



*City of Bristol
Retirement Board*

INFORMATION TO ACCESS THIS MEETING

<https://bristolct-gov.zoom.us/j/83439580558?pwd=Ug8rh29U14SGv8ZZoPnK1ZC9maqmE0.>

1

*Meeting ID: 834 3958 0558
Passcode: 687473*

The regular meeting will be held on Thursday, November 14, 2024, at 5:00 PM. in City Hall Council Chambers, 111 North Main Street, Bristol, CT.

AGENDA

1. Call to Order
2. Public Participation
3. Approval of Minutes
 - a. October 24 Minutes
4. Treasurer's Report
 - a. October 24 Treasurer's Report.
5. Approval of the 2025 Retirement Board Meeting Calendar
 - a. Retirement Board Meeting Calendar 2025
6. Review and acceptance of June 30, 2024 Year End Financial Statements
 - a. June 30, 2024, Year End Financial Statements
7. Consent Agenda
 - a. November 24 Retirements
8. Discussion and possible action on participation as lead plaintiff in Elanco Animal Health Inc. Securities Litigation
 - a. Elanco Health Inc.

9. Investment Review- Beirne Wealth Consulting, LLC

a. Investment Review

10. Any other business proper to come before meeting

11. Adjournment

PER ORDER OF THE CHAIRPERSON

Thomas Barnes, Jr

**MEETING OF THE GENERAL
GOVERNMENT RETIREMENT BOARD**

October 10, 2024

A Regular meeting of the General Government Retirement Board was held on **October 10, 2024 at 5:00 p.m.** in the City Hall Council Chamber, 1st floor, City Hall, 111 North Main Street, Bristol, CT. Members present: Chairman Tom Barnes Jr. (Zoom), Vice Chairman Robert Parenti, Comptroller Diane M. Waldron, Mayor Jeffrey Caggiano, Council member Jacqueline Olsen, Commissioners David Maikowski (Zoom), William Veits, Peter Dauphinais, and Tom DeNoto. Absent: Commissioner Matthew Ragaini, David Butkus, and Frank Rossi.

Also present: John Oliver Beirne, from Beirne Wealth Consulting.

1. Call to Order

Pledge of Allegiance

The meeting was called to order at 5:00 p.m. by Chairman Tom Barnes Jr.

2. Public Participation

None.

3. Approval of the minutes

a. General Government Retirement Board – Regular Meeting on August 8, 2024.

A motion was made by Council member Olsen and seconded by Commissioner Veits, and it was unanimously voted to:

“Approve the minutes of the General Government Retirement Board Regular Meeting of August 8, 2024 and place them on file.”

4. Treasurers Report

- a. August 2024.**
- b. September 2024.**

A motion was made by Commissioner Dauphinais, and seconded by Comptroller Waldron and it was unanimously voted to:

“Accept the Treasurer’s Report for August 2024 and September 2024 and place them on file.”

5. Consideration to approve the Treasurer’s request for pension withdrawals each month from November 1, 2024 through April 1, 2025.

A motion was made by Comptroller Waldron and seconded by Commissioner Tom DeNoto and it was unanimously voted to:

“Approve the Treasurer’s request for pension withdrawals each month from November 1, 2024 through April 1, 2025 in the amount of \$2,595,000.00 per month.”

6. Consent Agenda.

- a. Consideration of a request to approve the Normal Retirement from John Sassu, Bristol Police Department, Police Union effective September 19, 2024 with an annual pension amount of \$89,484.77 or \$3,432.30 biweekly.
- b. Consideration of a request to approve the Normal Retirement from Michelle Vasile, Bristol Board of Education, Local 2267 effective August 31, 2024 with an annual pension amount of \$13,044.00 or \$1,087.00 monthly.
- c. Consideration of a request to approve the Normal Retirement from Sandra Plourde, Bristol Board of Education, Local 2267 effective August 31, 2024 with an annual pension amount of \$3,552.77 or \$296.06 monthly.
- d. Consideration of a request to approve a Deferred Retirement Option Pension (DROP) for David Simard, Fire Department Local 773 effective February 27, 2026.

A motion was made by Commissioner Dauphinais and seconded by Council member Olsen and it was unanimously voted to:

“Approve Consent Agenda Items 6a through 6d.”

7. Investment Review- Beirne Wealth Consulting, LLC.

John Oliver reviewed the portfolio and updated the board members on where the fund is today. The portfolio is over \$800 Million. The portfolio has 28% in alternatives as cash position was reduced.

The total portfolio market value is \$804,068,552.

Credit - market value \$189,891,994 = 23.94% of portfolio.

- High Quality Credit market value \$96,248,677 = 11.97% of portfolio.
- Multi-Credit market value \$76,287,428 = 9.49% of portfolio.

Equity - market value \$376,471,045 = 46.82% of portfolio.

- Public Equity market value \$301,796,239 = 37.53% of portfolio.
- Private Equity market value \$74,674,806 = 9.29% of portfolio.

Alternatives - market value \$231,257,248 = 28.76% of portfolio.

- Real Estate market value \$68,550,586 = 8.53% of portfolio.
- Commodities market value \$5,104,841 = .63% of portfolio.
- Differentiated Return Stream market value \$157,601,821 = 19.60% of portfolio.

Cash - market value \$23,804,154 = 2.96% of portfolio.

John Oliver addressed the board and addressed the Federal Reserve lowering of rates by 50 basis points, which gave a big rally into the equity, and bond markets. With this, the portfolio was able to capture a significant increase especially in the bond market.

He also addressed how China came out with a huge stimulus package that they pumped into their economy, which sparked a 30% rally from Chinese stock markets. This resulted in Hong Kong selling 9% in a single day. John-Oliver suggested if there is any follow through in this, the Board may want to consider adding more of an allocation to emerging markets, as the portfolio is relatively light in this asset class.

Everything's been unexpectedly good this year, as continued efforts to diversify the portfolio, while taking less risk has been accomplished. John-Oliver also underlined that although the fund is not at an asset high right now due to drawdowns, it is performing very high overall. The Credit and Equity portfolio is in the top

26% for all Pension funds and overall generated 2.2% per year of excess risk adjusted return, which puts the fund in the top 8% of all funds.

John-Oliver emphasized that October is the most Volatile month in the entire calendar year, as rates are starting to tick back up slightly, causing some concerns of inflation. There may be some increased volatility and possibly a choppy market from now until the end of the year, although this shouldn't be too much of a concern, as the portfolio is diversified. Concerns were brought up surrounding whether or not the fund will be able to continue to generate the returns it has been due to the position in Public Equities being the lowest they've ever been. John-Oliver discussed making some minor adjustments around the portfolio by possibly adding a percent or two to performance, to end the year strong.

8. Any other business proper to come before meeting.

None.

At 5:16p.m. a motion was made by Vice Chairman Robert Parenti and second by Council member Olsen and it was unanimously voted to:
"Adjourn."

Respectively submitted,

Diane M. Waldron

Diane M. Waldron
Comptroller and Secretary, Retirement Board

Treasurer's Report
Police, Firefighters, Retirement System Fund
October 2024

	Police 710	Firefighter 711	Retirement 712/715	Total
<u>Pension Funds in Pension Bank Accounts</u>				
CASH & CASH EQUIVALENTS: 10/1/2024	\$ 312,914.70	\$ 251,885.76	\$ 222,934.53	\$ 787,734.99
<u>RECEIPTS:</u>				
Employee Contributions City/BDA/WPC	63,487.03	31,353.38	116,393.27	211,233.68
Employee Contributions BOE			100,415.65	100,415.65
Employee Contributions Health Dept			14,054.31	14,054.31
Employee Contributions Water Dept			15,953.58	15,953.58
Employer Contributions BOE			-	-
Employer Contributions City/BDA/WPC			-	-
Employer Contributions Water Dept			-	-
Employee Contributions Buy Back			181.70	181.70
Employee Contributions Fire Dept Healthcare 1.00%			10,451.12	10,451.12
Employee Contributions Police Healthcare 1.625%, 1.875%			21,162.75	21,162.75
Employee Contributions Retiree Healthcare -Health Dept - 1.5%			3,438.00	3,438.00
Employee Contributions Retiree Healthcare 233 - 1.5%, 1.75%			14,993.44	14,993.44
Employee Contributions Retiree Healthcare BPSA - 1.5%, 1.75%			10,479.34	10,479.34
Employee Contributions Retiree Healthcare - 1338 -1.5%, 1.75%			14,932.50	14,932.50
Employee Contributions Retiree Healthcare -NBAR - 1.5%, 1.75%			3,455.57	3,455.57
Employee Contributions Retiree Healthcare -BOE NBAR / 818- 1.5%			5,565.47	5,565.47
Miscellaneous Income			-	-
Interest	119.26	95.01	96.77	311.04
Total Receipts, Contributions and Interest	63,606.29	31,448.39	331,573.47	426,628.15
<u>EXPENDITURES:</u>				
Pensions Paid <i>P, F, R total retirees</i>	750,979.76	434,023.98	1,643,301.78	2,828,305.52
Refund of Contributions / Interest	-	-	46,148.52	46,148.52
Fiduciary Insurance	-	-	-	-
Legal- Robinson & Cole	-	-	99.00	99.00
Actuary- Milliman	4,786.66	4,786.67	4,786.67	14,360.00
Accountant/Bookkeeper Salaries (Note 1)	3,217.24	3,217.24	3,217.24	9,651.72
Comptroller/Assistant to Comptroller Salaries (Note 1)	2,494.18	2,494.18	2,494.17	7,482.53
Postage (Note 1)	19.40	19.40	160.08	198.88
Other Expenses / (Revenue) (Tyler Technologies)			-	-
Total Expenditures	761,497.24	444,541.47	1,700,207.46	2,906,246.17
CURRENT MONTH, Surplus/(deficit)	(697,890.95)	(413,093.08)	(1,368,633.99)	(2,479,618.02)
TRSFN IN-FIDELITY TO PENSION	760,000.00	460,000.00	1,450,000.00	2,670,000.00
CASH & CASH EQUIVALENTS: 10/31/2024	\$ 375,023.75	\$ 298,792.68	\$ 304,300.54	\$ 978,116.97
(Beginning Bal+Current Month+Transfer in)				
<u>Pension Trust Funds</u>				
Market Value at July 1, 2023 (Note 2)				\$ 733,844,047
Actuarial Value at July 1, 2023 (Note 2)				\$ 744,150,539
Accrued Liability				\$ 601,283,176
Pension Surplus (Unfunded Liability)				\$ (142,867,363)
Funded Ratio= Actuarial Value divided by Accrued Liability				123.8%

Note 1: Amount will be invoiced quarterly by the Comptroller's office to the Pension fund.

Note 2: Source: Milliman Actuarial Valuation as of July 1, 2021 projected for fiscal year 2022-23, final report dated February 28, 2022.



Comptroller's Office | Phone: 860.584.6130 | Fax: 860-584-3827

To: Erica Cabiya, Town & City Clerk

From: General Government Retirement Board
(Name of Board or Commission)

Contact Person: Diane Waldron Telephone Number: 860-584-6127

Address: 111 North Main Street, Bristol E-mail Address: dianewaldron@bristolct.gov

In compliance with Section 1-225 of the Connecticut General Statutes the following is a listing of dates of the regular meetings of the General Government Retirement Board
(Name of Board or Commission)

MONTH	DATE	TIME & PLACE OF MEETING
January	January 09, 2025	5:00 p.m. Council Chambers
February	February 13, 2025	5:00 p.m. Council Chambers
March	March 13, 2025	5:00 p.m. Council Chambers
April	April 10, 2025	5:00 p.m. Council Chambers
May	May 8, 2025	5:00 p.m. Council Chambers
June	June 12, 2025	5:00 p.m. Council Chambers
July	July 10, 2025	5:00 p.m. Council Chambers
August	August 14, 2025	5:00 p.m. Council Chambers
September	September 11, 2025	5:00 p.m. Council Chambers
October	October 09, 2025	5:00 p.m. Council Chambers
November	November 13, 2025	5:00 p.m. Council Chambers
December	December 11, 2025	5:00 p.m. Council Chambers
January	January 8, 2026	5:00 p.m. Council Chambers

Yours very truly,

(Signature) **Chairman**

(Signature) **Secretary**

(Date)

CITY OF BRISTOL												
INDIVIDUAL ACCOUNT SUMMARY WITH FEES												
7/1/2023-6/30/2024 (unaudited)												
		INPUT FROM FIDELITY/MANAGER STATEMENTS					CALC FOR FIDELITY OR INPUT FROM MANAGER STATEMENTS		INPUT FROM FIDELITY/MANAGER STATEMENTS			
	Market Value		Withdrawals		Realized		Unrealized		Interest/	Account & Management	Misc	Market Value
	6/30/2023	Additions	Between Funds	To Pension Account	Gains	Losses	Gains	Losses	Dividends	Fees	Fees	6/30/2024
BW Consult (Beach Point)	8,999,755.52	-	49.83	-	-	-	1,375,639.42	(108,353.78)	-	(142,256.52)	(180,138.35)	9,944,696.12
Gamco	11,937,636.70	-	-	-	184,584.47	(856,312.71)	5,290,644.58	(3,258,517.10)	254,651.77	(119,765.00)	(25,137.16)	13,407,785.55
Sprott Asset Management (Gold)	9,106,121.53	-	-	-	76,138.18	(153,927.48)	4,546,612.82	(2,933,473.49)	120,484.65	(91,166.55)	(16,333.87)	10,654,455.79
Neub Berman (Growth)	76,791,034.85	-	(15,000,000.00)	-	14,088,454.01	(406.29)	20,796,353.04	(12,698,295.76)	464,786.14	(289,297.81)	(2,750.63)	84,149,877.55
NB Intl Eqty	20,322,776.14	-	(3,000,000.00)	-	1,081,203.41	(852,274.01)	4,743,186.12	(3,714,327.99)	543,370.39	(106,306.37)	(159,276.72)	18,858,350.97
Boyd Watterson Bond	28,780,898.19	-	-	-	-	(797,649.52)	3,130,799.13	(2,696,505.09)	1,158,924.79	(75,676.00)	(860.00)	29,499,931.50
Disbursing (CASH)	37,313,050.18	-	53,906,736.06	(31,130,000.00)	-	-	7,723,550.18	(5,478,207.58)	1,801,122.15	(418,180.00)	(0.02)	63,718,070.97
Robeco/Boston Partners	41,272,326.37	-	(3,001,230.06)	-	1,885,213.70	-	10,082,235.54	(3,646,459.77)	1,230.42	-	-	46,593,316.20
BW Consulting	33,028,572.80	-	(33,856,788.87)	-	-	-	814,468.13	-	13,747.94	-	-	0.00
Glovista Emerg Mkts	12,515,773.13	-	(13,604,864.15)	-	256,840.40	(609,055.55)	3,137,239.19	(1,957,525.34)	367,951.06	(100,472.18)	(5,702.70)	183.86
Fiera/Apex Cap Mgmt	33,742,929.98	-	(7,000,000.00)	-	4,666,771.44	(156,694.53)	4,688,671.21	(6,419,052.99)	211,257.18	(192,525.64)	(1,078.31)	29,540,278.34
Eagle	23,740,555.00	-	-	-	3,901,986.76	(283,622.99)	6,571,424.50	(2,954,987.63)	379,660.11	(206,629.45)	(11,764.42)	31,136,621.88
Columbia	15,222,119.89	-	-	-	506,760.88	(51,110.48)	3,435,525.14	(2,015,751.57)	423,418.93	(71,761.51)	(17.89)	17,449,183.39
Arsenal Growth Equity III	32,618,485.43	-	(7,220,154.24)	-	9,987,717.00	(1,909,096.00)	5,952,043.00	(10,207,460.00)	-	(331,081.00)	(620,730.00)	28,269,724.19
Arsenal Sayari Investors I LLC	2,983,034.00	-	-	-	-	(25,169.00)	1,325,902.00	-	-	-	(195,110.00)	4,088,657.00
Arsenal Cart Investors II LLC	3,781,815.00	-	-	-	-	(21,613.00)	389,733.00	(7,379.00)	-	-	(54,077.00)	4,088,479.00
Arsenal Growth Equity IV	7,271,545.51	-	7,052,378.94	-	-	(685,820.00)	9,589,266.00	-	2,363.00	(507,111.00)	(1,319,617.00)	21,403,005.45
Arsenal Elevate	4,633,039.00	-	-	-	16,659.00	(20,944.00)	285,751.00	-	-	-	(42,220.00)	4,872,285.00
AGE Investor IV LLC	-	-	2,900,000.00	-	-	-	-	(15,077.00)	-	-	-	2,884,923.00
EnTrust Structured/Maitland	7,502,067.87	-	(1,914,397.00)	-	-	-	2,439,001.78	(1,459,490.39)	-	(54,763.38)	-	6,512,418.88
EnTrust Structured FD II/Maitland	22,665,297.76	-	(4,790,428.00)	-	-	-	4,242,407.92	(3,123,660.40)	-	(140,634.81)	(131,770.61)	18,721,211.86
EnTrust Blue Ocean	21,704,355.00	-	254,740.00	-	-	-	4,439,433.00	-	-	(268,260.00)	(625,677.00)	25,504,591.00
EnTrust Blue Ocean II	-	-	12,026,929.00	-	-	-	296,220.00	-	-	(133,000.00)	(79,000.00)	12,111,149.00
Boyd Watterson GSA	38,242,474.01	-	(1,971,509.12)	-	-	-	-	(2,124,188.00)	-	-	-	34,146,776.89
Boyd Watterson St Gov	11,446,615.48	-	(555,782.00)	-	-	-	-	(672,583.00)	-	-	2.00	10,218,252.48
Boyd Diversified Government Reit	24,211,973.66	-	(816,558.62)	-	-	-	1,022,203.00	-	-	-	(1.00)	24,417,617.04
Corrum Cap Railcar	51,502.48	-	(47,004.70)	-	-	-	-	(4,497.78)	-	-	-	0.00
Corrum Cap Real Asset	6,483,085.95	-	(230,000.00)	-	-	-	80,295.00	(1,028,540.00)	-	-	-	5,304,840.95
Golden Tree	34,449,566.92	-	-	-	-	-	3,994,721.11	-	-	-	-	38,444,288.03
Golub GBDC 4	1,100,000.00	-	8,674,657.81	-	-	-	-	-	785,342.19	-	-	10,560,000.00
Greywolf Distressed Opportunities Overseas Fund	18,694,994.00	-	(1,262,371.70)	-	-	-	712,978.00	(2,151,484.00)	-	(203,567.00)	847,822.00	16,638,371.30
GW Containership Opportunities Offshore Fund II	3,764,648.00	-	1,923,228.73	-	-	-	1,240,229.00	(480,614.00)	-	(69,258.00)	(138,071.00)	6,240,162.73
GW Opportunities Offshore Fund II	8,342,278.00	-	9,470,845.00	-	-	(129,155.00)	-	(794,951.00)	263,862.00	(107,571.00)	285,570.00	17,330,878.00
GWC Select Opportunities SPC - SPC1	3,022,418.00	-	-	-	-	-	342,864.00	(11,450.00)	-	(37,552.00)	(58,773.00)	3,257,507.00
GWC Select Opportunities SPC- SPC1 Class B	-	-	2,412,222.22	-	-	-	429,317.00	-	-	(35,635.00)	(78,736.00)	2,727,168.22
Heitman Value III	25,701.00	-	(25,257.02)	-	-	-	0.02	(555.00)	-	-	111.00	(0.00)
Invesco 2	2,149,027.00	-	-	-	-	(58,558.00)	-	(1,441,939.00)	-	(33,950.00)	-	614,580.00
Invesco Fund	38,447.00	-	(18,660.85)	-	-	-	201.85	(19,988.00)	-	-	-	-
Kelly Park Capital	16,864,239.25	-	-	-	-	-	860,764.86	141,792.94	-	-	-	17,866,797.05
Lone Star	37,883.77	-	(28,269.88)	-	-	-	2,242.00	(394.00)	-	-	-	11,461.89
Longford Capital Fund I	8,116,459.46	-	(5,673,451.36)	-	4,382,477.00	(276,238.00)	794,955.00	(4,159,803.00)	-	-	(180,639.00)	3,003,760.10
Longford Capital Fund II	14,741,229.00	-	(4,117,250.93)	-	1,524,325.00	(188,297.00)	2,194,519.00	(885,645.00)	11,811.00	(248,704.00)	(45,288.07)	12,986,699.00
Longford Capital Fund III	7,709,394.33	-	2,741,169.06	-	845,520.00	-	3,777,332.00	-	7,170.00	(600,000.00)	(865,620.00)	13,614,965.39
Omega Credit Opp (OCO Capital)	18,572,686.00	-	-	-	-	-	3,432,563.00	(2,398,606.00)	-	(115,310.00)	-	19,491,333.00
Prytania Athena Fund	13,044,697.83	-	(655,014.53)	-	-	-	2,586,368.09	(1,346,257.28)	-	(671,940.60)	4.92	12,957,858.43
Silver Point Specialty Credit Fund 3	3,386,596.24	-	3,080,987.38	-	41,674.04	(63,138.56)	864,246.22	-	104,880.74	(41,511.00)	(79,246.00)	7,294,489.06
Verition Int MS Fd Series IA	39,712,984.00	-	(41,740,860.00)	-	-	-	2,944,338.00	(110,946.00)	-	(360,372.00)	(445,144.00)	-
Verition Int MS Fd Series I	-	-	41,740,860.00	-	-	-	2,883,730.00	-	-	(379,554.00)	(450,752.00)	43,794,284.00
Zephyr Growth	2,691,513.00	-	998,957.00	-	-	-	970,718.00	(68,137.00)	(2,264.00)	(114,285.00)	(50,618.00)	4,425,884.00
Zephyr Peacock India	3,794,718.00	-	(653,908.00)	-	142,149.00	-	5,867.00	(738,791.00)	-	-	(59,467.00)	2,490,568.00
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	736,628,322.23	-	-	(31,130,000.00)	43,588,474.29	(7,139,082.12)	134,436,558.85	(80,992,101.00)	6,913,770.46	(6,268,096.82)	(4,790,106.83)	791,247,739.06
												54,619,416.83
												54,619,416.83
*** TRANSACTIONS IN TRANSIT:												791,247,739.06
Boyd Watterson GSA - Reports Distribution of \$482,260.22 to Fidelity on 06/30/24 Quarterly Statement - Fidelity reports received date as 07/29/24												
Boyd Watterson ST GOV - Reports Distribution of \$130,303.83 to Fidelity on 06/30/24 Quarterly Statement - Fidelity reports received date as 07/29/24												-
Boyd Watterson REIT - Reports Distribution of \$245,537.17 to Fidelity on 06/30/24 Quarterly Statement - Fidelity reports received date as 07/29/24												

CITY OF BRISTOL
COMBINING STATEMENT OF CHANGES IN PLAN ASSETS
7/1/23 - 6/30/24 (unaudited)

	710	711	712	Total	715	Total
	Police	Fire	General City	Pension Funds	Gen City 401 (h))OPEB	Pension plus OPEB
Additions						
Contributions						
Employer				-		-
Refund of Contributions w/Interest				-		-
Other			17,502	17,502		17,502
Employee	513,902	190,825	2,444,559	3,149,287	709,360	3,858,647
Total Contributions	513,902	190,825	2,462,061	3,166,788	709,360	3,876,148
Investment Income	2,445,159	2,299,087	2,460,219	7,204,465	10,817	7,215,282
Realized Gain	14,772,134	13,891,647	14,859,311	43,523,092	64,497	43,587,588
Misc Revenue				-		-
Unrealized Gain	45,560,550	42,844,931	45,829,423	134,234,904	202,541	134,437,445
Total	63,291,745	59,226,490	65,611,014	188,129,249	987,214	189,116,464
Less investment advisor and manager fees	(2,124,258)	(1,997,642)	(2,136,794)	(6,258,695)	(9,402)	(6,268,097)
Total additions	61,167,487	57,228,848	63,474,220	181,870,555	977,812	182,848,367
Deductions						
Benefits (Pension Payments)	(9,680,064)	(5,834,003)	(19,608,030)	(35,122,096)		(35,122,096)
Refunds	(1,580)		(459,002)	(460,582)		(460,582)
Retiree Health Benefits				-		-
Administration	(1,674,940)	(1,577,972)	(1,798,777)	(5,051,689)	(7,185)	(5,058,875)
Realized Loss	(2,419,435)	(2,275,225)	(2,433,713)	(7,128,373)	(10,709)	(7,139,082)
Unrealized Loss	(27,448,223)	(25,812,183)	(27,610,207)	(80,870,613)	(121,488)	(80,992,101)
Total	(41,224,242)	(35,499,383)	(51,909,729)	(128,633,354)	(139,382)	(128,772,736)
Net transfers in (out)	-	-	-	-	-	-
Net Increase (Decrease)	19,943,245	21,729,465	11,564,491	53,237,201	838,430	54,075,631
Fund Balance at 7/1	258,740,188	256,210,426	218,893,433	733,844,047	4,116,177	737,960,224
Fund Balance at 6/30	278,683,433	277,939,891	230,457,924	787,081,248	4,954,607	792,035,855
	278,683,435	277,939,892	230,457,922		4,954,607	
	(2)	(1)	1		0	
Reg wages - includes Treasurer's and Comptroller's office *	22,028	22,028	22,028	66,085		66,085
Fiduciary Insurance	14,328	14,328	14,328	42,983		42,983
Professional Fees Legal	250	102	646	998		998
Consultant - Actuarial	17,798	14,700	14,700	47,198		47,198
Postage	265	205	1,102	1,572		1,572
Interest on Refunds			112,850	112,850		112,850
Miscellaneous Expense**	1,620,272	1,526,609	1,633,124	4,780,005	7,185	4,787,190
	1,674,940	1,577,972	1,798,777	5,051,689	7,185	5,058,875

* 50% Treasury/Pension coordinator; 20% PT Treasurer Clerk; 5% Assistant to the Comptroller and 15% Comptroller

**Includes Foreign Taxes; miscellaneous trading and investment fees, accrued incentive fees and carried interest

CITY OF BRISTOL
Other Post Employment Benefits
June 30 2024 (unaudited)

GASB 45	<u>715 OPEB CITY</u>	<u>716 OPEB POLICE</u>	<u>717 OPEB FIRE</u>	<u>718 OPEB CITY</u>	<u>715-718 OPEB TOTALS</u>
7/1/23 Market Value of Assets	4,116,177.22	5,961,853.29	5,364,925.57	7,403,845.13	22,846,801.21
ER Contribution		396,268.52	362,208.77	659,062.71	1,417,540.00
EE Contributions (various)	709,359.59				709,359.59
Investment Income	10,817.00	178,871.54	163,378.71	199,456.40	552,523.65
Unrealized Gains	202,540.65	1,139,738.92	1,041,021.36	1,270,902.10	3,654,203.03
Realized Gains	64,496.89	32,014.66	29,241.74	35,698.97	161,452.26
Unrealized Loss	(121,488.15)	(588,958.09)	(537,945.96)	(656,736.44)	(1,905,128.64)
Realized Loss	(10,708.61)	(20,384.52)	(18,618.93)	(22,730.41)	(72,442.47)
Management Fees	(9,402.14)	(16,659.74)	(15,216.78)	(18,576.97)	(59,855.63)
Professional Fees	0.00	(3,033.34)	(3,033.33)	(3,033.33)	(9,100.00)
Misc Fees	(7,185.17)	(1,107.52)	(1,011.56)	(1,234.99)	(10,539.24)
6/30/24 Market Value of Assets	<u>4,954,607.28</u>	<u>7,078,603.72</u>	<u>6,384,949.59</u>	<u>8,866,653.17</u>	<u>27,284,813.76</u>

REPORT PREPARED FOR:



Your Strategic Partner for Defined Benefit Plans
Period Ending 6/30/2024

John-Oliver Beirne, CRPC®, MBA
Partner & President
JOBeirne@beirnegroup.com
(203) 701-8976

Richard DeFrancesco, Jr.
Partner, Chief Operating Officer
RDeFrancesco@beirnegroup.com
(203) 951-3577

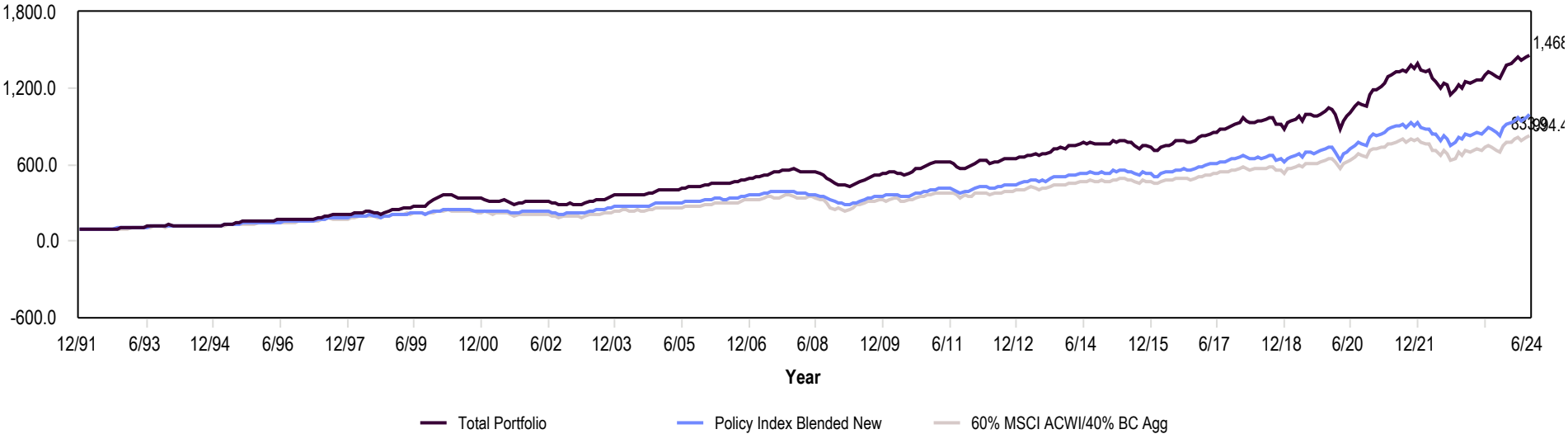
John Beirne, CIMA®
Founding Partner
JBeirne@beirnegroup.com
(203) 701-8974

Lindsey Allard, AWMA®, MBA
Partner, Managing Director
LAllard@beirnegroup.com
(203) 951-0305

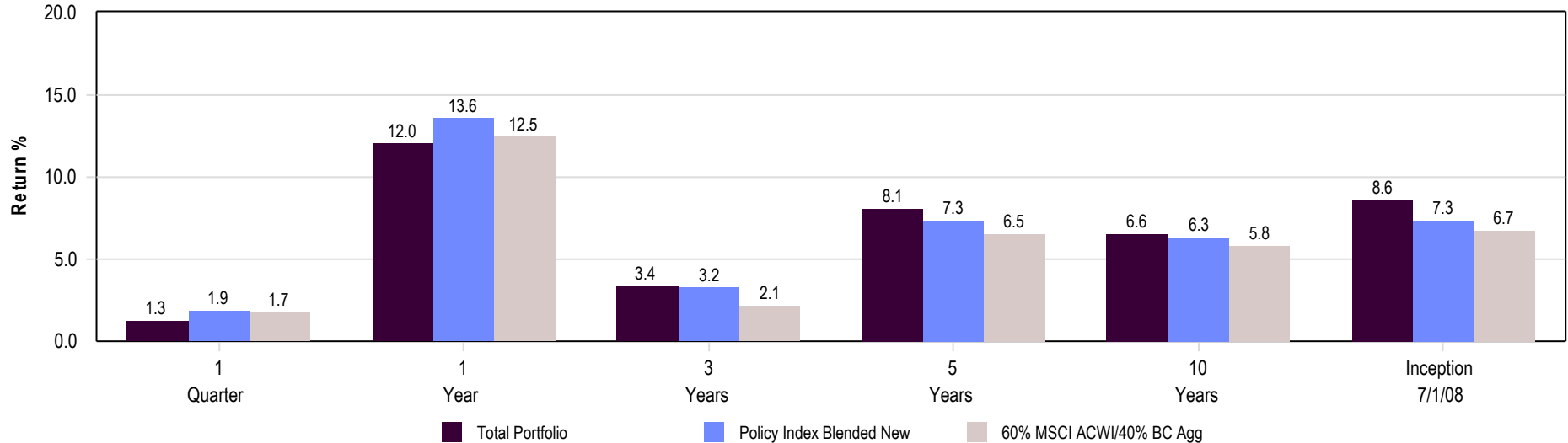
Periods Ending 06/30/24

Name	1 Month	Last 3 Months	YTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
US Equity									
Russell 3000 Index	3.1	3.2	13.6	23.1	8.1	14.1	12.1	14.5	13.1
S&P 500 Index	3.6	4.3	15.3	24.6	10.0	15.0	12.9	14.8	13.5
Russell 1000 Index	3.3	3.6	14.2	23.9	8.7	14.6	12.5	14.7	13.4
Russell 1000 Growth Index	6.7	8.3	20.7	33.5	11.3	19.3	16.3	17.3	12.2
Russell 1000 Value Index	-0.9	-2.2	6.6	13.1	5.5	9.0	8.2	11.8	14.0
Russell Midcap Index	-0.7	-3.3	5.0	12.9	2.4	9.5	9.0	13.2	14.5
Russell 2000 Index	-0.9	-3.3	1.7	10.1	-2.6	6.9	7.0	11.2	11.1
Russell 2000 Growth Index	-0.2	-2.9	4.4	9.1	-4.9	6.2	7.4	11.6	8.0
Russell 2000 Value Index	-1.7	-3.6	-0.8	10.9	-0.5	7.1	6.2	10.6	13.6
International Equity									
MSCI AC World Index	2.3	3.0	11.6	19.9	5.9	11.3	9.0	10.9	-
MSCI AC World ex USA	-0.1	1.2	6.0	12.2	1.0	6.1	4.3	6.7	-
MSCI EAFE Index	-1.6	-0.2	5.7	12.1	3.4	7.0	4.8	7.3	11.3
MSCI Emerging Markets Index	4.0	5.1	7.7	13.0	-4.7	3.5	3.2	5.3	-
Fixed Income									
90 Day U.S. Treasury Bill	0.4	1.3	2.6	5.4	3.0	2.2	1.5	1.0	5.4
Blmbg. U.S. Aggregate	0.9	0.1	-0.7	2.6	-3.0	-0.2	1.3	2.5	9.5
Blmbg. U.S. Gov't/Credit	0.9	0.0	-0.7	2.7	-3.1	-0.1	1.5	2.7	9.4
Bloomberg U.S. Municipal Bond Index	1.5	0.0	-0.4	3.2	-0.9	1.2	2.4	3.5	8.6
Blmbg. U.S. Corp: High Yield Index	0.9	1.1	2.6	10.4	1.6	3.9	4.3	7.4	10.2
Real Estate									
FTSE NAREIT All REITs Index	2.2	-0.9	-2.2	5.7	-2.0	3.0	5.9	11.3	10.2
NCREIF Property Index	-	-0.3	-1.2	-5.5	2.3	3.4	6.1	7.3	7.5
Alternatives									
Barclay Hedge Fund Index	0.4	1.0	5.4	10.5	2.3	6.0	4.7	5.7	-
Inflation									
CPI - All Urban Consumers (SA)	-0.1	0.3	1.4	3.0	5.0	4.2	2.8	2.5	3.0

Growth of a Dollar



Return Summary (%)



Total Portfolio

Run Date: October 2, 2024

As of June 30, 2024

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
Total Portfolio	790,389,448	100.00	1.25	6.02	12.01	3.36	8.10	6.56	7.92	7.10	8.62	Jan-92
<i>Policy Index Blended New</i>			1.88	7.20	13.59	3.22	7.33	6.30	7.96	6.51	7.32	
Over/Under			-0.63	-1.18	-1.58	0.14	0.77	0.26	-0.04	0.59	1.30	
<i>60% MSCI ACWI/40% BC Agg</i>			1.75	6.39	12.49	2.15	6.52	5.78	7.41	6.29	6.74	
Over/Under			-0.50	-0.37	-0.48	1.21	1.58	0.78	0.51	0.81	1.88	
Credit	185,810,663	23.51	0.02	3.32	5.17	2.36	4.88	-	-	-	5.84	Jan-19
<i>Blmbg. U.S. Aggregate</i>			0.07	-0.71	2.63	-3.02	-0.23	-	-	-	0.87	
Over/Under			-0.05	4.03	2.54	5.38	5.11	-	-	-	4.97	
High Quality Credit	112,404,784	14.22	1.00	4.33	6.58	1.15	3.22	-	-	-	4.47	Jan-19
<i>Blmbg. U.S. Aggregate</i>			0.07	-0.71	2.63	-3.02	-0.23	-	-	-	0.87	
Over/Under			0.93	5.04	3.95	4.17	3.45	-	-	-	3.60	
Boyd Waterson Fixed Income	29,499,928	3.73	0.10	-0.31	2.50	-2.88	0.11	1.62	2.90	3.69	5.40	Apr-90
<i>Blmbg. U.S. Aggregate</i>			0.07	-0.71	2.63	-3.02	-0.23	1.35	2.50	3.12	5.07	
Over/Under			0.03	0.40	-0.13	0.14	0.34	0.27	0.40	0.57	0.33	
iShares Core US Aggregate Bond ETF(AGG)	15,179,356	1.92	0.02	-0.71	-	-	-	-	-	-	2.60	Aug-23
<i>Blmbg. U.S. Aggregate</i>			0.07	-0.71	-	-	-	-	-	-	2.70	
Over/Under			-0.05	0.00	-	-	-	-	-	-	-0.10	
GoldenTree High Grade Floating Rate Fund, Ltd.	38,444,288	4.86	2.60	5.55	11.60	5.46	4.29	-	-	-	3.94	Feb-18
<i>Blmbg. U.S. Aggregate Float Adjusted</i>			0.08	-0.64	2.73	-2.99	-0.18	-	-	-	0.98	
Over/Under			2.52	6.19	8.87	8.45	4.47	-	-	-	2.96	
Golub Capital BDC 4, Inc.(\$22 million)	10,560,000	1.34	3.78	9.01	16.23	-	-	-	-	-	16.65	Dec-22
<i>Blmbg. U.S. Aggregate</i>			0.07	-0.71	2.63	-	-	-	-	-	2.70	
Over/Under			3.71	9.72	13.60	-	-	-	-	-	13.95	
EnTrust Structured Income II-A	18,721,212	2.37	-1.22	11.43	5.72	1.10	6.26	-	-	-	6.54	Jul-17
<i>Blmbg. U.S. Aggregate</i>			0.07	-0.71	2.63	-3.02	-0.23	-	-	-	0.86	
Over/Under			-1.29	12.14	3.09	4.12	6.49	-	-	-	5.68	
Multi-Credit	73,405,879	9.29	-1.52	1.74	2.94	4.45	7.70	-	-	-	8.10	Jan-19
<i>Blmbg. U.S. Corp: High Yield Index</i>			1.09	2.58	10.44	1.64	3.92	-	-	-	5.36	
Over/Under			-2.61	-0.84	-7.50	2.81	3.78	-	-	-	2.74	
Prytania Athena Fund	12,957,858	1.64	-6.34	-1.11	4.36	2.14	-0.48	2.80	-	-	3.06	Mar-14
<i>Blmbg. Global High Yield Index</i>			1.04	3.18	11.82	0.54	2.68	3.33	-	-	3.57	
Over/Under			-7.38	-4.29	-7.46	1.60	-3.16	-0.53	-	-	-0.51	
EnTrust Structured Income Fund	6,512,419	0.82	-7.55	5.27	13.41	-0.90	5.90	6.59	-	-	6.19	Mar-13
<i>Blmbg. U.S. Aggregate</i>			0.07	-0.71	2.63	-3.02	-0.23	1.35	-	-	1.36	
Over/Under			-7.62	5.98	10.78	2.12	6.13	5.24	-	-	4.83	
Beach Point TR Offshore Fund II	9,944,696	1.26	0.48	2.82	10.50	3.09	5.46	4.21	-	-	5.78	Jan-12
<i>Blmbg. U.S. Corp: High Yield Index</i>			1.09	2.58	10.44	1.64	3.92	4.31	-	-	5.70	
Over/Under			-0.61	0.24	0.06	1.45	1.54	-0.10	-	-	0.08	

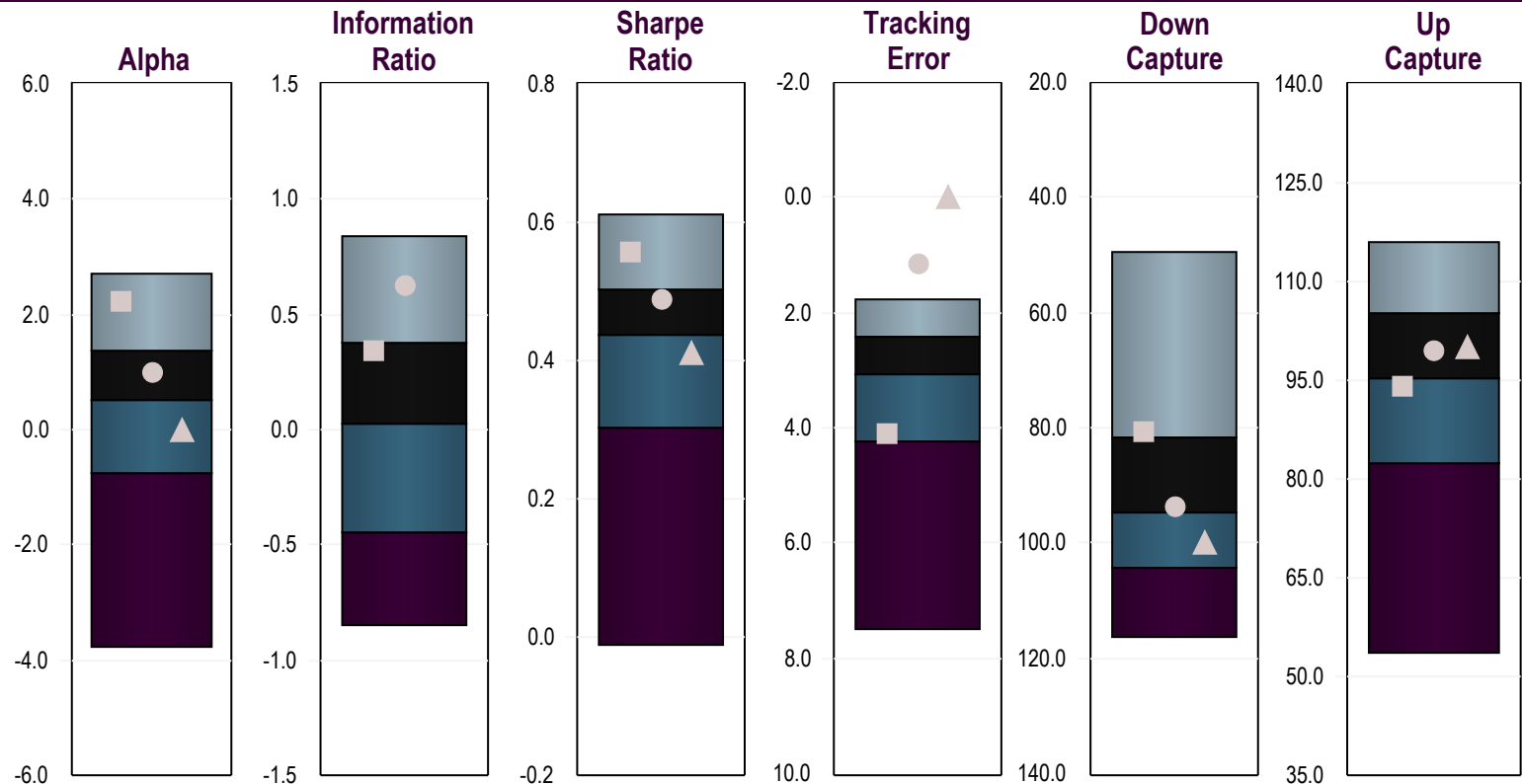
	Total Portfolio											
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
Silver Point Specialty Credit Fund III, LP(\$22 million)	7,294,489	0.92	1.14	5.45	12.02	-	-	-	-	-	11.50	Apr-23
Blmbg. U.S. Corporate Investment Grade Index			-0.09	-0.49	4.63	-	-	-	-	-	3.45	
Over/Under			1.23	5.94	7.39	-	-	-	-	-	8.05	
GWC Select Opportunities SPC1(\$2.6 million)	2,727,168	0.35	2.49	6.50	-	-	-	-	-	-	12.45	Sep-23
Blmbg. U.S. Corp: High Yield Index			1.09	2.58	-	-	-	-	-	-	8.63	
Over/Under			1.40	3.92	-	-	-	-	-	-	3.82	
Greywolf Opportunities Offshore Fund II, LP(\$24 million)	17,330,878	2.19	-1.20	-1.05	-3.46	-	-	-	-	-	6.60	Oct-22
Blmbg. U.S. Corp: High Yield Index			1.09	2.58	10.44	-	-	-	-	-	11.63	
Over/Under			-2.29	-3.63	-13.90	-	-	-	-	-	-5.03	
Greywolf Distressed Opp Fund, LP(\$17 million)	16,638,371	2.11	3.56	3.83	-4.56	4.34	-	-	-	-	7.15	Aug-20
Blmbg. U.S. Universal Index			0.19	-0.28	3.47	-2.68	-	-	-	-	-2.22	
Over/Under			3.37	4.11	-8.03	7.02	-	-	-	-	9.37	
Equity	373,259,066	47.22	1.81	9.27	19.90	4.93	12.15	-	-	-	14.01	Jan-19
MSCI AC World Index			3.01	11.58	19.92	5.94	11.28	-	-	-	13.33	
Over/Under			-1.20	-2.31	-0.02	-1.01	0.87	-	-	-	0.68	
Public Equity	297,478,034	37.64	2.10	11.59	20.23	4.17	11.55	-	-	-	13.45	Jan-19
MSCI AC World Index			3.01	11.58	19.92	5.94	11.28	-	-	-	13.33	
Over/Under			-0.91	0.01	0.31	-1.77	0.27	-	-	-	0.12	
Neuberger Berman Large Cap Growth	84,149,877	10.65	6.40	20.89	33.30	9.87	19.82	16.58	16.27	12.83	14.67	Feb-79
Russell 1000 Growth Index			8.33	20.70	33.48	11.28	19.34	16.33	17.29	12.19	12.22	
Over/Under			-1.93	0.19	-0.18	-1.41	0.48	0.25	-1.02	0.64	2.45	
iShares Russell 1000 Value ETF(IWD)	6,612,830	0.84	-2.20	6.47	12.86	5.35	8.84	-	-	-	9.61	Feb-19
Russell 1000 Value Index			-2.17	6.62	13.06	5.52	9.01	-	-	-	9.81	
Over/Under			-0.03	-0.15	-0.20	-0.17	-0.17	-	-	-	-0.20	
Columbia Dividend Income	17,449,183	2.21	-0.45	7.89	14.63	7.55	11.36	-	-	-	11.07	May-19
Russell 1000 Value Index			-2.17	6.62	13.06	5.52	9.01	-	-	-	8.75	
Over/Under			1.72	1.27	1.57	2.03	2.35	-	-	-	2.32	
Eagle Equity	31,136,622	3.94	4.99	18.51	31.15	8.54	14.15	-	-	-	14.81	Apr-19
Russell 1000 Value Index			-2.17	6.62	13.06	5.52	9.01	-	-	-	9.33	
Over/Under			7.16	11.89	18.09	3.02	5.14	-	-	-	5.48	
Robeco LCV	46,593,316	5.89	-1.35	10.18	20.58	8.76	11.78	9.45	-	-	10.32	Oct-13
Russell 1000 Value Index			-2.17	6.62	13.06	5.52	9.01	8.23	-	-	9.40	
Over/Under			0.82	3.56	7.52	3.24	2.77	1.22	-	-	0.92	
Patient Opportunity I(LMNOX)	7,777,773	0.98	-1.70	10.23	22.71	-7.68	9.16	-	-	-	8.96	Apr-19
Russell 1000 Value Index			-2.17	6.62	13.06	5.52	9.01	-	-	-	9.33	
Over/Under			0.47	3.61	9.65	-13.20	0.15	-	-	-	-0.37	
Fiera SMID Growth	29,540,280	3.74	-5.85	1.77	9.28	1.47	12.15	-	-	-	10.61	Nov-14
Russell 2500 Growth Index			-4.22	3.93	9.02	-4.11	7.58	-	-	-	9.08	
Over/Under			-1.63	-2.16	0.26	5.58	4.57	-	-	-	1.53	

Total Portfolio												
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
Neuberger Berman International	18,858,351	2.39	-0.53	2.66	7.32	-1.86	5.35	4.49	7.87	-	6.18	Feb-05
<i>MSCI EAFE Index</i>			-0.17	5.75	12.09	3.43	6.98	4.84	7.26	-	5.64	
Over/Under			-0.36	-3.09	-4.77	-5.29	-1.63	-0.35	0.61	-	0.54	
Vanguard Developed Mkts Ind(VTMNX)	2,816,430	0.36	-0.75	4.35	10.62	1.82	-	-	-	-	8.51	Mar-20
<i>FTSE Developed x North America Index</i>			-0.50	5.07	11.76	2.49	-	-	-	-	9.12	
Over/Under			-0.25	-0.72	-1.14	-0.67	-	-	-	-	-0.61	
GAMCO Gold	13,407,786	1.70	6.39	6.44	12.31	1.56	6.77	3.28	-	-	-2.09	Feb-12
<i>Philadelphia Gold and Silver Index</i>			8.57	10.22	16.52	1.85	12.58	4.64	-	-	-1.91	
Over/Under			-2.18	-3.78	-4.21	-0.29	-5.81	-1.36	-	-	-0.18	
Sprott Asset Management	10,654,457	1.35	8.30	14.44	16.99	-0.54	6.99	1.19	-	-	-3.26	Feb-12
<i>Philadelphia Gold and Silver Index</i>			8.57	10.22	16.52	1.85	12.58	4.64	-	-	-1.91	
Over/Under			-0.27	4.22	0.47	-2.39	-5.59	-3.45	-	-	-1.35	
iShares MSCI Emerging Markets ETF(EEM)	28,481,130	3.60	4.41	6.67	10.48	-5.98	2.16	-	-	-	4.05	Feb-17
<i>MSCI Emerging Markets Index</i>			5.12	7.68	12.97	-4.68	3.49	-	-	-	5.36	
Over/Under			-0.71	-1.01	-2.49	-1.30	-1.33	-	-	-	-1.31	
Private Equity	75,781,032	9.59	0.65	0.79	18.45	20.12	24.20	13.44	-	-	9.47	Jan-12
<i>7.5% Annual Return</i>			1.82	3.68	7.50	7.50	7.50	7.50	-	-	7.50	
Over/Under			-1.17	-2.89	10.95	12.62	16.70	5.94	-	-	1.97	
Arsenal III, LP(\$15 mill)	28,269,725	3.58	-1.22	-1.87	8.44	16.43	28.17	-	-	-	33.22	Feb-19
Arsenal Growth Equity IV, LP(\$35 mill)	21,403,005	2.71	1.58	0.30	65.33	-	-	-	-	-	37.20	Feb-23
Arsenal-Beamer Investors, LLC(\$2.9 million)	2,884,923	0.37	-	-	-	-	-	-	-	-	-	May-24
Arsenal-Cart Investors II, LLC(\$2 million)	4,088,479	0.52	1.63	4.97	8.11	-	-	-	-	-	30.75	Nov-21
Arsenal-Elevate Investors I, LLC(\$4.6 million)	4,872,285	0.62	0.00	0.29	5.16	-	-	-	-	-	3.19	Sep-22
Arsenal-Sayari Investors, LLC(\$2 million)	4,088,657	0.52	-0.14	-0.28	37.06	-	-	-	-	-	30.75	Nov-21
GWC Select Opportunities SPC(\$2.5 million)	3,257,507	0.41	1.81	2.18	7.78	-	-	-	-	-	17.21	Nov-22
Zephyr Peacock India Fund III Limited (\$5 million)	2,490,567	0.32	-0.33	-2.81	-17.65	0.15	1.48	4.63	-	-	0.96	Jun-12
Zephyr Peacock India Growth Fund US, LP(\$6 million)	4,425,884	0.56	10.32	25.47	18.22	14.20	5.63	-	-	-	1.71	Jul-18

Total Portfolio												
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
Alternatives	228,469,169	28.91	1.30	2.99	5.62	4.29	3.34	-	-	-	4.48	Jan-19
Barclay Hedge Fund Index			1.02	5.42	10.47	2.30	5.98	-	-	-	6.76	
Over/Under			0.28	-2.43	-4.85	1.99	-2.64	-	-	-	-2.28	
Real Estate	68,550,586	8.67	-0.64	-1.62	-4.48	0.23	2.62	-	-	-	3.17	Jan-19
NCREIF Property Index			-0.26	-1.24	-5.53	2.33	3.39	-	-	-	3.70	
Over/Under			-0.38	-0.38	1.05	-2.10	-0.77	-	-	-	-0.53	
Boyd Titanium GSA Fund (\$34.5 million)	33,664,516	4.26	-1.00	-2.81	-5.74	0.34	3.24	5.82	-	-	5.60	Oct-13
Boyd Watterson State Govt Fund, LP(\$10 million)	10,087,948	1.28	-0.84	-3.61	-6.08	1.20	4.82	-	-	-	5.26	Feb-18
Boyd Diversified Gov't REIT(\$10 million)	24,172,080	3.06	0.51	1.66	4.29	-	-	-	-	-	4.94	Jan-23
Invesco Mortgage Recovery Fund II, LP(\$10 million)	614,580	0.08	-18.75	-21.50	-71.40	-45.27	-38.74	-	-	-	-19.05	Apr-15
Lone Star (\$10 million)	11,462	0.00	-3.32	-3.26	19.22	83.24	40.74	28.02	-	-	20.79	Jun-11
Commodities	5,304,841	0.67	-2.77	-1.32	-15.16	-4.65	-7.51	-	-	-	-6.95	Jan-19
Bloomberg Commodity Index Total Return			2.89	5.14	5.00	5.65	7.25	-	-	-	7.53	
Over/Under			-5.66	-6.46	-20.16	-10.30	-14.76	-	-	-	-14.48	
Corrum Capital Real Assets, LP (\$10 million)	5,304,841	0.67	-2.77	-1.32	-15.16	-4.65	-7.51	-	-	-	-1.20	Jun-15
Differentiated Return Stream	154,613,742	19.56	2.35	5.45	12.24	6.81	2.05	-	-	-	5.24	Jan-19
CPI+2%			1.09	3.44	5.03	7.06	6.25	-	-	-	6.23	
Over/Under			1.26	2.01	7.21	-0.25	-4.20	-	-	-	-0.99	
Kelly Park Capital	17,866,797	2.26	1.36	-0.02	5.94	-2.67	-	-	-	-	1.11	Jan-20
Verition International Multi-Strategy Fund, Ltd.	43,794,284	5.54	1.19	4.92	10.28	7.53	-	-	-	-	12.49	Jan-20
OCO Opportunities Offshore Fund, Ltd.	19,491,333	2.47	2.04	4.94	4.95	2.73	15.81	7.78	-	-	7.97	Feb-14
Greywolf Containership Opps II, LP(\$6 million)	6,240,163	0.79	9.97	14.57	10.21	-	-	-	-	-	12.78	Nov-22
Entrust Blue Ocean Fund, LP(\$17 million)	25,504,591	3.23	4.13	8.78	15.81	22.21	-	-	-	-	20.02	Apr-20
Entrust Blue Ocean Fund II, LP (\$30 mill)	12,111,149	1.53	0.97	1.06	-	-	-	-	-	-	-0.49	Dec-23
Longford Capital (\$15 million)	3,003,760	0.38	0.47	2.83	13.12	13.90	10.80	9.69	-	-	4.42	Jul-13
Longford Capital Fund II, LP (\$30 million)	12,986,699	1.64	-3.59	-0.72	15.52	4.85	4.54	-	-	-	2.11	Dec-16
Longford Capital Fund III, LP(\$30 million)	13,614,966	1.72	9.19	15.53	33.72	25.83	-	-	-	-	9.19	Apr-20
Cash	2,850,550	0.36	1.29	2.59	5.20	2.89	1.95	-	-	-	1.96	Jan-19
Cash Account	2,850,550	0.36	1.29	2.59	5.20	2.89	1.95	1.30	-	-	1.09	Jan-12
90 Day U.S. Treasury Bill			1.32	2.63	5.40	3.03	2.16	1.50	-	-	1.22	
Over/Under			-0.03	-0.04	-0.20	-0.14	-0.21	-0.20	-	-	-0.13	

Policy Index-Blended New = MSCI ACWI 55% / BBgBarc US Aggregate TR 25% / Barclay Hedge Fund Index 20%.

From 4/30/2022-1/1/2019 the Policy Index Blended New consists of MSCI ACWI 55% / BBgBarc US Aggregate TR 25% / HFRI Fund of Funds Composite Index 20%. Prior to 1/1/2019 the Policy Index Blended New consists of 15% Russell 1000 Growth, 15% Russell 1000 Value, 5% Russell MidCap, 13.6% MSCI EAFE, 7.5% MSCI Emerging Markets, 21.3% BC US Aggregate, 7.6% BofA HY BB-B Rated Constrained Index, 10% HFRX Global Hedge Fund Index, 5% Private Equity Actual.

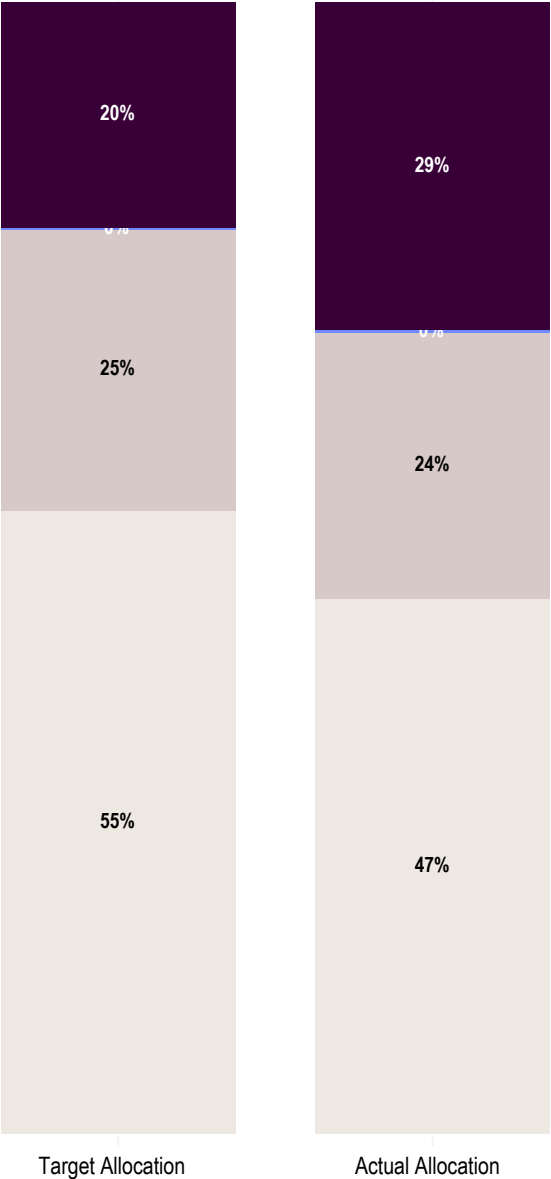
Total Portfolio**As of June 30, 2024 vs. All DB Plans**

	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years
■ Total Portfolio	2.2 (8)	0.3 (27)	0.6 (11)	4.1 (72)	80.5 (23)	94.2 (53)
● Policy Index Blended New	1.0 (37)	0.6 (11)	0.5 (31)	1.2 (1)	93.8 (48)	99.5 (42)
▲ 60% MSCI ACWI/40% BC Agg	0.0 (63)	-	0.4 (58)	0.0 (1)	100.0 (63)	100.0 (40)

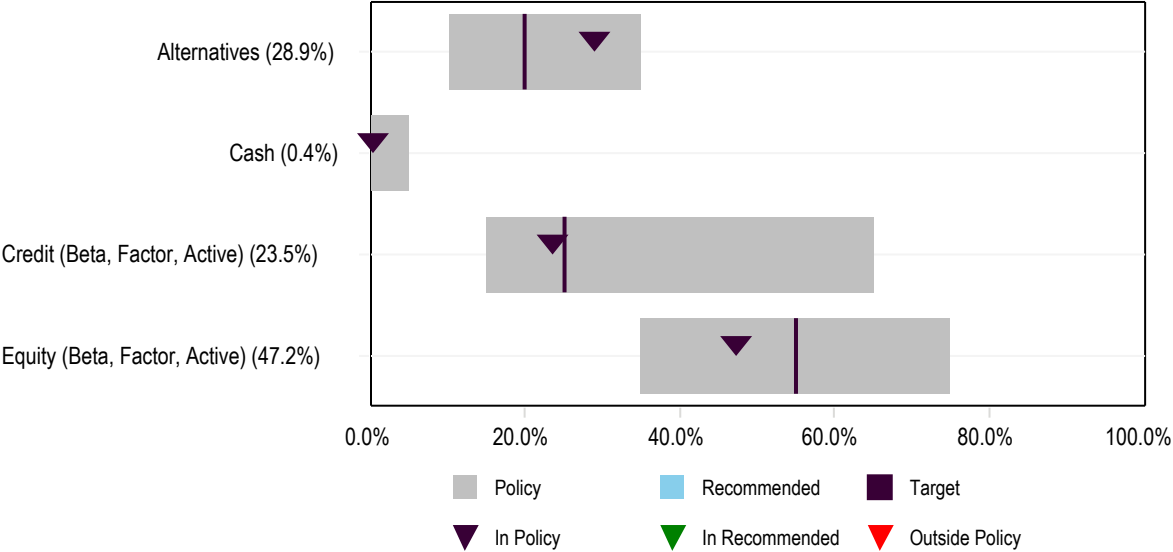
5th Percentile	2.7	0.8	0.6	1.8	49.4	115.9
1st Quartile	1.4	0.4	0.5	2.4	81.8	105.3
Median	0.5	0.0	0.4	3.1	94.8	95.4
3rd Quartile	-0.7	-0.4	0.3	4.2	104.2	82.4
95th Percentile	-3.8	-0.9	0.0	7.5	116.2	53.6

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

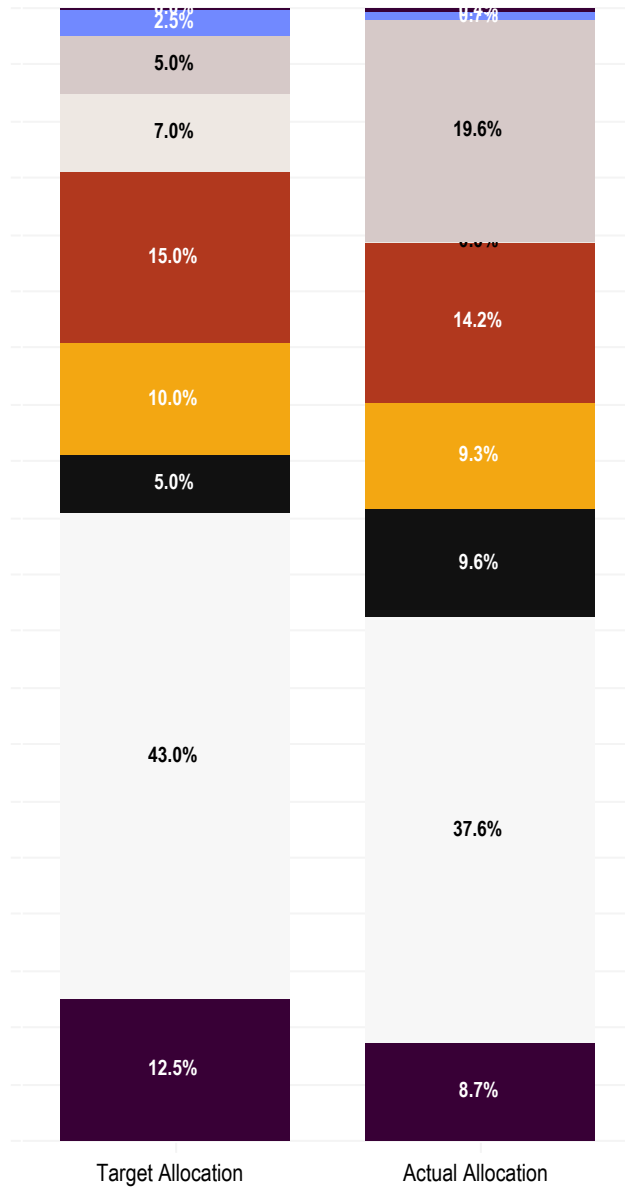
Total Portfolio



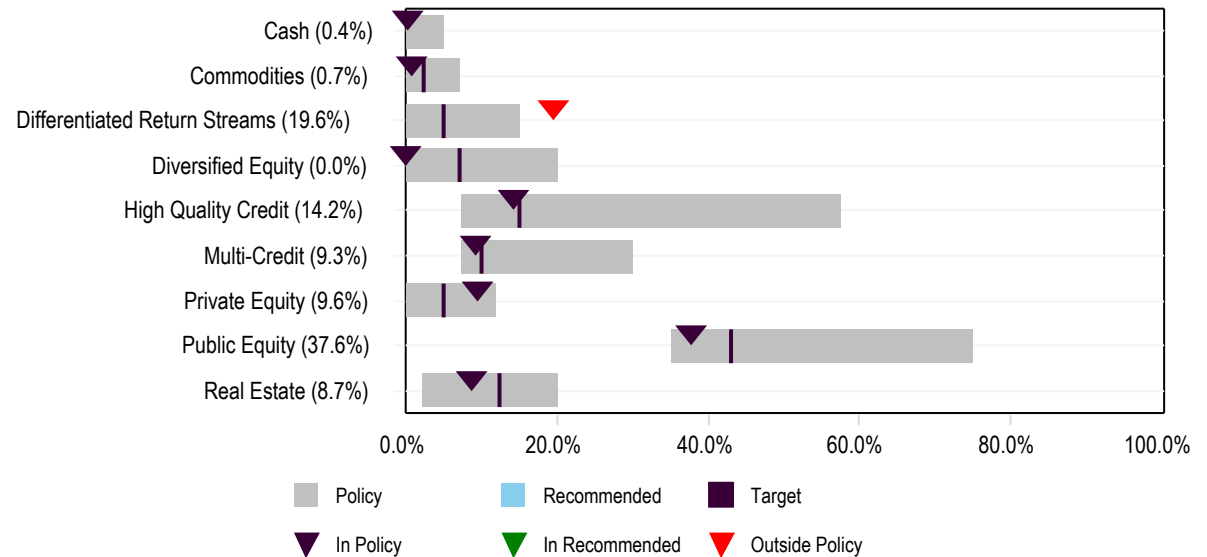
	Current Balance	Current Allocation	Policy	Policy Range	Difference	Within IPS Range?
Alternatives	\$228,469,169	28.9	20.0	10.0 - 35.0	8.9	Yes
Cash	\$2,850,550	0.4	0.0	0.0 - 5.0	0.4	Yes
Credit (Beta, Factor, Active)	\$185,810,663	23.5	25.0	15.0 - 65.0	-1.5	Yes
Equity (Beta, Factor, Active)	\$373,259,066	47.2	55.0	35.0 - 75.0	-7.8	Yes
Total	\$790,389,448	100.0	100.0		0.0	



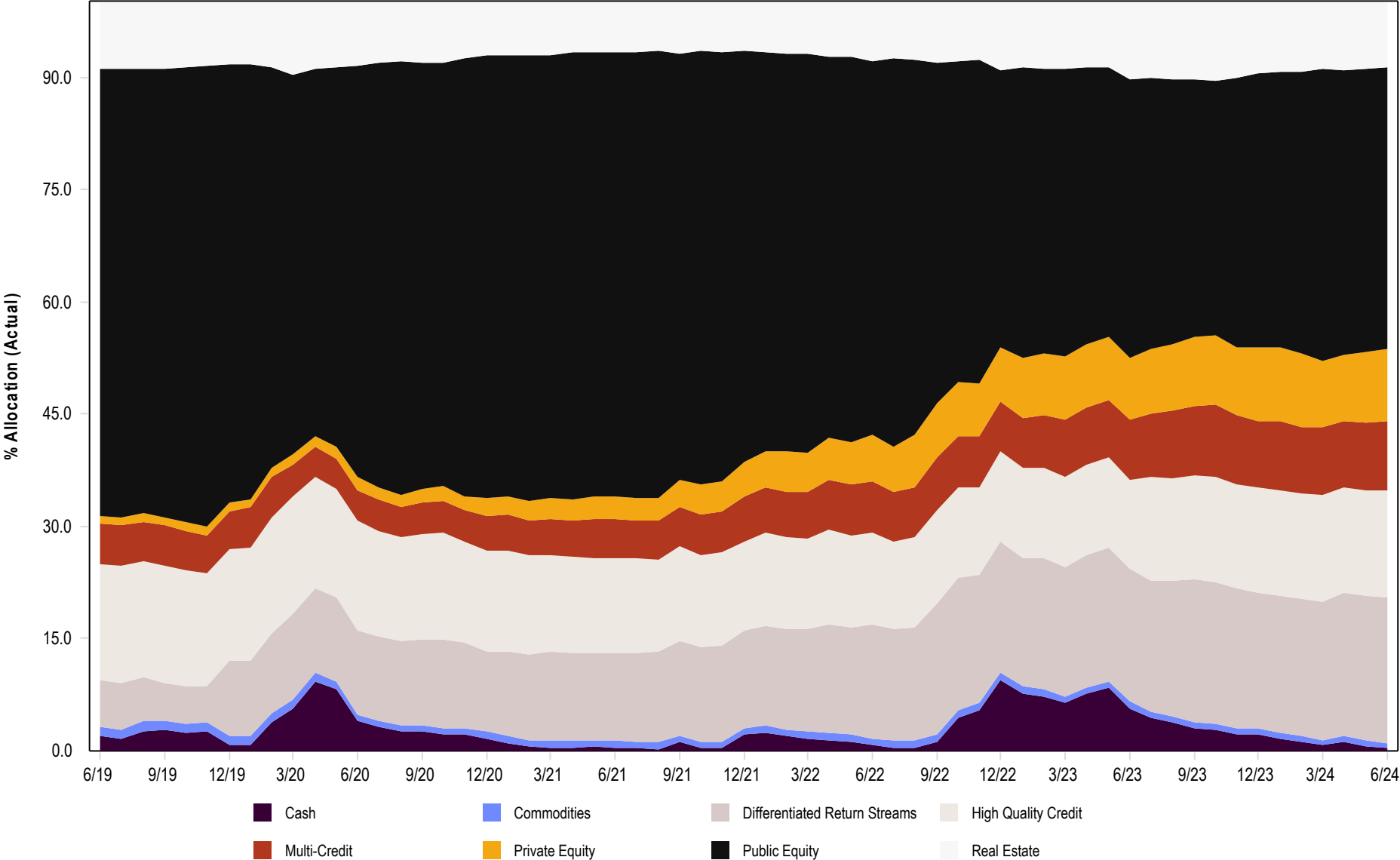
Total Portfolio



	Current Balance	Current Allocation	Policy	Policy Range	Difference	Within IPS Range?
Cash	2,850,550	0.4	0.0	0.0 - 5.0	0.4	Yes
Commodities	5,304,841	0.7	2.5	0.0 - 7.0	-1.8	Yes
Differentiated Return Streams	154,613,742	19.6	5.0	0.0 - 15.0	14.6	No
Diversified Equity		0.0	7.0	0.0 - 20.0	-7.0	Yes
High Quality Credit	112,404,784	14.2	15.0	7.5 - 57.5	-0.8	Yes
Multi-Credit	73,405,879	9.3	10.0	7.5 - 30.0	-0.7	Yes
Private Equity	75,781,032	9.6	5.0	0.0 - 12.0	4.6	Yes
Public Equity	297,478,034	37.6	43.0	35.0 - 75.0	-5.4	Yes
Real Estate	68,550,586	8.7	12.5	2.0 - 20.0	-3.8	Yes
Total	790,389,448	100.0	100.0		0.0	



Asset Allocation History June 30, 2024



Commentary

Total Fund

The City of Bristol Employee Pension Fund ended the fiscal year with \$790.4 million in assets (including approx. \$31.3 million in net distributions), up from \$736.5 million in June. Relative to policy targets, the portfolio segments are within +/- 15% of policy. The Fund has an overweight to the Differentiated Return Streams and to the Private Equity segments. Conversely, The Fund has an underweight to Diversified Equity, to Real Estate and to Public Equity segments. The Total Fund returned +12.0% for the fiscal year, 1.2% below the policy but ranking above the median (26th percentile) of the All DB Plans Universe. For the three-year period, The Fund leads the benchmark by 14 basis points and ranks above the median (23rd percentile) of the same universe. The Alternatives segment's underperformance of their benchmark (*Barclay Hedge Fund Index*) and an underweight to the Equity segment detracted total performance during the quarter.

Watch List (due to underperformance for the past three consecutive quarters)

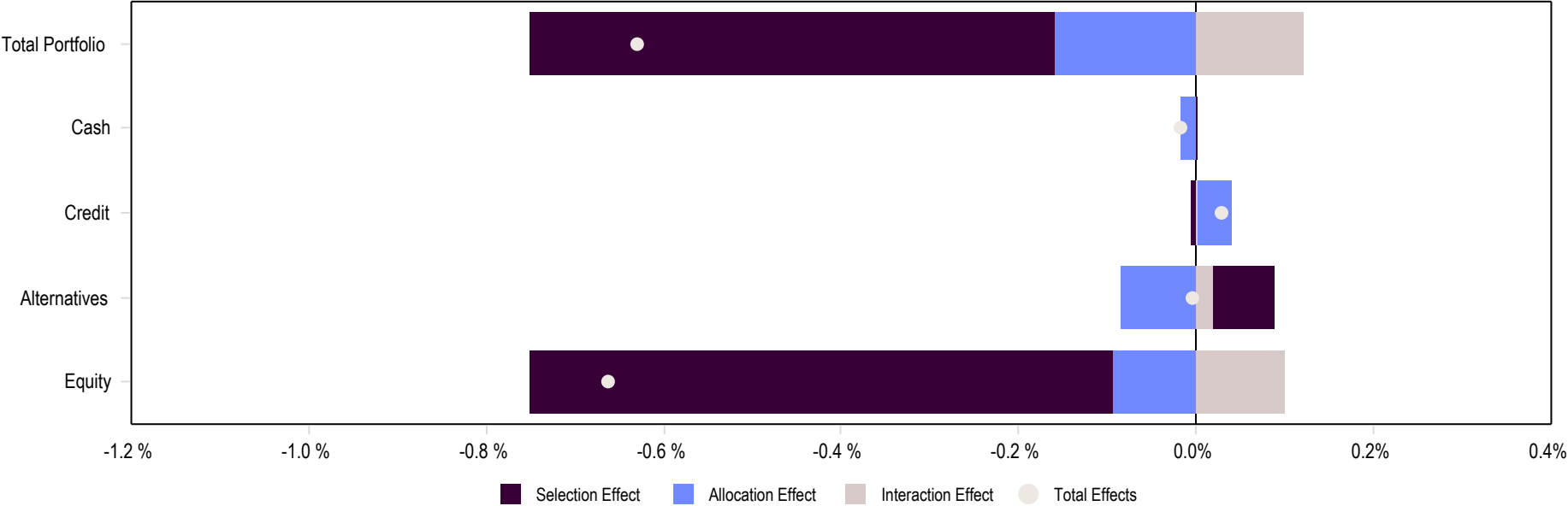
Greywolf Opportunities Offshore Fund II, LP (4)

Neuberger Berman International (4)

GAMCO Gold

Total Portfolio

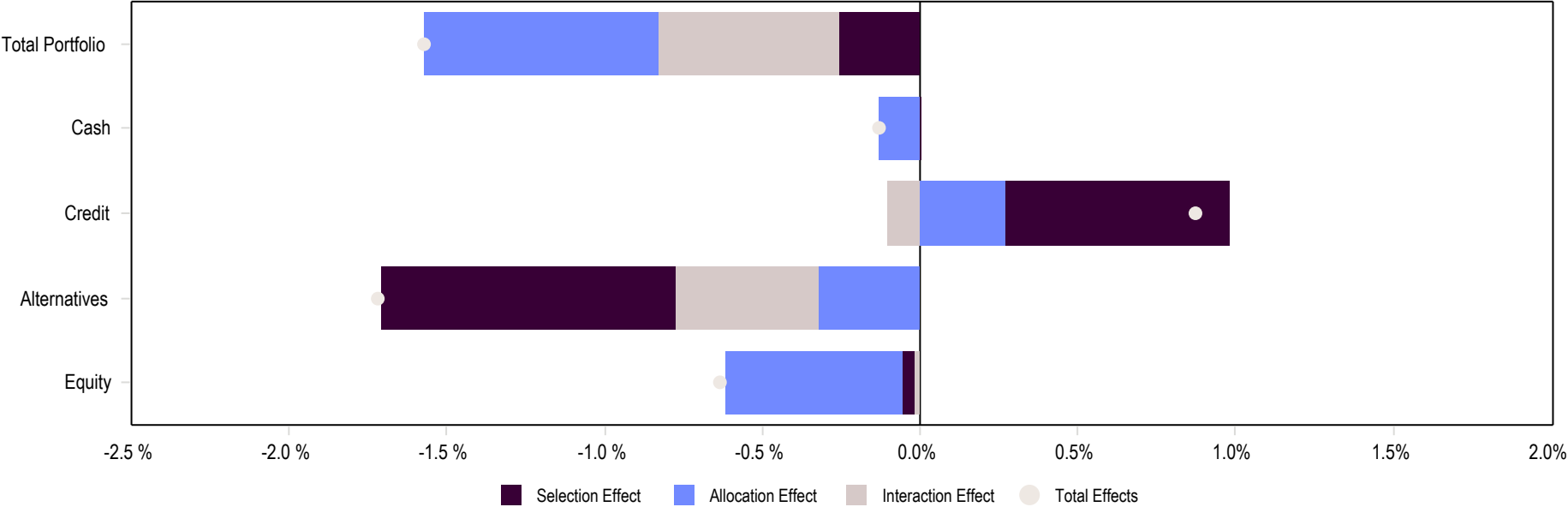
1 Quarter



1 Quarter

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effect	Total Effect
Cash	1.3	1.3	0.0	0.0	0.0	0.0	0.0
Credit	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Alternatives	1.3	1.0	0.3	0.1	-0.1	0.0	0.0
Equity	1.8	3.0	-1.2	-0.7	-0.1	0.1	-0.7
Total Portfolio	1.3	1.9	-0.6	-0.6	-0.2	0.1	-0.6

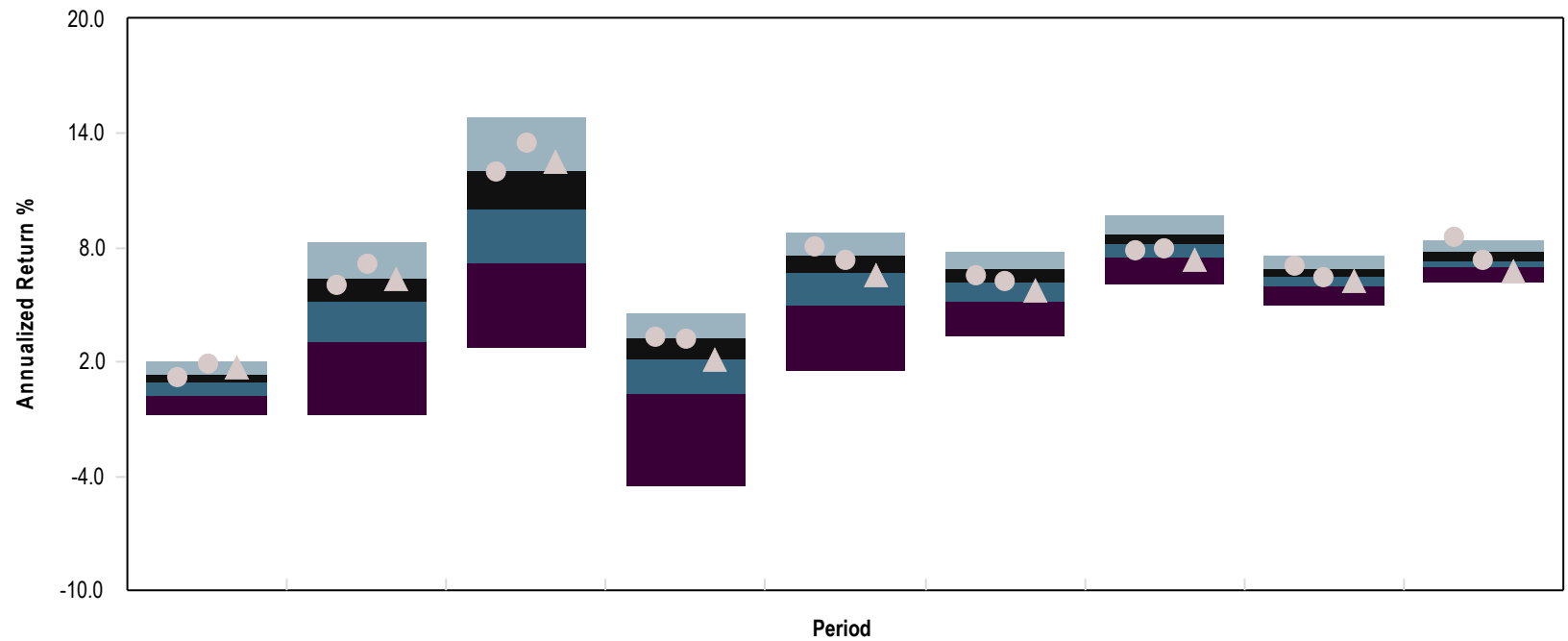
Fiscal Year To Date



Fiscal Year To Date

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effect	Total Effect
Cash	5.2	5.4	-0.2	0.0	-0.1	0.0	-0.1
Credit	5.2	2.6	2.5	0.7	0.3	-0.1	0.9
Alternatives	5.6	10.5	-4.8	-0.9	-0.3	-0.5	-1.7
Equity	19.9	19.9	0.0	0.0	-0.6	0.0	-0.6
Total Portfolio	12.0	13.6	-1.6	-0.3	-0.7	-0.6	-1.6

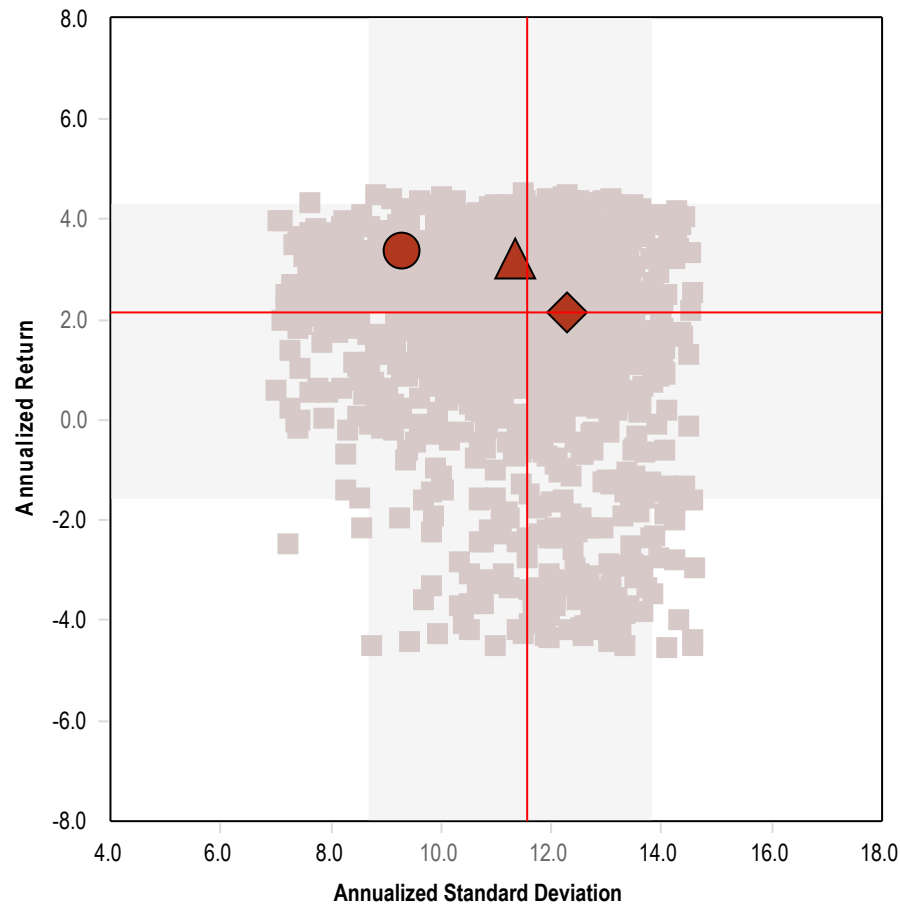
Total Portfolio vs. All DB Plans



	Quarter	YTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception
Total Portfolio	1.3 (30)	6.0 (33)	12.0 (26)	3.4 (23)	8.1 (14)	6.6 (37)	7.9 (61)	7.1 (17)	8.6 (3)
Policy Index Blended New	1.9 (7)	7.2 (13)	13.6 (11)	3.2 (26)	7.3 (32)	6.3 (45)	8.0 (60)	6.5 (48)	7.3 (47)
60% MSCI ACWI/40% BC Agg	1.7 (10)	6.4 (25)	12.5 (20)	2.1 (50)	6.5 (54)	5.8 (61)	7.4 (78)	6.3 (60)	6.7 (86)
5th Percentile	2.0	8.2	14.8	4.5	8.8	7.8	9.7	7.6	8.4
1st Quartile	1.3	6.4	12.0	3.2	7.6	6.9	8.7	6.9	7.8
Median	0.9	5.1	10.0	2.1	6.7	6.2	8.2	6.4	7.3
3rd Quartile	0.2	3.0	7.2	0.3	4.9	5.2	7.5	6.0	7.0
95th Percentile	-0.8	-0.8	2.7	-4.6	1.5	3.4	6.0	5.0	6.2
Population	1,637	1,632	1,614	1,535	1,480	1,237	944	596	108

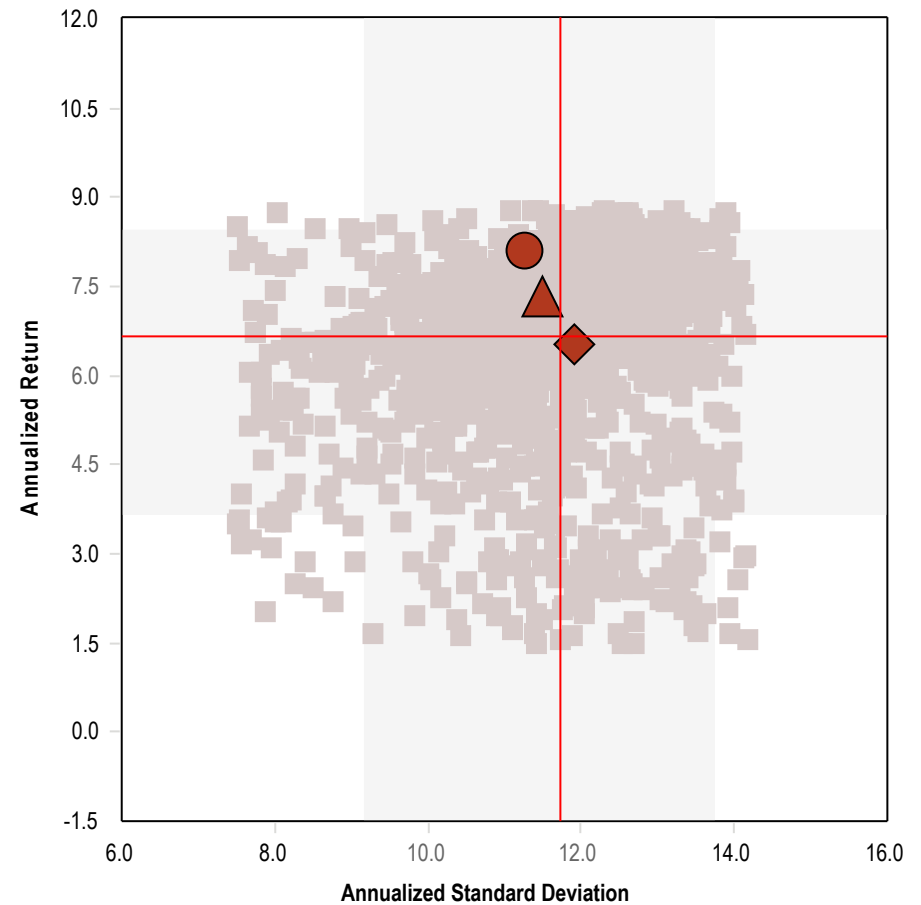
Parentheses contain percentile rankings.
Calculation based on quarterly periodicity.

**Annualized Return vs. Annualized Standard Deviation
3 Years Ending June 30, 2024**



- All DB Plans
 - Total Portfolio
 - ▲ Policy Index Blended New
 - ◆ 60% MSCI ACWI/40% BC Agg
 - X Sigma Band
 - Y Sigma Band
- Sigma Cross Section

**Annualized Return vs. Annualized Standard Deviation
5 Years Ending June 30, 2024**



- All DB Plans
 - Total Portfolio
 - ▲ Policy Index Blended New
 - ◆ 60% MSCI ACWI/40% BC Agg
 - X Sigma Band
 - Y Sigma Band
- Sigma Cross Section

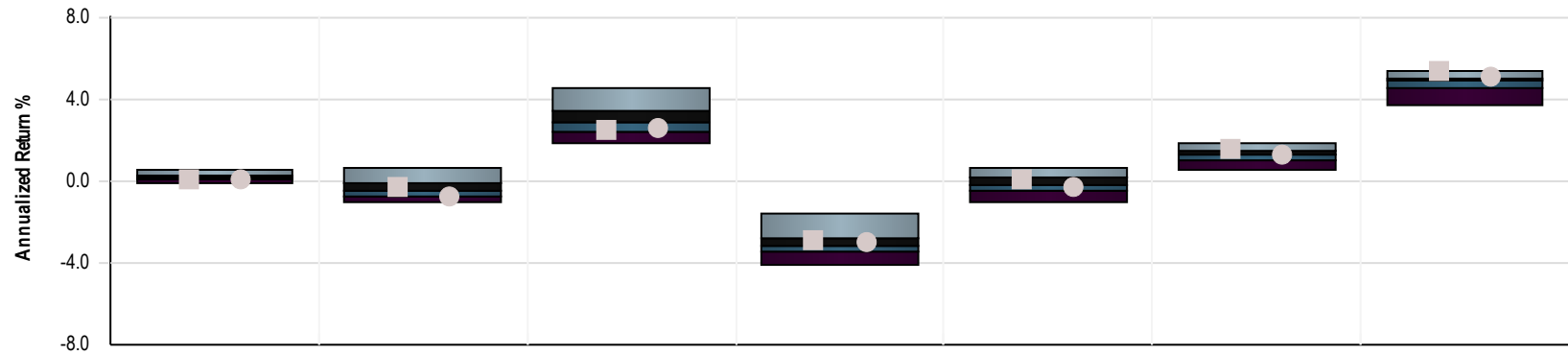
Total Portfolio**June 30, 2024**

	Market Value As of 06/30/2024	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Total Portfolio	790,389,448	100.00	8,156,546	1.03
Boyd Watterson Fixed Income	29,499,928	3.73	93,750	0.32
iShares Core US Aggregate Bond ETF(AGG)	15,179,356	1.92	4,554	0.03
GoldenTree High Grade Floating Rate Fund, Ltd.	38,444,288	4.86	96,111	0.25
EnTrust Structured Income II-A	18,721,212	2.37	140,409	0.75
Golub Capital BDC 4, Inc.(\$22 million)	10,560,000	1.34	132,000	1.25
OCO Opportunities Offshore Fund, Ltd.	19,491,333	2.47	292,370	1.50
Prytania Athena Fund	12,957,858	1.64	194,368	1.50
EnTrust Structured Income Fund	6,512,419	0.82	48,843	0.75
Beach Point TR Offshore Fund II	9,944,696	1.26	149,170	1.50
Silver Point Specialty Credit Fund III, LP(\$22 million)	7,294,489	0.92	109,417	1.50
Greywolf Opportunities Offshore Fund II, LP(\$24 million)	17,330,878	2.19	259,963	1.50
Greywolf Distressed Opp Fund, LP(\$17 million)	16,638,371	2.11	249,576	1.50
Neuberger Berman Large Cap Growth	84,149,877	10.65	370,259	0.44
iShares Russell 1000 Value ETF(IWD)	6,612,830	0.84	12,564	0.19
Columbia Dividend Income	17,449,183	2.21	78,521	0.45
Eagle Equity	31,136,622	3.94	246,025	0.79
Robeco LCV	46,593,316	5.89	232,967	0.50
Patient Opportunity I(LMNOX)	7,777,773	0.98	97,222	1.25
Fiera SMID Growth	29,540,280	3.74	177,242	0.60
Neuberger Berman International	18,858,351	2.39	111,264	0.59
Vanguard Developed Mkts Ind(VTMNX)	2,816,430	0.36	1,408	0.05
GAMCO Gold	13,407,786	1.70	134,078	1.00
Sprott Asset Management	10,654,457	1.35	106,545	1.00
iShares MSCI Emerging Markets ETF(EEM)	28,481,130	3.60	199,368	0.70
Arsenal III, LP(\$15 mill)	28,269,725	3.58	565,395	2.00
Arsenal Growth Equity IV, LP(\$35 mill)	21,403,005	2.71	428,060	2.00
Arsenal-Beamer Investors, LLC(\$2.9 million)	2,884,923	0.37	-	-
Arsenal-Cart Investors II, LLC(\$2 million)	4,088,479	0.52	-	0.00
Arsenal-Elevate Investors I, LLC(\$4.6 million)	4,872,285	0.62	-	0.00
Arsenal-Sayari Investors, LLC(\$2 million)	4,088,657	0.52	-	0.00
GWC Select Opportunities SPC(\$2.5 million)	3,257,507	0.41	48,863	1.50
GWC Select Opportunities SPC1(\$2.6 million)	2,727,168	0.35	40,908	1.50
Zephyr Peacock India Fund III Limited (\$5 million)	2,490,567	0.32	49,811	2.00
Zephyr Peacock India Growth Fund US, LP(\$6 million)	4,425,884	0.56	88,518	2.00
Boyd Titanium GSA Fund (\$34.5 million)	33,664,516	4.26	420,806	1.25
Boyd Watterson State Govt Fund, LP(\$10 million)	10,087,948	1.28	126,099	1.25
Boyd Diversified Gov't REIT(\$10 million)	24,172,080	3.06	302,151	1.25
Invesco Mortgage Recovery Fund II, LP(\$10 million)	614,580	0.08	6,146	1.00
Lone Star (\$10 million)	11,462	0.00	52	0.45

Total Portfolio

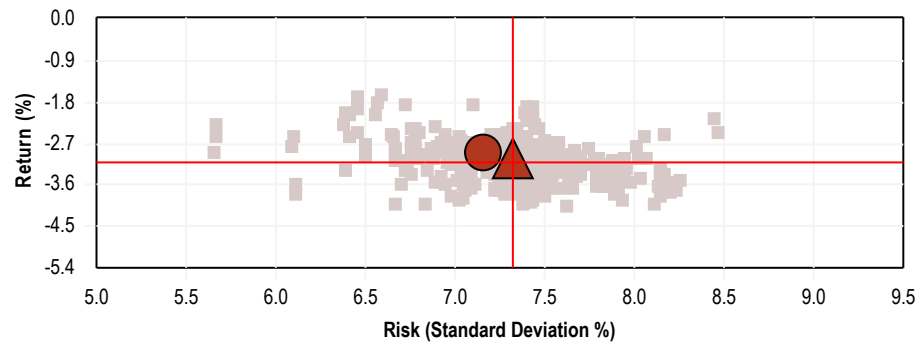
	Market Value As of 06/30/2024	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Corrum Capital Real Assets, LP (\$10 million)	5,304,841	0.67	47,744	0.90
Kelly Park Capital	17,866,797	2.26	357,336	2.00
Verition International Multi-Strategy Fund, Ltd.	43,794,284	5.54	875,886	2.00
Greywolf Containership Opps II, LP(\$6 million)	6,240,163	0.79	93,602	1.50
Entrust Blue Ocean Fund, LP(\$17 million)	25,504,591	3.23	382,569	1.50
Entrust Blue Ocean Fund II, LP (\$30 mill)	12,111,149	1.53	181,667	1.50
Longford Capital (\$15 million)	3,003,760	0.38	60,075	2.00
Longford Capital Fund II, LP (\$30 million)	12,986,699	1.64	259,734	2.00
Longford Capital Fund III, LP(\$30 million)	13,614,966	1.72	272,299	2.00
Cash Account	2,850,550	0.36	10,832	0.38

Boyd Watterson Fixed Income vs. Intermediate Core Bond as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
Boyd Watterson Fixed Income	0.1 (70)	-0.3 (39)	2.5 (73)	-2.9 (29)	0.1 (28)	1.6 (18)	5.4 (4)
Blmbg. U.S. Aggregate	0.1 (78)	-0.7 (76)	2.6 (65)	-3.0 (40)	-0.2 (54)	1.3 (43)	5.1 (22)
Median	0.2	-0.5	2.9	-3.1	-0.2	1.3	4.9

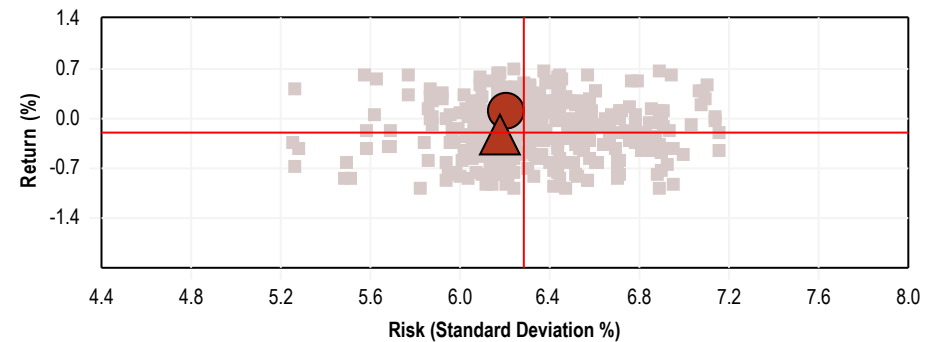
3 Years



● Boyd Watterson Fixed Income ▲ Blmbg. U.S. Aggregate

Alpha	0.1
Information Ratio	0.1
Tracking Error	0.9
Sharpe Ratio	-0.8

5 Years



● Boyd Watterson Fixed Income ▲ Blmbg. U.S. Aggregate

Alpha	0.3
Information Ratio	0.3
Tracking Error	1.0
Sharpe Ratio	-0.3

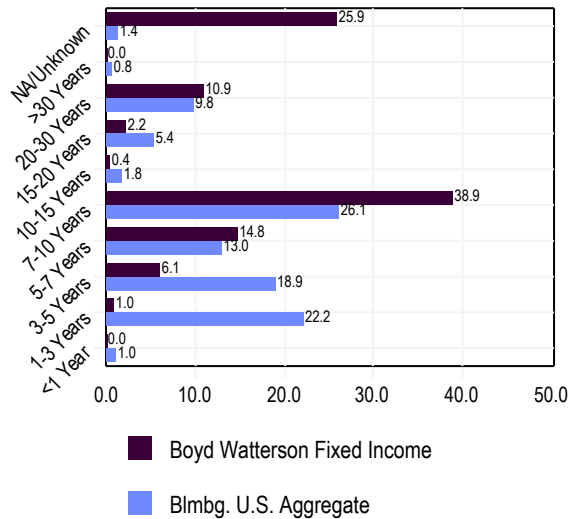
Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Boyd Watterson Fixed Income

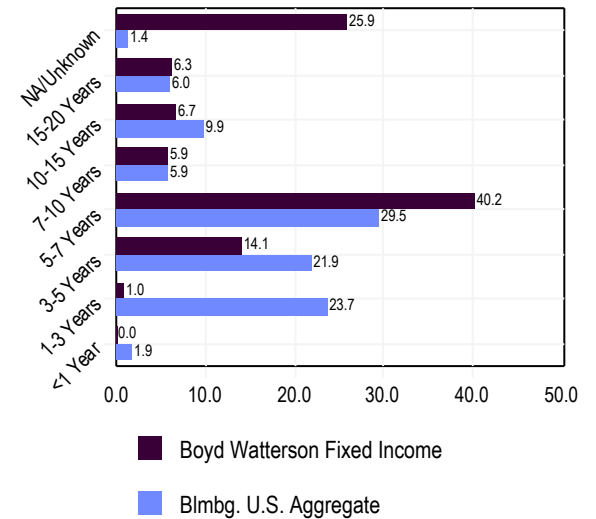
Characteristics

	Portfolio	Benchmark
Coupon Rate (%)	3.8	3.4
Avg. Eff. Duration	7.5	6.0
Avg. Eff. Maturity	10.7	8.4
Avg. Credit Quality	A	AA
Yield To Maturity (%)	5.1	4.9

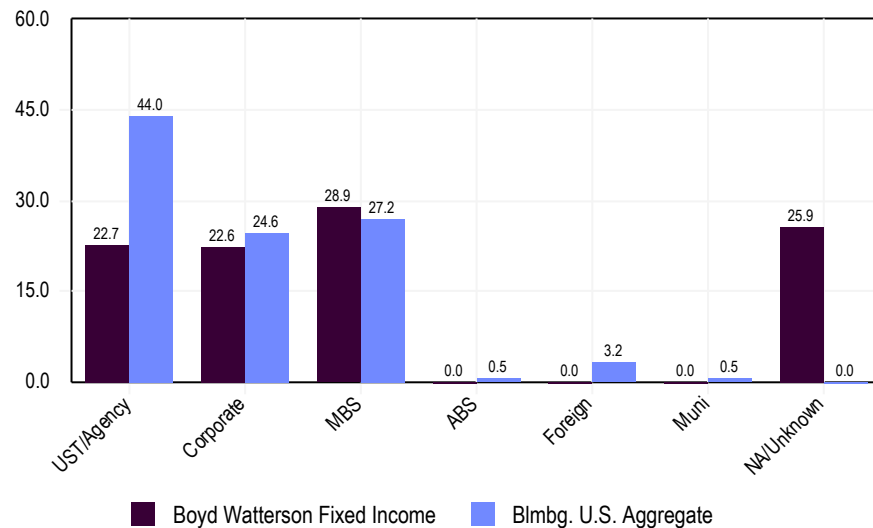
Maturity Distribution



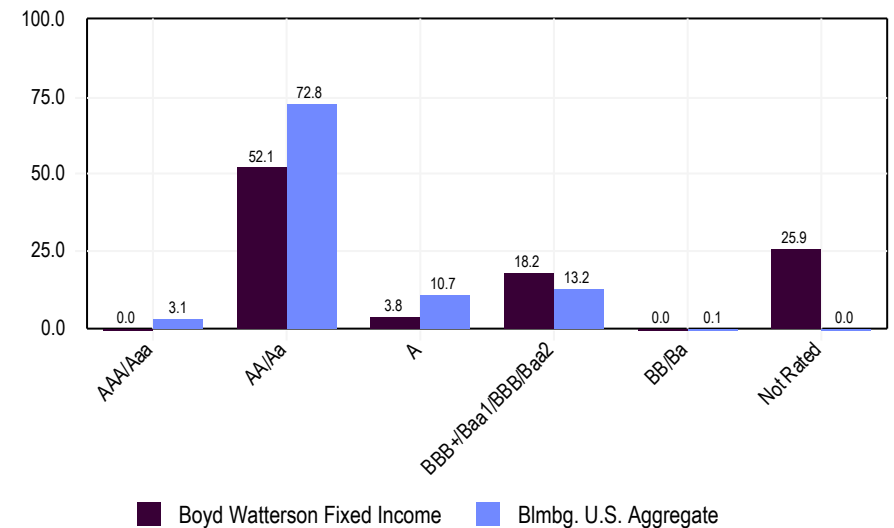
Duration Distribution



Sector Distribution

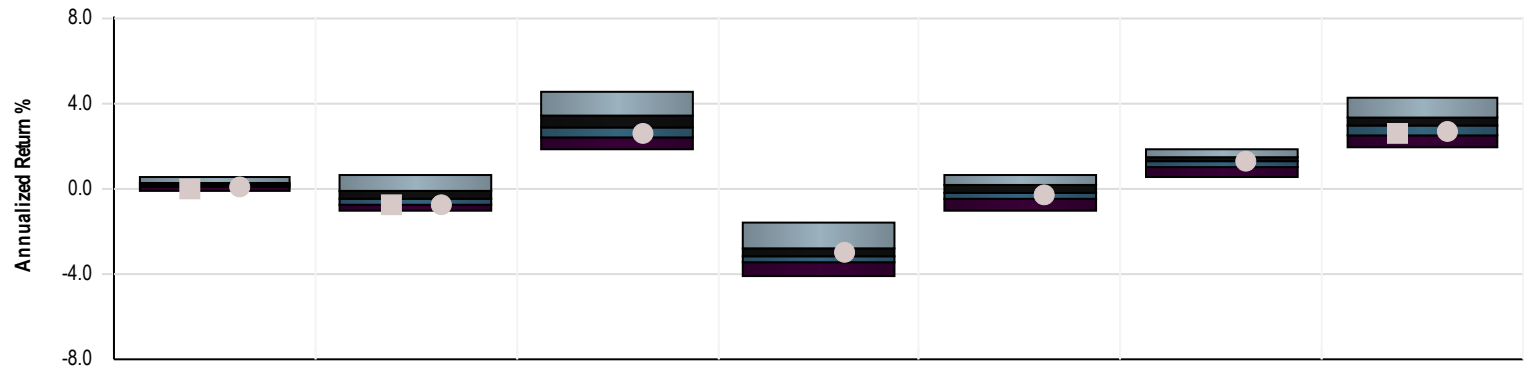


Credit Quality Distribution



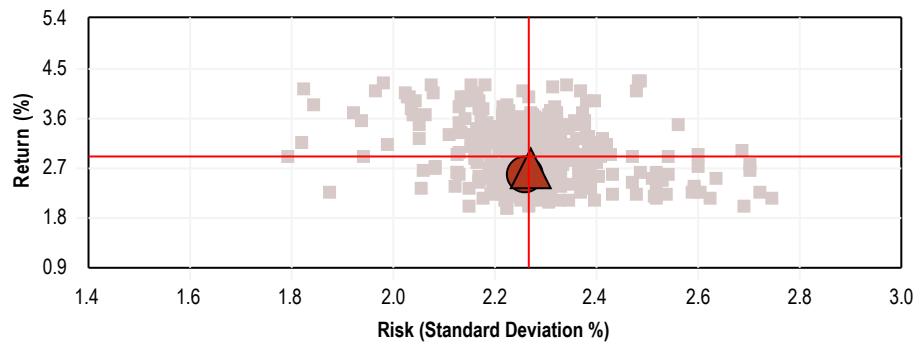
iShares Core US Aggregate Bond ETF(AGG)

iShares Core US Aggregate Bond ETF(AGG) vs. Intermediate Core Bond as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
iShares Core US Aggregate Bond ETF(AGG)	0.0 (84)	-0.7 (76)	-	-	-	-	2.6 (72)
Blmbg. U.S. Aggregate	0.1 (78)	-0.7 (76)	2.6 (65)	-3.0 (40)	-0.2 (54)	1.3 (43)	2.7 (63)
Median	0.2	-0.5	2.9	-3.1	-0.2	1.3	2.9

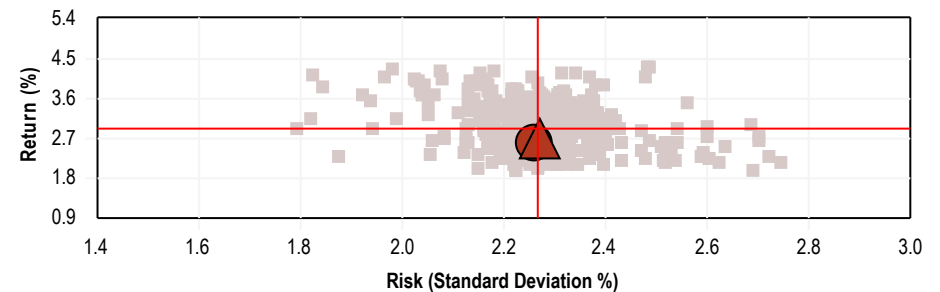
0.92 Year



● iShares Core US Aggregate Bond ETF(AGG) ▲ Blmbg. U.S. Aggregate

Alpha	0.0
Information Ratio	-0.1
Tracking Error	0.1
Sharpe Ratio	-0.1

0.92 Year



● iShares Core US Aggregate Bond ETF(AGG) ▲ Blmbg. U.S. Aggregate

Alpha	0.0
Information Ratio	-0.1
Tracking Error	0.1
Sharpe Ratio	-0.1

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

iShares Core US Aggregate Bond ETF(AGG)**Fund Information**

Fund Name : iShares Core US Aggregate Bond ETF
 Fund Family : iShares
 Ticker : AGG
 Inception Date : 09/22/2003
 Fund Assets : \$116,890 Million
 Portfolio Turnover : 89%

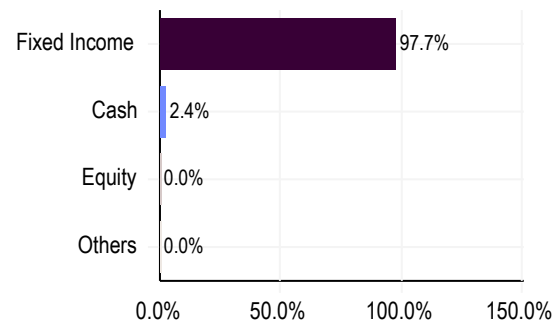
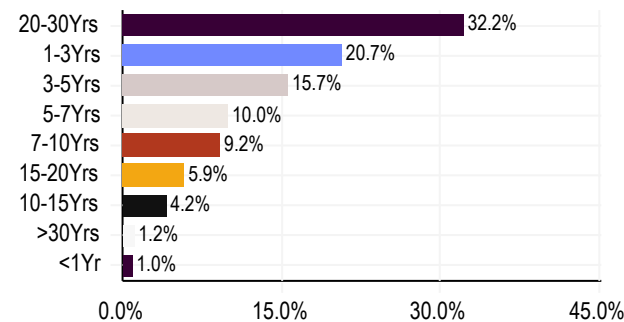
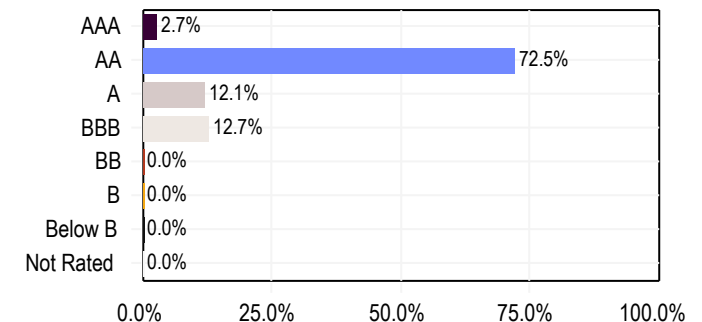
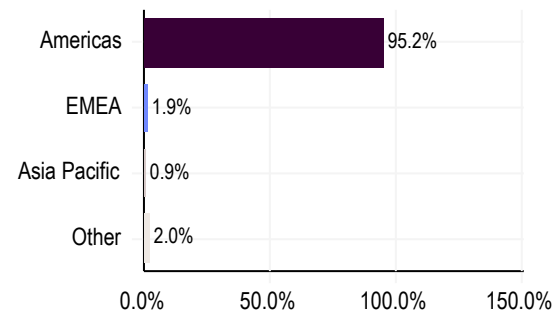
Portfolio Assets : \$116,890 Million
 Portfolio Manager : Mauro,J/Uyehara,K
 PM Tenure : 12 Years 11 Months
 Fund Style : Intermediate Core Bond
 Style Benchmark : Bloomberg U.S. Aggregate

Fund Characteristics

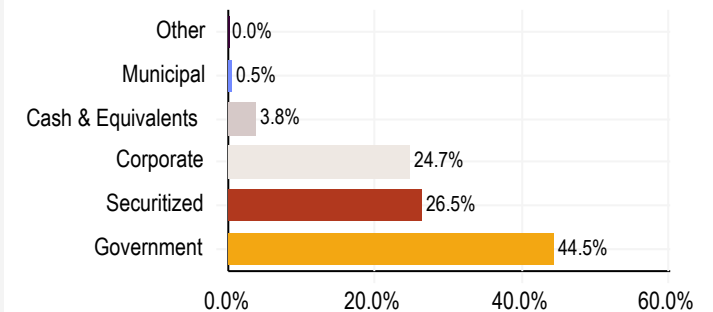
Avg. Coupon 3.44 %
 Avg. Effective Maturity 8.5 Years
 Avg. Effective Duration 5.98 Years
 Avg. Credit Quality A
 Yield To Maturity 5.01 %
 SEC Yield 4.66 %

Fund Investment Policy

The investment seeks to track the investment results of the Bloomberg U.S. Aggregate Bond Index.

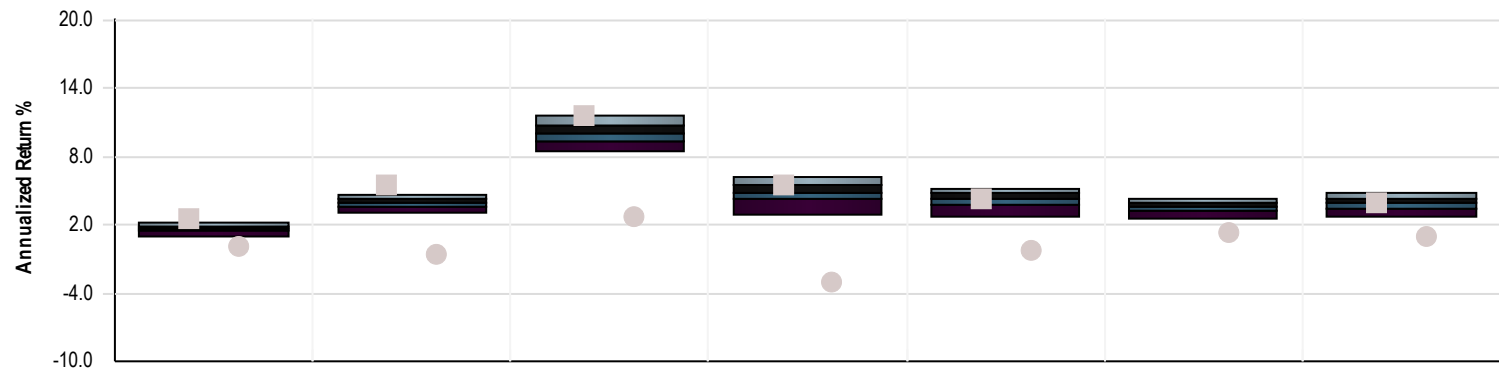
Asset Allocation As of 06/30/2024**Maturity Distribution As of 06/27/2024****Quality Allocation As of 06/30/2024****Regional Allocation As of 06/27/2024****Top Ten Securities As of 06/27/2024**

BlackRock Cash Funds Instl SL	3.9 %
United States Treasury Notes 4.5%	0.6 %
United States Treasury Notes 0.375%	0.5 %
United States Treasury Notes 3.875%	0.5 %
United States Treasury Notes 4%	0.4 %
United States Treasury Notes 3.375%	0.4 %
United States Treasury Notes 2.875%	0.4 %
United States Treasury Notes 0.75%	0.4 %
Fnma Pass-Thru I 2%	0.4 %
Fnma Pass-Thru I 2%	0.4 %
Total	7.9 %

Fixed Income Sector Allocation As of 06/27/2024

GoldenTree High Grade Floating Rate Fund, Ltd.

GoldenTree High Grade Floating Rate Fund, Ltd. vs. Bank Loan as of June 30, 2024

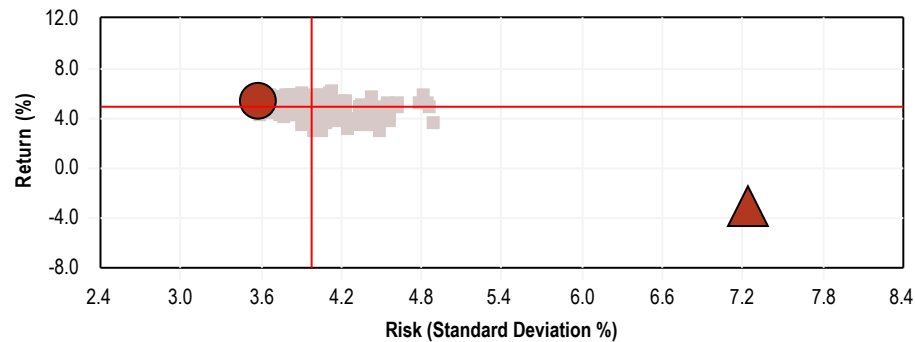


■ GoldenTree High Grade Floating Rate Fund, Ltd.
● Blmbg. U.S. Aggregate Float Adjusted

	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
GoldenTree High Grade Floating Rate Fund, Ltd.	2.6 (1)	5.5 (1)	11.6 (5)	5.5 (27)	4.3 (49)	-	3.9 (49)
Blmbg. U.S. Aggregate Float Adjusted	0.1 (100)	-0.6 (100)	2.7 (100)	-3.0 (100)	-0.2 (100)	1.4 (100)	1.0 (100)

Median	1.6	3.9	10.0	4.9	4.3	3.7	3.9
--------	-----	-----	------	-----	-----	-----	-----

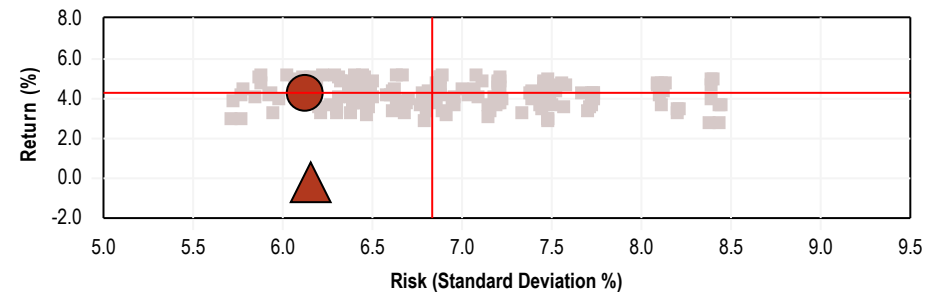
3 Years



● GoldenTree High Grade Floating Rate Fund, Ltd. ▲ Blmbg. U.S. Aggregate Float Adjusted

Alpha	6.1
Information Ratio	1.2
Tracking Error	6.6
Sharpe Ratio	0.7

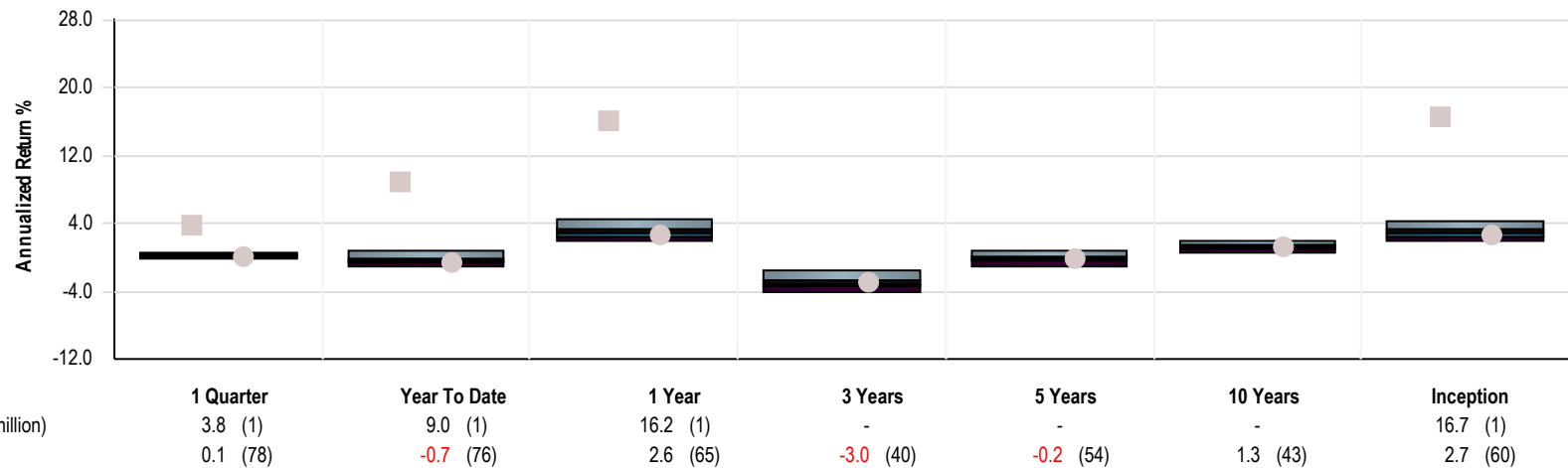
5 Years



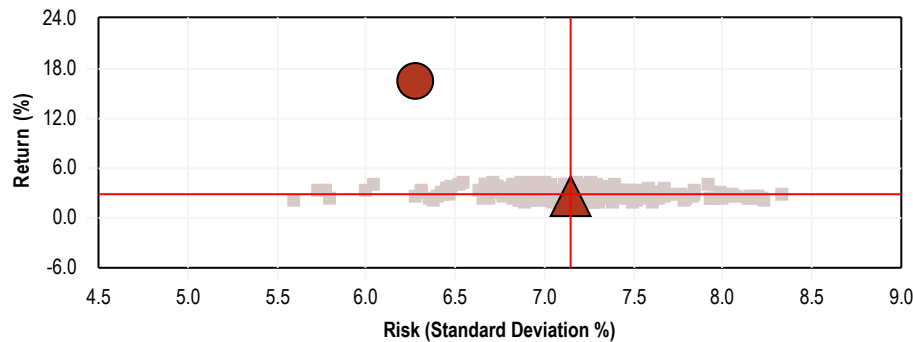
● GoldenTree High Grade Floating Rate Fund, Ltd.
▲ Blmbg. U.S. Aggregate Float Adjusted

Alpha	4.5
Information Ratio	0.6
Tracking Error	7.5
Sharpe Ratio	0.4

Parentheses contain percentile rankings.
 Calculation based on monthly periodicity.

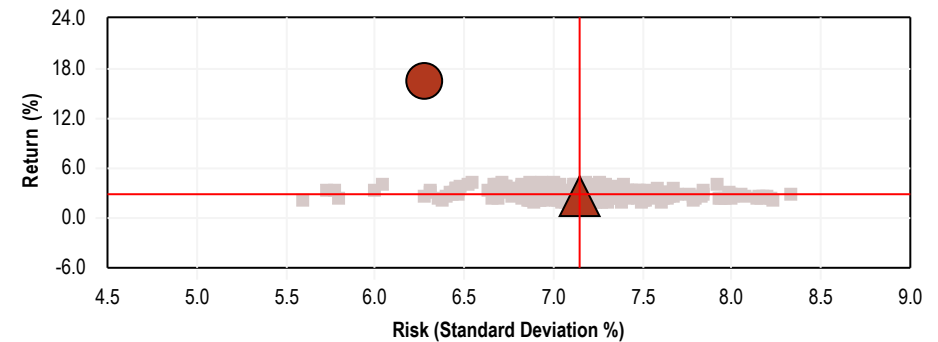
Golub Capital BDC 4, Inc.(\$22 million)**Golub Capital BDC 4, Inc.(\$22 million) vs. Intermediate Core Bond as of June 30, 2024**

Median	0.2	-0.5	2.9	-3.1	-0.2	1.3	2.9
--------	-----	------	-----	------	------	-----	-----

1.58 Years

● Golub Capital BDC 4, Inc.(\$22 million) ▲ Blmbg. U.S. Aggregate

Alpha	16.4
Information Ratio	1.5
Tracking Error	8.7
Sharpe Ratio	1.7

1.58 Years

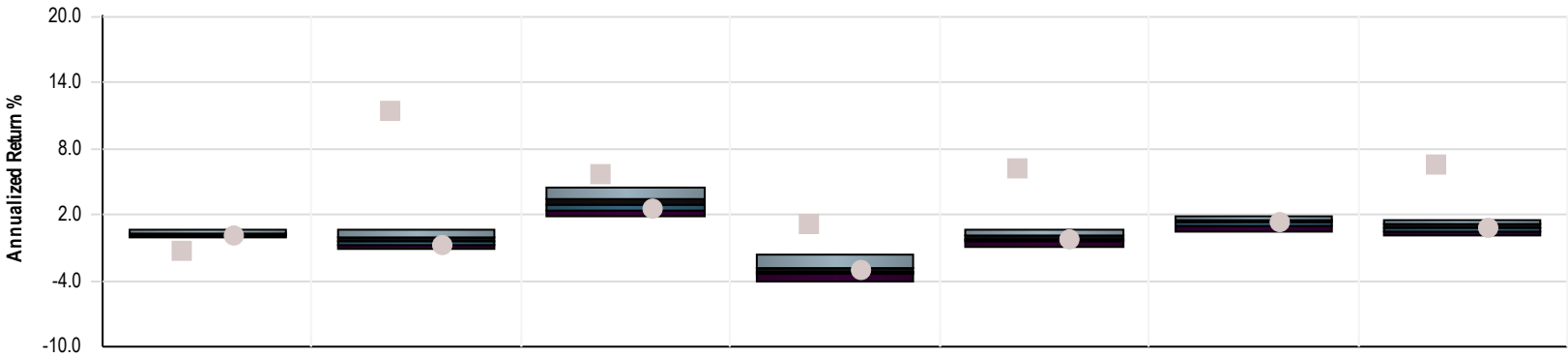
● Golub Capital BDC 4, Inc.(\$22 million) ▲ Blmbg. U.S. Aggregate

Alpha	16.4
Information Ratio	1.5
Tracking Error	8.7
Sharpe Ratio	1.7

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

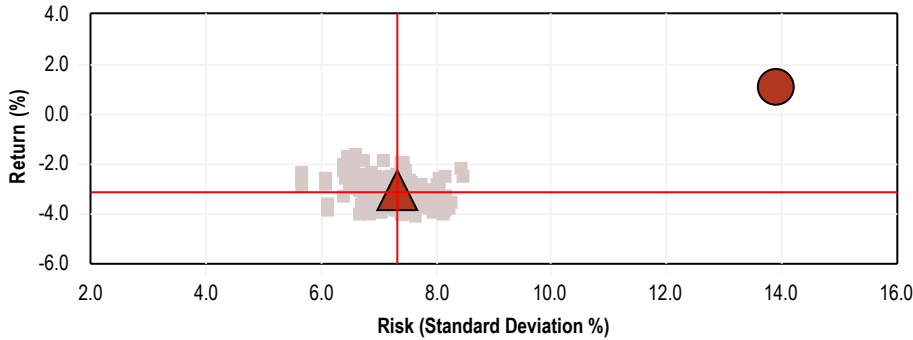
EnTrust Structured Income II-A

EnTrust Structured Income II-A vs. Intermediate Core Bond as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
EnTrust Structured Income II-A	-1.2 (100)	11.4 (1)	5.7 (2)	1.1 (1)	6.3 (1)	-	6.5 (1)
Blmbg. U.S. Aggregate	0.1 (78)	-0.7 (76)	2.6 (65)	-3.0 (40)	-0.2 (54)	1.3 (43)	0.9 (47)
Median	0.2	-0.5	2.9	-3.1	-0.2	1.3	0.8

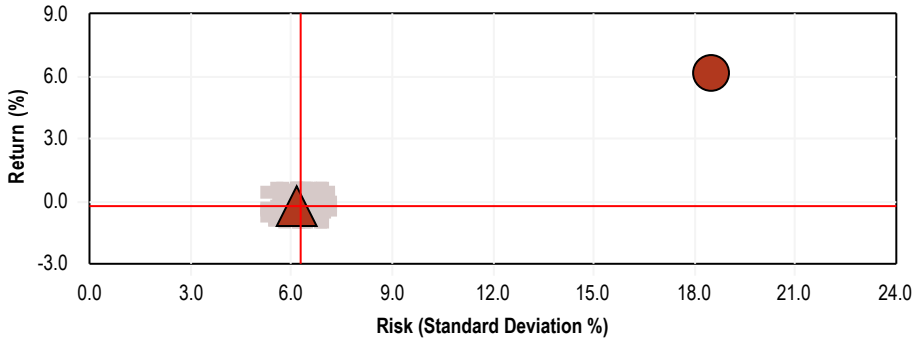
3 Years



● EnTrust Structured Income II-A ▲ Blmbg. U.S. Aggregate

Alpha	2.1
Information Ratio	0.3
Tracking Error	15.6
Sharpe Ratio	-0.1

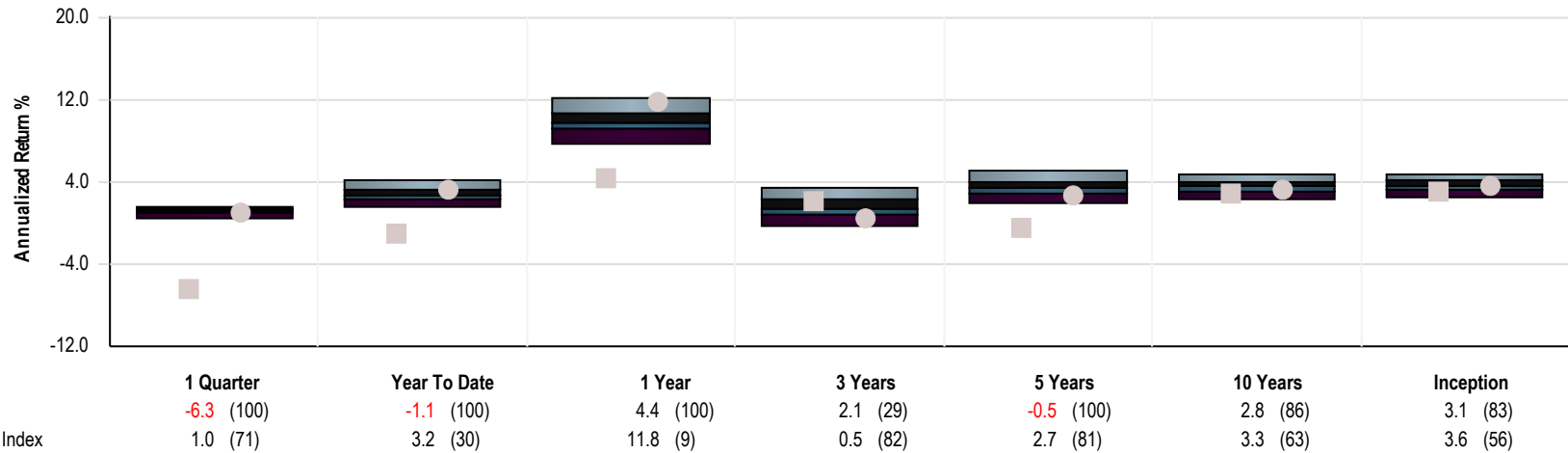
5 Years



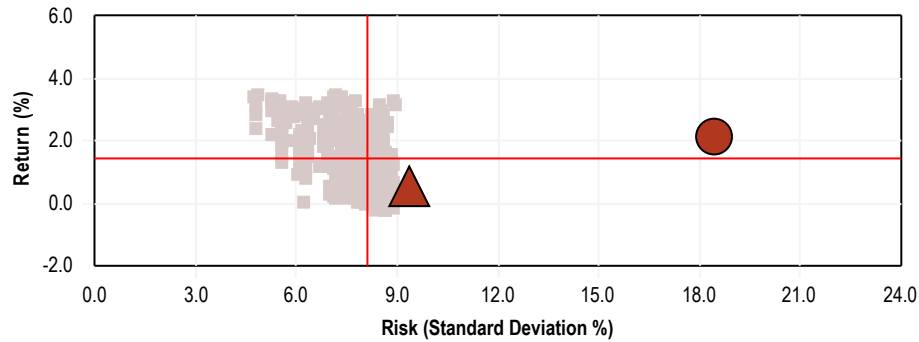
● EnTrust Structured Income II-A ▲ Blmbg. U.S. Aggregate

Alpha	8.2
Information Ratio	0.4
Tracking Error	19.4
Sharpe Ratio	0.3

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

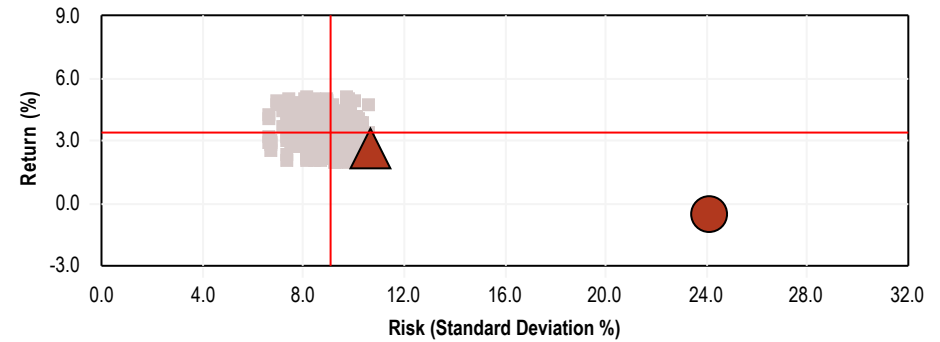
Prytania Athena Fund vs. High Yield Bond as of June 30, 2024

Median	1.2	2.7	9.8	1.5	3.4	3.6	3.7
--------	-----	-----	-----	-----	-----	-----	-----

3 Years

● Prytania Athena Fund ▲ Blmbg. Global High Yield Index

Alpha	3.0
Information Ratio	0.2
Tracking Error	16.8
Sharpe Ratio	0.0

5 Years

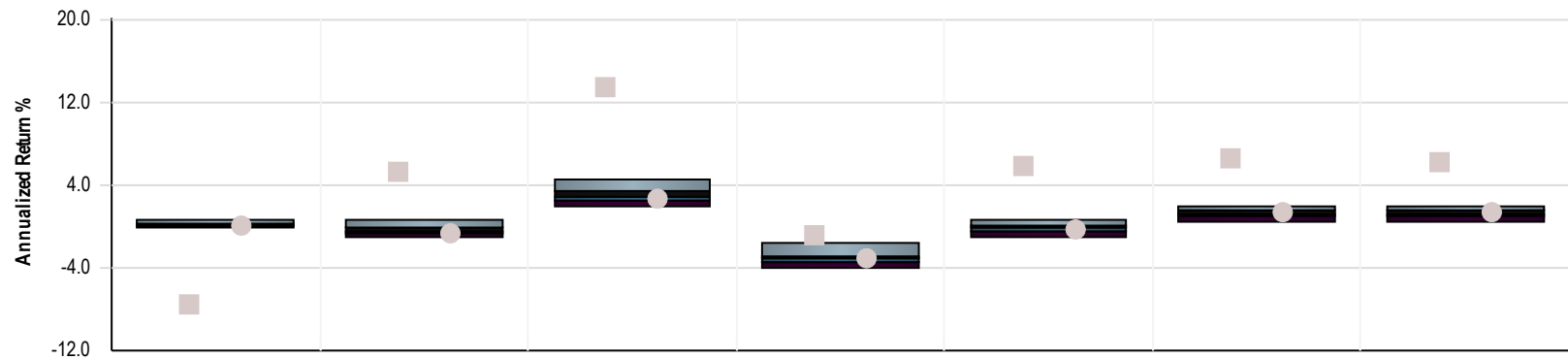
● Prytania Athena Fund ▲ Blmbg. Global High Yield Index

Alpha	-2.1
Information Ratio	0.0
Tracking Error	18.3
Sharpe Ratio	0.0

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

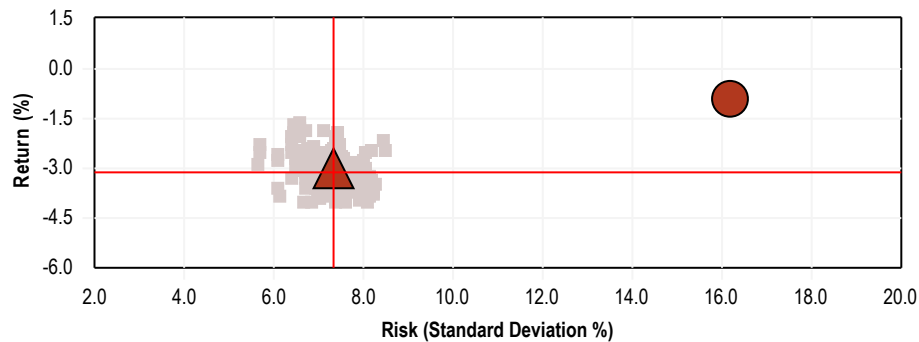
EnTrust Structured Income Fund

EnTrust Structured Income Fund vs. Intermediate Core Bond as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
EnTrust Structured Income Fund	-7.5 (100)	5.3 (1)	13.4 (1)	-0.9 (2)	5.9 (1)	6.6 (1)	6.2 (1)
Blmbg. U.S. Aggregate	0.1 (78)	-0.7 (76)	2.6 (65)	-3.0 (40)	-0.2 (54)	1.3 (43)	1.4 (43)
Median	0.2	-0.5	2.9	-3.1	-0.2	1.3	1.3

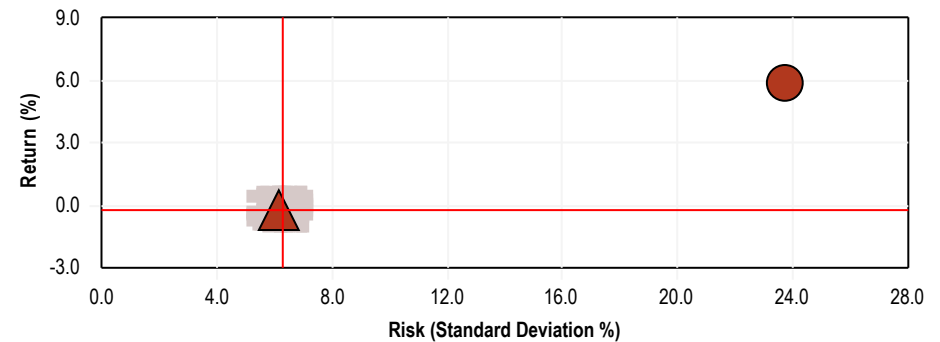
3 Years



● EnTrust Structured Income Fund ▲ Blmbg. U.S. Aggregate

Alpha	-0.2
Information Ratio	0.2
Tracking Error	18.4
Sharpe Ratio	-0.2

5 Years



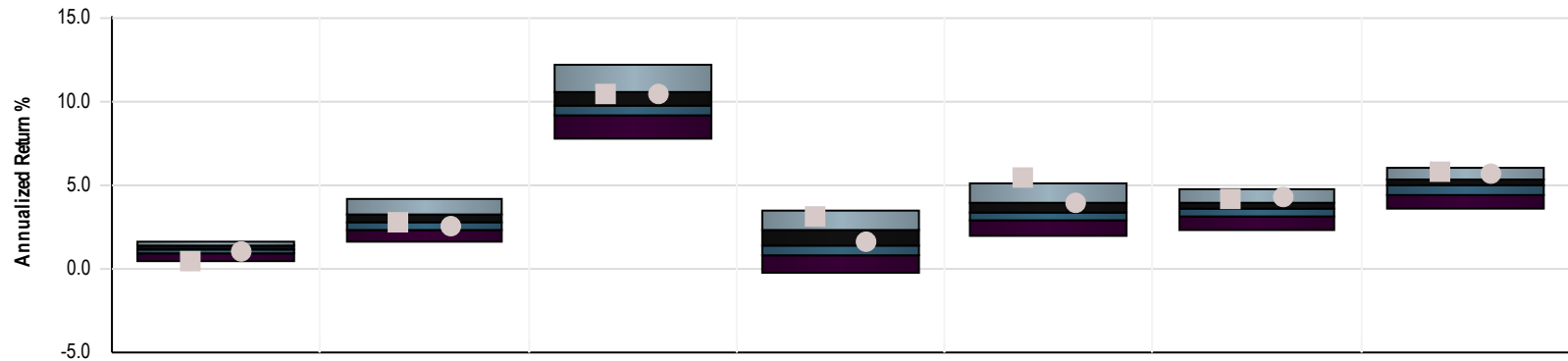
● EnTrust Structured Income Fund ▲ Blmbg. U.S. Aggregate

Alpha	9.0
Information Ratio	0.4
Tracking Error	24.5
Sharpe Ratio	0.3

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

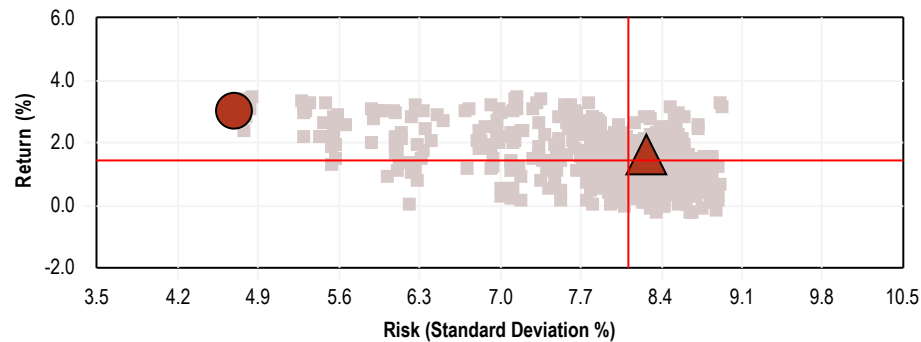
Beach Point TR Offshore Fund II

Beach Point TR Offshore Fund II vs. High Yield Bond as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
Beach Point TR Offshore Fund II	0.5 (95)	2.8 (47)	10.5 (28)	3.1 (11)	5.5 (4)	4.2 (15)	5.8 (11)
Blmbg. U.S. Corp: High Yield Index	1.1 (64)	2.6 (59)	10.4 (30)	1.6 (42)	3.9 (27)	4.3 (12)	5.7 (12)
Median	1.2	2.7	9.8	1.5	3.4	3.6	5.0

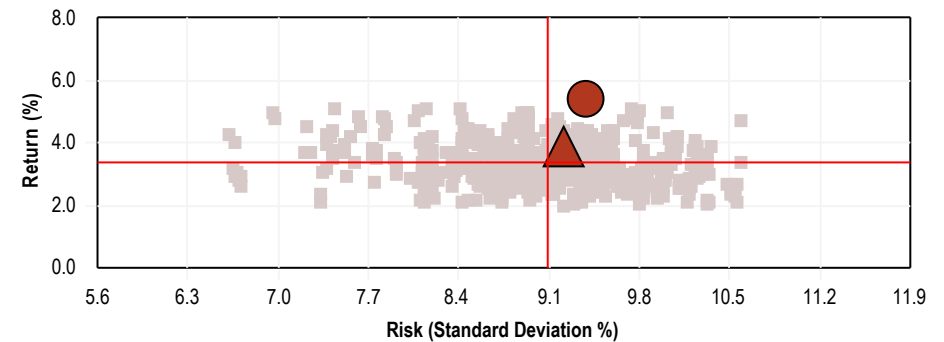
3 Years



Beach Point TR Offshore Fund II Blmbg. U.S. Corp: High Yield Index

Alpha	2.2
Information Ratio	0.2
Tracking Error	4.9
Sharpe Ratio	0.0

5 Years



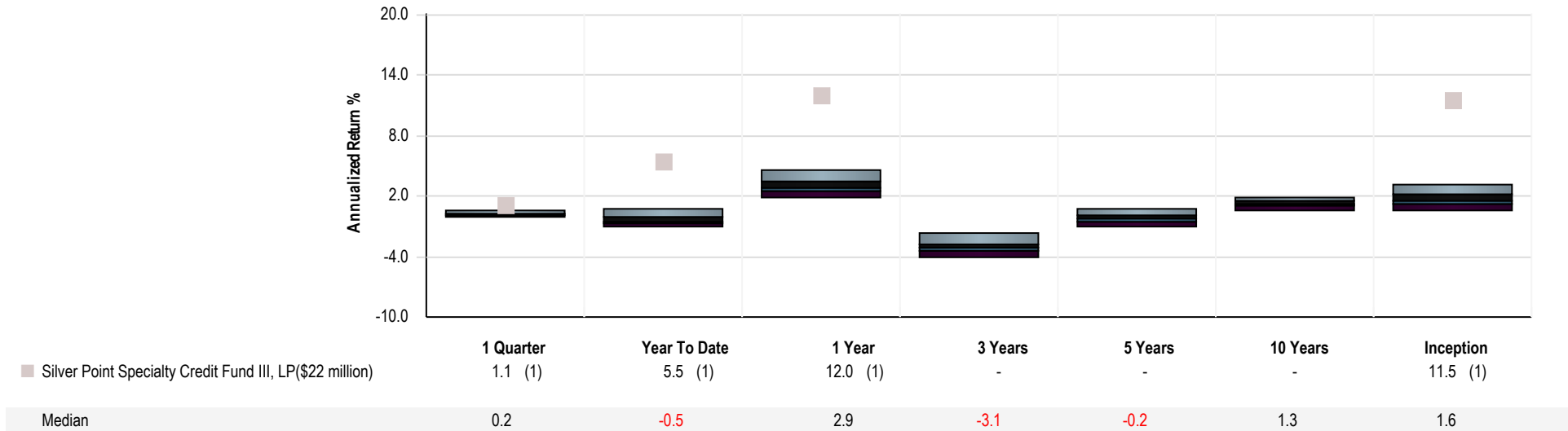
Beach Point TR Offshore Fund II Blmbg. U.S. Corp: High Yield Index

Alpha	2.1
Information Ratio	0.3
Tracking Error	5.1
Sharpe Ratio	0.4

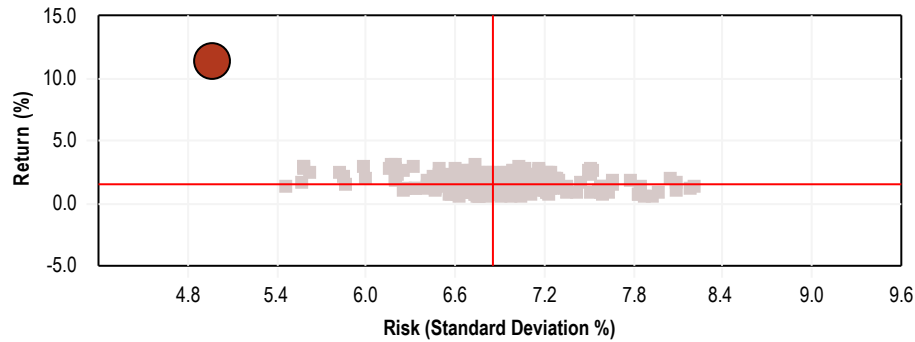
Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Silver Point Specialty Credit Fund III, LP(\$22 million)

Silver Point Specialty Credit Fund III, LP(\$22 million) vs. Intermediate Core Bond as of June 30, 2024



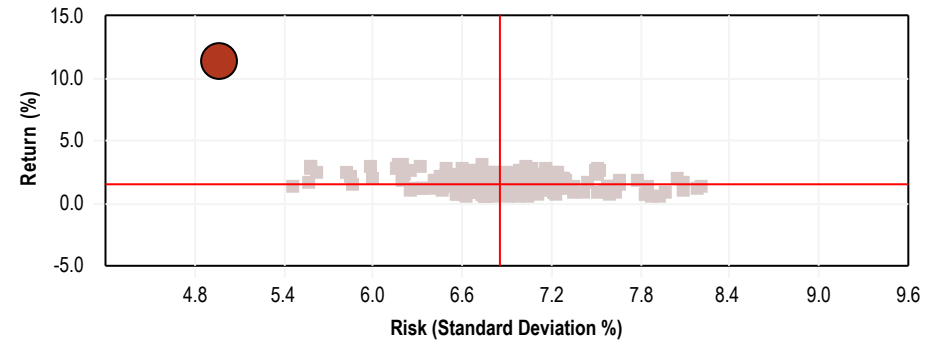
1.25 Years



● Silver Point Specialty Credit Fund III, LP(\$22 million)

Alpha	11.2
Information Ratio	0.8
Tracking Error	8.7
Sharpe Ratio	1.2

1.25 Years



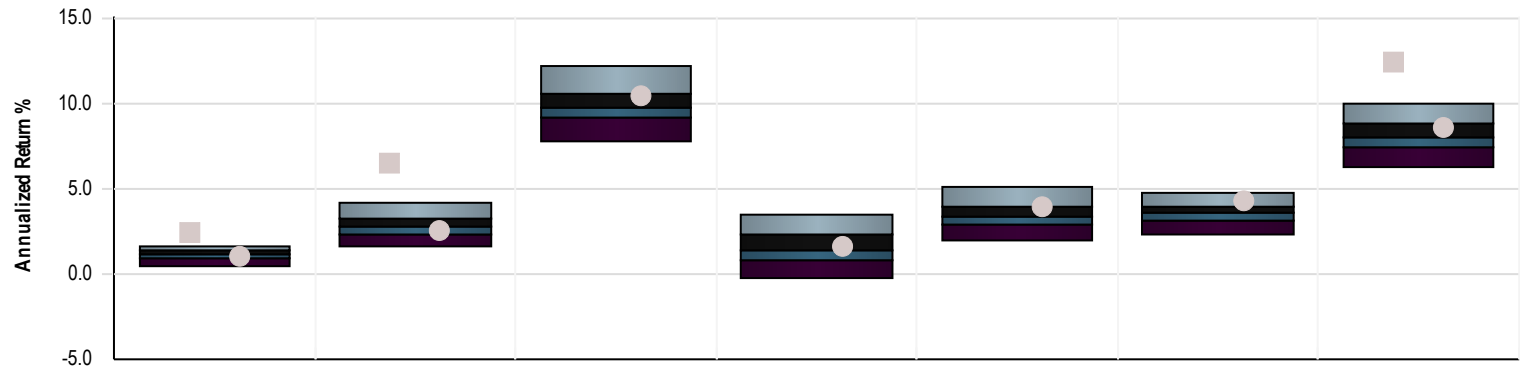
● Silver Point Specialty Credit Fund III, LP(\$22 million)

Alpha	11.2
Information Ratio	0.8
Tracking Error	8.7
Sharpe Ratio	1.2

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

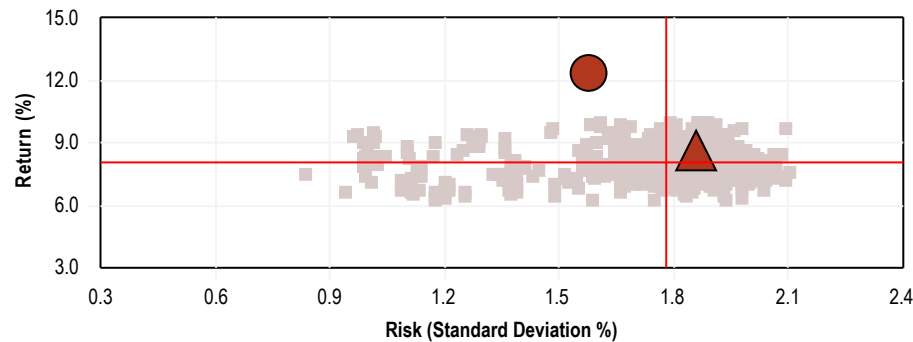
GWC Select Opportunities SPC1(\$2.6 million)

GWC Select Opportunities SPC1(\$2.6 million) vs. High Yield Bond as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
GWC Select Opportunities SPC1(\$2.6 million)	2.5 (1)	6.5 (1)	-	-	-	-	12.4 (1)
Blmbg. U.S. Corp: High Yield Index	1.1 (64)	2.6 (59)	10.4 (30)	1.6 (42)	3.9 (27)	4.3 (12)	8.6 (29)
Median	1.2	2.7	9.8	1.5	3.4	3.6	8.1

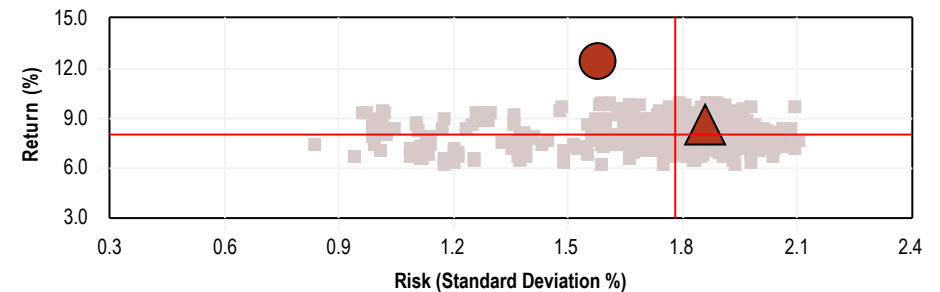
0.83 Year



● GWC Select Opportunities SPC1(\$2.6 million)
▲ Blmbg. U.S. Corp: High Yield Index

Alpha	1.0
Information Ratio	0.2
Tracking Error	2.0
Sharpe Ratio	0.5

0.83 Year



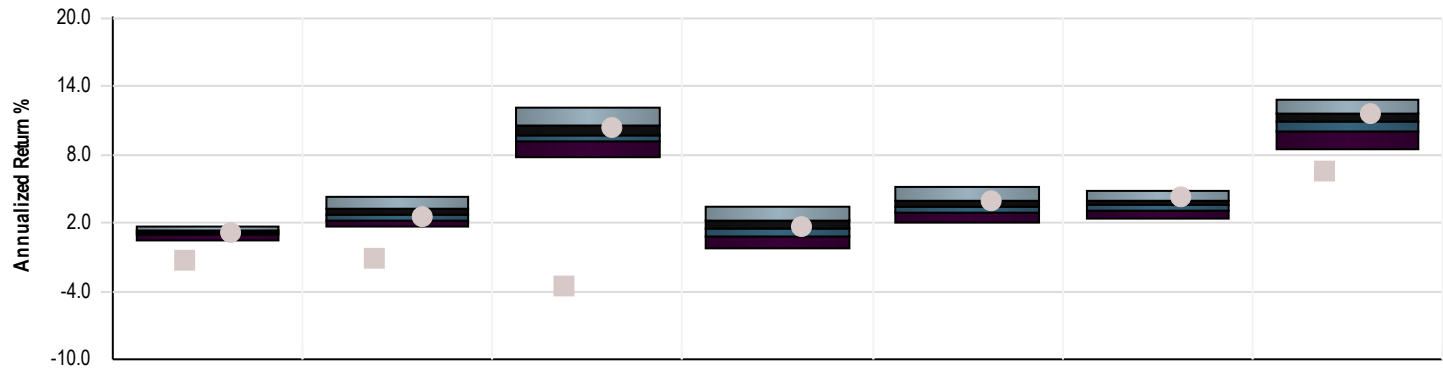
● GWC Select Opportunities SPC1(\$2.6 million)
▲ Blmbg. U.S. Corp: High Yield Index

Alpha	1.0
Information Ratio	0.2
Tracking Error	2.0
Sharpe Ratio	0.5

Parentheses contain percentile rankings.
 Calculation based on monthly periodicity.

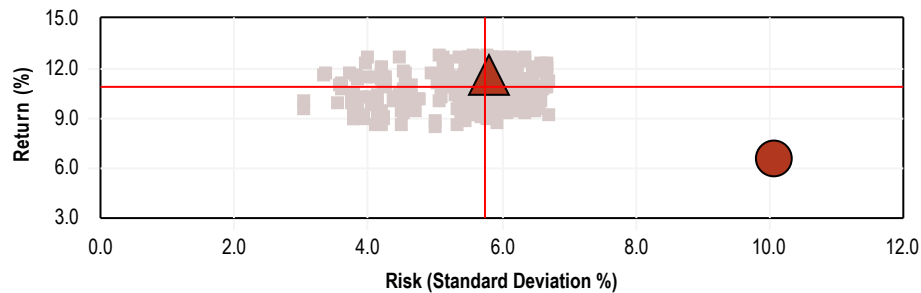
Greywolf Opportunities Offshore Fund II, LP(\$24 million)

Greywolf Opportunities Offshore Fund II, LP(\$24 million) vs. High Yield Bond as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
Greywolf Opportunities Offshore Fund II, LP(\$24 million)	-1.2 (100)	-1.0 (100)	-3.5 (100)	-	-	-	6.6 (99)
Blmbg. U.S. Corp: High Yield Index	1.1 (64)	2.6 (59)	10.4 (30)	1.6 (42)	3.9 (27)	4.3 (12)	11.6 (26)
Median	1.2	2.7	9.8	1.5	3.4	3.6	10.9

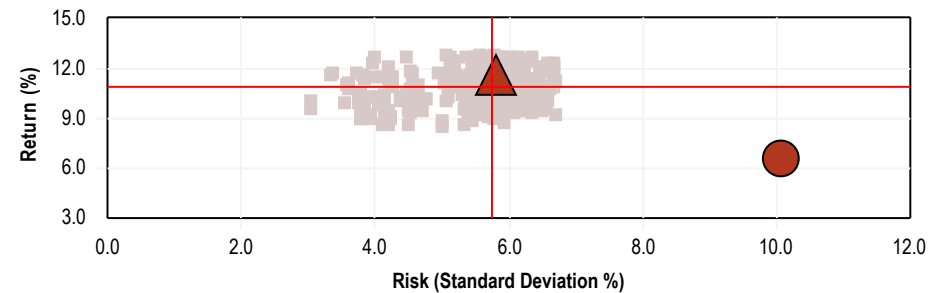
1.75 Years



● Greywolf Opportunities Offshore Fund II, LP(\$24 million)
▲ Blmbg. U.S. Corp: High Yield Index

Alpha	5.3
Information Ratio	-0.4
Tracking Error	11.2
Sharpe Ratio	0.2

1.75 Years



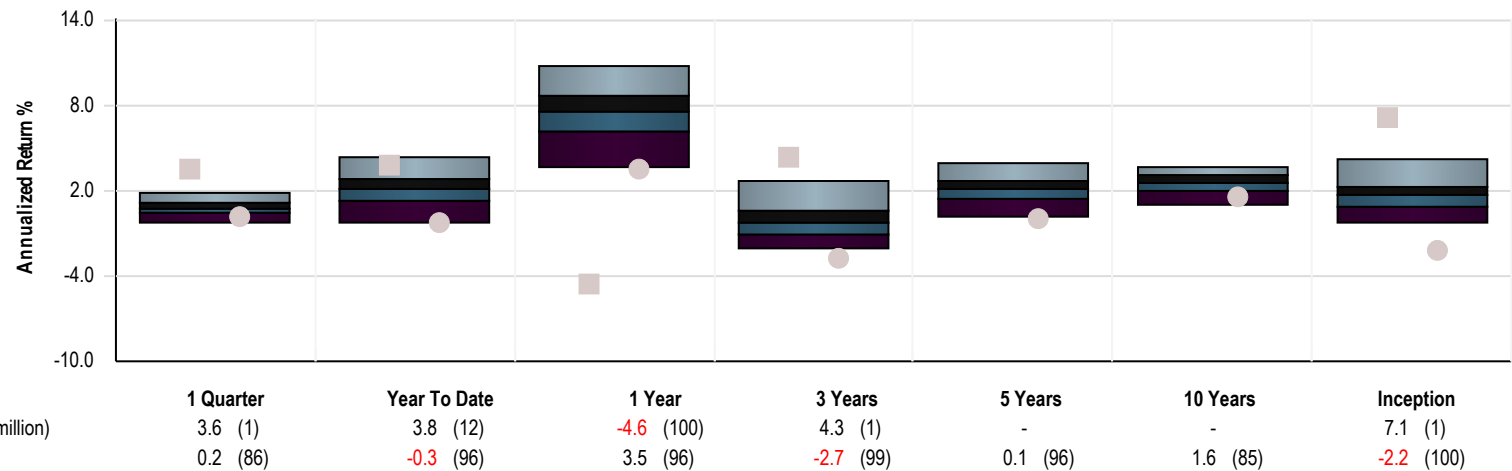
● Greywolf Opportunities Offshore Fund II, LP(\$24 million)
▲ Blmbg. U.S. Corp: High Yield Index

Alpha	5.3
Information Ratio	-0.4
Tracking Error	11.2
Sharpe Ratio	0.2

Parentheses contain percentile rankings.
 Calculation based on monthly periodicity.

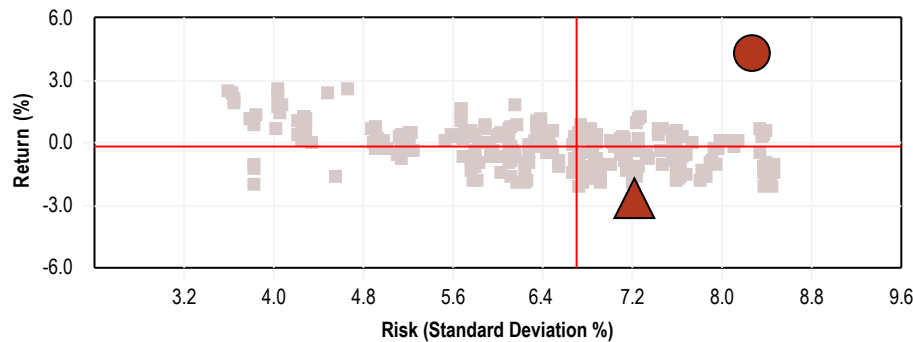
Greywolf Distressed Opp Fund, LP(\$17 million)

Greywolf Distressed Opp Fund, LP(\$17 million) vs. Multisector Bond as of June 30, 2024



Median	0.8	2.1	7.5	-0.2	2.1	2.6	1.7
--------	-----	-----	-----	------	-----	-----	-----

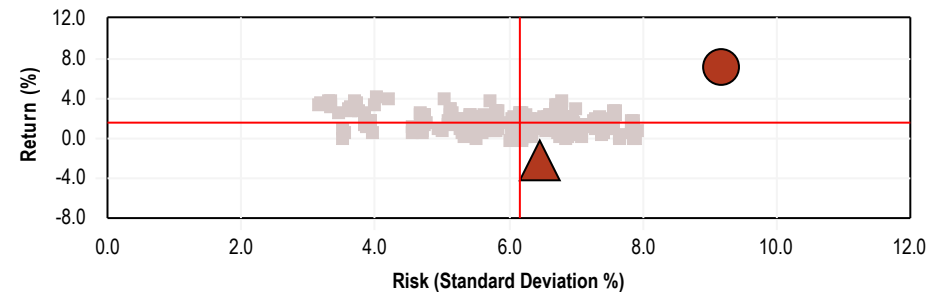
3 Years



● Greywolf Distressed Opp Fund, LP(\$17 million) ▲ Blmbg. U.S. Universal Index

Alpha	4.1
Information Ratio	0.6
Tracking Error	12.0
Sharpe Ratio	0.2

3.92 Years



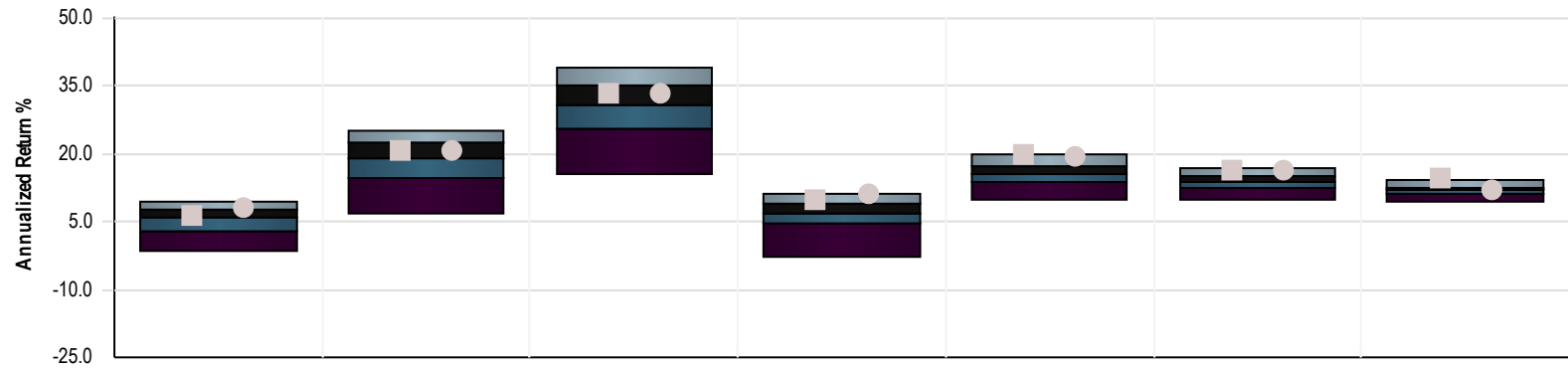
● Greywolf Distressed Opp Fund, LP(\$17 million)
▲ Blmbg. U.S. Universal Index

Alpha	7.0
Information Ratio	0.8
Tracking Error	12.1
Sharpe Ratio	0.5

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

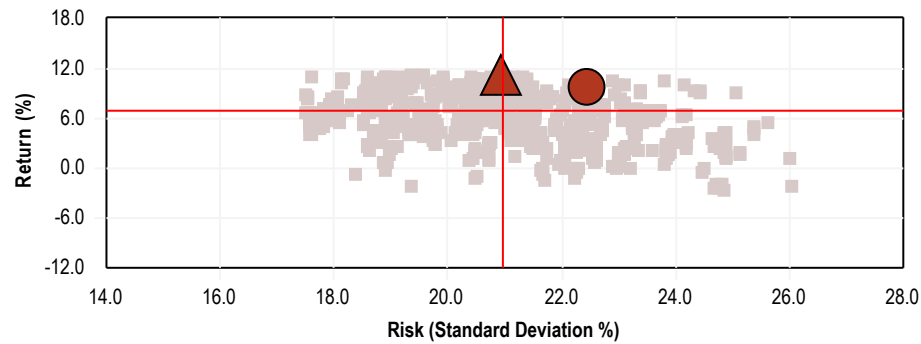
Neuberger Berman Large Cap Growth

Neuberger Berman Large Cap Growth vs. Large Growth as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
Neuberger Berman Large Cap Growth	6.4 (44)	20.9 (36)	33.3 (36)	9.9 (17)	19.8 (6)	16.6 (6)	14.7 (1)
Russell 1000 Growth Index	8.3 (14)	20.7 (37)	33.5 (34)	11.3 (5)	19.3 (7)	16.3 (7)	12.2 (45)
Median	5.8	19.0	30.8	7.0	15.6	13.9	12.0

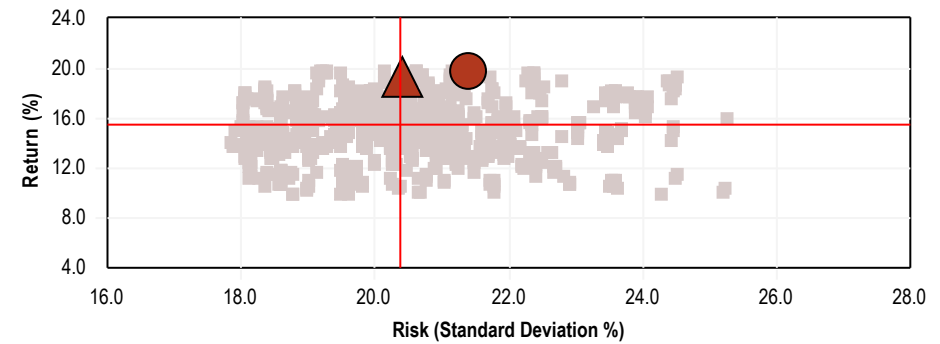
3 Years



● Neuberger Berman Large Cap Growth ▲ Russell 1000 Growth Index

Alpha	-1.7
Information Ratio	-0.3
Tracking Error	3.3
Sharpe Ratio	0.4

5 Years



● Neuberger Berman Large Cap Growth ▲ Russell 1000 Growth Index

Alpha	0.0
Information Ratio	0.2
Tracking Error	3.8
Sharpe Ratio	0.9

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Neuberger Berman Large Cap Growth

Characteristics

	Portfolio
Wtd. Avg. Mkt. Cap \$	1,413,804,444,230
Median Mkt. Cap \$	117,110,547,290
Price/Earnings ratio	39.8
Price/Book ratio	9.4
5 Yr. EPS Growth Rate (%)	24.2
Current Yield (%)	0.4
Beta	-
Number of Stocks	39

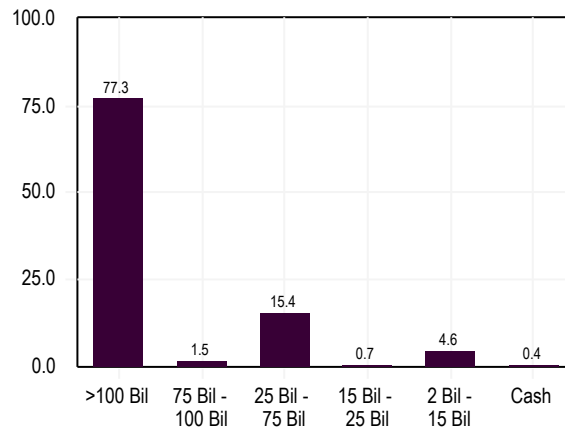
Top Ten Equity Holdings

	Portfolio	Return
NVIDIA Corporation	10.8	36.7
Microsoft Corp	10.3	6.4
Apple Inc	9.0	23.0
Amazon.com Inc	7.9	7.1
Meta Platforms Inc	5.5	3.9
Alphabet Inc	4.2	20.8
Eli Lilly and Co	3.2	16.6
Visa Inc	2.7	-5.8
Uber Technologies Inc	2.5	-5.6
Vertex Pharmaceuticals Inc	2.1	12.1
% of Portfolio	58.2	

Sector Weight & Qtrly Return

Sector	Weight	Returns
Communication Services	12.1	11.8
Consumer Discretionary	10.1	3.4
Consumer Staples	1.9	16.2
Energy	1.3	-0.9
Financials	6.3	-4.8
Health Care	13.8	5.4
Industrials	10.1	-6.5
Information Technology	41.3	12.7

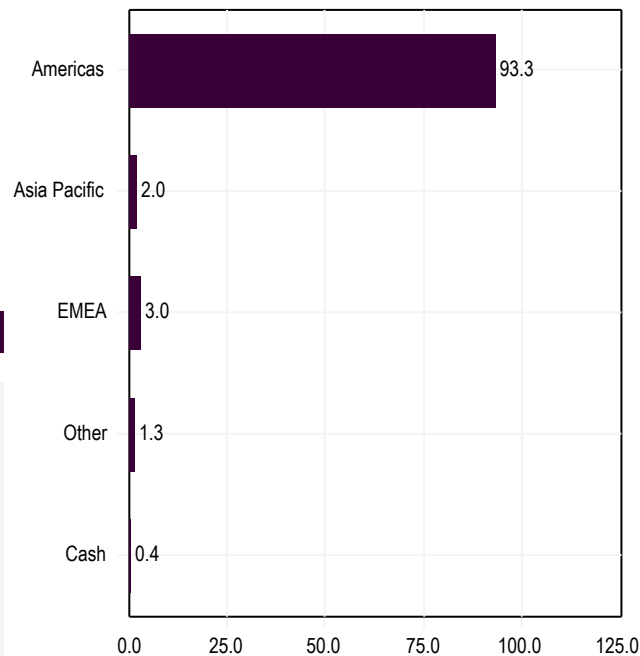
Distribution of Market Capitalization



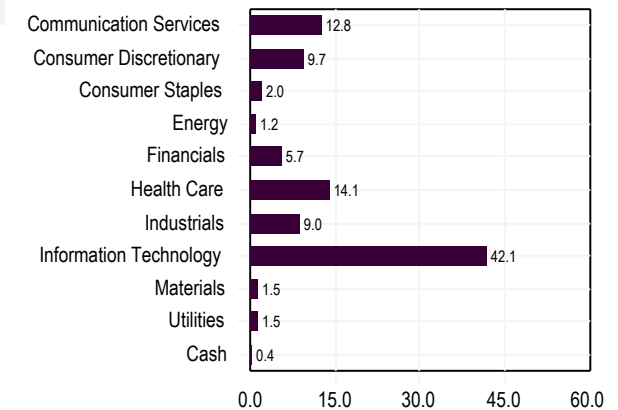
Top Ten Contributors

	Portfolio	Return	Contribution
NVIDIA Corporation	8.4	36.7	3.1
Apple Inc	5.9	23.0	1.4
Alphabet Inc	3.7	20.8	0.8
Microsoft Corp	10.3	6.4	0.7
Amazon.com Inc	7.9	7.1	0.6
Eli Lilly and Co	3.0	16.6	0.5
Alphabet Inc	1.5	20.6	0.3
Costco Wholesale Corp	1.9	16.2	0.3
Vertex Pharmaceuticals Inc	2.0	12.1	0.2
Meta Platforms Inc	5.7	3.9	0.2

Region Allocation



Sector Weights

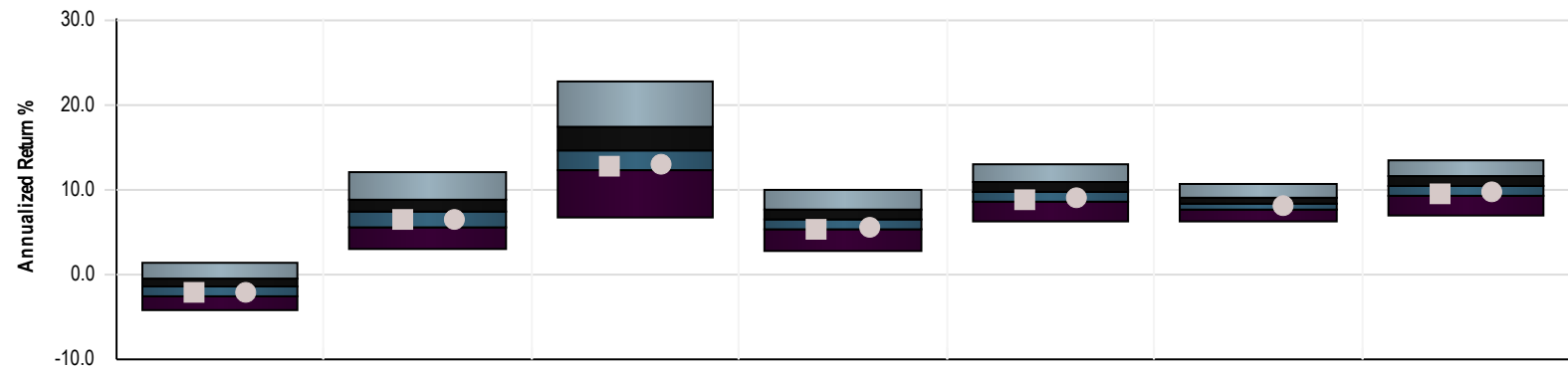


Top Ten Detractors

	Portfolio	Return	Contribution
WillScot Holdings Corporation	2.3	-19.1	-0.4
MongoDB Inc	1.1	-30.3	-0.3
Advanced Micro Devices Inc	2.6	-10.1	-0.3
DexCom Inc	1.3	-18.3	-0.2
Visa Inc	3.0	-5.8	-0.2
Keysight Technologies Inc	1.4	-12.6	-0.2
Aon plc	1.4	-11.8	-0.2
Uber Technologies Inc	2.8	-5.6	-0.2
CSX Corp	1.4	-9.4	-0.1
Tapestry Inc	1.2	-9.2	-0.1

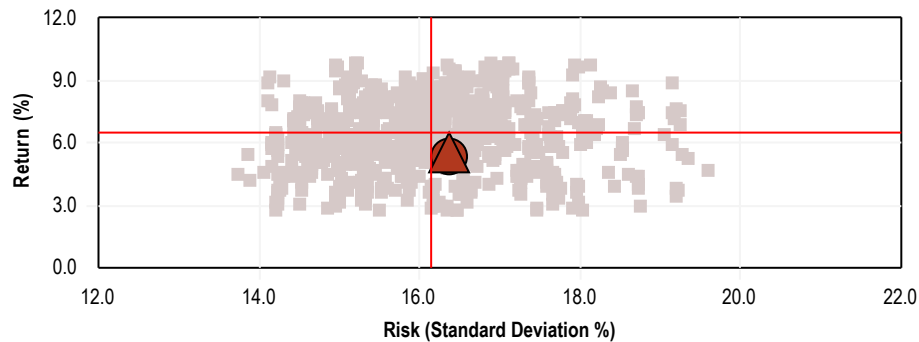
iShares Russell 1000 Value ETF(IWD)

iShares Russell 1000 Value ETF(IWD) vs. Large Value as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
iShares Russell 1000 Value ETF(IWD)	-2.2 (69)	6.5 (65)	12.9 (69)	5.3 (76)	8.8 (71)	-	9.6 (68)
Russell 1000 Value Index	-2.2 (68)	6.6 (62)	13.1 (66)	5.5 (74)	9.0 (67)	8.2 (55)	9.8 (63)
Median	-1.5	7.3	14.6	6.5	9.7	8.4	10.4

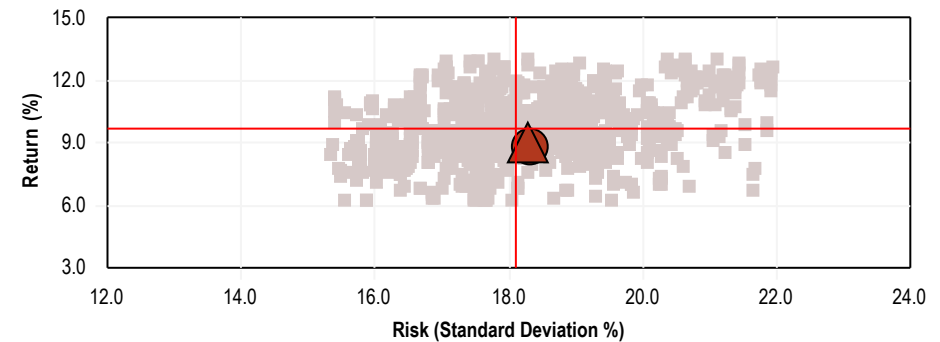
3 Years



● iShares Russell 1000 Value ETF(IWD) ▲ Russell 1000 Value Index

Alpha	-0.2
Information Ratio	-0.8
Tracking Error	0.2
Sharpe Ratio	0.2

5 Years



● iShares Russell 1000 Value ETF(IWD) ▲ Russell 1000 Value Index

Alpha	-0.2
Information Ratio	-0.4
Tracking Error	0.3
Sharpe Ratio	0.4

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

iShares Russell 1000 Value ETF**Fund Information**

Fund Name : iShares Russell 1000 Value ETF
 Fund Family : iShares
 Ticker : IWD
 Inception Date : 05/22/2000
 Fund Assets : \$59,741 Million
 Portfolio Turnover : 14%

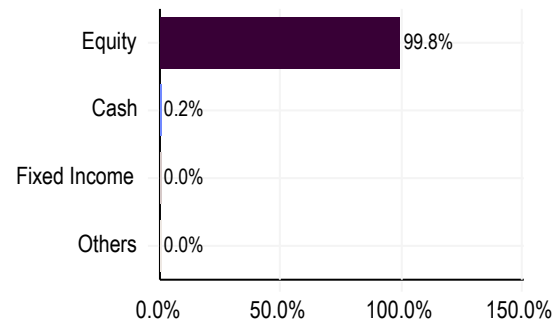
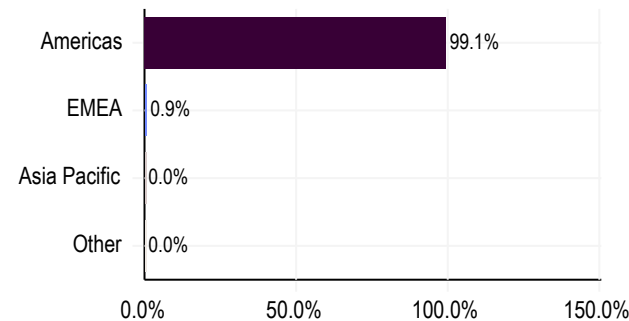
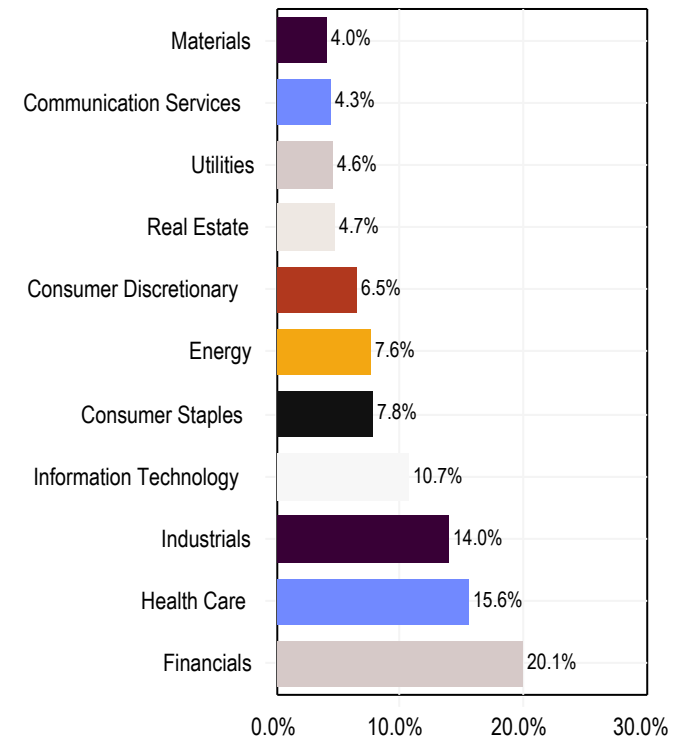
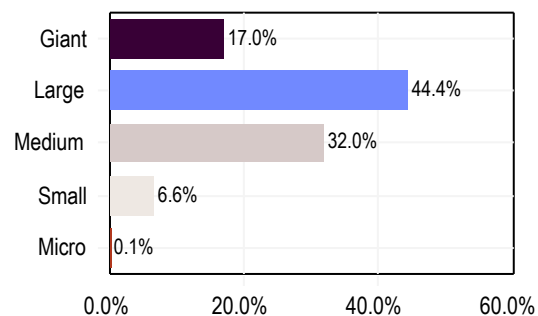
Portfolio Assets : \$59,741 Million
 Portfolio Manager : Hsui,J/Savage,G/Whitehead,P
 PM Tenure : 16 Years 5 Months
 Fund Style : Large Value
 Style Benchmark : Russell 1000 Value Index

Fund Characteristics

Total Securities 876
 Avg. Market Cap \$77,064 Million
 P/E 16.6
 P/B 2.3
 Div. Yield 2.3%

Fund Investment Policy

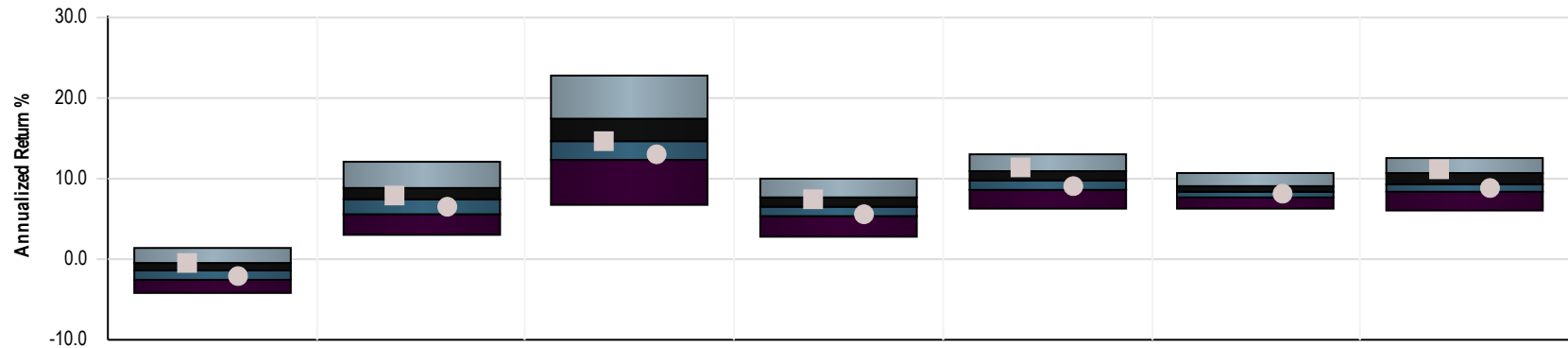
The investment seeks to track the investment results of the Russell 1000® Value Index (the "underlying index"), which measures the performance of large- and mid- capitalization value sectors of the U.S. equity market.

Asset Allocation As of 06/30/2024**Regional Allocation As of 06/28/2024****Equity Sector Allocation As of 06/28/2024****Market Capitalization As of 06/28/2024****Top Ten Securities As of 06/28/2024**

Berkshire Hathaway Inc Class B	3.2 %
JPMorgan Chase & Co	2.5 %
Exxon Mobil Corp	2.2 %
UnitedHealth Group Inc	1.9 %
Johnson & Johnson	1.5 %
Procter & Gamble Co	1.3 %
Walmart Inc	1.3 %
Bank of America Corp	1.2 %
Chevron Corp	1.2 %
Thermo Fisher Scientific Inc	0.9 %
Total	17.1 %

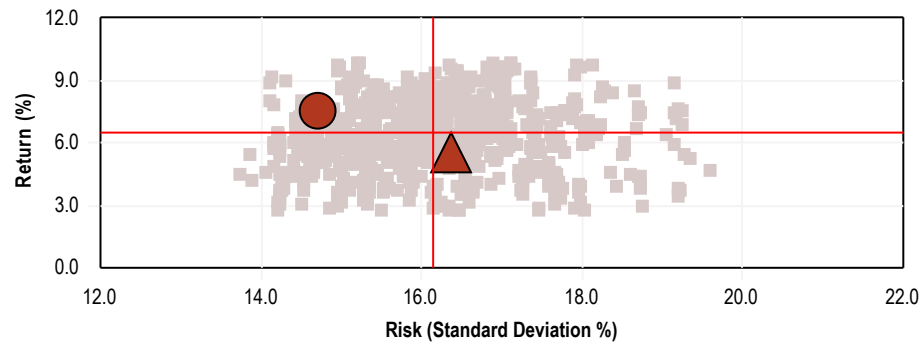
Columbia Dividend Income

Columbia Dividend Income vs. Large Value as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
Columbia Dividend Income	-0.4 (24)	7.9 (42)	14.6 (50)	7.5 (31)	11.4 (22)	-	11.1 (19)
Russell 1000 Value Index	-2.2 (68)	6.6 (62)	13.1 (66)	5.5 (74)	9.0 (67)	8.2 (55)	8.8 (65)
Median	-1.5	7.3	14.6	6.5	9.7	8.4	9.4

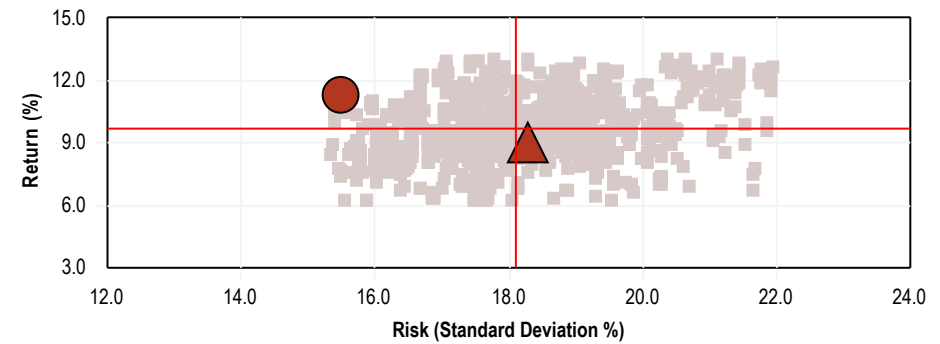
3 Years



● Columbia Dividend Income ▲ Russell 1000 Value Index

Alpha	2.5
Information Ratio	0.4
Tracking Error	4.2
Sharpe Ratio	0.4

5 Years



● Columbia Dividend Income ▲ Russell 1000 Value Index

Alpha	3.5
Information Ratio	0.3
Tracking Error	4.9
Sharpe Ratio	0.6

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Columbia Dividend Income**Characteristics**

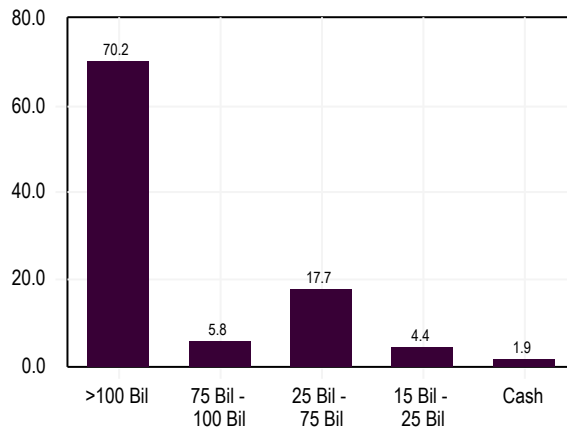
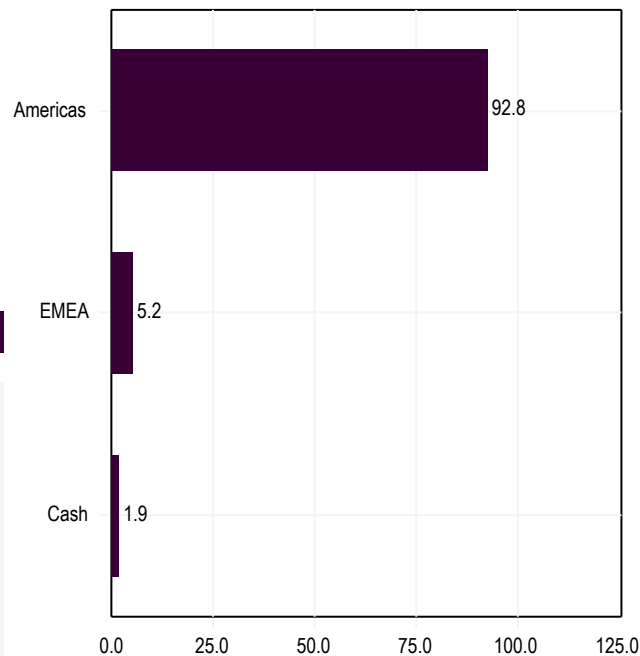
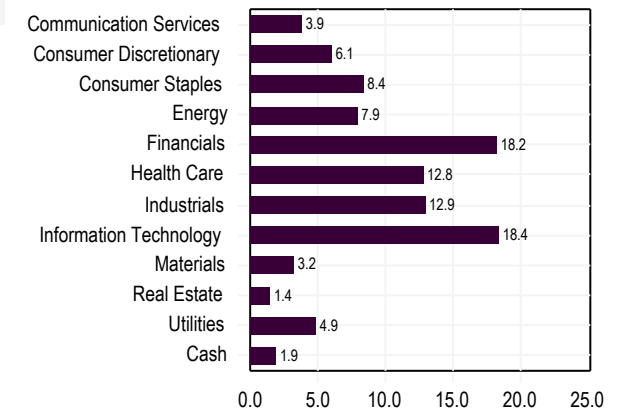
	Portfolio
Wtd. Avg. Mkt. Cap \$	325,766,675,932
Median Mkt. Cap \$	104,052,498,560
Price/Earnings ratio	20.8
Price/Book ratio	3.6
5 Yr. EPS Growth Rate (%)	8.0
Current Yield (%)	2.5
Beta	-
Number of Stocks	80

Top Ten Equity Holdings

	Portfolio	Return
JPMorgan Chase & Co	4.1	1.6
Microsoft Corp	3.6	6.4
Broadcom Inc	2.9	21.5
Exxon Mobil Corp	2.5	-0.2
Walmart Inc	2.3	12.9
Johnson & Johnson	2.3	-6.8
Chevron Corp	2.3	0.2
Procter & Gamble Co (The)	2.2	2.3
Home Depot Inc. (The)	2.2	-9.6
AbbVie Inc	2.2	-4.9
% of Portfolio	26.6	

Sector Weight & Qtrly Return

Sector	Weight	Returns
Communication Services	3.9	-5.5
Consumer Discretionary	5.4	-7.5
Consumer Staples	8.6	2.7
Energy	8.2	-2.3
Financials	18.2	-0.2
Health Care	12.9	-4.1
Industrials	14.0	-2.9
Information Technology	17.5	6.8

Distribution of Market Capitalization**Region Allocation****Sector Weights****Top Ten Contributors**

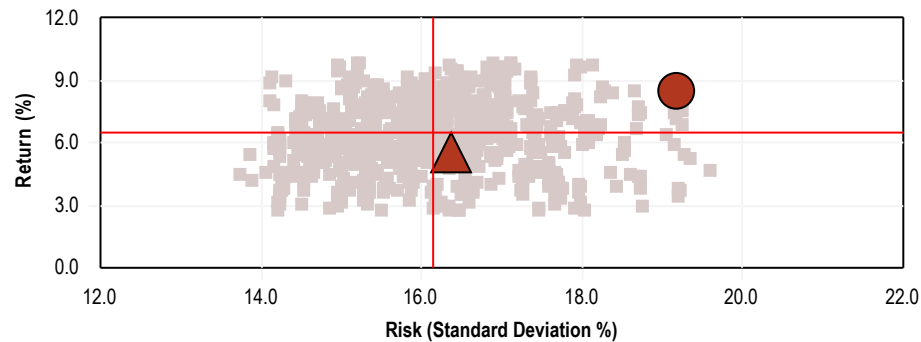
	Portfolio	Return	Contribution
Broadcom Inc	2.4	21.5	0.5
KLA Corp	1.7	18.3	0.3
Walmart Inc	2.1	12.9	0.3
Analog Devices Inc	1.6	15.9	0.3
Microsoft Corp	3.6	6.4	0.2
Lam Research Corp	1.6	9.8	0.2
AT&T Inc	1.3	10.4	0.1
Philip Morris International Inc	0.9	12.0	0.1
Trane Technologies plc	1.0	9.9	0.1
Texas Instruments Inc	0.8	12.5	0.1

Top Ten Detractors

	Portfolio	Return	Contribution
Home Depot Inc. (The)	2.5	-9.6	-0.2
Johnson & Johnson	2.5	-6.8	-0.2
Accenture PLC	1.4	-12.1	-0.2
Comcast Corp	1.8	-9.0	-0.2
Walt Disney Co (The)	0.8	-18.9	-0.2
International Business Machines Corp	1.7	-8.5	-0.1
Union Pacific Corp	2.0	-7.5	-0.1
Parker-Hannifin Corp	1.6	-8.7	-0.1
McDonald's Corp	1.4	-9.0	-0.1
Merck & Co Inc	2.3	-5.6	-0.1

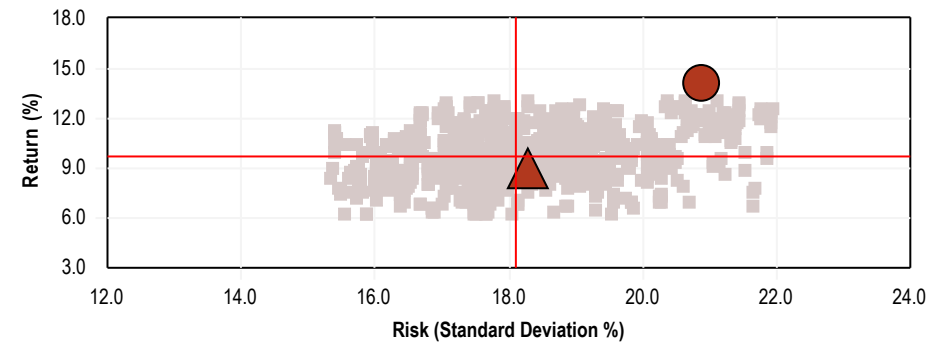
Eagle Equity vs. Large Value as of June 30, 2024

■ Eagle Equity	5.0 (2)	18.5 (1)	31.2 (1)	8.5 (15)	14.2 (3)	-	14.8 (2)
● Russell 1000 Value Index	-2.2 (68)	6.6 (62)	13.1 (66)	5.5 (74)	9.0 (67)	8.2 (55)	9.3 (65)
Median	-1.5	7.3	14.6	6.5	9.7	8.4	10.0

3 Years

● Eagle Equity ▲ Russell 1000 Value Index

Alpha	3.2
Information Ratio	0.4
Tracking Error	9.1
Sharpe Ratio	0.4

5 Years

● Eagle Equity ▲ Russell 1000 Value Index

Alpha	4.7
Information Ratio	0.6
Tracking Error	8.0
Sharpe Ratio	0.6

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Eagle Equity**Characteristics**

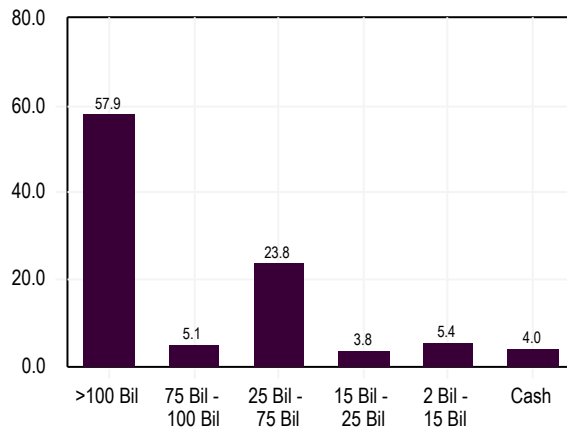
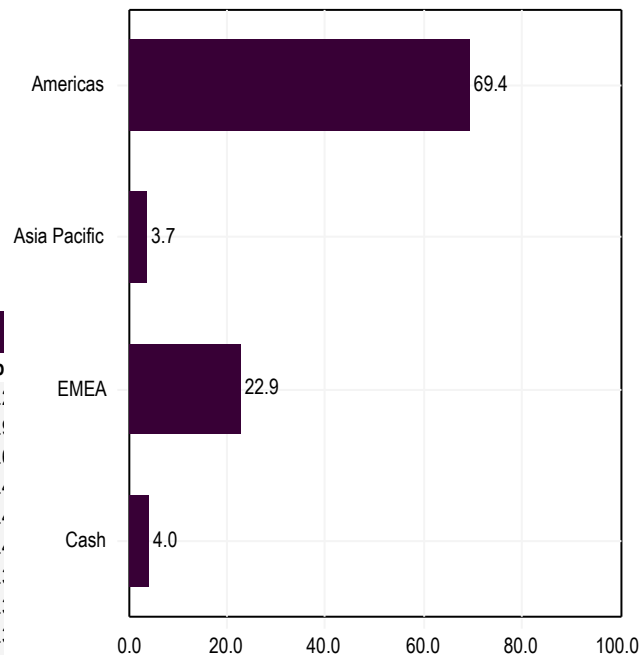
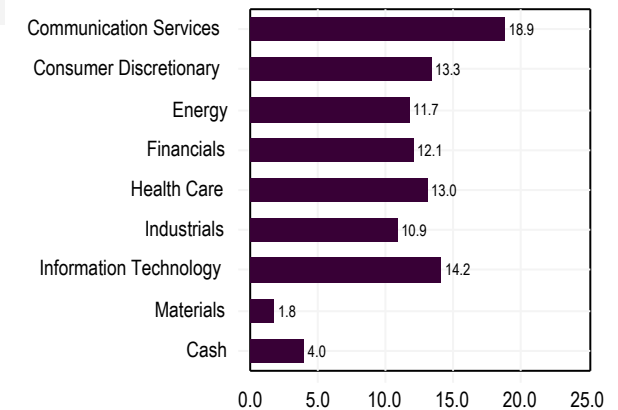
	Portfolio
Wtd. Avg. Mkt. Cap \$	637,164,661,443
Median Mkt. Cap \$	94,778,897,805
Price/Earnings ratio	19.8
Price/Book ratio	3.3
5 Yr. EPS Growth Rate (%)	14.8
Current Yield (%)	1.1
Beta	-
Number of Stocks	33

Top Ten Equity Holdings

	Portfolio	Return
Amazon.com Inc	8.4	7.1
Alphabet Inc	6.0	20.6
Meta Platforms Inc	5.4	3.9
Conocophillips	5.1	-9.6
Microsoft Corp	5.0	6.4
Shell Plc	4.5	8.7
Humana Inc.	4.0	8.0
Aon plc	3.9	-11.8
UnitedHealth Group Incorporated	3.9	3.4
AerCap Holdings NV	3.8	7.5
% of Portfolio	50.0	

Sector Weight & Qtrly Return

Sector	Weight	Returns
Communication Services	19.2	7.1
Consumer Discretionary	13.3	6.4
Energy	12.8	-2.0
Financials	14.6	-0.2
Health Care	10.3	4.8
Industrials	11.8	10.3
Information Technology	12.3	11.0
Materials	0.9	13.5

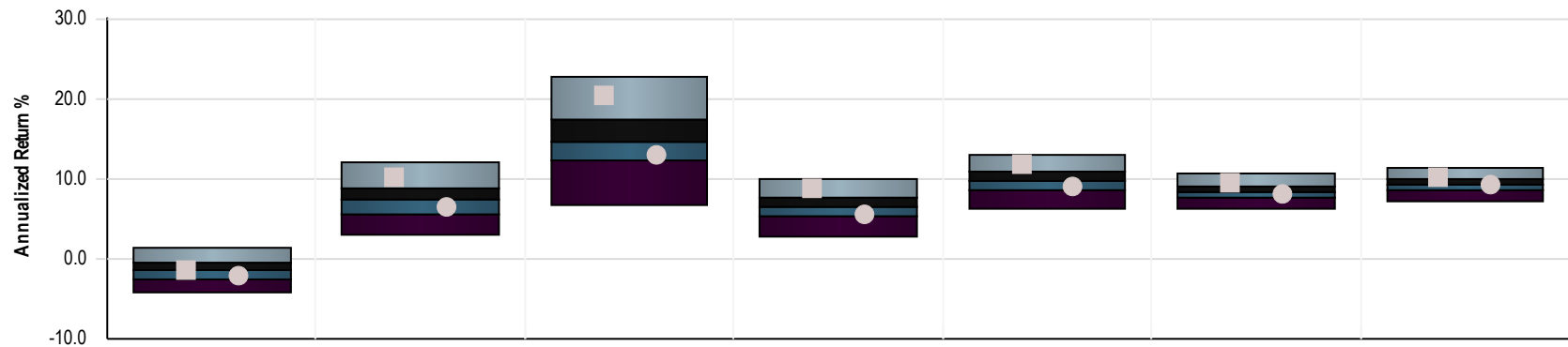
Distribution of Market Capitalization**Region Allocation****Sector Weights****Top Ten Contributors**

	Portfolio	Return	Contrib
Alphabet Inc	5.7	20.6	1.2
Taiwan Semiconductor Manufacturing Co Ltd	3.1	28.2	0.9
Amazon.com Inc	8.3	7.1	0.6
GE Aerospace	3.1	14.5	0.5
Microsoft Corp	6.6	6.4	0.4
Shell Plc	4.4	8.7	0.4
Goldman Sachs Group Inc (The)	3.9	9.0	0.4
Netflix Inc	2.9	11.1	0.3
AerCap Holdings NV	3.7	7.5	0.3
Prosus NV	2.0	13.5	0.3

Top Ten Detractors

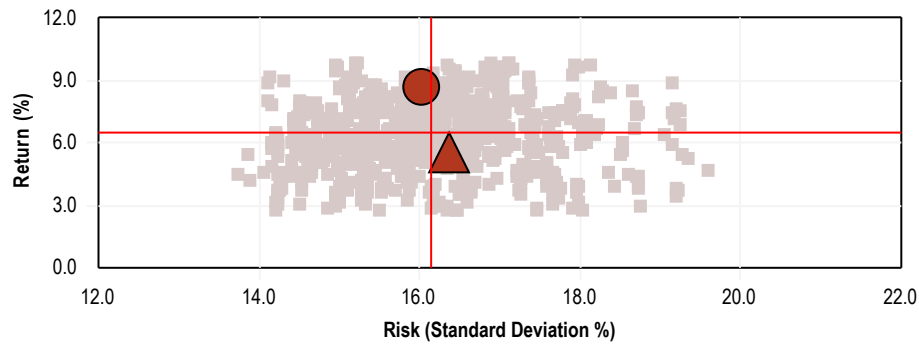
	Portfolio	Return	Contribution
Conocophillips	6.1	-9.6	-0.6
Aon plc	3.2	-11.8	-0.4
Comcast Corp	2.8	-9.0	-0.3
Safran SA	3.3	-5.8	-0.2
Capital One Financial Corp	2.7	-6.6	-0.2
Bayer AG	1.1	-7.6	-0.1
Visa Inc	1.2	-5.8	-0.1
Liberty Broadband Corp	1.5	-4.2	-0.1
Occidental Petroleum Corp	2.3	-2.7	-0.1
Marriott International Inc	1.0	-3.9	0.0

Robeco LCV vs. Large Value as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
Robeco LCV	-1.3 (47)	10.2 (14)	20.6 (8)	8.8 (13)	11.8 (16)	9.4 (19)	10.3 (20)
Russell 1000 Value Index	-2.2 (68)	6.6 (62)	13.1 (66)	5.5 (74)	9.0 (67)	8.2 (55)	9.4 (49)
Median	-1.5	7.3	14.6	6.5	9.7	8.4	9.4

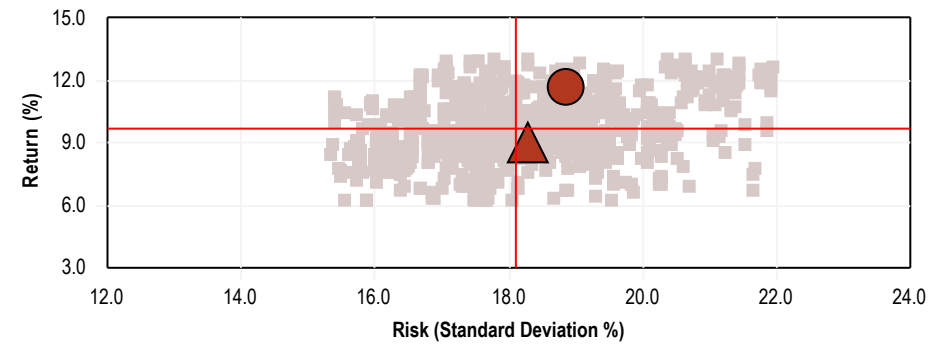
3 Years



● Robeco LCV ▲ Russell 1000 Value Index

Alpha	3.3
Information Ratio	1.0
Tracking Error	3.1
Sharpe Ratio	0.4

5 Years

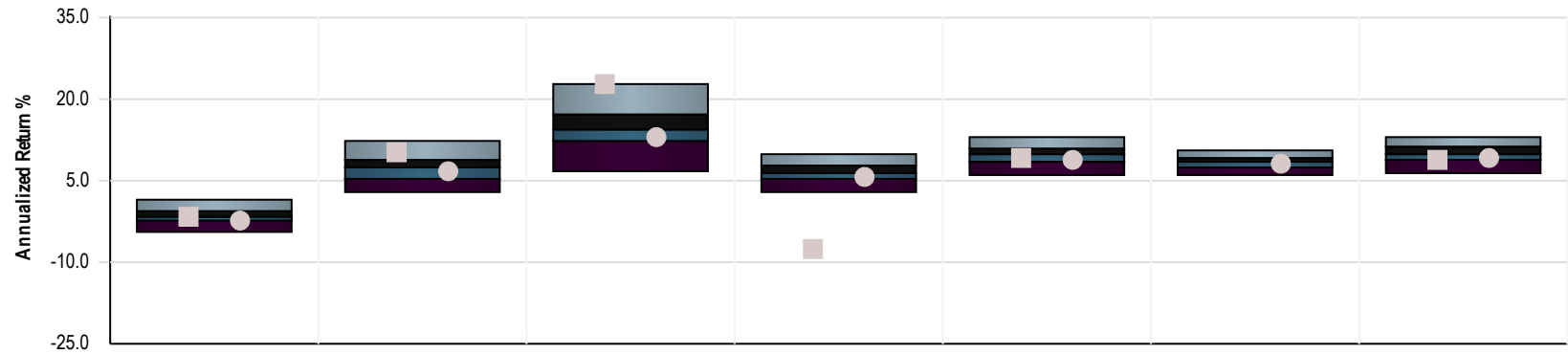


● Robeco LCV ▲ Russell 1000 Value Index

Alpha	2.5
Information Ratio	0.9
Tracking Error	3.1
Sharpe Ratio	0.6

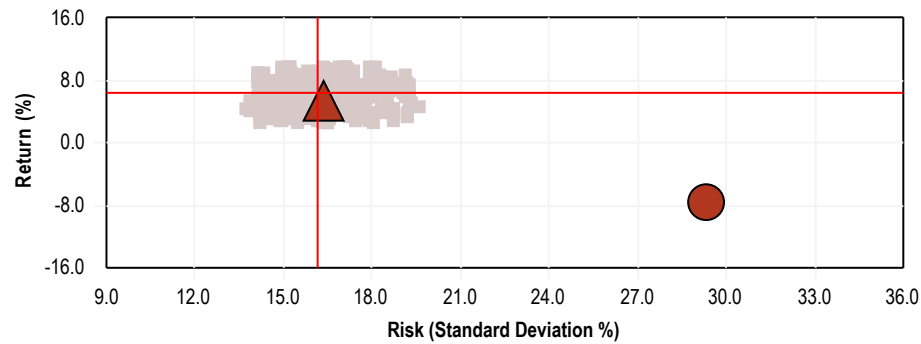
Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Patient Opportunity I(LMNOX) vs. Large Value as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
Patient Opportunity I(LMNOX)	-1.7 (56)	10.2 (14)	22.7 (5)	-7.7 (100)	9.2 (64)	-	9.0 (74)
Russell 1000 Value Index	-2.2 (68)	6.6 (62)	13.1 (66)	5.5 (74)	9.0 (67)	8.2 (55)	9.3 (65)
Median	-1.5	7.3	14.6	6.5	9.7	8.4	10.0

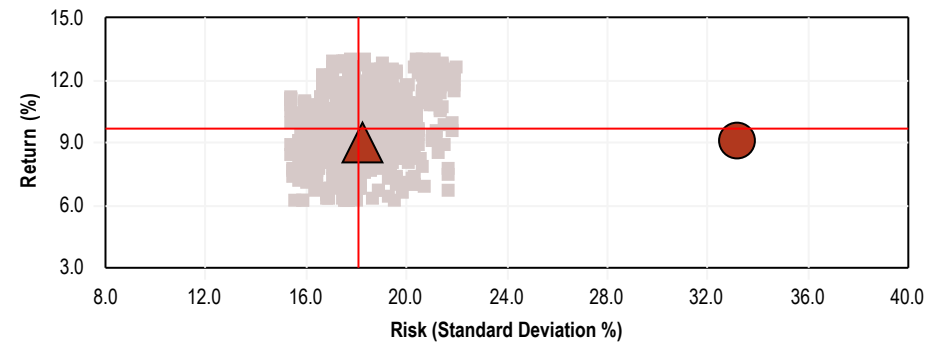
3 Years



● Patient Opportunity I(LMNOX) ▲ Russell 1000 Value Index

Alpha	-13.0
Information Ratio	-0.6
Tracking Error	18.0
Sharpe Ratio	-0.2

5 Years



● Patient Opportunity I(LMNOX) ▲ Russell 1000 Value Index

Alpha	-1.9
Information Ratio	0.2
Tracking Error	19.5
Sharpe Ratio	0.4

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Patient Opportunity I**Fund Information**

Fund Name : Patient Opportunity I
 Fund Family : Patient Capital Management
 Ticker : LMNOX
 Inception Date : 06/26/2000
 Fund Assets : \$1,451 Million
 Portfolio Turnover : 40%

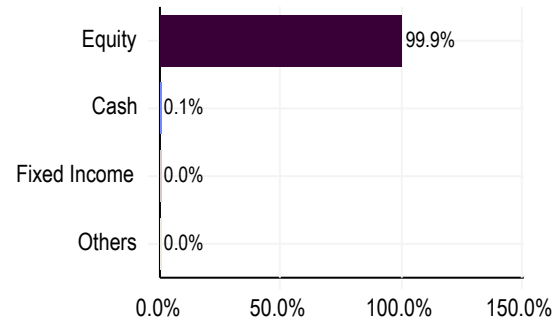
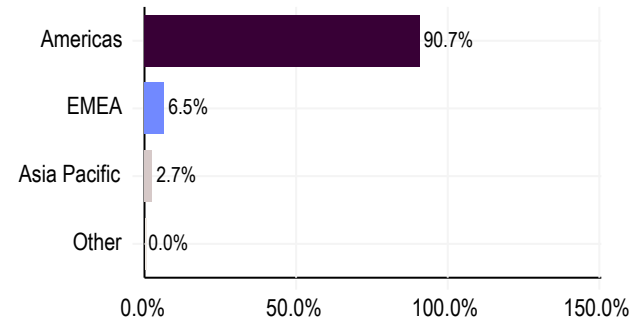
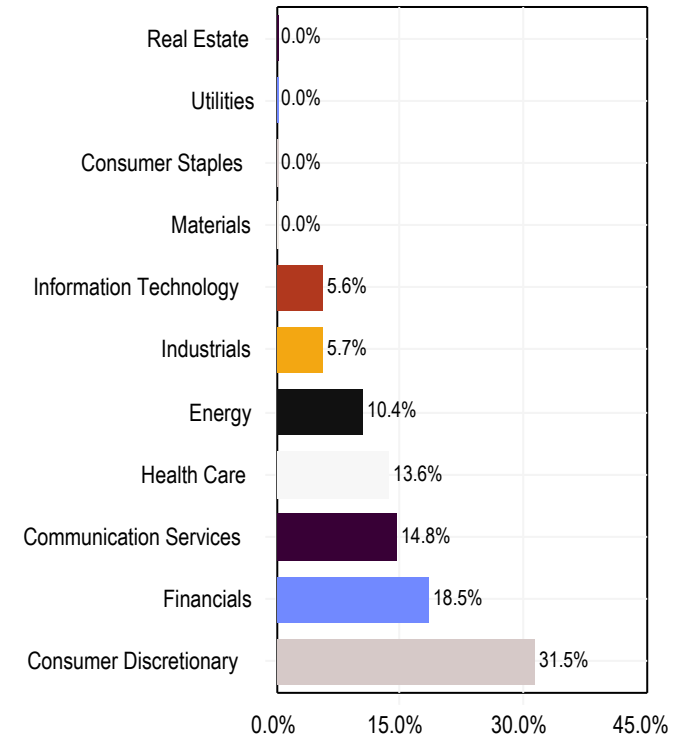
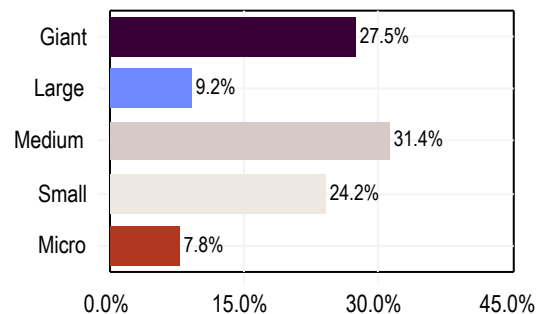
Portfolio Assets : \$678 Million
 Portfolio Manager : Malbon,C/McLemore,S
 PM Tenure : 15 Years 10 Months
 Fund Style : Mid-Cap Blend
 Style Benchmark : Russell Midcap Index

Fund Characteristics

Total Securities 41
 Avg. Market Cap \$40,712 Million
 P/E 12.2
 P/B 1.6
 Div. Yield 1.5%

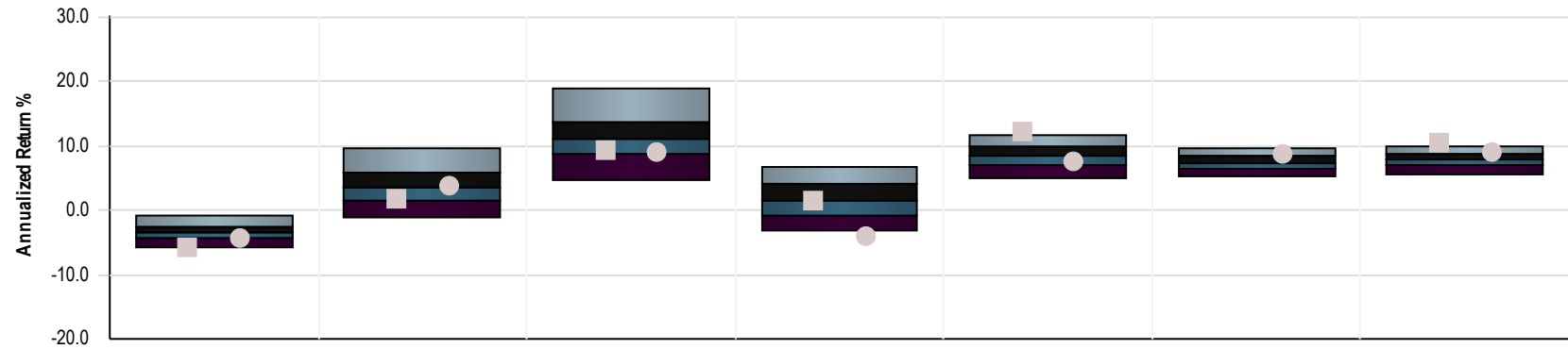
Fund Investment Policy

The investment seeks long term growth of capital.

Asset Allocation As of 06/30/2024**Regional Allocation As of 06/30/2024****Equity Sector Allocation As of 06/30/2024****Market Capitalization As of 06/30/2024****Top Ten Securities As of 06/30/2024**

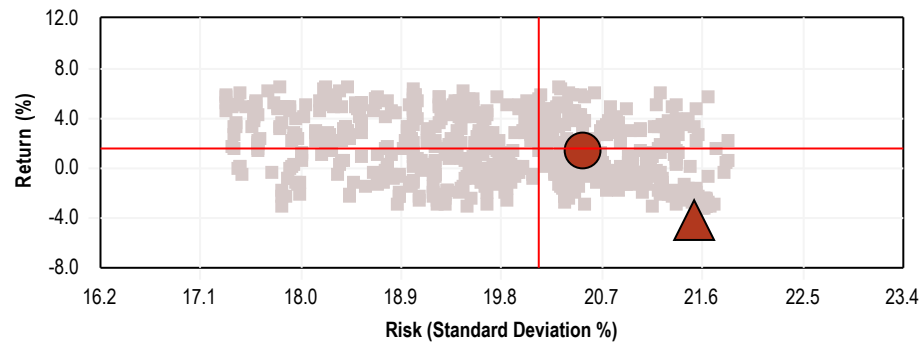
Amazon.com Inc	6.4 %
Alphabet Inc Class A	5.7 %
Citigroup Inc	5.4 %
Expedia Group Inc	4.6 %
Energy Transfer LP	4.5 %
Meta Platforms Inc Class A	4.1 %
NVIDIA Corp	4.1 %
General Motors Co	4.0 %
IAC Inc Ordinary Shares - New	3.8 %
OneMain Holdings Inc	3.8 %
Total	46.4 %

Fiera SMID Growth vs. SMID Blend as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
Fiera SMID Growth	-5.9 (97)	1.8 (68)	9.3 (72)	1.5 (52)	12.2 (4)	-	10.6 (4)
Russell 2500 Growth Index	-4.2 (76)	3.9 (45)	9.0 (74)	-4.1 (98)	7.6 (69)	8.8 (15)	9.1 (16)
Median	-3.5	3.4	11.0	1.6	8.6	7.4	7.9

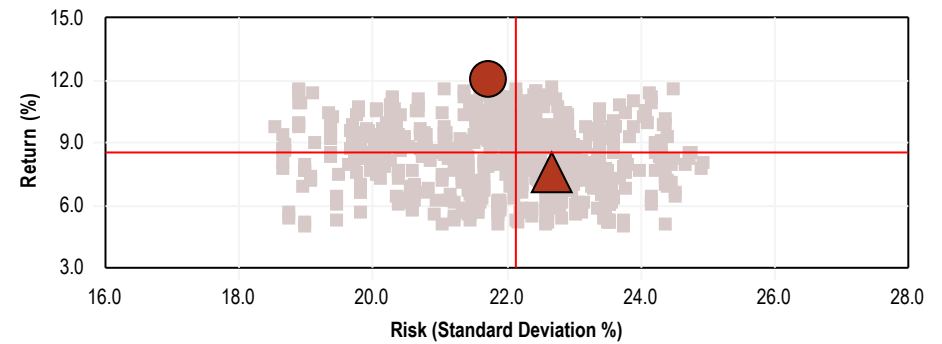
3 Years



● Fiera SMID Growth ▲ Russell 2500 Growth Index

Alpha	5.4
Information Ratio	1.0
Tracking Error	5.7
Sharpe Ratio	0.0

5 Years



● Fiera SMID Growth ▲ Russell 2500 Growth Index

Alpha	4.8
Information Ratio	0.7
Tracking Error	6.1
Sharpe Ratio	0.5

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Fiera SMID Growth**Characteristics**

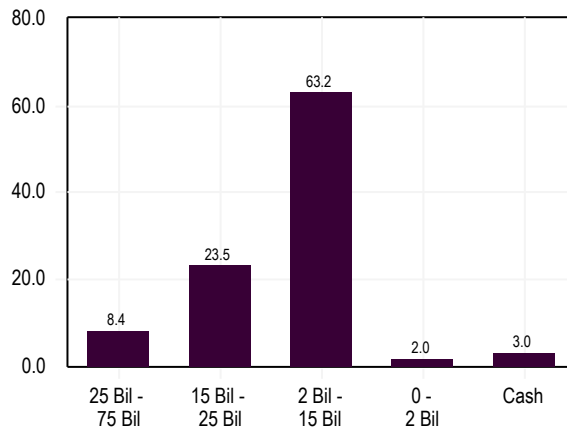
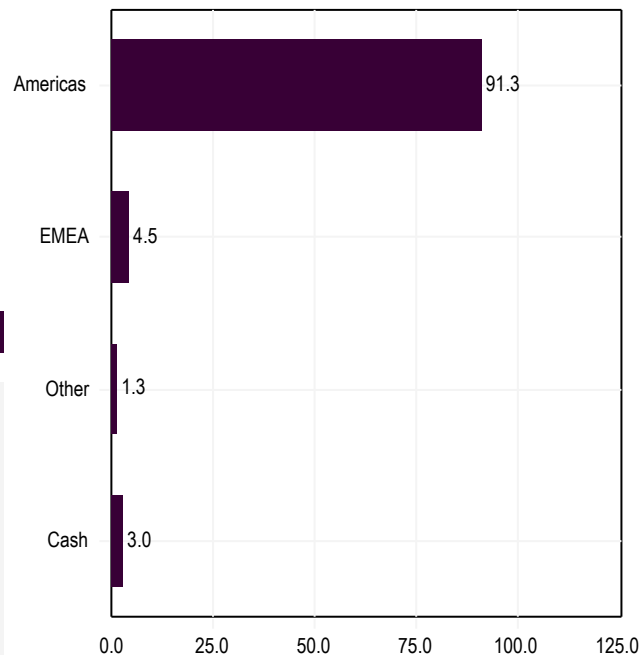
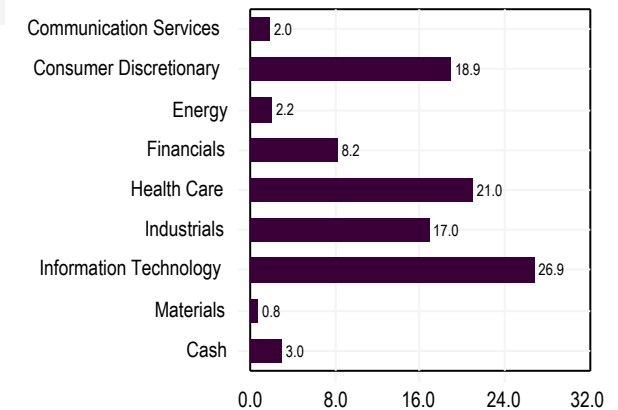
	Portfolio
Wtd. Avg. Mkt. Cap \$	12,264,557,790
Median Mkt. Cap \$	8,839,277,090
Price/Earnings ratio	22.0
Price/Book ratio	4.2
5 Yr. EPS Growth Rate (%)	20.3
Current Yield (%)	0.6
Beta	-
Number of Stocks	67

Top Ten Equity Holdings

	Portfolio	Return
Entegris Inc	3.6	-3.6
GoDaddy Inc	3.5	17.7
Wingstop Inc	3.2	15.4
HubSpot Inc	3.1	-5.9
Tyler Technologies Inc	3.0	18.3
Hyatt Hotels Corp	2.6	-4.7
BWX Technologies Inc	2.6	-7.2
arGEN-X SE	2.1	9.2
Neurocrine Biosciences Inc	2.1	-0.2
The New York Times Company	2.0	18.8
% of Portfolio	27.8	

Sector Weight & Qtrly Return

Sector	Weight	Returns
Communication Services	2.9	8.4
Consumer Discretionary	18.1	-2.3
Energy	2.2	-4.4
Financials	7.9	0.5
Health Care	20.4	-10.4
Industrials	18.6	-8.3
Information Technology	26.5	-5.8
Materials	0.8	1.2

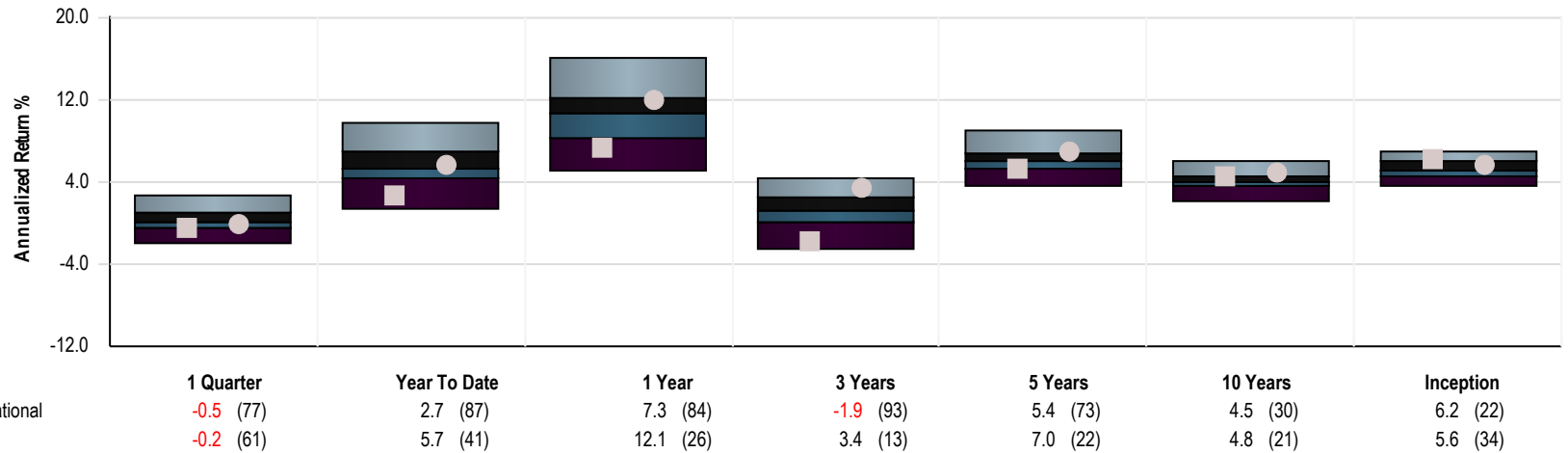
Distribution of Market Capitalization**Region Allocation****Sector Weights****Top Ten Contributors**

	Portfolio	Return	Contribution
GoDaddy Inc	2.8	17.7	0.5
Tyler Technologies Inc	2.4	18.3	0.4
Wingstop Inc	2.6	15.4	0.4
Royal Caribbean Group	2.1	14.7	0.3
The New York Times Company	1.5	18.8	0.3
Sarepta Therapeutics Inc	1.3	22.0	0.3
arGEN-X SE	1.8	9.2	0.2
ACI Worldwide Inc	0.8	19.2	0.2
Stifel Financial Corp.	1.5	8.2	0.1
EMCOR Group Inc.	2.6	4.3	0.1

Top Ten Detractors

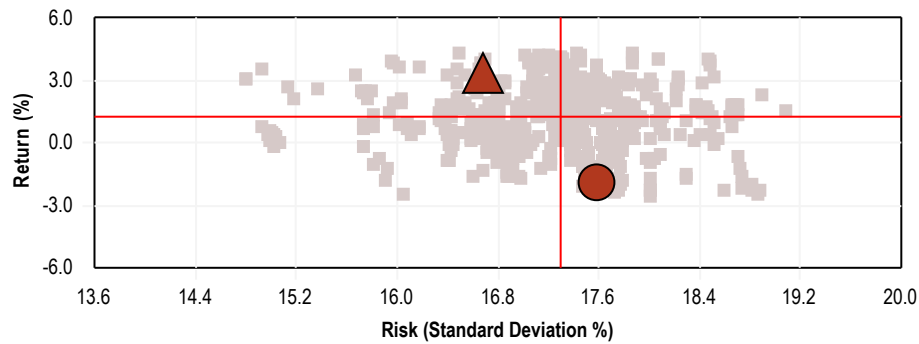
	Portfolio	Return	Contribution
Immunocore Holdings plc	1.5	-47.9	-0.7
MongoDB Inc	2.4	-30.3	-0.7
Apellis Pharmaceuticals Inc	1.5	-34.7	-0.5
Lattice Semiconductor Corporation	1.8	-25.9	-0.5
Regal Rexnord Corp	1.5	-24.7	-0.4
Lincoln Electric Holdings Inc	1.4	-25.9	-0.4
Procore Technologies Inc	1.6	-19.3	-0.3
JFrog Ltd	1.9	-15.1	-0.3
GitLab Inc	1.9	-14.7	-0.3
SpringWorks Therapeutics Inc	1.1	-23.5	-0.3

Neuberger Berman International vs. Foreign Large Blend as of June 30, 2024



Median	0.1	5.4	10.8	1.3	6.1	4.1	5.2
--------	-----	-----	------	-----	-----	-----	-----

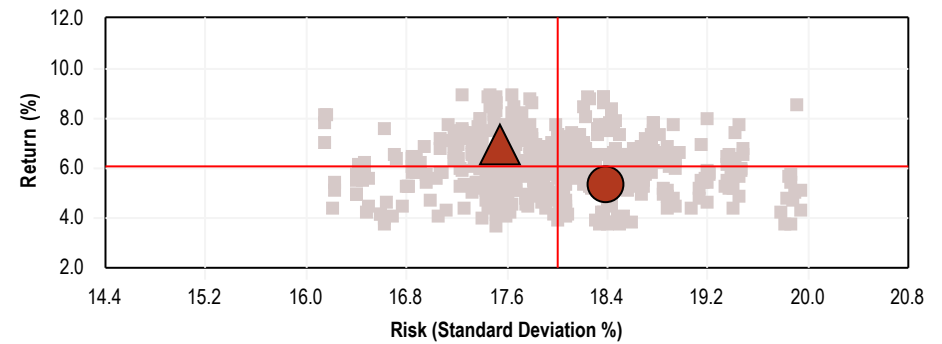
3 Years



● Neuberger Berman International ▲ MSCI EAFE Index

Alpha	-5.0
Information Ratio	-1.1
Tracking Error	4.7
Sharpe Ratio	-0.2

5 Years



● Neuberger Berman International ▲ MSCI EAFE Index

Alpha	-1.4
Information Ratio	-0.3
Tracking Error	5.2
Sharpe Ratio	0.3

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Characteristics

	Portfolio
Wtd. Avg. Mkt. Cap \$	95,186,796,427
Median Mkt. Cap \$	39,015,452,762
Price/Earnings ratio	10.8
Price/Book ratio	4.8
5 Yr. EPS Growth Rate (%)	11.8
Current Yield (%)	0.6
Beta	-
Number of Stocks	89

Top Ten Equity Holdings

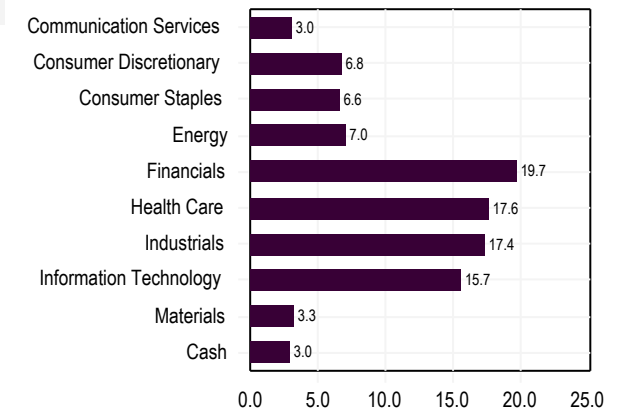
	Portfolio	Return
ASML Holding NV	5.2	5.1
Astrazeneca PLC	3.5	14.1
EXPERIAN PLC	2.9	N/A
London Stock Exchange Group PLC	2.9	-1.0
Novo Nordisk A/S	2.8	14.9
Symrise AG	2.6	4.1
Schlumberger Ltd	2.2	-13.4
Shell Plc	2.1	11.7
Coca-Cola Europacific Partners PLC	2.1	5.3
BAE Systems PLC	2.1	-1.8

% of Portfolio 28.4

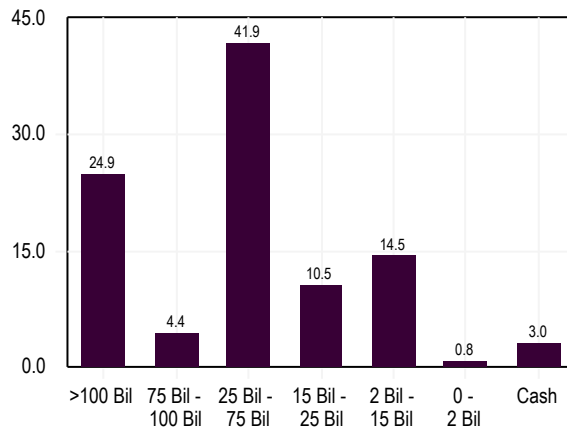
Sector Weight & Qtrly Return

Sector	Weight	Returns
Communication Services	2.5	5.0
Consumer Discretionary	7.0	-4.3
Consumer Staples	7.6	-2.5
Energy	8.5	0.0
Financials	17.9	-0.3
Health Care	17.6	5.5
Industrials	17.1	0.0
Information Technology	15.2	3.4

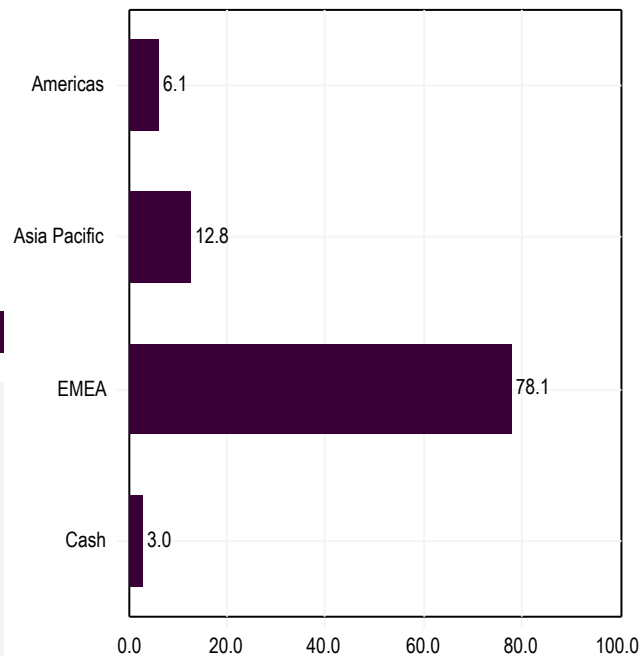
Sector Weights



Distribution of Market Capitalization



Region Allocation



Top Ten Contributors

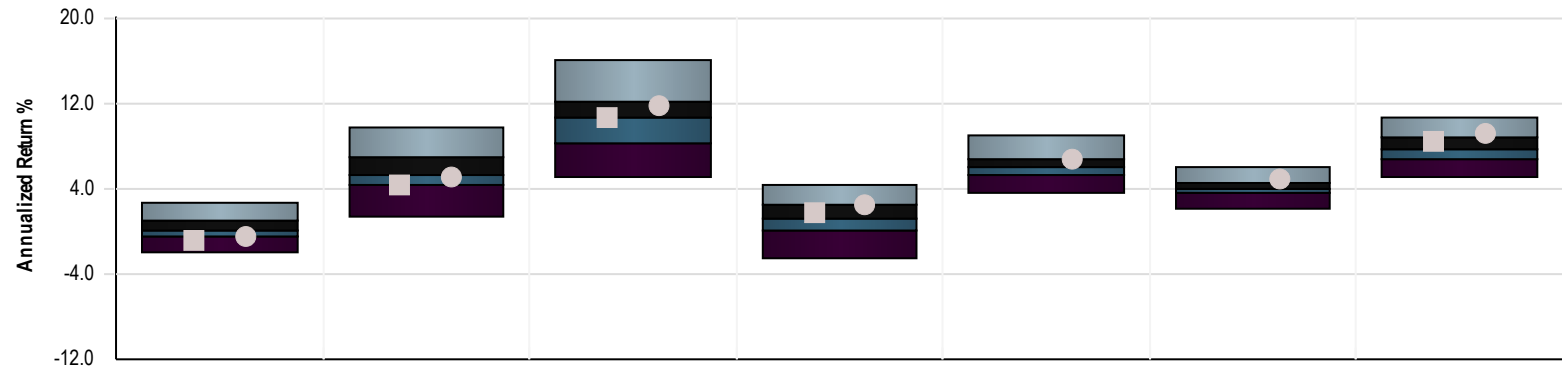
	Portfolio	Return	Contribution
Hitachi Ltd	2.8	22.0	0.6
Astrazeneca PLC	3.5	14.1	0.5
ASM International NV	2.1	18.1	0.4
Novo Nordisk A/S	2.0	14.9	0.3
ASML Holding NV	5.2	5.1	0.3
Shell Plc	2.3	11.7	0.3
HSBC Holdings PLC	1.6	14.5	0.2
Renesas Electronics Corporation	1.5	9.5	0.1
Novartis AG	1.8	7.8	0.1
Roche Holding AG	1.4	8.2	0.1

Top Ten Detractors

	Portfolio	Return	Contribution
Schlumberger Ltd	1.9	-13.4	-0.3
Pernod Ricard SA	1.6	-15.9	-0.2
Softchoice Corp	1.0	-23.7	-0.2
Capgemini SE	1.6	-14.2	-0.2
Autoliv Inc	2.0	-10.7	-0.2
DSV A/S	1.7	-11.5	-0.2
CRH PLC	1.4	-12.7	-0.2
Aon plc	1.4	-11.8	-0.2
Ashtead Group PLC	2.0	-7.3	-0.1
ICON Public Limited Company	1.9	-6.7	-0.1

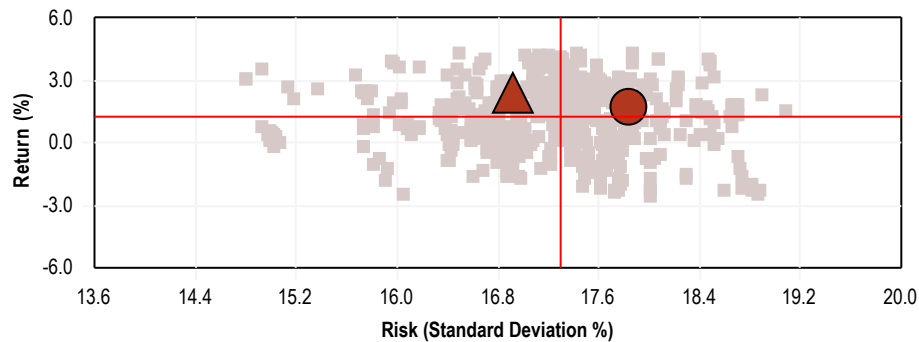
Vanguard Developed Mkts Ind(VTMNX)

Vanguard Developed Mkts Ind(VTMNX) vs. Foreign Large Blend as of June 30, 2024



	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
Vanguard Developed Mkts Ind(VTMNX)	-0.7 (83)	4.4 (75)	10.6 (53)	1.8 (39)	-	-	8.5 (33)
FTSE Developed x North America Index	-0.5 (76)	5.1 (62)	11.8 (30)	2.5 (27)	6.9 (24)	4.8 (21)	9.1 (21)
Median	0.1	5.4	10.8	1.3	6.1	4.1	7.8

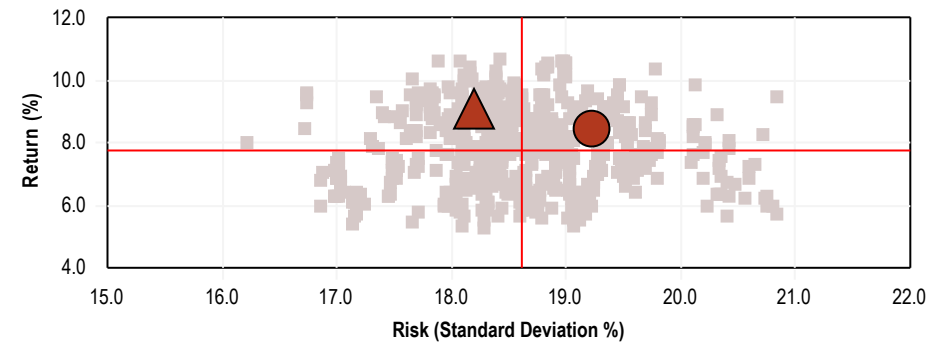
3 Years



● Vanguard Developed Mkts Ind(VTMNX) ▲ FTSE Developed x North America Index

Alpha	-0.7
Information Ratio	-0.2
Tracking Error	2.6
Sharpe Ratio	0.0

4.33 Years



● Vanguard Developed Mkts Ind(VTMNX) ▲ FTSE Developed x North America Index

Alpha	-0.9
Information Ratio	-0.1
Tracking Error	2.6
Sharpe Ratio	0.4

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Vanguard Developed Markets Index Instl**Fund Information**

Fund Name : Vanguard Developed Markets Index Instl
Fund Family : Vanguard
Ticker : VTMNX
Inception Date : 01/04/2001
Fund Assets : \$204,338 Million
Portfolio Turnover : 3%

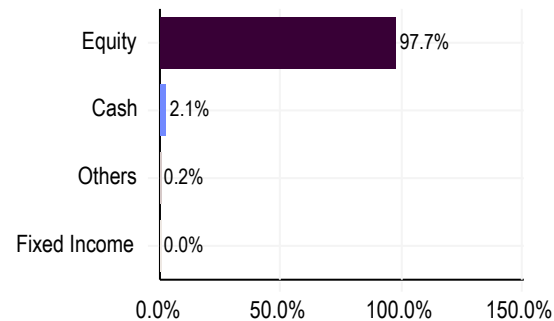
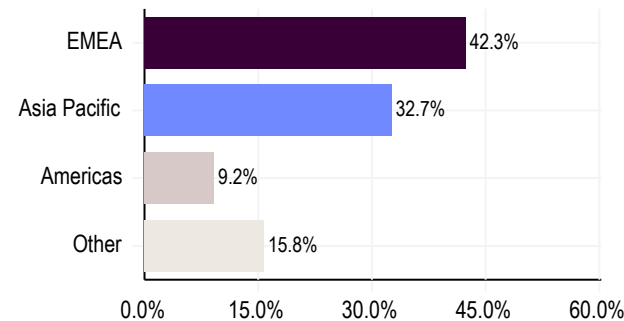
Portfolio Assets : \$15,267 Million
Portfolio Manager : Franquin,C/Perre,M
PM Tenure : 11 Years 4 Months
Fund Style : Foreign Large Blend
Style Benchmark : MSCI AC World ex USA (Net)

Fund Characteristics

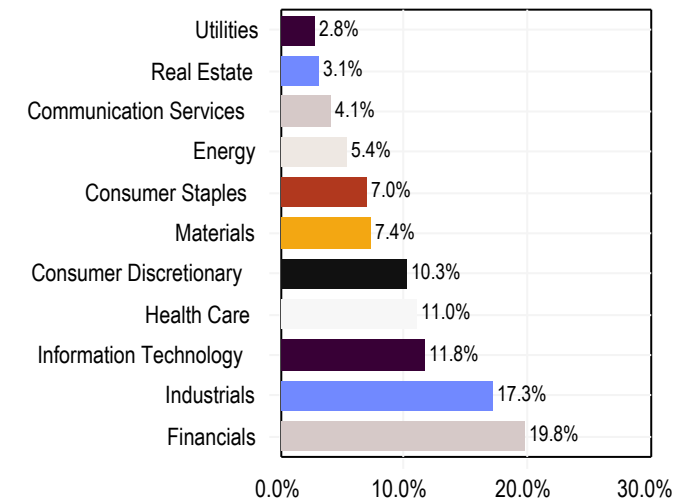
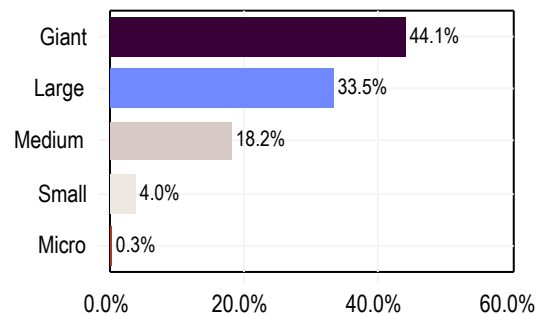
Total Securities 3,990
Avg. Market Cap \$34,104 Million
P/E 13.8
P/B 1.6
Div. Yield 3.3%

Fund Investment Policy

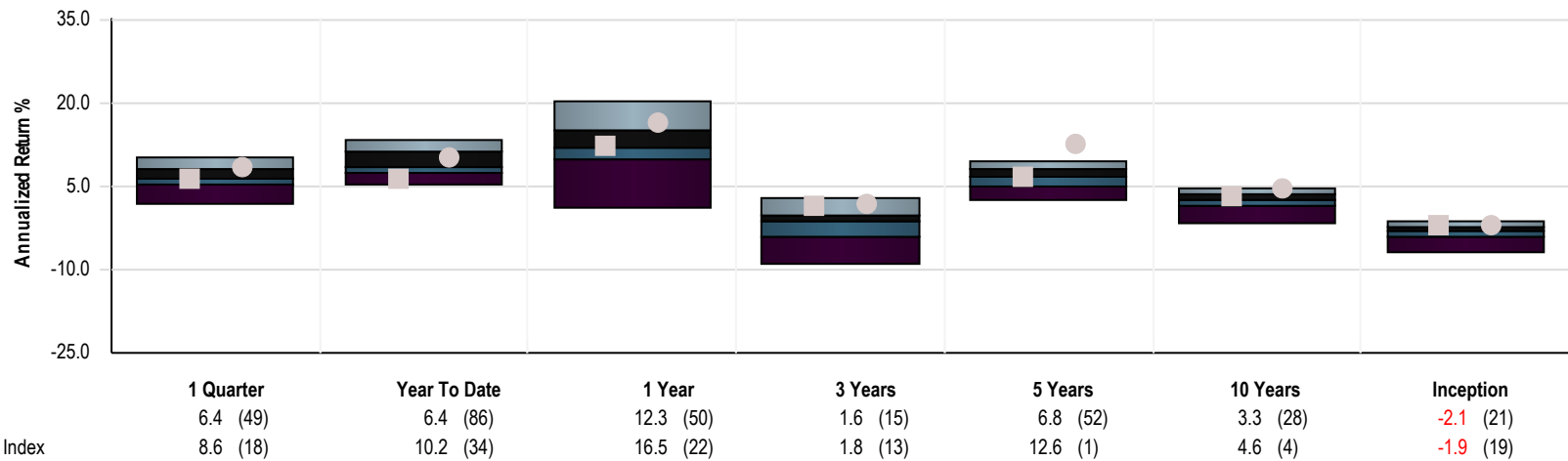
The investment seeks to track the performance of the FTSE Developed All Cap ex US Index.

Asset Allocation As of 06/30/2024**Regional Allocation As of 06/30/2024****Top 5 Countries As of 06/30/2024**

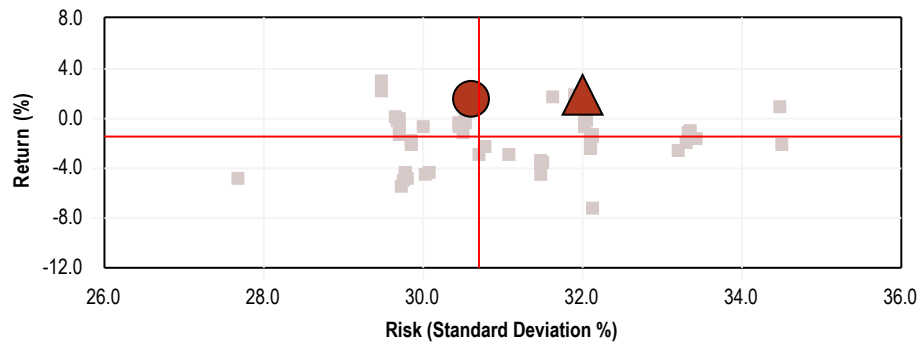
Japan	21.4 %
United Kingdom	12.1 %
Canada	9.2 %
Switzerland	8.1 %
France	8.0 %
Total	58.8 %

Equity Sector Allocation As of 06/30/2024**Market Capitalization As of 06/30/2024****Top Ten Securities As of 06/30/2024**

Novo Nordisk A/S Class B	1.9 %
ASML Holding NV	1.7 %
Samsung Electronics Co Ltd	1.2 %
Nestle SA	1.2 %
Toyota Motor Corp	1.1 %
AstraZeneca PLC	1.0 %
Shell PLC	1.0 %
SAP SE	1.0 %
Novartis AG Registered Shares	0.9 %
Roche Holding AG	0.8 %
Total	11.9 %

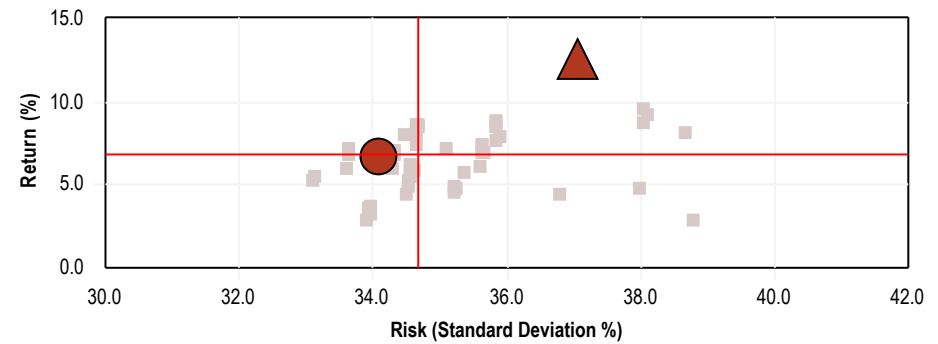
GAMCO Gold vs. Equity Precious Metals as of June 30, 2024

Median	6.4	8.5	11.9	-1.4	6.8	2.7	-3.2
--------	-----	-----	------	------	-----	-----	------

3 Years

● GAMCO Gold ▲ Philadelphia Gold and Silver Index

Alpha	-0.3
Information Ratio	-0.1
Tracking Error	5.2
Sharpe Ratio	0.1

5 Years

● GAMCO Gold ▲ Philadelphia Gold and Silver Index

Alpha	-4.4
Information Ratio	-0.8
Tracking Error	7.5
Sharpe Ratio	0.3

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Characteristics

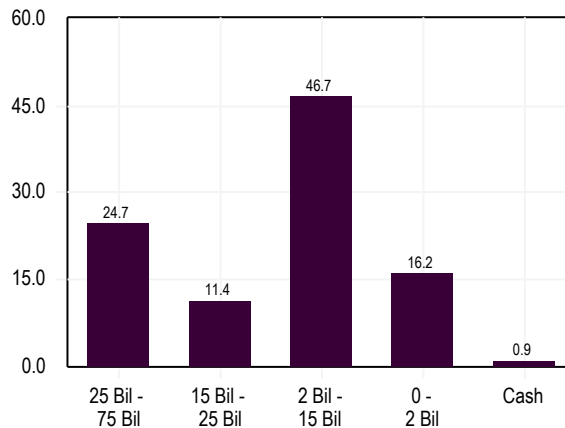
	Portfolio
Wtd. Avg. Mkt. Cap \$	15,306,800,797
Median Mkt. Cap \$	3,485,507,230
Price/Earnings ratio	27.7
Price/Book ratio	2.0
5 Yr. EPS Growth Rate (%)	7.9
Current Yield (%)	1.3
Beta	-
Number of Stocks	32

Top Ten Equity Holdings

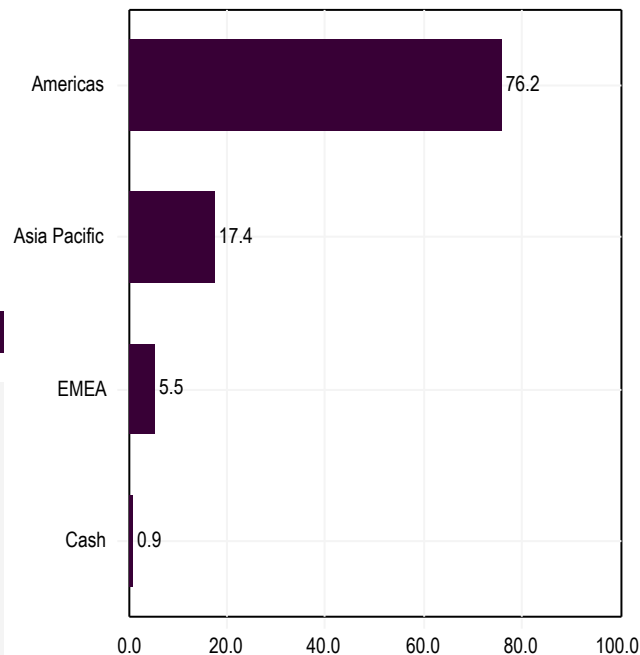
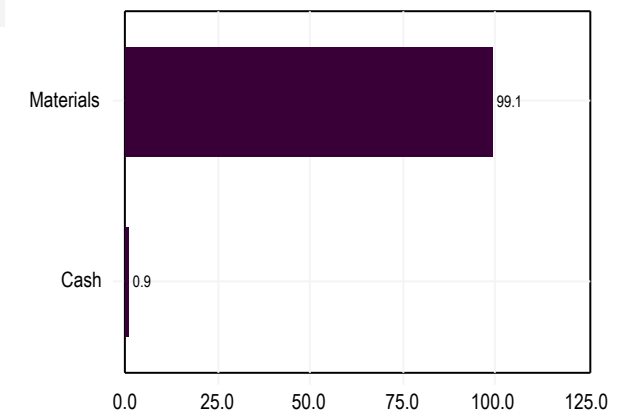
	Portfolio	Return
Newmont Corporation	9.7	17.5
Agnico Eagle Mines Ltd	9.6	10.3
Wheaton Precious Metals Corp	6.7	11.9
Northern Star Resources Ltd	6.5	-7.5
Alamos Gold Inc	6.4	6.5
Kinross Gold Corp	5.7	36.2
Barrick Gold Corp	5.4	0.8
Franco-Nevada Corp	4.8	-0.2
Royal Gold Inc	4.3	3.1
Endeavour Mining plc	4.2	4.0
% of Portfolio	63.3	

Sector Weight & Qtrly Return

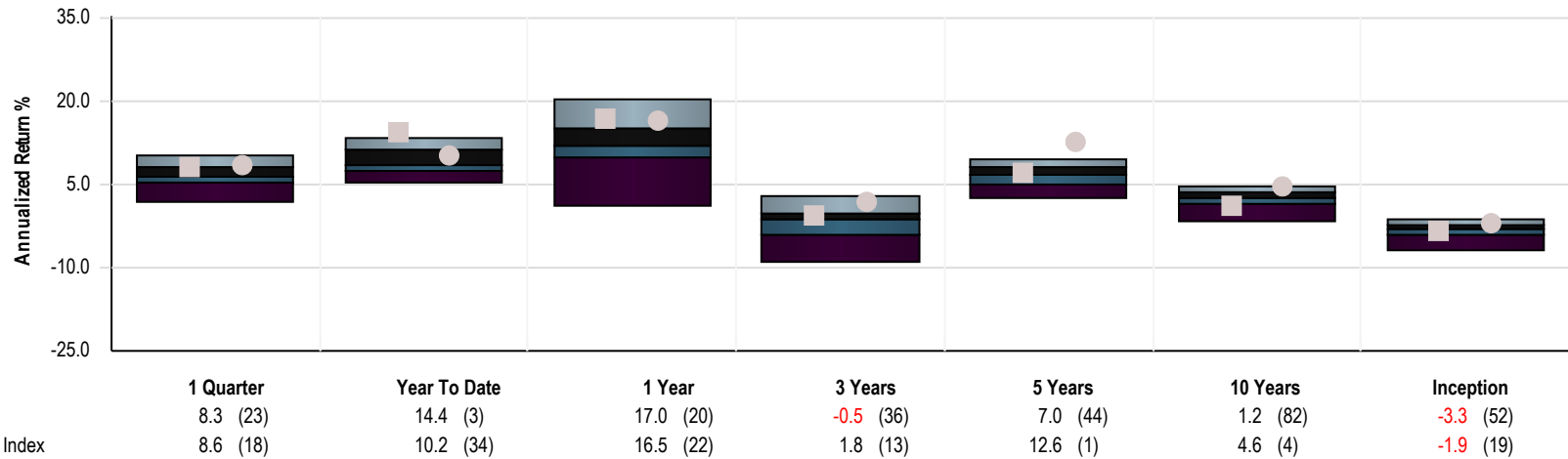
Sector	Weight	Returns
Materials	99.1	7.2
Cash	0.9	1.3

Distribution of Market Capitalization**Top Ten Contributors**

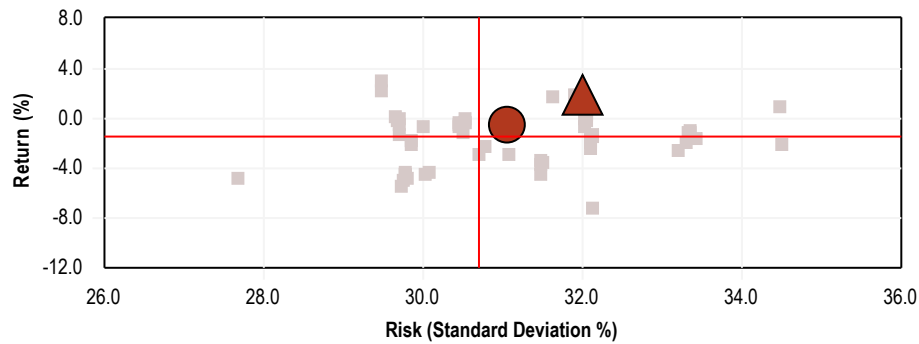
	Portfolio	Return	Contribution
Kinross Gold Corp	4.5	36.2	1.6
Newmont Corporation	8.9	17.5	1.6
Agnico Eagle Mines Ltd	9.3	10.3	1.0
Wheaton Precious Metals Corp	6.9	11.9	0.8
Pan American Silver Corp	1.6	32.4	0.5
K92 Mining Inc	2.0	23.0	0.5
Alamos Gold Inc	6.7	6.5	0.4
Karora Resources Inc	2.5	16.5	0.4
Perseus Mining Ltd	3.8	8.9	0.3
Artemis Gold Inc	1.7	18.7	0.3

Region Allocation**Sector Weights****Top Ten Detractors**

	Portfolio	Return	Contribution
Northern Star Resources Ltd	7.7	-7.5	-0.6
Osisko Gold Royalties Ltd	3.7	-4.8	-0.2
Gold Fields Ltd	1.4	-6.2	-0.1
Franco-Nevada Corp	5.1	-0.2	0.0
Evolution Mining Ltd	3.6	0.2	0.0
Osisko Mining Inc	1.6	1.2	0.0
Barrick Gold Corp	5.8	0.8	0.0
Dundee Precious Metals Inc	1.4	3.5	0.0
Triple Flag Precious Metals Corp	1.1	7.6	0.1
Lundin Gold Inc	2.5	4.5	0.1

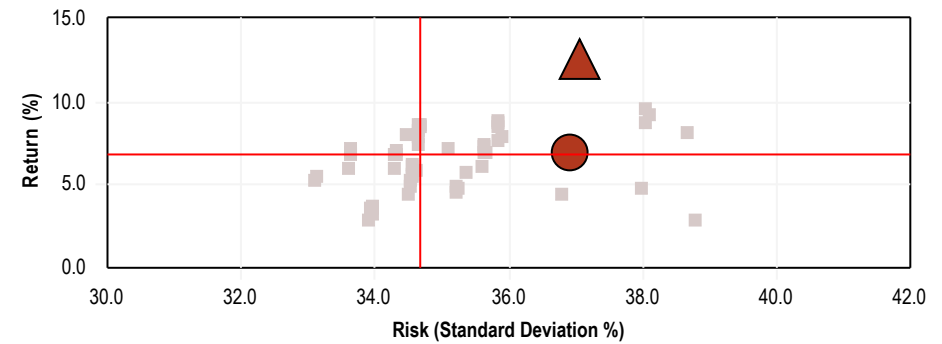
Sprott Asset Management vs. Equity Precious Metals as of June 30, 2024

Median	6.4	8.5	11.9	-1.4	6.8	2.7	-3.2
--------	-----	-----	------	------	-----	-----	------

3 Years

● Sprott Asset Management ▲ Philadelphia Gold and Silver Index

Alpha	-2.3
Information Ratio	-0.4
Tracking Error	6.8
Sharpe Ratio	0.0

5 Years

● Sprott Asset Management ▲ Philadelphia Gold and Silver Index

Alpha	-4.7
Information Ratio	-0.7
Tracking Error	7.0
Sharpe Ratio	0.3

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Sprott Asset Management**Characteristics**

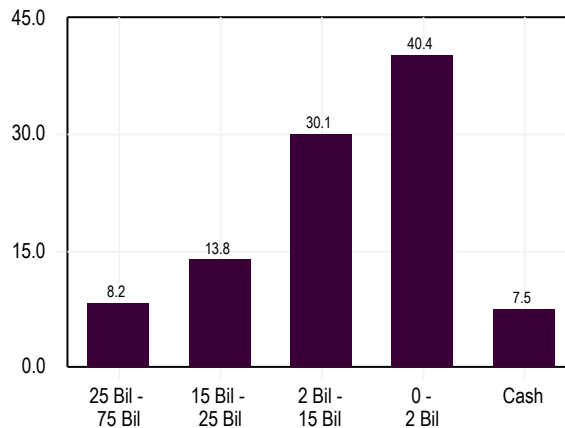
	Portfolio
Wtd. Avg. Mkt. Cap \$	8,525,679,781
Median Mkt. Cap \$	1,620,195,200
Price/Earnings ratio	22.5
Price/Book ratio	2.4
5 Yr. EPS Growth Rate (%)	5.9
Current Yield (%)	0.9
Beta	-
Number of Stocks	36

Top Ten Equity Holdings

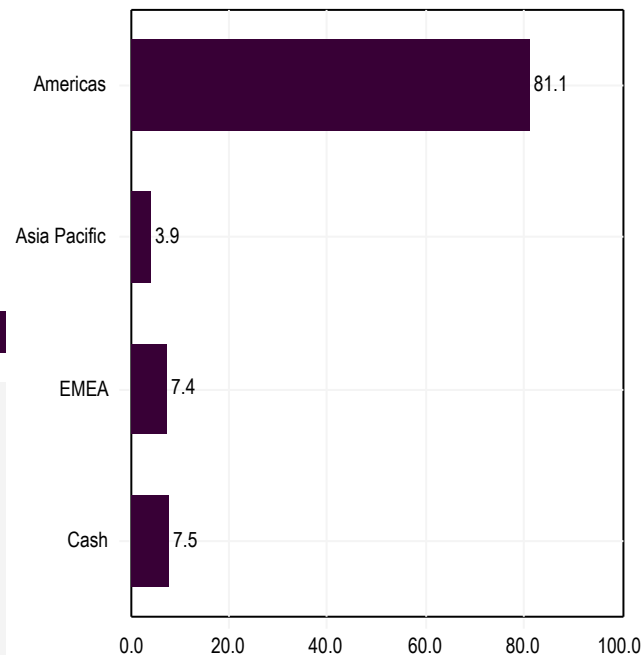
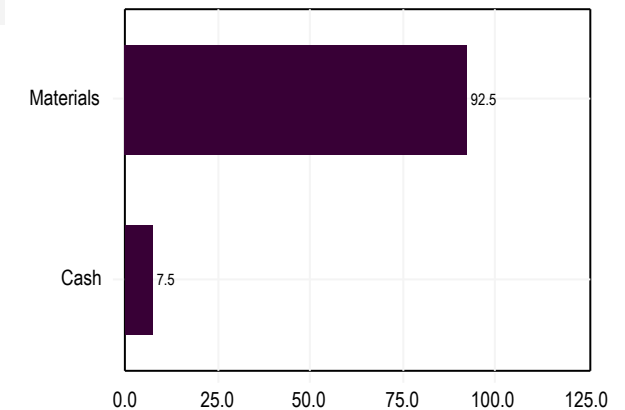
	Portfolio	Return
Ivanhoe Mines Ltd	6.4	7.8
Alamos Gold Inc	5.9	6.5
Agnico Eagle Mines Ltd	5.5	10.3
Wheaton Precious Metals Corp	5.1	11.9
Artemis Gold Inc	5.1	18.7
Gold Fields Ltd	4.1	-6.2
Pan American Silver Corp	4.0	32.4
Snowline Gold Corp	3.8	-12.4
SilverCrest Metals Inc	3.8	22.4
Vizsla Silver Corp	3.5	34.6
% of Portfolio	47.2	

Sector Weight & Qtrly Return

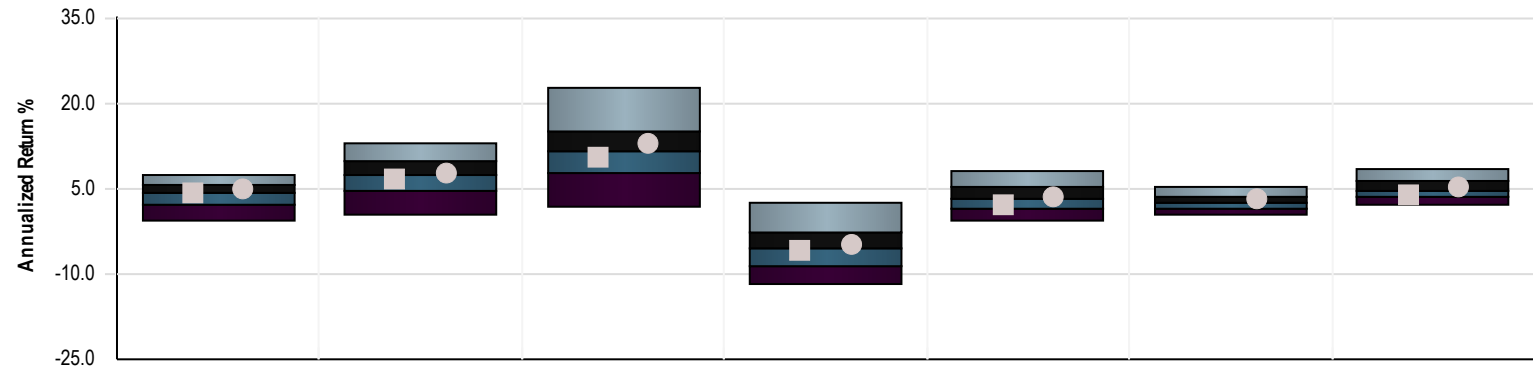
Sector	Weight	Returns
Materials	94.5	8.5
Cash	5.5	1.3

Distribution of Market Capitalization**Top Ten Contributors**

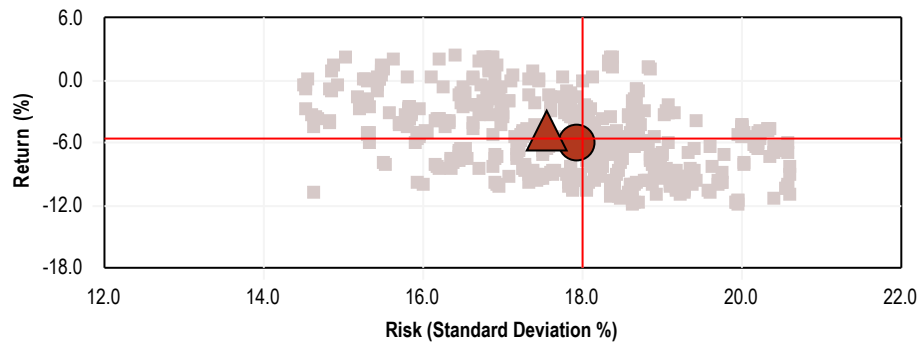
	Portfolio	Return	Contribution
Pan American Silver Corp	3.3	32.4	1.1
Reunion Gold Corp	1.9	47.1	0.9
Artemis Gold Inc	4.7	18.7	0.9
Vizsla Silver Corp	2.4	34.6	0.8
Kinross Gold Corp	2.1	36.2	0.8
SilverCrest Metals Inc	3.3	22.4	0.7
Karora Resources Inc	4.2	16.5	0.7
Wheaton Precious Metals Corp	5.0	11.9	0.6
Agnico Eagle Mines Ltd	5.5	10.3	0.6
Ivanhoe Mines Ltd	6.4	7.8	0.5

Region Allocation**Sector Weights****Top Ten Detractors**

	Portfolio	Return	Contribution
Snowline Gold Corp	4.7	-12.4	-0.6
Gold Fields Ltd	4.7	-6.2	-0.3
i-80 Gold Corp	1.0	-19.4	-0.2
Osisko Gold Royalties Ltd	4.0	-4.8	-0.2
Northern Star Resources Ltd	2.4	-7.5	-0.2
Collective Mining Ltd	0.6	-20.6	-0.1
Seabridge Gold Inc	1.0	-9.5	-0.1
Franco-Nevada Corp	2.4	-0.2	0.0
Fortitude Gold Corp	0.0	-18.5	0.0
Gold Resource Corp	0.0	-14.1	0.0

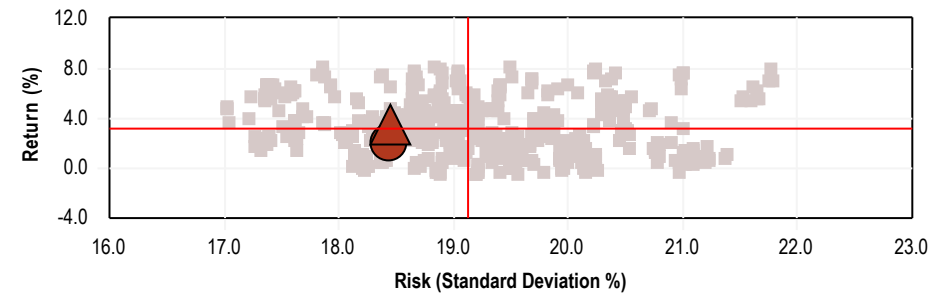
iShares MSCI Emerging Markets ETF(EEM)**iShares MSCI Emerging Markets ETF(EEM) vs. Diversified Emerging Mkts as of June 30, 2024**

	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years	Inception
iShares MSCI Emerging Markets ETF(EEM)	4.4 (47)	6.7 (60)	10.5 (60)	-6.0 (54)	2.2 (66)	-	4.0 (69)
MSCI Emerging Markets Index	5.1 (33)	7.7 (47)	13.0 (42)	-4.7 (41)	3.5 (47)	3.2 (39)	5.4 (38)
Median	4.2	7.3	11.7	-5.6	3.2	2.6	4.8

3 Years

● iShares MSCI Emerging Markets ETF(EEM) ▲ MSCI Emerging Markets Index

Alpha	-1.3
Information Ratio	-0.4
Tracking Error	3.0
Sharpe Ratio	-0.4

5 Years

● iShares MSCI Emerging Markets ETF(EEM) ▲ MSCI Emerging Markets Index

Alpha	-1.2
Information Ratio	-0.4
Tracking Error	3.1
Sharpe Ratio	0.1

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

iShares MSCI Emerging Markets ETF**Fund Information**

Fund Name : iShares MSCI Emerging Markets ETF
 Fund Family : iShares
 Ticker : EEM
 Inception Date : 04/07/2003
 Fund Assets : \$17,686 Million
 Portfolio Turnover : 15%

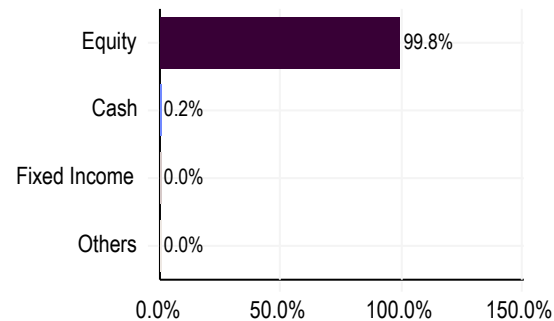
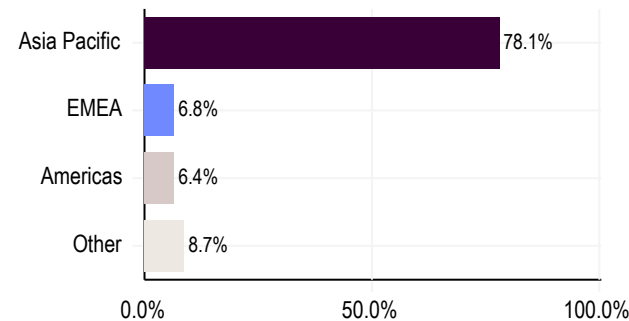
Portfolio Assets : \$17,686 Million
 Portfolio Manager : Hsui,J/Savage,G/Whitehead,P
 PM Tenure : 16 Years 5 Months
 Fund Style : Diversified Emerging Mkts
 Style Benchmark : MSCI Emerging Markets (Net)

Fund Characteristics

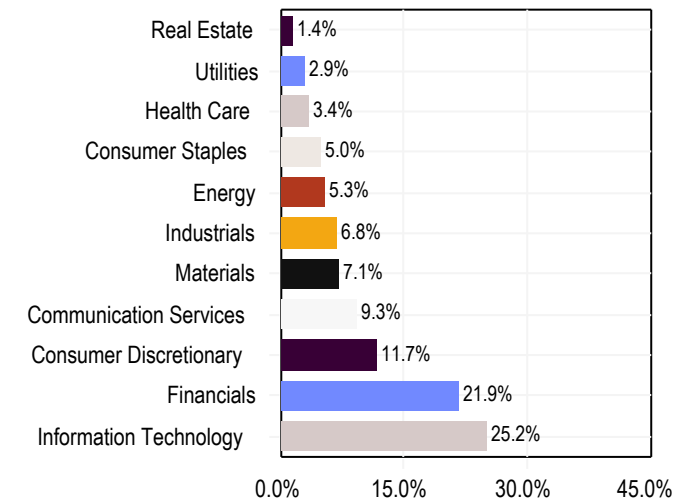
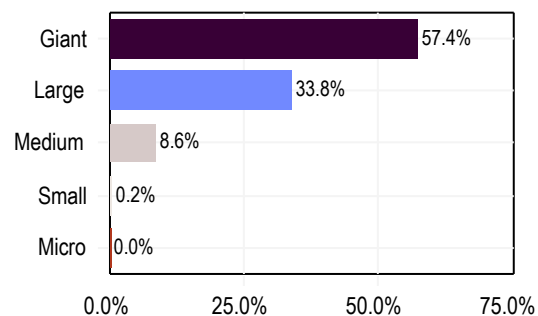
Total Securities 1,268
 Avg. Market Cap \$43,487 Million
 P/E 12.7
 P/B 1.6
 Div. Yield 3.3%

Fund Investment Policy

The investment seeks to track the investment results of the MSCI Emerging Markets Index.

Asset Allocation As of 06/30/2024**Regional Allocation As of 06/28/2024****Top 5 Countries As of 06/28/2024**

China	24.6 %
Taiwan	19.3 %
India	19.2 %
Korea	12.2 %
Brazil	4.2 %
Total	79.4 %

Equity Sector Allocation As of 06/28/2024**Market Capitalization As of 06/28/2024****Top Ten Securities As of 06/28/2024**

Taiwan Semiconductor Manufacturing	9.7 %
Tencent Holdings Ltd	4.2 %
Samsung Electronics Co Ltd	3.7 %
Alibaba Group Holding Ltd Ordinary	1.9 %
Reliance Industries Ltd	1.5 %
SK Hynix Inc	1.2 %
Hon Hai Precision Industry Co Ltd	1.1 %
PDD Holdings Inc ADR	1.1 %
ICICI Bank Ltd	1.0 %
Meituan Class B	1.0 %
Total	26.3 %

Beirne Wealth Consulting Services, LLC (BWC) D/B/A beirne. All rights reserved.

For more information, please visit www.beirnewealth.com or call BWC at 888-231-6372. This contains confidential and proprietary information of BWC and is intended for the exclusive use of the parties to whom it was provided by BWC. Its content may not be modified, sold or otherwise provided, in whole or in part, to any other person or entity, without BWC's prior written permission.

The findings, ratings and/or opinions expressed herein are the intellectual property of BWC and are subject to change without notice. They are not intended to convey any guarantees as to the future performance of the investment products, asset classes or capital markets discussed. Past performance does not guarantee future results. BWC's ratings do not constitute individualized investment advice.

Information contained herein has been obtained from a range of third party sources. While the information is believed to be reliable, BWC has not sought to verify it independently. As such, BWC makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability (including for indirect, consequential or incidental damages) for any error, omission or inaccuracy in the data supplied by any third party.

This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities and/or any other financial instruments or products or constitute a solicitation on behalf of any of the investment managers, their affiliates, products or strategies that BWC may evaluate or recommend.

For the most recent approved ratings of an investment strategy, and a fuller explanation of their meanings, contact your BWCS representative.

Returns for pooled funds, e.g., mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by BWCS. Returns for separate accounts, with some exceptions, are calculated by BWC. 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.

BWC'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 BWC 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.

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

This report is intended for the exclusive use of the client listed within the report. Content is privileged and confidential. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecast represents median expectations and actual returns, volatilities and correlations will differ from forecasts. Please note each client has customized investment objectives and constraints and the investment strategy for each portfolio is based on a client-specific asset allocation model. Past performance does not indicate future performance and there is a possibility of a loss.

This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice.

Please remember to review the periodic statements you receive from your custodian. If you do not receive periodic statements from your custodian or notice issues with the activity reported in those statements, please contact BWCS or your custodian immediately.

INDEX DEFINITIONS

- Citigroup 3 Month T-Bill measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.
- Bloomberg Barclays Treasury U.S. T-Bills-1-3 Month Index includes aged U.S. Treasury bills, notes and bonds with a remaining maturity from 1 up to (but not including) 3 months. It excludes zero coupon strips.
- Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index consists of Inflation-Protection securities issued by the U.S. Treasury.
- Bloomberg Barclays Muni Index is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- Bloomberg Barclays Muni 1 Year Index is the 1-year (1-2) component of the Municipal Bond index.
- Bloomberg Barclays Muni 3 Year Index is the 3-year (2-4) component of the Municipal Bond index.
- Bloomberg Barclays Muni 5 Year Index is the 5-year (4-6) component of the Municipal Bond index.
- Bloomberg Barclays Muni 7 Year Index is the 7-year (6-8) component of the Municipal Bond index.
- Bloomberg Barclays Intermediate U.S. Gov't/Credit is the Intermediate component of the U.S. Government/Credit index, which includes securities in the Government and Credit Indices. The Government Index includes treasuries and agencies, while the credit index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements.
- Bloomberg Barclays U.S. Aggregate Index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset backed securities.
- Bloomberg Barclays Global Aggregate ex. USD Indices represent a broad-based measure of the global investment-grade fixed income markets. The two major components of this index are the Pan-European Aggregate and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate securities.
- Bloomberg Barclays U.S. Corporate High Yield Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- JP Morgan Government Bond Index-Emerging Market (GBI-EM) Index is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
- The S&P 500 is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
- The Dow Jones Industrial Index is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.
- The NASDAQ is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.
- Russell 3000 is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
- Russell 1000 consists of the largest 1000 companies in the Russell 3000 Index.
- Russell 1000 Growth measures the performance of those Russell 1000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 1000 Value measures the performance of those Russell 1000 companies with lower P/B ratios and lower forecasted growth values.
- Russell Mid Cap measures the performance of the 800 smallest companies in the Russell 1000 Index.
- Russell Mid Cap Growth measures the performance of those Russell Mid Cap companies with higher P/B ratios and higher forecasted growth values.
- Russell Mid Cap Value measures the performance of those Russell Mid Cap companies with lower P/B ratios and lower forecasted growth values.

- Russell 2000 consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
- Russell 2000 Growth measures the performance of the Russell 2000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2000 Value measures the performance of those Russell 2000 companies with lower P/B ratios and lower forecasted growth values.
- Russell 2500 consists of the 2,500 smallest U.S. companies in the Russell 3000 index.
- Russell 2500 Growth measures the performance of the Russell 2500 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2500 Value measures the performance of those Russell 2500 companies with lower P/B ratios and lower forecasted growth values.
- MSCI World captures large and mid-cap representation across 23 Developed Markets countries. With 1,645 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI ACWI (All Country World Index) ex. U.S. Index captures large and mid-cap representation across 22 of 23 Developed Markets countries (excluding the United States) and 23 Emerging Markets countries. With 1,859 constituents, the index covers approximately 85% of the global equity opportunity set outside the US.
- MSCI ACWI (All Country World Index) ex. U.S. Small Cap Index captures small cap representation across 22 of 23 Developed Markets countries (excluding the US) and 23 Emerging Markets countries. With 4,368 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
- MSCI EAFE is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. With 930 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI EAFE Value captures large and mid-cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the US and Canada. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 507 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI EAFE Growth captures large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the US and Canada. The growth investment style characteristics for index construction are defined using five variables: long-term forward 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. With 542 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI Emerging Markets captures large and mid-cap representation across 23 Emerging Markets countries. With 836 constituents, the index covers approximately 85% of the free-float adjusted market capitalization in each country.
- Consumer Price Index is a measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rates represent the inflation rate.
- FTSE NAREIT Equity REITs Index contains all Equity REITs not designed as Timber REITs or Infrastructure REITs.
- S&P Developed World Property defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- S&P Developed World Property x U.S. defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
- HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- The Alerian MLP Index is the leading gauge of energy Master Limited Partnerships (MLPs). The float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
- The Adjusted Alerian MLP Index is commensurate with 65% of the monthly returns of the Alerian MLP Index to incorporate the effect of deferred tax liabilities incurred by MLP entities.

DEFINITION OF KEY STATISTICS AND TERMS

- Returns: A percentage figure used when reporting historical average compounded rate of investment return. All returns are annualized if the period for which they are calculated exceeds one year.
- Universe Comparison: The universe compares the fund's returns to a group of other investment portfolios with similar investment strategies. The returns for the fund, the index and the universe percentiles are displayed. A percentile ranking of 1 is the best, while a percentile ranking of 100 is the worst. For example, a ranking of 50 indicates the fund outperformed half of the universe. A ranking of 25 indicates the fund was in the top 25% of the universe, outperforming 75%.
- Returns In Up/Down Markets: This measures how the fund performed in both up and down markets. The methodology is to segregate the performance for each time period into the quarters in which the market, as defined by the index, was positive and negative. Quarters with negative index returns are treated as down markets, and quarters with positive index returns are treated as up markets. Thus, in a 3 year or 12 quarter period, there might be 4 down quarters and 8 up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the down quarters. The up-market capture ratio is the ratio of the fund's return in up markets to the index. The down-market capture ratio is the ratio of the fund's return in down markets to the index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio.
- Standard Deviation: Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.
- R-Squared: This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.
- Beta: This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse than the market in down markets. It is important to note, however, a low fund beta does not imply the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).
- Alpha: The Alpha is the nonsystematic return, or the return that cannot be attributed to the market. It can be thought of as how the manager performed if the market's return was zero. A positive alpha implies the manager added value to the return of the portfolio over that of the market. A negative alpha implies the manager did not contribute any value over the performance of the market.
- Sharpe Ratio: The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The higher the Sharpe ratio, the more reward you are receiving per unit of total risk. This measure can be used to rank the performance of mutual funds or other portfolios.
- Treynor Ratio: The Treynor ratio measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. The ratio relates excess return over the risk-free rate to the additional risk taken; however, systematic risk is used instead of total risk. The Treynor ratio is similar to the Sharpe ratio, except in the fact that it uses the beta to evaluate the returns.
- Tracking Error: Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.
- Information Ratio: The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.
- Downside Risk: Downside risk is a measure similar to standard deviation but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.

Total Fund

Run Date: October 10, 2024

As of June 30, 2024

	Market Value (\$)	% of Portfolio	Month	Quarter	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	Inception (%)	Inception Date
Total Fund	22,337,657	100.00	1.49	1.94	6.81	11.96	3.11	6.28	5.73	3.92	Dec-12
60% MSCI ACWI/40% BC Agg			1.72	1.75	6.39	12.49	2.15	6.52	6.54	6.63	
Credit	5,163,663	23.12	0.60	0.52	1.42	3.85	-0.57	-	-	1.50	Jan-20
Blmbg. U.S. Aggregate			0.95	0.07	-0.71	2.63	-3.02	-	-	-0.79	
Lord Abbett Ultra Short Bond(LUBYX)	439,480	1.97	0.45	1.43	2.93	6.27	2.78	-	-	2.18	Feb-20
ICE BofAML 1-3 Year Treasury			0.58	0.94	1.24	4.53	0.40	-	-	0.83	
iShares Core US Agg Bond ETF(AGG)	361,794	1.62	0.88	0.02	-0.71	2.59	-3.04	-	-	-2.60	Nov-20
Blmbg. U.S. Aggregate			0.95	0.07	-0.71	2.63	-3.02	-	-	-2.61	
iShares 7-10 Year Treasury Bond ETF(IEF)	-	0.00	-	-	-	-	-	-	-	-	Sep-24
Bloomberg U.S. Treasury 7+ Year Index			-	-	-	-	-	-	-	-	
Vanguard Short-Term Federal(VSGDX)	1,485,330	6.65	0.62	0.85	1.33	4.53	-	-	-	-0.39	Oct-21
Blmbg. 1-5 Year Government			0.71	0.77	0.73	4.14	-	-	-	-0.49	
Boyd Watterson Ultra Enhanced Core	1,869,485	8.37	0.90	0.28	-0.69	1.97	-3.31	-0.07	1.07	1.36	Sep-15
Blmbg. Intermed. U.S. Government/Credit			0.80	0.64	0.49	4.19	-1.18	0.71	1.39	1.53	
Entrust Structured Income II-A	374,428	1.68	-0.02	-1.22	11.44	5.72	1.10	6.26	-	6.60	Aug-17
Blmbg. U.S. Aggregate			0.95	0.07	-0.71	2.63	-3.02	-0.23	-	0.81	
Corrum Capital Global Credit Opportunities Fund, LP	165,390	0.74	-1.46	-1.46	-2.78	-3.35	3.06	3.00	4.22	4.64	Sep-15
Blmbg. U.S. Corp: High Yield Index			0.94	1.09	2.58	10.44	1.64	3.92	4.23	5.21	
T. Rowe Price Instl Floating Rate(RPIFX)	467,756	2.09	0.56	2.25	4.54	10.97	5.80	5.14	4.82	4.74	Sep-15
Blmbg. U.S. TIPS			0.78	0.79	0.70	2.71	-1.33	2.07	2.47	2.43	
Equity	10,849,326	48.57	2.66	3.37	12.46	21.05	6.12	-	-	9.08	Jan-20
MSCI AC World Index			2.26	3.01	11.58	19.92	5.94	-	-	10.44	
Vanguard Growth Index Admiral(VIGAX)	1,194,900	5.35	6.60	8.66	20.50	32.77	9.90	-	-	19.82	May-20
Russell 1000 Growth Index			6.74	8.33	20.70	33.48	11.28	-	-	20.64	
iShares Russell 1000 Value ETF(IWD)	-	0.00	-	-	-	-	-	-	-	-	Sep-24
Russell 1000 Value Index			-	-	-	-	-	-	-	-	
iShares MSCI Multifactor USA(LRGF)	1,018,710	4.56	3.08	3.77	16.00	26.79	10.86	-	-	17.39	Jul-20
Russell 1000 Value Index			-0.94	-2.17	6.62	13.06	5.52	-	-	13.98	
Vanguard 500 Index Admiral(VFIAX)	1,114,734	4.99	3.58	4.27	15.27	24.51	9.97	-	-	18.10	May-20
S&P 500 Index			3.59	4.28	15.29	24.56	10.01	-	-	18.13	
Vanguard 500 ETF(VOO)	2,673,891	11.97	3.57	4.41	15.28	24.62	10.00	-	-	14.46	Feb-20
S&P 500 Index			3.59	4.28	15.29	24.56	10.01	-	-	14.49	

Total Fund

	Market Value (\$)	% of Portfolio	Month	Quarter	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	Inception (%)	Inception Date
Vanguard Mid-Cap ETF(VO)	347,837	1.56	-0.64	-2.73	4.88	11.80	2.22	-	-	10.75	Nov-20
<i>Russell Midcap Index</i>			-0.66	-3.35	4.96	12.88	2.37	-	-	11.41	
Vanguard Small-Cap ETF(VB)	702,256	3.14	-1.53	-4.24	2.91	11.37	0.48	-	-	11.04	Nov-20
<i>CRSP U.S. Small Cap TR Index</i>			-1.34	-4.15	3.05	11.45	0.46	-	-	11.08	
iShares MSCI Multifactor USA SC(SMLF)	439,478	1.97	-1.55	-3.46	4.63	15.34	5.08	-	-	15.91	Jul-20
<i>Russell 2000 Index</i>			-0.93	-3.28	1.73	10.06	-2.58	-	-	10.62	
iShares MSCI ACWI(ACWI)	2,210,850	9.90	2.04	2.92	11.37	19.30	5.55	-	-	10.60	Feb-20
<i>MSCI AC World Index</i>			2.26	3.01	11.58	19.92	5.94	-	-	10.92	
Vanguard FTSE Emerging Mkts ETF(VWO)	1,146,670	5.13	1.97	5.17	6.98	11.32	-3.81	-	-	3.07	Nov-20
<i>FTSE Emerging Index</i>			3.10	5.84	8.42	13.87	-3.14	-	-	3.38	
Alternatives	727,908	3.26	-0.94	-0.94	-3.14	-5.89	0.65	-	-	3.12	Jan-20
<i>Barclay Hedge Fund Index</i>			0.45	1.02	5.42	10.47	2.30	-	-	5.92	
Boyd Watterson GSA Fund	440,641	1.97	-1.01	-1.01	-2.83	-5.77	0.30	3.21	4.60	5.58	Sep-15
Boyd Watterson State Govt Fund	287,267	1.29	-0.84	-0.84	-3.61	-6.08	1.20	-	-	4.45	Oct-19
Cash	5,596,760	25.06	0.41	1.23	2.49	5.08	2.86	-	-	1.99	Jan-20
Cash	5,596,760	25.06	0.41	1.23	2.49	5.08	2.86	1.96	1.82	1.12	Dec-12
<i>90 Day U.S. Treasury Bill</i>			0.41	1.32	2.63	5.40	3.03	2.16	2.07	1.31	

Approx. 6% of portfolio is only valued quarterly.

Beirne Wealth Consulting Services, LLC (BWC) D/B/A beirne. All rights reserved.

For more information, please visit www.beirnewealth.com or call BWC at 888-231-6372. This contains confidential and proprietary information of BWC and is intended for the exclusive use of the parties to whom it was provided by BWC. Its content may not be modified, sold or otherwise provided, in whole or in part, to any other person or entity, without BWC's prior written permission.

The findings, ratings and/or opinions expressed herein are the intellectual property of BWC and are subject to change without notice. They are not intended to convey any guarantees as to the future performance of the investment products, asset classes or capital markets discussed. Past performance does not guarantee future results. BWC's ratings do not constitute individualized investment advice.

Information contained herein has been obtained from a range of third party sources. While the information is believed to be reliable, BWC has not sought to verify it independently. As such, BWC makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability (including for indirect, consequential or incidental damages) for any error, omission or inaccuracy in the data supplied by any third party.

This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities and/or any other financial instruments or products or constitute a solicitation on behalf of any of the investment managers, their affiliates, products or strategies that BWC may evaluate or recommend.

For the most recent approved ratings of an investment strategy, and a fuller explanation of their meanings, contact your BWCS representative.

Returns for pooled funds, e.g., mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by BWCS. Returns for separate accounts, with some exceptions, are calculated by BWC. 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.

BWC'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 BWC 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.

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

This report is intended for the exclusive use of the client listed within the report. Content is privileged and confidential. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecast represents median expectations and actual returns, volatilities and correlations will differ from forecasts. Please note each client has customized investment objectives and constraints and the investment strategy for each portfolio is based on a client-specific asset allocation model. Past performance does not indicate future performance and there is a possibility of a loss.

This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice.

Please remember to review the periodic statements you receive from your custodian. If you do not receive periodic statements from your custodian or notice issues with the activity reported in those statements, please contact BWCS or your custodian immediately.

INDEX DEFINITIONS

- Citigroup 3 Month T-Bill measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.
- Bloomberg Barclays Treasury U.S. T-Bills-1-3 Month Index includes aged U.S. Treasury bills, notes and bonds with a remaining maturity from 1 up to (but not including) 3 months. It excludes zero coupon strips.
- Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index consists of Inflation-Protection securities issued by the U.S. Treasury.
- Bloomberg Barclays Muni Index is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- Bloomberg Barclays Muni 1 Year Index is the 1-year (1-2) component of the Municipal Bond index.
- Bloomberg Barclays Muni 3 Year Index is the 3-year (2-4) component of the Municipal Bond index.
- Bloomberg Barclays Muni 5 Year Index is the 5-year (4-6) component of the Municipal Bond index.
- Bloomberg Barclays Muni 7 Year Index is the 7-year (6-8) component of the Municipal Bond index.
- Bloomberg Barclays Intermediate U.S. Gov't/Credit is the Intermediate component of the U.S. Government/Credit index, which includes securities in the Government and Credit Indices. The Government Index includes treasuries and agencies, while the credit index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements.
- Bloomberg Barclays U.S. Aggregate Index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset backed securities.
- Bloomberg Barclays Global Aggregate ex. USD Indices represent a broad-based measure of the global investment-grade fixed income markets. The two major components of this index are the Pan-European Aggregate and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate securities.
- Bloomberg Barclays U.S. Corporate High Yield Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- JP Morgan Government Bond Index-Emerging Market (GBI-EM) Index is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
- The S&P 500 is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
- The Dow Jones Industrial Index is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.
- The NASDAQ is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.
- Russell 3000 is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
- Russell 1000 consists of the largest 1000 companies in the Russell 3000 Index.
- Russell 1000 Growth measures the performance of those Russell 1000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 1000 Value measures the performance of those Russell 1000 companies with lower P/B ratios and lower forecasted growth values.
- Russell Mid Cap measures the performance of the 800 smallest companies in the Russell 1000 Index.
- Russell Mid Cap Growth measures the performance of those Russell Mid Cap companies with higher P/B ratios and higher forecasted growth values.
- Russell Mid Cap Value measures the performance of those Russell Mid Cap companies with lower P/B ratios and lower forecasted growth values.

- Russell 2000 consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
- Russell 2000 Growth measures the performance of the Russell 2000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2000 Value measures the performance of those Russell 2000 companies with lower P/B ratios and lower forecasted growth values.
- Russell 2500 consists of the 2,500 smallest U.S. companies in the Russell 3000 index.
- Russell 2500 Growth measures the performance of the Russell 2500 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2500 Value measures the performance of those Russell 2500 companies with lower P/B ratios and lower forecasted growth values.
- MSCI World captures large and mid-cap representation across 23 Developed Markets countries. With 1,645 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI ACWI (All Country World Index) ex. U.S. Index captures large and mid-cap representation across 22 of 23 Developed Markets countries (excluding the United States) and 23 Emerging Markets countries. With 1,859 constituents, the index covers approximately 85% of the global equity opportunity set outside the US.
- MSCI ACWI (All Country World Index) ex. U.S. Small Cap Index captures small cap representation across 22 of 23 Developed Markets countries (excluding the US) and 23 Emerging Markets countries. With 4,368 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
- MSCI EAFE is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. With 930 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI EAFE Value captures large and mid-cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the US and Canada. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 507 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI EAFE Growth captures large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the US and Canada. The growth investment style characteristics for index construction are defined using five variables: long-term forward 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. With 542 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI Emerging Markets captures large and mid-cap representation across 23 Emerging Markets countries. With 836 constituents, the index covers approximately 85% of the free-float adjusted market capitalization in each country.
- Consumer Price Index is a measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rates represent the inflation rate.
- FTSE NAREIT Equity REITs Index contains all Equity REITs not designed as Timber REITs or Infrastructure REITs.
- S&P Developed World Property defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- S&P Developed World Property x U.S. defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
- HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- The Alerian MLP Index is the leading gauge of energy Master Limited Partnerships (MLPs). The float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
- The Adjusted Alerian MLP Index is commensurate with 65% of the monthly returns of the Alerian MLP Index to incorporate the effect of deferred tax liabilities incurred by MLP entities.

DEFINITION OF KEY STATISTICS AND TERMS

- Returns: A percentage figure used when reporting historical average compounded rate of investment return. All returns are annualized if the period for which they are calculated exceeds one year.
- Universe Comparison: The universe compares the fund's returns to a group of other investment portfolios with similar investment strategies. The returns for the fund, the index and the universe percentiles are displayed. A percentile ranking of 1 is the best, while a percentile ranking of 100 is the worst. For example, a ranking of 50 indicates the fund outperformed half of the universe. A ranking of 25 indicates the fund was in the top 25% of the universe, outperforming 75%.
- Returns In Up/Down Markets: This measures how the fund performed in both up and down markets. The methodology is to segregate the performance for each time period into the quarters in which the market, as defined by the index, was positive and negative. Quarters with negative index returns are treated as down markets, and quarters with positive index returns are treated as up markets. Thus, in a 3 year or 12 quarter period, there might be 4 down quarters and 8 up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the down quarters. The up-market capture ratio is the ratio of the fund's return in up markets to the index. The down-market capture ratio is the ratio of the fund's return in down markets to the index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio.
- Standard Deviation: Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.
- R-Squared: This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.
- Beta: This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse than the market in down markets. It is important to note, however, a low fund beta does not imply the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).
- Alpha: The Alpha is the nonsystematic return, or the return that cannot be attributed to the market. It can be thought of as how the manager performed if the market's return was zero. A positive alpha implies the manager added value to the return of the portfolio over that of the market. A negative alpha implies the manager did not contribute any value over the performance of the market.
- Sharpe Ratio: The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The higher the Sharpe ratio, the more reward you are receiving per unit of total risk. This measure can be used to rank the performance of mutual funds or other portfolios.
- Treynor Ratio: The Treynor ratio measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. The ratio relates excess return over the risk-free rate to the additional risk taken; however, systematic risk is used instead of total risk. The Treynor ratio is similar to the Sharpe ratio, except in the fact that it uses the beta to evaluate the returns.
- Tracking Error: Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.
- Information Ratio: The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.
- Downside Risk: Downside risk is a measure similar to standard deviation but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.

CITY OF BRISTOL-GENERAL CITY RETIREMENT
BENEFIT CALCULATION

Department: Personnel
Group : Non-Bargaining

Employee: Mark Penney
Soc.Sec: "On File"

Date of Retire: 10/26/2024 64 rule:80/85

Early Retirement

NRD 10/3/2032

CALENDAR YEAR	GROSS EARNINGS	PENSION CALCULATION
2024	\$ 155,787.17 *	Highest Three Years:
2023	\$ 154,349.72 *	
2022	\$ 129,964.92 *	\$ 155,787.17
2021	\$ 122,840.14 *	\$ 154,349.72
	\$ (100,627.95) *	\$ 129,964.92
2020	\$ 117,109.18	\$ 122,840.14
2019	\$ 87,590.15	\$ (100,627.95)

Calculation: \$ 462,314.00

Sum Of Highest Three Years Divided By 3

= Average Annual Earnings

\$ 462,314.00 x 1/3 =
\$ 154,104.67

\$ 154,104.67 Average Annual Earnings
x .0200 Percentage Factor

\$ 3,082.09
x 5 Years of Service

\$ 15,410.45 Annual Pension: Normal Retirement
0.5667 Early Retirement Adjustment Factor

\$ 8,733.10 Annual Pension: Early Retirement

\$ 727.76 Monthly Pension: Early Retirement

Comments: City Retirement Benefits are Exclusive of Social Security Benefits.
2024 Gross wages include Payout of \$22,295.12

Prepared by: Lindsey Schaffner

Date: 10/30/2024

Reviewed by: Robert A. Marable

Date: 11/5/2024

Approved by: Diane M. Waldron

Date: 11/5/2024

Board
Approved: _____

Date: _____

**CITY OF BRISTOL-GENERAL CITY RETIREMENT
BENEFIT CALCULATION**

Department: Public Works
Group : Local #233

Employee: GERALYN MONTAMBAULT
Soc.Sec: "On File"

Date of Retire: 10/17/2024 75 rule:80/85

Early Retirement

NRD 9/26/2027

CALENDAR YEAR	GROSS EARNINGS	PENSION CALCULATION
2024	\$ 53,365.00 *	Highest Three Years:
2023	\$ 49,446.05 *	
2022	\$ 49,448.17 *	\$ 53,365.00
2021	\$ 46,852.98 *	\$ 49,446.05
	\$ (37,225.66) *	\$ 49,448.17
2020	\$ 45,951.72	\$ 46,852.98
2019	\$ 43,710.88	\$ (37,225.66)
2018	\$ 40,596.36	
2017	\$ 40,309.91	Calculation: \$ 161,886.54
2016	\$ 36,996.72	
2015	\$ 37,233.69	Sum Of Highest Three Years Divided By 3
		= Average Annual Earnings
		\$ 161,886.54 x 1/3 =
		<u>\$ 53,962.18</u>
		\$ 53,962.18 Average Annual Earnings
		x .0240 Percentage Factor
		\$ 1,295.09
		x 14 Years of Service
		\$ 18,131.26 Annual Pension: Normal Retirement
		0.8000 Early Retirement Adjustment Factor
		\$ 14,505.01 Annual Pension: Early Retirement
		<u>\$ 1,208.75</u> Monthly Pension: Early Retirement

Comments: City Retirement Benefits are Exclusive of Social Security Benefits.
2024 Gross wages include Payout of \$13,796.72

Prepared by: Lindsay Schaffrick

Date: 10/31/2024

Reviewed by: Robin A. Marule

Date: 11/5/2024

Approved by: Diane M. Waldron

Date: 11/5/24

Board
Approved: _____

Date: _____

**CITY OF BRISTOL-GENERAL CITY RETIREMENT
BENEFIT CALCULATION**

Department: BBHD Employee: **Phyllis Amodio** [REDACTED]
 Group : Local #1303 Soc.Sec: "On File" Date of Retire: 9/28/2024 94 rule:80/85

Normal Retirement

CALENDAR YEAR	GROSS EARNINGS	PENSION CALCULATION
2024	\$ 121,063.99 *	Highest Three Years:
2023	\$ 123,495.42 *	
2022	\$ 116,953.62 *	\$ 121,063.99
2021	\$ 106,181.75	\$ 123,495.42
	\$ (78,836.31)	\$ 116,953.62
2020	\$ 101,765.07	\$ 106,181.75
2019	\$ 94,838.57	\$ (78,836.31)
2018	\$ 92,293.77	
2017	\$ 89,886.23	Calculation: \$ 388,858.47
2016	\$ 90,425.48 *	
2015	\$ 86,106.01 *	Sum Of Highest Three Years Divided By 3
		= Average Annual Earnings
		\$ 388,858.47 x 1/3 =
		<u>\$ 129,619.49</u>
		\$ 129,619.49 Average Annual Earnings
		x .0240 Percentage Factor
		<u>\$ 3,110.87</u>
		x 36 Years of Service
		\$ 111,991.32 Annual Pension: Normal Retirement
		<u>\$ 9,332.61</u> Monthly Pension: Normal Retirement

Comments: City Retirement Benefits are Exclusive of Social Security Benefits.
 2024 Gross Wages include an accrual payout of \$29,479.78

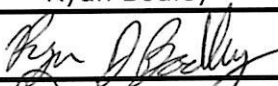
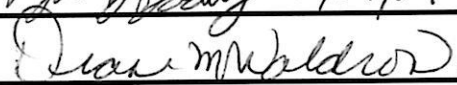
Prepared by: Lindsey Schaffner Date: 10/11/2024
 Reviewed by: Robin O Manuele Date: 11/5/2024
 Approved by: Deshaun Walker Date: 11/5/24
 Board
 Approved: _____ Date: _____

Pension Calculation Worksheet

NAME:	Todd Lavallee	Employee #:	3275
		Job Class:	3030
		Grade/Rank:	04/1
Effective Date:	10/3/2024	Pension Class:	9031
		Grade/Rank:	67/14
Salary:	96,519.00		

Balance Sick Hours:	1,600.00		
	x	<u>0.45</u>	contract rate
		720.00	
	x	<u>49.3614</u>	hourly rate
		35,540.21	
	x	<u>0.40</u>	per contract
		14,216.08	

Base Salary	96,519.00		
40% sick	14,216.08		
	<u>110,735.08</u>		
	x	<u>0.70</u>	
		77,514.56	
	/	<u>52.1428</u>	
		1,486.58	
	x	<u>2</u>	bi-weekly
New Bi-weekly Rate		<u>2,973.16</u>	

Prepared By:	Ryan Bodley	10/24/2024
Deputy Treasurer:		10/24/24
Comptroller/Assist.:		11/8/24



Comptroller's Office | Phone: 860.584.6130

Memorandum

To: Retirement Board
Cc: Corporation Counsel
From: Diane M. Waldron, Comptroller *DMW*
Re: Scott & Scott Litigation Alert
Date: November 12, 2024

Please see the attached Litigation Alert from Scott & Scott Attorneys regarding their recommendation to move forward as a lead plaintiff in the class action securities litigation proceedings against Elanco Animal Health Inc. Based on their estimates the Plan suffered a loss of approximately \$228,520.

The Retirement Board would need to officially authorize the city to participate as a lead plaintiff so this is being forwarded for your review and either a vote to participate or not participate.

The Board did participate as a lead plaintiff in 2017-2019 timeframe for 2 class action lawsuits. It is a very time-consuming process to participate which can be reviewed further it at the meeting.



SCOTT+SCOTT ATTORNEYS AT LAW LLP

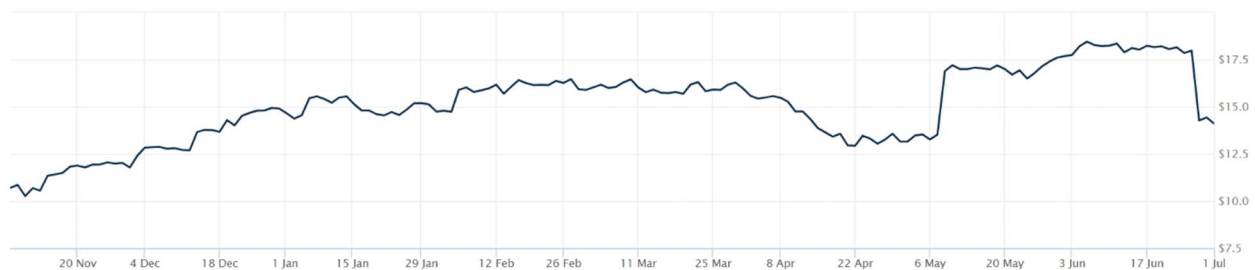
LITIGATION ALERT

+ CONFIDENTIAL ATTORNEY-CLIENT COMMUNICATION +

To: City of Bristol Pension Fund
From: Don Broggi
Date: October 11, 2024
Re: Elanco Animal Health Inc. Securities Litigation

Scott+Scott Attorneys at Law LLP (“Scott+Scott”) is alerting the the City of Bristol Pension Fund (the “Fund”) to a securities class action currently pending against Elanco Animal Health Inc. (“Elanco” or the “Company”) (NYSE: ELAN) and certain of the Company’s senior executives in the U.S. District Court for the District of Maryland (the “Action”). As a result of the alleged wrongdoing, *the Fund suffered a loss of approximately \$228,520*. For the reasons detailed below, Scott+Scott believes that the Fund should seriously consider taking an active role in this litigation by moving for lead plaintiff by the **December 6, 2024** deadline.

Elanco’s Stock Price from November 7, 2023 through July 1, 2024



Elanco is the second-largest independent animal health company and develops and sells animal pharmaceuticals, vaccines, and diagnostics. The Action was filed on October 7, 2024 and alleges that Elanco made false and misleading statements about the safety of one of its key drug prospects, Zenrelia, which treats canine dermatitis, and misled investors about the timeline for FDA approval of Zenrelia and another of its core drug prospects, Credelio Quattro, a canine parasiticide.

The Action alleges that the truth was revealed on June 27, 2024, when Elanco announced that it expected that the FDA would approve Zenrelia, but require the drug to carry a “black box” safety warning label, based on the outcome of a vaccine study (the “Vaccine Study”). Elanco told

the market that the “black box” warning label would “slow the product adoption curve in the U.S.” and limit the number of expected treatment days by about 25%. In addition, Elanco disclosed that FDA approval of both Zenrelia and Credelio Quattro would be delayed by a quarter. Following these revelations, Elanco shares declined by \$3.69/share or about 20%, to close at \$14.28/share.

Based on Scott+Scott’s investigation, the Vaccine Study was completed on March 13, 2023, and demonstrated that it was not safe to administer vaccines to dogs taking Zenrelia. Despite this, Elanco touted to the market for months that Zenrelia was “differentiated” from its competitor drug before finally disclosing the truth on June 27, 2024, leading to widespread investor losses, including the *Fund’s loss of \$228,520*.

+Recommendation+

Scott+Scott believes there is good reason for the Fund to pursue litigation against Elanco and certain of its senior executives to recover the substantial losses it suffered. Scott+Scott recommends that the Fund move for lead plaintiff before the December 6, 2024 deadline. In doing so, the Fund can actively seek to maximize recovery of the substantial losses it suffered in Elanco securities. In the meantime, we are available to answer any questions you may have on this or any other matter.

CONTACT

Donald A. Broggi

Jonathan M. Zimmerman

Scott+Scott Attorneys at Law LLP

The Helmsley Building

230 Park Avenue, 24th Floor, New York, NY 10169

Telephone: (212) 519-0518 (Broggi)

(212) 419-3171 (Zimmerman)

dbroggi@scott-scott.com

jzimmerman@scott-scott.com

PRELIMINARY REPORT PREPARED FOR:



Your Strategic Partner for Defined Benefit Plans

Month Ending 10/31/2024

John-Oliver Beirne, CRPC®, MBA
Partner & President
JOBeirne@beirnegroup.com
(203) 701-8976

Richard DeFrancesco, Jr.
Partner, Chief Operating Officer
RDeFrancesco@beirnegroup.com
(203) 951-3577

John Beirne, CIMA®
Founding Partner
JBeirne@beirnegroup.com
(203) 701-8974

Lindsey Allard, AWMA®, MBA
Partner, Managing Director
LAllard@beirnegroup.com
(203) 951-0305

Periods Ending 10/31/24

Name	1 Month	Last 3 Months	YTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
US Equity									
Russell 3000 Index	-0.7	3.5	19.7	37.9	7.6	14.6	12.4	13.9	12.6
S&P 500 Index	-0.9	3.7	21.0	38.0	9.1	15.3	13.0	14.2	12.9
Russell 1000 Index	-0.7	3.8	20.3	38.1	8.1	15.0	12.8	14.1	12.8
Russell 1000 Growth Index	-0.3	4.6	24.1	43.8	8.8	19.0	16.2	16.6	11.6
Russell 1000 Value Index	-1.1	3.0	15.4	31.0	6.8	10.1	8.9	11.4	13.6
Russell Midcap Index	-0.5	3.7	14.0	35.4	3.5	10.9	9.8	12.8	14.0
Russell 2000 Index	-1.4	-2.2	9.6	34.1	0.0	8.5	7.9	11.0	10.9
Russell 2000 Growth Index	-1.3	-1.1	11.7	36.5	-2.3	7.9	8.1	11.5	7.8
Russell 2000 Value Index	-1.6	-3.4	7.5	31.8	1.9	8.4	7.3	10.2	13.4
International Equity									
MSCI AC World Index	-2.2	2.7	16.4	33.4	6.0	11.6	9.6	10.1	-
MSCI AC World ex USA	-4.9	0.6	9.1	25.0	2.1	6.3	5.3	5.7	-
MSCI EAFE Index	-5.4	-1.4	7.3	23.6	3.2	6.8	5.8	6.2	11.3
MSCI Emerging Markets Index	-4.3	3.8	12.2	25.9	-1.0	4.3	3.8	4.2	-
Fixed Income									
90 Day U.S. Treasury Bill	0.4	1.3	4.4	5.4	3.6	2.4	1.7	1.1	5.2
Blmbg. U.S. Aggregate	-2.5	0.2	1.9	10.5	-2.2	-0.2	1.5	2.4	9.0
Blmbg. U.S. Gov't/Credit	-2.4	0.3	1.9	10.2	-2.3	-0.1	1.7	2.6	9.0
Bloomberg U.S. Municipal Bond Index	-1.5	0.3	0.8	9.7	-0.3	1.1	2.3	3.3	8.4
Blmbg. U.S. Corp: High Yield Index	-0.5	2.7	7.4	16.5	3.0	4.5	4.9	6.7	10.0
Real Estate									
FTSE NAREIT All REITs Index	-3.7	4.5	9.5	33.4	-0.5	3.7	6.4	10.4	10.2
NCREIF Property Index	-	-	-	-	-	-	-	-	-
Alternatives									
Barclay Hedge Fund Index	-0.7	1.6	8.7	16.0	2.9	6.5	5.1	5.4	-
Inflation									
CPI - All Urban Consumers (SA)	-	-	-	-	-	-	-	-	3.0

Total Portfolio

Run Date: November 12, 2024

As of October 31, 2024

	Market Value (\$)	% of Portfolio	Month	Quarter	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Years	Inception (%)	Inception Date
Total Portfolio	802,231,819	100.00	-0.28	1.79	8.93	17.34	3.00	8.55	7.03	7.38	8.62	Jan-92
Policy Index Blended New			-1.98	1.86	11.14	23.88	3.51	7.67	6.69	7.45	7.36	
60% MSCI ACWI/40% BC Agg			-2.34	1.63	10.18	23.50	2.52	6.69	6.21	6.90	6.79	
Credit	154,895,820	19.31	-0.77	1.24	4.82	8.13	1.53	5.43	-	-	5.76	Jan-19
Blmbg. U.S. Aggregate			-2.48	0.25	1.86	10.55	-2.20	-0.23	1.49	2.39	1.26	
High Quality Credit	77,428,539	9.65	-1.54	0.25	5.10	11.11	1.22	3.62	-	-	4.34	Jan-19
Blmbg. U.S. Aggregate			-2.48	0.25	1.86	10.55	-2.20	-0.23	1.49	2.39	1.26	
Boyd Watterson Fixed Income	30,300,131	3.78	-2.61	0.36	2.40	11.32	-2.00	0.12	1.75	2.75	5.42	Apr-90
Blmbg. U.S. Aggregate			-2.48	0.25	1.86	10.55	-2.20	-0.23	1.49	2.39	5.10	
iShares Core US Aggregate Bond ETF(AGG)	15,580,163	1.94	-2.52	0.22	1.91	10.52	-	-	-	-	4.22	Aug-23
Blmbg. U.S. Aggregate			-2.48	0.25	1.86	10.55	-2.20	-0.23	1.49	2.39	4.25	
GoldenTree High Grade Floating Rate Fund, Ltd.	975,591	0.12	0.00	0.76	6.99	9.51	5.77	4.42	-	-	3.95	Feb-18
Blmbg. U.S. Aggregate Float Adjusted			-2.42	0.29	1.92	10.46	-2.17	-0.19	1.53	2.43	1.31	
Golub Capital BDC 4, Inc.(\$22 million)	13,530,000	1.69	0.00	0.89	9.98	13.42	-	-	-	-	14.10	Dec-22
Blmbg. U.S. Aggregate			-2.48	0.25	1.86	10.55	-2.20	-0.23	1.49	2.39	3.59	
EnTrust Structured Income II-A	17,042,654	2.12	0.00	0.59	7.71	14.64	-0.46	6.94	-	-	5.75	Jul-17
Blmbg. U.S. Aggregate			-2.48	0.25	1.86	10.55	-2.20	-0.23	1.49	2.39	1.17	
Multi-Credit	77,467,281	9.66	0.02	2.31	3.84	3.19	1.98	8.41	-	-	7.99	Jan-19
Blmbg. U.S. Corp: High Yield Index			-0.54	2.72	7.42	16.47	2.97	4.55	4.86	6.69	5.87	
Prytania Athena Fund	13,679,030	1.71	0.00	5.20	6.06	7.86	3.48	1.37	3.68	-	3.64	Mar-14
Blmbg. Global High Yield Index			-0.63	3.51	8.90	19.36	2.67	3.77	4.18	6.11	3.98	
EnTrust Structured Income Fund	5,734,292	0.71	0.00	3.00	-1.06	-1.99	-3.35	5.16	5.76	-	5.44	Mar-13
Blmbg. U.S. Aggregate			-2.48	0.25	1.86	10.55	-2.20	-0.23	1.49	2.39	1.55	
Beach Point TR Offshore Fund II[CE]	10,255,853	1.28	0.18	1.65	6.04	11.16	3.69	6.16	4.77	-	5.88	Jan-12
Blmbg. U.S. Corp: High Yield Index			-0.54	2.72	7.42	16.47	2.97	4.55	4.86	6.69	5.93	
Silver Point Specialty Credit Fund III, LP(\$22 million)	9,261,570	1.15	0.00	0.00	5.45	8.77	-	-	-	-	8.97	Apr-23
Blmbg. U.S. Corporate Investment Grade Index			-2.43	0.86	2.77	13.63	-2.07	0.54	2.57	3.85	4.81	
GWC Select Opportunities SPC1(\$2.6 million)	2,622,138	0.33	0.00	2.59	9.26	13.44	-	-	-	-	13.03	Sep-23
Blmbg. U.S. Corp: High Yield Index			-0.54	2.72	7.42	16.47	2.97	4.55	4.86	6.69	11.65	
Greywolf Opportunities Offshore Fund II, LP(\$24 million)	20,565,392	2.56	0.00	4.23	3.14	1.70	-	-	-	-	7.63	Oct-22
Blmbg. U.S. Corp: High Yield Index			-0.54	2.72	7.42	16.47	2.97	4.55	4.86	6.69	12.11	
Greywolf Distressed Opp Fund, LP(\$17 million)	15,349,006	1.91	0.00	-1.05	2.74	-4.32	4.59	-	-	-	6.31	Aug-20
Blmbg. U.S. Universal Index			-2.27	0.53	2.52	11.20	-1.78	0.18	1.82	2.78	-1.41	

Total Portfolio												
	Market Value (\$)	% of Portfolio	Month	Quarter	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Years	Inception (%)	Inception Date
Equity	375,037,163	46.75	-0.41	2.68	14.06	31.11	4.83	12.60	-	-	13.99	Jan-19
MSCI AC World Index			-2.21	2.67	16.44	33.40	6.01	11.61	9.62	10.12	13.33	
Public Equity	300,252,812	37.43	-0.51	3.34	17.74	35.25	4.66	12.22	-	-	13.68	Jan-19
MSCI AC World Index			-2.21	2.67	16.44	33.40	6.01	11.61	9.62	10.12	13.33	
Neuberger Berman Large Cap Growth	80,820,915	10.07	-1.25	3.24	21.91	42.85	6.90	19.22	16.36	15.43	14.58	Feb-79
Russell 1000 Growth Index			-0.33	4.63	24.14	43.77	8.84	19.00	16.18	16.60	12.19	
iShares Russell 1000 Value ETF(IWD)	7,151,890	0.89	-1.12	2.89	15.15	30.72	6.64	9.93	-	-	10.52	Feb-19
Russell 1000 Value Index			-1.10	2.96	15.40	30.98	6.85	10.14	8.87	11.35	10.72	
Columbia Dividend Income	18,614,951	2.32	-1.23	3.38	15.10	27.67	7.95	11.86	-	-	11.68	May-19
Russell 1000 Value Index			-1.10	2.96	15.40	30.98	6.85	10.14	8.87	11.35	9.76	
Eagle Equity	32,429,185	4.04	-0.11	3.87	23.42	36.49	7.29	14.58	-	-	14.70	Apr-19
Russell 1000 Value Index			-1.10	2.96	15.40	30.98	6.85	10.14	8.87	11.35	10.30	
Robeco LCV	45,278,390	5.64	-0.02	2.09	16.74	31.71	9.78	12.34	9.79	-	10.57	Oct-13
Russell 1000 Value Index			-1.10	2.96	15.40	30.98	6.85	10.14	8.87	11.35	9.88	
Patient Opportunity I(LMNOX)	8,510,096	1.06	3.30	6.23	20.61	55.24	-0.62	9.96	-	-	10.16	Apr-19
Russell 1000 Value Index			-1.10	2.96	15.40	30.98	6.85	10.14	8.87	11.35	10.30	
Fiera SMID Growth	30,234,516	3.77	-0.40	0.17	4.16	25.92	0.42	13.36	10.50	-	10.50	Nov-14
Russell 2500 Growth Index			-0.25	0.60	10.92	34.21	-2.47	9.14	9.48	12.63	9.47	
Neuberger Berman International	19,905,018	2.48	-2.28	-1.76	8.35	23.41	-1.24	5.60	5.65	7.12	6.37	Feb-05
MSCI EAFE Index			-5.42	-1.40	7.34	23.58	3.22	6.76	5.78	6.18	5.62	
Vanguard Developed Mkts Ind(VTMNX)	2,866,998	0.36	-5.29	-1.56	6.23	22.46	1.91	-	-	-	8.29	Mar-20
FTSE Developed x North America Index			-5.51	-1.88	6.26	22.81	2.54	6.58	5.74	6.18	8.70	
GAMCO Gold	16,650,406	2.08	3.60	12.34	32.19	48.58	10.17	9.84	9.69	-	-0.35	Feb-12
Philadelphia Gold and Silver Index			1.62	6.23	29.88	47.31	10.50	13.35	11.13	-0.54	-0.59	
Sprott Asset Management	13,111,826	1.63	4.10	12.07	40.83	60.49	8.32	9.65	8.28	-	-1.59	Feb-12
Philadelphia Gold and Silver Index			1.62	6.23	29.88	47.31	10.50	13.35	11.13	-0.54	-0.59	
iShares MSCI Emerging Markets ETF(EEM)	24,678,622	3.08	-3.07	3.49	11.34	24.31	-2.06	3.20	-	-	4.45	Feb-17
MSCI Emerging Markets Index			-4.32	3.79	12.17	25.95	-0.99	4.35	3.83	4.21	5.67	

Total Portfolio												
	Market Value (\$)	% of Portfolio	Month	Quarter	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Years	Inception (%)	Inception Date
Private Equity	74,784,351	9.32	0.00	0.14	0.93	16.35	13.75	24.38	12.94	-	9.22	Jan-12
7.5% Annual Return			0.60	1.82	6.21	7.50	7.50	7.50	7.50	7.50	7.50	
Arsenal III, LP(\$15 mill)	28,490,803	3.55	0.00	0.78	-1.11	5.59	10.19	28.43	-	-	31.20	Feb-19
Arsenal Growth Equity IV, LP(\$35 mill)	20,023,326	2.50	0.00	-0.02	0.28	63.27	-	-	-	-	29.17	Feb-23
Arsenal-Beamer Investors, LLC(\$2.9 million)	2,884,923	0.36	0.00	0.00	-	-	-	-	-	-	-0.52	Jun-24
Arsenal-Cart Investors II, LLC(\$2 million)	4,088,479	0.51	0.00	0.00	4.97	8.46	26.91	-	-	-	26.91	Nov-21
Arsenal-Elevate Investors I, LLC(\$4.6 million)	4,872,285	0.61	0.00	0.00	0.29	1.71	-	-	-	-	2.69	Sep-22
Arsenal-Sayari Investors, LLC(\$2 million)	4,088,657	0.51	0.00	0.00	-0.28	25.95	26.92	-	-	-	26.92	Nov-21
GWC Select Opportunities SPC(\$2.5 million)	3,149,506	0.39	0.00	-3.32	-1.21	-1.73	-	-	-	-	12.24	Nov-22
Zephyr Peacock India Fund III Limited (\$5 million)	2,490,567	0.31	0.00	0.00	-2.81	-4.42	0.61	1.69	3.72	-	0.94	Jun-12
Zephyr Peacock India Growth Fund US, LP(\$6 million)	4,695,805	0.59	0.00	0.00	25.47	22.39	0.66	5.73	-	-	1.62	Jul-18
Alternatives	231,677,702	28.88	0.15	0.78	4.20	5.72	4.37	4.35	-	-	4.42	Jan-19
Barclay Hedge Fund Index			-0.71	1.64	8.72	16.05	2.86	6.52	5.09	5.38	6.92	
Real Estate	66,424,121	8.28	0.00	-1.87	-3.46	-5.94	-0.90	1.55	-	-	2.66	Jan-19
NCREIF Property Index			0.00	0.78	-0.46	-3.47	0.87	3.26	5.88	7.56	3.62	
Boyd Titanium GSA Fund (\$34.5 million)	32,063,794	4.00	0.00	-3.37	-6.09	-8.14	-1.19	1.85	5.26	-	5.10	Oct-13
Boyd Watterson State Govt Fund, LP(\$10 million)	9,674,244	1.21	0.00	-2.82	-6.33	-8.19	-0.48	3.51	-	-	4.55	Feb-18
Boyd Diversified Gov't REIT(\$10 million)	24,060,041	3.00	0.00	0.58	2.25	3.72	-	-	-	-	4.35	Jan-23
Invesco Mortgage Recovery Fund II, LP(\$10 million)	614,580	0.08	0.00	0.00	-21.50	-69.25	-45.79	-39.10	-	-	-18.45	Apr-15
Lone Star (\$10 million)	11,462	0.00	0.00	0.00	-3.26	4.55	81.37	39.17	26.55	-	20.23	Jun-11
Commodities	5,104,841	0.64	0.00	0.00	-1.32	-9.62	-4.81	-6.78	-	-	-6.56	Jan-19
Bloomberg Commodity Index Total Return			-1.85	2.97	3.89	-1.18	2.15	6.96	-0.08	-0.78	6.86	
Corrum Capital Real Assets, LP (\$10 million)	5,104,841	0.64	0.00	0.00	-1.32	-9.62	-4.81	-6.78	-	-	-1.16	Jun-15

	Total Portfolio											
	Market Value (\$)	% of Portfolio	Month	Quarter	YTD	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Years	Inception (%)	Inception Date
Differentiated Return Stream	160,148,740	19.96	0.22	1.96	8.14	12.58	7.52	6.70	-	-	5.39	Jan-19
<i>CPI+2%</i>			-	-	-	-	-	-	-	-	-	
Kelly Park Capital	18,169,821	2.26	0.00	0.89	1.68	6.19	-0.42	-	-	-	1.39	Jan-20
Verition International Multi-Strategy Fund, Ltd.[CE]	44,960,322	5.60	0.78	2.21	7.71	9.38	7.78	-	-	-	12.19	Jan-20
OCO Opportunities Offshore Fund, Ltd.	20,962,326	2.61	0.00	4.58	12.86	22.78	-2.94	17.24	8.27	-	8.44	Feb-14
Greywolf Containership Opps II, LP(\$6 million)	6,851,994	0.85	0.00	17.44	34.55	25.56	-	-	-	-	19.79	Nov-22
Entrust Blue Ocean Fund, LP(\$17 million)	23,133,129	2.88	0.00	0.00	8.78	13.27	20.82	-	-	-	18.44	Apr-20
Entrust Blue Ocean Fund II, LP (\$30 mill)	15,227,806	1.90	0.00	0.00	1.06	-	-	-	-	-	-0.49	Dec-23
Longford Capital (\$15 million)	2,741,677	0.34	0.00	0.00	2.83	9.03	16.87	14.48	10.48	-	4.29	Jul-13
Longford Capital Fund II, LP (\$30 million)	12,986,699	1.62	0.00	0.00	-0.72	6.76	3.13	5.49	-	-	2.02	Dec-16
Longford Capital Fund III, LP(\$30 million)	15,114,966	1.88	0.00	0.00	15.53	23.72	20.84	-	-	-	8.49	Apr-20
Cash	40,621,134	5.06	0.38	1.20	4.25	5.13	3.44	2.15	-	-	2.13	Jan-19
Cash Account	40,621,134	5.06	0.38	1.20	4.25	5.13	3.44	2.15	1.47	-	1.19	Jan-12
<i>90 Day U.S. Treasury Bill</i>			0.38	1.30	4.43	5.39	3.63	2.36	1.68	1.14	1.33	

Approx. 10% of portfolio is unvalued as of 10/31. Additionally, there is approx. 35% which is only valued quarterly.

Policy Index-Blended New = MSCI ACWI 55% / BBgBarc US Aggregate TR 25% / Barclay Hedge Fund Index 20%.

From 4/30/2022-1/1/2019 the Policy Index Blended New consists of MSCI ACWI 55% / BBgBarc US Aggregate TR 25% / HFRI Fund of Funds Composite Index 20%. Prior to 1/1/2019 the Policy Index Blended New consists of 15% Russell 1000 Growth, 15% Russell 1000 Value, 5% Russell MidCap, 13.6% MSCI EAFE, 7.5% MSCI Emerging Markets, 21.3% BC US Aggregate, 7.6% BofA HY BB-B Rated Constrained Index, 10% HFRX Global Hedge Fund Index, 5% Private Equity Actual.

Beirne Wealth Consulting Services, LLC (BWC) D/B/A beirne. All rights reserved.

For more information, please visit www.beirnewealth.com or call BWC at 888-231-6372. This contains confidential and proprietary information of BWC and is intended for the exclusive use of the parties to whom it was provided by BWC. Its content may not be modified, sold or otherwise provided, in whole or in part, to any other person or entity, without BWC's prior written permission.

The findings, ratings and/or opinions expressed herein are the intellectual property of BWC and are subject to change without notice. They are not intended to convey any guarantees as to the future performance of the investment products, asset classes or capital markets discussed. Past performance does not guarantee future results. BWC's ratings do not constitute individualized investment advice.

Information contained herein has been obtained from a range of third party sources. While the information is believed to be reliable, BWC has not sought to verify it independently. As such, BWC makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability (including for indirect, consequential or incidental damages) for any error, omission or inaccuracy in the data supplied by any third party.

This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities and/or any other financial instruments or products or constitute a solicitation on behalf of any of the investment managers, their affiliates, products or strategies that BWC may evaluate or recommend.

For the most recent approved ratings of an investment strategy, and a fuller explanation of their meanings, contact your BWCS representative.

Returns for pooled funds, e.g., mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by BWCS. Returns for separate accounts, with some exceptions, are calculated by BWC. 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.

BWC'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 BWC 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.

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

This report is intended for the exclusive use of the client listed within the report. Content is privileged and confidential. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecast represents median expectations and actual returns, volatilities and correlations will differ from forecasts. Please note each client has customized investment objectives and constraints and the investment strategy for each portfolio is based on a client-specific asset allocation model. Past performance does not indicate future performance and there is a possibility of a loss.

This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice.

Please remember to review the periodic statements you receive from your custodian. If you do not receive periodic statements from your custodian or notice issues with the activity reported in those statements, please contact BWCS or your custodian immediately.

INDEX DEFINITIONS

- Citigroup 3 Month T-Bill measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.
- Bloomberg Barclays Treasury U.S. T-Bills-1-3 Month Index includes aged U.S. Treasury bills, notes and bonds with a remaining maturity from 1 up to (but not including) 3 months. It excludes zero coupon strips.
- Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index consists of Inflation-Protection securities issued by the U.S. Treasury.
- Bloomberg Barclays Muni Index is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- Bloomberg Barclays Muni 1 Year Index is the 1-year (1-2) component of the Municipal Bond index.
- Bloomberg Barclays Muni 3 Year Index is the 3-year (2-4) component of the Municipal Bond index.
- Bloomberg Barclays Muni 5 Year Index is the 5-year (4-6) component of the Municipal Bond index.
- Bloomberg Barclays Muni 7 Year Index is the 7-year (6-8) component of the Municipal Bond index.
- Bloomberg Barclays Intermediate U.S. Gov't/Credit is the Intermediate component of the U.S. Government/Credit index, which includes securities in the Government and Credit Indices. The Government Index includes treasuries and agencies, while the credit index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements.
- Bloomberg Barclays U.S. Aggregate Index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset backed securities.
- Bloomberg Barclays Global Aggregate ex. USD Indices represent a broad-based measure of the global investment-grade fixed income markets. The two major components of this index are the Pan-European Aggregate and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate securities.
- Bloomberg Barclays U.S. Corporate High Yield Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- JP Morgan Government Bond Index-Emerging Market (GBI-EM) Index is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
- The S&P 500 is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
- The Dow Jones Industrial Index is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.
- The NASDAQ is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.
- Russell 3000 is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
- Russell 1000 consists of the largest 1000 companies in the Russell 3000 Index.
- Russell 1000 Growth measures the performance of those Russell 1000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 1000 Value measures the performance of those Russell 1000 companies with lower P/B ratios and lower forecasted growth values.
- Russell Mid Cap measures the performance of the 800 smallest companies in the Russell 1000 Index.
- Russell Mid Cap Growth measures the performance of those Russell Mid Cap companies with higher P/B ratios and higher forecasted growth values.
- Russell Mid Cap Value measures the performance of those Russell Mid Cap companies with lower P/B ratios and lower forecasted growth values.

- Russell 2000 consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
- Russell 2000 Growth measures the performance of the Russell 2000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2000 Value measures the performance of those Russell 2000 companies with lower P/B ratios and lower forecasted growth values.
- Russell 2500 consists of the 2,500 smallest U.S. companies in the Russell 3000 index.
- Russell 2500 Growth measures the performance of the Russell 2500 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2500 Value measures the performance of those Russell 2500 companies with lower P/B ratios and lower forecasted growth values.
- MSCI World captures large and mid-cap representation across 23 Developed Markets countries. With 1,645 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI ACWI (All Country World Index) ex. U.S. Index captures large and mid-cap representation across 22 of 23 Developed Markets countries (excluding the United States) and 23 Emerging Markets countries. With 1,859 constituents, the index covers approximately 85% of the global equity opportunity set outside the US.
- MSCI ACWI (All Country World Index) ex. U.S. Small Cap Index captures small cap representation across 22 of 23 Developed Markets countries (excluding the US) and 23 Emerging Markets countries. With 4,368 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
- MSCI EAFE is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. With 930 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI EAFE Value captures large and mid-cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the US and Canada. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 507 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI EAFE Growth captures large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the US and Canada. The growth investment style characteristics for index construction are defined using five variables: long-term forward 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. With 542 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI Emerging Markets captures large and mid-cap representation across 23 Emerging Markets countries. With 836 constituents, the index covers approximately 85% of the free-float adjusted market capitalization in each country.
- Consumer Price Index is a measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rates represent the inflation rate.
- FTSE NAREIT Equity REITs Index contains all Equity REITs not designed as Timber REITs or Infrastructure REITs.
- S&P Developed World Property defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- S&P Developed World Property x U.S. defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
- HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- The Alerian MLP Index is the leading gauge of energy Master Limited Partnerships (MLPs). The float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
- The Adjusted Alerian MLP Index is commensurate with 65% of the monthly returns of the Alerian MLP Index to incorporate the effect of deferred tax liabilities incurred by MLP entities.

DEFINITION OF KEY STATISTICS AND TERMS

- Returns: A percentage figure used when reporting historical average compounded rate of investment return. All returns are annualized if the period for which they are calculated exceeds one year.
- Universe Comparison: The universe compares the fund's returns to a group of other investment portfolios with similar investment strategies. The returns for the fund, the index and the universe percentiles are displayed. A percentile ranking of 1 is the best, while a percentile ranking of 100 is the worst. For example, a ranking of 50 indicates the fund outperformed half of the universe. A ranking of 25 indicates the fund was in the top 25% of the universe, outperforming 75%.
- Returns In Up/Down Markets: This measures how the fund performed in both up and down markets. The methodology is to segregate the performance for each time period into the quarters in which the market, as defined by the index, was positive and negative. Quarters with negative index returns are treated as down markets, and quarters with positive index returns are treated as up markets. Thus, in a 3 year or 12 quarter period, there might be 4 down quarters and 8 up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the down quarters. The up-market capture ratio is the ratio of the fund's return in up markets to the index. The down-market capture ratio is the ratio of the fund's return in down markets to the index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio.
- Standard Deviation: Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.
- R-Squared: This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.
- Beta: This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse than the market in down markets. It is important to note, however, a low fund beta does not imply the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).
- Alpha: The Alpha is the nonsystematic return, or the return that cannot be attributed to the market. It can be thought of as how the manager performed if the market's return was zero. A positive alpha implies the manager added value to the return of the portfolio over that of the market. A negative alpha implies the manager did not contribute any value over the performance of the market.
- Sharpe Ratio: The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The higher the Sharpe ratio, the more reward you are receiving per unit of total risk. This measure can be used to rank the performance of mutual funds or other portfolios.
- Treynor Ratio: The Treynor ratio measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. The ratio relates excess return over the risk-free rate to the additional risk taken; however, systematic risk is used instead of total risk. The Treynor ratio is similar to the Sharpe ratio, except in the fact that it uses the beta to evaluate the returns.
- Tracking Error: Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.
- Information Ratio: The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.
- Downside Risk: Downside risk is a measure similar to standard deviation but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.