further defined as the US Value Equity business unit, now defined as MEM which manages portfolios primarily for institutional investors adhering to an investment process incorporating fundamental analysis of security valuation factors and drivers. The composites within this unit vary primarily by the capitalization range of the equity securities held. MEM is comprised of the legacy entities of Mesirow Financial Investment Management - US Value Equity (the surviving entity) and Fiduciary Management Associates, LLC (the acquired entity), with each prior to this effective date being held out to the public as separate firms, and each claiming compliance with the GIPS Standards. Effective 04.01.2016, the firm was redefined and renamed for GIPS purposes to include both the legacy Mesirow Financial Investment Management - US Value Equity division and the legacy Fiduciary Management Associates, LLC division as one combined entity.

In 2016, MFIM acquired the asset management rights for all managed portfolios from an independent investment advisory firm and retained all of the principals and employees related to such portfolios. Performance results of the Small Cap Value Equity Composite at the prior firm are the performance record of the Firm.

(1) Total Firm Assets are not presented for periods prior to 2016 because the Composite was not part of the Firm.

Performance and composite inception and creation date is 07.01.1994.

Disclosure

The Small Cap Value Equity Composite includes all institutional portfolios that invest in the small capitalization strategy with a minimum initial account size of \$1,000,000. The strategy allows for investments in equity securities of companies with market capitalizations in a range representative of constituents in the Russell 2000 Index. The strategy aims to deliver a total return primarily through long-term capital appreciation. The benchmarks for the strategy are the Russell 2000 Index and the Russell 2000 Value Index. The performance presented herein represents past performance and is no guarantee of future results. Gross returns presented are net of any withholding taxes incurred. MEM and benchmark performance reflect the reinvestment of dividends and interest income, expressed in U.S. dollars. Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. The composite policy requires the temporary removal of any portfolio incurring a client-initiated significant inflow or outflow of 10% of portfolio assets. The firm maintains a complete list of composite descriptions, a list of pooled fund descriptions for limited distributions pooled funds and a list of broad distributions pooled funds, which is available upon request. Policies for valuing investments, calculating performance, and preparing GIPS Reports are available upon request.

Balanced portfolio segments were included in this composite prior to 10.01.1999 and cash was equally distributed among asset segments in their respective composites. On 06.30.2008, MEM redefined the requirements for membership in the composite to exclude accounts or carve-out segments of accounts with client mandated cash allocations in excess of 5%. The membership of this composite did not change as a result of this redefinition. On of 04.01.2009, MEM redefined the requirements for membership in the composite to exclude all carve-out accounts. The membership of this composite did not change as a result of this redefinition.

Calculation of Risk Measures: Annual / 3 Years Dispersion

Composite internal dispersion is calculated using the asset-weighted standard deviation of annual gross returns of those portfolios that were included in the composite for the entire year. Because it is not statistically meaningful, MEM does not calculate the dispersion of annual returns for the years the composite held five or fewer accounts. Inclusion of the three-year annualized ex-post standard deviation of the composite and benchmark was added as a requirement effective 12.31.2011.

Performance / Net of Fee Disclosure

Net of fee performance is calculated using the actual monthly fee accrued to each account in the composite as of 01.01.2010. Prior to 01.01.2010, Net of fee performance was calculated using the highest actual management fee charged to a member of the composite during the calendar year, applied monthly. Performance information that is provided gross of fees does not reflect the deduction of advisory fees. Client returns will be reduced by such fees and other expenses that may be incurred in the management of the account. Advisory fees are described in Part 2 of Form ADV of MIIM.

In presentations shown prior to 09.30.2014, net of fee performance was calculated using the actual monthly fee accrued to each account in the composite as of 04.01.2014. Prior to 04.01.2014, Net of fee performance was calculated using the highest actual management fee charged to a member of the composite during the calendar year, applied monthly.

- 10.01.2011 - 03.31.2014 the annual fee rate used was 0.95% which was the highest fee.
- 06.01.2011 - 09.30.2011 the annual fee rate used was 1.00%
- 01.01.2010 - 05.31.2011 the annual fee rate used was 0.90%
- 01.01.2008 - 12.31.2009 the annual fee rate used was 0.80%
- prior to 01.01.2008 the annual fee rate used was 0.79%

Investment Fee Disclosure

MEM requests that any third party, including investment management consultants, provide our performance data only on a one-on-one basis. Performance results are presented before management and custodial fees. As described in MEM's Form ADV, Part 2, investment management fees for the Small Cap Equity Strategy are:

- 0.85% on the first \$25 million
- 0.75% on the next \$25 million
- 0.60% on the next \$50 million
- 0.55% on the balance

An actual fee charged to an individual portfolio may vary by size and type of portfolio. Fees are collected quarterly, which produces a compounding effect on the total rate of return net of management fees. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) \$1,000,000 investment, (b) portfolio return of 8% a year, and (c) 0.85% annual investment advisory fee would reduce the portfolio's value by \$8,892 in the first year, by \$51,223 over five years and \$123,351 over 10 years. Actual investment advisory fees incurred by clients will vary.

Benchmark Definitions

The Russell 3000® Index measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market. The Russell 2000 Index® offers investors access to the small-cap segment of the U.S. equity universe. The Russell 2000 is constructed to provide a comprehensive and unbiased small-cap barometer and is completely reconstituted annually to ensure larger stocks do not distort the performance and characteristics of the true small-cap opportunity set. The Russell 2000 includes the smallest 2000 securities in the Russell 3000.

The Russell 2000 Value Index® offers investors access to the small-cap value segment of the U.S. equity universe. The Russell 2000 Value is constructed to provide a comprehensive and unbiased barometer of the small-cap value market. Based on ongoing empirical research of investment manager behavior, the methodology used to determine value probability approximates the aggregate small-cap value manager's opportunity set. (Source: Russell).

These indexes have been displayed as comparisons to the performance of the Small Cap Value Equity Composite.

(2) Additional Information.

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GLOBAL INVESTMENT MANAGEMENT

CAPITAL MARKETS & INVESTMENT BANKING

ADVISORY SERVICES

Mesirow refers to Mesirow Financial Holdings, Inc. and its divisions, subsidiaries and affiliates. The Mesirow name and logo are registered service marks of Mesirow Financial Holdings, Inc. © 2022. All rights reserved. Effective 07.01.2022, Mesirow Equity Management ("MEM") became a division of Mesirow Institutional Investment Management ("MIIM") an SEC-registered investment manager. Prior to 07.01.2022, MEM was a division of Mesirow Financial Investment Management, Inc., ("MFIM"). This communication is for institutional use only and may contain privileged and/or confidential information. It is intended solely for the use of the addressee. If this information was received in error, you are strictly prohibited from disclosing, copying, distributing or using any of this information and are requested to contact the sender immediately and destroy the material in its entirety, whether electronic or hardcopy. Nothing contained herein constitutes an offer to sell or a solicitation of an offer to buy an interest in any Mesirow Financial investment vehicle. The information contained herein has been obtained from sources believed to be reliable, but is not necessarily complete and its accuracy cannot be guaranteed. Any opinions expressed are subject to change without notice. It should not be assumed that any recommendations incorporated herein will be profitable or will equal past performance. Model, theoretical or hypothetical performance information and results do not reflect actual trading or asset or fund advisory management and the results may not reflect the impact that material economic and market factors may have had, and can reflect the benefit of hindsight, on MEM's decision-making if MEM were actually managing client's money. Any chart, graph, or formula should not be used by itself to make any trading or investment decision. Mesirow Financial Investment Management, Inc. and its affiliated companies and/or individuals may, from time to time, own, have long or short positions in, or options on, or act as a market maker in, any securities discussed herein and may also perform financial advisory or investment banking services for those companies. Mesirow Financial does not provide tax or legal advice. Securities offered through Mesirow Financial, Inc. member FINRA, SIPC.



Presentation to

MWRA Retirement System

December 14, 2022

Presented by:

Chris Wallis, CFA - CEO & CIO

Mark Farrell - Managing Director, Business Development

600 Travis St., Suite 3800
Houston, TX 77002
713-224-2545

180 N. Stetson Ave., Suite 5525
Chicago, IL 60601
312-767-1803



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VAUGHAN
NELSON

FIRM OVERVIEW

FIRM OVERVIEW

Why Vaughan Nelson?

We believe investing is about

offsetting future obligations

not just having market exposure.



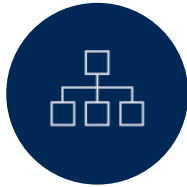
Focus on a targeted return. We seek investments which have the ability to generate a 50% return over three years



We trade time for value. A longer time horizon allows us to exploit short-term volatility and poor short-term price discovery

FIRM OVERVIEW

Providing Financial Wellbeing Through Superior Performance



ORGANIZATION

Founded 1970

\$12.7* billion under management as of 9/30/2022

Domestic Equity
International Equity
Global Equity
Fixed Income



PEOPLE

54 employees

22 investment team professionals

13 Chartered Financial Analyst designations

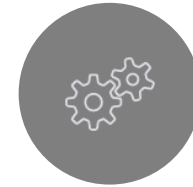
3 Ph.D.s



PHILOSOPHY

Concentrated, high-conviction, high-active share

Temporary inefficiencies and time arbitrage create long-term opportunities



PROCESS

Unconstrained benchmark agnostic

Rigorous, bottom-up fundamental analysis

Macro environment impacts security selection and construction

* Number includes assets where Vaughan Nelson Investment Management does not have full unconditional trading authority. The assets consist of model portfolio relationships with third-party platforms and totaled \$1.7 billion as of 9/30/2022.

FIRM OVERVIEW

Our Equity Strategies

SMALL CAP VALUE

- **Benchmarked against the Russell 2000® Value Index**
- **Generally 55 to 85 positions**

VALUE OPPORTUNITY

- Benchmarked against the Russell Midcap® Value Index and Russell 2500™ Value Index
- Generally 55 to 75 positions

SELECT

- Benchmarked against the Russell 3000® Index and S&P 500 Index
- Generally 20 to 40 positions

GLOBAL SMID CAP

- Benchmarked against the MSCI ACWI SMID Cap Index
- Generally 40 to 80 positions

INTERNATIONAL SMALL CAP

- Benchmarked against the MSCI EAFE Small Cap Index
- Generally 60 to 80 positions

EMERGING MARKETS

- Benchmarked against the MSCI Emerging Markets SMID Index
- Generally 60 to 80 positions

FIRM OVERVIEW

Representative List of Institutional Clients

NON-PROFIT	Board of Higher Education, United Methodist Church Hamill Foundation Methodist Hospital Roman Catholic Diocese of Orange Texas Medical Association The Community Foundation of Louisville Trull Foundation University of Dallas Wortham Foundation
PUBLIC	Austin Fire Fighters Relief and Retirement Fund Cobb County Employees' Retirement System Florida State Board of Administration Gwinnett County Public Employees Retirement System Teacher Retirement System of Texas
CORPORATE	Baxter International Hess Corporation Principal Global Investors Stewart Title

It is not known whether the listed clients approve or disapprove of the advisor or the advisory services provided. This is a list of institutional clients whose investment management is a matter of public record, selected because it was believed that their names would be recognized by prospective clients, without regard to performance-based criteria.

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OUR TEAM

OUR TEAM

Equity Investment Team

Portfolio Management	Title	Primary Strategy	Investment Experience	Joined Firm
Dennis Alff, CFA	Senior Portfolio Manager	Value Opportunity	25 years	2006
Stephen Davis, CFA	Portfolio Manager	Small Cap Value	17 years	2010
James Eisenman, CFA, CPA	Portfolio Manager	Global SMID, Small Cap Value	20 years	2005
Chad Fargason, PhD	Senior Portfolio Manager	Value Opportunity	22 years	2013
Marco Priani, CFA, CPA	Senior Portfolio Manager	International, Global SMID	21 years	2019
Kevin Ross, CFA	Senior Portfolio Manager	International, Global SMID	16 years	2019
Chris Wallis, CFA, CPA	CEO, CIO, Senior Portfolio Manager	Small Cap Value	30 years	1999
Scott Weber, CFA	Senior Portfolio Manager	Select	26 years	2003
Research	Title	Primary Strategy	Investment Experience	Joined Firm
Benjamin Carrier, CFA	Associate	Small Cap Value	8 years	2016
Tyler Fry, CFA	Associate	Select	8 years	2016
Sundeep Khanna, CFA	Vice President	Value Opportunity	17 years	2020
Earl Lee, CFA	Associate	Small Cap Value	10 years	2022
Masa Matsumura, PhD	Vice President	International, Global SMID	12 years	2020
Adam Rich, CFA	Vice President	Select	12 years	2016
Corrine Richter	Associate	Select	1 year	2021
Zhongjie (Matt) Wang	Associate	International, Global SMID	3 years	2022
Risk Management	Title	Primary Strategy	Investment Experience	Joined Firm
Isabelle Long	Associate	All Strategies	< 1 year	2022
William Wojciechowski, PhD	Chief Risk Officer	All Strategies	20 years	2007
ESG Analytics	Title	Primary Strategy	Investment Experience	Joined Firm
Sean Lechleiter	Senior Associate	All Strategies	5 Years	2022
Trading	Title	Primary Strategy	Investment Experience	Joined Firm
J. D. Michael	Senior Vice President	All Strategies	29 years	2006
Allyson Percy	Managing Director	All Strategies	24 years	1999

OUR TEAM

Small Capitalization Value Investment Team



Chris Wallis, CFA, CPA
CEO and CIO, Senior Portfolio Manager

- 30 years investment management / financial analysis and accounting experience
- MBA, Harvard Business School, 1998
- BBA, Baylor University, 1991



Benjamin Carrier, CFA
Associate

- 8 years financial analysis and accounting experience
- BBA, Baylor University, 2014, *cum laude*



Stephen Davis, CFA
Portfolio Manager

- 17 years investment management and research experience
- BA, Rice University, 2005, *cum laude*

Earl Lee, CFA
Associate

- 10 years investment management and financial analysis experience
- MBA, The University of Texas at Austin, 2012
- BS, Purdue University, 2007



James Eisenman, CFA, CPA
Portfolio Manager

- 20 years financial services and accounting experience
- MAcc, Ohio State University, 2002, with Honors
- BBA, Ohio State University, 2002, with Honors

Isabelle Long
Associate

- BS, Texas A&M University, 2022



William Wojciechowski, PhD
Chief Risk Officer

- 20 years investment management and financial analysis experience
- PhD, Rice University, 2001
- MA, Rice University, 1999
- MS, West Virginia University, 1996
- BS, Carnegie Mellon University, 1992

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STRATEGY PROFILE

STRATEGY PROFILE

Consistency of Returns and Risk

eVestment U.S. Small Cap Value Universe Percentile Rank (9/30/22)					
	1 year	3 Years	5 Years	10 Years	Since Inception
Returns (Gross)	8	25	13	16	8
Information Ratio	14	32	20	21	7
Sharpe Ratio	7	13	9	6	1

All periods longer than 12 months are annualized. Performance data shown represents past performance and is not a guarantee of future results. See page 15 for disclosures.
Source: GPS

STRATEGY PROFILE

Investment Results as of 11/30/2022 (preliminary based on model)

Investment Objective

- Long term capital appreciation through investments in small capitalization companies with a focus on a targeted return

Investment Focus

- Companies within the market capitalization range of the Russell 2000 Value Index at time of purchase
- Companies earnings a positive return on capital, valued at a discount to their asset value or with an attractive dividend yield
- Companies that have the potential for 50% returns over a three year investment horizon

Past performance is no guarantee of future results.

	QTD	YTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception 12/31/1999
Small Cap Value (Gross)	-15.58%	-2.80%	3.29%	12.99%	8.90%	9.89%	12.49%	13.65%
Russell 2000 Value Index	-16.03%	-8.48%	-4.75%	8.33%	5.35%	8.44%	9.67%	9.14%

All returns are presented gross-of-fees and all periods longer than 12 months are annualized.

Rounding may affect figures.

See next page for detailed composite information.

Source: OP-os

STRATEGY PROFILE

Investment Results as of 9/30/2022

Investment Objective

- Long term capital appreciation through investments in small capitalization companies with a focus on a targeted return

Investment Focus

- Companies within the market capitalization range of the Russell 2000 Value Index at time of purchase
- Companies earnings a positive return on capital, valued at a discount to their asset value or with an attractive dividend yield
- Companies that have the potential for 50% returns over a three year investment horizon

Past performance is no guarantee of future results.

	3Q 2022	YTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception 12/31/1999
Small Cap Value (Gross)	-4.14%	-16.02%	-7.17%	8.33%	6.66%	8.53%	10.87%	13.04%
Small Cap Value (Net)	-4.38%	-16.66%	-8.10%	7.26%	5.60%	7.46%	9.78%	11.94%
Russell 2000 Value Index	-4.61%	-21.12%	-17.69%	4.72%	2.87%	7.42%	7.94%	8.50%

All returns are presented gross/net-of-fees and all periods longer than 12 months are annualized.

Rounding may affect figures.

See next page for detailed composite information.

Source: OP-os

Small Capitalization Value: GIPS® Composite Returns

December 31, 1999 through September 30, 2022

Past performance is no guarantee of future results.

Year	Composite (Gross)	Composite (Net)	R2000V Index	Number of Portfolios	Dispersion at End-of-Period (Std Dev)	Composite Assets at End-of-Period (\$MM-USD)	Total Firm Assets (ex. model assets) (\$MM-USD)	Entity Assets* (\$MM-USD)	Std Dev Composite (3-Yr Annlzd)	R2000V Index (3-Yr Annlzd)
YTD 2022	-16.02%	-16.66%	-21.12%	60	N/A	1,765	10,950	12,656	22.92%	26.11%
2021	32.54%	31.26%	28.27%	67	0.26%	2,340	13,490	15,481	21.82%	25.00%
2020	9.82%	8.60%	4.63%	64	1.16%	2,571	12,690	14,052	23.18%	26.12%
2019	25.95%	24.64%	22.39%	72	0.35%	2,712	11,346	13,064	14.18%	15.68%
2018	-13.59%	-14.47%	-12.86%	87	0.38%	2,663	10,078	11,425	14.15%	15.76%
2017	7.77%	6.71%	7.84%	101	0.21%	3,780	11,675	13,172	12.78%	13.97%
2016	21.37%	20.18%	31.74%	109	0.86%	3,944	11,572	12,912	13.69%	15.50%
2015	0.99%	-0.01%	-7.47%	102	0.18%	3,135	11,316	12,469	12.12%	13.46%
2014	10.12%	9.02%	4.22%	95	0.16%	3,783	9,943	11,057	10.76%	12.79%
2013	40.39%	39.02%	34.52%	100	0.36%	3,933	9,243	10,258	14.48%	15.82%
2012	16.26%	15.16%	18.05%	96	0.28%	2,902	7,273	8,071	17.60%	19.89%
2011	-2.54%	-3.48%	-5.50%	102	0.19	2,801	6,876	7,667	20.89%	26.05%
2010	25.20%	23.97%	24.50%	111	0.31	3,133	7,050	7,965	22.91%	28.37%
2009	30.36%	29.09%	20.58%	93	0.66	2,491	6,757	7,690	20.31%	25.62%
2008	-21.57%	-22.37%	-28.92%	95	0.52	1,711	5,761	6,642	16.69%	19.14%
2007	7.31%	6.25%	-9.78%	109	0.29	1,840	6,637	8,176	10.68%	12.59%
2006	20.00%	18.82%	23.48%	35	0.47	580	5,218	6,711	11.26%	12.33%
2005	11.81%	10.71%	4.71%	23	0.31	234	4,120	4,688	14.60%	14.09%
2004	20.11%	18.93%	22.25%	12	0.12	73	3,446	3,617	18.12%	17.51%
2003	53.27%	51.79%	46.03%	9	0.29	61	3,246	3,274	19.57%	18.42%
2002	-6.80%	-7.74%	-11.43%	Fewer than 5	N/A	7	3,470	3,471	20.42%	17.39%
2001	5.93%	4.99%	14.03%	Fewer than 5	N/A	8	N/A	4,247	18.37%	14.65%
2000	57.55%	56.65%	22.83%	Fewer than 5	N/A	7	N/A	3,955	19.81%	16.61%

See next page for Notes and Disclosures.

Small Capitalization Value: GIPS® Notes and Disclosures

NOTES:

COMPOSITE DESCRIPTION. This composite is comprised of all fee paying, discretionary Small Capitalization Value portfolios in excess of \$1 million under management. Small Capitalization Value is defined as a company within the market capitalization range of Russell 2000® Value Index at time of initial purchase. The benchmark is the Russell 2000® Value Index. The Russell 2000® Value Index measures the performance of small-cap value segment of the U.S. equity universe. It includes those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values. The Russell 2000® Value Index is constructed to provide a comprehensive and unbiased barometer for the small-cap value segment. The Index is completely reconstituted annually to ensure larger stocks do not distort the performance and characteristics of the true small-cap opportunity set and that the represented companies continue to reflect value characteristics. Frank Russell Company ("Russell") is the source and owner of Russell Index data contained herein. Any further dissemination of the data is strictly prohibited. Russell is not responsible for any inaccuracy in this presentation. The composite creation and inception date is April 1997. **FIRM DEFINITION.** Vaughan Nelson Investment Management ("Vaughan Nelson") is an equity, fixed-income and balanced portfolio investment manager. Vaughan Nelson is defined as an independent investment advisory firm and is affiliated with Natixis Investment Managers, LLC. **FEES.** Small Capitalization Value Fee Schedule: 1.00% on the first \$25 million, .85% on the next \$25 million, .75% on the remainder. **OTHER NOTES.** Performance results are presented before management fees. Results for the full historical period are time weighted. Accounts have been valued daily and portfolio returns have been weighted by using beginning-of-month market values plus daily weighted cash flow. The dispersion calculation is based on a dollar-weighted average of gross portfolio returns within the composite for the entire period. The dispersion percent of N/A indicates that the number of portfolios for the entire year were equal to five or fewer or periods of less than one year. The benchmark source is FactSet. The valuation source is Intercontinental Exchange (ICE). Benchmark returns are not covered by the report of independent verifiers.

DISCLOSURES:

BASIS OF PRESENTATION. The attached information and index performance has been developed internally and/or obtained from sources, which Vaughan Nelson believes to be reliable; however, Vaughan Nelson does not guarantee the accuracy, adequacy or completeness of such information, nor does it guarantee the appropriateness of any strategy referred to for any particular investor. This document is provided for informational purposes only and should not be construed as advice or a recommendation for purchase or sale of securities. Past performance is not indicative of future results. The strategy is managed by Chris Wallis and Stephen Davis from 12/31/18, Chris Wallis, Scott Weber, Dennis Alff, and Chad Fargason from 9/30/13; and Chris Wallis and Scott Weber from 6/30/04. **COMPOSITE NOTES.** The composite for each investment strategy has specific criteria in terms of minimum portfolio size, tax status, and discretion. Portfolios meeting the stated criteria are added to the composite as of the first full quarter of investment in that composite's style. Similarly, accounts are removed from the composite after the last full quarter of management under the composite style. A list of all composites and pooled fund investment strategies offered by the firm, with a description of each strategy, is available upon request. The composite results portrayed reflect the reinvestment of dividends, capital gains, and other earnings when appropriate. **CALCULATION METHODOLOGY.** The composite performance results are time-weighted total return net of commissions and transaction costs. Valuations and returns are expressed in U.S. dollars. Vaughan Nelson consistently values all portfolios each month on a trade date basis. Policies for valuing investments, calculating performance, and preparing GIPS Report are available upon request. No composite accounts hold foreign denominated securities. This fee is divided by 12 and subtracted from the gross composite return on a monthly basis to calculate monthly net-of-fee returns. Quarterly and annual net-of-fee returns are calculated by geometrically linking these monthly returns. **COMPLIANT STATEMENT.** Vaughan Nelson claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS® Standards. Vaughan Nelson has been independently verified for the periods 12/31/97 through 6/30/22. 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 Small Cap Value composite has had a performance examination for the periods 1/1/01 through 12/31/21. The verification and performance examination reports are available upon request. 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. **PERFORMANCE DISCLOSURE.** For returns presented gross of fees, results were calculated prior to a deduction for investment management fees. Client returns will be reduced by Vaughan Nelson's investment management fees. The fee schedule is disclosed in Part 2A of Form ADV filed with the Securities and Exchange Commission. Over a period of years, deductions for annual investment management fees will reduce the compounding effect on portfolio growth. For example, assuming a 5% annual return for five years and application of the maximum annual fee of 1.00%, a total gross return of 27.63% and a total net return of 21.67% would be generated.

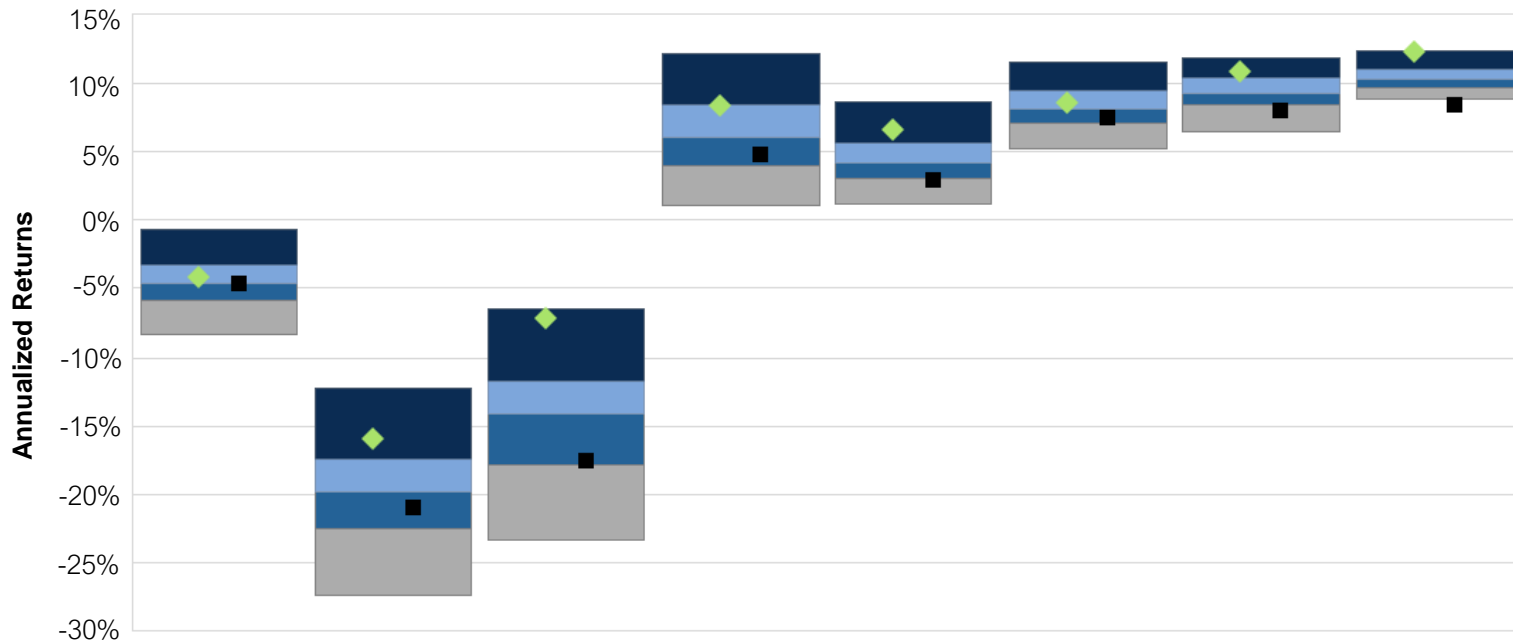
Model year-end portfolio totals were as follows: 2021 - \$2.0 billion, 2020 - \$1.4 billion; 2019 - \$1.7 billion, 2018 - \$1.3 billion; 2017 - \$1.5 billion; 2016 - \$1.3 billion, 2015 - \$1.2 billion, 2014 - \$1.1 billion, 2013 - \$1.0 billion, 2012 - \$798 million.

* Number includes assets where Vaughan Nelson Investment Management does not have full unconditional trading authority. The assets consist of model portfolio relationships with third-party platforms and totaled \$1.7 billion as of 9/30/22. This information is presented as supplemental information to the Small Capitalization Value GIPS Report.

STRATEGY PROFILE

eVestment Rankings as of 9/30/2022

Past performance is no guarantee of future results.



	QTR		YTD		1 Year		3 Years		5 Years		7 Years		10 Years		Since Inception 25.5 Years	
		Rk		Rk		Rk		Rk		Rk		Rk		Rk		Rk
■ 5th Percentile	-0.75		-12.30		-6.56		12.13		8.62		11.54		11.80		12.31	
■ 25th Percentile	-3.26		-17.50		-11.84		8.38		5.65		9.42		10.37		10.96	
■ Median	-4.68		-19.90		-14.22		6.04		4.20		8.08		9.24		10.31	
■ 75th Percentile	-5.92		-22.56		-17.91		3.96		3.06		7.07		8.42		9.67	
■ 95th Percentile	-8.42		--27.44		-23.43		1.03		1.11		5.23		6.44		8.82	
■ # of Observations	229		229		229		225		213		205		193		61	
◆ Small Cap Value	-4.14	42	-16.02	15	-7.17	8	8.33	26	6.65	13	8.53	39	10.87	16	12.21	7
■ Russell 2000 Value Index	-4.61	49	-21.12	63	-17.69	74	4.72	67	2.87	79	7.42	66	7.94	82	8.38	98

eVestment Alliance, LLC, and its affiliated entities (collectively, "eVestment") collect gross-of-fee investment returns directly from investment management firms and other sources believed to be reliable. eVestment then determines percentiles based on the investment return data it has collected and provides percentile rankings for investment management firms. See page 16 for composite gross-of-fee and net-of-fee investment returns for QTD, YTD, 1-yr, 3-yr, 5-yr, 10-yr, and since inception periods.

Source: eVestment

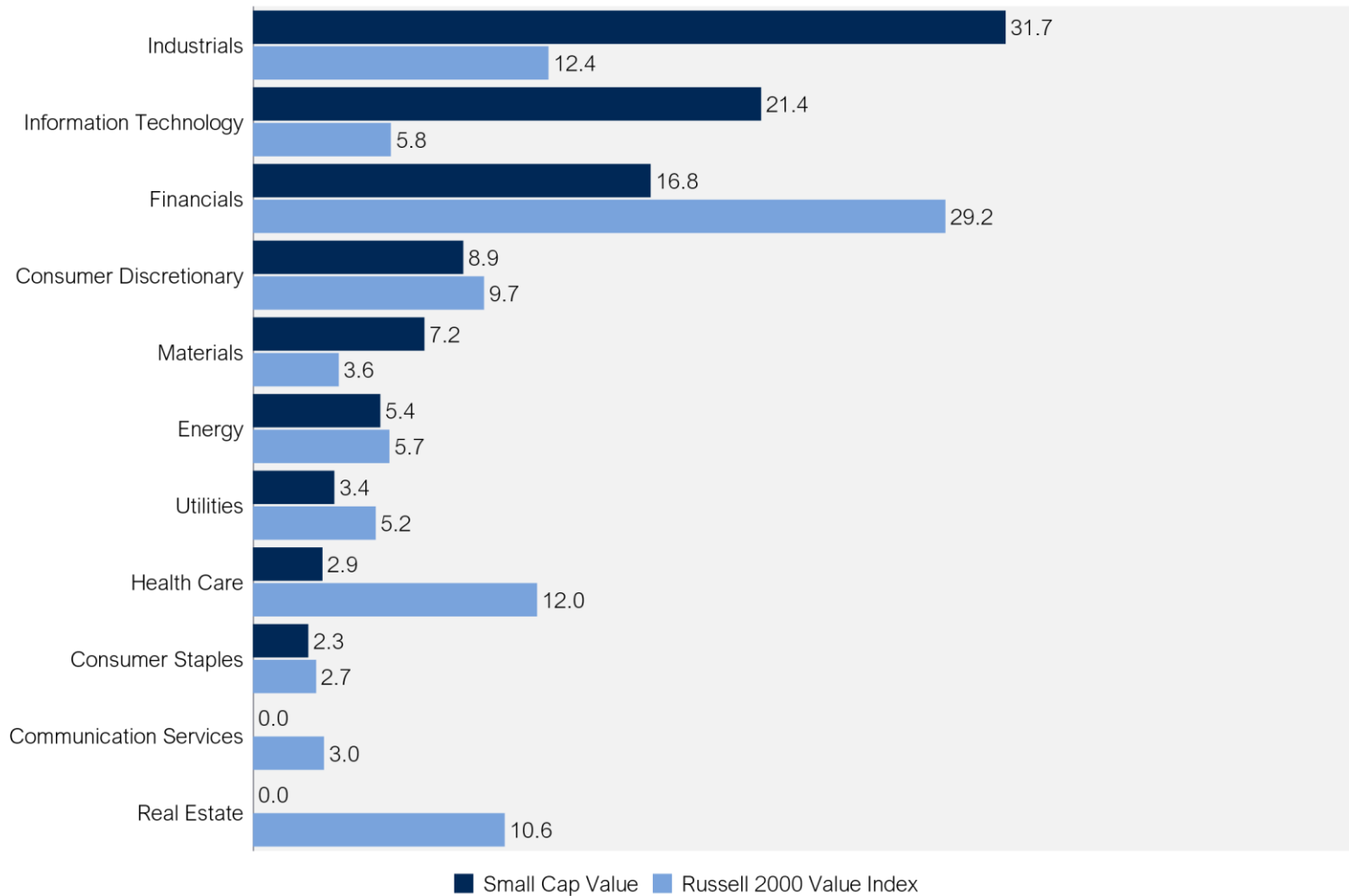
STRATEGY PROFILE

Portfolio Structure

UNIVERSE	Positions that fall within the market capitalization range of the Russell 2000 Value at time of purchase
DIVERSIFICATION	Generally 55-85 positions, top ten typically ~20-30% of portfolio
EXPOSURE	Focused on U.S. small cap markets
SECTOR LIMITS	Generally +/- 20% vs benchmark
PORTFOLIO WEIGHTINGS	Generally 5% at purchase cost maximum
ACTIVE SHARE	Generally greater than 90%
NAME TURNOVER	Generally 30-40%
CURRENCY HEDGING, MARGINS, OPTIONS	None

STRATEGY PROFILE

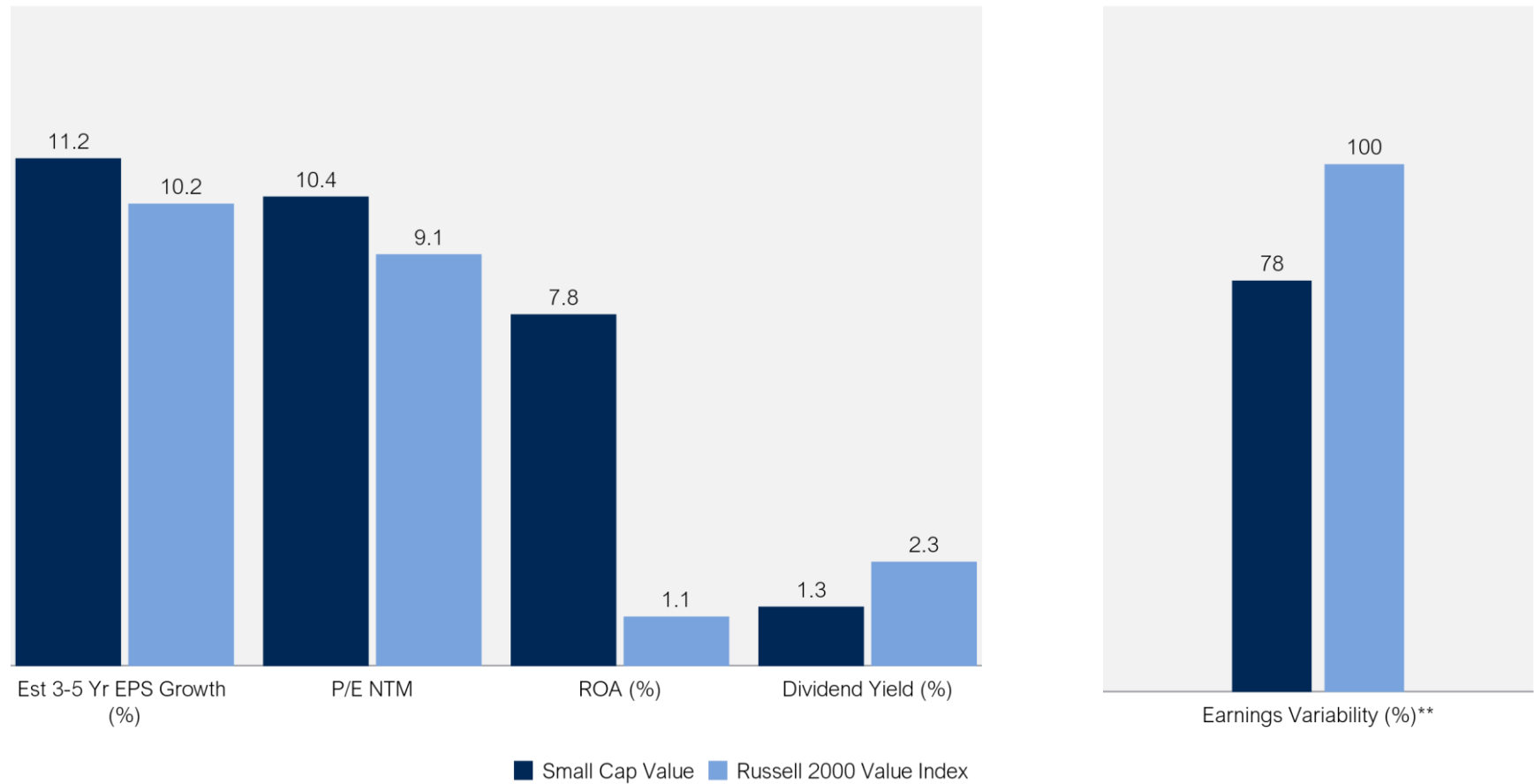
Sector Allocation as of 9/30/2022 (%)



Due to rounding, totals may not equal 100%. Excludes 6.29% cash.
Source: FactSet

STRATEGY PROFILE

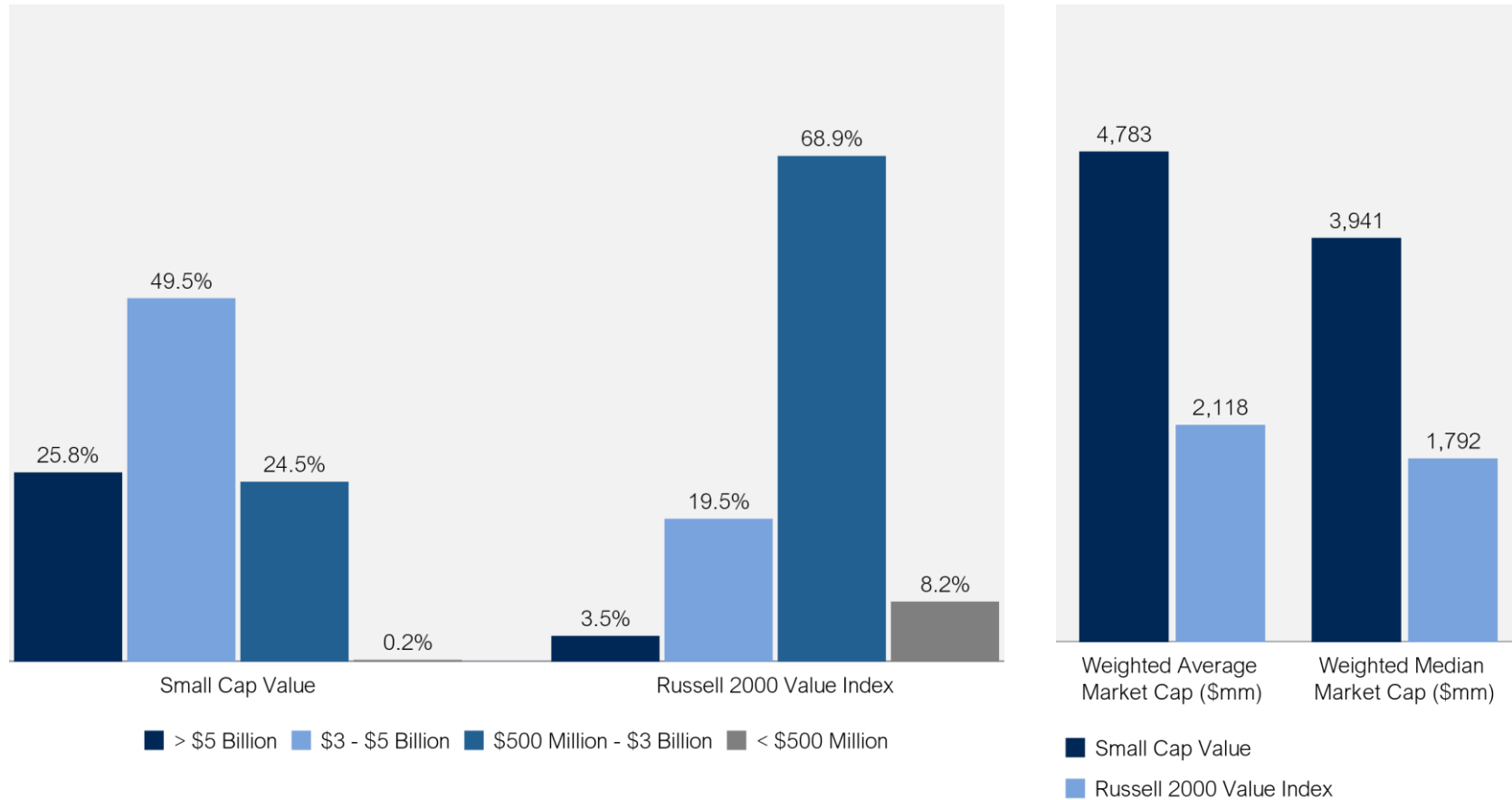
Portfolio Characteristics as of 9/30/2022



** The numerical value one minus the R-squared statistic for a trend line of the most recent five years of fiscal year earnings per share. Earnings variability of the Small Cap Value portfolio is 0.42 versus 0.54 for the Russell 2000 Value Index (9/30/2017 to 9/30/2022). Source: FactSet

STRATEGY PROFILE

Market Cap Allocation as of 9/30/2022



Due to rounding, totals may not equal 100%.
Source: FactSet

STRATEGY PROFILE

Portfolio Characteristics as of 9/30/2022

	Small Cap Value	Russell 2000 Value Index
Beta*	0.86	1.00
Sharpe Ratio*	0.27	0.08
Information Ratio*	0.61	N/A
R-Squared*	0.93	1.00
Standard Deviation (%)*	20.67	23.19

* Annualized 5 years ending 9/30/2022.
Source: eVestment

STRATEGY PROFILE

Top Ten Holdings as of 9/30/2022

Company	Portfolio Weight (%)*
Element Solutions Inc	3.53
Insight Enterprises Inc	3.49
ExlService Holdings Inc	2.95
WNS Holdings Ltd	2.94
ASGN Inc	2.63
Cboe Global Markets Inc	2.60
GATX Corp	2.43
Federal Signal Corp	2.31
Franklin Electric Co Inc	2.28
Rambus Inc	2.11

* Excludes 6.29% cash.

There is no assurance that any securities discussed herein will remain in an account portfolio at the time you review this Profile or securities sold have not been re-purchased. The securities discussed do not represent an account's entire portfolio and, in the aggregate, may represent only a small percentage of an account's portfolio holdings. It should not be assumed that any of the security transactions or holdings discussed were or will prove to be profitable or that the investment recommendations or decisions made in the future will be profitable or will equal the investment performance of the securities discussed herein.

Source: FactSet

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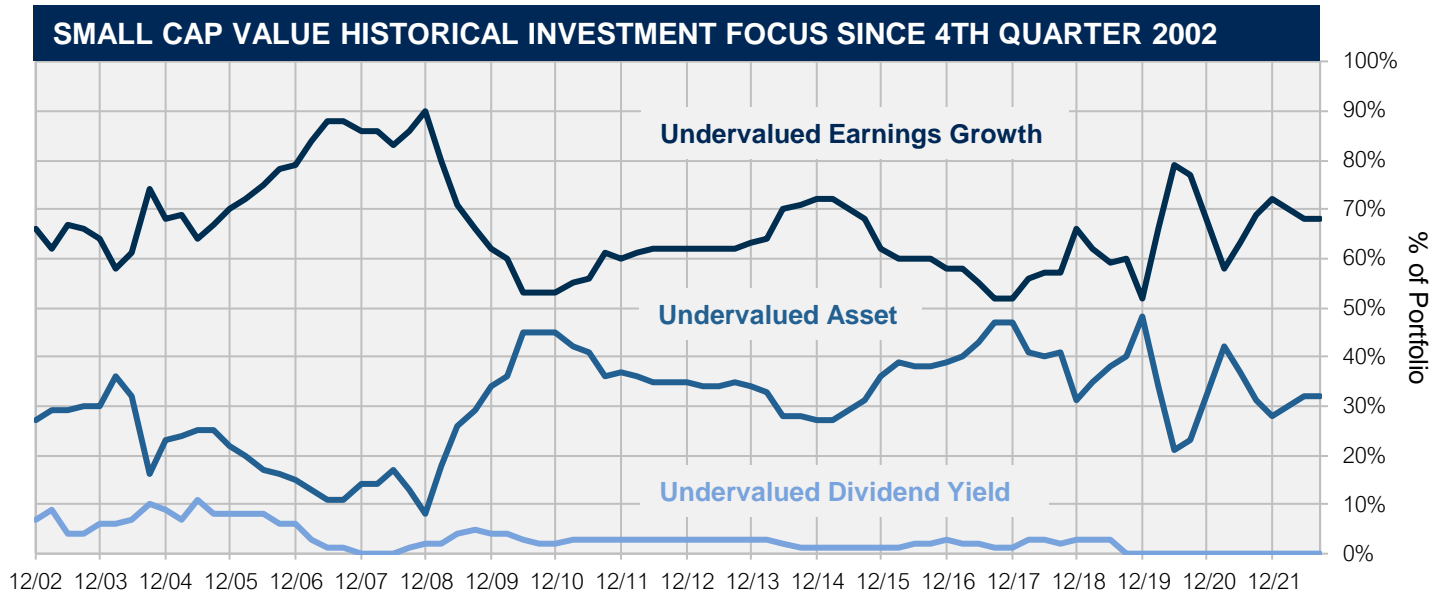
INVESTMENT PROCESS

INVESTMENT PROCESS

Three Ways to Achieve Our Targeted Return

- 1 Undervalued Earnings Growth**
 - Future redeployment of capital is not reflected in current valuation
- 2 Undervalued Asset**
 - Asset priced at a significant discount
 - Identified catalyst to close valuation gap
- 3 Undervalued Dividend Yield**
 - High secure dividend yield, typically +10%

Past performance is no guarantee of future results.



Weightings as of 9/30/22.

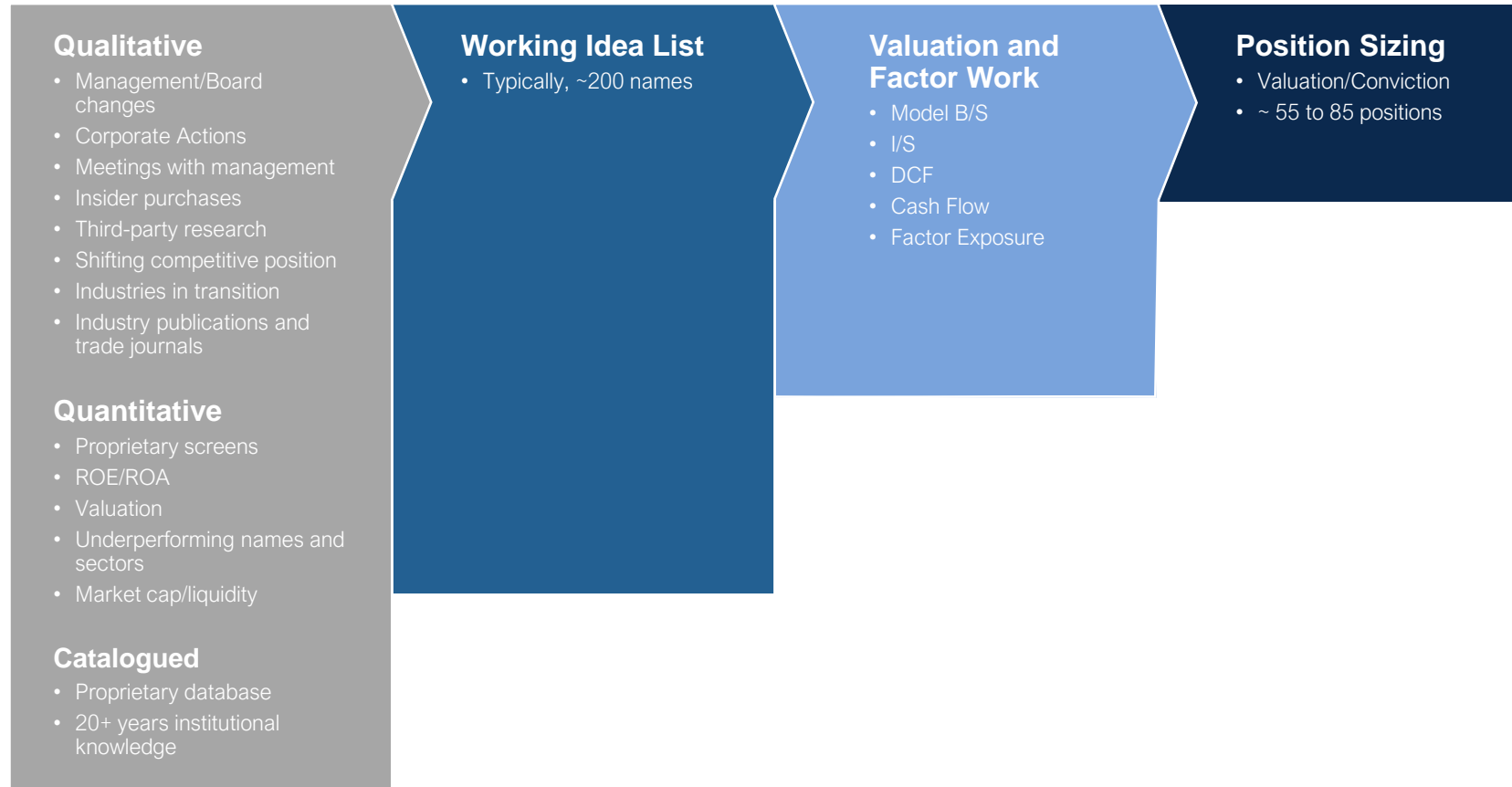
INVESTMENT PROCESS

Stocks Meet at Least One of Three Criteria

	CONSIDERATIONS
1 Undervalued Earnings Growth	<ul style="list-style-type: none">• Market not considering the company's ability to continue investing for extended period of time at high rates of return• Management team with strong capital allocation track record• Earn same to higher rate of return on redeployed earnings, thus avoiding multiple compression• Management understands limit of reinvestment and has other means and willingness to return excess cash to shareholders
2 Undervalued Assets	<ul style="list-style-type: none">• Cyclical industries at trough valuations with identifiable industry inflection• Corporate asset and/or balance sheet restructuring• End markets are stable to improving across cycles, not in secular decline• Underlying return characteristics and competitive dynamics are stable to improving, avoiding "value traps"
3 Undervalued Dividend Yield	<ul style="list-style-type: none">• Balance sheet not being liquidated to pay the dividend• Stable industry dynamics• Bulk of expected return to come from dividend• Shareholder friendly payout policy

INVESTMENT PROCESS

Idea Generation



INVESTMENT PROCESS

Sell Discipline

- ▶ Targeted valuation reached
- ▶ Investment thesis invalidated
- ▶ Better risk-reward elsewhere
- ▶ Competitive dynamics changed
- ▶ Macro factors dictate

INVESTMENT PROCESS

Macro in the Investment Process

Macro Information We Routinely Monitor

- Two most important influences for risk assets are inflections higher/lower in economic growth rates and inflationary pressures.
 - Utilizing third party data services, we identify growth rate cycle downturns nine-to-twelve months in advance and growth rate cycle upturns with a one-to-three-month lead time. While we are able to identify growth rate cycle upturns and downturns, we are not able to identify the magnitude of such upturns and downturns.
- This information is delineated by country as well as industrial and service sectors. For the U.S., this also includes employment conditions.
- We are also able to determine by country when a growth slowdown will lead to a “recessionary window”. A recessionary window is when economic growth is so weak that any normally recurring headwind will tip an economy into a recession.
- Depending on what level of economic activity is implied in current capital market valuations, such upturns and downturns may prove to be immaterial or quite material.
- By country we have a three plus month lead time on inflation accelerations and decelerations and can determine whether the inflation is trending or transitory.
- We also monitor liquidity, credit, and market conditions, to identify where economic trends or investment themes are unsustainable or becoming disconnected from economic reality.

How We Incorporate Macro Info into the Investment Process

- Macro is not the driver of idea generation or portfolio construction. Idea generation and positions held in the portfolio are based on their industry and corporate outlook combined with positive asymmetrical return expectations.
- Our routine bottom-up research allows an understanding as to whether the macro environment provides tailwinds or headwinds as management seeks to execute their corporate strategy. This can help in assessing the reasonableness of our financial projections and the risk inherent in the investment thesis.
- As we construct portfolios our macroeconomic understanding informs when to add to or detract from economic risk and can assist with the timing of building or exiting positions.
- As we identify liquidity, credit, or market conditions that are unsustainable or disconnected from economic reality, we assess to what degree they could influence current or prospective portfolio holdings in a positive or negative manner. These risks are monitored to minimize exposure in the portfolios and as risks occur, we can exploit market volatility and macro unaware investors to capture investment opportunities.

INVESTMENT PROCESS

Environmental, Social and Governance (ESG)

- ESG considerations are factored into our fundamental analysis to ascertain ESG issues that could be a mitigant to achieving our targeted-return objective.
- Vaughan Nelson maintains that positive management engagement, inclusive of significant and/or material ESG related factors, is a fundamental component to the investment process and contributes to better corporate performance, increased shareholder value and more accurate investment intelligence.
- Vaughan Nelson is a signatory to the United Nations Principles for Responsible Investment.



INVESTMENT PROCESS

Diversity, Equality, and Inclusion

Vaughan Nelson is committed to fostering, cultivating, and preserving a culture of diversity and inclusion.



Our human capital is the most valuable asset we have. The collective sum of the individual differences, life experiences, knowledge, inventiveness, innovation, self-expression, unique capabilities, and talent that our employees invest in their work represents a significant part of not only our culture, but also our reputation and company's achievement.

Vaughan Nelson's diversity initiatives are applicable—but not limited—to our practices and policies on:

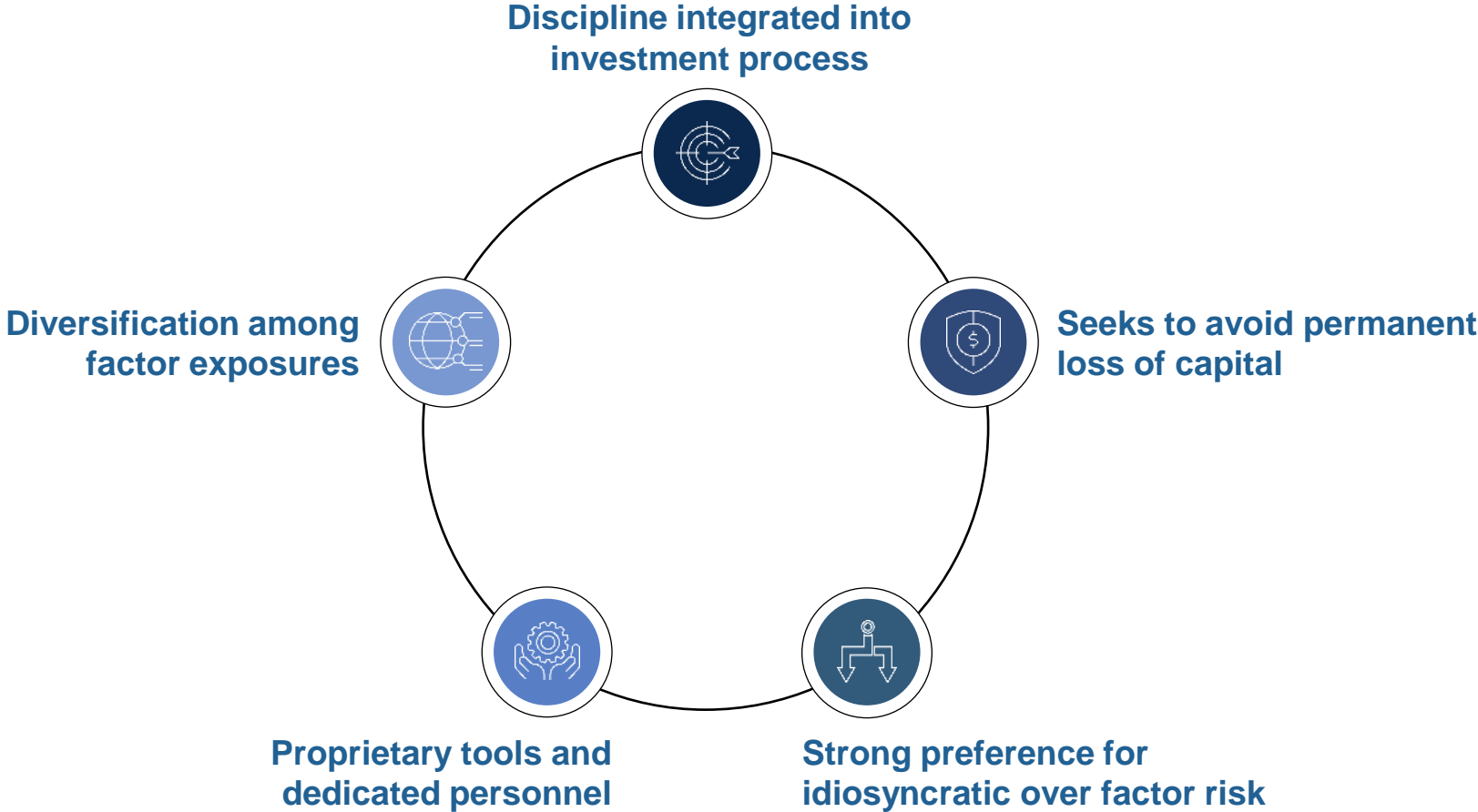
- Recruitment and selection;
- Compensation and benefits;
- Professional development and training;
- Social and recreational programs;
- Ongoing development of a work environment built on the premise of gender and diversity equality



RISK MANAGEMENT

RISK MANAGEMENT

Philosophy



RISK MANAGEMENT

Individual Security Level: Avoid Permanent Loss of Capital

Financial Distress Risk

- Traditionally not well compensated, thus try to avoid
- Fundamental analysis considers pensions, contingent liabilities, realization ratios, accruals, visibility of cash flows, covenants

Business Risk

- Can be a source of opportunities as the market often focuses on the short term
- Avoid industries in secular decline, poor quality, unproven business models, excessive leverage
- ESG integrated into the analysis of this risk as well

Valuation Risk

- Mitigated by valuation methodology, which is driven by ROIC
- Asymmetric profile of-expected return

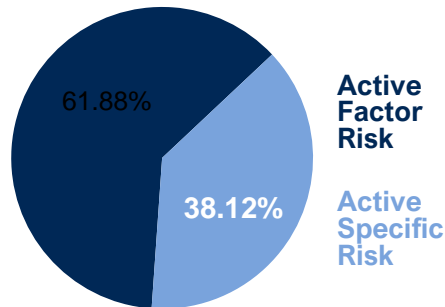
Liquidity Risk

- Not an independent risk but an accelerator of the previous three risks
- Mitigated through diversification, investment, and position size

RISK MANAGEMENT

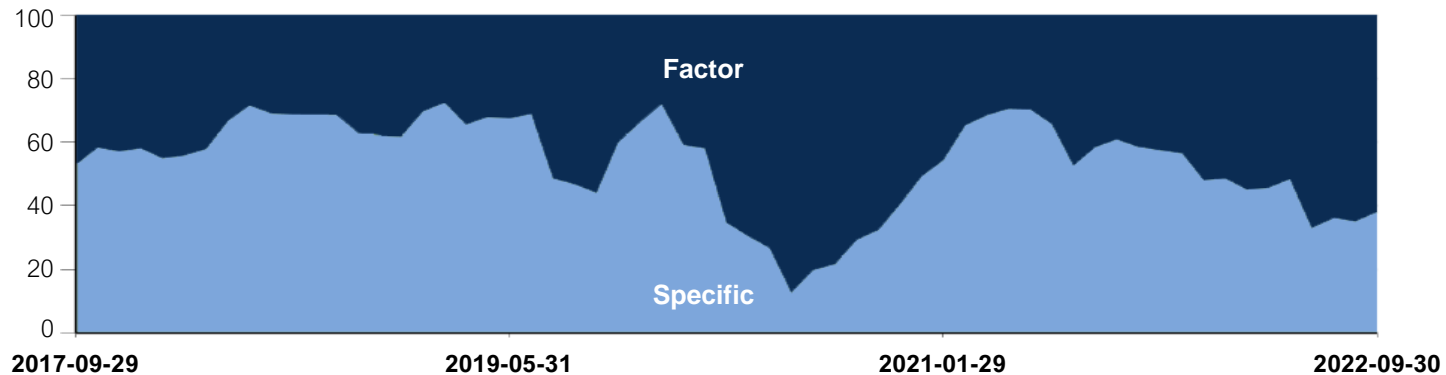
Portfolio Level: Idiosyncratic Risk Drives Returns

Active Risk Decomposition



Risk Decompression	Active Std Dev (%)	Active % of Var	Active % of Var (Cov-Dist)
Active Risk	5.44%	100.00%	100.00%
Specific Active Risk	3.36%	38.12%	38.12%
Factor Active Risk	4.28%	61.88%	61.88%
Style	2.59%	22.79%	29.34%
Country	0.71%	1.72%	2.67%
Industry	2.64%	24.65%	25.41%
Currency	0.10%	0.10%	-0.29%
Local	0.00%	0.00%	0.00%
Market	1.04%	3.69%	4.75%

Active Risk Decomposition (% Variance)



As of 9/30/22.

Dark blue area shows that idiosyncratic risk is predominant over time. No factor risk is dominant or large in absolute terms. We target idiosyncratic risk between 60%-80% and active risk between 300-500bps.

Source: Axioma

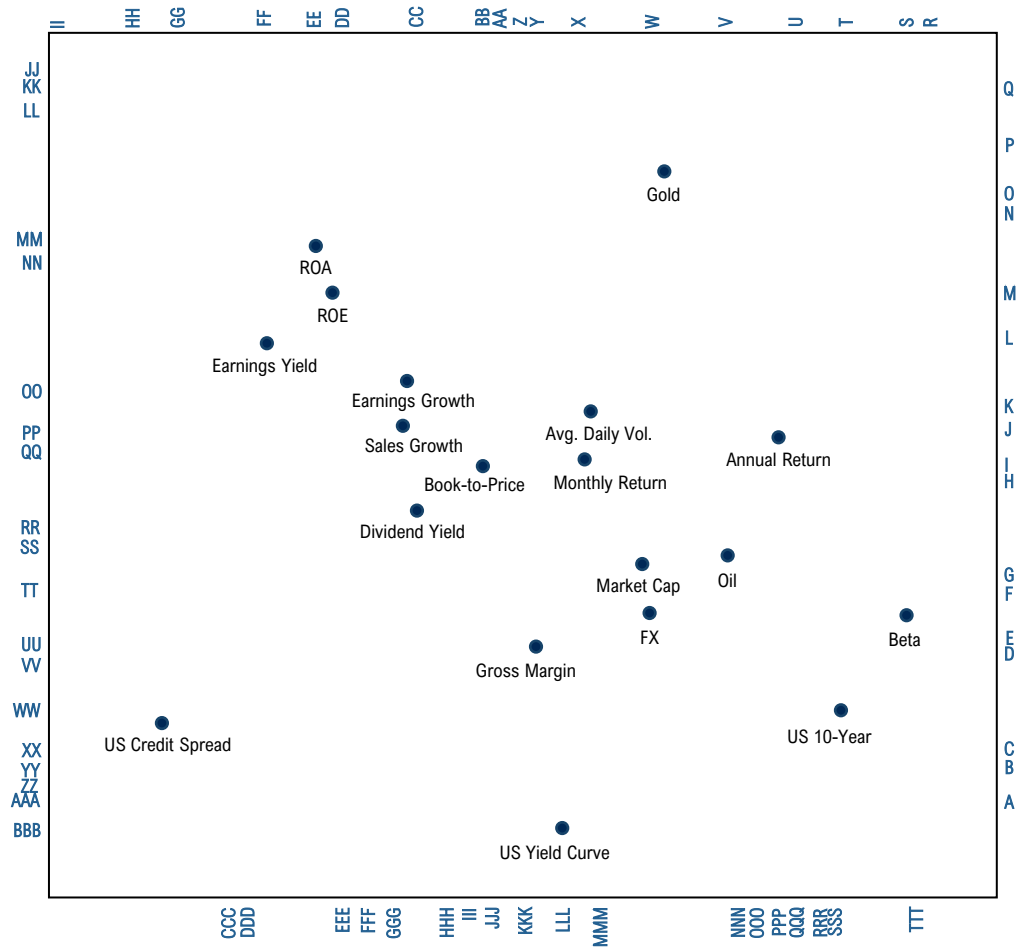
RISK MANAGEMENT

Portfolio Level: Diversification

Factor Exposure Shows Adequate Diversification (illustrative representation)

- Factors are plotted in relation to each other and to portfolio positions
- The closer factors and positions plot, the higher the correlation
- Positions distributed throughout the perimeter demonstrate factor diversification

Factor Representation*: Small Cap Value = 19, Russell 2000 Value = 22



As of 9/30/22.
 Information for illustrative purposes.
 All information is hypothetical and does not represent the actual Small Cap Value portfolio.
 Source: Axioma

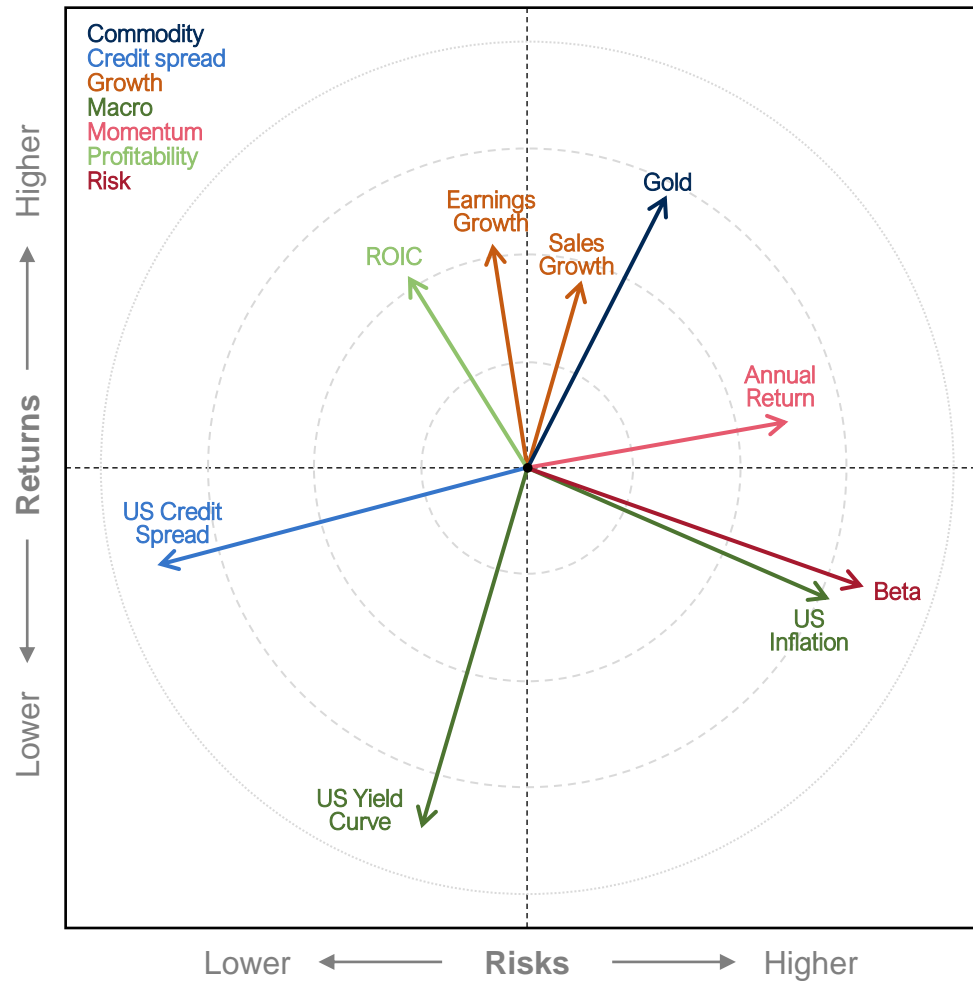
Black dots show representative factor exposures; Blue text show Vaughan Nelson representative portfolio positions.

* Represents the number of virtual independent instruments (VII) in the portfolio. VII is defined as a group of companies with highly correlated factor exposures. Each VII factor exposure is uncorrelated to all other VII's.

RISK MANAGEMENT

Portfolio Level: Risk Space

Vectors Indicate Strength and Direction of Factors
(illustrative representation)



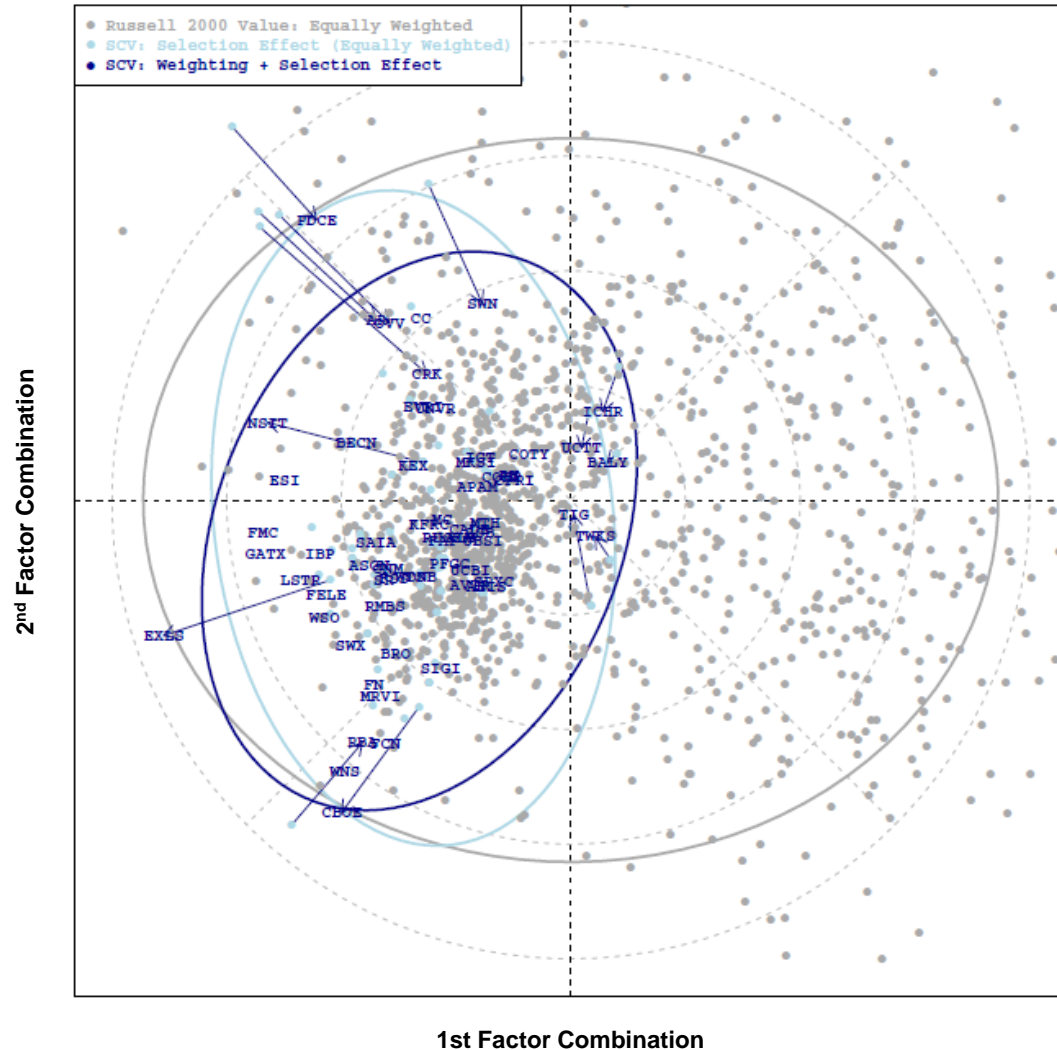
Information for illustrative purposes.
All information is hypothetical and does not represent
the actual Small Cap Value portfolio.
Source: Axioma

RISK MANAGEMENT

Portfolio Level: Our Names within the Risk Space

Graphical Orientation of the Portfolio Within the Risk Space

- Shows if the portfolio is tilted to specific risk factors
- Helps identify positions that are individual risk outliers
- Grey dots represent positions in the benchmark. Blue tickers represent positions in the portfolio



As of 9/30/22.
Source: Axioma

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VAUGHAN
NELSON

FEE SCHEDULE

FEE SCHEDULE FOR MWRA

The management fee is based on a percentage of the current market value of the total portfolio; the fee is paid at the beginning of each quarter, based on the quarterly market value.

.90% on all assets

Ryan Thomes
Portfolio Manager

Pat McMenamin
Managing Director
Institutional Client & Consultant Relations

Small Cap Diversified Value Review

MWRA EMPLOYEES' RETIREMENT SYSTEM

DECEMBER 15, 2022

REPRESENTATIVE FIRM-WIDE CLIENT LIST

As of November 2022

CORPORATE/PARTNERSHIP

American Airlines
The Boeing Company
Callan LLC (fbo DC plan)
Consolidated Rail Corporation
Minnesota Life Insurance Company
SKL Investment Group, LLC
1155 Partners, LLLP

GOVERNMENT/PUBLIC

Florida League of Cities, Inc.
Jackson County, Missouri Revised Pension Plan
Minnesota State Board of Investment
Municipal Police Employees' Retirement System
Oklahoma Law Enforcement Retirement System
San Diego County Employees Ret. Association
State Board of Administration of Florida

ADVISORY/SUB-ADVISORY (US)

American Beacon Balanced Fund
American Beacon Diversified Fund
American Beacon Large Cap Value Fund
American Beacon Small Cap Value Fund
AST Large-Cap Value Portfolio (Prudential)
AST Small-Cap Value Portfolio (Prudential)
Columbia Management Investment Advisers, LLC
Empower Small Cap Value Fund
Northern Trust Investments, Inc.
Principal Funds, Inc. – SmallCap Value Fund II
Vanguard Variable Ins. Fund - Diversified Value Fund
Vanguard Windsor II Fund
Wespath Institutional Investments LLC
Wilmington Trust – Large Cap Value CIT
Wilmington Trust – Small Cap Diversified Value CIT
Wilshire Mutual Funds Large Co. Value Portfolio
Wilshire Mutual Funds Small Co. Value Portfolio

NON-PROFIT

Jewish Federation of Greater MetroWest N.J.
David X. Marks Foundation
MedStar Health, Inc.
NTCA–The Rural Broadband Association
Portico Benefit Services
Rochester Regional Health
Wespath Benefits and Investments
Workers' Compensation Reinsurance Assoc.

TAFT-HARTLEY & OTHER

Alaska Electrical Trust Funds
Aldrich Wealth LP

ADVISORY/SUB-ADVISORY (NON-US)

Alma H&W US Global Value Equity Fund
Mercer Investment Fund 2
Momentum GF Global Equity Fund
Nomura Multi Managers Fund III - US Equity
Nomura World ex Japan Equity Fund

See Endnotes for selection criteria

INVESTMENT TEAM

As of November 2022

24

Investment Professionals

24

Avg Years of Experience

17

Avg Years with H&W

7

Research Associates

	Years of Experience:	H&W	Industry	Equity Owner
George Davis, Jr. – Executive Chairman	34	38	⊙	
Scott McBride, CFA – Chief Executive Officer	20	23	⊙	
Patty McKenna, CFA	27	36	⊙	
Jim Miles	27	34	⊙	
Stan Majcher, CFA	26	29	⊙	
David Green, CFA	25	32	⊙	
Patrick Meegan, CPA	24	32	⊙	
J.P. Flagler, CFA	23	27	⊙	
Judd Peters, CFA	22	25	⊙	
Jason Chan, CFA	21	23	⊙	
Dan McKenzie, CFA	18	18	⊙	
Hunter Doble, CFA	17	27	⊙	
Robin Henrich*	17	22	⊙	
Mark Schmidt	17	20	⊙	
Scott Rosenthal	15	22	⊙	
Noah Mayer, CFA	15	22	⊙	
Ryan Thomes, CFA	14	20	⊙	
Ray Kennedy, CFA	13	37	⊙	
Mark Hudoff	13	35	⊙	
Richard Mak, CFA	9	21	⊙	
Marshall Cowden, CFA	7	13	⊙	
Doug Campbell	5	13	⊙	
Anthony Philipp	3	14		
Michael Grigorieff	3	6		

*Indicates equity trading

WHY HOTCHKIS & WILEY SMALL CAP DIVERSIFIED VALUE?

DIFFERENTIATING FACTORS

- Penchant for finding opportunities in the smaller part of the small cap market
- We believe this creates 1) a performance edge and 2) a complementary portfolio

INDEPENDENCE AND STABILITY OF TEAM

- Independently owned firm, focused solely on asset management
- No PM departures in the strategy's 17-year history

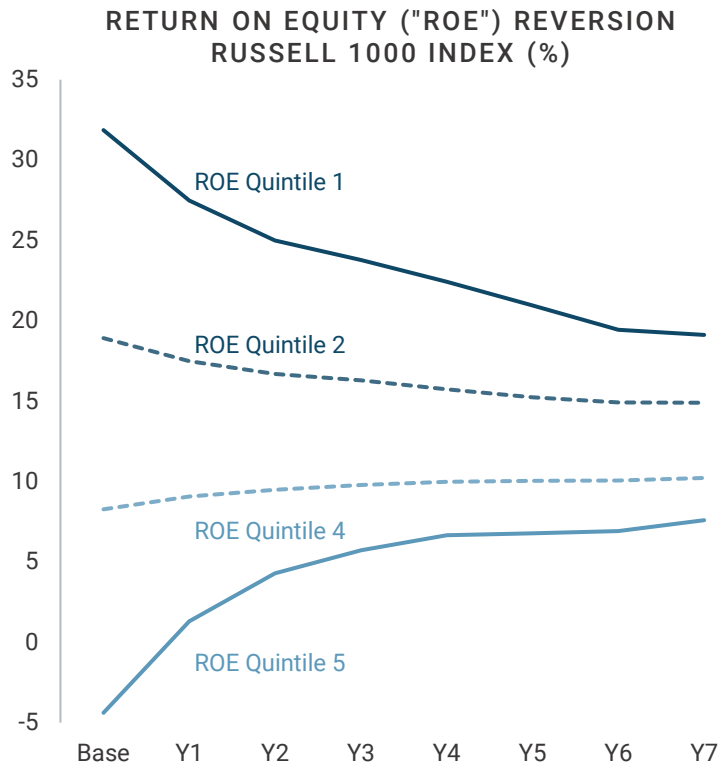
LOW FEES

- 0.55% on first \$15 million
 - 0.50% on next \$35 million
 - 0.45% thereafter
-

Additional information on the firm's advisory fees is provided in H&W's Form ADV Part 2

INVESTMENT PHILOSOPHY

- Investors often extrapolate a company's value from current conditions
- This behavior disregards basic economic principles and creates short-term mispricings
- Proprietary research focused on valuation relative to long-run normal earnings can exploit these opportunities



- Leverages knowledge base of experienced research team
- Disciplined process and portfolio construction
- Bottom-up stock selection with an emphasis on identifying undervalued securities

Source: Bloomberg, H&W 1995-2018

SMALL CAP DIVERSIFIED VALUE (“SCDV”) STRATEGY SUMMARY

As of November 2022

- SCDV blends sophisticated models to exploit valuation anomalies with fundamental reviews by our experienced research team

STRATEGY CHARACTERISTICS

Number of Stocks	350-400
Market Cap Range	\$100 million to ~\$5 billion (or the largest market cap in the Russell 2000 Index)
Inception Date	June 30, 2005 (17+ years)
Maximum Weight	0.4% at purchase
Rebalancing	Monthly
Max Sector Weight	35%*
Max Industry Weight	15%*

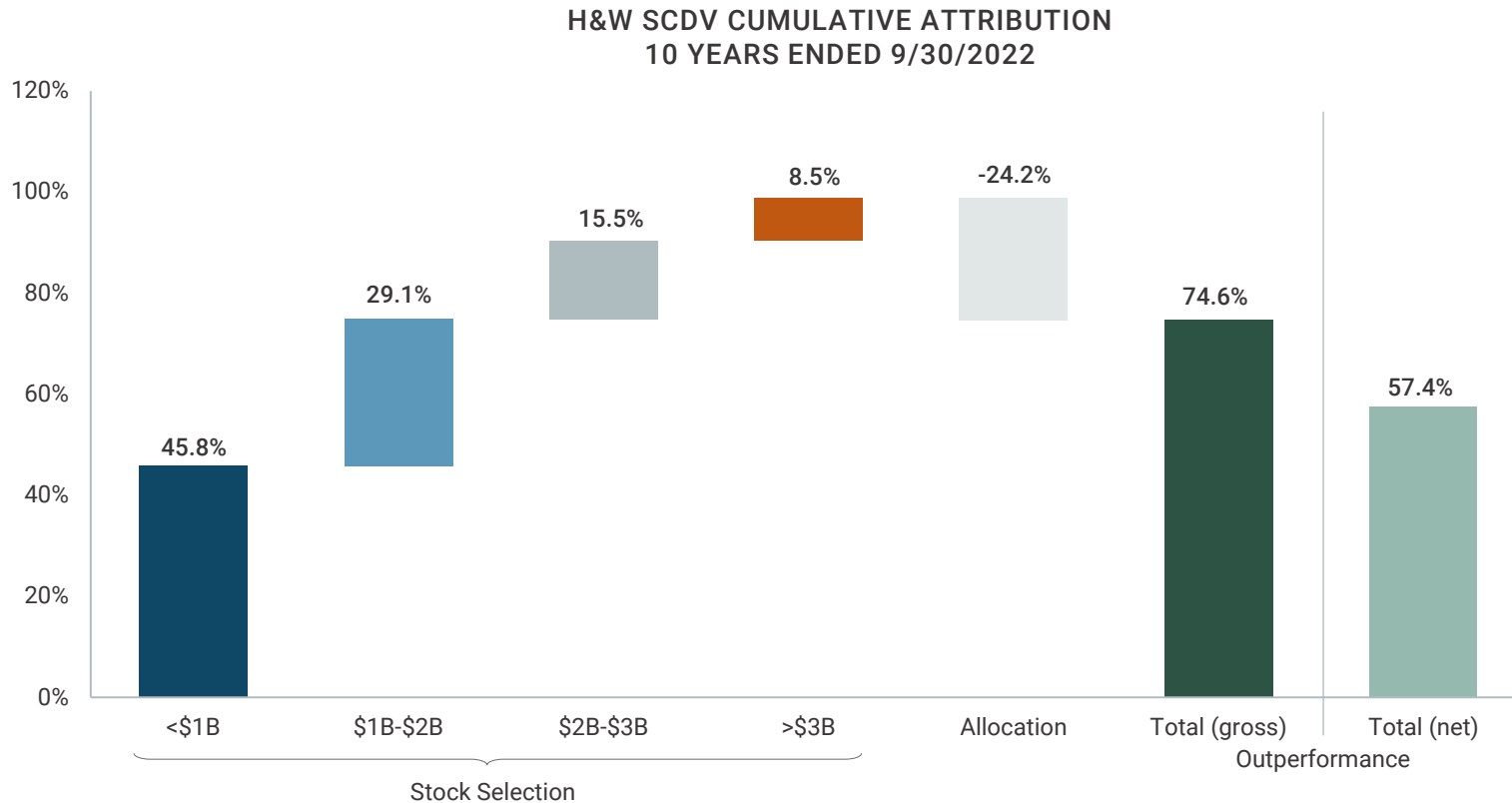
*Or 10% above the Russell 2000 Value Index weight

The strategy is designed for investors seeking diversified exposure to small cap value equities. In a capacity-constrained asset class, it addresses liquidity limitations while still leveraging the fundamental knowledge base of an experienced research group.

SCDV ATTRIBUTION BY MARKET CAP

As of September 2022

- Positive stock selection has been broad, but especially successful in micro caps



Source: Bloomberg, H&W

Performance: Small Cap Diversified Value Composite

Attribution: Representative Small Cap Diversified Value (SCDV) portfolio, gross of fees. Net of fee performance as well as results for different time periods may differ significantly; interaction effect is combined with stock selection. Client portfolio holdings may vary due to different restrictions, cash flows and other relevant considerations. Performance attribution is an analysis of the portfolio's return relative to the Russell 2000 Value Index and is calculated using daily holding information and does not reflect management fees and other transaction costs and expenses. Returns calculated using this buy-and-hold methodology can differ from actual portfolio returns due to intraday trades, cash flows, corporate actions, accrued/miscellaneous income, and trade price and closing price difference of any given security. The Carino smoothing method was used to link quarterly attribution. Additional disclosures provided in Endnotes. Past performance is no guarantee of future performance.

SCDV ATTRIBUTION BY MARKET CAP

As of September 2022

- Positive stock selection in companies with market caps of less than \$1 billion has been a consistent source of excess return

H&W SCDV VS. RUSSELL 2000 VALUE

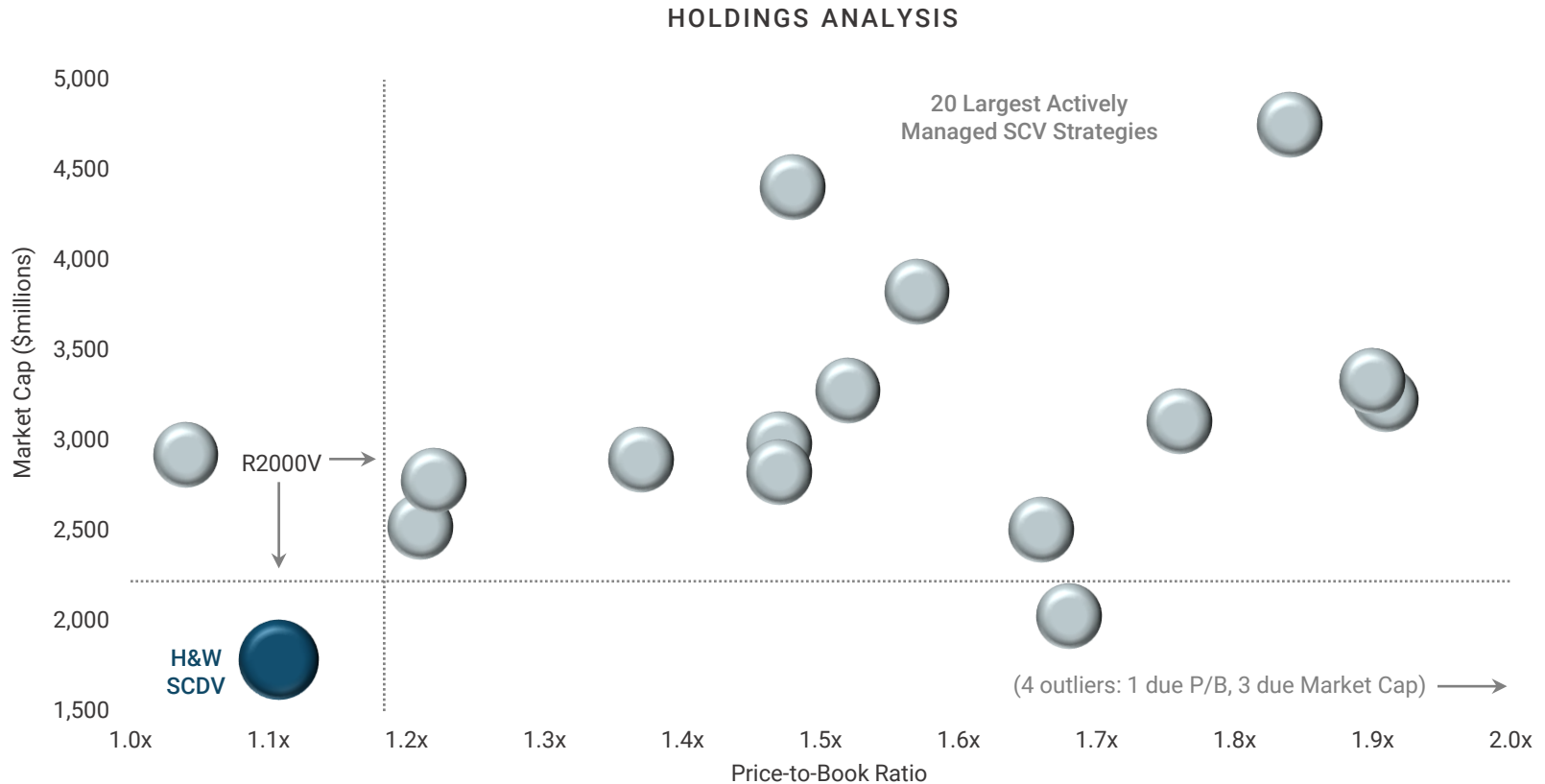
	Total Out (under) performance (%) gross of fees	Total Out (under) performance (%) net of fees	From stock selection <\$1B mkt cap (%)
Cumulative Last 10 Years	74.6%	57.4%	45.8%
YTD 2022	3.6	3.3	1.5
2021	8.3	7.7	2.1
2020	(3.7)	(4.2)	(0.4)
2019	0.8	0.3	0.5
2018	(0.6)	(0.9)	(0.3)
2017	7.1	6.4	3.7
2016	3.7	2.7	2.8
2015	(0.4)	(1.1)	1.8
2014	5.7	4.8	3.6
2013	10.6	9.2	4.2
2012	1.7	0.5	1.8

Source: Bloomberg, H&W

Performance: Small Cap Diversified Value Composite

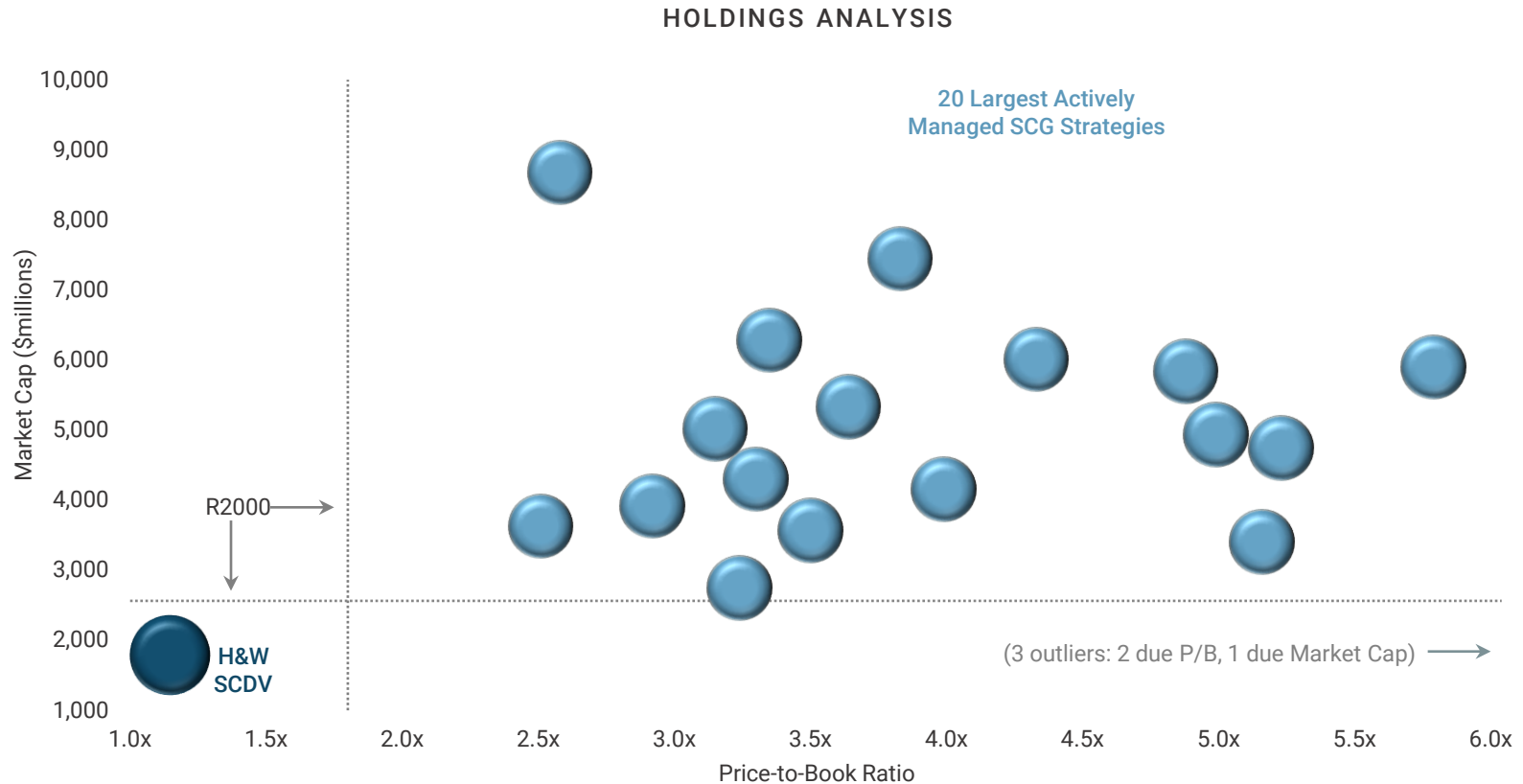
Attribution: Representative Small Cap Diversified Value (SCDV) portfolio, gross of fees. Net of fee performance as well as results for different time periods may differ significantly; interaction effect is combined with stock selection. Client portfolio holdings may vary due to different restrictions, cash flows and other relevant considerations. Performance attribution is an analysis of the portfolio's return relative to the Russell 2000 Value Index and is calculated using daily holding information and does not reflect management fees and other transaction costs and expenses. Returns calculated using this buy-and-hold methodology can differ from actual portfolio returns due to intraday trades, cash flows, corporate actions, accrued/miscellaneous income, and trade price and closing price difference of any given security. Additional disclosures provided in Endnotes. Past performance is no guarantee of future performance.

- The nature of the strategy often translates into a complementary fit with other equity managers (both style and size)



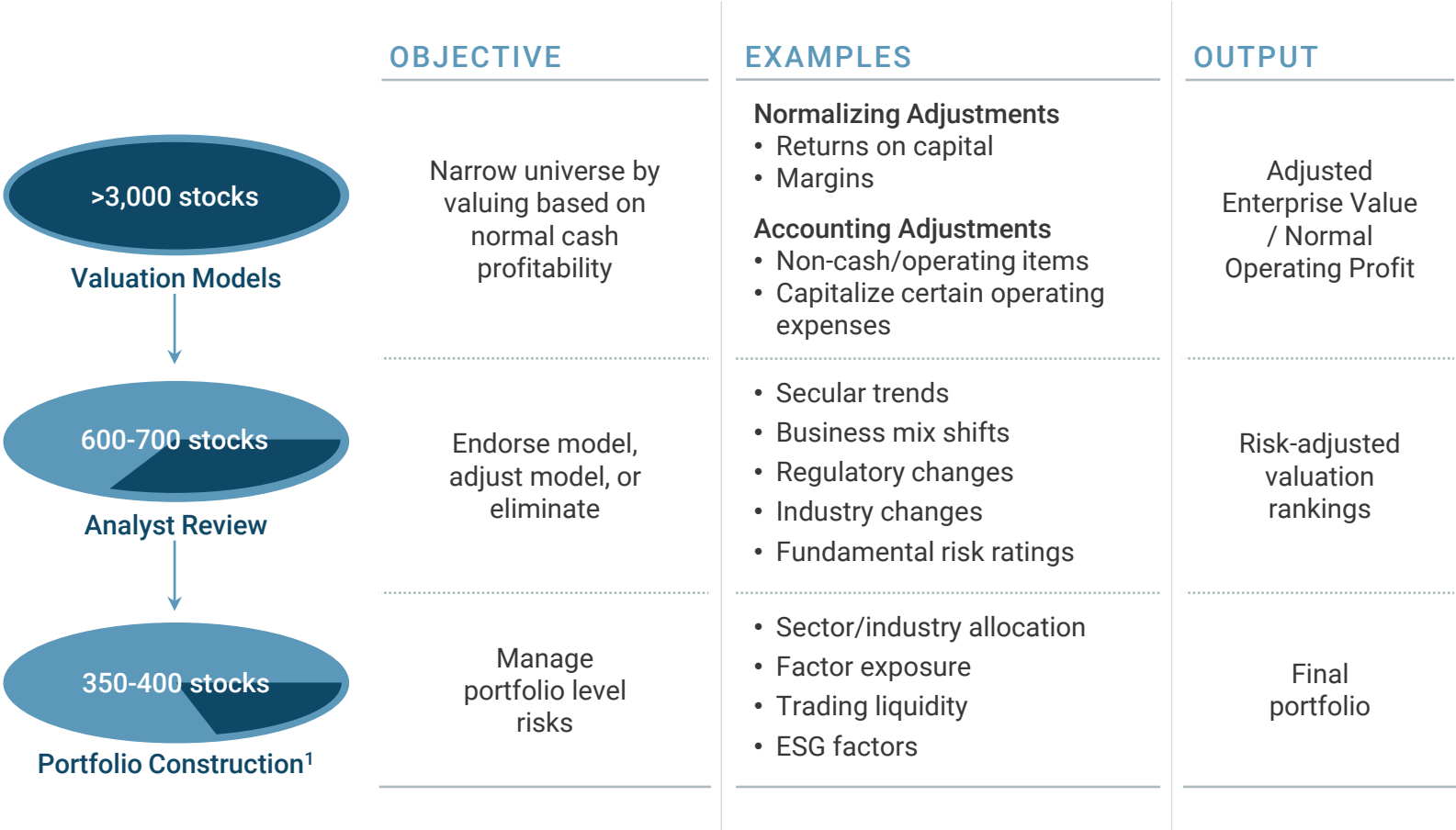
Source: 20 Largest Actively Managed Small Cap Value (SCV) Strategies based on assets selected from the eVestment SCV Category Universe. Representative Small Cap Diversified Value (SCDV) portfolio. Client portfolio holdings may vary due to different restrictions, cash flows, and other relevant considerations. Information obtained from third-party sources, which are subject to change and cannot be guaranteed. Additional disclosures provided in Endnotes. Past performance is no guarantee of future performance.

- The nature of the strategy often translates into a complementary fit with other SCG managers



Source: 20 Largest Actively Managed Small Cap Growth (SCG) Strategies based on assets selected from the eVestment SCG Category Universe. Representative Small Cap Diversified Value (SCDV) portfolio. Client portfolio holdings may vary due to different restrictions, cash flows, and other relevant considerations. Information obtained from third-party sources, which are subject to change and cannot be guaranteed. Additional disclosures provided in Endnotes. Past performance is no guarantee of future performance.

INVESTMENT PROCESS



¹ ~100 @ 0.4%, ~100 @ 0.3%, ~100 @ 0.2% and ~100 @ 0.1%

CHARACTERISTICS

As of November 2022

Small Cap Diversified Value

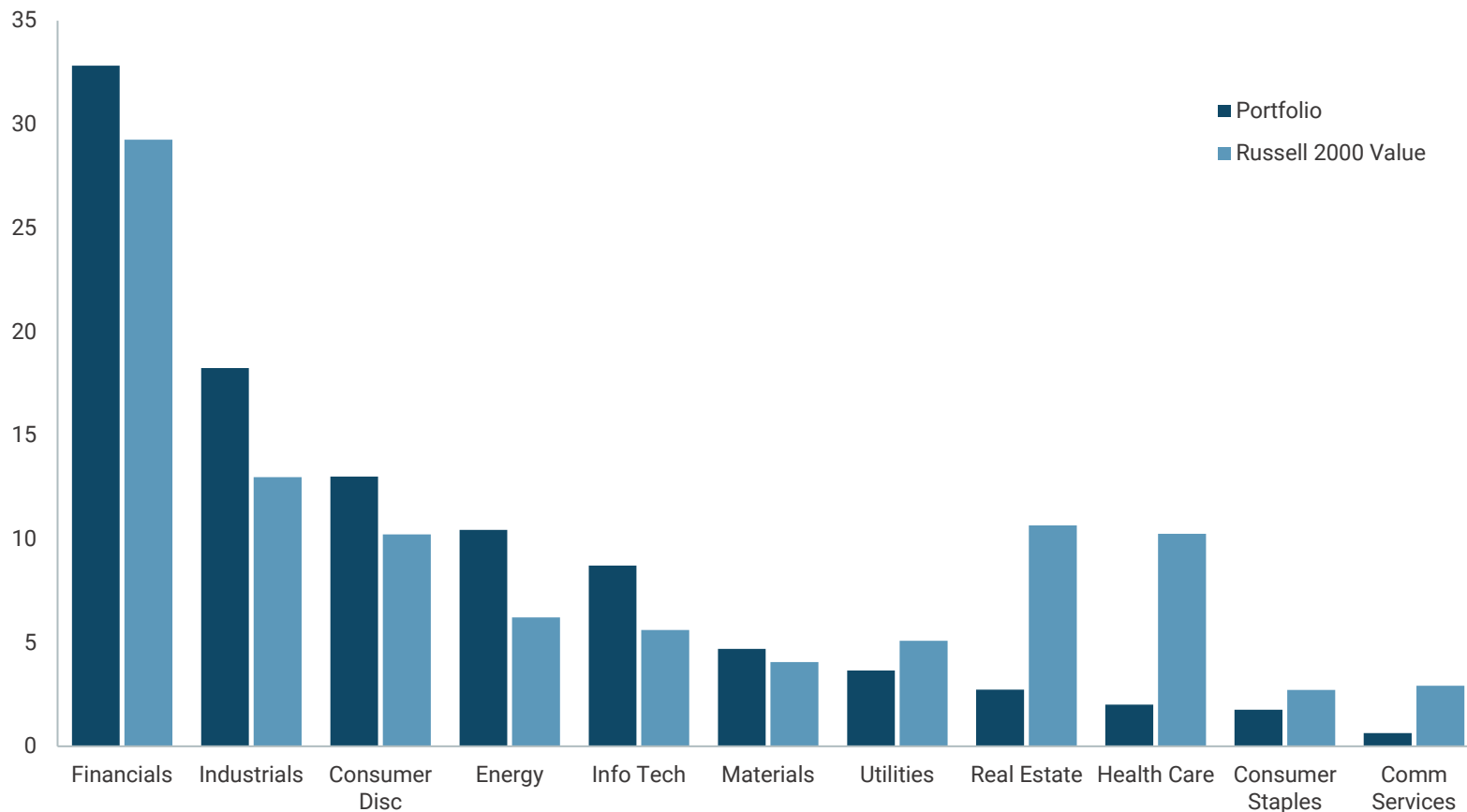
	PORTFOLIO	RUSSELL 2000 VALUE	RUSSELL 2000
Price/Normal Earnings	9.8x	12.9x	14.7x
Forward Price/Earnings (FY2)	9.0x	11.1x	12.4x
Price/Book	1.3x	1.4x	2.0x
Dividend Yield	2.2%	2.1%	1.4%
Payout Yield	6.6%	4.9%	4.0%
Weighted Avg Market Cap (\$M)	\$2,175	\$2,538	\$2,947
Median Market Cap (\$M)	\$1,368	\$894	\$1,030
Number of Securities	400	1,385	1,954

Source: Russell, Bloomberg, representative H&W Small Cap Diversified Value portfolio. Client portfolio holdings may vary due to different restrictions, cash flows, and other relevant considerations. Certain information presented is based on proprietary or third-party estimates, which are subject to change and cannot be guaranteed. Additional disclosures provided in Endnotes.

SECTOR WEIGHTS (%)

As of November 2022

Small Cap Diversified Value

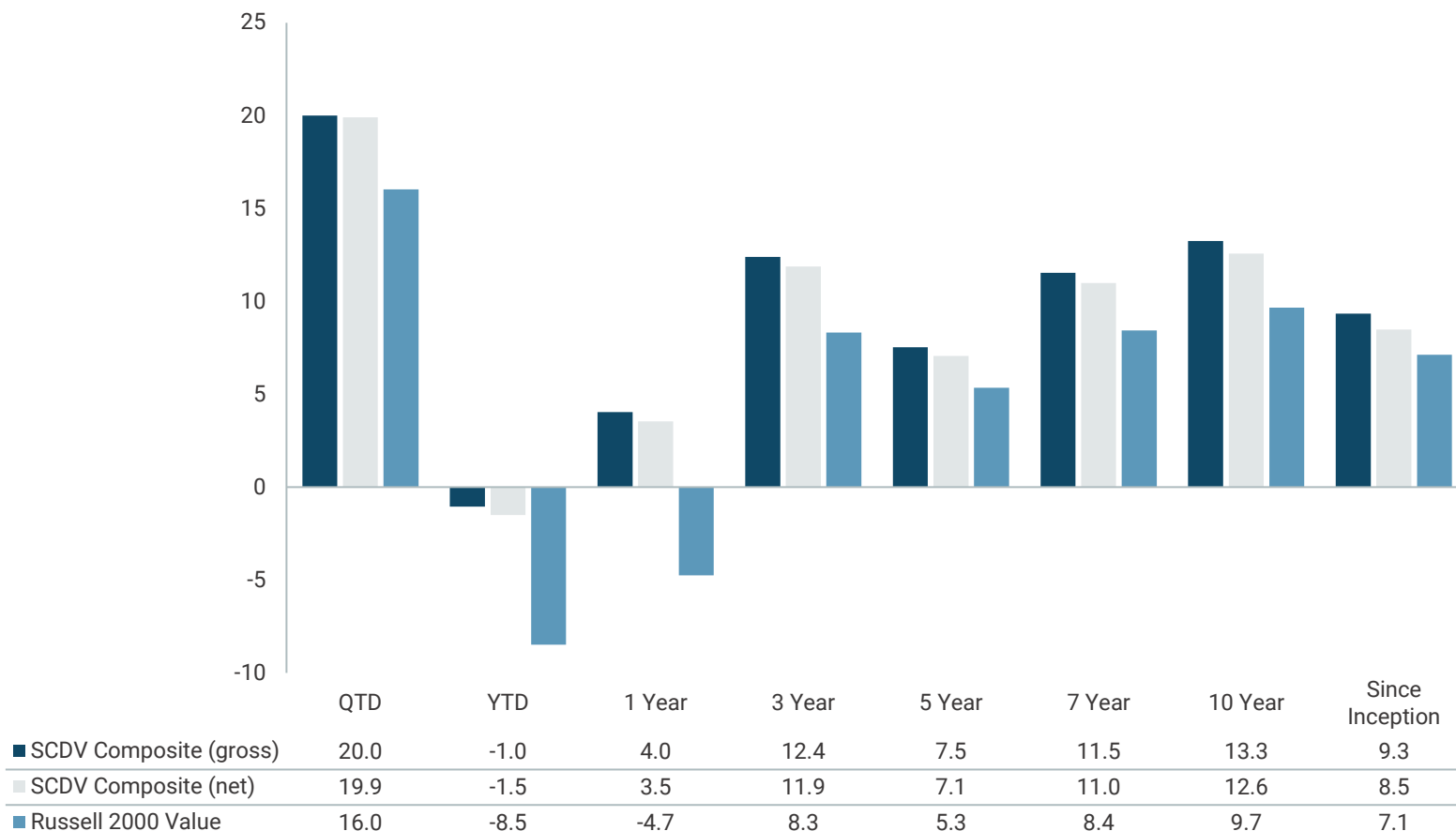


Source: Russell, Bloomberg, representative H&W Small Cap Diversified Value portfolio. Client portfolio holdings may vary due to different restrictions, cash flows, and other relevant considerations. Additional disclosures provided in Endnotes.

COMPOSITE PERFORMANCE (%)

As of November 2022

Small Cap Diversified Value

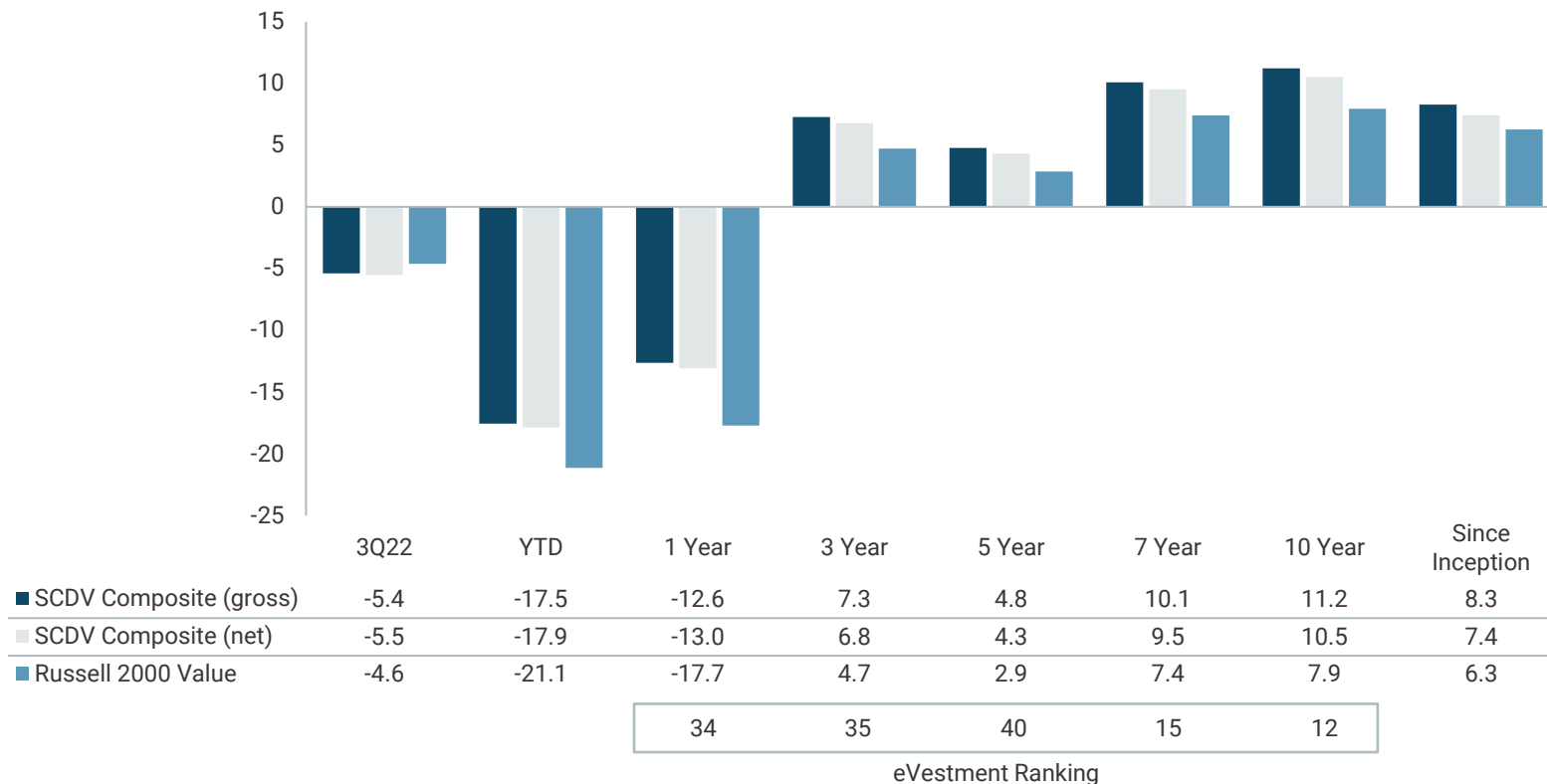


Commencement of Small Cap Diversified Value (SCDV) Composite: 7/1/05. Average annual total returns for periods greater than one year. Net performance results are presented after actual management fees (including performance-based fees if applicable) and all trading expenses but before custodial fees. See GIPS Report included at end of the presentation; additional disclosures provided in Endnotes. Past performance is no guarantee of future performance.

COMPOSITE PERFORMANCE (%)

As of September 2022

Small Cap Diversified Value



Ranking source: eVestment Alliance as of September 30, 2022. The peer group used to calculate this data is the eVestment US Small Cap Value Equity Universe, calculated using monthly returns, gross of fees; H&W pays a subscription fee to eVestment Alliance for access to peer rankings. There are 213, 208, 197, 190 and 179 products considered in this peer universe of US Small Cap Value Equity for 1-, 3-, 5-, 7-, and 10-year periods, respectively. eVestment collects information directly from investment management firms and other sources believed to be reliable. eVestment does not guarantee or warrant the accuracy, timeliness, or completeness of the information provided and are not responsible for any errors or omissions. Performance results may be provided with additional disclosures available on eVestment's systems and other important considerations such as fees that may be applicable.

Commencement of Small Cap Diversified Value (SCDV) Composite: 7/1/05. Average annual total returns for periods greater than one year. Net performance results are presented after actual management fees (including performance-based fees if applicable) and all trading expenses but before custodial fees. See GIPS Report included at end of the presentation; additional disclosures provided in Endnotes. Past performance is no guarantee of future performance.

ESG HIGHLIGHTS

Philosophy – Sustainable business practices are consistent with long-term shareholder value. While current practices are important, we focus on and encourage the move towards sustainable practices.

ESG INTEGRATION



FULLY INTEGRATED

- Evaluate material ESG issues that could affect intrinsic value or risk profile
- Incorporate ESG factors into Fundamental Risk Rating
- Portfolio-level ESG assessment
- Proxy policy incorporates ESG issues



LIVING ESG AT H&W

- UNPRI signatory
- Formal DE&I process
- In-house staff training and development
- Community involvement

DIVERSITY, EQUITY & INCLUSION OVERVIEW

- H&W's Diversity, Equity & Inclusion Committee (DEIC) is comprised of senior leaders – including our CEO
- The DEIC is charged with developing, implementing and monitoring action plans tied to H&W's DEI goals
- The majority of H&W management roles are led by women and diverse team members (66%)

DEI GOALS

- Foster an inclusive culture with equal access to resources and opportunities
- Strive for diverse representation across departments and levels
- Ensure fair and equitable compensation practices
- Promote work/life balance
- Support our local communities

DEI ACTIVITIES

- Intensive recruiting outreach for diverse professionals
- MBA and undergraduate Internship program for female and other diverse candidates
- External partnerships including Robert Toigo, Women in Investing and CEO Action
- Employee training
- Vendor diversity analysis

PROFESSIONAL STAFF BIOGRAPHIES

Judd Peters, CFA

Portfolio Manager
22 Years with H&W
25 Years Industry Experience

Judd Peters serves as a portfolio manager on the Large Cap Fundamental Value, Large Cap Diversified Value, Small Cap Diversified Value and International Small Cap Diversified Value portfolios. He covers utilities companies and is a member of the capital goods, energy and technology sector teams.

Prior to joining the firm, Mr. Peters was an analyst in the investment banking division of Wedbush Morgan Securities. Mr. Peters, a CFA® charterholder, received his BA in Mathematics and a BS in Biochemistry from University of California, San Diego.

Ryan Thomes, CFA

Portfolio Manager
14 Years with H&W
20 Years Industry Experience

Ryan Thomes serves as a portfolio manager on the Small Cap Diversified Value and International Small Cap Diversified Value portfolios. In addition, Ryan supports the firm's investment process by managing much of the firm's quantitative and market research effort.

Prior to joining the firm, Mr. Thomes was a global equity senior research associate for Jeffrey Slocum and Associates, Inc. He began his investment career as a research analyst at Berthel Schutter LLC. Mr. Thomes, a CFA® charterholder, received his BS in Entrepreneurial Management and Finance from the University of Minnesota.

Pat McMenamain

Managing Director
Institutional Client & Consultant Relations
28 Years with H&W
37 Years Industry Experience

Mr. McMenamain is responsible for Sales and Client Service for corporate, public, retirement plans, Taft-Hartley, endowment and foundation funds and sub-advisory services in the Eastern United States. He joined the firm in 1994.

Prior to joining H&W, Mr. McMenamain was responsible for institutional business development for Merrill Lynch Investment Managers. Additionally, Mr. McMenamain held similar positions with Morgan Stanley Asset Management and John Hancock Financial Services. Mr. McMenamain received his BS in Economics and Business Administration from Saint Leo University. He holds FINRA Series 6, 63 and 65 registrations

GIPS REPORT – SMALL CAP DIVERSIFIED VALUE

	% Total Return Gross of Fees	% Total Return Net of Fees	% Total Return R2000V	% Total Return R2000	No. of Accts	Internal Dispersion (%)	Comp. Assets (\$M)	Total Firm Assets (\$M)
2021	36.6	36.0	28.3	14.8	16	0.5	2,381	34,902
2020	0.9	0.4	4.6	20.0	13	0.6	1,757	31,687
2019	23.2	22.7	22.4	25.5	11	0.2	1,781	33,623
2018	-13.5	-13.8	-12.9	-11.0	7	0.1	835	27,191
2017	14.9	14.2	7.8	14.6	6	n/m	418	32,037
2016	35.4	34.5	31.7	21.3	<6	n/m	19	29,952
2015	-7.9	-8.6	-7.5	-4.4	<6	n/m	14	28,367
2014	9.9	9.0	4.2	4.9	<6	n/m	6	32,190
2013	45.1	43.7	34.5	38.8	<6	n/m	5	25,962
2012	19.7	18.6	18.1	16.4	<6	n/m	3	18,781

n/m—not considered meaningful for composites with five accounts or less for the full year.

Hotchkis and Wiley Capital Management, LLC (the “Firm” or “H&W”) claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. H&W has been independently verified for the periods October 9, 2001 through December 31, 2020. 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 Small Cap Diversified Value Composite has had a performance examination for the periods July 1, 2005 through December 31, 2020. The verification and performance examination reports are available upon request.

H&W is an independent investment management firm registered with the U.S. Securities and Exchange Commission and manages value equity and high yield assets for institutional and mutual fund investors. Its predecessor firm was established in 1980. The equity team of the predecessor firm established H&W in October 2001.

H&W refers to itself as a “registered investment adviser” in materials distributed to current and prospective clients. As a registered investment adviser with the SEC, H&W is subject to the rules and regulations adopted by the SEC under the Investment Advisers Act of 1940, as amended (the “Advisers Act”). Registration as an investment adviser is not an indication that H&W or its directors, officers, employees or representatives have attained a particular level of skill or ability.

Valuations and returns are stated in U.S. dollars. Investment returns include reinvestment of dividends, interest, and capital gains. Gross performance results are presented before management and custodial fees but after all trading expenses. Effective January 1, 2006 net performance results are presented after actual management fees (including performance-based fees if applicable) and all trading expenses but before custodial fees.

H&W’s management fees are described in Part 2A of its Form ADV. The standard Small Cap Diversified Value management fee schedule is 55 basis points on the first \$15 million, 50 basis points on the next \$35 million and 45 basis points thereafter. Internal dispersion is calculated using the equal-weighted standard deviation of all portfolios (gross returns) that were included in the Composite for the entire year. A list of composite and broad distribution pooled fund descriptions and policies for valuing investments, calculating performance, and preparing GIPS Reports are available upon request. Past performance is no guarantee of future performance. 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.

Composite: The Composite includes all Small Cap Diversified Value discretionary accounts. The Small Cap Diversified Value strategy seeks capital appreciation primarily through investments in equity securities of small capitalization companies and may invest in foreign (non-U.S.) securities. Under normal conditions, it typically will hold equity securities of approximately 300 to 400 different companies. The typical market cap range of the strategy is consistent with the market cap range of the Russell 2000® Index. Beginning May 1, 2020, accounts with significant cash flows (≥ 25% of beginning of the month assets and ≥ \$10 million in asset size) are excluded from the respective month’s composite calculation and included in the subsequent month. (Composite creation & inception date: 7/1/2005)

Indexes: The Russell 2000® Value Index (“R2000V”) measures the performance of those Russell 2000® companies with lower price-to-book ratios and lower forecasted growth values. The Russell 2000® Index (“R2000”), an unmanaged index, measures the performance of the 2,000 smallest companies in the Russell 3000® Index. The indexes assume reinvestment of dividends and capital gains, and assumes no management, custody, transaction or other expenses. The value disciplines used in managing the accounts in the Composite may prevent or limit investment in major stocks in the R2000V and R2000 and returns may not be correlated to the indexes. Benchmark returns are not covered by the report of independent verifiers.

The 3-year annualized standard deviation measures the variability of the composite (using gross returns) and the benchmark(s) returns over the preceding 36-month period ended.

3-Year Annualized Standard Deviation (%)

	Composite	R2000V	R2000
2021	29.1	25.0	23.4
2020	29.7	26.1	25.3
2019	17.7	15.7	15.7
2018	16.7	15.8	15.8
2017	14.9	14.0	13.9
2016	15.9	15.5	15.8
2015	13.9	13.5	14.0
2014	14.0	12.8	13.1
2013	19.2	15.8	16.5
2012	23.2	19.9	20.2

ENDNOTES

Hotchkis & Wiley selected the representative firm-wide discretionary clients list based on objective criteria which includes the type of client (Corporate/Partnership, Non-Profit, Government/Public, Pension/Taft-Hartley and Sub-Advisory) and strategy. Clients are included on the list when the account is funded and removed from the list when the firm is notified of termination. It is not known whether the listed clients approve of H&W or the advisory services provided.

Investment returns include reinvestment of dividends, interest and capital gains. Valuation is based on trade-date information. The investment returns presented gross of fees do not reflect the deduction of investment advisory fees. Actual returns will be reduced by the amount of investment advisory fees and any other expenses, such as custody fees, incurred in the management of the account.

Over a ten-year period, for example, if a client had experienced gross returns of 10% per year, its initial US\$1,000 investment would have grown to US\$2,594.

Small Cap Diversified Value: If the client paid an annual investment management fee of 55 basis points (highest tier), its net compounded returns would have averaged 9.45% per year and its investment would have grown to US\$2,467.

Standard fees are described in Part 2A of the Form ADV of H&W.

All investments contain risk and may lose value. Investing in foreign as well as emerging markets involves additional risk such as greater volatility, political, economic, and currency risks and differences in accounting methods. Investing in value stocks presents the risk that value stocks may fall out of favor with investors and underperform growth stocks during given periods.

Investing in smaller, medium-sized and/or newer companies involves greater risks not associated with investing in large company stocks, such as business risk, significant stock price fluctuations and illiquidity.

Representative H&W portfolios are selected based on factors determined by Advisor to be “representative” of the strategy, considering such factors as (but not limited to) investment guidelines/restrictions, time period under Advisor’s discretion, and/or cash flow activities. Each portfolio’s holdings/performance in the strategy vary due to different restrictions, cash flows and other relevant considerations.

Russell Investment Group is the source and owner of the Russell Index data contained herein (and all trademarks related thereto), which may not be redistributed. The information herein is not approved by Russell. H&W and Russell sectors are based on the Global Industry Classification Standard by MSCI and S&P.

Market Disruption: The global coronavirus pandemic has caused disruption in the global economy and extreme fluctuations in global capital and financial markets. H&W is unable to predict the impact caused by coronavirus pandemic, which has the potential to negatively impact the firm’s investment strategies and investment opportunities.

Opinions expressed and/or data included in this presentation are subject to change without notice. Information based on forecasts, proprietary or third-party estimates cannot be guaranteed and are subject to change. Information obtained from independent sources is considered reliable, but H&W cannot guarantee its accuracy or completeness.

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Past performance is no guarantee of future performance.



MONTHLY PERFORMANCE REPORT

**MWRA EMPLOYEES' RETIREMENT
SYSTEM**

NOVEMBER 30, 2022



PROPRIETARY & CONFIDENTIAL

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:

- **Time Horizon:** 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.
- **Liquidity Needs:** 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 (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Composite	647,232,051	3.8	-10.5	-7.5	5.5	5.5	6.9
<i>Allocation Index</i>		4.1	-8.8	-6.2	6.2	5.9	7.2
<i>Policy Index</i>		4.2	-9.2	-6.5	6.8	6.5	7.4

20 Years As of November 30, 2022				
	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Composite	7.5	8.4	0.8	1.1
<i>Allocation Index</i>	6.8	7.9	0.7	1.1
<i>Policy Index</i>	7.3	8.5	0.7	1.1

Performance

- The Composite had a preliminary return of 3.8% (net) for the month, trailing the Allocation Index (4.1%) and Policy Index (4.2%).
- Global equities moved higher in November, cementing gains from the prior month, as the MSCI ACWI Index added 7.8% and the S&P 500 Index returned 5.6%. Non-U.S. equities were supported by the weakening U.S. dollar. Notably, the MSCI China Index gained 29.7% in November as policymakers began easing some COVID-related restrictions, bolstering investor sentiment. The portfolio's Domestic Equity composite was up 4.4% (net) and the Non-US Equity composite returned 12.0% (net).
- Within fixed income, central banks around the world continued tightening monetary policy. The Fed raised rates by 75 basis points to a range of 3.75%-4%. The central bank reiterated its tough stance on inflation, while highlighting a higher terminal rate forecast than what was signaled in September. In response, the front-end of the yield curve increased, while longer-dated yields fell. The Treasury curve remains dramatically inverted with the 10- and two-year yield spreads falling 69 basis points. The Fixed Income composite was up 3.4% (net) for the month while the Bloomberg Agg and the Bloomberg US HY returned 3.7% and 2.2% respectively.
- This brings the total plan return for the trailing one-year period to -7.5% (net), while the Allocation Index and Policy Index returned -6.2% and -6.5%, 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 (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Composite	647,232,051	100.0	100.0	3.8	-10.5	-7.5	5.5	5.5	6.9	6.7	Jan-86
Allocation Index				4.1	-8.8	-6.2	6.2	5.9	7.2		
Policy Index				4.2	-9.2	-6.5	6.8	6.5	7.4		
Total Balanced	4,765,071	0.7	0.0	0.0	-12.2	-9.6	6.1	4.1	4.4	4.4	Dec-10
PRIT Core Fund	4,765,071	0.7		0.0	-13.2	-10.6	6.0	6.2	7.8	6.7	Apr-99
60% S&P 500 / 40% Bloomberg Aggregate				4.8	-12.6	-10.3	5.7	6.9	8.5	6.1	
Total Domestic Equity	199,500,762	30.8	31.0	4.4	-15.2	-11.2	8.8	9.9	12.1	7.4	May-99
Russell 3000 Index				5.2	-14.2	-10.8	10.3	10.3	12.9	7.1	
Large Cap	153,707,502	23.7	24.0	4.6	-15.9	-11.8	9.1	10.8	12.5	12.3	Dec-10
Rhumblin Advisors S&P 500 Index Fund	63,695,719	9.8	10.0	5.6	-13.1	-9.2	10.9	10.9	13.2	8.8	Apr-97
S&P 500 Index				5.6	-13.1	-9.2	10.9	11.0	13.3	8.8	
Coho Relative Value Equity	50,725,552	7.8	7.0	5.2	-0.6	7.6	10.4	10.3		11.4	Mar-16
Russell 1000 Value Index				6.2	-3.7	2.4	8.4	7.9	11.0	11.0	
Polen Focused Growth	39,286,231	6.1	7.0	2.3	-33.7	-32.2	4.0	10.5		12.1	Feb-16
Russell 1000 Growth Index				4.6	-23.3	-21.6	11.8	12.9	15.0	15.6	
Small Cap	45,793,260	7.1	7.0	3.9	-12.7	-9.4	7.7	7.6	11.2	11.2	Dec-10
Boston Partners Small Cap Value	23,542,423	3.6	3.5	3.7	-6.4	-2.1	7.3	5.5	9.3	10.2	Feb-97
Russell 2000 Value Index				3.1	-8.5	-4.7	8.3	5.3	9.7	8.8	
Loomis Sayles Small Cap Growth	22,250,837	3.4	3.5	4.1	-18.9	-16.5	7.3	9.0	12.6	6.7	Jan-97
Russell 2000 Growth Index				1.6	-21.3	-21.0	3.7	4.9	10.2	6.6	
Total Non-US Equity	103,129,304	15.9	19.0	12.0	-21.3	-19.2	-1.2	-0.3	3.7	3.7	Mar-99
International Equity	67,964,501	10.5	12.0	12.3	-19.1	-16.8	0.5	1.5	4.7	3.2	Sep-05
SEG Baxter Street	28,797,522	4.4	5.0	9.8	-20.3	-16.7	-0.7	2.7		5.8	May-16
MSCI AC World ex USA (Net)				11.8	-15.4	-11.9	1.8	1.5	4.2	4.9	
Schroder International Alpha Trust Class 1	25,895,727	4.0	4.0	12.1	-17.9	-15.1	5.9	4.3	6.3	6.0	Mar-12
MSCI AC World ex USA (Net)				11.8	-15.4	-11.9	1.8	1.5	4.2	3.9	
Baillie Gifford International Growth Fund Class K	13,271,252	2.1	3.0	18.8	-30.6	-31.6				-11.9	Oct-20
MSCI AC World ex USA (Net)				11.8	-15.4	-11.9	1.8	1.5	4.2	3.1	
Emerging Markets Equity	35,164,803	5.4	7.0	11.5	-25.4	-23.7				-18.5	Mar-21
Axiom Emerging Markets Trust Class 2	16,385,098	2.5	7.0	10.3	-29.4	-27.9				-21.3	Mar-21
MSCI Emerging Markets (Net)				14.8	-19.0	-17.4	0.1	-0.4	2.1	-14.4	
ABS Emerging Markets MA Fund	18,779,704	2.9		12.6	-21.4	-19.8				-19.8	Dec-21
MSCI Emerging Markets (Net)				14.8	-19.0	-17.4	0.1	-0.4	2.1	-17.4	

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)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy(%)	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fixed Income	130,035,665	20.1	20.0	3.4	-10.6	-10.4	-0.3	1.4	2.6	5.7	Mar-99
Garcia Hamilton Fixed Income Aggregate	34,784,920	5.4	6.0	4.2	-10.6	-10.9	-2.1			0.5	Apr-18
<i>Blmbg. U.S. Aggregate Index</i>				3.7	-12.6	-12.8	-2.6	0.2	1.1	0.4	
Lord Abbett Core Fixed Income	34,428,160	5.3	4.0	3.5	-12.8	-13.0	-2.2			0.6	Apr-18
<i>Blmbg. U.S. Aggregate Index</i>				3.7	-12.6	-12.8	-2.6	0.2	1.1	0.4	
Loomis Sayles Multisector Full Discretion Trust	46,831,208	7.2	8.0	3.2	-12.3	-11.6	0.3	1.7	3.3	6.8	Mar-99
<i>Blmbg. U.S. Aggregate Index</i>				3.7	-12.6	-12.8	-2.6	0.2	1.1	3.9	
<i>Blmbg. U.S. Corp: High Yield Index</i>				2.2	-10.6	-9.0	0.9	2.5	4.3	6.1	
Octagon Senior Secured Credit Cayman Fund Ltd. - Class L Acc, Series 1	13,938,026	2.2	2.0	1.4	-2.4	-1.7	2.3			2.3	Aug-19
<i>Credit Suisse Leveraged Loan</i>				1.1	-1.4	-0.8	2.8	3.2	3.8	2.5	
Invesco Mortgage Recovery Loans Feeder Fund	53,351	0.0		0.0	-0.7	-0.7	-2.0	3.6	5.3	10.0	Apr-10
<i>Blmbg. U.S. Aggregate Index</i>				3.7	-12.6	-12.8	-2.6	0.2	1.1	2.2	
Total Hedge Fund	41,758,442	6.5	6.0	-0.1	-3.5	-3.5	4.4	3.6	3.8	3.3	Oct-06
PRIM Portfolio Completion Strategies	14,837,412	2.3		0.0	-3.3	-2.3	2.7	2.9	4.2	3.6	Oct-06
Corbin Pinehurst Partners	12,480,898	1.9		0.0	-11.6	-12.8	4.0			4.1	Nov-18
<i>HFRI Fund of Funds Composite Index</i>				0.8	-5.6	-5.3	4.1	3.1	3.6	4.1	
UBS Neutral Alpha Strategies	13,709,984	2.1		-0.3	3.8	4.3	7.2			6.2	Nov-18
<i>HFRI Fund of Funds Composite Index</i>				0.8	-5.6	-5.3	4.1	3.1	3.6	4.1	
Entrust Peru Wind Down	730,149	0.1		0.0	-2.0	-0.8	-2.2	-3.2		-3.2	Dec-17
<i>HFRI Fund of Funds Composite Index</i>				0.8	-5.6	-5.3	4.1	3.1	3.6	3.1	
Other	8,815,744	1.4	0.0	0.3	1.2	1.2	0.8	1.3	0.8	0.7	Dec-10
Cash Account	8,815,744	1.4		0.3	1.2	1.2	0.8	1.3	0.8	1.7	Feb-00
<i>90 Day U.S. Treasury Bill</i>				0.3	1.1	1.1	0.6	1.2	0.7	1.6	

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)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy(%)	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Real Estate	73,200,774	11.3	12.0	0.0	11.2	20.8	12.9	11.0	11.3	8.5	Apr-99
<i>NCREIF Property Index</i>				0.0	9.4	16.1	9.9	8.6	9.5	8.9	
Morgan Stanley Prime Property (\$2.8m commitment in '95)	26,975,346	4.2		0.0	10.2	20.8	11.2	9.6	11.2	8.9	Sep-95
TA Realty Core Property Fund, LP (\$15m commitment in '19)	28,358,966	4.4		0.0	15.3	24.9	17.0			15.2	Jun-19
Invesco Mortgage Recovery II (\$3M commitment in '15)	921,638	0.1		0.0	-6.0	-6.0	-20.8	-6.6		-1.9	Oct-15
Landmark VI (\$2m commitment in '11)	43,209	0.0		0.0	-16.4	-0.8	-9.6	-8.5	0.7	2.2	Jul-11
Landmark VIII (\$4m commitment in '17)	2,157,675	0.3		0.0	25.3	36.1	21.7	21.5		21.2	Nov-17
StepStone Real Estate Fund II (\$2m commitment in '11)	462,324	0.1		0.0	-0.6	-1.6	-3.3	-0.8	4.7	2.1	May-12
Cerberus Institutional Real Estate Partners III (\$1.5m commitment in '12)	483,850	0.1		0.0	-19.6	-8.6	16.1	13.2		13.4	May-13
TA Realty Fund X LP (\$3.5m commitment in '12)	4,086	0.0		0.0	24.1	22.9	5.8	9.8		9.7	May-13
TerraCap Partners III, LP (\$2.6m commitment in '15)	1,382,202	0.2		0.0	6.7	6.1	4.4	6.0		9.2	Jul-15
TerraCap Partners IV, LP (\$4m commitment in '17)	3,565,886	0.6		0.0	3.0	14.7	11.6	10.5		10.3	Nov-17
TerraCap Partners V, LP (\$8m commitment in '22)	8,845,592	1.4		0.0						5.2	Jun-22
Total Private Equity and Debt	86,026,289	13.3	12.0	0.0	3.8	5.2	18.7	15.8	15.1	10.4	Apr-99
<i>CJA US All PE</i>				0.0	-2.7	2.9	19.6	16.9	15.1	13.2	
<i>NASDAQ W/O Income</i>				4.4	-26.7	-26.2	9.8	10.8	14.3	6.7	
PRIM Vintage Year 2008 (\$3m commitment in '08)	815,439	0.1		0.0	1.5	6.7	15.0	15.1	18.6	10.0	Jun-08
PRIM Vintage Year 2009 (\$1m commitment in '09)	89,748	0.0		0.0	-7.5	5.9	40.5	34.0	27.0	14.8	Nov-09
PRIM Vintage Year 2010 (\$1m commitment in '10)	495,114	0.1		0.0	-37.7	-23.4	24.2	20.5	19.9	11.6	Jun-10
PRIM Vintage Year 2011 (\$1.5m commitment in '11)	842,853	0.1		0.0	-4.1	-4.3	31.6	26.1	22.4	10.1	May-11
PRIM Vintage Year 2012 (\$1m commitment in '12)	458,948	0.1		0.0	-30.2	-29.1	12.6	12.8	14.1	-9.9	Jun-12
PRIM Vintage Year 2014 (\$2m commitment in '14)	2,245,315	0.3		0.0	1.3	1.9	26.9	26.0		8.9	Jun-14
PRIM Vintage Year 2017 (\$2m commitment in '17)	2,502,234	0.4		0.0	2.3	3.1	25.9	19.3		16.1	May-17
PRIM Vintage Year 2020 (\$5m commitment in '20)	3,491,778	0.5		0.0	5.8	6.7				17.5	Mar-20
PRIM Vintage Year 2021 (\$5m commitment in '21)	2,616,664	0.4		0.0	-2.2	1.2				0.7	Dec-20
PRIM Vintage Year 2022 (\$7.5m commitment in '22)	824,572	0.1		0.0						-5.0	Apr-22
Alcentra European DLF (\$5m commitment in '14)	197,301	0.0		0.0	9.2	12.1	23.7	14.2		12.1	Jan-15
Ascent Fund IV-B (\$1m commitment in '16)	40,322	0.0		0.0	-14.7	-14.7	-24.5	-20.2		-15.1	Jul-16
Ascent Fund V (\$2m commitment in '08)	1,250,422	0.2		0.0	-14.6	-18.8	-2.1	-2.3	2.4	3.9	Oct-08
Ascent VI (\$3m commitment in '15)	3,453,769	0.5		0.0	2.6	12.1	2.6	4.0		2.4	Dec-15
CVI Credit Value Fund IV A LP (\$6m commitment in '17)	5,402,590	0.8		0.0	4.4	6.4	6.7	6.2		6.2	Dec-17
Invesco Fund VI (\$5m commitment in '13)	1,068,293	0.2		0.0	-21.3	-5.6	31.8	23.6		18.9	Jul-13

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.



TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy(%)	1 Mo (%)	YTD (%)	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	51.3	-19.8	-14.0		-4.8	Jan-16
Foundry 2007 (\$3m commitment in '07)	484,034	0.1		0.0	-3.5	4.4	17.9	5.6	12.6	19.9	Dec-07
Foundry 2010 (\$3m commitment in '10)	5,956,413	0.9		0.0	-1.0	5.7	31.9	25.7	16.4	14.4	Feb-11
Foundry 2010 Annex (\$0.4m commitment in '15)	1,105,234	0.2		0.0	-0.9	-1.0	83.1	64.8		42.6	Sep-15
Pinebridge PEP V (\$6m commitment in '07)	492,734	0.1		0.0	-0.1	-0.1	10.3	4.9	9.4	8.5	Dec-10
Pinebridge (AIG) PEP V Asia (\$6m commitment in '07)	35,776	0.0		0.0	4.1	-7.8	-12.5			-12.5	Oct-18
Pinebridge (AIG) PEP V Co-Investment (\$6m commitment in '07)	96,394	0.0		0.0	8.0	14.0	21.1			8.0	Oct-18
Pinebridge (AIG) PEP V Europe (\$6m commitment in '07)	18,235	0.0		0.0	-12.3	-19.1	204.6			131.5	Oct-18
Pinebridge (AIG) PEP V Large Market US Buyout (\$6m commitment in '07)	85,418	0.0		0.0	-5.3	-6.5	17.4			9.8	Oct-18
Pinebridge (AIG) PEP V Preferred Participation Fund (\$6m commitment in '07)	93,372	0.0		0.0	-5.5	-8.5	5.2			1.0	Oct-18
Pinebridge (AIG) PEP V Secondary (\$6m commitment in '07)	24,803	0.0		0.0	-5.3	-25.5	-11.2	-10.8		-9.2	Jan-17
Pinebridge (AIG) PEP V Small-Mid Market US Buyout (\$6m commitment in '07)	90,345	0.0		0.0	-5.9	-2.5	19.1			16.2	Oct-18
Pinebridge (AIG) PEP V US Venture (\$6m commitment in '07)	48,391	0.0		0.0	-0.1	3.9	3.3			-2.2	Oct-18
Landmark XV (\$3m commitment in '13)	649,744	0.1		0.0	-15.7	-14.8	5.5	8.4		10.9	Nov-13
JFL Equity Investors IV, L.P. (\$6m commitment in '16)	1,723,874	0.3		0.0	9.8	24.0	40.1	44.8		38.0	Jan-17
Private Advisors Small Co. Coinvestment Fund, LP (\$4m commitment in '17)	4,671,521	0.7		0.0	0.0	4.7	23.9	21.7		19.6	Feb-17
Park Square Credit Opportunities III (\$3m commitment in '17)	2,775,654	0.4		0.0	3.3	6.4	7.6			6.7	Feb-18
Ironsides Constitution Opportunities (\$3m commitment in '18)	2,261,352	0.3		0.0	2.3	5.9	11.3			11.3	Oct-18
HarbourVest Dover Street X (\$9m commitment in '20)	7,026,359	1.1		0.0	6.1	18.6				67.1	Jun-20
Hamilton Lane Secondary Fund V LP (\$9m commitment in '20)	7,250,273	1.1		0.0	1.5	11.5				34.9	Jul-20
Constitution Ironsides Co-Investment Fund VI (\$12m commitment in '21)	13,314,503	2.1		0.0	4.9	4.9				4.6	Nov-21
HarbourVest Co-Investment Fund VI (\$8m commitment in '21)	1,965,382	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	20.7				1.4	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	4,765,071	0.7	23,349	0.5
Rhumblin Advisors S&P 500 Index Fund	0.1 % of Assets	63,695,719	9.8	31,848	0.1
Coho Relative Value Equity	0.5 % of First \$75 M 0.4 % of Next \$75 M 0.4 % Thereafter	50,725,552	7.8	253,628	0.5
Polen Focused Growth	0.7 % of Assets	39,286,231	6.1	255,361	0.6
Boston Partners Small Cap Value	1.0 % of Assets	23,542,423	3.6	235,424	1.0
Loomis Sayles Small Cap Growth	0.5 % of Assets Minimum Fee: \$45,000	22,250,837	3.4	100,129	0.5
SEG Baxter Street	1.0 % of Assets	28,797,522	4.4	287,975	1.0
Schroder International Alpha Trust Class 1	0.6 % of Assets	25,895,727	4.0	142,427	0.6
Baillie Gifford International Growth Fund Class K	0.6 % of Assets	13,271,252	2.1	79,628	0.6
Axiom Emerging Markets Trust Class 2	0.7 % of Assets	16,385,098	2.5	119,611	0.7
ABS Emerging Markets MA Fund	0.8 % of Assets	18,779,704	2.9	140,848	0.7
Garcia Hamilton Fixed Income Aggregate		34,784,920	5.4	43,481	0.1
Lord Abbett Core Fixed Income	0.2 % of Assets	34,428,160	5.3	65,414	0.2
Loomis Sayles Multisector Full Discretion Trust	0.5 % of First \$20 M 0.4 % of Next \$20 M 0.3 % Thereafter	46,831,208	7.2	200,494	0.4
Octagon Senior Secured Credit Cayman Fund Ltd. - Class L Acc, Series 1	0.4 % of Assets	13,938,026	2.2	55,752	0.4
Invesco Mortgage Recovery Loans Feeder Fund		53,351	0.0		
PRIM Portfolio Completion Strategies		14,837,412	2.3		
Corbin Pinehurst Partners	0.9 % of Assets	12,480,898	1.9	106,088	0.8
UBS Neutral Alpha Strategies	0.9 % of Assets	13,709,984	2.1	123,390	0.9
Entrust Peru Wind Down	0.5 % of Assets	730,149	0.1	3,651	0.5
Cash Account		8,815,744	1.4		
Morgan Stanley Prime Property (\$2.8m commitment in '95)		26,975,346	4.2		
TA Realty Core Property Fund, LP (\$15m commitment in '19)		28,358,966	4.4		
Invesco Mortgage Recovery II (\$3M commitment in '15)		921,638	0.1		
Landmark VI (\$2m commitment in '11)		43,209	0.0		
Landmark VIII (\$4m commitment in '17)		2,157,675	0.3		
StepStone Real Estate Fund II (\$2m commitment in '11)		462,324	0.1		
Cerberus Institutional Real Estate Partners III (\$1.5m commitment in '12)		483,850	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	0.6		
TerraCap Partners V, LP (\$8m commitment in '22)		8,845,592	1.4		
PRIM Vintage Year 2008 (\$3m commitment in '08)		815,439	0.1		
PRIM Vintage Year 2009 (\$1m commitment in '09)		89,748	0.0		
PRIM Vintage Year 2010 (\$1m commitment in '10)		495,114	0.1		
PRIM Vintage Year 2011 (\$1.5m commitment in '11)		842,853	0.1		
PRIM Vintage Year 2012 (\$1m commitment in '12)		458,948	0.1		
PRIM Vintage Year 2014 (\$2m commitment in '14)		2,245,315	0.3		
PRIM Vintage Year 2017 (\$2m commitment in '17)		2,502,234	0.4		
PRIM Vintage Year 2020 (\$5m commitment in '20)		3,491,778	0.5		
PRIM Vintage Year 2021 (\$5m commitment in '21)		2,616,664	0.4		
PRIM Vintage Year 2022 (\$7.5m commitment in '22)		824,572	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)		5,402,590	0.8		
Invesco Fund VI (\$5m commitment in '13)		1,068,293	0.2		
Kayne Energy Fund VII (\$5m commitment in '15)		2,766,350	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)		35,776	0.0		
Pinebridge (AIG) PEP V Co-Investment (\$6m commitment in '07)		96,394	0.0		
Pinebridge (AIG) PEP V Europe (\$6m commitment in '07)		18,235	0.0		
Pinebridge (AIG) PEP V Large Market US Buyout (\$6m commitment in '07)		85,418	0.0		
Pinebridge (AIG) PEP V Preferred Participation Fund (\$6m commitment in '07)		93,372	0.0		
Pinebridge (AIG) PEP V Secondary (\$6m commitment in '07)		24,803	0.0		
Pinebridge (AIG) PEP V Small-Mid Market US Buyout (\$6m commitment in '07)		90,345	0.0		
Pinebridge (AIG) PEP V US Venture (\$6m commitment in '07)		48,391	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)		4,671,521	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)		2,261,352	0.3		
HarbourVest Dover Street X (\$9m commitment in '20)		7,026,359	1.1		
Hamilton Lane Secondary Fund V LP (\$9m commitment in '20)		7,250,273	1.1		
Constitution Ironsides Co-Investment Fund VI (\$12m commitment in '21)		13,314,503	2.1		
JFL Equity Investors V, L.P. (\$9m commitment in '20)		7,787,501	1.2		
HarbourVest Co-Investment Fund VI (\$8m commitment in '21)		1,965,382	0.3		
Investment Management Fee		647,232,051	100.0	2,268,495	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.

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

Asset Allocation Rebalance Summary

December 9, 2022

	Market Value	Weight in Fund	Target Weight	Recommendation	New Market Value	New Weight
Composite	\$645,634,819	100.0%	100.0%	\$0	\$645,634,819	100.0%
Total Balanced	\$4,765,071	0.7%	0.0%	\$0	\$4,765,071	0.7%
PRIT Core Fund	\$4,765,071	0.7%	0.0%	\$0	\$4,765,071	0.7%
Total Domestic Equity	\$199,744,701	30.9%	31.0%	\$0	\$199,744,701	30.9%
Rhumblin Advisors S&P 500 Index Fund	\$63,695,719	9.9%	10.0%	\$0	\$63,695,719	9.9%
Coho Relative Value	\$53,383,147	8.3%	7.0%	\$0	\$53,383,147	8.3%
Polen Focused Growth	\$38,199,404	5.9%	7.0%	\$0	\$38,199,404	5.9%
Robeco Boston Partners Small Cap Value	\$22,664,012	3.5%	3.5%	\$0	\$22,664,012	3.5%
Loomis Sayles Small Cap Growth	\$21,802,419	3.4%	3.5%	\$0	\$21,802,419	3.4%
Total International Equity	\$103,526,156	16.0%	19.0%	\$0	\$103,526,156	16.0%
SEG - Baxter Street Fund	\$28,797,522	4.5%	5.0%	\$0	\$28,797,522	4.5%
Schroders International Alpha	\$26,372,208	4.1%	4.0%	\$0	\$26,372,208	4.1%
Baillie Gifford	\$13,191,624	2.0%	3.0%	\$0	\$13,191,624	2.0%
Axiom Emerging Markets	\$16,385,098	2.5%	3.5%	\$0	\$16,385,098	2.5%
ABS Emerging Markets Strategic Portfolio	\$18,779,704	2.9%	3.5%	\$0	\$18,779,704	2.9%
Total Equity	\$303,270,857	47.0%	50.0%	\$0	\$303,270,857	47.0%
Total Fixed Income	\$130,372,913	20.2%	20.0%	-\$3,000,000	\$127,372,913	19.7%
Garcia Hamilton	\$35,211,660	5.5%	6.0%	-\$3,000,000	\$32,211,660	5.0%
Lord Abbett	\$34,720,499	5.4%	6.0%	\$0	\$34,720,499	5.4%
Loomis Sayles Multi Sector Bonds	\$47,449,377	7.3%	7.0%	\$0	\$47,449,377	7.3%
Octagon Senior Secured Loans	\$12,938,026	2.0%	1.0%	\$0	\$12,938,026	2.0%
Invesco Mortgage Recovery	\$53,351	0.0%	0.0%	\$0	\$53,351	0.0%
Total Hedge Fund	\$39,758,443	6.2%	6.0%	\$0	\$39,758,443	6.2%
PRIM Absolute Return Fund	\$12,837,412	2.0%		\$0	\$12,837,412	2.0%
Corbin Pinehurst Partners	\$12,480,898	1.9%		\$0	\$12,480,898	1.9%
UBS Neutral Alpha Strategies	\$13,709,984	2.1%		\$0	\$13,709,984	2.1%
Entrust Peru Winddown	\$730,149	0.1%		\$0	\$730,149	0.1%
Total Real Estate	\$73,200,774	11.3%	12.0%	\$0	\$73,200,774	11.3%
TA Realty Core	\$28,358,966	4.4%		\$0	\$28,358,966	4.4%
Morgan Stanley PPF	\$26,975,346	4.2%		\$0	\$26,975,346	4.2%
Total Private Equity	\$86,026,289	13.3%	12.0%	\$0	\$86,026,289	13.3%
Cash	\$8,240,472	1.3%	0.0%	\$3,000,000	\$11,240,472	1.7%
Peoples United Cash	\$8,240,472	1.3%	0.0%	\$3,000,000	\$11,240,472	1.7%



SMALL CAP VALUE EQUITY SEARCH REVIEW

MWRA RETIREMENT SYSTEM

DECEMBER 15, 2022

Sebastian Grzejka, CAIA, Partner
Kiley Fischer, Sr. Consulting Analyst



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SUMMARY OF SMALL CAP VALUE EQUITY SEARCH

- **Target fund strategy**
 - U.S. Small Cap Value strategy

- **Advertised requirements for the search:**
 1. 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 November 15, 2022 by 5:00 PM EST.**
 - A total of 53 managers responded





SMALL CAP VALUE FINALISTS



PROPRIETARY & CONFIDENTIAL

SMALL CAP VALUE EQUITY SEARCH FINALISTS

Firm	Fund	Vehicle	Fund AUM (MM)	Firm AUM (MM)	Track Record	Fees	Side Letter	MWRA Rating
Boston Partners (Incumbent)	Small Cap Value	SMA	\$2,310	\$59,468	27	0.80%	Yes	2
Hotchkis and Wiley	Small Cap Diversified Value	SMA	\$2,022	\$25,614	17	0.55% on first \$15M, 0.50% on next \$35M, 0.45% thereafter	Yes*	1
Mesirow	Mesirow Small Cap Value	SMA	\$541	\$159,178	28	0.85% on first \$25M, 0.75% on next \$25M, 0.60% on next \$50M, 0.55% thereafter	Yes	2
Vaughan Nelson	Small Cap Value	SMA	\$2,358	\$12,656	25	1.0% on first \$25m, 0.85% on next \$25m, 0.75% thereafter	Yes	2



Yes* = Yes with Modifications

FIRM AND PRODUCT SUMMARY

Firm/Product	Firm/Team Comments	Investment Style/Strategy	Performance Expectations	Portfolio Positioning	Other Comments
Small Cap Value Equity					
Boston Partners - BP Small Cap Value	Boston Partners is an indirect, wholly owned subsidiary of ORIX Corporation of Japan.	Strategy seeks valuation, business fundamentals, and momentum. Discussions and decisions consider trade-off between these criteria.	Fundamental strategy. Should perform well in markets when strong financial fundamentals are rewarded. Quality bias offers downside protection.	~100 - 140 stocks. Market cap range consistent with the Russell 2000 Index. Maximum sector weight is 35%.	Incumbent
Hotchkis Wiley - SCDV	Hotchkis and Wiley is owned 54% by employees, 43% passively by Stephens-H&W, and 3% by outside investors. Judd Peters and Ryan Thomes oversee the Small Cap Diversified Value strategy.	Strategy uses proprietary quantitative models to pick stocks by reverse-engineering how the fundamental industry analysts identify attractively valued stocks based on their analyses of long-run normal earnings power.	Should outperform well in fundamental value markets and struggle in growth/momentum markets. The many small positions help to mitigate the volatility that is typical of deep value managers.	350-400 stocks. The max industry weight is 15%, and max sector weight is 35%. Roughly one third of the portfolio is invested in companies with market caps below \$500 million. Annual turnover ranges from 50%-100%.	
Mesirow – Small Cap Value	Mesirow Financial Financial Holdings, Inc., is approximately 94% owned by employees and the remainder is owned by non-employee individuals with a prior or current business relationship with Mesirow.	Strategy employs a relative value philosophy that invests in attractively valued, high-quality companies with catalyst-driven earnings and cash flow growth. The portfolio uses a combination of fundamental analysis (~80% of the process) and top-down/macroeconomic factors (~20 of the process)	Fundamental strategy, which looks to outperform the Russell 2000 Value over a market cycle.	Portfolios generally hold between 70 to 90 positions, with sector weights constrained to the greater of two times the benchmark or 15% of the portfolio and market cap range consistent with the Russell 2000 Index.	
Vaughan Nelson - Small Cap Value	Houston based firm, owned 100% by Natixis Investment Managers, L.P. Seasoned investment team led by Chris Wallis.	Strategy seeks to invest in companies that are trading at a discount to intrinsic value as a result of informational and liquidity related inefficiencies that exist in the small cap universe.	The strategy should perform well in markets where companies are rewarded for improving fundamentals, and investors are adverse to paying for stretched valuations. Given the high active share and fairly concentrated portfolio, performance may deviate from the benchmark for periods of time.	The portfolio holds 55-85 stocks. Initial position size varies from 0.5% to 3%. The portfolio is sector agnostic and will have a high active share.	



SECTOR EXPOSURES

	Comm. Services	Consumer Disc.	Consumer Staples	Energy	Financials	Health Care	Industrials	Technology	Materials	Utilities	Real Estate
Boston Partners	3.5%	14.7%	3.3%	8.5%	24.6%	6.8%	19.5%	10.3%	6.8%	0.0%	2.1%
Hotchkis & Wiley	0.7%	12.4%	1.7%	10.6%	34.4%	2.2%	18.0%	8.9%	4.6%	3.6%	2.9%
Mesirow	1.6%	8.7%	1.7%	6.4%	23.0%	13.8%	15.2%	7.5%	3.9%	6.1%	12.2%
Vaughan Nelson	0.0%	8.9%	2.3%	5.4%	16.8%	2.9%	31.7%	21.4%	7.2%	3.5%	0.0%
Russell 2000 Value Index	3.0%	9.7%	2.7%	5.7%	29.2%	12.0%	12.4%	5.8%	3.6%	5.2%	10.6%



Source: eVestment

As of September 30, 2022

TRAILING PERIOD RETURNS

NET OF FEES

	Benchmark	Qtr	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
US Small Cap Value Equity								
BstnPtnrs - Robeco BP SCVE	1	-6.4%	-19.4%	-16.5%	3.8%	3.2%	6.8%	7.9%
HotchWiley - Small Cap Diversified Value	1	-5.5%	-17.9%	-13.1%	6.7%	4.2%	9.5%	10.6%
Mesirow - Sm Cap Value Equity	1	-0.8%	-13.0%	-7.6%	9.2%	5.5%	7.7%	9.0%
Vaughan Nelson - Small Cap Value	1	-4.4%	-16.7%	-8.1%	7.3%	5.6%	7.5%	9.8%

Actual Return								
1	Russell 2000 Value	-4.6%	-21.1%	-17.7%	4.7%	2.9%	7.4%	7.9%



CALENDAR YEAR RETURNS

NET OF FEES

	Benchmark	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
US Small Cap Value Equity											
Boston Partners	1	25.9%	2.3%	30.1%	-16.4%	10.4%	24.7%	-4.5%	3.9%	34.2%	21.9%
Hotchkis & Wiley	1	35.9%	0.3%	22.5%	-14.0%	14.3%	34.8%	-8.4%	9.3%	44.4%	19.1%
Mesirow	1	29.3%	7.5%	23.3%	-15.7%	13.5%	14.8%	-0.6%	5.6%	35.2%	10.8%
Vaughan Nelson	1	31.3%	8.7%	24.7%	-14.5%	6.7%	20.2%	0.0%	9.0%	39.0%	15.1%

Actual Index Return											
1	Russell 2000 Value	28.3%	4.6%	22.4%	-12.9%	7.8%	31.7%	-7.5%	4.2%	34.5%	18.1%

	Benchmark	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
US Small Cap Value Equity											
Boston Partners	1	-2.4%	-2.3%	7.7%	-3.5%	2.6%	-7.1%	2.9%	-0.3%	-0.3%	3.8%
Hotchkis & Wiley	1	7.6%	-4.3%	0.1%	-1.1%	6.5%	3.1%	-0.9%	5.1%	9.8%	1.0%
Mesirow	1	1.0%	2.9%	0.9%	-2.8%	5.7%	-17.0%	6.9%	1.4%	0.7%	-7.3%
Vaughan Nelson	1	3.0%	4.1%	2.3%	-1.6%	-1.1%	-11.6%	7.5%	4.8%	4.5%	-2.9%

Manager Excess Return: > 3%, between 0% and 3%, between -0% and -3%, < -3%



EXCESS RETURNS PERFORMANCE SUMMARY

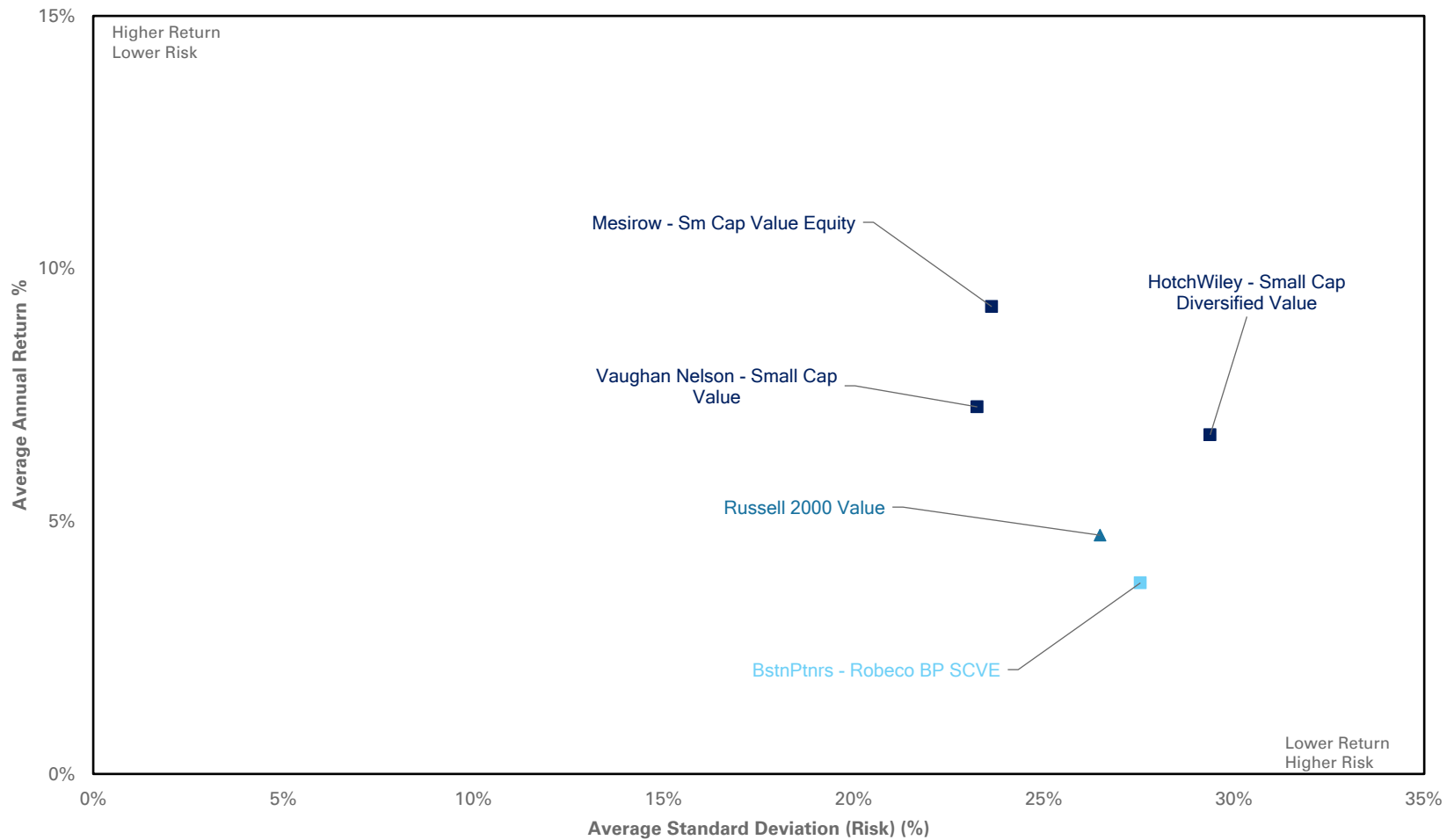
NET OF FEES

	Primary Benchmark	# of Months (Track Record)	% Positive (Mo.)	High (Mo.)	Low (Mo.)	Average (Mo.)	% > 0.5%	Rolling 1 Yr. Rtr.		Rolling 3 Yr. Rtr.	
								> 0%	> 3%	> 0%	> 3%
US Small Cap Value Equity											
Boston Partners	Russell 2000 Value	240	55%	4.3%	(3.8%)	0.1%	38%	59%	24%	65%	18%
Hotchkis & Wiley	Russell 2000 Value	207	57%	11.5%	(4.7%)	0.2%	37%	60%	45%	74%	33%
Mesirow	Russell 2000 Value	240	51%	4.9%	(5.5%)	0.0%	33%	52%	26%	55%	17%
Vaughan Nelson	Russell 2000 Value	240	53%	6.2%	(5.1%)	0.2%	41%	61%	46%	76%	39%

	# of Months (Track Record)	Excess Return					Tracking Error				Information Ratio				Beta vs. Primary Benchmark
		1 Yr.	3 Yrs.	5 Yrs.	7 Yrs.	10 Yrs.	3 Yrs.	5 Yrs.	7 Yrs.	10 Yrs.	3 Yrs.	5 Yrs.	7 Yrs.	10 Yrs.	
US Small Cap Value Equity															
Boston Partners	240	1.2%	(0.9%)	0.3%	(0.6%)	0.0%	5.5%	4.9%	4.5%	4.3%	(0.17)	0.06	(0.13)	0.00	0.98
Hotchkis & Wiley	207	4.6%	2.0%	1.3%	2.1%	2.7%	6.3%	5.4%	4.9%	4.5%	0.31	0.25	0.43	0.60	1.09
Mesirow	240	10.1%	4.5%	2.6%	0.2%	1.0%	5.6%	4.9%	4.8%	4.5%	0.81	0.54	0.05	0.23	0.86
Vaughan Nelson	240	9.6%	2.5%	2.7%	0.0%	1.8%	7.2%	6.2%	5.8%	5.6%	0.35	0.44	0.01	0.33	0.84



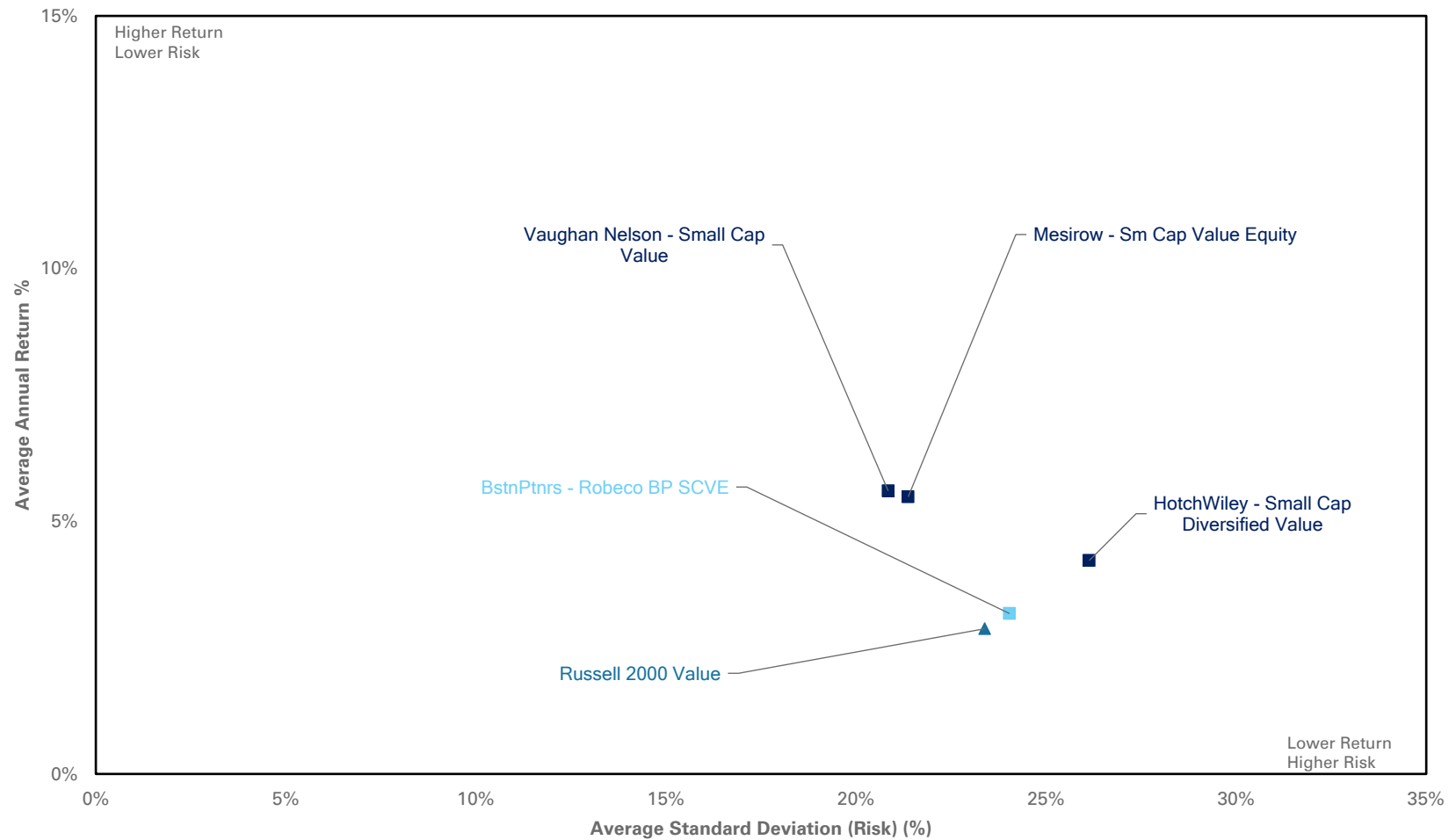
3 YEAR TOTAL RISK/RETURNS COMPARISON NET OF FEES



Past performance is no guarantee of future results

Performance as of September 30, 2022

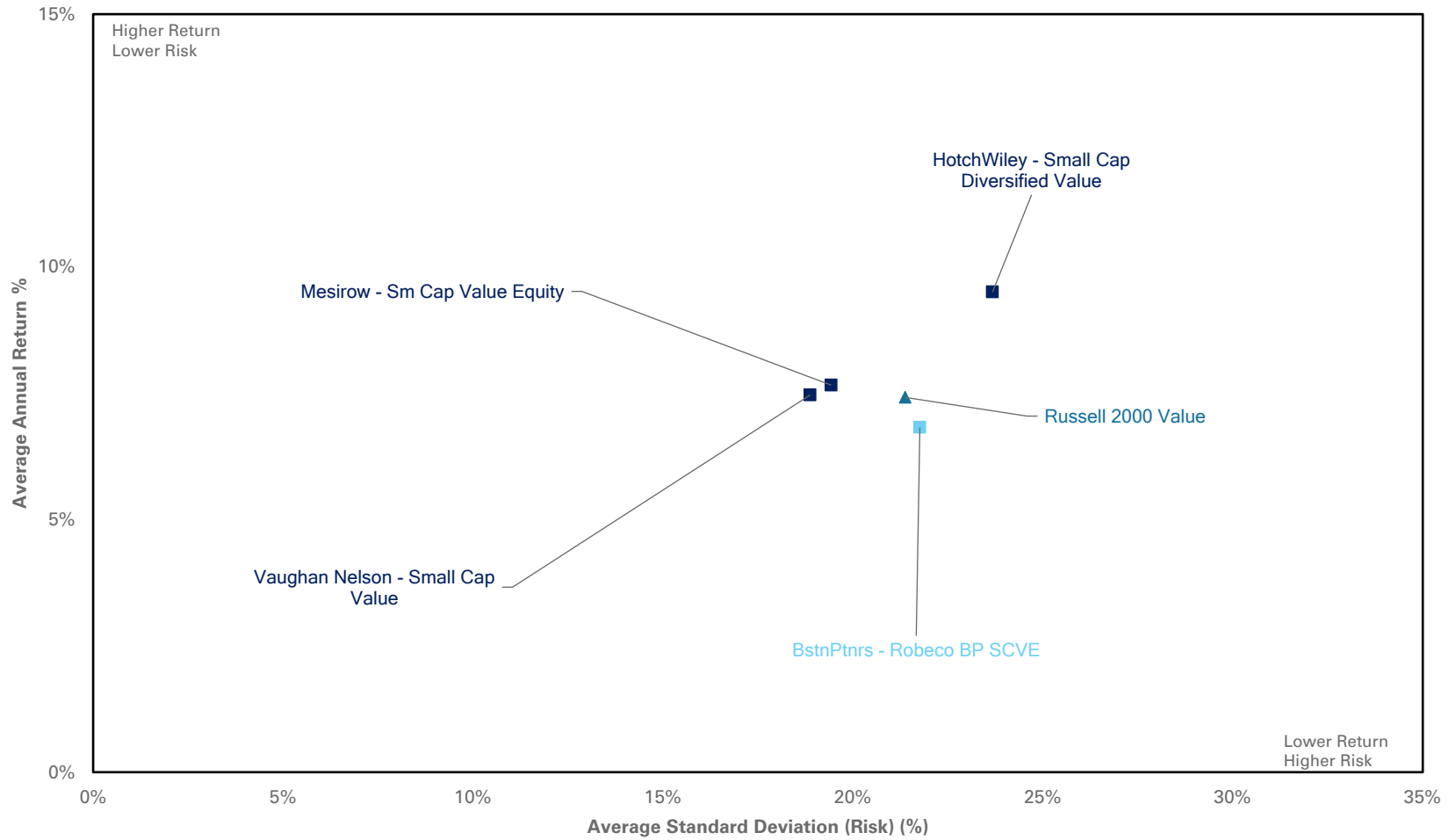
5 YEAR TOTAL RISK/RETURNS COMPARISON NET OF FEES



Past performance is no guarantee of future results

Performance as of September 30, 2022

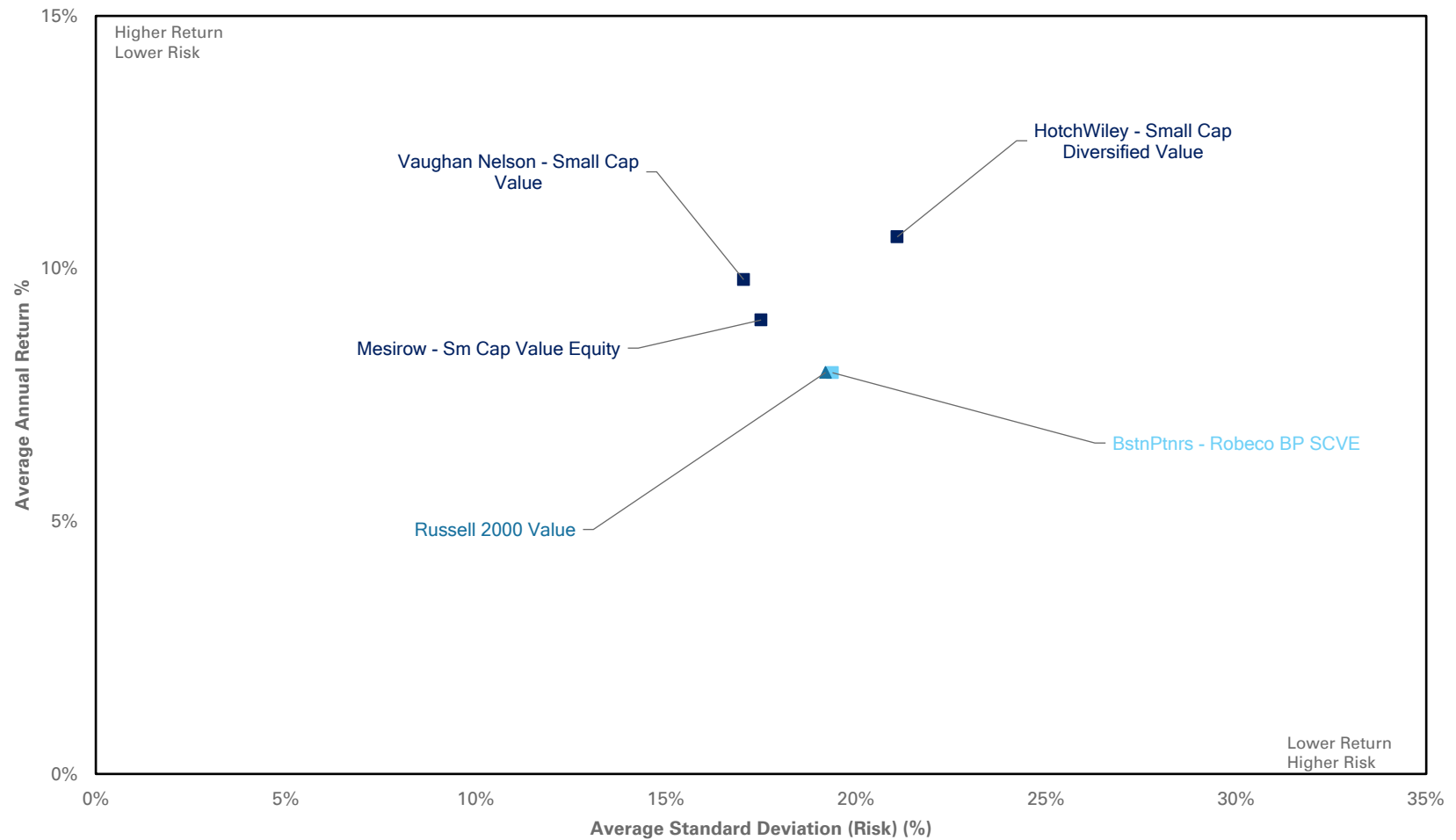
7 YEAR TOTAL RISK/RETURNS COMPARISON NET OF FEES



Past performance is no guarantee of future results

Performance as of September 30, 2022

10 YEAR TOTAL RISK/RETURNS COMPARISON NET OF FEES



Past performance is no guarantee of future results

Performance as of September 30, 2022



APPENDIX

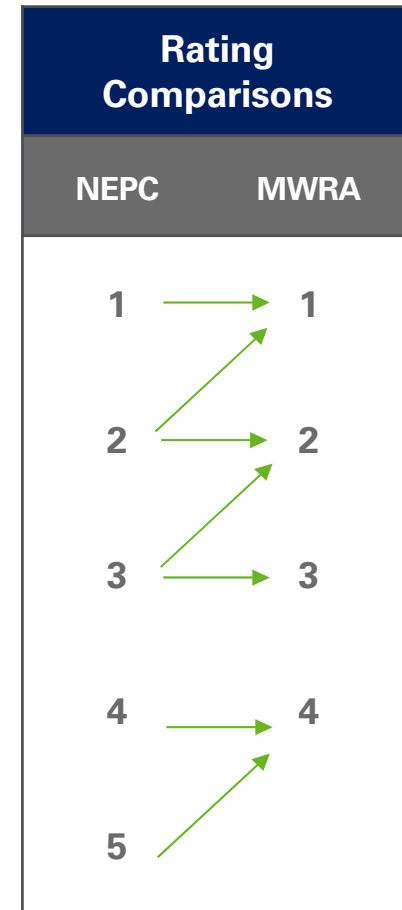


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RATINGS SYSTEM COMPARISON

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 MWRA Retirement System. 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.



SMALL CAP VALUE EQUITY SEARCH RESPONSES

Firm	Fund	Vehicle	Fund AUM (MM)	Firm AUM (MM)	Track Record	Fees	Side Letter	MWRA Rating
Brown Advisory	Small-Cap Fundamental Value	SMA	\$1,835	\$48,606	14	0.85% (0.15% fee discount)	Yes	3
Ceredex Value	Small Cap Value Equity	SMA	\$1,084	\$6,608	24	55 bps	Yes	2
Channing Capital	Small Cap Value	SMA	\$2,283	\$2,991	16	First \$25M – 85bps, Next \$25M – 75bps, Over \$50M – 70bps	Yes	1
Columbia Threadneedle	Columbia Small Cap Value II	CIT	\$1,762	\$109,179	20	Net Expense Ratio: 0.70%	Yes*	3
Congress	Small Cap Value	SMA	\$305	\$9,608	12	65 bps on first \$25m; 60 bps on next \$25m; 50 bps thereafter	Yes	3
Cove Street	Classic Value Small Cap	SMA	\$263	\$388	28	0.80%	Yes	3
Denali	Denali Network Value Small	SMA	\$275	\$321	9	1%	Yes*	3
DePrince, Race & Zollo	Small Cap Value	SMA	\$1,631	\$4,276	27	70bps on first \$50m, 65bps on next \$50m, 55bps thereafter	Yes	3
Dimensional (DFA)	US Small Cap Value Equity	MF	\$12,605	\$539,623	29	0.30%	Yes*	3
Fiduciary Mgmt.	FMI Small Cap Equity	SMA	\$1,960	\$12,487	42	\$0-25M: 0.85%, \$25-50M: 0.80%, \$50-100M: 0.70%, 0.60% thereafter	Yes	3
Frontier	Frontier Small Cap Value	SMA	\$2,003	\$8,683	24	1.00%	Yes*	3
Goldman Sachs	US Small Cap Value Equity Insights	CIT/MF	\$1,014	\$2,197,876	16	MF: Net Expense Ratio: 0.84% CIT: TBD	Yes*	3
Heartland	Small Cap Value Plus	SMA	\$513	\$1,488	14	First \$5m @ 1.0%, Next \$10m @ 0.85%, >\$15M negotiable	Yes	3
Kayne Anderson	KAR Small Cap Quality Value	SMA	\$5,038	\$45,190	24	80 bps	Yes*	2
Leeward	Leeward Small Cap Value	SMA	\$1,444	\$2,706	20	85 bps	Yes	3
LSV	U.S. Small Cap Value Equity	SMA	\$3,033	\$82,385	25	First \$25m at 75 bps, Next \$25m at 65 bps, 55 bps thereafter	Yes	3
Mutual of America	Disciplined Small Cap Value	SMA/C F	\$475	\$17,686	19	SMA - 90 bps MF - 80 bps	Yes	3
Neumeier Poma	Small Cap Value	SMA	\$1,186	\$1,187	23	1% on first \$25M, 0.80% on next \$25M, 0.70% above \$50M	Yes	3
NewSouth	Small Cap Value	SMA	\$557	\$2,172	37	0.90% on first \$25m, 0.85% on next \$25m, 0.75% thereafter;	Yes	3



Yes* = Yes with Modifications

SMALL CAP VALUE EQUITY SEARCH RESPONSES

Firm	Fund	Vehicle	Fund AUM (MM)	Firm AUM (MM)	Track Record	Fees	Side Letter	MWRA Rating
Peregrine	Peregrine Small Cap Value	SMA/CF	\$1,200	\$2,374	26	SMA: 0.80% first \$100m, 0.75% next \$50m, 0.65% Balance CF: 0.70%	Yes	3
PGIM	Small Cap Value Equity	SMA	\$404	\$80,956	15	75 bps on first \$50m, 70 bps on next \$50m, 65 bps thereafter	Yes*	3
Port Capital	Small Cap Equity	SMA/CF	\$659	\$1,595	7	SMA: 100 bps on first \$15m, then 80 bps CF: 95 bps on first \$15m, then 80 bps	Yes	3
Putnam Investments	U.S. Small Cap Value Equity	SMA	\$417	\$157,473	4	80 bps	Yes	3
Pzena	Small Cap Focused Value	SMA	\$1,882	\$42,005	27	1.0% on first \$250m, 0.75% thereafter	Yes*	3
Segall Bryant & Hamill	Small Cap Value	SMA	\$1,961	\$21,512	15	70 bps	Yes	1
SouthernSun	Small Cap Strategy	SMA	\$661	\$869	19	82 bps	Yes	3
Systematic Financial	Small Cap Value Free Cash Flow	SMA	\$2,776	\$3,081	30	0.85% on first \$25M, 0.75% on next \$50M, 0.60% thereafter	Yes*	1
The London Company	Small Cap	SMA	\$692	\$29,193	23	0.70% on first \$50m; 0.55% on next \$50m; 0.50% thereafter	Yes	3
WCM	Focused Small Cap	SMA	\$971	\$65,685	10	80 bps	Yes*	3
Wellington	Small Cap Value	CF	\$359	\$1,096,540	13	0.85%	Yes*	3
Westwood	SmallCap Value	SMA	\$2,542	\$8,684	19	First \$100m at 75 bps, 70 bps thereafter	Yes	1



Yes* = Yes with Modifications

SMALL CAP VALUE EQUITY SEARCH RESPONSES

Firm	Fund	Vehicle	Fund AUM (MM)	Firm AUM (MM)	Track Record	Fees	Side Letter	MWRA Rating
Advisory Research	Advisory Research Partners Fund	SMA, CF	\$48	\$1,360	4	0.50% mgmt. fee & 20% perf. fee w/ 6% hurdle	Yes	4
Advisory Research	Small Cap Value	SMA	\$83	\$1,360	4	0.75%	Yes	4
Bailard	U.S. Small Cap Value	SMA	\$84	\$2,635	20	0.50%	Yes	4
CornerCap	Fundametrics Small Cap Equity	SMA	\$202	\$1,177	16	60 bps	Yes	4
Cornerstone	Opportunistic Small Cap Value	SMA	\$1	\$1,530	8	0.45% for first \$100m	Yes	4
Donald Smith & Co.	Small Cap Value Equity	SMA	\$200	\$2,270	30	100 bp on first \$25M, 85bp on next \$25M, 75bp thereafter	Yes	4
First Eagle	First Eagle US Small Cap	SMA	\$545	\$112,265	1	First \$75m 0.85%, next \$75m 0.75%, next \$300m 0.70%, 0.65% thereafter	Yes*	4
Huber	Small Cap Value	SMA, MF	\$73	\$379	15	SMA 1.25% MF: 1.35%	Yes	4
GMO	U.S. Small Cap Value	MF	\$92	\$53,932	4	0.51%	Yes*	4
Jackson Creek	U.S. Small Cap Equity	SMA	\$204	\$304	11	0.50%	Yes	4
Legion Partners	Legion Commingled Strategy	SMA	\$361	N/A	9	1% + 20% incentive (6% hurdle)	Yes	4
Monarch	Small Cap Value Equity	SMA	\$127	\$346	13	100 bps on first \$25m, then 90 bps	Yes	4
NewSouth	Small Cap Value CIT	CIT	\$0	\$2,172	N/A	Class 1 0.65% / Class 2 0.80%	Yes	4
Newton	US Small Cap Value Equity	SMA, CF, MF	\$1,913	\$98,711	23	MF: BOSYX = 1.0%, STSVX= 1.03% SMA: 70 bps CIT*: 50 bps if MWRA seeds (70 bps otherwise)	Yes	4
Oliver Luxxe	Small Cap Value Equity	SMA	\$30	\$557	5	0.80% on first \$30M, 0.75% on next \$20M, and 0.70% thereafter	Yes	4
Pacific Ridge	Small Cap Value	SMA	\$70	\$392	12	75 bps or perf. fee with a 0.10% and 1.90% max. fee	Yes	4
Penn Capital	Small Cap Value Equity	SMA	\$14	\$1,481	6	75 bps on first \$25m, 70 bps on next \$50m, 65 bps thereafter *Discounted	Yes*	4
PIMCO	PIMCO RAE US Small	MF	\$8,642	\$1,690,584	17	0.50%	No	4
Seizert	Small Cap Value	SMA	\$164	\$1,842	12	0.85%	Yes	4
Third Avenue	Small-Cap Value Strategy	MF	\$148	\$1,105	25	1.05%	No	4
Third Avenue	Small-Cap Value	SMA	\$0	\$1,105	25	First \$10m at 90 bps, next \$15m at 80 bps, next \$25m at 75 bps, then 70 bps	Yes*	4



Yes* = Yes with Modifications

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.





FIXED INCOME STRUCTURE REVIEW

MWRA RETIREMENT SYSTEM

DECEMBER 15, 2022

Sebastian Grzejka, CAIA, Partner
Kiley Fischer, Senior Analyst



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EXECUTIVE SUMMARY

- **The purpose of today's presentation is to review the current structure and implementation of the Fixed Income allocation**
 - The goal is to reaffirm the structure and consider next steps in the implementation of the exposure

- **Today, we want to focus on the following areas**
 - *Fixed Income Implementation:*
 - We have provided a detailed quantitative analysis of the allocation
 - The goal is to reaffirm the existing approach, or consider adjusting the implementation that best meets the Systems goals
 - We have provided additional options for consideration to enhance the exposure
 - *The Fixed Income Exposure was last reviewed in 2018/2019:*
 - The allocation is structured to blend high quality with yield seeking bonds
 - The Core Bond (high quality) allocation paired Garcia Hamilton and Lord Abbett
 - The Multi Sector (yield seeking) allocation complemented Loomis Sayles Full Discretion with Octagon Bank Loans
 - Over time, this pairing has performed well, however, has struggled in 2022
 - *Fixed Income Considerations:*
 - Today, the entire allocation is actively managed. Should consideration be given to indexing a part of the allocation?
 - Loomis represents the most unconstrained manager in the portfolio, resulting in strong performance historically. Should other options be considered?
 - What role does Octagon play within the allocation going forward?



PORTFOLIO CONSTRUCTION SUMMARY

Fund	Total Fixed Income (Incumbent)	Mix 1 (Core Passive Option)	Mix 2 (Garcia/Loomis Mix)	Mix 3 (Lord Abbett/Loomis Mix)	Benchmark	Analysis Start Date	Analysis End Date
Garcia Hamilton Fixed Income - Aggregate	26%	---	52%	---	Bloomberg Barclays US Aggregate	2/28/2012	9/30/2022
Lord Abbett Core Fixed Income	26%	---	---	52%	Bloomberg Barclays US Aggregate	2/28/2012	9/30/2022
Loomis Sayles Multisector Full Discretion	37%	37%	48%	48%	Bloomberg Barclays US Aggregate	2/28/2012	9/30/2022
Octagon Senior Secured Credit	11%	11%	---	---	CS Leveraged Loan	2/28/2012	9/30/2022
Passive Bloomberg Barclays US Aggregate Index	---	52%	---	---	Bloomberg Barclays US Aggregate	2/28/2012	9/30/2022
Total	100%	100%	100%	100%			

	Total Fixed Income (Incumbent)	Mix 1 (Core Passive Option)	Mix 2 (Garcia/Loomis Mix)	Mix 3 (Lord Abbett/Loomis Mix)
Active Risk and Return				
Realized Alpha	1.7%	1.3%	2.1%	1.8%
Beta	0.94	0.95	0.93	0.95
Tracking Error	1.8%	1.5%	2.2%	2.3%
Diversification Ratio	1.20	1.05	1.18	1.05
Information Ratio	0.95	0.86	0.94	0.79
Style and Size Regression				
Duration	Neutral	Neutral	Neutral	Neutral
Quality	Moderate	Moderate	Moderate	Moderate
Return Decomposition				
Upside Market Capture	115.2%	112.5%	120.3%	117.9%
Downside Market Capture	86.4%	90.6%	84.6%	87.7%
Upside Alpha	2.2%	1.7%	2.8%	2.4%
Downside Alpha	1.1%	0.8%	1.2%	1.1%

The current fixed income allocation was designed to provide balanced exposure between high quality and yield seeking approaches.

All mixes exhibit good upside capture, and downside protection, however, the current structure achieves this more efficiently.

In a "core"-"satellite" approach, there is potential to achieve a more attractive risk and return profile, however, may introduce unintended tilts and overlap of exposure.

All Risk/Return statistics calculated through 09/30/22. Portfolio metrics calculated by combining fund statistics at specified weights.

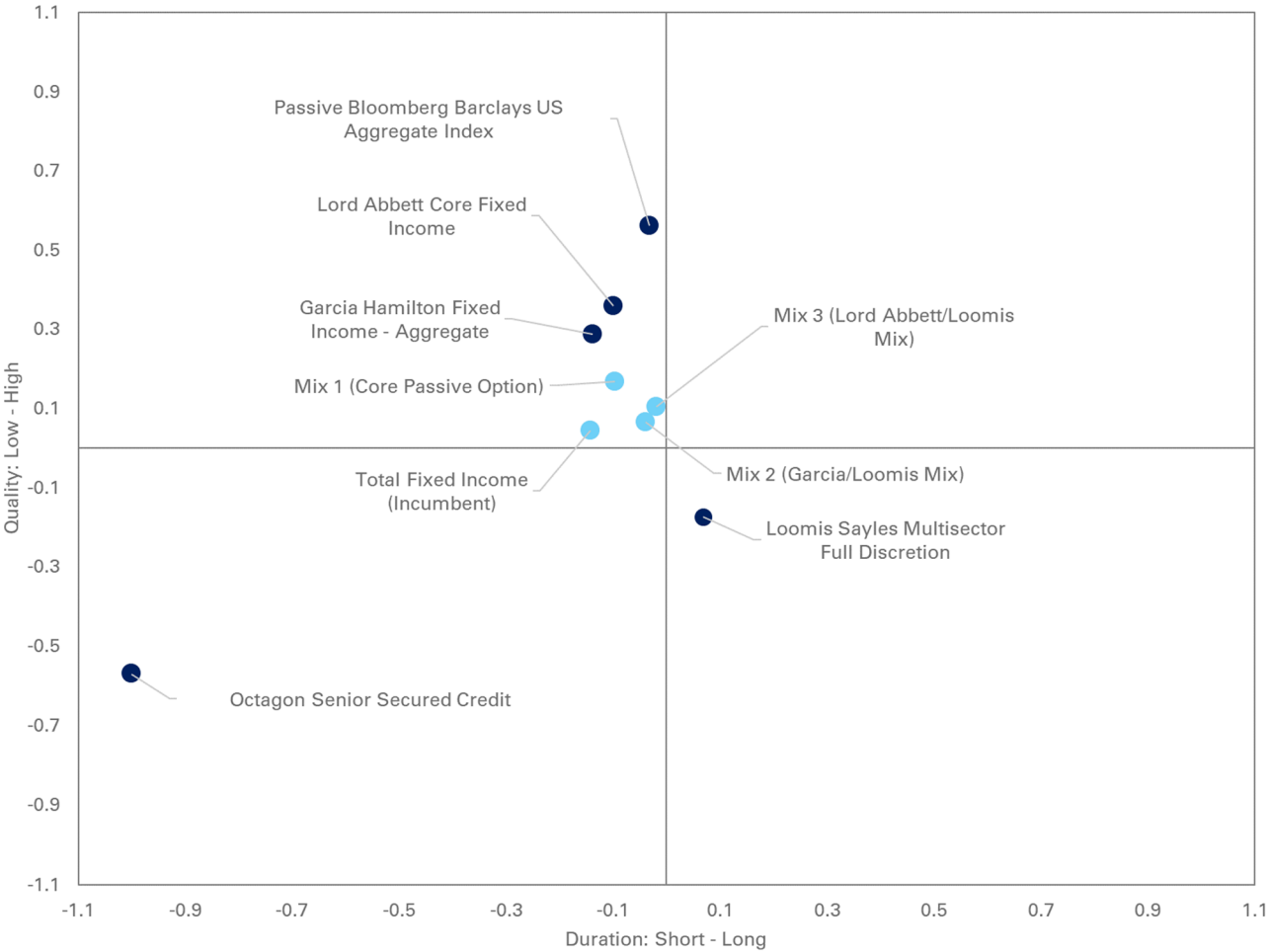
Diversification Ratio defined as: $\sum(\text{Fund Active Risk} * \text{Fund Weight}) / (\text{Total Portfolio Active Risk})$. Higher numbers represent greater diversification.

Information Ratio defined as: Realized Alpha/Tracking Error

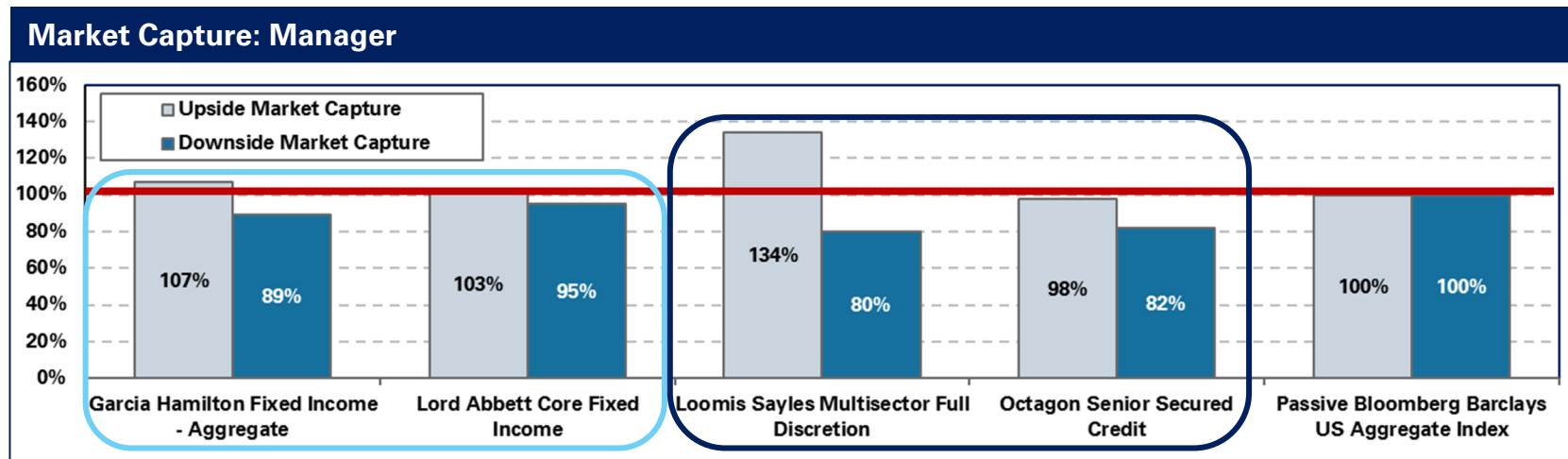
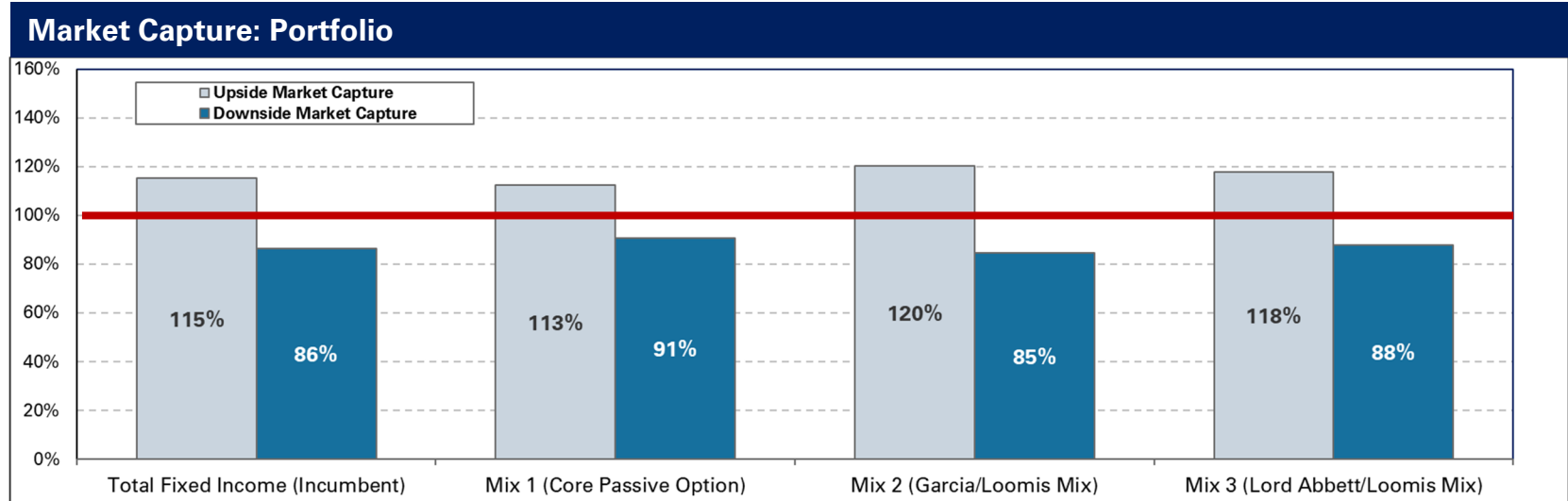


DURATION/QUALITY MATRIX

Duration/Quality Matrix

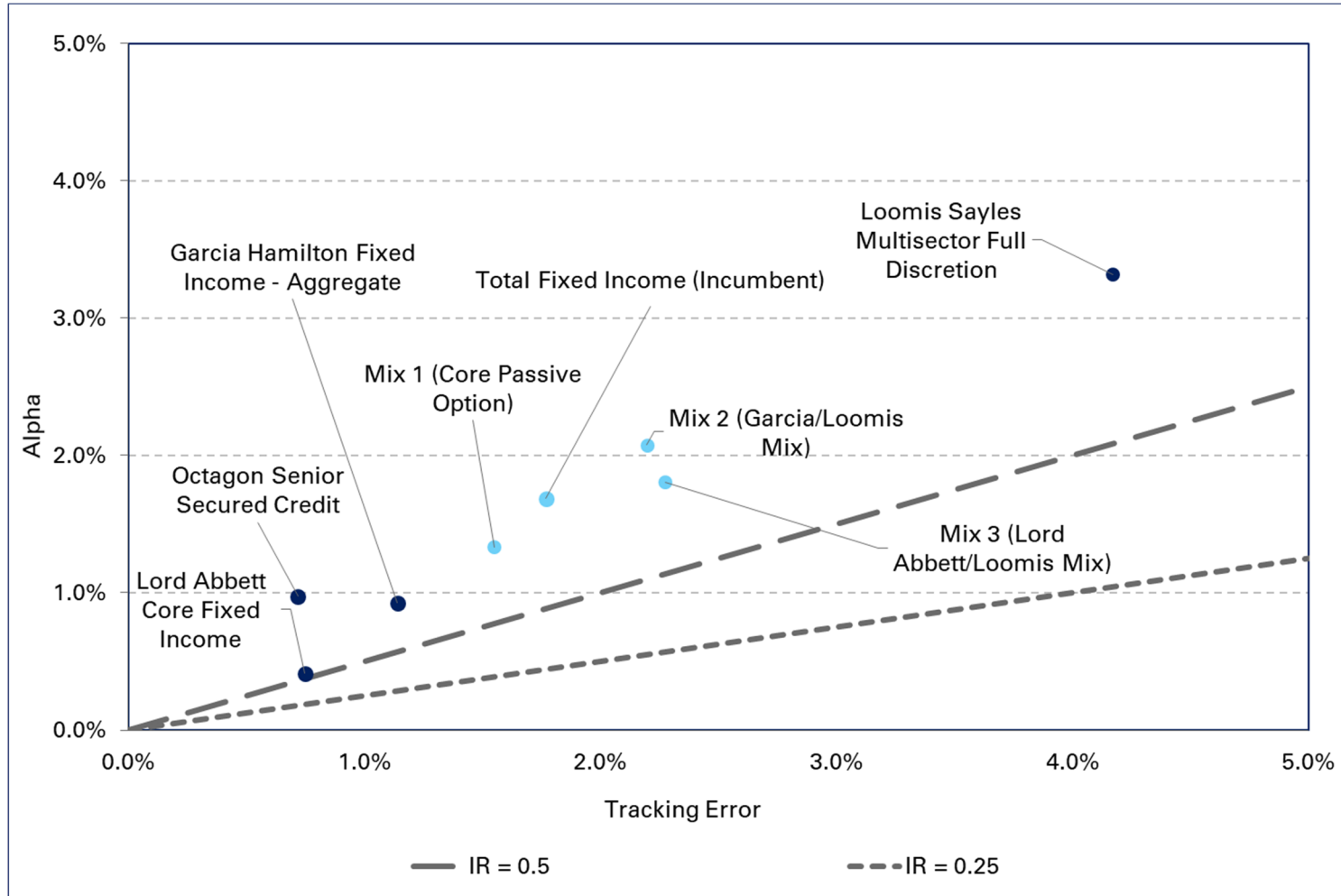


MARKET CAPTURE



ACTIVE RISK-RETURN

ALPHA, TRACKING ERROR, & INFORMATION RATIO



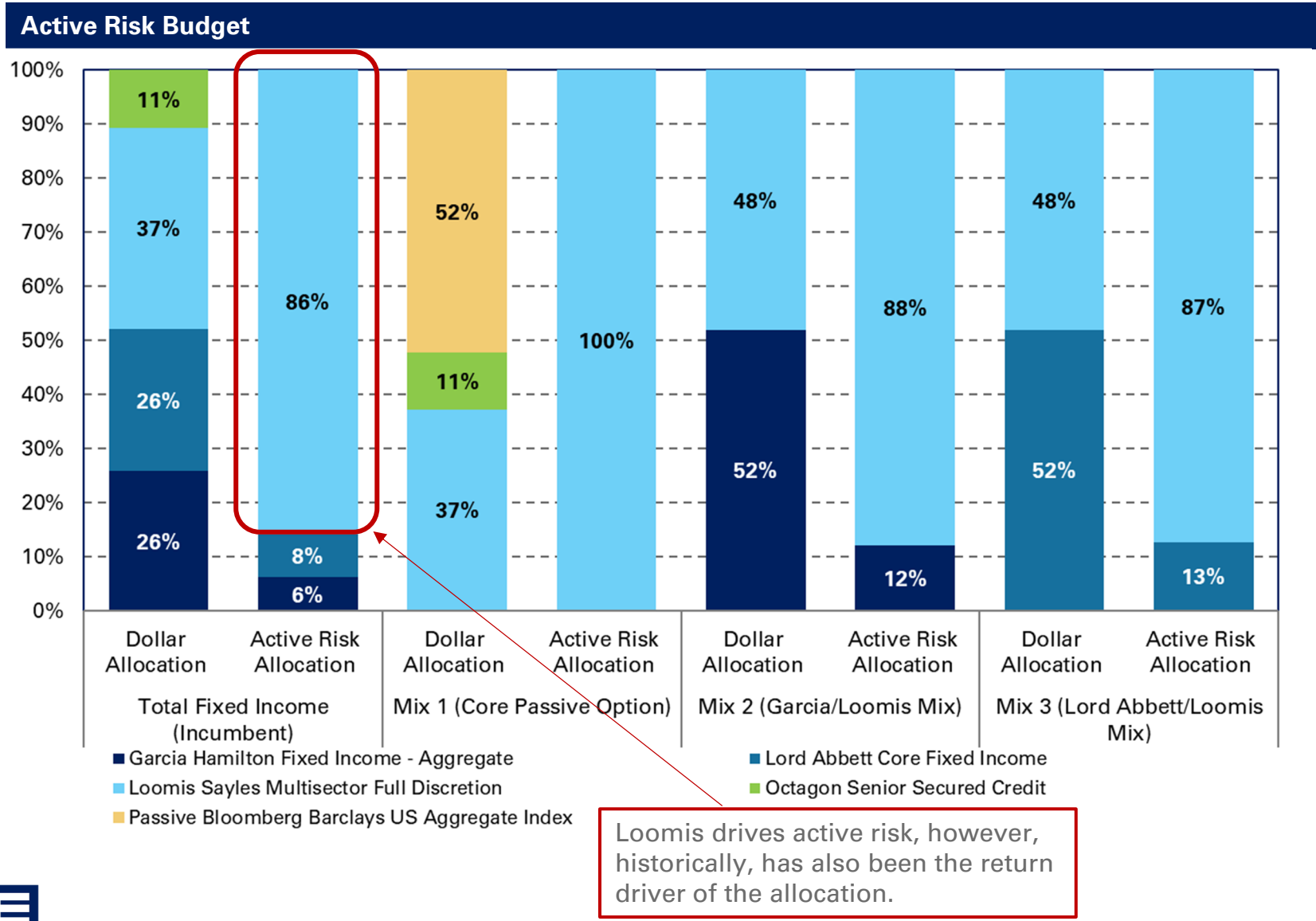
All Risk/Return statistics calculated through 09/30/22.

Benchmarks shown on page 2 (Portfolio construction summary)

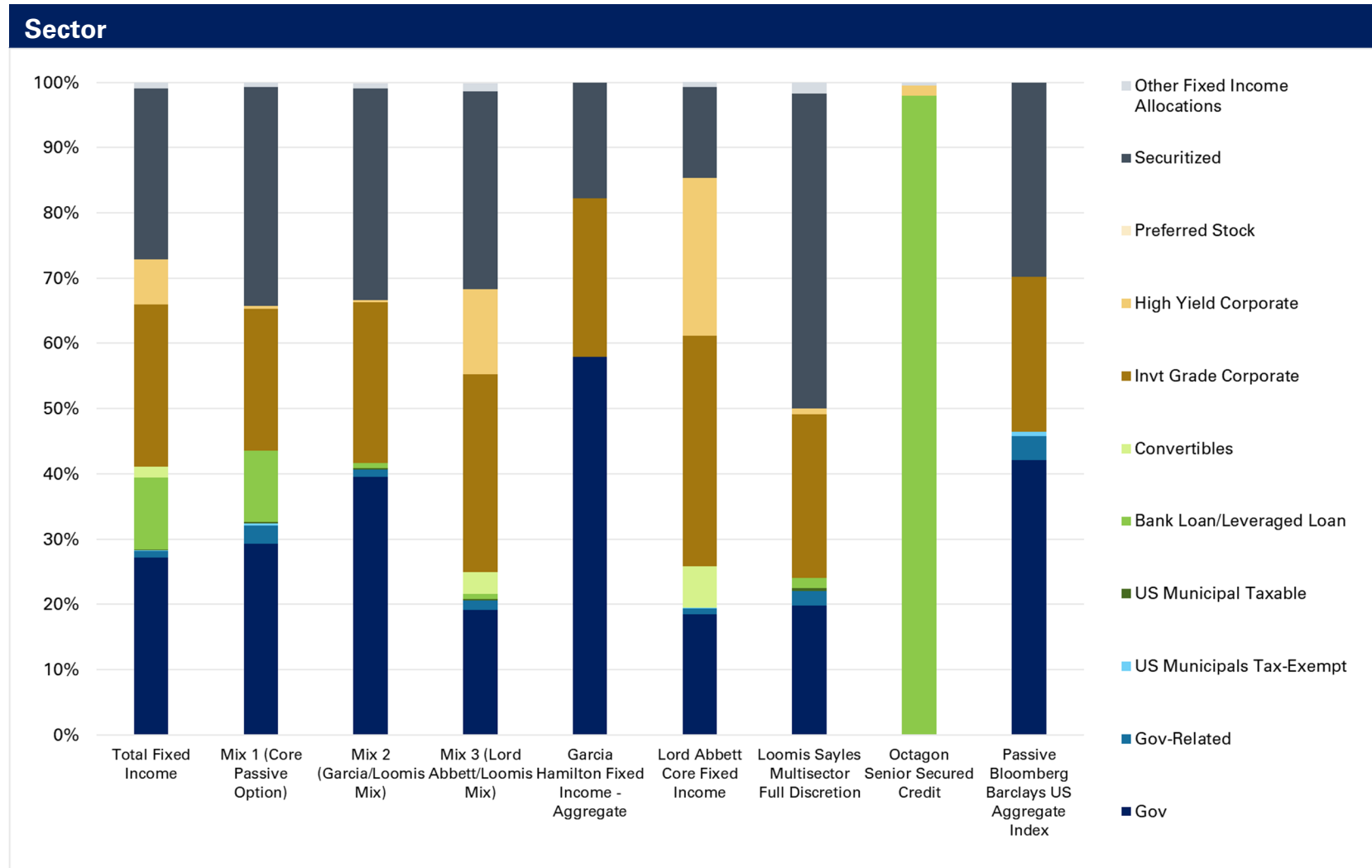
Information Ratio defined as: Realized Alpha/Tracking Error



ACTIVE RISK BUDGET



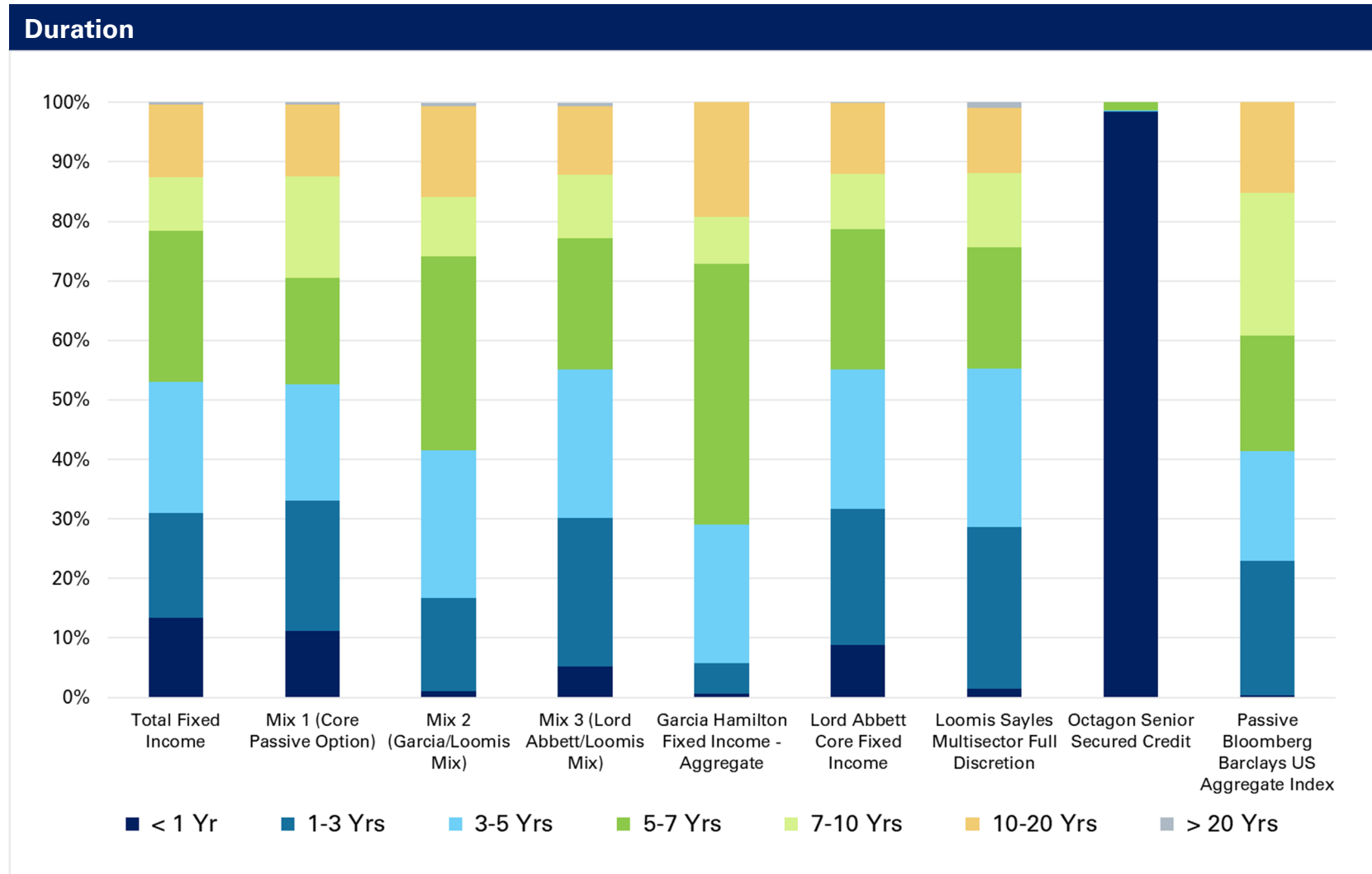
HOLDINGS ANALYSIS



Allocations as of 09/30/2022. The Northern Trust: NT Aggregate US Bond Index Strategy was used to proxy the holdings of the Bloomberg Barclays US Aggregate Index.



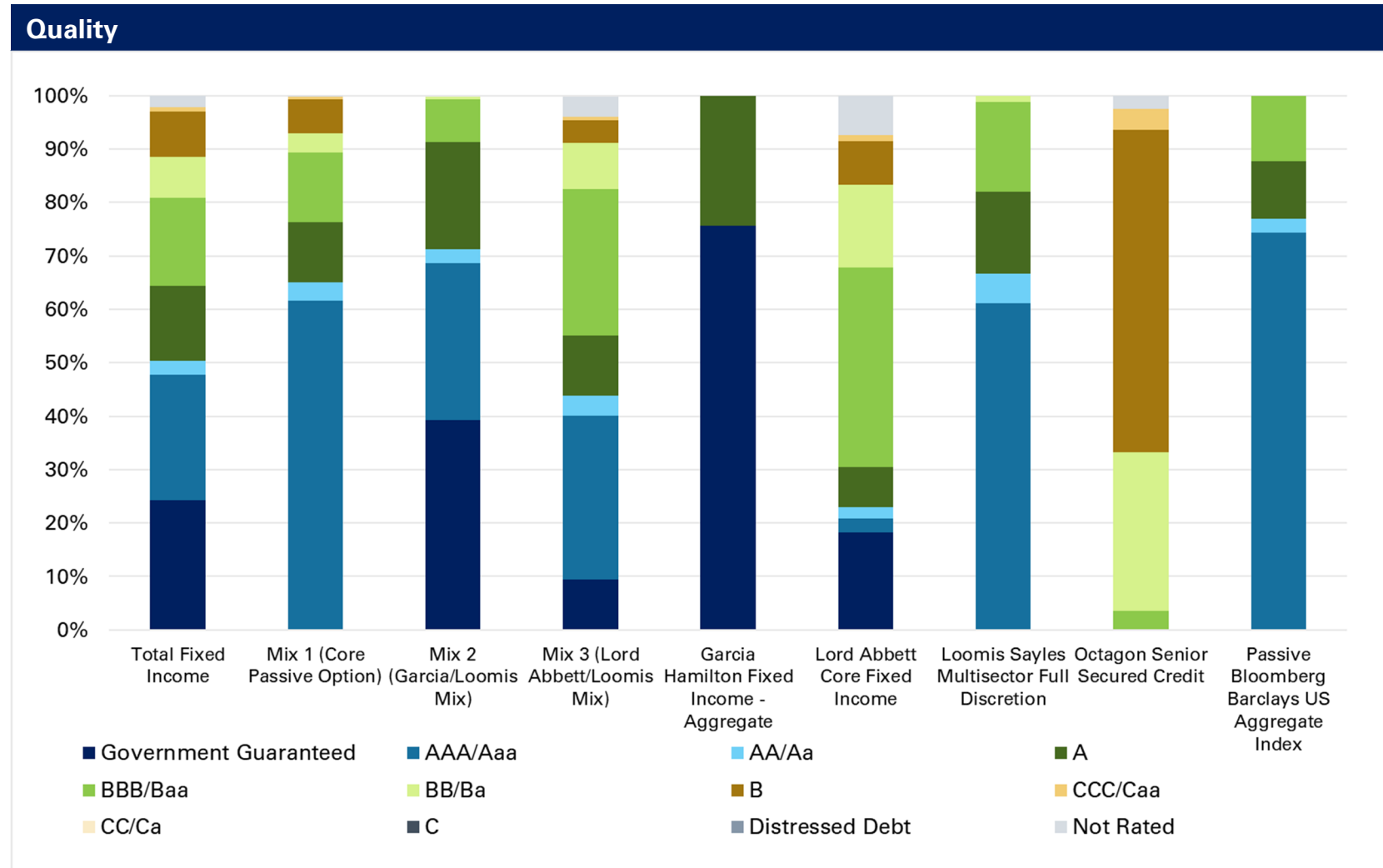
HOLDINGS ANALYSIS



Allocations as of 09/30/2022. The Northern Trust: NT Aggregate US Bond Index Strategy was used to proxy the holdings of the Bloomberg Barclays US Aggregate Index.



HOLDINGS ANALYSIS



Allocations as of 09/30/2022. The Northern Trust: NT Aggregate US Bond Index Strategy was used to proxy the holdings of the Bloomberg Barclays US Aggregate Index.

TOTAL RETURN CORRELATIONS

Total Return	Garcia Hamilton Fixed Income - Aggregate	Lord Abbett Core Fixed Income	Loomis Sayles Multisector Full Discretion	Octagon Senior Secured Credit	Passive Bloomberg Barclays US Aggregate Index	S&P 500 Index
Garcia Hamilton Fixed Income - Aggregate	1.00					
Lord Abbett Core Fixed Income	0.95	1.00				
Loomis Sayles Multisector Full Discretion	0.66	0.72	1.00			
Octagon Senior Secured Credit	0.25	0.31	0.68	1.00		
Passive Bloomberg Barclays US Aggregate Index	0.95	0.98	0.64	0.16	1.00	
S&P 500 Index	0.31	0.31	0.70	0.64	0.24	1.00

High Positive (> 0.75)	Moderate Positive ($0.75 - 0.25$)	Uncorrelated ($-0.25 - 0.25$)	Moderate Negative ($-0.25 - -0.75$)	High Negative ($< - 0.75$)
--------------------------------------	---	---	---	--



Analysis time period relative to start/end dates shown on "Portfolio Summary" page



APPENDIX



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FUND SUMMARY

	Garcia Hamilton Fixed Income - Aggregate	Lord Abbett Core Fixed Income	Loomis Sayles Multisector Full Discretion	Octagon Senior Secured Credit	Passive Bloomberg Barclays US Aggregate Index
Total Risk and Return					
Annualized Return (Since Inception)	2.0%	1.5%	3.8%	4.5%	1.1%
Annualized Standard Deviation	3.8%	3.8%	5.5%	4.3%	3.8%
Active Risk and Return					
Realized Alpha	0.9%	0.4%	3.3%	1.0%	0.0%
Beta	0.96	0.99	0.90	0.90	1.00
Tracking Error	1.1%	0.7%	4.2%	0.7%	0.0%
Information Ratio	0.81	0.55	0.80	1.36	---
Duration and Quality Regression					
Duration	Neutral	Neutral	Neutral	Very Short	Neutral
Quality	Moderate	High	Moderate	Low	High
Return Decomposition					
Upside Market Capture	107.4%	102.7%	134.3%	98.1%	100.0%
Downside Market Capture	89.0%	95.1%	79.7%	81.8%	100.0%



All Risk/Return statistics calculated through 09/30/22.
Information Ratio defined as: Realized Alpha/Tracking Error

FUND SUMMARY: TRAILING RETURNS

Fund	Analysis Start Date	Analysis End Date	Last 3 Months	YTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception (Analysis Start Date)
Garcia Hamilton Fixed Income - Aggregate	2/28/2012	9/30/2022	-5.2%	-13.0%	-13.1%	-2.9%	0.0%	0.8%	1.5%	2.0%
Bloomberg Barclays US Aggregate			-4.8%	-14.6%	-14.6%	-3.3%	-0.3%	0.5%	0.9%	1.1%
<i>Excess Return</i>			<i>-0.5%</i>	<i>1.6%</i>	<i>1.5%</i>	<i>0.4%</i>	<i>0.2%</i>	<i>0.2%</i>	<i>0.6%</i>	<i>0.9%</i>
Lord Abbett Core Fixed Income	2/28/2012	9/30/2022	-4.9%	-14.8%	-14.8%	-2.9%	-0.1%	0.7%	1.1%	1.5%
Bloomberg Barclays US Aggregate			-4.8%	-14.6%	-14.6%	-3.3%	-0.3%	0.5%	0.9%	1.1%
<i>Excess Return</i>			<i>-0.1%</i>	<i>-0.2%</i>	<i>-0.2%</i>	<i>0.4%</i>	<i>0.2%</i>	<i>0.2%</i>	<i>0.2%</i>	<i>0.4%</i>
Loomis Sayles Multisector Full Discretion	2/28/2012	9/30/2022	-3.0%	-14.7%	-14.9%	-0.3%	1.3%	3.2%	3.2%	3.8%
Bloomberg Barclays US Aggregate			-4.8%	-14.6%	-14.6%	-3.3%	-0.3%	0.5%	0.9%	1.1%
<i>Excess Return</i>			<i>1.8%</i>	<i>-0.1%</i>	<i>-0.3%</i>	<i>3.0%</i>	<i>1.6%</i>	<i>2.7%</i>	<i>2.3%</i>	<i>2.7%</i>
Octagon Senior Secured Credit	2/28/2012	9/30/2022	0.9%	-4.5%	-3.9%	2.0%	3.0%	3.9%	4.2%	4.5%
CS Leveraged Loan			1.2%	-3.3%	-2.6%	2.1%	3.0%	3.7%	3.7%	4.0%
<i>Excess Return</i>			<i>-0.3%</i>	<i>-1.2%</i>	<i>-1.2%</i>	<i>-0.2%</i>	<i>0.0%</i>	<i>0.2%</i>	<i>0.5%</i>	<i>0.5%</i>
Passive Bloomberg Barclays US Aggregate Index	2/28/2012	9/30/2022	-4.8%	-14.6%	-14.6%	-3.3%	-0.3%	0.5%	0.9%	1.1%
Bloomberg Barclays US Aggregate			-4.8%	-14.6%	-14.6%	-3.3%	-0.3%	0.5%	0.9%	1.1%
<i>Excess Return</i>			<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>



All Risk/Return statistics calculated through 09/30/22.

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 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 accurate data cannot be obtained, manager data 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. Fund performance or rankings contained in this report should not be considered a recommendation by NEPC.
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