



To: Norwalk Municipal Employees' Pension Board

From: Tina Fogell, Chief Human Resources Officer

Date: March 8, 2024

Subject: Pension Board Meeting – Wednesday, March 13, 2024 - Hybrid meeting

A meeting of the Norwalk Municipal Employees' Pension Board will be held on **Wednesday, March 13, 2024 at 6:00 p.m.**, via zoom / Room 220.

To allow public access, anyone may access a meeting by telephone, Zoom, and/or the City of Norwalk YouTube channel. Specific instructions and links can be found at norwalkct.org/meetings

A G E N D A

1. Call to Order and Approval of Minutes from February 14, 2024
2. Public Comments
3. Approval of Pension Applications
4. Asset Allocation Review
5. Performance Review
6. Cash Needs for Benefit Payments
7. Adjourn

Next meeting scheduled for April 10, 2024.

cc: Mayor Harry Rilling
Irene Dixon, City Clerk
Britton Murdoch, Callan Associates Inc.
Kevin Schmidt, Callan Associates Inc.
Billy Ireland, Fire Union President
Al Palumbo, NASA President

**CITY OF NORWALK
NORWALK MUNICIPAL EMPLOYEES
PENSION BOARD MEETING
WEDNESDAY, FEBRUARY 14, 2024
VIA TELECONFERENCE**

ATTENDANCE: Frank Nash; Chair, Chitsamay Lam, David Pramer, Richard Baskin,
Robert Raleigh, James Hendrickson

STAFF: Tina Fogell

OTHER: Britton Murdoch; Callan LLC, Kevin Schmidt; Callan LLC, Jeff Wright, Managing Director/IR at Pantheon, Jack Opperman; Private Management Associate at Pantheon, Eileen Romeo; Union Representative, NFEP

CALL TO ORDER

The meeting was called to order at 6:01 p.m.

APPROVAL OF MINUTES FROM JANUARY 10, 2024

Mr. Pramer noted his name was misspelled.

**** MR. BASKIN MOVE TO ACCEPT THE MINUTES AS AMENDED.
** THE MOTION TO APPROVE THE MINUTES AS AMENDED PASSED
UNANIMOUSLY.**

PUBLIC COMMENTS

There were no members of the public in attendance.

APPROVAL OF PENSION APPLICATIONS

There were no pension applications put forward to review.

PANTHEON PRIVATE EQUITY REVIEW PRESENTATION

Mr. Wright and Mr. Opperman ~~had a slide presentation updating~~ provided a presentation on Pantheon, its personnel, ~~and, Norwalk's investments with Pantheon~~ the various funds, strategy, and market backdrop. Mr. Wright discussed funds in liquidation ~~mode~~ and potential residual value.

There was a discussion of the various ~~type~~ Norwalk investments of funds and their ability to provide returns.

PERFORMANCE REVIEW

Kevin Schmidt reviewed the market environment in December. (no last name given) noted the effects of market fluctuations and how they would relate to future expectations.

Mr. Murdoch ~~presented a series of slides that described the following~~ reviewed the performance flash report as of 12/31/23. The Board asked questions throughout the presentation. ÷

- ~~Investment manager asset allocation~~
- ~~Investment manager returns~~

Executive Session

ADJOURN

Mr. Nash Stated they would be going into executive session.

** MR. BASKIN MOVED TO ADJOURN THE MEETING.
** THE MOTION WAS SECONDED.
** THE MOTION PASSED UNANIMOUSLY

The meeting adjourned at 6:52 p.m.

Respectfully submitted
China Mayhew
Telesco Secretarial Services

APPROVAL OF PENSION APPLICATIONS

MEETING OF: March 13, 2024

Name	Years of Service	Type of Pension	Option Selected
Timothy Thorne Board of Education Custodian Commencement Date	19 Years, 0 Months 12/30/2023	Early	Option III



To: Norwalk Municipal Employees' Pension Board

From: Tina Fogell, Chief Human Resources Officer

Date: March 8, 2024

Subject: OPEB Committee Meeting – Wednesday, March 13, 2024 – Hybrid meeting

A meeting of the Norwalk Municipal Employees' Pension Board's OPEB Committee will be held on **Wednesday, March 13, 2024 at 6:30 p.m.,** via zoom / Room 220.

To allow public access, anyone may access a meeting by telephone, Zoom, and/or the City of Norwalk YouTube channel. Specific instructions and links can be found at norwalkct.org/meetings

A G E N D A

1. Call to Order and Approval of Minutes from December 13, 2023
2. Performance Review
3. Cash Needs for Benefit Payments
4. Adjourn

cc: Mayor Harry Rilling
Irene Dixon, City Clerk
Kevin Schmidt, Callan Associates, Inc.
Britton Murdoch, Callan Associates Inc.
Billy Ireland, Fire Union President

CITY OF NORWALK
NORWALK MUNICIPAL EMPLOYEES PENSION BOARD
OPEB COMMITTEE
REGULAR MEETING
DECEMBER 13, 2023
VIA HYBRID/TELECONFERENCE

ATTENDANCE: James Hendrickson, Acting Chair; Richard Baskin, David Pramer

STAFF: Chitsamay Lam, Comptroller; Tina Fogel, Director of Human Resources

OTHERS: Britton Murdoch, Kevin Schmidt, Callan LLC;
Eileen Romeo, Union Representative, NFEP

CALL TO ORDER

Mr. Hendrickson called the meeting to order at 7:15 p.m. A quorum was present.

PUBLIC COMMENT

There was no one present or attending zoom conference who signed up or emailed to comment.

APPROVAL OF MINUTES – September 13, 2023

** MR. BASKIN MOVED TO APPROVE THE MINUTES FROM THE MEETING OF
SEPTEMBER 13, 2023 AS SUBMITTED.

** MR. ~~HENDERSON~~ Hendrickson SECONDED.

** MOTION PASSED UNANIMOUSLY.

Performance Review

Mr. Schmidt presented the review of OPEB performance as contained in the agenda packet. There was discussion of the documents and reports and questions from the Board members were fielded throughout the review.

** MR. BASKIN MOVED TO ADJOURN.

** MR. HENDRICKSON SECONDED THE MOTION.

** MOTION PASSED UNANIMOUSLY.

The meeting was adjourned at 7:30 p.m.

Respectfully Submitted,
Telesco Secretarial Services.

City of Norwalk
Municipal Employees Pension Board
OPEB
December 13, 2023

City of Norwalk - Pension Rebalancing Analysis								
	Preliminary Market Values (as of 1/31/24)	Asset Allocation (as of 1/31/24)	Target Asset Allocation	Target Asset Allocation Ranges	Rebalance Amount	Updated Market Values	Updated Asset Allocation	Difference to Target
Total Equity	\$ 342,836,459	68.7%	69%	60% - 75%	\$ (7,000,000)	\$ 335,836,459.00	67.6%	-1.4%
US Equity	\$ 181,983,346	36.5%	35%	27% - 40%	\$ (5,000,000)	\$ 176,983,346	35.6%	0.6%
BlackRock R1000 Index	\$ 135,912,468	27.2%			\$ (5,000,000)	\$ 130,912,468	26.3%	
LSV	\$ 24,136,899	4.8%			\$ -	\$ 24,136,899	4.9%	
Columbus Circle	\$ 21,933,978	4.4%			\$ -	\$ 21,933,978	4.4%	
International Equity	\$ 117,108,329	23.5%	23%	18% - 28%	\$ (2,000,000)	\$ 115,108,329	23.2%	0.2%
Walter Scott	\$ 34,860,757	7.0%			\$ -	\$ 34,860,757	7.0%	
Silchester	\$ 63,164,106	12.7%			\$ (2,000,000)	\$ 61,164,106	12.3%	
BlackRock EM	\$ 19,083,466	3.8%			\$ -	\$ 19,083,466	3.8%	
Global Equity/Long Short	\$ 19,748,986	4.0%	8%	4% - 12%	\$ -	\$ 19,748,986	4.0%	-4.0%
ABS	\$ 21,255,699	4.3%			\$ -	\$ 21,255,699	4.3%	
Blackstone	\$ 242,306	0.0%			\$ -	\$ 242,306	0.0%	
Private Equity	\$ 22,246,779	4.5%	3%	0% - 6%	\$ -	\$ 22,246,779	4.5%	1.5%
Domestic Fixed Income	\$ 87,257,764	17.5%	19%	14% - 24%	\$ -	\$ 87,257,764.00	17.6%	-1.4%
Prudential	\$ 38,663,159	7.8%			\$ -	\$ 38,663,159	7.8%	
MetWest	\$ 48,594,604	9.7%			\$ -	\$ 48,594,604	9.8%	
Absolute Return - UBS	\$ 28,887,418	5.8%	4%	0% - 6%	\$ -	\$ 28,887,418	5.8%	1.8%
Real Assets - PIMCO	\$ 33,744,152	6.8%	6%	4% - 10%	\$ (2,000,000)	\$ 31,744,152.00	6.4%	0.4%
Cash*	\$ 6,137,736	1.2%	2%	0% - 4%	\$ 9,000,000	\$ 15,137,736	3.0%	1.0%
TOTAL	\$ 498,863,530	100%	100%		\$ -	\$ 497,114,510	100%	

*Cash does not take into account benefit payments paid in February and March which reduce the current cash balance by ~\$3mm per month (total ~\$6mm)

City of Norwalk - OPEB Rebalancing Analysis								
	Preliminary Market Values (as of 12/31/23)	Asset Allocation (as of 12/31/23)	Target Asset Allocation	Target Asset Allocation Ranges	Rebalance Amount	Updated Market Values	Updated Asset Allocation	Difference to Target
Total Equity	\$ 93,989,724	70.3%	68%	53% - 83%	\$ (4,000,000)	\$ 89,989,724.00	67.3%	-0.7%
US Equity - Vanguard Total Stock Market Idx	\$ 60,592,030	45.3%	41%	31% - 51%	\$ (4,000,000)	\$ 56,592,030	42.3%	1.3%
International Equity - Vanguard Total Intl Stock Idx	\$ 33,397,694	25.0%	27%	20% - 34%	\$ -	\$ 33,397,694	25.0%	-2.0%
Domestic Fixed Income	\$ 23,398,696	17.5%	20%	15% - 25%	\$ -	\$ 23,398,696.00	17.5%	-2.5%
Prudential	\$ 14,545,105	10.9%			\$ -	\$ 14,545,105	10.9%	
MetWest	\$ 8,853,591	6.6%			\$ -	\$ 8,853,591	6.6%	
Real Assets - PIMCO	\$ 15,063,213	11.3%	12%	0% - 12%	\$ -	\$ 15,063,213.00	11.3%	-0.7%
Cash	\$ 1,308,642	1.0%	0%	0% - 0%	\$ 4,000,000	\$ 5,308,642	4.0%	4.0%
TOTAL	\$ 133,760,275	100%	100%		\$ -	\$ 133,760,275.00	100%	

January 31, 2024



City of Norwalk Monthly Report

Investment Measurement Service Monthly Review

Table of Contents
City of Norwalk
January 31, 2024

Asset Distribution	1
Manager Performance Table	2

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of January 31, 2024, with the distribution as of December 31, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	January 31, 2024			December 31, 2023				
	Market Value	Weight	Target	Net New Inv.	Inv. Return	Market Value	Weight	Target
Total Equity	\$342,836,459	68.72%	69.00%	\$(184,410)	\$472,776	\$342,548,094	68.27%	69.00%
U.S. Equity	\$181,983,346	36.48%	35.00%	\$(76,086)	\$1,325,216	\$180,734,216	36.02%	35.00%
BR Russell 1000 Index Non-Lend	135,912,468	27.24%		0	1,865,593	134,046,875	26.72%	
LSV	24,136,899	4.84%		(76,086)	(674,820)	24,887,805	4.96%	
Principal Dynamic Growth	21,933,978	4.40%		0	134,443	21,799,535	4.34%	
International Equity	\$117,108,329	23.48%	23.00%	\$(40,824)	\$(1,011,692)	\$118,160,846	23.55%	23.00%
Developed Markets	\$98,024,863	19.65%	-	\$(40,824)	\$(362,077)	\$98,427,764	19.62%	-
Silchester	63,164,106	12.66%		(40,824)	(824,301)	64,029,231	12.76%	
Walter Scott	34,860,757	6.99%		0	462,224	34,398,534	6.86%	
Emerging Markets	\$19,083,466	3.83%	-	\$0	\$(649,615)	\$19,733,081	3.93%	-
BlackRock EM Alpha Tilts	19,083,466	3.83%		0	(649,615)	19,733,081	3.93%	
Global Equity/Long Short	\$21,498,005	4.31%	8.00%	\$0	\$159,252	\$21,338,753	4.25%	8.00%
ABS Global	21,255,699	4.26%		0	159,252	21,096,447	4.20%	
Blackstone Park Ave. NT	242,306	0.05%		0	0	242,306	0.05%	
Private Equity*	\$22,246,779	4.46%	3.00%	\$(67,500)	\$0	\$22,314,279	4.45%	3.00%
Pantheon USA IV	22,762	0.00%		0	0	22,762	0.00%	
Pantheon USA VI	141,111	0.03%		0	0	141,111	0.03%	
Pantheon USA VII	673,998	0.14%		0	0	673,998	0.13%	
Pantheon Europe Fund V A	338,172	0.07%		0	0	338,172	0.07%	
Pantheon Global Fund III	59,955	0.01%		0	0	59,955	0.01%	
Pantheon US Select 2014	21,010,781	4.21%		(67,500)	0	21,078,281	4.20%	
Domestic Fixed-Income	\$87,257,764	17.49%	19.00%	\$(11,156)	\$(117,276)	\$87,386,196	17.42%	19.00%
Prudential Cons Core Bond	38,663,159	7.75%		(11,156)	(73,654)	38,747,969	7.72%	
Metropolitan West CIT	48,594,604	9.74%		0	(43,622)	48,638,226	9.69%	
Absolute Return	\$28,887,418	5.79%	4.00%	\$0	\$300,239	\$28,587,179	5.70%	4.00%
UBS AIS	28,887,418	5.79%		0	300,239	28,587,179	5.70%	
Real Assets	\$33,744,152	6.76%	6.00%	\$0	\$(61,409)	\$33,805,561	6.74%	6.00%
PIMCO All Asset	33,744,152	6.76%	6.00%	0	(61,409)	33,805,561	6.74%	6.00%
Cash	\$6,137,736	1.23%	2.00%	\$(3,293,182)	\$39,514	\$9,391,404	1.87%	2.00%
Cash Account	6,137,736	1.23%		(3,293,182)	39,514	9,391,404	1.87%	
Total Fund	\$498,863,530	100.0%	100.0%	\$(3,488,748)	\$633,844	\$501,718,434	100.0%	100.0%

*Market values are preliminary and adjust for asset flows.

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended January 31, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended January 31, 2024

	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months	Last 84 Months
Total Equity	6.67%	11.31%	5.62%	9.58%	9.23%
U.S. Long Equity	8.42%	15.72%	7.76%	13.02%	12.18%
Russell 3000 Index	9.63%	19.15%	9.10%	13.53%	12.69%
BR Russell 1000 Index Non-Lendable	9.97%	20.26%	9.79%	14.00%	13.11%
Russell 1000 Index	9.95%	20.23%	9.78%	13.99%	13.11%
LSV	10.38%	5.16%	13.08%	8.68%	6.28%
Russell 2000 Value Index	6.77%	(0.09%)	4.48%	6.74%	5.50%
Principal Dynamic Growth	(2.25%)	2.98%	(4.89%)	12.47%	14.53%
Russell 2500 Growth Index	2.52%	5.66%	(4.30%)	8.45%	9.51%
International Equity	5.60%	8.26%	2.61%	5.77%	6.29%
MSCI ACWI ex US Index	4.74%	6.42%	1.63%	5.83%	6.16%
Developed Markets	6.43%	10.69%	5.18%	6.92%	7.15%
MSCI EAFE Index	6.49%	10.01%	4.59%	6.92%	6.56%
Silchester	7.92%	12.05%	8.13%	7.22%	7.05%
MSCI EAFE Val Idx	8.78%	10.35%	7.85%	5.69%	5.15%
Walter Scott	3.82%	-	-	-	-
MSCI EAFE Index	6.49%	10.01%	4.59%	6.92%	6.56%
MSCI EAFE Growth	4.20%	9.66%	1.12%	7.71%	7.66%
Emerging Markets	1.56%	(1.95%)	(7.62%)	0.79%	2.55%
BlackRock EM Alpha Tilts	1.56%	(1.95%)	(7.62%)	-	-
MSCI Emerging Mkts Idx	0.06%	(2.55%)	(7.15%)	1.37%	3.87%
Global Equity/Long Short	5.67%	5.95%	0.91%	4.78%	4.47%
HFRI FOF: Strategic Index	5.18%	5.11%	0.69%	4.56%	4.03%
ABS Global	5.97%	7.02%	1.93%	5.66%	5.18%
MSCI World Index	8.85%	16.99%	8.06%	11.39%	10.54%
Private Equity(1)	(0.49%)	1.29%	12.58%	15.07%	13.88%
Pantheon USA IV	0.00%	-	-	-	-
Pantheon USA VI	(0.22%)	-	-	-	-
Pantheon USA VII	(1.64%)	-	-	-	-
Pantheon Europe Fund V A	0.14%	-	-	-	-
Pantheon Global Secondary Fund III	0.00%	-	-	-	-
Pantheon US Select 2014	(0.47%)	-	-	-	-
Private Equity Benchmark(2)	(0.49%)	1.29%	12.58%	15.07%	13.88%

*Fiscal year starts 7/1 and ends 6/30.

(1) Private Equity has a 1 quarter lag in valuation.

(2) Private Equity benchmark is a composite of Private Equity performance.

Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended January 31, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended January 31, 2024

	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months	Last 84 Months
Domestic Fixed Income	3.51%	2.34%	(3.28%)	1.00%	1.36%
Prudential Cons Core Bond	3.48%	2.50%	(3.00%)	0.89%	1.27%
Metropolitan West Fund (2)	3.53%	2.20%	(3.51%)	1.04%	1.40%
Blmbg Aggregate Index	3.08%	2.10%	(3.17%)	0.83%	1.22%
Absolute Return	5.18%	5.50%	6.64%	6.92%	5.47%
UBS AIS	5.18%	5.50%	6.64%	6.92%	5.47%
HFRI FOF: Conservative Index	4.07%	4.94%	4.42%	4.90%	4.14%
Real Assets	4.23%	2.85%	2.86%	5.26%	6.15%
PIMCO All Asset Fund	4.23%	2.85%	2.86%	5.22%	5.22%
Blmbg US TIPS 1-10	3.23%	3.37%	0.64%	3.28%	2.62%
Cash	3.31%	5.43%	2.58%	2.16%	2.01%
Cash	3.31%	5.43%	2.58%	2.16%	2.01%
3-month Treasury Bill	3.14%	5.13%	2.29%	1.93%	1.79%
Total Fund	5.94%	8.72%	3.89%	7.48%	7.24%
Total Fund Custom Benchmark (1)	5.86%	9.31%	3.65%	7.41%	7.12%
Annual Discount Rate:6.5%					

*Fiscal year starts 7/1 and ends 6/30.

(1) The Total Fund Custom Benchmark is 35.0% Russell 3000 Index, 23.0% MSCI ACWI ex-US, 19.0% Bloomberg Aggregate Index 3.0% Norwalk Private Equity, 8.0% HFRI FOF Strategic, 6.0% Bloomberg US TIPS 1-10 Year Index, 4.0% HFRI FOF Conservative, 2% 3-month Treasury Bill.

(2) On August 24, 2022 switched from Mutual Fund to CIT.

Important Disclosures

Information contained in this document may include confidential, trade secret and/or proprietary information of Callan and the client. It is incumbent upon the user to maintain such information in strict confidence. Neither this document nor any specific information contained herein is to be used other than by the intended recipient for its intended purpose.

The content of this document is particular to the client and should not be relied upon by any other individual or entity. There can be no assurance that the performance of any account or investment will be comparable to the performance information presented in this document.

Certain information herein has been compiled by Callan from a variety of sources believed to be reliable but for which Callan has not necessarily verified for accuracy or completeness. Information contained herein may not be current. Callan has no obligation to bring current the information contained herein.

Callan's performance measurement service reports returns for a portfolio and compares them against relevant benchmarks and peer groups, as appropriate; such service may also report on historical portfolio holdings, comparing them to holdings of relevant benchmarks and peer groups, as appropriate ("portfolio holdings analysis"). To the extent that Callan's performance measurement service includes portfolio holdings analysis, Callan relies entirely on holdings data provided by third parties including custodian banks, record keepers and investment managers. Callan reports the performance and holdings data as received and does not attempt to audit or verify the holdings data. Callan is not responsible for the accuracy or completeness of the performance or holdings data received from third parties and such data may not have been verified for accuracy or completeness. Callan does not perform forward-looking risk analysis or guideline compliance analysis based on the performance or portfolio holdings data.

In no event should performance measurement service provided by Callan be used in the calculation, deliberation, policy determination, or any other action of the client as it pertains to determining contribution or funding amounts, timing or activity, benefit payments or distribution amounts, timing or activity, or performance-based fee amounts, timing or activity.

The content of this document may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact. The opinions expressed herein may change based upon changes in economic, market, financial and political conditions and other factors. Callan has no obligation to bring current the opinions expressed herein.

The information contained herein may include forward-looking statements regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties. Actual results may vary, perhaps materially, from the future results projected in this document. Undue reliance should not be placed on forward-looking statements.

Callan is not responsible for reviewing the risks of individual securities or the compliance/non-compliance of individual security holdings with a client's investment policy guidelines.

This document should not be construed as legal or tax advice on any matter. You should consult with legal and tax advisers before applying any of this information to your particular situation.

Reference to, or inclusion in this document of, any product, service or entity should not necessarily be construed as recommendation, approval, or endorsement or such product, service or entity by Callan. This document is provided in connection with Callan's consulting services and should not be viewed as an advertisement of Callan, or of the strategies or products discussed or referenced herein.

The issues considered and risks highlighted herein are not comprehensive and other risks may exist that the user of this document may deem material regarding the enclosed information. Please see any applicable full performance report or annual communication for other important disclosures.

Unless Callan has been specifically engaged to do so, Callan does not conduct background checks or in-depth due diligence of the operations of any investment manager search candidate or investment vehicle, as may be typically performed in an operational due diligence evaluation assignment and in no event does Callan conduct due diligence beyond what is described in its report to the client.

Any decision made on the basis of this document is sole responsibility of the client, as the intended recipient, and it is incumbent upon the client to make an independent determination of the suitability and consequences of such a decision.

Callan undertakes no obligation to update the information contained herein except as specifically requested by the client.

Past performance is no guarantee of future results.



March 8, 2023

City of Norwalk Pension Plan

Asset Allocation Review

Ric Ford, FSA, CFA, EA, FCA, MAAA
Capital market Research

Britton M. Murdoch
Fund Sponsor Consulting

Kevin Schmidt
Fund Sponsor Consulting

Important Disclosures regarding the use of this document are included at the end of this document. These disclosures are an integral part of this document and should be considered by the user.

Agenda

- ▶ Introduction
- ▶ Capital Market Assumptions
- ▶ Asset Allocation
 - Current mixes
 - Asset mix alternatives
 - Forecast performance
- ▶ Considerations
- ▶ Appendix

Introduction

City of Norwalk Pension Plan

Asset Allocation Summary

As best practice, the Pension Board and Callan reviews the asset allocation every 3-5 years or as material changes occur.

The current asset allocation has been in place since 2021. In 2021, the following policy changes were adopted:

- Private Equity target reduced from 6% to 3% to reflect the Board's desire to maintain liquidity and not investment in new private equity funds. The 3% target reflects the estimated long-term target as the current private equity funds continue to wind down and distribute capital.
- Real Assets target reduced from 12% to 6% to reflect the wind down of private infrastructure.
- Domestic Equity was increased from 27% to 35%
- International Equity was increased from 22% to 23%

The changes to the target asset allocation in 2021 maintained the existing risk and return levels based on Callan's Capital Market Assumptions.

In 2022, the Board terminated Blackstone Global Equity Long/Short. The Pension Plan has a target of 8% to Global Equity Long/Short. Prior to the termination, the allocation was split: 4% to ABS and 4% to Blackstone.

Given the termination and the Board's desire to not replace Blackstone with another global equity long/short manager, Callan recommends updating the target asset allocation to reflect the lower allocation to global equity long/short.

Over the past 10 years, the City of Norwalk's discount rate has been reduced by 1/8th of one percent each year. The current discount rate is 6.5% and is not expected to change in the near term.

Importance of Asset Allocation

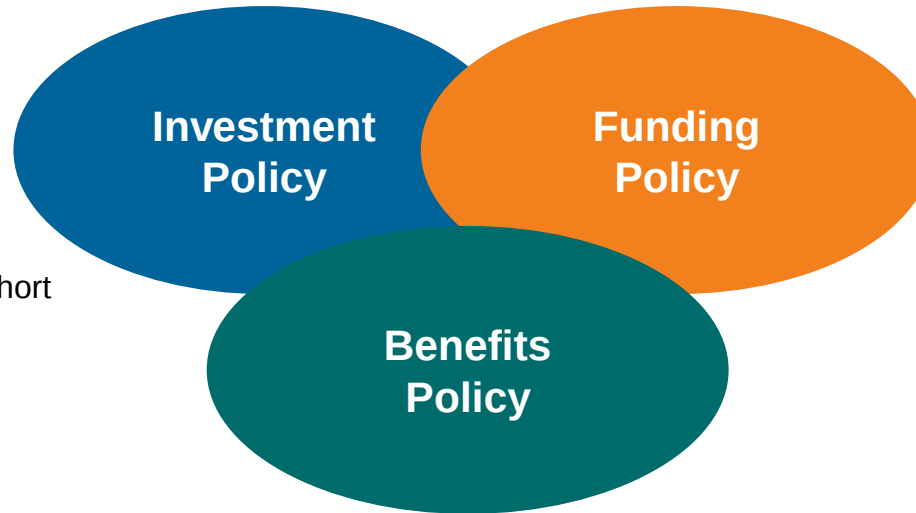
- ▶ 80-90% of funded status volatility is driven by the broad asset allocation decision
- ▶ An appropriate asset allocation will depend on the investment objectives.
 - Minimize costs over the long run (long-term goal).
 - How much return generation (from beta and alpha) is necessary to lower costs and/or improve funded status?
 - Minimize funded status volatility (short-term goal).
 - How much risk reduction is necessary to reduce funded status volatility?
- ▶ Other factors to consider
 - Liability characteristics
 - Funded status
 - Contribution policy
 - Time horizon
 - Liquidity needs
- ▶ Asset allocation will vary by the unique circumstances
 - No “one-size-fits-all” solution exists
- ▶ The goal of this asset allocation study is to establish a long-term strategic asset allocation target for the City of Norwalk
 - Determine an appropriate long-term mix between return-seeking assets (e.g., equities, real assets, alternatives) and risk-mitigating assets (cash, fixed income)

How Does Asset Allocation Fit Into the Pension System?

Evaluate the interaction of three key policies to identify an appropriate investment policy

Investment Policy

- 58% Public Equity
- 21% Fixed Income and Cash
- 21% Other
 - 12% Hedge Funds
 - Equity Long/Short
 - Abs Return
 - 6% Real Assets
 - 3% Private Equity



Funding Policy

- Normal Cost plus Amortization of unfunded liability
- Amortization of 2021 unfunded liability: 15 years
- FYE 23 contributions = \$15.3 m

Benefits Policy

- ~\$30m - \$35m per year
- ~6-8% of the market value of assets
- ~3% net of contributions
- Cost of Living Adjustments for applicable members
- DROP for applicable members

$$\text{Contributions} + \text{Investment Earnings} = \text{Benefits Paid} + \text{Expenses}$$

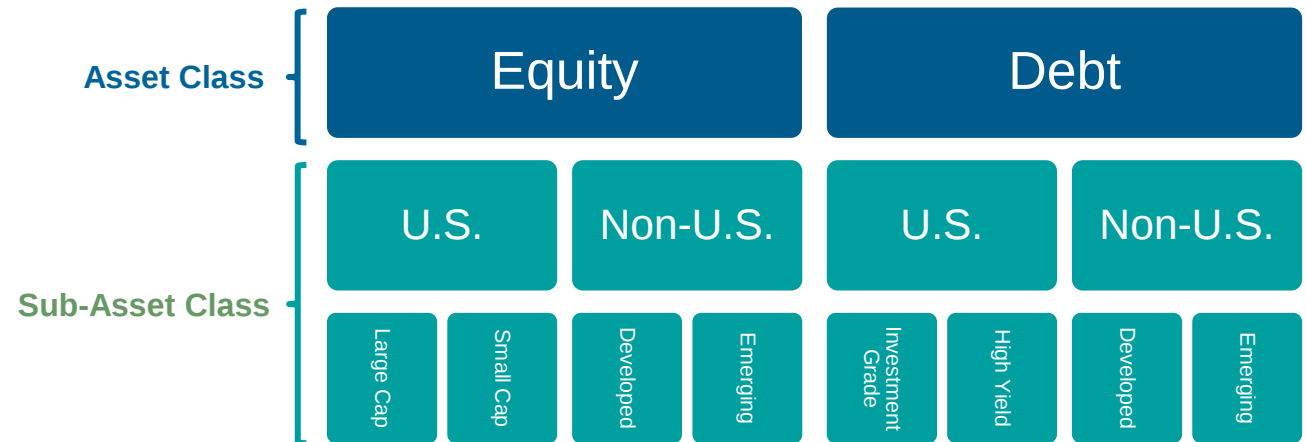
Importance of Asset Allocation

Focus is on Broad Asset Classes

Breakdowns between investment styles within asset classes (growth vs. value, large cap vs. small cap) are best addressed in a manager structure analysis

Primary asset classes and important sub-asset classes include:

- ▶ U.S. Stocks
- ▶ U.S. Bonds
- ▶ Non-U.S. Stocks
- ▶ Non-U.S. Bonds
- ▶ Real Estate
- ▶ Private Equity
- ▶ Absolute Return
- ▶ Cash



Capital Market Assumptions

Callan Capital Market Process, Philosophy and Construction

Underlying beliefs guide the development of the projections

- ▶ An initial bias toward long-run averages
- ▶ An awareness of risk premiums
- ▶ A presumption that markets ultimately are rational

Reflect our belief that long-term equilibrium relationships between the capital markets and lasting trends in global economic growth are key drivers to setting capital market expectations

Long-term compensated risk premiums represent “beta” - exposure to each broad market, whether traditional or “exotic,” with limited dependence on successful realization of alpha

The projection process is built around several key building blocks

- ▶ A comprehensive economic outlook
- ▶ Cohesive paths for inflation, government interest rates and credit spreads
- ▶ Individual asset class models
- ▶ A framework that encompasses Callan’s beliefs about the long-term operation and efficiencies of the capital markets

Projections are 10-year forward-looking, representing a medium to long-term planning horizon:

- ▶ Differs from the actuarial assumptions, which tend to reflect longer-term horizons of 30–40 years

Projections consist of return and two measures that contribute to portfolio volatility: standard deviation and correlation

2024 vs. 2023 Risk and Returns Assumptions

Summary of Callan's Long-Term Capital Markets Assumptions (2024–2033)

		Projected Return			Projected Risk	Projected Yield**	2023–2032		
		1-Year Arithmetic	10-Year Geometric*	Real	Standard Deviation		1-Year Arithmetic	10-Year Geometric*	Standard Deviation
Asset Class	Index								
Equities									
Broad U.S. Equity	Russell 3000	8.85%	7.65%	5.15%	17.40%	1.95%	8.75%	7.35%	18.05%
Developed ex-U.S. Equity	MSCI World ex USA	9.25%	7.50%	5.00%	20.15%	3.75%	9.00%	7.25%	20.15%
Emerging Markets Equity	MSCI Emerging Markets	10.65%	7.70%	5.20%	25.60%	3.55%	10.45%	7.45%	25.70%
Fixed Income									
Core U.S. Fixed	Bloomberg Aggregate	5.25%	5.25%	2.75%	4.25%	4.70%	4.25%	4.25%	4.10%
Alternatives									
Core Real Estate	NCREIF ODCE	6.85%	6.00%	3.50%	14.00%	4.00%	6.60%	5.75%	14.20%
Private Equity	Cambridge Private Equity	12.15%	8.75%	6.25%	27.60%	0.00%	11.95%	8.50%	27.60%
Hedge Funds	Callan Hedge FOF Database	6.25%	6.05%	3.55%	8.20%	0.00%	5.80%	5.55%	8.45%
Cash Equivalents	90-Day T-Bill	3.00%	3.00%	0.50%	0.90%	3.00%	2.75%	2.75%	0.90%
Inflation	CPI-U		2.50%		1.60%			2.50%	1.60%

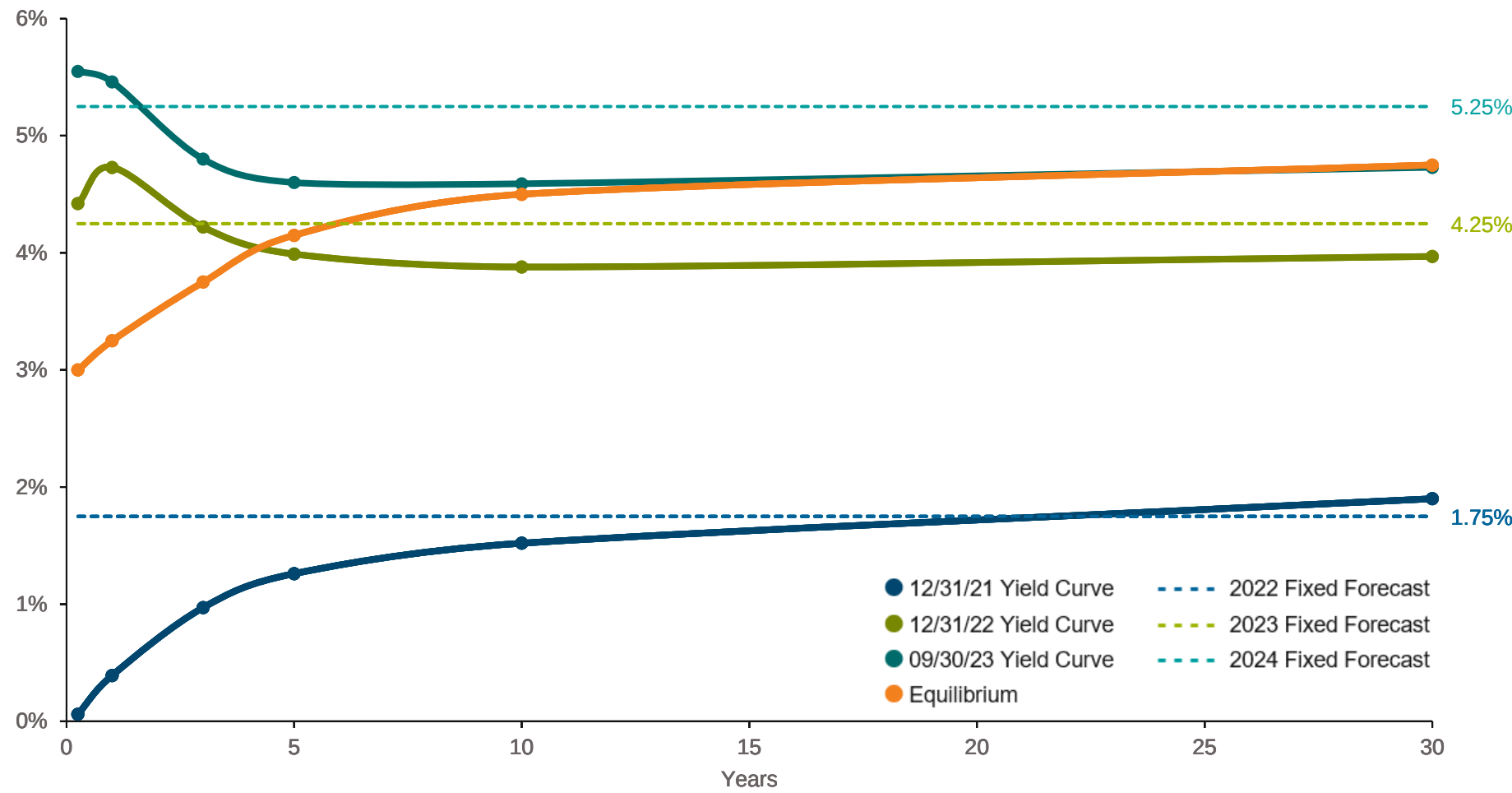
* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).

** Projected Yields represent the expected 10-year average yield

Source: Callan

Core Fixed Income Assumptions Follow Yields

Fixed Income Yields and Forecasts



Source: Bloomberg

Projected Fixed Income Returns

10-year projections

	Income Return	+	Capital Gain/Loss	+	Credit Default	+	Roll Return	=	2024 Expected Return	2023 Expected Return	Change vs. 2023	2022 Expected Return	Change vs. 2022
Cash	3.00%		0.00%		0.00%		0.00%		3.00%	2.75%	0.25%	1.20%	1.80%
Aggregate	4.70%		0.40%		-0.10%		0.25%		5.25%	4.25%	1.00%	1.75%	3.50%
Government	4.20%		0.40%		0.00%		0.25%		4.85%	3.95%			
Securitized	4.50%		0.60%		0.00%		0.25%		5.35%	4.25%			
Credit	5.55%		0.20%		-0.40%		0.25%		5.60%	4.70%			

U.S. Equity Market: Key Metrics

S&P 500 valuation measures

S&P 500 Index: Forward P/E Ratio

Valuation Measure	Latest	30-year Average*	Std Dev Over- / Under-valued
Forward P/E	19.51x	16.59x	0.90
Shiller's P/E	32.43x	27.55x	0.79
Dividend yield	1.54%	2.00%	1.33
Price to book	3.97x	3.11x	1.10
Price to cash flow	14.82x	11.13x	1.64
EY minus Baa yield	-0.33%	0.04%	0.20



► Forward P/E (19.5) is about one standard deviation above its long-term average (16.6).

Source: FactSet, FRB, Refinitiv Datastream, Robert Shiller, S&P Dow Jones Indices, Thomson Reuters, J.P. Morgan Asset Management.

Price-to-earnings is price divided by consensus analyst estimates of earnings per share for the next 12 months as provided by IBES since December 1998 and by FactSet since January 2022. Current next 12-months consensus earnings estimates are \$245. Average P/E and standard deviations are calculated using 30 years of history. Shiller's P/E uses trailing 10-years of inflation-adjusted earnings as reported by companies. Dividend yield is calculated as the next 12-months consensus dividend divided by most recent price. Price-to-book ratio is the price divided by book value per share. Price-to-cash flow is price divided by NTM cash flow. EY minus Baa yield is the forward earnings yield (consensus analyst estimates of EPS over the next 12 months divided by price) minus the Moody's Baa seasoned corporate bond yield. Std. dev. over-/under-valued is calculated using the average and standard deviation over 30 years for each measure.

*Averages and standard deviations for dividend yield and P/CF are since November 1995 due to data availability. Guide to the Markets – U.S. Data are as of December 31, 2023.

Equity Forecasts

Building block model

Index	Forecasted Dividend Yield	Net Buyback Yield	Inflation	Real Earnings Growth	Valuation Adjustment	Total Expected Return
S&P 500	2.00%	0.50%	2.50%	2.50%	0.00%	7.50%
Russell 2500	1.75%	0.00%	2.50%	3.45%	0.00%	7.70%
MSCI World ex USA	3.75%	0.00%	2.00%	1.75%	0.00%	7.50%
MSCI Emerging Markets	3.55%	-2.90%	3.25%	3.80%	0.00%	7.70%

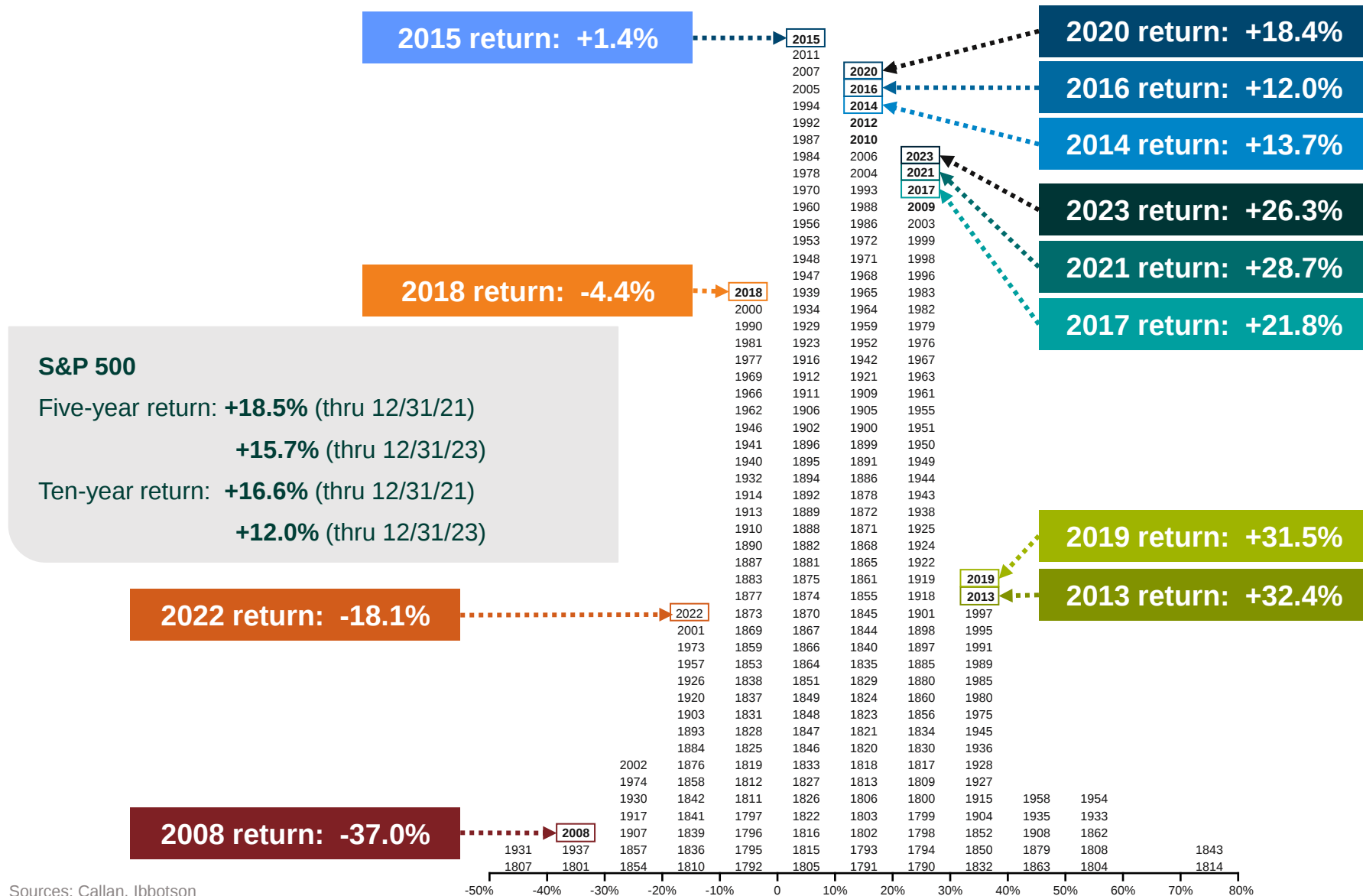
Our return expectations for US large cap (S&P 500) and non-US Developed markets (MSCI World ex-US) are the same, but the paths to those returns are different

U.S. companies tend to deliver more return from earnings growth than from return of capital via dividends or buybacks

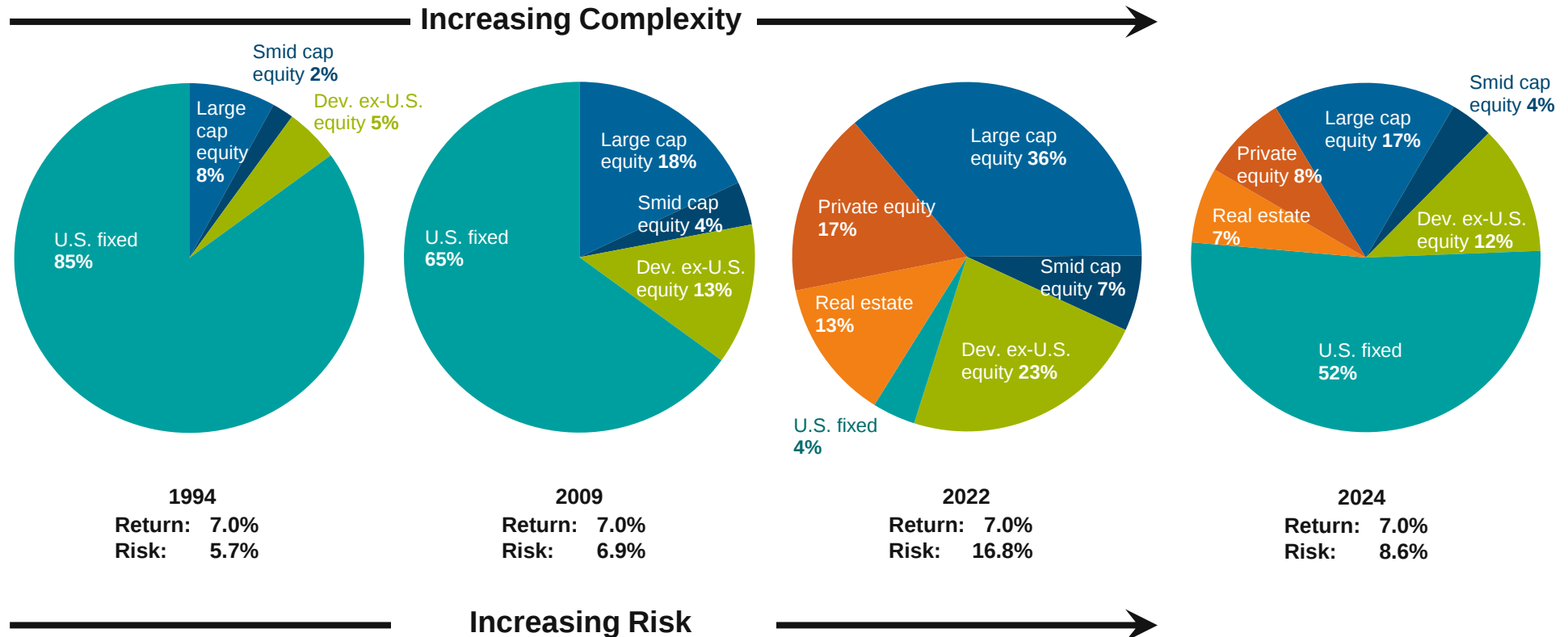
- Non-U.S. developed companies have the opposite relationship
- Emerging market companies tend to deliver strong earnings growth, which is somewhat offset by net issuance of shares as these companies issue stock to support growth

Stock Market Returns by Calendar Year

Performance in perspective: History of the U.S. stock market (233 years of returns)



7% Expected Returns Over Past 30 Years



In 1994, our return expectation for broad U.S. fixed income was 6.2%.

Just 15% in return-seeking assets was required to earn a 7% projected return.

15 years later, an institutional investor would have needed an additional 20% of the portfolio in public equities for a total of 35% to achieve a 7% projected return.

In 2022 an investor was required to include 96% in return-seeking assets (including 30% in private markets investments) to earn a 7% projected return at almost 3x the volatility compared to 1994.

Today's 7% expected return portfolio is much more reasonable than it was just two years ago. The allocation to fixed income jumps to 52%, while risk is essentially cut in half. Private markets investments are also cut in half.

Asset Allocation

Historical Expected Return

Comparison of Results under 2024 and prior Capital Market Assumption Sets

Asset Class	Policy
Broad US Equity	35.0%
International Equity	23.0%
Hedge Funds	12.0%
Private Equity	3.0%
Core Fixed Income	19.0%
Real Assets	6.0%
Cash Equivalents	2.0%

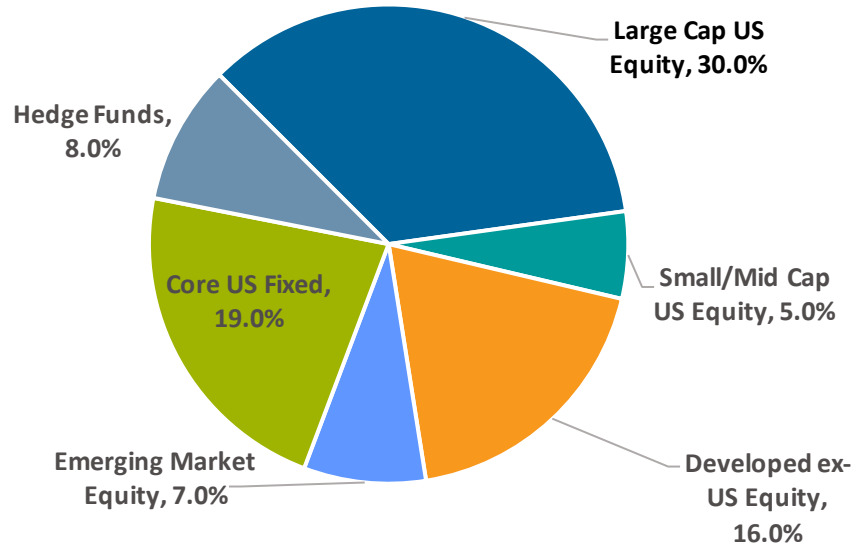
Total	100%
--------------	-------------

Asset Only Metrics	Return	Risk
2024 Assumptions	7.3%	12.1%
2023 Assumptions	6.8%	12.5%
2022 Assumptions	5.6%	12.4%

- ▶ The existing policy is expected to earn 7.3% over the next ten-years using 2024 assumptions
- ▶ The recent increase in expected returns can be primarily attributed to the higher yield environment

Existing Asset Allocations

Target Investment Policy



Market Value Assets as of 12/31/2023: **\$501 Million**
 Expected 10 Yr Return: **7.3%**
 Standard Deviation: **12.1%**

Market Value Assets as of: 12/31/2023 \$Million

Asset Class	Current (12/31)	Alloc%	Policy	Delta
Broad US Equity	\$180.7	36.0%	35.0%	1.0%
International Equity	\$118.2	23.6%	23.0%	0.6%
Hedge Funds	\$49.9	10.0%	12.0%	-2.1%
Private Equity	\$22.3	4.5%	3.0%	1.5%
Core Fixed Income	\$87.4	17.4%	19.0%	-1.6%
Real Assets	\$33.8	6.7%	6.0%	0.7%
Cash Equivalents	\$9.4	1.9%	2.0%	-0.1%
Total	\$501.7	100.0%		

- The existing policy is expected to earn 7.3% over the next 10 years
- All asset classes are within policy ranges
- Real Assets represents PIMCO All Asset
- Private Equity overweight should reduce over time as it is in run-off

Alternative Asset Mixes

Current Discount Rate: 6.50%

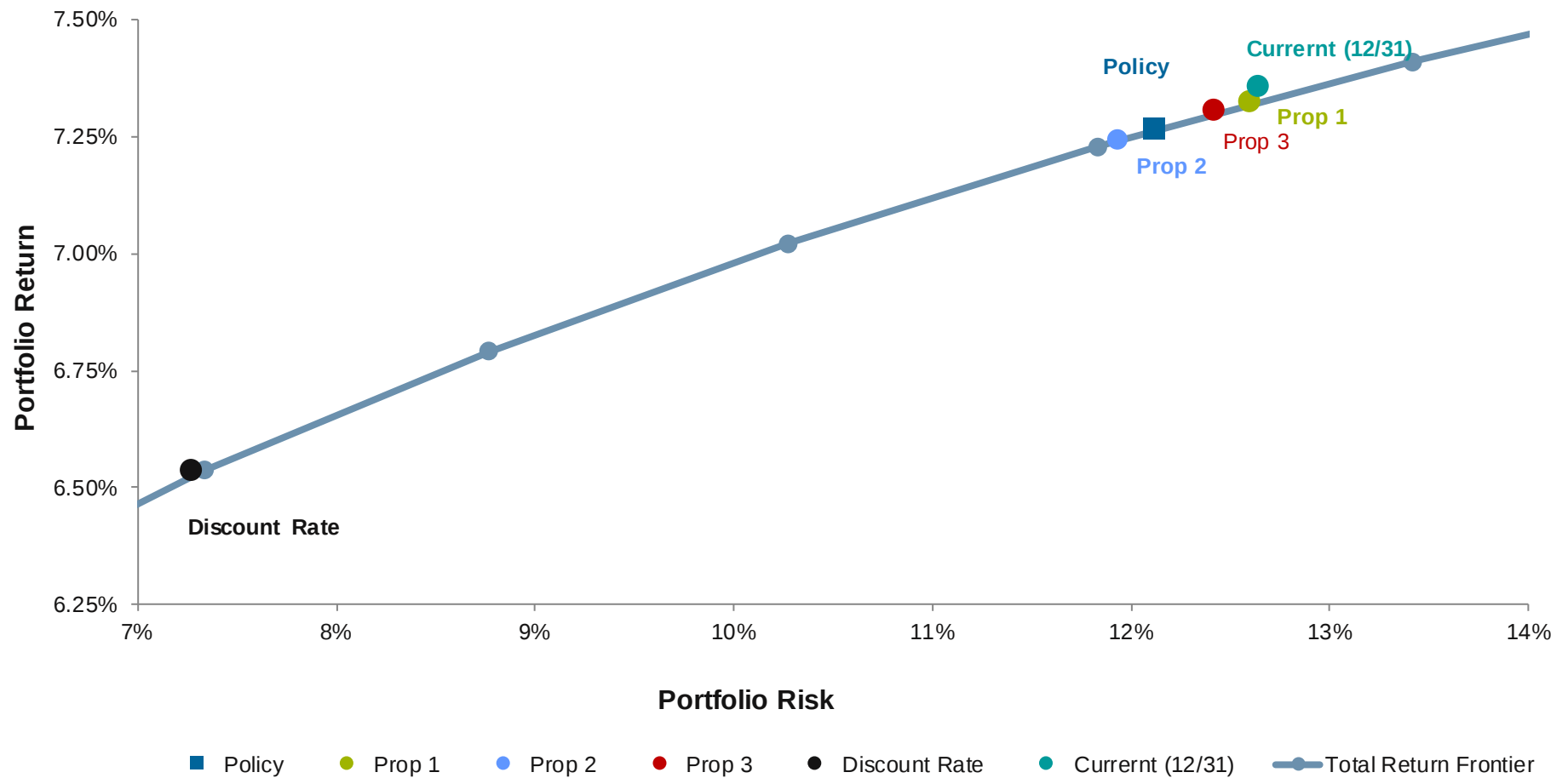
Asset Class	Policy	Current (12/31)	Prop 1	Prop 2	Discount Rate
Broad US Equity	35.0%	36.0%	38.0%	35.0%	19.8%
International Equity	23.0%	23.6%	24.0%	23.0%	13.2%
Hedge Funds	12.0%	10.0%	8.0%	8.0%	0.0%
Private Equity	3.0%	4.5%	3.0%	3.0%	3.0%
Core Fixed Income	19.0%	17.4%	19.0%	23.0%	62.0%
Real Assets	6.0%	6.7%	6.0%	6.0%	0.0%
Cash Equivalents	2.0%	1.9%	2.0%	2.0%	2.0%
Total	100%	100%	100%	100%	100%

Asset Only Metrics										
Exp 10 Yr Return/Standard Deviation	7.3%	12.1%	7.4%	12.6%	7.3%	12.6%	7.2%	11.9%	6.5%	7.3%
Sharpe Ratio	0.35		0.34		0.34		0.36		0.49	
Equity Beta	0.66		0.69		0.69		0.65		0.36	
Bear Equity Shock -30%	-20%		-21%		-21%		-19%		-11%	
Asset Only Metrics	Return	Risk	Return	Risk	Return	Risk	Return	Risk	Return	Risk
2024 Assumptions	7.3%	12.1%	6.5%	7.3%	7.3%	12.1%	7.3%	12.6%	7.3%	12.4%
2023 Assumptions	6.8%	12.5%	6.9%	13.0%	6.9%	12.9%	6.8%	12.2%	5.8%	7.2%
2022 Assumptions	5.6%	12.4%	5.7%	12.9%	5.7%	12.8%	5.5%	12.1%	4.0%	6.8%

- ▶ Proposed Allocation #1 (Prop 1) removes 4% hedge funds and places it into public equities
- ▶ Proposed Allocation #2 (Prop 2) removes 4% hedge funds and places it into core fixed income
- ▶ All allocations are expected to exceed the discount rate of 6.50% over the forecast period
- ▶ Hedge Funds include Global Long/Short and Absolute Return

Efficient Frontier

Total Return Framework

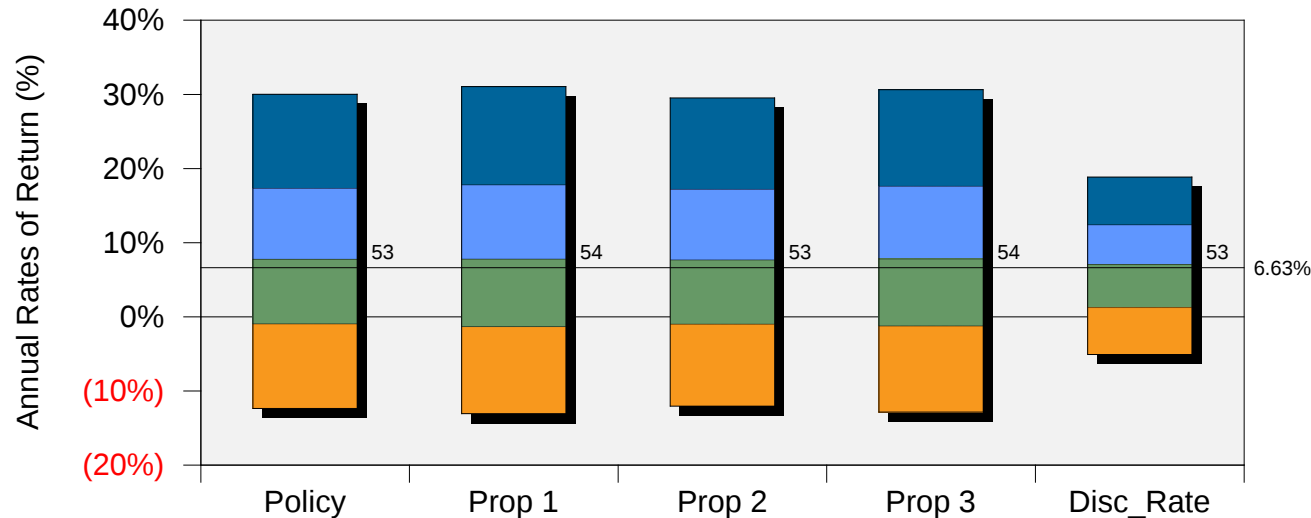


- The efficient frontier represents all optimal asset mixes
 - Optimal asset mixes are those that have the highest return for a given risk limited by allocation constraints
 - Mixes are the same as those on the prior slide
 - The Policy allocation is efficient

Range of Projected Rates of Return

1-Year Distribution

Range of Projected Rates of Return
Projection Period: 1 Year
Optimization Set: 2024 Expanded (Internal Only)

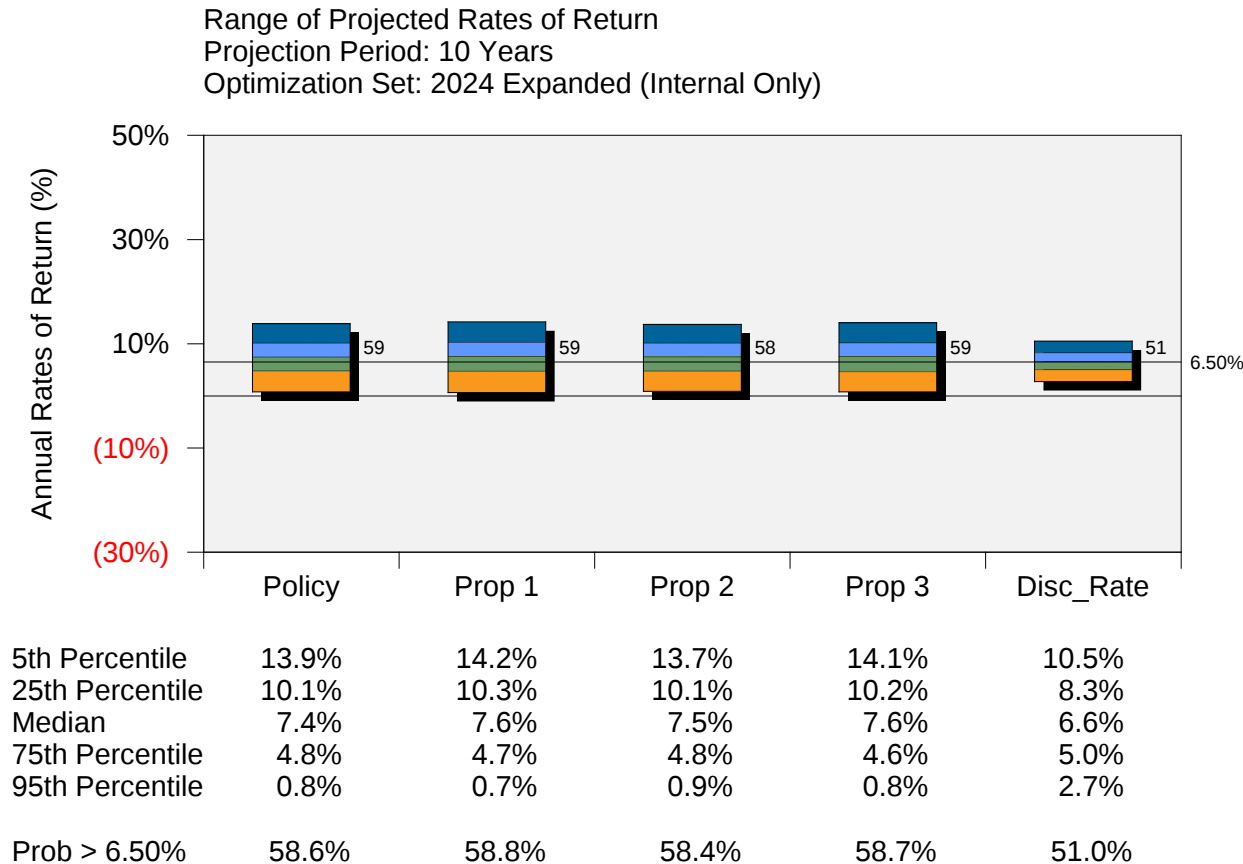


- The ranges of returns are created by simulating the capital market assumptions 5,000 times
 - The 5th percentile represents the 5% of the 5,000 simulations (250) that had projected returns of at this level or higher
- The median represents our best estimate of return over one year
 - 2,500 simulated returns above, 2,500 returns below
- The 95th percentile represents risk
- Median returns for optimal mixes increase from left to right while 95th percentile returns decrease

- All the allocations have a greater than 50% of exceeding the discount rate in any single year

Range of Projected Rates of Return

Distribution over a 10-Year Period



- Over ten years the median returns decline
 - Declines in returns are due to “volatility drag”
- The return distributions also narrow
 - Distributions narrow because extreme returns in any one year are highly unlikely to be repeated in other years
 - The 95th percentile returns are still negative but much less negative than over one year
 - These returns are annualized so on a cumulative basis they would be lower

- All the allocations have a greater than 50% of exceeding the discount rate over the next ten-years

Considerations

Considerations

Increase the fixed income allocation by 4%

Asset Class	Policy	Prop 2	Difference
Broad US Equity	35.0%	35.0%	0.0%
International Equity	23.0%	23.0%	0.0%
Hedge Funds	12.0%	8.0%	-4.0%
Private Equity	3.0%	3.0%	0.0%
Core Fixed Income	19.0%	23.0%	4.0%
Real Assets	6.0%	6.0%	0.0%
Cash Equivalents	2.0%	2.0%	0.0%
Total	100%	100%	
Exp 10 Yr Return	7.27%	7.25%	0.0%
Standard Deviation	12.1%	11.9%	-0.2%
Sharpe Ratio	0.352	0.356	0.00
Equity Beta	0.66	0.65	-0.01
Bear Equity Shock -30%	-20%	-19%	0.4%

Almost all of the Blackstone assets were sold off last year

Appendix

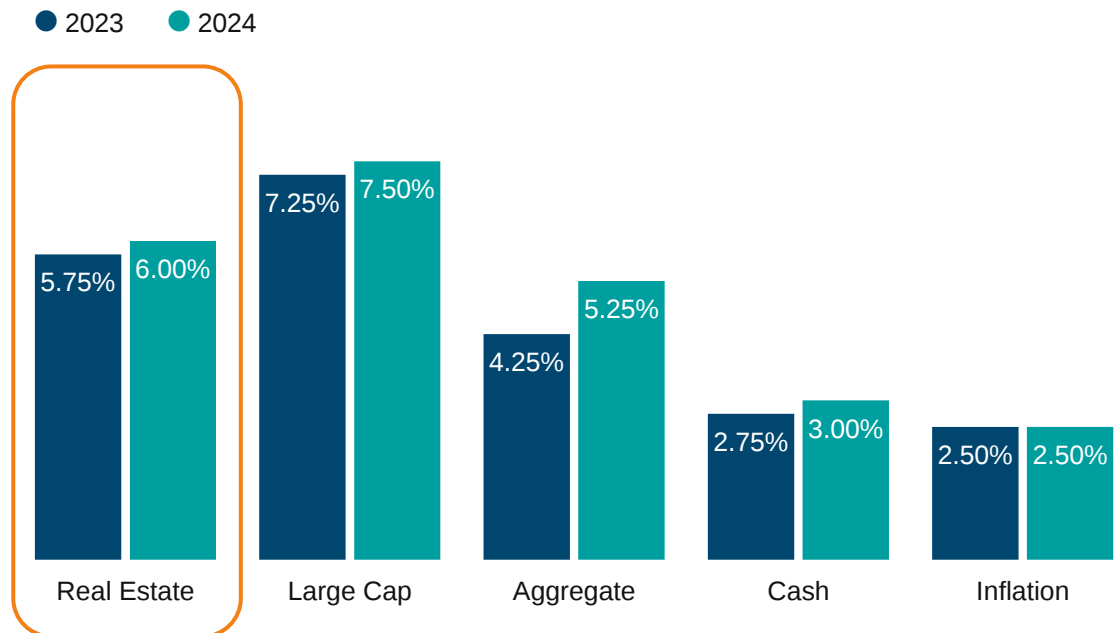
Core Real Estate

Background

- Real estate has characteristics of equity (ownership and appreciation) and bonds (income from rents). Real estate fell 8.4% for the year ended Sept. 30, 2023, on an unlevered property basis.
- While real estate, especially within offices, is expected to continue facing headwinds in the short-term, recent price declines could provide more attractive entry points for long-term investors.
- Slight increase in real estate returns compared to last year

2024 real estate return projection: 6%
(up 25 bps)

Return Projections



Source: Callan, NCREIF NPI index

2024–2033 Callan Capital Markets Assumptions Correlations

Asset Class	Index	10-Year Geometric	Standard Deviation
Equities			
Broad U.S. Equity	Russell 3000	7.65%	17.40%
Global ex-U.S. Equity	MSCI ACWI ex USA	7.65%	21.40%
Fixed Income			
Core U.S. Fixed	Bloomberg Barclays Aggregate	4.75%	4.25%
Alternatives			
Core Real Estate	NCREIF ODCE	6.00%	14.00%
Private Equity	Cambridge Private Equity	8.75%	27.60%
Hedge Funds	Callan Hedge FoF Database	6.05%	8.20%
Cash Equivalents	90-Day T-Bill	3.00%	0.90%
Inflation	CPI-U	2.50%	1.60%

Correlation Matrix		1	2	3	4	5	6	7
1	Broad US Equity	1.00						
2	Global ex-US Equity	0.79	1.00					
3	Core US Fixed	0.08	0.04	1.00				
4	Core Real Estate	0.34	0.34	0.22	1.00			
5	Private Equity	0.80	0.78	-0.04	0.46	1.00		
6	Hedge Funds	0.59	0.50	0.39	0.24	0.34	1.00	
7	Cash Equivalents	-0.03	-0.08	0.16	0.02	-0.04	0.00	1.00

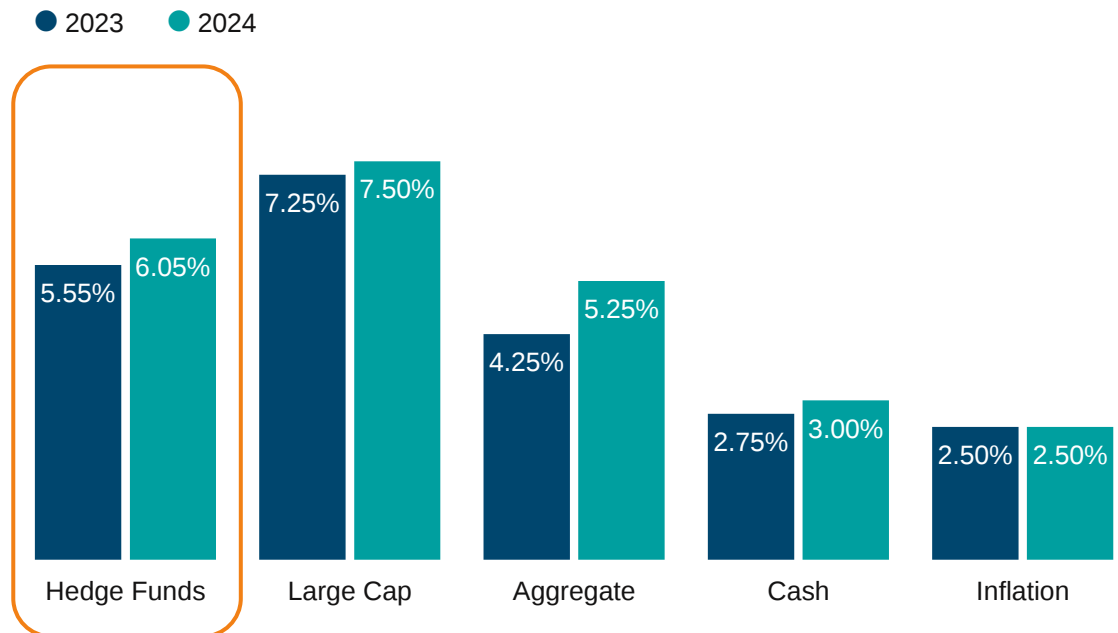
Hedge Funds

Background

- ▶ Hedge funds can be evaluated in a multi-factor context using the following relationship:
- ▶ $\text{Expected Return} = \text{Cash} + \text{Equity Beta} \times (\text{Equity-Cash}) + \text{Exotic Beta} + \text{Net Alpha}$
- ▶ Callan's 10-year cash forecast is 3.00%.
- ▶ Diversified hedge fund portfolios have historically exhibited equity beta relative to the S&P 500 of about 0.4.
- ▶ Combined with our equity risk premium forecast, this results in an excess return from equity beta of 1.8%.
- ▶ Return from hedge fund exotic beta and illiquidity premia is forecast to be 0.5% to 1.5%, to arrive at an overall expected return of 6.05%.

2024 hedge fund return projection: 6.05%
(up 50 bps)

Return Projections



Source: Callan

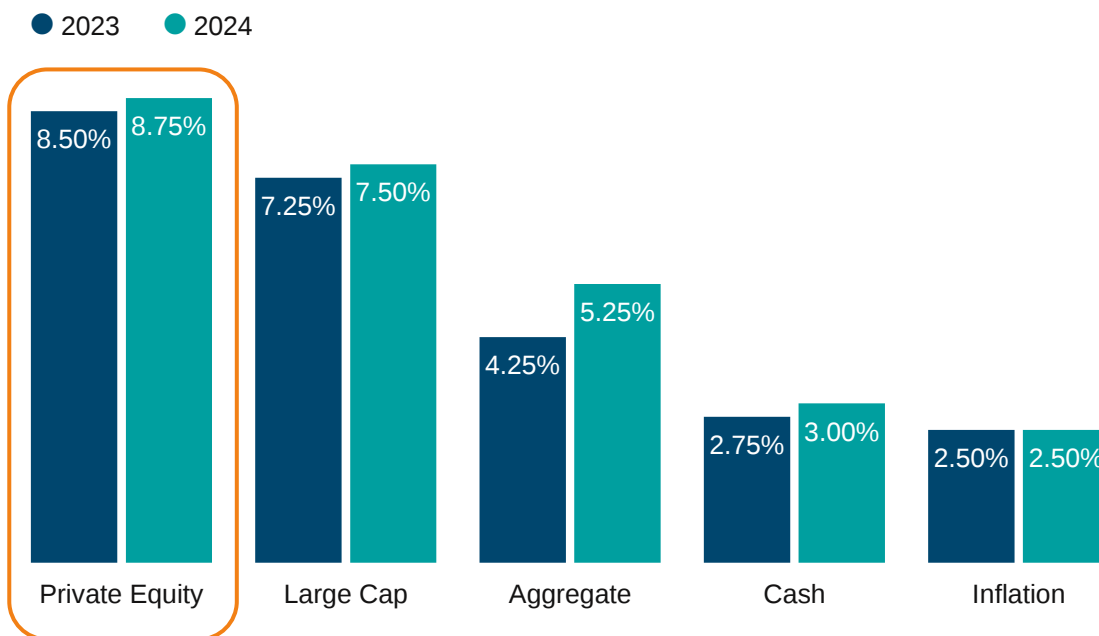
Private Equity

Background

- ▶ The private equity market in aggregate is driven by many of the same economic factors as public equity markets. However, we expect private equity to experience some write-downs that have not yet been reflected in performance.
- ▶ Private equity performance expectations rose in line with public equity expectations.
- ▶ We see tremendous disparity between the best- and worst-performing private equity managers.
- ▶ The ability to select skillful managers could result in realized returns significantly greater than projected here.

2024 private equity return projection: 8.75%
(up 25 bps)

Return Projections



Source: Callan

Important Disclosures

Information contained in this document may include confidential, trade secret and/or proprietary information of Callan and the client. It is incumbent upon the user to maintain such information in strict confidence. Neither this document nor any specific information contained herein is to be used other than by the intended recipient for its intended purpose.

The content of this document is particular to the client and should not be relied upon by any other individual or entity. There can be no assurance that the performance of any account or investment will be comparable to the performance information presented in this document.

Certain information herein has been compiled by Callan from a variety of sources believed to be reliable but for which Callan has not necessarily verified for accuracy or completeness. Information contained herein may not be current. Callan has no obligation to bring current the information contained herein.

This content of this document may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact. The opinions expressed herein may change based upon changes in economic, market, financial and political conditions and other factors. Callan has no obligation to bring current the opinions expressed herein.

The statements made herein may include forward-looking statement regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties. Actual results may vary, perhaps materially, from the future results projected in this document. Undue reliance should not be placed on forward-looking statements.

Callan disclaims any responsibility for reviewing the risks of individual securities or the compliance/non-compliance of individual security holdings with a client's investment policy guidelines.

This document should not be construed as legal or tax advice on any matter. You should consult with legal and tax advisers before applying any of this information to your particular situation.

Reference to, or inclusion in this document of, any product, service or entity should not necessarily be construed as recommendation, approval, or endorsement or such product, service or entity by Callan.

This document is provided in connection with Callan's consulting services and should not be viewed as an advertisement of Callan, or of the strategies or products discussed or referenced herein.

The issues considered and risks highlighted herein are not comprehensive and other risks may exist that the user of this document may deem material regarding the enclosed information.

Any decision you make on the basis of this document is sole responsibility of the client, as the intended recipient, and it is incumbent upon you to make an independent determination of the suitability and consequences of such a decision.

Callan undertakes no obligation to update the information contained herein except as specifically requested by the client.

Past performance is no guarantee of future results.



March 5, 2024

City of Norwalk Pension and OPEB Performance Review

Period ended December 31, 2023

Britton M. Murdoch
Vice President

Kevin Schmidt
Senior Vice President

Overview

- Market Environment
- Pension Performance
- OPEB Performance

Callan

Market Environment

Equity Markets Surge in 4Q, Following Decline in 3Q

Stocks have recovered losses of 2022, bonds still have ground to make up

S&P 500 surged 11.7% in 4Q23

- Loss through first three quarters of 2022 was 23.9%; the rebound in the following five quarters brought the index back to a positive return of 1.7% over the past two years.

Fixed income recovered in 4Q

- The Bloomberg Aggregate surged 6.8% after suffering a sharp loss of 3.2% in 3Q.
- The Aggregate was on track for another negative year through 3Q; softening Fed language on rates in 4Q turned the market around.
- CPI-U: declined in 4Q compared to 3Q but is still up 3.4% year-over-year, and the index is 10% higher than it was at the start of 2022

Economy defied recession fears

- GDP growth came in at 2.1% in 1Q, 2.2% in 2Q, 4.9% in 3Q, and a very healthy 3.3% in 4Q.

Returns for Periods ended 12/31/23

	Quarter	1 Year	2 Years	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	12.07	25.96	0.88	15.16	11.48	7.74
S&P 500	11.69	26.29	1.69	15.69	12.03	7.56
Russell 2000	14.03	16.93	-3.55	9.97	7.16	7.91
Global ex-U.S. Equity						
MSCI World ex USA	10.51	17.94	0.54	8.45	4.32	4.62
MSCI Emerging Markets	7.86	9.83	-6.32	3.69	2.66	--
MSCI ACWI ex USA Small Cap	10.12	15.66	-3.79	7.89	4.88	7.28
Fixed Income						
Bloomberg Aggregate	6.82	5.53	-4.19	1.10	1.81	3.85
90-day T-Bill	1.37	5.01	3.22	1.88	1.25	1.90
Bloomberg Long Gov/Credit	13.24	7.13	-11.62	1.12	3.22	5.21
Bloomberg Global Agg ex-US	9.21	5.72	-7.29	-1.56	-0.79	2.25
Real Estate						
NCREIF Property Index	-3.02	-7.94	-1.44	4.33	6.80	8.03
FTSE Nareit Equity	16.22	13.73	-7.25	7.39	7.65	9.27
Alternatives						
HFRI Fund Weighted	3.64	7.57	1.55	7.01	4.54	6.31
Cambridge Private Equity*	-0.42	4.17	0.19	14.59	14.27	13.87
Bloomberg Commodity	-4.63	-7.91	3.40	7.23	-1.11	2.83
Gold Spot Price	11.02	13.45	6.44	10.09	5.59	8.19
Inflation - CPI-U	-0.34	3.35	4.89	4.07	2.79	2.54

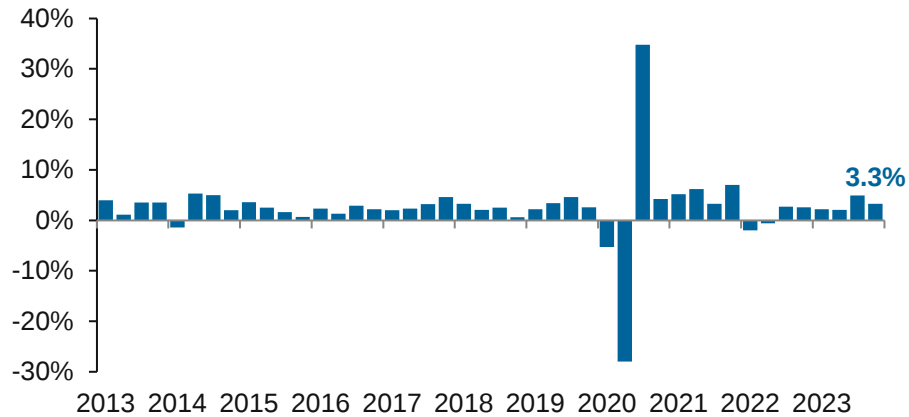
*Cambridge PE data as of 9/30/23.

Sources: Bloomberg, Callan, Cambridge, FTSE Russell, HFRI, MSCI, NCREIF, S&P Dow Jones Indices

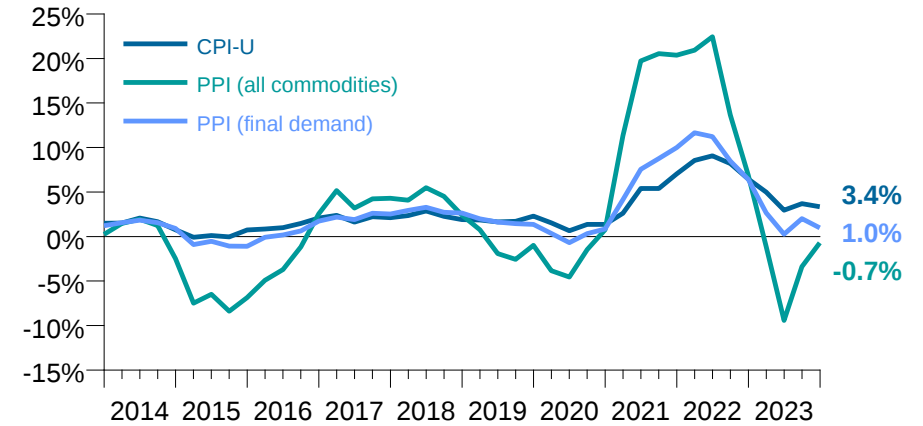
U.S. Economy—Summary

For periods ended 12/31/23

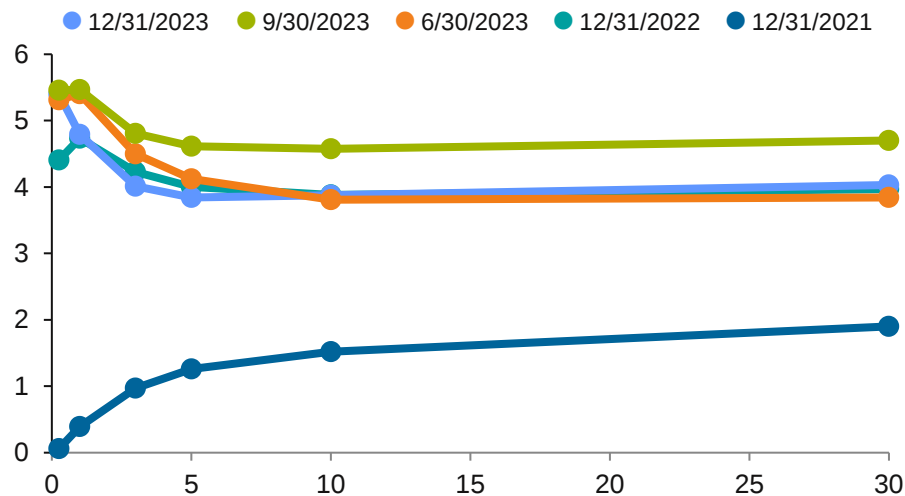
Quarterly Real GDP Growth



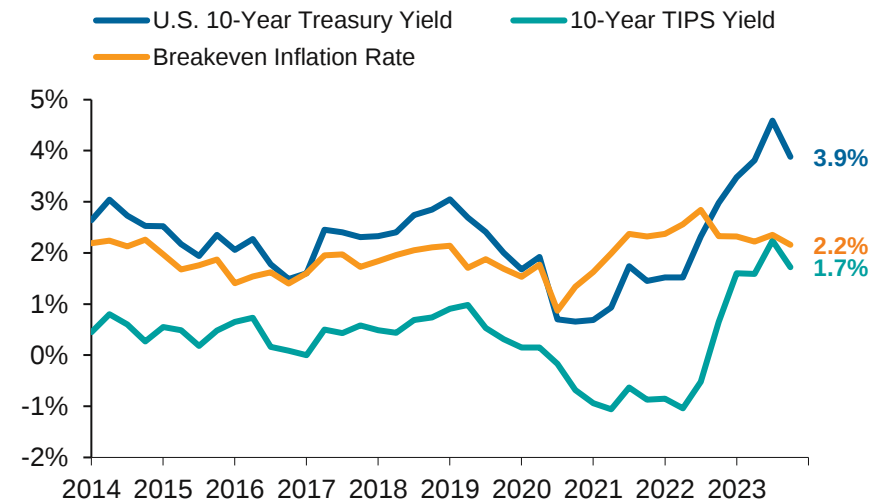
Inflation Year-Over-Year



U.S. Treasury Yield Curves



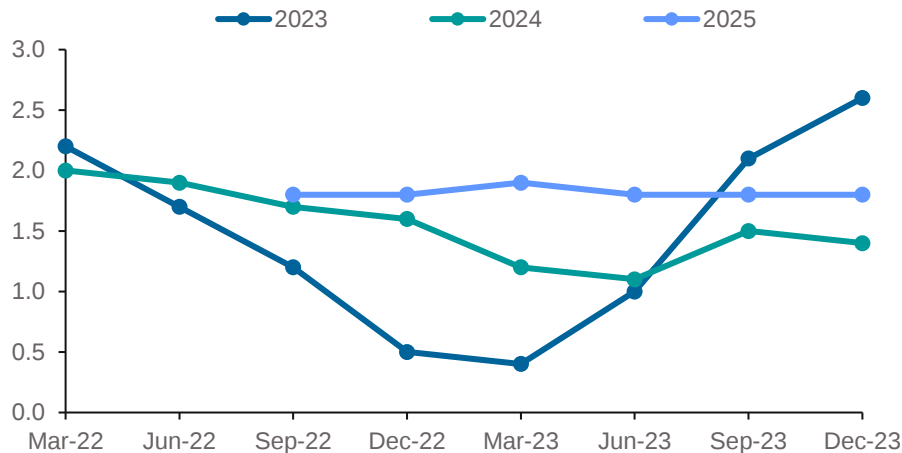
Historical 10-Year Yields Through 12/31/23



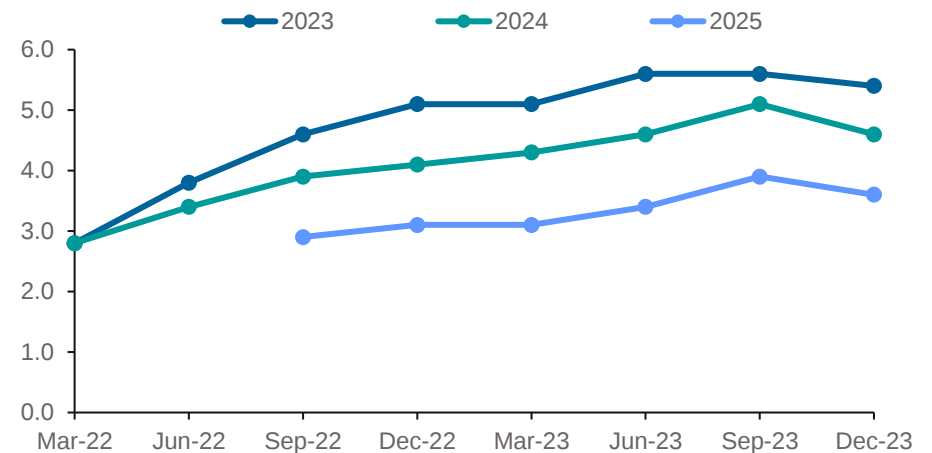
Sources: Bloomberg, Bureau of Labor Statistics, Callan

The Shifting Mindset at the Fed

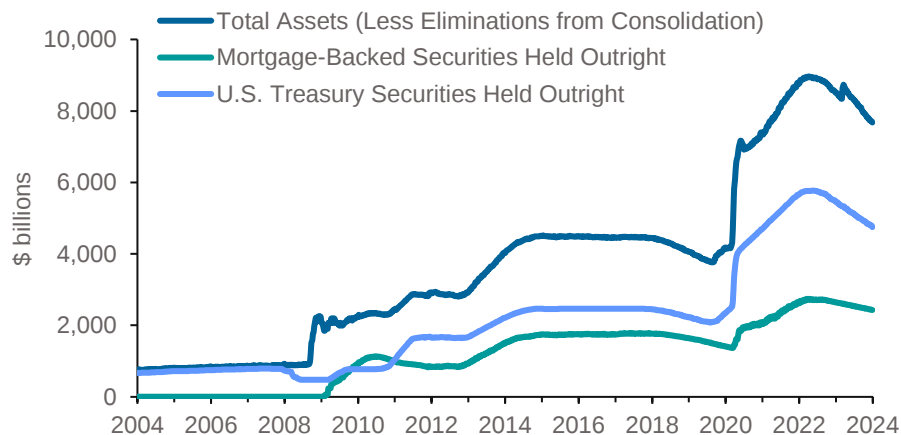
**Fed Projection of Change in Real GDP
By Fed Meeting Date and Projection Year**



**Fed Projection of Fed Funds Rate
By Fed Meeting Date and Projection Year**



Fed Balance Sheet



The big swing in the Fed's GDP projection reflects the surprising nature of economic resilience.

- The Fed steadily increased projections for the appropriate Fed Funds Rate in response to this economic strength.
 - Inflation down from recent highs but well above the Fed's long-term 2% target
- The Fed is also unwinding its balance sheet.
 - This has a more direct impact on longer-term rates than the Fed Funds Rate and could help to slow economic activity if it causes rates to rise.

Source: Federal Reserve, Financial Times

U.S. Equity Performance: 4Q23

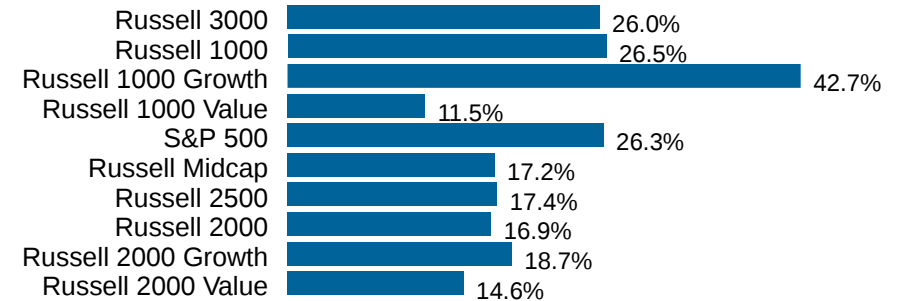
The U.S. equity market rallied in 4Q, closing the year near record highs

- U.S. equity markets rebounded in the last two months of the year as possible rate cuts in 2024 started to get priced in.
- 2023 saw the narrowest breadth of leadership (“the Magnificent Seven”) since 1987 with just 27% of stocks outperforming the S&P 500. Historically such concentrated leadership has not been the sign of a healthy market.
- However, gains started broadening out in the last two months of the year with the equal-weighted S&P index outperforming the capitalization-weighted version.
- Smaller cap stocks also outperformed their large cap counterparts in 4Q23, further proof of the broadening out of returns. For the full year large cap stocks outperformed small cap stocks by almost 10 percentage points.
- Growth vs. value performance was mixed across market capitalization during the quarter. Within large cap growth outperformed value; the opposite was true within small cap.

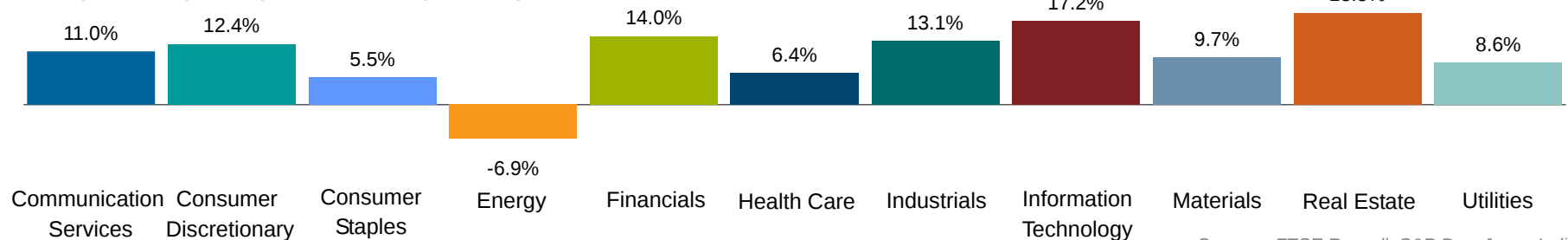
U.S. Equity: Quarter Ended 12/31/23



U.S. Equity: One Year Ended 12/31/23



Industry Sector Quarterly Performance (S&P 500) as of 12/31/23



Sources: FTSE Russell, S&P Dow Jones Indices

Global/Global ex-U.S. Equity Performance: 4Q23

Dovish central banks drove market higher

Broad market

- Dovish signaling from central banks and dropping yields led to a broad market rally in 4Q.
- Global ex-U.S. small caps reclaimed some of their lagging performance in 4Q but ended the year as the worst-performing broad-based index, albeit up over 12%. Elevated borrowing costs and the persistent risk of a recession have kept investors away.
- Japan's low rates have benefited exporters, and the threat of being delisted spurred a stock buy-back spree. Coupled with an increased focus on governance, Japan hit a multi-decade high.

Emerging markets

- Emerging markets underperformed developed markets.
 - India's rally couldn't overcome China's weakness, whose economic growth was near the government's target, but investor concerns around stimulus and a surprisingly sluggish reopening drove stocks lower.

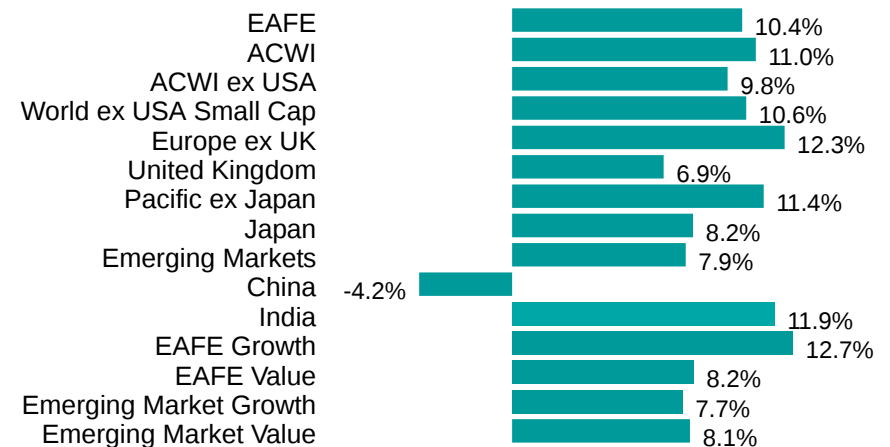
Growth vs. value

- Energy, a volatile area in the market, pulled back value's rally after having a strong 3Q. Global ex-U.S. growth rallied on lowering yields but couldn't overcome earlier underperformance and ended the year behind its value peers in both emerging and developed markets.

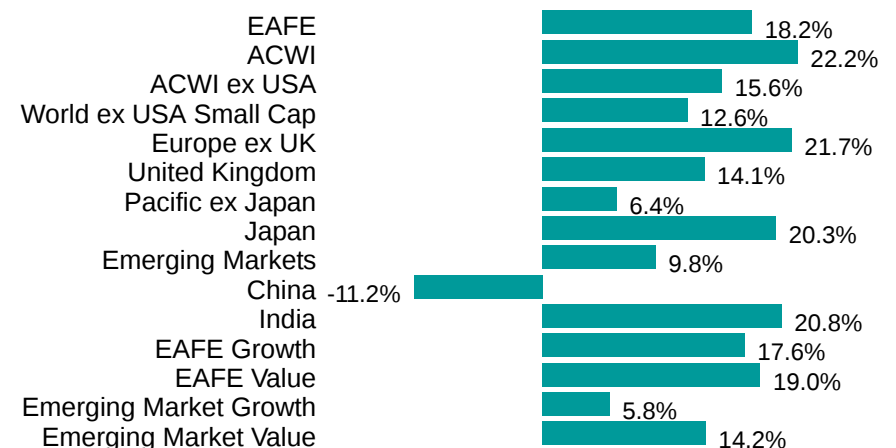
U.S. dollar vs. other currencies

- The U.S. dollar weakened in 4Q as investors believed that U.S. interest rates would fall faster than much of the developed world.

Global Equity Returns: Quarter Ended 12/31/23



Global Equity Returns: One Year Ended 12/31/23



Source: MSCI

U.S. Fixed Income Performance: 4Q23

Bonds bounce back at year-end; U.S. Treasury yield has volatile 2023

Strong returns at end of year

- Driven by falling rates and strong risk-on sentiment, the Agg returned 6.8%, the highest quarterly return since 2Q89 (when the 90-day T-bill was over 8% and inflation hit 14% earlier in the decade)!
- 10-year U.S. Treasury yield closed the year at 3.88%.
 - A round trip from 12/2022, masking significant volatility during the year
 - High was 4.98% in October and low was 3.30% in April
- Corporates and mortgages outperformed Treasuries for the quarter and year.
- High yield corporates soared as defaults remained low, economy resilient.

U.S. Treasury yield curve remained inverted, but less so

- 106 bps as of 6/30; 44 bps as of 9/30; 35 bps as of 12/31

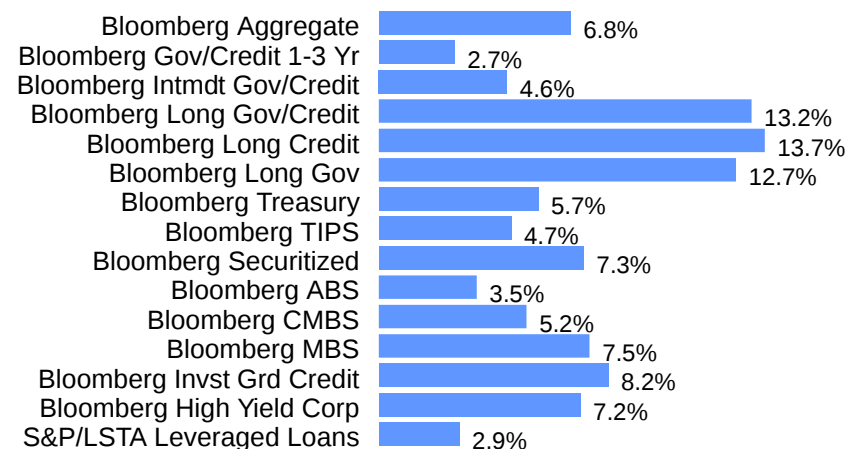
Fed kept Fed Funds rate on hold and softened language

- Pivoted from “higher for longer” to projected rate cuts in 2024
- Inflation over past six months below Fed’s 2% target
 - Core PCE Price Index was 1.9% annualized in November
- Markets expect six rate cuts in 2024 versus three in the Fed’s Summary of Economic Projections

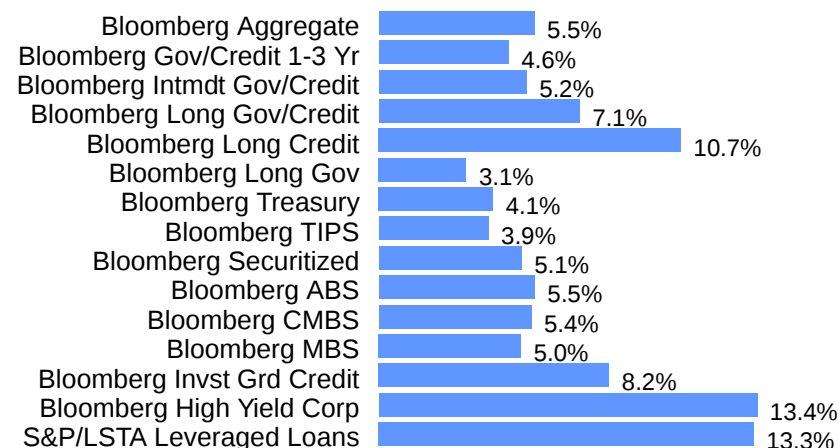
Valuations

- Investment grade and high yield corporate spreads now below 10-year averages

U.S. Fixed Income Returns: Quarter Ended 12/31/23



U.S. Fixed Income Returns: One Year Ended 12/31/23



Sources: Bloomberg, Callan, S&P Dow Jones Indices

Hedge Fund Performance: 4Q23

Risk assets rallied into year-end boosted by hopes for aggressive Fed cuts in 2024

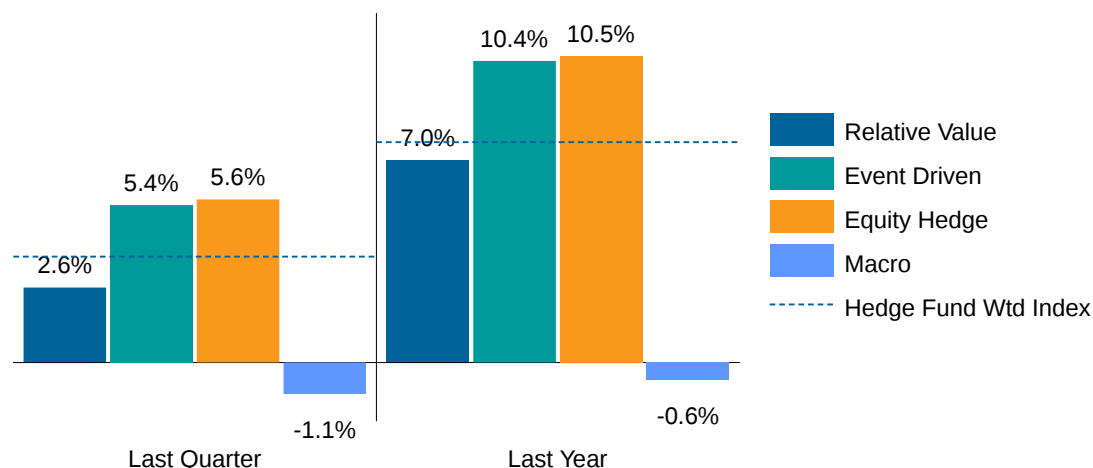
Hedge fund strategies finished strong

- Event-driven strategies ended higher, as positions across special situations equities and credit drove performance.
- Equity hedge strategies finished strong, as positions across technology and financials aided performance during 4Q23.
- Macro strategies posted a loss during 4Q, as commodities detracted from performance while rates trading slightly offset some of that performance.

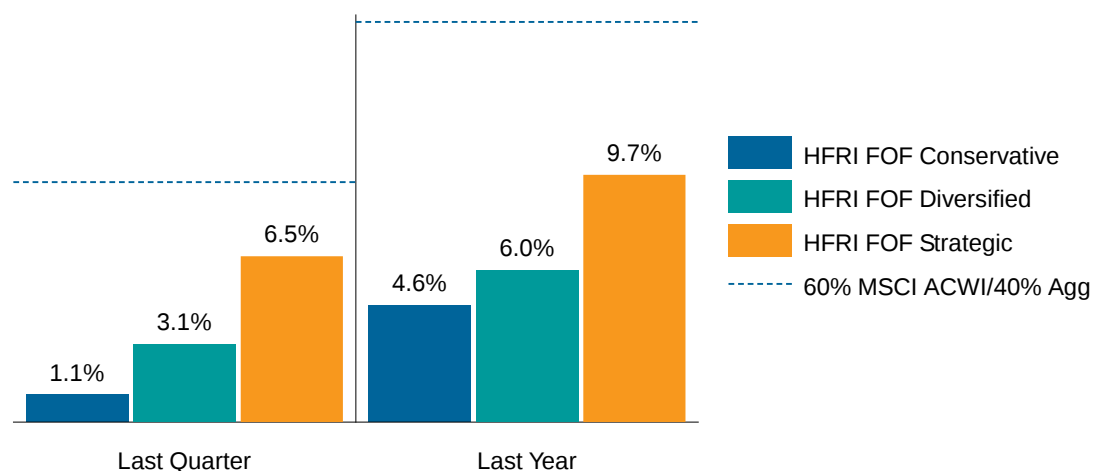
FOFs ended on a strong note

- FOFs with more exposure to equity hedge strategies performed well during 4Q.
- Those FOFs with less equity beta and more relative value strategies underperformed those with more equity beta.

HFRI Strategy Index Returns vs. Broad Hedge Fund Universe as of 12/31/23



HFRI Fund-of-Funds Returns vs. 60% Stock/40% Bond Mix as of 12/31/23



Source: Hedge Fund Research (www.hedgefundresearch.com)

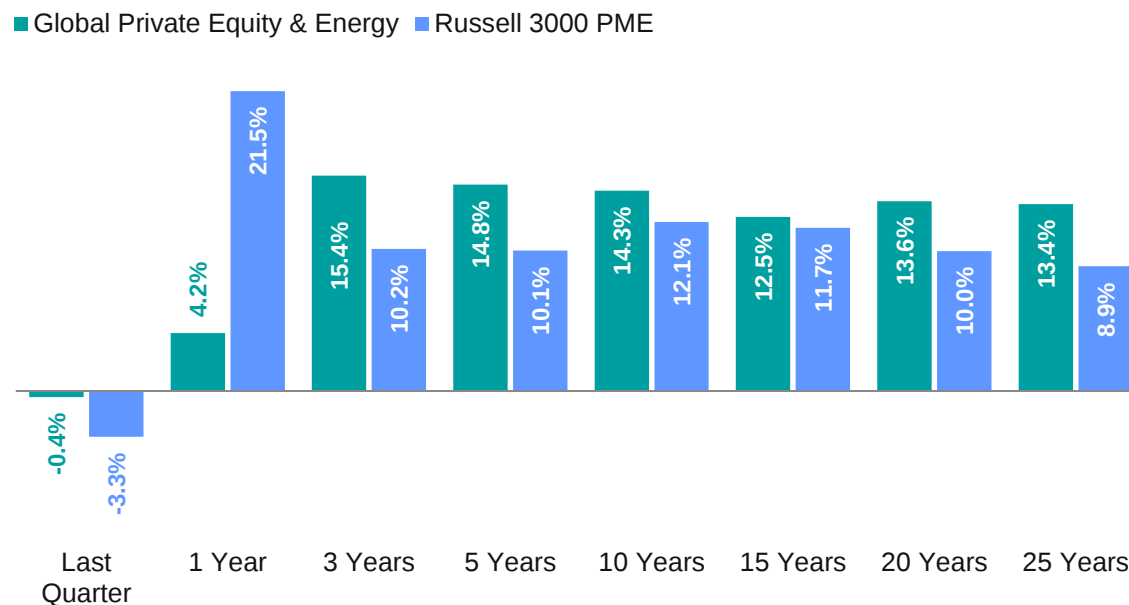
Private Equity Market Trends

Gains for stocks not shared by private equity

Smoothing effect in performance

- Public equity's strong recovery in 2023 (led by the "Magnificent Seven" technology stocks) has left private equity in its wake.
- Private equity doesn't recover as quickly as the public markets, because the smoothing effect dampens private equity returns in both up and down markets.
- Private equity only saw about a fifth of the gains of the public markets over the last year, on a PME basis.
- While buyouts saw solid performance for the year, venture capital and growth equity continued to struggle. These strategies have seen the largest valuation adjustments from the highs of 2021.

Net IRRs as of 09/30/23



Net IRRs by Strategy as of 09/30/23

Strategy	Last Quarter	1 Year	3 Years	5 Years	10 Years	15 Years
Venture Capital	-2.4%	-8.9%	14.8%	17.2%	17.2%	13.4%
Growth Equity	-0.6%	0.8%	12.3%	14.8%	14.3%	13.1%
Buyouts	0.1%	10.2%	16.8%	15.0%	14.6%	12.4%
Mezzanine	1.8%	13.0%	13.5%	11.0%	11.1%	10.7%
Credit Opportunities	1.2%	8.2%	11.1%	7.1%	7.5%	10.1%
Control-Oriented Distressed	0.4%	5.6%	19.4%	13.6%	11.7%	11.5%

Source: Refinitiv/Cambridge. PME: Public Market Equivalent

Diversification Remains Key Risk Control

Periodic Table of Investment Returns

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Emerging Markets	Emerging Markets	Emerging Markets	Emerging Markets	U.S. Fixed	Emerging Markets	Small Cap	Real Estate Funds	Emerging Markets	Small Cap	Large Cap	Real Estate Funds	Small Cap	Emerging Markets	Real Estate Funds	Large Cap	Small Cap	Large Cap	Real Estate Funds	Large Cap
25.55%	34.00%	32.17%	39.38%	5.24%	78.51%	26.85%	14.96%	18.23%	38.82%	13.69%	13.95%	21.31%	37.28%	7.36%	31.49%	19.96%	28.71%	6.55%	26.29%
Non-U.S. Equity	Real Estate Funds	Non-U.S. Equity	Real Estate Funds	Non-U.S. Fixed	High Yield	Emerging Markets	U.S. Fixed	Non-U.S. Equity	Large Cap	Real Estate Funds	Large Cap	High Yield	Non-U.S. Equity	Cash Equivalent	Small Cap	Large Cap	Real Estate Funds	Cash Equivalent	Non-U.S. Equity
20.38%	20.15%	25.71%	14.84%	4.39%	58.21%	18.88%	7.84%	16.41%	32.39%	11.46%	1.38%	17.13%	24.21%	1.87%	25.52%	18.40%	21.02%	1.46%	17.94%
Small Cap	Non-U.S. Equity	Small Cap	Hedge Funds	Cash Equivalent	Non-U.S. Equity	Real Estate Funds	High Yield	Small Cap	Non-U.S. Equity	U.S. Fixed	U.S. Fixed	Large Cap	Large Cap	U.S. Fixed	Non-U.S. Equity	Emerging Markets	Small Cap	Hedge Funds	Small Cap
18.33%	14.47%	18.37%	12.56%	2.06%	33.67%	15.26%	4.98%	16.35%	21.02%	5.97%	0.55%	11.96%	21.83%	0.01%	22.49%	18.31%	14.82%	1.06%	16.93%
Non-U.S. Fixed	Hedge Funds	Large Cap	Non-U.S. Equity	Real Estate Funds	Small Cap	High Yield	Non-U.S. Fixed	Large Cap	Real Estate Funds	Small Cap	Cash Equivalent	Emerging Markets	Small Cap	High Yield	Emerging Markets	Non-U.S. Fixed	Non-U.S. Equity	High Yield	High Yield
12.54%	7.61%	15.79%	12.44%	-10.70%	27.17%	15.12%	4.36%	16.00%	12.90%	4.89%	0.05%	11.19%	14.65%	-2.08%	18.44%	10.11%	12.62%	-11.19%	13.44%
Real Estate Funds	Large Cap	Real Estate Funds	Non-U.S. Fixed	Hedge Funds	Large Cap	Large Cap	Large Cap	High Yield	Hedge Funds	Hedge Funds	Hedge Funds	Real Estate Funds	Non-U.S. Fixed	Non-U.S. Fixed	High Yield	Non-U.S. Equity	Hedge Funds	U.S. Fixed	Emerging Markets
12.00%	4.91%	15.27%	11.03%	-19.07%	26.47%	15.06%	2.11%	15.81%	9.73%	4.13%	-0.71%	7.79%	10.51%	-2.15%	14.32%	7.59%	8.23%	-13.01%	9.83%
High Yield	Small Cap	Hedge Funds	U.S. Fixed	High Yield	Hedge Funds	Hedge Funds	Cash Equivalent	Real Estate Funds	High Yield	High Yield	Non-U.S. Equity	Non-U.S. Equity	High Yield	Hedge Funds	Hedge Funds	U.S. Fixed	High Yield	Non-U.S. Equity	Hedge Funds
11.13%	4.55%	13.86%	6.97%	-26.16%	18.57%	10.95%	0.10%	9.79%	7.44%	2.45%	-3.04%	2.75%	7.50%	-3.19%	9.31%	7.51%	5.28%	-14.29%	5.83%
Large Cap	Cash Equivalent	High Yield	Large Cap	Small Cap	Non-U.S. Fixed	Non-U.S. Equity	Hedge Funds	Hedge Funds	Cash Equivalent	Cash Equivalent	Small Cap	U.S. Fixed	Hedge Funds	Large Cap	U.S. Fixed	High Yield	Cash Equivalent	Large Cap	Non-U.S. Fixed
10.88%	3.06%	11.85%	5.49%	-33.79%	7.53%	8.95%	-2.52%	7.67%	0.07%	0.04%	-4.41%	2.65%	7.12%	-4.38%	8.72%	7.11%	0.05%	-18.11%	5.72%
Hedge Funds	High Yield	Non-U.S. Fixed	Cash Equivalent	Large Cap	U.S. Fixed	U.S. Fixed	Small Cap	U.S. Fixed	U.S. Fixed	Emerging Markets	High Yield	Non-U.S. Fixed	Real Estate Funds	Small Cap	Non-U.S. Fixed	Hedge Funds	U.S. Fixed	Non-U.S. Fixed	U.S. Fixed
9.64%	2.74%	8.16%	5.00%	-37.00%	5.93%	6.54%	-4.18%	4.21%	-2.02%	-2.19%	-4.47%	1.49%	6.66%	-11.01%	5.09%	6.36%	-1.54%	-18.70%	5.53%
U.S. Fixed	U.S. Fixed	Cash Equivalent	High Yield	Non-U.S. Equity	Cash Equivalent	Non-U.S. Fixed	Non-U.S. Equity	Non-U.S. Fixed	Emerging Markets	Non-U.S. Fixed	Non-U.S. Fixed	Hedge Funds	U.S. Fixed	Non-U.S. Equity	Real Estate Funds	Cash Equivalent	Emerging Markets	Emerging Markets	Cash Equivalent
4.34%	2.43%	4.86%	1.87%	-43.56%	0.21%	4.95%	-12.21%	4.09%	-2.60%	-3.09%	-6.02%	1.25%	3.54%	-14.09%	4.39%	0.67%	-2.54%	-20.09%	5.01%
Cash Equivalent	Non-U.S. Fixed	U.S. Fixed	Small Cap	Emerging Markets	Real Estate Funds	Cash Equivalent	Emerging Markets	Cash Equivalent	Non-U.S. Fixed	Non-U.S. Equity	Emerging Markets	Cash Equivalent	Cash Equivalent	Emerging Markets	Cash Equivalent	Real Estate Funds	Non-U.S. Fixed	Small Cap	Real Estate Funds
1.33%	-8.65%	4.33%	-1.57%	-53.33%	-30.40%	0.13%	-18.42%	0.11%	-3.08%	-4.32%	-14.92%	0.33%	0.86%	-14.57%	2.28%	0.34%	-7.05%	-20.44%	-12.73%

- Bloomberg Barclays Corp High Yield ● Bloomberg Barclays Global Aggregate ex US ● Bloomberg Barclays US Aggregate
- Credit Suisse Hedge Fund ● ICE BofAML US 3-Month Treasury Bill ● MSCI Emerging Markets ● MSCI World ex USA
- NFI-ODCE (value-weighted net) ● Russell 2000 ● S&P 500

Published Research Highlights from 4Q23

2023 Nuclear Decommissioning Funding Study



2023 Investment Management Fee Study



2023 Asset Manager ESG Study



Callan's Retirement Conundrum Webinar



Recent Blog Posts

ILS on Pace for Banner Year in 2023

Sean Lee

Carbon- Footprinting Basics for Institutional Investors

Amit Bansal

Key Issues to Know for the Proposed Fiduciary Rule

Jana Steele

Additional Reading

Alternatives Focus quarterly newsletter
Active vs. Passive quarterly charts
Capital Markets Review quarterly newsletter
Monthly Updates to the Periodic Table
Market Pulse Flipbook quarterly markets update
Real Estate Indicators market outlook

Callan Institute Events

Upcoming conferences, workshops, and webinars

Callan College

Intro to Investments—Learn the Fundamentals

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with basic investment theory, terminology, and practices.

- March 19-21, 2024 – Virtual Session via Zoom
- June 18-19, 2024 – In Person Session in Chicago

Intro to Alternatives

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with alternative investments like private equity, hedge funds, and real estate and how they can play a key role in any portfolio. You will learn about the importance of allocations to alternatives and how to consider integrating, evaluating, and monitoring them.

- February 21–22, 2024 – Virtual Session via Zoom

Please visit our website at callan.com/events-education as we add dates to our 2024 calendar!

Mark Your Calendar

2024 National Conference

April 8–10, 2024 – San Francisco

2024 Regional Workshops

June 25, 2024 – Atlanta

June 27, 2024 – San Francisco

October 22, 2024 – Denver

October 24, 2024 – Location TBD

Watch your email for further details and an invitation.

Webinars & Research Café Sessions

Webinar: Capital Markets Assumptions

January 17, 2024 – Virtual Session via Zoom

Webinar: Market Intelligence

January 19, 2024 – Virtual Session via Zoom

Research Café: ESG Interview Series

March 12, 2024 – Virtual Session via Zoom

Callan

Pension Plan Performance

Actual versus Target Asset Allocation

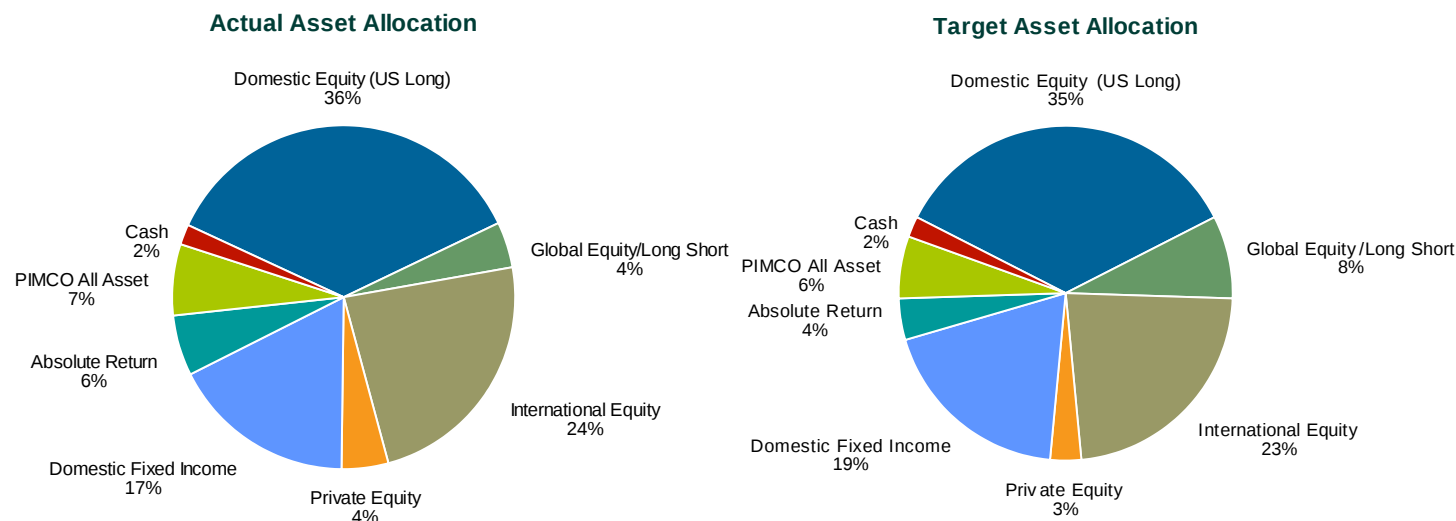
For Periods Ended December 31, 2023

Overweights:

- Absolute Return (5.7% vs 4% target)
- Private Equity (4.4% vs 3% target)
- Domestic Equity (36.0% vs 35% target)
- Real Assets (6.7% vs 6% target)
- International Equity (23.6% vs 23%)

Underweights:

- Global Equity Long/Short (4.3% vs 8% target)
- Domestic Fixed Income (17.4% vs 19% target)
- Cash was 1.9% at the end of the fourth quarter.



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity (US Long)	180,734	36.0%	35.0%	1.0%	5,133
Global Equity/Long Short	21,339	4.3%	8.0%	(3.7%)	(18,799)
International Equity	118,161	23.6%	23.0%	0.6%	2,766
Private Equity	22,314	4.4%	3.0%	1.4%	7,263
Domestic Fixed Income	87,386	17.4%	19.0%	(1.6%)	(7,940)
Absolute Return	28,587	5.7%	4.0%	1.7%	8,518
PIMCO All Asset	33,806	6.7%	6.0%	0.7%	3,702
Cash	9,391	1.9%	2.0%	(0.1%)	(643)
Total	501,718	100.0%	100.0%		

Portfolio Holdings

For Periods Ended December 31, 2023

- As of December 31, 2023, total fund assets were \$501.7 million, up from \$471.5 million as of September 30, 2023.

- The total fund had a positive investment return of \$40.1 million for the quarter.

	December 31, 2023			September 30, 2023		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Total Equity	\$342,548,094	68.27%	\$(10,515,443)	\$31,255,626	\$321,807,911	68.25%
U.S. Equity	\$180,734,216	36.02%	\$(10,175,289)	\$19,720,043	\$171,189,462	36.30%
BR Russell 1000 Index Non-Lendable	134,046,875	26.72%	(10,000,000)	15,285,563	128,761,312	27.31%
LSV	24,887,805	4.96%	(175,289)	3,351,696	21,711,399	4.60%
Principal Dynamic Growth	21,799,535	4.34%	0	1,082,785	20,716,750	4.39%
International Equity	\$118,160,846	23.55%	\$(115,154)	\$10,359,142	\$107,916,857	22.89%
Developed Markets	\$98,427,764	19.62%	\$(115,154)	\$9,013,055	\$89,529,864	18.99%
Silchester	64,029,231	12.76%	(115,154)	4,741,476	59,402,909	12.60%
Walter Scott	34,398,534	6.86%	0	4,271,579	30,126,955	6.39%
Emerging Markets	\$19,733,081	3.93%	\$0	\$1,346,087	\$18,386,994	3.90%
BlackRock EM Alpha Tilts	19,733,081	3.93%	0	1,346,087	18,386,994	3.90%
Global Equity Long/Short	\$21,338,753	4.25%	\$0	\$1,176,441	\$20,162,313	4.28%
ABS Global	21,096,447	4.20%	0	1,176,441	19,920,007	4.22%
Blackstone Park Ave. NT	242,306	0.05%	0	0	242,306	0.05%
Private Equity (1)	\$22,314,279	4.45%	\$(225,000)	\$0	\$22,539,279	4.78%
Pantheon USA IV	22,762	0.00%	0	0	22,762	0.00%
Pantheon USA VI	141,111	0.03%	0	0	141,111	0.03%
Pantheon USA VII	673,998	0.13%	0	0	673,998	0.14%
Pantheon Europe Fund V A	338,172	0.07%	0	0	338,172	0.07%
Pantheon Global Secondary Fund III	59,955	0.01%	0	0	59,955	0.01%
Pantheon US Select 2014	21,078,281	4.20%	(225,000)	0	21,303,281	4.52%
Domestic Fixed Income	\$87,386,196	17.42%	\$(11,177)	\$5,969,884	\$81,427,489	17.27%
Prudential Cons Core Bond Fund	38,747,969	7.72%	(11,177)	2,567,389	36,191,758	7.68%
Metropolitan West Fund	48,638,226	9.69%	0	3,402,495	45,235,731	9.59%
Absolute Return	\$28,587,179	5.70%	\$0	\$619,764	\$27,967,415	5.93%
UBS AIS	28,587,179	5.70%	0	619,764	27,967,415	5.93%
Real Assets	\$33,805,561	6.74%	\$0	\$2,143,901	\$31,661,660	6.71%
PIMCO All Asset	33,805,561	6.74%	0	2,143,901	31,661,660	6.71%
Cash	\$9,391,404	1.87%	\$633,449	\$79,389	\$8,678,566	1.84%
Cash Account	9,391,404	1.87%	633,449	79,389	8,678,566	1.84%
Total Fund	\$501,718,434	100.0%	\$(9,893,172)	\$40,068,565	\$471,543,041	100.0%

Portfolio Holdings

For Periods Ended December 31, 2023

	December 31, 2023					September 30, 2023		
	Market Value	Weight	(min)	Target	(max)	Market Value	Weight	Target
Total Equity	\$342,548,094	68.27%	60.00%	69.00%	75.00%	\$321,807,911	68.25%	69.00%
U.S. Equity	\$180,734,216	36.02%	27.00%	35.00%	40.00%	\$171,189,462	36.30%	35.00%
BR Russell 1000 Idx Non-Lendable	134,046,875	26.72%				128,761,312	27.31%	
LSV	24,887,805	4.96%				21,711,399	4.60%	
Principal Dynamic Growth	21,799,535	4.34%				20,716,750	4.39%	
International Equity	\$118,160,846	23.55%	18.00%	23.00%	28.00%	\$107,916,857	22.89%	23.00%
Developed Markets	\$98,427,764	19.62%	-	-	-	\$89,529,864	18.99%	-
Silchester	64,029,231	12.76%				59,402,909	12.60%	
Walter Scott	34,398,534	6.86%				30,126,955	6.39%	
Emerging Markets	\$19,733,081	3.93%	-	-	-	\$18,386,994	3.90%	-
BlackRock EM Alpha Tilts	19,733,081	3.93%				18,386,994	3.90%	
Global Equity/Long Short	\$21,338,753	4.25%	4.00%	8.00%	12.00%	\$20,162,313	4.28%	8.00%
ABS Global	21,096,447	4.20%				19,920,007	4.22%	
Blackstone Park Ave. NT	242,306	0.05%				242,306	0.05%	
Private Equity (1)	\$22,314,279	4.45%	0.00%	3.00%	6.00%	\$22,539,279	4.78%	3.00%
Pantheon USA IV	22,762	0.00%				22,762	0.00%	
Pantheon USA VI	141,111	0.03%				141,111	0.03%	
Pantheon USA VII	673,998	0.13%				673,998	0.14%	
Pantheon Europe Fund V A	338,172	0.07%				338,172	0.07%	
Pantheon Global Fund III	59,955	0.01%				59,955	0.01%	
Pantheon US Select 2014	21,078,281	4.20%				21,303,281	4.52%	
Domestic Fixed Income	\$87,386,196	17.42%	14.00%	19.00%	24.00%	\$81,427,489	17.27%	19.00%
Prudential Cons Core Bond Fund	38,747,969	7.72%				36,191,758	7.68%	
Metropolitan West Fund CIT	48,638,226	9.69%				45,235,731	9.59%	
Absolute Return	\$28,587,179	5.70%	0.00%	4.00%	6.00%	\$27,967,415	5.93%	4.00%
UBS AIS	28,587,179	5.70%				27,967,415	5.93%	
Real Assets	\$33,805,561	6.74%	4.00%	6.00%	12.00%	\$31,661,660	6.71%	6.00%
PIMCO All Asset	33,805,561	6.74%	4.00%	6.00%	10.00%	31,661,660	6.71%	6.00%
Cash	\$9,391,404	1.87%	0.00%	2.00%	4.00%	\$8,678,566	1.84%	2.00%
Cash Account	9,391,404	1.87%				8,678,566	1.84%	
Total Fund	\$501,718,434	100.00%		100.00%		\$471,543,041	100.00%	100.00%

Investment Manager Returns

For Periods Ended December 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Total Equity	9.76%	18.36%	5.55%	11.09%	9.62%
U.S. Long Equity	11.58%	23.18%	7.56%	14.89%	12.34%
Pure US Equity Composite	11.58%	23.18%	7.61%	14.95%	12.43%
Russell 3000 Index	12.07%	25.96%	8.54%	15.16%	12.81%
Russell 1000 Index Non-Lendable	11.98%	26.56%	8.99%	15.53%	13.21%
Russell 1000 Index	11.96%	26.53%	8.97%	15.52%	13.21%
LSV	15.56%	17.22%	15.70%	11.88%	6.46%
Russell 2000 Value Index	15.26%	14.65%	7.94%	10.00%	6.10%
Principal Dynamic Growth	5.23%	11.32%	(4.50%)	14.96%	15.26%
Russell 2500 Growth Index	12.59%	18.93%	(2.68%)	11.43%	10.24%
International Equity	9.61%	17.86%	3.21%	7.35%	7.09%
MSCI ACWI ex US	9.75%	15.62%	1.55%	7.08%	6.33%
Developed Markets	10.08%	19.72%	5.35%	8.39%	7.87%
MSCI EAFE Index	10.42%	18.24%	4.02%	8.16%	6.91%
Silchester	8.00%	21.69%	9.00%	8.90%	7.80%
MSCI EAFE Val Idx	8.22%	18.95%	7.59%	7.08%	5.52%
Walter Scott	14.18%	-	-	-	-
MSCI EAFE Index	10.42%	18.24%	4.02%	8.16%	6.91%
MSCI EAFE Growth	12.72%	17.58%	0.26%	8.81%	7.99%
Emerging Markets	7.32%	10.27%	(5.38%)	2.92%	3.75%
MSCI Emerging Mkts Idx Net	7.86%	9.83%	(5.08%)	3.69%	4.98%
BlackRock EM Alpha Tilts	7.32%	10.27%	(5.38%)	-	-
MSCI Emerging Mkts Idx Net	7.86%	9.83%	(5.08%)	3.69%	4.98%
Global Equity/Long Short	5.83%	8.13%	(1.06%)	5.71%	4.65%
HFRI FOF: Strategic Index	4.98%	8.13%	0.48%	5.14%	4.20%
ABS Global	5.91%	9.08%	0.83%	6.27%	5.25%
MSCI ACWI Idx	11.15%	22.81%	6.25%	12.27%	10.60%
Private Equity (1)	0.00%	1.39%	14.92%	15.45%	14.25%
Pantheon USA IV	0.00%	0.00%	(2.06%)	1.40%	1.85%
Pantheon USA VI	0.00%	(7.80%)	(12.14%)	(10.61%)	(6.10%)
Pantheon USA VII	0.00%	1.64%	7.72%	9.91%	10.20%
Pantheon Europe Fund V A	0.00%	2.37%	(0.93%)	11.00%	11.92%
Pantheon Global Secondary Fund III	0.00%	0.00%	(5.76%)	(0.98%)	2.11%
Pantheon US Select 2014	0.00%	1.44%	16.95%	18.38%	17.91%

Zesiger portfolio is included in US Long Equity Assets and Returns.

(1) Current 0% return due to a one quarter lag in valuation.

Investment Manager Returns

For Periods Ended December 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Domestic Fixed Income	7.33%	5.84%	(3.44%)	1.25%	1.42%
Prudential Core Bond	7.10%	6.04%	(3.17%)	1.14%	1.33%
Metropolitan West Fund*	7.52%	5.69%	(3.66%)	1.29%	1.46%
Blmbg Aggregate Index	6.82%	5.53%	(3.31%)	1.10%	1.29%
Absolute Return	2.22%	5.63%	5.77%	6.99%	5.38%
UBS AIS	2.22%	5.63%	5.77%	6.99%	5.38%
HFRI FOF: Conservative In	2.09%	5.65%	4.40%	5.19%	4.15%
Real Assets	6.77%	8.53%	3.53%	6.13%	6.62%
PIMCO All Asset	6.77%	8.53%	3.53%	6.19%	5.58%
Blmbg US TIPS 1-10	3.89%	4.36%	0.73%	3.43%	2.68%
Cash	1.41%	5.28%	2.43%	2.10%	1.95%
Cash Account	1.41%	5.28%	2.43%	2.10%	1.95%
3-month Treasury Bill	1.37%	5.01%	2.15%	1.88%	1.73%
Total Fund	8.62%	14.46%	3.82%	8.57%	7.53%
Target Benchmark (1)	8.51%	14.84%	3.66%	8.37%	7.34%
Annual Discount Rate:6.5%					

(1) Current Quarter Target = 35.0% Russell 3000 Index, 23.0% MSCI ACWI ex US, 19.0% Blmbg Aggregate, 8.0% HFRI FOF: Strategic Index, 6.0% Blmbg TIPS 1-10 Yr, 4.0% HFRI FOF: Conservative In, 3.0% Private Equity and 2.0% 3-month Treasury Bill.

*On August 24 ,2022 switched from Mutual Fund to CIT

Investment Manager Returns – Fiscal Years

For Periods Ended December 31, 2023

	6/2023- 12/2023	FY 2023	FY 2022	FY 2021	FY 2020
Total Equity	6.52%	14.53%	(14.13%)	39.04%	1.53%
U.S. Long Equity	7.63%	17.93%	(14.69%)	48.45%	5.18%
Russell 3000 Index	8.43%	18.95%	(13.87%)	44.16%	6.53%
Russell 1000 Index Non-Lendable	8.46%	19.37%	(13.03%)	43.08%	7.47%
Russell 1000 Index	8.44%	19.36%	(13.04%)	43.07%	7.48%
LSV	13.47%	12.16%	(6.00%)	71.06%	(23.09%)
Russell 2000 Value Index	11.85%	6.01%	(16.28%)	73.28%	(17.48%)
Principal Dynamic Growth	(2.85%)	16.17%	(28.37%)	63.07%	22.10%
Russell 2500 Growth Index	4.90%	18.58%	(31.81%)	49.63%	9.21%
International Equity	6.52%	15.70%	(18.54%)	32.22%	(4.70%)
MSCI ACWI ex US	5.61%	12.72%	(19.42%)	35.72%	(4.80%)
Developed Markets	6.82%	19.12%	(16.32%)	29.77%	(5.04%)
MSCI EAFE Index	5.88%	18.77%	(17.77%)	32.35%	(5.13%)
Silchester	9.32%	17.84%	(11.34%)	35.22%	(9.35%)
MSCI EAFE Val Idx	8.85%	17.40%	(11.95%)	33.50%	(14.48%)
Walter Scott	2.44%	-	-	-	-
MSCI EAFE Index	5.88%	18.77%	(17.77%)	32.35%	(5.13%)
MSCI EAFE Growth Idx	2.98%	20.20%	(23.76%)	30.97%	4.15%
Emerging Markets	5.02%	2.00%	(27.08%)	42.61%	(3.22%)
MSCI Emerging Mkts Idx Net	4.71%	1.75%	(25.28%)	40.90%	(3.39%)
BlackRock EM Alpha Tilts	5.02%	2.00%	(27.08%)	42.61%	(3.22%)
MSCI Emerging Mkts Idx Net	4.71%	1.75%	(25.28%)	40.90%	(3.39%)
Global Equity/Long Short	4.89%	4.10%	(13.73%)	22.51%	4.25%
HFRI FOF: Strategic Index	4.67%	4.21%	(11.92%)	23.82%	0.40%
ABS Global	5.17%	5.08%	(9.66%)	19.76%	5.07%
MSCI ACWI Idx	7.48%	17.13%	(15.37%)	39.87%	2.64%
Private Equity	(0.49%)	1.10%	12.77%	55.16%	5.82%
Pantheon USA IV	0.00%	(1.24%)	(4.88%)	13.48%	0.00%
Pantheon USA VI	(0.22%)	(7.02%)	(22.03%)	(7.18%)	(21.95%)
Pantheon USA VII	(1.64%)	(0.04%)	4.03%	47.49%	(0.99%)
Pantheon Europe Fund V A	0.14%	(1.80%)	(12.57%)	59.73%	11.81%
Pantheon Global Secondary Fund III	0.00%	0.36%	(19.00%)	8.19%	0.15%
Pantheon US Select 2014	(0.47%)	1.25%	15.05%	59.99%	12.67%

Zesiger portfolio is included in US Long Equity Assets and Returns.

Investment Manager Returns – Fiscal Years

For Periods Ended December 31, 2023

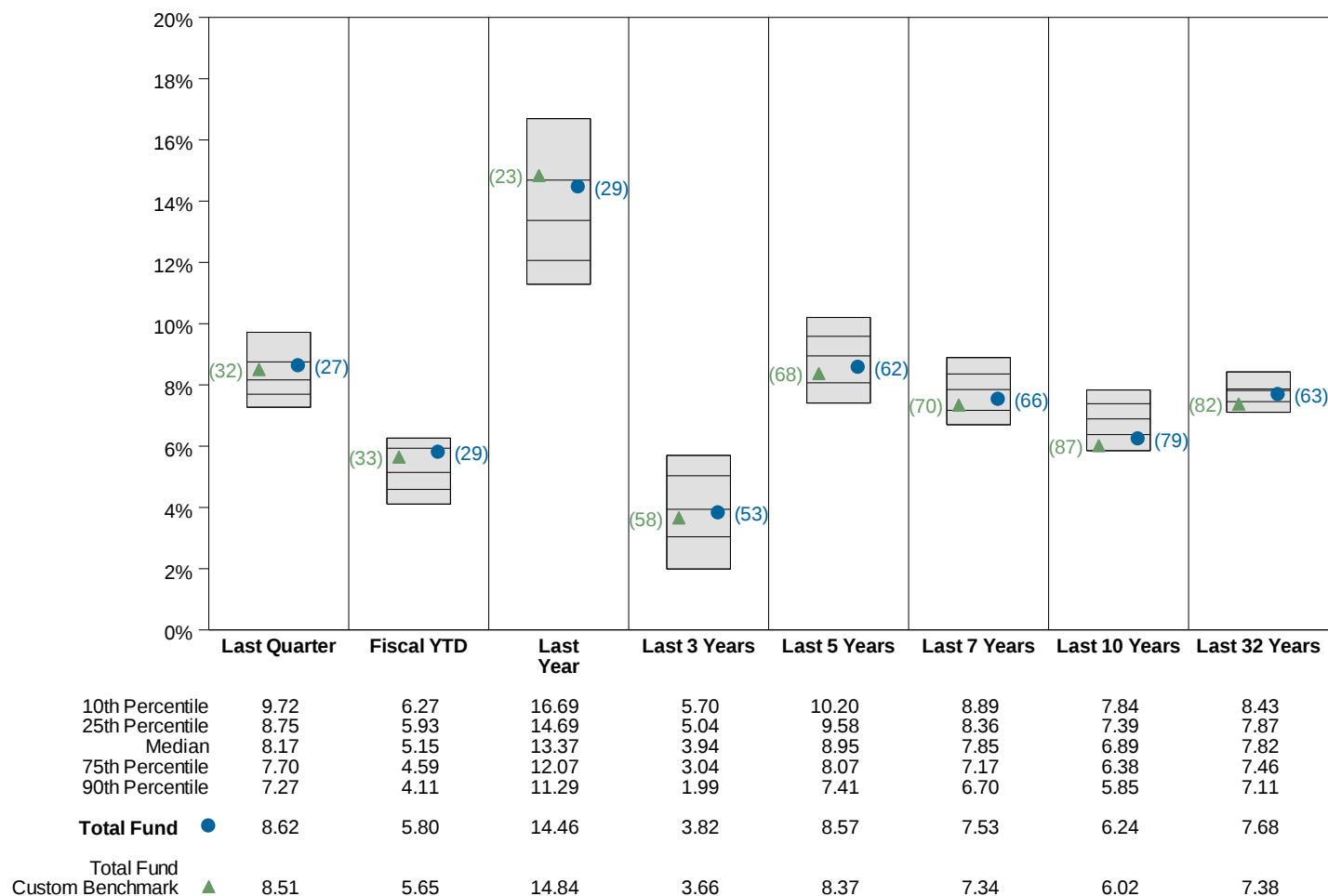
	6/2023- 12/2023	FY 2023	FY 2022	FY 2021	FY 2020
Domestic Fixed Income	3.65%	(0.95%)	(11.14%)	0.72%	8.89%
Prudential Cons Core Bond Fund	3.68%	(0.51%)	(10.60%)	(0.02%)	8.11%
Metropolitan West Fund	3.62%	(1.29%)	(11.56%)	1.36%	9.18%
Blmbg Aggregate Index	3.37%	(0.94%)	(10.29%)	(0.33%)	8.74%
Absolute Return	4.09%	4.23%	7.95%	10.18%	4.05%
UBS AIS	4.09%	4.23%	7.95%	10.18%	4.05%
HFRI FOF: Conservative In	3.60%	3.67%	0.10%	15.01%	(0.48%)
Real Assets	4.42%	4.64%	(9.86%)	29.53%	(2.18%)
PIMCO All Asset	4.42%	4.64%	(9.85%)	29.55%	(2.23%)
Blmbg US TIPS 1-10	2.85%	(0.91%)	(2.03%)	6.60%	5.75%
Cash	2.81%	4.04%	0.35%	0.26%	1.75%
Cash Account	2.81%	4.04%	0.35%	0.26%	1.75%
3-month Treasury Bill	2.70%	3.59%	0.17%	0.09%	1.63%
Total Fund	5.80%	10.10%	(11.98%)	28.40%	2.76%
Total Fund Custom Benchmark*	5.65%	9.88%	(11.91%)	25.66%	4.63%
Annual Discount Rate:6.5%					

*Current Quarter Target = 35.0% Russell 3000 Index, 23.0% MSCI ACWI ex US, 19.0% Blmbg Aggregate, 8.0% HFRI FOF: Strategic Index, 6.0% Blmbg TIPS 1-10 Yr, 4.0% HFRI FOF: Conservative In, 3.0% Private Equity and 2.0% 3-month Treasury Bill.

Cumulative Performance versus Target

For Periods Ended December 31, 2023

Performance vs Callan Public Fund Spons- Mid (100M-1B) (Gross)

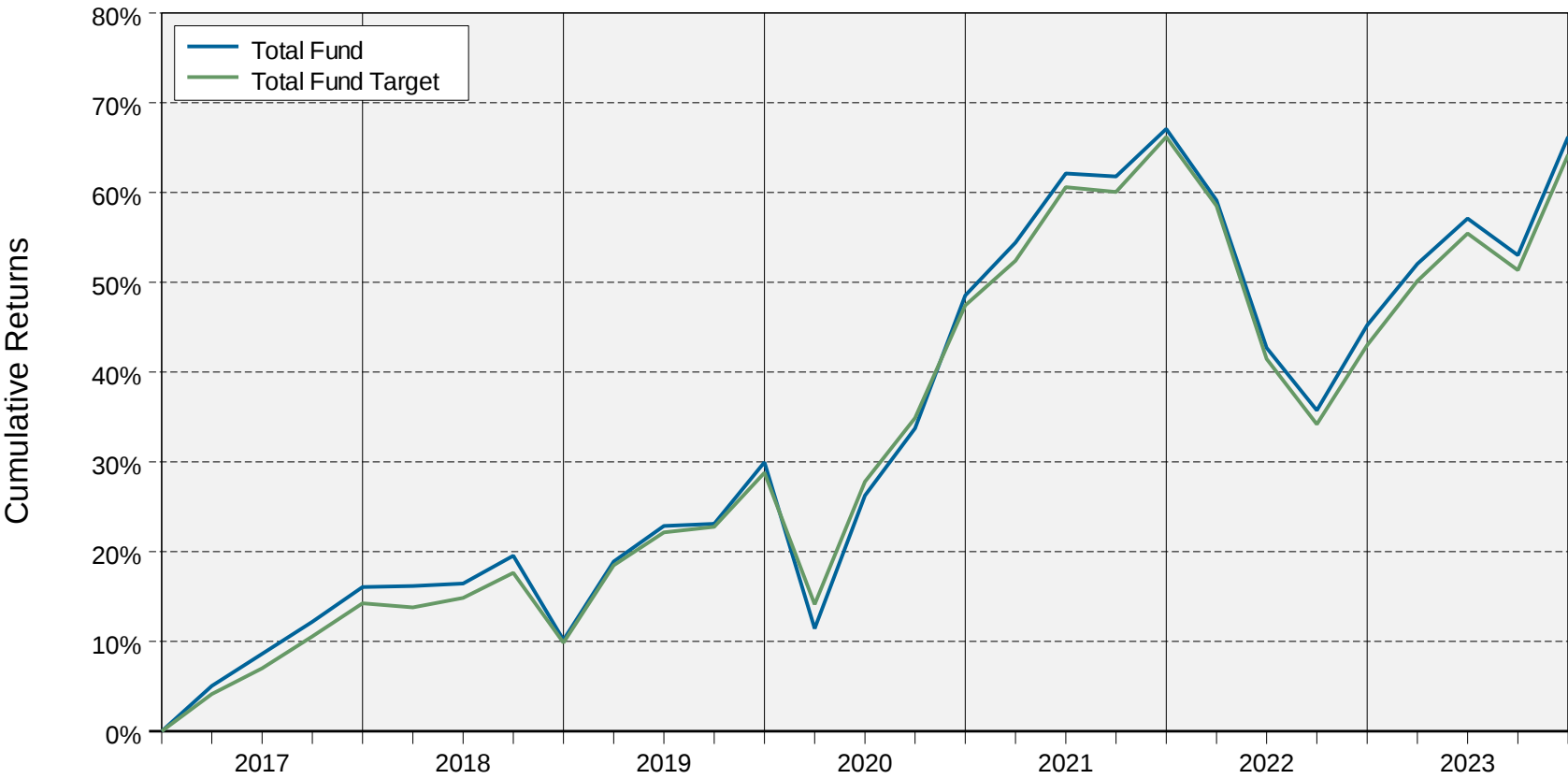


Current Quarter Target = 35.0% Russell 3000 Index, 23.0% MSCI ACWI ex US, 19.0% Blmbg Aggregate, 8.0% HFRI FOF: Strategic Index, 6.0% Blmbg TIPS 1-10 Yr, 4.0% HFRI FOF: Conservative In, 3.0% Private Equity and 2.0% 3-month Treasury Bill.

Cumulative Performance versus Target

For Periods Ended December 31, 2023

Cumulative Returns Actual vs Target



Performance Attribution

For Periods Ended December 31, 2023

Relative Attribution Effects for Quarter ended December 31, 2023

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return			
Domestic Equity	36%	35%	11.58%	12.07%	(0.18%)	0.05%	(0.13%)			
Domestic Fixed Income	17%	19%	7.33%	6.82%	0.09%	0.03%	0.12%			
International Equity	23%	23%	9.61%	9.75%	(0.03%)	(0.00%)	(0.03%)			
Absolute Return	6%	4%	2.22%	2.09%	0.01%	(0.10%)	(0.09%)			
Global Equity/Long Short	4%	8%	5.83%	4.98%	0.04%	0.15%	0.19%			
Private Equity	5%	3%	0.00%	0.00%	0.00%	(0.12%)	(0.12%)			
PIMCO All Asset	7%	6%	6.77%	3.89%	0.19%	(0.03%)	0.17%			
Cash	2%	2%	1.41%	1.37%	0.00%	0.01%	0.01%			
Total			8.62%	=	8.51%	+	0.12%	+	(0.00%)	0.12%

One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	35%	35%	23.18%	25.96%	(0.89%)	(0.07%)	(0.97%)
Domestic Fixed Income	18%	19%	5.84%	5.53%	0.06%	0.09%	0.15%
International Equity	23%	23%	17.86%	15.62%	0.50%	(0.02%)	0.48%
Absolute Return	6%	4%	5.63%	5.65%	(0.00%)	(0.17%)	(0.17%)
Global Equity Long/Short	5%	8%	8.13%	8.13%	(0.01%)	0.15%	0.15%
Private Equity	5%	3%	1.39%	1.39%	0.00%	(0.25%)	(0.25%)
PIMCO All Asset Class	7%	6%	8.53%	4.36%	0.30%	(0.13%)	0.17%
Cash	1%	2%	5.28%	5.01%	0.00%	0.07%	0.07%
Total			14.46% = 14.84% + (0.03%) + (0.34%)				(0.38%)

Summary Observations

For Periods Ended December 31, 2023

The total fund returned +8.62% for the quarter, +14.46% annualized for the trailing 1-year period, +3.82% annualized for the trailing 3-year period and +8.57% annualized for the trailing 5-year period. For the trailing 7-year period, the total fund returned +7.53%, annualized.

One Quarter Attribution - what helped:

- Relative Performance of PIMCO All Asset
- An underweight to global equity/long short and domestic fixed income, versus the target allocation
- Relative performance of fixed income managers Prudential and TCW MetWest
- An overweight to domestic equity, versus the target allocation

One Quarter Attribution - what hurt:

- Relative performance of domestic equity manager Principal Smid Growth
- An overweight to absolute return and private equity, versus the target allocation

OPEB Performance

Actual versus Target Asset Allocation

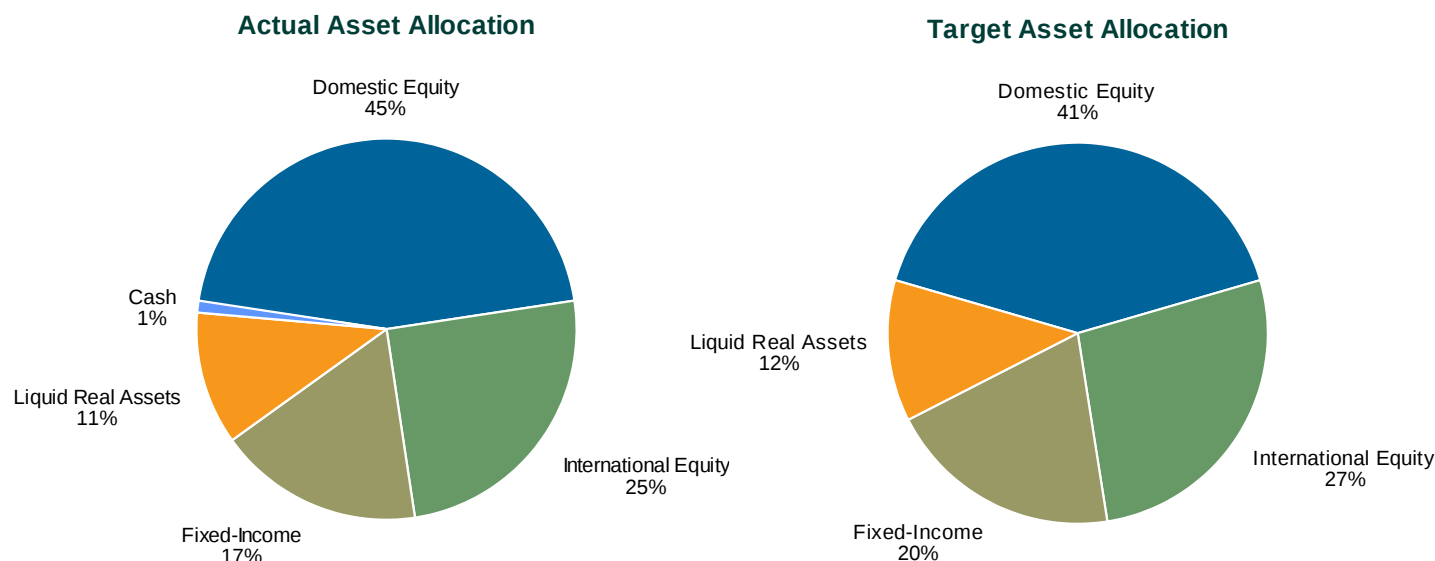
For Periods Ended December 31, 2023

Overweight's:

- Domestic Equity (45.3% vs 41% target)
- Cash (1.0% vs 0% target)

Underweights:

- Fixed-Income (17.5% vs 20% target)
- International equity (25.0% vs 27% target)



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	60,592	45.3%	41.0%	4.3%	5,750
International Equity	33,398	25.0%	27.0%	(2.0%)	(2,718)
Fixed-Income	23,399	17.5%	20.0%	(2.5%)	(3,353)
Liquid Real Assets	15,063	11.3%	12.0%	(0.7%)	(988)
Cash	1,309	1.0%	0.0%	1.0%	1,309
Total	133,760	100.0%	100.0%		

Portfolio Holdings

For Periods Ended December 31, 2023

	December 31, 2023				September 30, 2023	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Total Equity	\$93,989,724	70.27%	\$0	\$9,601,746	\$84,387,978	67.73%
Domestic Equity	\$60,592,030	45.30%	\$0	\$6,573,727	\$54,018,302	43.36%
Vanguard Total Stock Mrkt	60,592,030	45.30%	0	6,573,727	54,018,302	43.36%
International Equity	\$33,397,694	24.97%	\$0	\$3,028,019	\$30,369,675	24.37%
Vanguard Total Intl Stock	33,397,694	24.97%	0	3,028,019	30,369,675	24.37%
Fixed Income	\$23,398,696	17.49%	\$(4,197)	\$1,577,867	\$21,825,026	17.52%
Metropolitan West Fund	8,853,591	6.62%	0	620,390	8,233,200	6.61%
Prudential Cons Core Bond Fnd	14,545,105	10.87%	(4,197)	957,476	13,591,826	10.91%
Liquid Real Assets	\$15,063,213	11.26%	\$0	\$955,288	\$14,107,926	11.32%
PIMCO All Assets	15,063,213	11.26%	0	955,288	14,107,926	11.32%
Cash	\$1,308,642	0.98%	\$(3,004,581)	\$39,286	\$4,273,937	3.43%
Short Term Fund	1,308,642	0.98%	(3,004,581)	39,286	4,273,937	3.43%
Total Fund	\$133,760,275	100.0%	\$(3,008,778)	\$12,174,186	\$124,594,866	100.0%

- Total fund increased to \$133.8 million at the end of the quarter from \$124.6 million as of September 30, 2023.

Portfolio Holdings

For Periods Ended December 31, 2023

	December 31, 2023					September 30, 2023		
	Market Value	Weight	(min)	Target	(max)	Market Value	Weight	Target
Total Equity	\$93,989,724	70.27%	53.00%	68.00%	83.00%	\$84,387,978	67.73%	68.00%
Domestic Equity	\$60,592,030	45.30%	31.00%	41.00%	51.00%	\$54,018,302	43.36%	41.00%
Vanguard Total Stock Mkt	60,592,030	45.30%				54,018,302	43.36%	
International Equity	\$33,397,694	24.97%	20.00%	27.00%	34.00%	\$30,369,675	24.37%	27.00%
Vanguard Total Int'l. Stock	33,397,694	24.97%				30,369,675	24.37%	
Fixed Income	\$23,398,696	17.49%	15.00%	20.00%	25.00%	\$21,825,026	17.52%	20.00%
Metropolitan West Fund	8,853,591	6.62%				8,233,200	6.61%	
Prudential Cons Core Bond	14,545,105	10.87%				13,591,826	10.91%	
Liquid Real Assets	\$15,063,213	11.26%	0.00%	12.00%	20.00%	\$14,107,926	11.32%	12.00%
PIMCO All Assets	15,063,213	11.26%				14,107,926	11.32%	
Cash	\$1,308,642	0.98%	0.00%	0.00%	0.00%	\$4,273,937	3.43%	0.00%
Short Term Fund	1,308,642	0.98%				4,273,937	3.43%	
Total Fund	\$133,760,275	100.00%		100.00%		\$124,594,866	100.00%	100.00%

Investment Manager Returns

For Periods Ended December 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Total Equity	11.38%	22.08%	5.88%	12.12%	10.38%
Domestic Equity	12.17%	26.02%	8.44%	15.08%	12.77%
Vanguard Total Stock Market (1)	12.17%	26.02%	8.44%	15.08%	12.77%
Vanguard Total Stock Benchmark (2)	12.14%	25.98%	8.44%	15.08%	12.77%
Russell 3000 Index	12.07%	25.96%	8.54%	15.16%	12.81%
International Equity	9.97%	15.52%	1.79%	7.37%	6.54%
Vanguard Total Int'l. Stock (3)	9.97%	15.52%	1.79%	7.37%	6.54%
Vanguard International Benchmark (4)	9.82%	16.17%	2.19%	7.78%	6.86%
MSCI ACWI ex US	9.75%	15.62%	1.55%	7.08%	6.33%
Fixed-Income	7.23%	6.05%	(3.36%)	1.26%	1.42%
Prudential Conservative Core Bond (5)	7.01%	5.91%	(3.32%)	1.11%	1.27%
Metropolitan West Fund	7.54%	6.07%	(3.64%)	1.31%	1.46%
Blmbg Aggregate Index	6.82%	5.53%	(3.31%)	1.10%	1.29%
Liquid Real Assets	6.77%	8.56%	3.54%	6.19%	5.58%
PIMCO All Asset	6.77%	8.56%	3.54%	6.19%	5.58%
Blmbg US TIPS 1-10	3.89%	4.36%	0.73%	3.43%	2.68%
Cash	1.32%	4.94%	2.07%	1.83%	1.69%
Short Term Fund	1.32%	4.94%	2.07%	1.83%	1.69%
3-month Treasury Bill	1.37%	5.01%	2.15%	1.88%	1.73%
Total Fund	9.91%	16.90%	3.83%	9.21%	7.95%
Total Fund Benchmark*	9.43%	16.34%	3.49%	8.99%	7.70%

Annual Discount Rate:6.5%

* Current Quarter Target = 41.0% Russell 3000 Index, 27.0% MSCI ACWI ex US, 20.0% Blmbg Aggregate and 12.0% Blmbg:TIPS 1-10 Yr.

(1) Vanguard Total Stock Market switched to Admiral Shares from Signal Shares in October 2014. In November 2014 switched to institutional shares.

(2) Vanguard Total Stock Market Benchmark was US Broad Market Index switched to CRSP U.S. Total Market Index Jun. 2013

(3) Vanguard Total Int'l. Stock switched to Institutional Shares from Investor Shares on November 30, 2014

(4) Vanguard Total International Benchmark was MSCI ACWI ex US IMI switched to FTSE Global All Cap ex US Index Jun. 2013.

(5) February 8, 2017 fund switched to Institutional Trust.

Investment Manager Returns – Fiscal Years

For Periods Ended December 31, 2023

	6/2023- 12/2023	FY 2023	FY 2022	FY 2021	FY 2020
Total Equity	7.42%	16.47%	(16.08%)	41.24%	2.43%
Domestic Equity	8.48%	18.93%	(14.24%)	44.33%	6.47%
Vanguard Total Stock Market (1)	8.48%	18.93%	(14.24%)	44.33%	6.47%
Vanguard Total Stock Benchmark (2)	8.44%	18.94%	(14.22%)	44.35%	6.47%
Russell 3000 Index	8.43%	18.95%	(13.87%)	44.16%	6.53%
International Equity	5.56%	12.34%	(18.92%)	36.54%	(4.07%)
Vanguard Total Int'l. Stock (3)	5.56%	12.34%	(18.92%)	36.54%	(4.07%)
Vanguard International Benchmark (4)	6.24%	12.89%	(19.01%)	37.55%	(4.16%)
MSCI ACWI ex US	5.61%	12.72%	(19.42%)	35.72%	(4.80%)
Fixed-Income	3.67%	(0.85%)	(10.95%)	0.45%	8.94%
Prudential Cons Core Bond Fnd (5)	3.56%	(0.68%)	(10.70%)	(0.16%)	8.65%
Metropolitan West Fund	3.76%	(1.36%)	(11.56%)	1.36%	9.18%
Blmbg Aggregate Index	3.37%	(0.94%)	(10.29%)	(0.33%)	8.74%
Liquid Real Assets	4.42%	4.68%	(9.85%)	29.55%	(2.23%)
PIMCO All Asset	4.42%	4.68%	(9.85%)	29.55%	(2.23%)
Blmbg US TIPS 1-10	2.85%	(0.91%)	(2.03%)	6.60%	5.75%
Cash	2.64%	3.43%	0.16%	0.09%	1.78%
Short Term Fund	2.64%	3.43%	0.16%	0.09%	1.78%
3-month Treasury Bill	2.70%	3.59%	0.17%	0.09%	1.63%
Total Fund	6.39%	11.12%	(14.34%)	31.50%	3.26%
Total Fund Benchmark*	6.05%	10.93%	(13.16%)	27.43%	4.85%

Annual Discount Rate:6.5%

* Current Quarter Target = 41.0% Russell 3000 Index, 27.0% MSCI ACWI ex US, 20.0% Blmbg Aggregate and 12.0% Blmbg:TIPS 1-10 Yr.

(1) Vanguard Total Stock Market switched to Admiral Shares from Signal Shares in October 2014. In November 14th, 2014 switched to Institutional shares.

(2) Vanguard Total Stock Market Benchmark was US Broad Market Index switched to CRSP U.S. Total Market Index Jun. 2013

(3) Vanguard Total Int'l. Stock switched to Institutional Shares from Investor Shares in November 30, 2014

(4) Vanguard Total International Benchmark was MSCI ACWI ex US IMI switched to FTSE Global All Cap ex US Index Jun. 2013.

(5) February 8, 2017 fund switched to Institutional Trust.

Performance Attribution

For Periods Ended December 31, 2023

Relative Attribution Effects for Quarter ended December 31, 2023

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	44%	41%	12.17%	12.07%	0.04%	0.08%	0.12%
Fixed-Income	18%	20%	7.23%	6.82%	0.07%	0.06%	0.14%
International Equity	24%	27%	9.97%	9.75%	0.05%	(0.01%)	0.04%
Dvsfd Real Assets	11%	12%	6.77%	3.89%	0.32%	0.04%	0.36%
Cash	3%	0%	1.32%	1.32%	0.00%	(0.17%)	(0.17%)
			9.91% = 9.43% + 0.49% + (0.00%)				0.48%

One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	42%	41%	26.02%	25.96%	0.02%	0.11%	0.13%
Fixed-Income	18%	20%	6.05%	5.53%	0.10%	0.17%	0.27%
International Equity	25%	27%	15.52%	15.62%	(0.03%)	(0.02%)	(0.05%)
Dvsfd Real Assets	11%	12%	8.56%	4.36%	0.49%	0.04%	0.54%
Cash	4%	0%	4.94%	4.94%	0.00%	(0.33%)	(0.33%)
			16.90% = 16.34% + 0.60% + (0.04%)				0.56%

Important Disclosures

Information contained in this document may include confidential, trade secret and/or proprietary information of Callan and the client. It is incumbent upon the user to maintain such information in strict confidence. Neither this document nor any specific information contained herein is to be used other than by the intended recipient for its intended purpose.

The content of this document is particular to the client and should not be relied upon by any other individual or entity. There can be no assurance that the performance of any account or investment will be comparable to the performance information presented in this document.

Certain information herein has been compiled by Callan from a variety of sources believed to be reliable but for which Callan has not necessarily verified for accuracy or completeness. Information contained herein may not be current. Callan has no obligation to bring current the information contained herein.

This content of this document may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact. The opinions expressed herein may change based upon changes in economic, market, financial and political conditions and other factors. Callan has no obligation to bring current the opinions expressed herein.

The statements made herein may include forward-looking statement regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties. Actual results may vary, perhaps materially, from the future results projected in this document. Undue reliance should not be placed on forward-looking statements.

Callan disclaims any responsibility for reviewing the risks of individual securities or the compliance/non-compliance of individual security holdings with a client's investment policy guidelines.

This document should not be construed as legal or tax advice on any matter. You should consult with legal and tax advisers before applying any of this information to your particular situation.

Reference to, or inclusion in this document of, any product, service or entity should not necessarily be construed as recommendation, approval, or endorsement or such product, service or entity by Callan.

This document is provided in connection with Callan's consulting services and should not be viewed as an advertisement of Callan, or of the strategies or products discussed or referenced herein.

The issues considered and risks highlighted herein are not comprehensive and other risks may exist that the user of this document may deem material regarding the enclosed information.

Any decision you make on the basis of this document is sole responsibility of the client, as the intended recipient, and it is incumbent upon you to make an independent determination of the suitability and consequences of such a decision.

Callan undertakes no obligation to update the information contained herein except as specifically requested by the client.

Past performance is no guarantee of future results.

December 31, 2023

City of Norwalk

**Investment Measurement Service
Quarterly Review**

Table of Contents

December 31, 2023

Capital Market Review	3
Asset Allocation and Performance	
Asset Allocation	23
Investment Manager Performance	25
Total Fund Attribution	29
Total Fund Performance	33
Manager Performance	
Domestic Equity	
Domestic Equity Overview	37
Pure US Equity Composite	38
BlackRock Russell 1000 Index	42
LSV	48
Principal Dynamic Growth	54
International Equity	
International Equity Overview	61
International Equity Composite	62
Silchester	69
Walter Scott	76
BlackRock EM Alpha Tilts	81
Global Equity Long/Short	
ABS Global	89
Domestic Fixed Income	
Domestic Fixed Income Overview	93
Domestic Fixed Income	94
Prudential Cons Core Bond	98
Metropolitan West Fund Bond	102
Absolute Return	
UBS AIS	107
Real Assets	
PIMCO All Asset Fund	111
Private Equity	114
Callan Research/Education	128
Disclosures	131

Economy Becomes Even More Surprising

ECONOMY

2 Last year was supposed to feature the recession caused by the Fed's dedication to fighting inflation; instead, the economy grew 2.5% for the year. While the rate of overall growth slowed in 4Q, the economy seemed to get stronger by the quarter in 2023.

Broad Rally for Bonds Across the World

FIXED INCOME

8 Driven by falling rates and strong risk-on sentiment, the Agg returned 6.8%, the highest quarterly return since 2Q89. The 10-year U.S. Treasury yield closed the year at 3.88%. Global bonds saw broad-based gains across countries and developed markets topped the U.S.

Net IRR of Nearly 9% Over Three Years

PRIVATE CREDIT

12 Given its high returns, private credit remained in high demand across Callan's investor base. Private credit assets under management stood at over \$1.5 trillion at the end of 2023, with Preqin forecasting the asset class will grow to over \$2.5 trillion by 2028.

Increases in 2023 but Inflation Tops Worries

INSTITUTIONAL INVESTORS

4 Robust equity returns led all institutional investor types to show gains for 2023, a stark reversal from the double-digit losses of 2022. But over the last year, all investors lagged a 60% stocks/40% bonds benchmark by a significant amount, likely due to those same equity gains.

Private RE Falls but REITs Outpace Stocks

REAL ESTATE/REAL ASSETS

10 The NCREIF Property Index fell 3.0% during 4Q23. The NCREIF Open-End Diversified Core Equity (ODCE) Index fell 4.8% during 4Q. The FTSE EPRA Nareit Developed REIT Index rose 15.6% during 4Q23. The FTSE Nareit Equity REITs Index increased 16.2%.

Gains Spurred by Stocks and Bonds

HEDGE FUNDS/MACs

13 Most hedge fund managers showed gains in 4Q23. Equity hedge strategies were the best performing. Relative value strategies generated positive performance as well, while event-driven strategies also ended on a strong note. Multi-asset class (MAC) strategies also gained.

Dovish Policy Drives Widespread Gains

EQUITY

6 U.S. equity markets rebounded in the last two months of the year as the impact of possible rate cuts in 2024 started to get priced in. Dovish signaling from central banks and dropping yields led to a broad market rally in 4Q23 for global ex-U.S. markets as well.

Big Slowdown After Frenzy of 2021

PRIVATE EQUITY

11 Both new investment activity and exit activity slowed markedly in 2023. Public equity's strong recovery in 2023 has left private equity in its wake. Private equity only saw about a fifth of the gains of the public markets over the last year, on a PME basis.

2.9% Drop After Three Quarters of Gains

DEFINED CONTRIBUTION

15 Despite the loss, the Callan DC Index™ saw a trailing one-year gain of 13.8%. The Age 45 Target Date Fund (analogous to the 2045 vintage) fell 3.6%. Balances within the DC Index fell by 3.2% after a 4.3% increase in the previous quarter, driven by investment losses.

Broad Market Quarterly Returns

U.S. Equity
Russell 3000

12.1%

Global ex-U.S. Equity
MSCI ACWI ex USA

9.8%

U.S. Fixed Income
Bloomberg Agg

6.8%

Global ex-U.S. Fixed Income
Bloomberg Global Agg ex US

9.2%

Sources: Bloomberg, FTSE Russell, MSCI

The Economy Is More Surprising by the Quarter

ECONOMY | Jay Kloepfer

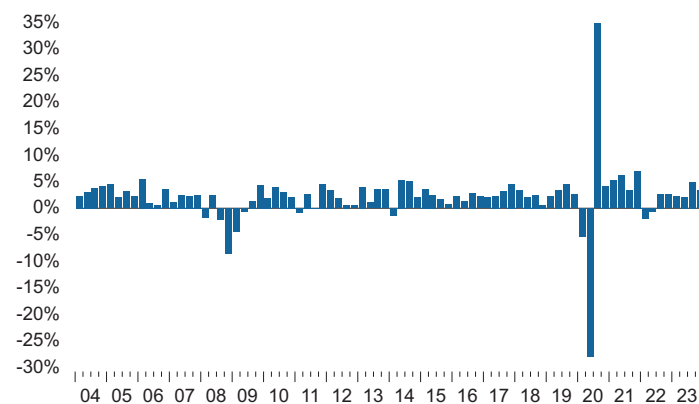
The U.S. economy grew by 3.3% in 4Q23, once again surprising to the upside. If you asked anyone who has to indulge in the hubris of forecasting the economy, all of 2023 has been a surprise. Last year was supposed to feature the recession caused by the Fed's dedication to fighting inflation by raising interest rates; instead, the economy grew 2.5% for the year, up from the 1.9% rate in 2022. The job market has generated 5.4 million new jobs since the end of 2019, before the start of the pandemic. Real wages and real income growth turned positive in mid-2023 as inflation subsided but demand for workers remained. Workers feel confident in the tight labor market, and this confidence is driving consumer spending. Consumption expenditures accounted for half of GDP growth in 3Q and almost 60% in 4Q. The economy seemed to get stronger by the quarter in 2023.

So why no recession? Underneath the mayhem that defined both 2022 and 2023—geopolitical uncertainty, spiking inflation, rising interest rates, and the volatility in the equity market—the U.S. and global economies remain in remarkably good shape. The U.S. economy weathered the rate hikes in 2022 and 2023 particularly well. The first reason is stimulus and lots of it, around the globe, which translated into pent-up demand. Second, the very tight labor market in the U.S. gives workers and their families confidence to spend. Third, despite the housing market taking a big hit as mortgage rates shot up, housing has not dragged down the economy as in rate hike episodes of yore. In addition, we do not have a mortgage crisis similar to the one that struck in 2008-09 and nearly took down the banking system.

However, we do have a commercial real estate tsunami working through offices in central business districts and retail trade, which will reshape the physical as well as business landscape of many communities in the U.S. Finally, we do have a housing shortage around the U.S. that may have long-term generational consequences for homeownership, wealth creation, and financial security for younger people.

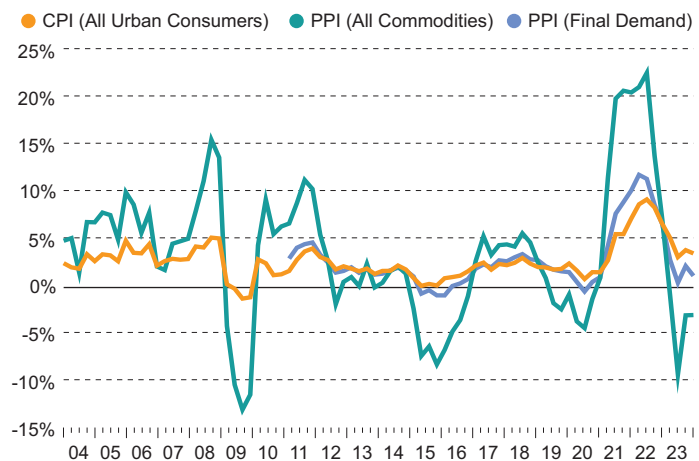
Quarterly Real GDP Growth

(20 Years)



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

Inflation shot up to 9% in mid 2022, but the rate of price increases began to ebb in the second half of 2022 and declined steadily to 3% by the end of 3Q23. Unfortunately, headline inflation ticked back up to 3.5% by the end of the year, so we are not out of the inflation woods yet. Even as the rate of price increases comes down, prices are now “permanently” higher unless we see deflation. The level of the CPI-U index is up 10% since the start of 2022.

One key factor keeping inflation from falling back toward the Federal Reserve's goal of 2% is the labor market. We ended 2023 with labor markets not only tight but tightening. Initial unemployment claims (measured on a weekly basis)—one of our few leading indicators—began climbing in 2Q, and by early spring weekly claims had surpassed the average set in 2019 of 218,000. As claims rose to 250,000 by August, the data appeared to show that interest rate hikes were finally starting to bite. Then initial claims fell back sharply and we ended the year at 203,000. Continuing unemployment claims also began to rise from a very low level starting in 4Q22 and ended the year about 9% higher than the pre-pandemic level. So initial claims show workers holding onto jobs, but the continuing claims show workers have a bit more trouble finding jobs once laid off. However, the unemployment rate remains low at 3.7%. The tightness in the labor market is inconsistent with the Fed's goal of achieving its 2% inflation target. As continuing claims rose in 2023, bond markets read the data as the first sign of easing in the labor market, but the robust end-of-the-year GDP report, the lower initial claims, and the strong December job market report suggest labor market tightness is not yet easing.

The remarkable GDP growth is fueling continued demand for workers, and with inflation falling while wages are rising, workers saw real incomes (wages and salaries net of inflation) grow in each of the last three quarters of 2023, with a sharp gain of 2.5% in real disposable (after-tax) income in 4Q. Average hourly earnings growth slowed from 5% (annual growth) in 2022 to 4% by December 2023, but as inflation fell real wage growth finally turned positive starting in May, and this real growth carried through December (wage growth is exceeding inflation).

The upshot: it may take longer than many believed to unravel the current growth momentum in the U.S. economy. The Fed had stated

The Long-Term View

Index	4Q23	Periods Ended 12/31/23			
		1 Yr	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	12.1	26.0	15.2	11.5	7.7
S&P 500	11.7	26.3	15.7	12.0	7.6
Russell 2000	14.0	16.9	10.0	7.2	7.9
Global ex-U.S. Equity					
MSCI EAFE	10.4	18.2	8.2	4.3	4.4
MSCI ACWI ex USA	9.8	15.6	7.1	3.8	--
MSCI Emerging Markets	7.9	9.8	3.7	2.7	--
MSCI ACWI ex USA Small Cap	10.1	15.7	7.9	4.9	7.3
Fixed Income					
Bloomberg Agg	6.8	5.5	1.1	1.8	3.9
90-Day T-Bill	1.4	5.0	1.9	1.3	1.9
Bloomberg Long G/C	13.2	7.1	1.1	3.2	5.2
Bloomberg GI Agg ex US	9.2	5.7	-1.6	-0.8	2.2
Real Estate					
NCREIF Property	-3.0	-7.9	4.3	6.8	8.0
FTSE Nareit Equity	16.2	13.7	7.4	7.6	9.3
Alternatives					
HFRI Fund Weighted	4.2	8.1	7.1	4.6	6.3
Cambridge PE*	-0.4	4.2	14.6	14.3	13.9
Bloomberg Commodity	-4.6	-7.9	7.2	-1.1	2.8
Gold Spot Price	11.0	13.4	10.1	5.6	8.2
Inflation – CPI-U	-0.3	3.4	4.1	2.8	2.5

*Data for most recent period lags. Data as of 3Q23.

Sources: Bloomberg, Bureau of Economic Analysis, FTSE Russell, Hedge Fund Research, MSCI, NCREIF, Refinitiv/Cambridge, S&P Dow Jones Indices

earlier in 2023 a belief that rates would remain elevated, based on its economic expectation of “stronger for longer.” After the Fed reversed course in the November and December FOMC meetings, signaling rate cuts were likely in 2024, the economy reverted to stronger for longer on its own.

Recent Quarterly Economic Indicators

	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22
Employment Cost: Total Compensation Growth	4.2%	4.3%	4.5%	4.8%	5.1%	5.0%
Nonfarm Business: Productivity Growth	3.2%	4.9%	3.6%	-0.8%	1.6%	0.4%
GDP Growth	3.3%	4.9%	2.1%	2.2%	2.6%	2.7%
Manufacturing Capacity Utilization	77.1%	77.7%	78.0%	78.2%	78.5%	79.4%
Consumer Sentiment Index (1966=100)	64.9	69.6	62.3	64.6	58.8	56.1

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan

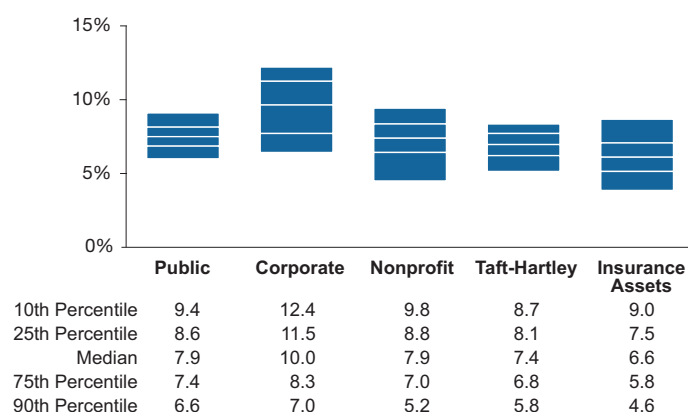
Gains in 2023 but Inflation Tops Worries

INSTITUTIONAL INVESTORS

- The 2023 equity market was up 24%, led by seven securities nicknamed “The Magnificent Seven.”
- Other 493 securities gained 12% in 2023.
- These robust equity returns led all institutional investor types to show gains for 2023, a stark reversal from the double-digit losses of 2022.
- Nonprofits showed the best returns, while corporate defined benefit (DB) plans and Taft-Hartley plans brought up the rear.
- But over the last year, all investors lagged a 60% stocks/40% bonds benchmark by a significant amount.
- Remarkable U.S. equity gains likely played a big role in that gap.
- As has been the case for years, institutional investors continued to show 20-year returns close to but still below the 60%/40% benchmark.

- *Recession:* There is no shortage of worries that could cause one: interest rate hikes, global armed conflicts, U.S.-China conflict, the U.S. presidential election
- *Equity valuations:* The Magnificent Seven and index concentration worried some clients, while stock prices in light of higher interest rates were also a concern.

Quarterly Returns, Callan Database Groups (12/31/23)



Source: Callan

All Investor Types

- The major macroeconomic issues investors are discussing include:
 - *Interest rates:* As has been true for much of the past year, worries about inflation and the future direction of interest rates were pervasive.

Callan Database Median and Index Returns* for Periods Ended 12/31/23

Database Group	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Public Database	7.9	13.0	4.3	9.0	6.9	7.2
Corporate Database	10.0	11.8	-0.1	6.6	5.7	6.6
Nonprofit Database	7.9	13.5	4.3	8.7	6.5	7.0
Taft-Hartley Database	7.4	11.9	4.5	8.6	6.9	6.8
Insurance Assets Database	6.6	9.7	1.5	5.1	4.1	4.9
All Institutional Investors	8.1	12.6	3.7	8.3	6.5	6.9
Large (>\$1 billion)	7.5	11.7	4.6	8.6	6.9	7.2
Medium (\$100mm - \$1bn)	8.2	12.8	3.8	8.4	6.5	7.0
Small (<\$100 million)	8.3	13.1	3.4	8.2	6.2	6.5
60% S&P 500/40% Bloomberg Agg	9.7	17.7	4.7	10.1	8.1	7.4

*Returns less than one year are not annualized.

Source: Callan. Callan's database includes the following groups: public defined benefit (DB) plans, corporate DB plans, nonprofits, insurance assets, and Taft-Hartley plans. Approximately 10% to 15% of the database constituents are Callan's clients. All database group returns presented gross of fees. Past performance is no guarantee of future results. Reference to or inclusion in this report of any product, service, or entity should not be construed as a recommendation, approval, affiliation, or endorsement of such product, service, or entity by Callan.

Public DB Plans

- The average or median discount rate, according to the most recent NASRA survey, remains at 7.00%.
- A 7.00% return expectation can be hit with almost 50% in fixed income.
- Plans have increased their exposure to both fixed income and/or alternatives.
- Given this rate, investors are weighing how or whether to adjust allocations based on Callan's 2024-2033 Capital Markets Assumptions.
- The rise in fixed income expectations in particular has made estimated return-on-asset assumptions much easier to hit.
- But if plans increase their discount rates, the higher funded status could lead to increased pressure to improve benefits.

Corporate DB Plans

- Liabilities decreased as rates rose.
- Interest rate hedging continues to work.
- Plans that were hedged were insulated from changes to interest rates in 2023.
- Some plans focused on total return “won” for a second year in a row as rising rates decreased the liability, resulting in an increased funded ratio.
- As closed plans' liabilities shorten, interest in intermediate fixed income continues.

- Many plans' improved funded status has led some to further implement de-risking glidepaths.
- Higher fixed income assumptions have led clients to weigh changing allocations to the asset class, but in different ways. Some are looking at long duration bonds, others at whether to add to their fixed income allocations or stay pat.

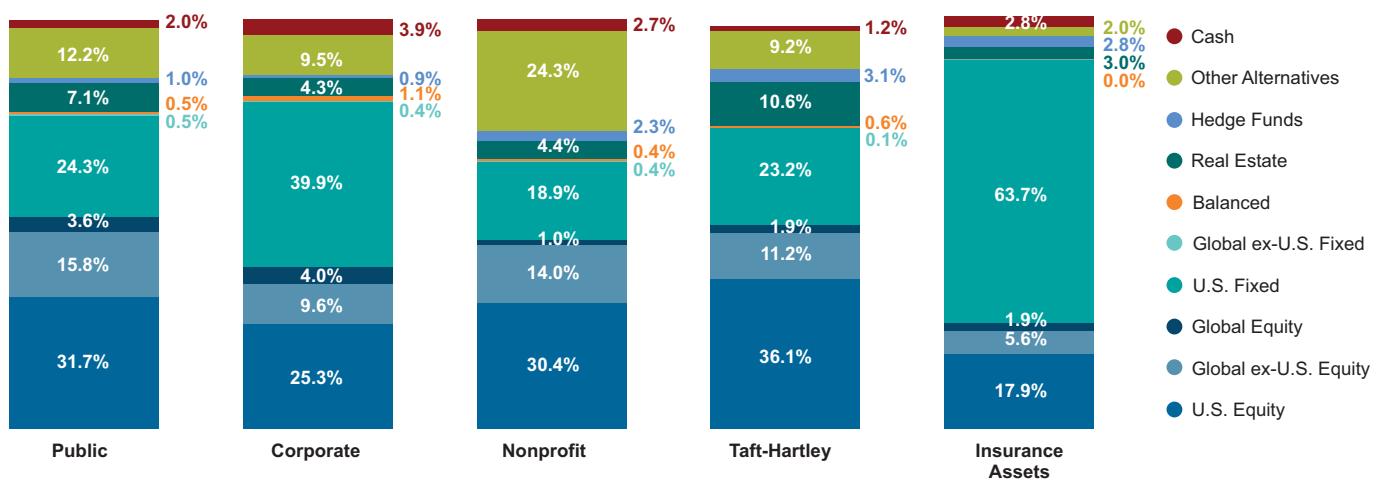
Nonprofits

- These investors are still focused on total return.
- Interest in private credit remains strong.
- Inflation concerns continue to affect real returns.
- Strong economies can lead to strong fundraising efforts, which can help dampen return volatility.

Defined Contribution (DC) Plans

- These are the significant new issues:
 - SECURE 2.0 and its postponement
 - Retirement income and how the maturing demographics of participants, higher rates, and rollovers can affect the different types of retirement income solutions plans can choose.
- The gap in returns between money market and stable value funds was a new source of concern for some plans.

Average Asset Allocation, Callan Database Groups



Note: Charts may not sum to 100% due to rounding. Other alternatives include but is not limited to: diversified multi-asset, private credit, private equity, and real assets.
Source: Callan

Equity

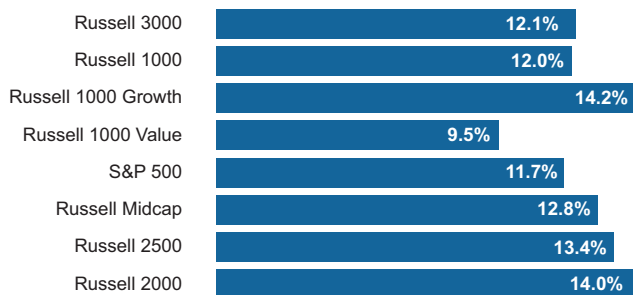
U.S. Equities

End-of-the-year rally

- U.S. equity markets rebounded in the last two months of the year as the impact of possible rate cuts in 2024 started to get priced in.
- The S&P 500 Index approached a record high as the year closed. Of note, 2023 was the first year since 2012 that the S&P failed to reach a high-water mark. That said, the index was up an impressive 11.7% in 4Q and 26.3% for the year.
- The tech sector was the clear winner for the quarter and the year (+17.2%; +57.8%) while Energy (-6.9%; -1.3%) was the only sector to register both a 4Q and 2023 decline.
- 2023 saw the narrowest breadth of leadership ("the Magnificent Seven") since 1987, with just 27% of stocks outperforming the S&P 500. Historically, such concentrated leadership has not been the sign of a healthy market.
- Fourth quarter and 2023 returns for the bunch were impressive: Alphabet: +6.8%, +58.8%; Amazon: +19.5%, +80.9%; Apple: +12.6%, +49.0%; Meta: +17.9%, +194.1%; Microsoft: +19.3%, +58.2%; NVIDIA: +13.9%, +239.0%; Tesla: -0.7%, +101.7%.
- The index would have been up only about 10% for the year without these stocks, and the equal-weighted S&P 500 returned 11.9% in 4Q and 13.9% in 2023.
- However, gains started broadening out in the last two months of the year with the equal-weighted S&P index outperforming the capitalization-weighted version.
- Smaller cap stocks also outperformed their large cap counterparts in 4Q23, further proof of the broadening out of returns.
- For the full year, large cap stocks outperformed small cap stocks by almost 10 percentage points.
- Growth vs. value performance was mixed across market capitalization during the quarter. Within large cap, growth outperformed value, while the opposite was true within small cap.

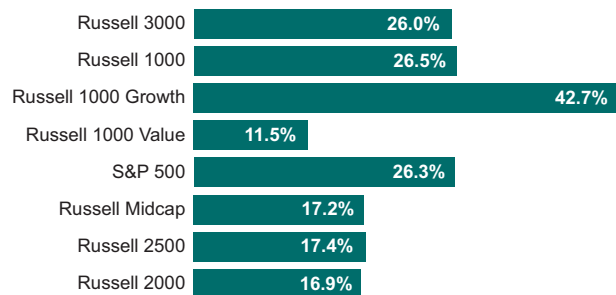
U.S. Equity: Quarterly Returns

(12/31/23)



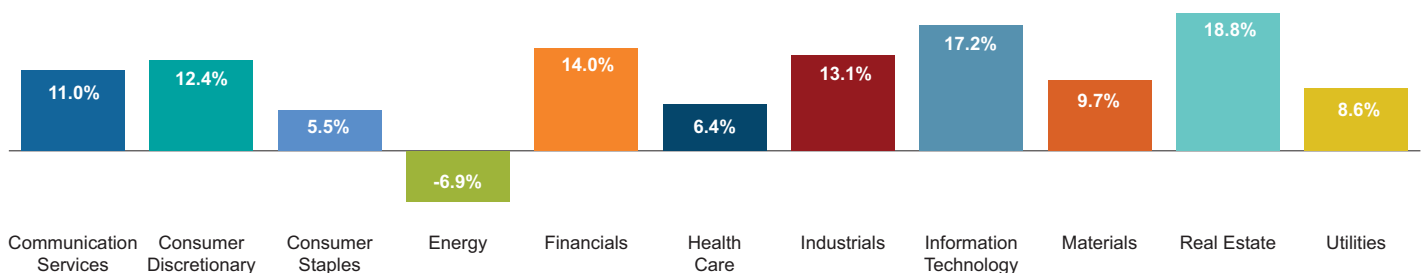
U.S. Equity: One-Year Returns

(12/31/23)



Sources: FTSE Russell and S&P Dow Jones Indices

Quarterly Performance of Industry Sectors (12/31/23)



Source: S&P Dow Jones Indices

Global Equities: Global markets in the black for 4Q

Broad market

- Dovish signaling from central banks and dropping yields led to a broad market rally in 4Q23.
- Global ex-U.S. small caps reclaimed some of their lagging performance in 4Q but ended the year as the worst-performing broad-based index, albeit up over 12%. Elevated borrowing costs and the persistent risk of a recession have kept investors away.
- Japan's low rates have benefited exporters, and the threat of being delisted spurred a stock buy-back spree. Coupled with an increased focus on governance, this spurred Japan to a multi-decade high.

Emerging markets

- Emerging markets underperformed developed markets.
- India's rally couldn't overcome China's weakness, whose economic growth was near the government's target, but investor concerns around stimulus and a surprisingly sluggish reopening drove stocks lower.

Growth vs. value

- Energy, a volatile area in the market, pulled back value's rally after having a strong 3Q. Global ex-U.S. growth rallied on lowering yields but couldn't overcome earlier underperformance and ended the year behind its value peers in both emerging and developed markets.

U.S. dollar vs. other currencies

- The U.S. dollar weakened in 4Q as investors believed that U.S. interest rates would fall faster than much of the developed world.

China: Danger or opportunity?

Long-term growth potential

- China has the second-largest GDP and the world's largest population of consumers.

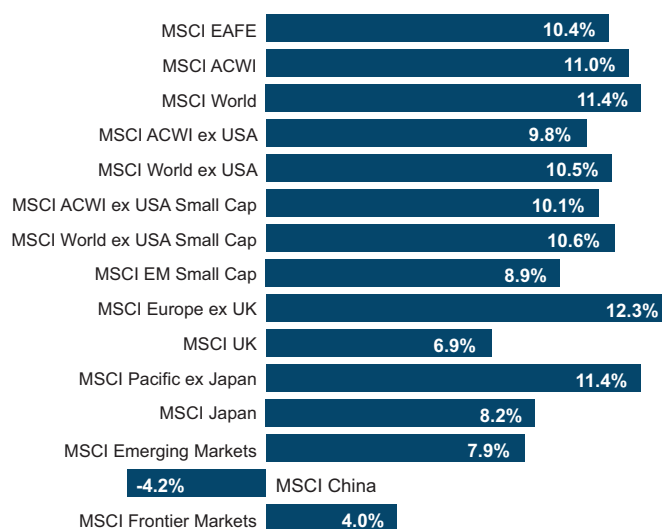
Valuation

- Valuations remain attractive on a forward P/E basis.

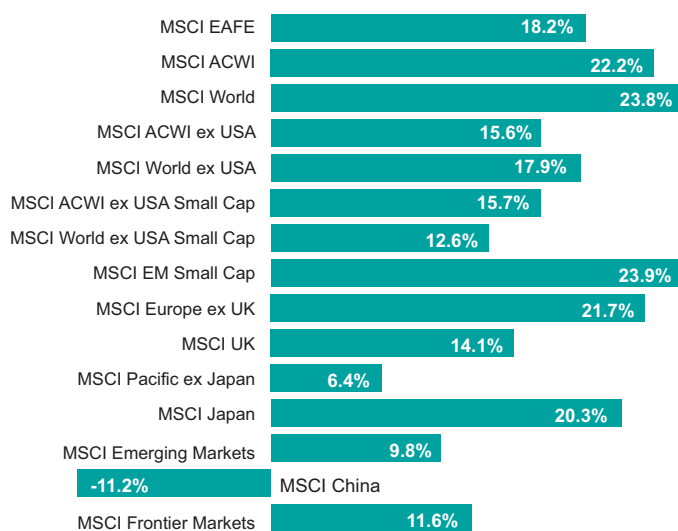
Structural challenges

- Inbound foreign direct investment (FDI) for China went negative for the first time as local markets remained weak and geopolitical tensions persisted.
- China is run by an authoritarian regime that may act against investors' best interests.

Global ex-U.S. Equity: Quarterly Returns (U.S. Dollar, 12/31/23)



Global ex-U.S. Equity: One-Year Returns (U.S. Dollar, 12/31/23)



Source: MSCI

Fixed Income

U.S. Fixed Income

Strong returns at end of year

- Driven by falling rates and strong risk-on sentiment, the Agg returned 6.8%, the highest quarterly return since 2Q89 (when the 90-day T-bill was over 8% and inflation hit 14% earlier in the decade)!
- 10-year U.S. Treasury yield closed the year at 3.88%
- A round trip from December 2022, masking significant volatility during the year
- High was 4.98% in October and low was 3.30% in April
- Corporates and mortgages outperformed Treasuries for the quarter and year.
- High yield corporates soared as defaults remained low and the economy resilient.

U.S. Treasury yield curve remained inverted, but less so

- 106 bps as of 6/30; 44 bps as of 9/30; 35 bps as of 12/31

Fed kept Fed Funds rate on hold and softened language

- Pivoted from “higher for longer” to projected rate cuts in 2024
- Inflation over past six months below Fed’s 2% target
- Core PCE Price Index was 1.9% annualized in November.
- Markets expect six rate cuts in 2024 versus three in the Fed’s Summary of Economic Projections.

Valuations

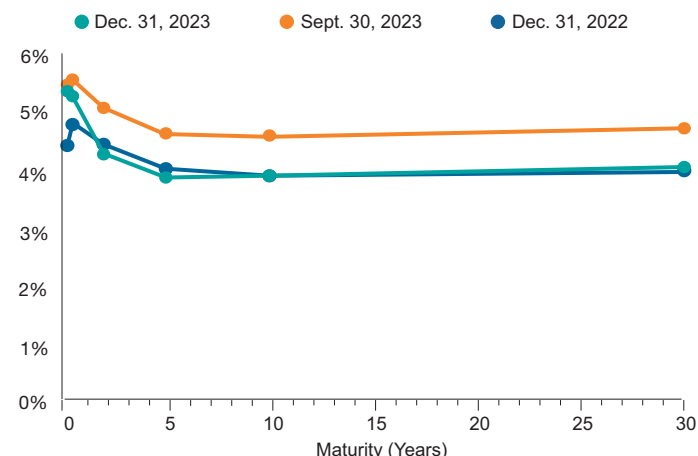
- Investment grade and high yield corporate spreads now below 10-year averages

Municipal Bonds

Gains in 4Q and a superb November

- November was the best month since August 1982.
- Helped by falling yields, muted issuance, and strong demand
- Reversed the -1.4% year-to-date return as of 9/30

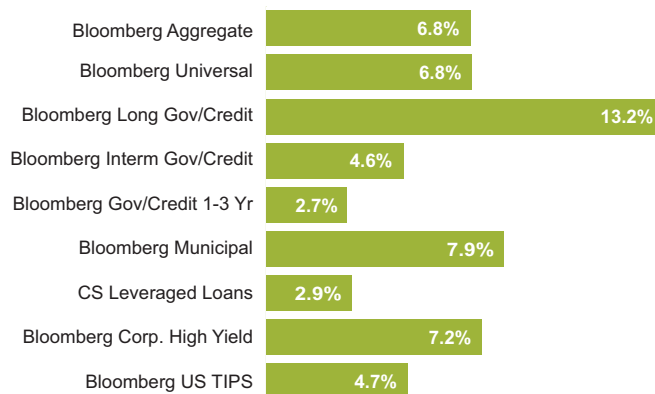
U.S. Treasury Yield Curves



Source: Bloomberg

U.S. Fixed Income: Quarterly Returns

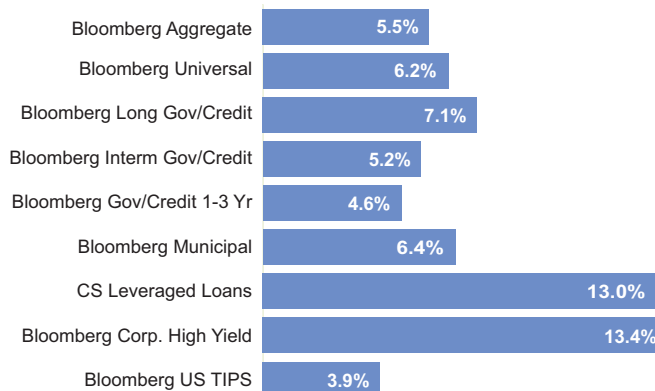
(12/31/23)



Sources: Bloomberg and Credit Suisse

U.S. Fixed Income: One-Year Returns

(12/31/23)



BBBs performed best for quarter and year

- AAA: +8.4%; +5.8%
- AA: +7.6%; +5.9%
- A: +8.0%; +7.3%
- BBB: +9.2%; +8.9%

Valuations

- Credit spreads close to historical averages
- Mortgage spreads widened on interest rate volatility and slowing prepayments.

Valuations vs. U.S. Treasuries richened

- 10-year AAA Muni/10-year U.S. Treasury yield ratio 59%, down from 75% as of 9/30
- Well below 10-year median of 87%
- After-tax yields remain attractive at 5.4% (source: Morgan Stanley).

Fundamentals for state, local governments remain sound

- Upgrades exceeded downgrades in 2023.

Global Fixed Income

Falling rates bolstered 4Q returns globally

- Central banks seen as moving closer to cutting rates as inflation moderated
- Gains were broad-based across countries with the U.S. lagging other developed markets in unhedged terms.
- Emerging markets also posted strong results with gains across most countries.

U.S. dollar weakened

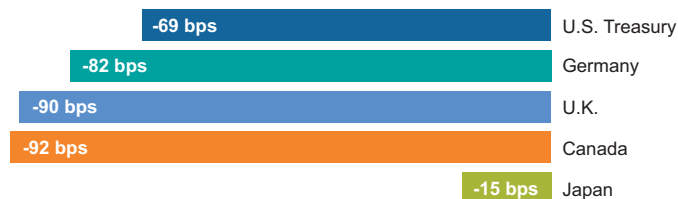
- Major currencies rose compared to the dollar in 4Q.

Emerging markets also posted strong results

- Gains across most countries

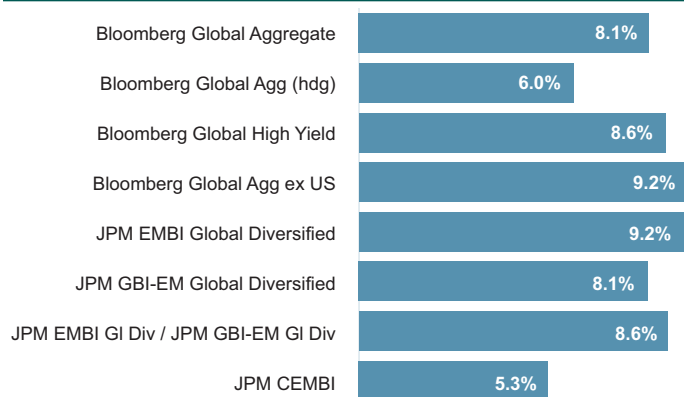
Change in 10-Year Global Government Bond Yields

3Q23 to 4Q23



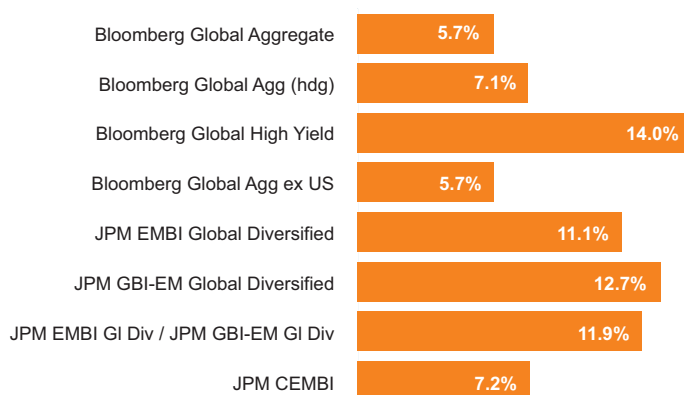
Source: Bloomberg

Global Fixed Income: Quarterly Returns (12/31/23)



Sources: Bloomberg and JPMorgan Chase

Global Fixed Income: One-Year Returns (12/31/23)



Sources: Bloomberg and JPMorgan Chase

Private RE Falls but REITs Outpace Stocks

REAL ESTATE/REAL ASSETS | Munir Iman

Private RE valuations reflect higher rates

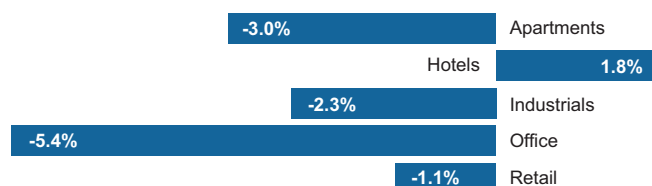
- The NCREIF Property Index, a measure of U.S. institutional real estate assets, fell 3.0% during 4Q23. The income return was 1.1% while the appreciation return was –4.1%.
- Hotels, which represent a small portion of the index, led property sector performance with a gain of 1.8%.
- Office finished last with a loss of 5.4%.
- Regionally, the South led with a loss of 1.9%, while the West was the worst performer with a drop of 3.7%.
- The NCREIF Open-End Diversified Core Equity (ODCE) Index, representing equity ownership positions in U.S. core real estate, fell 4.8% during 4Q, with an income return of 1.0% and an appreciation return of -5.8%.

REITs outperform equities

- The FTSE EPRA Nareit Developed REIT Index, a measure of global real estate securities, rose 15.6% during 4Q23.
- U.S. REITs, as measured by the FTSE Nareit Equity REITs Index, increased 16.2%.
- The FTSE EPRA Nareit Asia Index (USD), representing the Asia/Pacific region, gained 8.6%.
- European REITs, as measured by the FTSE EPRA Nareit Europe Index (USD), jumped 26.8%.
- U.S. REITs outperformed the S&P 500 (11.7%). They also topped Asia REITs but underperformed Europe.

Sector Quarterly Returns by Property Type

(12/31/23)



Source: NCREIF

- The outperformance in the U.S. was driven by dampening inflation, coupled with a more dovish Federal Reserve sentiment sparking a rally to close the year.
- The office sector outperformed, coming off its lows.
- Gaming, residential, health care, and data center lagged, impacted by interest rate challenges and prior strong performances.
- The FTSE EPRA Nareit Developed Asia Index (USD) rose 8.6% during the quarter. China's economic outlook remains uncertain, exacerbated by geopolitical tensions and underwhelming stimulus.
- The FTSE EPRA Nareit Developed Europe Index (USD) increased by 26.8% during the quarter.
- Europe was the top-performing region, driven by meaningful currency tailwinds. Expectations of a dovish central bank were driven by weakening economic data.

Callan Database Median and Index Returns* for Periods Ended 12/31/23

Private Real Assets	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years	15 Years
Real Estate ODCE Style	-0.4	-10.0	-10.0	4.9	4.7	7.0	5.2
NFI-ODCE (value-weighted, net)	-5.0	-12.7	-12.7	4.0	3.3	6.3	5.1
NCREIF Property	-3.0	-7.9	-7.9	4.6	4.3	6.8	6.4
NCREIF Farmland	2.3	5.0	5.0	7.4	6.0	7.3	9.4
NCREIF Timberland	4.3	9.5	9.5	10.5	6.6	5.8	4.7
Public Real Estate							
Global Real Estate Style	15.4	12.2	12.2	2.6	5.6	6.0	9.3
FTSE EPRA Nareit Developed	11.3	2.2	2.2	3.5	5.9	6.0	8.6
Global ex-U.S. Real Estate Style	15.4	9.0	9.0	-3.7	3.2	4.8	8.6
FTSE EPRA Nareit Dev ex US	14.9	6.3	6.3	-4.5	-0.5	1.0	5.6
U.S. REIT Style	16.5	14.0	14.0	6.8	8.8	8.6	11.6
FTSE EPRA Nareit Equity REITs	16.2	13.7	13.7	7.2	7.4	7.6	10.5

*Returns less than one year are not annualized. Sources: Callan, FTSE Russell, NCREIF

Big Slowdown After Frenzy of 2021

PRIVATE EQUITY | Ashley Kahn

Both new investment activity and exit activity slowed markedly in 2023, following rising interest rates, declines in the public markets, and continued price uncertainty.

Fundraising ► Fundraising declined back closer to historical levels in 2022 after its frenzied peak in 2021. So far, 2023 has been another down year, with LPs being more selective with their commitments.

Buyouts ► There was a significant decline in deal activity this year after the highs of 2021-2022, caused by high interest rates, a wide bid-ask spread, and lingering effects from the slowdown in the public markets. There was also greater difficulty in obtaining financing this year, particularly for mega buyout deals, which has brought down leverage ratios across the industry.

Buyout valuations are finally starting to normalize in 2023 after their peak in 2021. Buyout valuations are sensitive to changes in interest rates—as the cost of borrowing rises, it is harder to justify high valuations.

Venture Capital and Growth Equity ► There was a substantial decline in venture capital and growth equity activity in 2023, following the crazed highs of 2021 and early 2022. Valuations, likewise, have reverted back to historical levels, particularly at the late stage.

Private Equity Performance (%) (Pooled Horizon IRRs through 9/30/23*)

Strategy	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years
All Venture	-2.4	-8.9	14.8	17.2	17.2	13.4	12.5	20.4
Growth Equity	-0.6	0.8	12.3	14.8	14.3	13.1	13.8	14.3
All Buyouts	0.1	10.2	16.8	15.0	14.6	12.4	14.6	12.8
Mezzanine	1.8	13.0	13.5	11.0	11.1	10.7	11.1	9.9
Credit Opportunities	1.2	8.2	11.1	7.1	7.5	10.1	9.3	9.6
Control Distressed	0.4	5.6	19.4	13.6	11.7	11.5	11.6	11.4
All Private Equity	-0.4	4.2	15.4	14.8	14.3	12.5	13.6	13.0
S&P 500	11.7	26.3	10.0	15.7	12.0	14.0	9.7	7.6
Russell 3000	12.1	26.0	8.5	15.2	11.5	13.8	9.7	7.7

Note: Private equity returns are net of fees. Sources: Refinitiv/Cambridge and S&P Dow Jones Indices

*Most recent data available at time of publication

Exits ► Exits have declined dramatically after hitting all-time records in 2021. Only 8% of total private equity AUM generated liquidity in 2023 (the lowest level ever)—lower even than the depths of the Global Financial Crisis.

With the IPO window still closed and increasing antitrust sentiment, it is unclear whether exit activity will rebound in 2024. IPO exits in 2023 were at just 15% of pre-pandemic levels.

Returns ► Public equity's strong recovery in 2023 (led by the "Magnificent 7" technology stocks) has left private equity in its wake. Private equity only saw about a fifth of the gains of the public markets over the last year, on a PME basis.

Funds Closed 1/1/23 to 12/31/23

Strategy	No. of Funds	Amt (\$mm)	Share
Venture Capital	1,584	199,090	21%
Growth Equity	139	103,324	11%
Buyouts	515	471,684	50%
Mezzanine Debt	24	36,050	4%
Distressed/Special Credit	42	46,018	5%
Energy	6	3,296	0%
Secondary and Other	137	74,616	8%
Fund-of-funds	25	5,567	1%
Totals	1,472	552,402	100%

Source: PitchBook (Figures may not total due to rounding.)

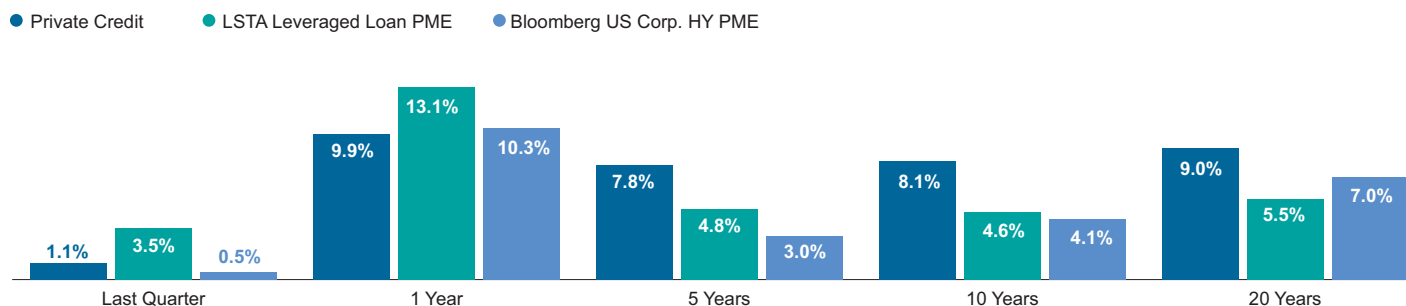
Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of the *Capital Markets Review* and other Callan publications.

Net IRR of Nearly 9% Over Three Years

PRIVATE CREDIT | Catherine Beard

- Private credit performance varies across sub-asset class and underlying return drivers. Over the past three years the asset class has generated a net IRR of nearly 9%. Higher-risk strategies have performed better than lower-risk strategies.
- Private credit remained in high demand across Callan's investor base, and a number of large defined benefit plans are looking to increase their existing private credit allocations from 2%–3% to 5%–10%.
- While we always work to build out diversified client portfolios, we think there is particularly interesting relative value in upper middle market sponsor-backed lending and asset-based lending.
- We are seeing an uptick in stress for some individual names in direct lending portfolios due to a combination of input cost inflation and increased interest expense.
- Private credit AUM stood at over \$1.5 trillion at the end of 2023, with Preqin forecasting the asset class will grow to over \$2.5 trillion by 2028 at a 11.13% CAGR from 2023 to 2028.
- Direct lending is expected to grow steadily through 2028 as investors increase their private credit allocations. Distressed exposure will grow a bit more slowly with other strategies such as opportunistic, special situations, and other niche diversifiers growing more quickly.

Private Credit Performance (%) (Pooled Horizon IRRs through 9/30/23*)



Private Credit Performance (%) (Pooled Horizon IRRs by Strategy through 9/30/23*)

Strategy	Quarter	1 Year	5 Years	10 Years	20 Years
Senior Debt	0.1	11.4	5.9	6.6	6.8
Mezzanine	1.8	13.0	11.0	11.1	10.5
Credit Opportunities	1.2	8.2	7.1	7.6	8.9

Source: LSEG/Cambridge

*Most recent data available at time of publication

Gains in 4Q23 Spurred by Rising Stocks and Bonds

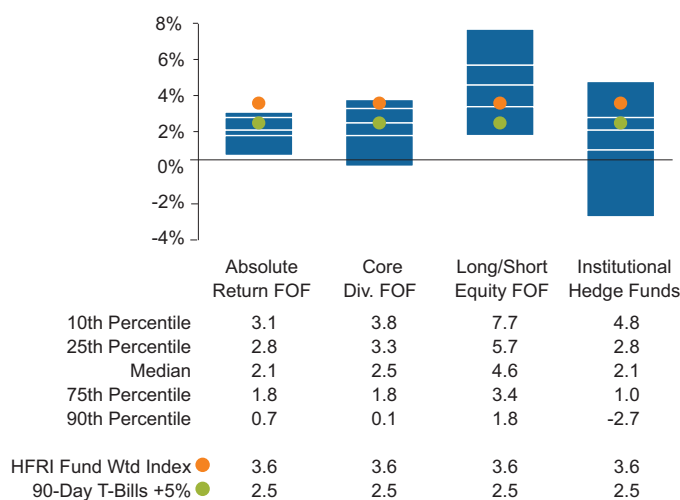
HEDGE FUNDS/MACs | Joe McGuane

Equity markets ended the final quarter of 2023 with double-digit gains and, by the time the year ended, recouped all of 2022's losses. This surge was marked by rising expectations that the Federal Reserve was done hiking interest rates and would begin easing monetary policy in the new year. The yield on the U.S. 10-year Treasury declined sharply to end December at 3.9%, the same level where it began the year. Credit in general had a positive quarter, driven by lower rates and tighter spreads. Investment grade outperformed high yield, as both indices ended the quarter positive.

Hedge funds ended the year on a strong note. Equity hedge strategies were the best performing, as those with higher net long exposure performed better, along with strategies focused on health care and technology, media, and telecommunications (TMT). Relative value strategies generated positive performance during the quarter, driven by fundamental and systematic equity relative value strategies. Event-driven strategies

Hedge Fund Style Group Returns

(12/31/23)



Sources: Callan, Credit Suisse, Federal Reserve

Callan Peer Group Median and Index Returns* for Periods Ended 12/31/23

Hedge Fund Universe	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years
Callan Institutional Hedge Fund Peer Group	2.1	7.5	7.5	5.6	7.1	5.8
Callan Fund-of-Funds Peer Group	2.9	6.9	6.9	4.0	5.6	4.2
Callan Absolute Return FOF Style	2.1	5.7	5.7	5.5	5.3	4.3
Callan Core Diversified FOF Style	2.5	6.8	6.8	3.7	5.7	3.6
Callan Long/Short Equity FOF Style	4.6	9.0	9.0	-0.2	6.1	5.2
HFRI Fund Weighted Index	3.6	7.6	7.6	4.3	7.0	4.5
HFRI Fixed Convertible Arbitrage	1.4	4.8	4.8	3.8	6.8	4.8
HFRI Distressed/Restructuring	3.2	6.7	6.7	5.7	6.3	4.0
HFRI Emerging Markets	4.2	8.1	8.1	0.1	4.8	3.1
HFRI Equity Market Neutral	1.4	5.6	5.6	4.6	3.2	2.9
HFRI Event-Driven	5.4	10.4	10.4	5.7	6.8	4.6
HFRI Relative Value	2.6	7.0	7.0	4.6	4.9	4.0
HFRI Macro	-1.1	-0.6	-0.6	5.3	5.5	3.1
HFRI Equity Hedge	5.6	10.5	10.5	3.5	8.3	5.2
HFRI Multi-Strategy	4.6	9.8	9.8	1.8	4.5	2.9
HFRI Merger Arbitrage	4.3	5.8	5.8	6.4	6.2	4.7
90-Day T-Bill + 5%	2.5	10.0	10.0	7.2	6.9	6.3

*Net of fees. Sources: Callan, Credit Suisse, Hedge Fund Research

also ended on a strong note, as interest rate volatility provided trading opportunities when credit spreads tightened going into year-end. Macro strategies ended the quarter slightly negative, as losses from short positions in U.S. equities and developed market rates were offset by long technology equities and long front-end rates positions.

Serving as a proxy for large, broadly diversified hedge funds with low-beta exposure to equity markets, the median Callan Institutional Hedge Fund Peer Group rose 2.1%. Within this style group of 50 peers, the average hedged credit manager gained 2.6%, driven by actively trading around interest rate volatility. The median Callan Institutional hedged rates manager rose 2.3%, largely driven by relative value fixed income trades. Meanwhile, the average hedged equity manager added 2.2%, as sector-focused managers were able to profit from the broad market rally.

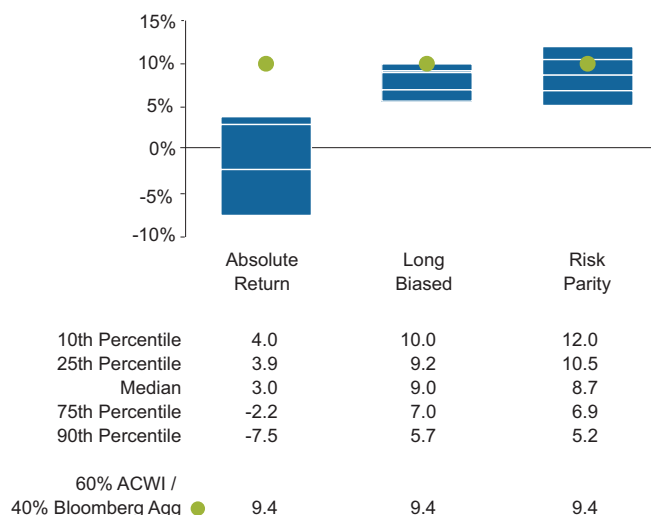
Within the HFRI indices, the best-performing strategy last quarter was equity hedge (5.6%), as health care-, financial-, and technology-focused strategies drove performance during the final quarter of the year. Macro strategies fell 1.1%, as short equity positions offset gains from front end interest rate trading.

Across the Callan Hedge FOF database, the median Callan Long-Short Equity FOF gained 4.6%, as sector-focused strategies drove performance during the quarter. The median Callan Core Diversified FOF rose 2.5%, boosted by equity and event-driven strategies. The Callan Absolute Return FOF ended 2.1% higher, as lower equity beta strategies were behind this move higher.

Within Callan's database of liquid alternative solutions, the Callan MAC Long Biased manager rose 9.0%, as the broad-based equity rally moved performance higher. The Callan MAC Risk Parity peer group rose 8.7%, as equities and fixed income drove performance. The Callan MAC Absolute Return peer group rose, as broad markets had a strong end of the year.

MAC Style Group Returns

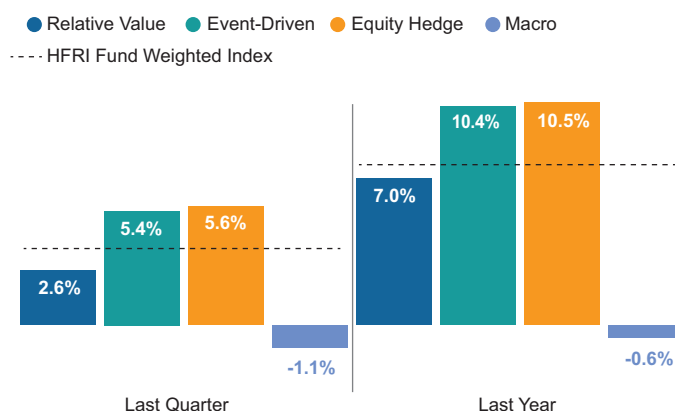
(12/31/23)



Sources: Bloomberg, Callan, Eurekahedge, S&P Dow Jones Indices

HFRI Hedge Fund-Weighted Strategy Returns

(12/31/23)



Source: HFRI

Index Drops by 2.9% After Three Quarters of Gains

DEFINED CONTRIBUTION | **Scotty Lee**

Performance: Index Dips after Third Straight Quarterly Gain

- The Callan DC Index™ lost 2.9% in 3Q23, which brought the Index's trailing one-year gain to 13.8%. The Age 45 Target Date Fund (analogous to the 2045 vintage) had a lower quarterly return (-3.6%).

Growth sources: Investment Losses Lead to Fall in Balances

- Balances within the DC Index fell by 3.2% after a 4.3% increase in the previous quarter. Investment losses (-2.9%) were the primary driver.

Turnover: Net Transfers Decrease

- Turnover (i.e., net transfer activity levels within DC plans) in the DC Index decreased to 0.26% from the previous quarter's measure of 0.33%. Despite the decrease, the Index's historical average (0.55%) remained steady.

Net cash flow analysis: Stable Value Declines Sharply

- Automatic features and their appeal to “do-it-for-me” investors typically result in target date funds (TDFs) receiving the largest net inflows in the DC Index, which was the case in 3Q23 as the asset allocation funds garnered 87.2% of quarterly net flows. Stable value (-56.2%) saw relatively large outflows for the fourth straight quarter.

Equity allocation: Exposure Declines

- The Index's overall allocation to equity (71.5%) fell slightly from the previous quarter's level (71.8%). The current equity allocation continues to sit above the Index's historical average (68.4%).

Asset allocation: Fixed Income, TDFs See Gains

- U.S. fixed income (5.5%) and target date funds (34.1%) were among the asset classes with the largest percentage increases in allocation, while U.S. small/mid cap equity (7.4%) had the largest decrease in allocation from the previous quarter due to net outflows.

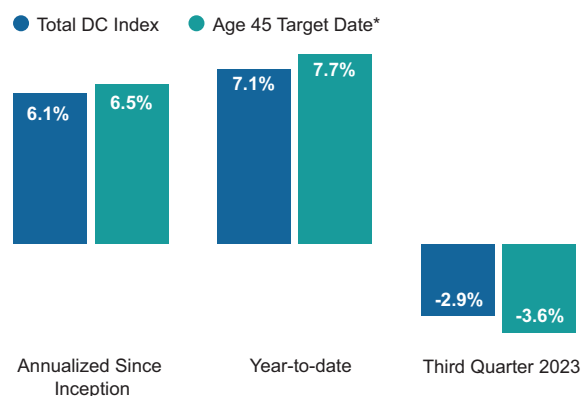
Prevalence: Money Market Up, Stable Value Down

- The prevalence of money market funds (54.1%) rose by 1.5% accompanied by a decrease in the prevalence of stable value funds (70.1%) by 0.8%.

Underlying fund performance, asset allocation, and cash flows of more than 100 large defined contribution plans representing approximately \$400 billion in assets are tracked in the Callan DC Index.

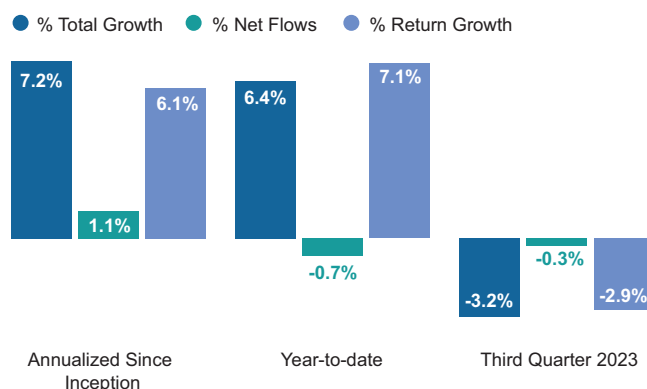
Investment Performance

(9/30/23)



Growth Sources

(9/30/23)



Net Cash Flow Analysis (3Q23)

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	87.2%
Global ex-U.S. Equity	5.3%
U.S. Small/Mid Cap	-13.3%
Stable Value	-56.2%
Total Turnover**	0.3%

Data provided here is the most recent available at time of publication.

Source: Callan DC Index

Note: DC Index inception date is January 2006.

* The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.

** Total Index “turnover” measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

ASSET ALLOCATION AND PERFORMANCE

Asset Allocation and Performance

This section begins with an overview of the fund's asset allocation at the broad asset class level. This is followed by a top down performance attribution analysis which analyzes the fund's performance relative to the performance of the fund's policy target asset allocation. The fund's historical performance is then examined relative to funds with similar objectives. Performance of each asset class is then shown relative to the asset class performance of other funds. Finally, a summary is presented of the holdings of the fund's investment managers, and the returns of those managers over various recent periods.

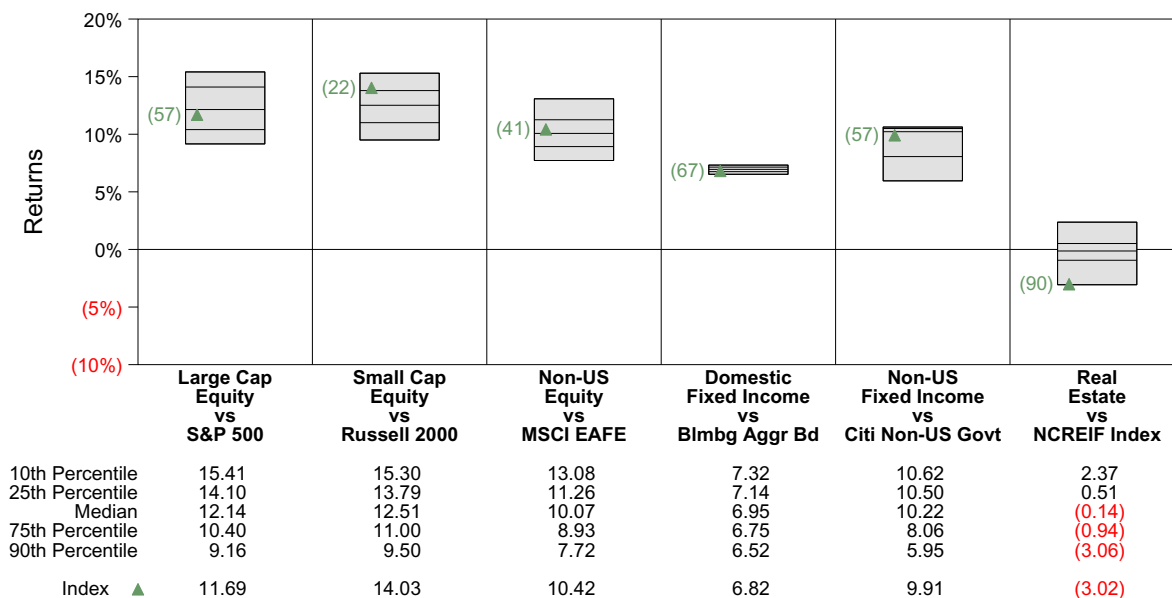
Market Overview

Active Management vs Index Returns

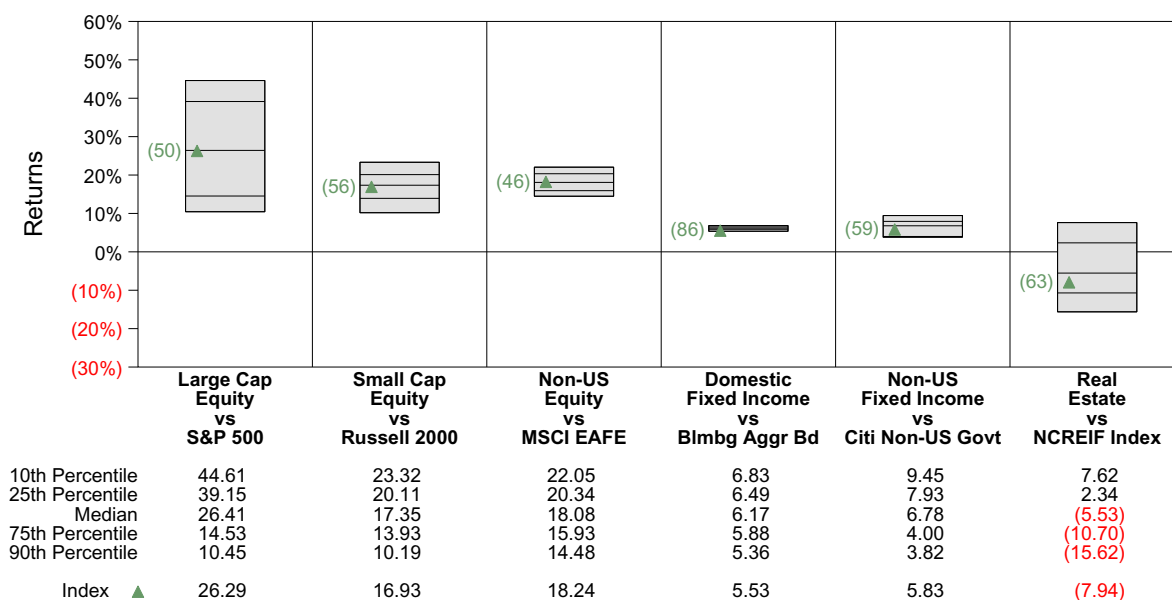
Market Overview

The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also shown for each asset class for comparison purposes. As an example, the first bar in the upper chart illustrates the range of returns for domestic equity managers over the last quarter. The triangle represents the S&P 500 return. The number next to the triangle represents the ranking of the S&P 500 in the Large Cap Equity manager database.

Range of Separate Account Manager Returns by Asset Class One Quarter Ended December 31, 2023

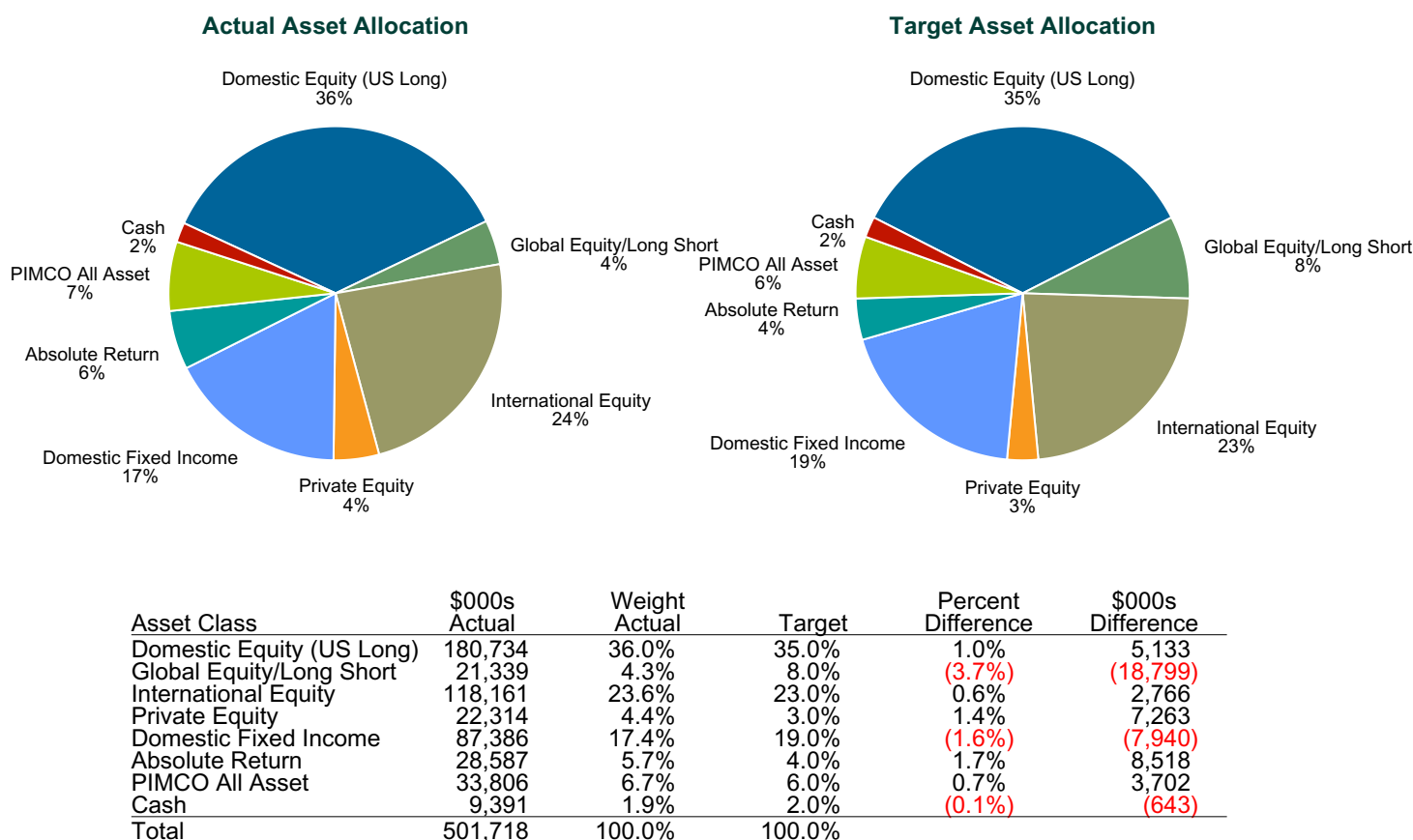


Range of Separate Account Manager Returns by Asset Class One Year Ended December 31, 2023

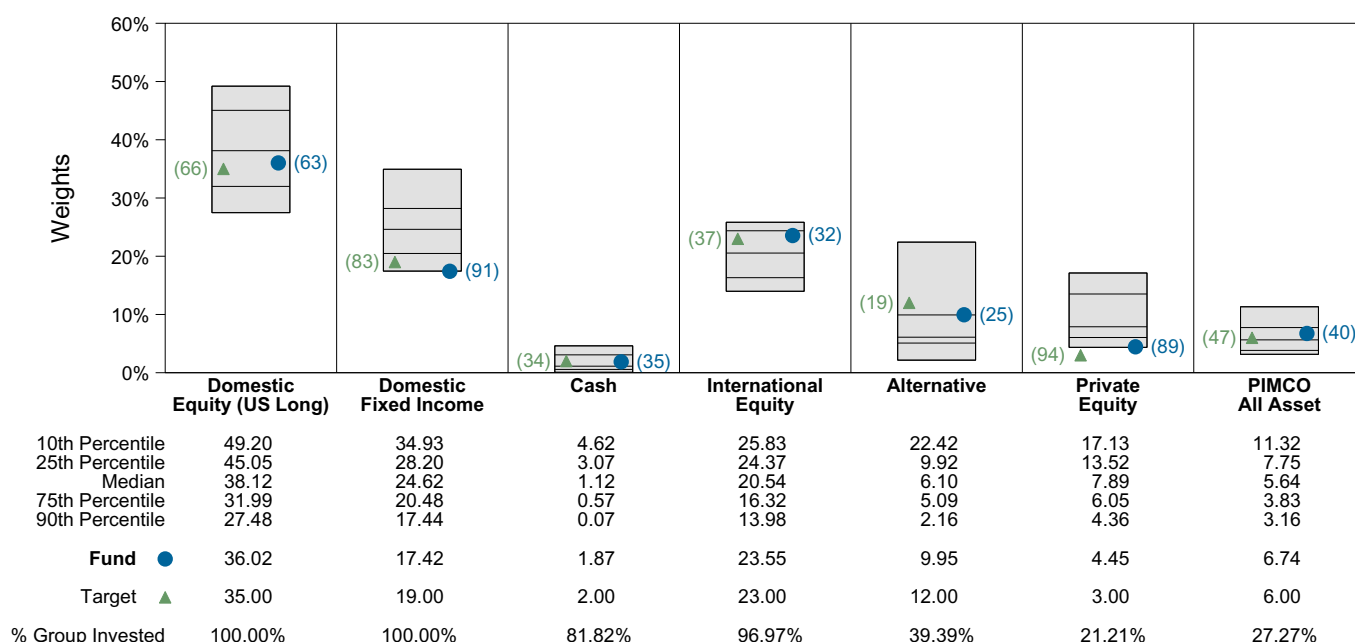


Actual vs Target Asset Allocation As of December 31, 2023

The top left chart shows the Fund's asset allocation as of December 31, 2023. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Spons- Mid (100M-1B).



Asset Class Weights vs Callan Public Fund Spons- Mid (100M-1B)



* Current Quarter Target = 35.0% Russell 3000 Index, 23.0% MSCI ACWI xUS (Net), 19.0% Blmbg:Aggregate, 8.0% HFRI FOF: Strategic Index, 6.0% Blmbg TIPS 1-10 Yr, 4.0% HFRI FOF: Conservative In, 3.0% Private Equity and 2.0% 3-month Treasury Bill.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2023, with the distribution as of September 30, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	December 31, 2023				September 30, 2023	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Total Equity	\$342,548,094	68.27%	\$(10,515,443)	\$31,255,626	\$321,807,911	68.25%
U.S. Equity	\$180,734,216	36.02%	\$(10,175,289)	\$19,720,043	\$171,189,462	36.30%
BR Russell 1000 Index Non-Lendable	134,046,875	26.72%	(10,000,000)	15,285,563	128,761,312	27.31%
LSV	24,887,805	4.96%	(175,289)	3,351,696	21,711,399	4.60%
Principal Dynamic Growth	21,799,535	4.34%	0	1,082,785	20,716,750	4.39%
International Equity	\$118,160,846	23.55%	\$(115,154)	\$10,359,142	\$107,916,857	22.89%
Developed Markets	\$98,427,764	19.62%	\$(115,154)	\$9,013,055	\$89,529,864	18.99%
Silchester	64,029,231	12.76%	(115,154)	4,741,476	59,402,909	12.60%
Walter Scott	34,398,534	6.86%	0	4,271,579	30,126,955	6.39%
Emerging Markets	\$19,733,081	3.93%	\$0	\$1,346,087	\$18,386,994	3.90%
BlackRock EM Alpha Tilts	19,733,081	3.93%	0	1,346,087	18,386,994	3.90%
Global Equity Long/Short	\$21,338,753	4.25%	\$0	\$1,176,441	\$20,162,313	4.28%
ABS Global	21,096,447	4.20%	0	1,176,441	19,920,007	4.22%
Blackstone Park Ave. NT	242,306	0.05%	0	0	242,306	0.05%
Private Equity (1)	\$22,314,279	4.45%	\$(225,000)	\$0	\$22,539,279	4.78%
Pantheon USA IV	22,762	0.00%	0	0	22,762	0.00%
Pantheon USA VI	141,111	0.03%	0	0	141,111	0.03%
Pantheon USA VII	673,998	0.13%	0	0	673,998	0.14%
Pantheon Europe Fund V A	338,172	0.07%	0	0	338,172	0.07%
Pantheon Global Secondary Fund III	59,955	0.01%	0	0	59,955	0.01%
Pantheon US Select 2014	21,078,281	4.20%	(225,000)	0	21,303,281	4.52%
Domestic Fixed Income	\$87,386,196	17.42%	\$(11,177)	\$5,969,884	\$81,427,489	17.27%
Prudential Cons Core Bond Fund	38,747,969	7.72%	(11,177)	2,567,389	36,191,758	7.68%
Metropolitan West Fund	48,638,226	9.69%	0	3,402,495	45,235,731	9.59%
Absolute Return	\$28,587,179	5.70%	\$0	\$619,764	\$27,967,415	5.93%
UBS AIS	28,587,179	5.70%	0	619,764	27,967,415	5.93%
Real Assets	\$33,805,561	6.74%	\$0	\$2,143,901	\$31,661,660	6.71%
PIMCO All Asset	33,805,561	6.74%	0	2,143,901	31,661,660	6.71%
Cash	\$9,391,404	1.87%	\$633,449	\$79,389	\$8,678,566	1.84%
Cash Account	9,391,404	1.87%	633,449	79,389	8,678,566	1.84%
Total Fund	\$501,718,434	100.0%	\$(9,893,172)	\$40,068,565	\$471,543,041	100.0%

(1) Market Values have a one quarter lag and are adjusted for asset flows.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2023, with the distribution as of September 30, 2023.

Asset Distribution Across Investment Managers

	December 31, 2023					September 30, 2023		
	Market Value	Weight	(min)	Target	(max)	Market Value	Weight	Target
Total Equity	\$342,548,094	68.27%	60.00%	69.00%	75.00%	\$321,807,911	68.25%	69.00%
U.S. Equity	\$180,734,216	36.02%	27.00%	35.00%	40.00%	\$171,189,462	36.30%	35.00%
BR Russell 1000 Idx Non-Lendable	134,046,875	26.72%				128,761,312	27.31%	
LSV	24,887,805	4.96%				21,711,399	4.60%	
Principal Dynamic Growth	21,799,535	4.34%				20,716,750	4.39%	
International Equity	\$118,160,846	23.55%	18.00%	23.00%	28.00%	\$107,916,857	22.89%	23.00%
Developed Markets	\$98,427,764	19.62%	-	-	-	\$89,529,864	18.99%	-
Silchester	64,029,231	12.76%				59,402,909	12.60%	
Walter Scott	34,398,534	6.86%				30,126,955	6.39%	
Emerging Markets	\$19,733,081	3.93%	-	-	-	\$18,386,994	3.90%	-
BlackRock EM Alpha Tilts	19,733,081	3.93%				18,386,994	3.90%	
Global Equity/Long Short	\$21,338,753	4.25%	4.00%	8.00%	12.00%	\$20,162,313	4.28%	8.00%
ABS Global	21,096,447	4.20%				19,920,007	4.22%	
Blackstone Park Ave. NT	242,306	0.05%				242,306	0.05%	
Private Equity (1)	\$22,314,279	4.45%	0.00%	3.00%	6.00%	\$22,539,279	4.78%	3.00%
Pantheon USA IV	22,762	0.00%				22,762	0.00%	
Pantheon USA VI	141,111	0.03%				141,111	0.03%	
Pantheon USA VII	673,998	0.13%				673,998	0.14%	
Pantheon Europe Fund V A	338,172	0.07%				338,172	0.07%	
Pantheon Global Fund III	59,955	0.01%				59,955	0.01%	
Pantheon US Select 2014	21,078,281	4.20%				21,303,281	4.52%	
Domestic Fixed Income	\$87,386,196	17.42%	14.00%	19.00%	24.00%	\$81,427,489	17.27%	19.00%
Prudential Cons Core Bond Fund	38,747,969	7.72%				36,191,758	7.68%	
Metropolitan West Fund CIT	48,638,226	9.69%				45,235,731	9.59%	
Absolute Return	\$28,587,179	5.70%	0.00%	4.00%	6.00%	\$27,967,415	5.93%	4.00%
UBS AIS	28,587,179	5.70%				27,967,415	5.93%	
Real Assets	\$33,805,561	6.74%	4.00%	6.00%	12.00%	\$31,661,660	6.71%	6.00%
PIMCO All Asset	33,805,561	6.74%	4.00%	6.00%	10.00%	31,661,660	6.71%	6.00%
Cash	\$9,391,404	1.87%	0.00%	2.00%	4.00%	\$8,678,566	1.84%	2.00%
Cash Account	9,391,404	1.87%				8,678,566	1.84%	
Total Fund	\$501,718,434	100.00%		100.00%		\$471,543,041	100.00%	100.00%

(1) Market Values have a one quarter lag and are adjusted for asset flows.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Total Equity	9.76%	18.36%	5.55%	11.09%	9.62%
U.S. Long Equity	11.58%	23.18%	7.56%	14.89%	12.34%
Pure US Equity Composite	11.58%	23.18%	7.61%	14.95%	12.43%
Russell 3000 Index	12.07%	25.96%	8.54%	15.16%	12.81%
Russell 1000 Index Non-Lendable	11.98%	26.56%	8.99%	15.53%	13.21%
Russell 1000 Index	11.96%	26.53%	8.97%	15.52%	13.21%
LSV	15.56%	17.22%	15.70%	11.88%	6.46%
Russell 2000 Value Index	15.26%	14.65%	7.94%	10.00%	6.10%
Principal Dynamic Growth	5.23%	11.32%	(4.50%)	14.96%	15.26%
Russell 2500 Growth Index	12.59%	18.93%	(2.68%)	11.43%	10.24%
International Equity	9.61%	17.86%	3.21%	7.35%	7.09%
MSCI ACWI ex US	9.75%	15.62%	1.55%	7.08%	6.33%
Developed Markets	10.08%	19.72%	5.35%	8.39%	7.87%
MSCI EAFE Index	10.42%	18.24%	4.02%	8.16%	6.91%
Silchester	8.00%	21.69%	9.00%	8.90%	7.80%
MSCI EAFE Val Idx	8.22%	18.95%	7.59%	7.08%	5.52%
Walter Scott	14.18%	-	-	-	-
MSCI EAFE Index	10.42%	18.24%	4.02%	8.16%	6.91%
MSCI EAFE Growth	12.72%	17.58%	0.26%	8.81%	7.99%
Emerging Markets	7.32%	10.27%	(5.38%)	2.92%	3.75%
MSCI Emerging Mkts Idx Net	7.86%	9.83%	(5.08%)	3.69%	4.98%
BlackRock EM Alpha Tilts	7.32%	10.27%	(5.38%)	-	-
MSCI Emerging Mkts Idx Net	7.86%	9.83%	(5.08%)	3.69%	4.98%
Global Equity/Long Short	5.83%	8.13%	(1.06%)	5.71%	4.65%
HFRI FOF: Strategic Index	4.98%	8.13%	0.48%	5.14%	4.20%
ABS Global	5.91%	9.08%	0.83%	6.27%	5.25%
MSCI ACWI Idx	11.15%	22.81%	6.25%	12.27%	10.60%
Private Equity (1)	0.00%	1.39%	14.92%	15.45%	14.25%
Pantheon USA IV	0.00%	0.00%	(2.06%)	1.40%	1.85%
Pantheon USA VI	0.00%	(7.80%)	(12.14%)	(10.61%)	(6.10%)
Pantheon USA VII	0.00%	1.64%	7.72%	9.91%	10.20%
Pantheon Europe Fund V A	0.00%	2.37%	(0.93%)	11.00%	11.92%
Pantheon Global Secondary Fund III	0.00%	0.00%	(5.76%)	(0.98%)	2.11%
Pantheon US Select 2014	0.00%	1.44%	16.95%	18.38%	17.91%

(1) Current 0% return due to a one quarter lag in valuation.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Domestic Fixed Income	7.33%	5.84%	(3.44%)	1.25%	1.42%
Prudential Core Bond	7.10%	6.04%	(3.17%)	1.14%	1.33%
Metropolitan West Fund*	7.52%	5.69%	(3.66%)	1.29%	1.46%
Blmbg Aggregate Index	6.82%	5.53%	(3.31%)	1.10%	1.29%
Absolute Return	2.22%	5.63%	5.77%	6.99%	5.38%
UBS AIS	2.22%	5.63%	5.77%	6.99%	5.38%
HFRI FOF: Conservative In	2.09%	5.65%	4.40%	5.19%	4.15%
Real Assets	6.77%	8.53%	3.53%	6.13%	6.62%
PIMCO All Asset	6.77%	8.53%	3.53%	6.19%	5.58%
Blmbg US TIPS 1-10	3.89%	4.36%	0.73%	3.43%	2.68%
Cash	1.41%	5.28%	2.43%	2.10%	1.95%
Cash Account	1.41%	5.28%	2.43%	2.10%	1.95%
3-month Treasury Bill	1.37%	5.01%	2.15%	1.88%	1.73%
Total Fund	8.62%	14.46%	3.82%	8.57%	7.53%
Target Benchmark (1)	8.51%	14.84%	3.66%	8.37%	7.34%
Annual Discount Rate:6.5%					

(1) The Total Fund Custom Benchmark is 35.0% Russell 3000 Index, 23.0% MSCI ACWI ex-US, 19.0% Bloomberg Aggregate Index 3.0% Private Equity, 8.0% HFRI FOF Strategic, 6.0% Blmbg US TIPS 1-10 Year Index, 2.0% TBIL, 4.0% HFRI FOF Conservative.

* On August 24, 2022 switched from Mutual Fund to CIT.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	6/2023- 12/2023	FY 2023	FY 2022	FY 2021	FY 2020
Total Equity	6.52%	14.53%	(14.13%)	39.04%	1.53%
U.S. Long Equity	7.63%	17.93%	(14.69%)	48.45%	5.18%
Russell 3000 Index	8.43%	18.95%	(13.87%)	44.16%	6.53%
Russell 1000 Index Non-Lendable	8.46%	19.37%	(13.03%)	43.08%	7.47%
Russell 1000 Index	8.44%	19.36%	(13.04%)	43.07%	7.48%
LSV	13.47%	12.16%	(6.00%)	71.06%	(23.09%)
Russell 2000 Value Index	11.85%	6.01%	(16.28%)	73.28%	(17.48%)
Principal Dynamic Growth	(2.85%)	16.17%	(28.37%)	63.07%	22.10%
Russell 2500 Growth Index	4.90%	18.58%	(31.81%)	49.63%	9.21%
International Equity	6.52%	15.70%	(18.54%)	32.22%	(4.70%)
MSCI ACWI ex US	5.61%	12.72%	(19.42%)	35.72%	(4.80%)
Developed Markets	6.82%	19.12%	(16.32%)	29.77%	(5.04%)
MSCI EAFE Index	5.88%	18.77%	(17.77%)	32.35%	(5.13%)
Silchester	9.32%	17.84%	(11.34%)	35.22%	(9.35%)
MSCI EAFE Val Idx	8.85%	17.40%	(11.95%)	33.50%	(14.48%)
Walter Scott	2.44%	-	-	-	-
MSCI EAFE Index	5.88%	18.77%	(17.77%)	32.35%	(5.13%)
MSCI EAFE Growth Idx	2.98%	20.20%	(23.76%)	30.97%	4.15%
Emerging Markets	5.02%	2.00%	(27.08%)	42.61%	(3.22%)
MSCI Emerging Mkts Idx Net	4.71%	1.75%	(25.28%)	40.90%	(3.39%)
BlackRock EM Alpha Tilts	5.02%	2.00%	(27.08%)	42.61%	(3.22%)
MSCI Emerging Mkts Idx Net	4.71%	1.75%	(25.28%)	40.90%	(3.39%)
Global Equity/Long Short	4.89%	4.10%	(13.73%)	22.51%	4.25%
HFRI FOF: Strategic Index	4.67%	4.21%	(11.92%)	23.82%	0.40%
ABS Global	5.17%	5.08%	(9.66%)	19.76%	5.07%
MSCI ACWI Idx	7.48%	17.13%	(15.37%)	39.87%	2.64%
Private Equity	(0.49%)	1.10%	12.77%	55.16%	5.82%
Pantheon USA IV	0.00%	(1.24%)	(4.88%)	13.48%	0.00%
Pantheon USA VI	(0.22%)	(7.02%)	(22.03%)	(7.18%)	(21.95%)
Pantheon USA VII	(1.64%)	(0.04%)	4.03%	47.49%	(0.99%)
Pantheon Europe Fund V A	0.14%	(1.80%)	(12.57%)	59.73%	11.81%
Pantheon Global Secondary Fund III	0.00%	0.36%	(19.00%)	8.19%	0.15%
Pantheon US Select 2014	(0.47%)	1.25%	15.05%	59.99%	12.67%

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

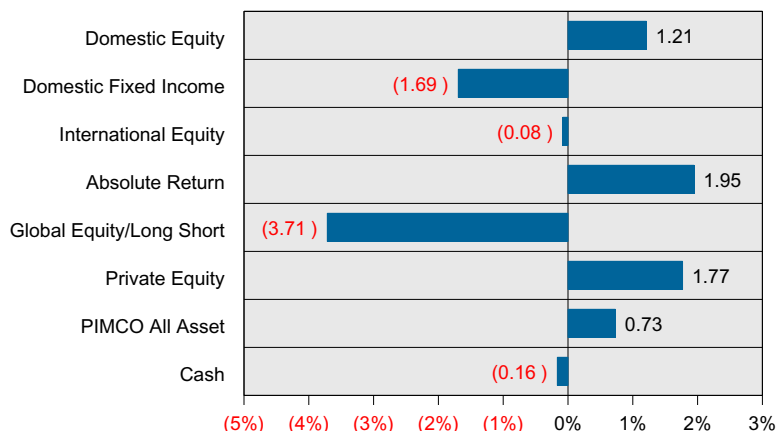
	6/2023- 12/2023	FY 2023	FY 2022	FY 2021	FY 2020
Domestic Fixed Income	3.65%	(0.95%)	(11.14%)	0.72%	8.89%
Prudential Cons Core Bond Fund	3.68%	(0.51%)	(10.60%)	(0.02%)	8.11%
Metropolitan West Fund	3.62%	(1.29%)	(11.56%)	1.36%	9.18%
Blmbg Aggregate Index	3.37%	(0.94%)	(10.29%)	(0.33%)	8.74%
Absolute Return	4.09%	4.23%	7.95%	10.18%	4.05%
UBS AIS	4.09%	4.23%	7.95%	10.18%	4.05%
HFRI FOF: Conservative In	3.60%	3.67%	0.10%	15.01%	(0.48%)
Real Assets	4.42%	4.64%	(9.86%)	29.53%	(2.18%)
PIMCO All Asset	4.42%	4.64%	(9.85%)	29.55%	(2.23%)
Blmbg US TIPS 1-10	2.85%	(0.91%)	(2.03%)	6.60%	5.75%
Cash	2.81%	4.04%	0.35%	0.26%	1.75%
Cash Account	2.81%	4.04%	0.35%	0.26%	1.75%
3-month Treasury Bill	2.70%	3.59%	0.17%	0.09%	1.63%
Total Fund	5.80%	10.10%	(11.98%)	28.40%	2.76%
Total Fund Custom Benchmark*	5.65%	9.88%	(11.91%)	25.66%	4.63%
Annual Discount Rate:6.5%					

* Current Quarter Target = 35.0% Russell 3000 Index, 23.0% MSCI ACWI xUS (Net), 19.0% Blmbg:Aggregate, 8.0% HFRI FOF: Strategic Index, 6.0% Blmbg TIPS 1-10 Yr, 4.0% HFRI FOF: Conservative In, 3.0% Private Equity and 2.0% 3-month Treasury Bill.

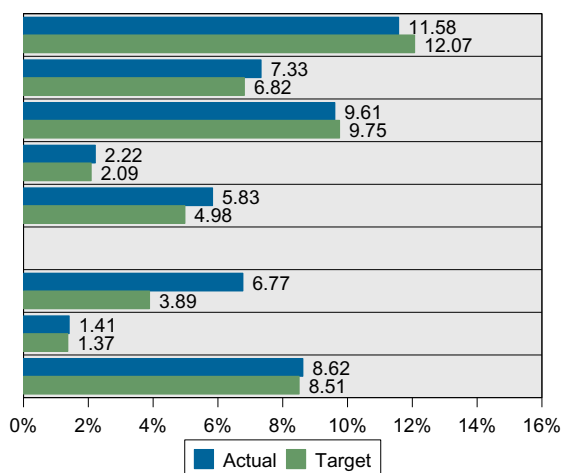
Quarterly Total Fund Relative Attribution - December 31, 2023

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

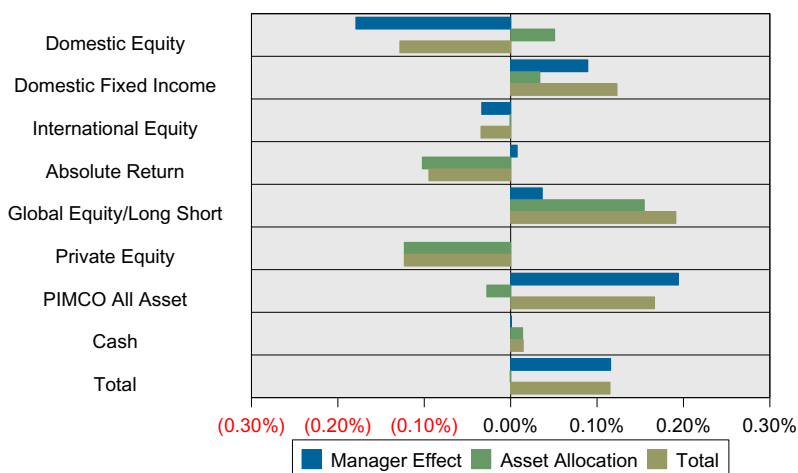
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended December 31, 2023

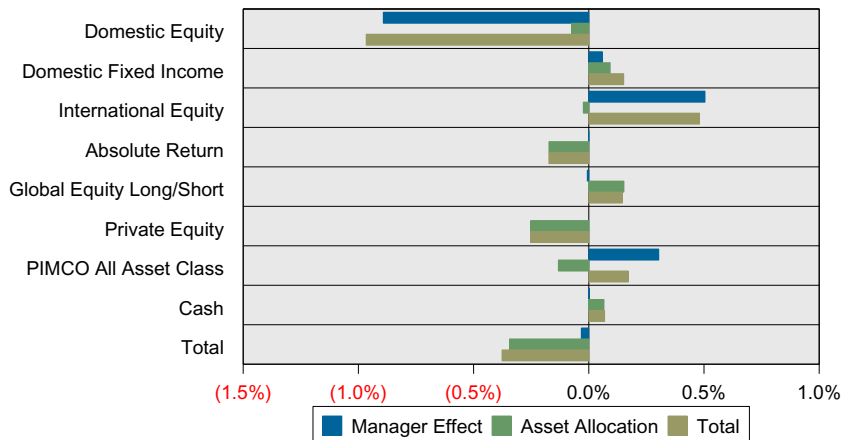
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	36%	35%	11.58%	12.07%	(0.18%)	0.05%	(0.13%)
Domestic Fixed Income	17%	19%	7.33%	6.82%	0.09%	0.03%	0.12%
International Equity	23%	23%	9.61%	9.75%	(0.03%)	(0.00%)	(0.03%)
Absolute Return	6%	4%	2.22%	2.09%	0.01%	(0.10%)	(0.09%)
Global Equity/Long Short	4%	8%	5.83%	4.98%	0.04%	0.15%	0.19%
Private Equity	5%	3%	0.00%	0.00%	0.00%	(0.12%)	(0.12%)
PIMCO All Asset	7%	6%	6.77%	3.89%	0.19%	(0.03%)	0.17%
Cash	2%	2%	1.41%	1.37%	0.00%	0.01%	0.01%
Total			8.62%	8.51%	0.12%	(0.00%)	0.12%

* Current Quarter Target = 35.0% Russell 3000 Index, 23.0% MSCI ACWI xUS (Net), 19.0% Blmbg:Aggregate, 8.0% HFRI FOF: Strategic Index, 6.0% Blmbg TIPS 1-10 Yr, 4.0% HFRI FOF: Conservative In, 3.0% Private Equity and 2.0% 3-month Treasury Bill.

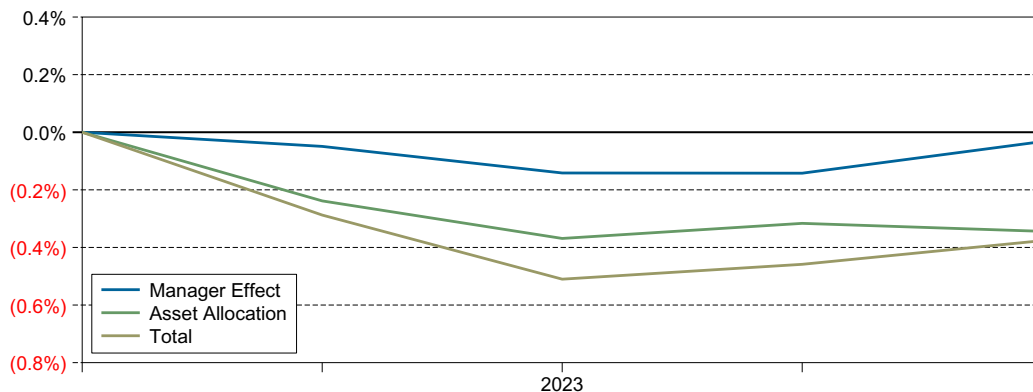
Cumulative Total Fund Relative Attribution - December 31, 2023

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

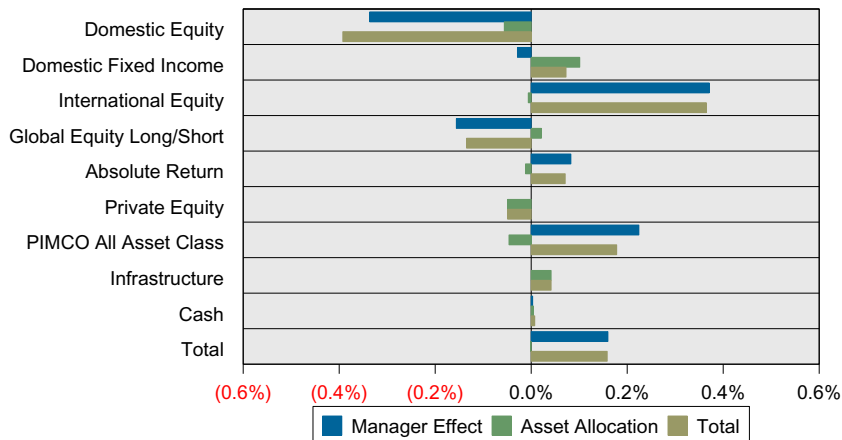
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	35%	35%	23.18%	25.96%	(0.89%)	(0.07%)	(0.97%)
Domestic Fixed Income	18%	19%	5.84%	5.53%	0.06%	0.09%	0.15%
International Equity	23%	23%	17.86%	15.62%	0.50%	(0.02%)	0.48%
Absolute Return	6%	4%	5.63%	5.65%	(0.00%)	(0.17%)	(0.17%)
Global Equity Long/Short	5%	8%	8.13%	8.13%	(0.01%)	0.15%	0.15%
Private Equity	5%	3%	1.39%	1.39%	0.00%	(0.25%)	(0.25%)
PIMCO All Asset Class	7%	6%	8.53%	4.36%	0.30%	(0.13%)	0.17%
Cash	1%	2%	5.28%	5.01%	0.00%	0.07%	0.07%
Total			14.46%	14.84%	+(0.03%)	+(0.34%)	(0.38%)

* Current Quarter Target = 35.0% Russell 3000 Index, 23.0% MSCI ACWI xUS (Net), 19.0% Blmbg:Aggregate, 8.0% HFRI FOF: Strategic Index, 6.0% Blmbg TIPS 1-10 Yr, 4.0% HFRI FOF: Conservative In, 3.0% Private Equity and 2.0% 3-month Treasury Bill.

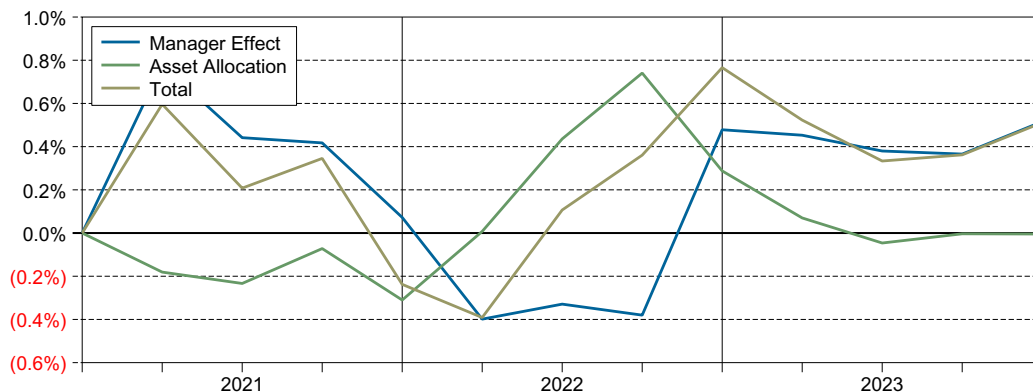
Cumulative Total Fund Relative Attribution - December 31, 2023

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

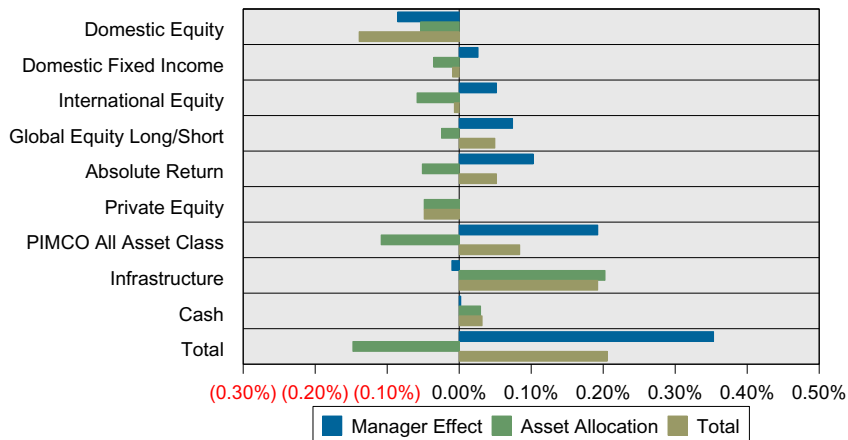
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	33%	34%	7.56%	8.54%	(0.34%)	(0.06%)	(0.39%)
Domestic Fixed Income	18%	19%	(3.44%)	(3.31%)	(0.03%)	0.10%	0.07%
International Equity	22%	23%	3.21%	1.55%	0.37%	(0.01%)	0.36%
Global Equity Long/Short	8%	8%	(1.06%)	0.48%	(0.16%)	0.02%	(0.13%)
Absolute Return	5%	4%	5.77%	4.40%	0.08%	(0.01%)	0.07%
Private Equity	5%	3%	14.92%	14.92%	0.00%	(0.05%)	(0.05%)
PIMCO All Asset Class	8%	6%	3.53%	0.73%	0.22%	(0.05%)	0.18%
Infrastructure	0%	0%	-	-	0.00%	0.04%	0.04%
Cash	1%	2%	2.43%	2.15%	0.00%	0.00%	0.01%
Total			3.82%	3.66%	+ 0.16%	+ (0.00%)	0.16%

* Current Quarter Target = 35.0% Russell 3000 Index, 23.0% MSCI ACWI xUS (Net), 19.0% Blmbg:Aggregate, 8.0% HFRI FOF: Strategic Index, 6.0% Blmbg TIPS 1-10 Yr, 4.0% HFRI FOF: Conservative In, 3.0% Private Equity and 2.0% 3-month Treasury Bill.

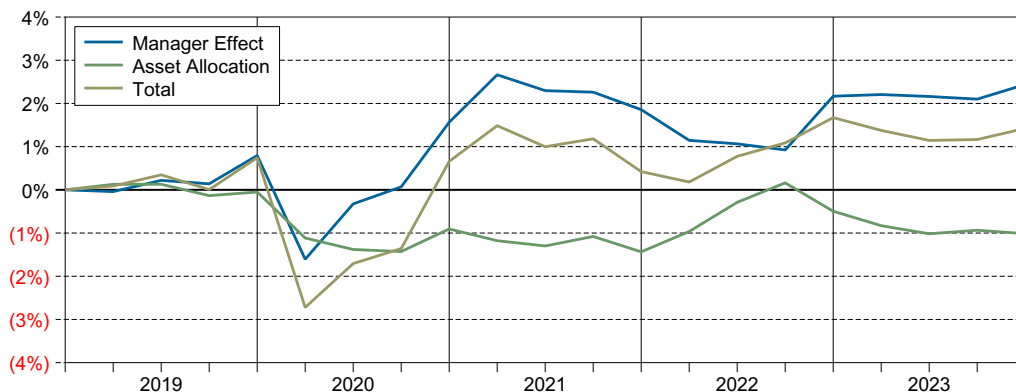
Cumulative Total Fund Relative Attribution - December 31, 2023

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	31%	31%	14.89%	15.16%	(0.09%)	(0.05%)	(0.14%)
Domestic Fixed Income	19%	20%	1.25%	1.10%	0.03%	(0.04%)	(0.01%)
International Equity	22%	23%	7.35%	7.08%	0.05%	(0.06%)	(0.01%)
Global Equity Long/Short	9%	8%	5.71%	5.14%	0.07%	(0.02%)	0.05%
Absolute Return	5%	4%	6.99%	5.19%	0.10%	(0.05%)	0.05%
Private Equity	4%	4%	15.45%	15.45%	0.00%	(0.05%)	(0.05%)
PIMCO All Asset Class	8%	6%	6.19%	3.43%	0.19%	(0.11%)	0.08%
Infrastructure	0%	3%	-	-	(0.01%)	0.20%	0.19%
Cash	1%	1%	2.10%	1.88%	0.00%	0.03%	0.03%
Total			8.57%	8.37%	+ 0.35%	+ (0.15%)	0.21%

* Current Quarter Target = 35.0% Russell 3000 Index, 23.0% MSCI ACWI xUS (Net), 19.0% Blmbg:Aggregate, 8.0% HFRI FOF: Strategic Index, 6.0% Blmbg TIPS 1-10 Yr, 4.0% HFRI FOF: Conservative In, 3.0% Private Equity and 2.0% 3-month Treasury Bill.

Total Fund Period Ended December 31, 2023

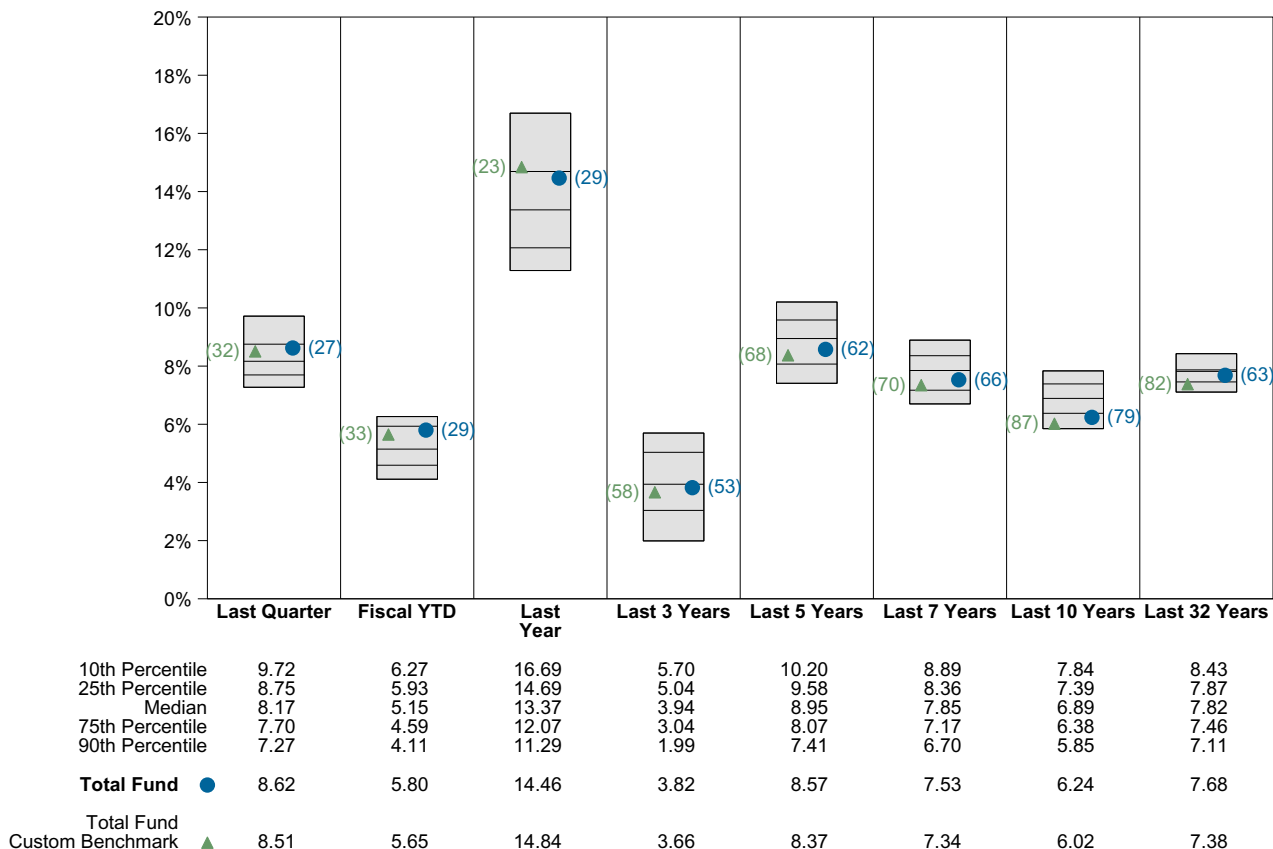
Quarterly Summary and Highlights

- Total Fund's portfolio posted a 8.62% return for the quarter placing it in the 27 percentile of the Callan Public Fund Spons- Mid (100M-1B) group for the quarter and in the 29 percentile for the last year.
- Total Fund's portfolio outperformed the Total Fund Custom Benchmark by 0.12% for the quarter and underperformed the Total Fund Custom Benchmark for the year by 0.38%.

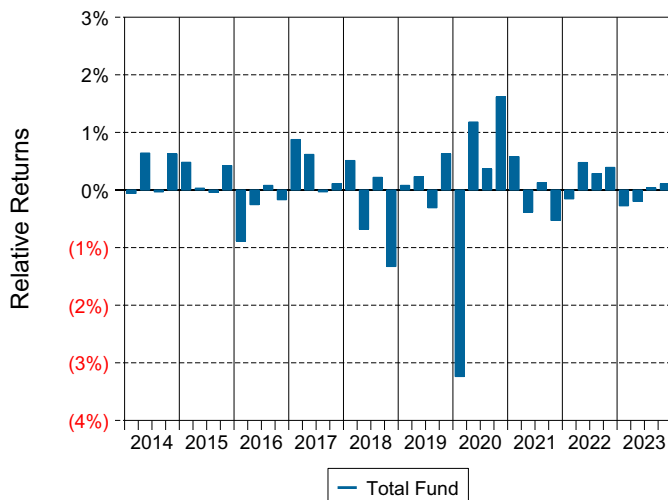
Quarterly Asset Growth

Beginning Market Value	\$471,543,041
Net New Investment	\$-9,893,172
Investment Gains/(Losses)	\$40,068,565
Ending Market Value	\$501,718,434

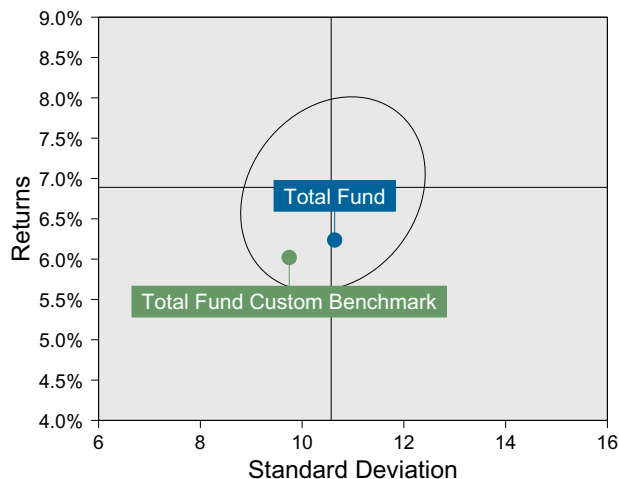
Performance vs Callan Public Fund Spons- Mid (100M-1B) (Gross)



Relative Returns vs Total Fund Custom Benchmark



Callan Public Fund Spons- Mid (100M-1B) (Gross) Annualized Ten Year Risk vs Return

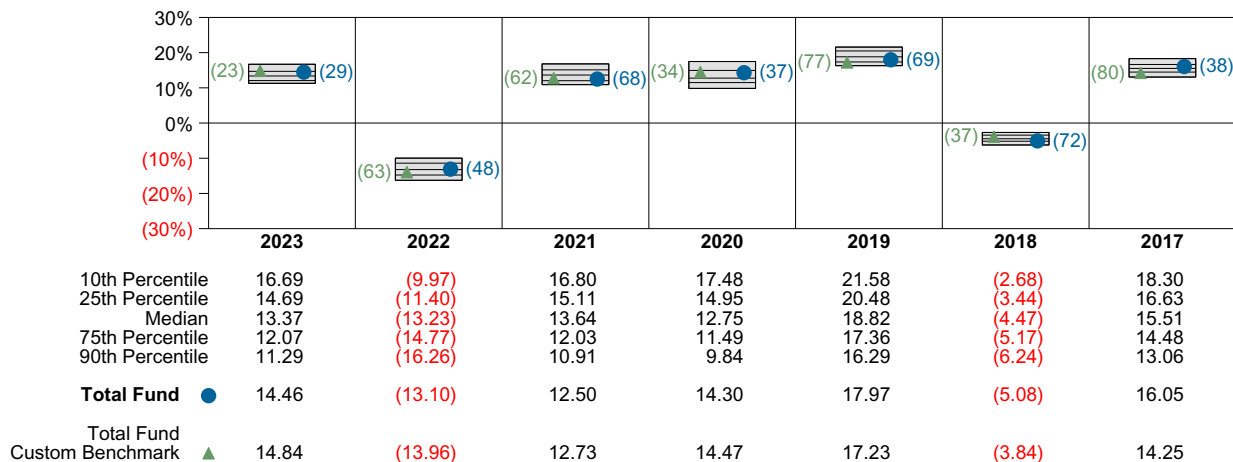


Total Fund Return Analysis Summary

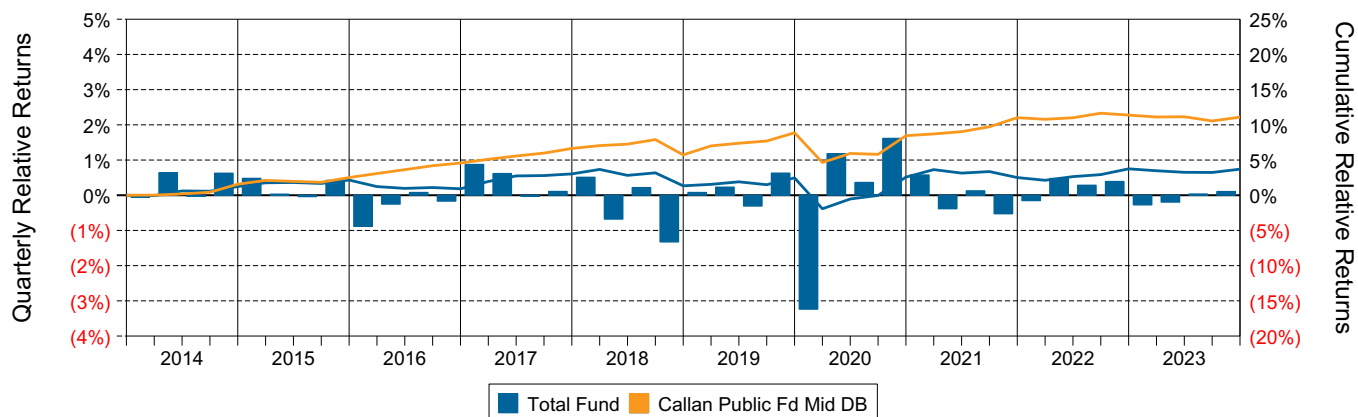
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

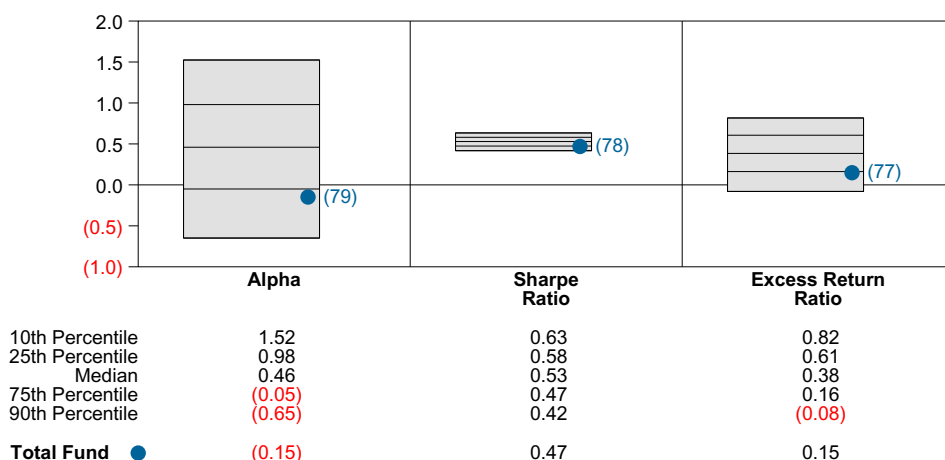
Performance vs Callan Public Fund Spons- Mid (100M-1B) (Gross)



Cumulative and Quarterly Relative Returns vs Total Fund Custom Benchmark



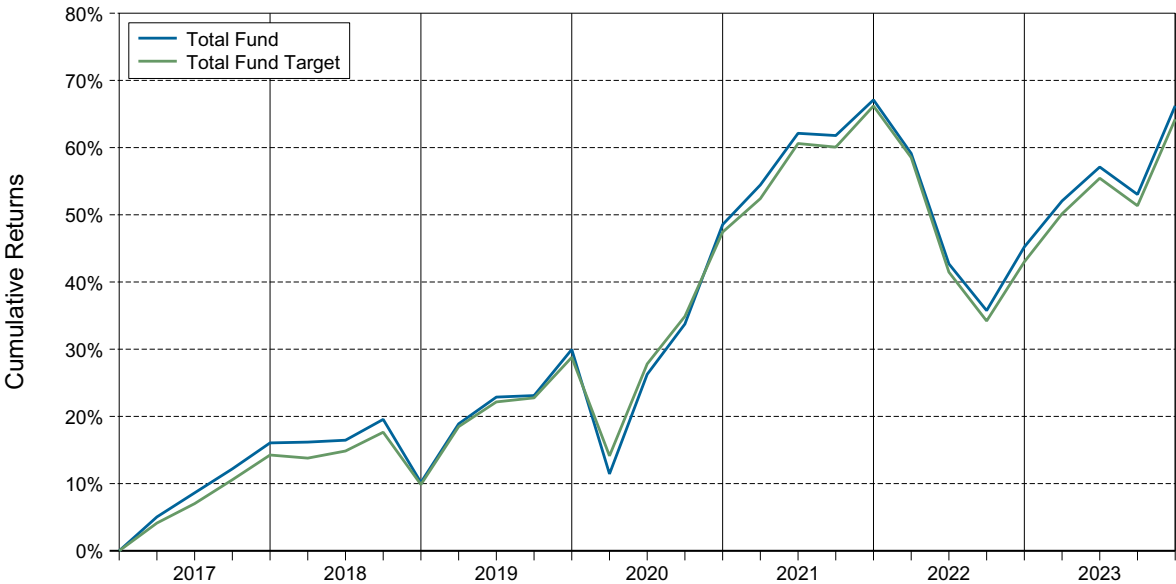
Risk Adjusted Return Measures vs Total Fund Custom Benchmark Rankings Against Callan Public Fund Spons- Mid (100M-1B) (Gross) Ten Years Ended December 31, 2023



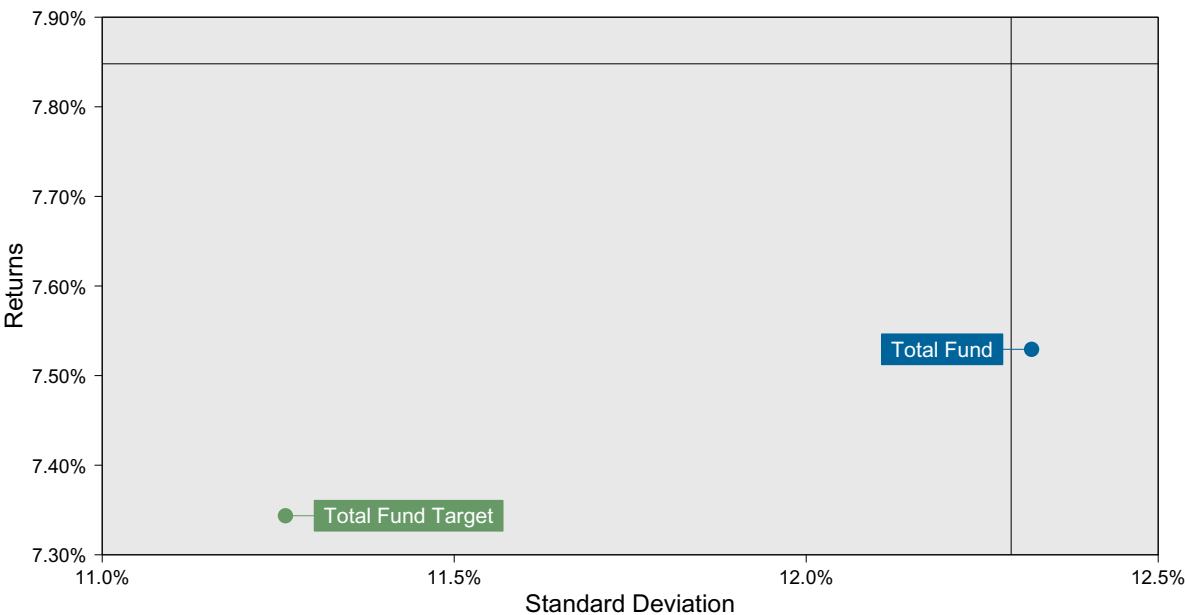
Cumulative Performance Relative to Target

The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the Callan Public Fund Spons- Mid (100M-1B).

Cumulative Returns Actual vs Target



Seven Year Annualized Risk vs Return



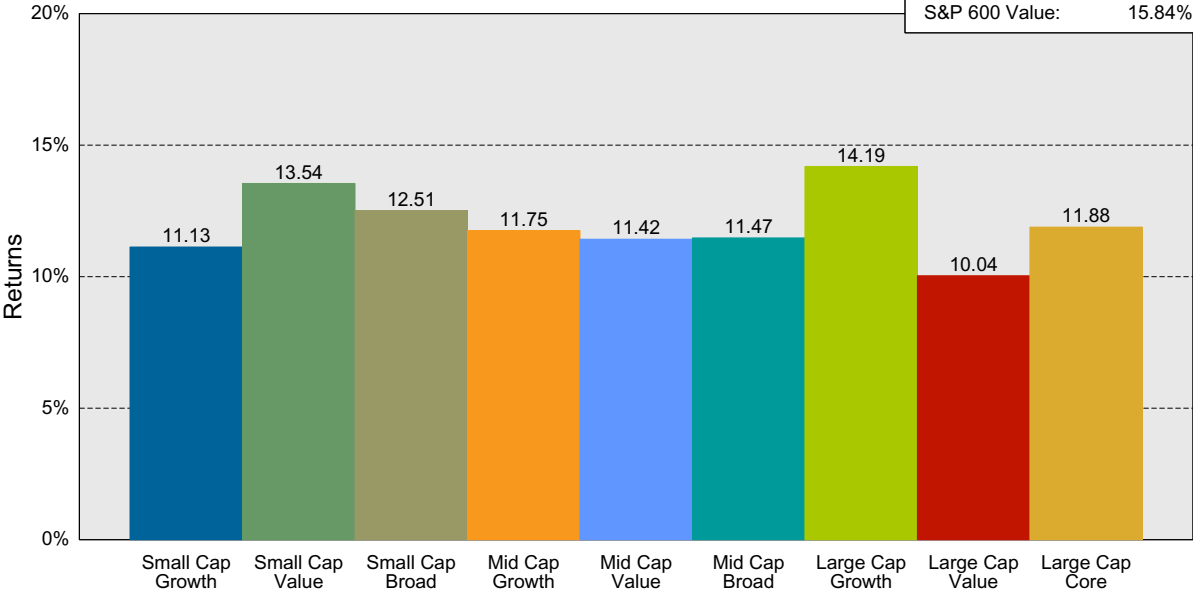
* Current Quarter Target = 35.0% Russell 3000 Index, 23.0% MSCI ACWI xUS (Net), 19.0% Blmbg:Aggregate, 8.0% HFRI FOF: Strategic Index, 6.0% Blmbg TIPS 1-10 Yr, 4.0% HFRI FOF: Conservative In, 3.0% Private Equity and 2.0% 3-month Treasury Bill.

Domestic Equity

Active Management Overview

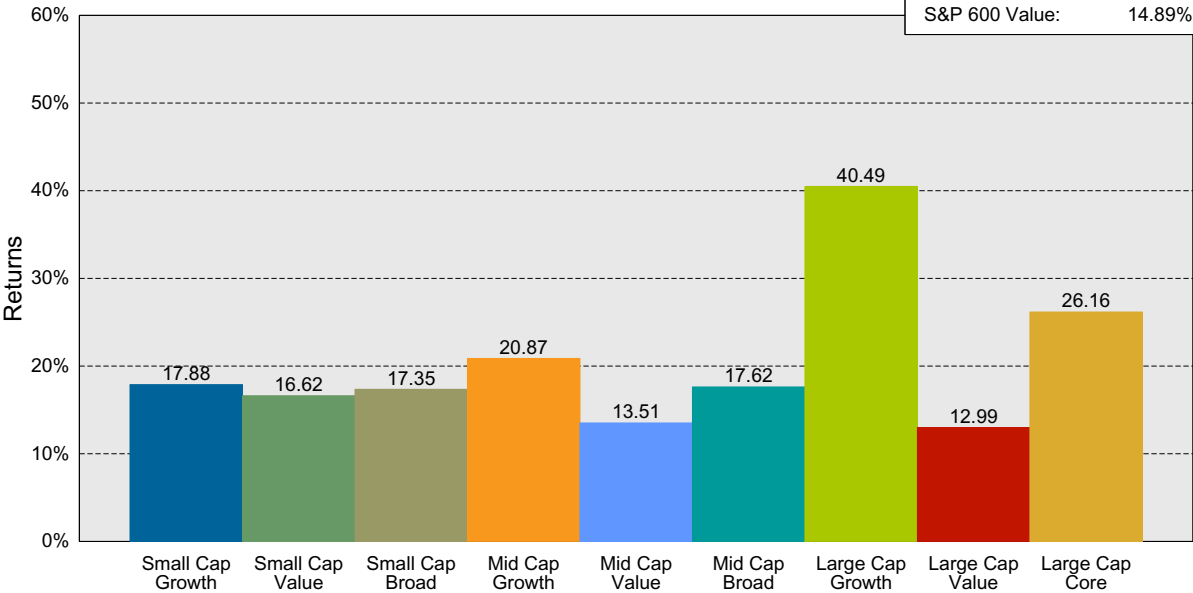
The S&P 500 Index approached a record high as the year closed. Of note, 2023 was the first year since 2012 that the S&P failed to reach a high-water mark. That said, the index was up an impressive 11.7% in 4Q and 26.3% for the year. The tech sector was the clear winner for the quarter and the year (+17.2%; +57.8%) while Energy (-6.9%; -1.3%) was the only sector to register both a 4Q and 2023 decline. Small caps (R2000: +14.0%; R1000: +12.0%) outperformed large caps for the quarter but lagged for the year (R2000: +16.9%; R1000: +26.5%). Growth outperformed value in 4Q (R1000 Growth: +14.2%; R1000 Value: +9.5%) and even more substantially for the year (R1000 Growth: +42.7%; R1000 Value: +11.5%). Index concentration continued to have a notable impact on returns in 4Q. The "Magnificent Seven," which comprise over 25% of the S&P 500, accounted for 76% of the 2023 return for the index. The index would have been up only about 10% for the year without these stocks, and the equal-weighted S&P 500 returned 11.9% in 4Q and 13.9% in 2023

Separate Account Style Group Median Returns for Quarter Ended December 31, 2023



S&P 500:	11.69%
S&P 500 Growth:	10.09%
S&P 500 Value:	13.63%
S&P Mid Cap:	11.67%
S&P 600:	15.12%
S&P 600 Growth:	14.28%
S&P 600 Value:	15.84%

Separate Account Style Group Median Returns for One Year Ended December 31, 2023



S&P 500:	26.29%
S&P 500 Growth:	30.03%
S&P 500 Value:	22.23%
S&P Mid Cap:	16.44%
S&P 600:	16.05%
S&P 600 Growth:	17.10%
S&P 600 Value:	14.89%

Domestic Equity Period Ended December 31, 2023

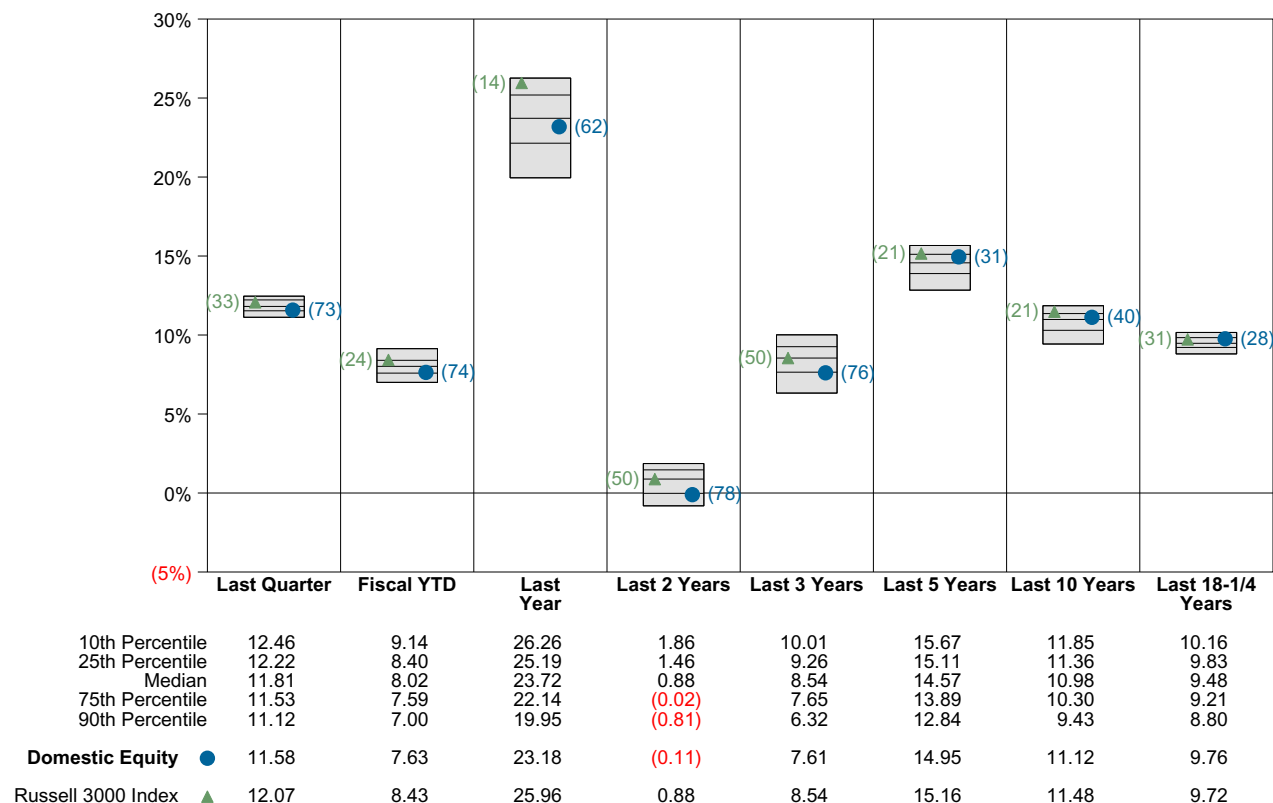
Composite Construction

The Pure US Equity composite is comprised of the BR Russell 1000 Index Non-Lendable, the LSV account and the Principal Dynamic Growth Fund.

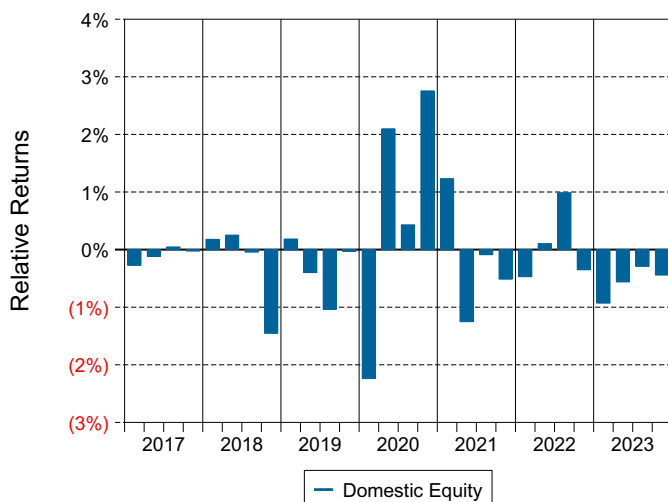
Quarterly Summary and Highlights

- Domestic Equity's portfolio posted a 11.58% return for the quarter placing it in the 73 percentile of the Public Fund - Domestic Equity group for the quarter and in the 62 percentile for the last year.
- Domestic Equity's portfolio underperformed the Russell 3000 Index by 0.49% for the quarter and underperformed the Russell 3000 Index for the year by 2.77%.

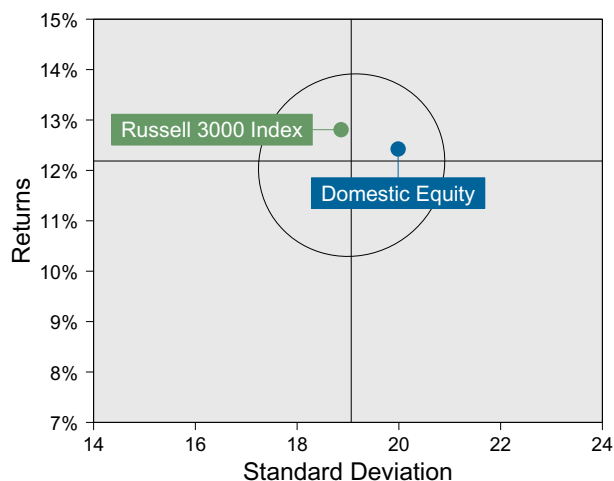
Performance vs Public Fund - Domestic Equity (Gross)



Relative Return vs Russell 3000 Index



Public Fund - Domestic Equity (Gross) Annualized Seven Year Risk vs Return

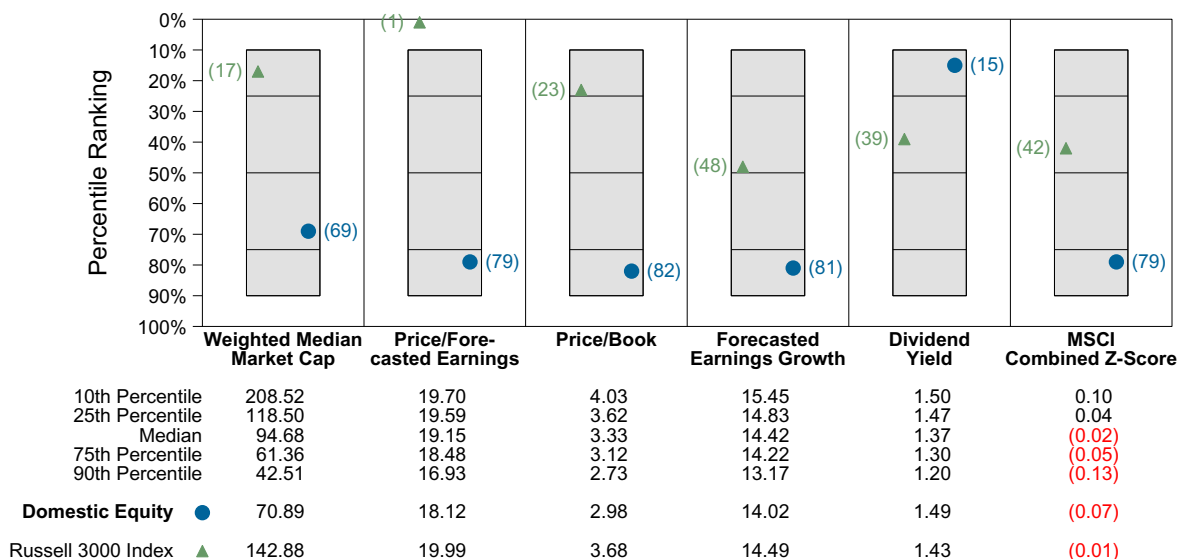


Domestic Equity Equity Characteristics Analysis Summary

Portfolio Characteristics

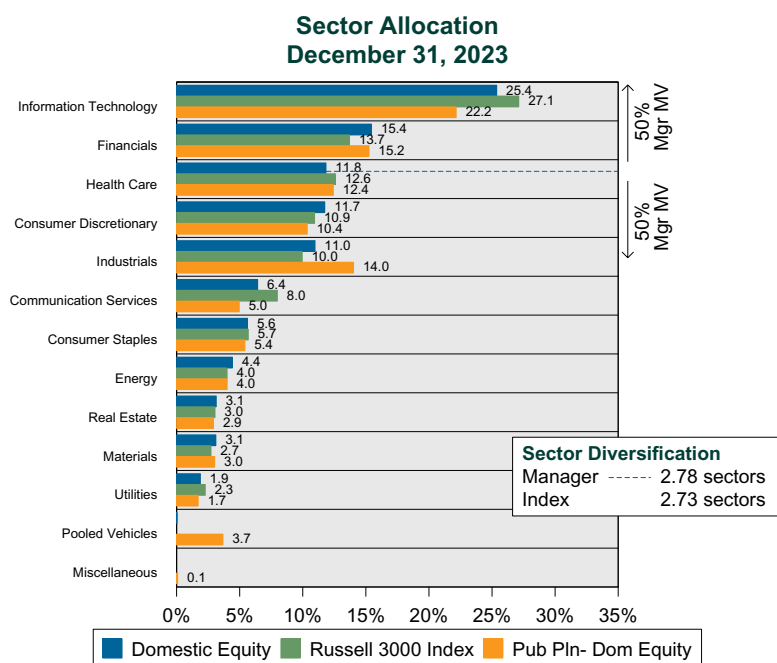
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Public Fund - Domestic Equity as of December 31, 2023

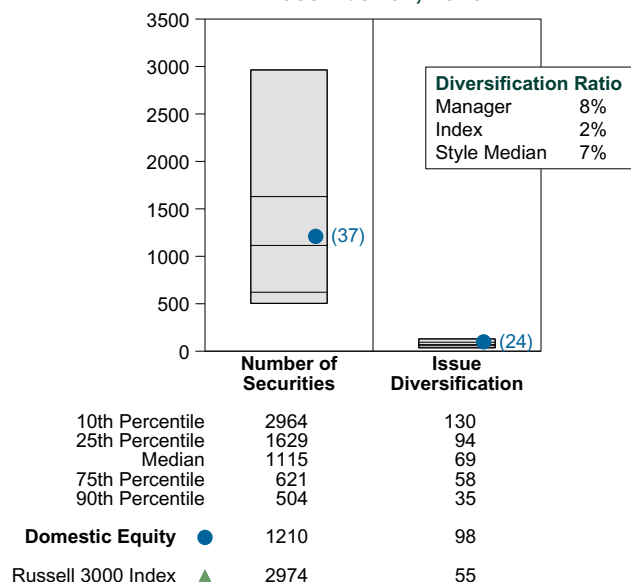


Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



Diversification December 31, 2023



Domestic Equity Top 10 Portfolio Holdings Characteristics as of December 31, 2023

10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Apple Inc	Information Technology	\$8,667,485	4.8%	12.60%	2994.37	28.67	0.50%	6.14%
Microsoft Corp	Information Technology	\$8,543,507	4.7%	19.34%	2794.83	31.10	0.80%	16.20%
Amazon.Com	Consumer Discretionary	\$4,179,304	2.3%	19.52%	1570.15	42.23	0.00%	7.27%
Nvidia Corp	Information Technology	\$3,592,712	2.0%	13.86%	1223.19	24.99	0.03%	102.46%
Alphabet Inc Cl A	Communication Services	\$2,534,682	1.4%	6.75%	826.69	20.89	0.00%	19.30%
Meta Platforms Inc	Communication Services	\$2,390,592	1.3%	17.90%	785.65	20.19	0.00%	32.00%
Alphabet Inc Cl C	Communication Services	\$2,160,012	1.2%	6.89%	806.82	21.27	0.00%	19.30%
Tesla Mtrs Inc	Consumer Discretionary	\$2,093,504	1.2%	(0.70)%	789.90	65.37	0.00%	1.78%
Berkshire Hathaway Inc Del Cl B New	Financials	\$1,994,634	1.1%	1.82%	466.66	19.71	0.00%	12.33%
Lilly (Eli) & Co	Health Care	\$1,504,517	0.8%	8.73%	553.37	47.09	0.77%	27.70%

10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Coinbase Global Inc -Class A	Financials	\$90,469	0.1%	131.66%	33.40	(346.45)	0.00%	-
Affirm Holdings Inc	Financials	\$33,185	0.0%	131.05%	11.90	(20.43)	0.00%	-
Rocky Brands Inc	Consumer Discretionary	\$54,324	0.0%	106.41%	0.22	10.34	2.06%	17.04%
Gap	Consumer Discretionary	\$12,408	0.0%	99.59%	7.75	17.50	2.87%	(23.64)%
Spirit Aerosystems Hldgs Inc Com Cl	Industrials	\$9,516	0.0%	96.91%	3.64	155.02	0.00%	(53.55)%
Office Pptys Income Tr Com Shs Ben I	Real Estate	\$13,893	0.0%	89.29%	0.36	(7.18)	13.66%	(8.10)%
Zimvie	Health Care	\$127,800	0.1%	88.60%	0.47	27.02	0.00%	(21.80)%
Karuna Therapeutics	Health Care	\$33,362	0.0%	87.19%	11.99	(28.34)	0.00%	-
Rocket Companies	Financials	\$4,432	0.0%	77.02%	1.93	45.53	0.00%	-
Macys Inc	Consumer Discretionary	\$16,953	0.0%	74.76%	5.51	7.24	3.29%	(11.34)%

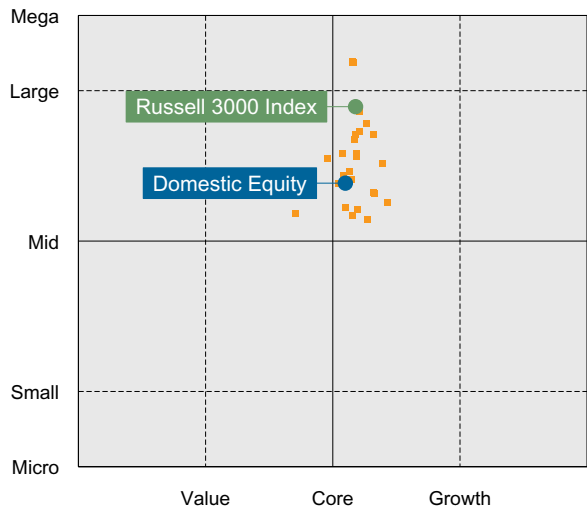
10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Eagle Pharmaceuticals Inc	Health Care	\$13,598	0.0%	(66.84)%	0.07	6.30	0.00%	14.29%
Chargepoint Holdings Inc Com Cl A	Industrials	\$1,524	0.0%	(52.91)%	0.98	(7.20)	0.00%	(38.40)%
Globant S A	Information Technology	\$367,242	0.2%	(47.93)%	10.10	35.76	0.00%	28.62%
Plug Power Inc	Industrials	\$6,821	0.0%	(40.84)%	2.72	(5.07)	0.00%	-
Maravai Lifesciences Hldgs Inc Cl A	Health Care	\$1,937	0.0%	(34.51)%	0.87	123.58	0.00%	(56.85)%
R1 Rcm Inc	Health Care	\$4,948	0.0%	(29.86)%	4.43	59.05	0.00%	(78.50)%
Computer Programs & Sys Inc	Health Care	\$25,760	0.0%	(29.73)%	0.16	6.09	0.00%	(9.55)%
Agilon Health Inc Com	Health Care	\$10,074	0.0%	(29.34)%	5.10	545.65	0.00%	-
Bill.Com Holdings, Inc.	Information Technology	\$26,106	0.0%	(24.85)%	8.71	40.43	0.00%	13.36%
Lucid Group Inc	Consumer Discretionary	\$9,165	0.0%	(24.68)%	9.64	(3.97)	0.00%	14.60%

Current Holdings Based Style Analysis
Domestic Equity
As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

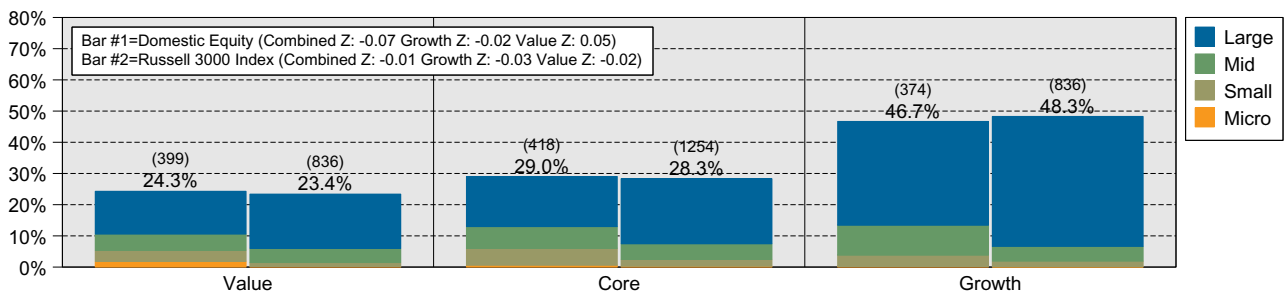
Style Map vs Pub Pln- Dom Equity
Holdings as of December 31, 2023



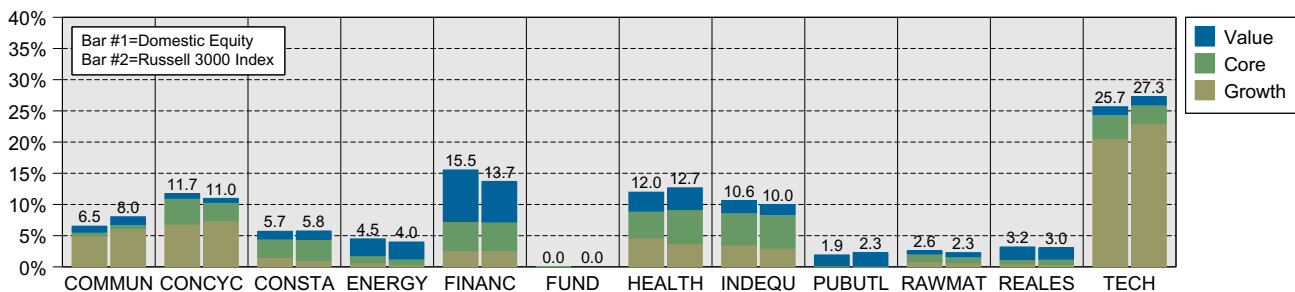
Style Exposure Matrix
Holdings as of December 31, 2023

	Value	Core	Growth	Total
Large	13.7% (95) 17.3% (96)	16.1% (93) 20.9% (96)	33.3% (99) 41.7% (100)	63.0% (287) 79.9% (292)
Mid	5.2% (165) 4.6% (166)	7.0% (192) 5.0% (207)	9.6% (191) 4.7% (213)	21.7% (548) 14.3% (586)
Small	3.5% (93) 1.3% (282)	5.4% (118) 2.2% (528)	3.6% (80) 1.8% (362)	12.5% (291) 5.3% (1172)
Micro	1.9% (46) 0.2% (292)	0.6% (15) 0.3% (423)	0.3% (4) 0.1% (161)	2.7% (65) 0.6% (876)
Total	24.3% (399) 23.4% (836)	29.0% (418) 28.3% (1254)	46.7% (374) 48.3% (836)	100.0% (1191) 100.0% (2926)

Combined Z-Score Style Distribution
Holdings as of December 31, 2023



Sector Weights Distribution
Holdings as of December 31, 2023



Russell 1000 Index Non-Lendable Period Ended December 31, 2023

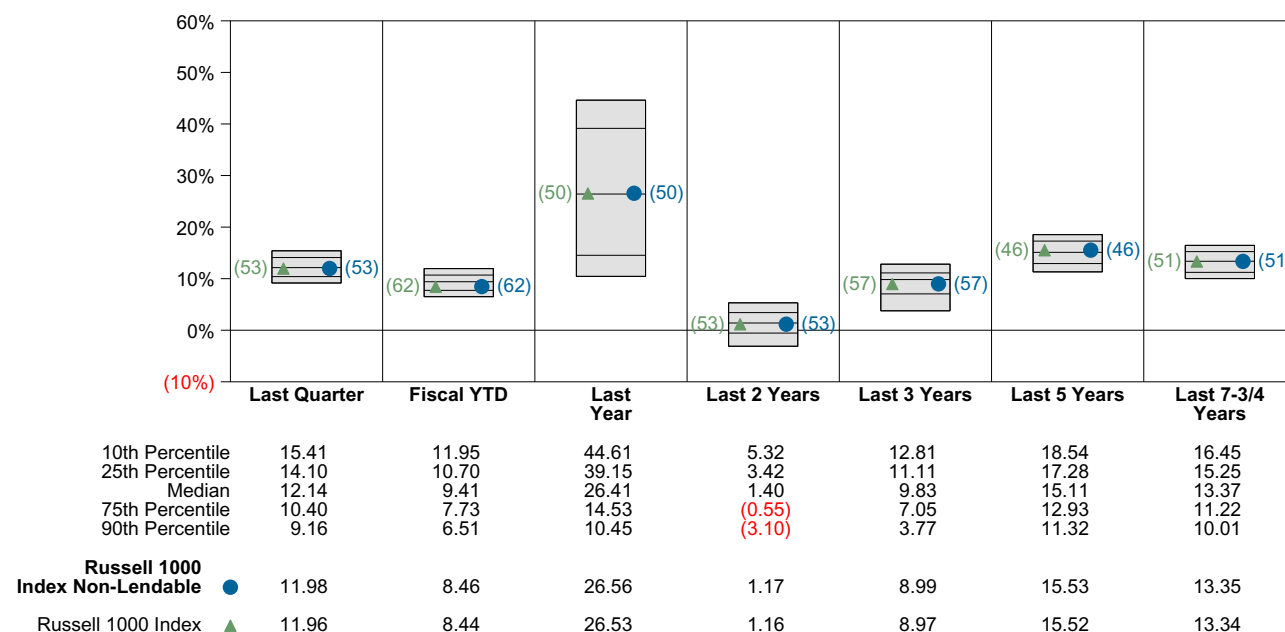
Investment Philosophy

As with all indexing strategies, the objective of the Russell 1000 Index Fund is to track the performance of its benchmark, the Russell 1000 Index. To manage the fund effectively, BlackRock focuses on three objectives: minimizing transaction costs, minimizing tracking error and minimizing risk. The Fund fully replicates the Russell 1000 Index, holding every stock in the index in its market capitalization weight to ensure close tracking and minimize transaction costs. As a fully replicating strategy, the only necessary trading is for dividend reinvestments, index changes, and to implement client contributions and redemptions, so costs can be controlled. BlackRock produces significant economies of scale for further minimizing transaction costs to clients, as the team has the ability to "cross" a majority of trades among funds tracking related US equity security universes.

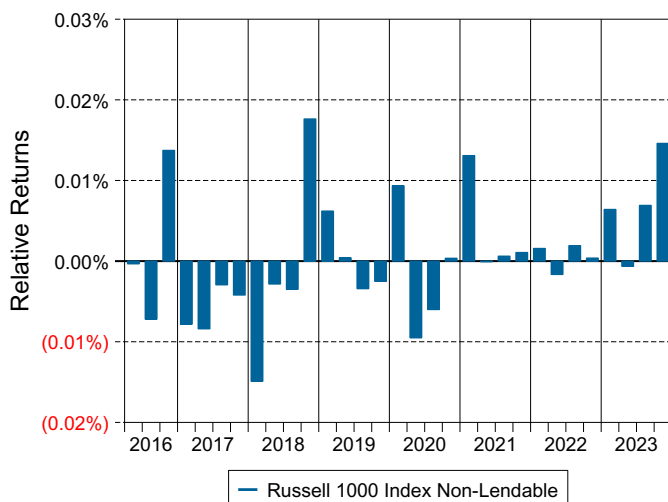
Quarterly Summary and Highlights

- Russell 1000 Index Non-Lendable's portfolio posted a 11.98% return for the quarter placing it in the 53 percentile of the Callan Large Capitalization group for the quarter and in the 50 percentile for the last year.
- Russell 1000 Index Non-Lendable's portfolio outperformed the Russell 1000 Index by 0.02% for the quarter and outperformed the Russell 1000 Index for the year by 0.03%.

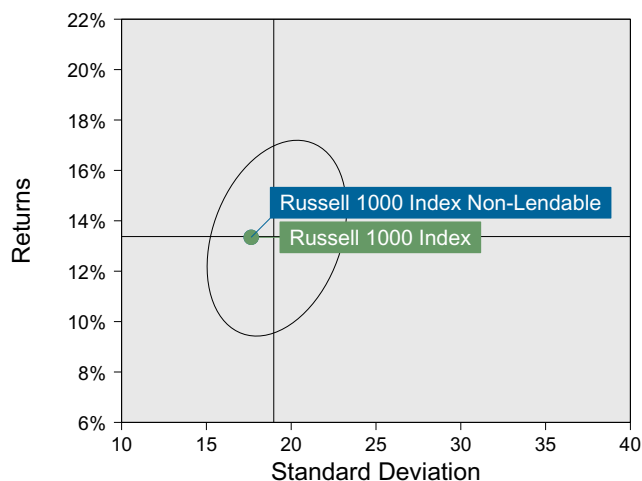
Performance vs Callan Large Capitalization (Gross)



Relative Return vs Russell 1000 Index



Callan Large Capitalization (Gross) Annualized Seven and Three-Quarter Year Risk vs Return

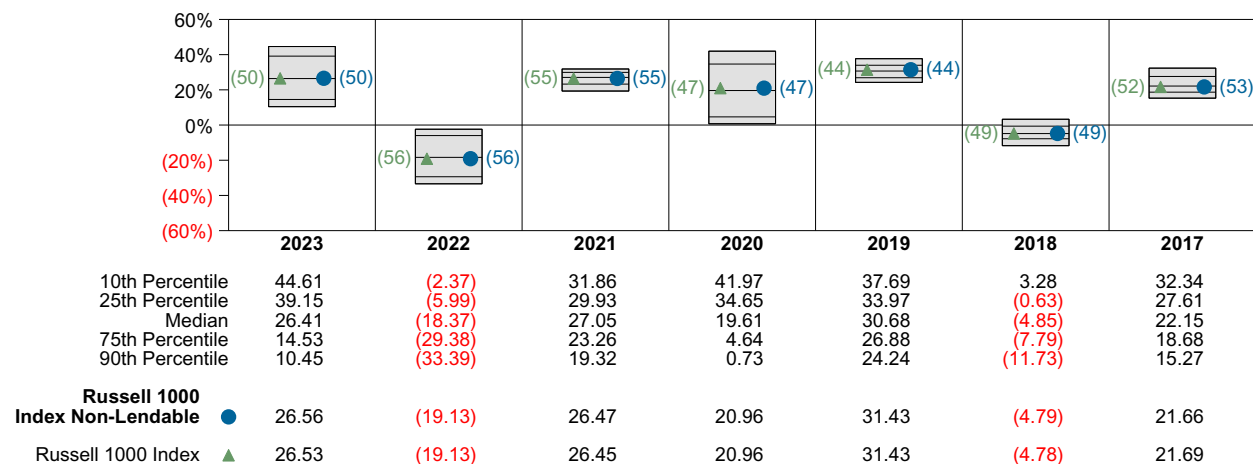


Russell 1000 Index Non-Lendable Return Analysis Summary

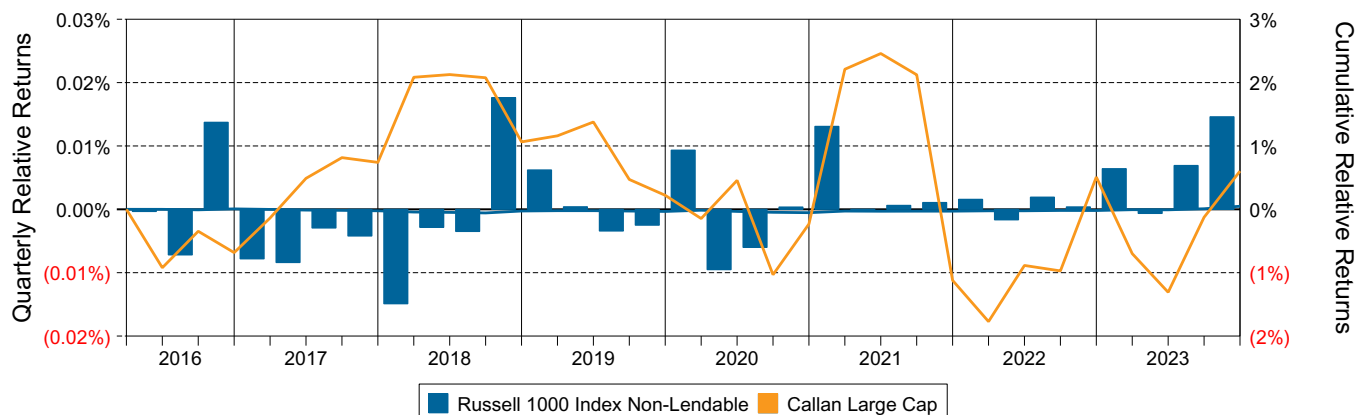
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

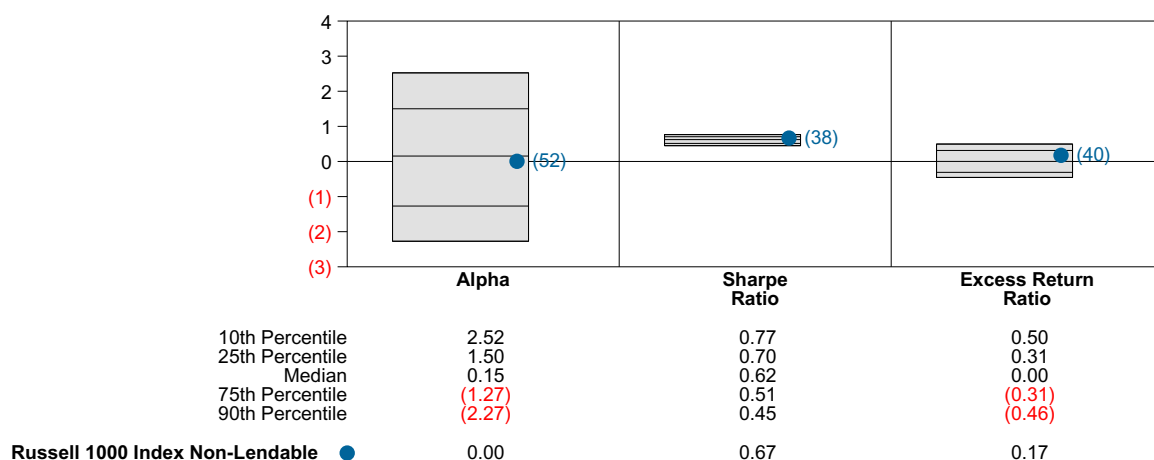
Performance vs Callan Large Capitalization (Gross)



Cumulative and Quarterly Relative Returns vs Russell 1000 Index



Risk Adjusted Return Measures vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Seven and Three-Quarter Years Ended December 31, 2023

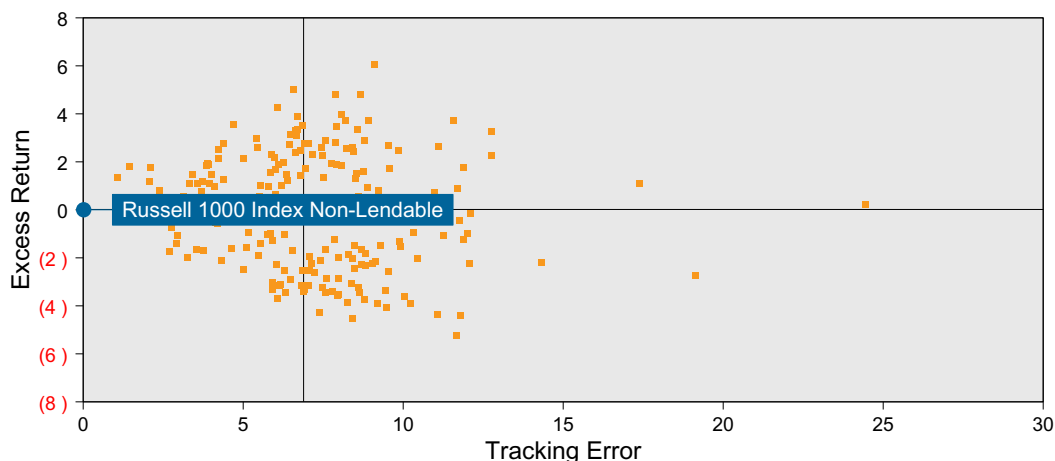


Russell 1000 Index Non-Lendable Risk Analysis Summary

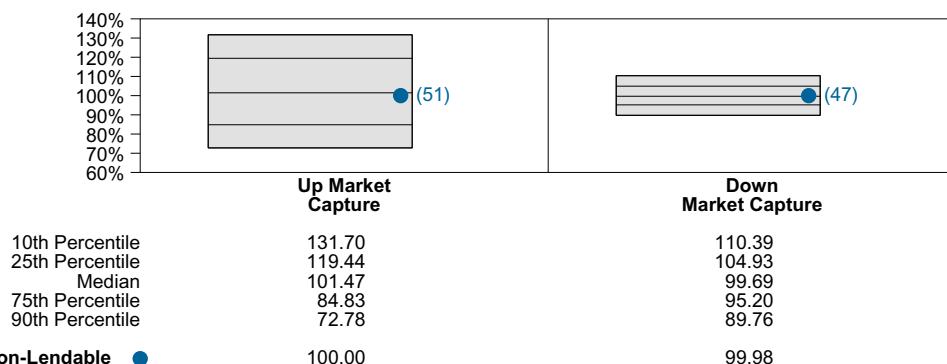
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

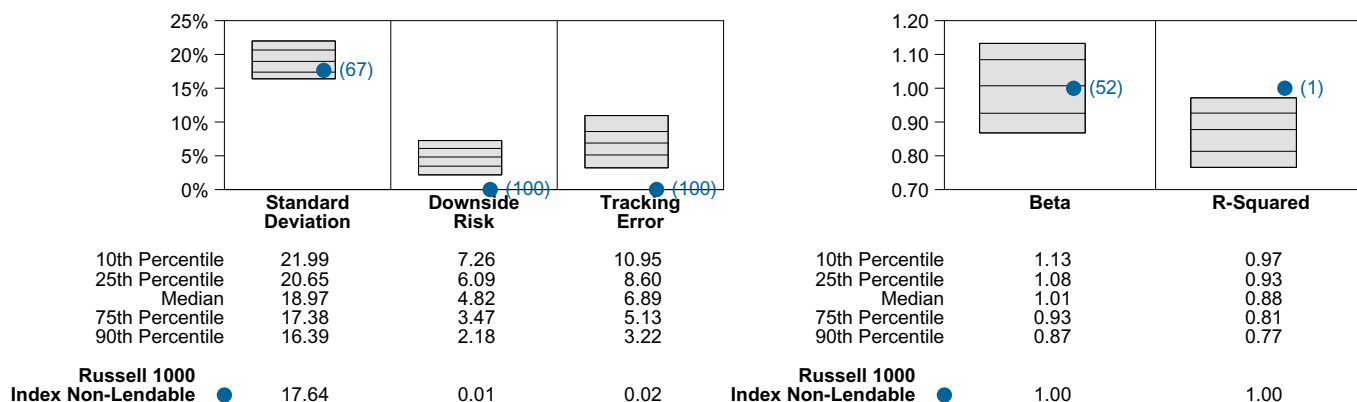
Risk Analysis vs Callan Large Capitalization (Gross) Seven and Three-Quarter Years Ended December 31, 2023



Market Capture vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Seven and Three-Quarter Years Ended December 31, 2023



Risk Statistics Rankings vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Seven and Three-Quarter Years Ended December 31, 2023

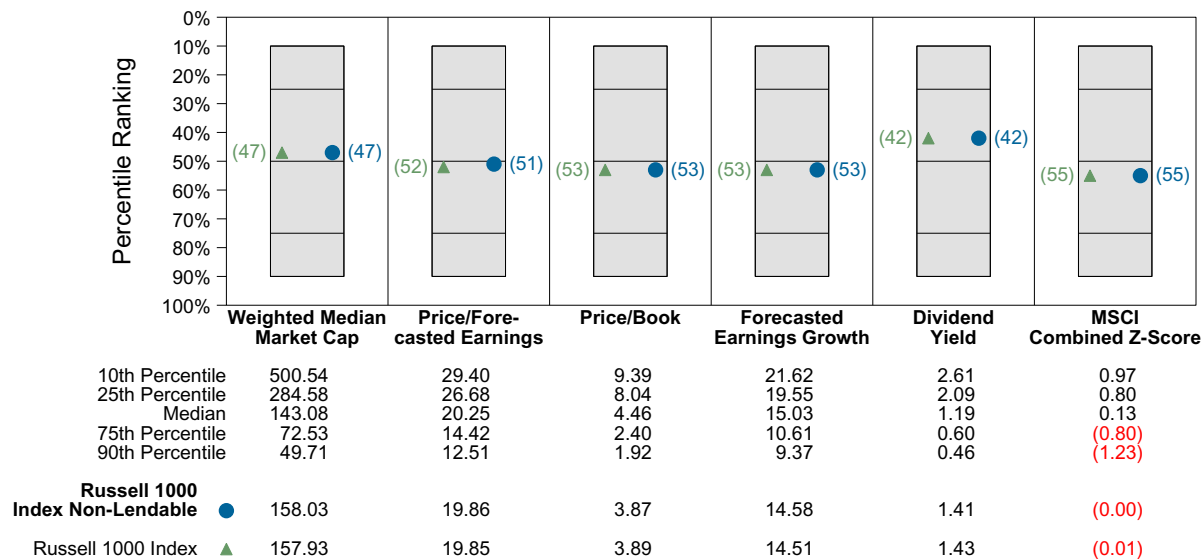


Russell 1000 Index Non-Lendable Equity Characteristics Analysis Summary

Portfolio Characteristics

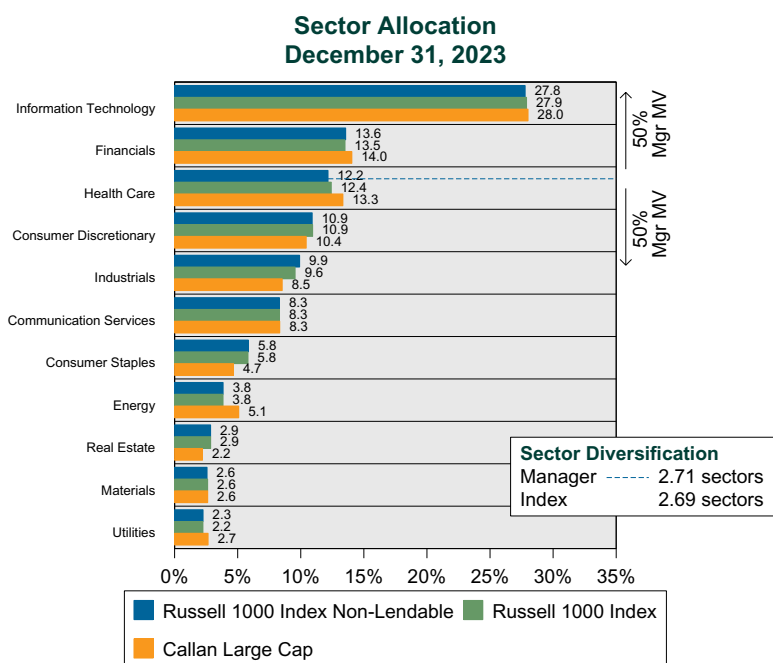
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Capitalization as of December 31, 2023

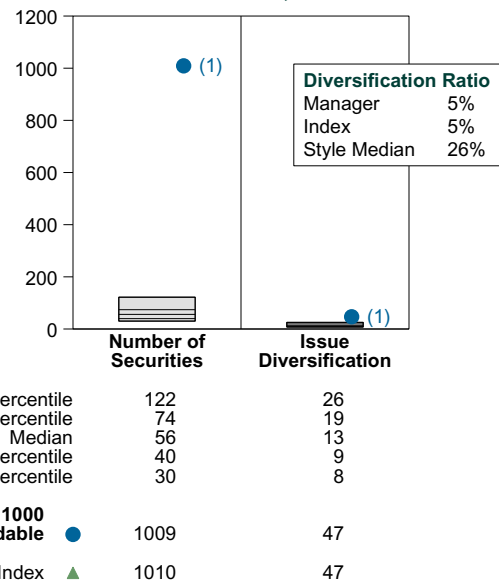


Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



Diversification December 31, 2023



Russell 1000 Index Non-Lendable Top 10 Portfolio Holdings Characteristics as of December 31, 2023

10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/ Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Apple Inc	Information Technology	\$8,667,485	6.5%	12.60%	2994.37	28.67	0.50%	6.14%
Microsoft Corp	Information Technology	\$8,543,507	6.4%	19.34%	2794.83	31.10	0.80%	16.20%
Amazon.Com	Consumer Discretionary	\$4,179,304	3.1%	19.52%	1570.15	42.23	0.00%	7.27%
Nvidia Corp	Information Technology	\$3,592,712	2.7%	13.86%	1223.19	24.99	0.03%	102.46%
Alphabet Inc Cl A	Communication Services	\$2,534,682	1.9%	6.75%	826.69	20.89	0.00%	19.30%
Meta Platforms Inc	Communication Services	\$2,390,592	1.8%	17.90%	785.65	20.19	0.00%	32.00%
Alphabet Inc Cl C	Communication Services	\$2,160,012	1.6%	6.89%	806.82	21.27	0.00%	19.30%
Tesla Mtrs Inc	Consumer Discretionary	\$2,093,504	1.6%	(0.70)%	789.90	65.37	0.00%	1.78%
Berkshire Hathaway Inc Del Cl B New	Financials	\$1,994,634	1.5%	1.82%	466.66	19.71	0.00%	12.33%
Lilly (Eli) & Co	Health Care	\$1,504,517	1.1%	8.73%	553.37	47.09	0.77%	27.70%

10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/ Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Coinbase Global Inc -Class A	Financials	\$90,469	0.1%	131.66%	33.40	(346.45)	0.00%	-
Affirm Holdings Inc	Financials	\$33,185	0.0%	131.05%	11.90	(20.43)	0.00%	-
Gap	Consumer Discretionary	\$12,408	0.0%	99.59%	7.75	17.50	2.87%	(23.64)%
Spirit Aerosystems Hldgs Inc Com Cl	Industrials	\$9,516	0.0%	96.91%	3.64	155.02	0.00%	(53.55)%
Karuna Therapeutics	Health Care	\$33,362	0.0%	87.19%	11.99	(28.34)	0.00%	-
Rocket Companies	Financials	\$4,432	0.0%	77.02%	1.93	45.53	0.00%	-
Macys Inc	Consumer Discretionary	\$16,953	0.0%	74.76%	5.51	7.24	3.29%	(11.34)%
Square Inc Cl A	Financials	\$128,842	0.1%	74.76%	42.82	25.29	0.00%	68.96%
Sentinelone A	Information Technology	\$19,257	0.0%	62.74%	6.83	946.21	0.00%	-
Frontier Communications Parent	Communication Services	\$19,537	0.0%	61.93%	6.23	(49.40)	0.00%	-

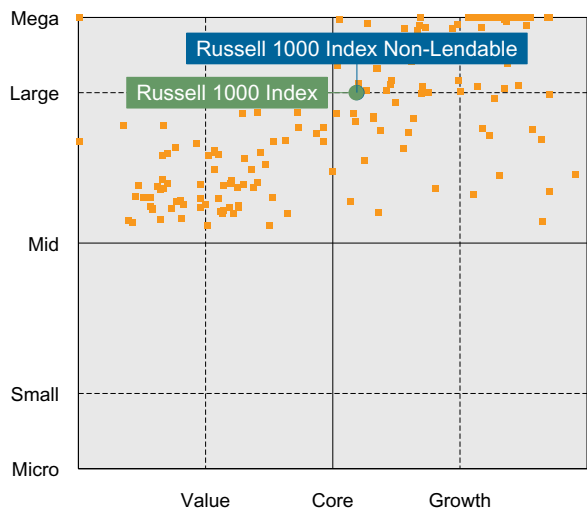
10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/ Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Chargepoint Holdings Inc Com Cl A	Industrials	\$1,524	0.0%	(52.91)%	0.98	(7.20)	0.00%	(38.40)%
Globant S A	Information Technology	\$28,541	0.0%	(47.93)%	10.10	35.76	0.00%	28.62%
Plug Power Inc	Industrials	\$6,821	0.0%	(40.84)%	2.72	(5.07)	0.00%	-
Maravai Lifesciences Hldgs Inc Cl A	Health Care	\$1,937	0.0%	(34.51)%	0.87	123.58	0.00%	(56.85)%
R1 Rcm Inc	Health Care	\$4,948	0.0%	(29.86)%	4.43	59.05	0.00%	(78.50)%
Agilon Health Inc Com	Health Care	\$10,074	0.0%	(29.34)%	5.10	545.65	0.00%	-
Bill.Com Holdings, Inc.	Information Technology	\$26,106	0.0%	(24.85)%	8.71	40.43	0.00%	13.36%
Lucid Group Inc	Consumer Discretionary	\$9,165	0.0%	(24.68)%	9.64	(3.97)	0.00%	14.60%
Amc Entmt Hldgs Inc Cl A New	Communication Services	\$3,647	0.0%	(23.45)%	1.21	(3.83)	0.00%	6.01%
Petco Health & Wellness Co Inc Cl A	Consumer Discretionary	\$1,033	0.0%	(22.72)%	0.73	31.60	0.00%	(31.63)%

Current Holdings Based Style Analysis
Russell 1000 Index Non-Lendable
As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

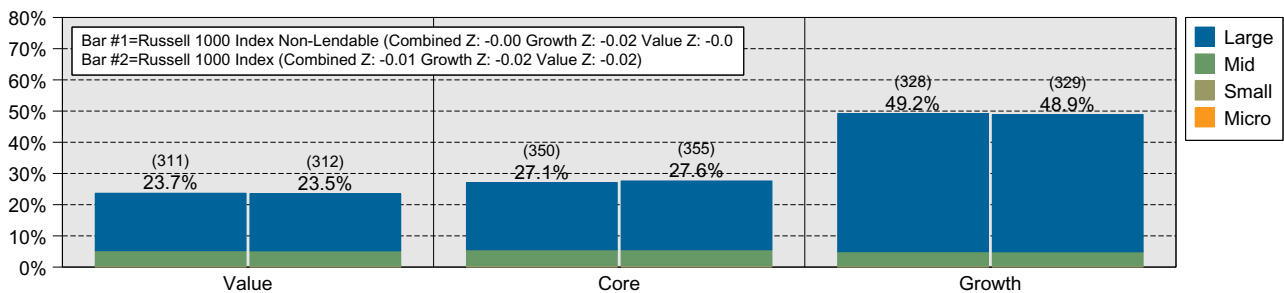
Style Map vs Callan Large Cap Holdings as of December 31, 2023



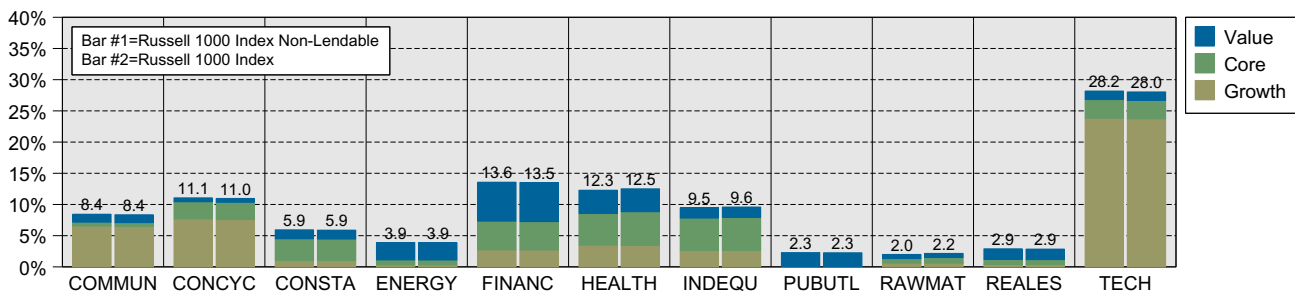
Style Exposure Matrix Holdings as of December 31, 2023

	Value	Core	Growth	Total
Large	18.4% (95) 18.3% (96)	21.6% (93) 22.0% (96)	44.3% (99) 44.0% (100)	84.3% (287) 84.4% (292)
Mid	4.9% (162) 4.8% (162)	5.0% (186) 5.0% (187)	4.5% (180) 4.5% (180)	14.4% (528) 14.3% (529)
Small	0.4% (54) 0.4% (54)	0.5% (71) 0.5% (72)	0.4% (49) 0.4% (49)	1.3% (174) 1.3% (175)
Micro	0.0% (0) 0.0% (0)	0.0% (0) 0.0% (0)	0.0% (0) 0.0% (0)	0.0% (0) 0.0% (0)
Total	23.7% (311) 23.5% (312)	27.1% (350) 27.6% (355)	49.2% (328) 48.9% (329)	100.0% (989) 100.0% (996)

Combined Z-Score Style Distribution Holdings as of December 31, 2023



Sector Weights Distribution Holdings as of December 31, 2023



LSV

Period Ended December 31, 2023

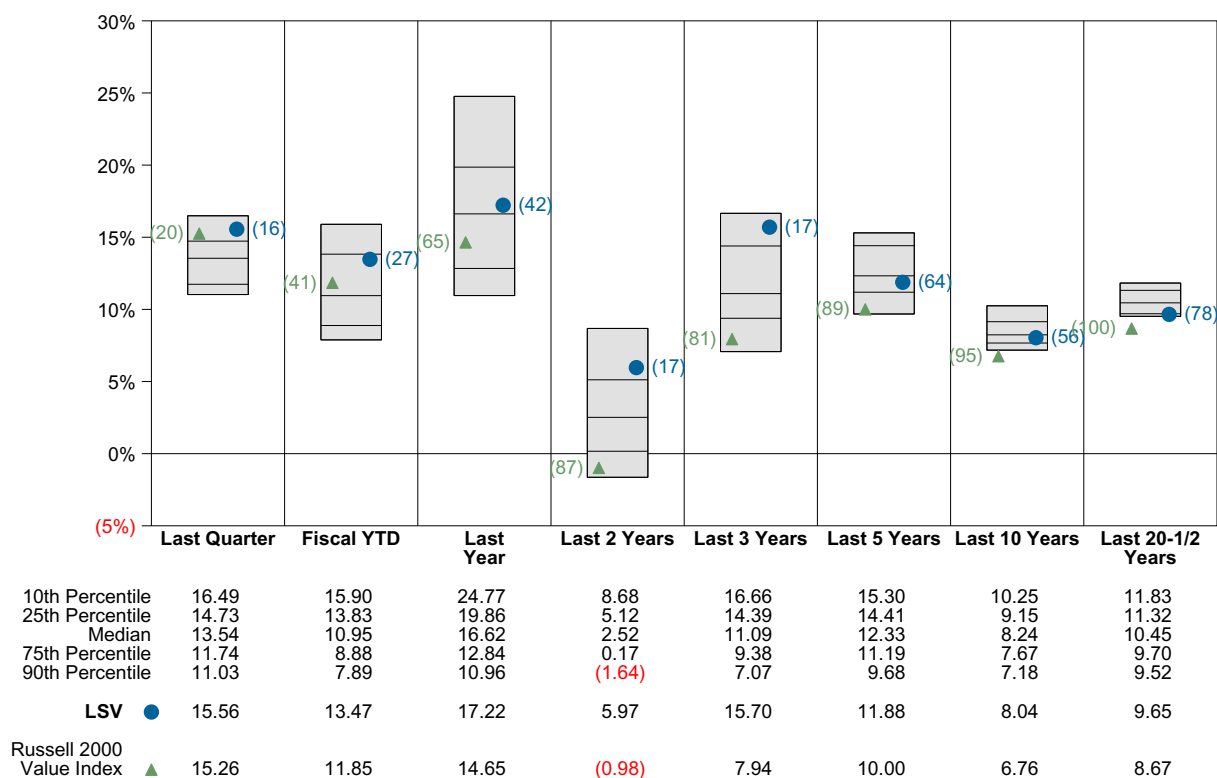
Investment Philosophy

LSV Asset Management seeks to systematically exploit the judgmental biases and behavioral weaknesses that influence the market. The strategy's primary emphasis is the use of quantitative techniques to select individual securities in what would be considered a bottom-up approach.

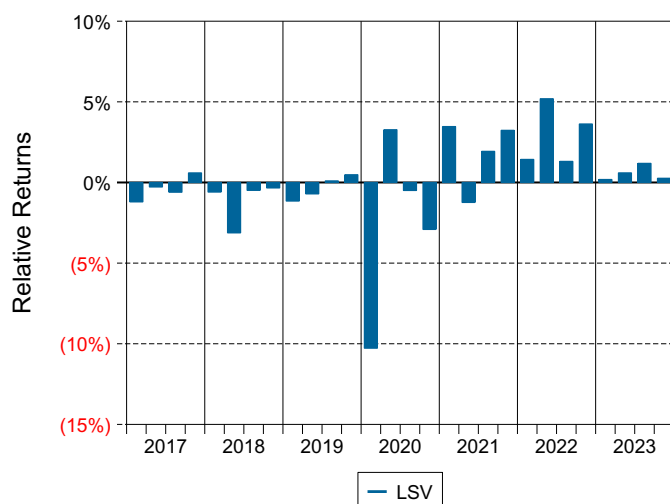
Quarterly Summary and Highlights

- LSV's portfolio posted a 15.56% return for the quarter placing it in the 16 percentile of the Callan Small Cap Value group for the quarter and in the 42 percentile for the last year.
- LSV's portfolio outperformed the Russell 2000 Value Index by 0.30% for the quarter and outperformed the Russell 2000 Value Index for the year by 2.57%.

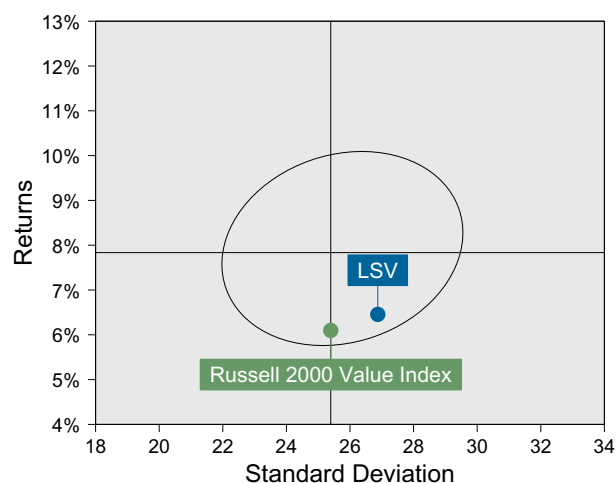
Performance vs Callan Small Cap Value (Gross)



Relative Return vs Russell 2000 Value Index



Callan Small Cap Value (Gross) Annualized Seven Year Risk vs Return

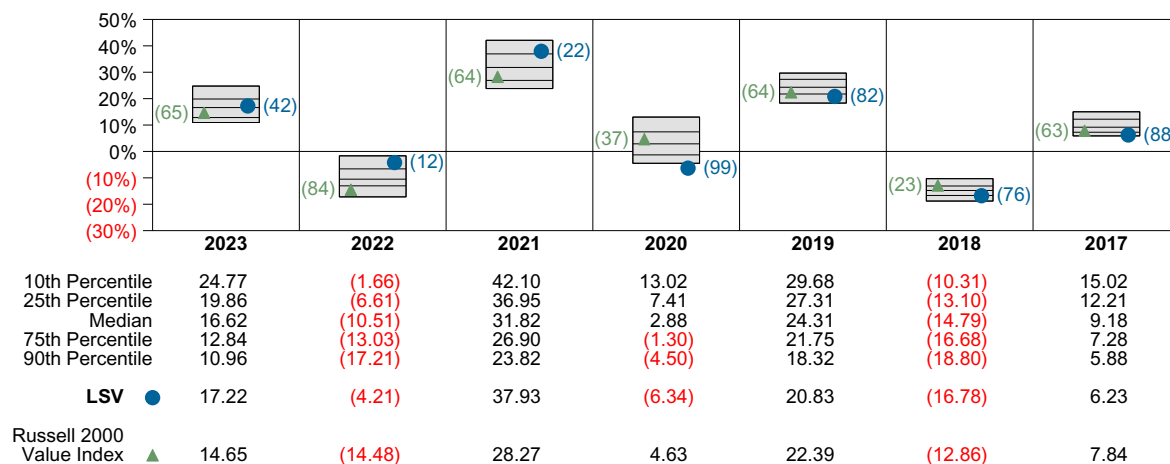


LSV Return Analysis Summary

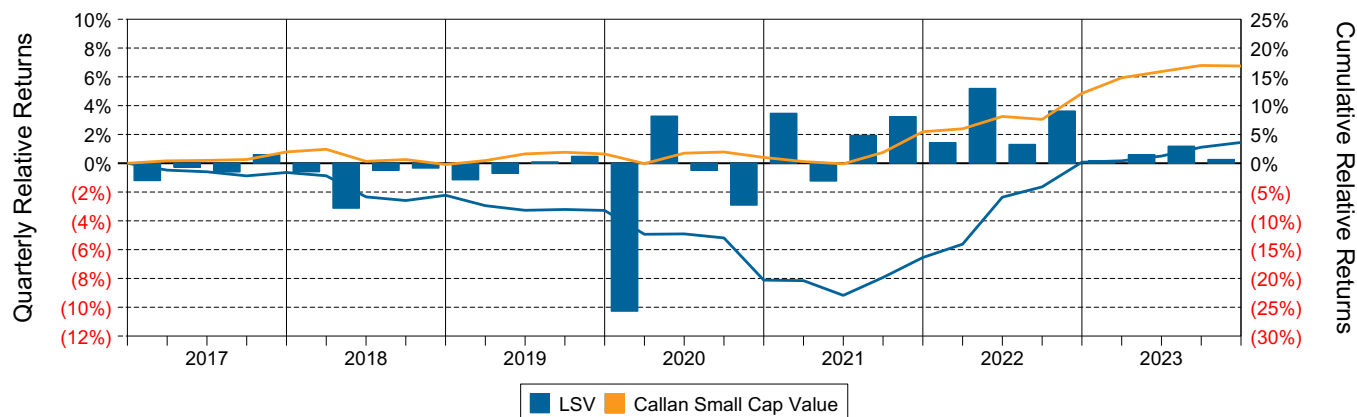
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

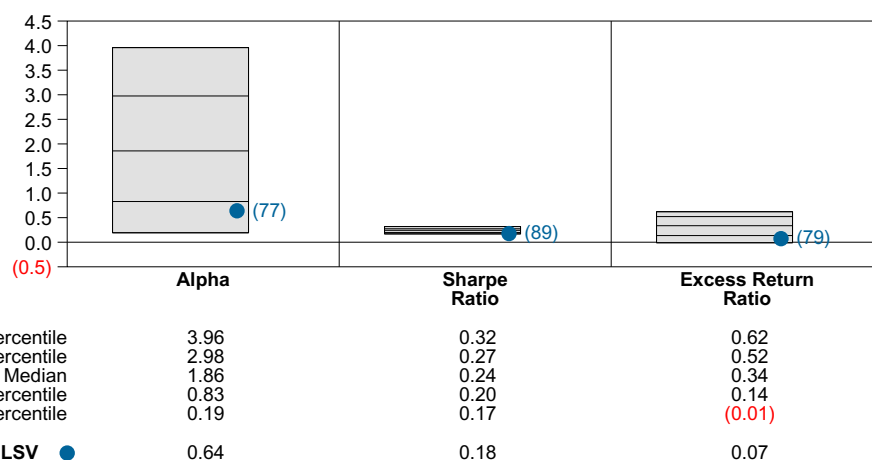
Performance vs Callan Small Cap Value (Gross)



Cumulative and Quarterly Relative Returns vs Russell 2000 Value Index



Risk Adjusted Return Measures vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Seven Years Ended December 31, 2023

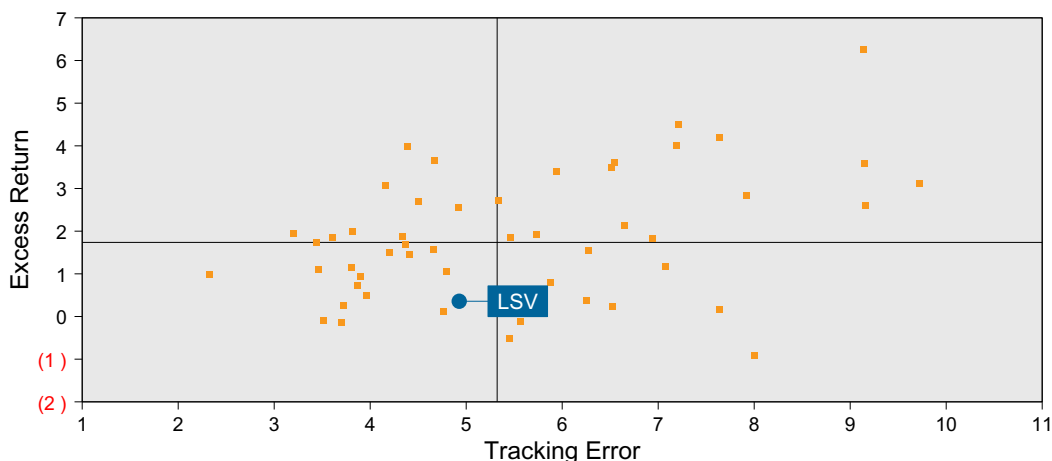


LSV Risk Analysis Summary

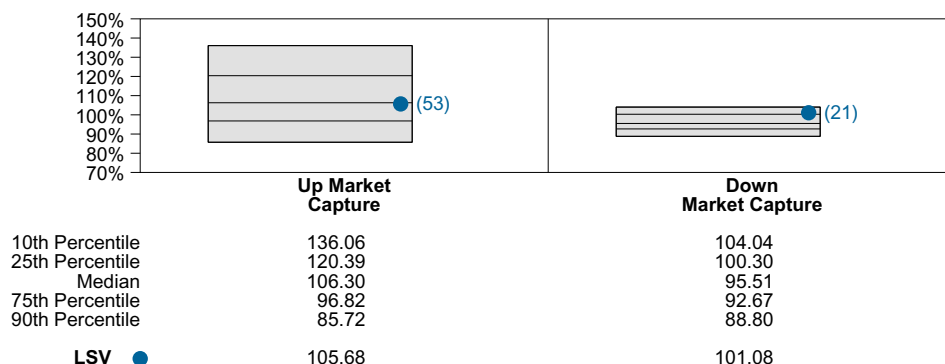
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

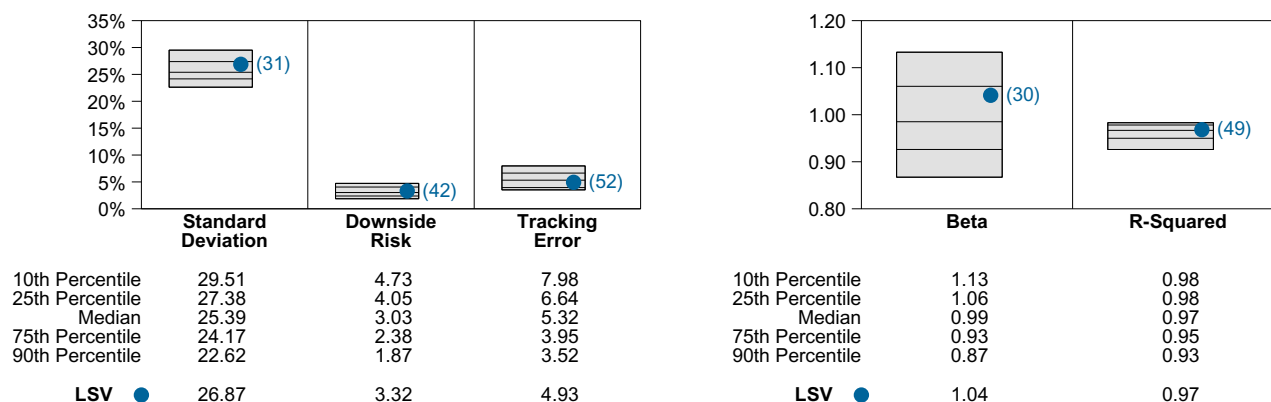
Risk Analysis vs Callan Small Cap Value (Gross) Seven Years Ended December 31, 2023



Market Capture vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Seven Years Ended December 31, 2023



Risk Statistics Rankings vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Seven Years Ended December 31, 2023



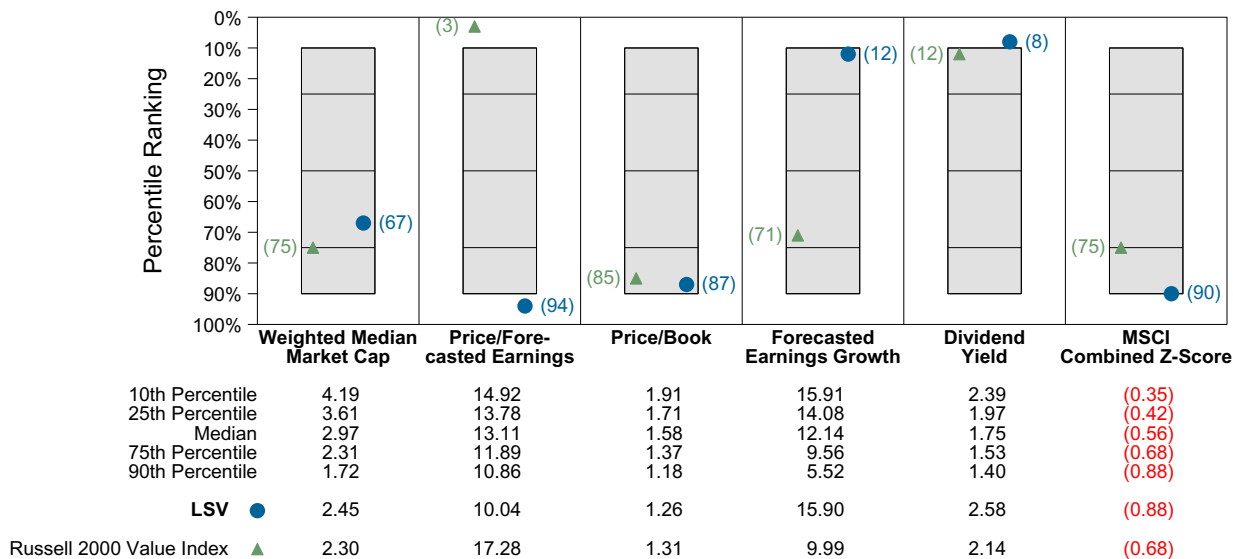
LSV

Equity Characteristics Analysis Summary

Portfolio Characteristics

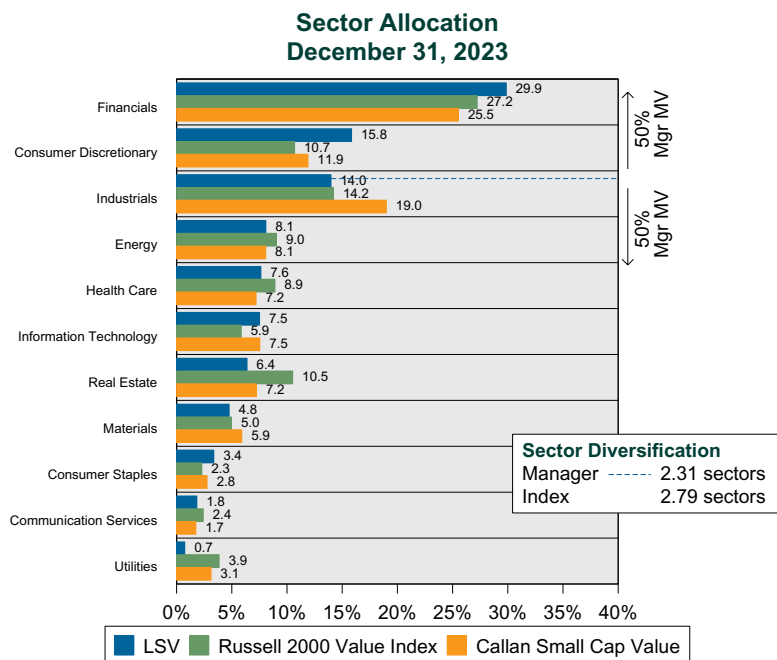
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Cap Value as of December 31, 2023

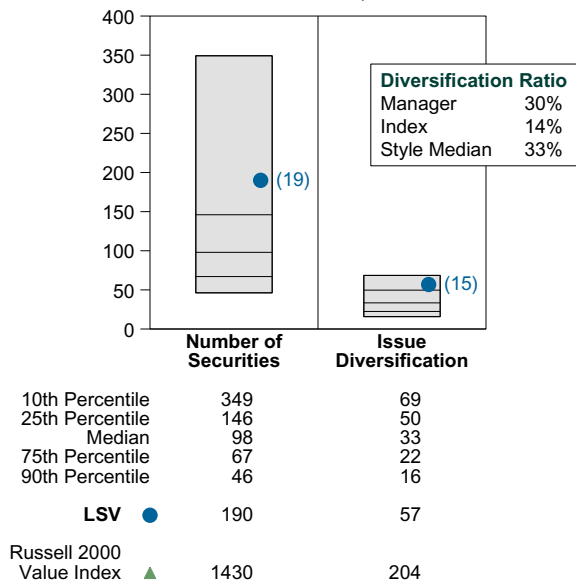


Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



Diversification December 31, 2023



LSV Top 10 Portfolio Holdings Characteristics as of December 31, 2023

10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Atkore Intl Group Inc	Industrials	\$352,000	1.4%	7.25%	5.94	9.40	0.00%	63.93%
Cno Finl Group Inc	Financials	\$323,640	1.3%	18.24%	3.13	8.93	2.15%	7.82%
Sprouts Fmrs Mkt Inc	Consumer Staples	\$293,471	1.2%	12.41%	4.89	17.17	0.00%	8.36%
Toll Brothers	Consumer Discretionary	\$287,812	1.2%	39.39%	10.70	8.37	0.85%	0.62%
Popular Inc	Financials	\$262,624	1.1%	31.32%	5.92	9.87	3.02%	19.74%
Avnet Inc	Information Technology	\$262,080	1.0%	5.28%	4.56	8.18	2.46%	28.94%
Amkor Technology Inc	Information Technology	\$256,179	1.0%	47.62%	8.18	16.25	0.95%	22.32%
National Fuel Gas Co N J	Utilities	\$255,867	1.0%	(2.40)%	4.61	8.58	3.95%	8.10%
Greif Inc Cl A	Materials	\$255,801	1.0%	(1.04)%	1.67	16.68	3.18%	19.56%
Hf Sinclair Corporation	Energy	\$255,622	1.0%	(1.58)%	9.98	8.41	3.24%	21.60%

10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Rocky Brands Inc	Consumer Discretionary	\$54,324	0.2%	106.41%	0.22	10.34	2.06%	17.04%
Office Pptys Income Tr Com Shs Ben I	Real Estate	\$13,893	0.1%	89.29%	0.36	(7.18)	13.66%	(8.10)%
Zimvie	Health Care	\$127,800	0.5%	88.60%	0.47	27.02	0.00%	(21.80)%
Semler Scientific Inc	Health Care	\$137,299	0.5%	74.58%	0.30	13.14	0.00%	20.67%
Industrial Logistics Pptys T Com Shs	Real Estate	\$17,240	0.1%	63.37%	0.31	(3.19)	0.85%	16.04%
Pvh Corp	Consumer Discretionary	\$170,968	0.7%	59.68%	7.28	10.39	0.12%	12.62%
Amc Networks Inc Cl A	Communication Services	\$43,217	0.2%	59.51%	0.60	2.83	0.00%	(0.83)%
Sally Beauty Hldgs Inc	Consumer Discretionary	\$104,912	0.4%	58.48%	1.42	6.90	0.00%	(1.12)%
Primis Financial Corp	Financials	\$46,842	0.2%	56.97%	0.31	9.24	3.16%	(20.95)%
Photronics	Information Technology	\$150,576	0.6%	55.22%	1.96	13.34	0.00%	46.69%

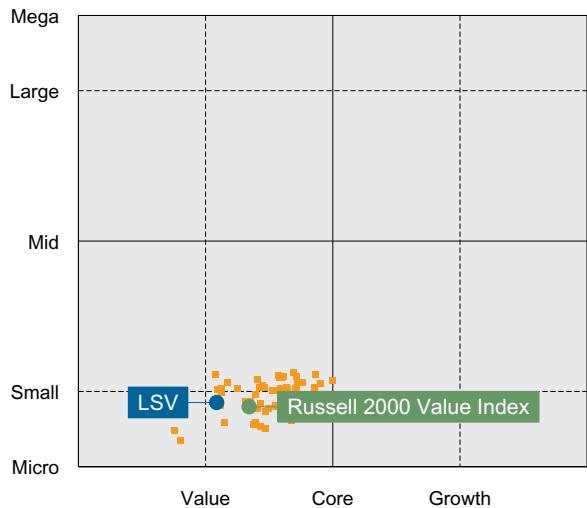
10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Eagle Pharmaceuticals Inc	Health Care	\$13,598	0.1%	(66.84)%	0.07	6.30	0.00%	14.29%
Computer Programs & Sys Inc	Health Care	\$25,760	0.1%	(29.73)%	0.16	6.09	0.00%	(9.55)%
Patterson Ut Energy Inc	Energy	\$98,280	0.4%	(21.43)%	4.51	8.35	2.96%	44.60%
Ashford Hospitality Tr Inc Com Shs	Real Estate	\$384	0.0%	(18.64)%	0.07	(0.37)	0.00%	57.69%
Pbf Energy Inc Cl A	Energy	\$189,028	0.8%	(17.43)%	5.37	6.29	2.27%	43.65%
Marriott Vacations Wrldwde C	Consumer Discretionary	\$48,557	0.2%	(14.88)%	3.02	10.71	3.39%	(5.30)%
Organon	Health Care	\$60,564	0.2%	(14.83)%	3.69	3.39	7.76%	(5.00)%
Civitas Resources Inc	Energy	\$51,969	0.2%	(13.57)%	6.41	4.52	2.92%	23.42%
Helmerich & Payne Inc	Energy	\$83,306	0.3%	(13.14)%	3.60	10.91	2.76%	25.12%
Amn Healthcare Services Inc	Health Care	\$67,392	0.3%	(12.09)%	2.83	15.34	0.00%	37.62%

Current Holdings Based Style Analysis
LSV
As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

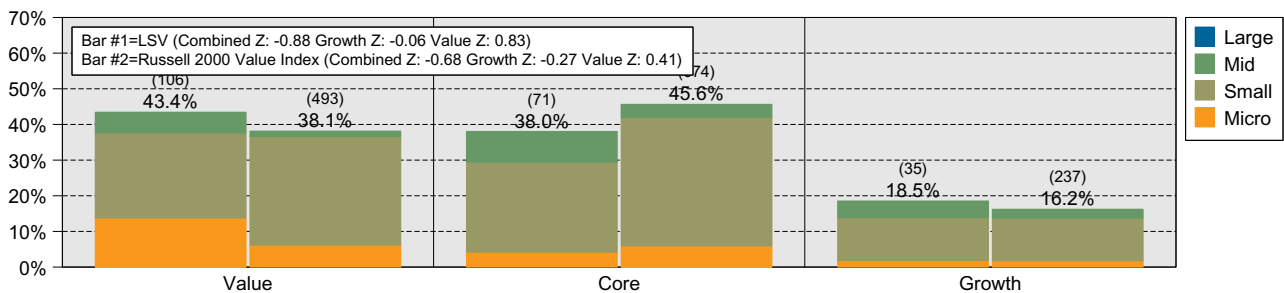
Style Map vs Callan Small Cap Value Holdings as of December 31, 2023



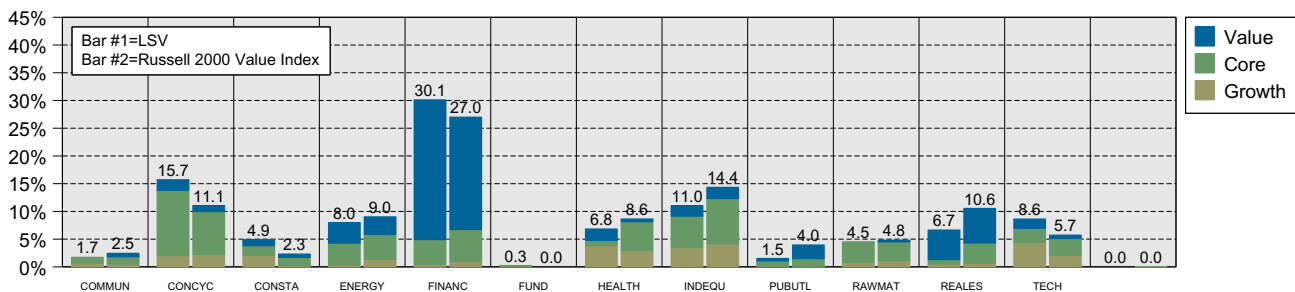
Style Exposure Matrix Holdings as of December 31, 2023

	Value	Core	Growth	Total
Large	0.0% (0) 0.0% (0)	0.0% (0) 0.0% (0)	0.0% (0) 0.0% (0)	0.0% (0) 0.0% (0)
Mid	5.8% (10) 1.4% (3)	8.6% (13) 3.7% (12)	4.7% (7) 2.5% (10)	19.1% (30) 7.7% (25)
Small	23.8% (52) 30.6% (222)	25.2% (44) 36.0% (333)	12.0% (24) 11.9% (136)	61.1% (120) 78.5% (691)
Micro	13.8% (44) 6.2% (268)	4.2% (14) 5.9% (329)	1.9% (4) 1.8% (91)	19.8% (62) 13.8% (688)
Total	43.4% (106) 38.1% (493)	38.0% (71) 45.6% (674)	18.5% (35) 16.2% (237)	100.0% (212) 100.0% (1404)

Combined Z-Score Style Distribution Holdings as of December 31, 2023



Sector Weights Distribution Holdings as of December 31, 2023



Principal Dynamic Growth Period Ended December 31, 2023

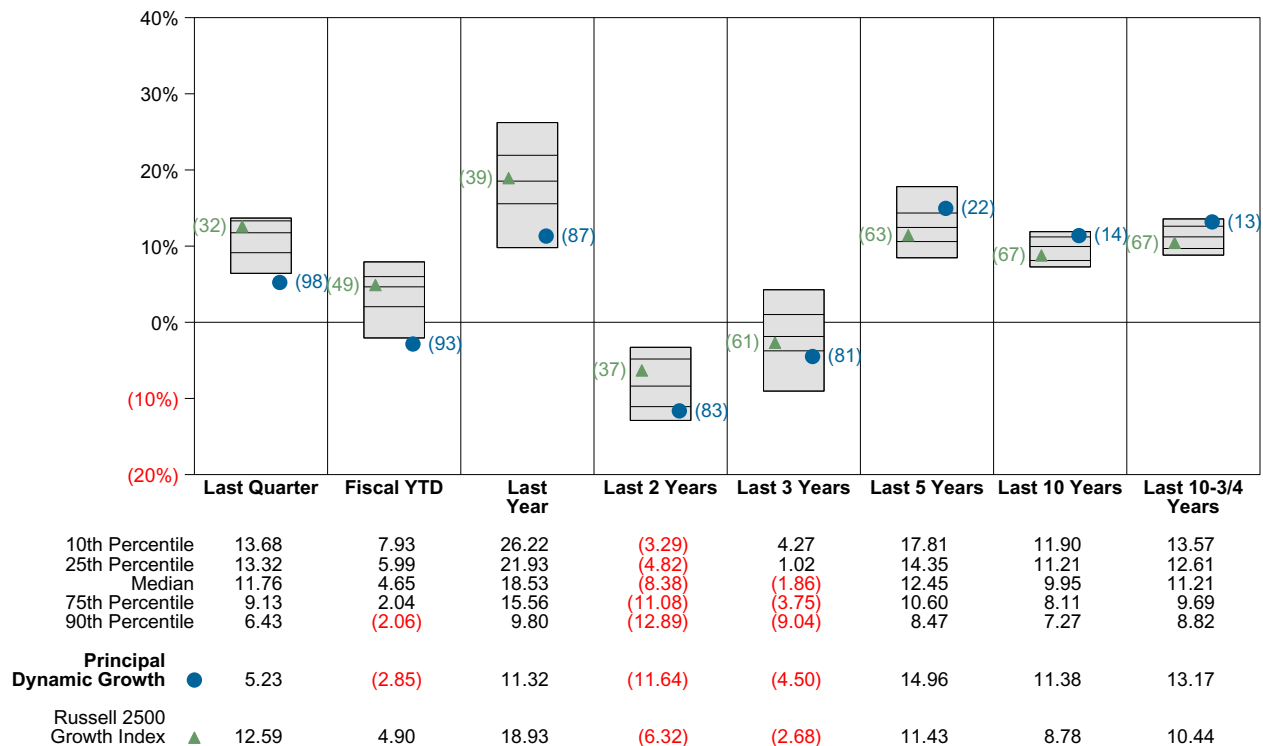
Investment Philosophy

The investment philosophy of Columbus Circle Investors (CCI) is based on the premise that companies doing better than expected will have rising securities prices, while companies producing less than expected results will not. They refer to their discipline as Positive Momentum & Positive Surprise. Analysis of company's fundamentals in the context of the prevailing economic environment allows CCI to measure and select companies based on the criteria of this discipline.

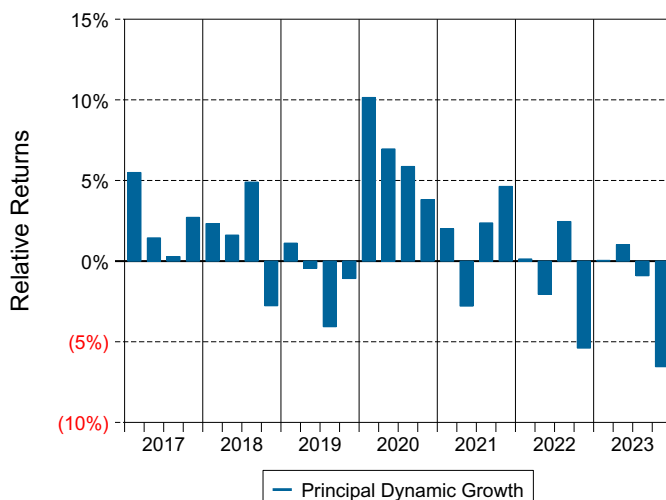
Quarterly Summary and Highlights

- Principal Dynamic Growth's portfolio posted a 5.23% return for the quarter placing it in the 98 percentile of the Callan Small/MidCap Growth group for the quarter and in the 87 percentile for the last year.
- Principal Dynamic Growth's portfolio underperformed the Russell 2500 Growth Index by 7.37% for the quarter and underperformed the Russell 2500 Growth Index for the year by 7.61%.

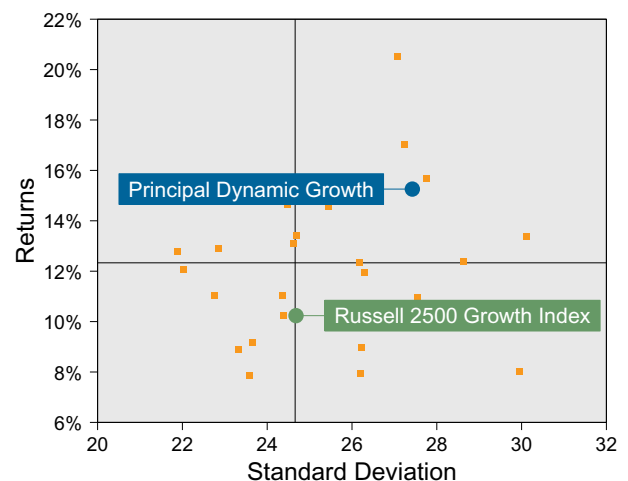
Performance vs Callan Small/MidCap Growth (Gross)



Relative Return vs Russell 2500 Growth Index



Callan Small/MidCap Growth (Gross) Annualized Seven Year Risk vs Return

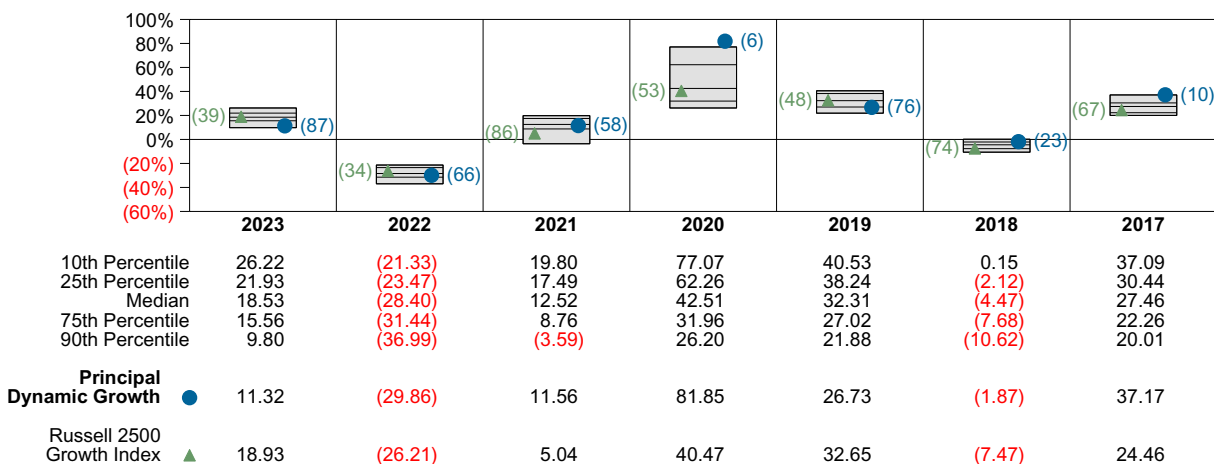


Principal Dynamic Growth Return Analysis Summary

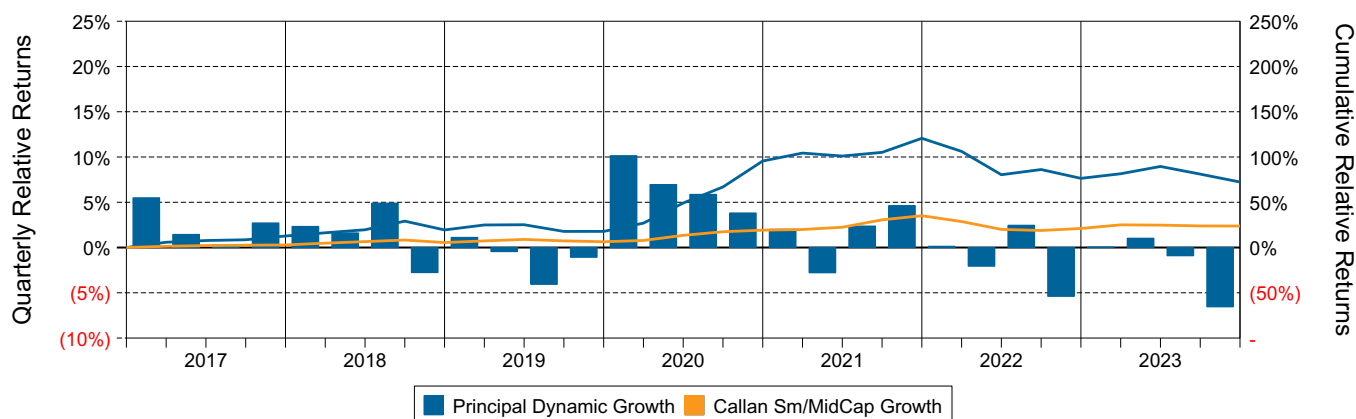
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

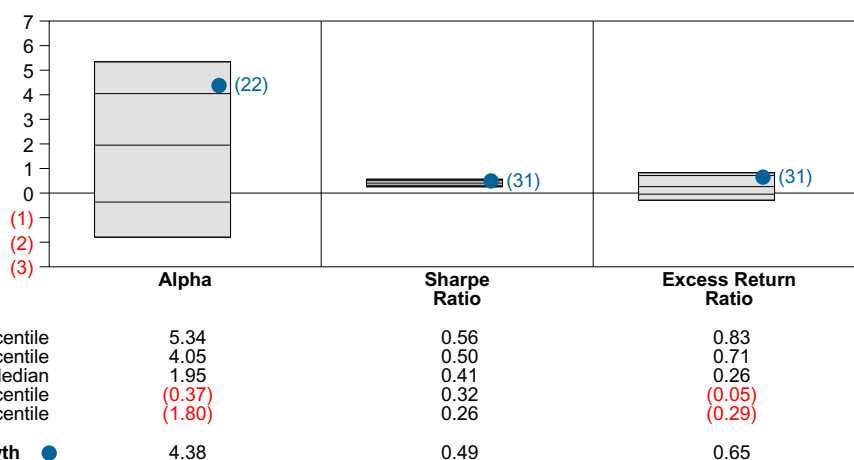
Performance vs Callan Small/MidCap Growth (Gross)



Cumulative and Quarterly Relative Returns vs Russell 2500 Growth Index



Risk Adjusted Return Measures vs Russell 2500 Growth Index Rankings Against Callan Small/MidCap Growth (Gross) Seven Years Ended December 31, 2023

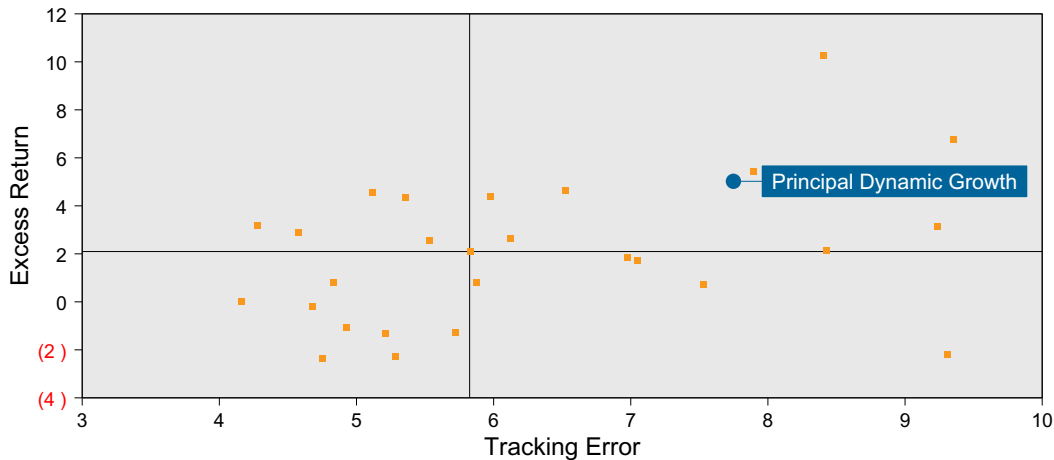


Principal Dynamic Growth Risk Analysis Summary

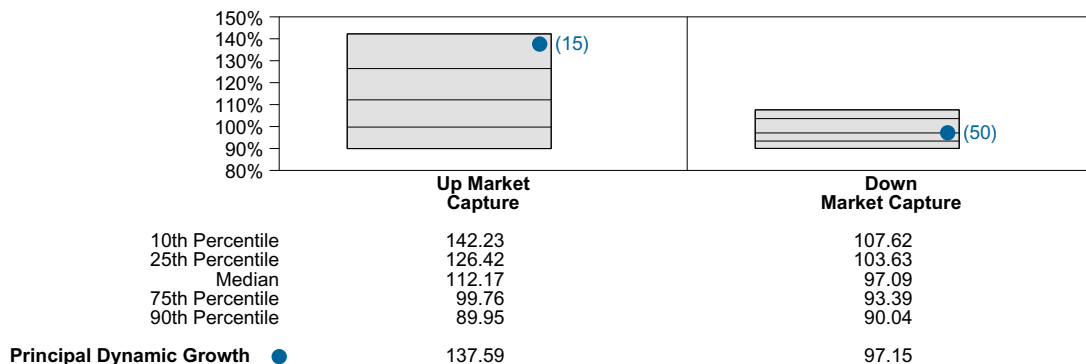
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

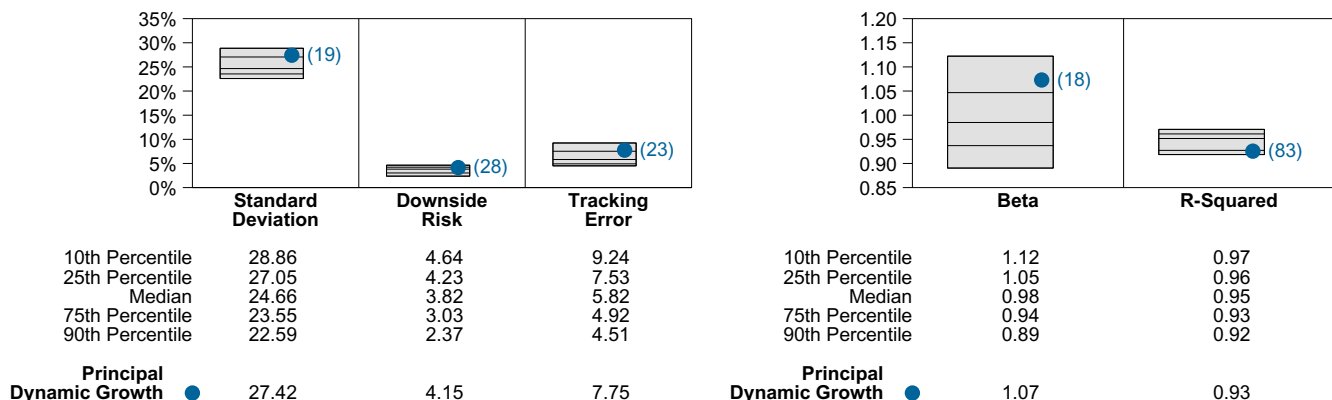
Risk Analysis vs Callan Small/MidCap Growth (Gross) Seven Years Ended December 31, 2023



Market Capture vs Russell 2500 Growth Index Rankings Against Callan Small/MidCap Growth (Gross) Seven Years Ended December 31, 2023



Risk Statistics Rankings vs Russell 2500 Growth Index Rankings Against Callan Small/MidCap Growth (Gross) Seven Years Ended December 31, 2023

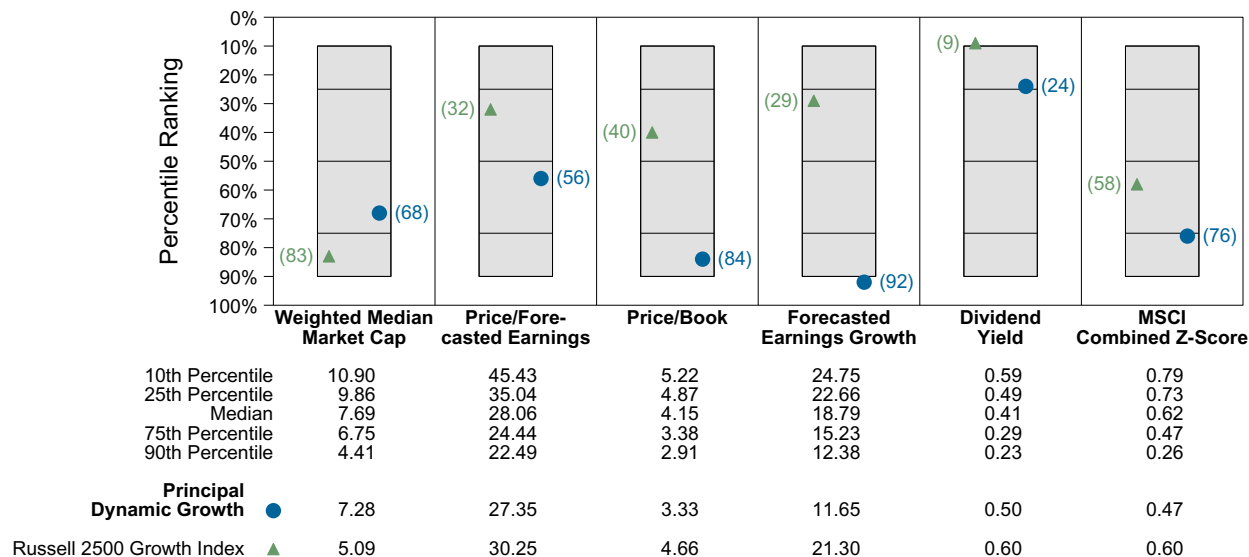


Principal Dynamic Growth Equity Characteristics Analysis Summary

Portfolio Characteristics

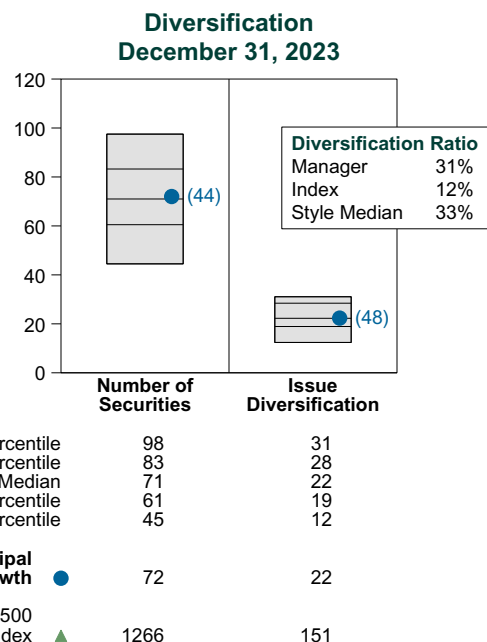
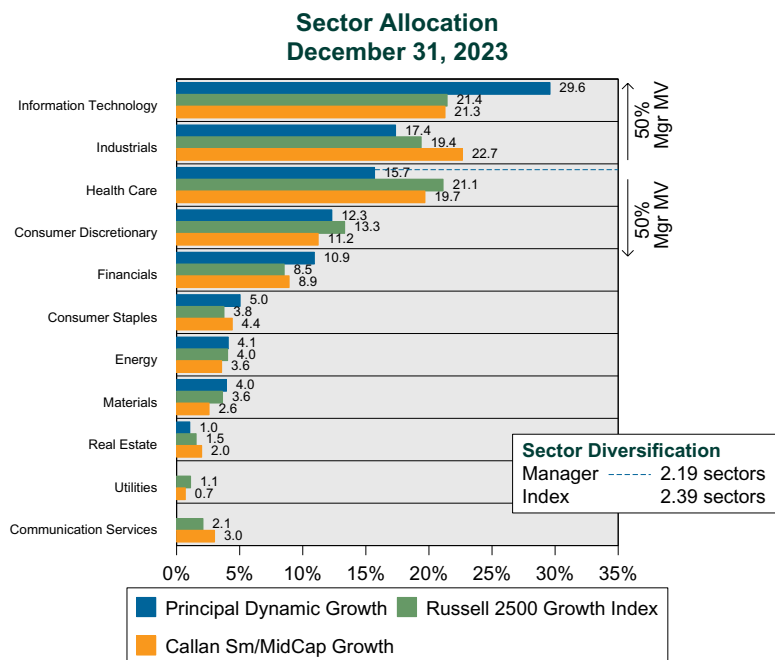
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Small/MidCap Growth as of December 31, 2023



Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



Principal Dynamic Growth Top 10 Portfolio Holdings Characteristics as of December 31, 2023

10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Rambus Inc Del	Information Technology	\$659,284	3.0%	22.33%	7.34	32.16	0.00%	14.05%
Howmet Aerospace Inc	Industrials	\$637,062	2.9%	17.14%	22.28	25.16	0.37%	21.37%
Ma Com Technology Solutions	Information Technology	\$560,901	2.6%	13.94%	6.68	32.33	0.00%	15.00%
Natera Inc	Health Care	\$553,947	2.5%	41.56%	7.53	(23.33)	0.00%	-
Pennymac Finl Svcs Inc	Financials	\$543,936	2.5%	33.06%	4.41	9.63	0.91%	11.78%
Gxo Logistics Inc Com	Industrials	\$536,371	2.5%	4.28%	7.28	21.03	0.00%	7.10%
Freshworks A	Information Technology	\$526,805	2.4%	17.68%	4.75	76.27	0.00%	-
Dominos Pizza Inc	Consumer Discretionary	\$522,622	2.4%	9.16%	14.38	26.23	1.17%	12.18%
Berkley W R Corp	Financials	\$519,438	2.4%	12.36%	18.24	12.22	0.63%	9.00%
Manhattan Associates	Information Technology	\$471,060	2.2%	8.93%	13.26	59.12	0.00%	15.84%

10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Wingstop Inc	Consumer Discretionary	\$136,847	0.6%	42.81%	7.55	90.15	0.35%	21.60%
Meritage Homes Corp	Consumer Discretionary	\$470,186	2.2%	42.55%	6.35	9.16	0.62%	(11.98)%
Endava Plc Ads	Information Technology	\$249,443	1.1%	41.78%	3.25	31.32	0.00%	5.54%
Natera Inc	Health Care	\$553,947	2.5%	41.56%	7.53	(23.33)	0.00%	-
Cava Group	Consumer Discretionary	\$111,736	0.5%	40.32%	4.88	288.46	0.00%	-
Marketaxess Hldgs Inc	Financials	\$164,145	0.8%	37.53%	11.10	39.12	0.98%	9.56%
Kratos Defense & Sec Solutio	Industrials	\$404,940	1.9%	35.12%	2.62	44.99	0.00%	(1.89)%
Bellring Brands	Consumer Staples	\$147,658	0.7%	34.44%	7.27	33.09	0.00%	17.40%
Builders Firstsource Inc	Industrials	\$109,971	0.5%	34.10%	20.59	13.93	0.00%	(12.30)%
Jones Lang Lasalle Inc	Real Estate	\$223,296	1.0%	33.78%	8.99	16.09	0.00%	(4.84)%

10 Worst Performers

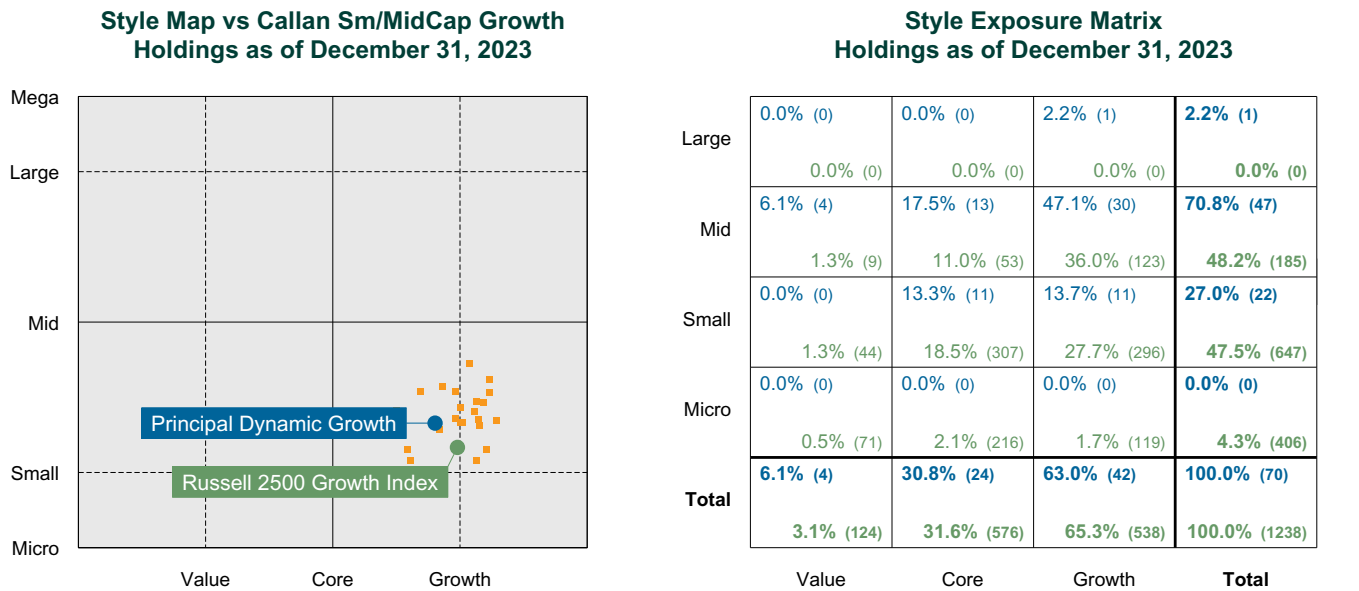
Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Globant S A	Information Technology	\$338,701	1.6%	(47.93)%	10.10	35.76	0.00%	28.62%
Sprinklr Inc A	Information Technology	\$113,675	0.5%	(13.01)%	1.83	31.94	0.00%	-
Chesapeake Energy Corp Common Stock	Energy	\$212,472	1.0%	(10.16)%	10.08	17.24	4.71%	(43.69)%
Matador Res Co	Energy	\$348,014	1.6%	(4.06)%	6.77	6.53	1.40%	66.80%
Si Bone Inc	Health Care	\$170,946	0.8%	(1.17)%	0.85	(21.27)	0.00%	-
Technip Fmc	Energy	\$314,454	1.4%	(0.74)%	8.77	17.54	1.00%	(15.00)%
Inari Med Inc Com	Health Care	\$434,296	2.0%	(0.73)%	3.73	(16230.00)	0.00%	-
Encompass Health Corp	Health Care	\$367,649	1.7%	(0.43)%	6.69	17.38	0.90%	0.58%
Emcor Group Inc	Industrials	\$268,515	1.2%	2.49%	10.13	16.40	0.34%	16.86%
Bwx Technologies Inc	Industrials	\$206,926	0.9%	2.63%	7.02	24.82	1.20%	2.59%

Current Holdings Based Style Analysis

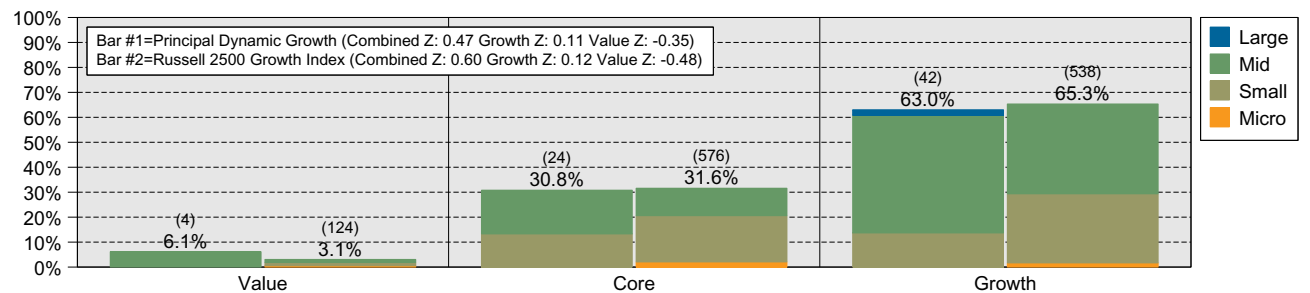
Principal Dynamic Growth

As of December 31, 2023

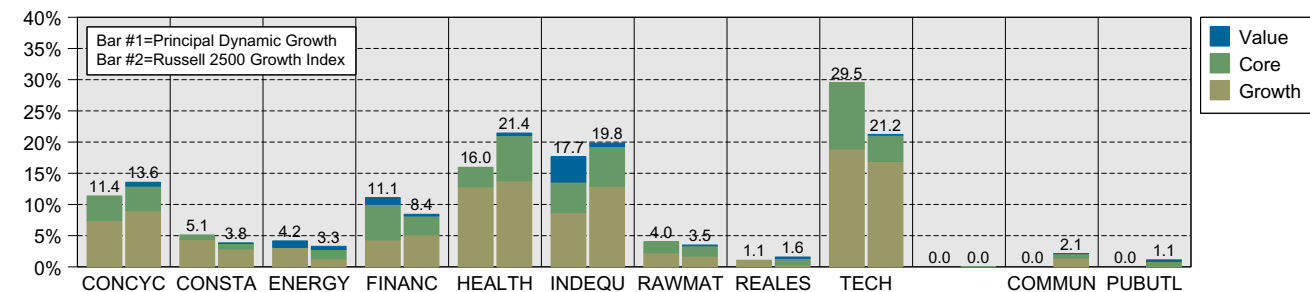
This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.



Combined Z-Score Style Distribution Holdings as of December 31, 2023



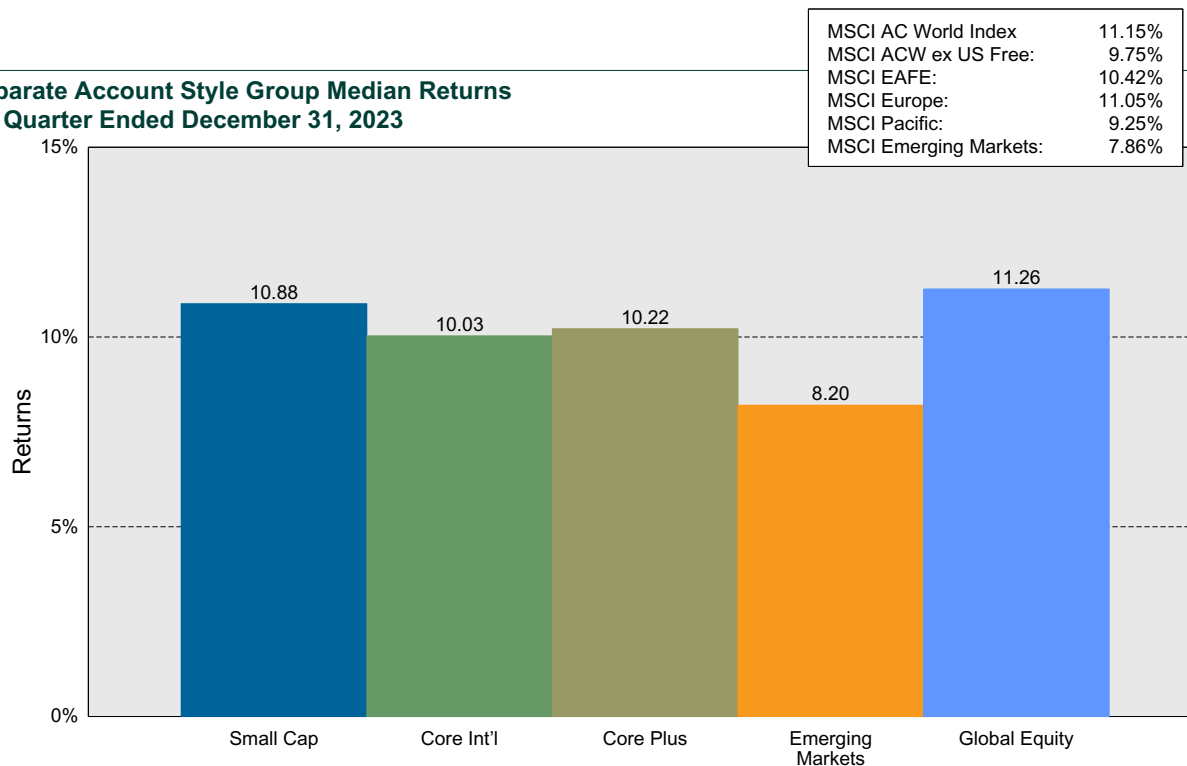
Sector Weights Distribution Holdings as of December 31, 2023



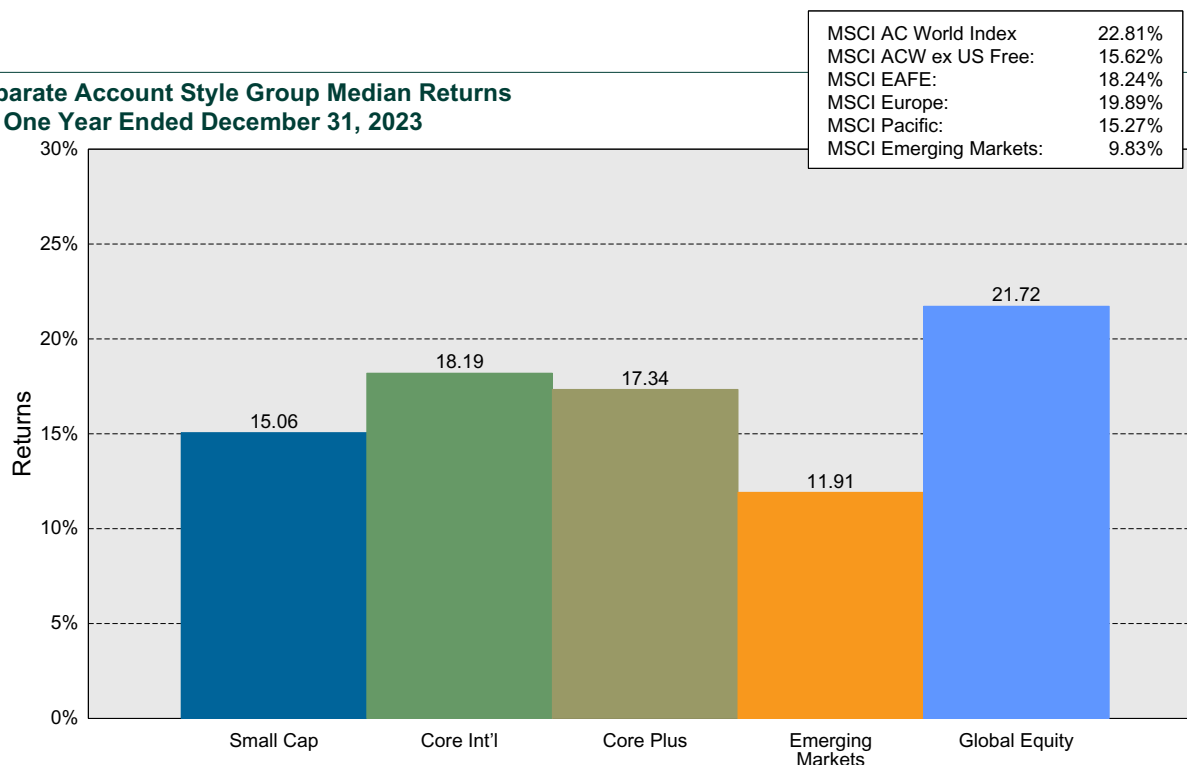
International Equity Active Management Overview

Global ex-U.S. equities (MSCI ACWI ex USA: +9.8%) performed well in 4Q and for the year (+15.6%) but lagged the U.S. Weakness in the U.S. dollar helped 4Q returns across developed markets (MSCI EAFE: +10.4%; MSCI EAFE Local: +5.0%). As in the U.S., growth outperformed value in the quarter (MSCI ACWI ex USA Growth: +11.1%; MSCI ACWI ex USA Value: +8.4%). However, value outperformed growth for the full year (MSCI ACWI ex USA Growth: +14.0%; MSCI ACWI ex USA Value: +17.3%). Mirroring the U.S., Technology was the strongest sector for both the quarter and the year (MSCI ACWI ex USA Information Technology: +20.0%; +36.3%).

Separate Account Style Group Median Returns for Quarter Ended December 31, 2023



Separate Account Style Group Median Returns for One Year Ended December 31, 2023



International Equity Period Ended December 31, 2023

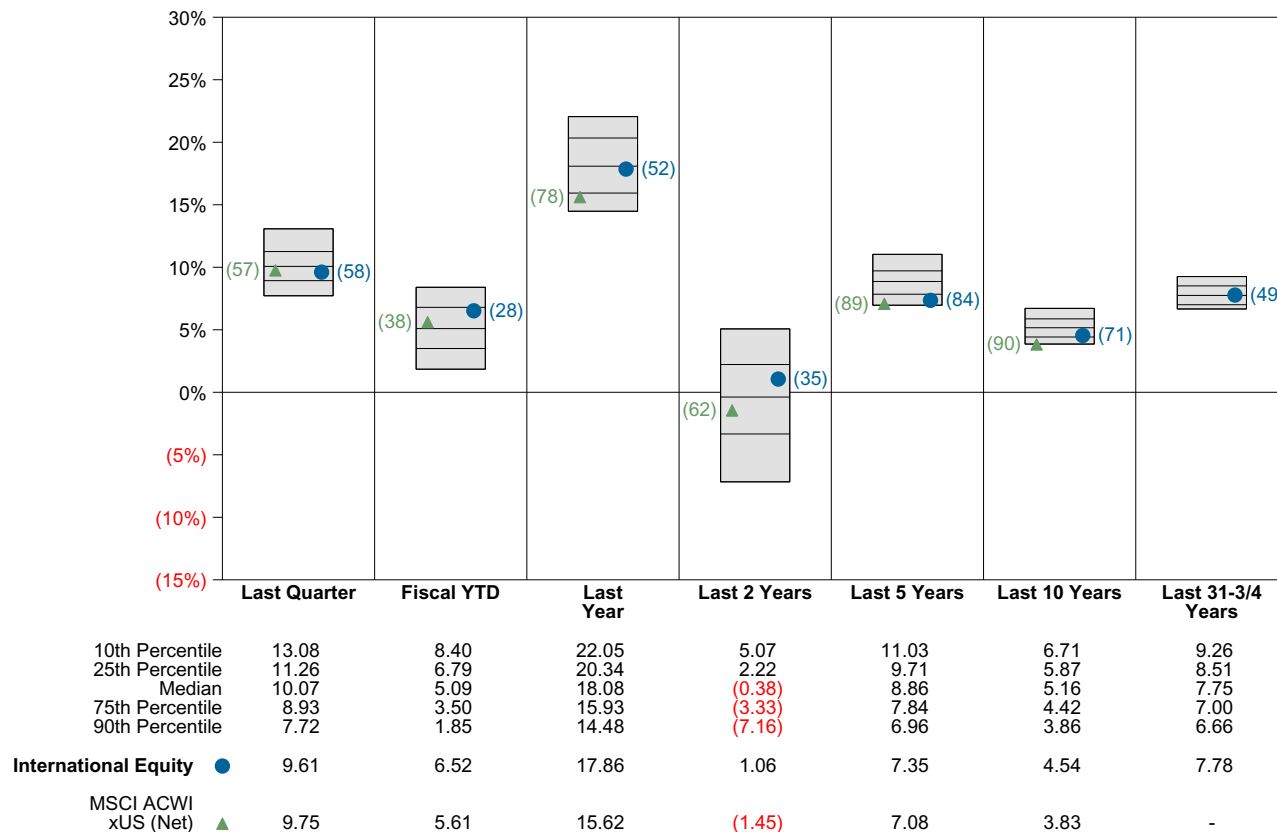
Composite Construction

The International Equity composite is comprised of the Walter Scott, the Silchester Fund, and the BlackRock EM Tilts fund.

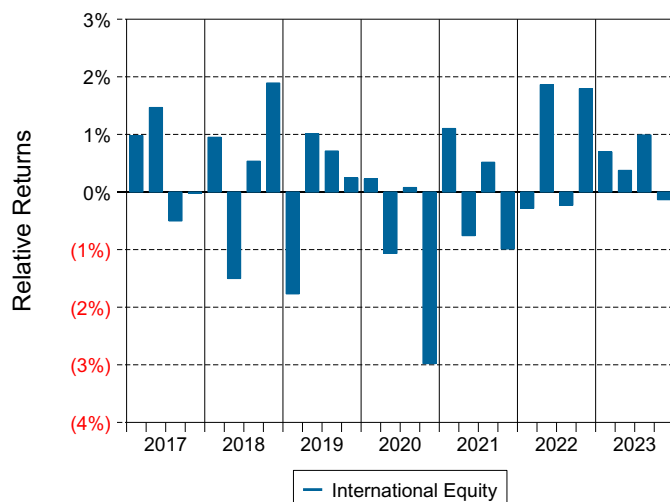
Quarterly Summary and Highlights

- International Equity's portfolio posted a 9.61% return for the quarter placing it in the 58 percentile of the Callan Non-US Equity group for the quarter and in the 52 percentile for the last year.
- International Equity's portfolio underperformed the MSCI ACWI xUS (Net) by 0.15% for the quarter and outperformed the MSCI ACWI xUS (Net) for the year by 2.24%.

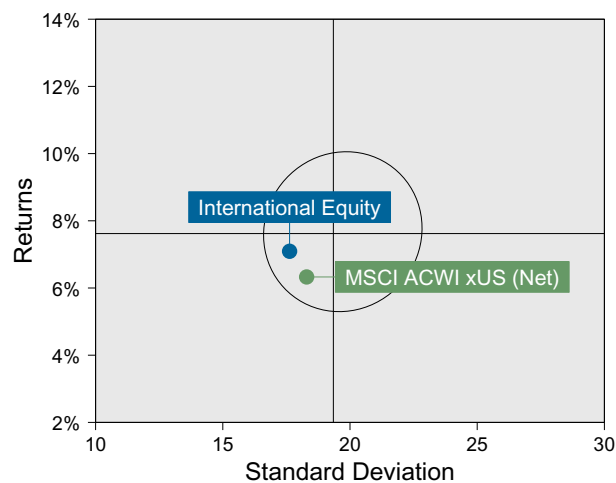
Performance vs Callan Non-US Equity (Gross)



Relative Return vs MSCI ACWI xUS (Net)



Callan Non-US Equity (Gross) Annualized Seven Year Risk vs Return

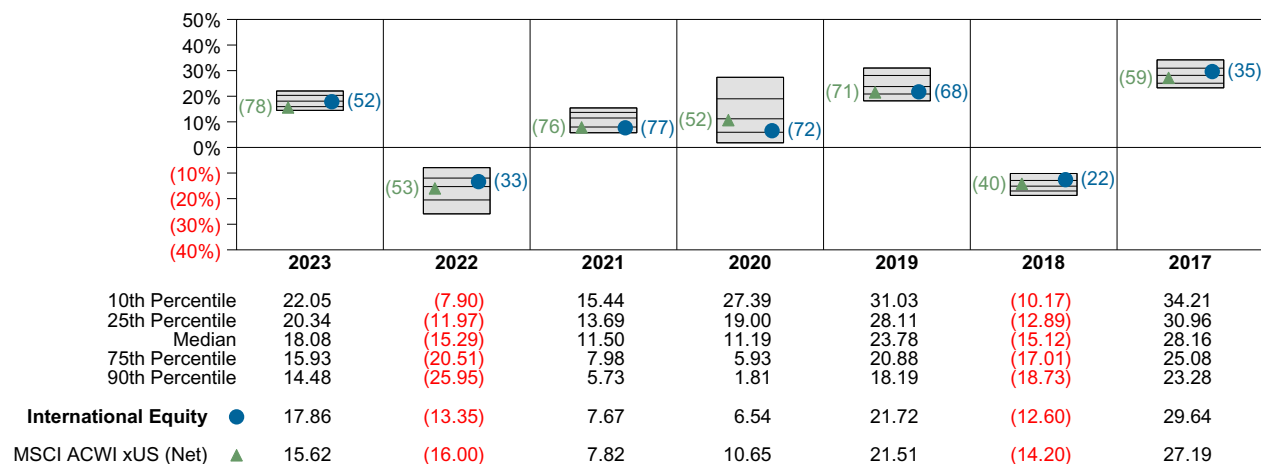


International Equity Return Analysis Summary

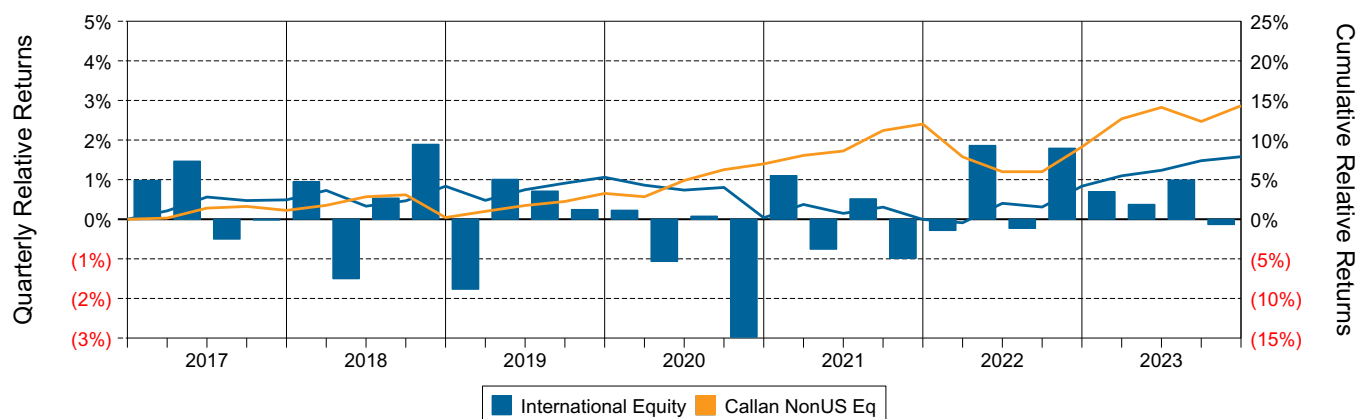
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

Performance vs Callan Non-US Equity (Gross)



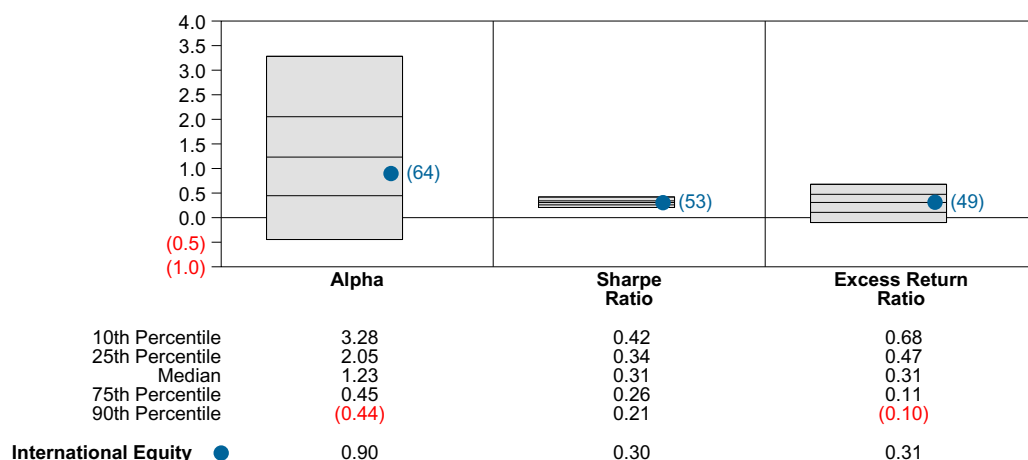
Cumulative and Quarterly Relative Returns vs MSCI ACWI xUS (Net)



Risk Adjusted Return Measures vs MSCI ACWI xUS (Net)

Rankings Against Callan Non-US Equity (Gross)

Seven Years Ended December 31, 2023

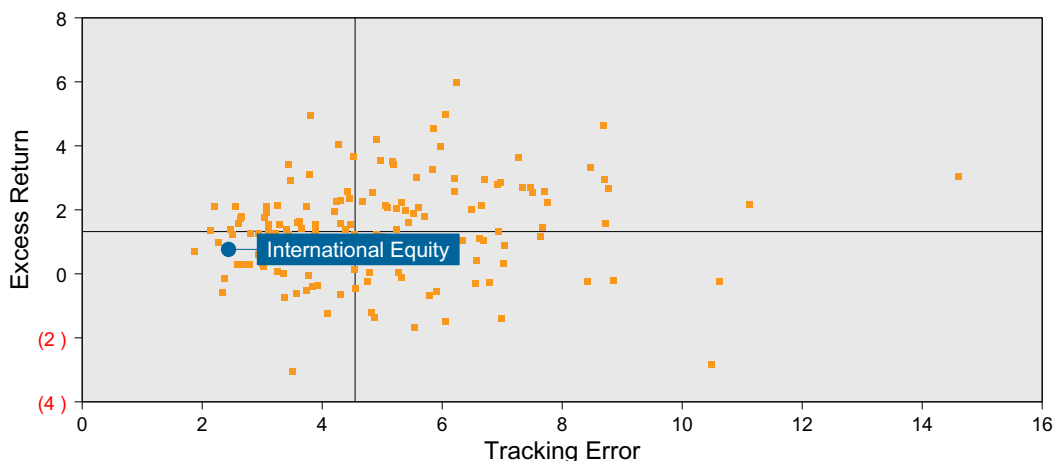


International Equity Risk Analysis Summary

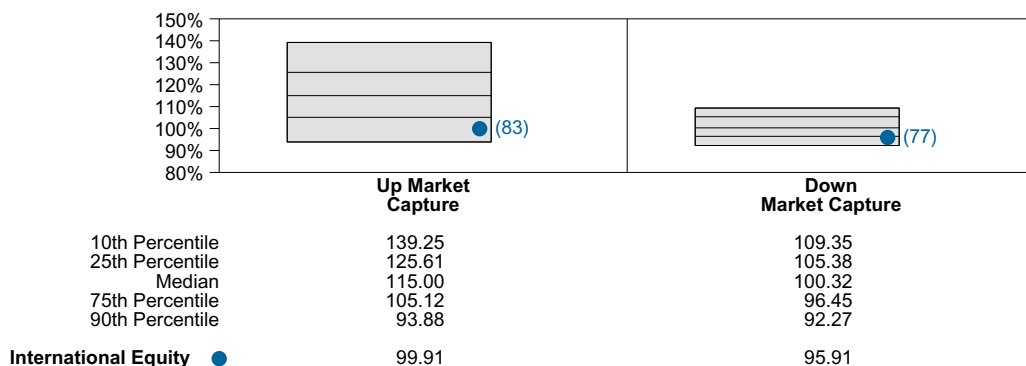
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

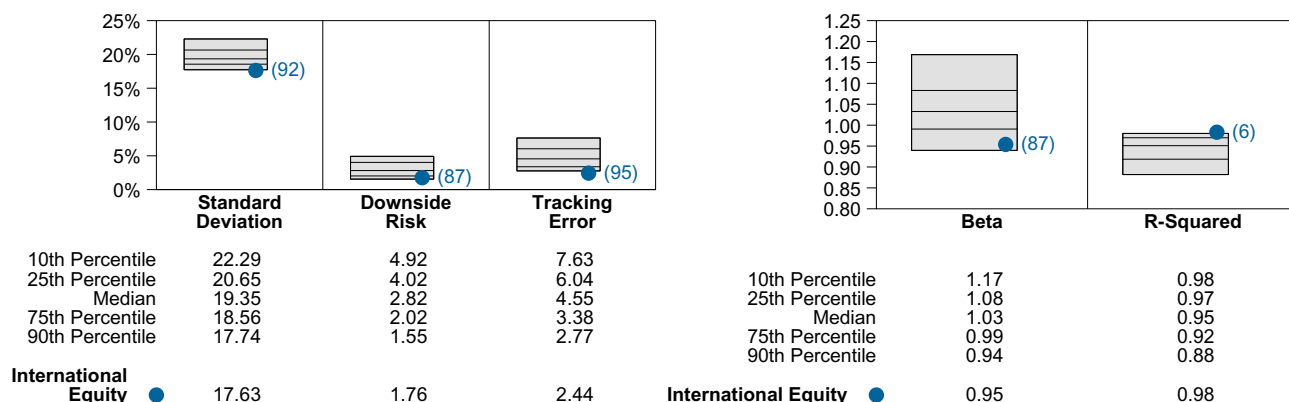
Risk Analysis vs Callan Non-US Equity (Gross) Seven Years Ended December 31, 2023



Market Capture vs MSCI ACWI xUS (Net) Rankings Against Callan Non-US Equity (Gross) Seven Years Ended December 31, 2023



Risk Statistics Rankings vs MSCI ACWI xUS (Net) Rankings Against Callan Non-US Equity (Gross) Seven Years Ended December 31, 2023

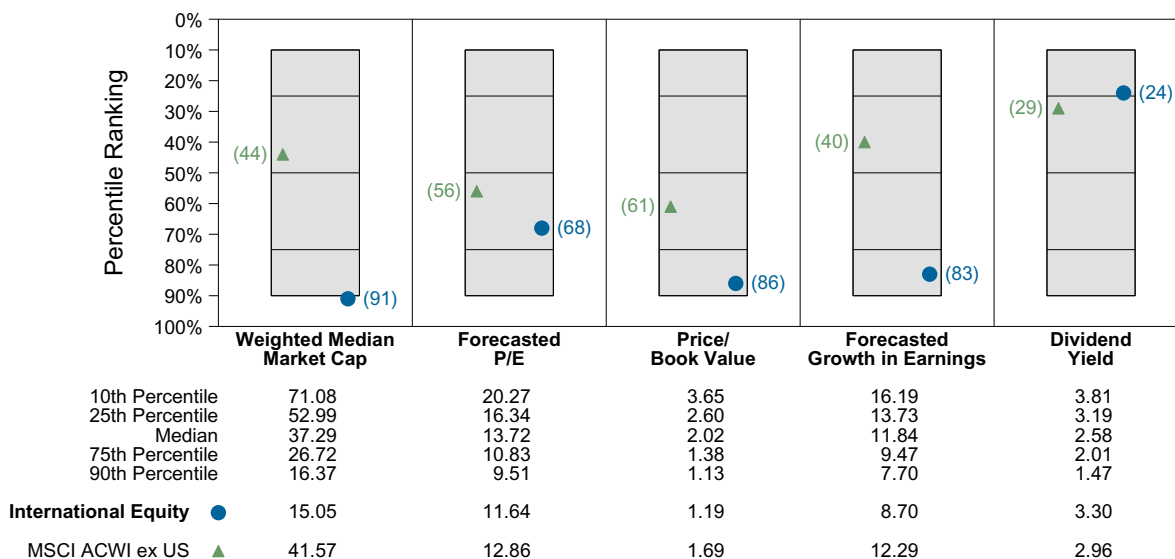


International Equity Equity Characteristics Analysis Summary

Portfolio Characteristics

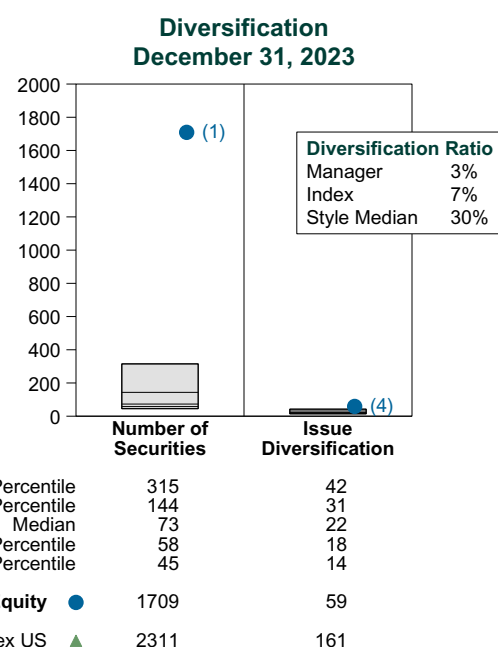
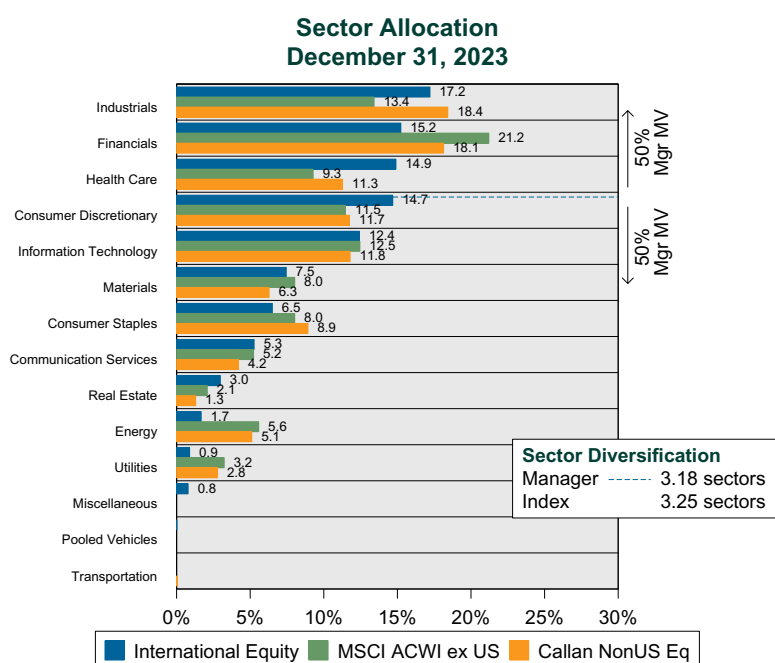
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Non-US Equity as of December 31, 2023



Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



International Equity Top 10 Portfolio Holdings Characteristics as of December 31, 2023

10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Sanofi Shs	Health Care	\$1,737,087	1.5%	(7.71)%	125.41	11.21	3.92%	7.01%
Bmw Stamm	Consumer Discretionary	\$1,666,038	1.4%	9.03%	64.56	6.23	8.33%	(15.40)%
Roche Hldgs Ag Basel Div Rts Ctf	Health Care	\$1,614,861	1.4%	6.11%	204.09	12.27	3.76%	2.25%
Novartis	Health Care	\$1,522,166	1.3%	3.68%	242.30	14.11	3.65%	10.96%
Honda Motor Co Ltd Shs	Consumer Discretionary	\$1,473,135	1.2%	(7.53)%	56.51	6.94	4.49%	21.20%
Tesco Plc Ord	Consumer Staples	\$1,468,649	1.2%	16.43%	26.16	11.49	3.73%	5.91%
Bayer A G Namen -Akt	Health Care	\$1,455,509	1.2%	(22.60)%	36.57	5.71	5.86%	(6.53)%
Adecco Sa Cheserex Ord	Industrials	\$1,366,366	1.2%	18.80%	8.26	12.95	5.86%	6.76%
Taiwan Semicond Manufac Co L Shs	Information Technology	\$1,363,289	1.2%	19.87%	501.06	15.76	2.03%	4.70%
Randstad Holding NV Ord	Industrials	\$1,356,035	1.1%	12.98%	11.33	13.26	5.05%	(5.04)%

10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Compania De Minas Buenaventu Sponsor	Materials	\$199	0.0%	83.54%	3.70	119.51	0.51%	-
Aac Technologies Holdings In Shs New	Information Technology	\$129	0.0%	77.15%	3.56	21.37	0.52%	(31.22)%
Harmony Gold Mining Co	Materials	\$221	0.0%	74.99%	4.05	8.06	0.78%	44.45%
Companhia Siderurgica Nacion Ord	Materials	\$163	0.0%	74.78%	5.62	13.73	12.46%	(11.05)%
Silergy	Information Technology	\$322	0.0%	72.71%	6.25	66.76	0.89%	12.75%
Bank of Polska Kasa Opieki Shs	Financials	\$97,816	0.1%	67.20%	10.15	7.57	2.37%	21.90%
The Korea Express Co Ltd Shs	Industrials	\$52,645	0.0%	64.94%	2.25	10.99	0.39%	37.60%
Adani Green Energy Ltd	Utilities	\$368	0.0%	61.44%	30.40	158.60	0.00%	-
Pko Bank Polski	Financials	\$90,980	0.1%	60.88%	16.00	7.77	3.58%	6.36%
Budimex Sa Shs	Industrials	\$123	0.0%	59.93%	4.06	24.09	2.83%	9.83%

10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Xtep International Holding L Shs	Consumer Discretionary	\$50	0.0%	(37.85)%	1.49	8.07	4.71%	(1.05)%
Sany Heavy Equip Intl Hldg L Shs	Industrials	\$65	0.0%	(37.60)%	3.08	7.44	2.52%	12.38%
Koza Altin Isletmeleri	Materials	\$39	0.0%	(37.01)%	2.12	9.85	2.10%	47.06%
Li Ning Company Limited Shs	Consumer Discretionary	\$385	0.0%	(35.10)%	7.03	11.02	3.35%	5.20%
Tofas Turk Otomobil Fabrikas Shs	Consumer Discretionary	\$54	0.0%	(34.03)%	3.56	5.06	2.93%	77.93%
China Overseas Property Hold Common	Real Estate	\$60	0.0%	(32.17)%	2.47	9.15	2.30%	19.80%
Tianjin Zhonghuan Semicon.'a'	Information Technology	\$32	0.0%	(31.55)%	8.92	6.76	0.51%	82.04%
Sasa	Materials	\$99	0.0%	(31.22)%	6.57	26.74	0.00%	41.98%
Hektas Ticaret	Materials	\$47	0.0%	(30.64)%	1.72	680.00	0.00%	(9.44)%
Haidilao International Holding	Consumer Discretionary	\$189	0.0%	(29.15)%	10.38	14.43	0.80%	-

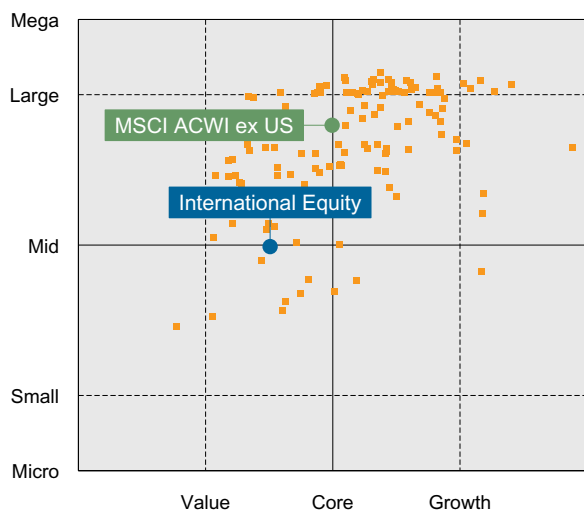
Current Holdings Based Style Analysis

International Equity

As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

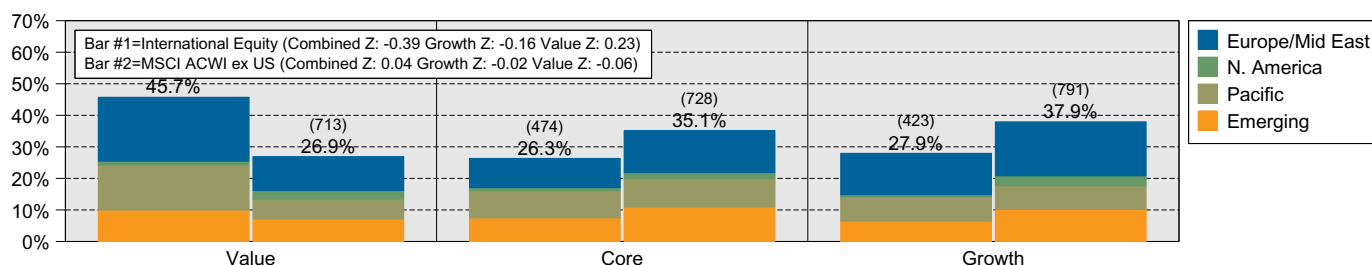
Style Map vs Callan NonUS Eq Holdings as of December 31, 2023



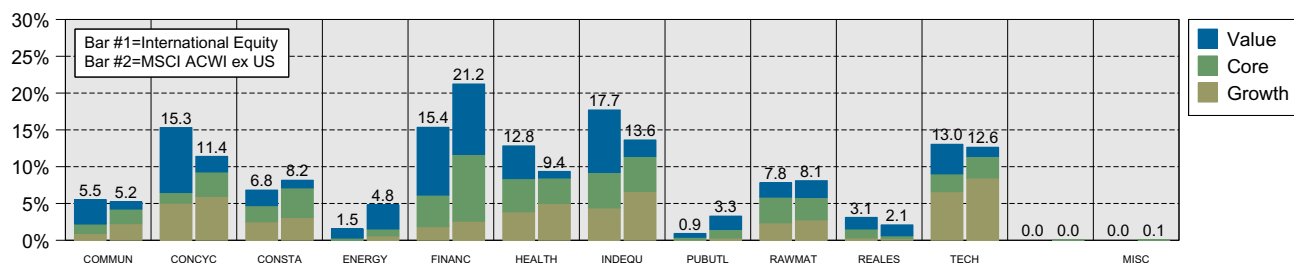
Style Exposure Matrix Holdings as of December 31, 2023

	Value	Core	Growth	Total
Europe/ Mid East	20.3% (35) 10.8% (147)	9.3% (19) 13.3% (137)	13.1% (22) 17.1% (149)	42.6% (76) 41.2% (433)
N. America	1.3% (3) 2.7% (27)	1.0% (1) 2.0% (26)	0.7% (1) 3.2% (36)	2.9% (5) 7.9% (89)
Pacific	14.2% (38) 6.3% (132)	8.6% (27) 8.9% (109)	7.7% (15) 7.5% (105)	30.6% (80) 22.8% (346)
Emerging	10.0% (420) 7.1% (407)	7.5% (427) 10.9% (456)	6.4% (385) 10.1% (501)	23.9% (1232) 28.1% (1364)
Total	45.7% (496) 26.9% (713)	26.3% (474) 35.1% (728)	27.9% (423) 37.9% (791)	100.0% (1393) 100.0% (2232)

Combined Z-Score Style Distribution Holdings as of December 31, 2023



Sector Weights Distribution Holdings as of December 31, 2023



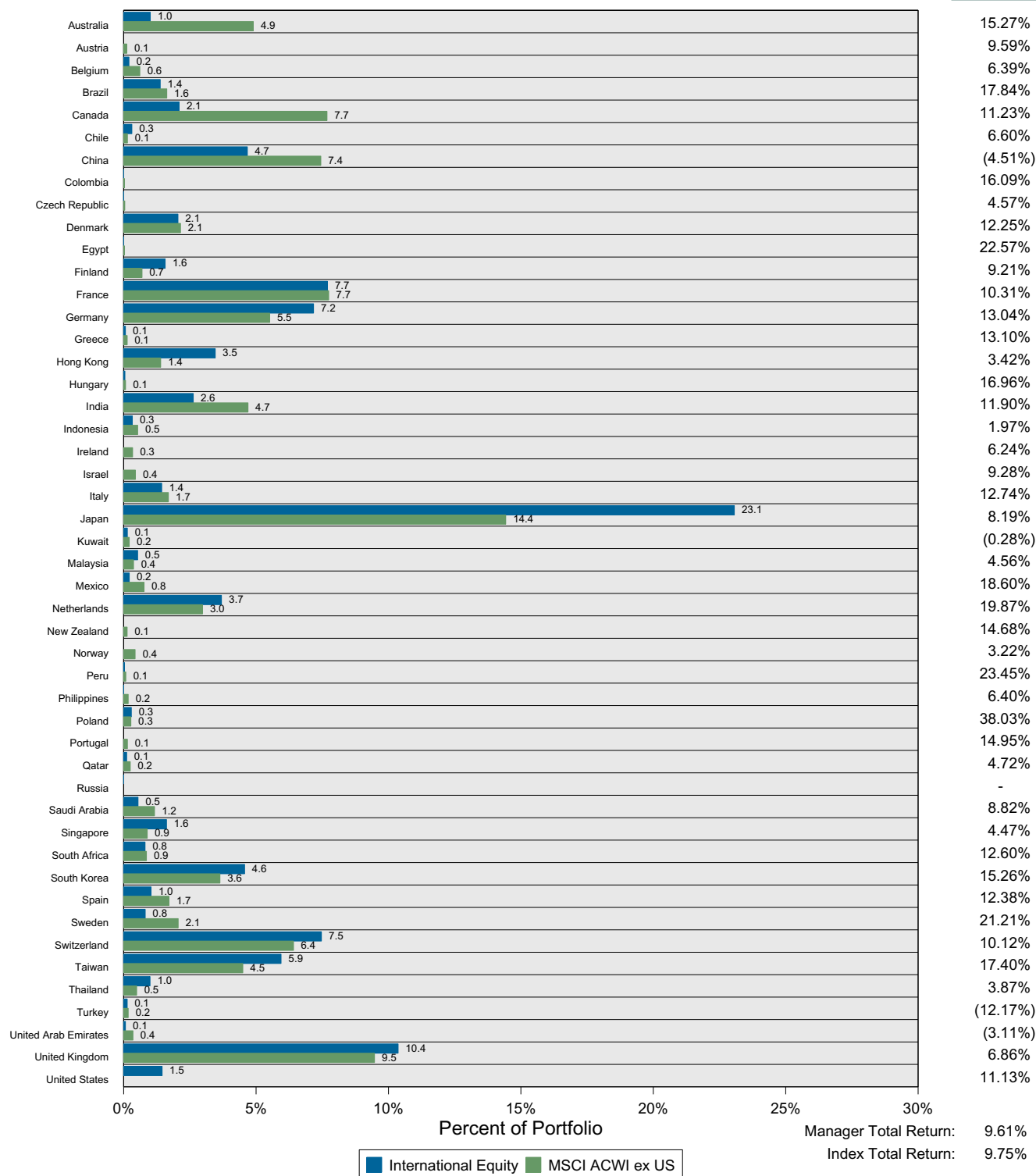
Country Allocation International Equity VS MSCI ACWI ex US

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of December 31, 2023

Index Rtns



Silchester Period Ended December 31, 2023

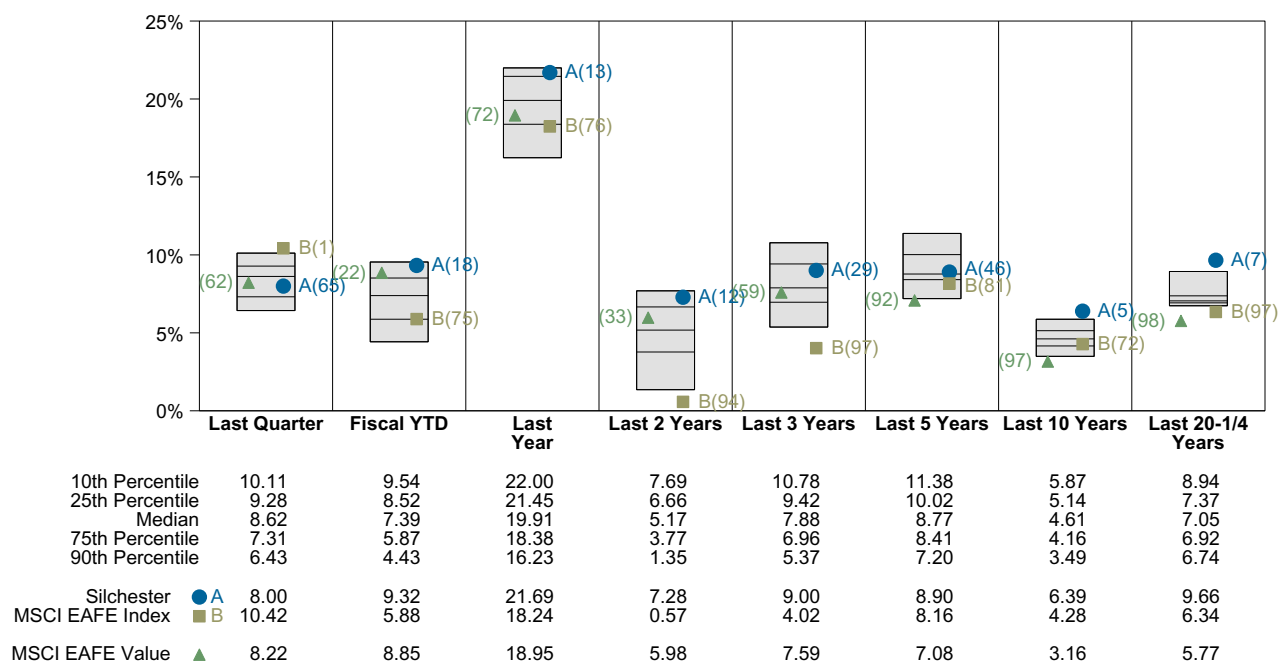
Investment Philosophy

Silchester is a London based, employee-owned, investment management firm focused on the International Value portfolio. The team is tenured and well resourced with 10 investment professionals responsible for decision making. The process is fundamentally based and seeks to maximize intrinsic value of the assets, earnings and dividends a company delivers to the investor, by focusing on price and quality. The International Equity strategy has historically exhibited value-tilted characteristics and smaller market capitalization than its international equity peers. Given the philosophy and construction process, the strategy can be expected to slightly trail or remain in-line with the index in strong up markets but provide the majority of outperformance through downside protection; it should be evaluated over a full market cycle.

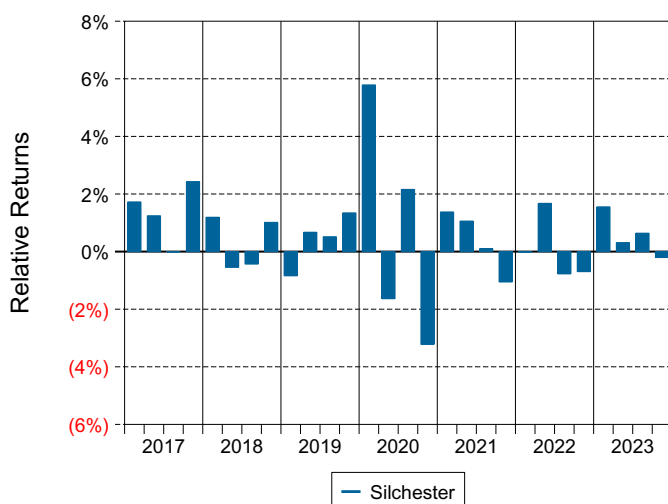
Quarterly Summary and Highlights

- Silchester's portfolio posted a 8.00% return for the quarter placing it in the 65 percentile of the Callan Non-US Developed Value Equity group for the quarter and in the 13 percentile for the last year.
- Silchester's portfolio underperformed the MSCI EAFE Value by 0.22% for the quarter and outperformed the MSCI EAFE Value for the year by 2.74%.

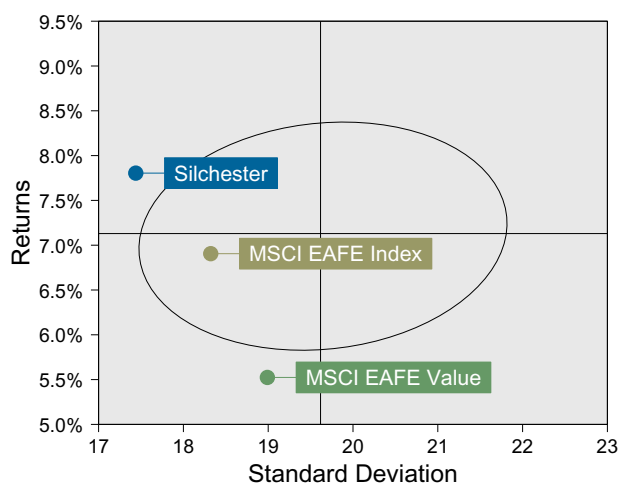
Performance vs Callan Non-US Developed Value Equity (Gross)



Relative Return vs MSCI EAFE Value



Callan Non-US Developed Value Equity (Gross) Annualized Seven Year Risk vs Return



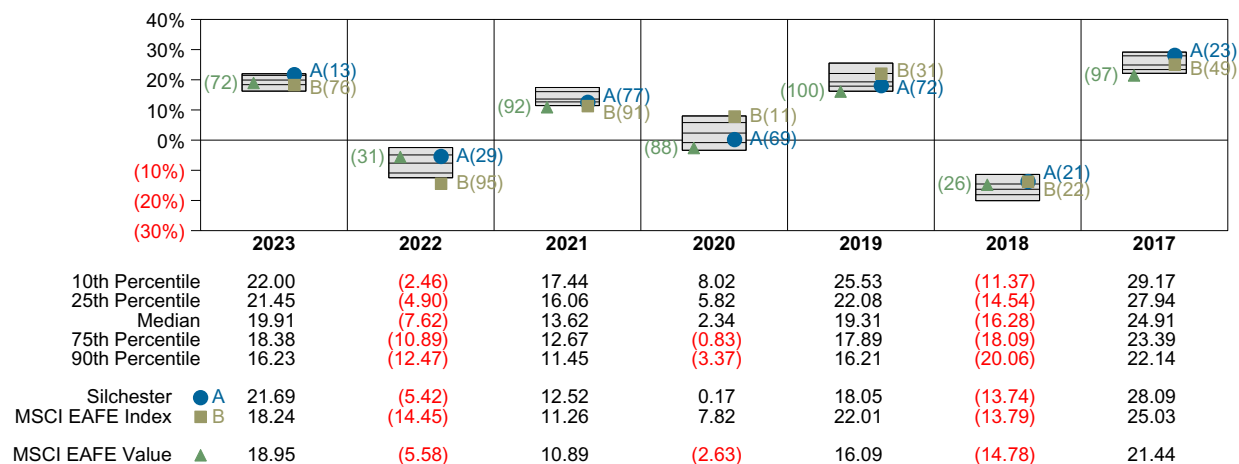
Silchester

Return Analysis Summary

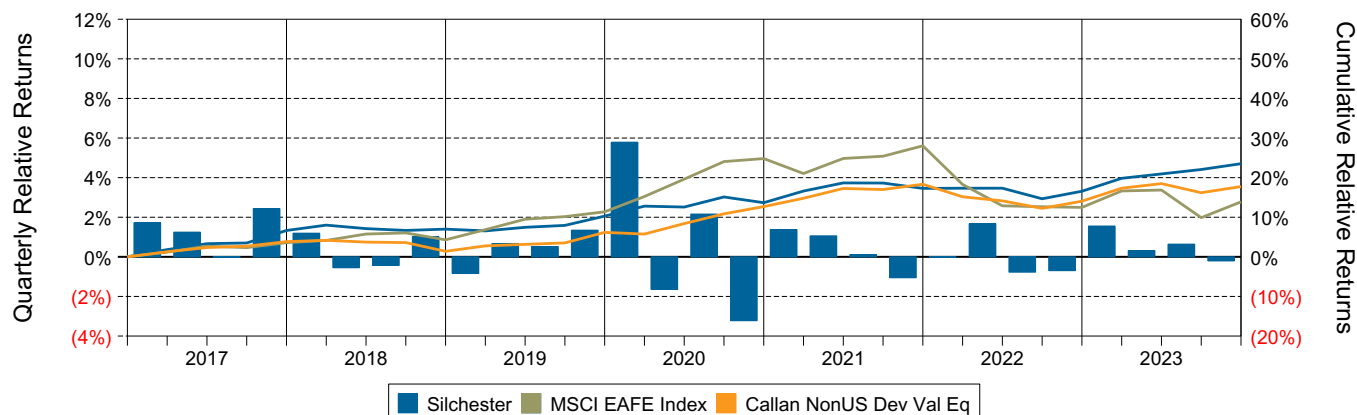
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

Performance vs Callan Non-US Developed Value Equity (Gross)



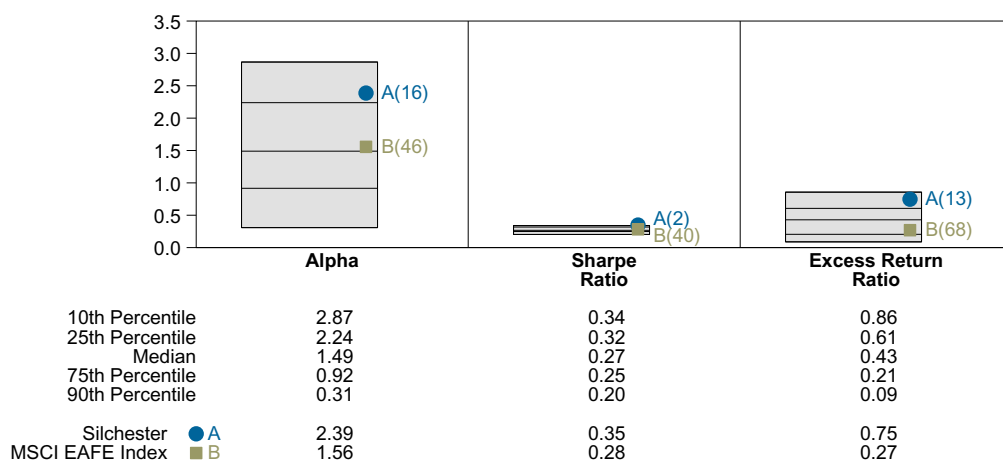
Cumulative and Quarterly Relative Returns vs MSCI EAFE Value



Risk Adjusted Return Measures vs MSCI EAFE Value

Rankings Against Callan Non-US Developed Value Equity (Gross)

Seven Years Ended December 31, 2023

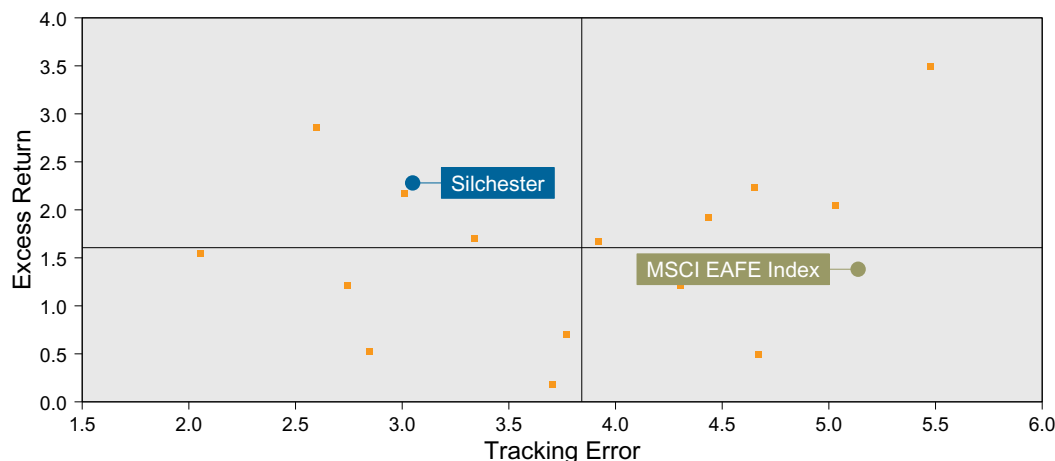


Silchester Risk Analysis Summary

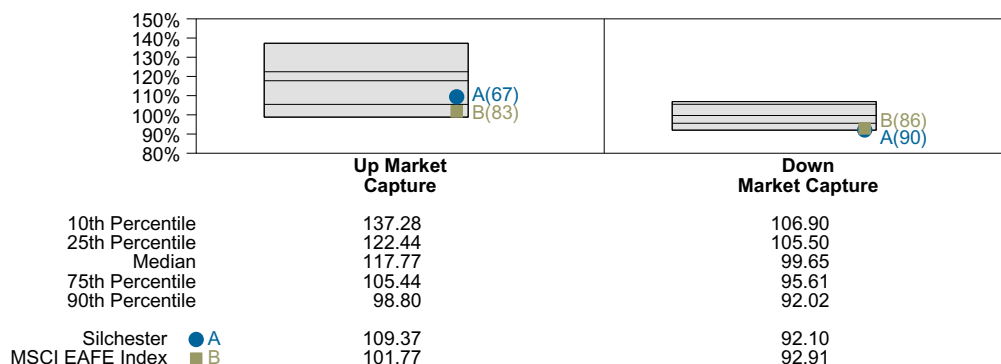
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

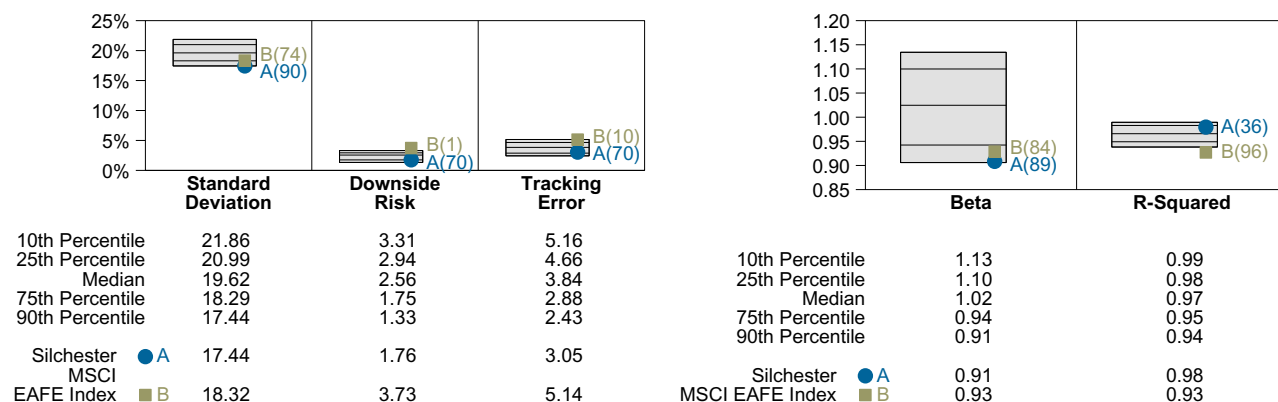
Risk Analysis vs Callan Non-US Developed Value Equity (Gross) Seven Years Ended December 31, 2023



Market Capture vs MSCI EAFE Value (Net) Rankings Against Callan Non-US Developed Value Equity (Gross) Seven Years Ended December 31, 2023



Risk Statistics Rankings vs MSCI EAFE Value (Net) Rankings Against Callan Non-US Developed Value Equity (Gross) Seven Years Ended December 31, 2023

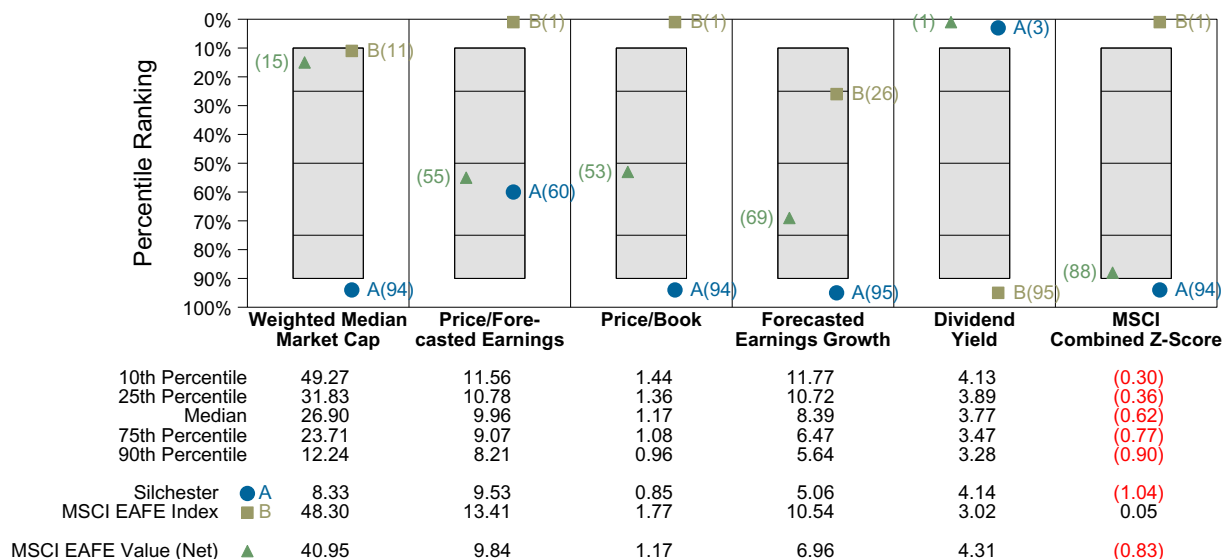


Silchester Equity Characteristics Analysis Summary

Portfolio Characteristics

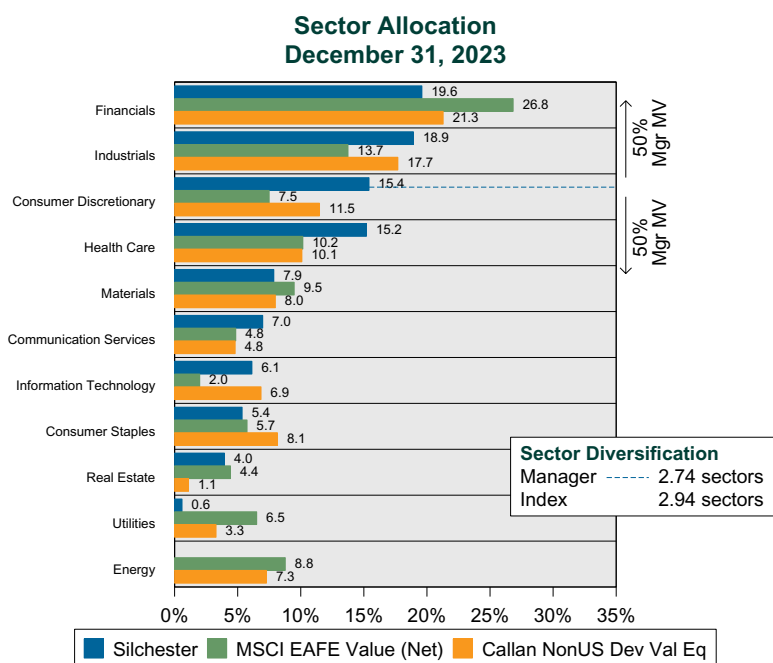
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Non-US Developed Value Equity as of December 31, 2023

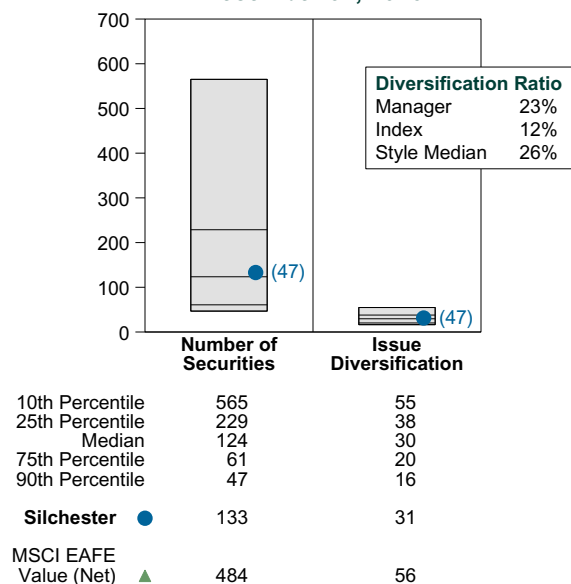


Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



Diversification December 31, 2023



Silchester Top 10 Portfolio Holdings Characteristics as of December 31, 2023

10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Sanofi Shs	Health Care	\$1,737,087	2.7%	(7.71)%	125.41	11.21	3.92%	7.01%
Bmw Stamm	Consumer Discretionary	\$1,666,038	2.6%	9.03%	64.56	6.23	8.33%	(15.40)%
Honda Motor Co Ltd Shs	Consumer Discretionary	\$1,473,135	2.3%	(7.53)%	56.51	6.94	4.49%	21.20%
Tesco Plc Ord	Consumer Staples	\$1,468,649	2.3%	16.43%	26.16	11.49	3.73%	5.91%
Bayer A G Namen -Akt	Health Care	\$1,455,509	2.3%	(22.60)%	36.57	5.71	5.86%	(6.53)%
Adecco Sa Cheserex Ord	Industrials	\$1,366,366	2.1%	18.80%	8.26	12.95	5.86%	6.76%
Randstad Holding NV Ord	Industrials	\$1,356,035	2.1%	12.98%	11.33	13.26	5.05%	(5.04)%
Wpp Plc New Shs	Communication Services	\$1,317,950	2.1%	9.48%	10.32	7.86	5.19%	4.50%
Ubs Ag Shs New	Financials	\$1,261,833	2.0%	25.03%	107.36	18.17	1.85%	7.80%
Kingfisher Plc Shs	Consumer Discretionary	\$1,190,208	1.9%	15.86%	5.82	10.23	5.07%	2.10%

10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Woong Jin Coway Co Ltd Shs	Consumer Discretionary	\$75,764	0.1%	45.11%	3.28	8.08	2.27%	15.00%
Largan Precision Co Ltd Shs	Information Technology	\$856,477	1.3%	41.39%	12.48	19.76	2.48%	(9.76)%
Asustek Computer Inc Shs	Information Technology	\$691,645	1.1%	40.29%	11.85	15.73	3.01%	24.95%
Tiger Brands	Consumer Staples	\$523,525	0.8%	35.14%	1.98	10.77	4.67%	2.91%
SEB Sa Act Ord	Consumer Discretionary	\$110,240	0.2%	32.99%	6.91	12.65	2.14%	18.39%
Sk Square Co Ltd Common Stock Krw500	Industrials	\$296,735	0.5%	29.82%	5.68	10.93	0.00%	-
Ericsson	Information Technology	\$457,191	0.7%	27.69%	19.32	11.22	3.96%	(2.73)%
Ubs Ag Shs New	Financials	\$1,261,833	2.0%	25.03%	107.36	18.17	1.85%	7.80%
Philips Lighting	Industrials	\$459,043	0.7%	24.01%	4.30	10.03	4.89%	2.88%
Holcim Ltd New Namen Akt	Materials	\$337,563	0.5%	22.08%	45.43	11.92	3.67%	23.10%

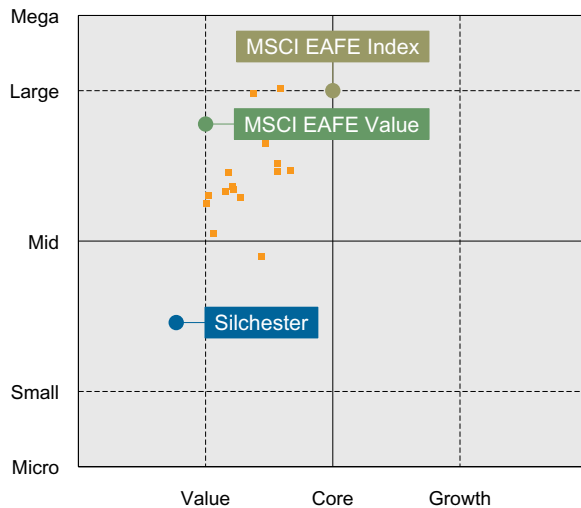
10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Bayer A G Namen -Akt	Health Care	\$1,455,509	2.3%	(22.60)%	36.57	5.71	5.86%	(6.53)%
Astellas Pharma	Health Care	\$256,526	0.4%	(13.95)%	21.64	18.26	3.68%	13.20%
Dentsu Inc Tokyo Shs	Communication Services	\$927,517	1.4%	(11.55)%	6.93	11.90	4.31%	(4.17)%
Jardine Matheson (Usd)	Industrials	\$355,332	0.6%	(10.96)%	11.92	6.30	5.35%	3.95%
Sunlight Reit	Real Estate	\$76,853	0.1%	(10.75)%	0.48	7.75	10.09%	5.89%
Iida Group Holding Co Ltd	Consumer Discretionary	\$614,509	1.0%	(10.12)%	4.20	9.09	4.06%	0.44%
Nokia Ord A Eur 0.24	Information Technology	\$577,954	0.9%	(9.78)%	18.94	9.56	1.96%	(11.12)%
Sanofi Shs	Health Care	\$1,737,087	2.7%	(7.71)%	125.41	11.21	3.92%	7.01%
Honda Motor Co Ltd Shs	Consumer Discretionary	\$1,473,135	2.3%	(7.53)%	56.51	6.94	4.49%	21.20%
Barloworld Ltd Ord	Industrials	\$216,790	0.3%	(6.28)%	0.82	7.61	6.11%	4.73%

Current Holdings Based Style Analysis Silchester As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

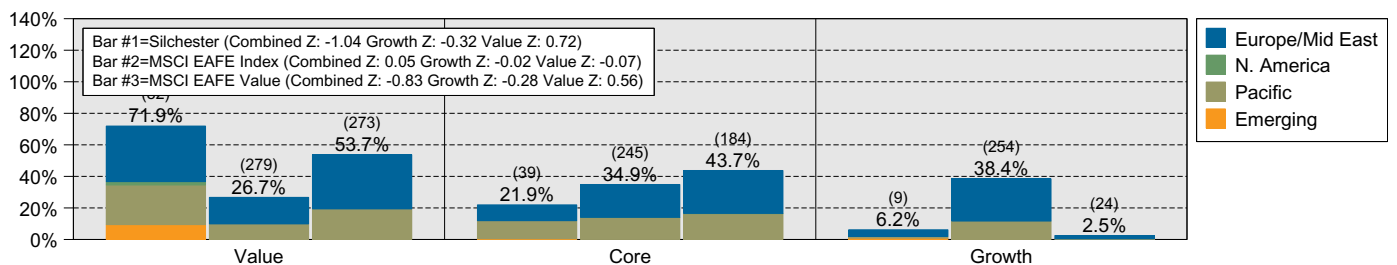
Style Map vs Callan NonUS Dev Val Eq Holdings as of December 31, 2023



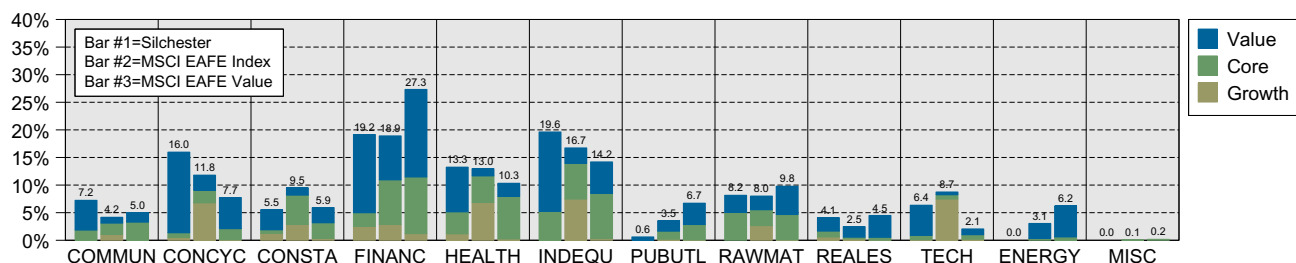
Style Exposure Matrix Holdings as of December 31, 2023

	Value	Core	Growth	Total
Europe/ Mid East	35.2% (32) 16.8% (147) 34.3% (146)	10.0% (14) 20.8% (137) 27.2% (105)	4.2% (5) 26.7% (149) 2.1% (16)	49.4% (51) 64.4% (433) 63.6% (267)
N. America	2.1% (2) 0.0% (0) 0.0% (0)	0.0% (0) 0.1% (1) 0.2% (1)	0.0% (0) 0.0% (0) 0.0% (0)	2.1% (2) 0.1% (1) 0.2% (1)
Pacific	25.1% (37) 9.9% (132) 19.4% (127)	11.4% (20) 13.9% (107) 16.4% (78)	1.1% (3) 11.7% (105) 0.4% (8)	37.7% (60) 35.5% (344) 36.2% (213)
Emerging	9.4% (11) 0.0% (0) 0.0% (0)	0.5% (5) 0.0% (0) 0.0% (0)	0.9% (1) 0.0% (0) 0.0% (0)	10.8% (17) 0.0% (0) 0.0% (0)
Total	71.9% (82) 26.7% (279) 53.7% (273)	21.9% (39) 34.9% (245) 43.7% (184)	6.2% (9) 38.4% (254) 2.5% (24)	100.0% (130) 100.0% (778) 100.0% (481)

Combined Z-Score Style Distribution Holdings as of December 31, 2023



Sector Weights Distribution Holdings as of December 31, 2023



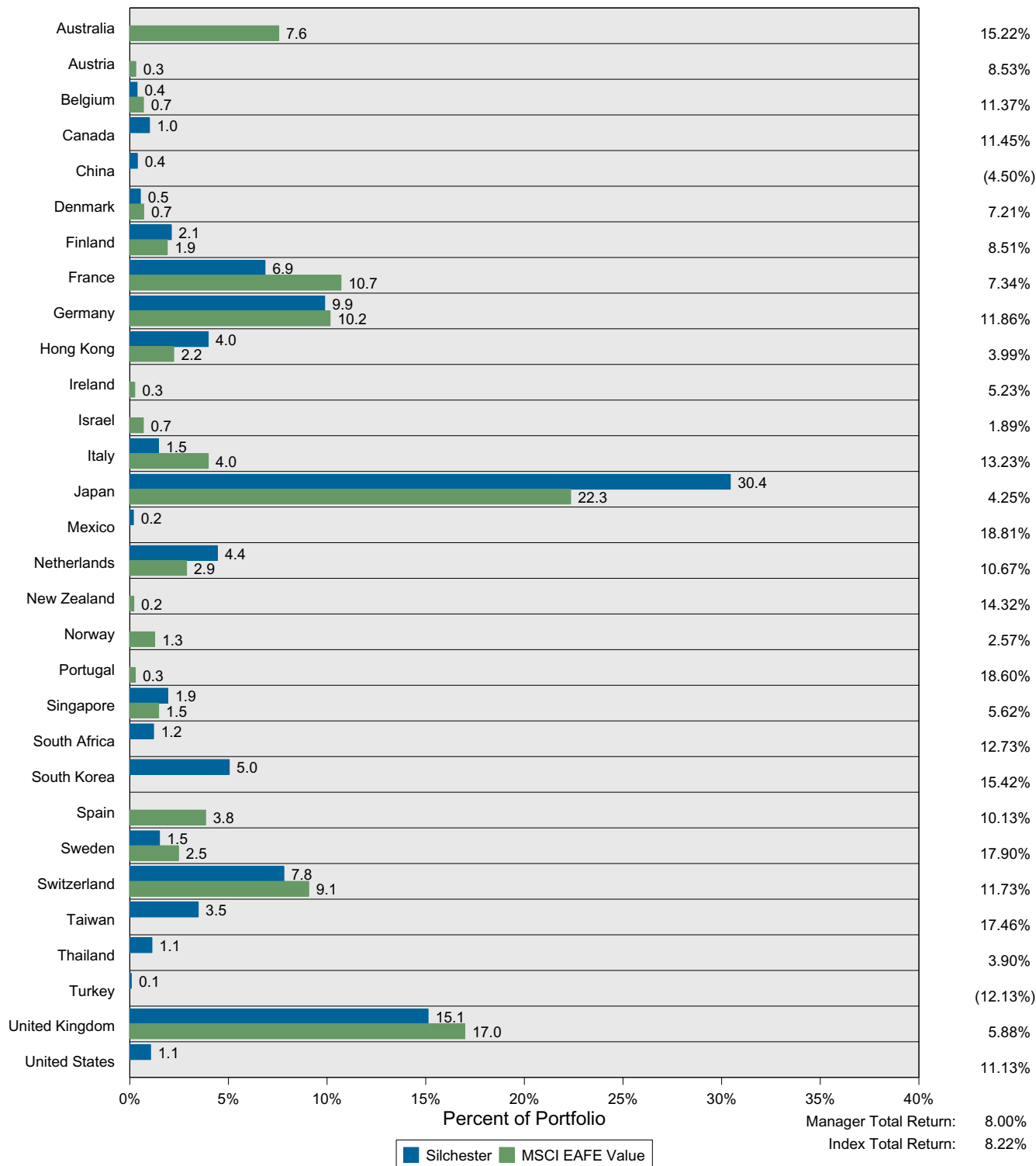
Country Allocation Silchester VS MSCI EAFE Value (Net)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of December 31, 2023

Index Rtns



Walter Scott Period Ended December 31, 2023

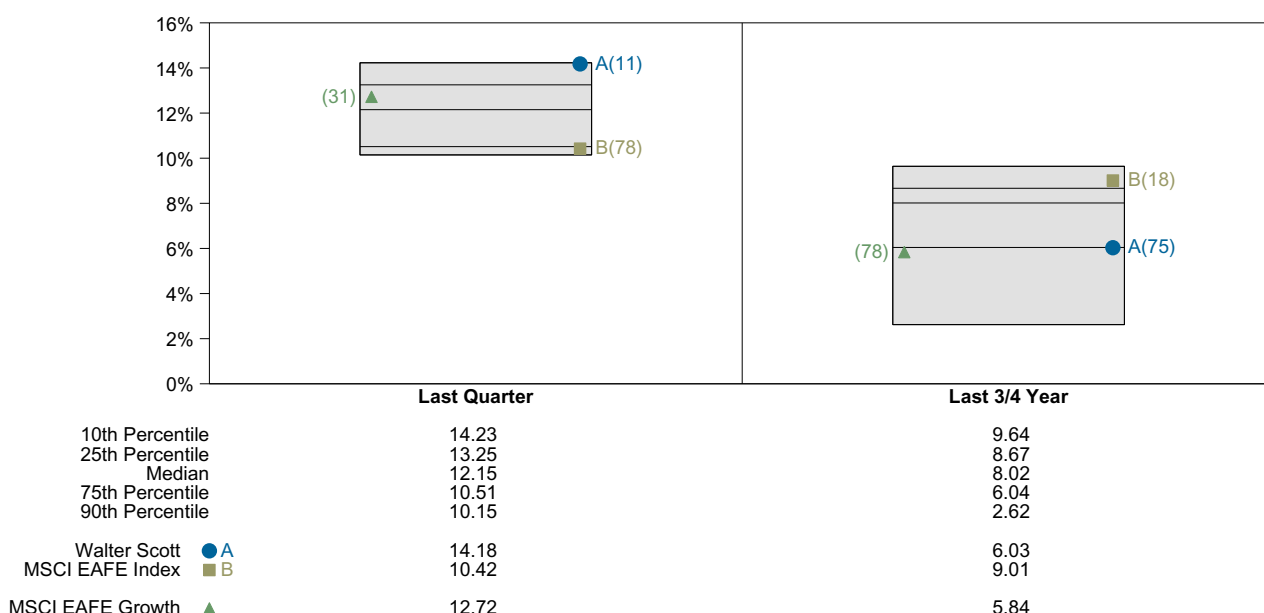
Investment Philosophy

Walter Scott employs a traditional bottom-up process to build portfolios with between 40 and 60 names. Given this bottom up approach, country weighting deviations from the benchmark can be significant. The team looks for companies with IRRs greater than 20% and then evaluates return components such as dividend yield, earnings growth, and P/E multiple expansion. The firm is unique in that its initial universe is primarily selected from a review of financial statements received directly from companies. Then, those that are likely to meet their financial criteria (IRR > 20%) are subject to in-depth review going back five years. A comprehensive analysis follows including assessment of the company's competitive position, industry, management, financials, and profitability. The team must be unanimously in favor of buying the stock before it is added to the portfolio.

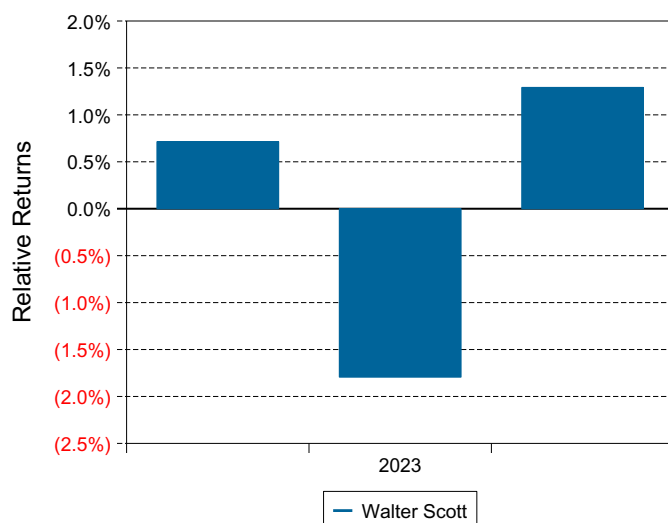
Quarterly Summary and Highlights

- Walter Scott's portfolio posted a 14.18% return for the quarter placing it in the 11 percentile of the Callan Non-US Developed Growth Equity group for the quarter and in the 75 percentile for the last three-quarter year.
- Walter Scott's portfolio outperformed the MSCI EAFE Growth by 1.46% for the quarter and outperformed the MSCI EAFE Growth for the three-quarter year by 0.20%.

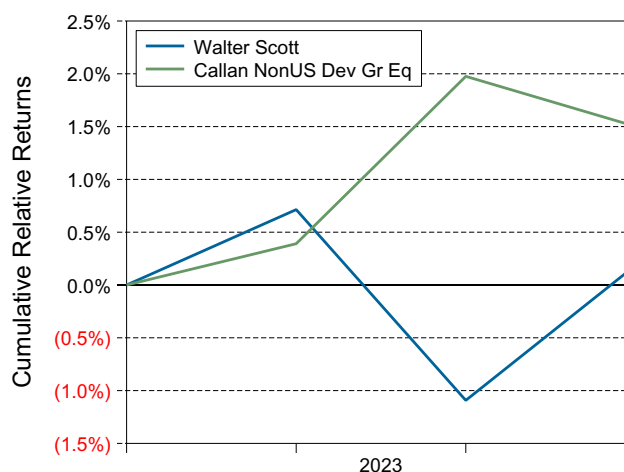
Performance vs Callan Non-US Developed Growth Equity (Gross)



Relative Return vs MSCI EAFE Growth



Cumulative Returns vs MSCI EAFE Growth

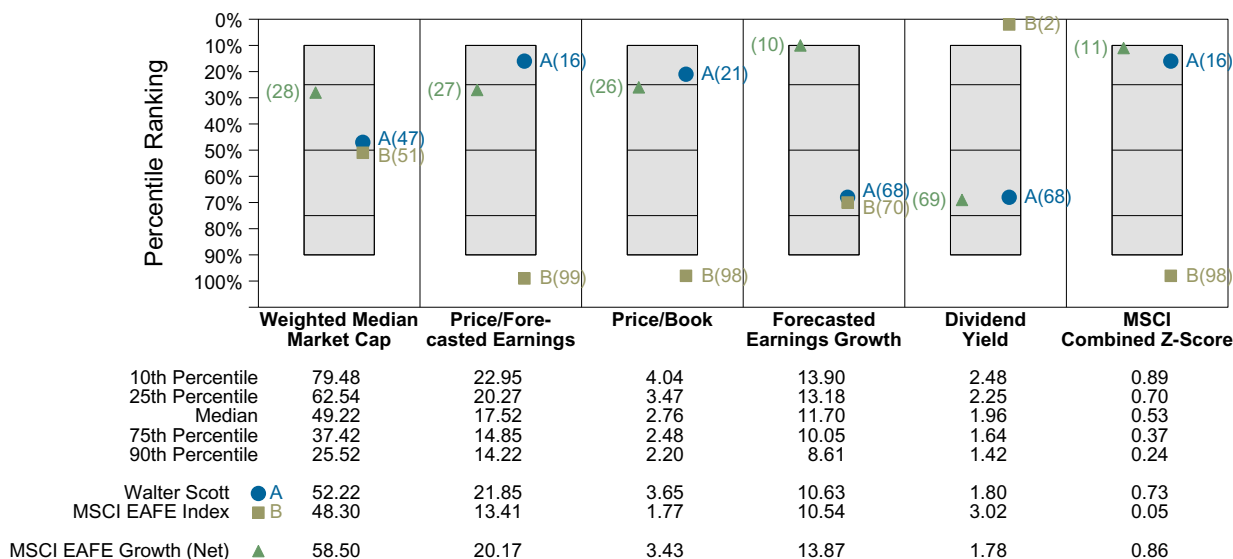


Walter Scott Equity Characteristics Analysis Summary

Portfolio Characteristics

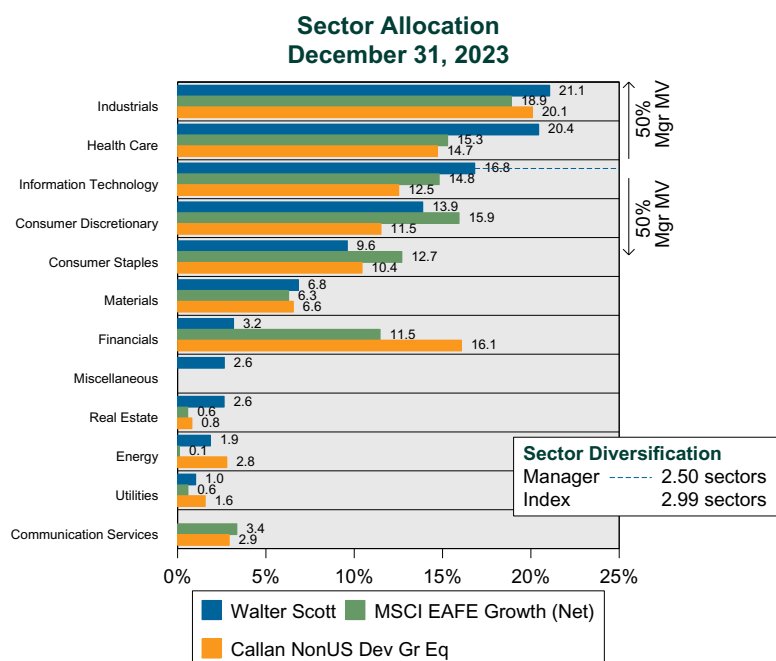
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Non-US Developed Growth Equity as of December 31, 2023

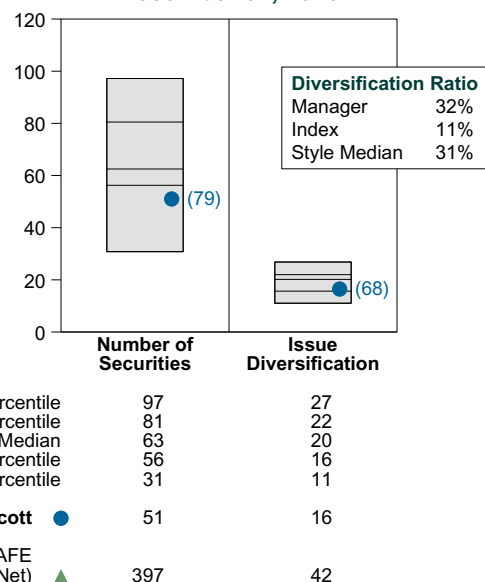


Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



Diversification December 31, 2023



Walter Scott Top 10 Portfolio Holdings Characteristics as of December 31, 2023

10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Shin Etsu Chemical Co Ltd Shs	Materials	\$1,296,974	3.8%	44.21%	84.95	19.12	1.69%	21.93%
Lvmh Moet Hennessy Lou Vuittd Ord	Consumer Discretionary	\$1,189,328	3.5%	7.68%	406.86	22.09	1.68%	6.99%
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$1,179,550	3.4%	27.54%	303.59	34.70	0.87%	20.64%
Keyence Corp Ord	Information Technology	\$1,150,826	3.3%	18.47%	107.16	38.48	0.46%	16.30%
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$1,149,411	3.3%	26.57%	501.06	15.76	2.03%	4.70%
Alimentation Couche Tardmulti Vtg.Sh	Consumer Staples	\$1,091,157	3.2%	16.25%	57.02	17.82	0.87%	7.60%
Air Liquide Sa	Materials	\$1,056,658	3.1%	14.96%	101.90	25.22	1.66%	9.20%
Daikin Industries Ltd Shs	Industrials	\$1,032,620	3.0%	3.64%	47.79	22.67	1.08%	9.30%
Loreal	Consumer Staples	\$1,025,557	3.0%	19.58%	266.20	34.16	1.05%	9.85%
Smc Corp Shs	Industrials	\$1,006,435	2.9%	19.72%	36.20	24.71	1.13%	19.03%

10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Shin Etsu Chemical Co Ltd Shs	Materials	\$1,296,974	3.8%	44.21%	84.95	19.12	1.69%	21.93%
Vat Group Ag Common Stock Chf.1	Industrials	\$673,602	2.0%	39.25%	15.02	55.85	1.44%	(4.60)%
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$1,179,550	3.4%	27.54%	303.59	34.70	0.87%	20.64%
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$1,149,411	3.3%	26.57%	501.06	15.76	2.03%	4.70%
Experian Group Ord Gbp0	Industrials	\$654,673	1.9%	24.28%	37.51	26.40	1.37%	8.93%
Cochlear	Health Care	\$517,006	1.5%	24.03%	13.35	50.35	0.98%	12.37%
Hoya Corp Shs	Health Care	\$708,804	2.1%	22.10%	43.88	32.17	0.60%	14.80%
Csl Ltd Shs	Health Care	\$666,039	1.9%	21.24%	94.49	30.35	1.14%	15.94%
Kuehne & Nagel Int'l	Industrials	\$937,988	2.7%	20.68%	41.58	27.03	4.68%	(20.73)%
Smc Corp Shs	Industrials	\$1,006,435	2.9%	19.72%	36.20	24.71	1.13%	19.03%

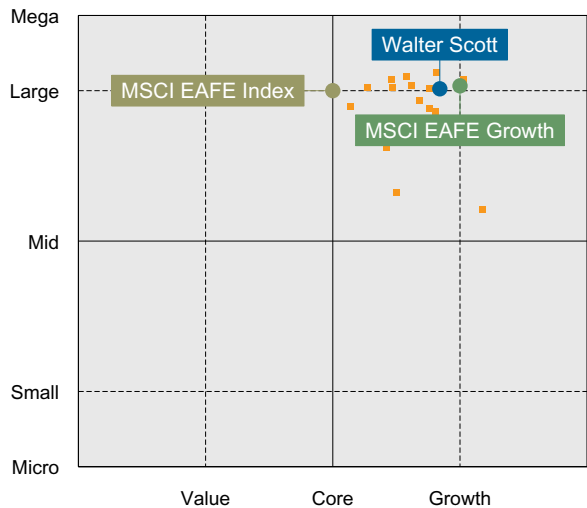
10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Jardine Matheson (Usd)	Industrials	\$324,157	0.9%	(10.96)%	11.92	6.30	5.35%	3.95%
Lonza Group Ag Zuerich Namen Akt	Health Care	\$436,459	1.3%	(9.67)%	31.29	28.65	0.95%	5.24%
Merck Kgaa Darmstadt Shs	Health Care	\$604,372	1.8%	(5.52)%	20.47	15.90	1.52%	0.79%
Diageo Plc Ord	Consumer Staples	\$569,674	1.7%	(1.68)%	81.45	18.15	2.78%	3.04%
Hang Lung Properties Limited Shs	Real Estate	\$227,029	0.7%	1.80%	6.27	9.16	7.17%	0.44%
Nestle S A Shs Nom New	Consumer Staples	\$619,381	1.8%	2.16%	309.33	19.17	2.93%	4.95%
Total Sa Act	Energy	\$640,680	1.9%	3.15%	164.15	6.86	5.15%	(1.90)%
Daikin Industries Ltd Shs	Industrials	\$1,032,620	3.0%	3.64%	47.79	22.67	1.08%	9.30%
Novartis	Health Care	\$566,561	1.6%	3.68%	242.30	14.11	3.65%	10.96%
Prudential	Financials	\$450,791	1.3%	4.27%	31.14	10.59	2.06%	(16.95)%

Current Holdings Based Style Analysis
Walter Scott
As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

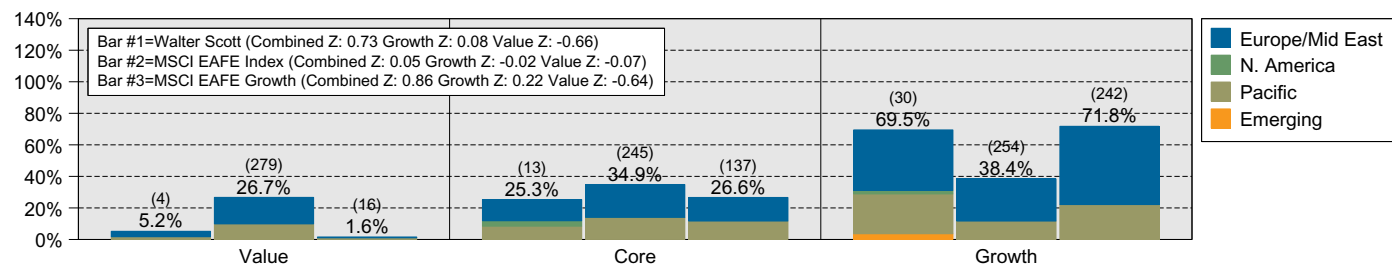
Style Map vs Callan NonUS Dev Gr Eq Holdings as of December 31, 2023



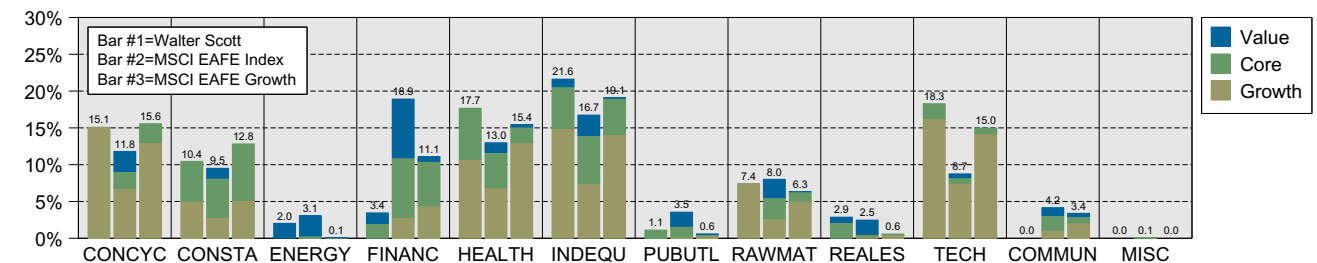
Style Exposure Matrix Holdings as of December 31, 2023

	Value	Core	Growth	Total
Europe/ Mid East	3.4% (2) 16.8% (147) 0.5% (6)	13.5% (7) 20.8% (137) 14.9% (69)	38.3% (17) 26.7% (149) 49.6% (139)	55.2% (26) 64.4% (433) 65.1% (214)
N. America	0.0% (0) 0.0% (0) 0.0% (0)	3.4% (1) 0.1% (1) 0.0% (0)	2.3% (1) 0.0% (0) 0.0% (0)	5.8% (2) 0.1% (1) 0.0% (0)
Pacific	1.7% (2) 9.9% (132) 1.1% (10)	8.4% (5) 13.9% (107) 11.7% (68)	25.2% (11) 11.7% (105) 22.1% (103)	35.4% (18) 35.5% (344) 34.9% (181)
Emerging	0.0% (0) 0.0% (0) 0.0% (0)	0.0% (0) 0.0% (0) 0.0% (0)	3.6% (1) 0.0% (0) 0.0% (0)	3.6% (1) 0.0% (0) 0.0% (0)
Total	5.2% (4) 26.7% (279) 1.6% (16)	25.3% (13) 34.9% (245) 26.6% (137)	69.5% (30) 38.4% (254) 71.8% (242)	100.0% (47) 100.0% (778) 100.0% (395)

Combined Z-Score Style Distribution Holdings as of December 31, 2023



Sector Weights Distribution Holdings as of December 31, 2023



Country Allocation

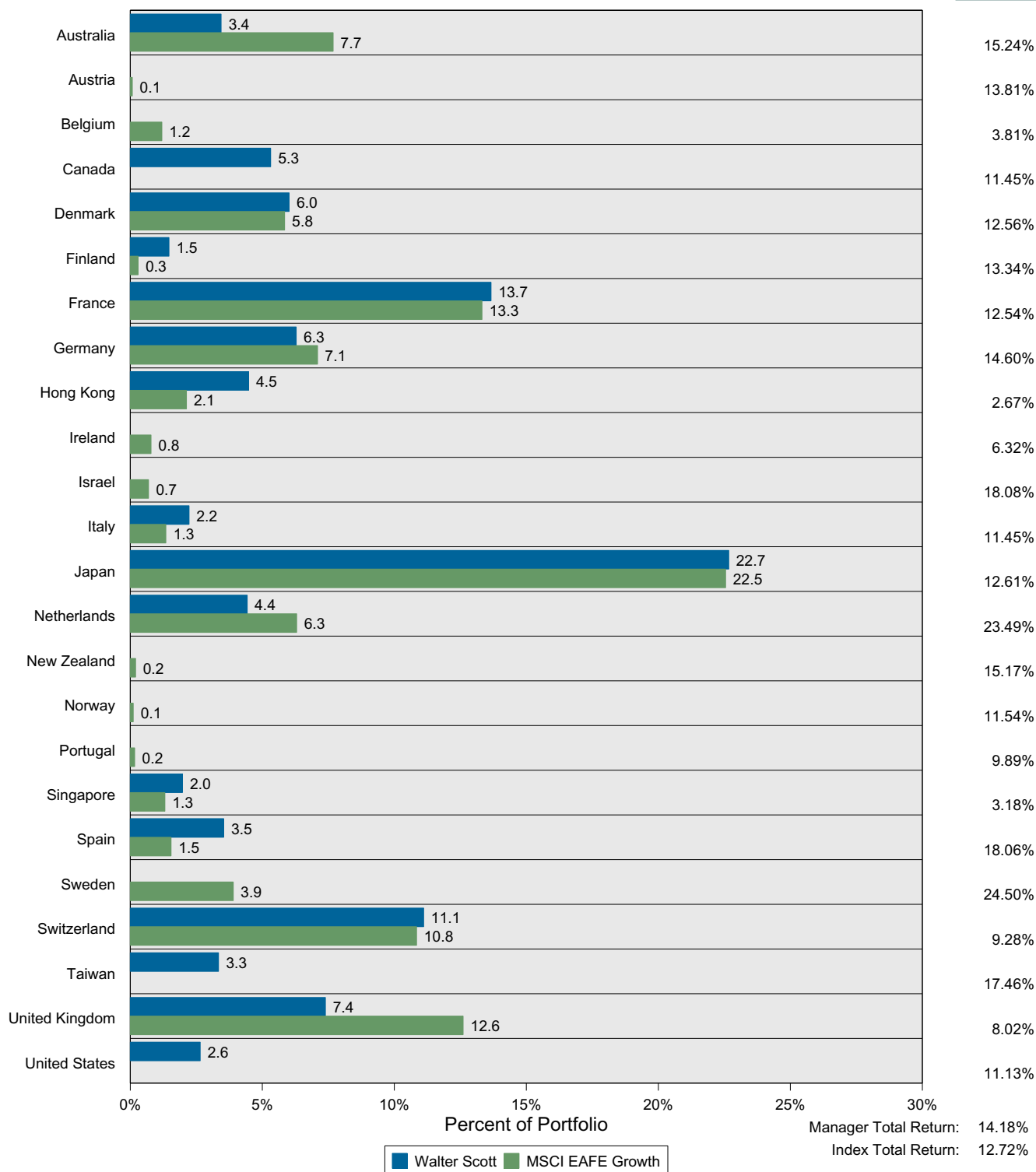
Walter Scott VS MSCI EAFE Growth (Net)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of December 31, 2023

Index Rtns



BlackRock EM Alpha Tilts Period Ended December 31, 2023

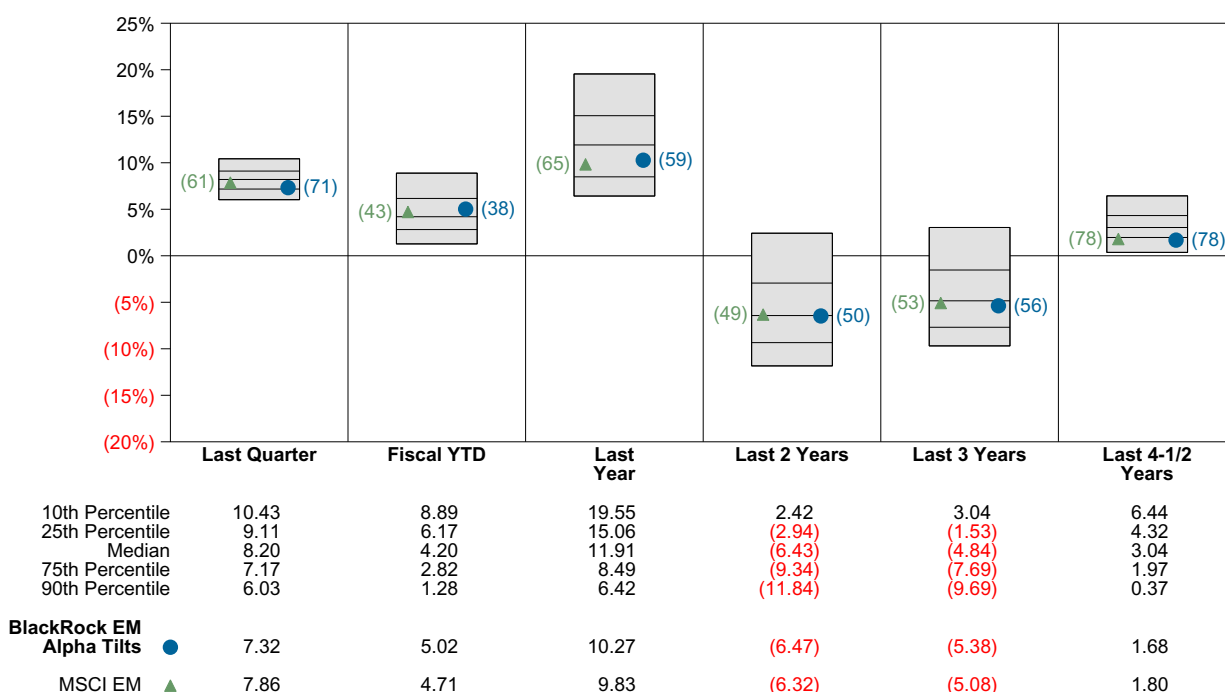
Investment Philosophy

BlackRock's Emerging Markets Opportunities Fund (EMOF), managed by BlackRock's Systematic Active Equity Team, offers investors active exposure to emerging markets equities as represented by the MSCI Emerging Markets Index. The EMOF strategy utilizes return forecasting techniques to identify opportunities across emerging markets. These opportunities are captured by over and underweighting securities and countries while managing the overall risk to the fund. The Fund's predicted alpha is 3-6% annualized over a market cycle, with 3-6% active risk. Overall, the strategy seeks to deliver absolute risk levels similar to that of the index

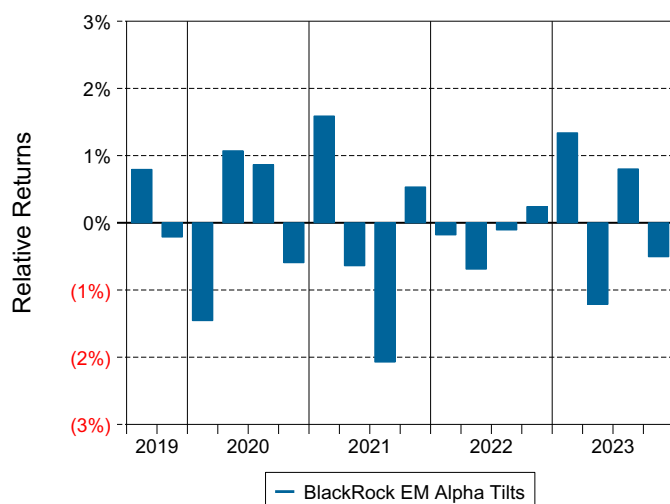
Quarterly Summary and Highlights

- BlackRock EM Alpha Tilts's portfolio posted a 7.32% return for the quarter placing it in the 71 percentile of the Callan Emerging Broad group for the quarter and in the 59 percentile for the last year.
- BlackRock EM Alpha Tilts's portfolio underperformed the MSCI EM by 0.54% for the quarter and outperformed the MSCI EM for the year by 0.44%.

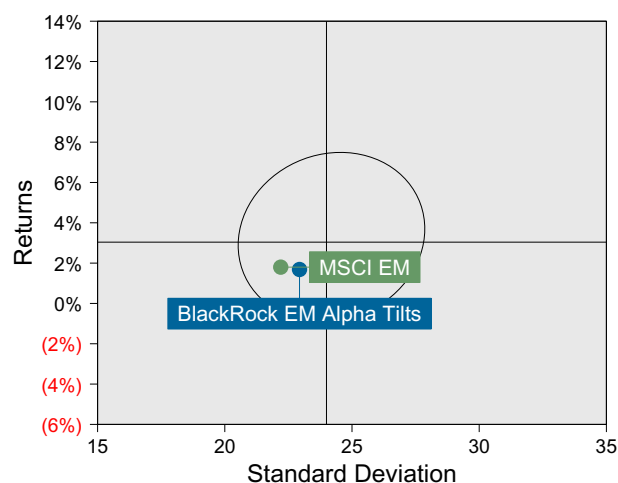
Performance vs Callan Emerging Broad (Gross)



Relative Return vs MSCI EM



Callan Emerging Broad (Gross) Annualized Four and One-Half Year Risk vs Return

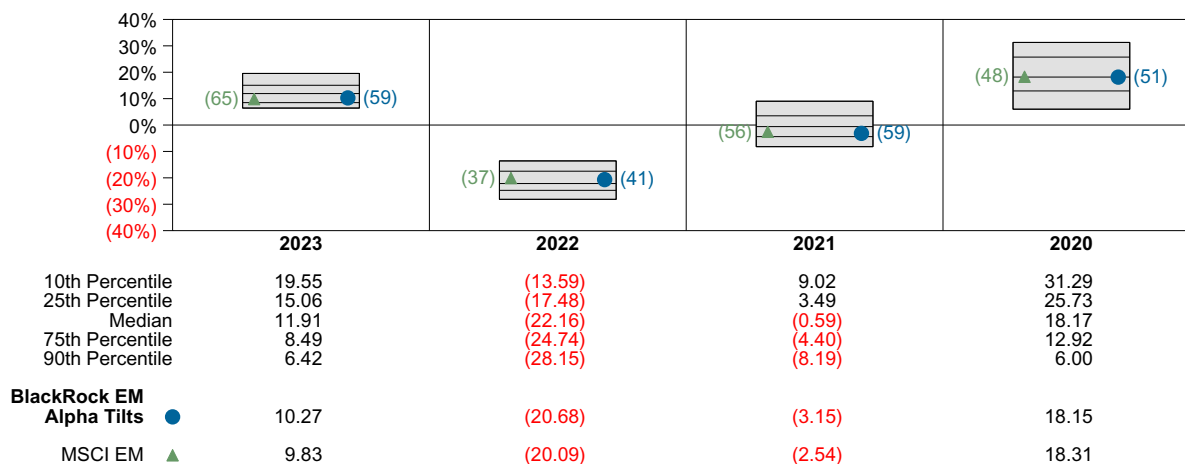


BlackRock EM Alpha Tilts Return Analysis Summary

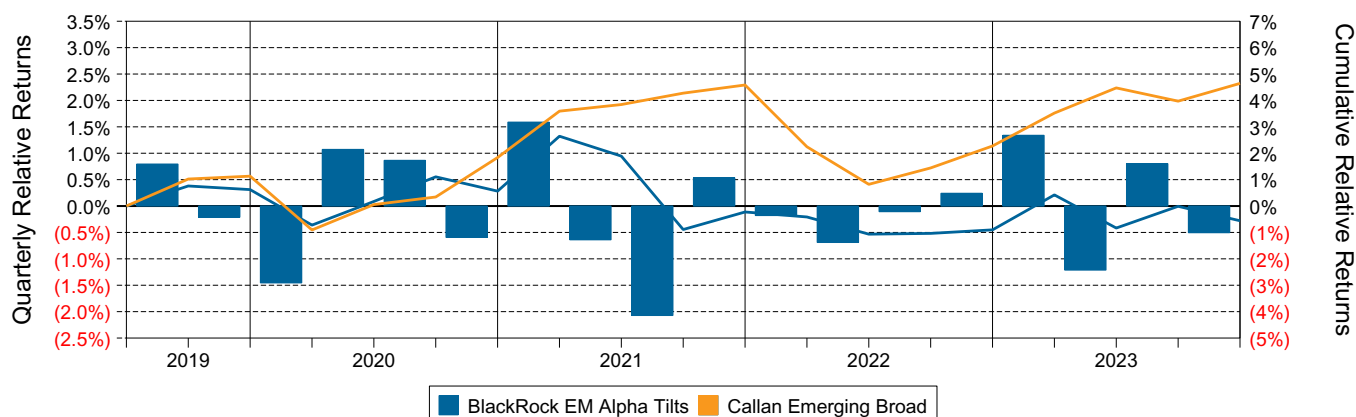
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

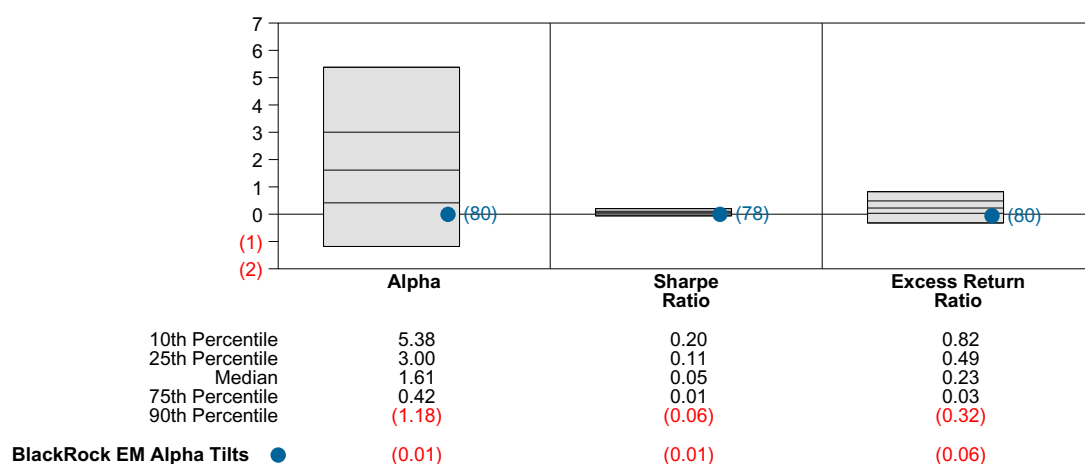
Performance vs Callan Emerging Broad (Gross)



Cumulative and Quarterly Relative Returns vs MSCI EM



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Four and One-Half Years Ended December 31, 2023

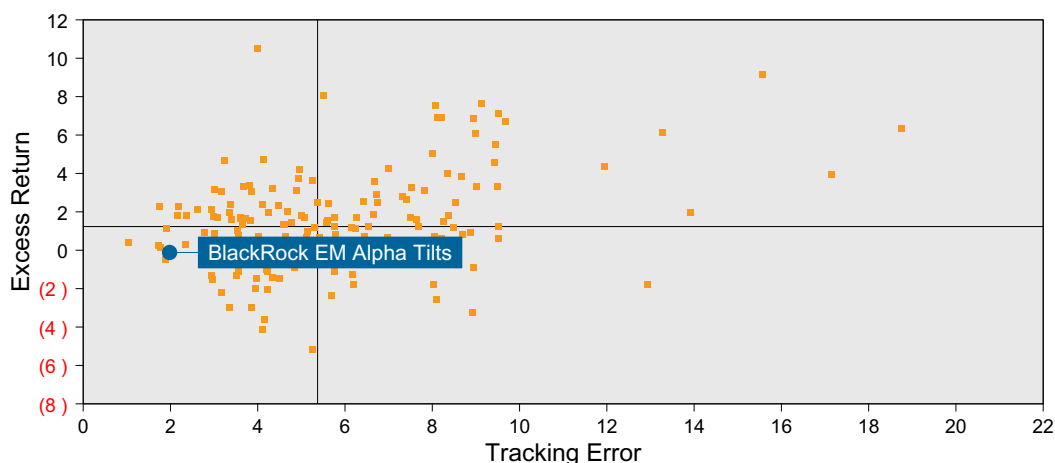


BlackRock EM Alpha Tilts Risk Analysis Summary

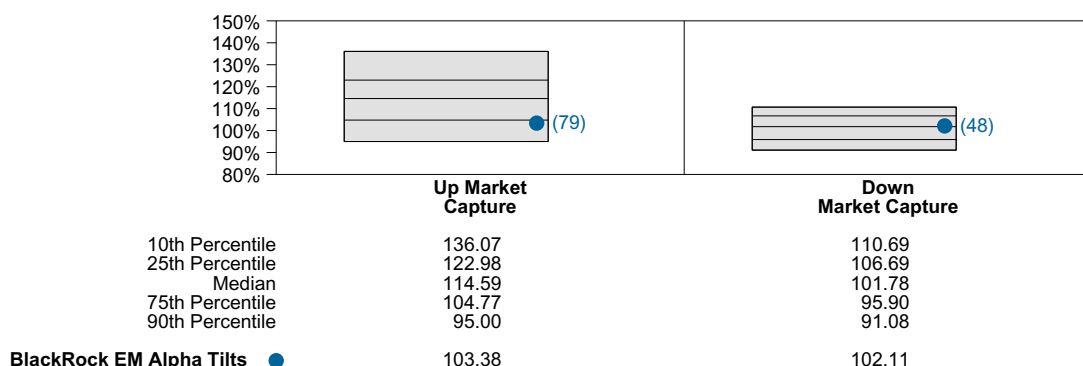
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

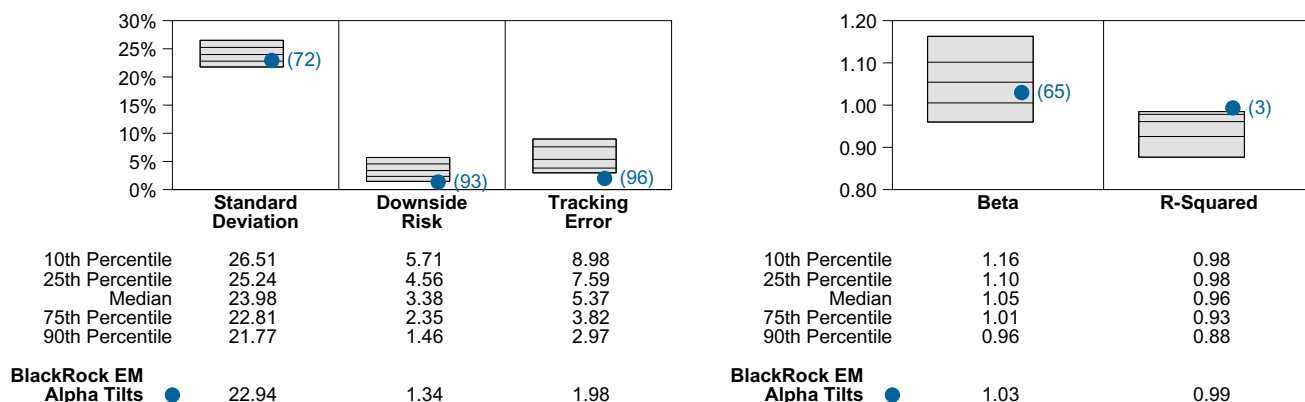
Risk Analysis vs Callan Emerging Broad (Gross) Four and One-Half Years Ended December 31, 2023



Market Capture vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Four and One-Half Years Ended December 31, 2023



Risk Statistics Rankings vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Four and One-Half Years Ended December 31, 2023

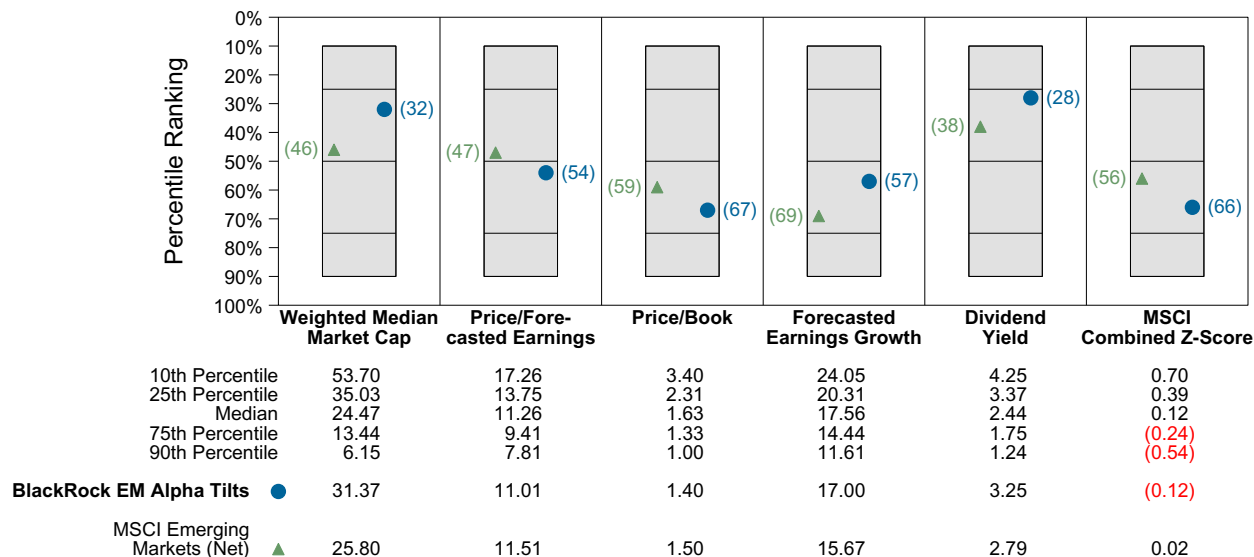


BlackRock EM Alpha Tilts Equity Characteristics Analysis Summary

Portfolio Characteristics

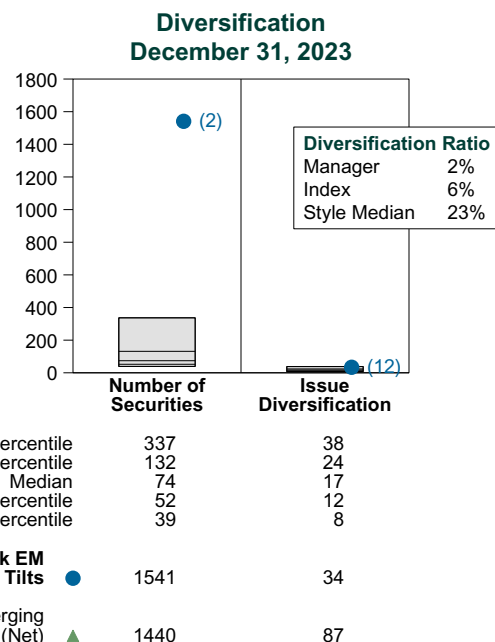
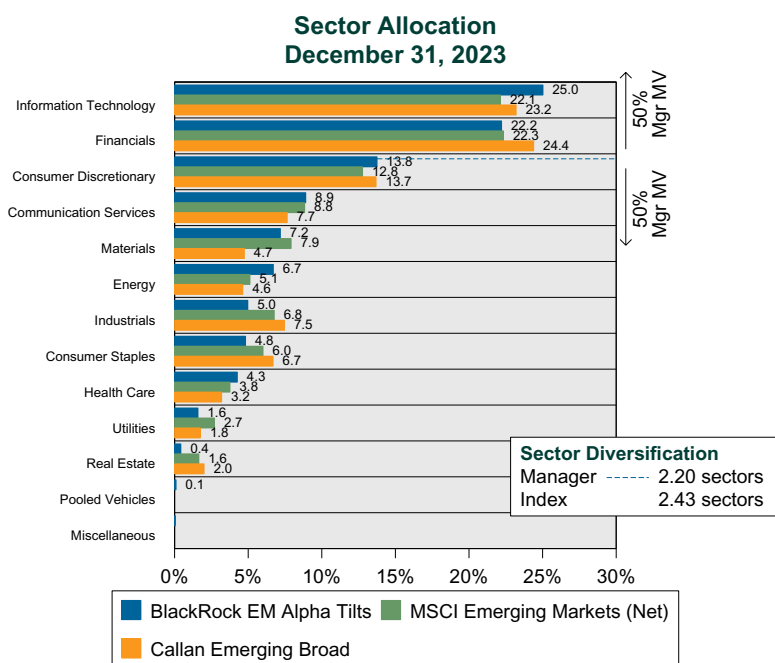
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of December 31, 2023



Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



BlackRock EM Alpha Tilts Top 10 Portfolio Holdings Characteristics as of December 31, 2023

10 Largest Holdings

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Taiwan Semicond Manufac Co L Shs	Information Technology	\$1,363,289	6.9%	19.87%	501.06	15.76	2.03%	4.70%
Tencent Holdings Limited Shs Par Hkd	Communication Services	\$833,138	4.2%	(1.89)%	356.56	14.15	0.82%	27.00%
Samsung Electronics Co Ltd Ord	Information Technology	\$774,301	3.9%	20.88%	363.87	17.26	1.83%	(6.00)%
Alibaba Group Holding Ltd	Consumer Discretionary	\$581,728	2.9%	(8.42)%	197.26	7.99	1.29%	(1.11)%
H D F C Bank Ltd Shs	Financials	\$305,364	1.5%	11.75%	155.95	17.99	1.11%	14.50%
Vale Sa Shs	Materials	\$299,432	1.5%	21.37%	72.14	6.40	7.85%	(12.46)%
Meituan Dianping Hk/03690	Consumer Discretionary	\$296,445	1.5%	(26.88)%	59.15	15.22	0.00%	134.10%
Media Tek Incorporation Shs	Information Technology	\$292,951	1.5%	45.25%	52.90	18.12	6.06%	46.77%
Reliance Industries Ltd Shs Demateri	Energy	\$269,973	1.4%	10.00%	210.17	21.61	0.35%	17.00%
Icici Bank Limited Shs Dematerial	Financials	\$267,159	1.4%	4.48%	84.01	16.85	0.80%	116.32%

10 Best Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Compania De Minas Buenaventu Sponsor	Materials	\$199	0.0%	83.54%	3.70	119.51	0.51%	-
Aac Technologies Holdings In Shs New	Information Technology	\$129	0.0%	77.15%	3.56	21.37	0.52%	(31.22)%
Harmony Gold Mining Co	Materials	\$221	0.0%	74.99%	4.05	8.06	0.78%	44.45%
Companhia Siderurgica Nacion Ord	Materials	\$163	0.0%	74.78%	5.62	13.73	12.46%	(11.05)%
Silergy	Information Technology	\$322	0.0%	72.71%	6.25	66.76	0.89%	12.75%
Bank of Polska Kasa Opieki Shs	Financials	\$97,816	0.5%	67.20%	10.15	7.57	2.37%	21.90%
The Korea Express Co Ltd Shs	Industrials	\$52,645	0.3%	64.94%	2.25	10.99	0.39%	37.60%
Adani Green Energy Ltd	Utilities	\$368	0.0%	61.44%	30.40	158.60	0.00%	-
Pko Bank Polski	Financials	\$90,980	0.5%	60.88%	16.00	7.77	3.58%	6.36%
Budimex Sa Shs	Industrials	\$123	0.0%	59.93%	4.06	24.09	2.83%	9.83%

10 Worst Performers

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Xtep International Holding L Shs	Consumer Discretionary	\$50	0.0%	(37.85)%	1.49	8.07	4.71%	(1.05)%
Sany Heavy Equip Intl Hldg L Shs	Industrials	\$65	0.0%	(37.60)%	3.08	7.44	2.52%	12.38%
Koza Altin Isletmeleri	Materials	\$39	0.0%	(37.01)%	2.12	9.85	2.10%	47.06%
Li Ning Company Limited Shs	Consumer Discretionary	\$385	0.0%	(35.10)%	7.03	11.02	3.35%	5.20%
Tofas Turk Otomobil Fabrikas Shs	Consumer Discretionary	\$54	0.0%	(34.03)%	3.56	5.06	2.93%	77.93%
China Overseas Property Hold Common	Real Estate	\$60	0.0%	(32.17)%	2.47	9.15	2.30%	19.80%
Tianjin Zhonghuan Semicon.'a'	Information Technology	\$32	0.0%	(31.55)%	8.92	6.76	0.51%	82.04%
Sasa	Materials	\$99	0.0%	(31.22)%	6.57	26.74	0.00%	41.98%
Hektas Ticaret	Materials	\$47	0.0%	(30.64)%	1.72	680.00	0.00%	(9.44)%
Haidilao International Holding	Consumer Discretionary	\$189	0.0%	(29.15)%	10.38	14.43	0.80%	-

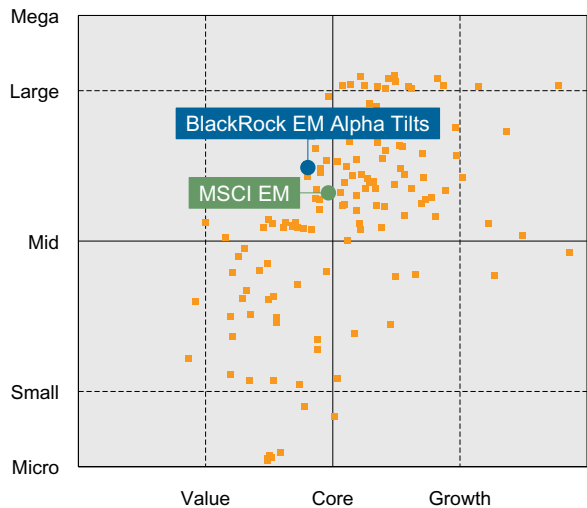
Current Holdings Based Style Analysis

BlackRock EM Alpha Tilts

As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

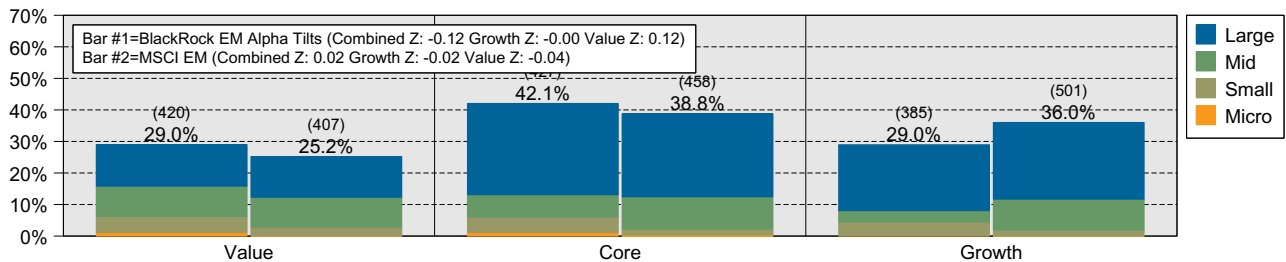
Style Map vs Callan Emerging Broad Holdings as of December 31, 2023



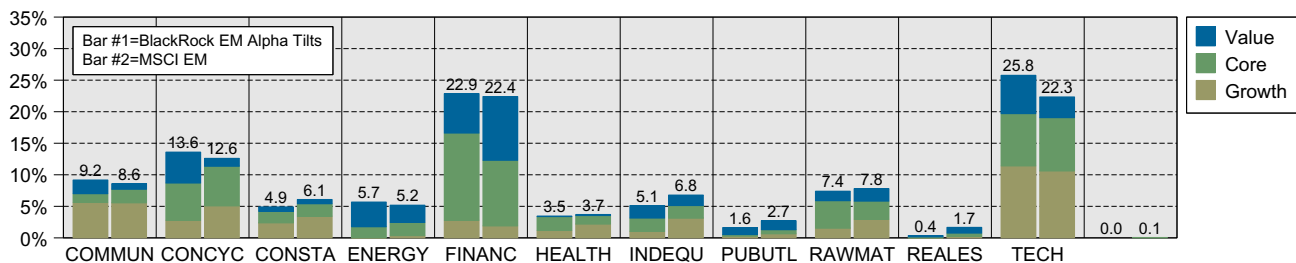
Style Exposure Matrix Holdings as of December 31, 2023

Large	13.2% (82)	29.0% (79)	20.9% (80)	63.0% (241)
	12.9% (88)	26.3% (80)	24.3% (98)	63.5% (266)
Mid	9.5% (179)	7.1% (221)	3.6% (199)	20.3% (599)
	9.5% (181)	10.3% (250)	9.8% (259)	29.6% (690)
Small	5.1% (144)	4.9% (123)	4.2% (102)	14.2% (369)
	2.7% (135)	1.8% (127)	1.9% (142)	6.4% (404)
Micro	1.2% (15)	1.1% (4)	0.2% (4)	2.5% (23)
	0.1% (3)	0.4% (1)	0.0% (2)	0.5% (6)
Total	29.0% (420)	42.1% (427)	29.0% (385)	100.0% (1232)
	25.2% (407)	38.8% (458)	36.0% (501)	100.0% (1366)
	Value	Core	Growth	Total

Combined Z-Score Style Distribution Holdings as of December 31, 2023



Sector Weights Distribution Holdings as of December 31, 2023



Country Allocation

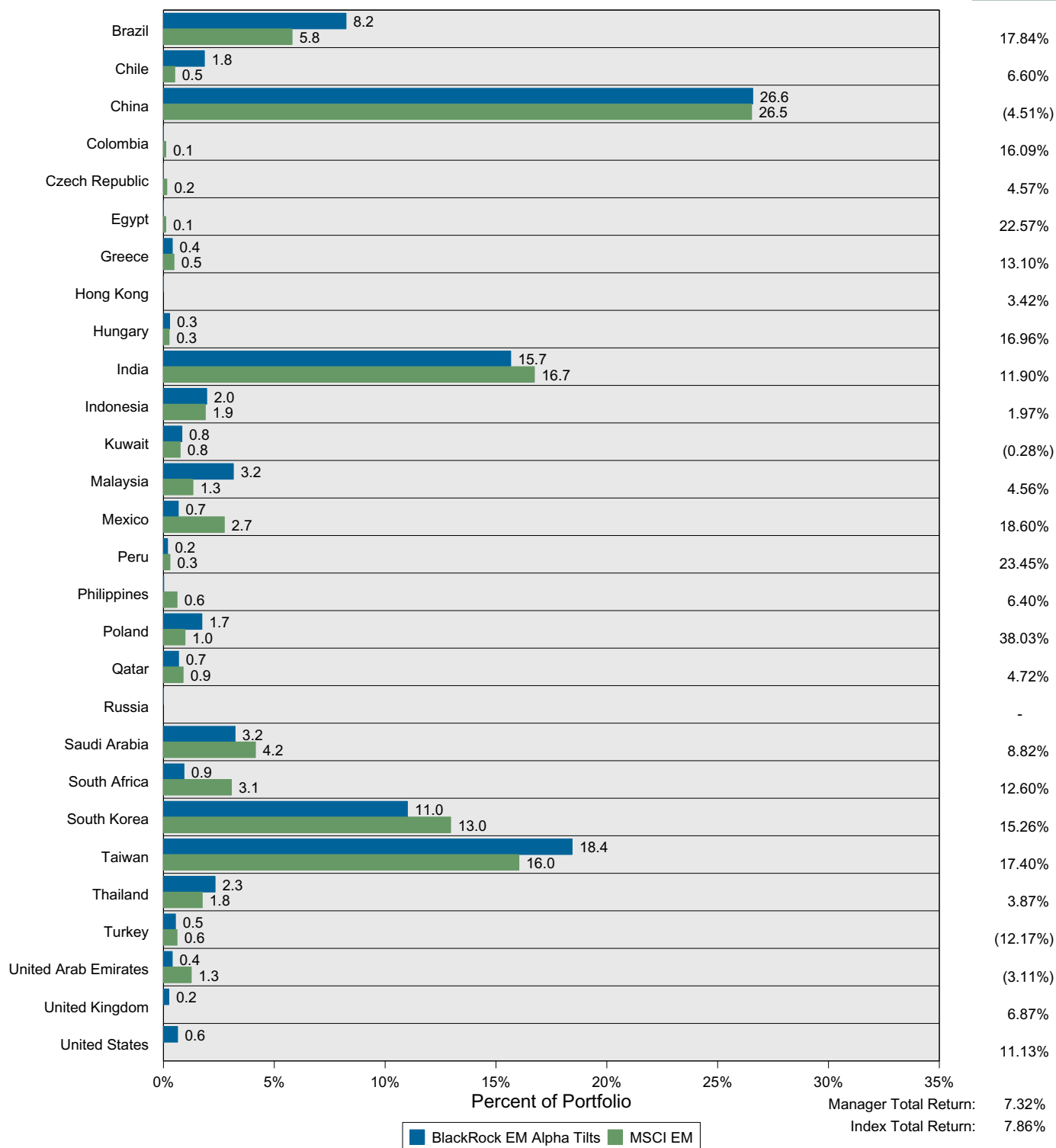
BlackRock EM Alpha Tilts VS MSCI Emerging Markets (Net)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of December 31, 2023

Index Rtns



ABS Global Period Ended December 31, 2023

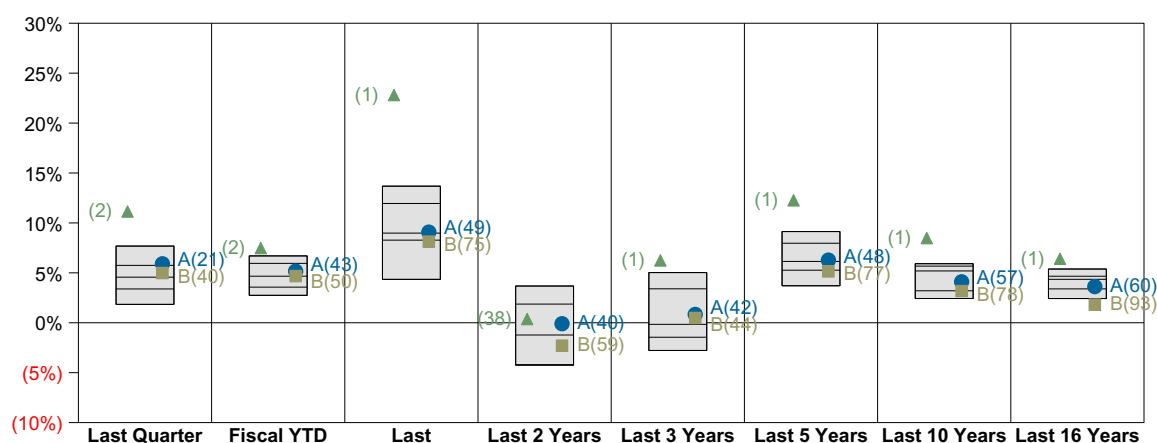
Investment Philosophy

ABS believes that equity long/short strategies provide an attractive long term risk reward profile in all market environments, making it not only an appealing alternative to long-only investing, but also an attractive approach to alternative asset investing. Coupled with their focus on equity long/short strategies, ABS believes that the FoHF portfolio framework enables investors the opportunity to invest in diversified portfolios with less volatility than the general equity markets. ABS manages portfolios employing a fundamental, global investment focus that target global equity market returns with significantly less volatility over a full market cycle.

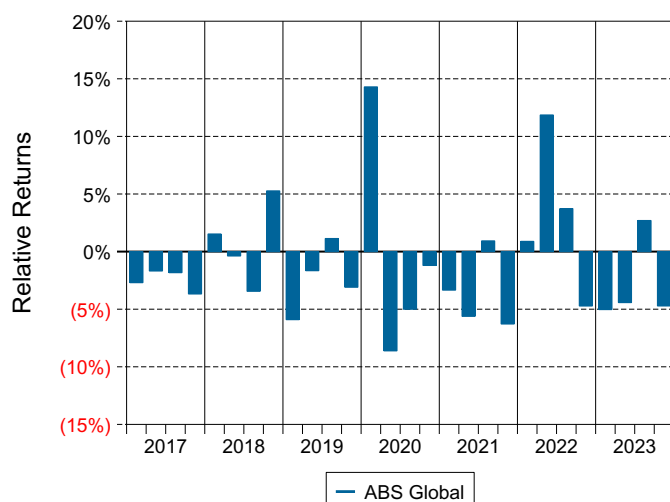
Quarterly Summary and Highlights

- ABS Global's portfolio posted a 5.91% return for the quarter placing it in the 21 percentile of the Callan Long/Short Equity Fund of Funds group for the quarter and in the 49 percentile for the last year.
- ABS Global's portfolio underperformed the MSCI ACWI GD by 5.24% for the quarter and underperformed the MSCI ACWI GD for the year by 13.73%.

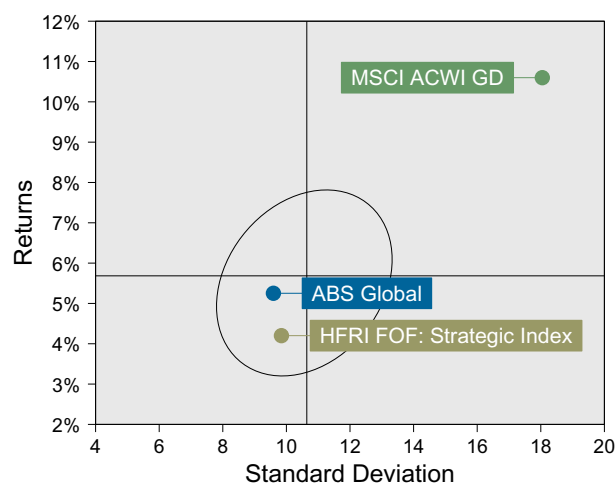
Performance vs Callan Long/Short Equity Fund of Funds (Net)



Relative Return vs MSCI ACWI GD



Callan Long/Short Equity Fund of Funds (Net) Annualized Seven Year Risk vs Return

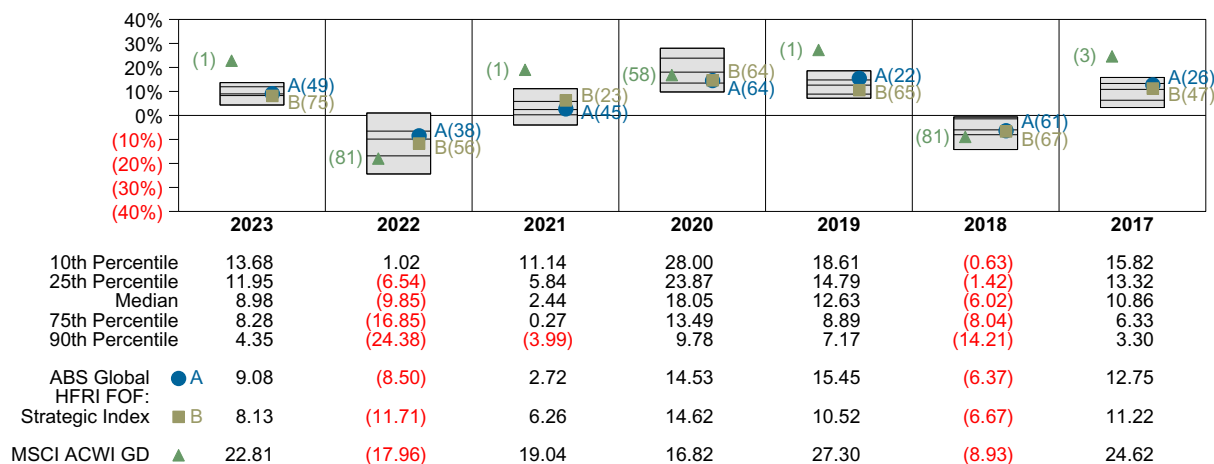


ABS Global Return Analysis Summary

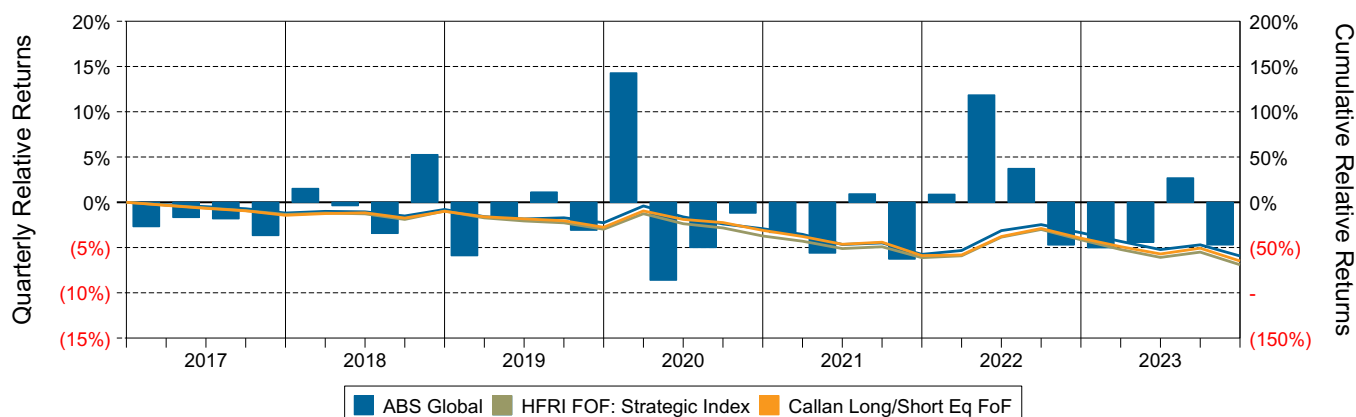
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

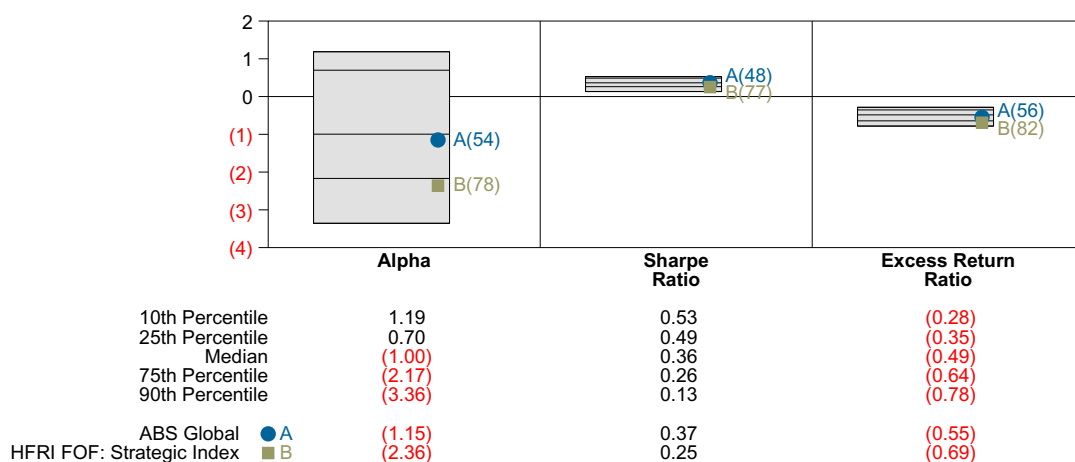
Performance vs Callan Long/Short Equity Fund of Funds (Net)



Cumulative and Quarterly Relative Returns vs MSCI ACWI GD



Risk Adjusted Return Measures vs MSCI ACWI GD Rankings Against Callan Long/Short Equity Fund of Funds (Net) Seven Years Ended December 31, 2023

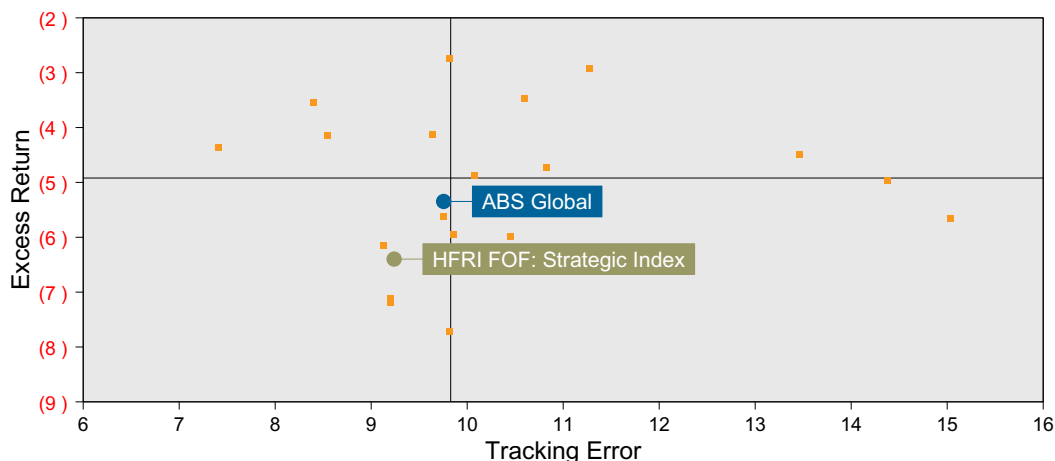


ABS Global Risk Analysis Summary

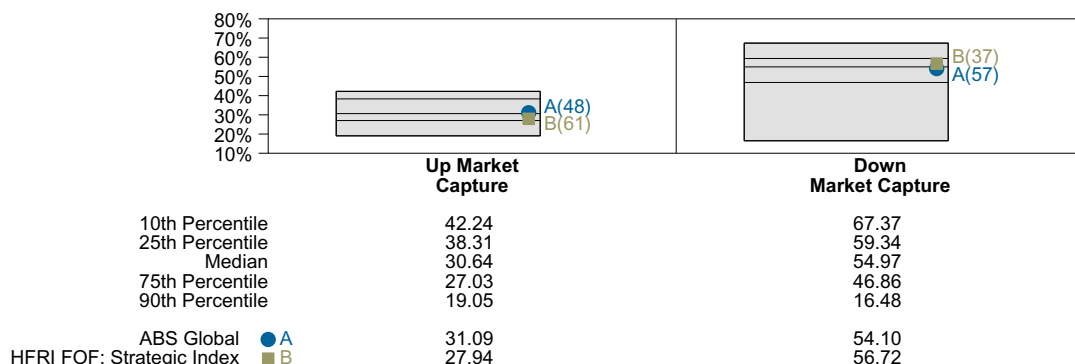
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

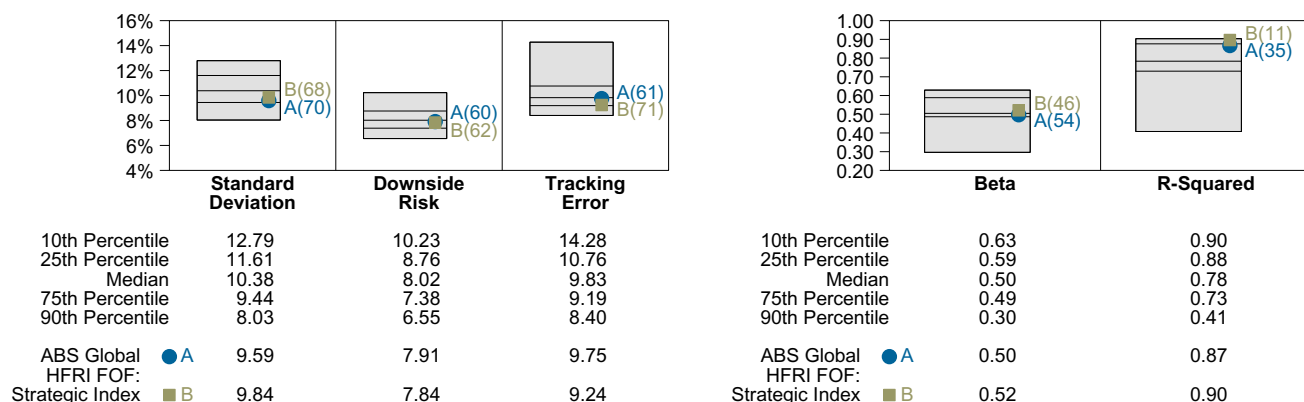
Risk Analysis vs Callan Long/Short Equity Fund of Funds (Net) Seven Years Ended December 31, 2023



Market Capture vs MSCI ACWI (Gross) Rankings Against Callan Long/Short Equity Fund of Funds (Net) Seven Years Ended December 31, 2023



Risk Statistics Rankings vs MSCI ACWI (Gross) Rankings Against Callan Long/Short Equity Fund of Funds (Net) Seven Years Ended December 31, 2023

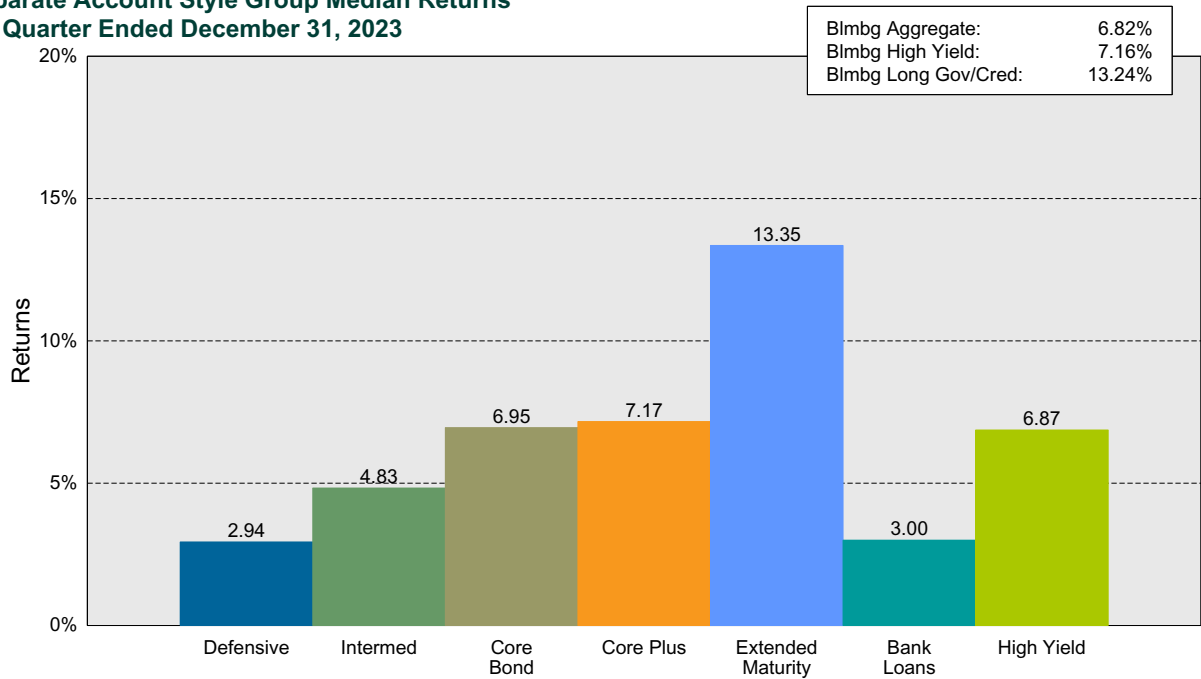


Domestic Fixed Income

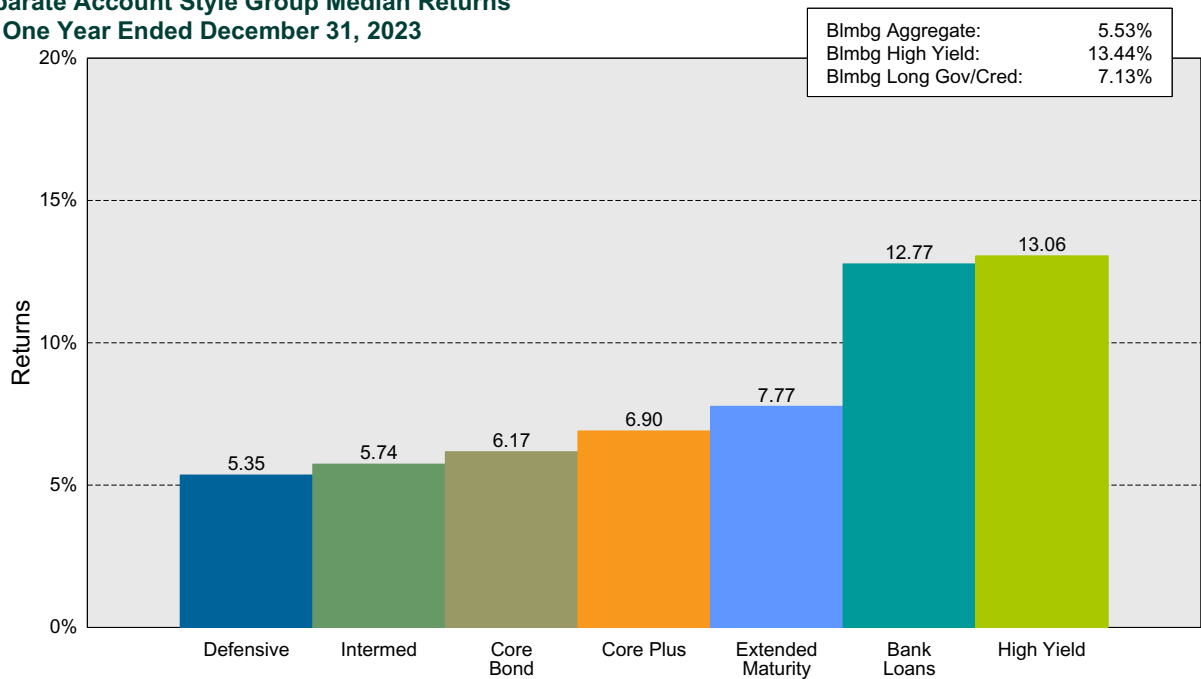
Active Management Overview

The 10-year U.S. Treasury yield was volatile in 2023. It began the year at 3.88%; the same place it closed at the end of 2022. During 2023, it hit an April low of 3.31% post the regional banking crisis and a high in October of 4.99%. Falling rates in November and December drove returns for the Bloomberg US Aggregate to a lofty +6.8% in 4Q and a solid +5.5% for the year. Corporate credit strongly outperformed U.S. Treasuries in 4Q (excess returns of 203 bps) and for the year (455 bps). High yield (Bloomberg US High Yield Corporate Index) climbed 7.2% for the quarter and was up an equity-like 13.4% for the year. Credit spreads for investment grade and high yield corporates ended the year below 10-year averages.

Separate Account Style Group Median Returns
for Quarter Ended December 31, 2023



Separate Account Style Group Median Returns
for One Year Ended December 31, 2023

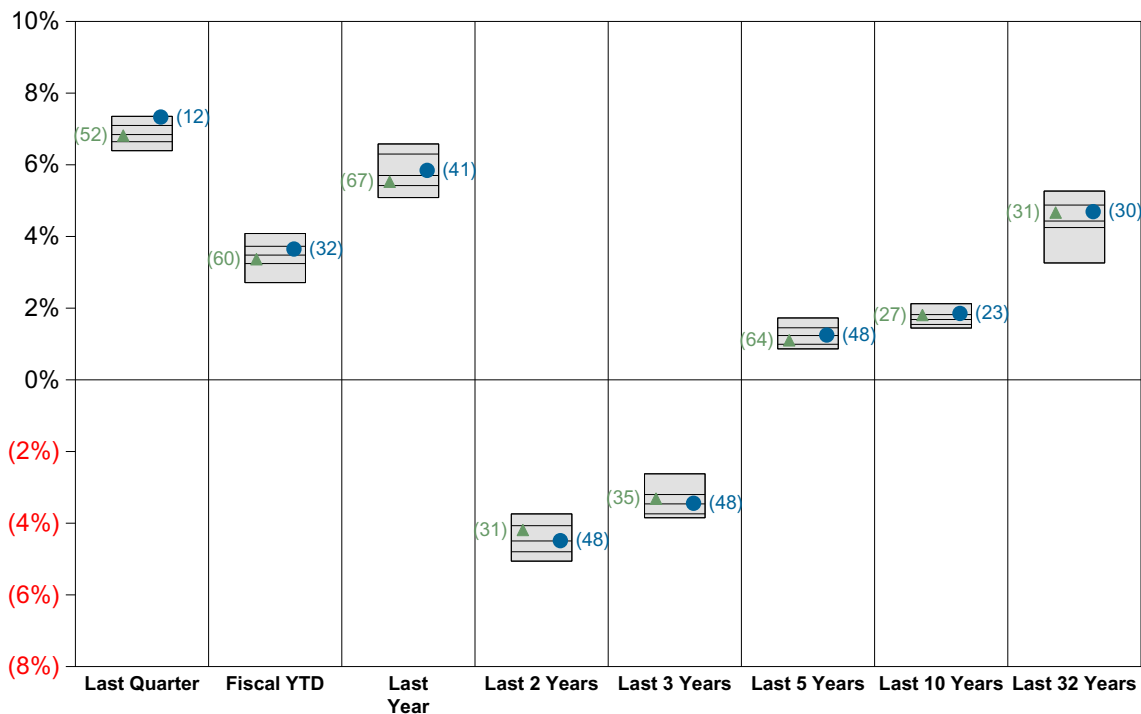


Domestic Fixed Income Period Ended December 31, 2023

Quarterly Summary and Highlights

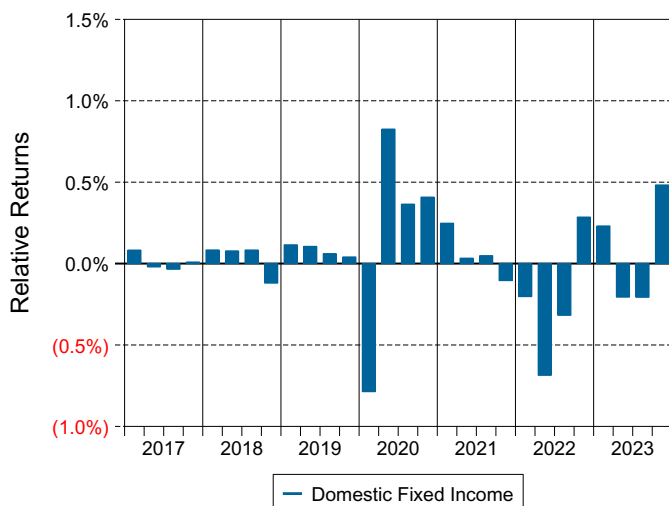
- Domestic Fixed Income's portfolio posted a 7.33% return for the quarter placing it in the 12 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 41 percentile for the last year.
- Domestic Fixed Income's portfolio outperformed the Blmbg:Aggregate by 0.52% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.32%.

Performance vs Callan Core Bond Mutual Funds (Net)

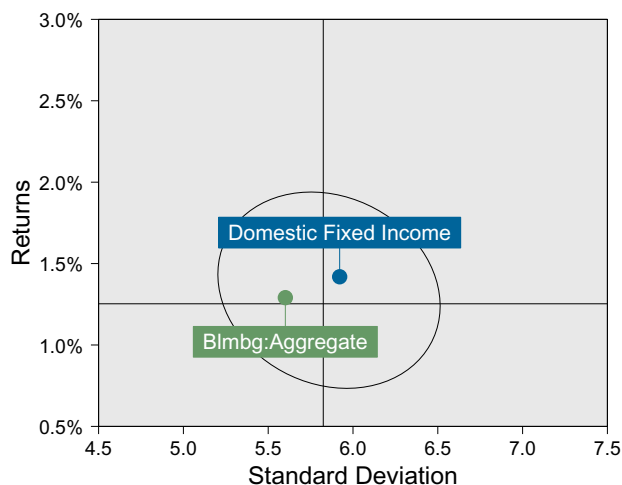


10th Percentile	7.35	4.08	6.58	(3.74)	(2.62)	1.73	2.12	5.27
25th Percentile	7.10	3.73	6.30	(4.07)	(3.20)	1.45	1.82	4.88
Median	6.84	3.48	5.70	(4.50)	(3.46)	1.24	1.68	4.43
75th Percentile	6.64	3.24	5.42	(4.80)	(3.74)	0.99	1.55	4.25
90th Percentile	6.39	2.71	5.09	(5.06)	(3.85)	0.86	1.45	3.26
Domestic Fixed Income	7.33	3.65	5.84	(4.49)	(3.44)	1.25	1.85	4.69
Blmbg:Aggregate	6.82	3.37	5.53	(4.19)	(3.31)	1.10	1.81	4.67

Relative Return vs Blmbg:Aggregate



Callan Core Bond Mutual Funds (Net) Annualized Seven Year Risk vs Return

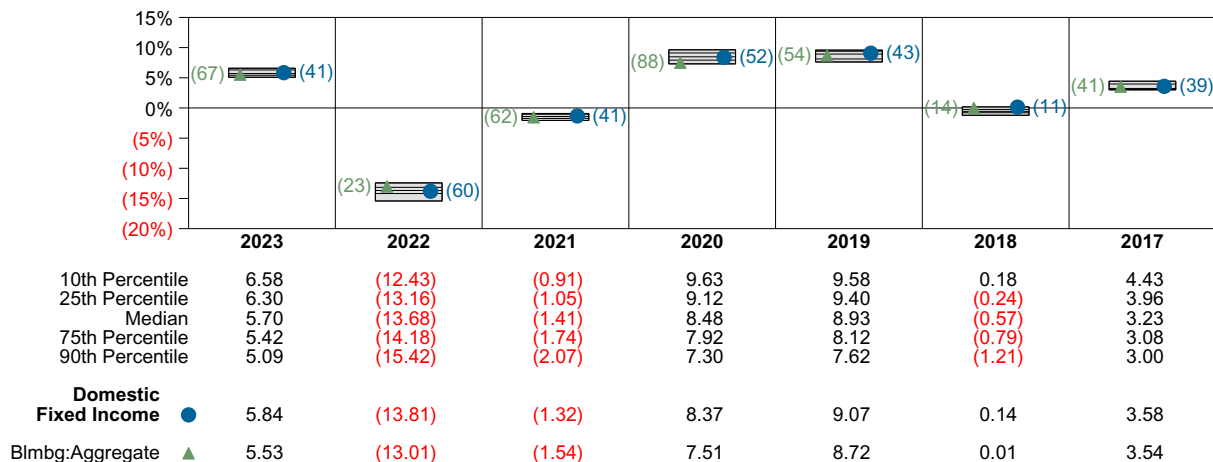


Domestic Fixed Income Return Analysis Summary

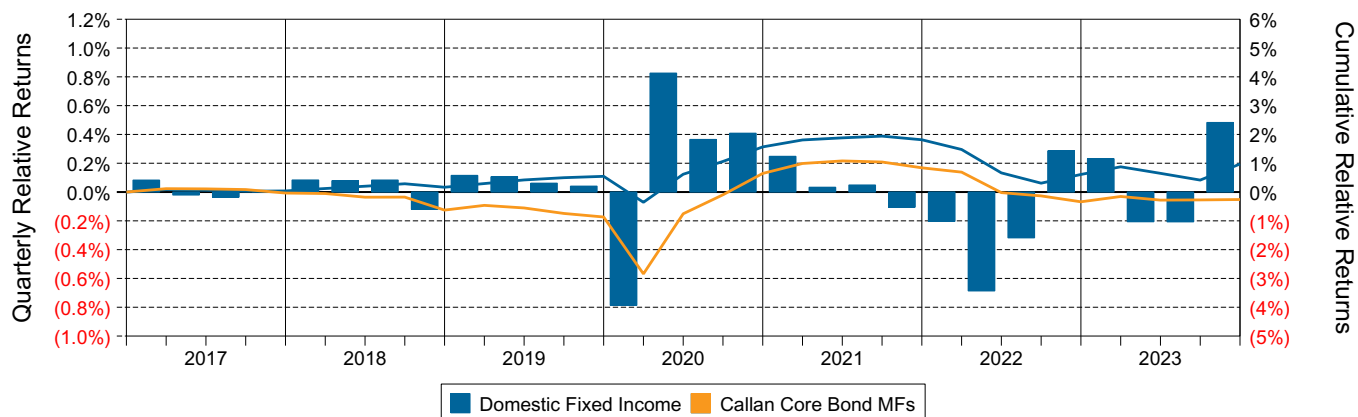
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

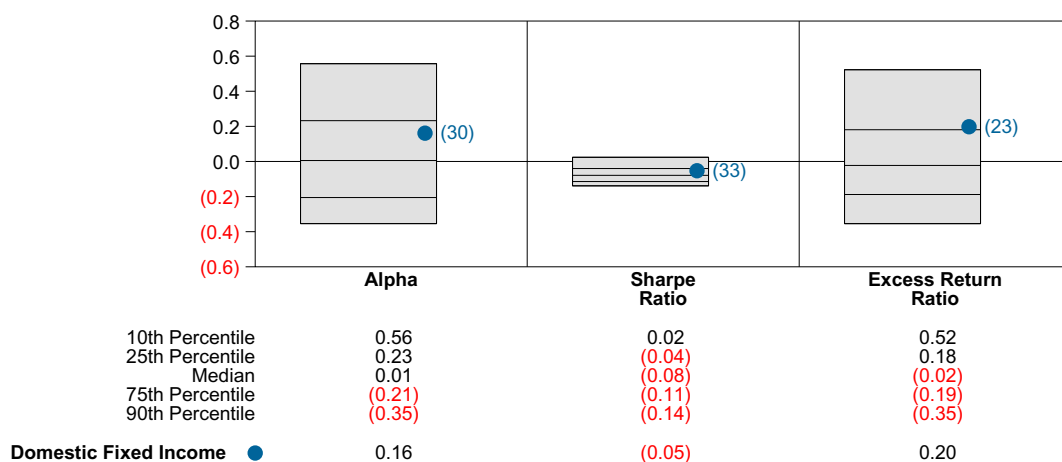
Performance vs Callan Core Bond Mutual Funds (Net)



Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Bond Mutual Funds (Net) Seven Years Ended December 31, 2023

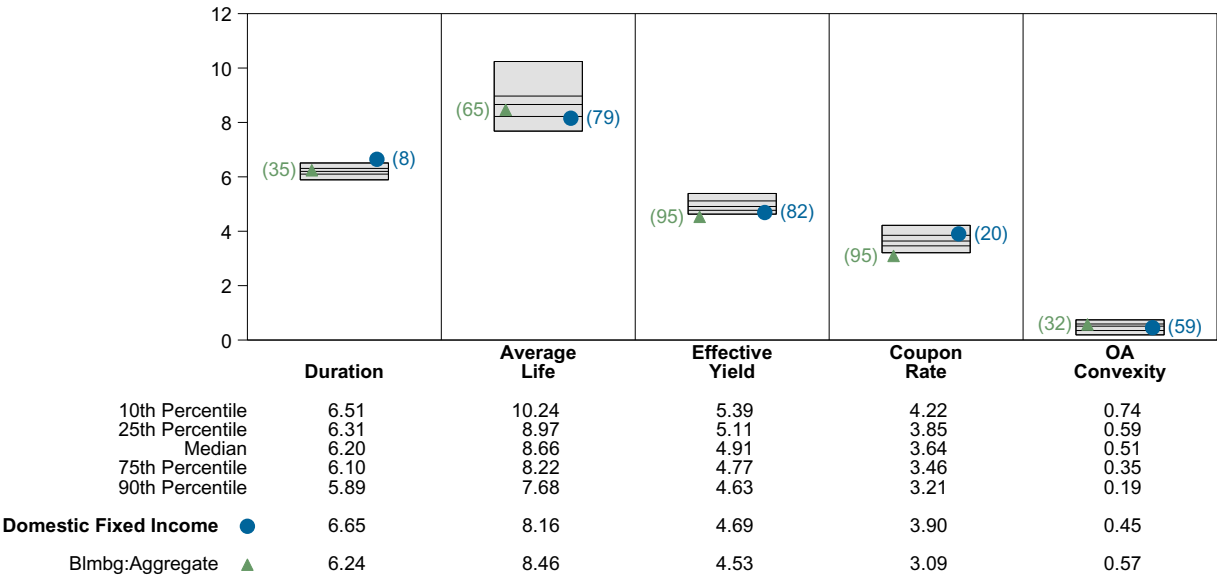


Domestic Fixed Income Bond Characteristics Analysis Summary

Portfolio Characteristics

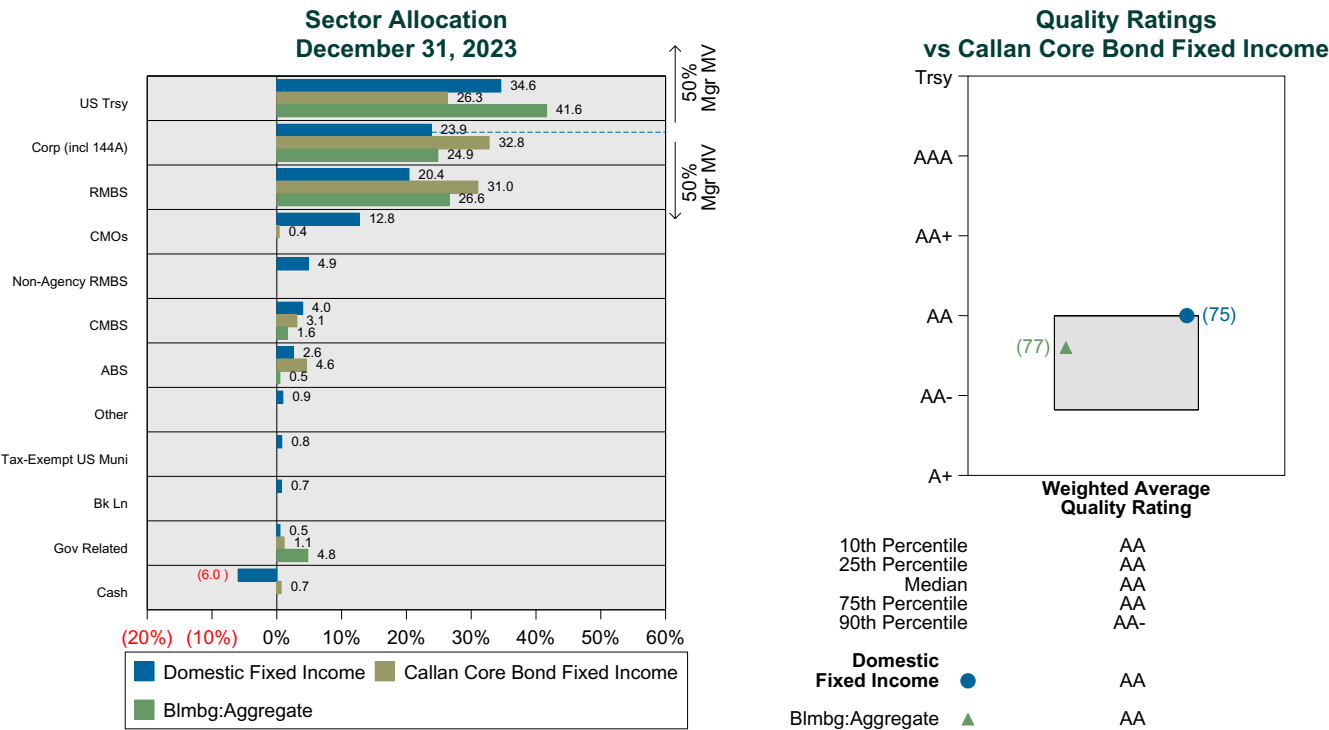
This graph compares the manager’s portfolio characteristics with the range of characteristics for the portfolios which make up the manager’s style group. This analysis illustrates whether the manager’s current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics
Rankings Against Callan Core Bond Fixed Income
as of December 31, 2023



Sector Allocation and Quality Ratings

The first graph compares the manager’s sector allocation with the average allocation across all the members of the manager’s style. The second graph compares the manager’s weighted average quality rating with the range of quality ratings for the style.

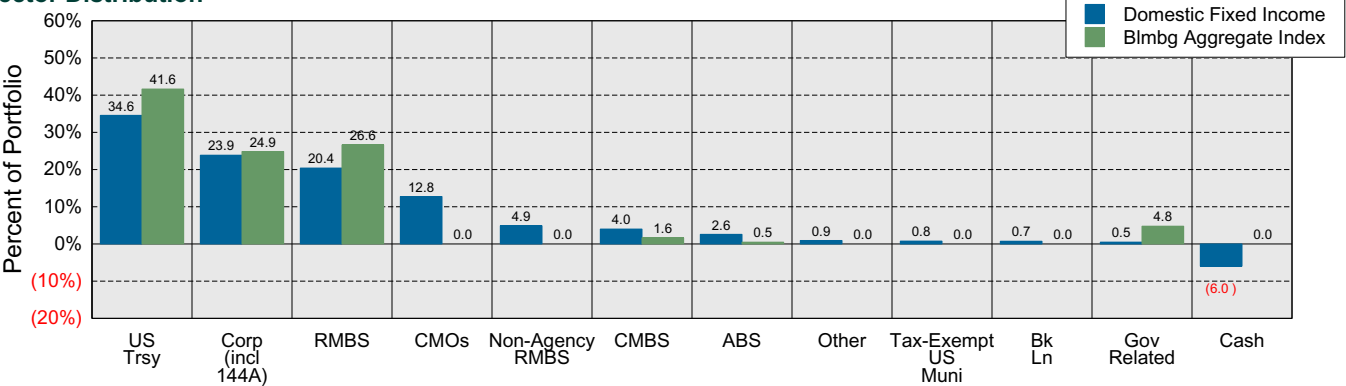


Domestic Fixed Income Portfolio Characteristics Summary As of December 31, 2023

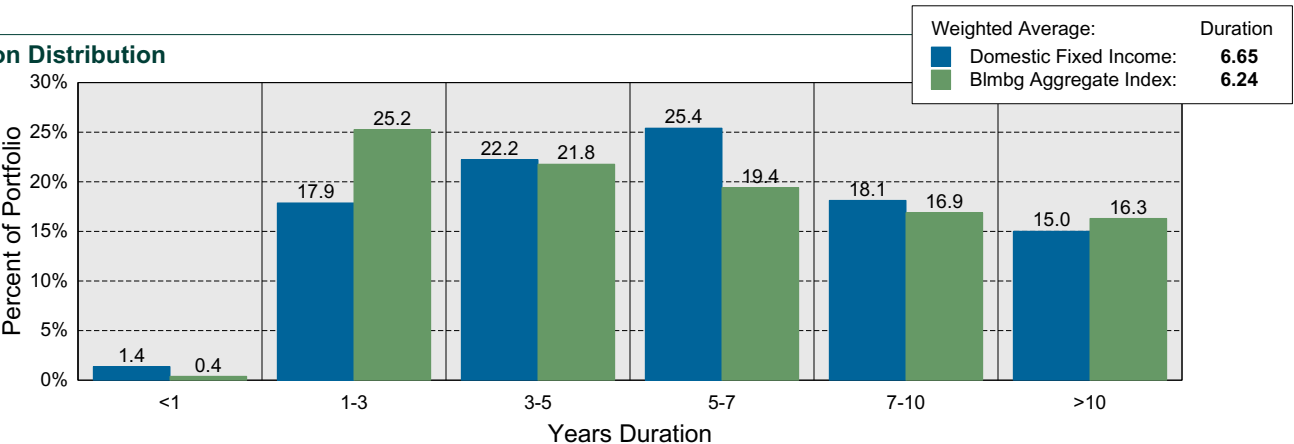
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

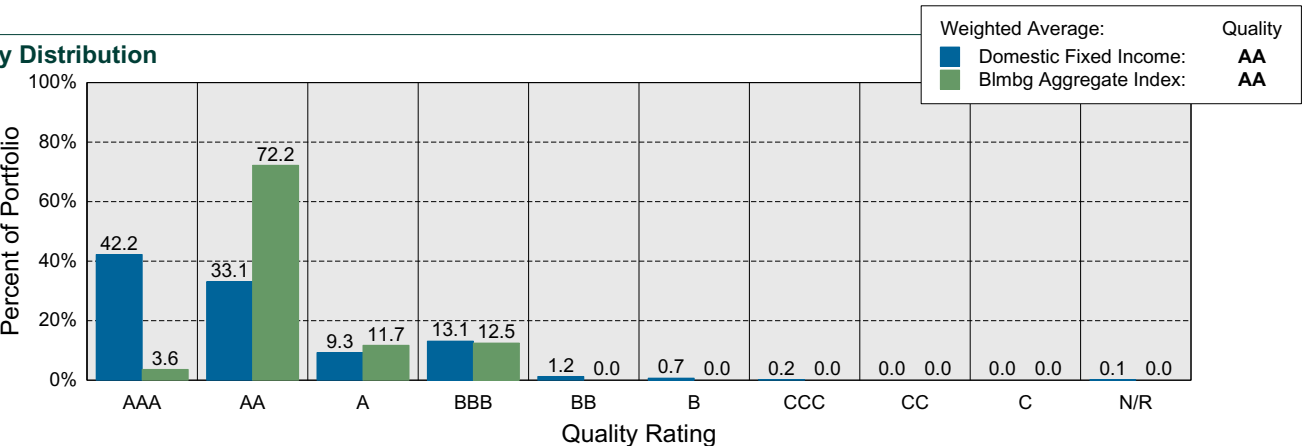
Sector Distribution



Duration Distribution



Quality Distribution



Prudential Cons Core Bond Period Ended December 31, 2023

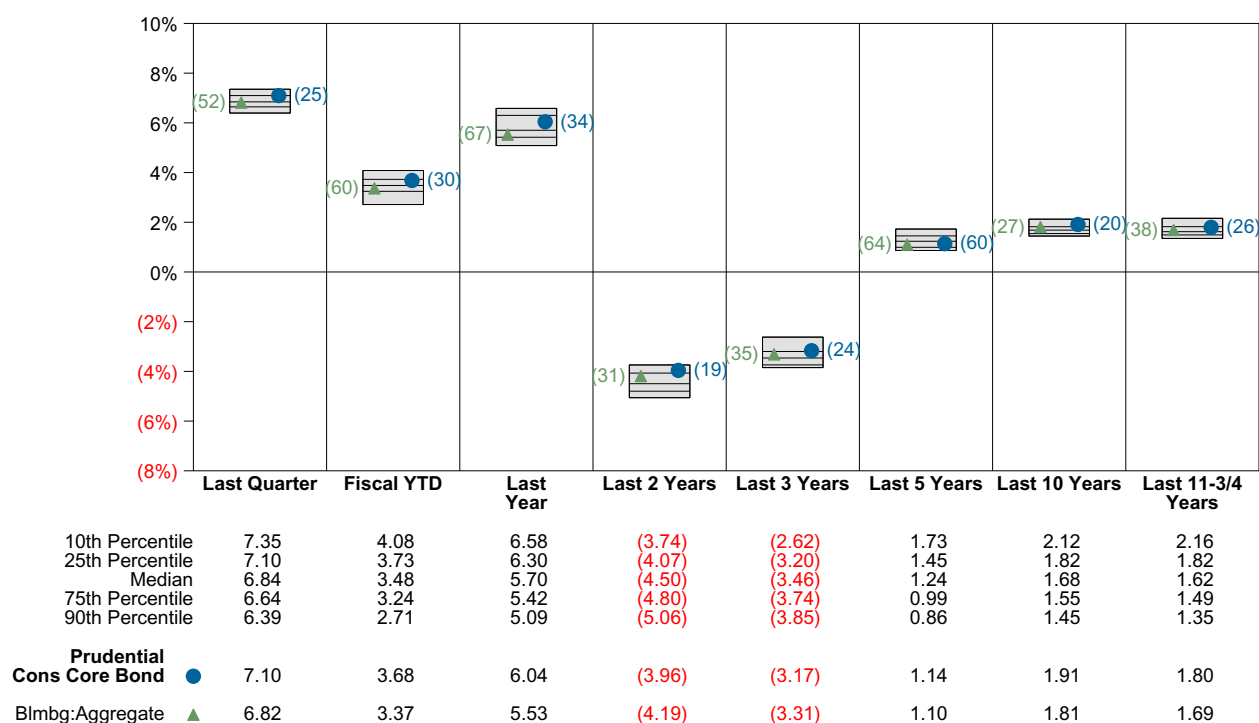
Investment Philosophy

PGIM Fixed Income's Core Conservative strategy is a benchmark-focused, investment grade-only, risk-controlled core strategy that seeks +25 bps over the Bloomberg Barclays Aggregate Index with index-like risk. The strategy seeks to generate virtually all of its excess return from just two activities: bottom-up subsector rotation within the corporate and mortgage/structured product sectors, and research-based security selection in all sectors. Top-down decisions such as duration, yield curve, and sector allocation are tightly constrained to benchmark weightings at all times.

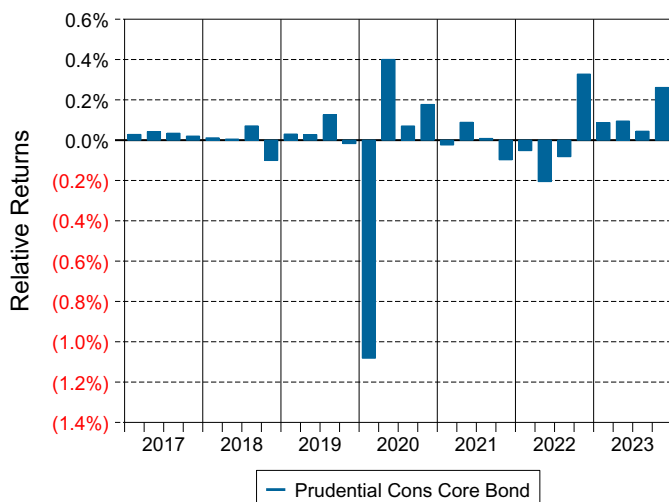
Quarterly Summary and Highlights

- Prudential Cons Core Bond's portfolio posted a 7.10% return for the quarter placing it in the 25 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 34 percentile for the last year.
- Prudential Cons Core Bond's portfolio outperformed the Blmbg:Aggregate by 0.28% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.51%.

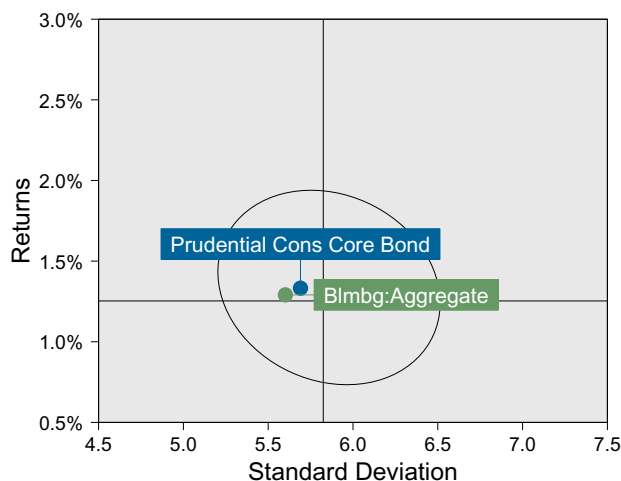
Performance vs Callan Core Bond Mutual Funds (Net)



Relative Return vs Blmbg:Aggregate



Callan Core Bond Mutual Funds (Net) Annualized Seven Year Risk vs Return

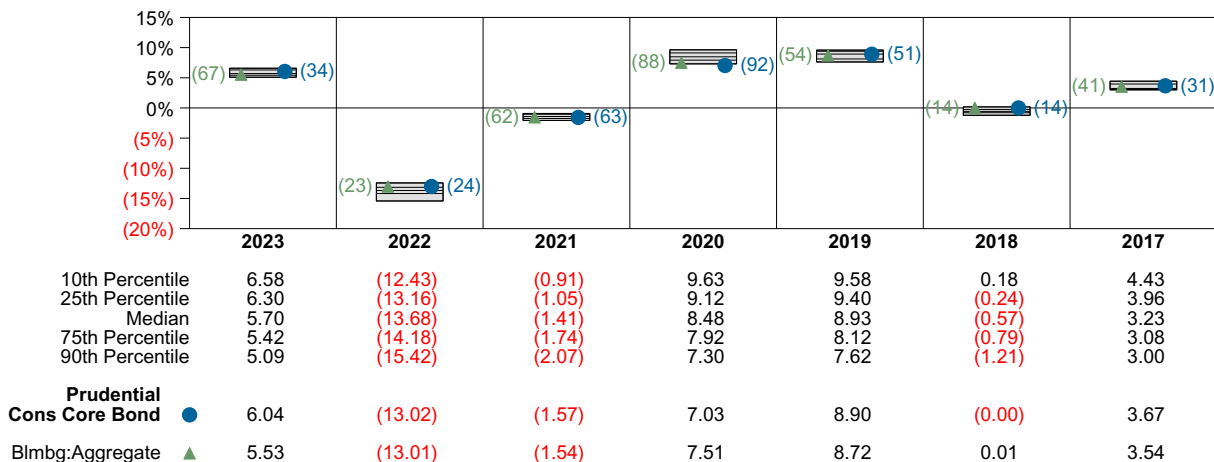


Prudential Cons Core Bond Return Analysis Summary

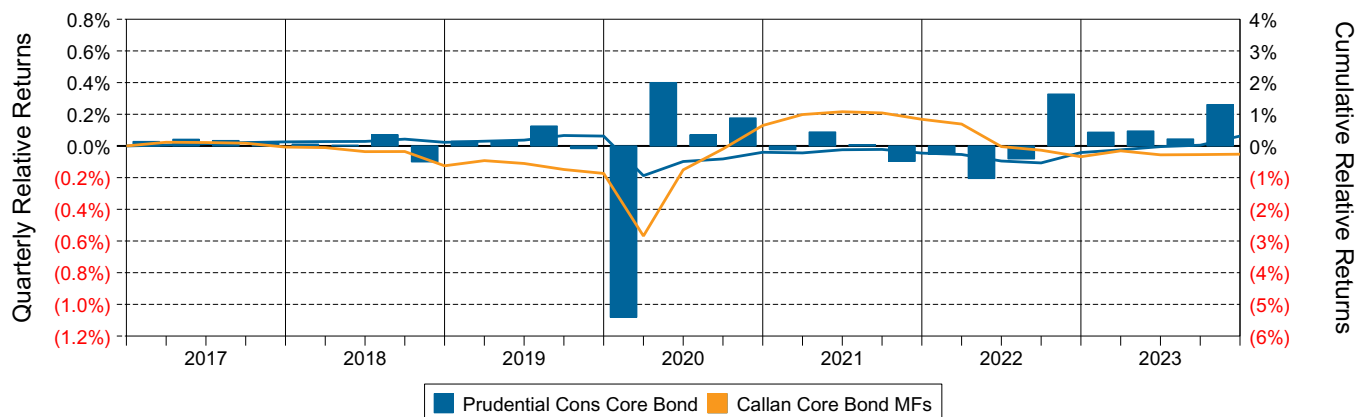
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

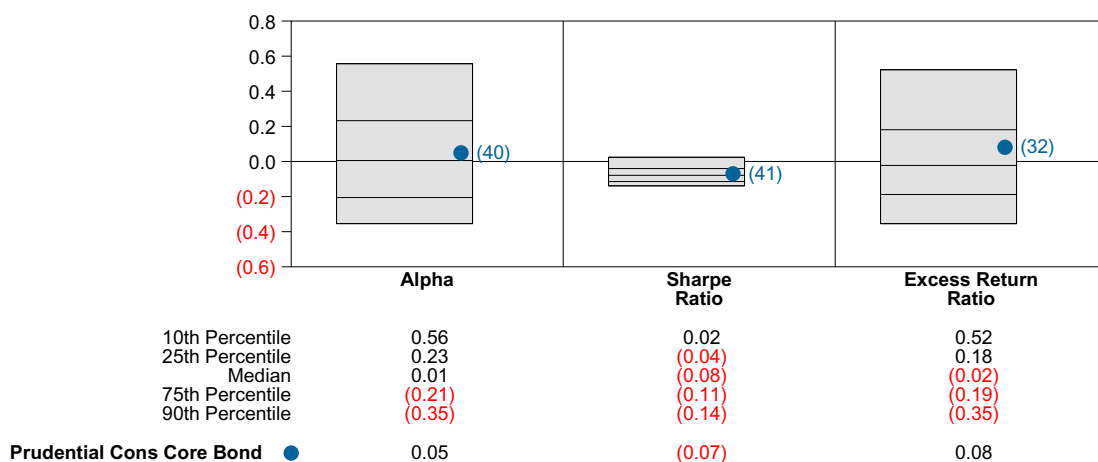
Performance vs Callan Core Bond Mutual Funds (Net)



Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Bond Mutual Funds (Net) Seven Years Ended December 31, 2023



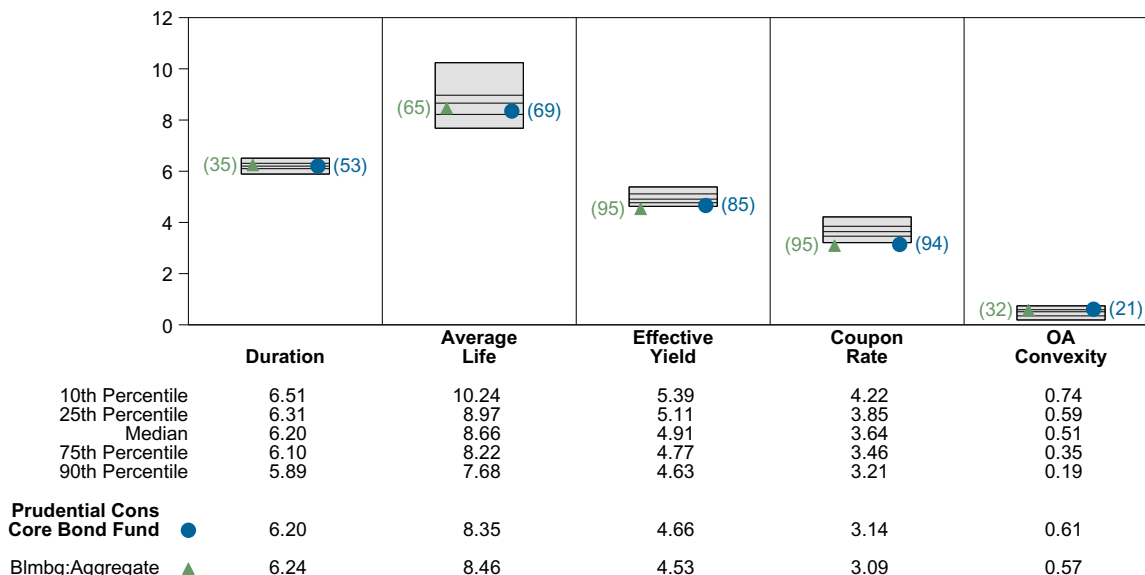
Prudential Cons Core Bond Fund

Bond Characteristics Analysis Summary

Portfolio Characteristics

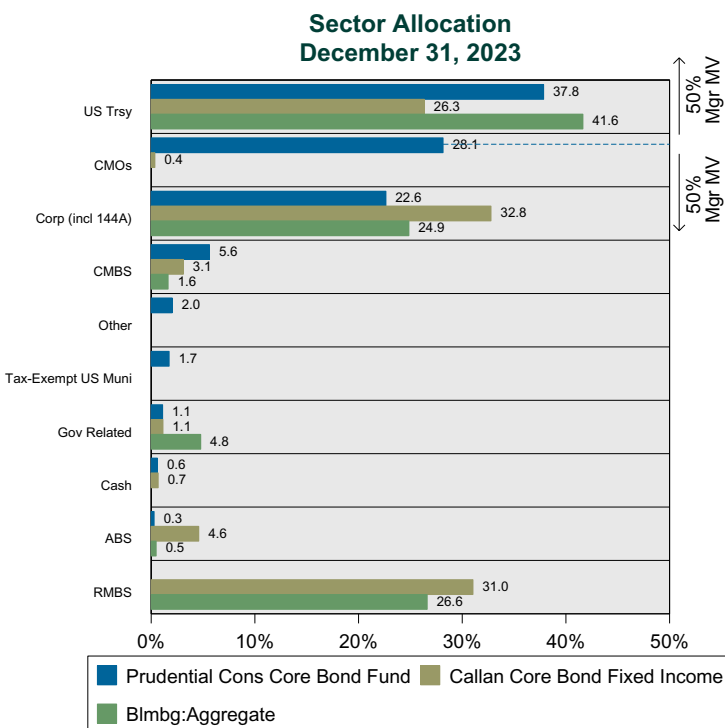
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income as of December 31, 2023

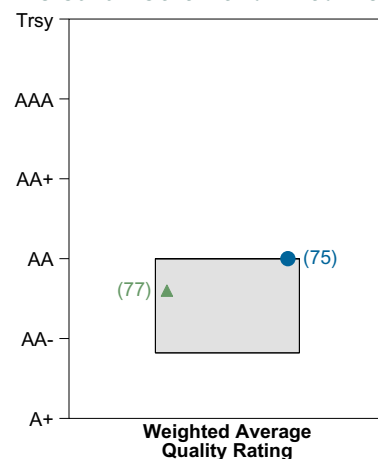


Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



Quality Ratings vs Callan Core Bond Fixed Income



10th Percentile AA
25th Percentile AA
Median AA
75th Percentile AA
90th Percentile AA-

Prudential Cons Core Bond Fund ● AA
Blmbg:Aggregate ▲ AA

Prudential Cons Core Bond Fund

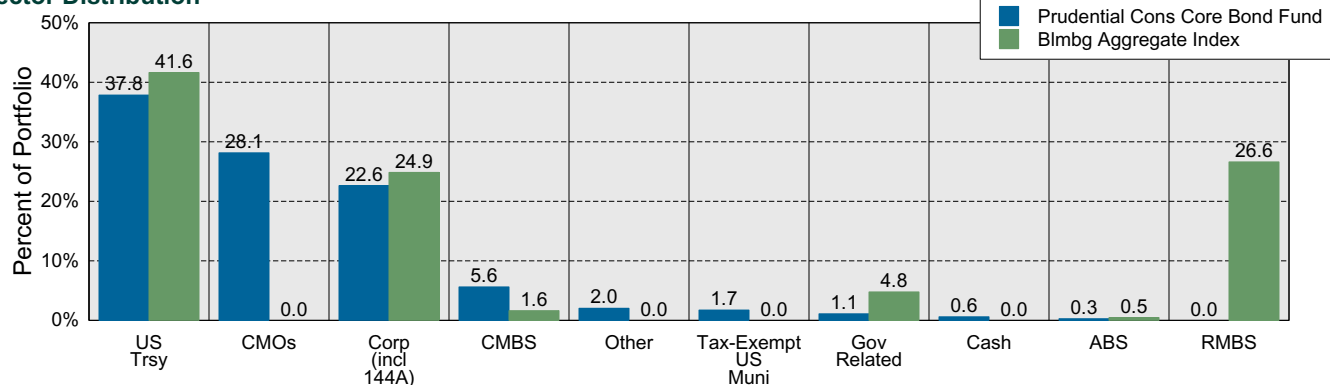
Portfolio Characteristics Summary

As of December 31, 2023

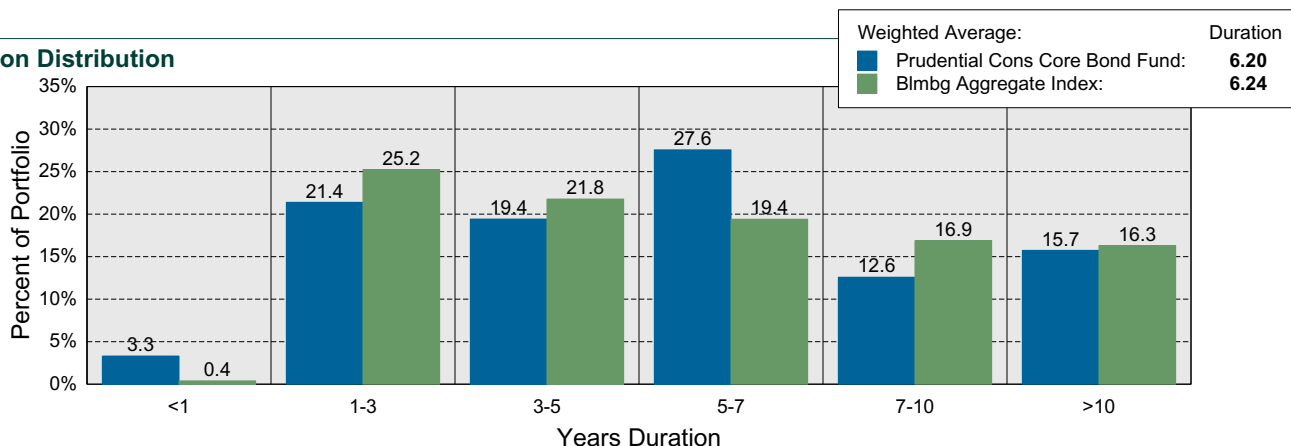
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

Sector Distribution



Duration Distribution



Quality Distribution

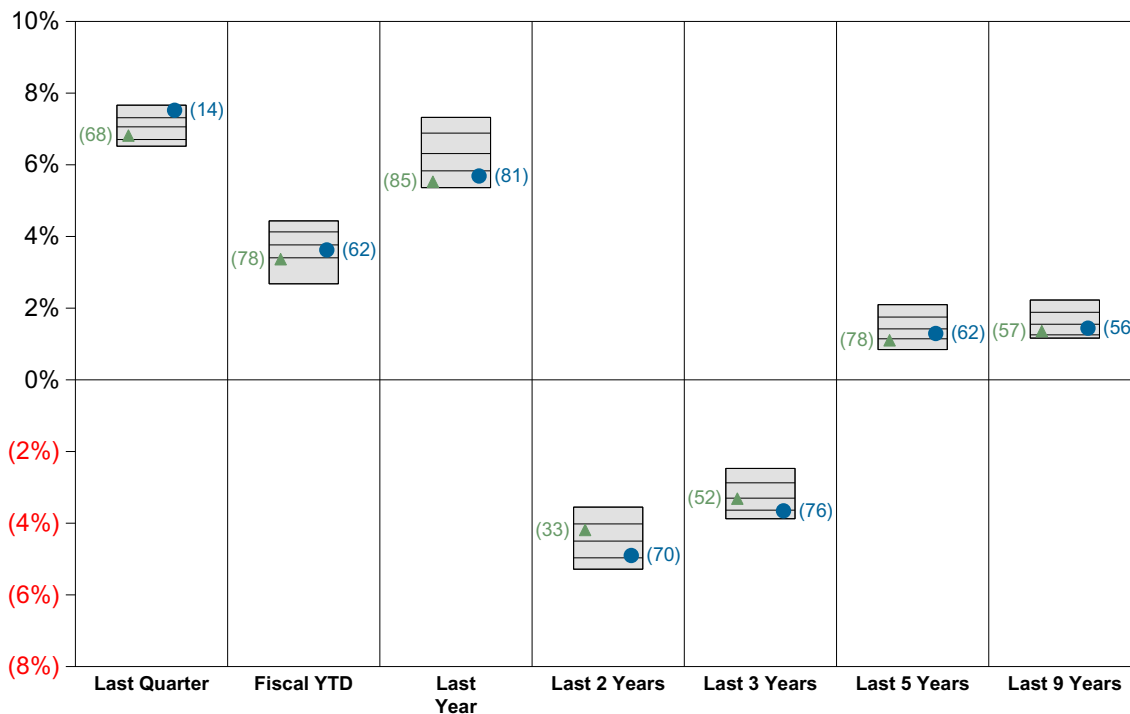


Metropolitan West Fund Period Ended December 31, 2023

Quarterly Summary and Highlights

- Metropolitan West Fund's portfolio posted a 7.52% return for the quarter placing it in the 14 percentile of the Callan Core Plus Mutual Funds group for the quarter and in the 81 percentile for the last year.
- Metropolitan West Fund's portfolio outperformed the Blmbg:Aggregate by 0.70% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.16%.

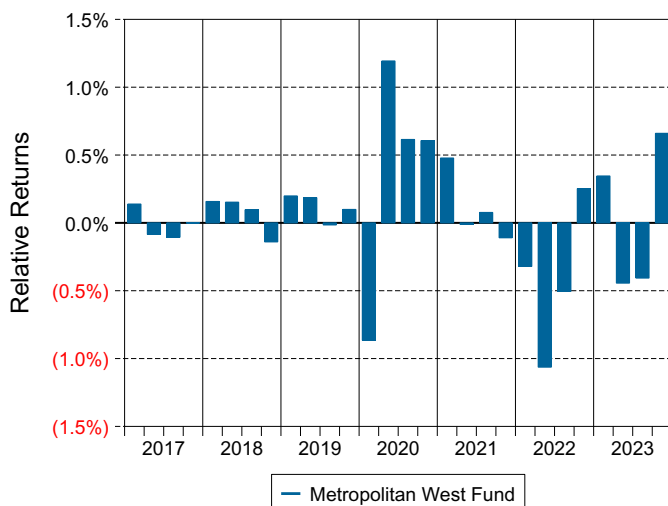
Performance vs Callan Core Plus Mutual Funds (Net)



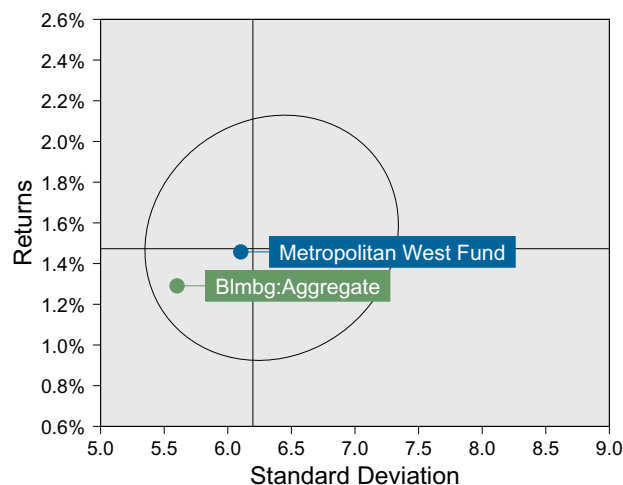
Metropolitan West Fund

Blmbg:Aggregate

Relative Return vs Blmbg:Aggregate



Callan Core Plus Mutual Funds (Net) Annualized Seven Year Risk vs Return

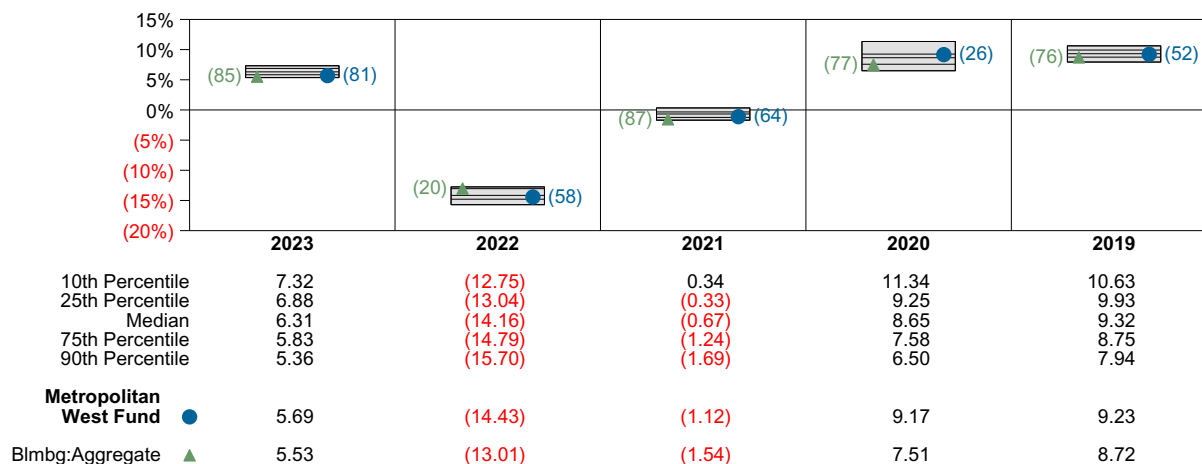


Metropolitan West Fund Return Analysis Summary

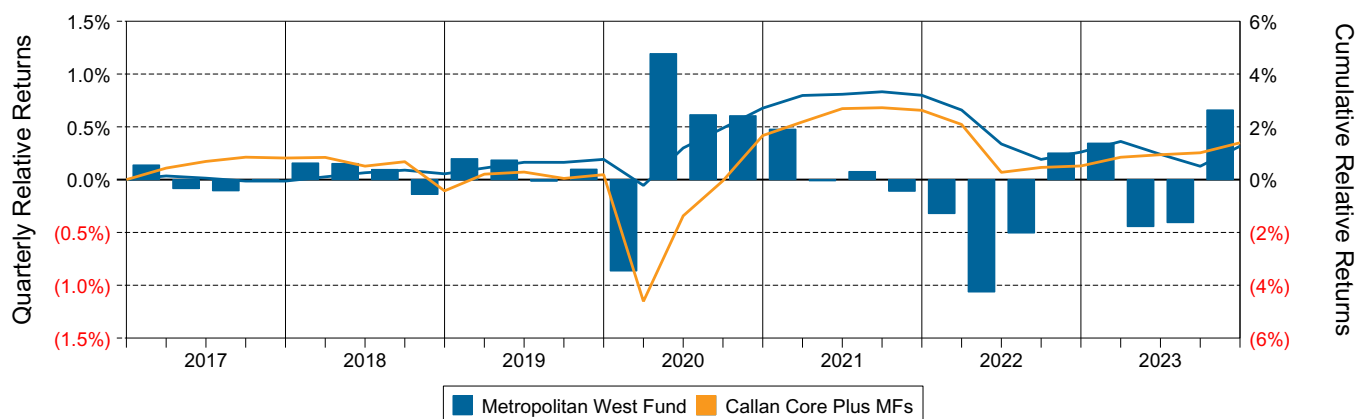
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

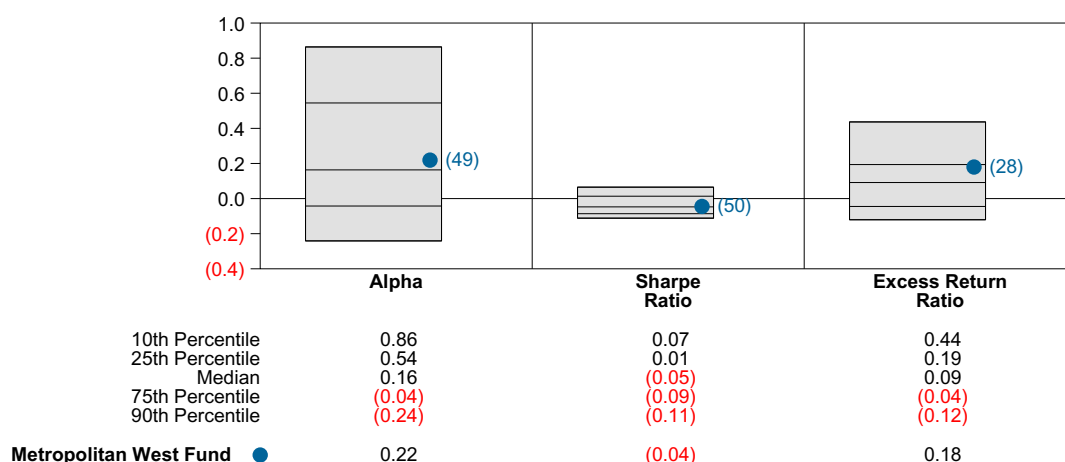
Performance vs Callan Core Plus Mutual Funds (Net)



Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Plus Mutual Funds (Net) Seven Years Ended December 31, 2023



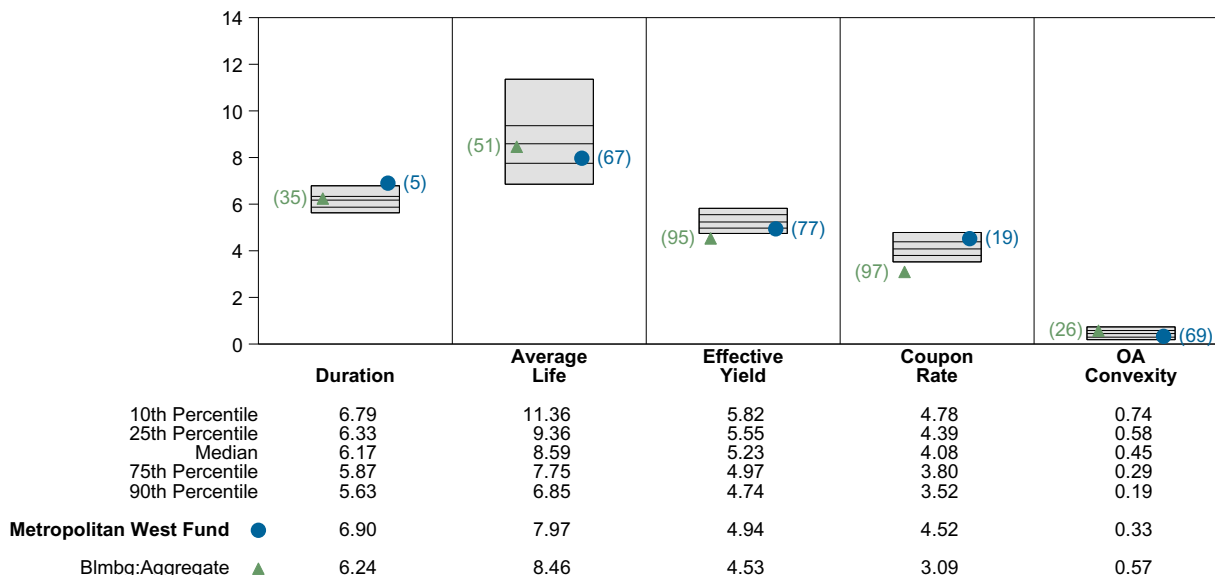
Metropolitan West Fund

Bond Characteristics Analysis Summary

Portfolio Characteristics

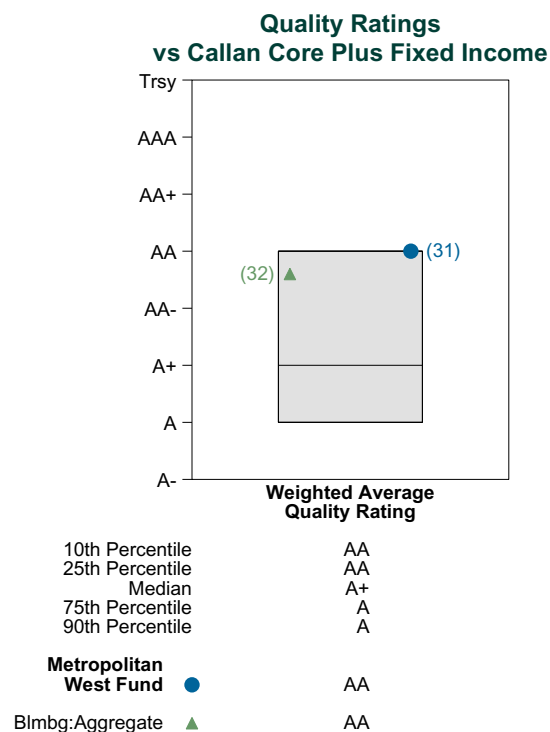
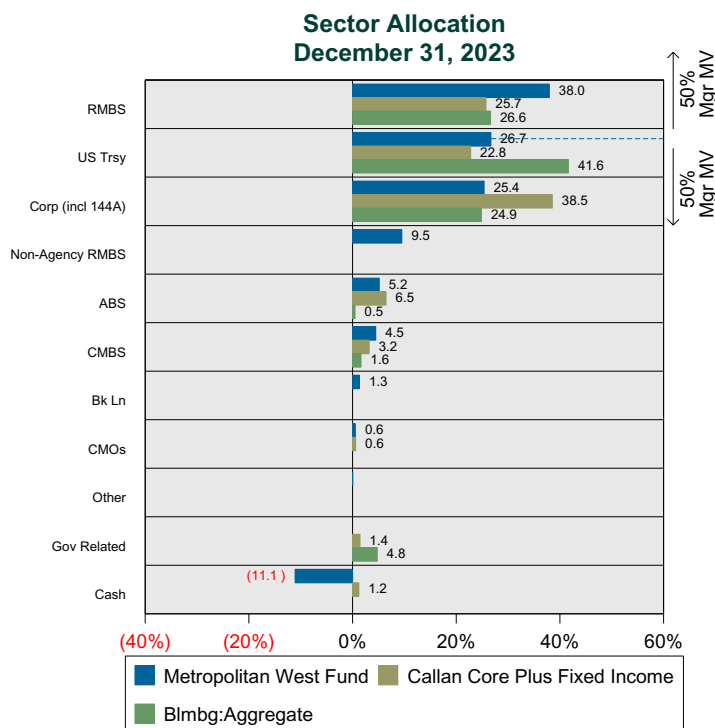
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Core Plus Fixed Income as of December 31, 2023



Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



Metropolitan West Fund

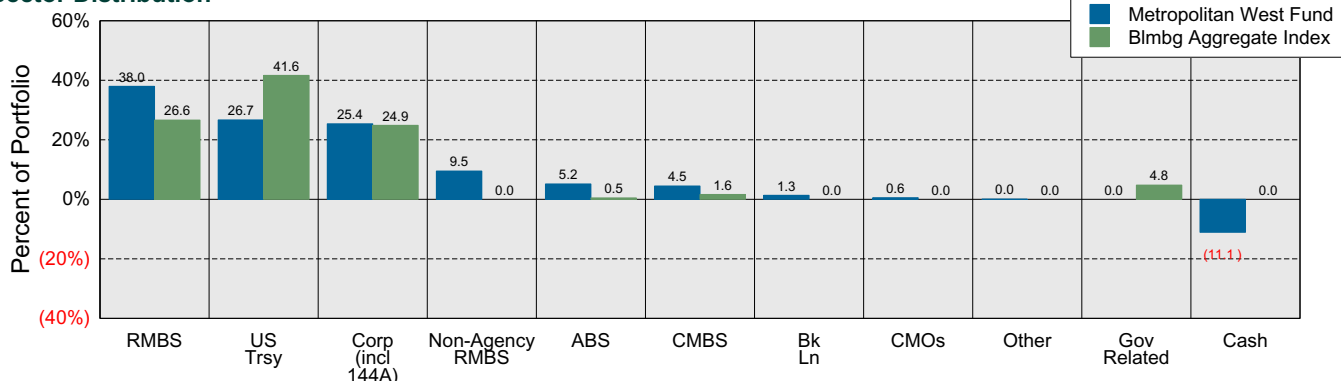
Portfolio Characteristics Summary

As of December 31, 2023

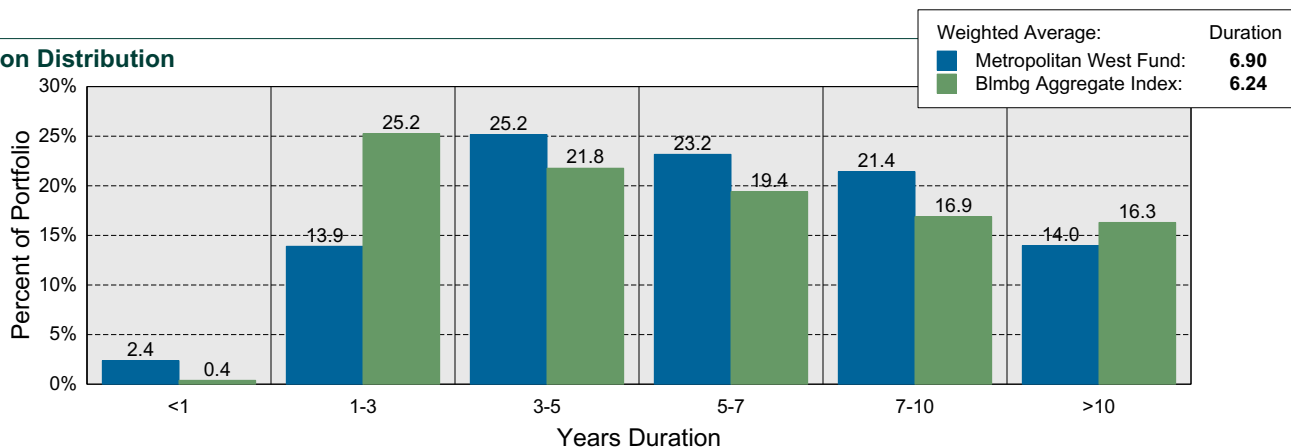
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

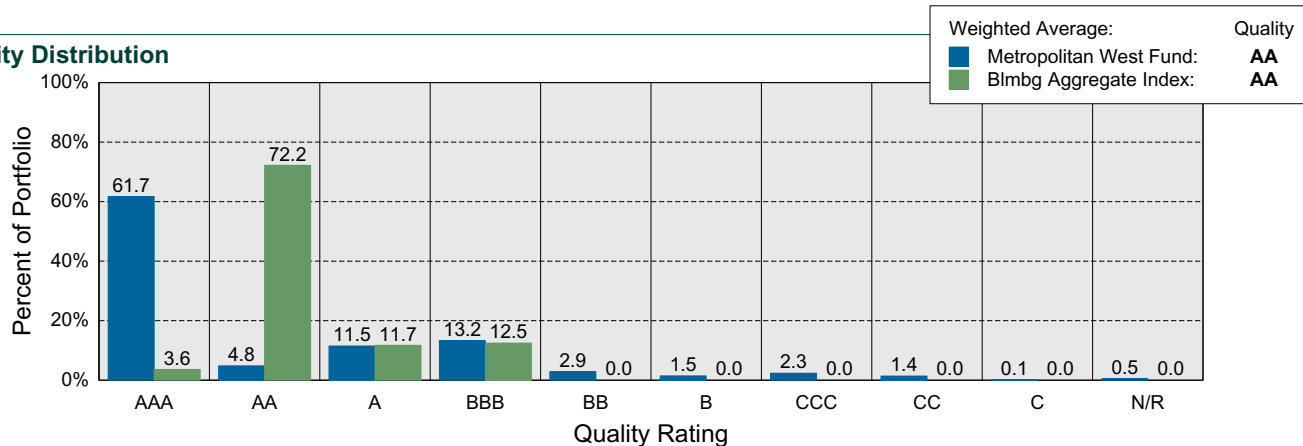
Sector Distribution



Duration Distribution



Quality Distribution



UBS AIS Period Ended December 31, 2023

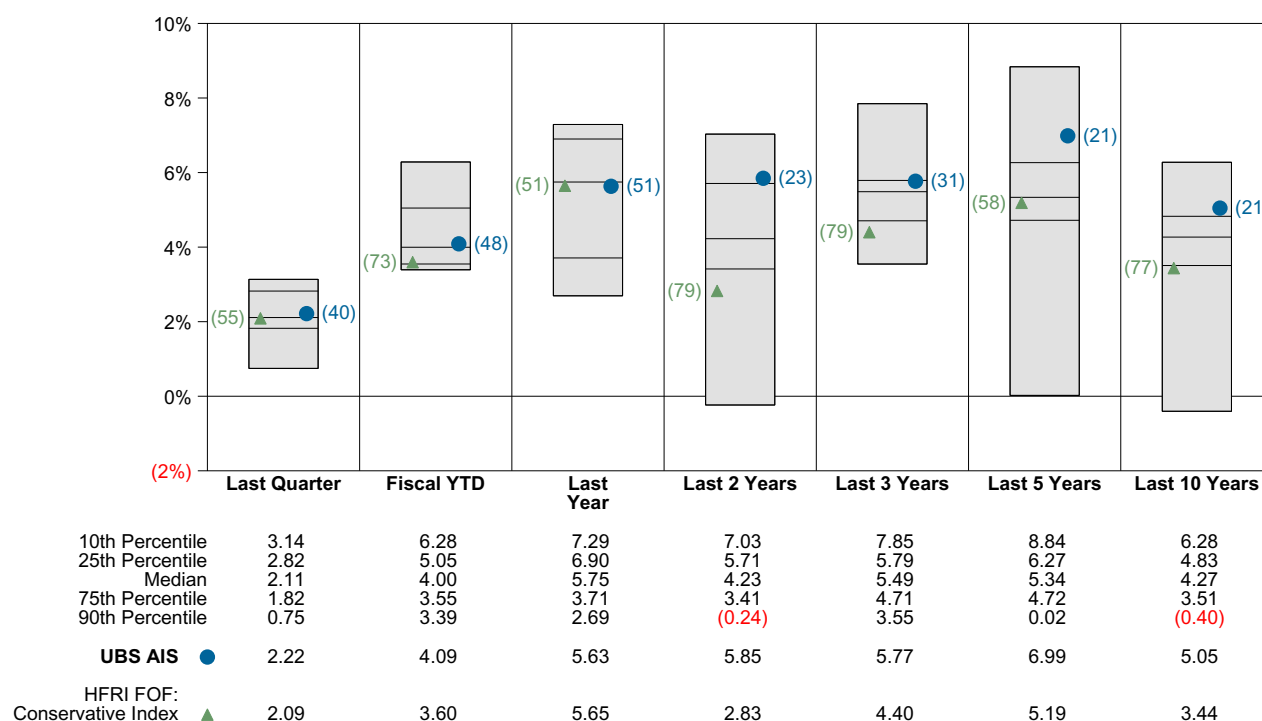
Investment Philosophy

UBS Neutral Alpha Strategies Limited is a broad based neutral fund of funds that seeks to achieve risk-adjusted capital appreciation over the long term while maintaining zero to low correlation to traditional asset classes and low volatility over an economic market cycle (3-5 years). The fund primarily invests in a diverse set of alternative investment funds employing a range of hedged strategies, including Credit/Income, conservative Equity Hedged, Multi-Strategy, Relative Value, and Trading.

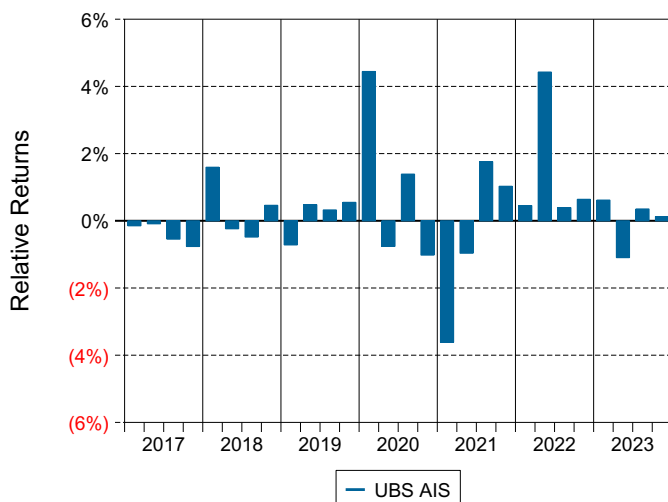
Quarterly Summary and Highlights

- UBS AIS's portfolio posted a 2.22% return for the quarter placing it in the 40 percentile of the Callan Absolute Rtn Hedge Fund of Funds group for the quarter and in the 51 percentile for the last year.
- UBS AIS's portfolio outperformed the HFRI FOF: Conservative Index by 0.13% for the quarter and underperformed the HFRI FOF: Conservative Index for the year by 0.01%.

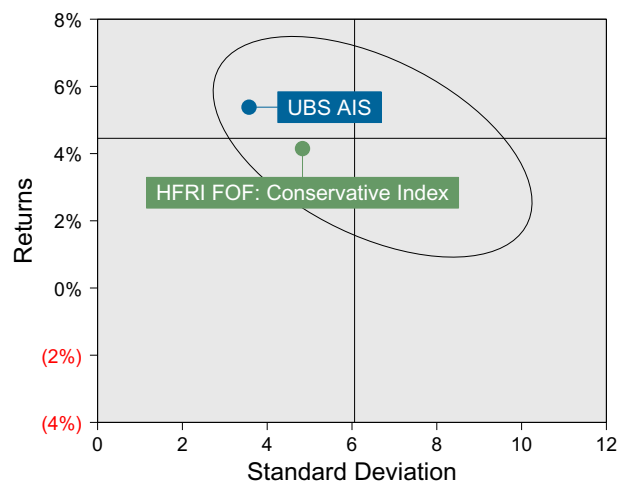
Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)



Relative Returns vs HFRI FOF: Conservative Index



Callan Absolute Rtn Hedge Fund of Funds (Net) Annualized Seven Year Risk vs Return

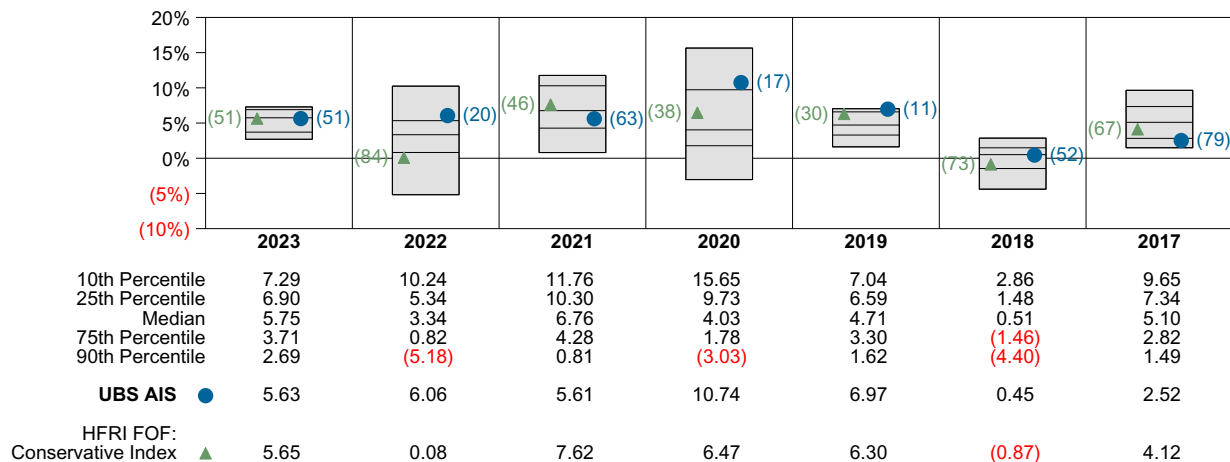


UBS AIS Return Analysis Summary

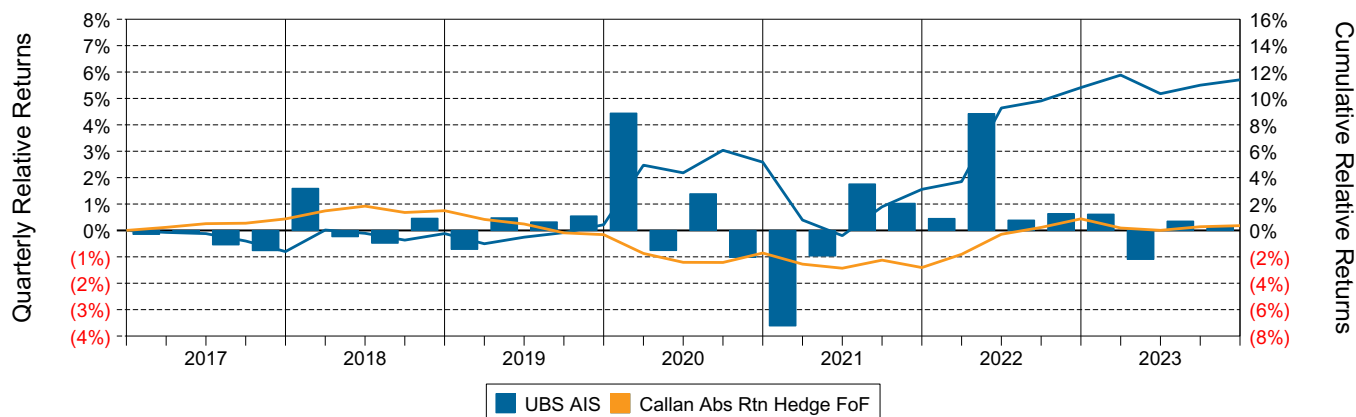
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

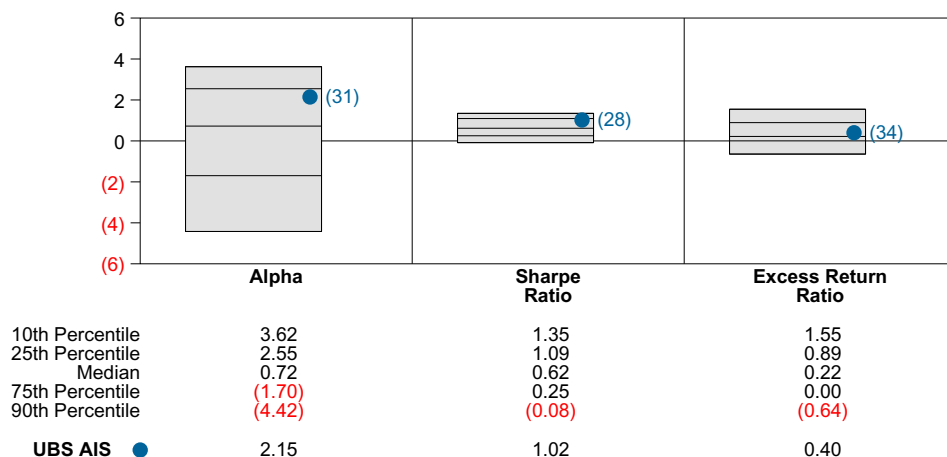
Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)



Cumulative and Quarterly Relative Returns vs HFRI FOF: Conservative Index



Risk Adjusted Return Measures vs HFRI FOF: Conservative Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Seven Years Ended December 31, 2023

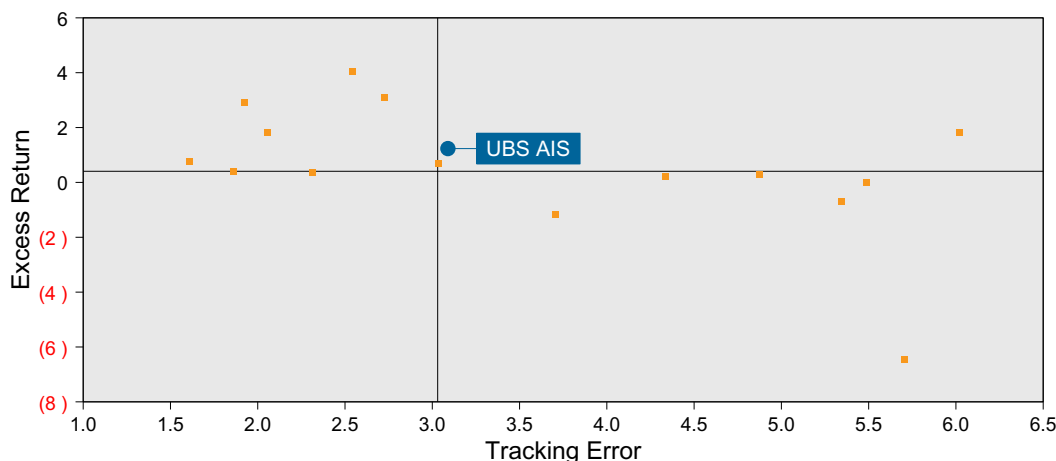


UBS AIS Risk Analysis Summary

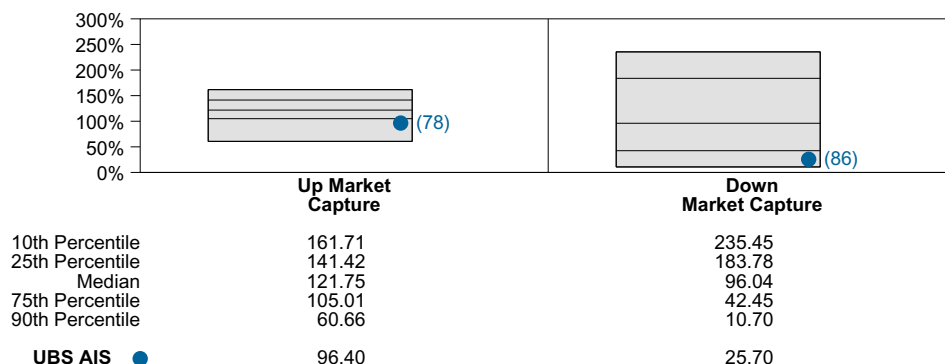
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

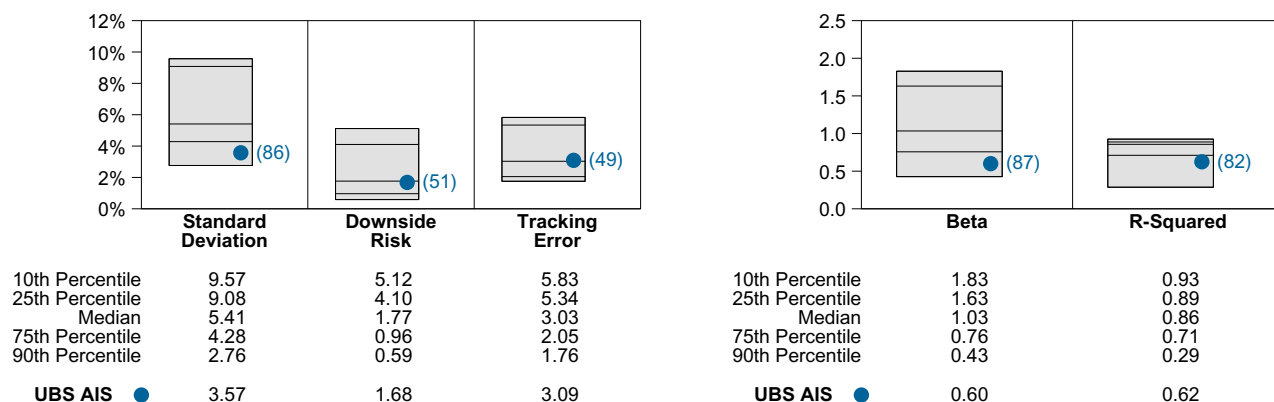
Risk Analysis vs Callan Absolute Rtn Hedge Fund of Funds (Net) Seven Years Ended December 31, 2023



Market Capture vs HFRI FOF: Conservative Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Seven Years Ended December 31, 2023



Risk Statistics Rankings vs HFRI FOF: Conservative Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Seven Years Ended December 31, 2023



PIMCO All Asset Fund Period Ended December 31, 2023

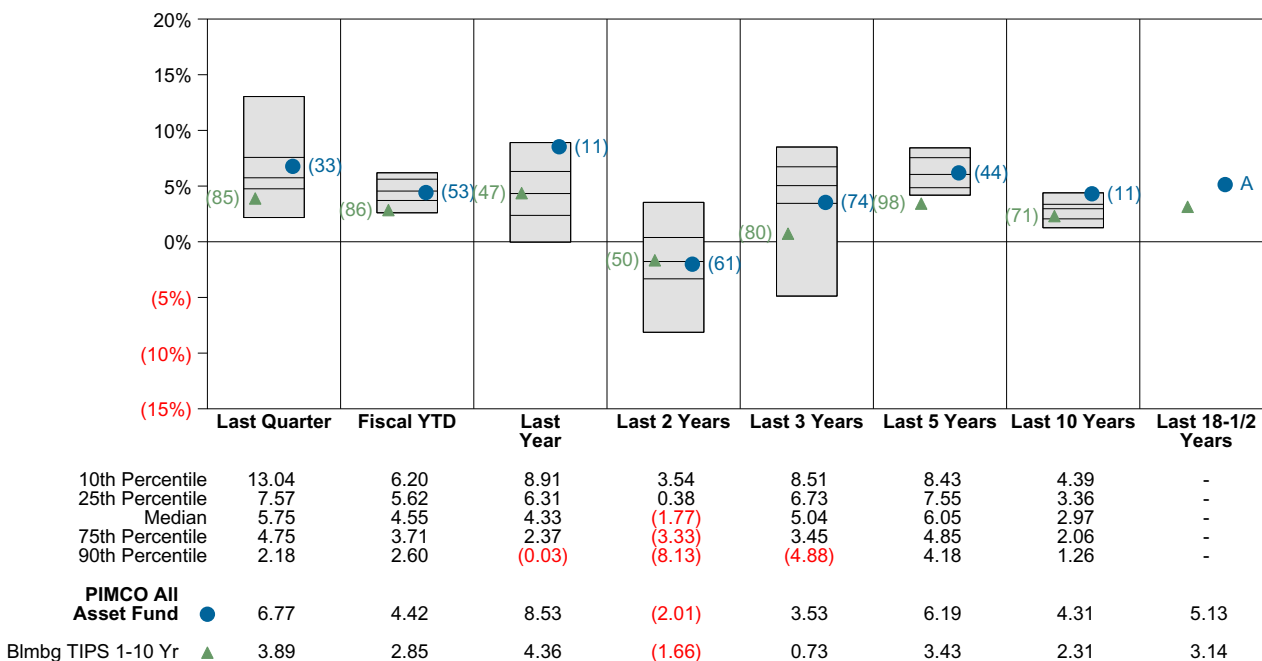
Investment Philosophy

The PIMCO All Asset Strategy is a real return-oriented, global tactical asset allocation strategy that seeks to provide three concurrent investor benefits: inflation protection, diversification and compelling long-term returns. Specifically, the All Asset Strategy has a primary benchmark of the Bloomberg Barclays Capital U.S. TIPS 1-10 Year Index and a secondary benchmark of the Consumer Price Index (CPI)+5%. PIMCO believes that this secondary benchmark reflects the Funds long-term investment strategy more accurately than the Bloomberg Barclays Capital U.S. TIPS 1-10 Year Index. As a result, the Strategy may be an attractive solution for investors seeking returns that track and meaningfully exceed inflation in a manner that also helps diversify equity risk.

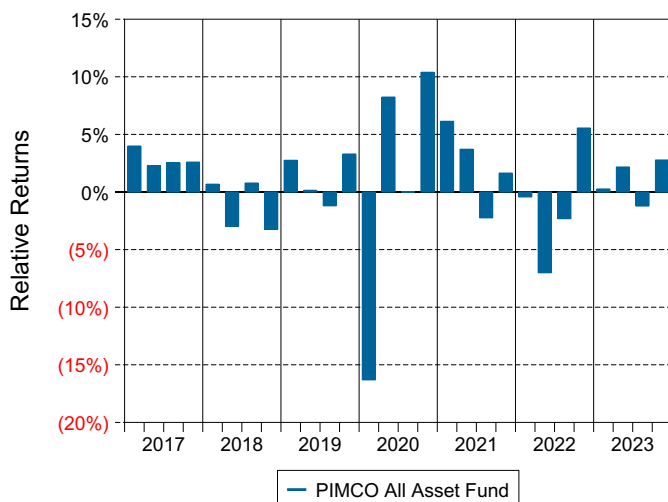
Quarterly Summary and Highlights

- PIMCO All Asset Fund's portfolio posted a 6.77% return for the quarter placing it in the 33 percentile of the Callan Real Assets Mutual Funds group for the quarter and in the 11 percentile for the last year.
- PIMCO All Asset Fund's portfolio outperformed the Blmbg TIPS 1-10 Yr by 2.88% for the quarter and outperformed the Blmbg TIPS 1-10 Yr for the year by 4.17%.

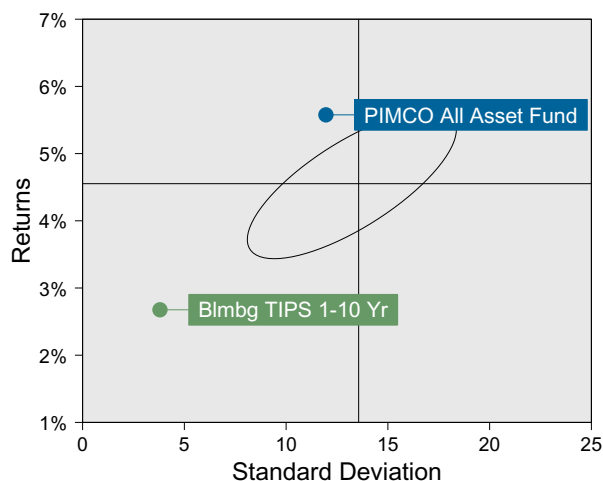
Performance vs Callan Real Assets Mutual Funds (Net)



Relative Return vs Blmbg TIPS 1-10 Yr



Callan Real Assets Mutual Funds (Net) Annualized Seven Year Risk vs Return

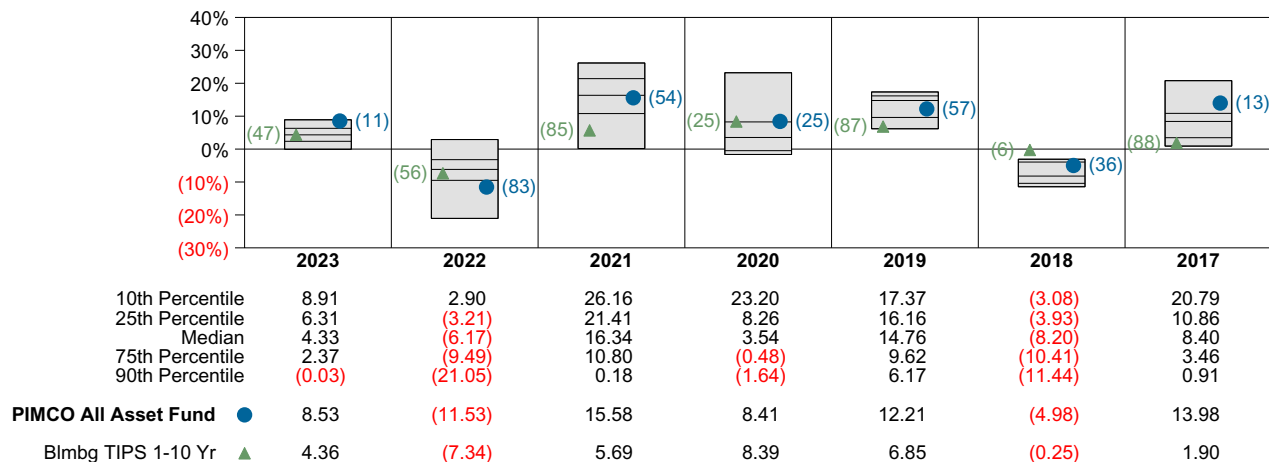


PIMCO All Asset Fund Return Analysis Summary

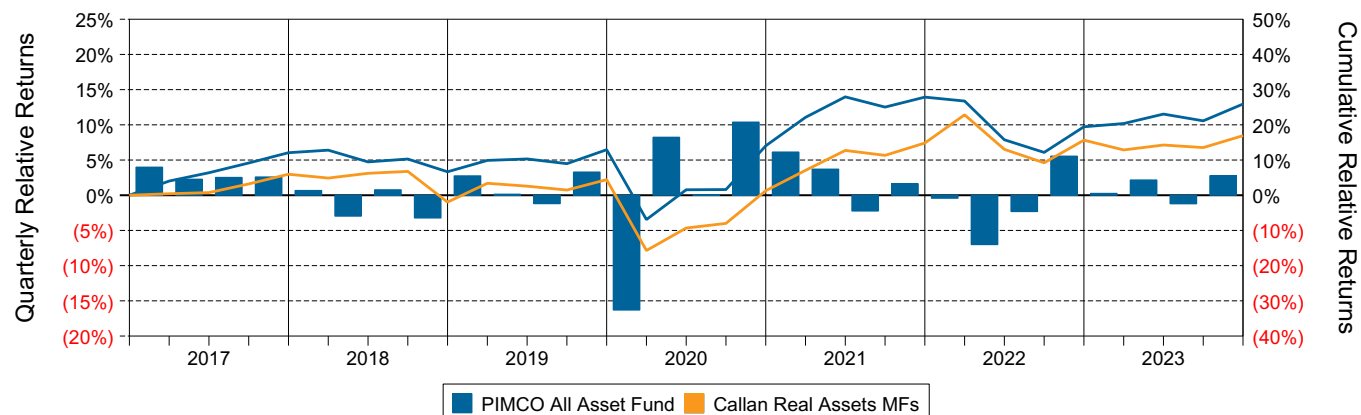
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

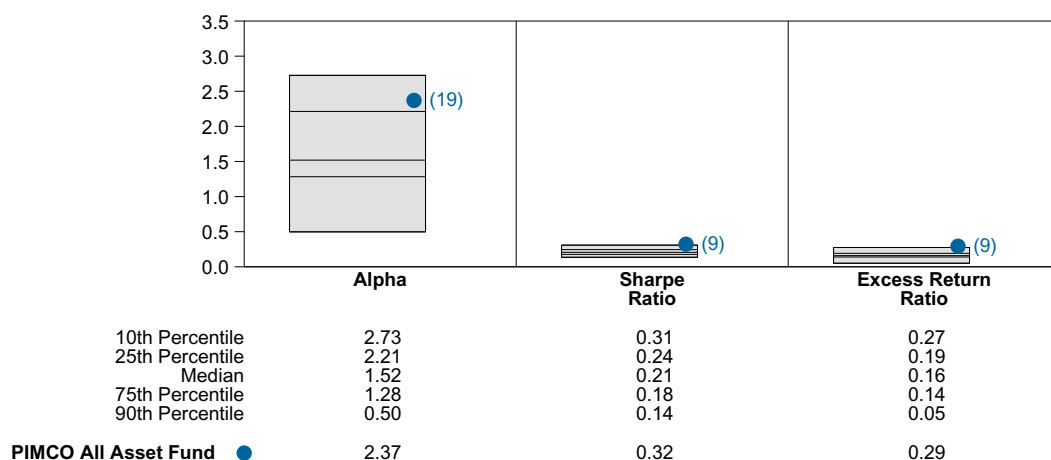
Performance vs Callan Real Assets Mutual Funds (Net)



Cumulative and Quarterly Relative Returns vs Blmbg TIPS 1-10 Yr



Risk Adjusted Return Measures vs Blmbg TIPS 1-10 Yr Rankings Against Callan Real Assets Mutual Funds (Net) Seven Years Ended December 31, 2023

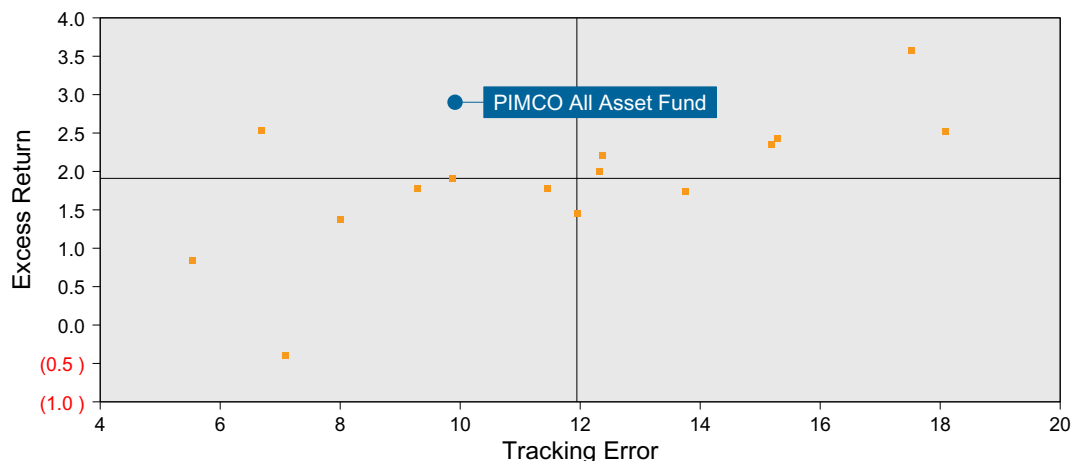


PIMCO All Asset Fund Risk Analysis Summary

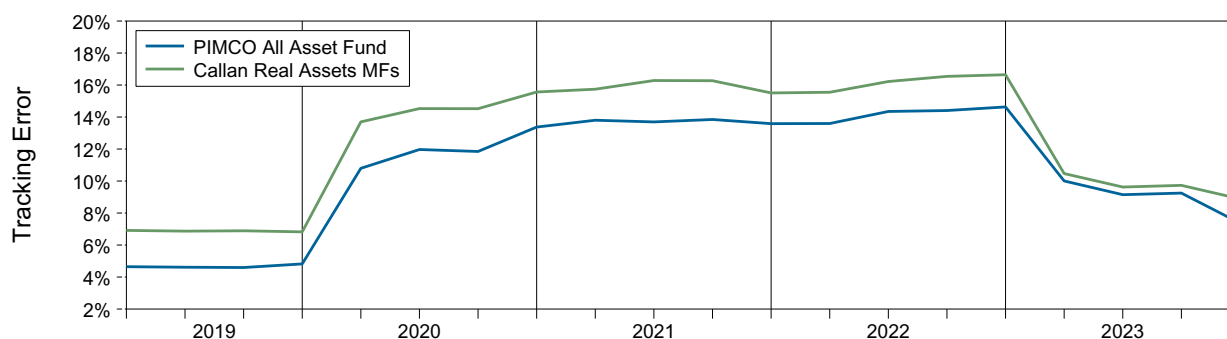
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

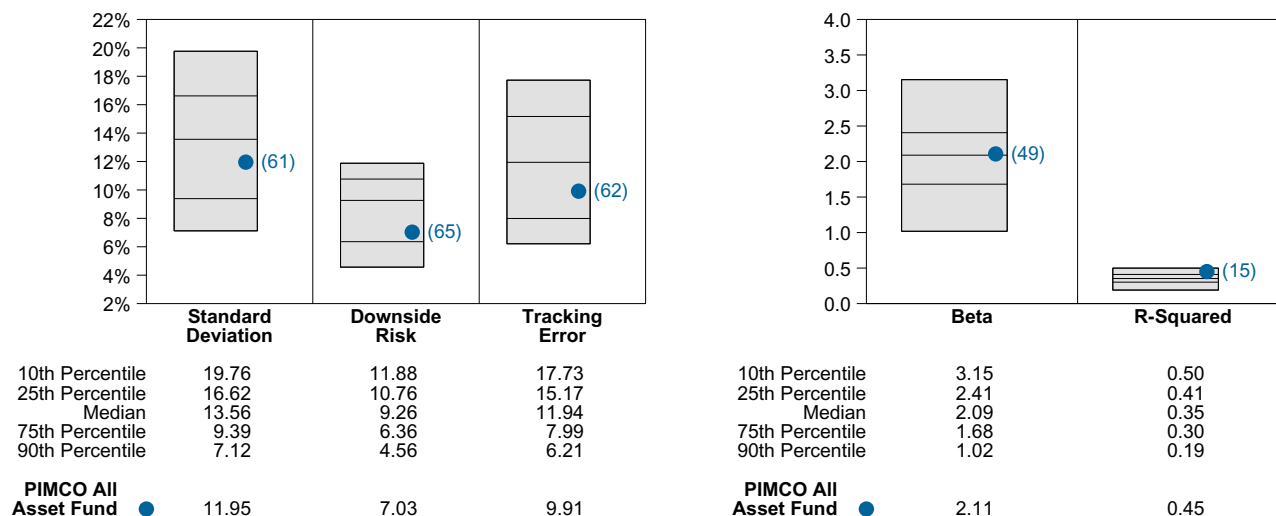
Risk Analysis vs Callan Real Assets Mutual Funds (Net) Seven Years Ended December 31, 2023



Rolling 12 Quarter Tracking Error vs Bloomberg TIPS 1-10 Yr



Risk Statistics Rankings vs Bloomberg TIPS 1-10 Yr Rankings Against Callan Real Assets Mutual Funds (Net) Seven Years Ended December 31, 2023



Pantheon USA IV
Private Equity Investment Portfolio
Quarterly Changes in Market Value

	Beg. of	Capital					Dist. of	Return	End of
	Period	+ Contri-	+ Accounting	- Mgmt.	+ Appre-	- Income &	- of	=	Period
	Market	butions	Income	Fees	ciation	Real. Gains	Capital		Market
03/2001	0	750,000	8,223	12,836	(57,546)	0	0		687,841
06/2001	687,841	375,000	7,264	7,928	(1,589)	0	0		1,060,588
09/2001	1,060,588	0	14,367	5,285	(23,881)	0	0		1,045,789
12/2001	1,045,789	375,000	5,664	8,042	(33,262)	0	0		1,385,149
03/2002	1,385,149	1,200,000	927	11,558	4,096	0	0		2,578,614
06/2002	2,578,614	0	2,048	12,973	(20,185)	0	0		2,547,504
09/2002	2,547,504	600,000	1,070	13,889	22,215	0	0		3,156,900
12/2002	3,156,900	450,000	871	16,582	(5,101)	0	0		3,586,088
03/2003	3,586,088	600,000	3,153	17,442	135,495	0	0		4,307,294
06/2003	4,307,294	300,000	653	17,815	208,249	0	0		4,798,381
09/2003	4,798,381	300,000	419	18,961	52,584	0	0		5,132,423
12/2003	5,132,423	300,000	921	19,575	357,043	0	0		5,770,812
03/2004	5,770,812	450,000	846	22,549	52,740	0	0		6,251,849
06/2004	6,251,849	300,000	895	23,425	93,587	0	150,000		6,472,906
09/2004	6,472,906	450,000	993	24,526	(13,696)	0	375,000		6,510,677
12/2004	6,510,677	450,000	811	24,878	1,170,082	0	150,000		7,956,692
03/2005	7,956,692	0	835	24,282	(63,728)	30,885	119,115		7,719,517
06/2005	7,719,517	450,000	2,488	24,282	516,548	7,763	367,237		8,289,271
09/2005	8,289,271	0	976	24,282	574,952	0	0		8,840,917
12/2005	8,840,917	2,100,000	1,260	24,384	498,530	0	2,100,000		9,316,323
03/2006	9,316,323	150,000	2,979	24,384	201,583	0	0		9,646,501
06/2006	9,646,501	0	3,157	24,384	187,131	0	150,000		9,662,405
09/2006	9,662,405	0	3,266	24,384	709,466	0	150,000		10,200,753
12/2006	10,200,753	1,500,000	5,773	24,384	1,172,764	0	1,650,000		11,204,906
03/2007	11,204,906	1,200,000	5,197	24,384	479,152	964,950	385,050		11,514,871
06/2007	11,514,871	0	6,934	24,551	942,418	383,290	216,710		11,839,672
09/2007	11,839,672	0	8,818	24,467	919,210	800,726	399,274		11,543,233
12/2007	11,543,233	0	4,160	24,467	583,602	207,000	243,000		11,656,528
03/2008	11,656,528	450,000	1,635	24,467	(50,605)	551,547	123,453		11,358,091
06/2008	11,358,091	225,000	1,302	24,467	60,753	206,609	18,391		11,395,679
09/2008	11,395,679	0	804	24,467	(482,065)	0	0		10,889,951
12/2008	10,889,951	0	599	24,467	(2,149,996)	0	0		8,716,087
03/2009	8,716,087	0	47	24,467	(165,736)	0	0		8,525,931
06/2009	8,525,931	0	58	24,467	(20,009)	0	0		8,481,513
09/2009	8,481,513	0	72	24,312	477,125	32,763	267,237		8,634,398
12/2009	8,634,398	0	80	24,330	619,011	100,558	349,442		8,779,159
03/2010	8,779,159	0	74	24,330	234,076	90,713	134,287		8,763,979
06/2010	8,763,979	0	63	24,201	129,283	143,880	81,120		8,644,124
09/2010	8,644,124	0	62	24,201	557,239	133,289	316,711		8,727,224
12/2010	8,727,224	0	103	24,201	365,171	20,178	804,822		8,243,297
03/2011	8,243,297	0	99	24,201	325,215	315,833	434,167		7,794,410
06/2011	7,794,410	0	62	24,201	132,134	431,439	243,561		7,227,405
09/2011	7,227,405	0	47	24,201	(95,355)	122,728	102,272		6,882,896
12/2011	6,882,896	750,000	39	22,975	247,209	849,891	125,109		6,882,169
03/2012	6,882,169	0	29	24,232	265,220	165,104	59,896		6,898,186
06/2012	6,898,186	150,000	4,184	24,232	150,864	369,767	155,233		6,654,002
09/2012	6,654,002	0	26	24,232	201,349	191,505	138,495		6,501,145

Pantheon USA IV
Private Equity Investment Portfolio
Quarterly Changes in Market Value

	Beg. of	Capital				Dist. of	Return	End of
	Period	+ Contri-	+ Accounting	- Mgmt.	+ Appre-	- Income &	- of	= Period
	Market	butions	Income	Fees	ciation	Real. Gains	Capital	Market
12/2012	6,501,145	0	89	24,232	60,319	588,870	236,130	5,712,321
03/2013	5,712,321	0	0	24,232	140,571	185,387	114,613	5,528,660
06/2013	5,528,660	0	80	24,232	83,516	195,385	104,615	5,288,024
09/2013	5,288,024	0	242	24,232	170,149	43,998	106,002	5,284,183
12/2013	5,284,183	0	0	24,232	132,583	285,673	239,327	4,867,534
03/2014	4,867,534	0	13	24,232	169,254	24,407	125,593	4,862,569
06/2014	4,862,569	0	0	24,232	36,266	392,392	252,609	4,229,602
09/2014	4,229,602	0	0	24,044	(20,499)	269,803	195,198	3,720,058
12/2014	3,720,058	0	0	24,044	2,886	94,776	115,224	3,488,900
03/2015	3,488,900	0	0	24,044	22,598	0	0	3,487,454
06/2015	3,487,454	450,000	750	20,651	(64,559)	599,628	135,372	3,117,994
09/2015	3,117,994	0	(3,481)	20,651	49,747	76,324	73,676	2,993,609
12/2015	2,993,609	0	6,633	20,096	(27,481)	178,240	121,760	2,652,665
03/2016	2,652,665	0	(552)	19,628	(277,835)	121,741	28,259	2,204,650
06/2016	2,204,650	0	25,584	19,628	20,035	169,385	265,615	1,795,641
09/2016	1,795,641	330,000	(7,065)	(6,686)	13,288	27,065	1,427,935	683,550
12/2016	683,550	75,000	(1,928)	0	14,438	43	389,957	381,060
03/2017	381,060	0	(2,405)	0	16,159	0	0	394,814
06/2017	394,814	0	57	0	6,836	0	0	401,707
09/2017	401,707	0	(994)	0	12,477	0	0	413,190
12/2017	413,190	0	(1,574)	0	(11,422)	150,000	0	250,194
03/2018	250,194	0	(458)	0	(67)	0	0	249,669
06/2018	249,669	0	452	0	16,690	0	0	266,811
09/2018	266,811	0	0	0	81	0	0	266,892
12/2018	266,892	0	(2,137)	0	(7,976)	372	89,628	166,779
03/2019	166,779	0	0	0	914	0	0	167,693
06/2019	167,693	0	0	0	0	0	0	167,693
09/2019	167,693	0	0	0	0	0	0	167,693
12/2019	167,693	0	0	0	0	0	0	167,693
03/2020	167,693	0	0	0	0	0	0	167,693
06/2020	167,693	0	0	0	0	0	0	167,693
09/2020	167,693	0	0	0	0	0	0	167,693
12/2020	167,693	0	0	0	22,606	0	0	190,299
03/2021	190,299	0	0	0	0	0	0	190,299
06/2021	190,299	0	0	0	0	0	0	190,299
09/2021	190,299	0	0	0	0	0	0	190,299
12/2021	190,299	0	0	0	(9,289)	0	0	181,010
03/2022	181,010	0	0	0	0	0	0	181,010
06/2022	181,010	0	0	0	0	0	0	181,010
09/2022	181,010	0	0	0	0	0	0	181,010
12/2022	181,010	0	0	0	(2,248)	0	0	178,762
03/2023	178,762	0	0	0	0	0	0	178,762
06/2023	178,762	0	0	0	0	0	0	178,762
09/2023	178,762	0	0	0	0	156,000	0	22,762
12/2023	22,762	0	0	0	0	0	0	22,762

Pantheon USA IV **Private Equity Investment Portfolio** **Quarterly Changes in Market Value**

<u>Beg. of</u> <u>Period</u> <u>Market</u>	<u>+</u>	<u>Capital</u> <u>Contri-</u> <u>butions</u>	<u>+</u>	<u>Accounting</u> <u>Income</u>	<u>-</u>	<u>Mgmt.</u> <u>Fees</u>	<u>+</u>	<u>Appre-</u> <u>ciation</u>	<u>-</u>	<u>Dist. of</u> <u>Income &</u> <u>Real. Gains</u>	<u>-</u>	<u>Return</u> <u>of</u> <u>Capital</u>	<u>=</u>	<u>End of</u> <u>Period</u> <u>Market</u>
0		14,730,000		117,659		1,347,274		10,033,379		9,679,907		13,831,095		22,762

Returns

Net Since Inception IRR = 10.17%

Ratios

Capital Account = \$22,762

Total Value = \$23,533,764

Paid In Capital = \$14,730,000

TVPI Investment Multiple (Total Value/Paid In Capital) = 1.60x

DPI Realization Multiple (Distributions/Paid In Capital) = 1.60x

RVPI Residual Multiple (Capital Account/Paid In Capital) = 0.00x

Pantheon USA VI
Private Equity Investment Portfolio
Quarterly Changes in Market Value

	Beg. of	Capital				Dist. of	Return	End of
	Period	+ Contri-	+ Accounting	- Mgmt.	+ Appre-	- Income &	- of	= Period
	Market	butions	Income	Fees	ciation	Real. Gains	Capital	Market
09/2004	0	300,000	21	10,598	(17,856)	0	0	271,567
12/2004	271,567	1,050,000	252	12,187	192,341	0	0	1,501,973
03/2005	1,501,973	0	1,031	12,187	(38,385)	0	0	1,452,432
06/2005	1,452,432	0	1,549	12,187	18,460	0	0	1,460,254
09/2005	1,460,254	0	2,314	17,487	(18,222)	0	0	1,426,859
12/2005	1,426,859	0	2,779	18,281	62,024	0	105,000	1,368,381
03/2006	1,368,381	0	2,879	18,281	(15,882)	0	0	1,337,097
06/2006	1,337,097	375,000	1,171	18,281	(19,654)	0	0	1,675,333
09/2006	1,675,333	675,000	2,408	23,580	82,649	0	0	2,411,810
12/2006	2,411,810	975,000	3,365	24,375	97,132	0	0	3,462,932
03/2007	3,462,932	750,000	3,577	24,375	10,601	0	0	4,202,735
06/2007	4,202,735	1,275,000	4,528	24,375	161,670	0	0	5,619,558
09/2007	5,619,558	975,000	4,320	24,375	132,610	0	0	6,707,113
12/2007	6,707,113	600,000	4,540	24,375	270,348	0	0	7,557,626
03/2008	7,557,626	1,575,000	3,508	24,375	(120,491)	73,041	226,959	8,691,268
06/2008	8,691,268	600,000	1,522	24,375	59,937	0	0	9,328,352
09/2008	9,328,352	600,000	2,056	24,375	(130,465)	0	0	9,775,568
12/2008	9,775,568	600,000	934	24,375	(1,545,047)	0	0	8,807,080
03/2009	8,807,080	0	97	24,375	(154,722)	0	0	8,628,080
06/2009	8,628,080	150,000	61	24,375	265,667	0	0	9,019,433
09/2009	9,019,433	150,000	43	24,375	523,871	0	0	9,668,972
12/2009	9,668,972	225,000	72	24,375	668,374	0	0	10,538,043
03/2010	10,538,043	150,000	78	24,375	358,692	0	0	11,022,438
06/2010	11,022,438	0	69	24,375	225,714	0	0	11,223,846
09/2010	11,223,846	450,000	74	24,375	454,607	99,882	470,118	11,534,152
12/2010	11,534,152	150,000	79	24,375	939,654	60,577	89,423	12,449,510
03/2011	12,449,510	0	97	24,375	618,092	57,566	392,434	12,593,324
06/2011	12,593,324	0	70	24,375	472,411	30,651	269,349	12,741,430
09/2011	12,741,430	75,000	72	24,375	(515,652)	2,782	297,218	11,976,475
12/2011	11,976,475	750,000	58	24,375	671,471	474,098	500,902	12,398,629
03/2012	12,398,629	225,000	60	24,375	798,160	292,030	82,970	13,022,474
06/2012	13,022,474	225,000	88	24,375	(72,923)	343,274	256,726	12,550,264
09/2012	12,550,264	0	28	24,375	214,474	71,839	228,161	12,440,391
12/2012	12,440,391	450,000	1,895	24,375	422,186	703,739	421,261	12,165,097
03/2013	12,165,097	0	12	24,375	539,068	261,847	413,153	12,004,802
06/2013	12,004,802	0	0	24,375	406,946	317,372	357,628	11,712,373
09/2013	11,712,373	0	0	24,375	580,758	167,452	207,548	11,893,756
12/2013	11,893,756	375,000	(2,322)	24,375	571,322	828,990	296,010	11,688,381
03/2014	11,688,381	0	(11,649)	24,375	371,626	313,728	286,273	11,423,982
06/2014	11,423,982	0	132	24,376	429,271	204,661	350,339	11,274,009
09/2014	11,274,009	0	3,016	24,375	(56,699)	220,317	244,682	10,730,952
12/2014	10,730,952	225,000	(1,063)	24,375	413,628	41,503	678,497	10,624,142
03/2015	10,624,142	150,000	3,089	21,937	22,870	462,168	227,832	10,088,164
06/2015	10,088,164	75,000	41,789	21,937	130,065	406,954	328,045	9,578,082
09/2015	9,578,082	0	23,994	21,937	(236,911)	423,601	446,399	8,473,228
12/2015	8,473,228	0	13,947	21,937	(65,411)	277,773	172,227	7,949,827
03/2016	7,949,827	0	7,243	19,744	(96,071)	138,014	296,986	7,406,255

Pantheon USA VI
Private Equity Investment Portfolio
Quarterly Changes in Market Value

	Beg. of	Capital	Accounting	Mgmt.	Appre-	Dist. of	Return	End of
	Period	+ Contri-	+ Income	- Fees	+ ciation	- Income &	- of	= Period
	Market	butions				Real. Gains	Capital	Market
06/2016	7,406,255	0	29,185	19,744	149,485	11,048	183,952	7,370,181
09/2016	7,370,181	0	254	19,744	133,111	290,751	294,249	6,898,802
12/2016	6,898,802	0	39,023	19,744	137,500	331,857	238,143	6,485,581
03/2017	6,485,581	0	70,303	17,526	72,286	163,693	151,307	6,295,644
06/2017	6,295,644	0	7,032	17,721	118,273	0	630,000	5,773,228
09/2017	5,773,228	0	10,125	17,915	161,228	178,561	181,440	5,566,665
12/2017	5,566,665	0	16,410	17,915	75,585	376,963	253,037	5,010,745
03/2018	5,010,745	0	29,951	15,773	41,058	257,342	447,658	4,360,981
06/2018	4,360,981	0	3,392	15,949	169,127	241,540	118,459	4,157,552
09/2018	4,157,552	0	2,153	16,124	54,877	248,746	154,681	3,795,031
12/2018	3,795,031	0	2,631	16,124	(142,588)	42,188	197,812	3,398,950
03/2019	3,398,950	0	0	14,196	185,560	89,999	0	3,480,315
06/2019	3,480,315	0	0	14,354	107,542	157,500	0	3,416,003
09/2019	3,416,003	0	0	14,511	6,000	464,999	0	2,942,493
12/2019	2,942,493	0	0	14,511	(552,511)	225,000	0	2,150,471
03/2020	2,150,471	0	0	12,883	(79,403)	315,000	0	1,743,185
06/2020	1,743,185	0	0	12,883	23,672	630,000	0	1,123,974
09/2020	1,123,974	0	0	1,699	(5,442)	0	0	1,116,833
12/2020	1,116,833	0	0	0	54,478	60,000	0	1,111,311
03/2021	1,111,311	0	0	0	(7,689)	660,000	0	443,622
06/2021	443,622	0	0	0	(22,663)	0	0	420,959
09/2021	420,959	0	0	0	(52,006)	0	0	368,953
12/2021	368,953	0	0	0	(17,770)	0	0	351,183
03/2022	351,183	0	0	0	(16,239)	75,000	0	259,944
06/2022	259,944	0	0	0	(2,840)	105,000	0	152,104
09/2022	152,104	0	0	0	(3,763)	0	0	148,341
12/2022	148,341	0	0	0	4,713	0	0	153,054
03/2023	153,054	0	0	0	(9,193)	0	0	143,861
06/2023	143,861	0	0	0	(2,438)	0	0	141,423
09/2023	141,423	0	0	0	(312)	0	0	141,111
12/2023	141,111	0	0	0	0	0	0	141,111
	0	14,175,000	334,342	1,334,253	8,661,946	11,199,046	10,496,878	141,111

Returns

Net Since Inception IRR = 6.68%

Ratios

Capital Account = \$141,111

Total Value = \$21,837,035

Paid In Capital = \$14,175,000

TVPI Investment Multiple (Total Value/Paid In Capital) = 1.54x

DPI Realization Multiple (Distributions/Paid In Capital) = 1.53x

RVPI Residual Multiple (Capital Account/Paid In Capital) = 0.01x

Pantheon USA VII
Private Equity Investment Portfolio
Quarterly Changes in Market Value

	Beg. of	Capital					Dist. of	Return		End of
	Period	+ Contri-	+ Accounting	- Mgmt.	+ Appre-	- Income &	- Real. Gains	of	=	Period
	Market	butions	Income	Fees	ciation			Capital		Market
12/2006	0	100,000	738	12,672	(7,470)	0	0	0		80,596
03/2007	80,596	250,000	528	4,687	767	0	0	0		327,204
06/2007	327,204	100,000	534	6,336	20,148	0	0	0		441,550
09/2007	441,550	100,000	1,687	7,031	15,286	0	0	0		551,492
12/2007	551,492	100,000	1,005	7,031	(23,884)	0	0	0		621,582
03/2008	621,582	175,000	1,033	7,031	(5,589)	0	0	0		784,995
06/2008	784,995	200,000	447	8,680	(8,058)	0	0	0		968,704
09/2008	968,704	200,000	585	9,375	(26,070)	0	0	0		1,133,844
12/2008	1,133,844	200,000	495	9,375	(165,573)	0	0	0		1,159,391
03/2009	1,159,391	0	55	9,375	(31,122)	0	0	0		1,118,949
06/2009	1,118,949	50,000	86	9,375	16,176	0	0	0		1,175,836
09/2009	1,175,836	100,000	34	9,375	83,643	0	0	0		1,350,138
12/2009	1,350,138	100,000	53	9,375	67,252	0	0	0		1,508,068
03/2010	1,508,068	100,000	25	9,375	27,655	0	0	0		1,626,373
06/2010	1,626,373	150,000	19	9,375	17,193	0	0	0		1,784,210
09/2010	1,784,210	300,000	44	9,375	51,750	0	0	0		2,126,629
12/2010	2,126,629	150,000	78	9,375	170,613	0	0	0		2,437,945
03/2011	2,437,945	200,000	162	9,375	109,285	0	0	0		2,738,017
06/2011	2,738,017	50,000	36	9,375	169,157	0	0	0		2,947,835
09/2011	2,947,835	300,000	17	9,375	(46,460)	150,000	0	0		3,042,017
12/2011	3,042,017	275,000	16	9,375	95,371	75,000	0	0		3,328,029
03/2012	3,328,029	100,000	20	9,375	196,043	0	0	0		3,614,717
06/2012	3,614,717	50,000	19	9,375	18,351	0	0	0		3,673,712
09/2012	3,673,712	0	10	9,375	101,545	0	0	0		3,765,892
12/2012	3,765,892	225,000	0	9,375	107,364	200,000	0	0		3,888,881
03/2013	3,888,881	100,000	0	9,375	181,736	150,000	0	0		4,011,242
06/2013	4,011,242	0	0	9,375	152,474	75,000	0	0		4,079,341
09/2013	4,079,341	0	0	9,375	211,778	75,000	0	0		4,206,744
12/2013	4,206,744	400,000	(694)	9,375	241,094	475,000	0	0		4,362,769
03/2014	4,362,769	0	(117)	9,375	238,983	93,744	81,256			4,417,260
06/2014	4,417,260	0	431	9,375	282,770	57,266	62,734			4,571,086
09/2014	4,571,086	100,000	(205)	9,375	101,395	190,803	124,197			4,447,901
12/2014	4,447,901	175,000	(389)	9,375	197,539	226,324	188,676			4,395,676
03/2015	4,395,676	75,000	15,663	9,375	86,397	156,847	78,153			4,328,361
06/2015	4,328,361	75,000	18,453	9,375	144,103	184,166	140,833			4,231,543
09/2015	4,231,543	35,000	22,690	9,375	(65,730)	116,172	156,327			3,941,629
12/2015	3,941,629	0	14,498	9,375	67,684	118,590	81,409			3,814,437
03/2016	3,814,437	0	6,329	9,375	(8,262)	18,729	71,272			3,713,128
06/2016	3,713,128	35,000	23,508	9,375	61,190	125,298	79,703			3,618,450
09/2016	3,618,450	20,000	4,066	9,375	122,444	86,430	78,570			3,590,585
12/2016	3,590,585	30,000	37,440	9,375	50,091	141,216	108,784			3,448,741
03/2017	3,448,741	0	16,189	8,322	157,510	55,097	84,903			3,474,118
06/2017	3,474,118	0	19,356	8,414	109,999	300,000	0			3,295,059
09/2017	3,295,059	0	8,827	8,507	94,355	170,000	0			3,219,734
12/2017	3,219,734	0	8,964	8,507	72,800	171,614	148,859			2,972,518
03/2018	2,972,518	0	9,527	7,490	80,949	245,073	99,927			2,710,504
06/2018	2,710,504	0	11,047	7,573	121,502	85,609	74,391			2,675,480

Pantheon USA VII
Private Equity Investment Portfolio
Quarterly Changes in Market Value

	Beg. of	Capital					Dist. of	Return	End of
	Period	+ Contri-	+ Accounting	- Mgmt.	+ Appre-	- Income &	- Real. Gains	of	= Period
	Market	butions	Income	Fees	ciation			Capital	Market
09/2018	2,675,480	0	6,205	7,656	70,977	50,697	54,303	2,640,006	
12/2018	2,640,006	0	9,057	7,656	(132,463)	108,215	141,786	2,258,943	
03/2019	2,258,943	0	0	6,741	107,773	165,000	0	2,194,975	
06/2019	2,194,975	0	0	6,816	48,175	200,000	0	2,036,334	
09/2019	2,036,334	0	0	6,891	(32,180)	170,001	0	1,827,262	
12/2019	1,827,262	0	0	6,891	16,758	154,999	0	1,682,130	
03/2020	1,682,130	40,000	0	6,117	(188,589)	120,000	0	1,407,424	
06/2020	1,407,424	0	0	6,117	170,744	125,000	0	1,447,051	
09/2020	1,447,051	0	0	6,185	164,141	40,000	0	1,565,007	
12/2020	1,565,007	0	0	6,185	121,576	160,000	0	1,520,398	
03/2021	1,520,398	0	0	5,460	180,657	165,000	0	1,530,595	
06/2021	1,530,595	0	0	5,521	118,990	230,001	0	1,414,063	
09/2021	1,414,063	0	0	0	46,650	205,000	0	1,255,713	
12/2021	1,255,713	0	0	5,581	12,635	195,001	0	1,067,766	
03/2022	1,067,766	0	0	4,914	52,014	85,000	0	1,029,866	
06/2022	1,029,866	0	0	1,529	(53,206)	65,000	0	910,131	
09/2022	910,131	0	0	0	(20,692)	100,000	0	789,439	
12/2022	789,439	0	0	0	(7,877)	40,000	0	741,562	
03/2023	741,562	0	0	0	9,216	29,999	0	720,779	
06/2023	720,779	0	0	0	14,742	30,000	0	705,521	
09/2023	705,521	0	0	0	(11,523)	20,000	0	673,998	
12/2023	673,998	0	0	0	0	0	0	673,998	
	0	4,660,000	238,571	511,291	4,344,692	6,201,891	1,856,083	673,998	

Returns

Net Since Inception IRR = 10.04%

Ratios

Capital Account = \$673,998

Total Value = \$8,731,972

Paid In Capital = \$4,660,000

TVPI Investment Multiple (Total Value/Paid In Capital) = 1.87x

DPI Realization Multiple (Distributions/Paid In Capital) = 1.73x

RVPI Residual Multiple (Capital Account/Paid In Capital) = 0.14x

Pantheon Europe Fund V A
Private Equity Investment Portfolio
Quarterly Changes in Market Value

	Beg. of	Capital	Accounting	Mgmt.	Appre-	Dist. of	Return	End of
	Period	+ Contri-	+ Income	- Fees	+ ciation	- Income &	- of	= Period
	Market	butions				Real. Gains	Capital	Market
12/2006	0	0	0	0	(36,905)	0	0	(36,905)
03/2007	(36,905)	0	(4,936)	0	(13,013)	0	0	(54,854)
06/2007	(54,854)	540,220	(4,497)	16,281	26,939	0	0	491,527
09/2007	491,527	113,772	(3,763)	7,426	7,154	0	0	601,264
12/2007	601,264	350,892	(2,961)	8,816	(5,527)	0	0	934,852
03/2008	934,852	190,146	8	8,897	55,056	0	0	1,171,165
06/2008	1,171,165	189,066	3,051	11,784	(68,387)	0	0	1,283,111
09/2008	1,283,111	421,395	(2,230)	10,621	(201,351)	0	0	1,490,304
12/2008	1,490,304	222,408	21,410	10,512	(319,183)	0	0	1,404,427
03/2009	1,404,427	0	2,886	9,737	(84,744)	0	0	1,312,832
06/2009	1,312,832	168,318	(612)	10,491	60,902	0	0	1,530,949
09/2009	1,530,949	292,340	102	10,985	112,039	0	0	1,924,445
12/2009	1,924,445	114,780	1,971	10,850	69,175	0	0	2,099,521
03/2010	2,099,521	162,372	4,387	10,009	(32,827)	0	0	2,223,444
06/2010	2,223,444	0	872	9,161	(55,632)	0	0	2,159,523
09/2010	2,159,523	436,864	1,482	10,324	199,240	0	0	2,786,785
12/2010	2,786,785	214,648	7,916	10,145	95,340	0	0	3,094,544
03/2011	3,094,544	0	26,259	10,497	224,192	0	0	3,334,498
06/2011	3,334,498	173,982	55,141	10,843	148,844	0	0	3,701,622
09/2011	3,701,622	134,170	61,038	10,146	(369,219)	0	0	3,517,465
12/2011	3,517,465	0	52,536	9,801	(78,617)	0	214,624	3,266,959
03/2012	3,266,959	106,536	46,832	9,933	183,790	0	0	3,594,184
06/2012	3,594,184	253,820	28,026	9,466	(59,794)	0	101,528	3,705,242
09/2012	3,705,242	0	95,623	9,701	51,508	0	102,920	3,739,752
12/2012	3,739,752	0	168,856	9,942	(4,547)	0	0	3,894,119
03/2013	3,894,119	205,456	36,117	9,499	(110,083)	0	154,092	3,862,018
06/2013	3,862,018	77,994	68,649	9,723	86,577	0	181,986	3,903,529
09/2013	3,903,529	108,296	98,404	10,236	71,353	0	297,814	3,873,532
12/2013	3,873,532	110,240	184,523	10,420	18,875	0	248,040	3,928,710
03/2014	3,928,710	110,264	9,778	10,196	140,285	0	165,396	4,013,445
06/2014	4,013,445	0	9,706	10,286	266,592	0	213,595	4,065,862
09/2014	4,065,862	50,532	15,103	10,795	65,337	0	389,096	3,796,943
12/2014	3,796,943	0	12,399	9,627	146,053	199,339	0	3,746,429
03/2015	3,746,429	0	29,256	8,798	207,557	0	351,573	3,622,871
06/2015	3,622,871	44,378	12,578	8,510	194,837	0	230,764	3,635,390
09/2015	3,635,390	193,043	12,578	8,510	56,596	0	501,467	3,387,630
12/2015	3,387,630	0	16,716	8,261	143,628	0	314,652	3,225,061
03/2016	3,225,061	18,100	11,270	8,438	(37,468)	248,871	0	2,959,654
06/2016	2,959,654	0	10,576	8,266	(455,285)	168,454	0	2,338,225
09/2016	2,338,225	0	5,431	8,462	(85,328)	170,571	0	2,079,294
12/2016	2,079,294	0	14,217	7,945	19,599	126,427	0	1,978,738
03/2017	1,978,738	0	(10,962)	6,658	54,293	256,000	0	1,759,411
06/2017	1,759,411	0	16,224	6,732	27,503	192,000	0	1,604,406
09/2017	1,604,406	0	10,694	6,805	10,668	48,000	0	1,570,963
12/2017	1,570,963	96,000	34,998	6,805	13,749	276,000	0	1,432,905
03/2018	1,432,905	0	3,235	5,992	10,842	140,000	0	1,300,990
06/2018	1,300,990	0	3,510	6,058	128,860	220,000	0	1,207,302

Pantheon Europe Fund V A
Private Equity Investment Portfolio
Quarterly Changes in Market Value

	Beg. of	Capital	Accounting	Mgmt.	Appre-	Dist. of	Return	End of
	Period	+ Contri-	+ Income	- Fees	+ ciation	- Income &	- of	= Period
	Market	butions				Real. Gains	Capital	Market
09/2018	1,207,302	0	7,071	6,125	72,338	180,000	0	1,100,586
12/2018	1,100,586	0	2,368	6,125	(18,189)	52,000	0	1,026,640
03/2019	1,026,640	0	0	5,393	67,525	48,000	0	1,040,772
06/2019	1,040,772	40,000	0	5,453	26,623	228,000	0	873,942
09/2019	873,942	0	0	5,512	16,950	84,000	0	801,380
12/2019	801,380	0	0	5,512	44,708	56,000	0	784,576
03/2020	784,576	0	0	4,894	(56,195)	76,000	0	647,487
06/2020	647,487	0	0	4,894	73,578	40,000	0	676,171
09/2020	676,171	0	0	4,947	204,283	64,000	0	811,507
12/2020	811,507	0	0	4,948	56,847	40,000	0	823,406
03/2021	823,406	0	0	4,368	44,229	132,000	0	731,267
06/2021	731,267	0	0	4,417	48,827	84,000	0	691,677
09/2021	691,677	0	0	4,465	23,185	12,000	0	698,397
12/2021	698,397	0	0	4,404	(10,332)	100,000	0	583,661
03/2022	583,661	0	0	3,931	(37,785)	32,000	0	509,945
06/2022	509,945	0	0	0	(27,101)	28,000	0	454,844
09/2022	454,844	0	0	0	(10,476)	0	0	444,368
12/2022	444,368	0	0	179	(7,446)	0	0	436,743
03/2023	436,743	0	0	0	(1,852)	28,000	0	406,891
06/2023	406,891	0	0	0	10,826	20,000	0	397,717
09/2023	397,717	0	0	82	537	60,000	0	338,172
12/2023	338,172	0	0	0	0	0	0	338,172
	0	5,140,032	1,173,836	499,040	1,400,553	3,409,662	3,467,547	338,172

Returns

Net Since Inception IRR = 5.65%

Ratios

Capital Account = \$338,172

Total Value = \$7,215,381

Paid In Capital = \$5,140,032

TVPI Investment Multiple (Total Value/Paid In Capital) = 1.40x

DPI Realization Multiple (Distributions/Paid In Capital) = 1.34x

RVPI Residual Multiple (Capital Account/Paid In Capital) = 0.07x

**Pantheon Global Secondary Fund III
Private Equity Investment Portfolio
Quarterly Changes in Market Value**

	Beg. of Period Market	+ Capital Contri- butions	+ Accounting Income	- Mgmt. Fees	+ Appre- ciation	- Dist. of Income & Real. Gains	- Return of Capital	= End of Period Market
12/2006	0	500,000	110	23,699	3,896	0	0	480,307
03/2007	480,307	275,000	1,104	12,329	102,564	0	0	846,646
06/2007	846,646	175,000	434	12,466	107,117	0	0	1,116,731
09/2007	1,116,731	225,000	1,822	12,603	102,490	0	0	1,433,440
12/2007	1,433,440	300,000	1,068	12,603	12,221	0	0	1,734,126
03/2008	1,734,126	650,000	1,024	12,329	93,162	0	0	2,465,983
06/2008	2,465,983	499,999	1,107	12,466	3,134	0	0	2,957,757
09/2008	2,957,757	275,000	461	12,603	(103,497)	0	0	3,117,118
12/2008	3,117,118	300,000	656	12,603	(452,340)	0	0	2,952,831
03/2009	2,952,831	225,000	164	12,329	(281,889)	0	0	2,883,777
06/2009	2,883,777	0	394	12,466	118,124	0	0	2,989,829
09/2009	2,989,829	25,000	1,369	12,603	97,319	0	0	3,100,914
12/2009	3,100,914	0	5,221	12,603	92,261	0	0	3,185,793
03/2010	3,185,793	0	1,325	12,329	22,086	0	75,000	3,121,875
06/2010	3,121,875	0	3,110	12,466	(24,073)	0	0	3,088,446
09/2010	3,088,446	175,000	3,213	12,603	115,854	0	0	3,369,910
12/2010	3,369,910	525,000	4,765	12,603	209,627	0	450,000	3,646,699
03/2011	3,646,699	0	12,106	12,329	189,903	0	0	3,836,379
06/2011	3,836,379	0	2,346	12,466	194,920	0	250,000	3,771,179
09/2011	3,771,179	100,000	33,335	12,603	(206,828)	0	225,000	3,460,083
12/2011	3,460,083	0	4,855	12,603	(85,269)	0	50,000	3,317,066
03/2012	3,317,066	50,000	5,583	12,432	117,995	0	225,000	3,253,212
06/2012	3,253,212	75,000	9,659	12,432	17,991	0	225,000	3,118,430
09/2012	3,118,430	0	7,370	12,568	34,523	0	0	3,147,755
12/2012	3,147,755	50,000	6,769	10,921	15,973	0	300,000	2,909,576
03/2013	2,909,576	0	473	12,229	16,421	75,000	0	2,839,241
06/2013	2,839,241	75,000	8,943	12,417	67,416	225,000	0	2,753,183
09/2013	2,753,183	0	2,788	12,554	17,968	175,000	0	2,586,385
12/2013	2,586,385	0	3,222	12,543	97,445	0	100,000	2,574,509
03/2014	2,574,509	100,000	2,009	11,036	73,662	0	225,000	2,514,144
06/2014	2,514,144	0	3,542	11,159	88,000	0	50,000	2,544,527
09/2014	2,544,527	0	13,697	11,282	(119,579)	0	165,000	2,262,363
12/2014	2,262,363	90,000	363	11,282	10,232	0	245,000	2,106,676
03/2015	2,106,676	0	11,952	9,928	21,332	0	140,000	1,990,032
06/2015	1,990,032	0	9,289	10,039	53,366	0	150,000	1,892,648
09/2015	1,892,648	55,000	4,597	10,150	(44,306)	0	175,000	1,722,789
12/2015	1,722,789	0	16,812	283,849	276,455	190,000	0	1,542,207
03/2016	1,542,207	0	9,036	9,006	(22,573)	170,000	0	1,349,664
06/2016	1,349,664	0	5,448	9,006	(14,055)	45,000	0	1,287,051
09/2016	1,287,051	0	(1,715)	9,106	36,381	100,000	0	1,212,611
12/2016	1,212,611	0	7,917	9,106	(19,624)	90,000	0	1,101,798
03/2017	1,101,798	0	4,216	8,046	22,430	50,000	0	1,070,398
06/2017	1,070,398	0	3,349	8,179	46,637	95,000	0	1,017,205
09/2017	1,017,205	0	(7,445)	8,182	24,438	50,000	0	976,016
12/2017	976,016	0	4,437	8,014	(18,926)	210,000	0	743,513
03/2018	743,513	0	2,131	7,280	5,078	80,000	0	663,442
06/2018	663,442	0	284	7,361	88,505	35,000	0	709,870

Pantheon Global Secondary Fund III
Private Equity Investment Portfolio
Quarterly Changes in Market Value

	Beg. of	+	Capital	+	Accounting	-	Mgmt.	+	Appre-	-	Dist. of	-	Return	=	End of
	Period		Contri-		Income		Fees		ciation		Income &		of		Period
	Market		butions								Real. Gains		Capital		Market
09/2018	709,870		0		4,396		7,442		29,299		10,000		0		726,123
12/2018	726,123		0		4,974		7,251		(47,122)		0		75,000		601,724
03/2019	601,724		0		0		6,552		51,506		35,000		0		611,678
06/2019	611,678		0		0		6,625		(4,058)		85,000		0		515,995
09/2019	515,995		0		0		5,242		6,394		50,000		0		467,147
12/2019	467,147		0		0		4,850		(49,110)		35,000		0		378,187
03/2020	378,187		0		0		9,352		(647)		40,000		0		328,188
06/2020	328,188		0		0		6,303		29,085		150,000		0		200,970
09/2020	200,970		0		0		3,739		3,736		40,000		0		160,967
12/2020	160,967		0		0		4,656		4,656		0		0		160,967
03/2021	160,967		0		0		0		(1,884)		0		0		159,083
06/2021	159,083		0		0		4,177		6,558		0		0		161,464
09/2021	161,464		0		0		0		(21,271)		0		0		140,193
12/2021	140,193		0		0		5,069		(702)		0		0		134,422
03/2022	134,422		0		0		7,604		(6,412)		25,000		0		95,406
06/2022	95,406		0		0		0		(586)		35,000		0		59,820
09/2022	59,820		0		0		79		(655)		0		0		59,086
12/2022	59,086		0		0		0		869		0		0		59,955
03/2023	59,955		0		0		0		0		0		0		59,955
06/2023	59,955		0		0		0		0		0		0		59,955
09/2023	59,955		0		0		0		0		0		0		59,955
12/2023	59,955		0		0		0		0		0		0		59,955
	0		4,744,999		224,085		892,752		1,203,623		2,095,000		3,125,000		59,955

Returns

Net Since Inception IRR = 1.90%

Ratios

Capital Account = \$59,955

Total Value = \$5,279,955

Paid In Capital = \$4,744,999

TVPI Investment Multiple (Total Value/Paid In Capital) = 1.11x

DPI Realization Multiple (Distributions/Paid In Capital) = 1.10x

RVPI Residual Multiple (Capital Account/Paid In Capital) = 0.01x

Pantheon US Select 2014
Real Estate Portfolio
Quarterly Changes in Market Value

	Beg. of	Capital				Dist. of	Return	End of
	Period	+ Contri-	+ Accounting	- Mgmt.	+ Appre-	- Income &	- of	= Period
	Market	butions	Income	Fees	ciation	Real. Gains	Capital	Market
03/2015	(5,712)	188,000	(26,666)	647	0	0	0	154,975
06/2015	154,975	555,000	(9,672)	13,291	0	0	0	687,012
09/2015	687,012	463,937	8,765	15,008	0	0	0	1,144,706
12/2015	1,144,706	0	5,605	(10,332)	(4,032)	0	0	1,156,611
03/2016	1,156,611	0	126	6,517	(3,021)	0	0	1,147,199
06/2016	1,147,199	480,000	(7,766)	6,955	(7,136)	0	0	1,605,341
09/2016	1,605,341	225,000	91,201	11,340	(3,551)	0	0	1,906,651
12/2016	1,906,651	269,668	(22,646)	12,538	131,076	0	0	2,272,211
03/2017	2,272,211	585,000	(5,710)	13,969	66,210	0	0	2,903,742
06/2017	2,903,742	1,230,138	(25,941)	15,016	147,215	0	0	4,240,138
09/2017	4,240,138	645,159	22,338	15,084	50,560	0	0	4,943,111
12/2017	4,943,111	870,000	(3)	19,246	341,589	0	0	6,135,451
03/2018	6,135,451	510,221	(4,603)	19,351	333,322	0	0	6,955,040
06/2018	6,955,040	555,179	(100,389)	20,725	349,082	0	0	7,738,187
09/2018	7,738,187	975,000	14,485	22,154	528,429	90,192	74,808	9,068,947
12/2018	9,068,947	1,095,407	122,516	26,079	132,047	0	0	10,392,838
03/2019	10,392,838	0	0	22,095	444,609	0	0	10,815,352
06/2019	10,815,352	225,245	0	18,500	727,786	0	0	11,749,883
09/2019	11,749,883	240,000	0	23,150	346,200	0	0	12,312,933
12/2019	12,312,933	330,240	0	23,909	123,689	0	0	12,742,953
03/2020	12,742,953	0	0	22,108	(16,784)	330,457	0	12,373,604
06/2020	12,373,604	0	0	22,107	1,033,527	600,219	0	12,784,805
09/2020	12,784,805	330,233	0	22,303	1,696,452	0	0	14,789,187
12/2020	14,789,187	525,222	0	22,647	375,495	0	0	15,667,257
03/2021	15,667,257	0	0	21,951	3,591,662	150,000	0	19,086,968
06/2021	19,086,968	0	0	23,007	2,322,461	540,000	0	20,846,422
09/2021	20,846,422	0	0	23,396	1,807,892	945,000	0	21,685,918
12/2021	21,685,918	0	0	23,088	695,656	390,001	0	21,968,485
03/2022	21,968,485	0	0	22,964	1,538,367	254,547	0	23,229,341
06/2022	23,229,341	0	0	23,206	(284,830)	330,000	0	22,591,305
09/2022	22,591,305	0	0	23,458	(154,642)	210,000	0	22,203,205
12/2022	22,203,205	60,000	0	21,362	4,662	450,000	0	21,796,505
03/2023	21,796,505	0	0	22,948	63,306	254,781	0	21,582,082
06/2023	21,582,082	0	0	23,233	350,804	165,000	0	21,744,653
09/2023	21,744,653	0	0	23,492	(102,880)	315,000	0	21,303,281
12/2023	21,303,281	135,000	0	0	0	360,000	0	21,078,281
	(5,712)	10,493,649	61,640	636,513	16,625,223	5,385,197	74,808	21,078,281

Pantheon US Select 2014
Real Estate Portfolio
Quarterly Changes in Market Value

Returns

Net Since Inception IRR = 319.11%

Ratios

Capital Account = \$21,078,281

Total Value = \$26,538,286

Paid In Capital = \$10,493,649

TVPI Investment Multiple (Total Value/Paid In Capital) = 2.53x

DPI Realization Multiple (Distributions/Paid In Capital) = 0.52x

RVPI Residual Multiple (Capital Account/Paid In Capital) = 2.01x

Quarterly Highlights

The Callan Institute provides research to update clients on the latest industry trends, carefully structured educational programs to enhance the knowledge of industry professionals, and events to enhance dialogue among investing professionals. Visit www.callan.com/research-library to see all of our publications, and www.callan.com/blog to view our blog. For more information contact Barb Gerraty at 415-274-3093 / institute@callan.com.

New Research from Callan's Experts

[2023 Nuclear Decommissioning Funding Study](#) | Callan's annual study offers key insights into the status of nuclear decommissioning funding to make peer comparisons more accurate and relevant.

[2023 Investment Management Fee Study](#) | The purpose of the study is to provide a detailed analysis on fee levels and trends across multiple asset classes and mandate sizes, for both active and passive management.

[2023 Asset Manager ESG Study](#) | Callan's inaugural ESG Study analyzes responses to various environmental, social, and governance questions in Callan's manager database by firm size, asset class, country of domicile, and ownership structure.

Webinar Replays

[Research Cafe: Office-to-Residential Conversions](#) | During this interview, Callan specialists Aaron Quach and Christine Mays of Callan's Real Assets Consulting Group discuss office-to-residential conversions.

[Webinar: Callan's Retirement Conundrum](#) | During this discussion, representatives from Callan and October Three (a human resource and actuarial consulting firm) discuss how a small provision in SECURE 2.0 has paved the way for cash-balance pension plans to meet retirement income needs.

Blog Highlights

[How Your Public DB Plan's Returns Compare](#) | This 3Q23 update to our quarterly series of blog posts provides context for public defined benefit (DB) plans about their returns over time.

[ILS on Pace for Banner Year in 2023](#) | When reviewing hedge fund portfolios, those investing in insurance-linked securities (ILS) are finding that this oft-overlooked strategy is buoying performance.

Quarterly Updates

[Private Equity Update, 3Q23](#) | A high-level summary of private equity activity in the quarter through all the investment stages

[Active vs. Passive Charts, 3Q23](#) | A comparison of active managers alongside relevant benchmarks over the long term

[Market Pulse, 3Q23](#) | A quarterly market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data on the capital markets

[Capital Markets Review, 3Q23](#) | Analysis and a broad overview of the economy and public and private markets activity each quarter across a wide range of asset classes

[Hedge Fund Update, 3Q23](#) | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

[Real Assets Update, 3Q23](#) | A summary of market activity for real assets and private real estate during the quarter

[Private Credit Update, 3Q23](#) | A review of performance and fund-raising activity for private credit during the quarter

[Callan Target Date Index™, 3Q23](#) | Tracks the performance and asset allocation of available target date mutual funds and CITs

[Callan DC Index™, 3Q23](#) | Provides underlying fund performance, asset allocation, and cash flows of more than 100 large defined contribution plans representing approximately \$400 billion in assets

Events

A complete list of all upcoming events can be found on our website: callan.com/events-education.

Please mark your calendar and look forward to upcoming invitations:

2024 National Conference

April 8-10, 2024 – San Francisco

June Regional Workshops

June 25, 2024 – Atlanta

June 27, 2024 – San Francisco

For more information about events, please contact Barb Gerraty: 415-274-3093 / gerraty@callan.com

Education: By the Numbers

50+

Unique pieces of research the Institute generates each year

525

Attendees (on average) of the Institute's annual National Conference

4,845

Total attendees of the "Callan College" since 1994

Education

Founded in 1994, the "Callan College" offers educational sessions for industry professionals involved in the investment decision-making process.

Alternative Investments

Feb. 21-22, 2024 – Virtual

Alternative investments like private equity, hedge funds, and real estate can play a key role in any portfolio. In our "Callan College" on Alternatives, you will learn about the importance of allocations to alternatives, and how to consider integrating, evaluating, and monitoring them.

Introduction to Investments

March 19-21, 2024 – Virtual

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities.

Our virtual sessions are held over two to three days with virtual modules of 2.5-3 hours, while in-person sessions run either a full day or one-and-a-half days. Virtual tuition is \$950 per person and includes instruction and digital materials. In-person tuition is \$2,350 per person and includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Additional information including registration can be found at: callan.com/events-education



"Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialogue to raise the bar across the industry."

Greg Allen, CEO and Chief Research Officer

List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry, and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor, and disclose potential conflicts on an ongoing basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database, or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g., attending an educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group, and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance department.

Manager Name

abrdn
ABS Global Investments
Acadian Asset Management LLC
Adams Street Partners, LLC
Aegon Asset Management
AEW Capital Management, L.P.
AllianceBernstein
Allspring Global Investments, LLC
Altrinsic Global Advisors, LLC
American Century Investments
Amundi US, Inc.
Antares Capital LP
Apollo Global Management, Inc.
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Atlanta Capital Management Co., LLC

Manager Name

AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Barings LLC
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
Belle Haven Investments L.P.
BentallGreenOak
Beutel, Goodman & Company Ltd.
BlackRock
Blackstone Group (The)
Blue Owl Capital, Inc.
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brookfield Asset Management Inc.
Brown Brothers Harriman & Company

Manager Name
Brown Investment Advisory & Trust Company
Capital Group
CastleArk Management, LLC
CIBC Asset Management Inc.
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Threadneedle Investments NA
Comvest Partners
Covenant Capital Group
CQS
Credit Suisse Asset Management, LLC
D.E. Shaw Investment Management, LLC
DePrince, Race & Zollo, Inc.
Diamond Hill Capital Management, Inc.
Dimensional Fund Advisors L.P.
Doubleline
DWS
EARNEST Partners, LLC
Fayez Sarofim & Company
Federated Hermes, Inc.
Fidelity Institutional Asset Management
Fiera Capital Corporation
First Eagle Investment Management, LLC
First Hawaiian Bank Wealth Management Division
First Sentier Investors
Fisher Investments
Franklin Templeton
Fred Alger Management, LLC
GAM (USA) Inc.
GlobeFlex Capital, L.P.
GoldenTree Asset Management, LP
Goldman Sachs
Golub Capital
Guggenheim Investments
GW&K Investment Management
Harbor Capital Advisors
Harding Loevner LP
Hardman Johnston Global Advisors LLC
Heitman LLC
Hotchkis & Wiley Capital Management, LLC

Manager Name
Impax Asset Management LLC
Income Research + Management
Insight Investment
Intech Investment Management LLC
Intercontinental Real Estate Corporation
Invesco
J.P. Morgan
Janus
Jennison Associates LLC
Jobs Peak Advisors
KeyCorp
Kohlberg Kravis Roberts & Co. L.P. (KKR)
Lazard Asset Management
LGIM America
Lincoln National Corporation
Longview Partners
Loomis, Sayles & Company, L.P.
Lord, Abbett & Company
LSV Asset Management
Mackay Shields LLC
Macquarie Asset Management (MAM)
Manulife Investment Management
Marathon Asset Management, L.P.
MetLife Investment Management
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
MUFG Union Bank, N.A.
Natixis Investment Managers
Neuberger Berman
Newton Investment Management
Northern Trust Asset Management
Nuveen
Oaktree Capital Management, L.P.
P/E Investments
Pacific Investment Management Company
Pantheon Ventures
Parametric Portfolio Associates LLC

Manager Name

Partners Group (USA) Inc.

Pathway Capital Management, LP

PFM Asset Management LLC

PGIM DC Solutions

PGIM Fixed Income

PGIM Quantitative Solutions LLC

Pictet Asset Management

PineBridge Investments

Polen Capital Management, LLC

Pretium Partners, LLC

Principal Asset Management

Putnam Investments, LLC

Raymond James Investment Management

RBC Global Asset Management

Regions Financial Corporation

Robeco Institutional Asset Management, US Inc.

Rockpoint

S&P Dow Jones Indices

Sands Capital Management

Schroder Investment Management North America Inc.

Segall Bryant & Hamill

SLC Management

Smith Graham & Co. Investment Advisors, L.P.

State Street Global Advisors

Manager Name

Strategic Global Advisors, LLC

T. Rowe Price Associates, Inc.

TD Global Investment Solutions – TD Epoch

The Carlyle Group

The TCW Group, Inc.

Thompson, Siegel & Walmsley LLC

Top Tier Capital Partners

Tri-Star Trust Bank

Turning Rock Partners, L.P.

UBS Asset Management

VanEck

Versus Capital Group

Victory Capital Management Inc.

Virtus Investment Partners, Inc.

Vontobel Asset Management

Voya

Walter Scott & Partners Limited

WCM Investment Management

Wellington Management Company, LLP

Western Asset Management Company LLC

Westfield Capital Management Company, LP

William Blair & Company LLC

Xponance, Inc.

Important Disclosures

Information contained in this document may include confidential, trade secret and/or proprietary information of Callan and the client. It is incumbent upon the user to maintain such information in strict confidence. Neither this document nor any specific information contained herein is to be used other than by the intended recipient for its intended purpose.

The content of this document is particular to the client and should not be relied upon by any other individual or entity. There can be no assurance that the performance of any account or investment will be comparable to the performance information presented in this document.

Certain information herein has been compiled by Callan from a variety of sources believed to be reliable but for which Callan has not necessarily verified for accuracy or completeness. Information contained herein may not be current. Callan has no obligation to bring current the information contained herein.

Callan's performance measurement service reports returns for a portfolio and compares them against relevant benchmarks and peer groups, as appropriate; such service may also report on historical portfolio holdings, comparing them to holdings of relevant benchmarks and peer groups, as appropriate ("portfolio holdings analysis"). To the extent that Callan's performance measurement service includes portfolio holdings analysis, Callan relies entirely on holdings data provided by third parties including custodian banks, record keepers and investment managers. Callan reports the performance and holdings data as received and does not attempt to audit or verify the holdings data. Callan is not responsible for the accuracy or completeness of the performance or holdings data received from third parties and such data may not have been verified for accuracy or completeness. Callan does not perform forward-looking risk analysis or guideline compliance analysis based on the performance or portfolio holdings data.

In no event should performance measurement service provided by Callan be used in the calculation, deliberation, policy determination, or any other action of the client as it pertains to determining contribution or funding amounts, timing or activity, benefit payments or distribution amounts, timing or activity, or performance-based fee amounts, timing or activity.

The content of this document may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact. The opinions expressed herein may change based upon changes in economic, market, financial and political conditions and other factors. Callan has no obligation to bring current the opinions expressed herein.

The information contained herein may include forward-looking statements regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties. Actual results may vary, perhaps materially, from the future results projected in this document. Undue reliance should not be placed on forward-looking statements.

Callan is not responsible for reviewing the risks of individual securities or the compliance/non-compliance of individual security holdings with a client's investment policy guidelines.

This document should not be construed as legal or tax advice on any matter. You should consult with legal and tax advisers before applying any of this information to your particular situation.

Reference to, or inclusion in this document of, any product, service or entity should not necessarily be construed as recommendation, approval, or endorsement or such product, service or entity by Callan. This document is provided in connection with Callan's consulting services and should not be viewed as an advertisement of Callan, or of the strategies or products discussed or referenced herein.

The issues considered and risks highlighted herein are not comprehensive and other risks may exist that the user of this document may deem material regarding the enclosed information. Please see any applicable full performance report or annual communication for other important disclosures.

Unless Callan has been specifically engaged to do so, Callan does not conduct background checks or in-depth due diligence of the operations of any investment manager search candidate or investment vehicle, as may be typically performed in an operational due diligence evaluation assignment and in no event does Callan conduct due diligence beyond what is described in its report to the client.

Any decision made on the basis of this document is sole responsibility of the client, as the intended recipient, and it is incumbent upon the client to make an independent determination of the suitability and consequences of such a decision.

Callan undertakes no obligation to update the information contained herein except as specifically requested by the client.

Past performance is no guarantee of future results.

December 31, 2023

**City of Norwalk
OPEB**

**Investment Measurement Service
Quarterly Review**

Table of Contents

December 31, 2023

Capital Markets Review	3
Asset Allocation and Performance	
Asset Allocation	21
Asset Distribution	22
Manager Performance Table	24
Domestic Equity	
Vanguard Total Stock Market	33
International Equity	
Vanguard Total Int'l. Stock	40
Domestic Fixed	
Prudential Conservative Core Bond	47
Metropolitan West Fund	51
Liquid Real Assets	
PIMCO All Asset Fund	56
Callan Research and Education	59
Disclosures	62

Economy Becomes Even More Surprising

ECONOMY

2 Last year was supposed to feature the recession caused by the Fed's dedication to fighting inflation; instead, the economy grew 2.5% for the year. While the rate of overall growth slowed in 4Q, the economy seemed to get stronger by the quarter in 2023.

Broad Rally for Bonds Across the World

FIXED INCOME

8 Driven by falling rates and strong risk-on sentiment, the Agg returned 6.8%, the highest quarterly return since 2Q89. The 10-year U.S. Treasury yield closed the year at 3.88%. Global bonds saw broad-based gains across countries and developed markets topped the U.S.

Net IRR of Nearly 9% Over Three Years

PRIVATE CREDIT

12 Given its high returns, private credit remained in high demand across Callan's investor base. Private credit assets under management stood at over \$1.5 trillion at the end of 2023, with Preqin forecasting the asset class will grow to over \$2.5 trillion by 2028.

Increases in 2023 but Inflation Tops Worries

INSTITUTIONAL INVESTORS

4 Robust equity returns led all institutional investor types to show gains for 2023, a stark reversal from the double-digit losses of 2022. But over the last year, all investors lagged a 60% stocks/40% bonds benchmark by a significant amount, likely due to those same equity gains.

Private RE Falls but REITs Outpace Stocks

REAL ESTATE/REAL ASSETS

10 The NCREIF Property Index fell 3.0% during 4Q23. The NCREIF Open-End Diversified Core Equity (ODCE) Index fell 4.8% during 4Q. The FTSE EPRA Nareit Developed REIT Index rose 15.6% during 4Q23. The FTSE Nareit Equity REITs Index increased 16.2%.

Gains Spurred by Stocks and Bonds

HEDGE FUNDS/MACs

13 Most hedge fund managers showed gains in 4Q23. Equity hedge strategies were the best performing. Relative value strategies generated positive performance as well, while event-driven strategies also ended on a strong note. Multi-asset class (MAC) strategies also gained.

Dovish Policy Drives Widespread Gains

EQUITY

6 U.S. equity markets rebounded in the last two months of the year as the impact of possible rate cuts in 2024 started to get priced in. Dovish signaling from central banks and dropping yields led to a broad market rally in 4Q23 for global ex-U.S. markets as well.

Big Slowdown After Frenzy of 2021

PRIVATE EQUITY

11 Both new investment activity and exit activity slowed markedly in 2023. Public equity's strong recovery in 2023 has left private equity in its wake. Private equity only saw about a fifth of the gains of the public markets over the last year, on a PME basis.

2.9% Drop After Three Quarters of Gains

DEFINED CONTRIBUTION

15 Despite the loss, the Callan DC Index™ saw a trailing one-year gain of 13.8%. The Age 45 Target Date Fund (analogous to the 2045 vintage) fell 3.6%. Balances within the DC Index fell by 3.2% after a 4.3% increase in the previous quarter, driven by investment losses.

Broad Market Quarterly Returns

U.S. Equity
Russell 3000

12.1%

Global ex-U.S. Equity
MSCI ACWI ex USA

9.8%

U.S. Fixed Income
Bloomberg Agg

6.8%

Global ex-U.S. Fixed Income
Bloomberg Global Agg ex US

9.2%

Sources: Bloomberg, FTSE Russell, MSCI

The Economy Is More Surprising by the Quarter

ECONOMY | Jay Kloepfer

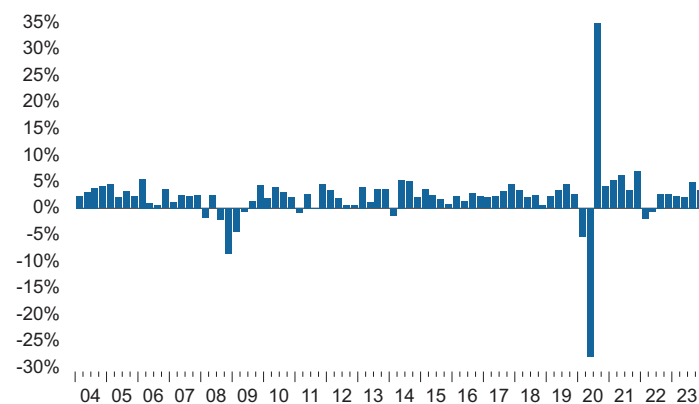
The U.S. economy grew by 3.3% in 4Q23, once again surprising to the upside. If you asked anyone who has to indulge in the hubris of forecasting the economy, all of 2023 has been a surprise. Last year was supposed to feature the recession caused by the Fed's dedication to fighting inflation by raising interest rates; instead, the economy grew 2.5% for the year, up from the 1.9% rate in 2022. The job market has generated 5.4 million new jobs since the end of 2019, before the start of the pandemic. Real wages and real income growth turned positive in mid-2023 as inflation subsided but demand for workers remained. Workers feel confident in the tight labor market, and this confidence is driving consumer spending. Consumption expenditures accounted for half of GDP growth in 3Q and almost 60% in 4Q. The economy seemed to get stronger by the quarter in 2023.

So why no recession? Underneath the mayhem that defined both 2022 and 2023—geopolitical uncertainty, spiking inflation, rising interest rates, and the volatility in the equity market—the U.S. and global economies remain in remarkably good shape. The U.S. economy weathered the rate hikes in 2022 and 2023 particularly well. The first reason is stimulus and lots of it, around the globe, which translated into pent-up demand. Second, the very tight labor market in the U.S. gives workers and their families confidence to spend. Third, despite the housing market taking a big hit as mortgage rates shot up, housing has not dragged down the economy as in rate hike episodes of yore. In addition, we do not have a mortgage crisis similar to the one that struck in 2008-09 and nearly took down the banking system.

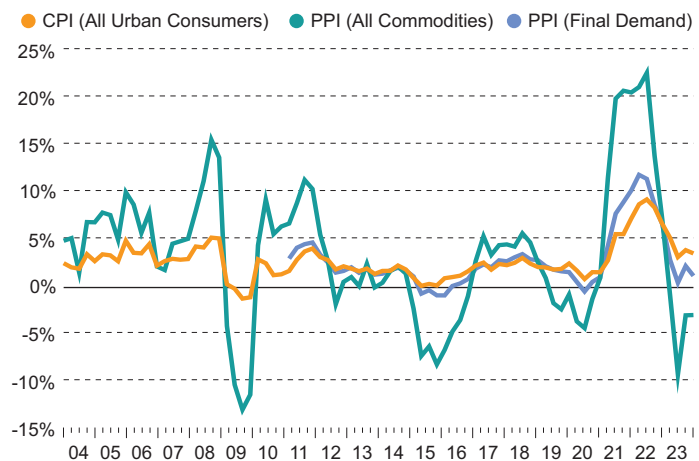
However, we do have a commercial real estate tsunami working through offices in central business districts and retail trade, which will reshape the physical as well as business landscape of many communities in the U.S. Finally, we do have a housing shortage around the U.S. that may have long-term generational consequences for homeownership, wealth creation, and financial security for younger people.

Quarterly Real GDP Growth

(20 Years)



Inflation Year-Over-Year



Inflation shot up to 9% in mid 2022, but the rate of price increases began to ebb in the second half of 2022 and declined steadily to 3% by the end of 3Q23. Unfortunately, headline inflation ticked back up to 3.5% by the end of the year, so we are not out of the inflation woods yet. Even as the rate of price increases comes down, prices are now “permanently” higher unless we see deflation. The level of the CPI-U index is up 10% since the start of 2022.

One key factor keeping inflation from falling back toward the Federal Reserve's goal of 2% is the labor market. We ended 2023 with labor markets not only tight but tightening. Initial unemployment claims (measured on a weekly basis)—one of our few leading indicators—began climbing in 2Q, and by early spring weekly claims had surpassed the average set in 2019 of 218,000. As claims rose to 250,000 by August, the data appeared to show that interest rate hikes were finally starting to bite. Then initial claims fell back sharply and we ended the year at 203,000. Continuing unemployment claims also began to rise from a very low level starting in 4Q22 and ended the year about 9% higher than the pre-pandemic level. So initial claims show workers holding onto jobs, but the continuing claims show workers have a bit more trouble finding jobs once laid off. However, the unemployment rate remains low at 3.7%. The tightness in the labor market is inconsistent with the Fed's goal of achieving its 2% inflation target. As continuing claims rose in 2023, bond markets read the data as the first sign of easing in the labor market, but the robust end-of-the-year GDP report, the lower initial claims, and the strong December job market report suggest labor market tightness is not yet easing.

The remarkable GDP growth is fueling continued demand for workers, and with inflation falling while wages are rising, workers saw real incomes (wages and salaries net of inflation) grow in each of the last three quarters of 2023, with a sharp gain of 2.5% in real disposable (after-tax) income in 4Q. Average hourly earnings growth slowed from 5% (annual growth) in 2022 to 4% by December 2023, but as inflation fell real wage growth finally turned positive starting in May, and this real growth carried through December (wage growth is exceeding inflation).

The upshot: it may take longer than many believed to unravel the current growth momentum in the U.S. economy. The Fed had stated

The Long-Term View

Index	4Q23	Periods Ended 12/31/23			
		1 Yr	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	12.1	26.0	15.2	11.5	7.7
S&P 500	11.7	26.3	15.7	12.0	7.6
Russell 2000	14.0	16.9	10.0	7.2	7.9
Global ex-U.S. Equity					
MSCI EAFE	10.4	18.2	8.2	4.3	4.4
MSCI ACWI ex USA	9.8	15.6	7.1	3.8	--
MSCI Emerging Markets	7.9	9.8	3.7	2.7	--
MSCI ACWI ex USA Small Cap	10.1	15.7	7.9	4.9	7.3
Fixed Income					
Bloomberg Agg	6.8	5.5	1.1	1.8	3.9
90-Day T-Bill	1.4	5.0	1.9	1.3	1.9
Bloomberg Long G/C	13.2	7.1	1.1	3.2	5.2
Bloomberg GI Agg ex US	9.2	5.7	-1.6	-0.8	2.2
Real Estate					
NCREIF Property	-3.0	-7.9	4.3	6.8	8.0
FTSE Nareit Equity	16.2	13.7	7.4	7.6	9.3
Alternatives					
HFRI Fund Weighted	4.2	8.1	7.1	4.6	6.3
Cambridge PE*	-0.4	4.2	14.6	14.3	13.9
Bloomberg Commodity	-4.6	-7.9	7.2	-1.1	2.8
Gold Spot Price	11.0	13.4	10.1	5.6	8.2
Inflation – CPI-U	-0.3	3.4	4.1	2.8	2.5

*Data for most recent period lags. Data as of 3Q23.

Sources: Bloomberg, Bureau of Economic Analysis, FTSE Russell, Hedge Fund Research, MSCI, NCREIF, Refinitiv/Cambridge, S&P Dow Jones Indices

earlier in 2023 a belief that rates would remain elevated, based on its economic expectation of “stronger for longer.” After the Fed reversed course in the November and December FOMC meetings, signaling rate cuts were likely in 2024, the economy reverted to stronger for longer on its own.

Recent Quarterly Economic Indicators

	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22
Employment Cost: Total Compensation Growth	4.2%	4.3%	4.5%	4.8%	5.1%	5.0%
Nonfarm Business: Productivity Growth	3.2%	4.9%	3.6%	-0.8%	1.6%	0.4%
GDP Growth	3.3%	4.9%	2.1%	2.2%	2.6%	2.7%
Manufacturing Capacity Utilization	77.1%	77.7%	78.0%	78.2%	78.5%	79.4%
Consumer Sentiment Index (1966=100)	64.9	69.6	62.3	64.6	58.8	56.1

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan

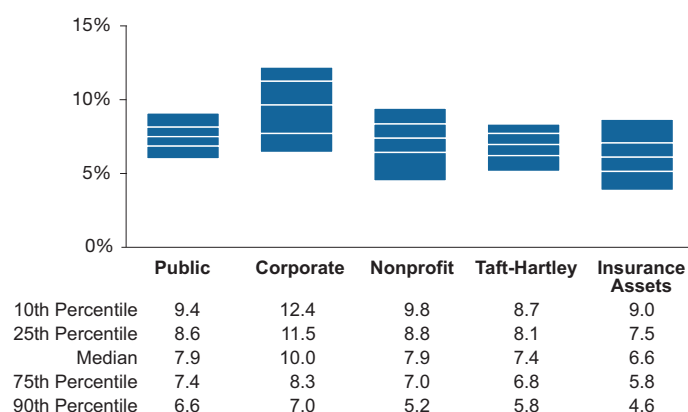
Gains in 2023 but Inflation Tops Worries

INSTITUTIONAL INVESTORS

- The 2023 equity market was up 24%, led by seven securities nicknamed “The Magnificent Seven.”
- Other 493 securities gained 12% in 2023.
- These robust equity returns led all institutional investor types to show gains for 2023, a stark reversal from the double-digit losses of 2022.
- Nonprofits showed the best returns, while corporate defined benefit (DB) plans and Taft-Hartley plans brought up the rear.
- But over the last year, all investors lagged a 60% stocks/40% bonds benchmark by a significant amount.
- Remarkable U.S. equity gains likely played a big role in that gap.
- As has been the case for years, institutional investors continued to show 20-year returns close to but still below the 60%/40% benchmark.

- *Recession:* There is no shortage of worries that could cause one: interest rate hikes, global armed conflicts, U.S.-China conflict, the U.S. presidential election
- *Equity valuations:* The Magnificent Seven and index concentration worried some clients, while stock prices in light of higher interest rates were also a concern.

Quarterly Returns, Callan Database Groups (12/31/23)



Source: Callan

All Investor Types

- The major macroeconomic issues investors are discussing include:
 - *Interest rates:* As has been true for much of the past year, worries about inflation and the future direction of interest rates were pervasive.

Callan Database Median and Index Returns* for Periods Ended 12/31/23

Database Group	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Public Database	7.9	13.0	4.3	9.0	6.9	7.2
Corporate Database	10.0	11.8	-0.1	6.6	5.7	6.6
Nonprofit Database	7.9	13.5	4.3	8.7	6.5	7.0
Taft-Hartley Database	7.4	11.9	4.5	8.6	6.9	6.8
Insurance Assets Database	6.6	9.7	1.5	5.1	4.1	4.9
All Institutional Investors	8.1	12.6	3.7	8.3	6.5	6.9
Large (>\$1 billion)	7.5	11.7	4.6	8.6	6.9	7.2
Medium (\$100mm - \$1bn)	8.2	12.8	3.8	8.4	6.5	7.0
Small (<\$100 million)	8.3	13.1	3.4	8.2	6.2	6.5
60% S&P 500/40% Bloomberg Agg	9.7	17.7	4.7	10.1	8.1	7.4

*Returns less than one year are not annualized.

Source: Callan. Callan's database includes the following groups: public defined benefit (DB) plans, corporate DB plans, nonprofits, insurance assets, and Taft-Hartley plans. Approximately 10% to 15% of the database constituents are Callan's clients. All database group returns presented gross of fees. Past performance is no guarantee of future results. Reference to or inclusion in this report of any product, service, or entity should not be construed as a recommendation, approval, affiliation, or endorsement of such product, service, or entity by Callan.

Public DB Plans

- The average or median discount rate, according to the most recent NASRA survey, remains at 7.00%.
- A 7.00% return expectation can be hit with almost 50% in fixed income.
- Plans have increased their exposure to both fixed income and/or alternatives.
- Given this rate, investors are weighing how or whether to adjust allocations based on Callan's 2024-2033 Capital Markets Assumptions.
- The rise in fixed income expectations in particular has made estimated return-on-asset assumptions much easier to hit.
- But if plans increase their discount rates, the higher funded status could lead to increased pressure to improve benefits.

Corporate DB Plans

- Liabilities decreased as rates rose.
- Interest rate hedging continues to work.
- Plans that were hedged were insulated from changes to interest rates in 2023.
- Some plans focused on total return “won” for a second year in a row as rising rates decreased the liability, resulting in an increased funded ratio.
- As closed plans' liabilities shorten, interest in intermediate fixed income continues.

- Many plans' improved funded status has led some to further implement de-risking glidepaths.
- Higher fixed income assumptions have led clients to weigh changing allocations to the asset class, but in different ways. Some are looking at long duration bonds, others at whether to add to their fixed income allocations or stay pat.

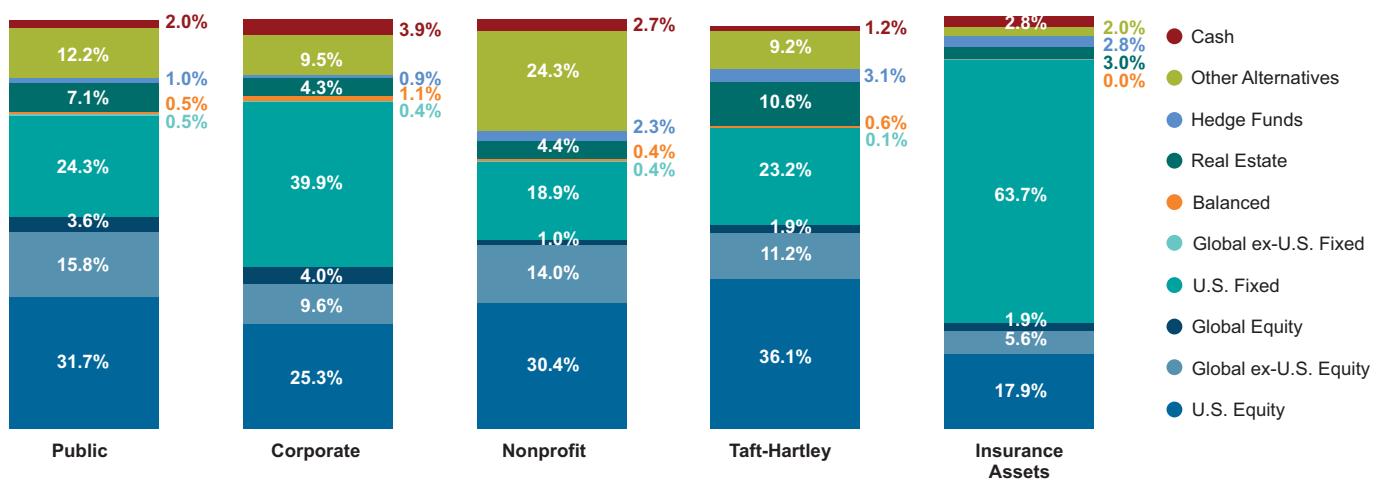
Nonprofits

- These investors are still focused on total return.
- Interest in private credit remains strong.
- Inflation concerns continue to affect real returns.
- Strong economies can lead to strong fundraising efforts, which can help dampen return volatility.

Defined Contribution (DC) Plans

- These are the significant new issues:
 - SECURE 2.0 and its postponement
 - Retirement income and how the maturing demographics of participants, higher rates, and rollovers can affect the different types of retirement income solutions plans can choose.
- The gap in returns between money market and stable value funds was a new source of concern for some plans.

Average Asset Allocation, Callan Database Groups



Note: Charts may not sum to 100% due to rounding. Other alternatives include but is not limited to: diversified multi-asset, private credit, private equity, and real assets.
Source: Callan

Equity

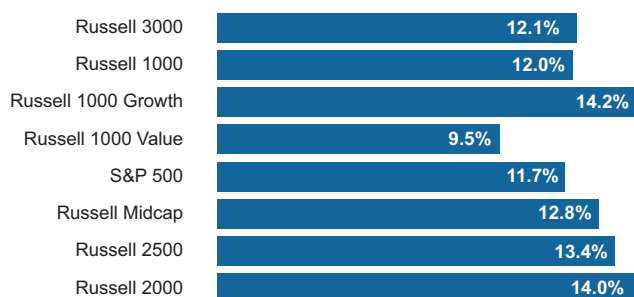
U.S. Equities

End-of-the-year rally

- U.S. equity markets rebounded in the last two months of the year as the impact of possible rate cuts in 2024 started to get priced in.
- The S&P 500 Index approached a record high as the year closed. Of note, 2023 was the first year since 2012 that the S&P failed to reach a high-water mark. That said, the index was up an impressive 11.7% in 4Q and 26.3% for the year.
- The tech sector was the clear winner for the quarter and the year (+17.2%; +57.8%) while Energy (-6.9%; -1.3%) was the only sector to register both a 4Q and 2023 decline.
- 2023 saw the narrowest breadth of leadership ("the Magnificent Seven") since 1987, with just 27% of stocks outperforming the S&P 500. Historically, such concentrated leadership has not been the sign of a healthy market.
- Fourth quarter and 2023 returns for the bunch were impressive: Alphabet: +6.8%, +58.8%; Amazon: +19.5%, +80.9%; Apple: +12.6%, +49.0%; Meta: +17.9%, +194.1%; Microsoft: +19.3%, +58.2%; NVIDIA: +13.9%, +239.0%; Tesla: -0.7%, +101.7%.
- The index would have been up only about 10% for the year without these stocks, and the equal-weighted S&P 500 returned 11.9% in 4Q and 13.9% in 2023.
- However, gains started broadening out in the last two months of the year with the equal-weighted S&P index outperforming the capitalization-weighted version.
- Smaller cap stocks also outperformed their large cap counterparts in 4Q23, further proof of the broadening out of returns.
- For the full year, large cap stocks outperformed small cap stocks by almost 10 percentage points.
- Growth vs. value performance was mixed across market capitalization during the quarter. Within large cap, growth outperformed value, while the opposite was true within small cap.

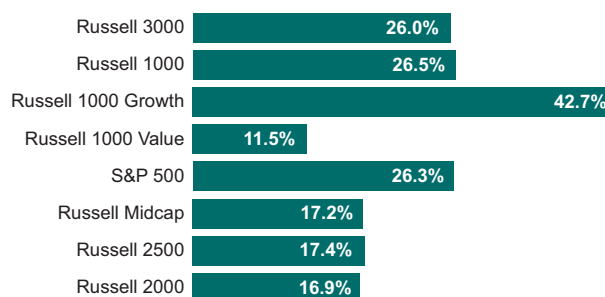
U.S. Equity: Quarterly Returns

(12/31/23)



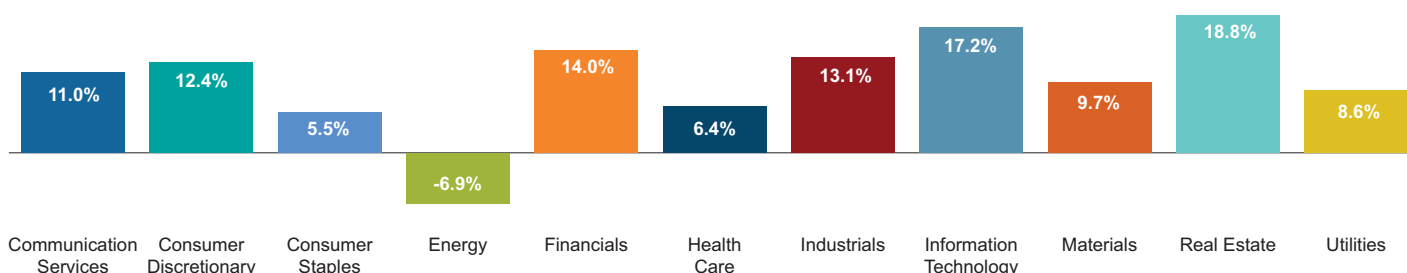
U.S. Equity: One-Year Returns

(12/31/23)



Sources: FTSE Russell and S&P Dow Jones Indices

Quarterly Performance of Industry Sectors (12/31/23)



Source: S&P Dow Jones Indices

Global Equities: Global markets in the black for 4Q

Broad market

- Dovish signaling from central banks and dropping yields led to a broad market rally in 4Q23.
- Global ex-U.S. small caps reclaimed some of their lagging performance in 4Q but ended the year as the worst-performing broad-based index, albeit up over 12%. Elevated borrowing costs and the persistent risk of a recession have kept investors away.
- Japan's low rates have benefited exporters, and the threat of being delisted spurred a stock buy-back spree. Coupled with an increased focus on governance, this spurred Japan to a multi-decade high.

Emerging markets

- Emerging markets underperformed developed markets.
- India's rally couldn't overcome China's weakness, whose economic growth was near the government's target, but investor concerns around stimulus and a surprisingly sluggish reopening drove stocks lower.

Growth vs. value

- Energy, a volatile area in the market, pulled back value's rally after having a strong 3Q. Global ex-U.S. growth rallied on lowering yields but couldn't overcome earlier underperformance and ended the year behind its value peers in both emerging and developed markets.

U.S. dollar vs. other currencies

- The U.S. dollar weakened in 4Q as investors believed that U.S. interest rates would fall faster than much of the developed world.

China: Danger or opportunity?

Long-term growth potential

- China has the second-largest GDP and the world's largest population of consumers.

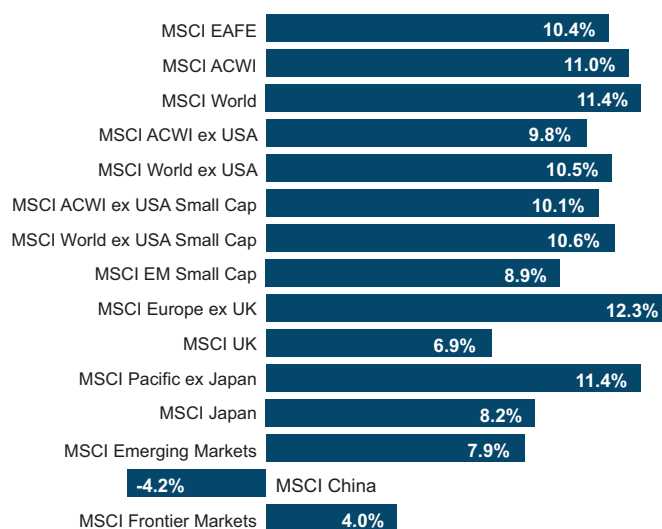
Valuation

- Valuations remain attractive on a forward P/E basis.

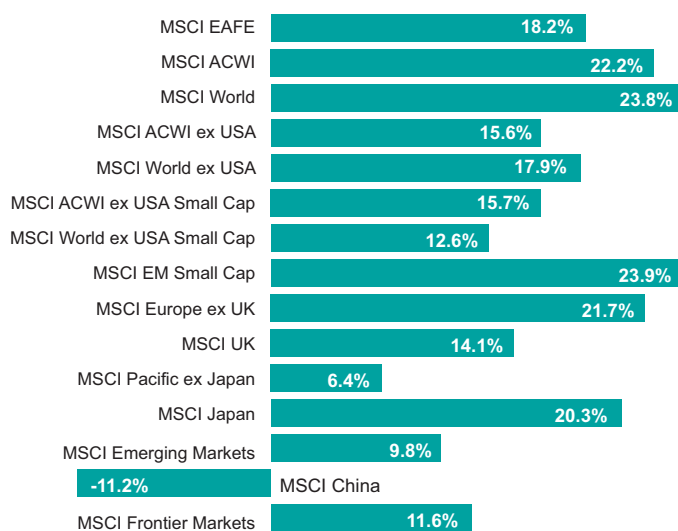
Structural challenges

- Inbound foreign direct investment (FDI) for China went negative for the first time as local markets remained weak and geopolitical tensions persisted.
- China is run by an authoritarian regime that may act against investors' best interests.

Global ex-U.S. Equity: Quarterly Returns (U.S. Dollar, 12/31/23)



Global ex-U.S. Equity: One-Year Returns (U.S. Dollar, 12/31/23)



Source: MSCI

Fixed Income

U.S. Fixed Income

Strong returns at end of year

- Driven by falling rates and strong risk-on sentiment, the Agg returned 6.8%, the highest quarterly return since 2Q89 (when the 90-day T-bill was over 8% and inflation hit 14% earlier in the decade)!
- 10-year U.S. Treasury yield closed the year at 3.88%
- A round trip from December 2022, masking significant volatility during the year
- High was 4.98% in October and low was 3.30% in April
- Corporates and mortgages outperformed Treasuries for the quarter and year.
- High yield corporates soared as defaults remained low and the economy resilient.

U.S. Treasury yield curve remained inverted, but less so

- 106 bps as of 6/30; 44 bps as of 9/30; 35 bps as of 12/31

Fed kept Fed Funds rate on hold and softened language

- Pivoted from “higher for longer” to projected rate cuts in 2024
- Inflation over past six months below Fed’s 2% target
- Core PCE Price Index was 1.9% annualized in November.
- Markets expect six rate cuts in 2024 versus three in the Fed’s Summary of Economic Projections.

Valuations

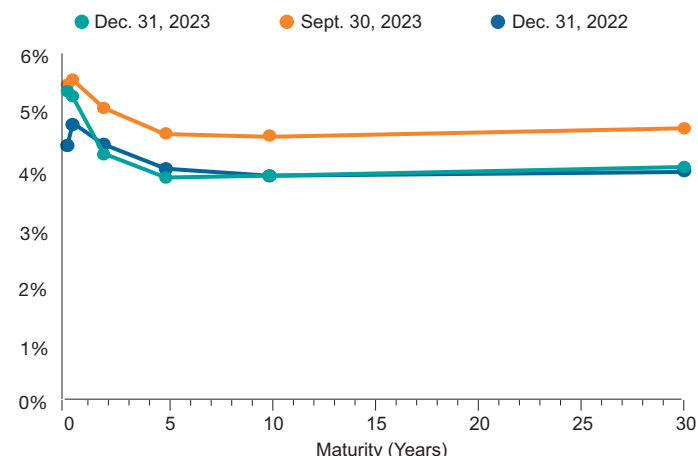
- Investment grade and high yield corporate spreads now below 10-year averages

Municipal Bonds

Gains in 4Q and a superb November

- November was the best month since August 1982.
- Helped by falling yields, muted issuance, and strong demand
- Reversed the -1.4% year-to-date return as of 9/30

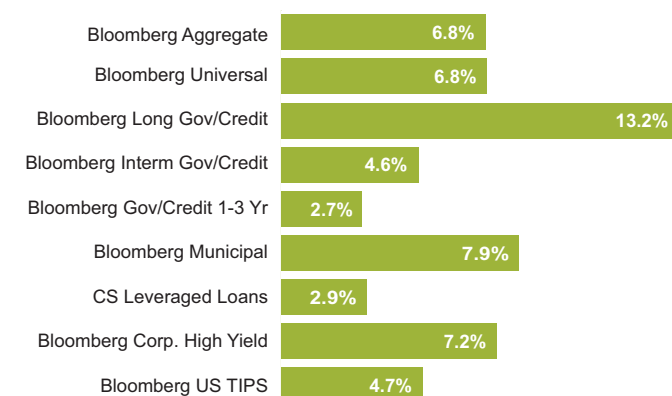
U.S. Treasury Yield Curves



Source: Bloomberg

U.S. Fixed Income: Quarterly Returns

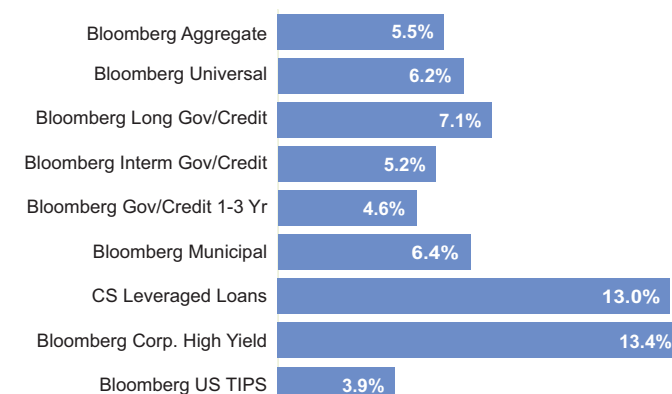
(12/31/23)



Sources: Bloomberg and Credit Suisse

U.S. Fixed Income: One-Year Returns

(12/31/23)



BBBs performed best for quarter and year

- AAA: +8.4%; +5.8%
- AA: +7.6%; +5.9%
- A: +8.0%; +7.3%
- BBB: +9.2%; +8.9%

Valuations

- Credit spreads close to historical averages
- Mortgage spreads widened on interest rate volatility and slowing prepayments.

Valuations vs. U.S. Treasuries richened

- 10-year AAA Muni/10-year U.S. Treasury yield ratio 59%, down from 75% as of 9/30
- Well below 10-year median of 87%
- After-tax yields remain attractive at 5.4% (source: Morgan Stanley).

Fundamentals for state, local governments remain sound

- Upgrades exceeded downgrades in 2023.

Global Fixed Income

Falling rates bolstered 4Q returns globally

- Central banks seen as moving closer to cutting rates as inflation moderated
- Gains were broad-based across countries with the U.S. lagging other developed markets in unhedged terms.
- Emerging markets also posted strong results with gains across most countries.

U.S. dollar weakened

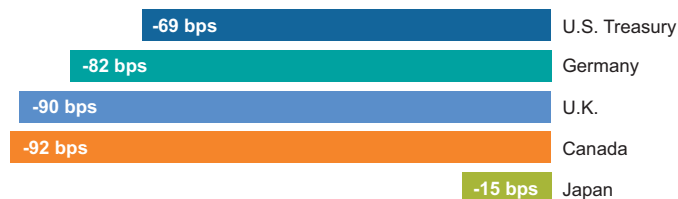
- Major currencies rose compared to the dollar in 4Q.

Emerging markets also posted strong results

- Gains across most countries

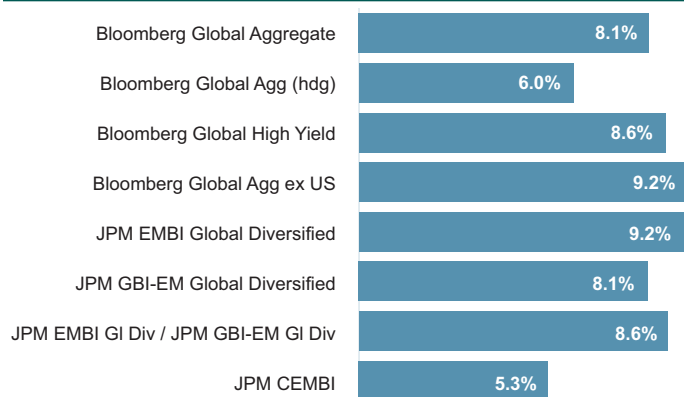
Change in 10-Year Global Government Bond Yields

3Q23 to 4Q23



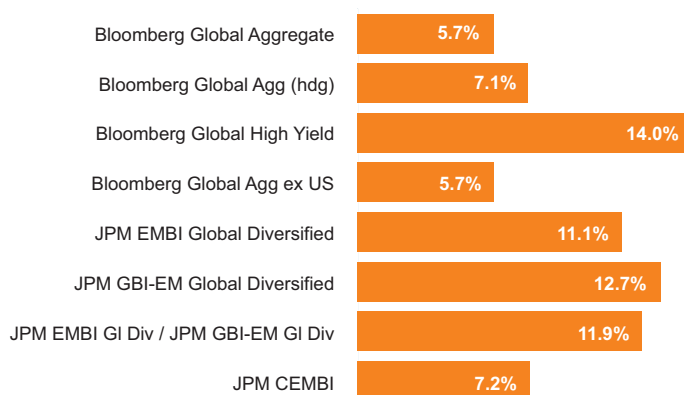
Source: Bloomberg

Global Fixed Income: Quarterly Returns (12/31/23)



Sources: Bloomberg and JPMorgan Chase

Global Fixed Income: One-Year Returns (12/31/23)



Sources: Bloomberg and JPMorgan Chase

Private RE Falls but REITs Outpace Stocks

REAL ESTATE/REAL ASSETS | Munir Iman

Private RE valuations reflect higher rates

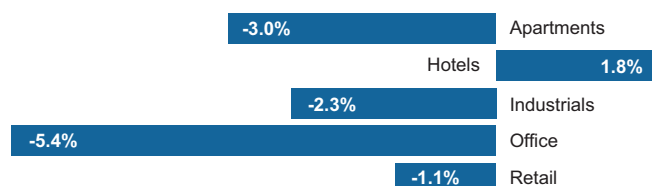
- The NCREIF Property Index, a measure of U.S. institutional real estate assets, fell 3.0% during 4Q23. The income return was 1.1% while the appreciation return was –4.1%.
- Hotels, which represent a small portion of the index, led property sector performance with a gain of 1.8%.
- Office finished last with a loss of 5.4%.
- Regionally, the South led with a loss of 1.9%, while the West was the worst performer with a drop of 3.7%.
- The NCREIF Open-End Diversified Core Equity (ODCE) Index, representing equity ownership positions in U.S. core real estate, fell 4.8% during 4Q, with an income return of 1.0% and an appreciation return of -5.8%.

REITs outperform equities

- The FTSE EPRA Nareit Developed REIT Index, a measure of global real estate securities, rose 15.6% during 4Q23.
- U.S. REITs, as measured by the FTSE Nareit Equity REITs Index, increased 16.2%.
- The FTSE EPRA Nareit Asia Index (USD), representing the Asia/Pacific region, gained 8.6%.
- European REITs, as measured by the FTSE EPRA Nareit Europe Index (USD), jumped 26.8%.
- U.S. REITs outperformed the S&P 500 (11.7%). They also topped Asia REITs but underperformed Europe.

Sector Quarterly Returns by Property Type

(12/31/23)



Source: NCREIF

- The outperformance in the U.S. was driven by dampening inflation, coupled with a more dovish Federal Reserve sentiment sparking a rally to close the year.
- The office sector outperformed, coming off its lows.
- Gaming, residential, health care, and data center lagged, impacted by interest rate challenges and prior strong performances.
- The FTSE EPRA Nareit Developed Asia Index (USD) rose 8.6% during the quarter. China's economic outlook remains uncertain, exacerbated by geopolitical tensions and underwhelming stimulus.
- The FTSE EPRA Nareit Developed Europe Index (USD) increased by 26.8% during the quarter.
- Europe was the top-performing region, driven by meaningful currency tailwinds. Expectations of a dovish central bank were driven by weakening economic data.

Callan Database Median and Index Returns* for Periods Ended 12/31/23

Private Real Assets	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years	15 Years
Real Estate ODCE Style	-0.4	-10.0	-10.0	4.9	4.7	7.0	5.2
NFI-ODCE (value-weighted, net)	-5.0	-12.7	-12.7	4.0	3.3	6.3	5.1
NCREIF Property	-3.0	-7.9	-7.9	4.6	4.3	6.8	6.4
NCREIF Farmland	2.3	5.0	5.0	7.4	6.0	7.3	9.4
NCREIF Timberland	4.3	9.5	9.5	10.5	6.6	5.8	4.7
Public Real Estate							
Global Real Estate Style	15.4	12.2	12.2	2.6	5.6	6.0	9.3
FTSE EPRA Nareit Developed	11.3	2.2	2.2	3.5	5.9	6.0	8.6
Global ex-U.S. Real Estate Style	15.4	9.0	9.0	-3.7	3.2	4.8	8.6
FTSE EPRA Nareit Dev ex US	14.9	6.3	6.3	-4.5	-0.5	1.0	5.6
U.S. REIT Style	16.5	14.0	14.0	6.8	8.8	8.6	11.6
FTSE EPRA Nareit Equity REITs	16.2	13.7	13.7	7.2	7.4	7.6	10.5

*Returns less than one year are not annualized. Sources: Callan, FTSE Russell, NCREIF

Big Slowdown After Frenzy of 2021

PRIVATE EQUITY | Ashley Kahn

Both new investment activity and exit activity slowed markedly in 2023, following rising interest rates, declines in the public markets, and continued price uncertainty.

Fundraising ► Fundraising declined back closer to historical levels in 2022 after its frenzied peak in 2021. So far, 2023 has been another down year, with LPs being more selective with their commitments.

Buyouts ► There was a significant decline in deal activity this year after the highs of 2021-2022, caused by high interest rates, a wide bid-ask spread, and lingering effects from the slowdown in the public markets. There was also greater difficulty in obtaining financing this year, particularly for mega buyout deals, which has brought down leverage ratios across the industry.

Buyout valuations are finally starting to normalize in 2023 after their peak in 2021. Buyout valuations are sensitive to changes in interest rates—as the cost of borrowing rises, it is harder to justify high valuations.

Venture Capital and Growth Equity ► There was a substantial decline in venture capital and growth equity activity in 2023, following the crazed highs of 2021 and early 2022. Valuations, likewise, have reverted back to historical levels, particularly at the late stage.

Private Equity Performance (%) (Pooled Horizon IRRs through 9/30/23*)

Strategy	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years
All Venture	-2.4	-8.9	14.8	17.2	17.2	13.4	12.5	20.4
Growth Equity	-0.6	0.8	12.3	14.8	14.3	13.1	13.8	14.3
All Buyouts	0.1	10.2	16.8	15.0	14.6	12.4	14.6	12.8
Mezzanine	1.8	13.0	13.5	11.0	11.1	10.7	11.1	9.9
Credit Opportunities	1.2	8.2	11.1	7.1	7.5	10.1	9.3	9.6
Control Distressed	0.4	5.6	19.4	13.6	11.7	11.5	11.6	11.4
All Private Equity	-0.4	4.2	15.4	14.8	14.3	12.5	13.6	13.0
S&P 500	11.7	26.3	10.0	15.7	12.0	14.0	9.7	7.6
Russell 3000	12.1	26.0	8.5	15.2	11.5	13.8	9.7	7.7

Note: Private equity returns are net of fees. Sources: Refinitiv/Cambridge and S&P Dow Jones Indices

*Most recent data available at time of publication

Exits ► Exits have declined dramatically after hitting all-time records in 2021. Only 8% of total private equity AUM generated liquidity in 2023 (the lowest level ever)—lower even than the depths of the Global Financial Crisis.

With the IPO window still closed and increasing antitrust sentiment, it is unclear whether exit activity will rebound in 2024. IPO exits in 2023 were at just 15% of pre-pandemic levels.

Returns ► Public equity's strong recovery in 2023 (led by the "Magnificent 7" technology stocks) has left private equity in its wake. Private equity only saw about a fifth of the gains of the public markets over the last year, on a PME basis.

Funds Closed 1/1/23 to 12/31/23

Strategy	No. of Funds	Amt (\$mm)	Share
Venture Capital	1,584	199,090	21%
Growth Equity	139	103,324	11%
Buyouts	515	471,684	50%
Mezzanine Debt	24	36,050	4%
Distressed/Special Credit	42	46,018	5%
Energy	6	3,296	0%
Secondary and Other	137	74,616	8%
Fund-of-funds	25	5,567	1%
Totals	1,472	552,402	100%

Source: PitchBook (Figures may not total due to rounding.)

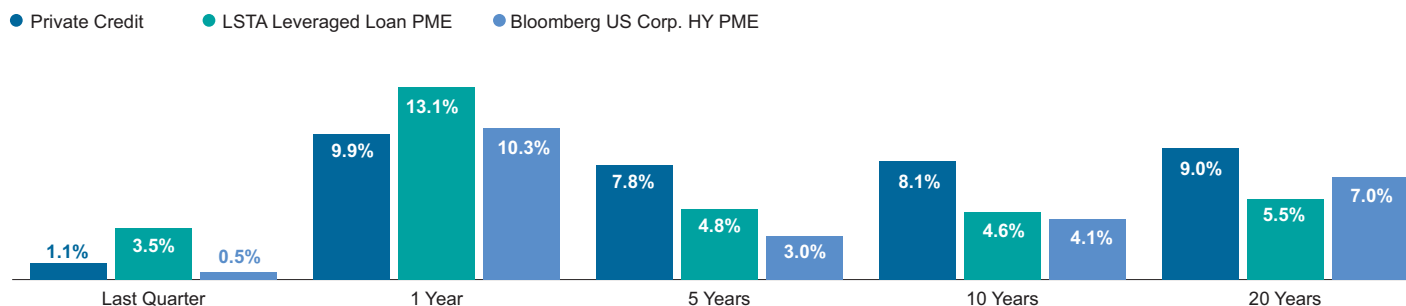
Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of the *Capital Markets Review* and other Callan publications.

Net IRR of Nearly 9% Over Three Years

PRIVATE CREDIT | Catherine Beard

- Private credit performance varies across sub-asset class and underlying return drivers. Over the past three years the asset class has generated a net IRR of nearly 9%. Higher-risk strategies have performed better than lower-risk strategies.
- Private credit remained in high demand across Callan's investor base, and a number of large defined benefit plans are looking to increase their existing private credit allocations from 2%–3% to 5%–10%.
- While we always work to build out diversified client portfolios, we think there is particularly interesting relative value in upper middle market sponsor-backed lending and asset-based lending.
- We are seeing an uptick in stress for some individual names in direct lending portfolios due to a combination of input cost inflation and increased interest expense.
- Private credit AUM stood at over \$1.5 trillion at the end of 2023, with Preqin forecasting the asset class will grow to over \$2.5 trillion by 2028 at a 11.13% CAGR from 2023 to 2028.
- Direct lending is expected to grow steadily through 2028 as investors increase their private credit allocations. Distressed exposure will grow a bit more slowly with other strategies such as opportunistic, special situations, and other niche diversifiers growing more quickly.

Private Credit Performance (%) (Pooled Horizon IRRs through 9/30/23*)



Private Credit Performance (%) (Pooled Horizon IRRs by Strategy through 9/30/23*)

Strategy	Quarter	1 Year	5 Years	10 Years	20 Years
Senior Debt	0.1	11.4	5.9	6.6	6.8
Mezzanine	1.8	13.0	11.0	11.1	10.5
Credit Opportunities	1.2	8.2	7.1	7.6	8.9

Source: LSEG/Cambridge

*Most recent data available at time of publication

Gains in 4Q23 Spurred by Rising Stocks and Bonds

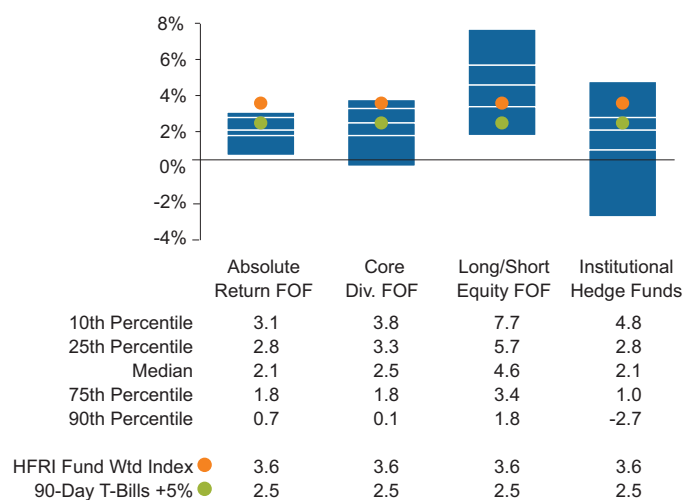
HEDGE FUNDS/MACs | Joe McGuane

Equity markets ended the final quarter of 2023 with double-digit gains and, by the time the year ended, recouped all of 2022's losses. This surge was marked by rising expectations that the Federal Reserve was done hiking interest rates and would begin easing monetary policy in the new year. The yield on the U.S. 10-year Treasury declined sharply to end December at 3.9%, the same level where it began the year. Credit in general had a positive quarter, driven by lower rates and tighter spreads. Investment grade outperformed high yield, as both indices ended the quarter positive.

Hedge funds ended the year on a strong note. Equity hedge strategies were the best performing, as those with higher net long exposure performed better, along with strategies focused on health care and technology, media, and telecommunications (TMT). Relative value strategies generated positive performance during the quarter, driven by fundamental and systematic equity relative value strategies. Event-driven strategies

Hedge Fund Style Group Returns

(12/31/23)



Sources: Callan, Credit Suisse, Federal Reserve

Callan Peer Group Median and Index Returns* for Periods Ended 12/31/23

Hedge Fund Universe	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years
Callan Institutional Hedge Fund Peer Group	2.1	7.5	7.5	5.6	7.1	5.8
Callan Fund-of-Funds Peer Group	2.9	6.9	6.9	4.0	5.6	4.2
Callan Absolute Return FOF Style	2.1	5.7	5.7	5.5	5.3	4.3
Callan Core Diversified FOF Style	2.5	6.8	6.8	3.7	5.7	3.6
Callan Long/Short Equity FOF Style	4.6	9.0	9.0	-0.2	6.1	5.2
HFRI Fund Weighted Index	3.6	7.6	7.6	4.3	7.0	4.5
HFRI Fixed Convertible Arbitrage	1.4	4.8	4.8	3.8	6.8	4.8
HFRI Distressed/Restructuring	3.2	6.7	6.7	5.7	6.3	4.0
HFRI Emerging Markets	4.2	8.1	8.1	0.1	4.8	3.1
HFRI Equity Market Neutral	1.4	5.6	5.6	4.6	3.2	2.9
HFRI Event-Driven	5.4	10.4	10.4	5.7	6.8	4.6
HFRI Relative Value	2.6	7.0	7.0	4.6	4.9	4.0
HFRI Macro	-1.1	-0.6	-0.6	5.3	5.5	3.1
HFRI Equity Hedge	5.6	10.5	10.5	3.5	8.3	5.2
HFRI Multi-Strategy	4.6	9.8	9.8	1.8	4.5	2.9
HFRI Merger Arbitrage	4.3	5.8	5.8	6.4	6.2	4.7
90-Day T-Bill + 5%	2.5	10.0	10.0	7.2	6.9	6.3

*Net of fees. Sources: Callan, Credit Suisse, Hedge Fund Research

also ended on a strong note, as interest rate volatility provided trading opportunities when credit spreads tightened going into year-end. Macro strategies ended the quarter slightly negative, as losses from short positions in U.S. equities and developed market rates were offset by long technology equities and long front-end rates positions.

Serving as a proxy for large, broadly diversified hedge funds with low-beta exposure to equity markets, the median Callan Institutional Hedge Fund Peer Group rose 2.1%. Within this style group of 50 peers, the average hedged credit manager gained 2.6%, driven by actively trading around interest rate volatility. The median Callan Institutional hedged rates manager rose 2.3%, largely driven by relative value fixed income trades. Meanwhile, the average hedged equity manager added 2.2%, as sector-focused managers were able to profit from the broad market rally.

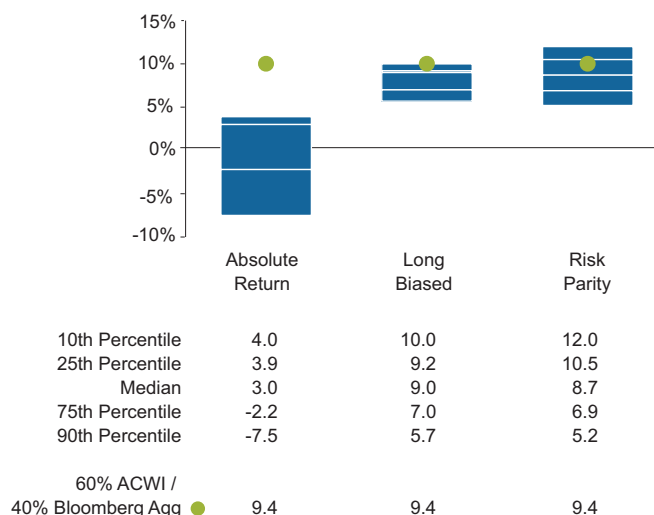
Within the HFRI indices, the best-performing strategy last quarter was equity hedge (5.6%), as health care-, financial-, and technology-focused strategies drove performance during the final quarter of the year. Macro strategies fell 1.1%, as short equity positions offset gains from front end interest rate trading.

Across the Callan Hedge FOF database, the median Callan Long-Short Equity FOF gained 4.6%, as sector-focused strategies drove performance during the quarter. The median Callan Core Diversified FOF rose 2.5%, boosted by equity and event-driven strategies. The Callan Absolute Return FOF ended 2.1% higher, as lower equity beta strategies were behind this move higher.

Within Callan's database of liquid alternative solutions, the Callan MAC Long Biased manager rose 9.0%, as the broad-based equity rally moved performance higher. The Callan MAC Risk Parity peer group rose 8.7%, as equities and fixed income drove performance. The Callan MAC Absolute Return peer group rose, as broad markets had a strong end of the year.

MAC Style Group Returns

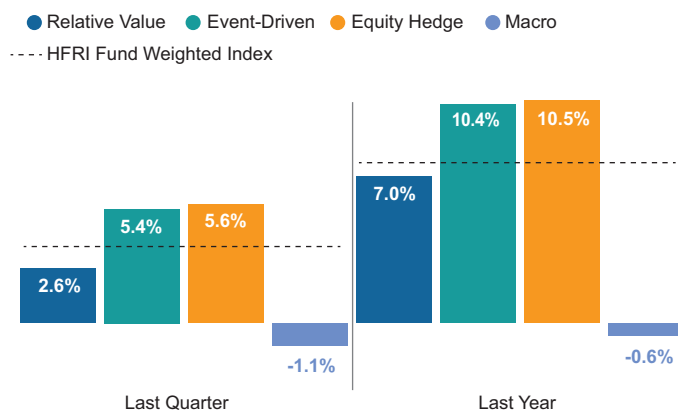
(12/31/23)



Sources: Bloomberg, Callan, Eurekahedge, S&P Dow Jones Indices

HFRI Hedge Fund-Weighted Strategy Returns

(12/31/23)



Source: HFRI

Index Drops by 2.9% After Three Quarters of Gains

DEFINED CONTRIBUTION | **Scotty Lee**

Performance: Index Dips after Third Straight Quarterly Gain

- The Callan DC Index™ lost 2.9% in 3Q23, which brought the Index's trailing one-year gain to 13.8%. The Age 45 Target Date Fund (analogous to the 2045 vintage) had a lower quarterly return (-3.6%).

Growth sources: Investment Losses Lead to Fall in Balances

- Balances within the DC Index fell by 3.2% after a 4.3% increase in the previous quarter. Investment losses (-2.9%) were the primary driver.

Turnover: Net Transfers Decrease

- Turnover (i.e., net transfer activity levels within DC plans) in the DC Index decreased to 0.26% from the previous quarter's measure of 0.33%. Despite the decrease, the Index's historical average (0.55%) remained steady.

Net cash flow analysis: Stable Value Declines Sharply

- Automatic features and their appeal to “do-it-for-me” investors typically result in target date funds (TDFs) receiving the largest net inflows in the DC Index, which was the case in 3Q23 as the asset allocation funds garnered 87.2% of quarterly net flows. Stable value (-56.2%) saw relatively large outflows for the fourth straight quarter.

Equity allocation: Exposure Declines

- The Index's overall allocation to equity (71.5%) fell slightly from the previous quarter's level (71.8%). The current equity allocation continues to sit above the Index's historical average (68.4%).

Asset allocation: Fixed Income, TDFs See Gains

- U.S. fixed income (5.5%) and target date funds (34.1%) were among the asset classes with the largest percentage increases in allocation, while U.S. small/mid cap equity (7.4%) had the largest decrease in allocation from the previous quarter due to net outflows.

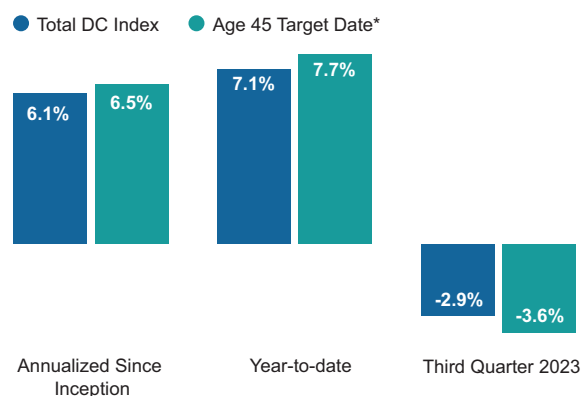
Prevalence: Money Market Up, Stable Value Down

- The prevalence of money market funds (54.1%) rose by 1.5% accompanied by a decrease in the prevalence of stable value funds (70.1%) by 0.8%.

Underlying fund performance, asset allocation, and cash flows of more than 100 large defined contribution plans representing approximately \$400 billion in assets are tracked in the Callan DC Index.

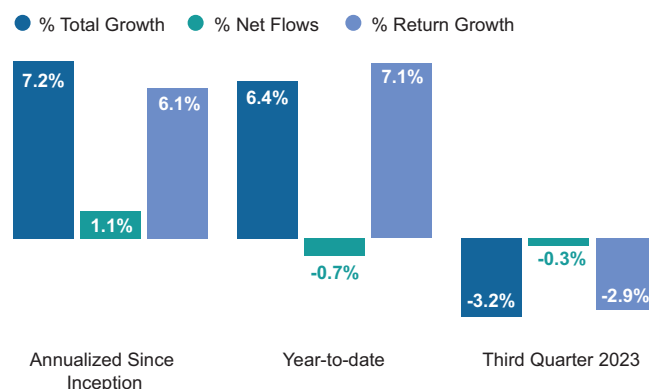
Investment Performance

(9/30/23)



Growth Sources

(9/30/23)



Net Cash Flow Analysis (3Q23)

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	87.2%
Global ex-U.S. Equity	5.3%
U.S. Small/Mid Cap	-13.3%
Stable Value	-56.2%
Total Turnover**	0.3%

Data provided here is the most recent available at time of publication.

Source: Callan DC Index

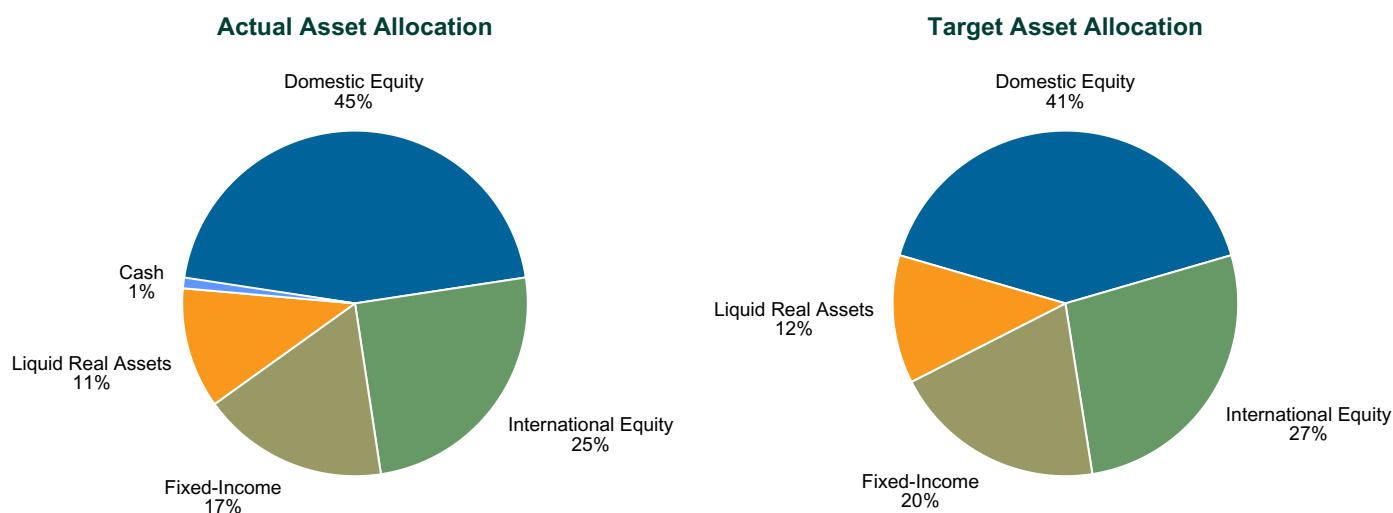
Note: DC Index inception date is January 2006.

* The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.

** Total Index “turnover” measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

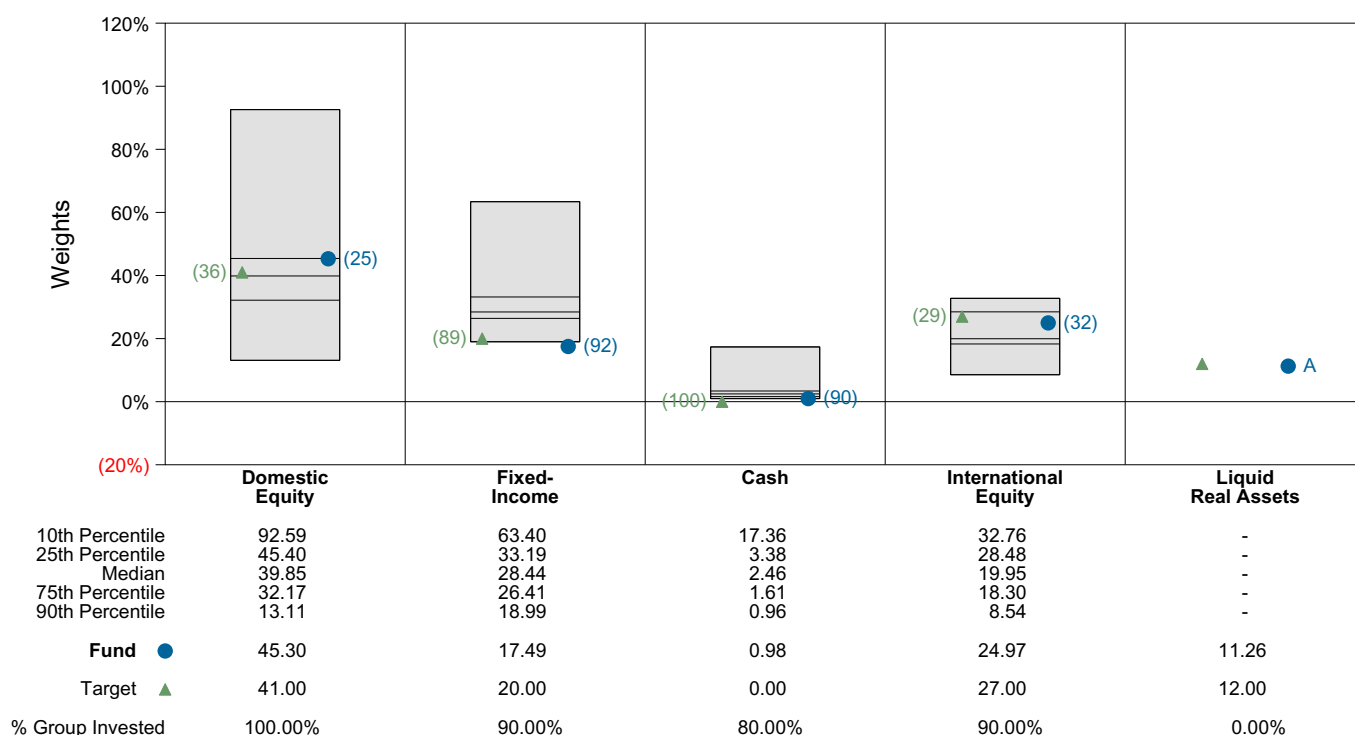
Actual vs Target Asset Allocation As of December 31, 2023

The top left chart shows the Fund's asset allocation as of December 31, 2023. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Spons - Sm DB (<100M).



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	60,592	45.3%	41.0%	4.3%	5,750
International Equity	33,398	25.0%	27.0%	(2.0%)	(2,718)
Fixed-Income	23,399	17.5%	20.0%	(2.5%)	(3,353)
Liquid Real Assets	15,063	11.3%	12.0%	(0.7%)	(988)
Cash	1,309	1.0%	0.0%	1.0%	1,309
Total	133,760	100.0%	100.0%		

Asset Class Weights vs Callan Public Fund Spons - Sm DB (<100M)



* Current Quarter Target = 41.0% Russell 3000 Index, 27.0% MSCI ACWI xUS (Net), 20.0% Blmbg:Aggregate and 12.0% Blmbg TIPS 1-10 Yr.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2023, with the distribution as of September 30, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	December 31, 2023		Net New Inv.	Inv. Return	September 30, 2023	
	Market Value	Weight			Market Value	Weight
Total Equity	\$93,989,724	70.27%	\$0	\$9,601,746	\$84,387,978	67.73%
Domestic Equity	\$60,592,030	45.30%	\$0	\$6,573,727	\$54,018,302	43.36%
Vanguard Total Stock Mkt	60,592,030	45.30%	0	6,573,727	54,018,302	43.36%
International Equity	\$33,397,694	24.97%	\$0	\$3,028,019	\$30,369,675	24.37%
Vanguard Total Intl Stock	33,397,694	24.97%	0	3,028,019	30,369,675	24.37%
Fixed Income	\$23,398,696	17.49%	\$(4,197)	\$1,577,867	\$21,825,026	17.52%
Metropolitan West Fund	8,853,591	6.62%	0	620,390	8,233,200	6.61%
Prudential Cons Core Bond Fnd	14,545,105	10.87%	(4,197)	957,476	13,591,826	10.91%
Liquid Real Assets	\$15,063,213	11.26%	\$0	\$955,288	\$14,107,926	11.32%
PIMCO All Assets	15,063,213	11.26%	0	955,288	14,107,926	11.32%
Cash	\$1,308,642	0.98%	\$(3,004,581)	\$39,286	\$4,273,937	3.43%
Short Term Fund	1,308,642	0.98%	(3,004,581)	39,286	4,273,937	3.43%
Total Fund	\$133,760,275	100.0%	\$(3,008,778)	\$12,174,186	\$124,594,866	100.0%

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2023, with the distribution as of September 30, 2023.

Asset Distribution Across Investment Managers

	December 31, 2023					September 30, 2023		
	Market Value	Weight	(min)	Target	(max)	Market Value	Weight	Target
Total Equity	\$93,989,724	70.27%	53.00%	68.00%	83.00%	\$84,387,978	67.73%	68.00%
Domestic Equity	\$60,592,030	45.30%	31.00%	41.00%	51.00%	\$54,018,302	43.36%	41.00%
Vanguard Total Stock Mkt	60,592,030	45.30%				54,018,302	43.36%	
International Equity	\$33,397,694	24.97%	20.00%	27.00%	34.00%	\$30,369,675	24.37%	27.00%
Vanguard Total Int'l. Stock	33,397,694	24.97%				30,369,675	24.37%	
Fixed Income	\$23,398,696	17.49%	15.00%	20.00%	25.00%	\$21,825,026	17.52%	20.00%
Metropolitan West Fund	8,853,591	6.62%				8,233,200	6.61%	
Prudential Cons Core Bond	14,545,105	10.87%				13,591,826	10.91%	
Liquid Real Assets	\$15,063,213	11.26%	0.00%	12.00%	20.00%	\$14,107,926	11.32%	12.00%
PIMCO All Assets	15,063,213	11.26%				14,107,926	11.32%	
Cash	\$1,308,642	0.98%	0.00%	0.00%	0.00%	\$4,273,937	3.43%	0.00%
Short Term Fund	1,308,642	0.98%				4,273,937	3.43%	
Total Fund	\$133,760,275	100.00%		100.00%		\$124,594,866	100.00%	100.00%

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended December 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Total Equity	11.38%	22.08%	5.88%	12.12%	10.38%
Domestic Equity	12.17%	26.02%	8.44%	15.08%	12.77%
Vanguard Total Stock Market (1)	12.17%	26.02%	8.44%	15.08%	12.77%
Vanguard Total Stock Benchmark (2)	12.14%	25.98%	8.44%	15.08%	12.77%
Russell 3000 Index	12.07%	25.96%	8.54%	15.16%	12.81%
International Equity	9.97%	15.52%	1.79%	7.37%	6.54%
Vanguard Total Int'l. Stock (3)	9.97%	15.52%	1.79%	7.37%	6.54%
Vanguard International Benchmark (4)	9.82%	16.17%	2.19%	7.78%	6.86%
MSCI ACWI ex US	9.75%	15.62%	1.55%	7.08%	6.33%
Fixed-Income	7.23%	6.05%	(3.36%)	1.26%	1.42%
Prudential Conservative Core Bond (5)	7.01%	5.91%	(3.32%)	1.11%	1.27%
Metropolitan West Fund	7.54%	6.07%	(3.64%)	1.31%	1.46%
Blmbg Aggregate Index	6.82%	5.53%	(3.31%)	1.10%	1.29%
Liquid Real Assets	6.77%	8.56%	3.54%	6.19%	5.58%
PIMCO All Asset	6.77%	8.56%	3.54%	6.19%	5.58%
Blmbg US TIPS 1-10	3.89%	4.36%	0.73%	3.43%	2.68%
Cash	1.32%	4.94%	2.07%	1.83%	1.69%
Short Term Fund	1.32%	4.94%	2.07%	1.83%	1.69%
3-month Treasury Bill	1.37%	5.01%	2.15%	1.88%	1.73%
Total Fund	9.91%	16.90%	3.83%	9.21%	7.95%
Total Fund Benchmark*	9.43%	16.34%	3.49%	8.99%	7.70%

Annual Discount Rate:6.5%

* Current Quarter Target = 41.0% Russell 3000 Index, 27.0% MSCI ACWI xUS (Net), 20.0% Blmbg:Aggregate and 12.0% Blmbg TIPS 1-10 Yr.

(1) Vanguard Total Stock Market switched to Admiral Shares from Signal Shares in October 2014. In November 2014 switched to institutional shares.

(2) Vanguard Total Stock Market Benchmark was US Broad Market Index switched to CRSP U.S. Total Market Index Jun. 2013

(3) Vanguard Total Int'l. Stock switched to Institutional Shares from Investor Shares on November 30, 2014

(4) Vanguard Total International Benchmark was MSCI ACWI exUS IMI switched to FTSE Global All Cap exUS Index Jun. 2013.

(5) February 8, 2017 fund switched to Institutional Trust.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	6/2023- 12/2023	FY 2023	FY 2022	FY 2021	FY 2020
Total Equity	7.42%	16.47%	(16.08%)	41.24%	2.43%
Domestic Equity	8.48%	18.93%	(14.24%)	44.33%	6.47%
Vanguard Total Stock Market (1)	8.48%	18.93%	(14.24%)	44.33%	6.47%
Vanguard Total Stock Benchmark (2)	8.44%	18.94%	(14.22%)	44.35%	6.47%
Russell 3000 Index	8.43%	18.95%	(13.87%)	44.16%	6.53%
International Equity	5.56%	12.34%	(18.92%)	36.54%	(4.07%)
Vanguard Total Int'l. Stock (3)	5.56%	12.34%	(18.92%)	36.54%	(4.07%)
Vanguard International Benchmark (4)	6.24%	12.89%	(19.01%)	37.55%	(4.16%)
MSCI ACWI ex US	5.61%	12.72%	(19.42%)	35.72%	(4.80%)
Fixed-Income	3.67%	(0.85%)	(10.95%)	0.45%	8.94%
Prudential Cons Core Bond Fnd (5)	3.56%	(0.68%)	(10.70%)	(0.16%)	8.65%
Metropolitan West Fund	3.76%	(1.36%)	(11.56%)	1.36%	9.18%
Blmbg Aggregate Index	3.37%	(0.94%)	(10.29%)	(0.33%)	8.74%
Liquid Real Assets	4.42%	4.68%	(9.85%)	29.55%	(2.23%)
PIMCO All Asset	4.42%	4.68%	(9.85%)	29.55%	(2.23%)
Blmbg US TIPS 1-10	2.85%	(0.91%)	(2.03%)	6.60%	5.75%
Cash	2.64%	3.43%	0.16%	0.09%	1.78%
Short Term Fund	2.64%	3.43%	0.16%	0.09%	1.78%
3-month Treasury Bill	2.70%	3.59%	0.17%	0.09%	1.63%
Total Fund	6.39%	11.12%	(14.34%)	31.50%	3.26%
Total Fund Benchmark*	6.05%	10.93%	(13.16%)	27.43%	4.85%

Annual Discount Rate:6.5%

* Current Quarter Target = 41.0% Russell 3000 Index, 27.0% MSCI ACWI xUS (Net), 20.0% Blmbg:Aggregate and 12.0% Blmbg TIPS 1-10 Yr.

(1) Vanguard Total Stock Market switched to Admiral Shares from Signal Shares in October 2014. In November 14th, 2014 switched to Institutional shares.

(2) Vanguard Total Stock Market Benchmark was US Broad Market Index switched to CRSP U.S. Total Market Index Jun. 2013

(3) Vanguard Total Int'l. Stock switched to Institutional Shares from Investor Shares in November 30, 2014

(4) Vanguard Total International Benchmark was MSCI ACWI exUS IMI switched to FTSE Global All Cap exUS Index Jun. 2013.

(5) February 8, 2017 fund switched to Institutional Trust.

Total Fund Period Ended December 31, 2023

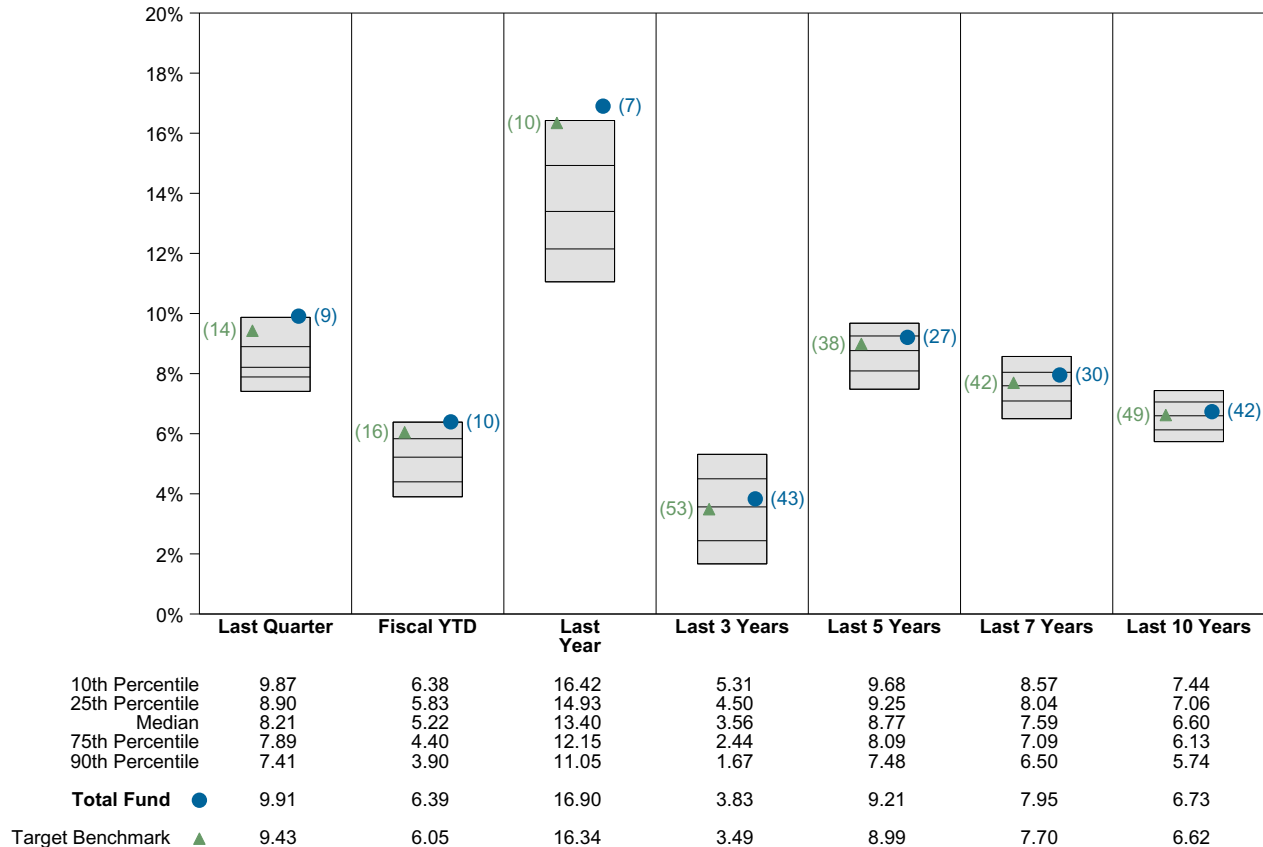
Quarterly Summary and Highlights

- Total Fund's portfolio posted a 9.91% return for the quarter placing it in the 9 percentile of the Callan Public Fund Spons - Sm DB (<100M) group for the quarter and in the 7 percentile for the last year.
- Total Fund's portfolio outperformed the Target Benchmark by 0.48% for the quarter and outperformed the Target Benchmark for the year by 0.56%.

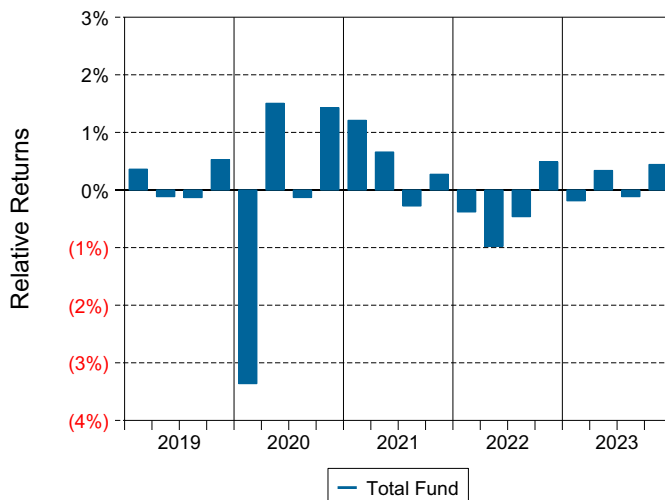
Quarterly Asset Growth

Beginning Market Value	\$124,594,866
Net New Investment	\$-3,008,778
Investment Gains/(Losses)	\$12,174,186
Ending Market Value	\$133,760,275

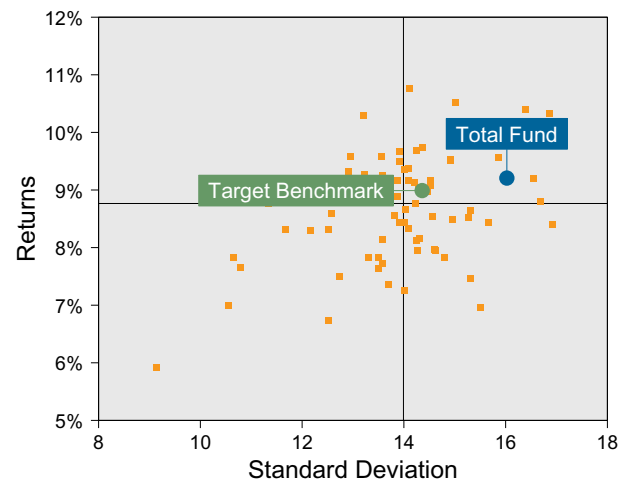
Performance vs Callan Public Fund Spons - Sm DB (<100M) (Gross)



Relative Return vs Target Benchmark



Callan Public Fund Spons - Sm DB (<100M) (Gross) Annualized Five Year Risk vs Return

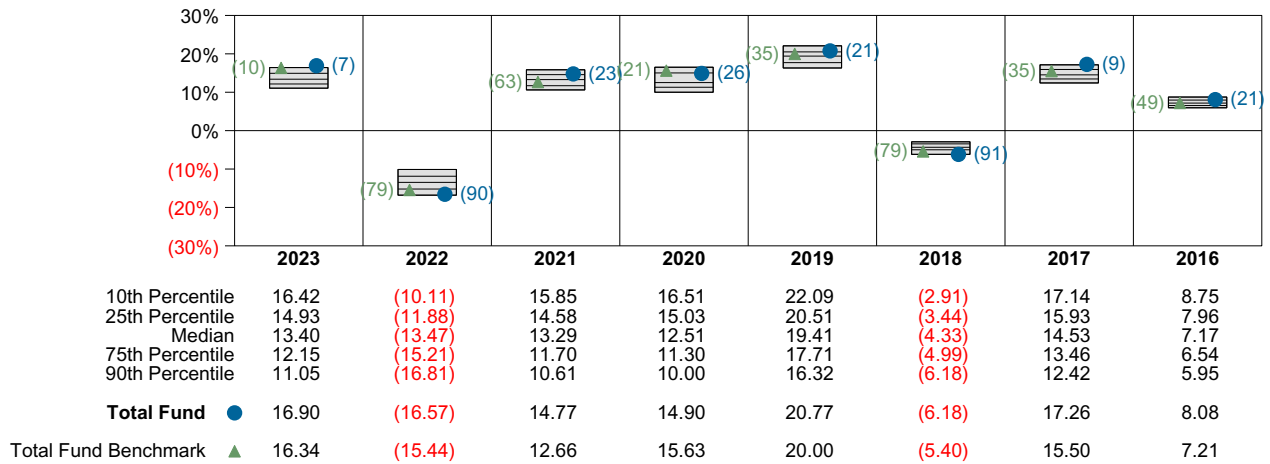


Total Fund Return Analysis Summary

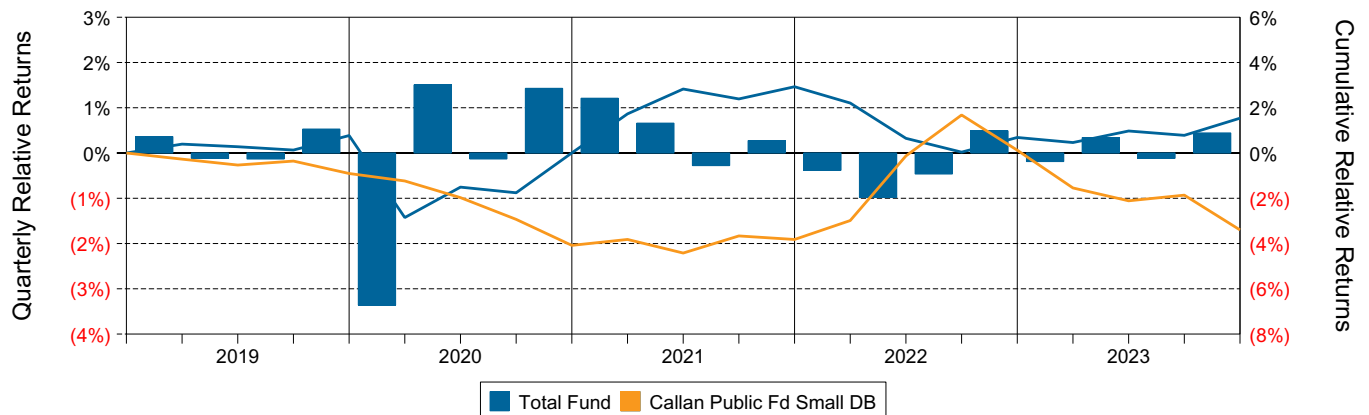
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

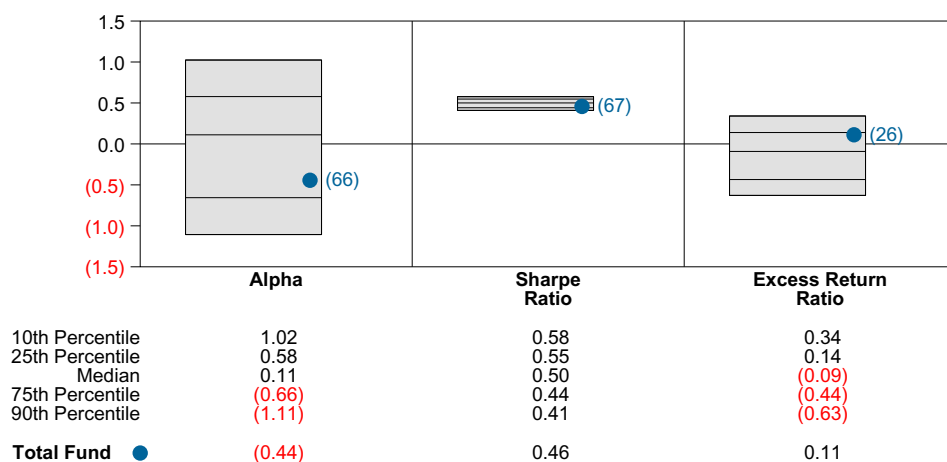
Performance vs Callan Public Fund Spons - Sm DB (<100M) (Gross)



Cumulative and Quarterly Relative Returns vs Total Fund Benchmark



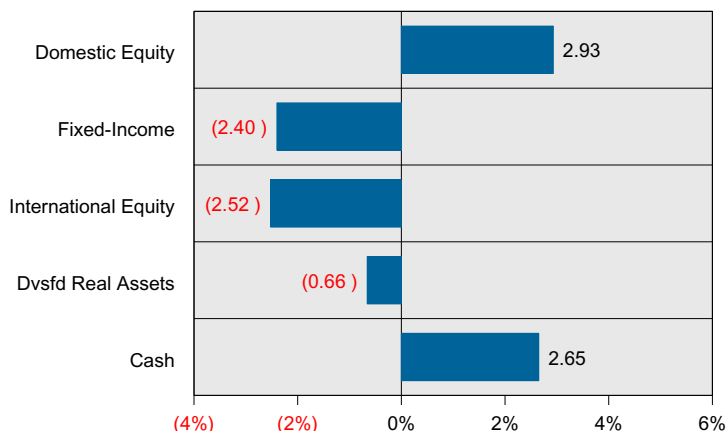
Risk Adjusted Return Measures vs Total Fund Benchmark Rankings Against Callan Public Fund Spons - Sm DB (<100M) (Gross) Five Years Ended December 31, 2023



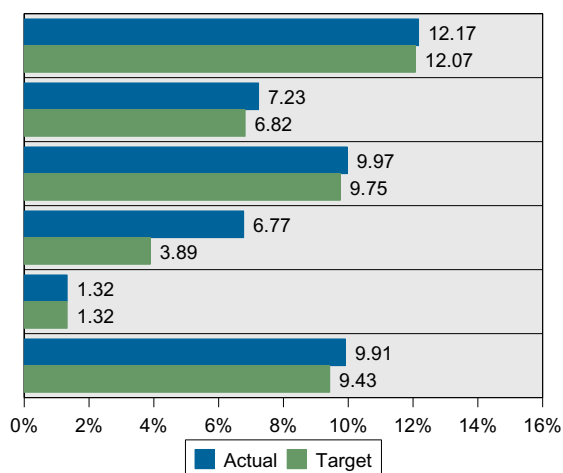
Quarterly Total Fund Relative Attribution - December 31, 2023

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

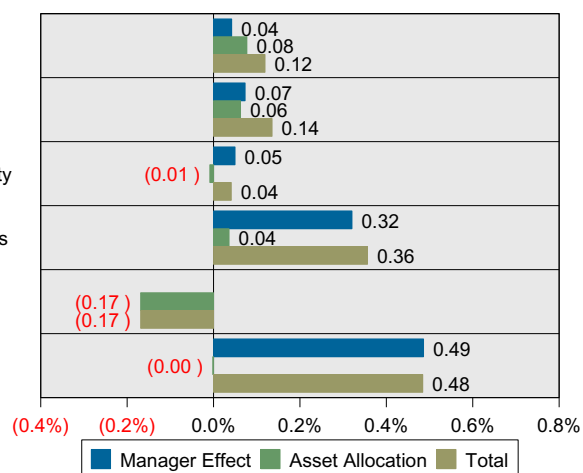
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended December 31, 2023

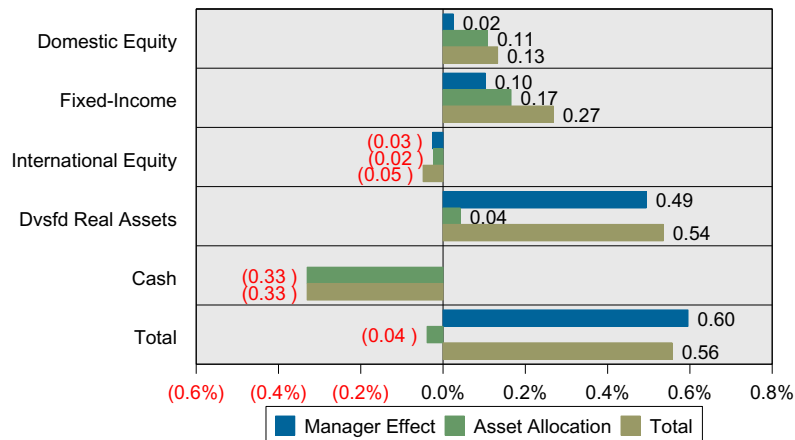
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	44%	41%	12.17%	12.07%	0.04%	0.08%	0.12%
Fixed-Income	18%	20%	7.23%	6.82%	0.07%	0.06%	0.14%
International Equity	24%	27%	9.97%	9.75%	0.05%	(0.01)%	0.04%
Dvsfd Real Assets	11%	12%	6.77%	3.89%	0.32%	0.04%	0.36%
Cash	3%	0%	1.32%	1.32%	0.00%	(0.17)%	(0.17)%
Total			9.91%	9.43%	+ 0.49%	+ (0.00)%	0.48%

* Current Quarter Target = 41.0% Russell 3000 Index, 27.0% MSCI ACWI xUS (Net), 20.0% Blmbg:Aggregate and 12.0% Blmbg TIPS 1-10 Yr.

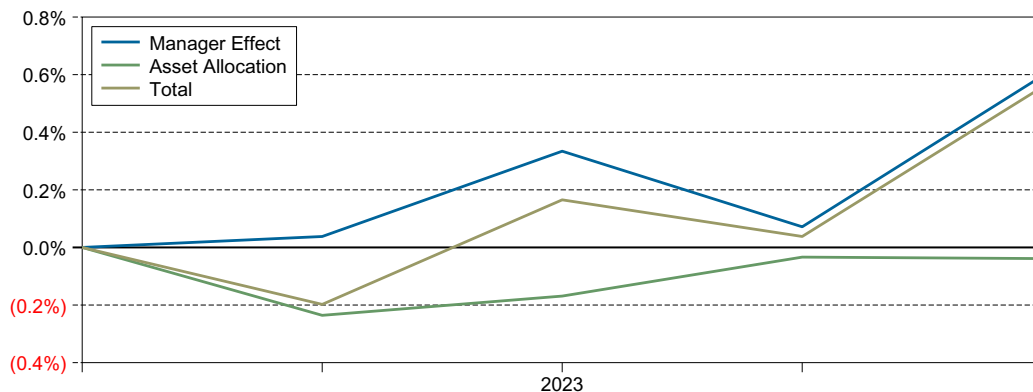
Cumulative Total Fund Relative Attribution - December 31, 2023

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

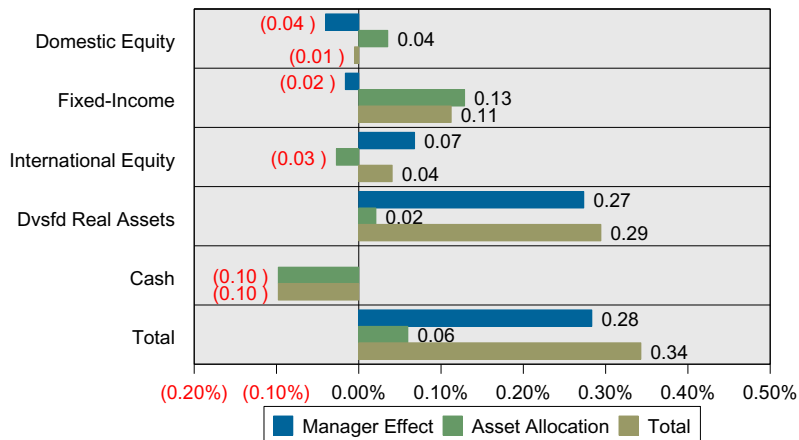
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	42%	41%	26.02%	25.96%	0.02%	0.11%	0.13%
Fixed-Income	18%	20%	6.05%	5.53%	0.10%	0.17%	0.27%
International Equity	25%	27%	15.52%	15.62%	(0.03%)	(0.02%)	(0.05%)
Dvsfd Real Assets	11%	12%	8.56%	4.36%	0.49%	0.04%	0.54%
Cash	4%	0%	4.94%	4.94%	0.00%	(0.33%)	(0.33%)
Total			16.90%	16.34%	+ 0.60%	+ (0.04%)	0.56%

* Current Quarter Target = 41.0% Russell 3000 Index, 27.0% MSCI ACWI xUS (Net), 20.0% Blmbg:Aggregate and 12.0% Blmbg TIPS 1-10 Yr.

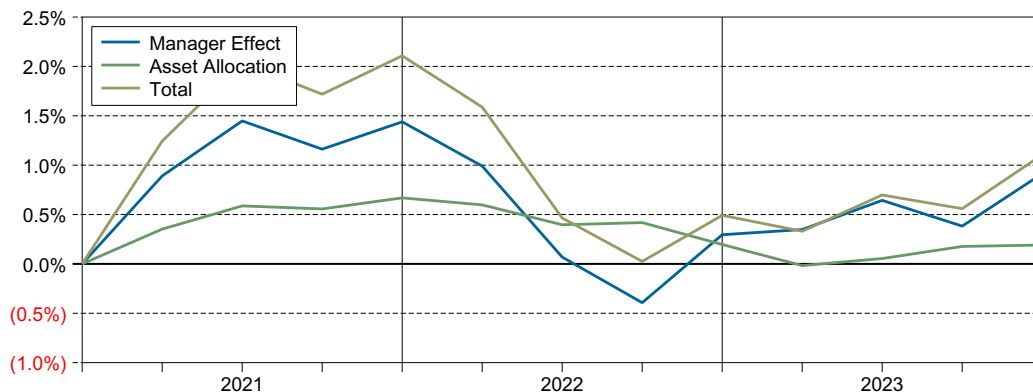
Cumulative Total Fund Relative Attribution - December 31, 2023

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Three Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

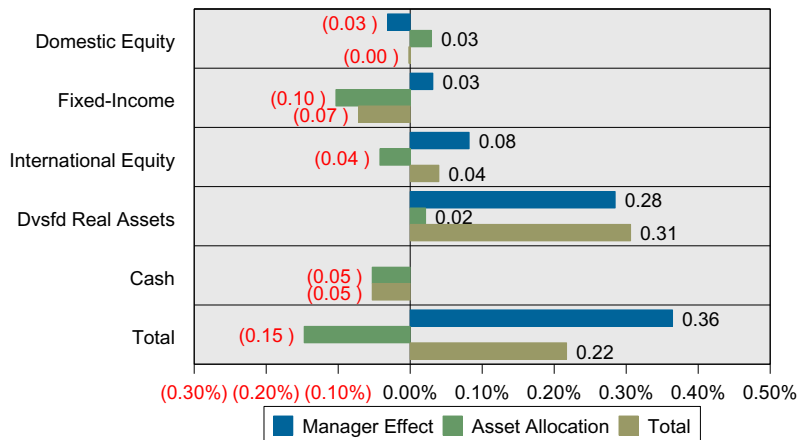
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	43%	41%	8.44%	8.54%	(0.04%)	0.04%	(0.01%)
Fixed-Income	18%	20%	(3.36%)	(3.31%)	(0.02%)	0.13%	0.11%
International Equity	26%	27%	1.79%	1.55%	0.07%	(0.03%)	0.04%
Dvsfd Real Assets	12%	12%	3.54%	0.73%	0.27%	0.02%	0.29%
Cash	1%	0%	2.07%	2.07%	0.00%	(0.10%)	(0.10%)
Total			3.83%	3.49%	+ 0.28%	+ 0.06%	0.34%

* Current Quarter Target = 41.0% Russell 3000 Index, 27.0% MSCI ACWI xUS (Net), 20.0% Blmbg:Aggregate and 12.0% Blmbg TIPS 1-10 Yr.

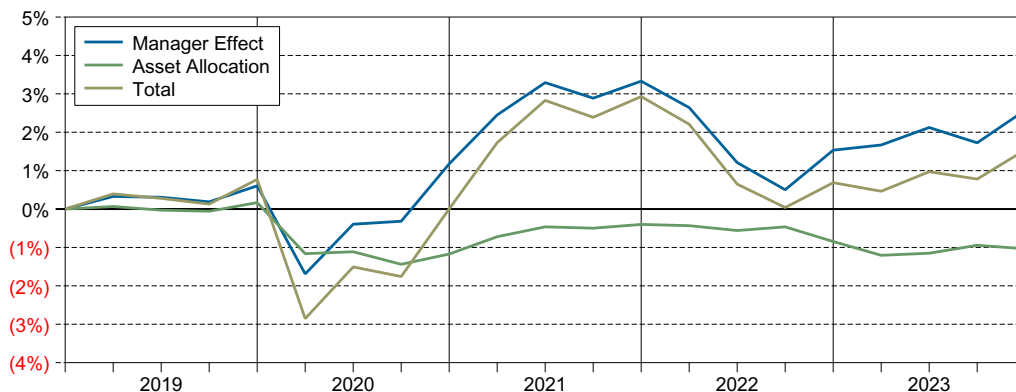
Cumulative Total Fund Relative Attribution - December 31, 2023

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Five Year Annualized Relative Attribution Effects



Cumulative Relative Attribution Effects



Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	42%	40%	15.08%	15.16%	(0.03%)	0.03%	(0.00%)
Fixed-Income	20%	22%	1.26%	1.10%	0.03%	(0.10%)	(0.07%)
International Equity	25%	26%	7.37%	7.08%	0.08%	(0.04%)	0.04%
Dvsfd Real Assets	11%	11%	6.19%	3.43%	0.28%	0.02%	0.31%
Cash	1%	0%	1.83%	1.83%	0.00%	(0.05%)	(0.05%)
Total			9.21%	8.99%	+ 0.36%	+ (0.15%)	0.22%

* Current Quarter Target = 41.0% Russell 3000 Index, 27.0% MSCI ACWI xUS (Net), 20.0% Blmbg:Aggregate and 12.0% Blmbg TIPS 1-10 Yr.

Vanguard Total Stock Market Period Ended December 31, 2023

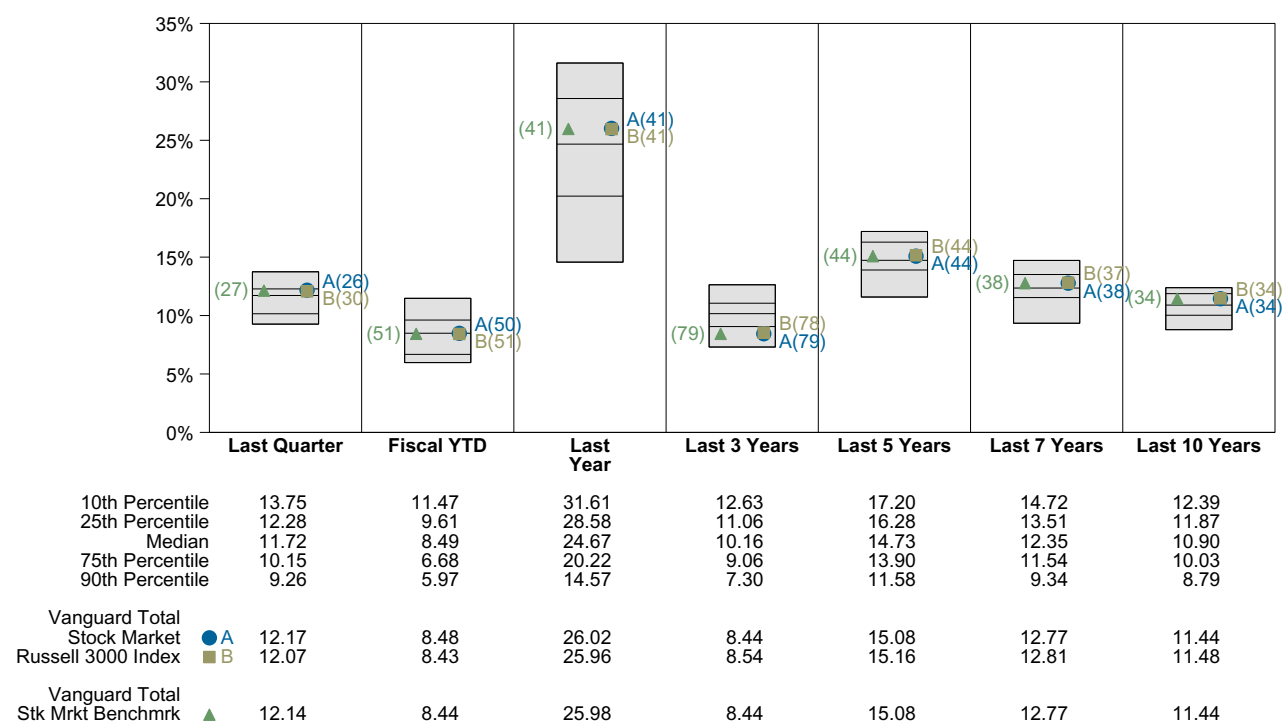
Investment Philosophy

The Vanguard Total Stock Market Index Fund is passively managed using index sampling. It seeks to replicate the performance of the CRSP US Total Market Index. The first full quarter of actual performance is the fourth quarter of 2009, prior returns reflect manager reported composite performance. June, 2013 Benchmark switched from MSCI Broad to CRSP. *Vanguard Total Stock Market switched to Admiral Shares from Signal Shares on October 27, 2014. On November 14, 2014 switched to Institutional Shares.

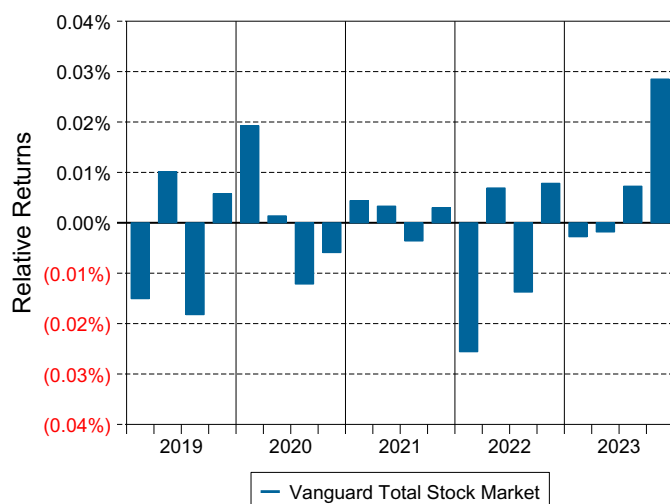
Quarterly Summary and Highlights

- Vanguard Total Stock Market's portfolio posted a 12.17% return for the quarter placing it in the 26 percentile of the Callan Large Cap Core Mutual Funds group for the quarter and in the 41 percentile for the last year.
- Vanguard Total Stock Market's portfolio outperformed the Vanguard Total Stk Mkt Benchmrk by 0.03% for the quarter and outperformed the Vanguard Total Stk Mkt Benchmrk for the year by 0.04%.

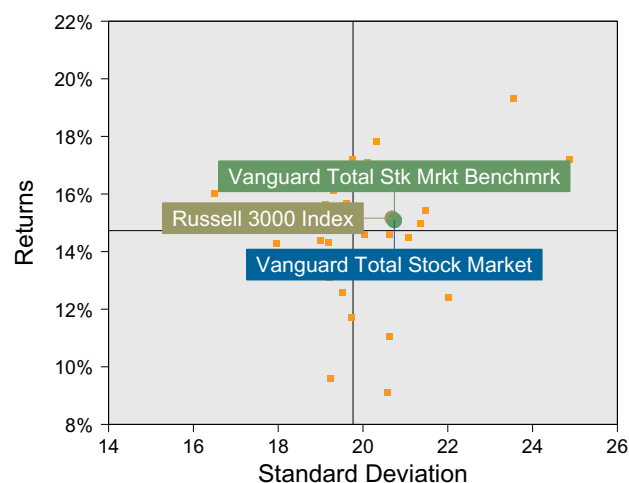
Performance vs Callan Large Cap Core Mutual Funds (Institutional Net)



Relative Returns vs Vanguard Total Stk Mkt Benchmrk



Callan Large Cap Core Mutual Funds (Institutional Net) Annualized Five Year Risk vs Return

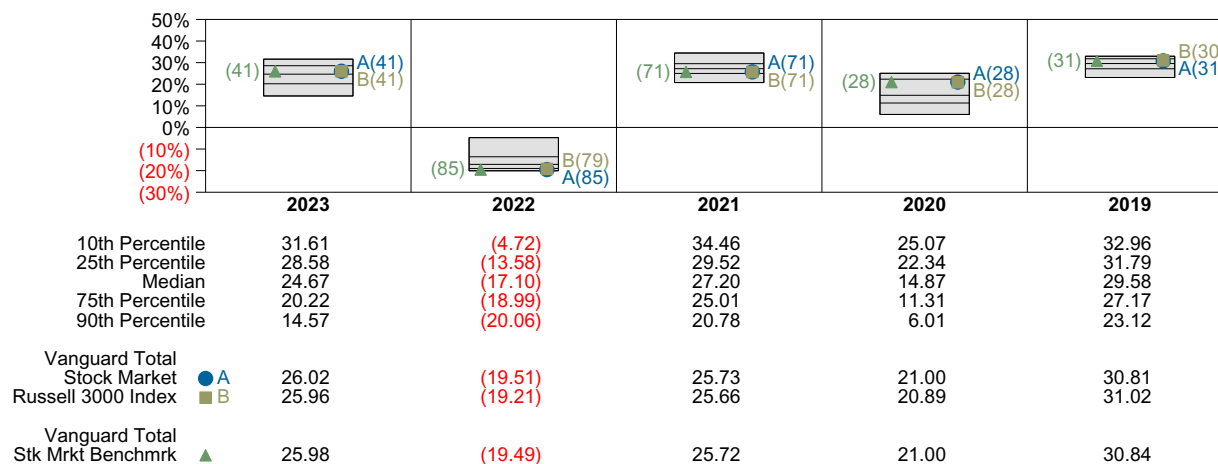


Vanguard Total Stock Market Return Analysis Summary

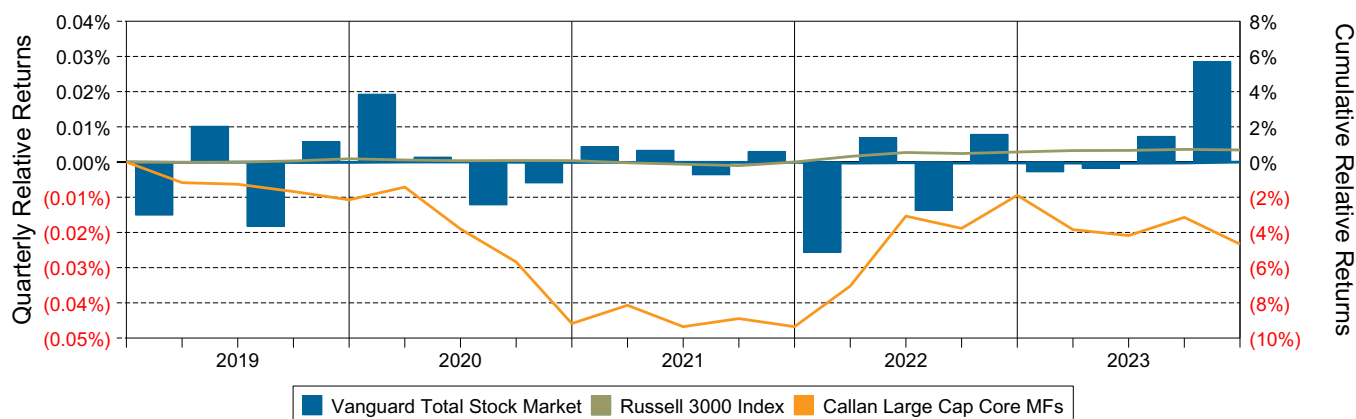
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

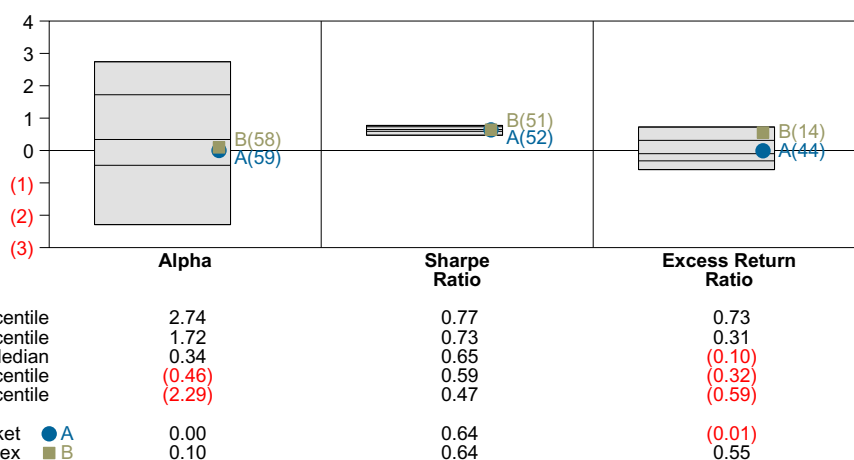
Performance vs Callan Large Cap Core Mutual Funds (Institutional Net)



Cumulative and Quarterly Relative Returns vs Vanguard Total Stk Mkt Benchmrk



Risk Adjusted Return Measures vs Vanguard Total Stk Mkt Benchmrk Rankings Against Callan Large Cap Core Mutual Funds (Institutional Net) Five Years Ended December 31, 2023

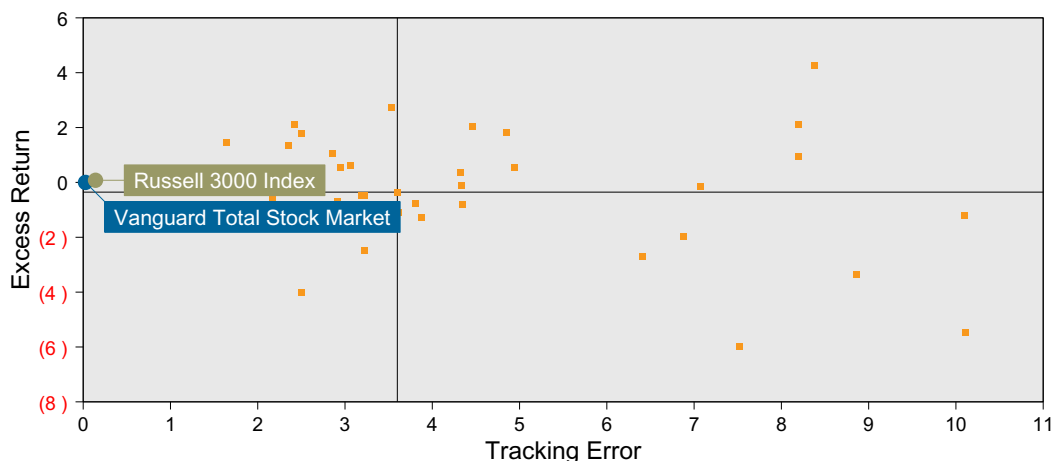


Vanguard Total Stock Market Risk Analysis Summary

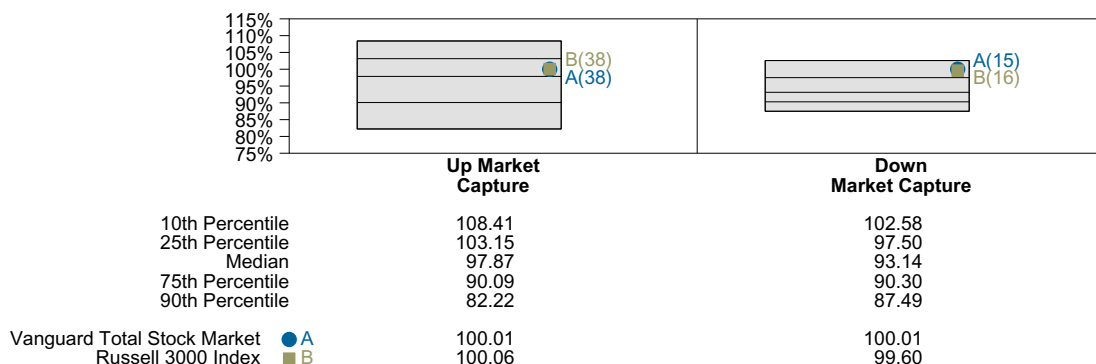
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

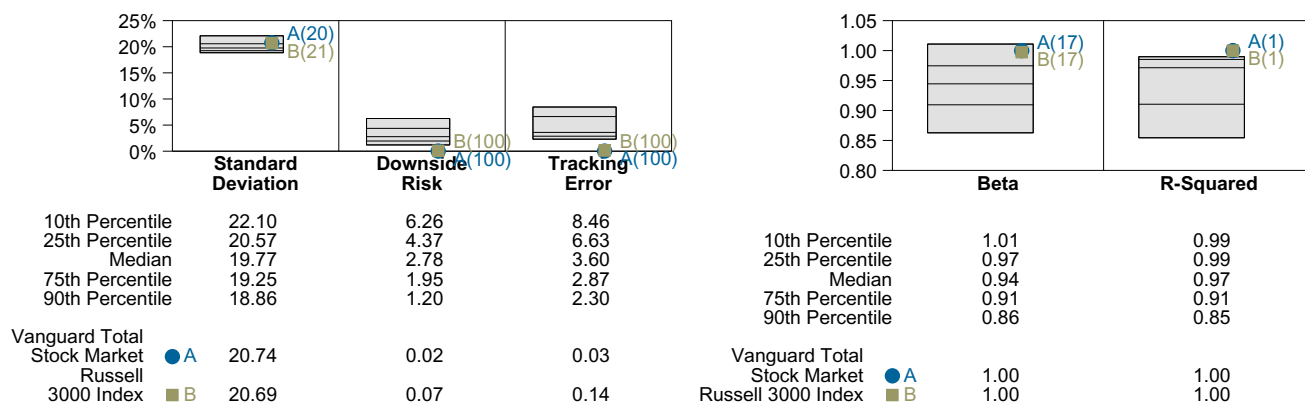
Risk Analysis vs Callan Large Cap Core Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



Market Capture vs Vanguard Total Stk Mrkt Benchmrk Rankings Against Callan Large Cap Core Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



Risk Statistics Rankings vs Vanguard Total Stk Mrkt Benchmrk Rankings Against Callan Large Cap Core Mutual Funds (Institutional Net) Five Years Ended December 31, 2023

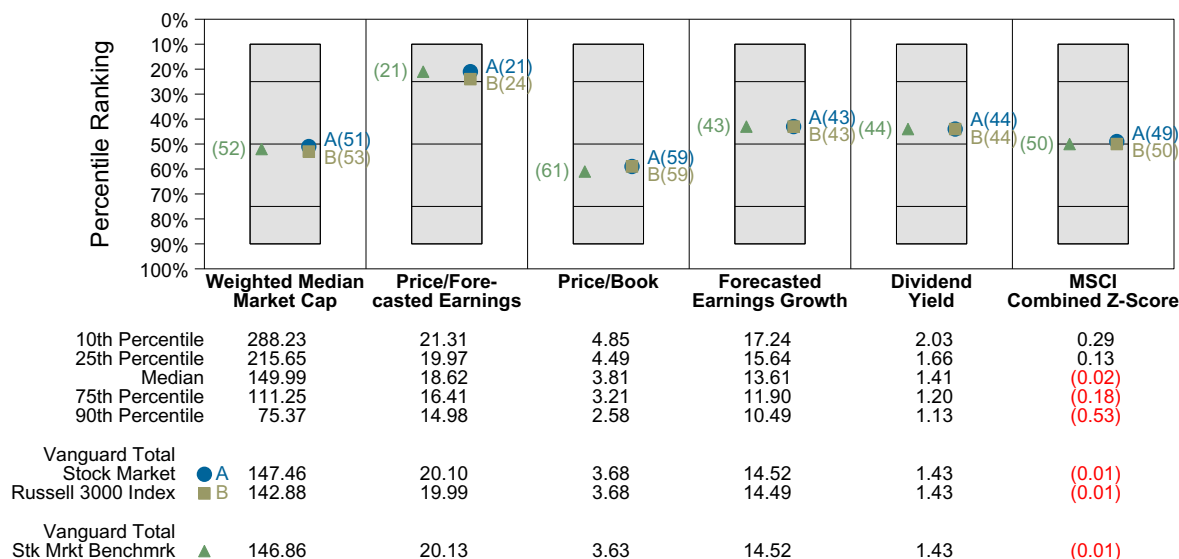


Vanguard Total Stock Market Equity Characteristics Analysis Summary

Portfolio Characteristics

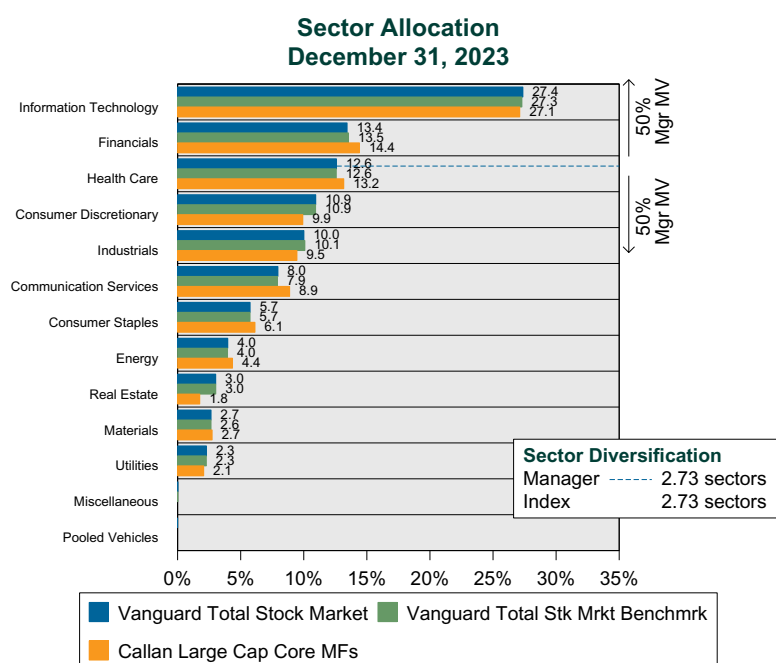
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Cap Core Mutual Funds as of December 31, 2023

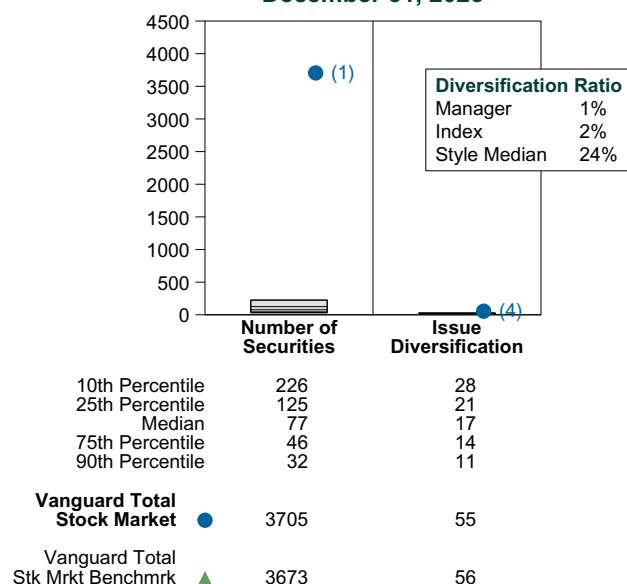


Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



Diversification December 31, 2023



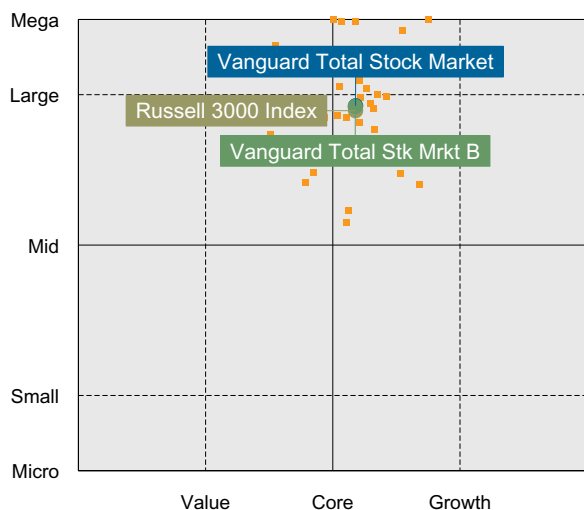
Current Holdings Based Style Analysis

Vanguard Total Stock Market

As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

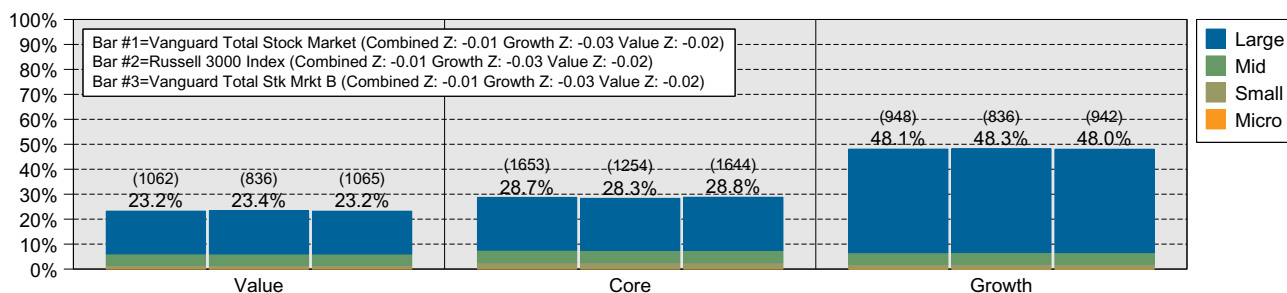
Style Map vs Callan Large Cap Core MFs
Holdings as of December 31, 2023



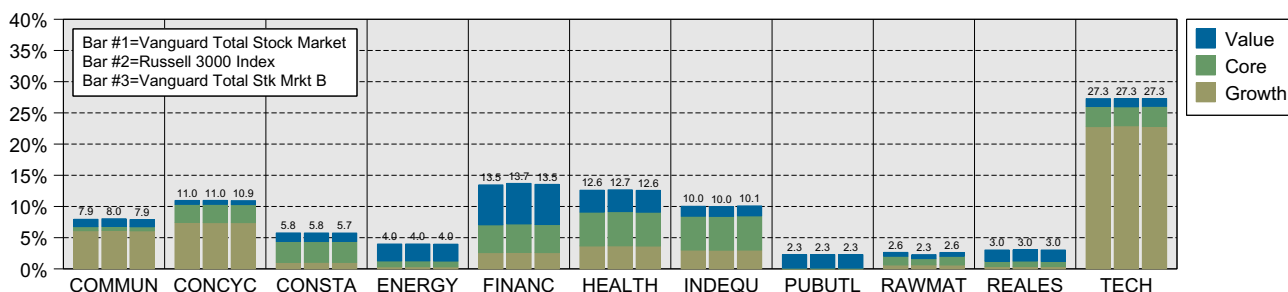
Style Exposure Matrix
Holdings as of December 31, 2023

	Value	Core	Growth	Total
Large	17.1% (97) 17.3% (96) 17.2% (97)	21.2% (97) 20.9% (96) 21.3% (99)	41.5% (97) 41.7% (100) 41.4% (98)	79.8% (291) 79.9% (292) 79.9% (294)
Mid	4.6% (167) 4.6% (166) 4.6% (165)	5.0% (207) 5.0% (207) 5.0% (205)	4.7% (211) 4.7% (213) 4.7% (212)	14.3% (585) 14.3% (586) 14.3% (582)
Small	1.2% (273) 1.3% (282) 1.2% (274)	2.2% (514) 2.2% (528) 2.2% (512)	1.8% (359) 1.8% (362) 1.8% (361)	5.2% (1146) 5.3% (1172) 5.2% (1147)
Micro	0.2% (525) 0.2% (292) 0.2% (529)	0.3% (835) 0.3% (423) 0.3% (828)	0.1% (281) 0.1% (161) 0.1% (271)	0.7% (1641) 0.6% (876) 0.7% (1628)
Total	23.2% (1062) 23.4% (836) 23.2% (1065)	28.7% (1653) 28.3% (1254) 28.8% (1644)	48.1% (948) 48.3% (836) 48.0% (942)	100.0% (3663) 100.0% (2926) 100.0% (3651)

Combined Z-Score Style Distribution
Holdings as of December 31, 2023



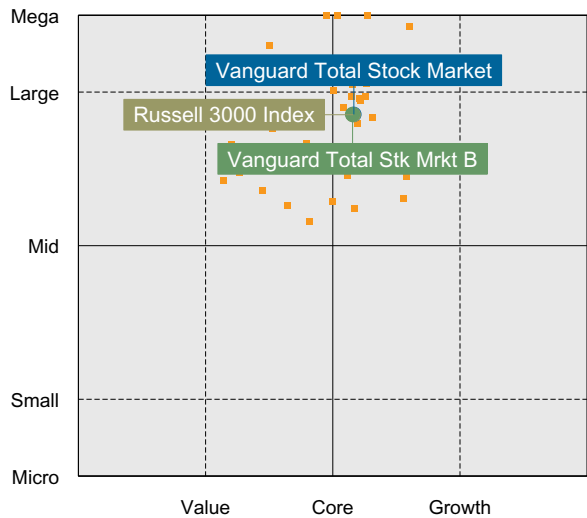
Sector Weights Distribution
Holdings as of December 31, 2023



Historical Holdings Based Style Analysis Vanguard Total Stock Market For Three Years Ended December 31, 2023

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

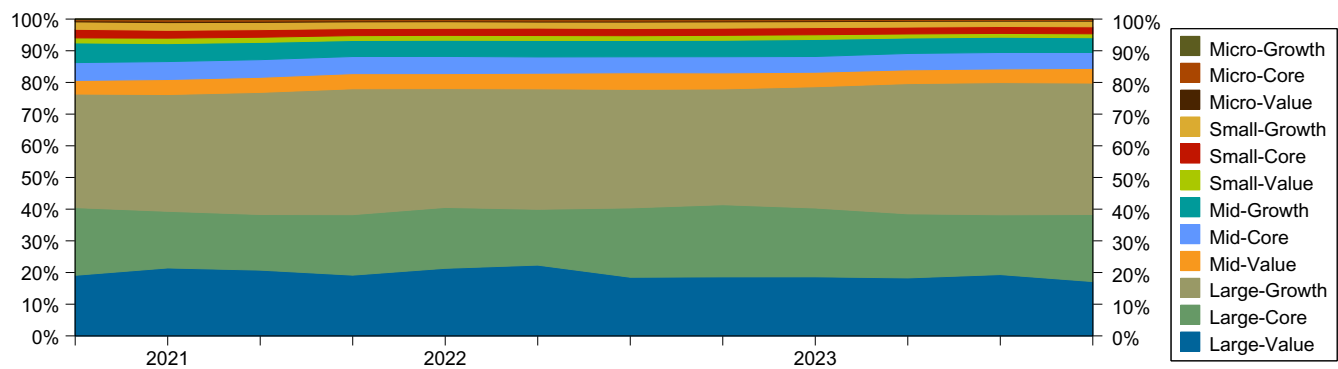
Average Style Map vs Callan Large Cap Core MFs Holdings for Three Years Ended December 31, 2023



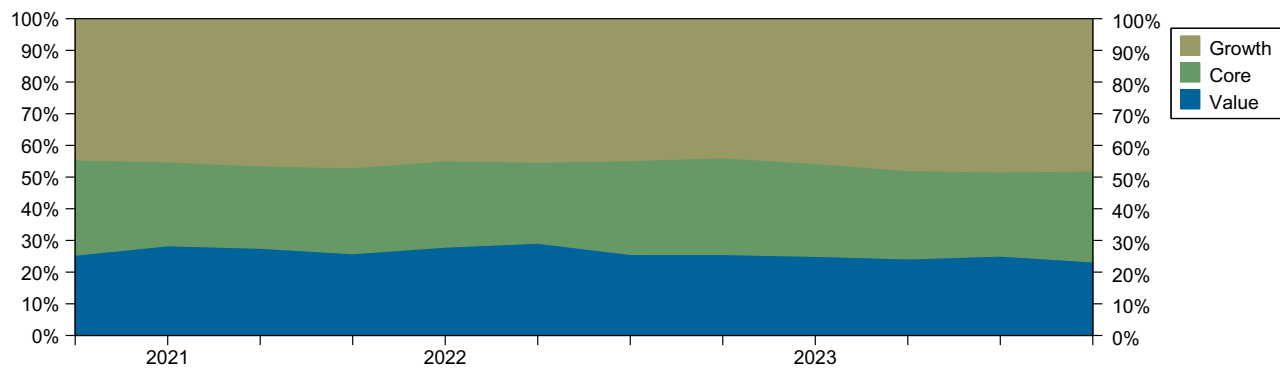
Average Style Exposure Matrix Holdings for Three Years Ended December 31, 2023

	Value	Core	Growth	Total
Large	19.6% (100) 19.7% (99) 19.9% (100)	20.0% (97) 19.8% (95) 19.8% (97)	38.6% (103) 38.7% (103) 38.5% (103)	78.1% (300) 78.2% (297) 78.1% (300)
Mid	4.7% (164) 4.7% (166) 4.7% (164)	5.3% (217) 5.2% (214) 5.3% (214)	5.2% (213) 5.3% (214) 5.2% (213)	15.2% (594) 15.3% (594) 15.2% (591)
Small	1.5% (291) 1.5% (298) 1.5% (291)	2.3% (526) 2.3% (510) 2.3% (519)	2.0% (382) 2.0% (381) 2.0% (382)	5.8% (1199) 5.8% (1189) 5.8% (1192)
Micro	0.3% (635) 0.2% (297) 0.3% (650)	0.4% (887) 0.3% (434) 0.4% (892)	0.2% (270) 0.1% (160) 0.2% (269)	0.9% (1792) 0.7% (891) 0.9% (1811)
Total	26.1% (1190) 26.2% (860) 26.4% (1205)	27.9% (1727) 27.7% (1253) 27.7% (1722)	46.0% (968) 46.1% (858) 45.9% (967)	100.0% (3885) 100.0% (2971) 100.0% (3894)

Vanguard Total Stock Market Historical Cap/Style Exposures



Vanguard Total Stock Market Historical Style Only Exposures



Vanguard Total Int'l. Stock

Period Ended December 31, 2023

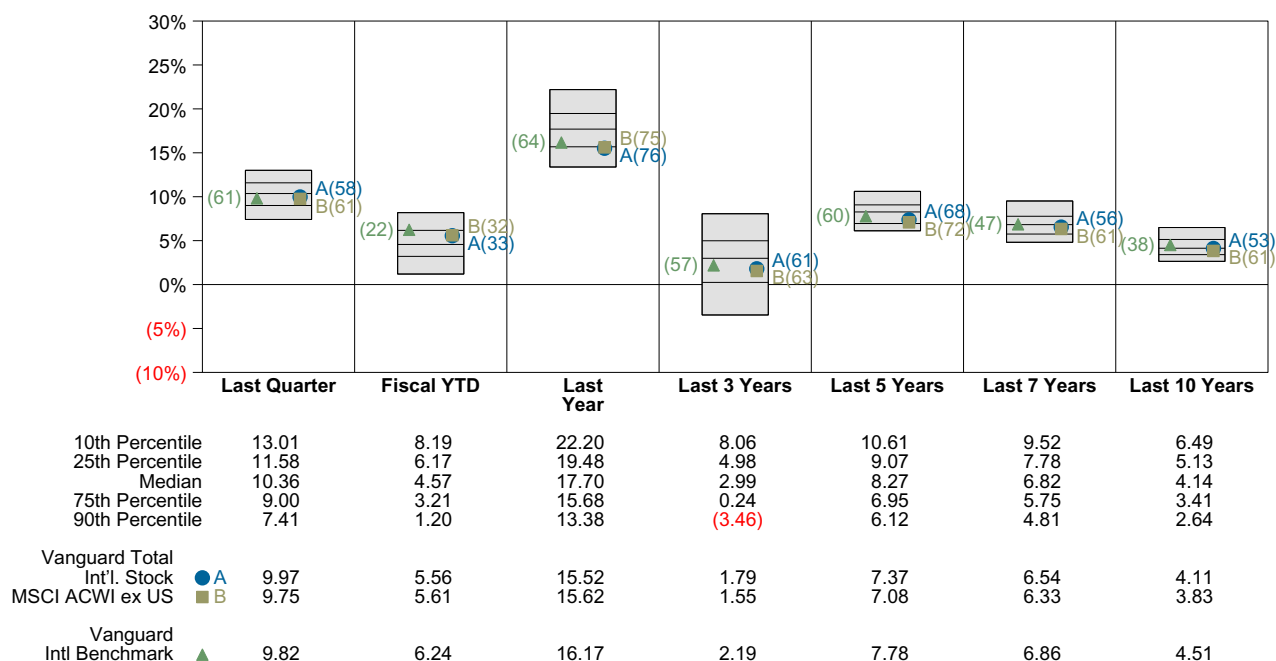
Investment Philosophy

The Vanguard Total International Stock open ended mutual fund is based on the FTSE Global All Cap ex U.S. Index. It contains more than 5,000 securities of both developed and emerging markets weighted by market capitalization and represents 98% of the universe. The fund's custom benchmark was the Total International Composite Index MSCI EAFE and MSCI Emerging Markets indices through December 15, 2010; MSCI ACWI ex US IMI Index until June 2013 and Global All Cap ex US Index thereafter. The first full quarter of actual performance is the fourth quarter of 2009, prior returns reflect manager reported composite performance. Vanguard Total Int'l. Stock switched to Institutional Shares from Investor Shares on November 30, 2014

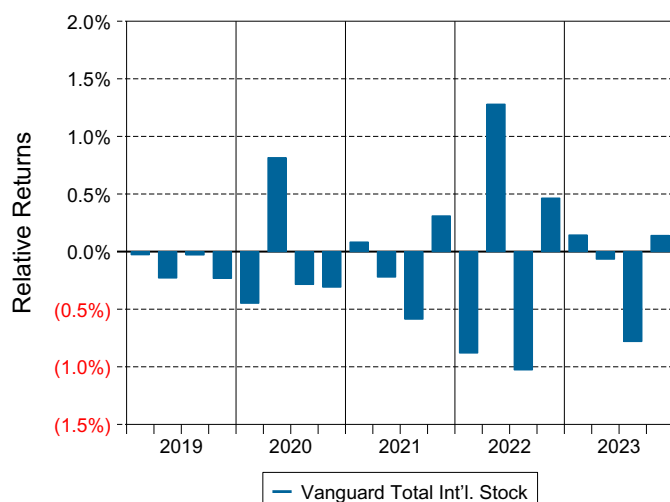
Quarterly Summary and Highlights

- Vanguard Total Int'l. Stock's portfolio posted a 9.97% return for the quarter placing it in the 58 percentile of the Callan Non US Equity Mutual Funds group for the quarter and in the 76 percentile for the last year.
- Vanguard Total Int'l. Stock's portfolio outperformed the Vanguard Intl Benchmark by 0.15% for the quarter and underperformed the Vanguard Intl Benchmark for the year by 0.65%.

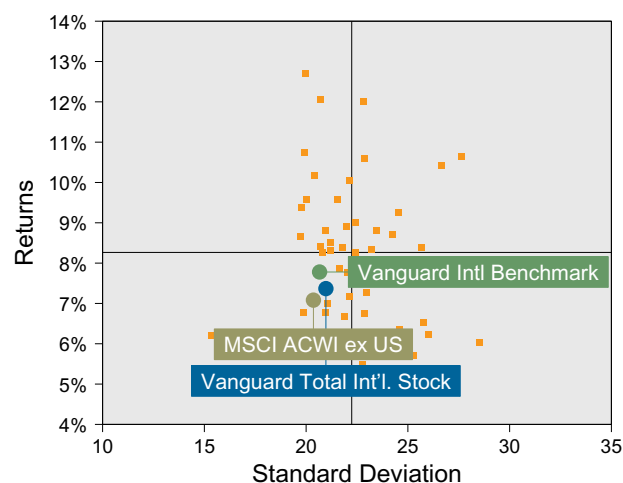
Performance vs Callan Non US Equity Mutual Funds (Institutional Net)



Relative Return vs Vanguard Intl Benchmark



Callan Non US Equity Mutual Funds (Institutional Net) Annualized Five Year Risk vs Return

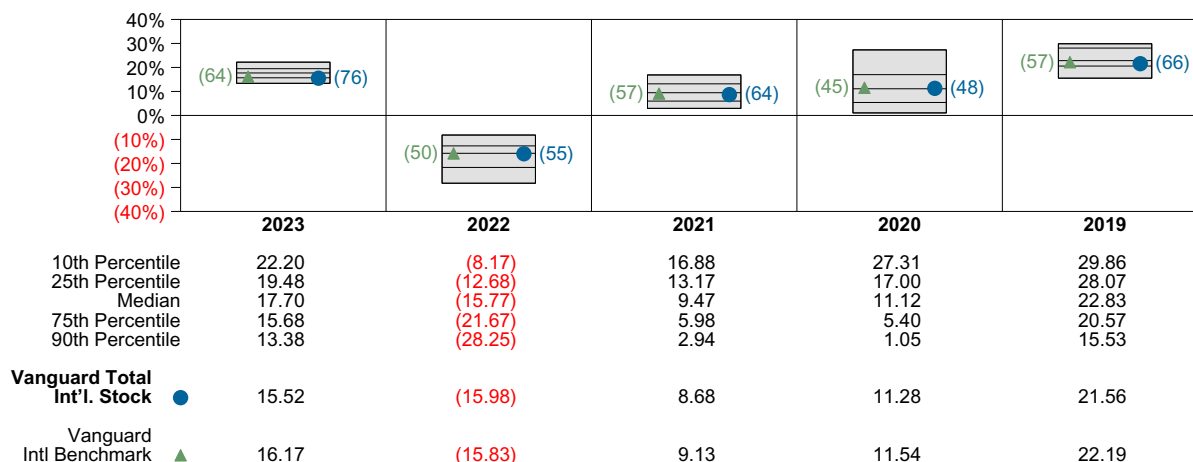


Vanguard Total Int'l. Stock Return Analysis Summary

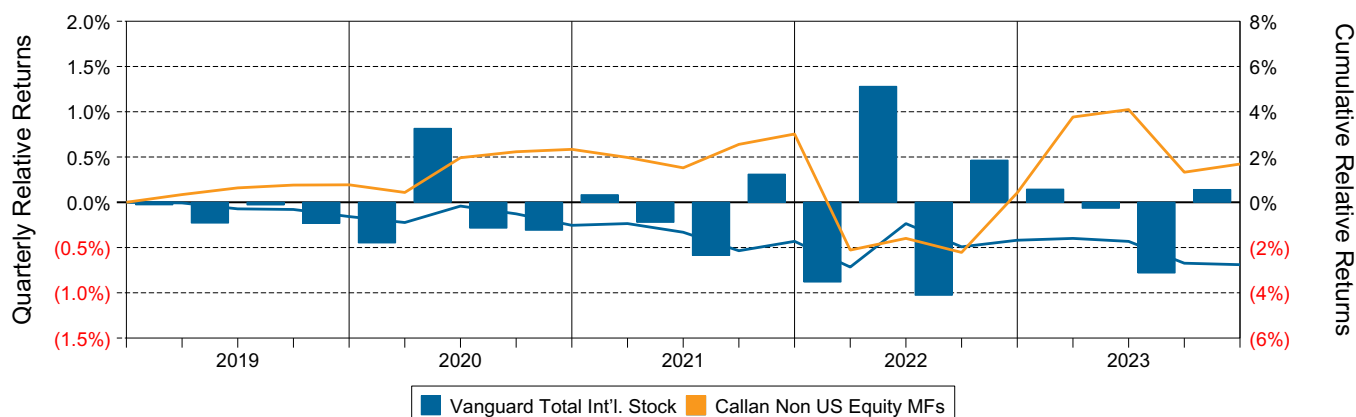
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

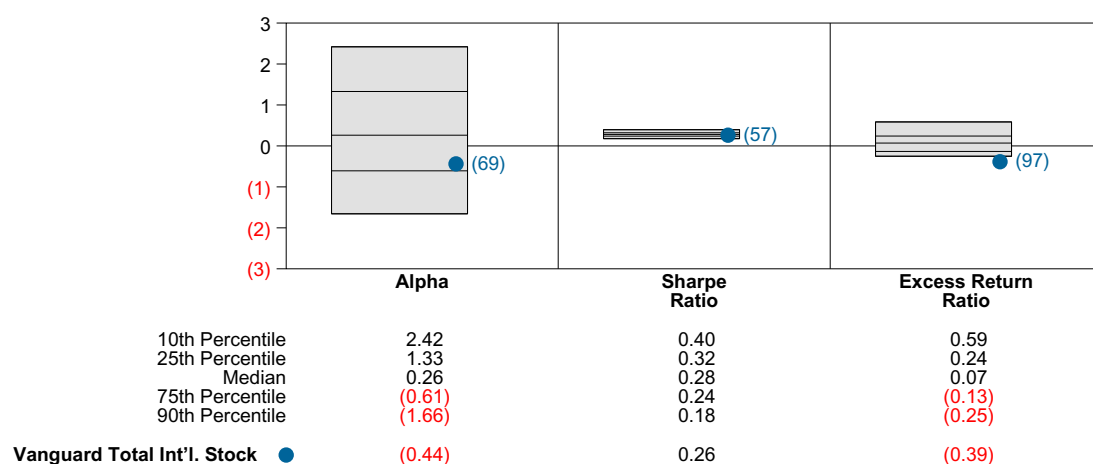
Performance vs Callan Non US Equity Mutual Funds (Institutional Net)



Cumulative and Quarterly Relative Returns vs Vanguard Intl Benchmark



Risk Adjusted Return Measures vs Vanguard Intl Benchmark Rankings Against Callan Non US Equity Mutual Funds (Institutional Net) Five Years Ended December 31, 2023

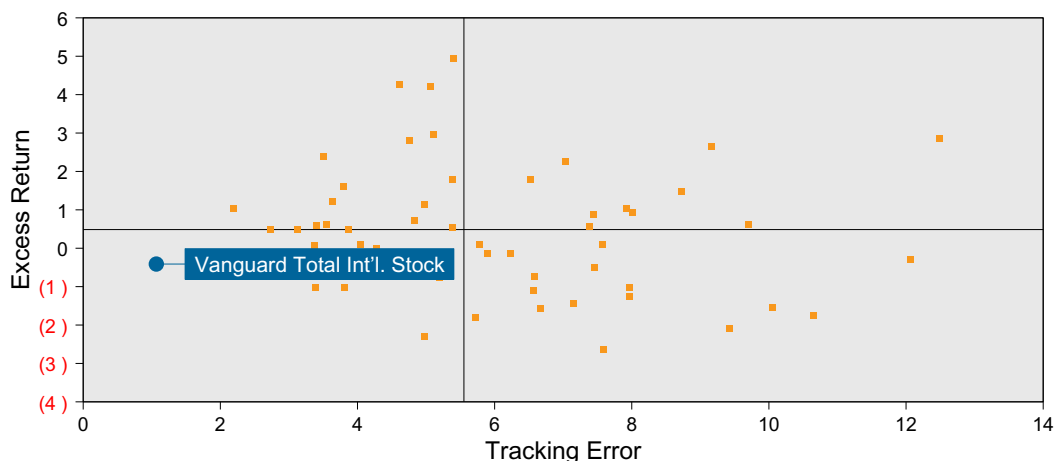


Vanguard Total Int'l. Stock Risk Analysis Summary

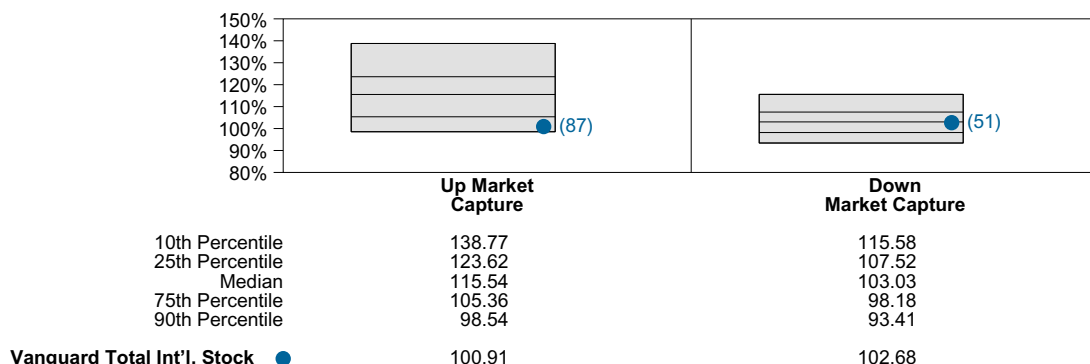
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

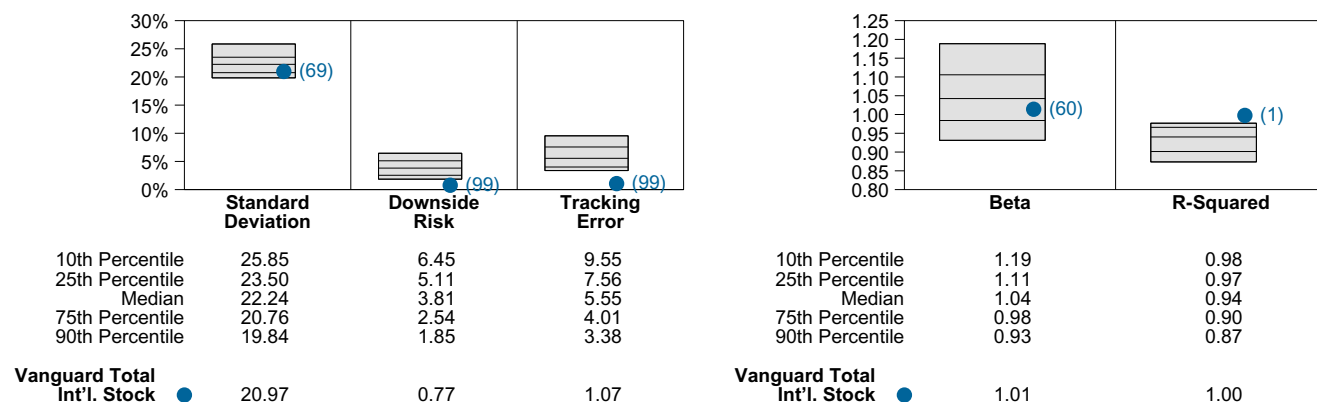
Risk Analysis vs Callan Non US Equity Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



Market Capture vs Vanguard Intl Benchmark Rankings Against Callan Non US Equity Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



Risk Statistics Rankings vs Vanguard Intl Benchmark Rankings Against Callan Non US Equity Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



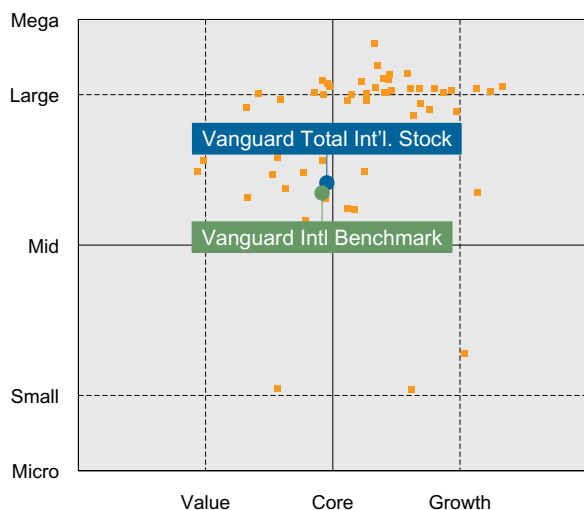
Current Holdings Based Style Analysis

Vanguard Total Int'l. Stock

As of December 31, 2023

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

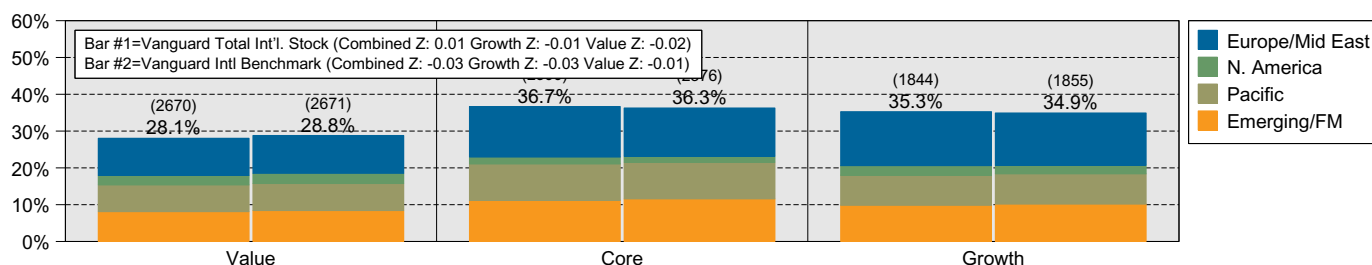
Style Map vs Callan Non US Equity MFs
Holdings as of December 31, 2023



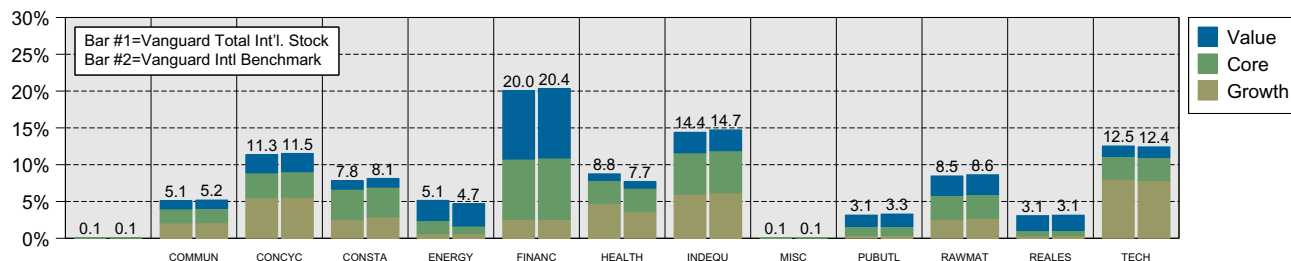
Style Exposure Matrix
Holdings as of December 31, 2023

Europe/ Mid East	10.1% (420)	13.7% (435)	14.7% (336)	38.5% (1191)
	10.3% (417)	13.1% (431)	14.2% (334)	37.5% (1182)
N. America	2.6% (60)	1.9% (58)	2.7% (49)	7.1% (167)
	2.8% (60)	1.7% (54)	2.4% (44)	6.8% (158)
Pacific	7.3% (803)	9.9% (604)	8.1% (538)	25.3% (1945)
	7.4% (800)	10.0% (597)	8.2% (536)	25.6% (1933)
Emerging/ FM	8.1% (1387)	11.2% (1302)	9.8% (921)	29.1% (3610)
	8.4% (1394)	11.6% (1294)	10.2% (941)	30.1% (3629)
Total	28.1% (2670)	36.7% (2399)	35.3% (1844)	100.0% (6913)
	28.8% (2671)	36.3% (2376)	34.9% (1855)	100.0% (6902)
	Value	Core	Growth	Total

Combined Z-Score Style Distribution
Holdings as of December 31, 2023



Sector Weights Distribution
Holdings as of December 31, 2023



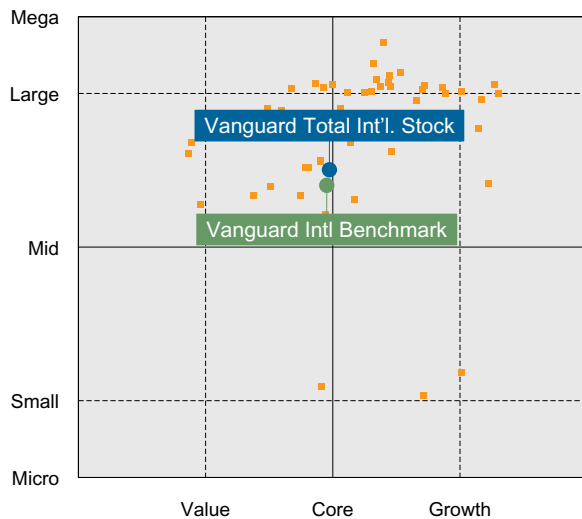
Historical Holdings Based Style Analysis

Vanguard Total Int'l. Stock

For Three Years Ended December 31, 2023

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

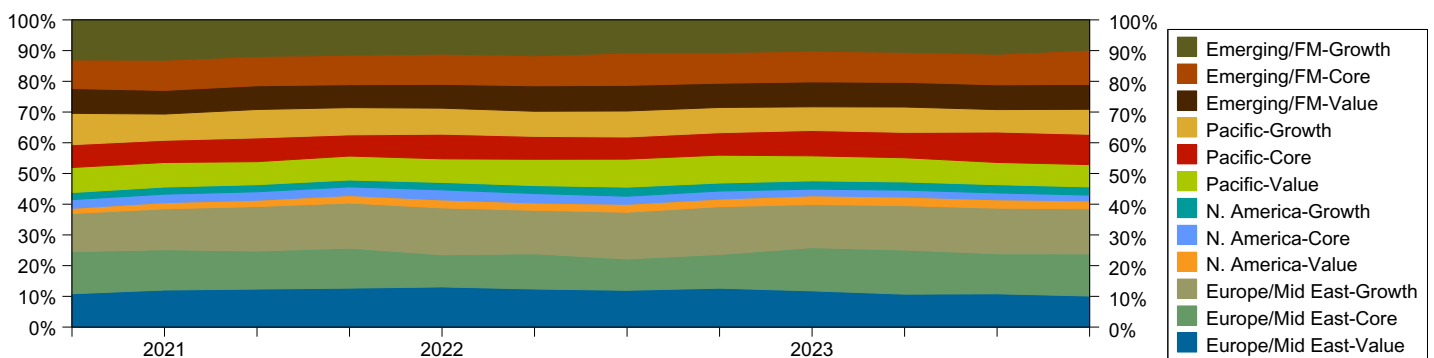
Average Style Map vs Callan Non US Equity MFs Holdings for Three Years Ended December 31, 2023



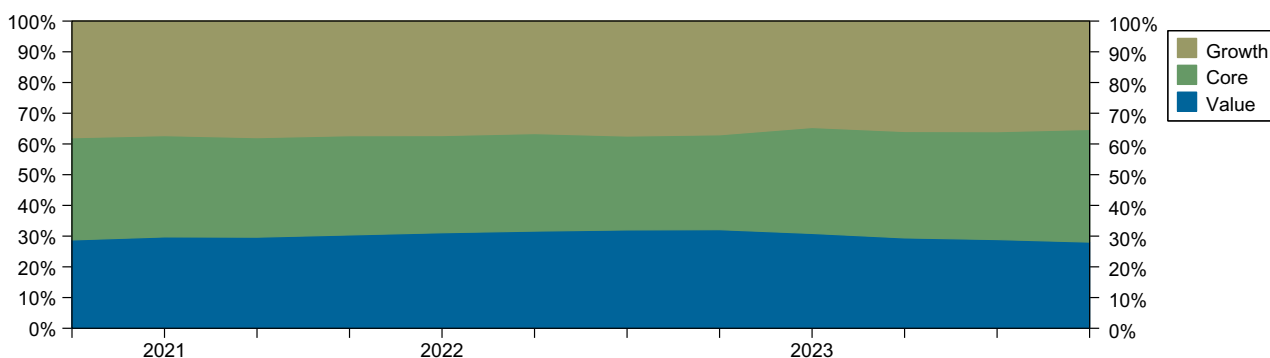
Average Style Exposure Matrix Holdings for Three Years Ended December 31, 2023

Europe/ Mid East	11.8% (459)	12.5% (460)	14.4% (400)	38.8% (1319)
	11.3% (423)	12.3% (430)	14.0% (359)	37.6% (1212)
N. America	2.4% (64)	2.6% (70)	2.5% (53)	7.6% (187)
	2.4% (60)	2.5% (67)	2.0% (42)	7.0% (169)
Pacific	8.0% (772)	8.0% (637)	8.5% (535)	24.5% (1944)
	8.2% (762)	8.3% (630)	8.8% (532)	25.3% (1924)
Emerging/ FM	8.0% (1468)	9.9% (1412)	11.3% (1145)	29.2% (4025)
	8.4% (1336)	10.2% (1155)	11.4% (891)	30.1% (3382)
Total	30.2% (2763)	33.1% (2579)	36.7% (2133)	100.0% (7475)
	30.4% (2581)	33.3% (2282)	36.3% (1824)	100.0% (6687)
	Value	Core	Growth	Total

Vanguard Total Int'l. Stock Historical Region/Style Exposures



Vanguard Total Int'l. Stock Historical Style Only Exposures



Country Allocation

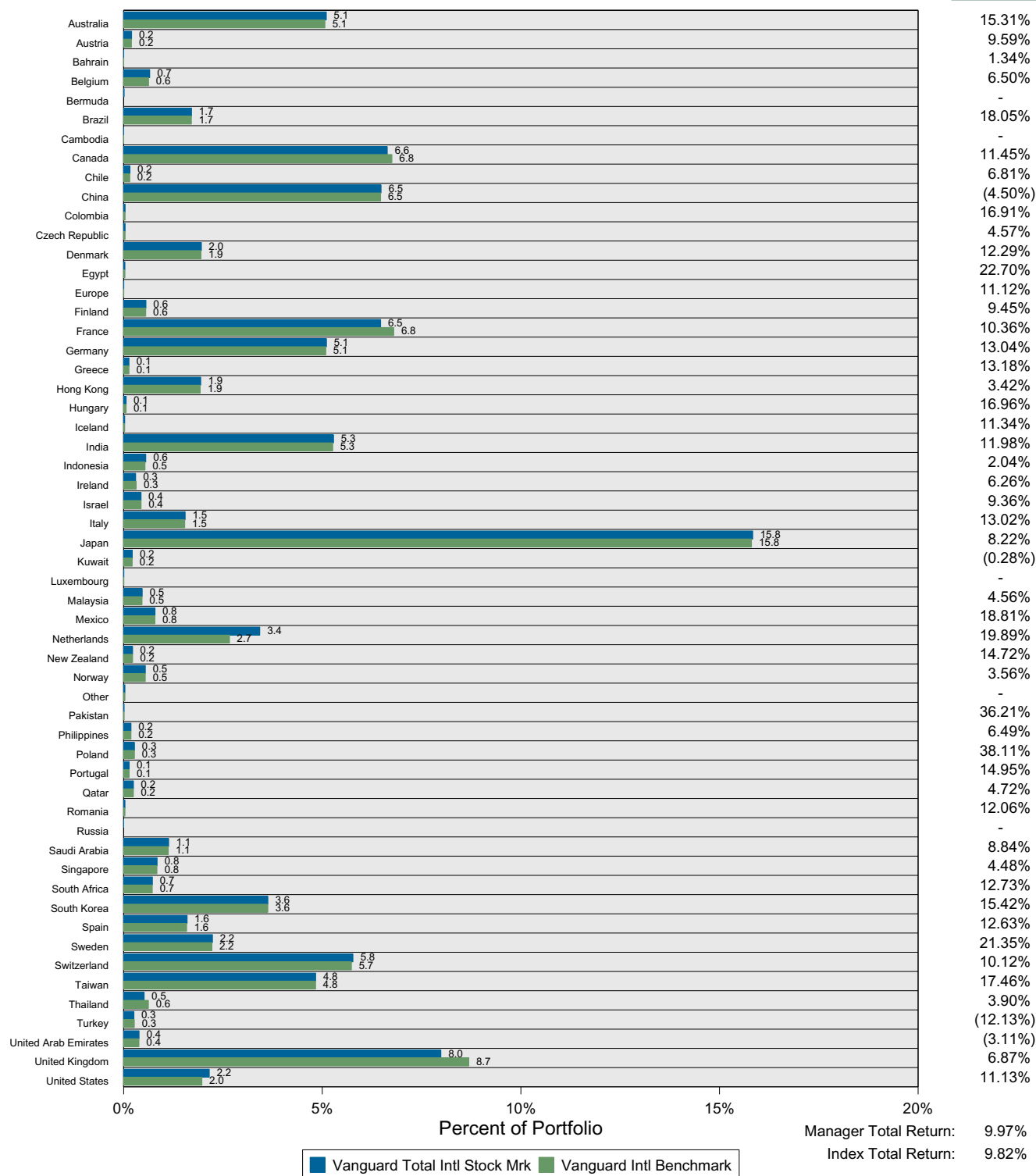
Vanguard Total Intl Stock Mrk VS Vanguard Intl Benchmark

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of December 31, 2023

Index Rtns



Prudential Conservative Core Bond Period Ended December 31, 2023

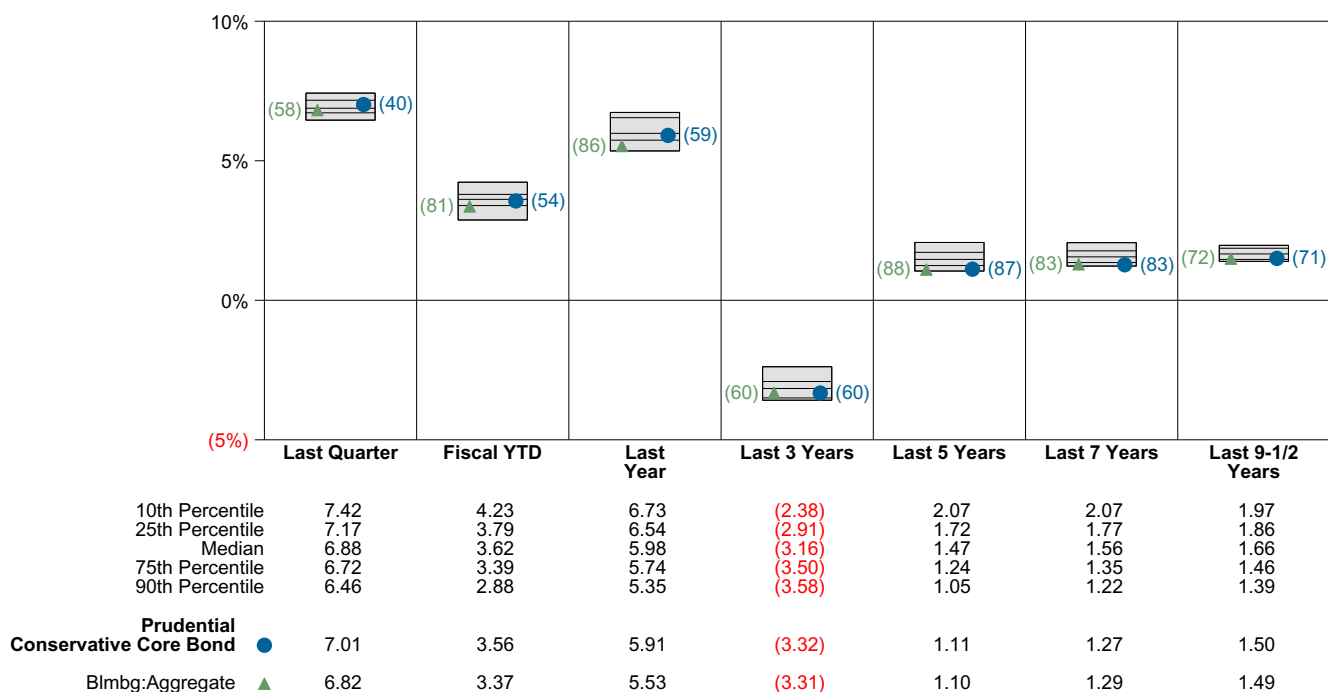
Investment Philosophy

PGIM Fixed Income's Core Conservative strategy is a benchmark-focused, investment grade-only, risk-controlled core strategy that seeks +25 bps over the Bloomberg Barclays Aggregate Index with index-like risk. The strategy seeks to generate virtually all of its excess return from just two activities: bottom-up subsector rotation within the corporate and mortgage/structured product sectors, and research-based security selection in all sectors. Top-down decisions such as duration, yield curve, and sector allocation are tightly constrained to benchmark weightings at all times. Initial investment in fund occurred in June 2014. On February 8, 2017 fund switched to Institutional Trust.

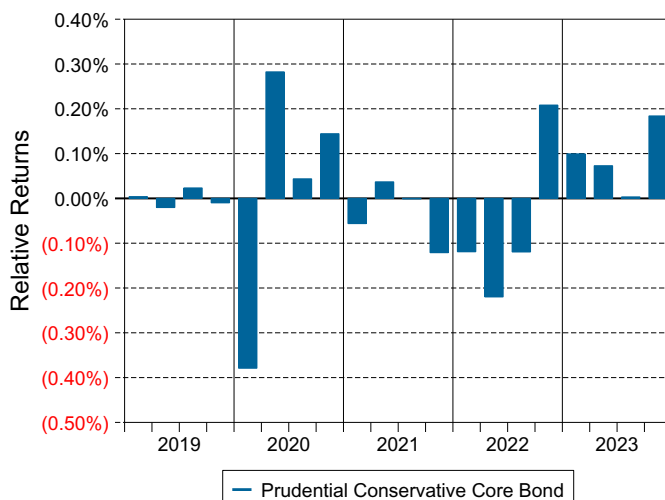
Quarterly Summary and Highlights

- Prudential Conservative Core Bond's portfolio posted a 7.01% return for the quarter placing it in the 40 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 59 percentile for the last year.
- Prudential Conservative Core Bond's portfolio outperformed the Blmbg:Aggregate by 0.20% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.38%.

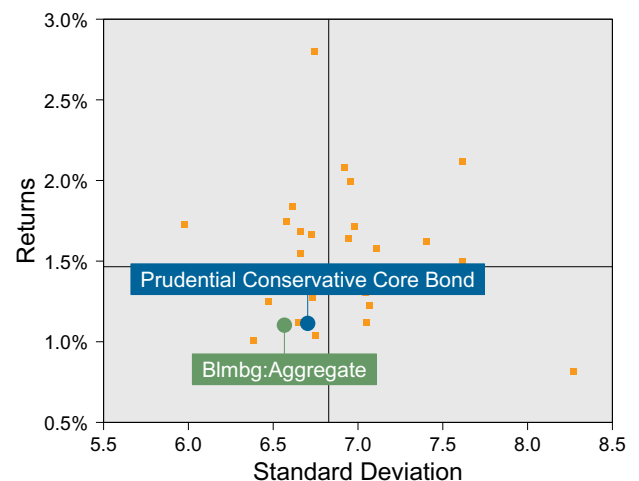
Performance vs Callan Core Bond Mutual Funds (Institutional Net)



Relative Return vs Blmbg:Aggregate



Callan Core Bond Mutual Funds (Institutional Net) Annualized Five Year Risk vs Return

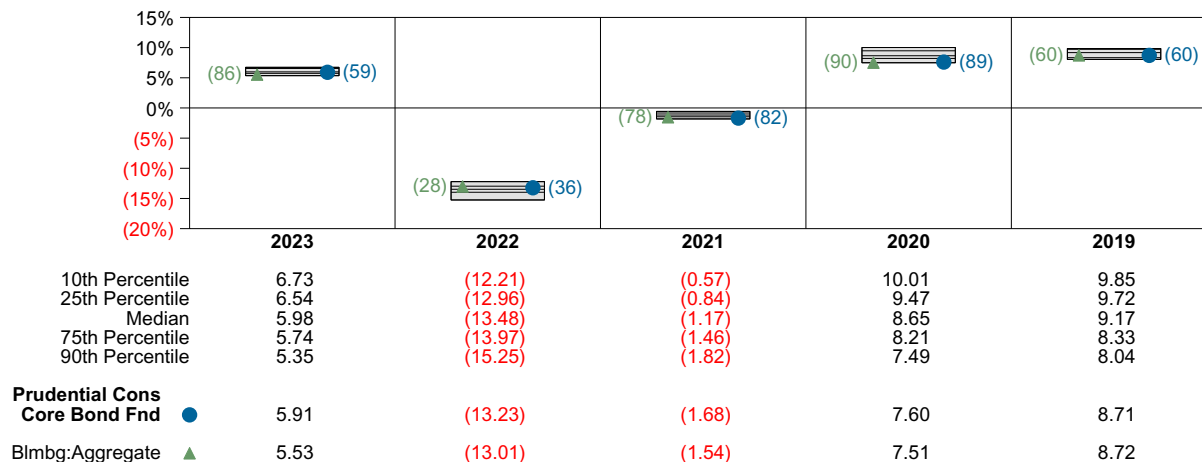


Prudential Cons Core Bond Fnd Return Analysis Summary

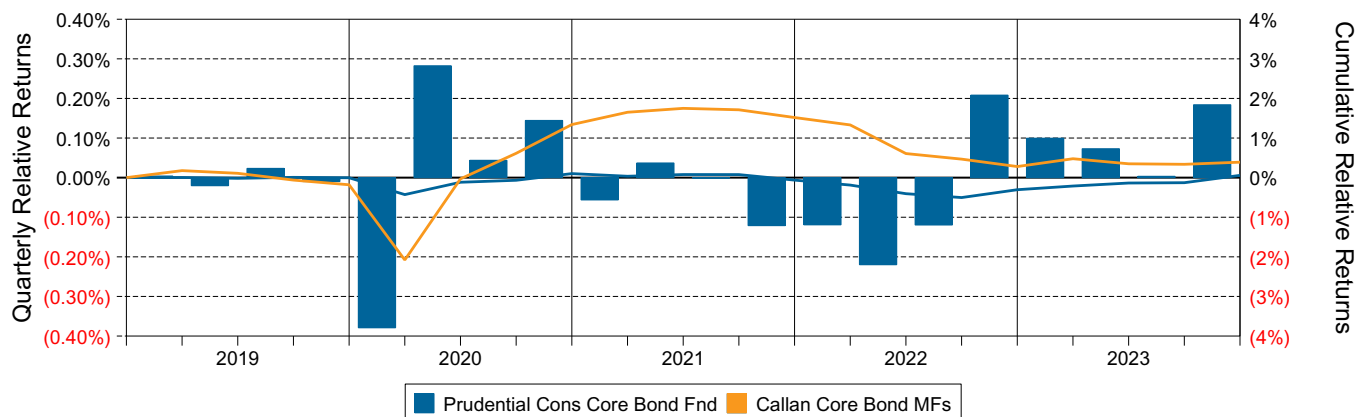
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

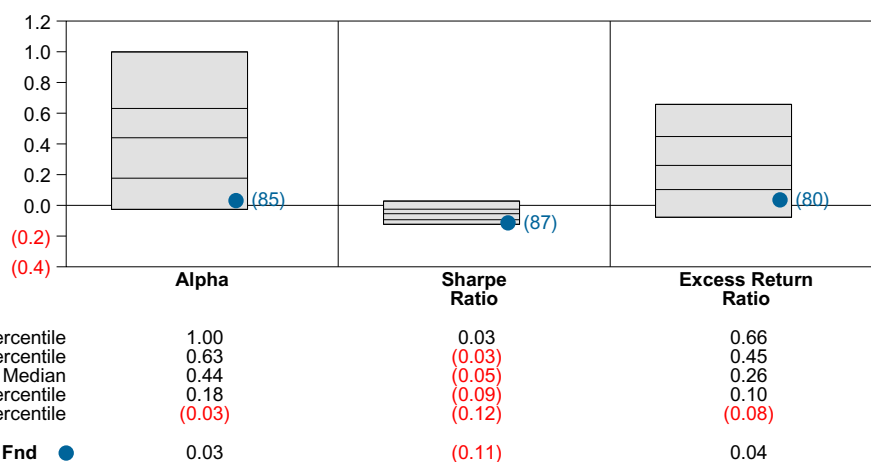
Performance vs Callan Core Bond Mutual Funds (Institutional Net)



Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Bond Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



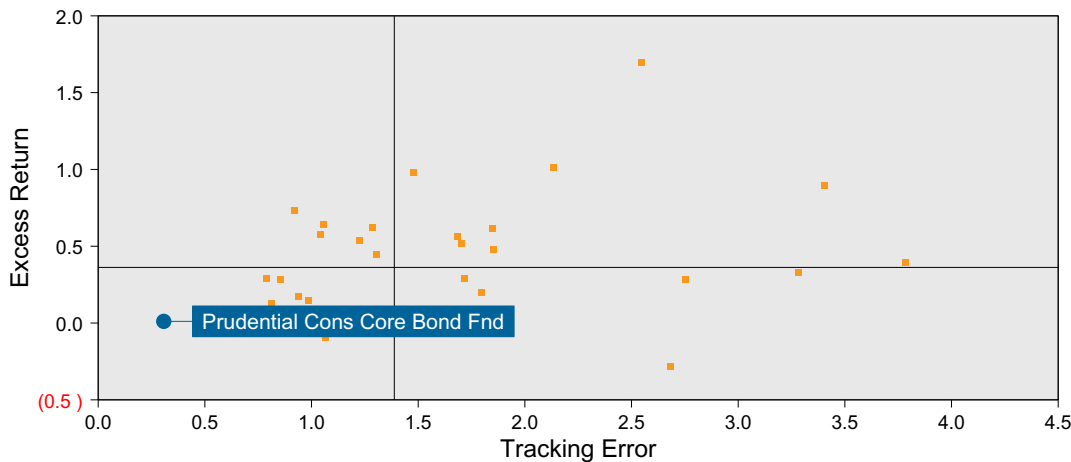
Prudential Cons Core Bond Fnd

Risk Analysis Summary

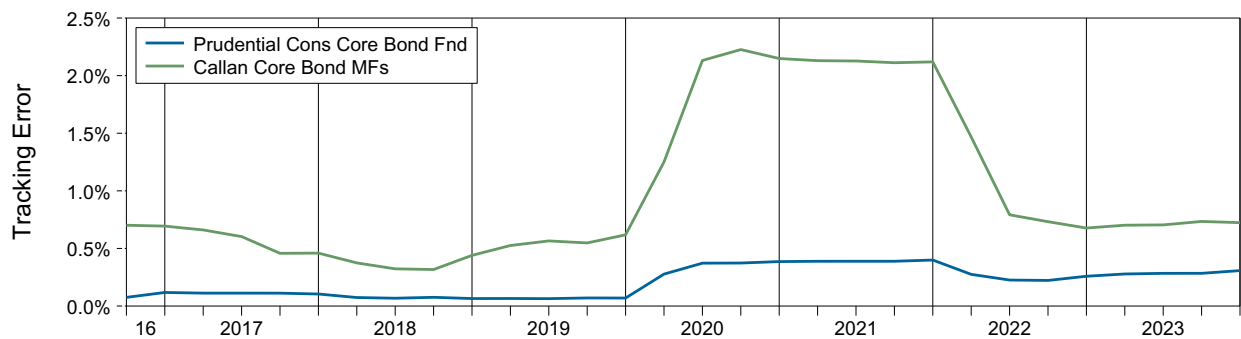
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

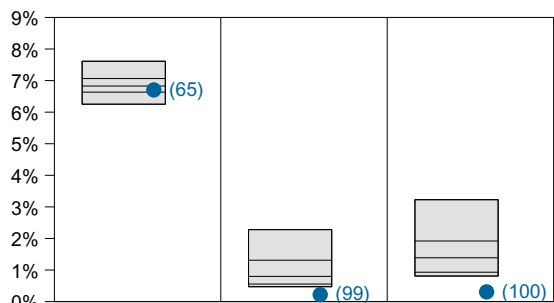
Risk Analysis vs Callan Core Bond Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



Rolling 8 Quarter Tracking Error vs Bloomberg Aggregate

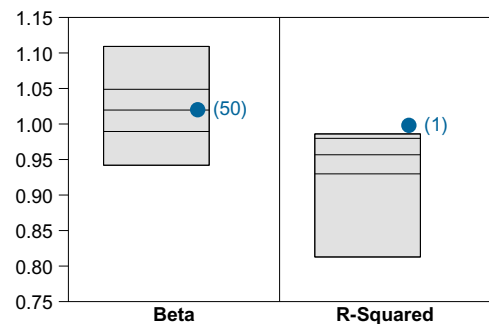


Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Callan Core Bond Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



	Standard Deviation	Downside Risk	Tracking Error
10th Percentile	7.61	2.28	3.23
25th Percentile	7.07	1.31	1.92
Median	6.83	0.80	1.39
75th Percentile	6.63	0.56	0.93
90th Percentile	6.25	0.47	0.81

Prudential Cons Core Bond Fnd ● 6.70 0.22 0.31



	Beta	R-Squared
10th Percentile	1.11	0.99
25th Percentile	1.05	0.98
Median	1.02	0.96
75th Percentile	0.99	0.93
90th Percentile	0.94	0.81

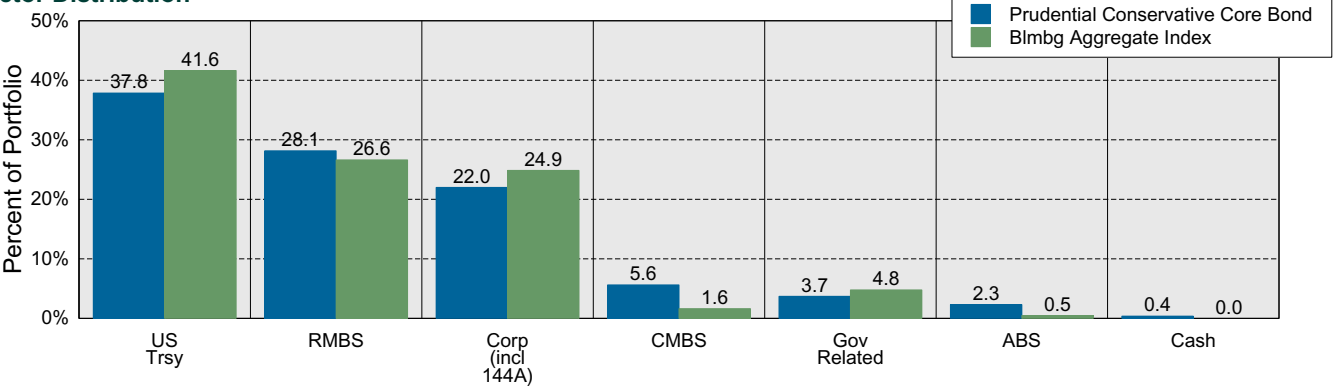
Prudential Cons Core Bond Fnd ● 1.02 1.00

Prudential Conservative Core Bond
Portfolio Characteristics Summary
As of December 31, 2023

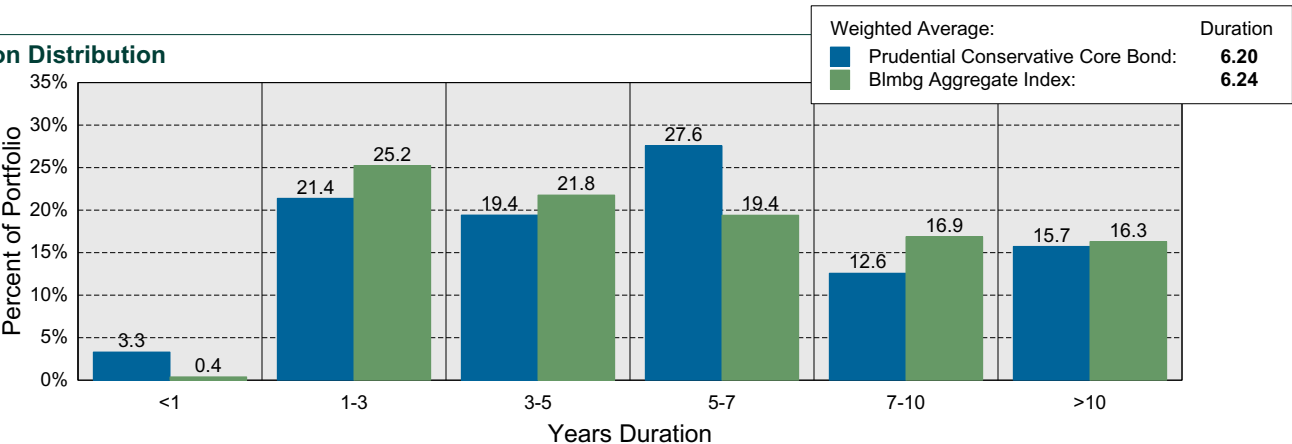
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

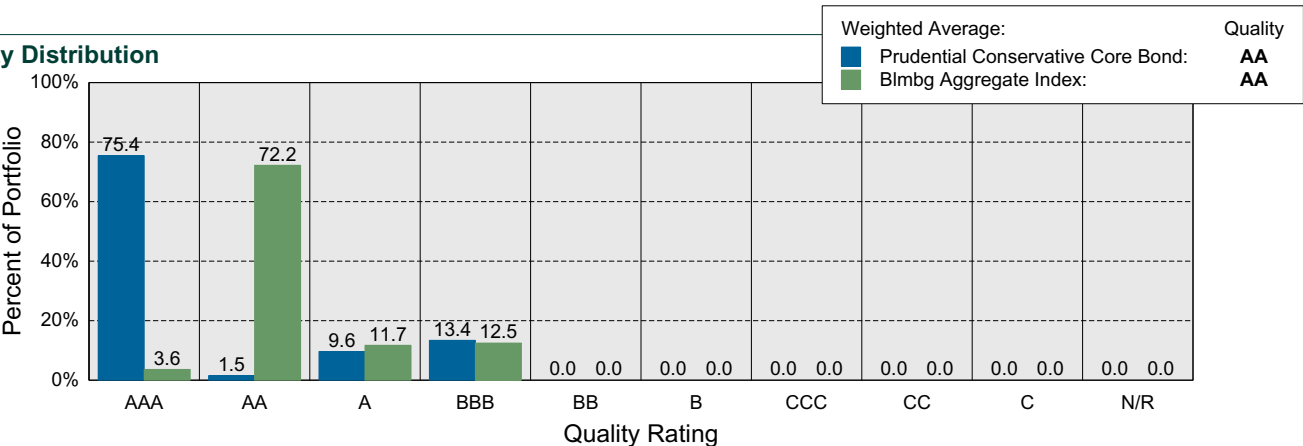
Sector Distribution



Duration Distribution



Quality Distribution

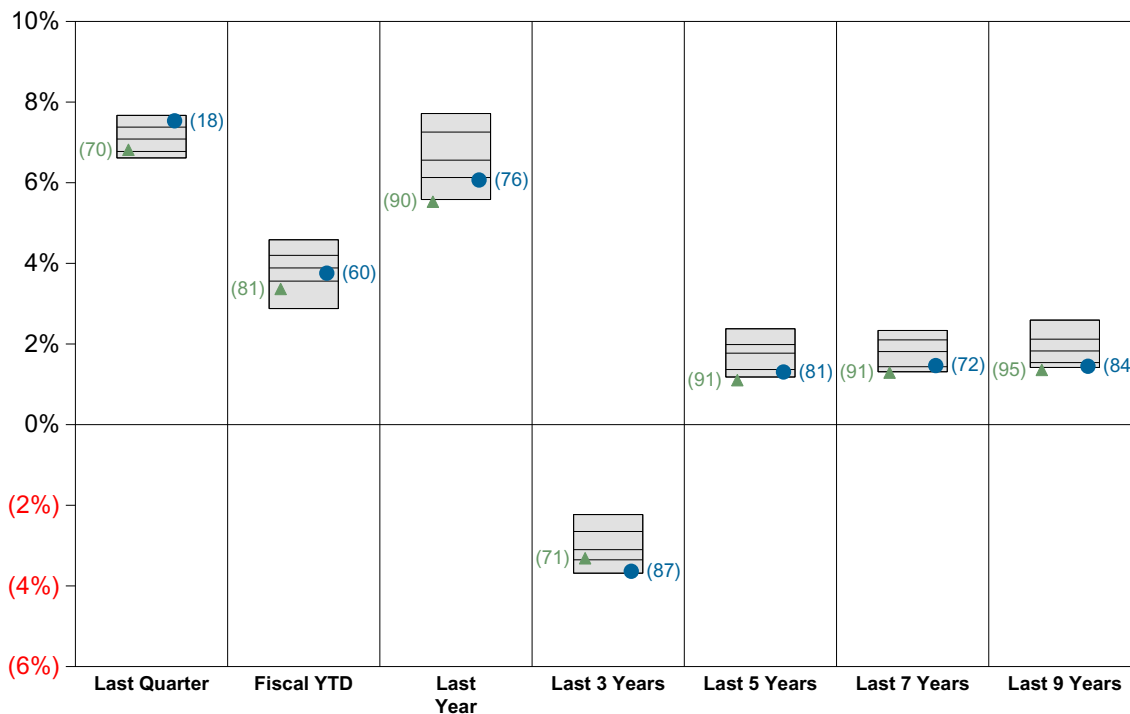


Metropolitan West Fund Period Ended December 31, 2023

Quarterly Summary and Highlights

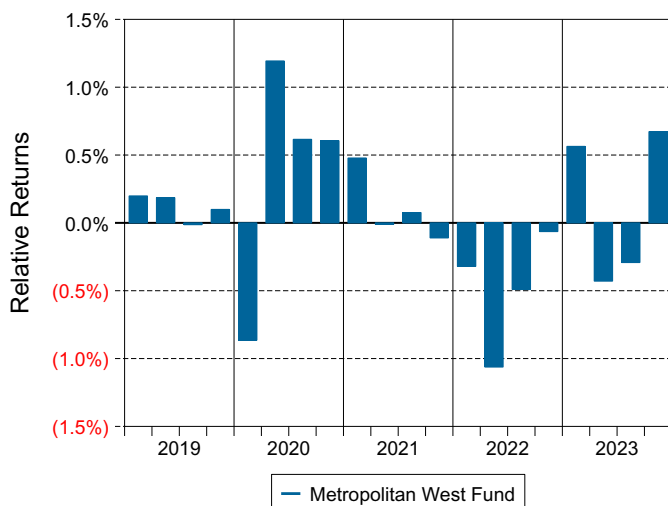
- Metropolitan West Fund's portfolio posted a 7.54% return for the quarter placing it in the 18 percentile of the Callan Core Plus Mutual Funds group for the quarter and in the 76 percentile for the last year.
- Metropolitan West Fund's portfolio outperformed the Blmbg:Aggregate by 0.72% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.54%.

Performance vs Callan Core Plus Mutual Funds (Institutional Net)

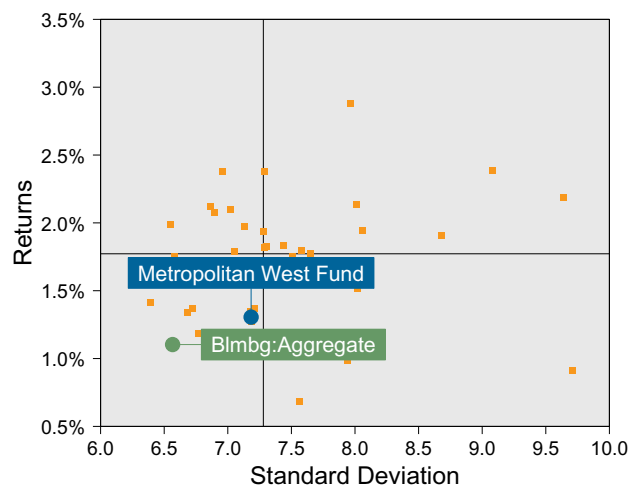


10th Percentile	7.67	4.59	7.72	(2.23)	2.38	2.34	2.59
25th Percentile	7.38	4.20	7.26	(2.65)	1.99	2.10	2.12
Median	7.08	3.89	6.56	(3.10)	1.77	1.81	1.83
75th Percentile	6.77	3.56	6.13	(3.35)	1.37	1.44	1.54
90th Percentile	6.62	2.88	5.58	(3.68)	1.18	1.31	1.42
Metropolitan West Fund	7.54	3.76	6.07	(3.64)	1.31	1.46	1.45
Blmbg:Aggregate	6.82	3.37	5.53	(3.31)	1.10	1.29	1.36

Relative Return vs Blmbg:Aggregate



Callan Core Plus Mutual Funds (Institutional Net) Annualized Five Year Risk vs Return



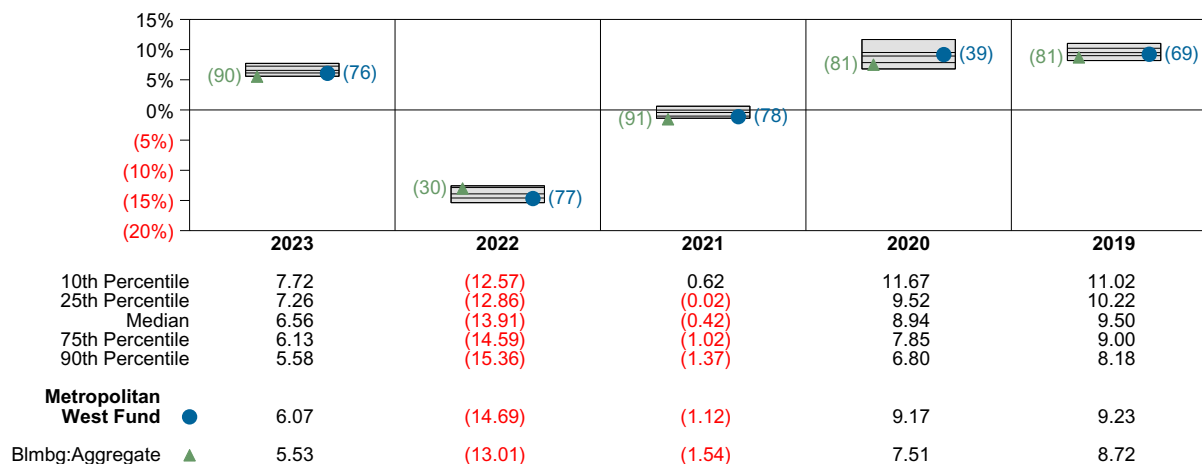
Metropolitan West Fund

Return Analysis Summary

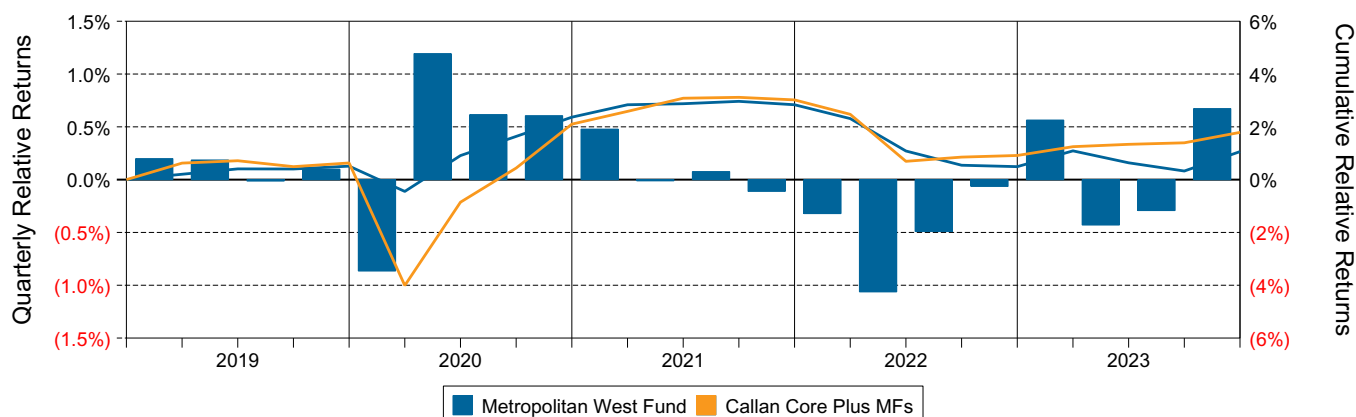
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

Performance vs Callan Core Plus Mutual Funds (Institutional Net)



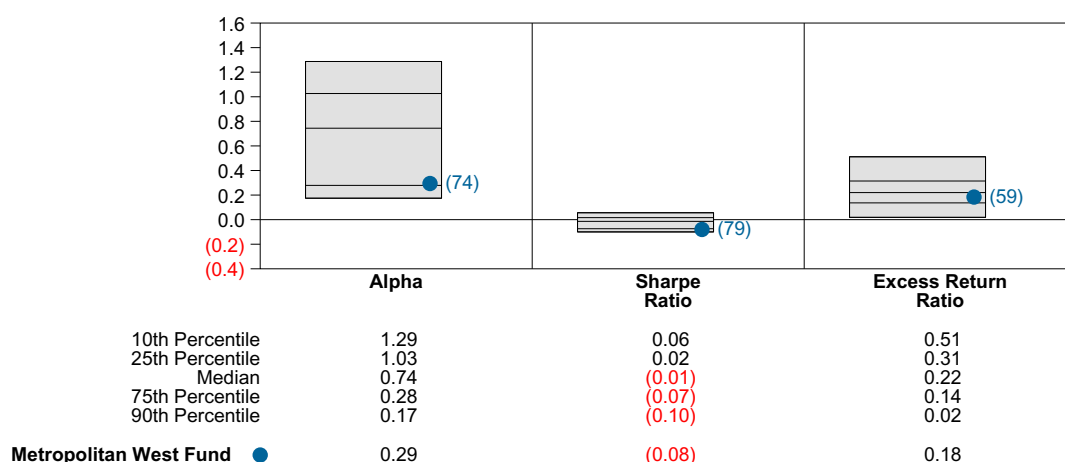
Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate

Rankings Against Callan Core Plus Mutual Funds (Institutional Net)

Five Years Ended December 31, 2023



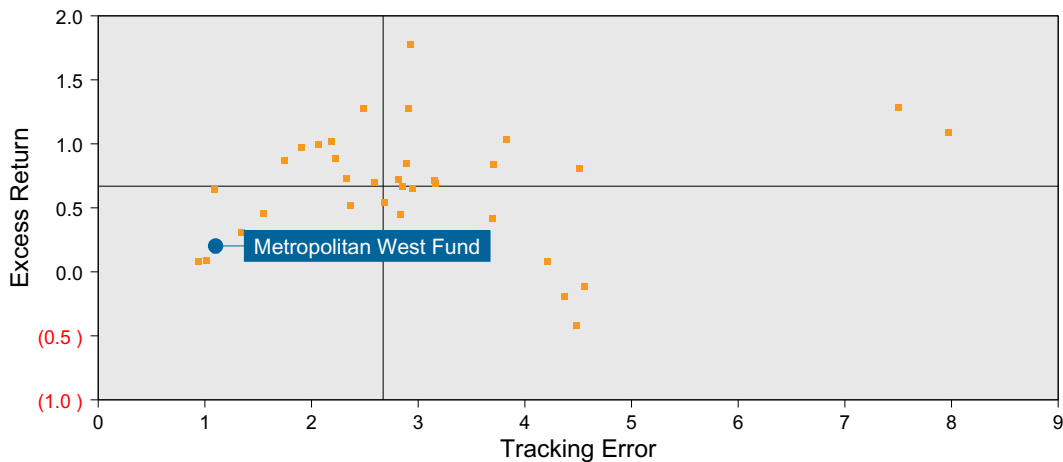
Metropolitan West Fund

Risk Analysis Summary

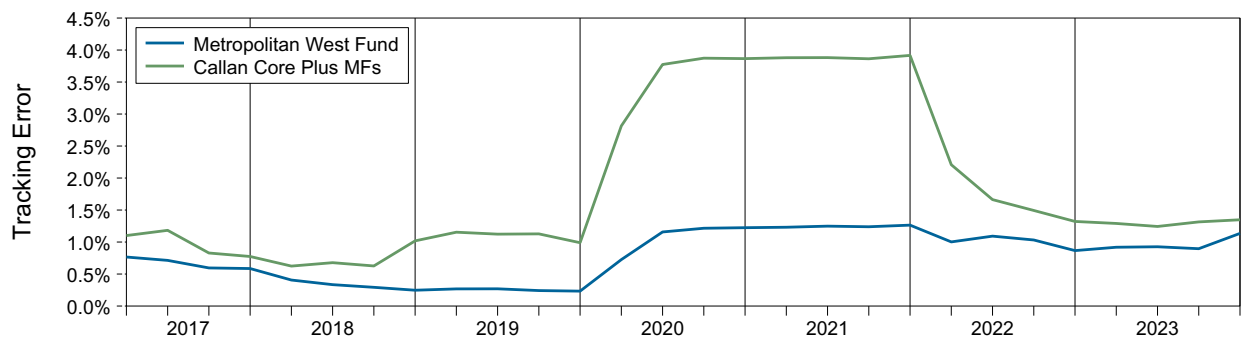
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

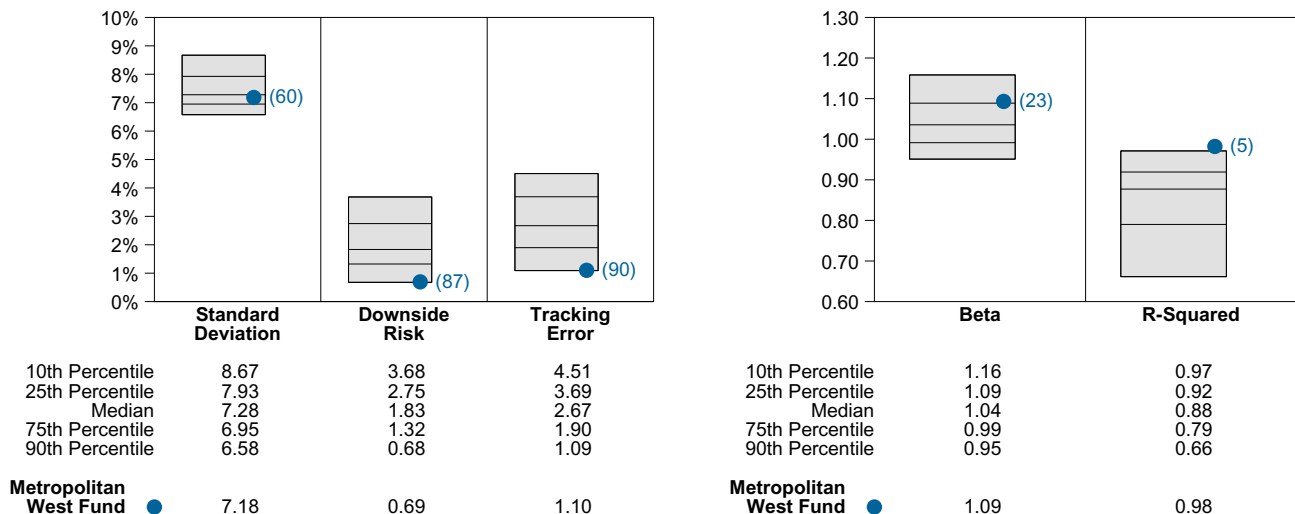
Risk Analysis vs Callan Core Plus Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



Rolling 8 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Callan Core Plus Mutual Funds (Institutional Net) Five Years Ended December 31, 2023

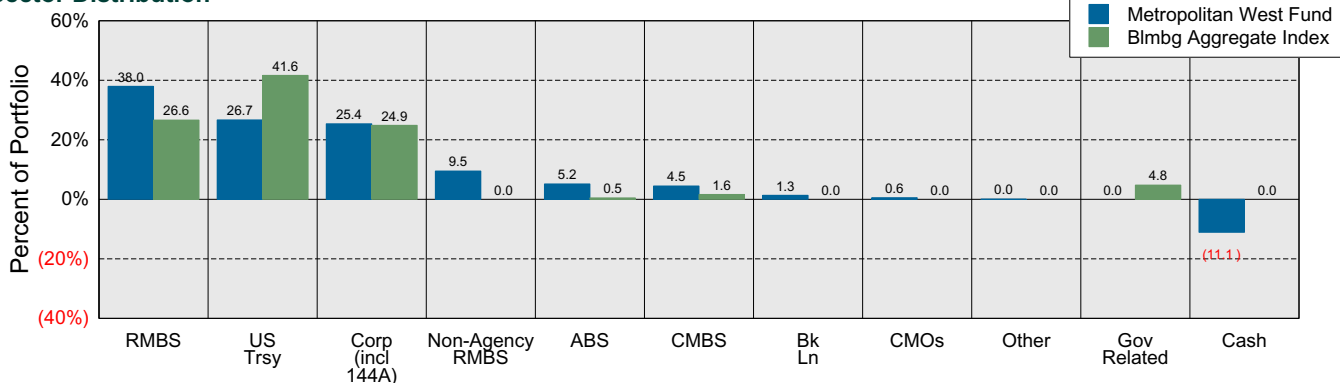


Metropolitan West Fund Portfolio Characteristics Summary As of December 31, 2023

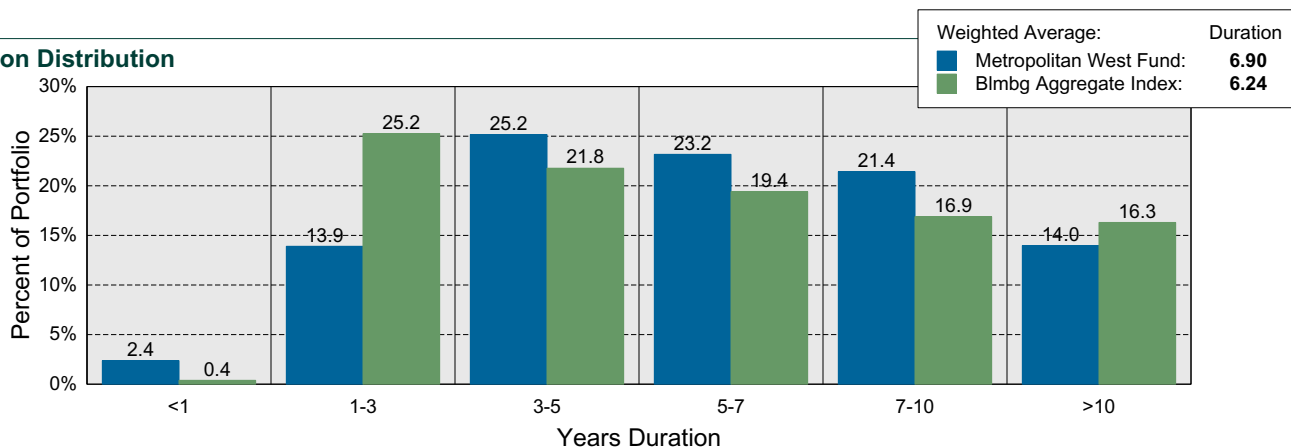
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

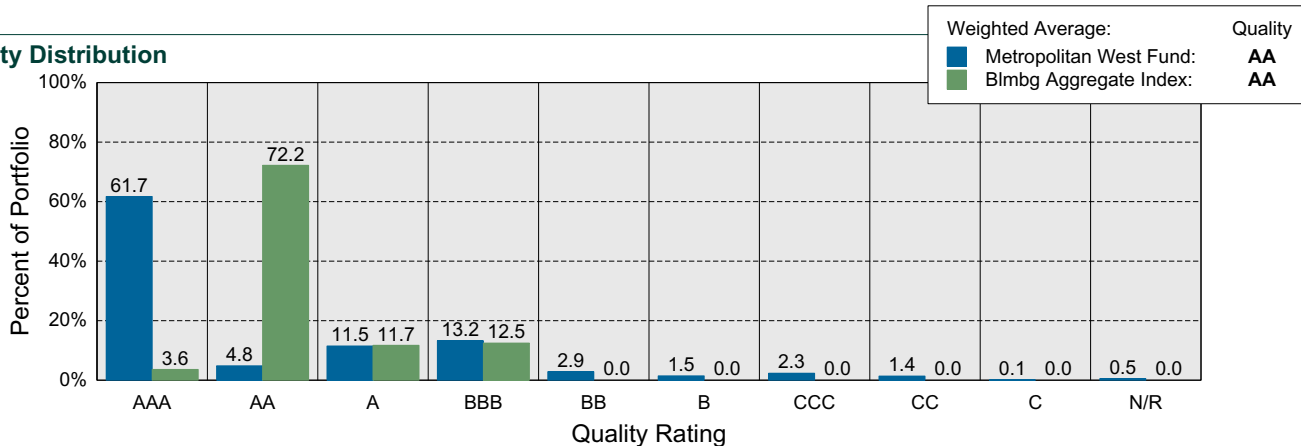
Sector Distribution



Duration Distribution



Quality Distribution



PIMCO All Asset Fund Period Ended December 31, 2023

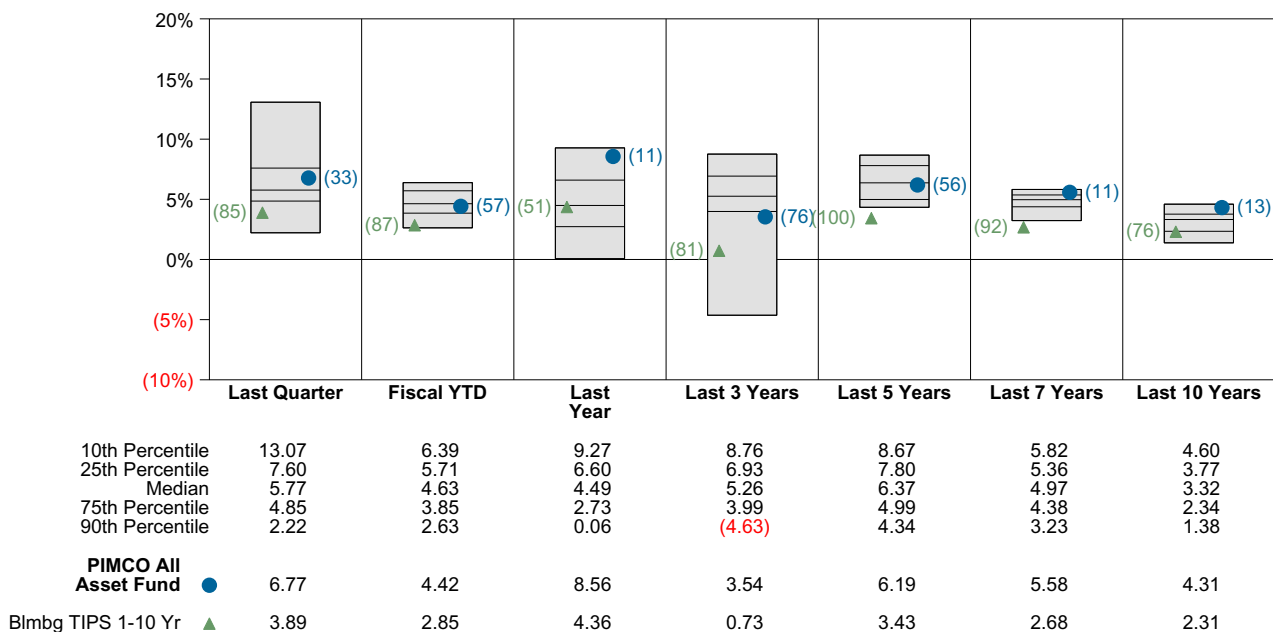
Investment Philosophy

The PIMCO All Asset Strategy is a real return-oriented, global tactical asset allocation strategy that seeks to provide three concurrent investor benefits: inflation protection, diversification and compelling long-term returns. Specifically, the All Asset Strategy has a primary benchmark of the Bloomberg Barclays Capital U.S. TIPS 1-10 Year Index and a secondary benchmark of the Consumer Price Index (CPI)+5%. PIMCO believes that this secondary benchmark reflects the Funds long-term investment strategy more accurately than the Bloomberg Barclays Capital U.S. TIPS 1-10 Year Index. As a result, the Strategy may be an attractive solution for investors seeking returns that track and meaningfully exceed inflation in a manner that also helps diversify equity risk. The first full quarter of actual performance is the first quarter of 2011, prior returns reflect manager reported composite performance.

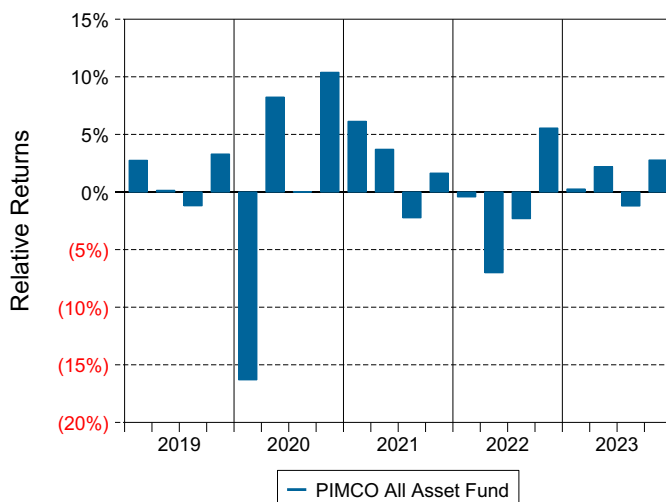
Quarterly Summary and Highlights

- PIMCO All Asset Fund's portfolio posted a 6.77% return for the quarter placing it in the 33 percentile of the Callan Real Assets Mutual Funds group for the quarter and in the 11 percentile for the last year.
- PIMCO All Asset Fund's portfolio outperformed the Blmbg TIPS 1-10 Yr by 2.88% for the quarter and outperformed the Blmbg TIPS 1-10 Yr for the year by 4.20%.

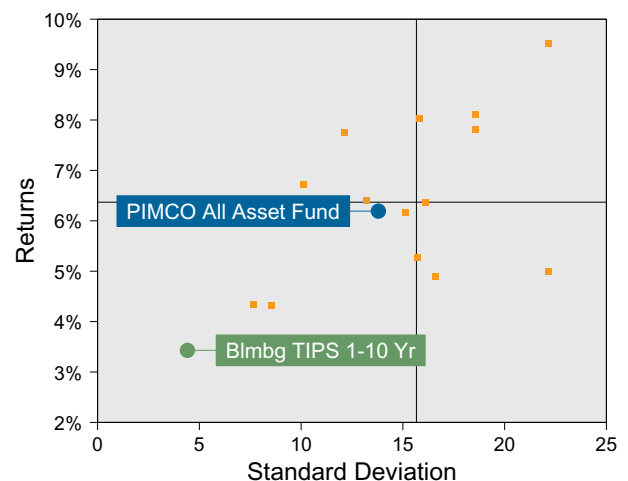
Performance vs Callan Real Assets Mutual Funds (Institutional Net)



Relative Return vs Blmbg TIPS 1-10 Yr



Callan Real Assets Mutual Funds (Institutional Net) Annualized Five Year Risk vs Return

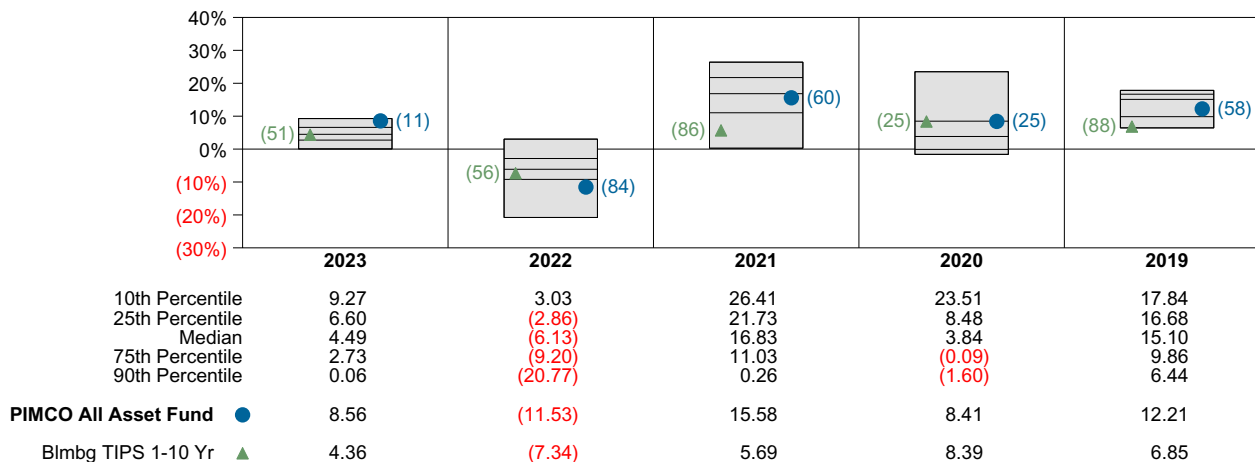


PIMCO All Asset Fund Return Analysis Summary

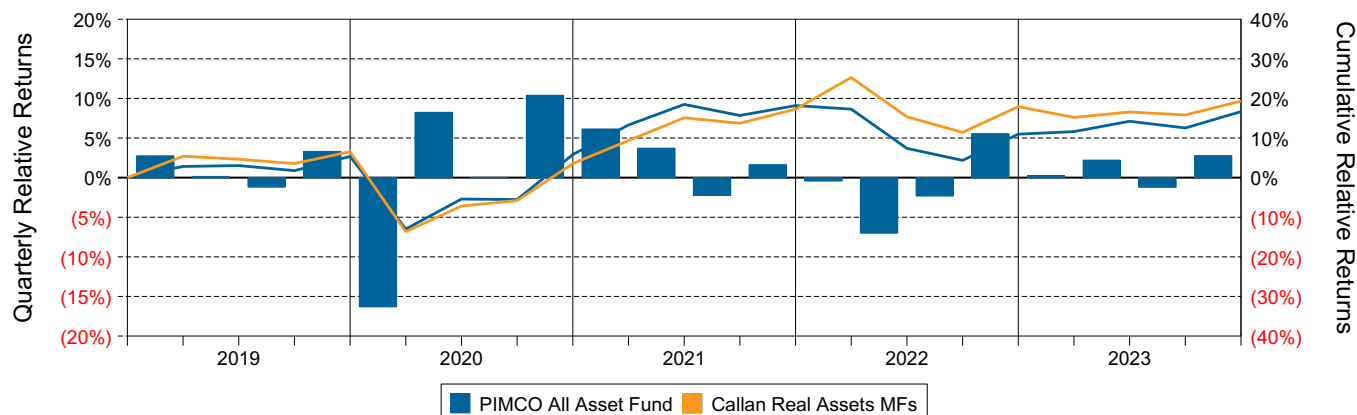
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

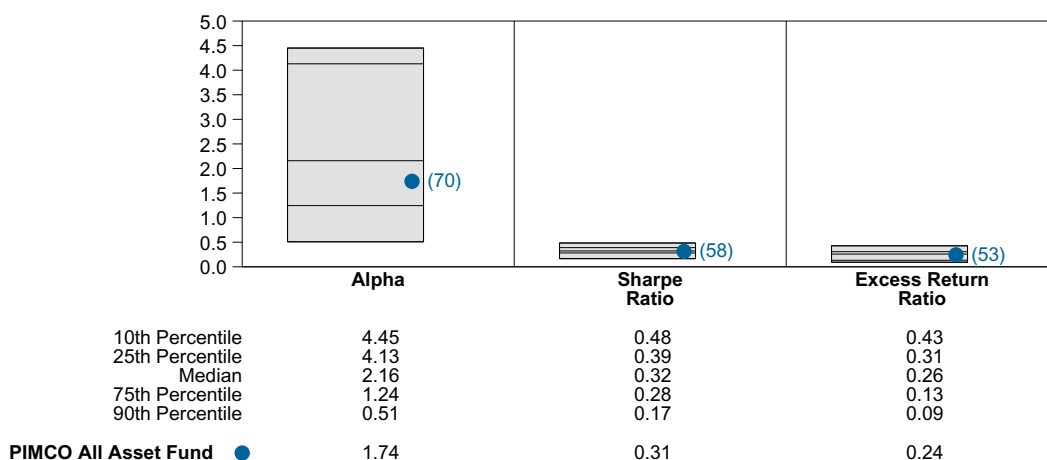
Performance vs Callan Real Assets Mutual Funds (Institutional Net)



Cumulative and Quarterly Relative Returns vs Bloomberg TIPS 1-10 Yr



Risk Adjusted Return Measures vs Bloomberg TIPS 1-10 Yr Rankings Against Callan Real Assets Mutual Funds (Institutional Net) Five Years Ended December 31, 2023

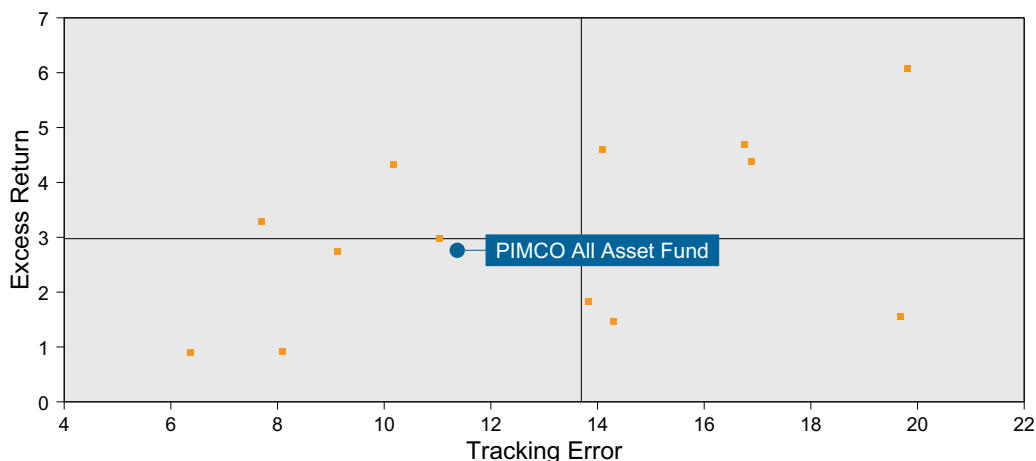


PIMCO All Asset Fund Risk Analysis Summary

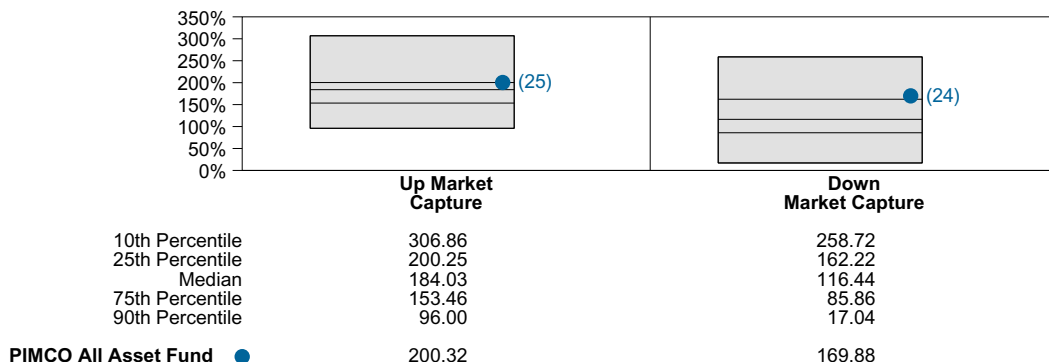
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

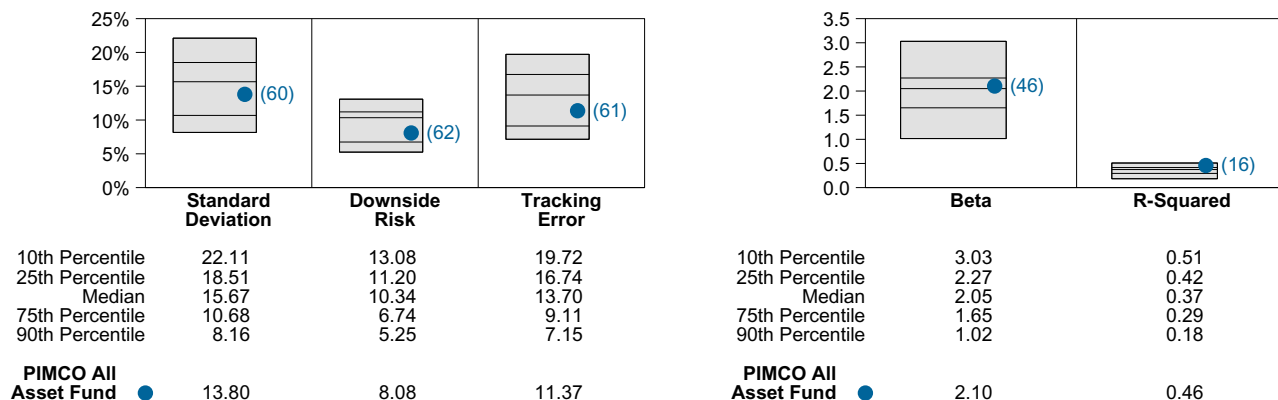
Risk Analysis vs Callan Real Assets Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



Market Capture vs Bloomberg TIPS 1-10 Yr Rankings Against Callan Real Assets Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



Risk Statistics Rankings vs Bloomberg TIPS 1-10 Yr Rankings Against Callan Real Assets Mutual Funds (Institutional Net) Five Years Ended December 31, 2023



Quarterly Highlights

The Callan Institute provides research to update clients on the latest industry trends, carefully structured educational programs to enhance the knowledge of industry professionals, and events to enhance dialogue among investing professionals. Visit www.callan.com/research-library to see all of our publications, and www.callan.com/blog to view our blog. For more information contact Barb Gerraty at 415-274-3093 / institute@callan.com.

New Research from Callan's Experts

[2023 Nuclear Decommissioning Funding Study](#) | Callan's annual study offers key insights into the status of nuclear decommissioning funding to make peer comparisons more accurate and relevant.

[2023 Investment Management Fee Study](#) | The purpose of the study is to provide a detailed analysis on fee levels and trends across multiple asset classes and mandate sizes, for both active and passive management.

[2023 Asset Manager ESG Study](#) | Callan's inaugural ESG Study analyzes responses to various environmental, social, and governance questions in Callan's manager database by firm size, asset class, country of domicile, and ownership structure.

Webinar Replays

[Research Cafe: Office-to-Residential Conversions](#) | During this interview, Callan specialists Aaron Quach and Christine Mays of Callan's Real Assets Consulting Group discuss office-to-residential conversions.

[Webinar: Callan's Retirement Conundrum](#) | During this discussion, representatives from Callan and October Three (a human resource and actuarial consulting firm) discuss how a small provision in SECURE 2.0 has paved the way for cash-balance pension plans to meet retirement income needs.

Blog Highlights

[How Your Public DB Plan's Returns Compare](#) | This 3Q23 update to our quarterly series of blog posts provides context for public defined benefit (DB) plans about their returns over time.

[ILS on Pace for Banner Year in 2023](#) | When reviewing hedge fund portfolios, those investing in insurance-linked securities (ILS) are finding that this oft-overlooked strategy is buoying performance.

Quarterly Updates

[Private Equity Update, 3Q23](#) | A high-level summary of private equity activity in the quarter through all the investment stages

[Active vs. Passive Charts, 3Q23](#) | A comparison of active managers alongside relevant benchmarks over the long term

[Market Pulse, 3Q23](#) | A quarterly market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data on the capital markets

[Capital Markets Review, 3Q23](#) | Analysis and a broad overview of the economy and public and private markets activity each quarter across a wide range of asset classes

[Hedge Fund Update, 3Q23](#) | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

[Real Assets Update, 3Q23](#) | A summary of market activity for real assets and private real estate during the quarter

[Private Credit Update, 3Q23](#) | A review of performance and fund-raising activity for private credit during the quarter

[Callan Target Date Index™, 3Q23](#) | Tracks the performance and asset allocation of available target date mutual funds and CITs

[Callan DC Index™, 3Q23](#) | Provides underlying fund performance, asset allocation, and cash flows of more than 100 large defined contribution plans representing approximately \$400 billion in assets

Events

A complete list of all upcoming events can be found on our website: callan.com/events-education.

Please mark your calendar and look forward to upcoming invitations:

2024 National Conference

April 8-10, 2024 – San Francisco

June Regional Workshops

June 25, 2024 – Atlanta

June 27, 2024 – San Francisco

For more information about events, please contact Barb Gerraty: 415-274-3093 / gerraty@callan.com

Education: By the Numbers

50+

Unique pieces of research the Institute generates each year

525

Attendees (on average) of the Institute's annual National Conference

4,845

Total attendees of the "Callan College" since 1994

Education

Founded in 1994, the "Callan College" offers educational sessions for industry professionals involved in the investment decision-making process.

Alternative Investments

Feb. 21-22, 2024 – Virtual

Alternative investments like private equity, hedge funds, and real estate can play a key role in any portfolio. In our "Callan College" on Alternatives, you will learn about the importance of allocations to alternatives, and how to consider integrating, evaluating, and monitoring them.

Introduction to Investments

March 19-21, 2024 – Virtual

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities.

Our virtual sessions are held over two to three days with virtual modules of 2.5-3 hours, while in-person sessions run either a full day or one-and-a-half days. Virtual tuition is \$950 per person and includes instruction and digital materials. In-person tuition is \$2,350 per person and includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Additional information including registration can be found at: callan.com/events-education



"Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialogue to raise the bar across the industry."

Greg Allen, CEO and Chief Research Officer

List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry, and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor, and disclose potential conflicts on an ongoing basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database, or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g., attending an educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group, and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance department.

Manager Name

abrdn
ABS Global Investments
Acadian Asset Management LLC
Adams Street Partners, LLC
Aegon Asset Management
AEW Capital Management, L.P.
AllianceBernstein
Allspring Global Investments, LLC
Altrinsic Global Advisors, LLC
American Century Investments
Amundi US, Inc.
Antares Capital LP
Apollo Global Management, Inc.
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Atlanta Capital Management Co., LLC

Manager Name

AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Barings LLC
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
Belle Haven Investments L.P.
BentallGreenOak
Beutel, Goodman & Company Ltd.
BlackRock
Blackstone Group (The)
Blue Owl Capital, Inc.
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brookfield Asset Management Inc.
Brown Brothers Harriman & Company

Manager Name
Brown Investment Advisory & Trust Company
Capital Group
CastleArk Management, LLC
CIBC Asset Management Inc.
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Threadneedle Investments NA
Comvest Partners
Covenant Capital Group
CQS
Credit Suisse Asset Management, LLC
D.E. Shaw Investment Management, LLC
DePrince, Race & Zollo, Inc.
Diamond Hill Capital Management, Inc.
Dimensional Fund Advisors L.P.
Doubleline
DWS
EARNEST Partners, LLC
Fayez Sarofim & Company
Federated Hermes, Inc.
Fidelity Institutional Asset Management
Fiera Capital Corporation
First Eagle Investment Management, LLC
First Hawaiian Bank Wealth Management Division
First Sentier Investors
Fisher Investments
Franklin Templeton
Fred Alger Management, LLC
GAM (USA) Inc.
GlobeFlex Capital, L.P.
GoldenTree Asset Management, LP
Goldman Sachs
Golub Capital
Guggenheim Investments
GW&K Investment Management
Harbor Capital Advisors
Harding Loevner LP
Hardman Johnston Global Advisors LLC
Heitman LLC
Hotchkis & Wiley Capital Management, LLC

Manager Name
Impax Asset Management LLC
Income Research + Management
Insight Investment
Intech Investment Management LLC
Intercontinental Real Estate Corporation
Invesco
J.P. Morgan
Janus
Jennison Associates LLC
Jobs Peak Advisors
KeyCorp
Kohlberg Kravis Roberts & Co. L.P. (KKR)
Lazard Asset Management
LGIM America
Lincoln National Corporation
Longview Partners
Loomis, Sayles & Company, L.P.
Lord, Abbett & Company
LSV Asset Management
Mackay Shields LLC
Macquarie Asset Management (MAM)
Manulife Investment Management
Marathon Asset Management, L.P.
MetLife Investment Management
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
MUFG Union Bank, N.A.
Natixis Investment Managers
Neuberger Berman
Newton Investment Management
Northern Trust Asset Management
Nuveen
Oaktree Capital Management, L.P.
P/E Investments
Pacific Investment Management Company
Pantheon Ventures
Parametric Portfolio Associates LLC

Manager Name

Partners Group (USA) Inc.

Pathway Capital Management, LP

PFM Asset Management LLC

PGIM DC Solutions

PGIM Fixed Income

PGIM Quantitative Solutions LLC

Pictet Asset Management

PineBridge Investments

Polen Capital Management, LLC

Pretium Partners, LLC

Principal Asset Management

Putnam Investments, LLC

Raymond James Investment Management

RBC Global Asset Management

Regions Financial Corporation

Robeco Institutional Asset Management, US Inc.

Rockpoint

S&P Dow Jones Indices

Sands Capital Management

Schroder Investment Management North America Inc.

Segall Bryant & Hamill

SLC Management

Smith Graham & Co. Investment Advisors, L.P.

State Street Global Advisors

Manager Name

Strategic Global Advisors, LLC

T. Rowe Price Associates, Inc.

TD Global Investment Solutions – TD Epoch

The Carlyle Group

The TCW Group, Inc.

Thompson, Siegel & Walmsley LLC

Top Tier Capital Partners

Tri-Star Trust Bank

Turning Rock Partners, L.P.

UBS Asset Management

VanEck

Versus Capital Group

Victory Capital Management Inc.

Virtus Investment Partners, Inc.

Vontobel Asset Management

Voya

Walter Scott & Partners Limited

WCM Investment Management

Wellington Management Company, LLP

Western Asset Management Company LLC

Westfield Capital Management Company, LP

William Blair & Company LLC

Xponance, Inc.

Important Disclosures

Information contained in this document may include confidential, trade secret and/or proprietary information of Callan and the client. It is incumbent upon the user to maintain such information in strict confidence. Neither this document nor any specific information contained herein is to be used other than by the intended recipient for its intended purpose.

The content of this document is particular to the client and should not be relied upon by any other individual or entity. There can be no assurance that the performance of any account or investment will be comparable to the performance information presented in this document.

Certain information herein has been compiled by Callan from a variety of sources believed to be reliable but for which Callan has not necessarily verified for accuracy or completeness. Information contained herein may not be current. Callan has no obligation to bring current the information contained herein.

Callan's performance measurement service reports returns for a portfolio and compares them against relevant benchmarks and peer groups, as appropriate; such service may also report on historical portfolio holdings, comparing them to holdings of relevant benchmarks and peer groups, as appropriate ("portfolio holdings analysis"). To the extent that Callan's performance measurement service includes portfolio holdings analysis, Callan relies entirely on holdings data provided by third parties including custodian banks, record keepers and investment managers. Callan reports the performance and holdings data as received and does not attempt to audit or verify the holdings data. Callan is not responsible for the accuracy or completeness of the performance or holdings data received from third parties and such data may not have been verified for accuracy or completeness. Callan does not perform forward-looking risk analysis or guideline compliance analysis based on the performance or portfolio holdings data.

In no event should performance measurement service provided by Callan be used in the calculation, deliberation, policy determination, or any other action of the client as it pertains to determining contribution or funding amounts, timing or activity, benefit payments or distribution amounts, timing or activity, or performance-based fee amounts, timing or activity.

The content of this document may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact. The opinions expressed herein may change based upon changes in economic, market, financial and political conditions and other factors. Callan has no obligation to bring current the opinions expressed herein.

The information contained herein may include forward-looking statements regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties. Actual results may vary, perhaps materially, from the future results projected in this document. Undue reliance should not be placed on forward-looking statements.

Callan is not responsible for reviewing the risks of individual securities or the compliance/non-compliance of individual security holdings with a client's investment policy guidelines.

This document should not be construed as legal or tax advice on any matter. You should consult with legal and tax advisers before applying any of this information to your particular situation.

Reference to, or inclusion in this document of, any product, service or entity should not necessarily be construed as recommendation, approval, or endorsement or such product, service or entity by Callan. This document is provided in connection with Callan's consulting services and should not be viewed as an advertisement of Callan, or of the strategies or products discussed or referenced herein.

The issues considered and risks highlighted herein are not comprehensive and other risks may exist that the user of this document may deem material regarding the enclosed information. Please see any applicable full performance report or annual communication for other important disclosures.

Unless Callan has been specifically engaged to do so, Callan does not conduct background checks or in-depth due diligence of the operations of any investment manager search candidate or investment vehicle, as may be typically performed in an operational due diligence evaluation assignment and in no event does Callan conduct due diligence beyond what is described in its report to the client.

Any decision made on the basis of this document is sole responsibility of the client, as the intended recipient, and it is incumbent upon the client to make an independent determination of the suitability and consequences of such a decision.

Callan undertakes no obligation to update the information contained herein except as specifically requested by the client.

Past performance is no guarantee of future results.