I ♥ NORWALK

To: Norwalk Municipal Employees' Pension Board

From: Tina Fogell, Chief Human Resources Officer

Date: December 6, 2023

Subject: Pension Board Meeting – Wednesday, December 13, 2023 - Hybrid meeting

A meeting of the Norwalk Municipal Employees' Pension Board will be held on **Wednesday, December 13, 2023 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

AGENDA

1. Call to Order and Approval of Minutes from November 8, 2023
2. Public Comments
3. Approval of Pension Applications
4. TCW Metwest Fixed Income Presentation
5. Performance Review
6. Cash Raise Discussion
7. Adjourn

Next meeting scheduled for January 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
NOVEMBER 8, 2023
HYBRID MEETING

ATTENDANCE:	~~Frank Nash, Chair;~~ Richard Baskin; James Hendrickson; David Pramer; Eileen Romeo, Union Representative, NFEP
STAFF:	Chitsamay Lam, Comptroller; Tina Fogel, Chief Human Resources Officer
OTHERS:	Britton Muredoch and Kevin Schmidt, Callan ~~Associates~~LLC

CALL TO ORDER AND APPROVAL OF MINUTES FROM OCTOBER 11, 2023

Mr. ~~Nash~~ Hendrickson called the meeting to order at 6:00 p.m.

The following correction was made to the minutes:

Correct the spelling of Mr. Hendrickson's name throughout.

** **MR. HENDRICKSON MOVED TO APPROVE THE MINUTES AS CORRECTED**
** **MR. BASKIN SECONDED**
** **MOTION PASSED UNANIMOUSLY**

PUBLIC COMMENTS

There were no members of the public who wished to comment this evening.

APPROVAL OF PENSION APPLICATIONS

Ms. Fogel presented the following pension application as contained in the agenda packet:

Name	Years of Service	Type of Pension	Option Selected
Clarence Joseph	23 years, 10 months	Regular	Standard

** **MR. HENDRICKSON MOVED TO APPROVE THE PENSION APPLICATION AS PRESENTED**
** **MR. PRAEMER SECONDED**
** **MOTION PASSED UNANIMOUSLY**

PERFORMANCE REVIEW

Mr. ~~Schmidt~~ Murdoch presented the performance review as of 9/30/23 and fielded questions from the Board.

FIXED INCOME DISCUSSION

Mr. ~~Murdock~~ Schmidt presented the fixed income review and fielded questions from the Board. ~~Next month, they will hear from TWC.~~ Callan and the Board discussed the pros and cons of shortening the duration of the fixed income portfolio. It was agreed that TCW will provide a portfolio review at the next meeting.

Mr. Schmidt noted that the asset allocation was presented in the spring and asked if the Board would want to ~~see it re-run~~review it again in 2024 ~~next year~~. ~~He asked if it would make sense to go through the exercise and find a long term plan. He said the discussion should be around the investment policy, given that Blackstone was terminated and the 4% needs to go somewhere. They can visit this early next year.~~

APPROVAL OF 2024 SCHEDULE OF MEETINGS

The 2024 schedule of meetings was approved as presented.

ADJOURN

There was no further business and the meeting was unanimously adjourned at 7:15 p.m.

Respectfully submitted,

Rosemarie Lombardi
Telesco Secretarial Service

APPROVAL OF PENSION APPLICATIONS

MEETING OF: 12/13/2023

Name	Years of Service	Type of Pension	Option Selected
Josephine Cegan Board of Education Budget Coordinator Commencement Date:	9 Years, 5 Months 10/16/2023	Vested	Option III
Ellen Grady Board of Education Secretary 1 Commencement Date:	18 Years, 3 Months 11/25/2023	Regular	Option I
James Finch Management & Budgets Dir of Man & Budgets Commencement Date:	5 Years 12/19/2023	Vested	Option II
Herman Naring, Jr. Fire Department Fire Dispatcher Commencement Date:	16 Years, 9 Months 1/2/2024	Vested	Option II

I♥NORWALK

To: Norwalk Municipal Employees' Pension Board

From: Tina Fogell, Chief Human Resources Officer

Date: December 6, 2023

Subject: OPEB Committee Meeting – Wednesday, December 13, 2023 – Hybrid meeting

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A meeting of the Norwalk Municipal Employees' Pension Board's OPEB Committee will be held on **Wednesday, December 13, 2023 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

AGENDA

1. Call to Order and Approval of Minutes from September 13, 2023
2. Performance Review
3. 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
MUNICIPAL EMPLOYEES' PENSION BOARD
OPEB COMMITTEE
SEPTEMBER 13, 2023
HYBRID MEETING

ATTENDANCE:	Frank Nash, Chair; Richard Baskin, Henry Dachowitz, Chief Financial Officer; James Hendrickson, Chitsimay Lam, Comptroller; Charlie Pirro, Dave Pramer; Eileen Romeo
STAFF:	Tina Fogell, Chief Human Resource Officer
OTHERS:	Britton Murdoch and Kevin Schmidt, Callan LLC

CALL TO ORDER AND APPROVAL OF MINUTES FROM JUNE 14, 2023

Mr. Nash called the meeting to order at 7:58 p.m.

The minutes were moved and seconded to unanimously approve them as submitted.

PERFORMANCE REVIEW

Mr. Schmidt reviewed the OPEB performance and said the fund outperformed the benchmark. Ms. Lam said they estimate they pay out $1 million each month.

ADJOURN

There was no further business, and the meeting was unanimously adjourned at 8:00 p.m.

Respectfully submitted,

Rosemarie Lombardi
Telesco Secretarial Services

MetWest Total Return Bond Fund CIT

PRESENTATION TO:

Norwalk City Employees' Pension System

DECEMBER 13, 2023

Table of Contents

I. TCW Overview

TCW Overview

AS OF SEPTEMBER 30, 2023

Distinguishing Features:

- Among leading global asset management firms with more than five decades of investment experience
- Disciplined, team-managed investment processes that have been tested across market cycles
- Broad range of products and expertise across fixed income, equities, emerging markets, and alternative investments
- TCW is a signatory to the UN Principles for Responsible Investment
- High level of employee ownership of TCW
- For the ninth year in a row, TCW named "Best Places to Work in Money Management among firms with 500-999 employees" by *Pensions & Investments*, 2014-2022

Firm Facts:

- Established in 1971 in Los Angeles, California
- $202 billion under management
- Through our TCW and MetWest Fund Families, TCW manages one of the largest mutual fund complexes in the U.S. with nearly $75 billion in assets under management
- TCW staff of more than 650 individuals
- Offices in Los Angeles, New York, Boston, Chicago, London, Milan, Singapore, Hong Kong, Tokyo, and Sydney

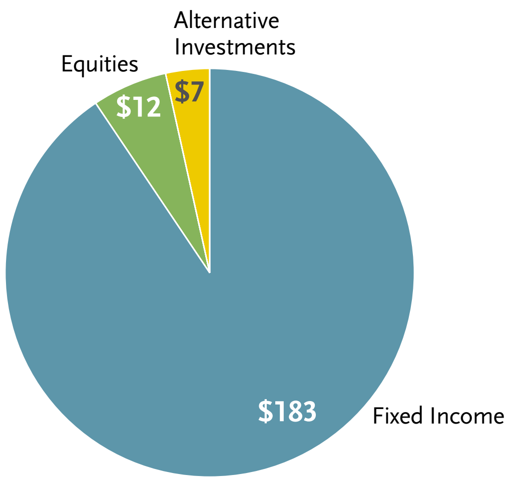
Source: TCW
Comprises the assets under management, or committed to management, of The TCW Group, Inc. and its subsidiaries.

TCW Assets Under Management

AS OF SEPTEMBER 30, 2023

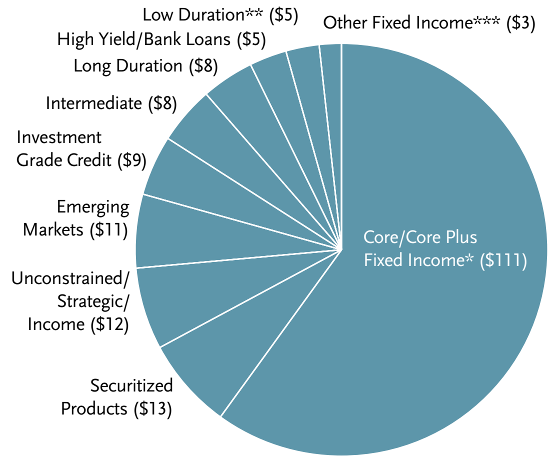
Firm AUM

$202 Billion[1]



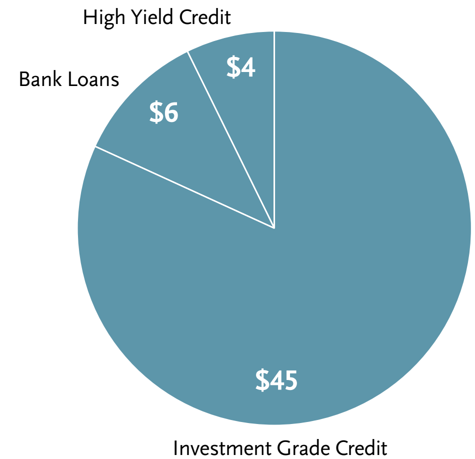
Fixed Income Assets by Strategy

$185 Billion[2]



Total Credit Assets by Security

$55 Billion



Source: TCW
Note: Totals may not reconcile due to rounding.
Comprises the assets under management, or committed to management, of The TCW Group, Inc. and its subsidiaries.
1 Includes respective allocations for multi-asset products.
2 Total invested assets by strategy includes cross-held positions and is not meant to reconcile to overall net firm AUM.
* Includes Core, Core Plus, and Opportunistic Core Plus Fixed Income.
** Includes Low Duration and Ultra Short/Cash Management.
*** Includes U.S. Government, Government/Credit, Global, and Other Fixed Income.

Fixed Income Products

Traditional

Ultra Short	Active liquidity management
Low Duration	Relative value, 1-3 year duration
Intermediate	Relative value, 2-4 year duration
Total Return	
Core	Investment grade; opportunistic, value driven
Core Plus	Value driven, up to 20% in high yield
Opportunistic Core Plus	Value driven, up to 50% in plus sectors

Securitized

Total Return MBS	Value-driven vs. MBS Index
Opportunistic MBS	Non-agency MBS focus
Securitized Opportunities	Full discretion, absolute return objective
Sustainable Securitized	Value-driven with positive ESG criteria

Corporate Credit

Investment Grade	Dedicated investment grade corporate bond portfolios
High Yield	Dedicated credit intensive process
Bank Loans/CLO	Secured, floating rate objective

Liability Driven Investments (LDI)

Long Duration	High quality vs. Long G/C or Long Credit
Overlay Strategies	Derivative-based asset/liability investing strategies

Global

Global	Invests in U.S., non-U.S. developed, and emerging market debt opportunities across sectors
Emerging Markets	Invests in sovereign, corporate and local currency emerging markets debt
Conservative Unconstrained	Invests in all sectors of the global market place, though investments with respect to high yield and emerging markets will be constrained
Global MBS Plus	Value-driven vs. Global Securitized benchmark
Global Securitized	Investment grade focused, absolute return objective
Unconstrained	Invests in all sectors of the global market place, untethered from a traditional fixed income benchmark

Other

Absolute Return	Multi-sector, absolute return fixed income
Investment Grade Credit	Multi-sector intermediate strategy focusing on investment grade corporate and securitized credit sectors
Treasury-Only	U.S. Treasuries
TIPs	Treasury Inflation Protected Securities
Secured Fixed Income	Multiple-sector, bonds backed by pledged collateral
Portable Alpha	Futures/swaps to gain beta (e.g., S&P 500 or Bloomberg Commodity Index) + fixed income alpha engine

Not all products shown are available for all investors nor in all jurisdictions.

Fixed Income Team

NOVEMBER 2023

GENERALIST PORTFOLIO MANAGERS

Bryan Whalen, Co-CIO
Laird Landmann
Stephen Kane, Co-CIO
Jerry Cudzil
Ruben Hovhannisyan

Portfolio Analytics

Milan Pfeisinger, CFA

SPECIALIST PORTFOLIO MANAGERS

Securitized

Elizabeth (Liza) Crawford
Peter Van Gelderen

Agency RMBS

Mitch Flack, PM
Pat Ahn
Jason Cheng
Gordon Li, CFA
Jae Lim, CFA
Nanlan Ye

Securitized Credit

Palak Pathak, CFA, Sr. PM

Adam August, CFA
Alexandra Crenshaw
Phillip Dominguez, CFA
Dexter Dysthe
Malea Figgins
Da-Wei Hong
Michael Hsu
Tony Lee, CFA
Madison Perry
Vincent Sokhanvari
Zhao Zhao

Credit

Brian Gelfand
Steven Purdy

Credit Trading

Tammy Karp, Sr. PM
Drew Sweeney, Sr. PM

Alex Bibi, CFA
Mike Carrion, CFA (L)
Daniel Pace, CFA
Jimmy Rong
Melicia Shen
Evan Tich

Credit Research

Ken Toshima, Sr. PM

Kim Ardoin (L)
Pedro Cardoso
Marie Choi
Nikhil Chopra
Nick Diaz
Isabella Freeman
Russel Higgins (L)
Yvonne Ho
Peter Johnson, CFA
Griffith Lee
Robert Main, CFA
Chet Malhotra
Ori Maoz
Tom Nguyen, CFA
Tania Salomon
Simon Shnayder, CFA
Joel Shpall
Ivy Thung (S)
Jesse Torrez
Michael Williams

Rates

Bret Barker
Jamie Patton

Non-U.S. Sovereign/Currency

Lawrence Rhee
Gannon Earhart

U.S. Rates

Michael Pak, CFA
Jeannie Fong

Emerging Markets Debt

Penny Foley
Dave Robbins
Alex Stanojevic

Portfolio Specialists

Anisha Goodly
Julie Diez
Valeria Mendiola

Sovereign Research

Blaise Antin
David Loevinger
Mauro Roca, PhD
Brett Rowley
Josh Rivera

Corporate Credit Research

Javier Segovia, CFA
Stephen Keck, CFA
Jeffrey Nuruki, CFA
Shant Thomasian, CFA
Chew May Tan (S)

Strategy

Local Markets
Jae Lee

External Debt and Sustainability
Chris Hays

Trading

Jason Shamaly
Justin Becker
Sherwin Chan (S)

COO – Fixed Income

Marcos Gutierrez

Sustainable Investment Group

Jamie Franco

Sherveen Abdarbashi, CFA
Michelle Avery
Tim Bastian
Nicholas Britz
Yusuf George
Lily Ghebrai
Alyssa Kocak
Rebecca Kurland
Ed Mitby, CFA
Cindy Paladines

Product Specialists / Client Services

Patrick Moore – Head

David Vick, CFA
Jeffrey Katz
Mark McNeill, CFA
Gino Nucci, CFA
Victoria Vogel, CFA
Tracy Gibson

Global Investment Risk

Andrew Xu

II. Fixed Income Investment Philosophy and Process

Fixed Income Investment Philosophy

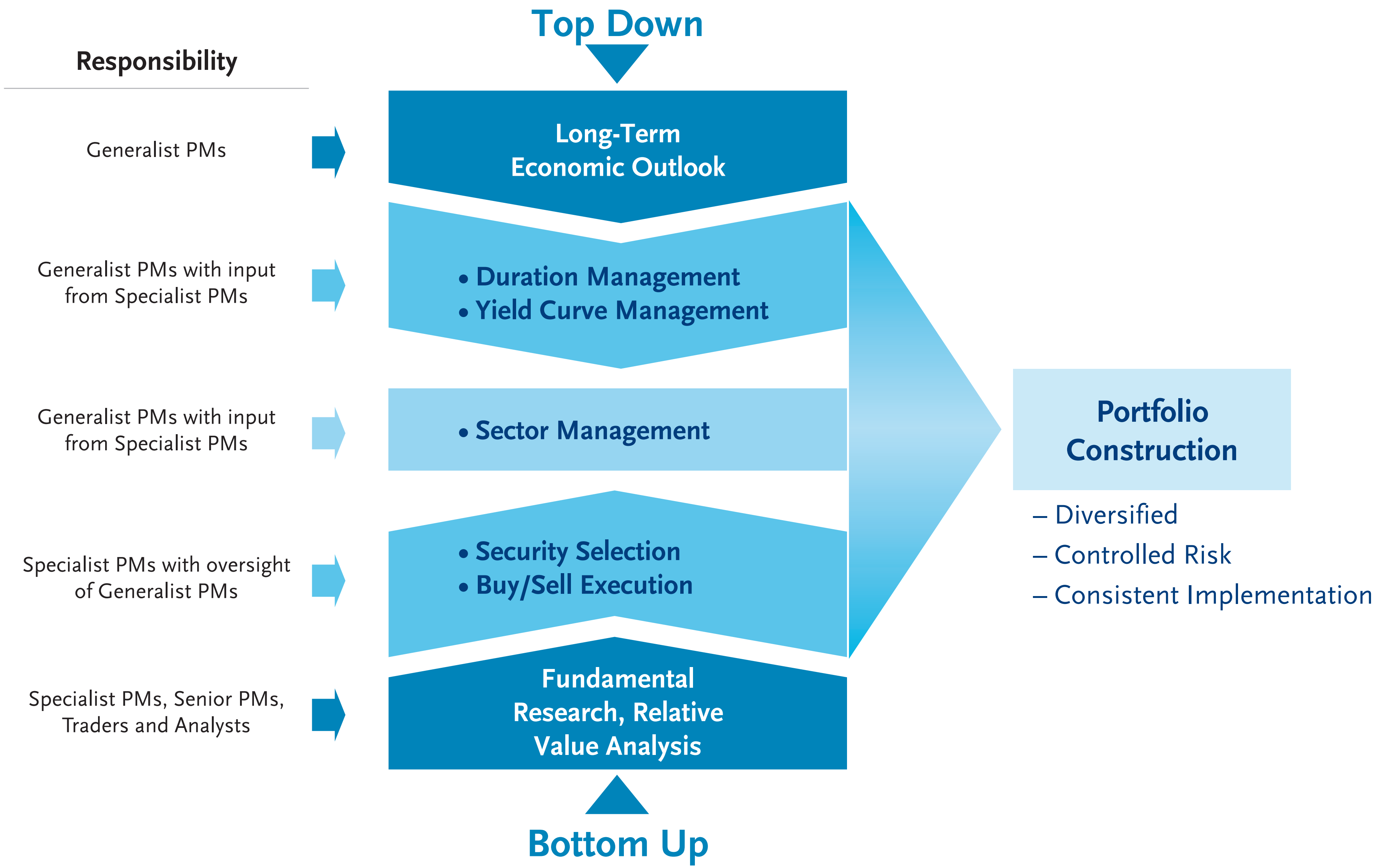
Philosophical Tenets:

- Fixed income markets/securities are mean reverting
- Technical factors can temporarily drive pricing away from fundamentals
- Persistent inefficiencies can be exploited through disciplined research and bottom-up issue selection

Outperformance May Be Achieved Through:

- Disciplined implementation of multiple fixed income strategies
- Application of fundamental value-driven research process
- Focus on sector management and issue selection

Investment Process

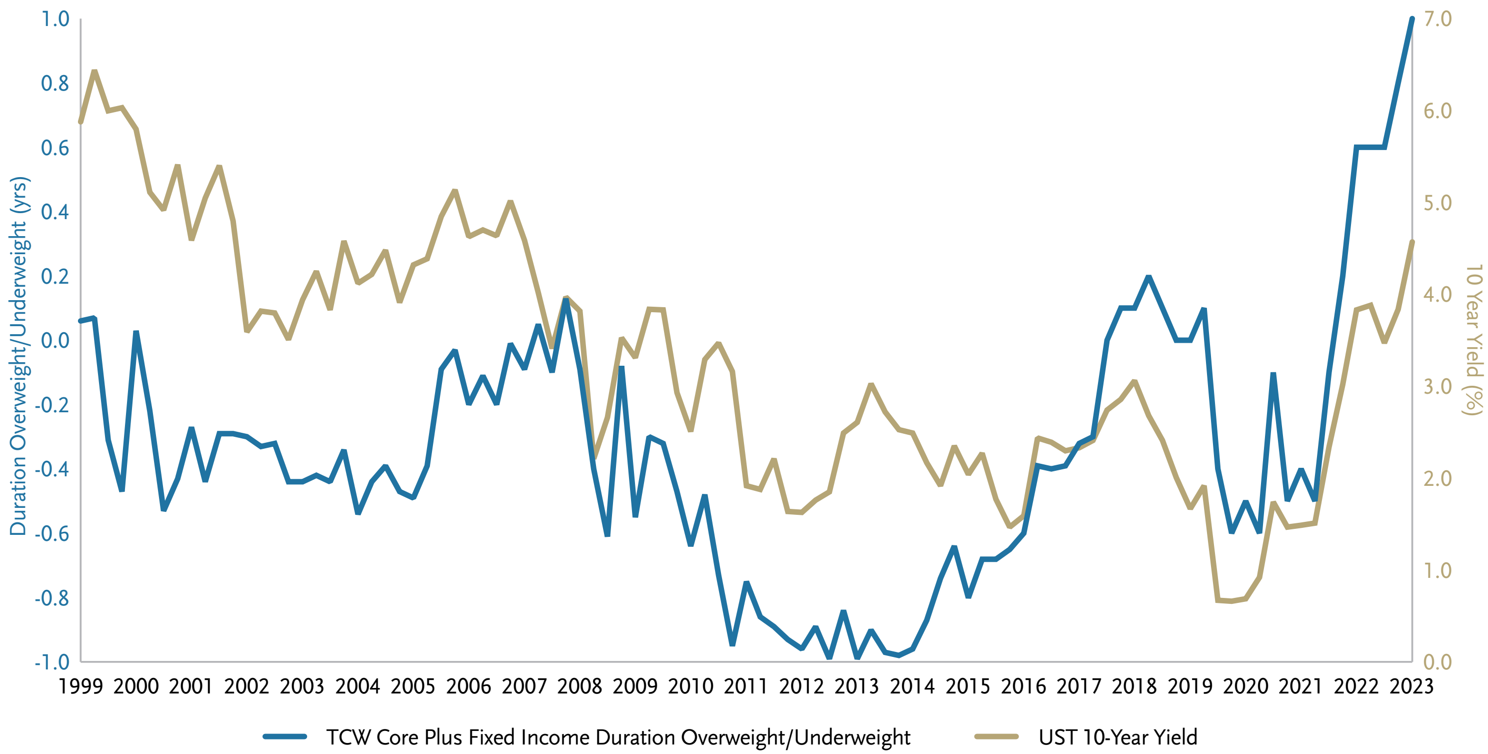


Duration Management and Historical Positioning

AS OF SEPTEMBER 30, 2023 | SUPPLEMENTAL INFORMATION

- Long-term outlook is primary driver of duration and yield curve strategy
- Dollar-cost averaging approach gradually moves duration up and down
- Duration is only one of multiple active management tools

TCW Core Plus Fixed Income Historical Duration Positioning



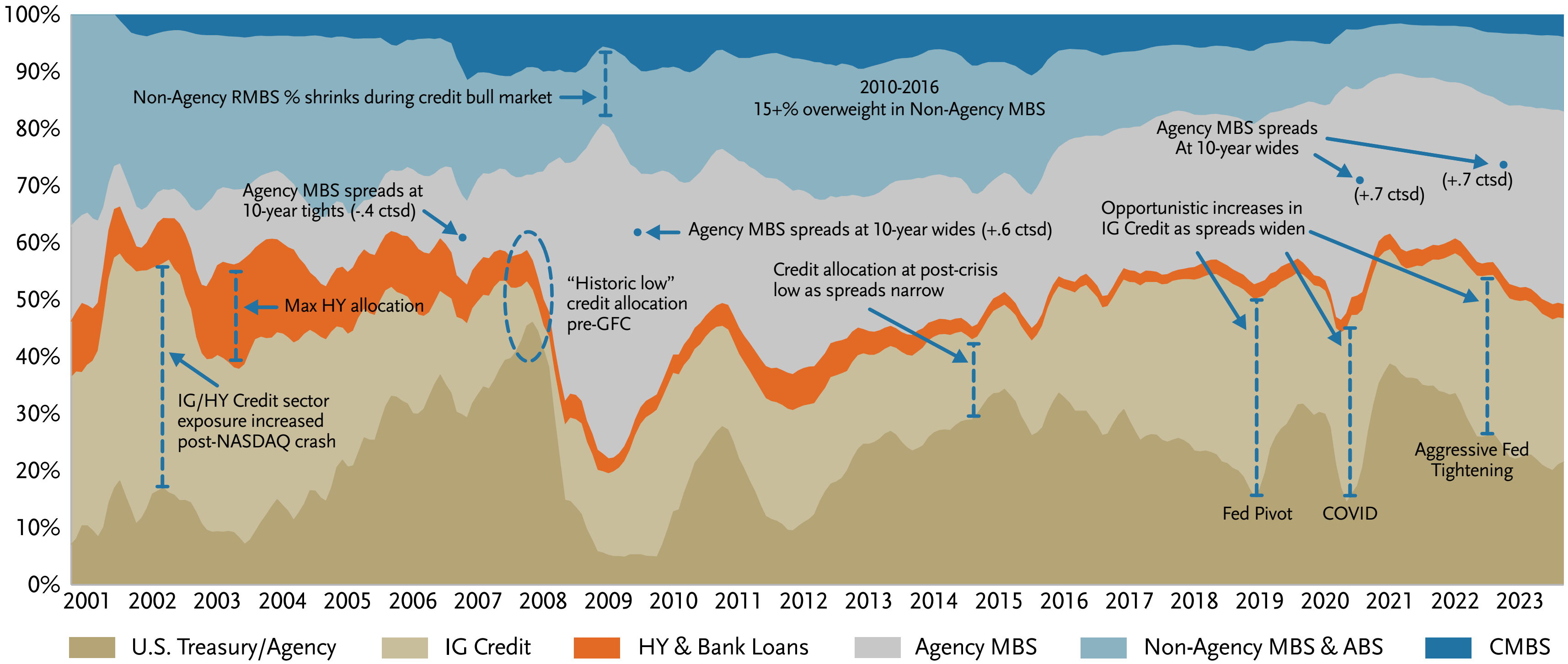
Source: TCW
Based upon the representative account.

Sector Management and Historical Positioning

AS OF SEPTEMBER 30, 2023 | SUPPLEMENTAL INFORMATION

"Investors should be greedy when others are fearful and fearful when others are greedy."
– Warren Buffett

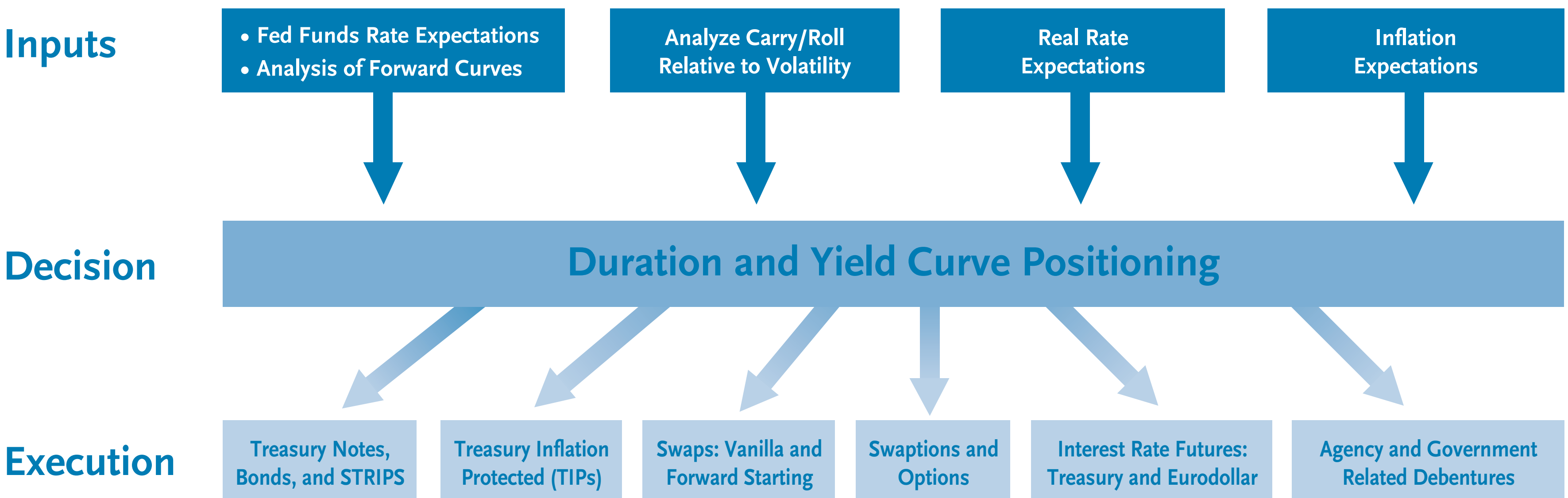
TCW Core Plus Fixed Income Historical Sector Positioning[1]



Source: TCW
1 Based upon the representative account's 3-month rolling market value of assets, excluding cash & equivalents, interest rate swaps/options, and equities.
Portfolio characteristics and holdings are subject to change at any time.

Issue Selection: Interest Rate Products

- TCW's Interest Rate Products Group is the hub amongst the specialist groups tasked with managing the liquidity, duration, convexity, and yield curve positioning across our fixed income strategies
- Market inefficiencies as a result of biases such as complexity and segmentation may result in alpha generation opportunities

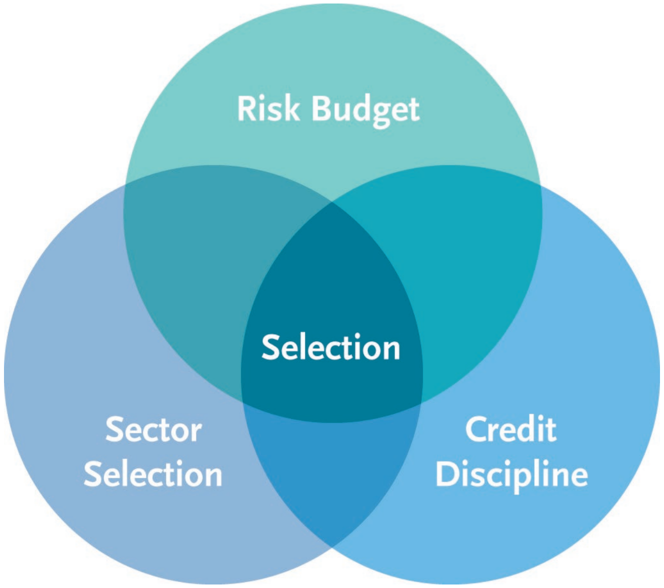


Issue Selection: Corporate Credit

- Credit discipline emphasizes protections: assets, covenants, contracts and regulation
- Top-down risk budget evolution anchored by bottom-up credit selection

- Adjust corporate exposure (basis) over the credit cycle
- Value-based discipline based on mean-reverting nature of fixed income markets

- Credit selection discipline based on downside protection
  - Collateral security
  - Covenant protection
  - Regulated industry oversight
  - Contracted or high visibility of cash flows
- Utilize full range of opportunities to gain attributes above
  - EETCs, project debt, loans, etc.



- Intensive fundamental credit analysis
  - Quality of company
    - Cash flow forecast
    - Available liquidity
  - Quality of claim
    - Capital structure analysis
    - Covenant analysis
  - Other factors
    - Ratings agency discussions
    - Management quality/ Shareholder influences
- Size affords nimble trading ability

Issue Selection: Agency Mortgage-backed Securities

- TCW utilizes proprietary tools to assess Agency MBS cash flows modeled over a range of scenarios for prepayments, interest rates, financial market volatility, and home prices.
- Proprietary loan-level analysis is essential in order to identify anomalies and pricing inefficiencies in Agency MBS market.
- Complexity and lack of homogeneity suggests that Agency MBS offers potential return advantages to knowledgeable participants.

Agency RMBS: Alpha Generation through Disciplined Portfolio Management

Portfolio Construction
- Benchmark Weightings
- Sector & Coupon Targets

Bond Surveillance
- Proprietary Security Analyzer
- Loan Level Analysis
- Slicing & Filtering

Portfolio Maintenance & Trading
- Single Account Look-through
- Multi Account Scaling

Market Monitoring
- Proprietary Tools
- Third Party Software

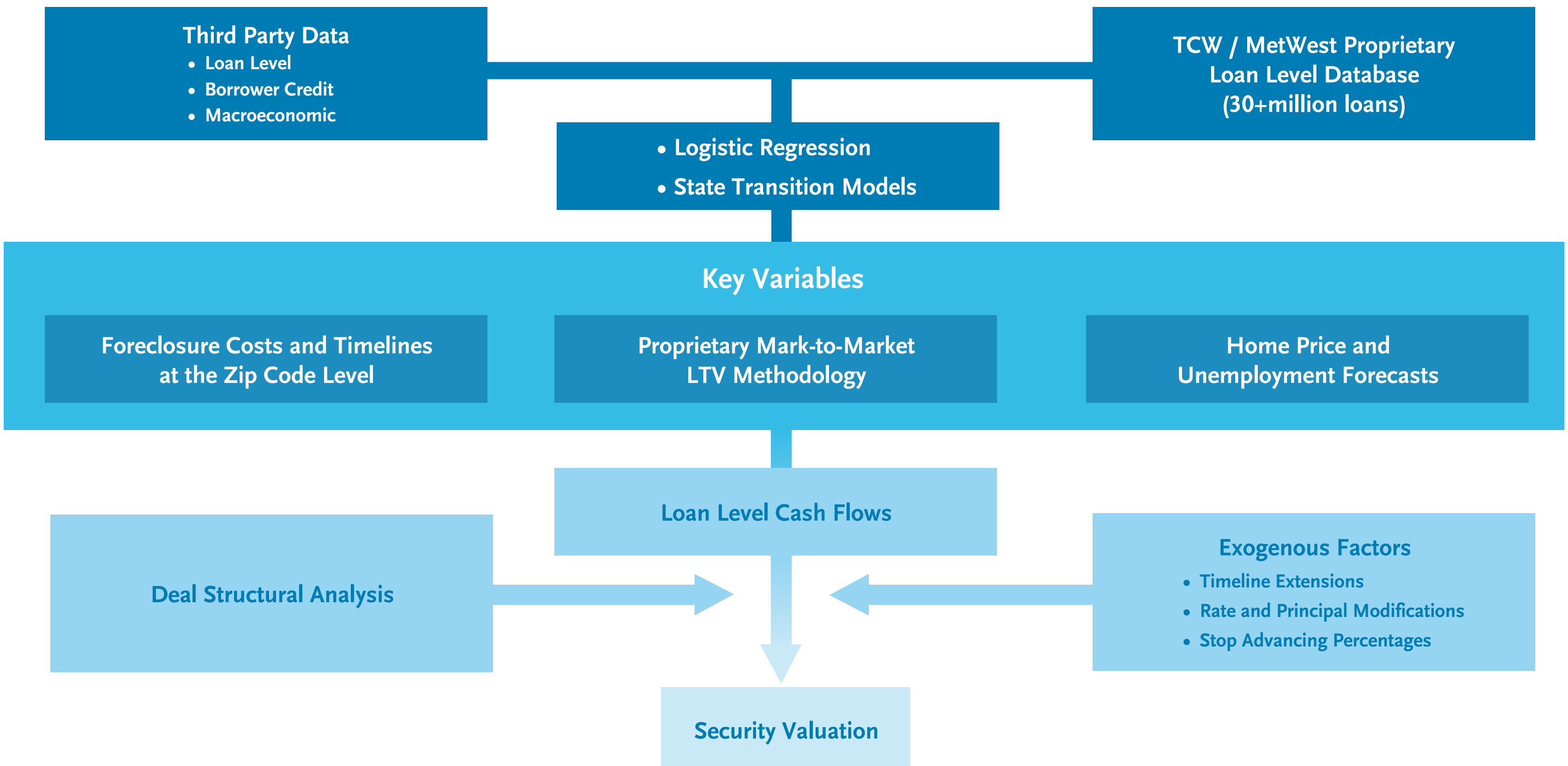
Relative Value
- Parametric Analysis
- Total Return Scenarios
- CMO Deconstruction
- OAS Analysis
- "Coupon Stack" & IO Valuation

Government Policy Analysis
- GSE Reform
- FHA/VA Policy Change
- Bank De-regulation
- Originator & Servicer Trends
- Housing Policy

Alpha Generation
Utilizing Disciplined Application of Process, Flow & Execution

Issue Selection: Securitized Credit

- TCW believes that persistent inefficiencies in the securitized credit market can be exploited through disciplined research and bottom-up issue selection
  - Cash flows among securities within the asset class have a wide range of alternative outcomes
  - Complexity in modeling cash flows and potential returns is significant, advantaging knowledgeable participants
- Below is a depiction of our Non-Agency RMBS issue selection process, which is one of many analytical methods across TCW's proprietary securitized products platform



TCW Core Plus Fixed Income Historical Alpha Attribution

	Approximate % of Historical Alpha	Notes
Issue Selection	50%	The cornerstone of our investment process and the largest component of our alpha is grounded in solid issue selection based on strong fundamental research. Risk is mitigated through 2.5% issuer concentration limits within the portfolio.
Sector	30%	Sector rotation is a key element of the TCW Core and Core Plus strategies, and as a result, sector weights can differ substantially from the index. For example, the strategies held roughly 70% in MBS in early 2009 and approximately 50% in corporates in 2003.
Yield Curve	10%	Yield curve is generally a small component of alpha, but at times, such as 2007 and 2003 when the curve was at extremes it can be a meaningful source of returns.
Duration	5%	Duration is typically a modest contributor to returns given large duration positions can add significant volatility.
Trading	5%	Diligent pursuit of best execution is persistently additive. We often capture liquidity premium as buyers in volatile markets.

Source: TCW
Portfolio characteristics and securities are subject to change at any time. Past performance is no guarantee of future results.

III. MetWest Total Return Bond Fund CIT

MetWest Total Return Bond Fund CIT Characteristics

Part of the TCW Multiple Investment Trust

AS OF NOVEMBER 30, 2023 | SHARE CLASS: D

	Fund	Bloomberg U.S. Aggregate Bond Fund Index[1]
Yield to Worst	5.44%	5.05%
Effective Duration	7.09 Year	6.19 Year
Average Maturity	8.12 Year	8.46 Year
Average Convexity	0.43 Year	0.61 Year
Average Quality	AA	AA

Sector Composition (%)

	Fund	Bloomberg U.S. Aggregate Bond Fund Index[1]
Government	32.01	42.62
IG Credit	23.97	27.01
High Yield (excl. EM)	2.96	0.00
Agency MBS	36.52	26.58
Non Agency MBS	9.00	0.00
CMBS	2.84	1.67
ABS	4.70	0.48
Emerging Markets	0.95	1.65
Cash and Equivalents	-13.02	0.00
Other[2]	0.07	0.00

Quality Composition (%)

	Fund	Bloomberg U.S. Aggregate Bond Fund Index[1]
AAA (Incl. Treasuries/Agencies)	79.63	3.67
AA	5.63	72.07
A	10.07	11.80
BBB	13.48	12.45
BB	2.38	0.00
B & Below	1.84	0.00
Cash and Equivalents	-13.02	0.00

Source: TCW

1 Bloomberg U.S. Aggregate Bond Index – A market capitalization-weighted index of investment-grade, fixed-rate debt issues, including government, corporate, asset-backed and mortgage-backed securities, with maturities of at least one year. The index is not available for direct investment; therefore its performance does not reflect a reduction for fees or expenses incurred in managing a portfolio. The securities in the index may be substantially different from those in the Fund.

2 Other can include futures, options, or swaps, if applicable.

MetWest Total Return Bond Fund CIT Performance

Part of the TCW Multiple Investment Trust

AS OF NOVEMBER 30, 2023 | SHARE CLASS: D

		Total Return								
							Annualized			
	NAV	1 M	3 M	6 M	YTD	1 Year	3 Year	5 Year	Inception to Date	Cumulative Inception to Date
MetWest Total Return Bond Fund, Class D (Net) *Inception Date 4/15/2015*	**$10.69**	**5.22%**	**0.19%**	**-1.29%**	**1.33%**	**1.33%**	**-4.93%**	**0.77%**	**0.78%**	**6.90%**
Bloomberg U.S. Aggregate Bond Index *Performance Start Date 4/1/2015*		4.53%	0.26%	-0.80%	1.64%	1.18%	-4.47%	0.71%	0.75%	6.69%

Total returns are cumulative for periods of one year or less, and annualized for periods of greater than one year. Past performance is not indicative of future results, and the principal value and investment return will fluctuate, so that you may have a gain or loss when you sell your units.

The TCW Multiple Investment Trust is a collective investment trust for the collective investment of assets of participating tax-qualified pension and profit sharing plans and related trusts, and governmental plans, as more fully described in the Declaration of Trust for the TCW Multiple Investment Trust. The TCW MetWest Total Return Bond Fund is managed by SEI Trust Company based on the investment advice of TCW Multiple Investment Trust. As a bank collective trust, TCW Multiple Investment Trust is exempt from registration as an investment company.

The Bloomberg U.S. Aggregate Index covers the dollardenominated investment-grade fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS passthrough securities (including hybrid ARMs as of April 1, 2007), asset-backed securities, and commercial mortgagebased securities. "Bloomberg®" and its indices and associated data are service marks of Bloomberg Finance L.P. and its affiliates, including Bloomberg Index Services Limited

("BISL"), the administrator of the index (collectively, "Bloomberg") and have been licensed for use for certain purposes by SEI Investments Company (SEI). Bloomberg is not affiliated with SEI Investments Company (SEI), and Bloomberg does not approve, endorse, review, or recommend this product. Bloomberg does not guarantee the timeliness, accurateness, or completeness of any data or information relating to this product.

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IV. Market Outlook
Immaculate Disinflation:
Can the Fed Get Inflation to 2% Without a Recession?

Where is the Plane Headed?

Hard Landing?

Soft Landing?

No Landing?

In This Unique Post-Pandemic Economy, a Case Can Be Made for Each Scenario

Hard Landing?

- Inverted yield curve
- Shrinking money supply
- Bank failures, tightened lending standards
- Increasing bankruptcies, defaults, delinquencies
- Manufacturing contracting
- Sticky services inflation, wage inflation

Soft Landing?

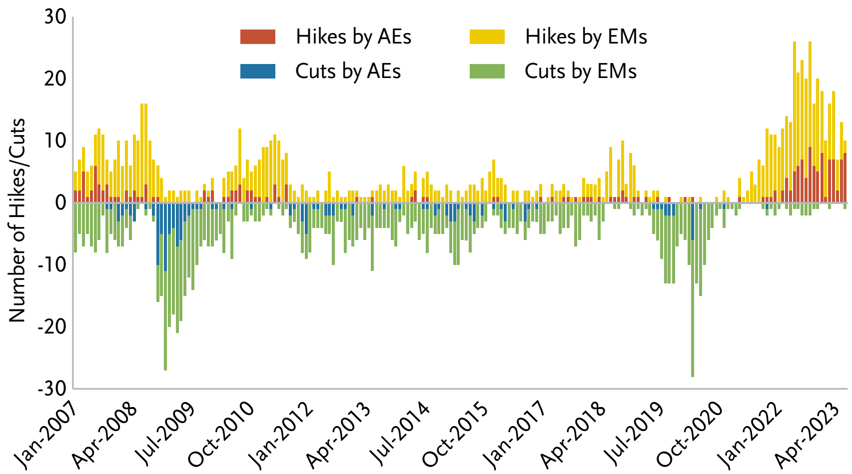
- Fed Fund Expectations (gradual ease to 4%)
- Disinflation in CPI, PPI
- Housing appears to have bottomed
- Below average credit spreads for IG, HY

No Landing?

- Labor market is robust
- Stock market is near record highs
- Healthy consumer income, spending
- Economy has already absorbed interest rate shock

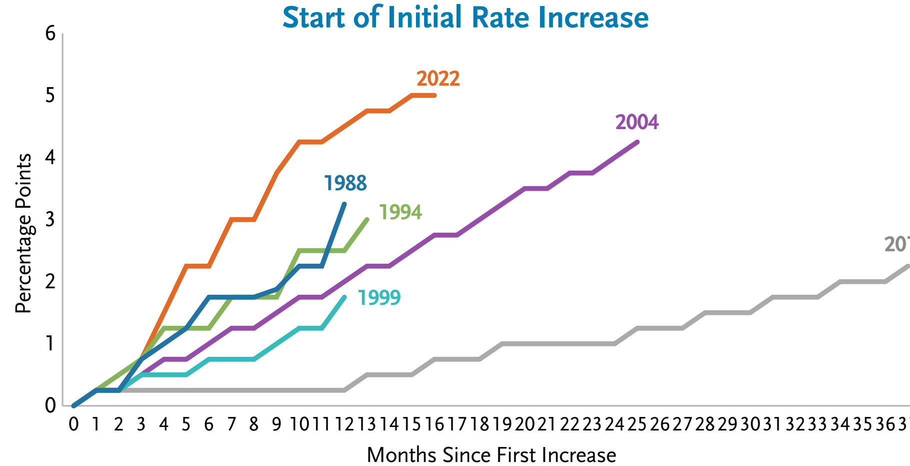
The Big Driver: Central Bank Regime Change Across the Globe to Combat Inflation

Change in Monetary Policy by Central Banks



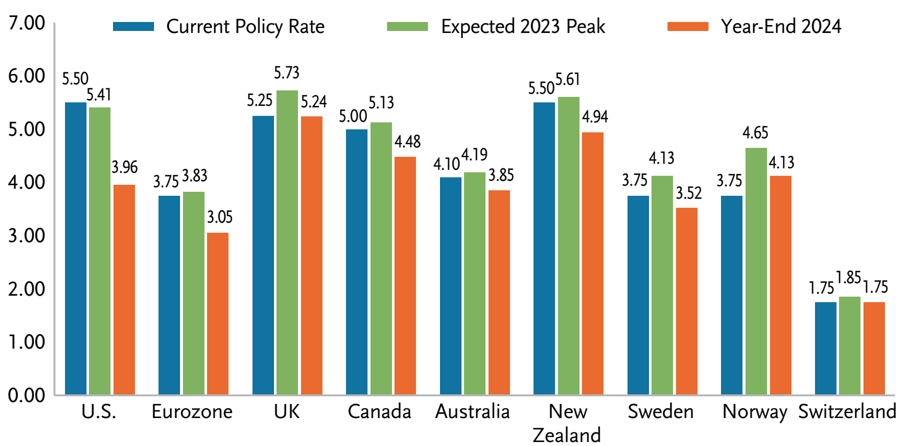
Source: BIS

Cumulative Change in Federal-Funds Rate Since Start of Initial Rate Increase



Source: Federal Reserve

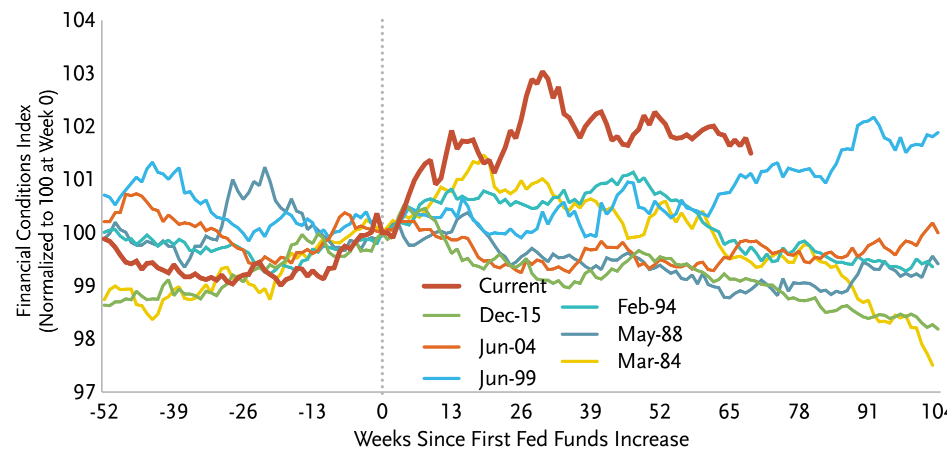
Monetary Policy Expectations



Source: Bloomberg

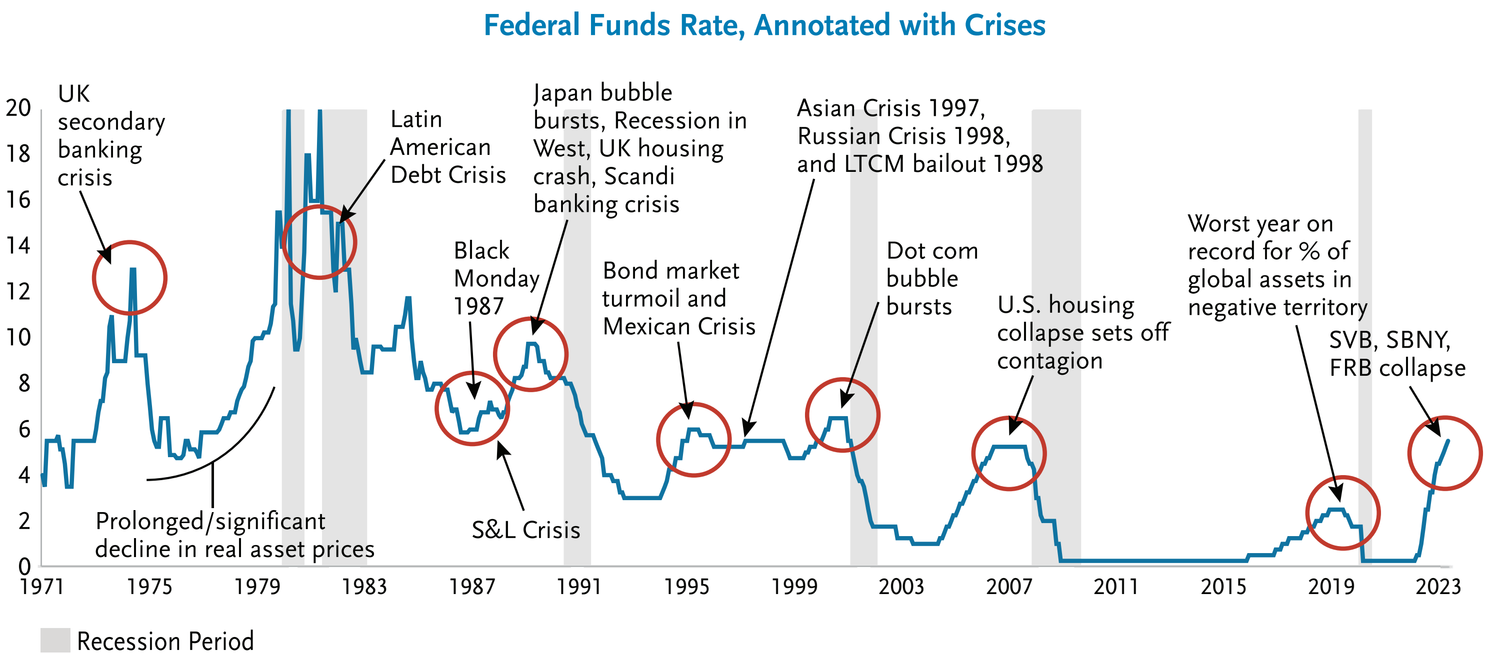
*Equal-Weight Index of Bloomberg Galaxy Crypto Index (BGCI US) & GS Non-Profitable Tech Basket

Financial Conditions Before & After Fed Liftoff



Source: Goldman Sachs, Bloomberg

Two Things Tend to Happen When the Fed Tightens...

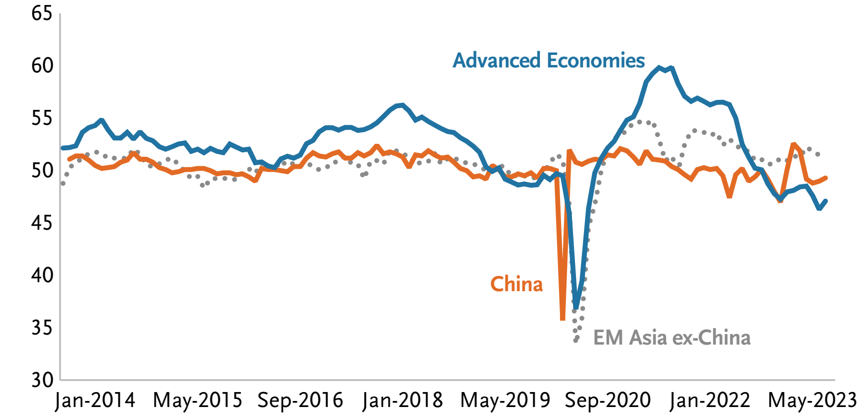


Source: Bloomberg, Haver Analytics, Deutsche Bank

- Stuff breaks
- Economy enters recession

Global Economic Indicators Are Sending Cautious Signals

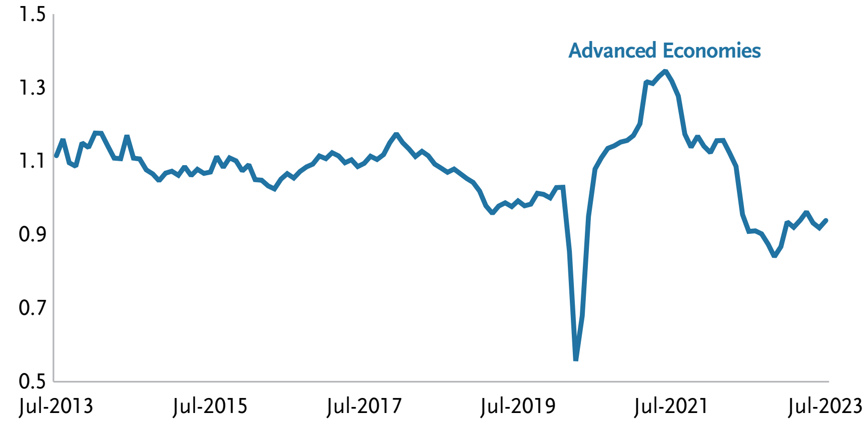
Manufacturing PMI



Source: S&P Global, J.P. Morgan

New Orders/Inventory Ratio

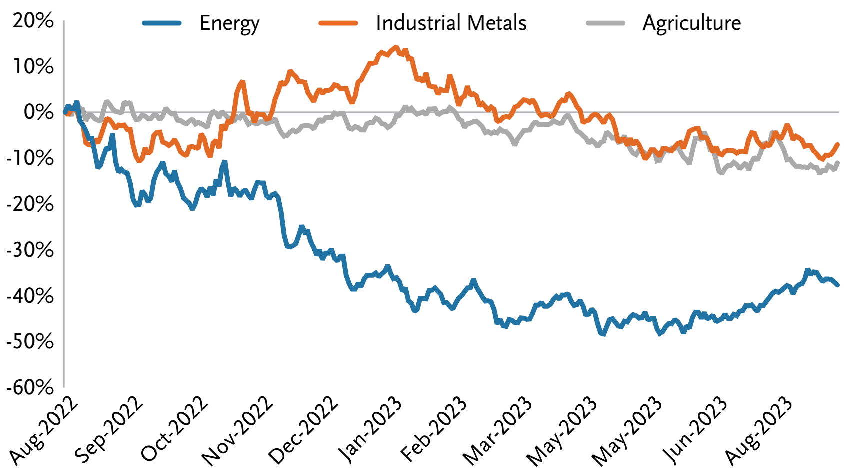
(Manufacturing PMI)



Source: S&P Global, J.P. Morgan

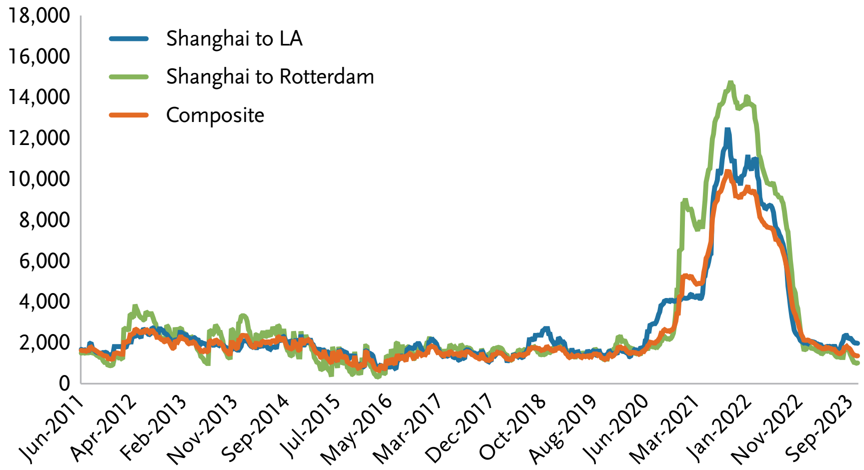
Commodity Groups – 1-Year Cumulative Performance

(Spot Price Only)



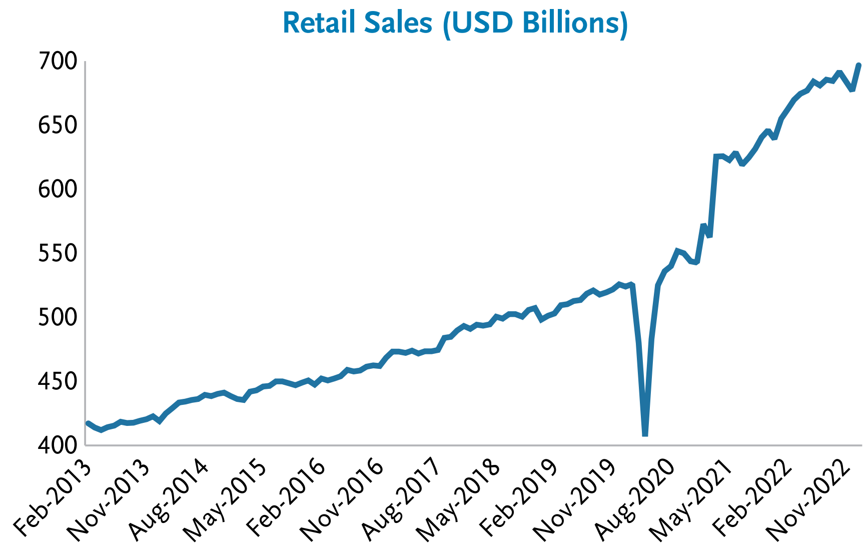
Source: Bloomberg

Container Freight Benchmark Rates

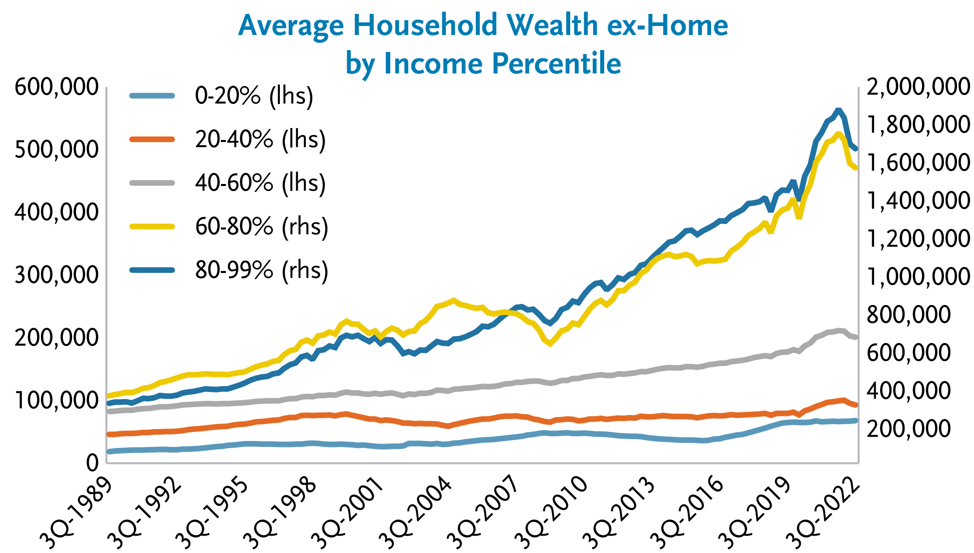


Source: Bloomberg, WCI Indices. USD per 40ft box.

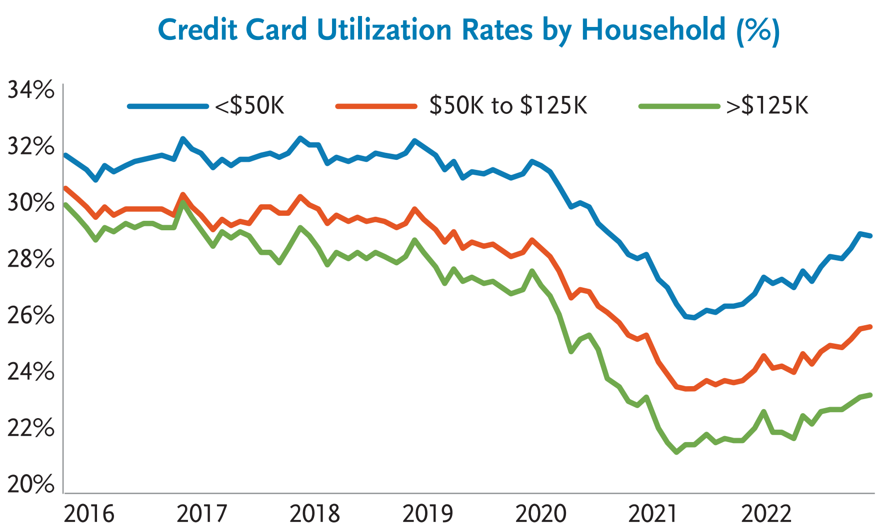
Consumption Has Been Bolstered by Accumulated Savings, Wage Growth, and Increase In Household Leverage…



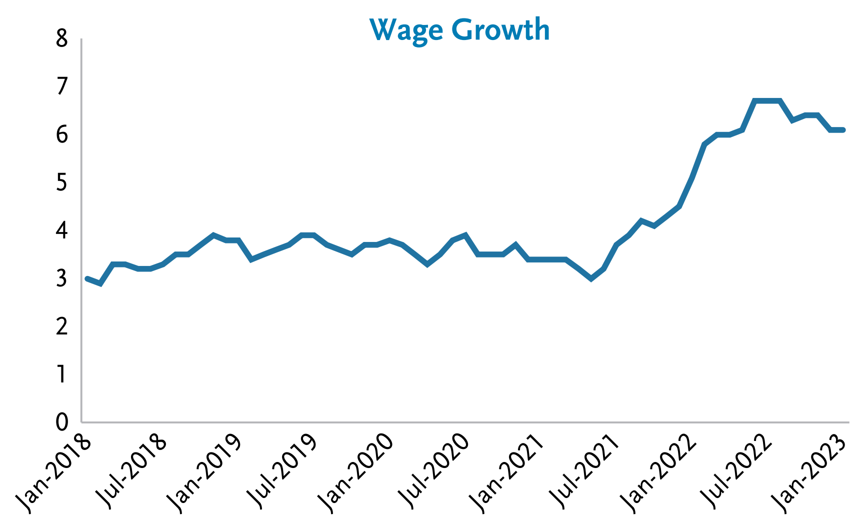
Source: Census Bureau, Bloomberg



Source: Fed



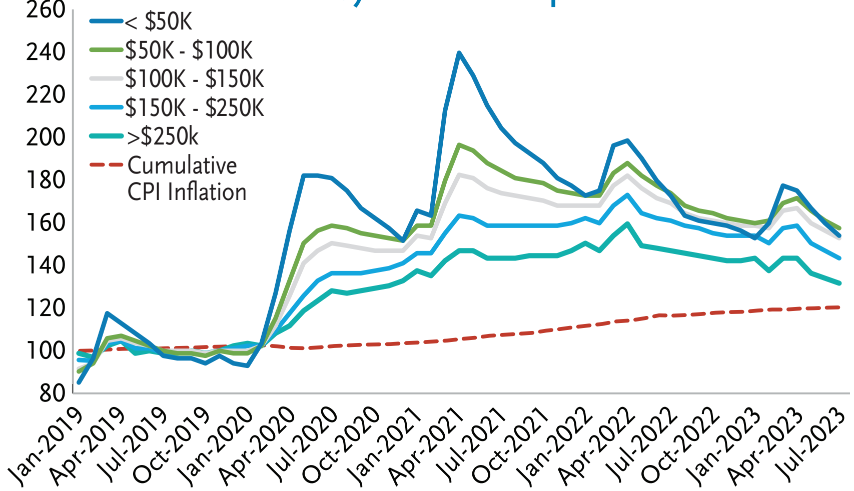
Source: BANK OF AMERICA INSTITUTE



Source: Bloomberg, Atlanta Fed, BLS

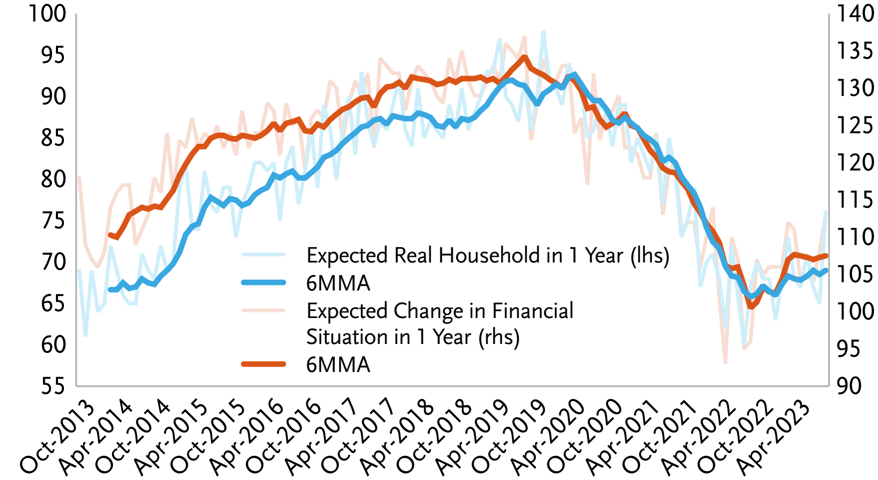
...But For How Long?

Median Checking + Savings Account Balances by Income Group



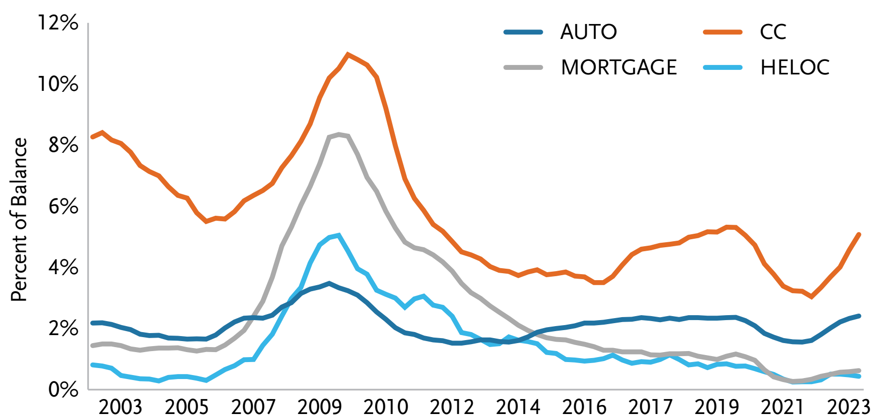
Source: BANK OF AMERICA INSTITUTE

Consumer Expectations in 1 Year – Diffusion Indexes



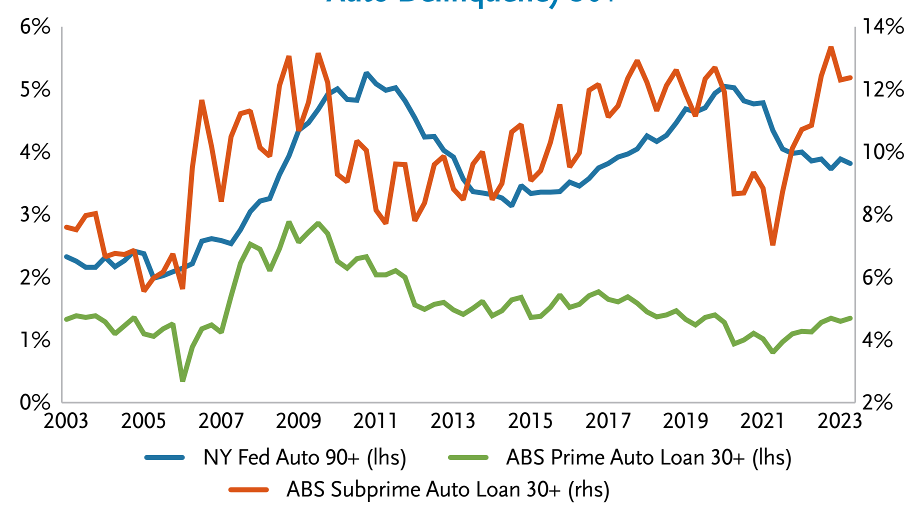
Source: UNIVERSITY OF MICHIGAN, BLOOMBERG

Transition into Delinquency (90+) By Loan Type



SOURCE: NEW YORK FED CONSUMER CREDIT PANEL / EQUIFAX.

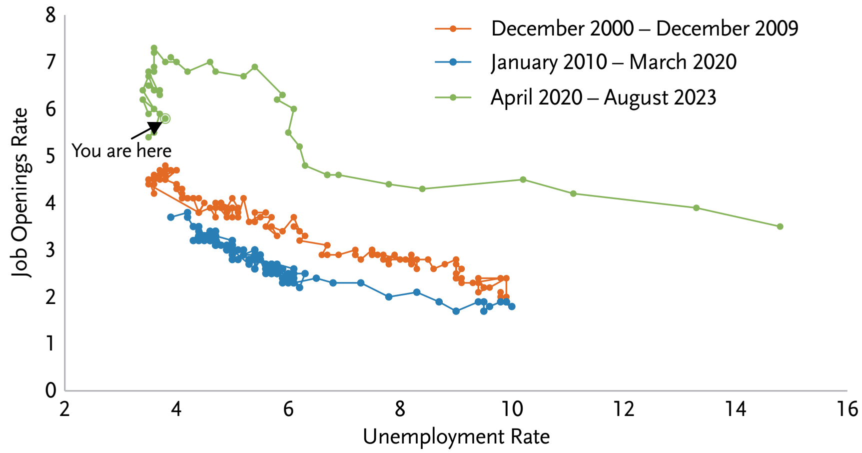
Auto Delinquency 30+



Source: NY FED CONSUMER CREDIT PANEL, EQUIFAX, JPM

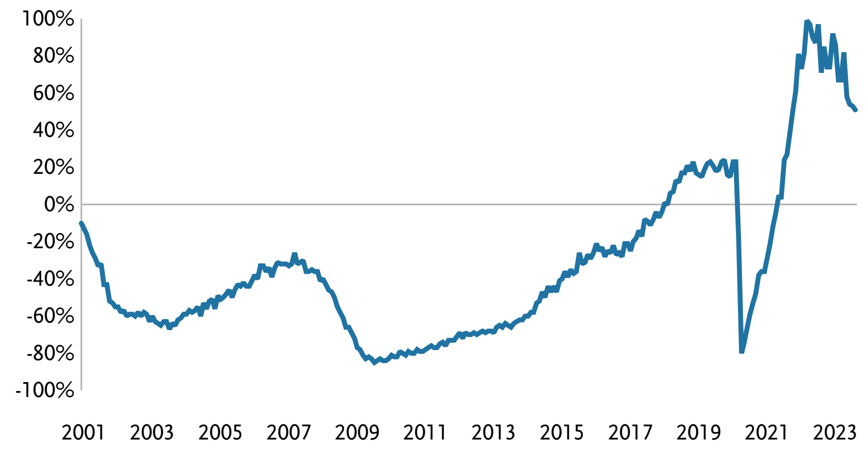
Labor Supply Is Still Constrained...

Beveridge Curve
Job Openings Rate vs. Unemployment Rate



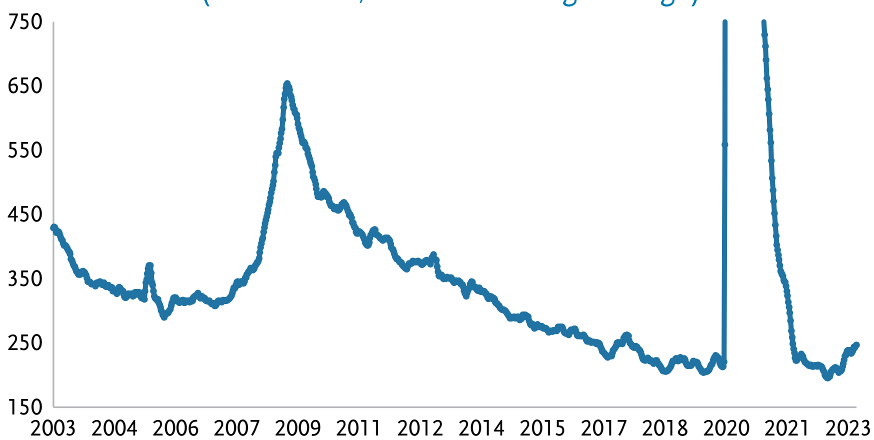
Source: BLS, TCW

U.S. Labor Demand/Supply Gap
Difference Between Job Openings and Unemployed as % of Unemployed



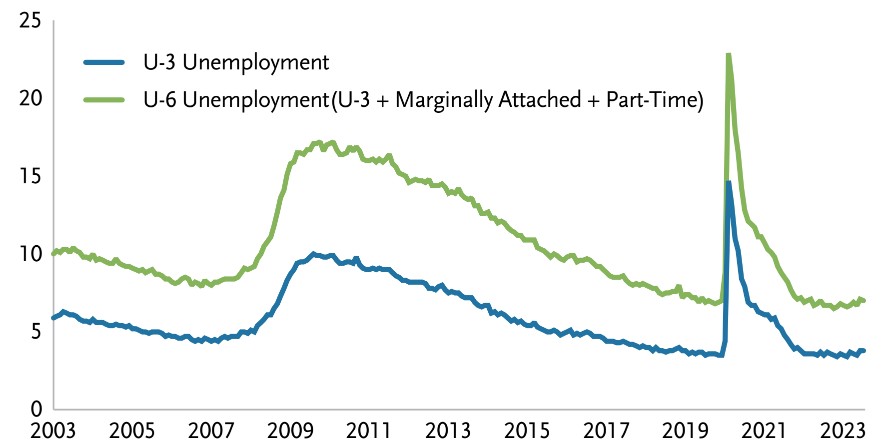
Source: BLS, TCW

Initial Unemployment Claims
(Thousands, 8-Week Moving Average)



Source: Department of Labor, Bloomberg

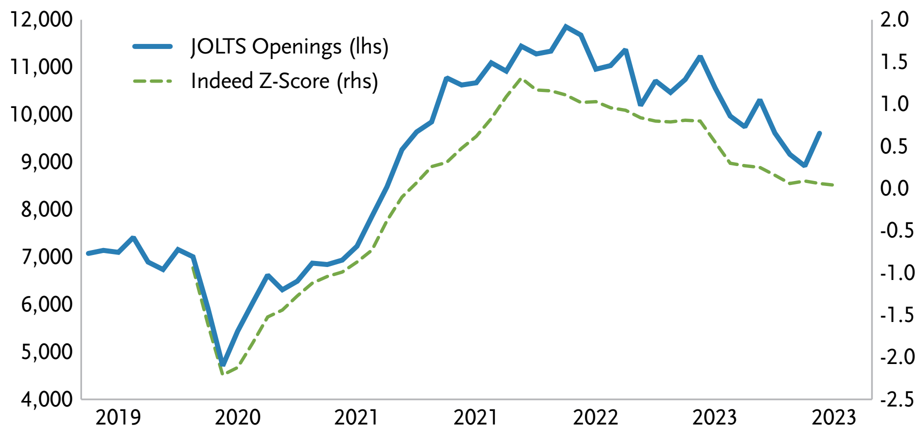
U.S. Unemployment Rates



Source: BLS, Bloomberg

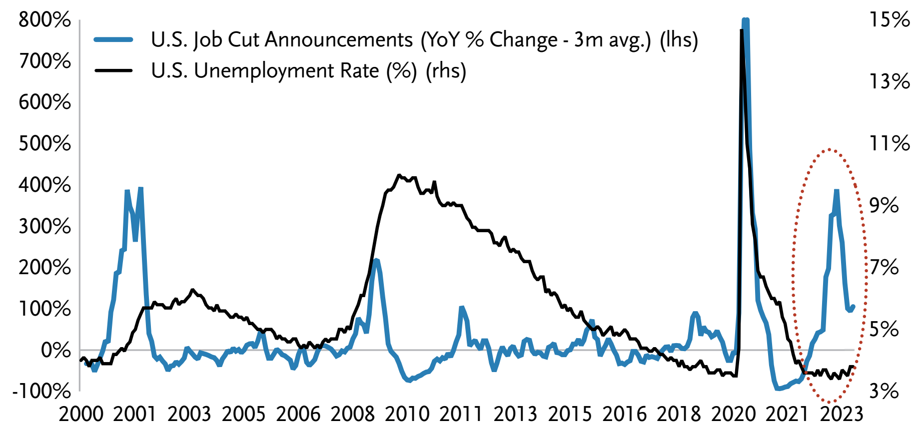
But Signs of Deceleration in the U.S. Job Market Appear

Measures of Job Openings



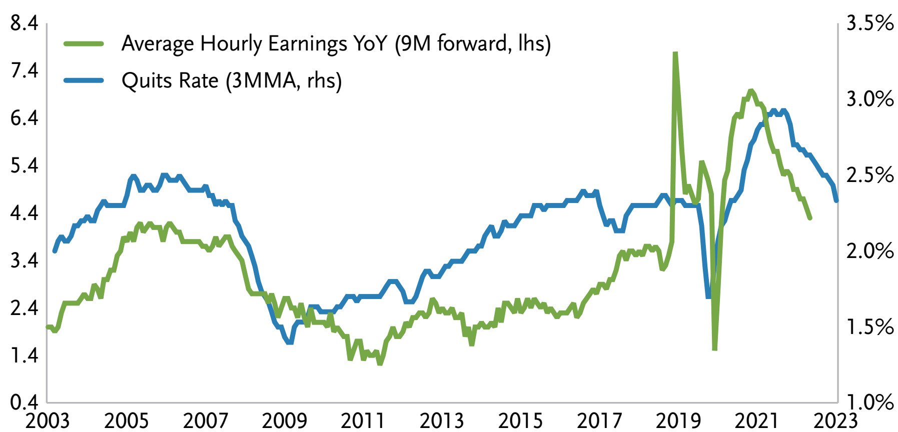
Source: BLS, Indeed.com, TCW

U.S. Job Cut Announcements (YoY % Change)



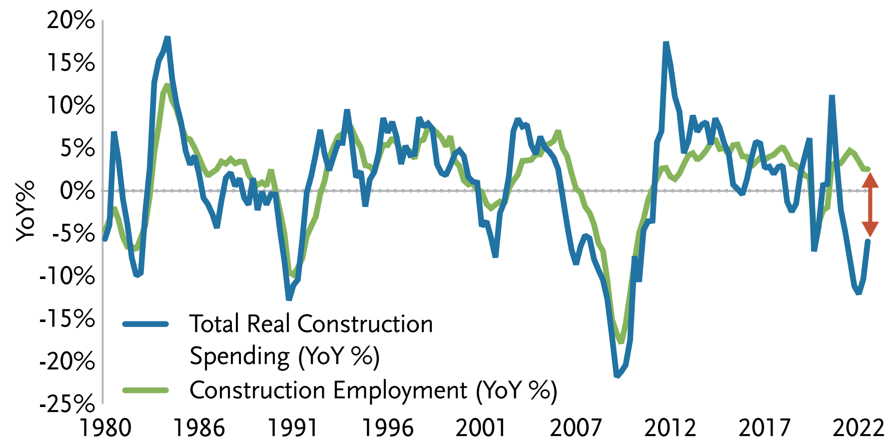
Source: Bloomberg

Hourly Earnings YoY vs. Quits Rate



Source: BLS, TCW

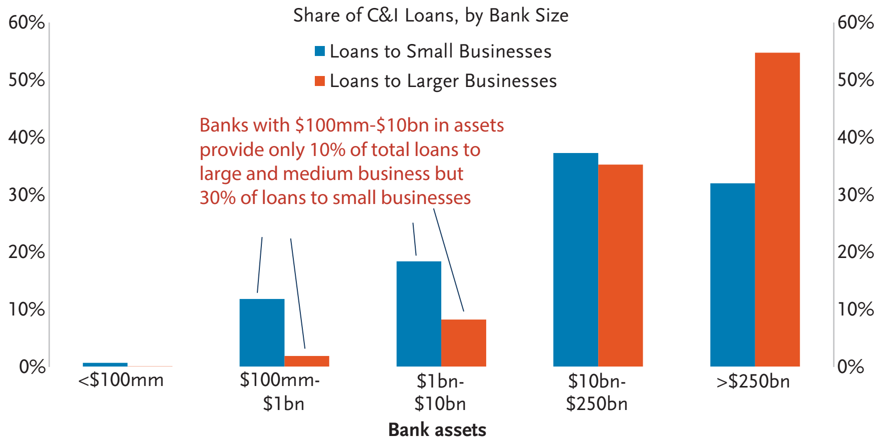
Construction Spending vs. Employment: Mind the Gap



Source: BEA, BLS, Haver, SMBC Nikko

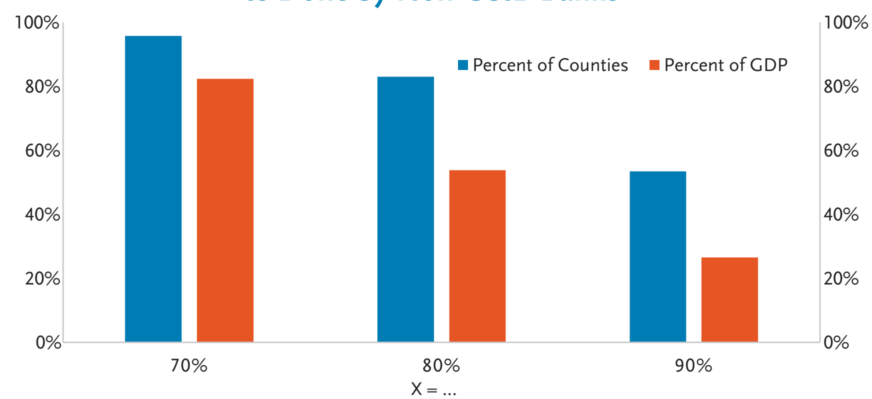
Banking Stress Portends More Challenges for Small Businesses, Which Employ Over One Third of U.S. Private Employees

Small Businesses Are More Reliant on Small Banks



Source: FDIC, Goldman Sachs

In 70% of U.S. Counties Small Business Lending Is Done by Non-GSIB Banks*

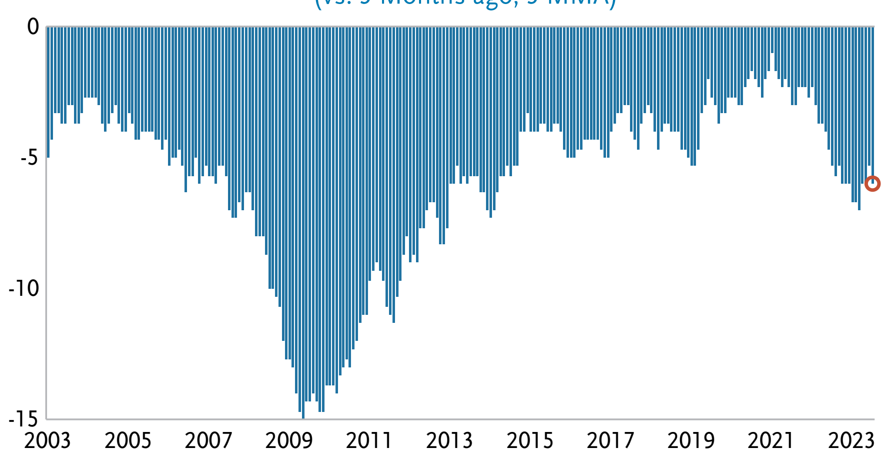


Source: FDIC, Goldman Sachs

*US GSIBs are: JP Morgan Chase, Bank of America, Citigroup, Wells Fargo, Goldman Sachs, Morgan Stanley, BNY Mellon, and State Street.

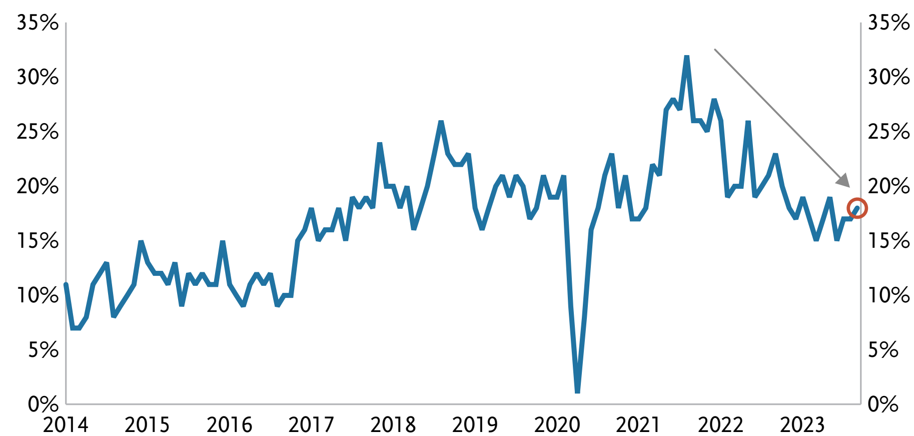
Net Share of Companies Reporting Tighter Financing Conditions

(vs. 3 Months ago, 3 MMA)



Source: National Federation of Independent Business

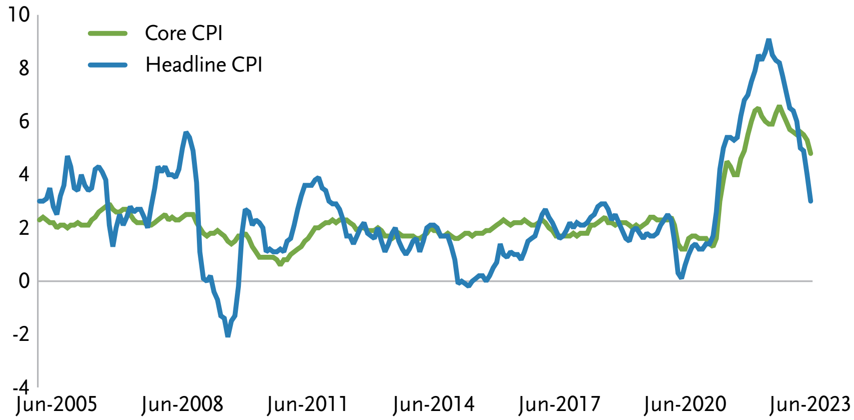
Percent of Small Businesses Planning to Increase Employment



Source: NFIB, NBER, Haver, SMBC Nikko

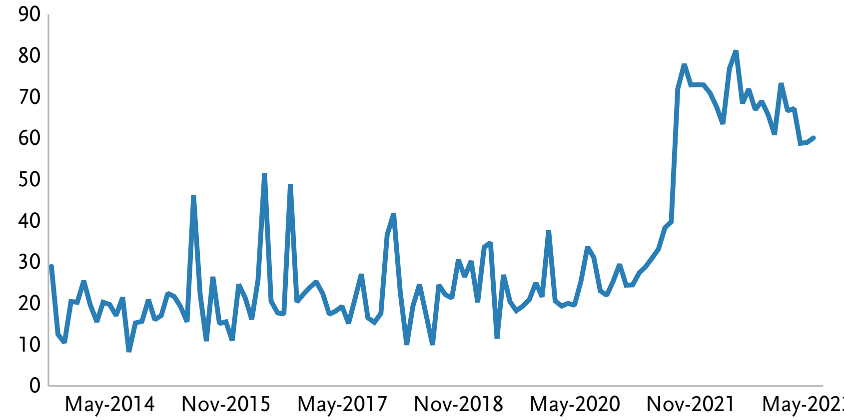
U.S. Inflation Is Past Peak Levels, but Far From Target

CPI vs. Core CPI



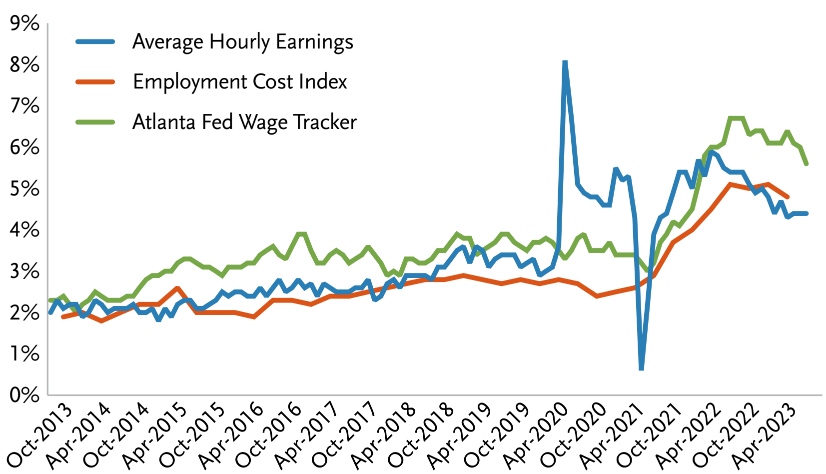
Source: BLS, Bloomberg

Percent of CPI Basket Inflating at >4% Annualized MoM%



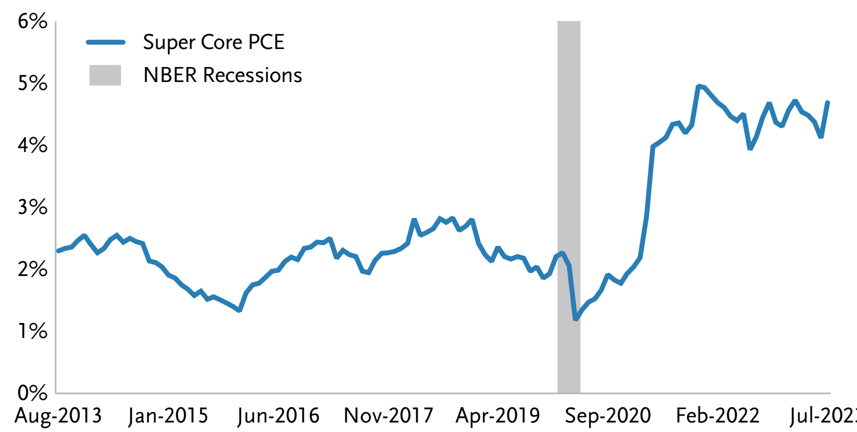
Source: BLS, Bloomberg

Wage Inflation



Source: BLS, Federal Reserve Bank of Atlanta, Bloomberg

Labor-Driven Inflation ("Super Core" PCE)



Source: BLS, Bloomberg

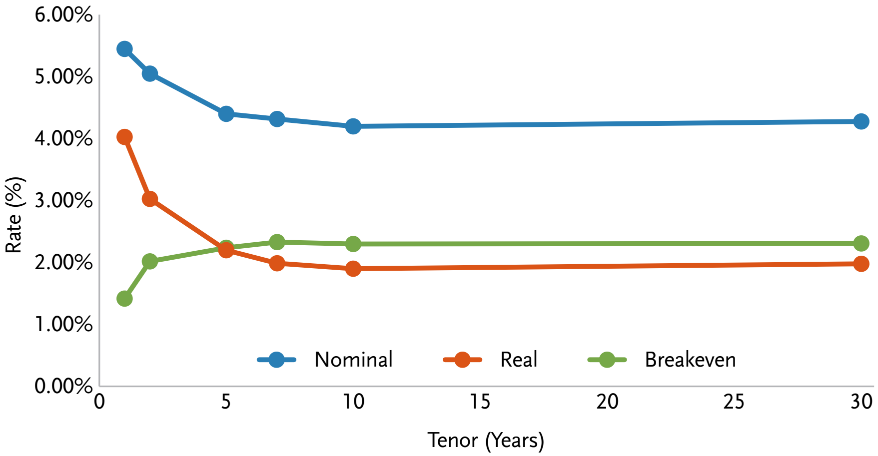
Macro Summary - Is Something Truly Different This Time?

- **Facts:**
  - Fed has raised rates 5 ¼% and shrunk their balance sheet by $1 Trillion
  - 3Q '23 GDP estimates range from 2 ½ - 5 ½%
  - Labor market still robust (3.8% unemployment, 4 ½% wage growth)
  - Despite regional banking crisis, equities are up 20% over last year, credit spreads below LT average
  - CPI, PPI disinflating while growth above 2%
- **More Facts:**
  - Lags between monetary policy and economy are long and variable (typically 12-24 months)
  - Unique factors (excess pandemic-related savings, high percentage of fixed/low coupon debt in mortgage and corporate bond market) have lengthened the lags this cycle
  - A very small percentage of borrowers (<10% in housing, HY) have felt the impact of higher rates
  - U.S. debt/GDP near historical high of 300%
  - Fed focused on lagging indicators (labor market, inflation), still committed to 2% goal
- **Conclusion:**
  - The U.S. economy is still interest rate sensitive
  - Monetary policy is likely to "overtighten" to reach objective
  - Rates levels are extremely attractive (2% real, 4-5% nominal)

What Is Priced Into the Fixed Income Markets?

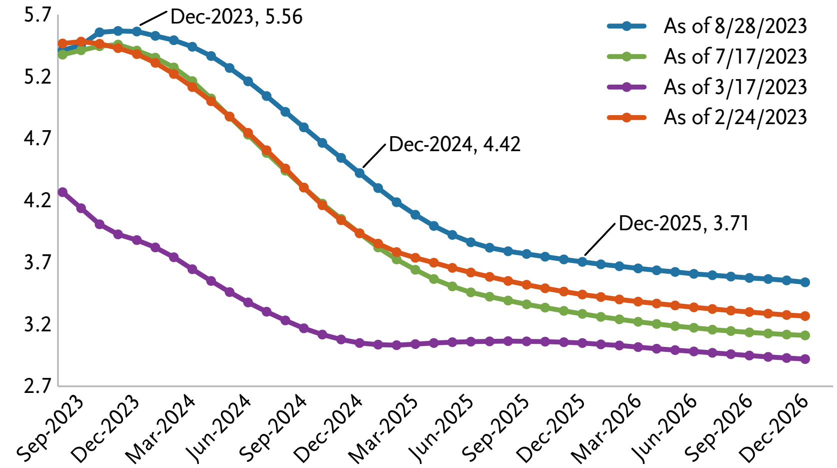
Fixed Income Markets Are Pricing...

U.S. Yields Curve



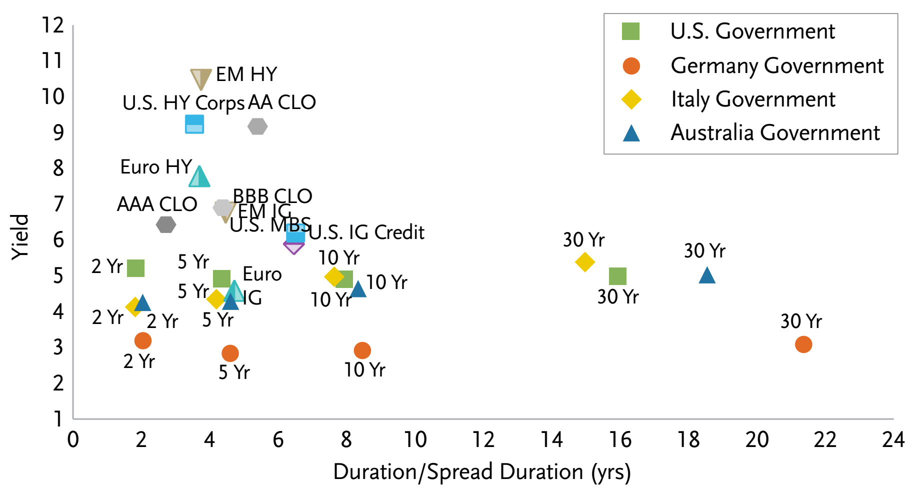
Source: Bloomberg

Market-Implied Path for Effective Federal Funds Rate (%)



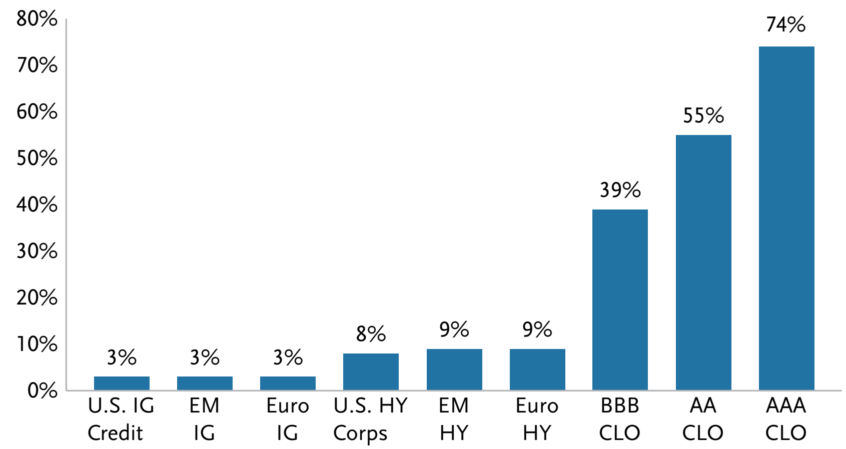
Source: Bloomberg

Fixed Income Investment Opportunity Set



Source: Bloomberg, JP Morgan, BofA, TCW

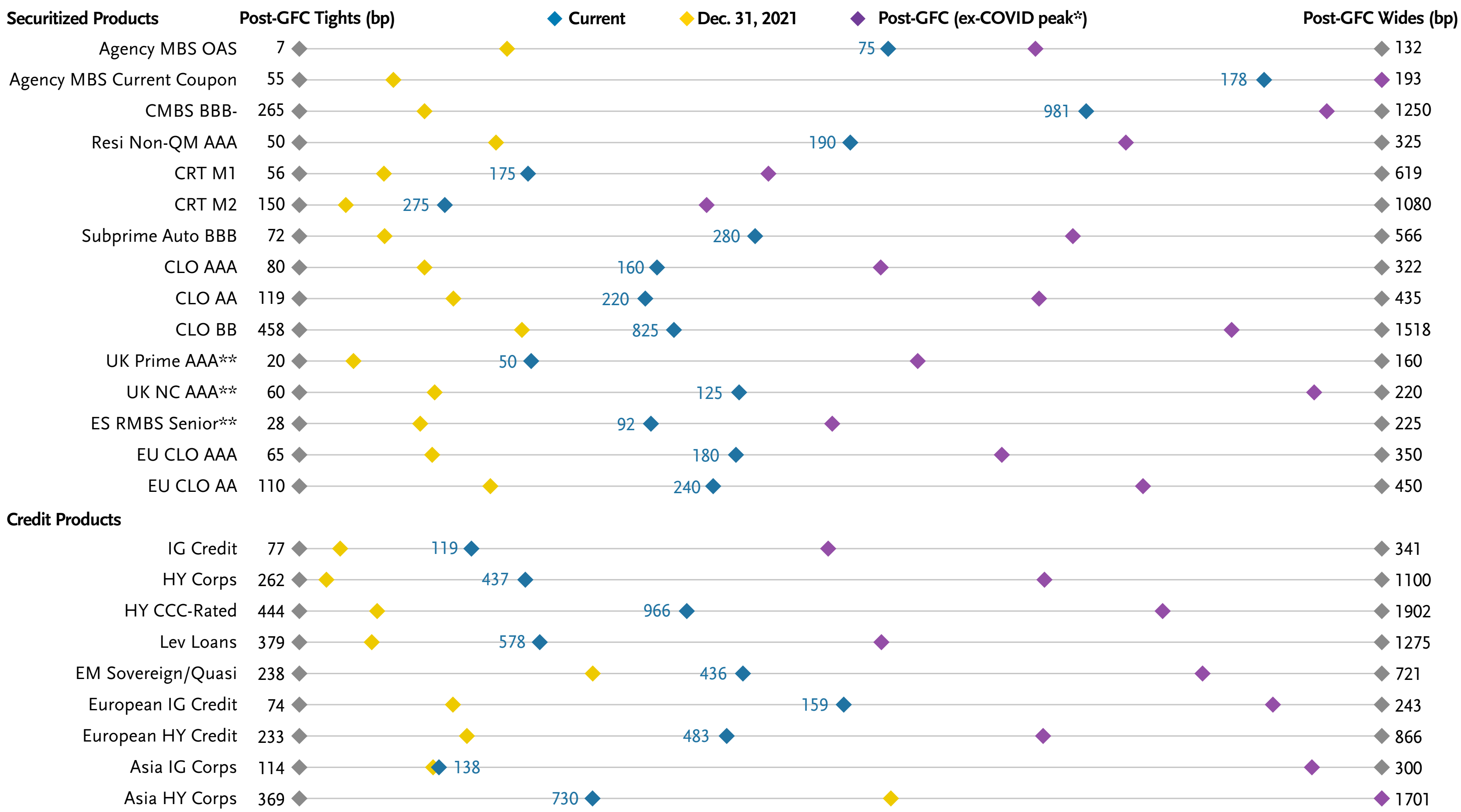
Breakeven Default Rates*



* Hypothetical default rates required to wipe out 1 year's worth of spread carry.
Source: Bloomberg, JP Morgan, BofA, TCW

Spread Snapshot – What a Difference a Year Makes

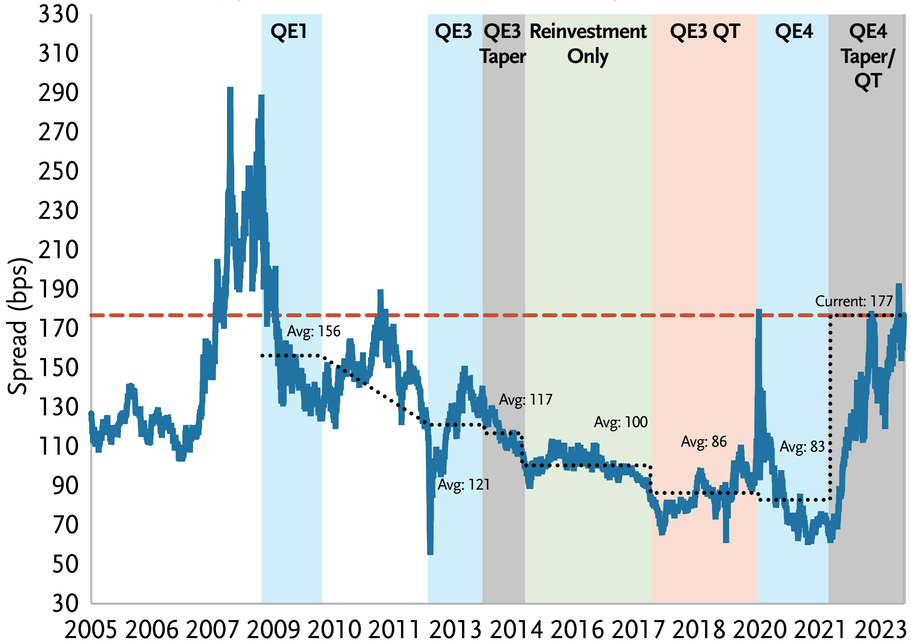
Spread Ranges



As of October 31, 2023
Source: Bloomberg, Yield Book, TRACE, JP Morgan, Credit Suisse, Morgan Stanley Research, Citi
*Excludes the extreme volatility episodes experienced from 3/1/2020 through 4/13/2020.
**This includes 6 year data as the index does not have a longer track record at this time.

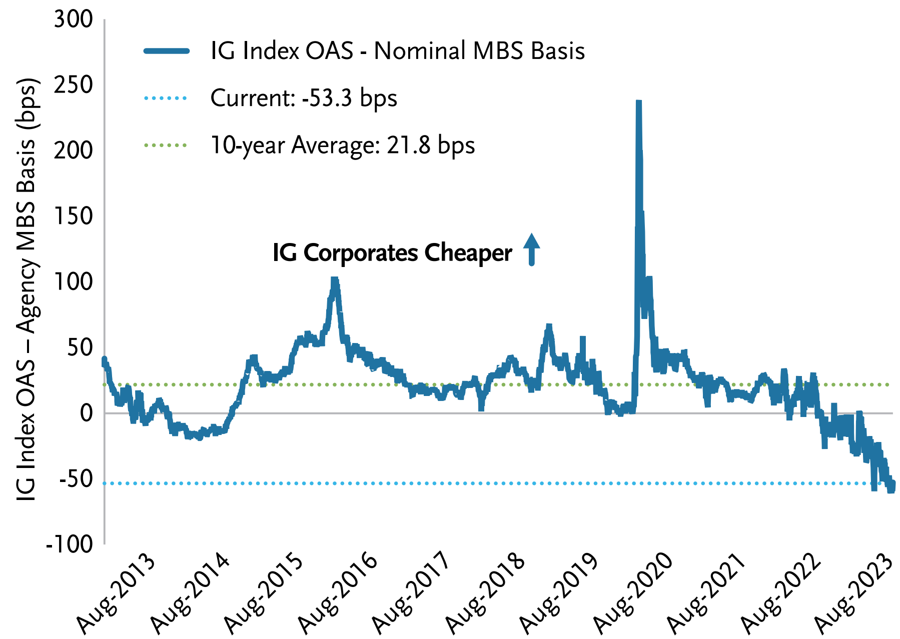
Nominal Agency MBS Spreads Have Reached Close to the Widest Levels Observed Historically

FNCL Current Coupon Agency MBS Spread to 5yr/10yr UST Yield Across Fed QE/QT Periods



Source: TCW, Bloomberg

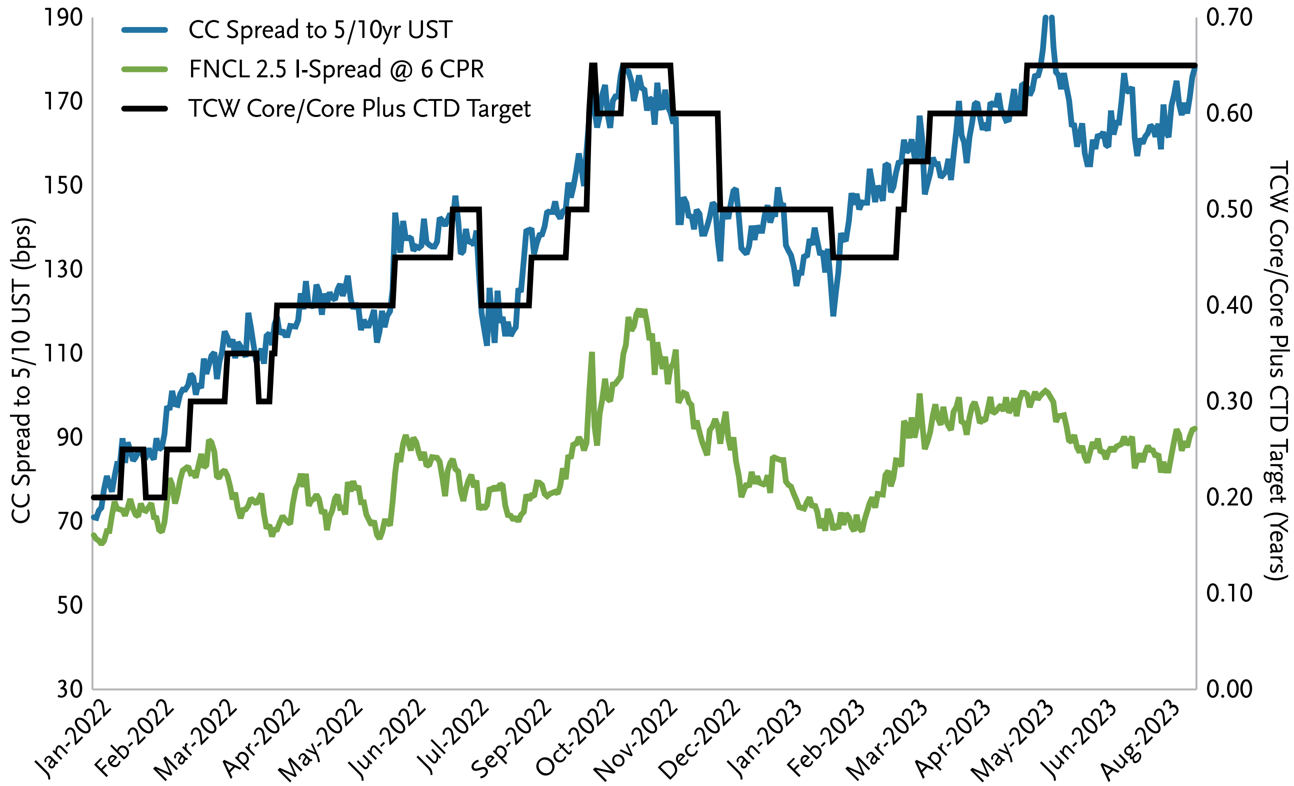
IG Index OAS – Agency MBS Basis (Last 10 Years)



Source: TCW, JP Morgan, Bloomberg

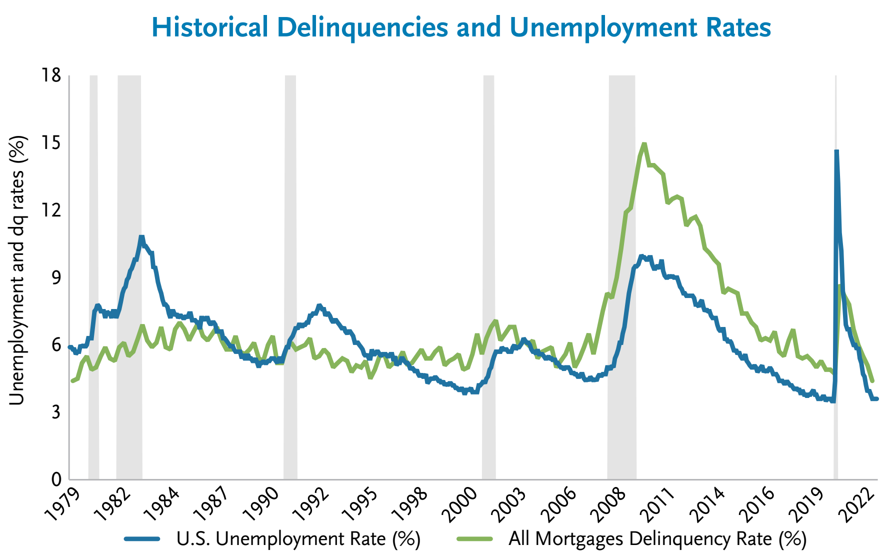
- Hawkish Fed rhetoric and elevated interest rate volatility have pushed nominal agency MBS spreads to close to the widest levels observed since QE3 and around 70 bps wider than previous Fed reinvestment-QT periods, presenting compelling valuations for active investors.
- Rate hikes priced in by the market this year and the next would make the Fed's base case of a "soft landing" for the economy difficult to achieve. It remains to be seen if the Fed can in-fact deliver a QT cycle that is akin to "watching paint dry."
- **Timing a pivot is ill-advised, dollar cost averaging is the best path forward.**

Agency MBS Positioning

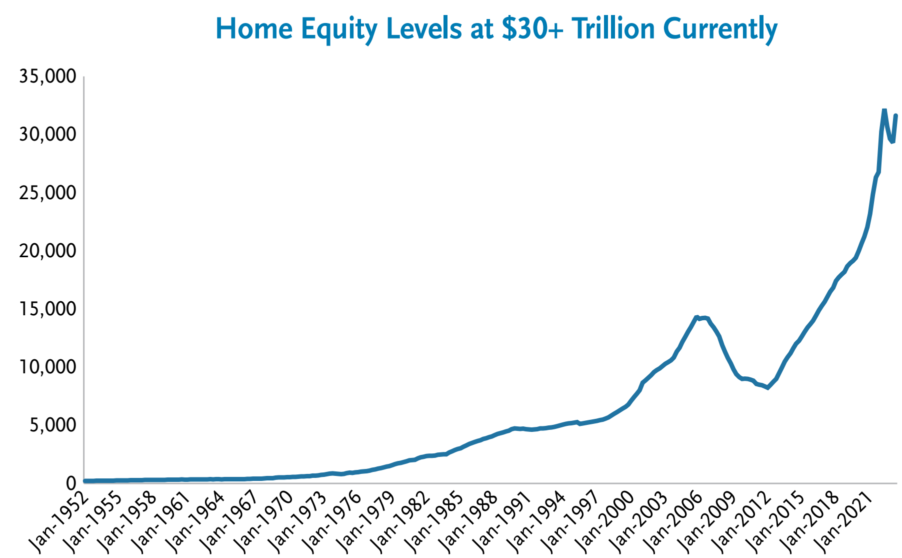


Source: TCW

Non-Agency Mortgage Market Update: Slowing Housing Market but Steady Credit Performance



Source: Nomura

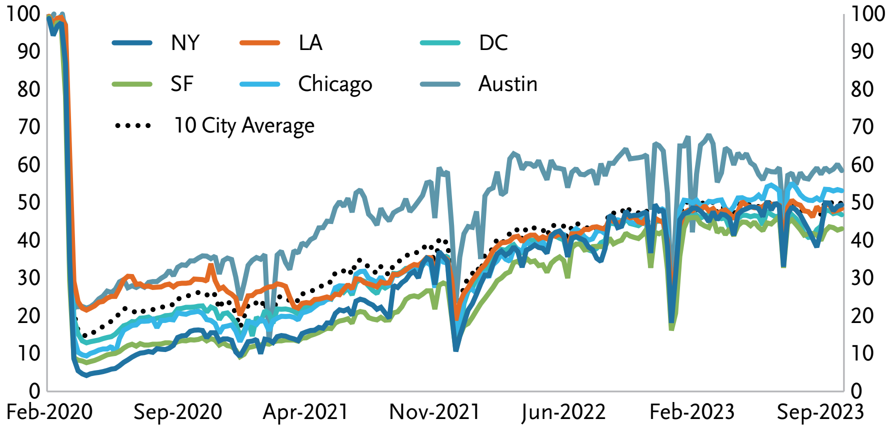


Source: Federal Reserve

- Mortgage delinquencies will likely pick up on the back of projections of unemployment rates increasing to +4.5% by 2023 year-end
- Fundamentally, the post-GFC mortgage credit landscape has been materially different from the pre-GFC one
- An absence of: No documentation standards, deep sub-prime mortgages, negatively amortizing loans, pay-option ARMs and other affordability products
- In addition to: Government regulation, CFPB's ATR/QM guidelines, record levels of single-family home-equity build-up and the presence of a more robust servicing toolkit/workout options
- These are part of the reasoning why we think losses are expected to remain significantly dampened this time around

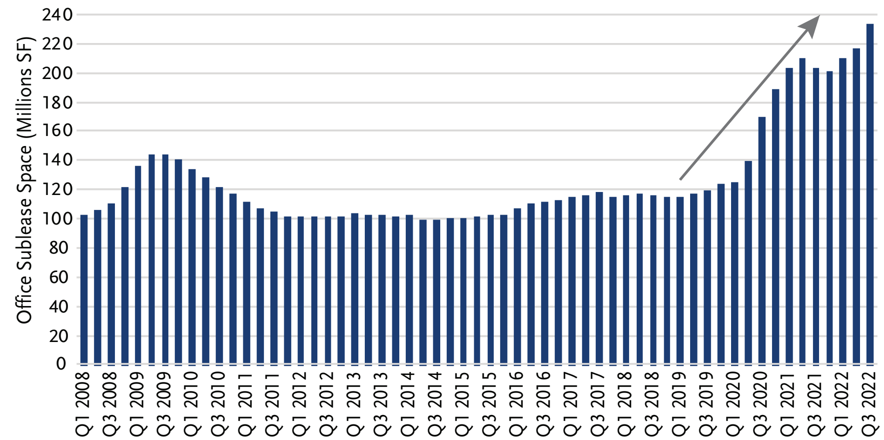
Bifurcation Is Real and Will Likely Deepen Due to Structural Changes

Over Half of Office Employees Are Still Working from Home



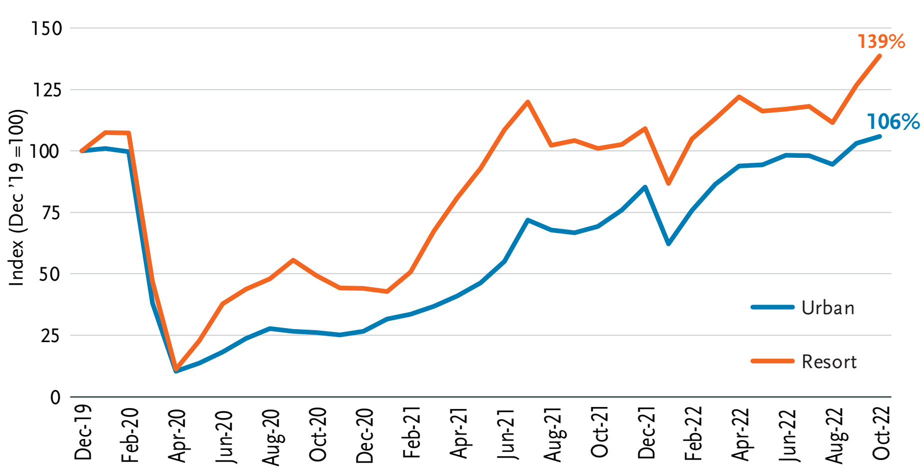
Source: Bloomberg, TCW

Available Office Sublease Space Is At Record High And Still Growing



Source: Colliers

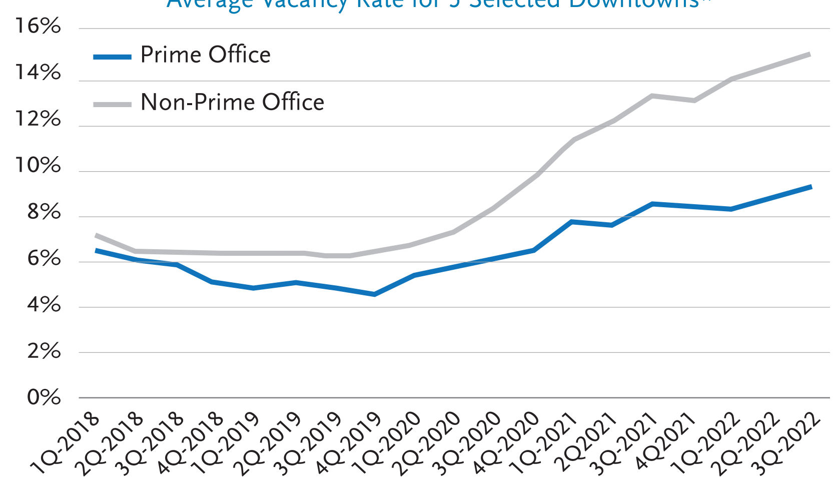
U.S. Hotels RevPAR Indexed to 2019



Source: CBRE Econometric Advisors

All Office Space Is NOT Created Equal

Average Vacancy Rate for 5 Selected Downtowns*

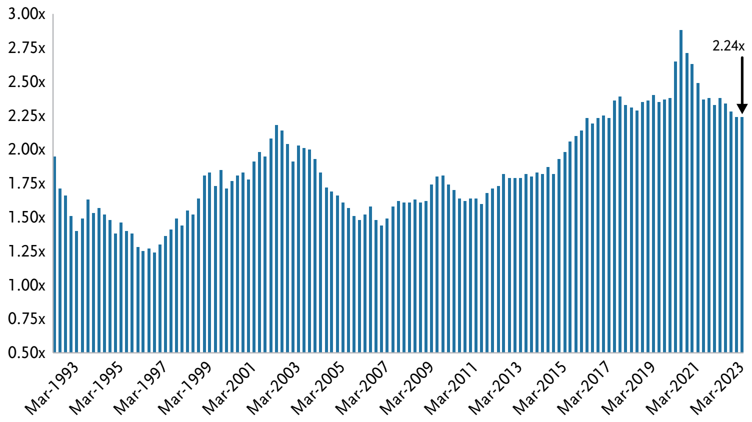


Source: CBRE Econometric Advisors

*Selected 5 downtowns include Manhattan, DC, San Francisco, Boston and Seattle.

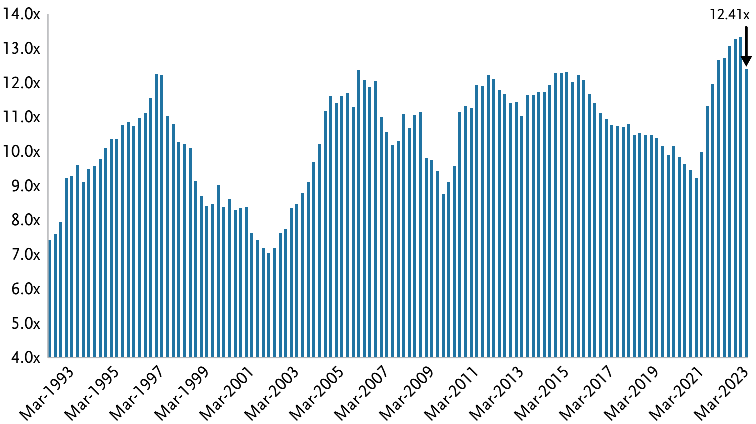
Credit Fundamentals Are Solid on an LTM Basis

IG Gross Leverage



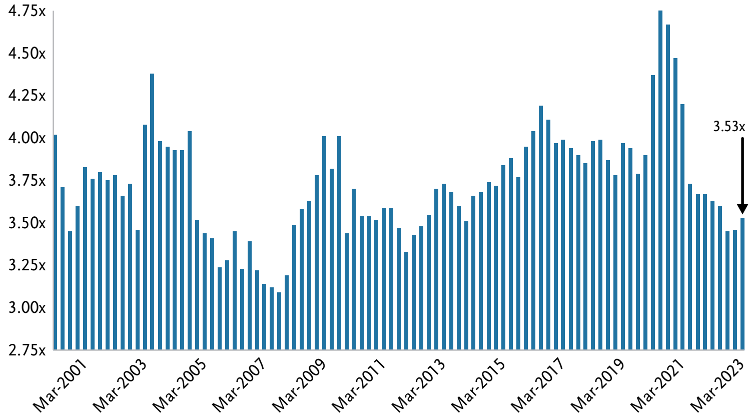
Source: Morgan Stanley Research, Bloomberg Finance LP, FTSE Fixed Income LLC

IG Interest Coverage



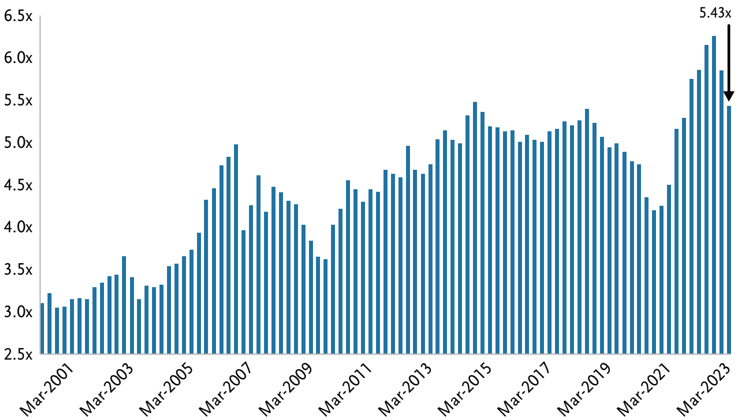
Source: Morgan Stanley Research, Bloomberg, S&P Capital IQ

High Yield Gross Leverage



Source: Morgan Stanley Research, Bloomberg Finance LP, FTSE Fixed Income LLC

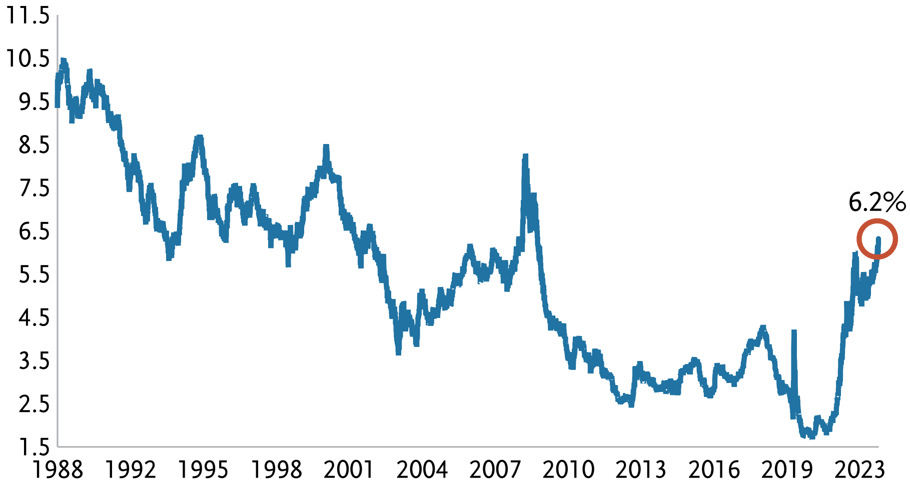
High Yield Interest Coverage



Source: Morgan Stanley Research, Bloomberg, S&P Capital IQ

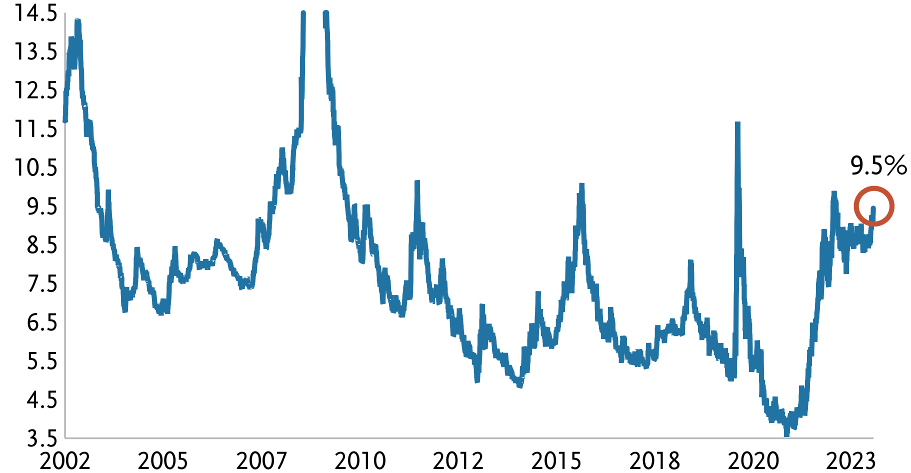
Corporate Bond Yields Are Attractive, Spreads Are Below Historical Averages

IG Credit Yield (%)



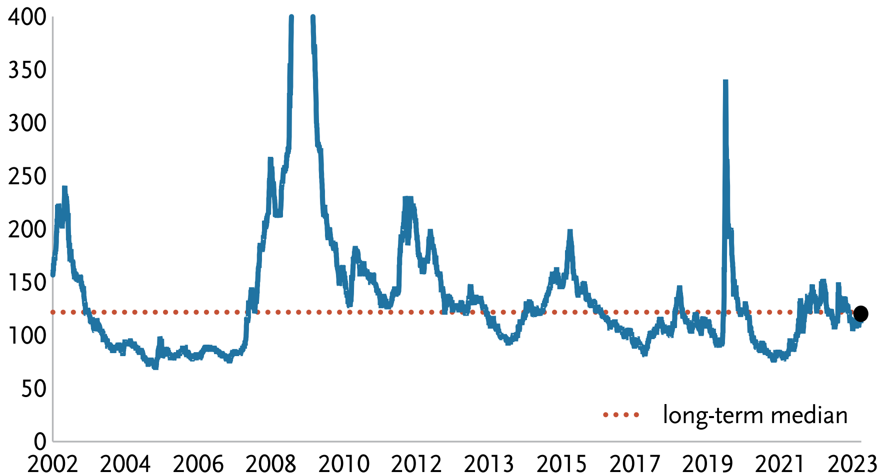
Source: Bloomberg

HY Corporate Yield (%)



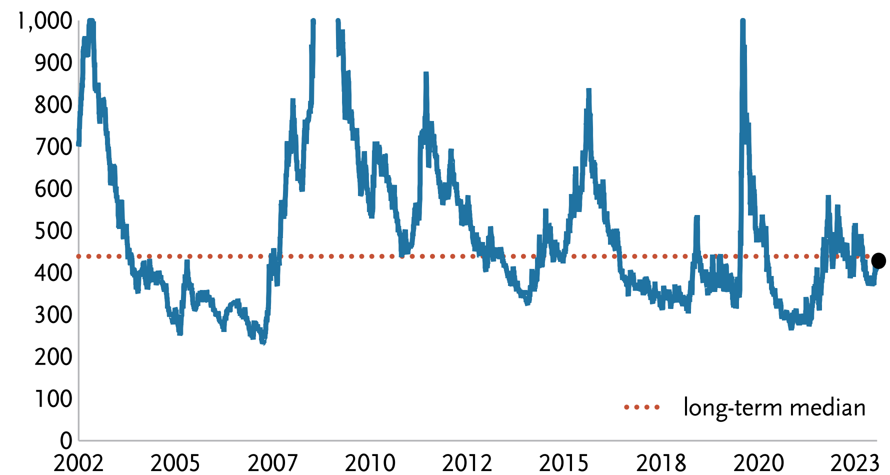
Source: Bloomberg

IG Credit Spreads (bps)



Source: Bloomberg

HY Corporate Spreads (bps)



Source: Bloomberg

TCW Fixed Income Strategic Themes – Building Our *Yield of Dreams*

- **Duration:** After adding over 1.0 years of duration relative to benchmarks in 2022, we have both reduced (1Q) and increased (3Q) duration in 2023; now approximately 0.8 years overweight with a slight steepening bias
- **Corporate Credit:** Our total return strategies are slightly underweight to the benchmark with overweights to Banks, Communications, and Consumer Non-Cyclicals, very modest exposure to high yield
- **Agency MBS:** High interest rate volatility and concerns regarding QT sales have kept spreads at the wide end of historical ranges offering a compelling long term opportunity
- **Securitized Credit:** Strong residential home price growth, solid structural protection, and robust issuance provide attractive "safe spread" opportunities in various sectors such as RPL, Non-QM, and Prime Jumbo with the Non-Agency RMBS market, CLO's, and Single Asset/Single Borrower deals in CMBS
- **Emerging Markets:** Given the disproportionate impact of global inflation, currency volatility, and geo-political instability on Emerging Market economies, our exposure is both minimal and highly selective
- **Core/CorePlus Portfolios:** Yielding over 5.5% with very defensive characteristics

V. Appendix

Biographies

Bryan T. Whalen, CFA
Co-Chief Investment Officer
Generalist Portfolio Manager
Co-Director Fixed Income

Mr. Whalen is Co-Chief Investment Officer and a Generalist Portfolio Manager in TCW's Fixed Income group, a team that oversees over $170 billion in fixed income assets including the nearly $60 billion MetWest Total Return Bond Fund, one of the largest actively managed bond funds in the world. Prior to joining TCW, Mr. Whalen was a Partner at Metropolitan West Asset Management and Co-Head of its Securitized Products division. Prior to joining MetWest in 2004, he was a Director in the Fixed Income department at Credit Suisse First Boston in New York. Previously, he was a Vice President at Donaldson, Lufkin & Jenrette. Mr. Whalen earned a BA in Economics from Yale University. He is a CFA charterholder.

Mark A. Romano, CFA, CAIA
Managing Director
Consultant Relations

Mr. Romano joined TCW in 2021 as a Managing Director and Senior Consultant Relations executive. Prior to joining TCW, he was an executive vice president at PIMCO and member of the Consultant Relations team for 23 years. Prior to joining PIMCO in 1997, he was with Wells Fargo's institutional money management group. Before that, he was the Director of Fixed Income and portfolio manager for the Pacifica family of mutual funds for 12 years; there he also invested assets for pension plans, foundations, financial institutions, corporations, and trust accounts. In addition, Mr. Romano reported the daily business news for the San Diego ABC-TV affiliate. He holds an MBA from San Diego State University and earned an BSBA in accounting from Shippensburg University, Pennsylvania. Mr. Romano is a CFA charterholder, a Chartered Alternative Investment Analyst (CAIA), and is a member of the San Diego CFA Society. He holds Series 3, 7, and 63 FINRA licenses.

Jerry Cudzil
Group Managing Director
Generalist Portfolio Manager

Mr. Cudzil is a Generalist Portfolio Manager in TCW's Fixed Income group, a team that oversees over $170 billion in fixed income assets including the nearly $60 billion MetWest Total Return Bond Fund, one of the largest actively managed bond funds in the world. Previously, Mr. Cudzil was Head of Credit Trading where he oversaw the Fixed Income group's trading of investment grade corporate bonds, high yield bonds, leveraged loans, and credit derivatives. Prior to joining TCW in 2012, Mr. Cudzil was a High Yield Bond Trader for Morgan Stanley and Deutsche Bank, specializing in project finance, aviation, and energy securities. He was previously a Portfolio Manager for Dimaio Ahmad Capital, managing the multi-strategy credit fund and aviation fund and leading the firm's risk management team. Mr. Cudzil began his career as a Corporate Bond Trader for Prudential Securities and has also traded investment grade and high yield debt for Credit Suisse and Goldman Sachs. Mr. Cudzil earned a BA in Economics from the University of Pennsylvania.

PERFORMANCE DISCLOSURE

Past performance is not indicative of future results. The inception date for the MetWest Total Return Bond Fund (Part of the TCW Multiple Investment Trust) was 1/30/15. The performance shown prior to that date is that of the TCW Core Plus Fixed Income composite. The TCW Core Plus Fixed Income composite, created on 8/1/96, is comprised of portfolios in excess of $10,000,000 in assets managed to an average duration of +/- 1 year of the Bloomberg Barclays U.S. Aggregate Bond Index or similar benchmark. The portfolios will usually have broad exposure to investment grade, non-investment grade, and non-U.S. fixed income securities. Composite performance represents gross and net of investment management fees performance for the TCW Core Plus Fixed Income composite and does not represent returns for the MetWest Total Return Bond Fund (Part of the TCW Multiple Investment Trust). Gross returns are calculated by deducting transaction costs. Net returns deduct both transaction costs and investment management fees. Net returns reflect the actual advisory fees paid in each portfolio and do not reflect other fees and expenses associated with the Trust or the other accounts in the composite.

INVESTMENT RISKS

An investment in the Trust involves various risks, including the risk that an investor can lose money. While the Trust strives to attain its investment objective, there is no guarantee of successful performance or that the objective can be reached or that a positive return can be achieved. As a general rule, investors can expect that investments with higher return potential will also have higher potential of risk of loss to capital and/or income. In addition, portfolio investments may fluctuate in market value from day to day and, therefore, the value of an investment could go down as well as up.

Past performance is not indicative of future results. The inception date for the MetWest Total Return Bond Fund (Part of the TCW Multiple Investment Trust) was 1/30/15. The performance shown prior to that date is that of the TCW Core Plus Fixed Income composite. The TCW Core Plus Fixed Income composite, created on 8/1/96, is comprised of portfolios in excess of $10,000,000 in assets managed to an average duration of +/- 1 year of the Bloomberg Barclays U.S. Aggregate Bond Index or similar benchmark. The portfolios will usually have broad exposure to investment grade, non-investment grade, and non-U.S. fixed income securities. Composite performance represents gross and net of investment management fees performance for the TCW Core Plus Fixed Income composite and does not represent returns for the MetWest Total Return Bond Fund (Part of the TCW Multiple Investment Trust). Gross returns are calculated by deducting transaction costs. Net returns deduct both transaction costs and investment management fees. Net returns reflect the actual advisory fees paid in each portfolio and do not reflect other fees and expenses associated with the Trust or the other accounts in the composite.

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Callan

October 31, 2023

City of Norwalk
Monthly Report

Investment Measurement Service
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Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of October 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

	October 31, 2023					September 30, 2023		
	Market Value	Weight	Target	Net New Inv.	Inv. Return	Market Value	Weight	Target
Total Equity	**$311,536,458**	**68.27%**	**69.00%**	**$(109,973)**	**$(10,299,232)**	**$321,945,663**	**68.25%**	**69.00%**
U.S. Equity	**$165,571,256**	**36.28%**	**35.00%**	**$(71,271)**	**$(5,546,935)**	**$171,189,462**	**36.29%**	**35.00%**
BR Russell 1000 Index Non-Lend	125,650,731	27.53%		0	(3,110,581)	128,761,312	27.30%	
LSV	20,791,658	4.56%		(71,271)	(848,471)	21,711,399	4.60%	
Principal Dynamic Growth	19,128,867	4.19%		0	(1,587,883)	20,716,750	4.39%	
International Equity	**$103,539,185**	**22.69%**	**23.00%**	**$(38,702)**	**$(4,338,970)**	**$107,916,857**	**22.88%**	**23.00%**
Developed Markets	**$85,746,380**	**18.79%**	**-**	**$(38,702)**	**$(3,744,782)**	**$89,529,864**	**18.98%**	**-**
Silchester	56,307,683	12.34%		(38,702)	(3,056,523)	59,402,909	12.59%	
Walter Scott	29,438,697	6.45%		0	(688,258)	30,126,955	6.39%	
Emerging Markets	**$17,792,805**	**3.90%**	**-**	**$0**	**$(594,189)**	**$18,386,994**	**3.90%**	**-**
BlackRock EM Alpha Tilts	17,792,805	3.90%		0	(594,189)	18,386,994	3.90%	
Global Equity/Long Short	**$19,748,986**	**4.33%**	**8.00%**	**$0**	**$(413,327)**	**$20,162,313**	**4.27%**	**8.00%**
ABS Global	19,506,680	4.27%		0	(413,327)	19,920,007	4.22%	
Blackstone Park Ave. NT	242,306	0.05%		0	0	242,306	0.05%	
Private Equity*	**$22,677,031**	**4.97%**	**3.00%**	**$0**	**$0**	**$22,677,031**	**4.81%**	**3.00%**
Pantheon USA IV	22,762	0.00%		0	0	22,762	0.00%	
Pantheon USA VI	141,423	0.03%		0	0	141,423	0.03%	
Pantheon USA VII	685,521	0.15%		0	0	685,521	0.15%	
Pantheon Europe Fund V A	337,717	0.07%		0	0	337,717	0.07%	
Pantheon Global Fund III	59,955	0.01%		0	0	59,955	0.01%	
Pantheon US Select 2014	21,429,653	4.70%		0	0	21,429,653	4.54%	
Domestic Fixed-Income	**$79,918,514**	**17.51%**	**19.00%**	**$(11,177)**	**$(1,497,798)**	**$81,427,489**	**17.26%**	**19.00%**
Prudential Cons Core Bond	35,598,839	7.80%		(11,177)	(581,742)	36,191,758	7.67%	
Metropolitan West CIT	44,319,675	9.71%		0	(916,056)	45,235,731	9.59%	
Absolute Return	**$28,054,984**	**6.15%**	**4.00%**	**$0**	**$87,570**	**$27,967,415**	**5.93%**	**4.00%**
UBS AIS	28,054,984	6.15%		0	87,570	27,967,415	5.93%	
Real Assets	**$30,966,795**	**6.79%**	**6.00%**	**$0**	**$(694,865)**	**$31,661,660**	**6.71%**	**6.00%**
PIMCO All Asset	30,966,795	6.79%	6.00%	0	(694,865)	31,661,660	6.71%	6.00%
Cash	**$5,877,366**	**1.29%**	**2.00%**	**$(2,838,073)**	**$36,873**	**$8,678,566**	**1.84%**	**2.00%**
Cash Account	5,877,366	1.29%		(2,838,073)	36,873	8,678,566	1.84%	
Total Fund	**$456,354,118**	**100.0%**	**100.0%**	**$(2,959,223)**	**$(12,367,452)**	**$471,680,793**	**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 October 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 October 31, 2023

	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months	Last 84 Months
Total Equity	**(6.02%)**	**7.83%**	**6.39%**	**7.26%**	**8.10%**
U.S. Long Equity	**(6.66%)**	**5.29%**	**8.69%**	**9.85%**	**11.21%**
Russell 3000 Index	(5.82%)	8.38%	9.19%	10.23%	11.56%
BR Russell 1000 Index Non-Lendable	(5.48%)	9.50%	9.54%	10.71%	11.92%
Russell 1000 Index	(5.49%)	9.48%	9.53%	10.71%	11.92%
LSV	(5.66%)	(2.98%)	17.66%	5.67%	6.16%
Russell 2000 Value Index	(8.75%)	(9.93%)	9.73%	3.26%	5.52%
Principal Dynamic Growth	(14.75%)	(8.40%)	(1.23%)	9.83%	13.98%
Russell 2500 Growth Index	(13.30%)	(4.80%)	(1.77%)	5.22%	8.50%
International Equity	**(6.73%)**	**15.69%**	**4.01%**	**3.89%**	**4.85%**
MSCI ACWI ex US Index	(7.64%)	12.66%	3.54%	3.96%	4.82%
Developed Markets	**(7.02%)**	**16.59%**	**6.03%**	**4.47%**	**5.64%**
MSCI EAFE Index	(8.00%)	14.40%	5.73%	4.10%	4.98%
Silchester	(3.98%)	22.51%	10.97%	5.33%	6.11%
MSCI EAFE Val Idx	(3.84%)	18.11%	10.97%	3.30%	4.24%
Walter Scott	(12.33%)	-	-	-	-
MSCI EAFE Index	(8.00%)	14.40%	5.73%	4.10%	4.98%
MSCI EAFE Growth	(12.01%)	10.79%	0.47%	4.46%	5.40%
Emerging Markets	**(5.31%)**	**12.49%**	**(3.96%)**	**1.37%**	**1.49%**
BlackRock EM Alpha Tilts	(5.31%)	12.49%	(3.96%)	-	-
MSCI Emerging Mkts Idx	(6.56%)	11.26%	(3.30%)	1.98%	2.99%
Global Equity/Long Short	**(2.92%)**	**3.25%**	**0.18%**	**3.32%**	**3.69%**
HFRI FOF: Strategic Index	(2.36%)	3.56%	1.38%	3.17%	3.26%
ABS Global	(2.75%)	4.41%	2.42%	4.02%	4.22%
MSCI World Index	(6.26%)	10.48%	8.14%	8.27%	9.16%
Private Equity(1)	**0.00%**	**1.87%**	**15.88%**	**15.22%**	**14.47%**
Pantheon USA IV	0.00%	-	-	-	-
Pantheon USA VI	0.00%	-	-	-	-
Pantheon USA VII	0.00%	-	-	-	-
Pantheon Europe Fund V A	0.00%	-	-	-	-
Pantheon Global Secondary Fund III	0.00%	-	-	-	-
Pantheon US Select 2014	0.00%	-	-	-	-
Private Equity Benchmark(2)	0.00%	1.87%	15.88%	15.22%	14.47%

*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 October 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 October 31, 2023

	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months	Last 84 Months
Domestic Fixed Income	**(5.21%)**	**0.35%**	**(5.81%)**	**(0.07%)**	**(0.17%)**
Prudential Cons Core Bond	(4.75%)	0.92%	(5.45%)	(0.10%)	(0.21%)
Metropolitan West Fund (2)	(5.58%)	(0.10%)	(6.10%)	(0.10%)	(0.17%)
Blmbg Aggregate Index	(4.76%)	0.36%	(5.57%)	(0.06%)	(0.21%)
Absolute Return	**2.15%**	**5.69%**	**6.49%**	**6.13%**	**5.22%**
UBS AIS	2.15%	5.69%	6.49%	6.13%	5.22%
HFRI FOF: Conservative Index	1.04%	4.09%	5.40%	4.30%	3.98%
Real Assets	**(4.35%)**	**3.22%**	**4.90%**	**4.26%**	**5.37%**
PIMCO All Asset Fund	(4.35%)	3.22%	4.90%	4.30%	4.18%
Blmbg US TIPS 1-10	(1.13%)	0.88%	0.08%	2.77%	1.90%
Cash	**1.86%**	**5.05%**	**2.13%**	**2.00%**	**1.83%**
Cash	1.86%	5.05%	2.13%	2.00%	1.83%
3-month Treasury Bill	1.77%	4.77%	1.85%	1.77%	1.61%
Total Fund	**(5.13%)**	**5.97%**	**4.04%**	**5.56%**	**6.08%**
Total Fund Custom Benchmark (1)	(4.92%)	6.50%	3.45%	5.59%	5.96%

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 Aggregrate 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.

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Callan

December 13, 2023

City of Norwalk Pension and OPEB Performance Review

Period ended September 30, 2023

Britton M. Murdoch
Vice President

Kevin Schmidt
Senior Vice President

Overview

- Market Environment
- Pension Performance
- OPEB Performance

Market Environment

Equity Markets Down in 3Q, Following Rebound in First Half of 2023

Stocks and bonds still have ground to make up after declines in 2022

- S&P 500 down 3.3% in 3Q23.
  - Loss through first three quarters of 2022 was 23.9%; rebound in the following three quarters reduced the loss to 2.9% by June, but decline in 3Q shows S&P is still over 7% below 1/2022 high-water mark
- Fixed income recovered in first half of 2023 as high inflation began to ease; speculation about interest rate cuts evaporated in 2Q
  - Bloomberg Aggregate: up 3% in 1Q, but declined 0.8% in 2Q and another 3.2% in 3Q as Fed continued to raise rates
  - CPI-U: +3.7% year-over year for 3Q, and still up 5.8% since the start of 2022
- Economic data defied expectations of recession in 2023; GDP growth came in at 2.1% in 1Q and 2.2% in 2Q, and surged to a stunning 4.9% in 3Q
  - Job market remains solid, providing support to Fed efforts to fight inflation

Returns for Periods ended 9/30/23

	Quarter	YTD	Since 1/2022	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	-3.25	12.39	-5.36	9.14	11.28	8.09
S&P 500	-3.27	13.07	-4.30	9.92	11.91	7.92
Russell 2000	-5.13	2.54	-10.98	2.40	6.65	8.00
Global ex-U.S. Equity						
MSCI World ex USA	-4.10	6.73	-4.97	3.44	3.84	4.98
MSCI Emerging Markets	-2.93	1.82	-11.12	0.56	2.07	--
MSCI ACWI ex USA Small Cap	-1.70	5.03	-9.45	2.58	4.35	7.41
Fixed Income						
Bloomberg Aggregate	-3.23	-1.21	-8.29	0.10	1.13	3.59
90-day T-Bill	1.31	3.60	2.89	1.72	1.11	1.89
Bloomberg Long Gov/Credit	-9.37	-5.40	-19.12	-1.21	1.94	4.67
Bloomberg Global Agg ex-US	-4.00	-3.20	-12.79	-3.10	-1.73	2.04
Real Estate						
NCREIF Property	-1.98	-5.66	-0.26	5.13	7.33	8.29
FTSE Nareit Equity	-7.13	-2.14	-15.80	2.77	5.96	8.49
Alternatives						
CS Hedge Fund Index	1.81	3.71	2.72	4.77	4.08	5.96
Cambridge Private Equity*	1.59	3.71	0.39	15.37	14.91	13.67
Bloomberg Commodity	4.71	-3.44	6.74	6.13	-0.75	2.45
Gold Spot Price	-3.28	2.18	1.17	9.30	3.47	7.60
Inflation - CPI-U	0.88	3.70	5.81	4.04	2.77	2.56

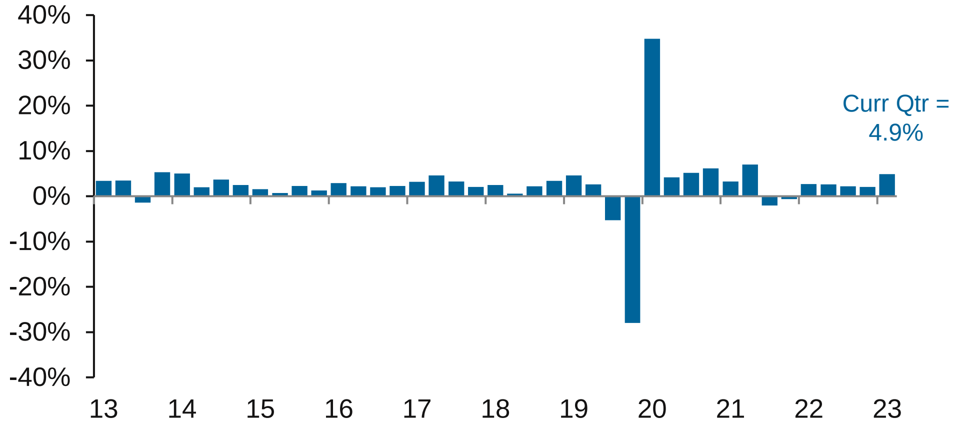
*Cambridge PE data as of 2Q23

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

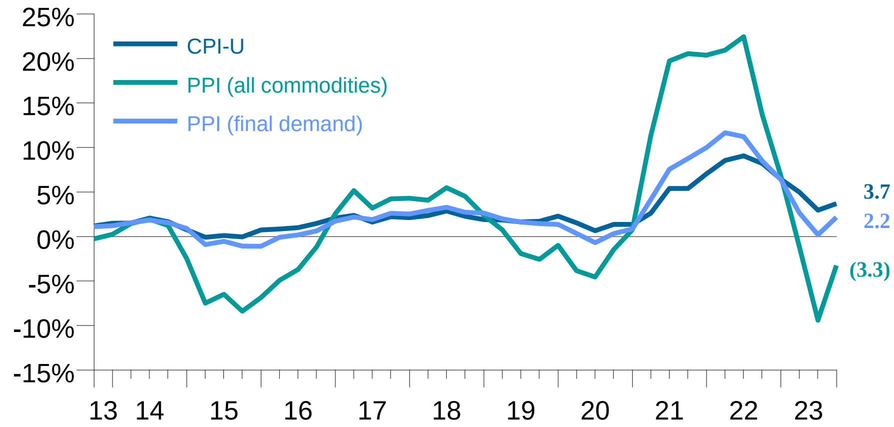
U.S. Economy—Summary

For periods ended 9/30/23

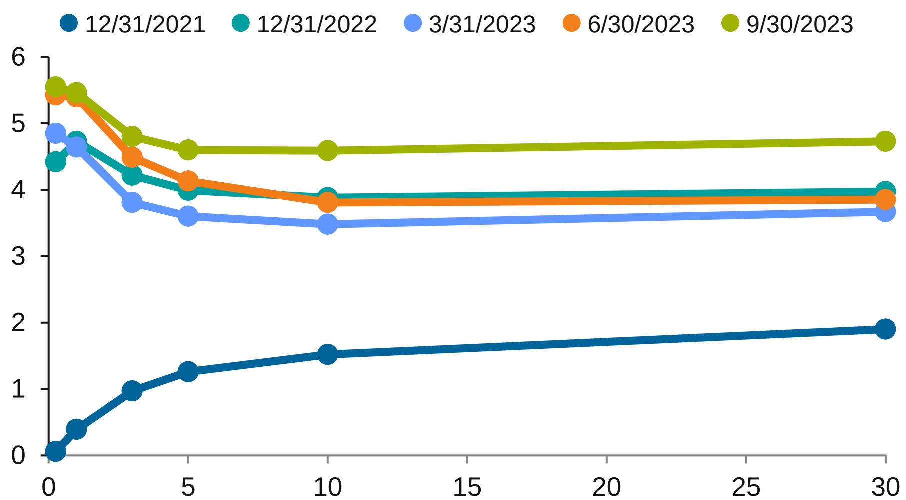
Quarterly Real GDP Growth



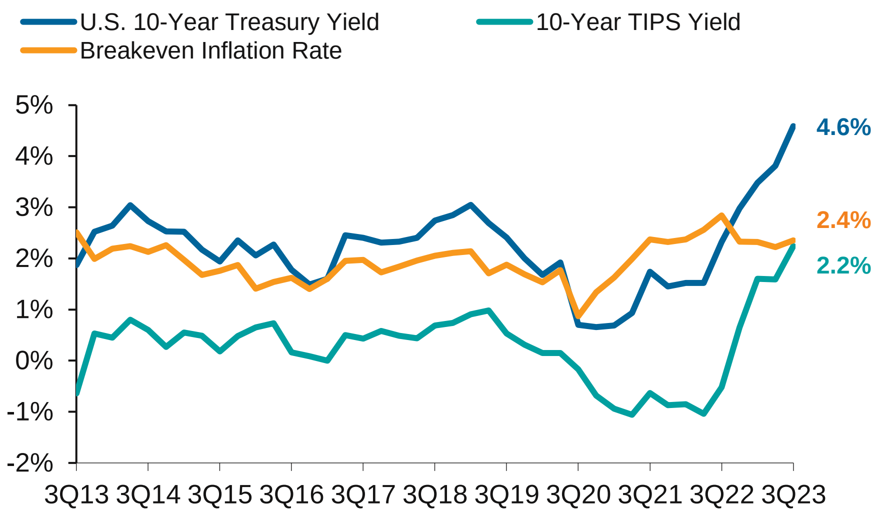
Inflation Year-Over-Year



U.S. Treasury Yield Curves



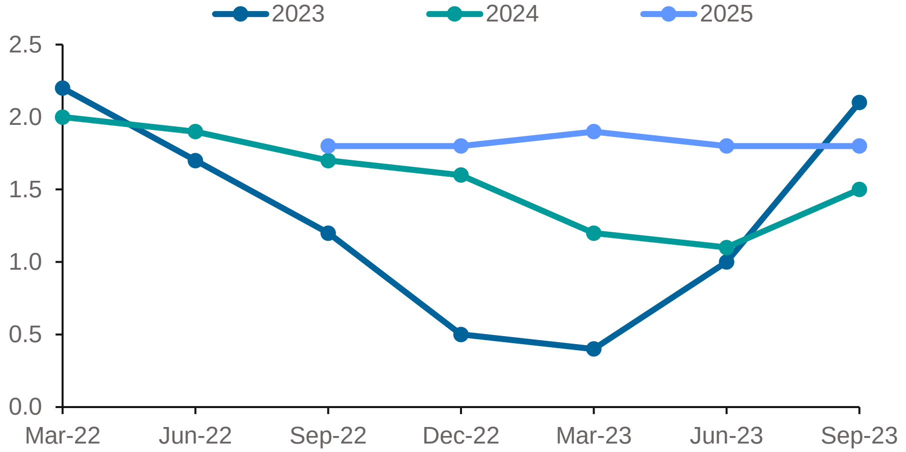
Historical 10-Year Yields Through 9/30/23



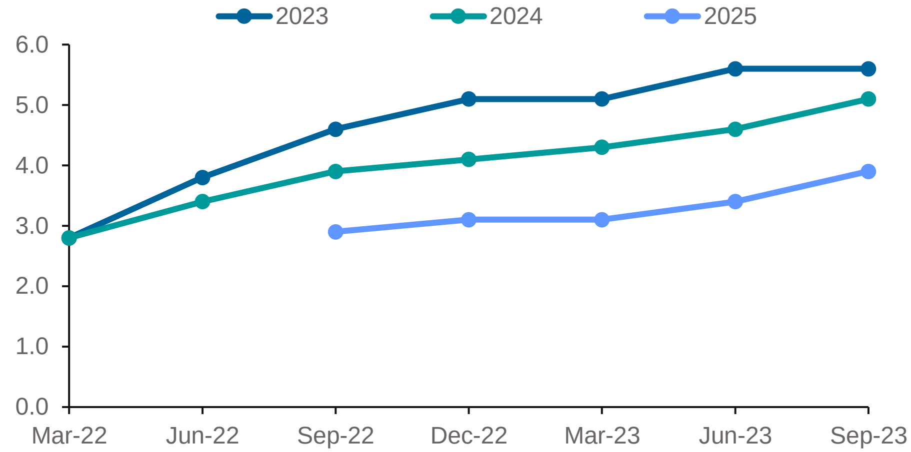
Sources: Bloomberg, Bureau of Labor Statistics, Callan

The Shifting Mindset at the Fed

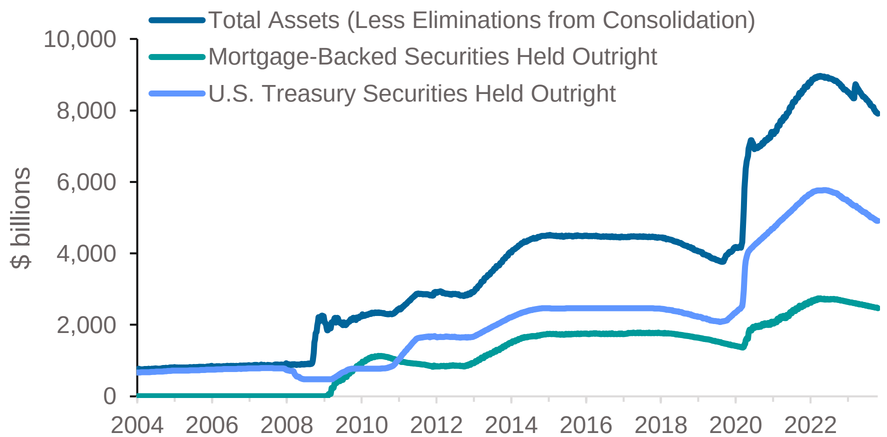
Fed Projection of Change in Real GDP
By Fed Meeting Date and Projection Year



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



Fed Balance Sheet



Source: Federal Reserve, Financial Times

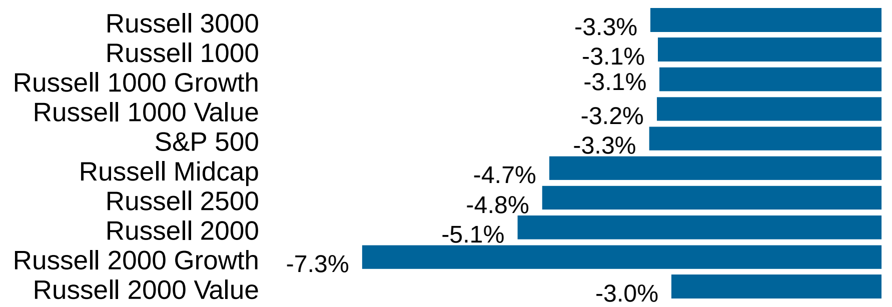
- The big swing in the Fed's GDP projection reflects the surprising nature of economic resilience despite high inflation and rapidly rising interest rates.
- The Fed has steadily increased projections for the appropriate Fed Funds Rate in response to this economic strength.
  - Inflation has come down from recent highs but remains well above the Fed's long-term 2% target.
- In addition to raising short-term rates (Federal Funds Rate), the Fed is also unwinding its balance sheet, also known as quantitative tightening (QT) as seen in the chart on the left.
  - QT is one of the reasons longer term rates have risen and could preclude the Fed from needing to keep raising short rates if this slows economic activity.

U.S. Equity Performance: 3Q23

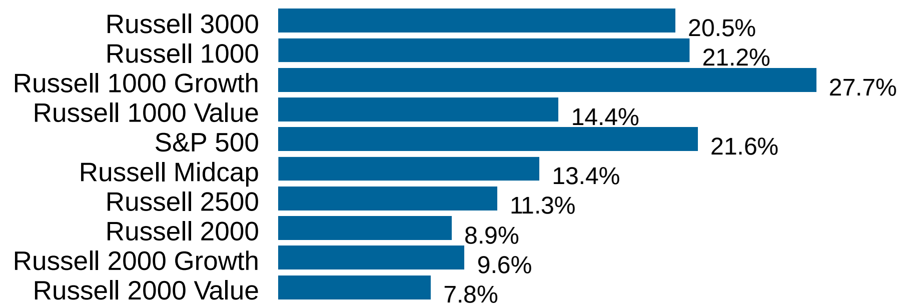
The U.S. equity markets cooled in 3Q after an exuberant start to the year

- All U.S. equity indices posted losses during 3Q23. August and September were marked by investor fears about the potential of a “higher for longer” interest rate environment, leading to broader market declines.
- While all indices were negative, the Russell 2000 Value Index led the pack during the quarter, a reversal of the previous two quarters when the Russell 1000 Growth Index led.
- Only two of the 11 S&P 500 Index sectors generated positive 3Q returns; Energy was up 12% and Communication Services was up 3%. However, on a YTD basis, six sectors generated positive returns, with Information Technology, Communication Services and Consumer Discretionary substantially leading the group.

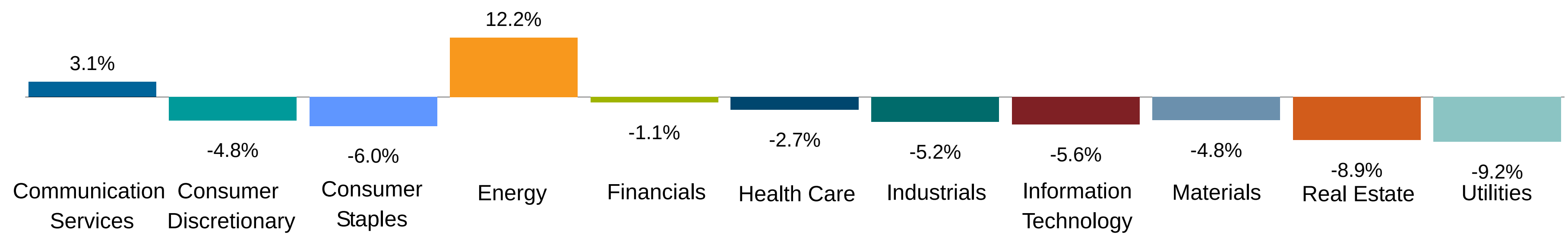
U.S. Equity: Quarter Ended 9/30/23



U.S. Equity: One-Year Returns Ended 9/30/23



Industry Sector Quarterly Performance (S&P 500) as of 9/30/23



Sources: FTSE Russell, S&P Dow Jones Indices

U.S. Equity Key Theme

Small cap valuations continue to look compelling

- Small cap valuations, on both an absolute and relative (to large cap valuations) basis, continue to look compelling and may point to an attractive entry point for investors.
- What continues to pressure the asset class is the rhetoric around interest rates; as investors anticipate a higher-for-longer interest rate environment, there are concerns about small cap companies' ability to repay and re-finance debt in a way that would not jeopardize their underlying financial stability.
- If inflation data continues to improve in 2023, particularly against a backdrop of steady labor and general economic data, the small cap market could be positioned for a boost to performance.

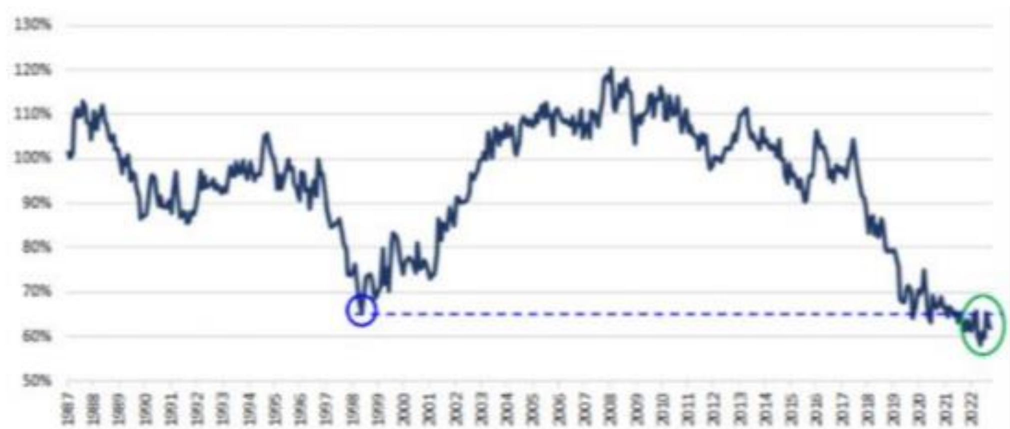
Small Cap Valuations at Historic Lows

Small Cap P/Es have come down amid lackluster returns

Weighted Harmonic average price-to-earnings ratio (excluding non-earners) for the Russell 2000 from 12/31/78–9/30/23

Relative to large caps, small caps have never been more attractive

Russell 2000 / S&P 500 Relative P/E



Sources: Furey Research Partners, Royce Associates, Westfield, MSCI
Past performance is no guarantee of future results.

Global/Global ex-U.S. Equity Performance: 3Q23

Global growth concerns

- Most global markets were in the red for 3Q23.

Narrow market

- Global markets retreated in 3Q23 amid fears of a global recession driven by higher interest rates and slowing growth in regions outside the U.S.
- Emerging markets outperformed developed markets, buoyed by good results from India, whose economy grew nearly 8% on the heels of supportive infrastructure spending.
- Japan was strong again in local currency as it continues to benefit from post-COVID exuberance, easy monetary policy, and a new economic stimulus plan.

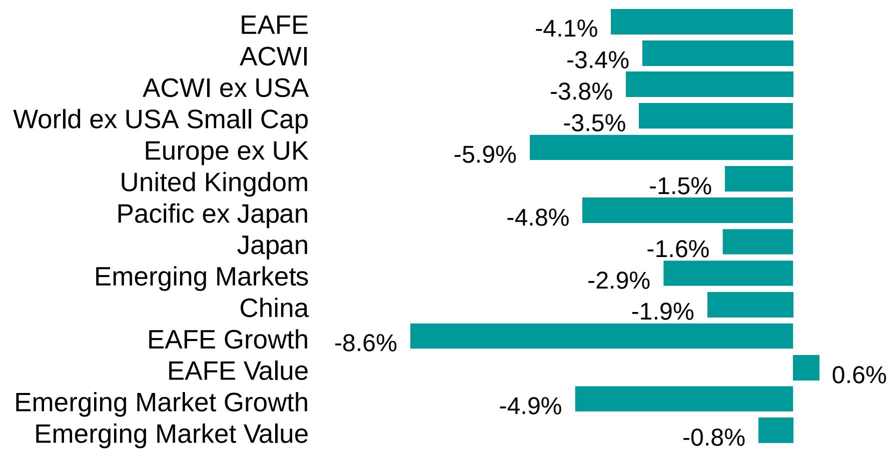
Growth vs. value

- With energy as a strong outperformer on the heels of oil price increases, value outpaced growth by a wide margin in global ex-U.S. markets.

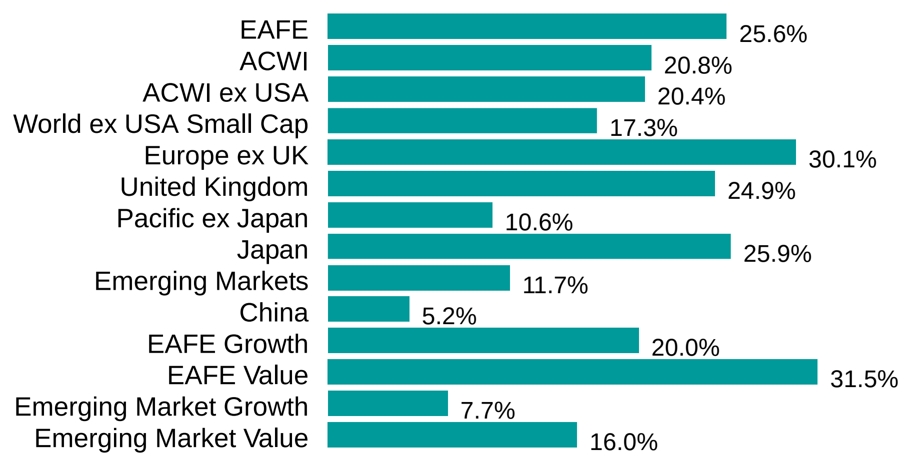
U.S. dollar vs. other currencies

- The stronger U.S. dollar, which gained 3% over the quarter, was a notable headwind for the period.

Global Equity Returns: Quarter Ended 9/30/23



Global Equity Returns: One Year Ended 9/30/23



Source: MSCI

Global/Global ex-U.S. Equity Key Themes

China: Danger or opportunity?

Merits

Long-term growth potential: China has the second-largest GDP and the world's largest population of consumers.

Compelling valuations: Forward earnings yield is at a decade high.

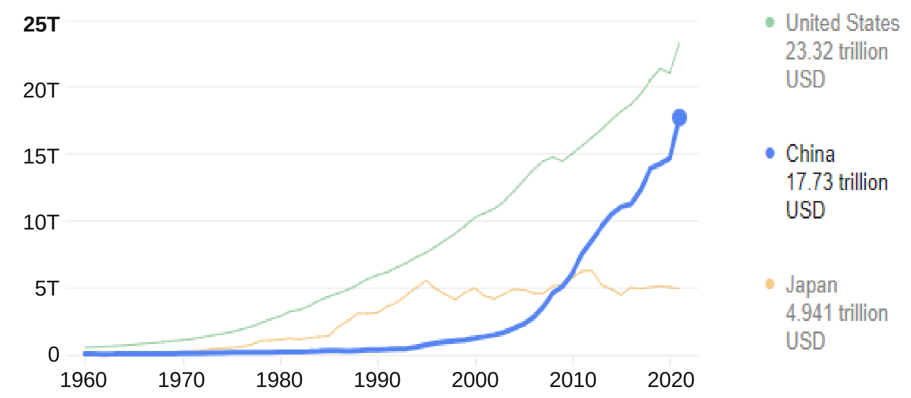
Considerations

Downside risk: Chinese federal debt has continued to grow aggressively and may become unsustainable.

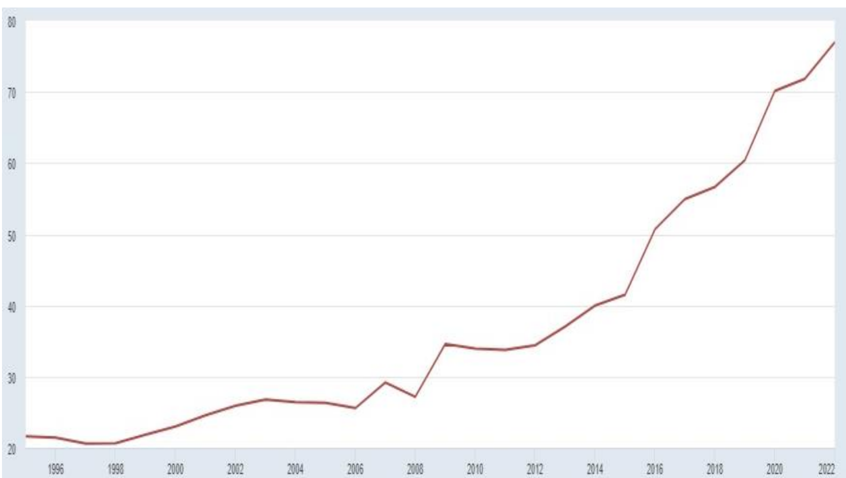
Political risk: China is run by an authoritarian regime that may act against investors.

Old before rich: China currently has 2.26 workers for every retiree—the U.S. has 2.8.

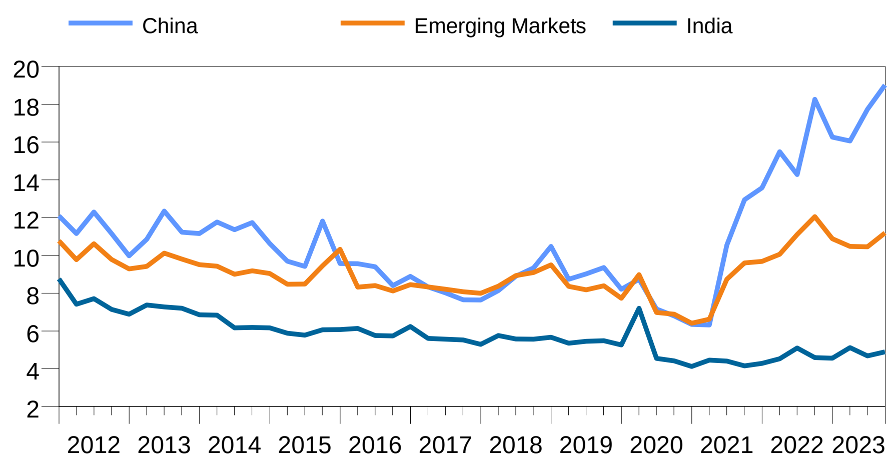
China GDP



General Government Gross Debt for China (percent of GDP)



Forecasted Earnings Yield



Sources: St. Louis Fed, MSCI, World Bank, Nikkei Asia, Peter G. Peterson Foundation

U.S. Fixed Income Performance: 3Q23

Yields continue to march upward as spreads remain range-bound

U.S. fixed income fell for a second straight quarter

- The Bloomberg Aggregate Index is on track for a third calendar year of negative returns, with the rise in yields continuing to detract from performance.

U.S. Treasury 10-year yield climbed roughly 80 bps

- 10-year ended the quarter at 4.59%, its highest level since 2007.
- The yield curve's inversion narrowed as long-term rates rose more than short-term rates.

TIPS outperformed nominal Treasuries

- 10-year break-even spreads widened over 10 bps.

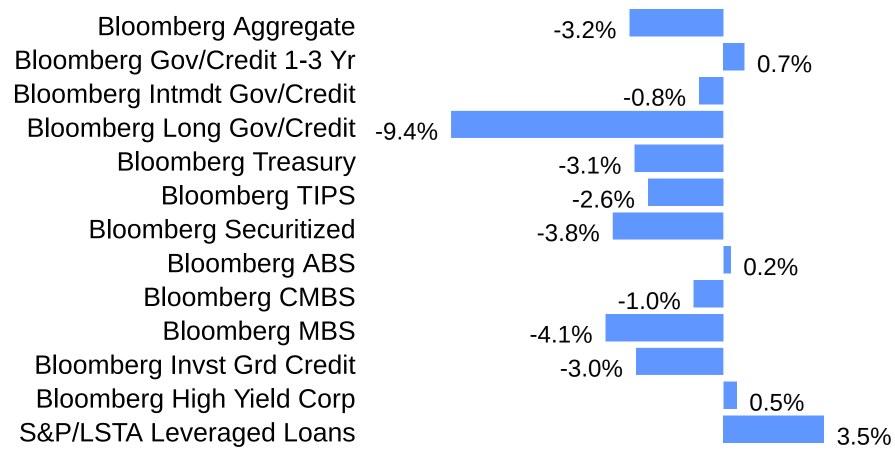
Fed policy rate held to 5.25%-5.50%

- The updated dot plot suggested an additional rate hike may be in the cards before year-end.

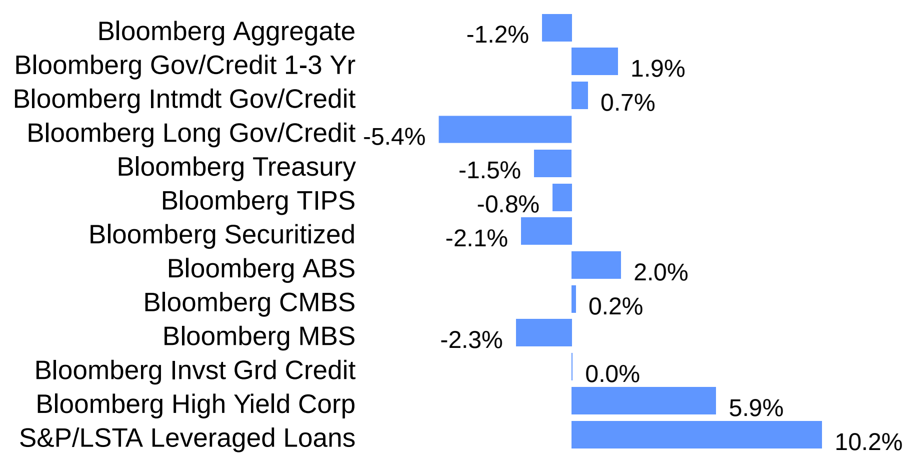
Lower-quality credit continued to outperform

- High yield spreads were flat, but the sector was buoyed by strong performance in July. Additionally, a combination of higher yields and no duration continued to drive bank loan outperformance.
- IG corporate spreads tightened slightly and remained close to their 10-year average.
- Agency RMBS underperformed other securitized sectors as interest rate volatility weighed on the sector.

U.S. Fixed Income Returns: Quarter Ended 9/30/23



U.S. Fixed Income Returns: YTD Ending 9/30/23



Sources: Bloomberg, S&P Dow Jones Indices

Hedge Fund Performance: 3Q23

Equities sell off and credit indices produce mixed results for the quarter

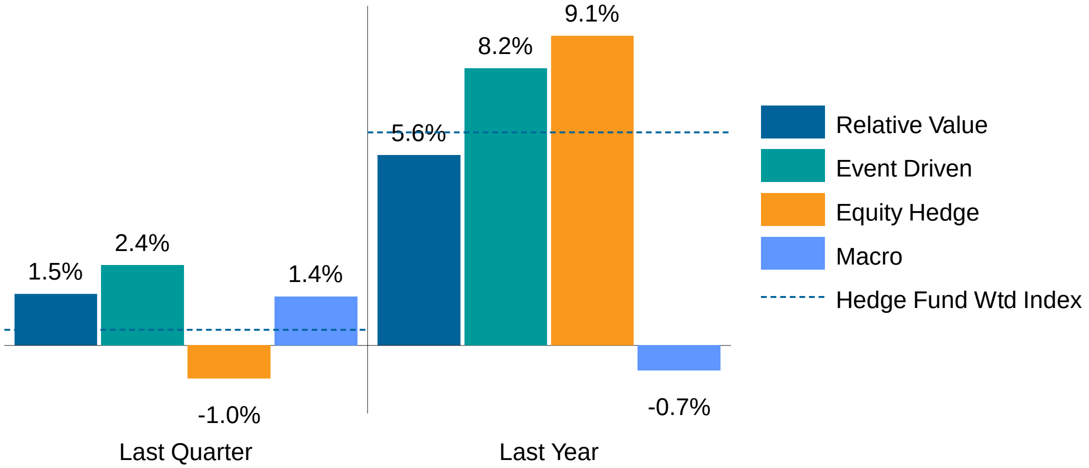
Solid quarter for most strategies

- Equity hedge strategies ended lower, as those focused on biotech, technology, and real estate struggled.
- Macro strategies continued to claw back performance, as they profited from a steeper yield curve and rising sovereign bond yields.
- Event-driven strategies had another solid quarter, as special situation equities drove performance, while credit positions were muted.
- Relative value gains were driven by strong yield opportunities within short-dated convertibles and strong new issuance.

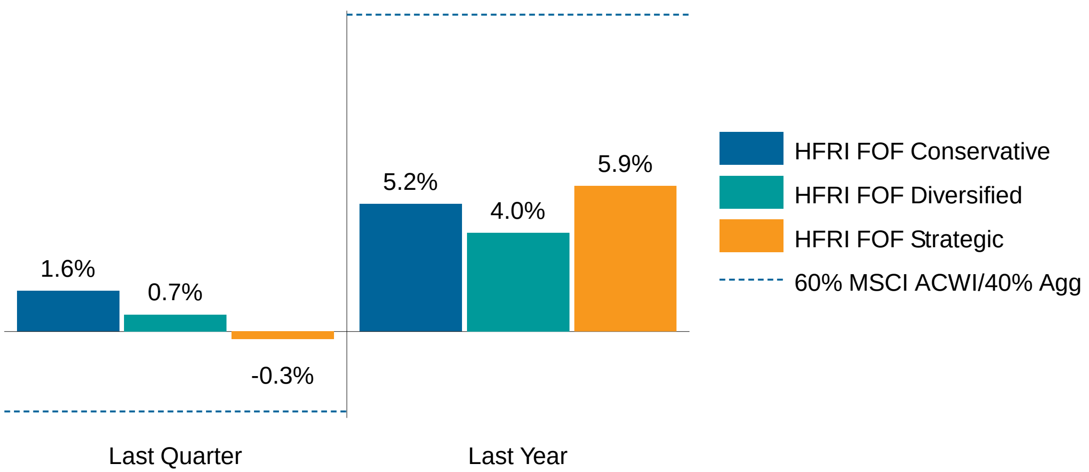
FOFs ended on a strong note

- FOFs with less exposure to equity hedge strategies had a strong quarter.
- Those FOFs with more equity beta struggled to stay in positive territory for the quarter.

HFRI Strategy Index Returns vs. Broad Hedge Fund Universe as of 9/30/23



HFRI Fund-of-Funds Returns vs. 60% Stock/40% Bond Mix as of 9/30/23



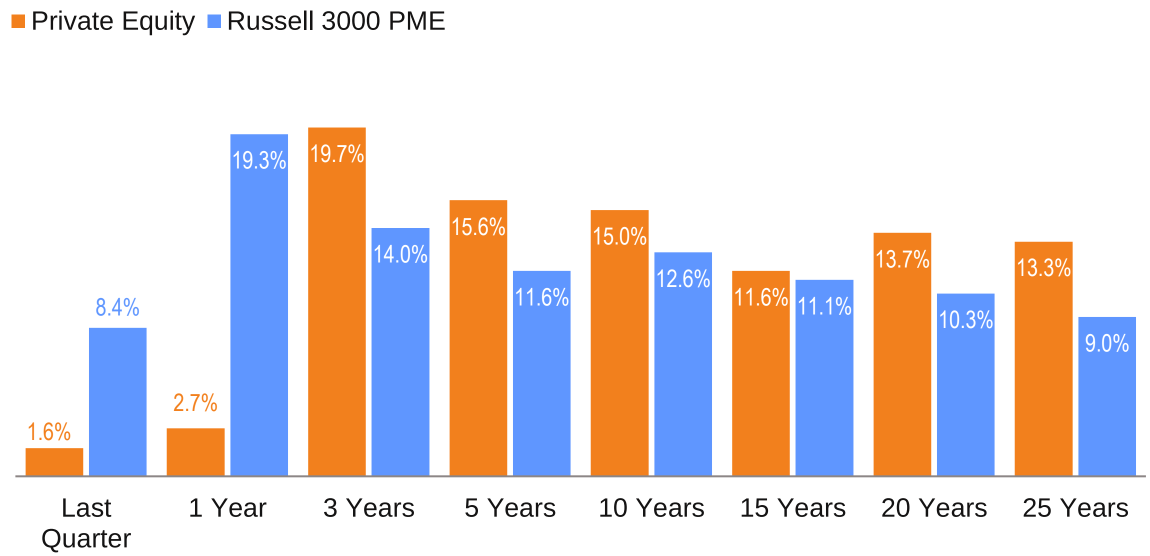
Source: Hedge Fund Research (www.hedgefundresearch.com)

Private Equity Performance

Volatility enhances differences in short-term private and public equity returns

- The strong recovery in public equity indices led by the “Magnificent 7” technology stocks left private equity returns in its wake (along with most other public stocks).
- During short-term periods in both up and down markets, the appraisal smoothing effect will tend to make private equity returns lag in magnitude of movement.
- Over longer periods (3-year horizon-plus) broad private equity has consistently outperformed public equity.
- After peaking at exuberant valuations in late 2021, venture capital continues to decline, with 2Q being modestly negative. Buyouts and other corporate finance strategies continued their rally for a third consecutive quarter.
- Portfolio companies are typically valued internally by the manager on a quarterly basis. Valuations are based on the operating metrics of the company, recent comparable transactions, and public market comps.

Pooled Horizon Net IRRs as of 06/30/23



Net IRRs by Strategy as of 06/30/23

Strategy	Last Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Venture Capital	-0.7%	-9.3%	20.2%	18.9%	18.2%	12.6%
Growth Equity	1.3%	-0.3%	17.2%	15.6%	15.0%	14.1%
Buyouts	2.6%	8.1%	21.1%	15.7%	15.3%	14.8%
Mezzanine	3.2%	10.7%	15.0%	11.1%	11.2%	11.3%
Credit Opportunities	1.4%	7.4%	11.9%	7.1%	7.6%	9.4%
Control-Oriented Distressed	1.2%	4.9%	22.4%	13.6%	12.0%	11.7%
Total Private Equity	**1.6%**	**2.7%**	**19.7%**	**15.6%**	**15.0%**	**13.7%**

Source: Refinitiv/Cambridge

Diversification Remains Key Risk Control

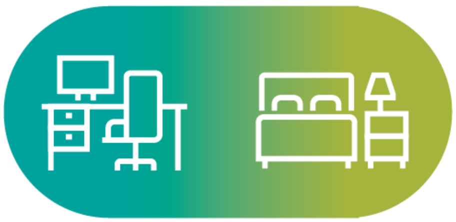
Periodic Table of Investment Returns

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	3 Qtrs. 2023
Emerging Markets 25.55%	Emerging Markets 34.00%	Emerging Markets 32.17%	Emerging Markets 39.38%	U.S. Fixed 5.24%	Emerging Markets 78.51%	Small Cap 26.85%	Real Estate Funds 14.96%	Emerging Markets 18.23%	Small Cap 38.82%	Large Cap 13.69%	Real Estate Funds 13.95%	Small Cap 21.31%	Emerging Markets 37.28%	Real Estate Funds 7.36%	Large Cap 31.49%	Small Cap 19.96%	Large Cap 28.71%	Real Estate Funds 6.55%	Large Cap 13.07%
Non-U.S. Equity 20.38%	Real Estate Funds 20.15%	Non-U.S. Equity 25.71%	Real Estate Funds 14.84%	Non-U.S. Fixed 4.39%	High Yield 58.21%	Emerging Markets 18.88%	U.S. Fixed 7.84%	Non-U.S. Equity 16.41%	Large Cap 32.39%	Real Estate Funds 11.46%	Large Cap 1.38%	High Yield 17.13%	Non-U.S. Equity 24.21%	Cash Equivalent 1.87%	Small Cap 25.52%	Large Cap 18.40%	Real Estate Funds 21.02%	Cash Equivalent 1.46%	Non-U.S. Equity 6.73%
Small Cap 18.33%	Non-U.S. Equity 14.47%	Small Cap 18.37%	Hedge Funds 12.56%	Cash Equivalent 2.06%	Non-U.S. Equity 33.67%	Real Estate Funds 15.26%	High Yield 4.98%	Small Cap 16.35%	Non-U.S. Equity 21.02%	U.S. Fixed 5.97%	U.S. Fixed 0.55%	Large Cap 11.96%	Large Cap 21.83%	U.S. Fixed 0.01%	Non-U.S. Equity 22.49%	Emerging Markets 18.31%	Small Cap 14.82%	Hedge Funds 1.06%	High Yield 5.86%
Non-U.S. Fixed 12.54%	Hedge Funds 7.61%	Large Cap 15.79%	Non-U.S. Equity 12.44%	Real Estate Funds -10.70%	Small Cap 27.17%	High Yield 15.12%	Non-U.S. Fixed 4.36%	Large Cap 16.00%	Real Estate Funds 12.90%	Small Cap 4.89%	Cash Equivalent 0.05%	Emerging Markets 11.19%	Small Cap 14.65%	High Yield -2.08%	Emerging Markets 18.44%	Non-U.S. Fixed 10.11%	Non-U.S. Equity 12.62%	High Yield -11.19%	Hedge Funds 3.71%
Real Estate Funds 12.00%	Large Cap 4.91%	Real Estate Funds 15.27%	Non-U.S. Fixed 11.03%	Hedge Funds -19.07%	Large Cap 26.47%	Large Cap 15.06%	Large Cap 2.11%	High Yield 15.81%	Hedge Funds 9.73%	Hedge Funds 4.13%	Hedge Funds -0.71%	Real Estate Funds 7.79%	Non-U.S. Fixed 10.51%	Non-U.S. Fixed -2.15%	High Yield 14.32%	Non-U.S. Equity 7.59%	Hedge Funds 8.23%	U.S. Fixed -13.01%	Cash Equivalent 3.60%
High Yield 11.13%	Small Cap 4.55%	Hedge Funds 13.86%	U.S. Fixed 6.97%	High Yield -26.16%	Hedge Funds 18.57%	Hedge Funds 10.95%	Cash Equivalent 0.10%	Real Estate Funds 9.79%	High Yield 7.44%	High Yield 2.45%	Non-U.S. Equity -3.04%	Non-U.S. Equity 2.75%	High Yield 7.50%	Hedge Funds -3.19%	Hedge Funds 9.31%	U.S. Fixed 7.51%	High Yield 5.28%	Non-U.S. Equity -14.29%	Small Cap 2.54%
Large Cap 10.88%	Cash Equivalent 3.06%	High Yield 11.85%	Large Cap 5.49%	Small Cap -33.79%	Non-U.S. Fixed 7.53%	Non-U.S. Equity 8.95%	Hedge Funds -2.52%	Hedge Funds 7.67%	Cash Equivalent 0.07%	Cash Equivalent 0.04%	Small Cap -4.41%	U.S. Fixed 2.65%	Hedge Funds 7.12%	Large Cap -4.38%	U.S. Fixed 8.72%	High Yield 7.11%	Cash Equivalent 0.05%	Large Cap -18.11%	Emerging Markets 1.82%
Hedge Funds 9.64%	High Yield 2.74%	Non-U.S. Fixed 8.16%	Cash Equivalent 5.00%	Large Cap -37.00%	U.S. Fixed 5.93%	U.S. Fixed 6.54%	Small Cap -4.18%	U.S. Fixed 4.21%	U.S. Fixed -2.02%	Emerging Markets -2.19%	High Yield -4.47%	Non-U.S. Fixed 1.49%	Real Estate Funds 6.66%	Small Cap -11.01%	Non-U.S. Fixed 5.09%	Hedge Funds 6.36%	U.S. Fixed -1.54%	Non-U.S. Fixed -18.70%	U.S. Fixed -1.21%
U.S. Fixed 4.34%	U.S. Fixed 2.43%	Cash Equivalent 4.86%	High Yield 1.87%	Non-U.S. Equity -43.56%	Cash Equivalent 0.21%	Non-U.S. Fixed 4.95%	Non-U.S. Equity -12.21%	Non-U.S. Fixed 4.09%	Emerging Markets -2.60%	Non-U.S. Fixed -3.09%	Non-U.S. Fixed -6.02%	Hedge Funds 1.25%	U.S. Fixed 3.54%	Non-U.S. Equity -14.09%	Real Estate Funds 4.39%	Cash Equivalent 0.67%	Emerging Markets -2.54%	Emerging Markets -20.09%	Non-U.S. Fixed -3.20%
Cash Equivalent 1.33%	Non-U.S. Fixed -8.65%	U.S. Fixed 4.33%	Small Cap -1.57%	Emerging Markets -53.33%	Real Estate Funds -30.40%	Cash Equivalent 0.13%	Emerging Markets -18.42%	Cash Equivalent 0.11%	Non-U.S. Fixed -3.08%	Non-U.S. Equity -4.32%	Emerging Markets -14.92%	Cash Equivalent 0.33%	Cash Equivalent 0.86%	Emerging Markets -14.57%	Cash Equivalent 2.28%	Real Estate Funds 0.34%	Non-U.S. Fixed -7.05%	Small Cap -20.44%	Real Estate Funds -8.14%

- 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 3Q23

Office-to-Residential Conversions: Vast Opportunity or Unfeasible Challenge?



Four-Part Series: The ESG Rule Explained

Callan Discount Rate Reporter: Regular Update on Corporate DB Plans

How Your Public DB Plan's Returns Compare: Quarterly Update

Recent Blog Posts

An Investor's Guide to the Nasdaq-100's Special Rebalance

Mark Wood

A Deeper Dive Into the Tradeoff Between Return and Risk

Kevin Machiz

S&P Global Moves Away from Numeric ESG Credit Indicators

Kristin Bradbury

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.

- November 1–2, 2023 – Atlanta, Georgia
- March 5–7, 2024 – Virtual Session via Zoom

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 2023 and 2024 calendar!

Mark Your Calendar

2023 Regional Workshops

October 24, 2023 – New York

October 26, 2023 – Chicago

2024 National Conference

April 8–10, 2024 – San Francisco

2024 Regional Workshops

June 25, 2024 – Atlanta

June 27, 2024 – San Francisco

Watch your email for further details and an invitation.

Webinars & Research Café Sessions

Webinar: ESG Study

November 7, 2023 – Virtual Session via Zoom

Webinar: The Retirement Conundrum

November 15, 2023 – Virtual Session via Zoom

Research Café: Conversion of Commercial Real Estate

December 6, 2023 – Virtual Session via Zoom

Pension Plan Performance

Actual versus Target Asset Allocation

For Periods Ended September 30, 2023

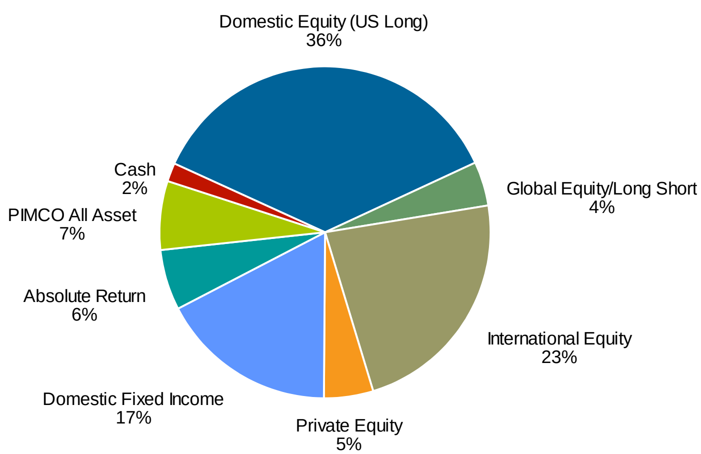
Overweights:

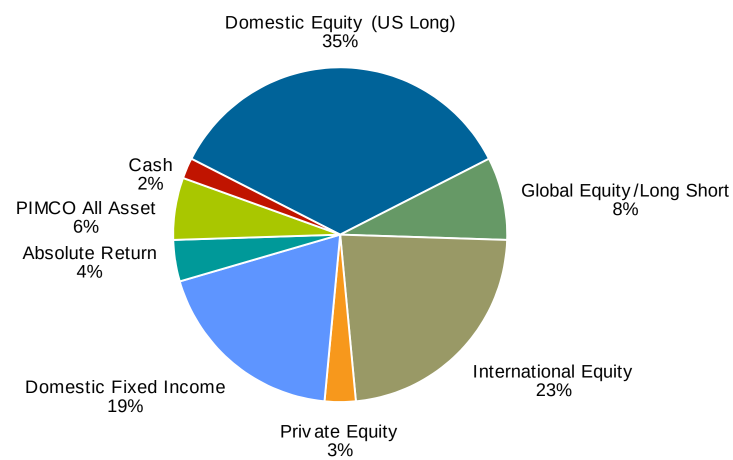
- Absolute Return (5.9% vs 4% target)
- Private Equity (4.8% vs 3% target)
- Domestic Equity (36.3% vs 35% target)
- Real Assets (6.7% vs 6% target)

Underweights:

- Global Equity Long/Short (4.3% vs 8% target)
- Domestic Fixed Income (17.3% vs 19% target)

- The cash was 1.8% at the end of the third quarter.





Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity (US Long)	171,189	36.3%	35.0%	1.3%	6,101
Global Equity/Long Short	20,162	4.3%	8.0%	(3.7%)	(17,572)
International Equity	107,917	22.9%	23.0%	(0.1%)	(570)
Private Equity	22,677	4.8%	3.0%	1.8%	8,527
Domestic Fixed Income	81,427	17.3%	19.0%	(1.7%)	(8,192)
Absolute Return	27,967	5.9%	4.0%	1.9%	9,100
PIMCO All Asset	31,662	6.7%	6.0%	0.7%	3,361
Cash	8,679	1.8%	2.0%	(0.2%)	(755)
Total	471,681	100.0%	100.0%		

Portfolio Holdings

For Periods Ended September 30, 2023

- As of September 30, 2023, total fund assets were $471.7 million, down from $475.7 million as of June 30, 2023.
- The total fund had a negative investment return of $12.8 million for the quarter.

	September 30, 2023				June 30, 2023	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Total Equity	**$321,945,663**	**68.25%**	**$2,918,598**	**$(9,849,054)**	**$328,876,119**	**69.14%**
U.S. Equity	**$171,189,462**	**36.29%**	**$8,428,596**	**$(6,577,783)**	**$169,338,648**	**35.60%**
BR Russell 1000 Index Non-Lendable	128,761,312	27.30%	8,600,000	(4,460,125)	124,621,437	26.20%
LSV	21,711,399	4.60%	(171,404)	(394,713)	22,277,517	4.68%
Principal Dynamic Growth	20,716,750	4.39%	0	(1,722,945)	22,439,695	4.72%
International Equity	**$107,916,857**	**22.88%**	**$(140,408)**	**$(3,132,111)**	**$111,189,376**	**23.38%**
Developed Markets	**$89,529,864**	**18.98%**	**$(117,629)**	**$(2,728,972)**	**$92,376,465**	**19.42%**
Silchester	59,402,909	12.59%	(117,629)	723,594	58,796,944	12.36%
Walter Scott	30,126,955	6.39%	0	(3,452,566)	33,579,521	7.06%
Emerging Markets	**$18,386,994**	**3.90%**	**$(22,779)**	**$(403,139)**	**$18,812,912**	**3.96%**
BlackRock EM Alpha Tilts	18,386,994	3.90%	(22,779)	(403,139)	18,812,912	3.96%
Global Equity Long/Short	**$20,162,313**	**4.27%**	**$(4,818,590)**	**$(139,160)**	**$25,120,063**	**5.28%**
ABS Global	19,920,007	4.22%	0	(139,161)	20,059,168	4.22%
Blackstone Park Ave. NT	242,306	0.05%	(4,818,590)	1	5,060,895	1.06%
Private Equity (1)	**$22,677,031**	**4.81%**	**$(551,000)**	**$0**	**$23,228,031**	**4.88%**
Pantheon USA IV	22,762	0.00%	(156,000)	0	178,762	0.04%
Pantheon USA VI	141,423	0.03%	0	0	141,423	0.03%
Pantheon USA VII	685,521	0.15%	(20,000)	0	705,521	0.15%
Pantheon Europe Fund V A	337,717	0.07%	(60,000)	0	397,717	0.08%
Pantheon Global Secondary Fund III	59,955	0.01%	0	0	59,955	0.01%
Pantheon US Select 2014	21,429,653	4.54%	(315,000)	0	21,744,653	4.57%
Domestic Fixed Income	**$81,427,489**	**17.26%**	**$(11,253)**	**$(2,893,257)**	**$84,332,000**	**17.73%**
Prudential Cons Core Bond Fund	36,191,758	7.67%	(11,253)	(1,192,009)	37,395,021	7.86%
Metropolitan West Fund	45,235,731	9.59%	0	(1,701,247)	46,936,979	9.87%
Absolute Return	**$27,967,415**	**5.93%**	**$0**	**$503,005**	**$27,464,410**	**5.77%**
UBS AIS	27,967,415	5.93%	0	503,005	27,464,410	5.77%
Real Assets	**$31,661,660**	**6.71%**	**$0**	**$(713,785)**	**$32,375,445**	**6.81%**
PIMCO All Asset	31,661,660	6.71%	0	(713,785)	32,375,445	6.81%
Cash	**$8,678,566**	**1.84%**	**$5,953,850**	**$113,450**	**$2,611,266**	**0.55%**
Cash Account	8,678,566	1.84%	5,953,850	113,450	2,611,266	0.55%
Total Fund	**$471,680,793**	**100.0%**	**$8,861,194**	**$(12,839,640)**	**$475,659,238**	**100.0%**

Portfolio Holdings

For Periods Ended September 30, 2023

	September 30, 2023					June 30, 2023		
	Market Value	Weight	(min)	Target	(max)	Market Value	Weight	Target
Total Equity	**$321,945,663**	**68.25%**	**60.00%**	**69.00%**	**75.00%**	**$328,876,119**	**69.14%**	**69.00%**
U.S. Equity	**$171,189,462**	**36.29%**	**27.00%**	**35.00%**	**40.00%**	**$169,338,648**	**35.60%**	**35.00%**
BR Russell 1000 Idx Non-Lendable	128,761,312	27.30%				124,621,437	26.20%	
LSV	21,711,399	4.60%				22,277,517	4.68%	
Principal Dynamic Growth	20,716,750	4.39%				22,439,695	4.72%	
International Equity	**$107,916,857**	**22.88%**	**18.00%**	**23.00%**	**28.00%**	**$111,189,376**	**23.38%**	**23.00%**
Developed Markets	**$89,529,864**	**18.98%**	**-**	**-**	**-**	**$92,376,465**	**19.42%**	**-**
Silchester	59,402,909	12.59%				58,796,944	12.36%	
Walter Scott	30,126,955	6.39%				33,579,521	7.06%	
Emerging Markets	**$18,386,994**	**3.90%**	**-**	**-**	**-**	**$18,812,912**	**3.96%**	**-**
BlackRock EM Alpha Tilts	18,386,994	3.90%				18,812,912	3.96%	
Global Equity/Long Short	**$20,162,313**	**4.27%**	**4.00%**	**8.00%**	**12.00%**	**$25,120,063**	**5.28%**	**8.00%**
ABS Global	19,920,007	4.22%				20,059,168	4.22%	
Blackstone Park Ave. NT	242,306	0.05%				5,060,895	1.06%	
Private Equity (1)	**$22,677,031**	**4.81%**	**0.00%**	**3.00%**	**6.00%**	**$23,228,031**	**4.88%**	**3.00%**
Pantheon USA IV	22,762	0.00%				178,762	0.04%	
Pantheon USA VI	141,423	0.03%				141,423	0.03%	
Pantheon USA VII	685,521	0.15%				705,521	0.15%	
Pantheon Europe Fund V A	337,717	0.07%				397,717	0.08%	
Pantheon Global Fund III	59,955	0.01%				59,955	0.01%	
Pantheon US Select 2014	21,429,653	4.54%				21,744,653	4.57%	
Domestic Fixed Income	**$81,427,489**	**17.26%**	**14.00%**	**19.00%**	**24.00%**	**$84,332,000**	**17.73%**	**19.00%**
Prudential Cons Core Bond Fund	36,191,758	7.67%				37,395,021	7.86%	
Metropolitan West Fund CIT	45,235,731	9.59%				46,936,979	9.87%	
Absolute Return	**$27,967,415**	**5.93%**	**0.00%**	**4.00%**	**6.00%**	**$27,464,410**	**5.77%**	**4.00%**
UBS AIS	27,967,415	5.93%				27,464,410	5.77%	
Real Assets	**$31,661,660**	**6.71%**	**4.00%**	**6.00%**	**12.00%**	**$32,375,445**	**6.81%**	**6.00%**
PIMCO All Asset	31,661,660	6.71%	4.00%	6.00%	10.00%	32,375,445	6.81%	6.00%
Cash	**$8,678,566**	**1.84%**	**0.00%**	**2.00%**	**4.00%**	**$2,611,266**	**0.55%**	**2.00%**
Cash Account	8,678,566	1.84%				2,611,266	0.55%	
Total Fund	**$471,680,793**	**100.00%**		**100.00%**		**$475,659,238**	**100.00%**	**100.00%**

Investment Manager Returns

For Periods Ended September 30, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Total Equity	**(2.92%)**	**17.46%**	**7.06%**	**6.46%**	**8.37%**
U.S. Long Equity	**(3.53%)**	**17.92%**	**9.52%**	**8.66%**	**11.37%**
Pure US Equity Composite	**(3.53%)**	**17.92%**	**9.58%**	**8.72%**	**11.46%**
Russell 3000 Index	(3.25%)	20.46%	9.38%	9.14%	11.64%
Russell 1000 Index Non-Lendable	(3.14%)	21.21%	9.54%	9.64%	12.00%
Russell 1000 Index	(3.15%)	21.19%	9.53%	9.63%	12.00%
LSV	(1.81%)	13.97%	20.17%	4.22%	6.34%
Russell 2000 Value Index	(2.96%)	7.84%	13.32%	2.59%	5.94%
Principal Dynamic Growth	(7.68%)	4.81%	2.66%	8.19%	14.52%
Russell 2500 Growth Index	(6.84%)	10.61%	1.01%	4.05%	8.78%
International Equity	**(2.82%)**	**25.09%**	**4.43%**	**3.25%**	**5.24%**
MSCI ACWI ex US	(3.77%)	20.39%	3.74%	2.58%	4.74%
Developed Markets	**(2.96%)**	**28.11%**	**6.01%**	**3.86%**	**5.99%**
MSCI EAFE Index	(4.11%)	25.65%	5.75%	3.24%	5.29%
Silchester	1.23%	33.88%	11.43%	4.81%	7.01%
MSCI EAFE Val Idx	0.59%	31.51%	11.11%	2.81%	4.95%
Walter Scott	(10.28%)	-	-	-	-
MSCI EAFE Index	(4.11%)	25.65%	5.75%	3.24%	5.29%
MSCI EAFE Growth	(8.64%)	20.00%	0.37%	3.23%	5.30%
Emerging Markets	**(2.15%)**	**12.99%**	**(2.07%)**	**0.61%**	**2.06%**
MSCI Emerging Mkts Idx Net	(2.93%)	11.70%	(1.73%)	0.56%	3.23%
BlackRock EM Alpha Tilts	(2.15%)	12.99%	(2.07%)	-	-
MSCI Emerging Mkts Idx Net	(2.93%)	11.70%	(1.73%)	0.56%	3.23%
Global Equity/Long Short	**(0.89%)**	**6.71%**	**0.81%**	**2.85%**	**3.86%**
HFRI FOF: Strategic Index	(0.33%)	5.89%	2.28%	2.74%	3.51%
ABS Global	(0.69%)	7.83%	3.16%	3.31%	4.42%
MSCI ACWI Idx	(3.30%)	21.41%	7.39%	6.99%	9.14%
Private Equity (1)	**0.00%**	**1.85%**	**16.28%**	**15.46%**	**14.85%**
Pantheon USA IV	0.00%	(1.24%)	2.15%	0.45%	2.20%
Pantheon USA VI	0.00%	(4.66%)	(12.23%)	(11.27%)	(5.71%)
Pantheon USA VII	0.00%	2.30%	11.20%	9.17%	10.85%
Pantheon Europe Fund V A	0.00%	0.51%	1.34%	10.64%	12.97%
Pantheon Global Secondary Fund III	0.00%	1.47%	(4.85%)	(2.23%)	1.96%
Pantheon US Select 2014	0.00%	1.94%	18.11%	19.11%	18.86%

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 September 30, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Domestic Fixed Income	**(3.43%)**	**0.75%**	**(5.36%)**	**0.13%**	**(0.01%)**
Prudential Core Bond	(3.19%)	1.20%	(5.09%)	0.07%	(0.09%)
Metropolitan West Fund*	(3.62%)	0.39%	(5.56%)	0.13%	0.03%
Blmbg Aggregate Index	(3.23%)	0.64%	(5.21%)	0.10%	(0.09%)
Absolute Return	**1.83%**	**5.51%**	**6.64%**	**5.92%**	**5.18%**
UBS AIS	1.83%	5.51%	6.64%	5.92%	5.18%
HFRI FOF: Conservative In	1.50%	5.01%	5.67%	4.07%	4.09%
Real Assets	**(2.20%)**	**9.05%**	**5.24%**	**4.21%**	**5.79%**
PIMCO All Asset	(2.20%)	9.05%	5.24%	4.11%	4.55%
Blmbg US TIPS 1-10	(1.00%)	2.11%	(0.02%)	2.63%	1.90%
Cash	**1.38%**	**4.86%**	**1.97%**	**1.94%**	**1.77%**
Cash Account	1.38%	4.86%	1.97%	1.94%	1.77%
3-month Treasury Bill	1.31%	4.47%	1.70%	1.72%	1.55%
Total Fund	**(2.58%)**	**12.75%**	**4.60%**	**5.07%**	**6.33%**
Target Benchmark (1)	(2.62%)	12.79%	3.92%	5.17%	6.18%
Annual Discount Rate:6.625%					

(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 September 30, 2023

	6/2023-9/2023	FY 2023	FY 2022	FY 2021	FY 2020
Total Equity	**(2.92%)**	**14.53%**	**(14.13%)**	**39.04%**	**1.53%**
U.S. Long Equity	**(3.53%)**	**17.93%**	**(14.69%)**	**48.45%**	**5.18%**
Russell 3000 Index	(3.25%)	18.95%	(13.87%)	44.16%	6.53%
Russell 1000 Index Non-Lendable	(3.14%)	19.37%	(13.03%)	43.08%	7.47%
Russell 1000 Index	(3.15%)	19.36%	(13.04%)	43.07%	7.48%
LSV	(1.81%)	12.16%	(6.00%)	71.06%	(23.09%)
Russell 2000 Value Index	(2.96%)	6.01%	(16.28%)	73.28%	(17.48%)
Principal Dynamic Growth	(7.68%)	16.17%	(28.37%)	63.07%	22.10%
Russell 2500 Growth Index	(6.84%)	18.58%	(31.81%)	49.63%	9.21%
International Equity	**(2.82%)**	**15.70%**	**(18.54%)**	**32.22%**	**(4.70%)**
MSCI ACWI ex US	(3.77%)	12.72%	(19.42%)	35.72%	(4.80%)
Developed Markets	**(2.96%)**	**19.12%**	**(16.32%)**	**29.77%**	**(5.04%)**
MSCI EAFE Index	(4.11%)	18.77%	(17.77%)	32.35%	(5.13%)
Silchester	1.23%	17.84%	(11.34%)	35.22%	(9.35%)
MSCI EAFE Val Idx	0.59%	17.40%	(11.95%)	33.50%	(14.48%)
Walter Scott	(10.28%)	-	-	-	-
MSCI EAFE Index	(4.11%)	18.77%	(17.77%)	32.35%	(5.13%)
MSCI EAFE Growth Idx	(8.64%)	20.20%	(23.76%)	30.97%	4.15%
Emerging Markets	**(2.15%)**	**2.00%**	**(27.08%)**	**42.61%**	**(3.22%)**
MSCI Emerging Mkts Idx Net	(2.93%)	1.75%	(25.28%)	40.90%	(3.39%)
BlackRock EM Alpha Tilts	(2.15%)	2.00%	(27.08%)	42.61%	(3.22%)
MSCI Emerging Mkts Idx Net	(2.93%)	1.75%	(25.28%)	40.90%	(3.39%)
Global Equity/Long Short	**(0.89%)**	**4.10%**	**(13.73%)**	**22.51%**	**4.25%**
HFRI FOF: Strategic Index	(0.33%)	4.21%	(11.92%)	23.82%	0.40%
ABS Global	(0.69%)	5.08%	(9.66%)	19.76%	5.07%
MSCI ACWI Idx	(3.30%)	17.13%	(15.37%)	39.87%	2.64%
Private Equity	**0.00%**	**1.10%**	**12.77%**	**55.16%**	**5.82%**
Pantheon USA IV	0.00%	(1.24%)	(4.88%)	13.48%	0.00%
Pantheon USA VI	0.00%	(7.02%)	(22.03%)	(7.18%)	(21.95%)
Pantheon USA VII	0.00%	(0.04%)	4.03%	47.49%	(0.99%)
Pantheon Europe Fund V A	0.00%	(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	0.00%	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 September 30, 2023

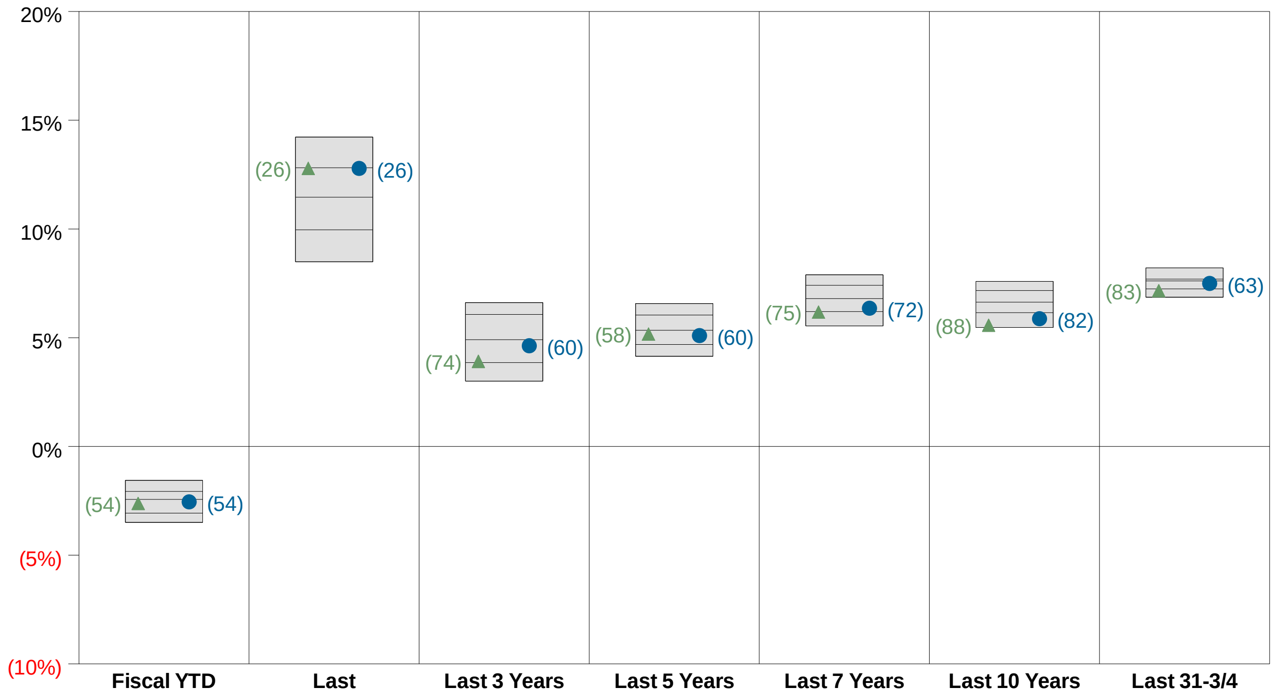
	6/2023-9/2023	FY 2023	FY 2022	FY 2021	FY 2020
Domestic Fixed Income	**(3.43%)**	**(0.95%)**	**(11.14%)**	**0.72%**	**8.89%**
Prudential Cons Core Bond Fund	(3.19%)	(0.51%)	(10.60%)	(0.02%)	8.11%
Metropolitan West Fund	(3.62%)	(1.29%)	(11.56%)	1.36%	9.18%
Blmbg Aggregate Index	(3.23%)	(0.94%)	(10.29%)	(0.33%)	8.74%
Absolute Return	**1.83%**	**4.23%**	**7.95%**	**10.18%**	**4.05%**
UBS AIS	1.83%	4.23%	7.95%	10.18%	4.05%
HFRI FOF: Conservative In	1.50%	3.67%	0.10%	15.01%	(0.48%)
Real Assets	**(2.20%)**	**4.64%**	**(9.86%)**	**29.53%**	**(2.18%)**
PIMCO All Asset	(2.20%)	4.64%	(9.85%)	29.55%	(2.23%)
Blmbg US TIPS 1-10	(1.00%)	(0.91%)	(2.03%)	6.60%	5.75%
Cash	**1.38%**	**4.04%**	**0.35%**	**0.26%**	**1.75%**
Cash Account	1.38%	4.04%	0.35%	0.26%	1.75%
3-month Treasury Bill	1.31%	3.59%	0.17%	0.09%	1.63%
Total Fund	**(2.58%)**	**10.10%**	**(11.98%)**	**28.40%**	**2.76%**
Total Fund Custom Benchmark*	(2.62%)	9.88%	(11.91%)	25.66%	4.63%
Annual Discount Rate:6.625%					

*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 September 30, 2023

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



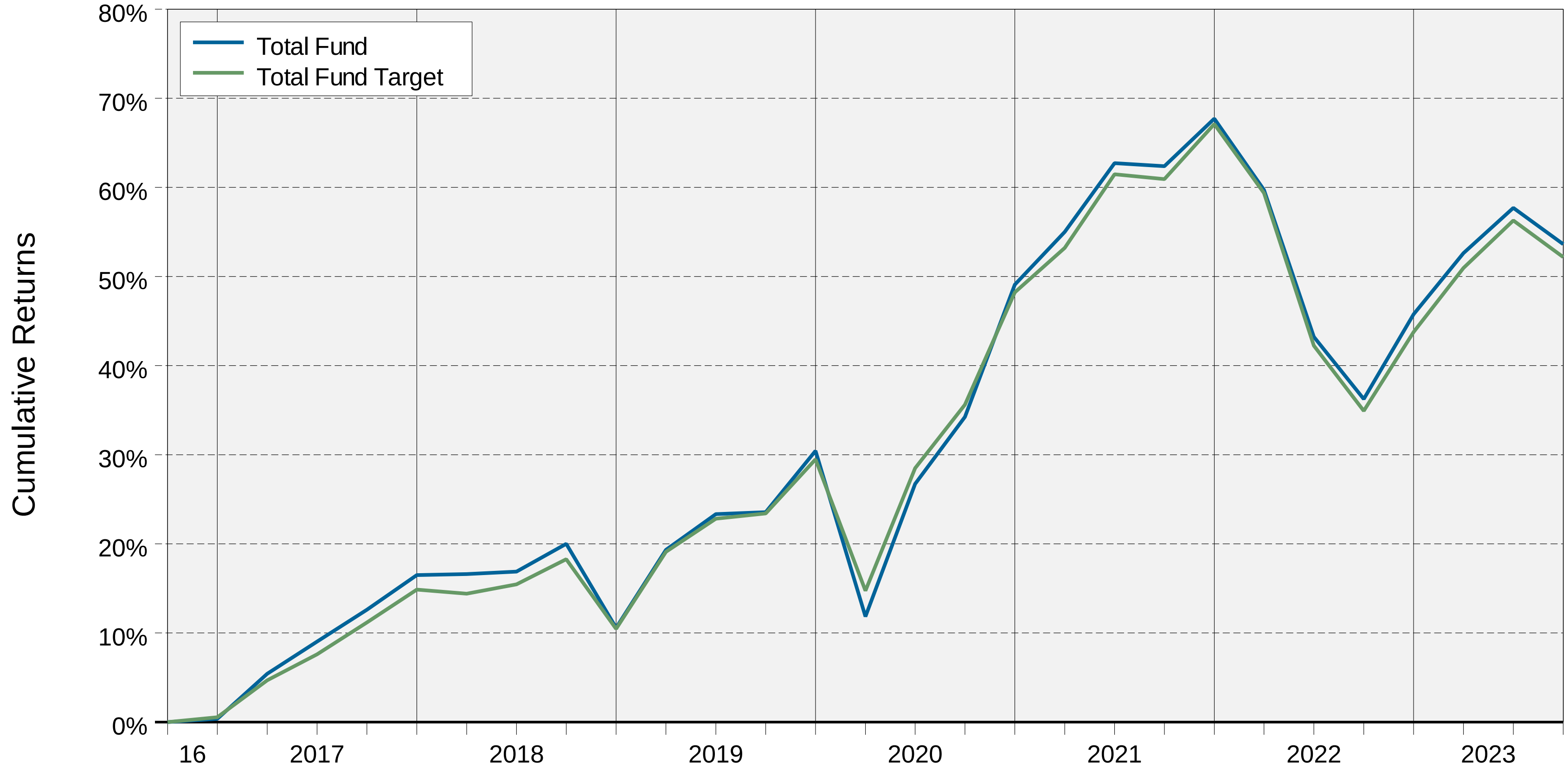
	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 31-3/4 Years
10th Percentile	(1.56)	14.23	6.61	6.58	7.90	7.59	8.21
25th Percentile	(2.07)	12.82	6.07	6.04	7.41	7.17	7.70
Median	(2.43)	11.46	4.91	5.34	6.80	6.63	7.61
75th Percentile	(3.07)	9.96	3.86	4.69	6.20	6.15	7.24
90th Percentile	(3.50)	8.49	3.00	4.15	5.54	5.47	6.86
Total Fund ●	(2.58)	12.75	4.60	5.07	6.33	5.85	7.47
Total Fund Custom Benchmark ▲	(2.62)	12.79	3.92	5.17	6.18	5.58	7.16

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 September 30, 2023

Cumulative Returns Actual vs Target



Performance Attribution

For Periods Ended September 30, 2023

Relative Attribution Effects for Quarter ended September 30, 2023

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	36%	35%	(3.53%)	(3.25%)	(0.10%)	(0.01%)	(0.11%)
Domestic Fixed Income	18%	19%	(3.43%)	(3.23%)	(0.04%)	0.01%	(0.03%)
International Equity	23%	23%	(2.82%)	(3.77%)	0.22%	(0.00%)	0.22%
Absolute Return	6%	4%	1.83%	1.50%	0.02%	0.08%	0.10%
Global Equity/Long Short	5%	8%	(0.89%)	(0.31%)	(0.03%)	(0.07%)	(0.09%)
Private Equity	5%	3%	0.00%	0.00%	0.00%	0.05%	0.05%
PIMCO All Asset	7%	6%	(2.20%)	(1.00%)	(0.08%)	0.01%	(0.07%)
Cash	1%	2%	1.38%	1.31%	0.00%	(0.03%)	(0.03%)
Total			**(2.58%) =**	**(2.62%) +**	**(0.00%) +**	**0.05%**	**0.04%**

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	34%	35%	17.92%	20.46%	(0.82%)	(0.14%)	(0.96%)
Domestic Fixed Income	18%	19%	0.75%	0.64%	0.02%	0.07%	0.10%
International Equity	22%	23%	25.09%	20.39%	0.96%	(0.26%)	0.70%
Global Equity Long/Short	6%	8%	6.71%	5.91%	0.09%	(0.01%)	0.08%
Absolute Return	6%	4%	5.51%	5.01%	0.03%	(0.18%)	(0.15%)
Private Equity	5%	3%	1.85%	1.85%	0.00%	(0.28%)	(0.28%)
PIMCO All Asset Class	7%	6%	9.05%	2.11%	0.57%	(0.21%)	0.36%
Cash	1%	2%	4.86%	4.47%	0.00%	0.11%	0.12%
Total			**12.75% =**	**12.79% +**	**0.86% +**	**(0.90%)**	**(0.04%)**

Summary Observations

For Periods Ended September 30, 2023

The total fund returned -2.58% for the quarter, +12.75% annualized for the trailing 1-year period, +4.60% annualized for the trailing 3-year period and +5.07% annualized for the trailing 5-year period. For the trailing 7-year period, the total fund returned +6.33%, annualized.

Fiscal Year to Date / One Quarter Attribution - what helped:

- Relative performance of international equity manager Silchester
- An overweight to absolute return versus target
- An overweight to private equity versus target

Fiscal Year to Date / One Quarter - what hurt:

- Relative performance of domestic equity manager Principal
- Relative performance of PIMCO All Asset Fund
- Relative performance of fixed income manager TCW Metwest
- An underweight to global equity long/short versus target

OPEB Performance

Actual versus Target Asset Allocation

For Periods Ended September 30, 2023

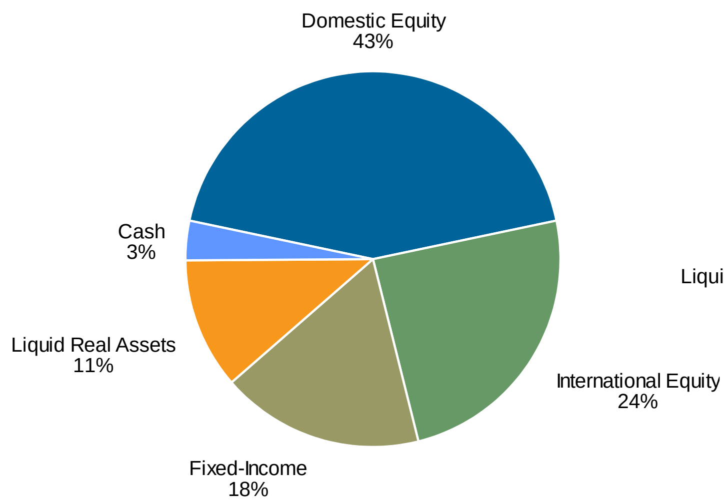
Overweight's:

- Cash (3.4% vs 0% target)
- Domestic Equity (43.4% vs 41% target)

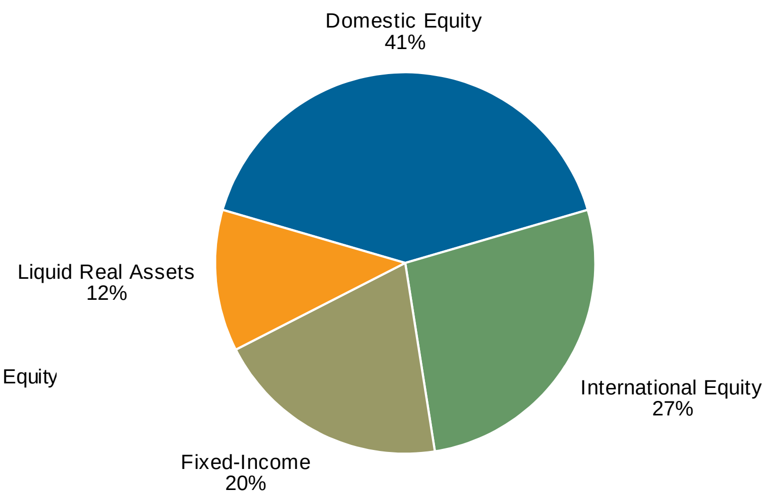
Underweights:

- International equity (24.4% vs 27% target)
- Fixed-Income (17.5% vs 20% target)
- Liquid Real Assets (11.3% vs 12% target)

Actual Asset Allocation



Target Asset Allocation



Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity	54,018	43.4%	41.0%	2.4%	2,934
International Equity	30,370	24.4%	27.0%	(2.6%)	(3,271)
Fixed-Income	21,825	17.5%	20.0%	(2.5%)	(3,094)
Liquid Real Assets	14,108	11.3%	12.0%	(0.7%)	(843)
Cash	4,274	3.4%	0.0%	3.4%	4,274
Total	124,595	100.0%	100.0%		

Portfolio Holdings

For Periods Ended September 30, 2023

	September 30, 2023				June 30, 2023	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Total Equity	**$84,387,978**	**67.73%**	**$0**	**$(3,107,116)**	**$87,495,094**	**67.97%**
Domestic Equity	**$54,018,302**	**43.36%**	**$0**	**$(1,837,429)**	**$55,855,731**	**43.39%**
Vanguard Total Stock Mrkt	54,018,302	43.36%	0	(1,837,429)	55,855,731	43.39%
International Equity	**$30,369,675**	**24.37%**	**$0**	**$(1,269,687)**	**$31,639,363**	**24.58%**
Vanguard Total Intl Stock	30,369,675	24.37%	0	(1,269,687)	31,639,363	24.58%
Fixed Income	**$21,825,026**	**17.52%**	**$(4,226)**	**$(748,990)**	**$22,578,242**	**17.54%**
Metropolitan West Fund	8,233,200	6.61%	0	(299,824)	8,533,025	6.63%
Prudential Cons Core Bond Fnd	13,591,826	10.91%	(4,226)	(449,166)	14,045,217	10.91%
Liquid Real Assets	**$14,107,926**	**11.32%**	**$0**	**$(318,051)**	**$14,425,977**	**11.21%**
PIMCO All Assets	14,107,926	11.32%	0	(318,051)	14,425,977	11.21%
Cash	**$4,273,937**	**3.43%**	**$(4,679)**	**$54,969**	**$4,223,646**	**3.28%**
Short Term Fund	4,273,937	3.43%	(4,679)	54,969	4,223,646	3.28%
Total Fund	**$124,594,866**	**100.0%**	**$(8,905)**	**$(4,119,188)**	**$128,722,959**	**100.0%**

- Total fund decreased to $124.6 million at the end of the quarter from $128.7 million as of June 30, 2023.

Portfolio Holdings

For Periods Ended September 30, 2023

	September 30, 2023					June 30, 2023		
	Market Value	Weight	(min)	Target	(max)	Market Value	Weight	Target
Total Equity	**$84,387,978**	**67.73%**	**53.00%**	**68.00%**	**83.00%**	**$87,495,094**	**67.97%**	**68.00%**
Domestic Equity	**$54,018,302**	**43.36%**	**31.00%**	**41.00%**	**51.00%**	**$55,855,731**	**43.39%**	**41.00%**
Vanguard Total Stock Mkt	54,018,302	43.36%				55,855,731	43.39%	
International Equity	**$30,369,675**	**24.37%**	**20.00%**	**27.00%**	**34.00%**	**$31,639,363**	**24.58%**	**27.00%**
Vanguard Total Int'l. Stock	30,369,675	24.37%				31,639,363	24.58%	
Fixed Income	**$21,825,026**	**17.52%**	**15.00%**	**20.00%**	**25.00%**	**$22,578,242**	**17.54%**	**20.00%**
Metropolitan West Fund	8,233,200	6.61%				8,533,025	6.63%	
Prudential Cons Core Bond	13,591,826	10.91%				14,045,217	10.91%	
Liquid Real Assets	**$14,107,926**	**11.32%**	**0.00%**	**12.00%**	**20.00%**	**$14,425,977**	**11.21%**	**12.00%**
PIMCO All Assets	14,107,926	11.32%				14,425,977	11.21%	
Cash	**$4,273,937**	**3.43%**	**0.00%**	**0.00%**	**0.00%**	**$4,223,646**	**3.28%**	**0.00%**
Short Term Fund	4,273,937	3.43%				4,223,646	3.28%	
Total Fund	**$124,594,866**	**100.00%**		**100.00%**		**$128,722,959**	**100.00%**	**100.00%**

Investment Manager Returns

For Periods Ended September 30, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Total Equity	**(3.55%)**	**20.49%**	**7.19%**	**6.65%**	**8.97%**
Domestic Equity	**(3.29%)**	**20.38%**	**9.25%**	**9.06%**	**11.58%**
Vanguard Total Stock Market (1)	(3.29%)	20.38%	9.25%	9.06%	11.58%
Vanguard Total Stock Benchmark (2)	(3.30%)	20.37%	9.26%	9.07%	11.58%
Russell 3000 Index	(3.25%)	20.46%	9.38%	9.14%	11.64%
International Equity	**(4.01%)**	**20.50%**	**3.89%**	**2.76%**	**4.81%**
Vanguard Total Int'l. Stock (3)	(4.01%)	20.50%	3.89%	2.76%	4.81%
Vanguard International Benchmark (4)	(3.26%)	20.79%	4.45%	3.17%	5.25%
MSCI ACWI ex US	(3.77%)	20.39%	3.74%	2.58%	4.74%
Fixed-Income	**(3.32%)**	**0.88%**	**(5.26%)**	**0.17%**	**(0.01%)**
Prudential Conservative Core Bond (5)	(3.23%)	1.03%	(5.23%)	0.06%	(0.15%)
Metropolitan West Fund	(3.51%)	0.42%	(5.54%)	0.14%	0.03%
Blmbg Aggregate Index	(3.23%)	0.64%	(5.21%)	0.10%	(0.09%)
Liquid Real Assets	**(2.20%)**	**9.09%**	**5.25%**	**4.11%**	**4.55%**
PIMCO All Asset	(2.20%)	9.09%	5.25%	4.11%	4.55%
Blmbg US TIPS 1-10	(1.00%)	2.11%	(0.02%)	2.63%	1.90%
Cash	**1.30%**	**4.36%**	**1.63%**	**1.66%**	**1.51%**
Short Term Fund	1.30%	4.36%	1.63%	1.66%	1.51%
3-month Treasury Bill	1.31%	4.47%	1.70%	1.72%	1.55%
Total Fund	**(3.20%)**	**14.83%**	**4.63%**	**5.23%**	**6.56%**
Total Fund Benchmark*	(3.09%)	14.23%	3.95%	5.30%	6.37%

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 September 30, 2023

	6/2023-9/2023	FY 2023	FY 2022	FY 2021	FY 2020
Total Equity	**(3.55%)**	**16.47%**	**(16.08%)**	**41.24%**	**2.43%**
Domestic Equity	**(3.29%)**	**18.93%**	**(14.24%)**	**44.33%**	**6.47%**
Vanguard Total Stock Market (1)	(3.29%)	18.93%	(14.24%)	44.33%	6.47%
Vanguard Total Stock Benchmark (2)	(3.30%)	18.94%	(14.22%)	44.35%	6.47%
Russell 3000 Index	(3.25%)	18.95%	(13.87%)	44.16%	6.53%
International Equity	**(4.01%)**	**12.34%**	**(18.92%)**	**36.54%**	**(4.07%)**
Vanguard Total Int'l. Stock (3)	(4.01%)	12.34%	(18.92%)	36.54%	(4.07%)
Vanguard International Benchmark (4)	(3.26%)	12.89%	(19.01%)	37.55%	(4.16%)
MSCI ACWI ex US	(3.77%)	12.72%	(19.42%)	35.72%	(4.80%)
Fixed-Income	**(3.32%)**	**(0.85%)**	**(10.95%)**	**0.45%**	**8.94%**
Prudential Cons Core Bond Fnd (5)	(3.23%)	(0.68%)	(10.70%)	(0.16%)	8.65%
Metropolitan West Fund	(3.51%)	(1.36%)	(11.56%)	1.36%	9.18%
Blmbg Aggregate Index	(3.23%)	(0.94%)	(10.29%)	(0.33%)	8.74%
Liquid Real Assets	**(2.20%)**	**4.68%**	**(9.85%)**	**29.55%**	**(2.23%)**
PIMCO All Asset	(2.20%)	4.68%	(9.85%)	29.55%	(2.23%)
Blmbg US TIPS 1-10	(1.00%)	(0.91%)	(2.03%)	6.60%	5.75%
Cash	**1.30%**	**3.43%**	**0.16%**	**0.09%**	**1.78%**
Short Term Fund	1.30%	3.43%	0.16%	0.09%	1.78%
3-month Treasury Bill	1.31%	3.59%	0.17%	0.09%	1.63%
Total Fund	**(3.20%)**	**11.12%**	**(14.34%)**	**31.50%**	**3.26%**
Total Fund Benchmark*	(3.09%)	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 September 30, 2023

Relative Attribution Effects for Quarter ended September 30, 2023

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	44%	41%	(3.29%)	(3.25%)	(0.02%)	(0.01%)	(0.02%)
Fixed-Income	17%	20%	(3.32%)	(3.23%)	(0.02%)	(0.01%)	(0.02%)
International Equity	25%	27%	(4.01%)	(3.77%)	(0.06%)	0.01%	(0.05%)
Dvsfd Real Assets	11%	12%	(2.20%)	(1.00%)	(0.14%)	(0.02%)	(0.16%)
Cash	3%	0%	1.30%	1.30%	0.00%	0.14%	0.14%
Total			**(3.20%) =**	**(3.09%) +**	**(0.23%) +**	**0.12%**	**(0.11%)**

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%	20.38%	20.46%	(0.03%)	(0.02%)	(0.05%)
Fixed-Income	18%	20%	0.88%	0.64%	0.05%	0.05%	0.10%
International Equity	25%	27%	20.50%	20.39%	0.02%	(0.18%)	(0.16%)
Dvsfd Real Assets	12%	12%	9.09%	2.11%	0.90%	(0.03%)	0.87%
Cash	3%	0%	4.36%	4.36%	0.00%	(0.15%)	(0.15%)
Total			**14.83% =**	**14.23% +**	**0.94% +**	**(0.34%)**	**0.60%**

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Callan

September 30, 2023

City of Norwalk
OPEB

Investment Measurement Service
Quarterly Review

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Callan Institute

Third Quarter 2023

Capital Markets Review

Stunning Growth but Clouds Loom Ahead

ECONOMY

2 PAGE

A year ago, a recession was on all forecasters' radar. Now ... not so much. GDP stunned with a 4.9% 3Q23 gain, after strong reports in 1Q and 2Q. This despite a number of headwinds, such as war, inflation, and rate hikes. And there are more shocks in store.

Lagging Bond Gains Hinder Performance

INSTITUTIONAL INVESTORS

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While equity gains helped, low fixed income returns left all major investor types lagging a 60% stocks/40% bonds benchmark over the last year ending 3Q23. Most investor types matched or nearly equaled the gains of the 60%/40% benchmark over the last 20 years.

All Indices Decline During Tough Quarter

EQUITY

6 PAGE

All U.S. equity indices posted negative returns in 3Q, and only 2 of the 11 S&P 500 sectors were up. The Russell 2000 Value Index led the pack in a tough quarter. Global markets retreated amid fears of a worldwide recession driven by higher interest rates and slowing growth.

Aggregate on Track For Third Annual Fall

FIXED INCOME

8 PAGE

The Bloomberg Aggregate fell in 3Q, with the rise in yields continuing to detract from performance. U.S. Treasuries continued to climb, with the 10-year ending the quarter at 4.6%. Developed markets sold off as long-term inflation moved higher. Emerging markets also fell.

Private RE, REITs Both Show Drops in Quarter

REAL ESTATE/REAL ASSETS

10 PAGE

The NCREIF Property Index, a measure of U.S. institutional real estate assets, fell 1.4% during 3Q23. The NCREIF Open-End Diversified Core Equity (ODCE) Index dropped 1.9%. REITs, both in the U.S. and globally, also fell and underperformed equities.

Focus on Exits as Activity Dipped

PRIVATE EQUITY

11 PAGE

Private equity activity measures generally dipped in 3Q23 compared to the previous quarter, except for some increases in exit measures. While continued volatility is expected to hamper volumes, GPs are keenly focused on providing liquidity.

Returns Easily Exceed Leveraged Loans

PRIVATE CREDIT

12 PAGE

Private credit has generated a net IRR of 11.8% over the three years ending 2Q23, easily exceeding leveraged loans. And continued 3Q23 rate rises across the yield curve have made private credit even more attractive than in the past for many institutional investors.

Most Strategies Slightly Higher

HEDGE FUNDS/MACs

13 PAGE

Geopolitics and an elevated rate environment helped set a backdrop for strong alpha generation for hedge funds. Managers continue to see high dispersion between winners and losers in the stock market, which will favor stock selection and alpha generation over beta returns.

2Q23 Finishes With Third Straight Gain

DEFINED CONTRIBUTION

15 PAGE

The Callan DC Index™ gained again in 2Q23, while balances also rose again. While target date funds, as is typical, saw the largest increase in net flows, stable value saw big outflows for the third straight quarter, while money market saw small net inflows.

Broad Market Quarterly Returns

U.S. Equity
Russell 3000

-3.3%

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

-3.8%

U.S. Fixed Income
Bloomberg Agg

-3.2%

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

-4.0%

Sources: Bloomberg, FTSE Russell, MSCI

Stunning Growth as Clouds Loom

ECONOMY | Jay Kloepfer

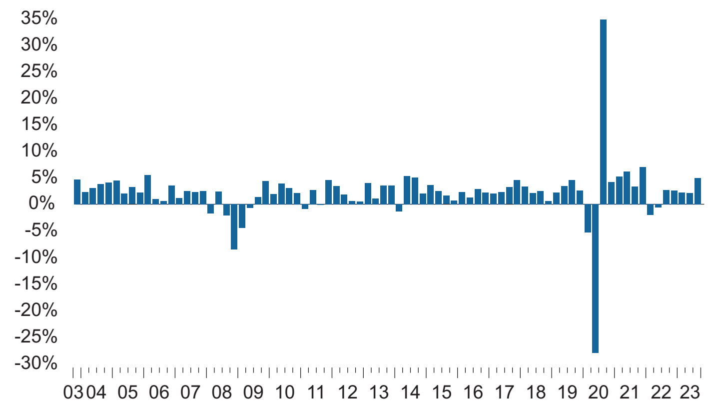
A year ago, no one saw this coming. Recession was on everyone's radar for 2023, and the only disagreement was the quarter in which it would show up. Then the U.S. economy generated 2.2% GDP growth in 1Q and another 2.1% in 2Q. The strong job market continued to add new jobs, inflation came down from the 9% spike last summer, and wage growth boosted consumer incomes and spending. Now 3Q GDP has clocked a stunning 4.9% gain, mocking all those who try to predict economic growth (including us). This despite the Federal Reserve's rate hikes, the war in Ukraine, elevated inflation, and geopolitical uncertainty. How are we defying economic gravity?

The robust 3Q economic report is the result of strong retail sales, industrial production, and investment in inventory. Retail sales came in much stronger than expected, driven by demand for building materials, recreational goods, and vehicles, as well as core goods such as food and household items. Growth in total consumption expenditures has been broad-based and spread across both goods and services, and it accounted for more than half of GDP growth in 3Q. This surge in spending suggests that many U.S. consumers feel financially secure and are spending freely in a tight labor market.

Headline inflation fell from 9% (year-over-year) in June 2022 to 3% in June 2023, a remarkable reduction. The decline likely reflected both the un-knotting of global supply chains following the pandemic, and the efforts of the Federal Reserve and central banks around the globe to contain inflation with higher interest rates. The lower rates also reflected a denominator effect, perhaps twice, in which the sharp rise in 2022 came off an abnormally low base for prices set during the lockdown in 2020 and 2021, and price increases were measured during the first half of 2023 against the now-higher prices set in 2022. However, headline inflation (including food and energy) edged back up in each of the last three months.

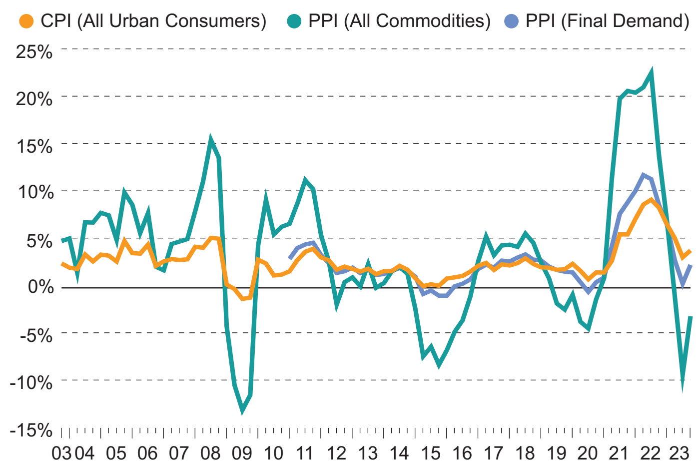
Labor markets are tight. The U.S. economy added 336,000 new jobs in September and has created an average of 260,000 per month this year. (For reference, a monthly rate of 200,000 suggests continuing growth in the economy.) The unemployment rate

Quarterly Real GDP Growth (20 Years)



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

remains below 4%, coming in at 3.8% in September. Finally, the Job Openings and Labor Turnover Survey (JOLTS) reported that the U.S. economy had 9.6 million job openings at the end of August, and 6.4 million unemployed people, so a ratio of unemployed people to job openings of just 0.7.

The current strong GDP growth suggests we may not see an easing in tight labor markets for some time. Hence, the prospect for continued inflationary pressure from the labor market is high. Average hourly earnings have grown between 4.0% and 5.0% (annual rate) during the first three quarters of 2023, meaning real wages finally turned positive starting in May, and this real growth carried through

September (wage growth is exceeding inflation). Inflation has come down significantly from its 2022 peak, but getting down to the Fed's stated goal of 2% will take more time, and some discomfort.

The housing market is in a conundrum. Housing starts have fallen in response to substantially higher mortgage rates, but not as much as might be expected. After plummeting earlier in the year, single-family starts rose 3.2% in September, while multi-family starts surged 17.6%. The single-family housing market is historically tight—and tightening. Inventory of homes for sale declined for the eighth straight month in August to 857,000, a record low. Low inventory has driven home prices up, and with mortgage rates at 7.5%, buying a home is increasingly unaffordable. As a result, sales of existing homes have collapsed.

If we thought clouds loomed at the start of 2023, there are more now. Interest rates are higher still and financial conditions are tight. Geopolitical uncertainty has certainly not abated (the conflict in the Middle East began in the fourth quarter and is not reflected in 3Q data). Another shutdown of the U.S. government is lurking. The full impact of higher interest rates is working through the real estate market, the cost of capital, the cost of home ownership, and the cost of debt to government, business, and consumers. The UAW strike began in mid-September, and the impact will likely show up in 4Q. The bond market has been calling for a recession since May 2022, with an inverted yield curve, and the curve has only become more inverted over the past year.

Expectations that the Fed would be done with rate hikes and would soon revert to rate easing have been continually thwarted by the strength in the job market, in industrial activity, in exports and by strong consumption expenditures. Financial conditions tightened toward the end of 3Q as investors pushed up yields on the long end of the Treasury curve. This tightening may less reflect a change in expectations for short-term monetary policy than investors' lower demand for term risk, as banks lower allocations to Treasuries. Investor sentiment also may indicate concern about our Congress. That the U.S. economy continues to thrive through such crosswinds has been both remarkable and baffling.

The Long-Term View

		Periods Ended 9/30/23			
Index	**3Q23**	**1 Yr**	**5 Yrs**	**10 Yrs**	**25 Yrs**
U.S. Equity					
Russell 3000	-3.3	20.5	9.1	11.3	8.1
S&P 500	-3.3	21.6	9.9	11.9	7.9
Russell 2000	-5.1	8.9	2.4	6.6	8.0
Global ex-U.S. Equity					
MSCI EAFE	-4.1	25.6	3.2	3.8	4.8
MSCI ACWI ex USA	-3.8	20.4	2.6	3.3	--
MSCI Emerging Markets	-2.9	11.7	0.6	2.1	--
MSCI ACWI ex USA Small Cap	-1.7	19.0	2.6	4.3	7.4
Fixed Income					
Bloomberg Agg	-3.2	0.6	0.1	1.1	3.6
90-Day T-Bill	1.3	4.5	1.7	1.1	1.9
Bloomberg Long G/C	-9.4	-2.9	-1.2	1.9	4.7
Bloomberg Gl Agg ex US	-4.0	3.4	-3.1	-1.7	2.0
Real Estate					
NCREIF Property	-1.4	-8.4	5.3	7.4	8.3
FTSE Nareit Equity	-7.1	3.0	2.8	6.0	8.5
Alternatives					
CS Hedge Fund	0.5	6.3	5.0	4.5	6.5
Cambridge PE*	1.6	2.7	15.4	14.9	13.7
Bloomberg Commodity	4.7	-1.3	6.1	-0.7	2.4
Gold Spot Price	-3.3	11.6	9.3	3.5	7.6
Inflation – CPI-U	0.9	3.7	4.0	2.8	2.6

*Data for most recent period lags. Data as of 2Q23.
Sources: Bloomberg, Bureau of Economic Analysis, Credit Suisse, FTSE Russell, MSCI, NCREIF, Refinitiv/Cambridge, S&P Dow Jones Indices

Recent Quarterly Economic Indicators

	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22
Employment Cost: Total Compensation Growth	4.3%	4.5%	4.8%	5.1%	5.0%	5.1%
Nonfarm Business: Productivity Growth	4.7%	3.6%	-0.8%	1.6%	0.4%	-3.6%
GDP Growth	4.9%	2.1%	2.2%	2.6%	2.7%	-0.6%
Manufacturing Capacity Utilization	77.8%	78.0%	78.2%	78.5%	79.4%	79.6%
Consumer Sentiment Index (1966=100)	69.6	62.3	64.6	58.8	56.1	57.8

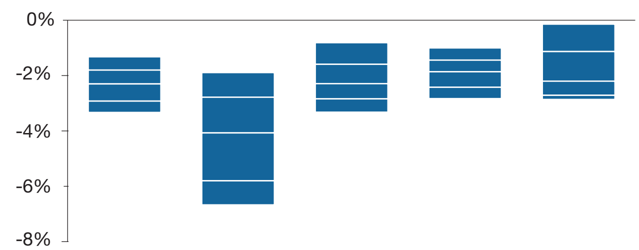
Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan

Weak Bond Gains Hinder Performance in Last Year

INSTITUTIONAL INVESTORS

- A big jump in equities over the year ending 3Q23 helped institutional investors' returns over that period, but weak fixed income performance left them trailing a composite index of 60% S&P 500/40% Bloomberg US Aggregate Bond Index.
- Corporate defined benefit (DB) plans, with their higher allocations to fixed income than most other investor types, fared worst among major investor types. Nonprofits slightly topped public DB plans.
- But the returns so far this year have helped make up for double-digit losses for calendar year 2022 for all investor types, and all major indices.
- Despite low gains for bonds over 20 years, most investor types nearly matched the gains of the 60%/40% composite, powered by strong gains from broad U.S. equities.
- Key issues for institutional investors now include:
  - *Inflation:* Its fall eases some concerns for institutional investors, but the Fed remains on its mission to combat it
  - *Stocks*: Equity markets through 3Q23 continue to meet or outpace long-term expectations.
  - *Bonds:* The Bloomberg Aggregate faces its third straight year of losses.
  - *Asset-Allocation:* Equity studies revisit active management while fixed income structures focus on the role of the asset class as it becomes more attractive.
  - *Alternatives:* Interest varies widely by investor type.

Quarterly Returns, Callan Database Groups (9/30/23)



	Public	Corporate	Nonprofit	Taft-Hartley	Insurance Assets
10th Percentile	-1.3	-1.9	-0.8	-1.0	-0.1
25th Percentile	-1.8	-2.8	-1.6	-1.4	-1.1
Median	-2.3	-4.1	-2.3	-1.9	-2.2
75th Percentile	-2.9	-5.8	-2.8	-2.4	-2.7
90th Percentile	-3.3	-6.7	-3.3	-2.8	-2.9

Source: Callan

Callan Database Median and Index Returns* for Periods Ended 9/30/23

Database Group	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Public Database	**-2.3**	**11.1**	**5.3**	**5.5**	**6.7**	**7.2**
Corporate Database	**-4.1**	**6.9**	**-0.3**	**3.2**	**5.2**	**6.6**
Nonprofit Database	**-2.3**	**11.5**	**5.2**	**5.2**	**6.2**	**7.1**
Taft-Hartley Database	**-1.9**	**9.8**	**5.4**	**5.4**	**6.8**	**6.9**
Insurance Assets Database	**-2.2**	**5.4**	**0.7**	**2.7**	**3.5**	**4.7**
All Institutional Investors	**-2.4**	**10.3**	**4.5**	**5.0**	**6.2**	**6.9**
Large (>$1 billion)	**-2.1**	**9.4**	**5.5**	**5.6**	**6.7**	**7.2**
Medium ($100mm - $1bn)	**-2.5**	**10.3**	**4.7**	**5.0**	**6.3**	**7.0**
Small (<$100 million)	**-2.6**	**11.0**	**4.2**	**4.7**	**5.9**	**6.6**
60% S&P 500/40% Bloomberg Agg	-3.3	12.9	4.0	6.4	7.8	7.3

*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, is 7.00%, which is now attainable without taking undue risk.
- For plans that measure at 6/30, the effect of investing in alternatives is measurable. Alternatives helped investors for FYE 2022 but are causing lags (when compared to non-alternatives investors) for FYE 2023.

Corporate DB Plans

- Liabilities decreased slightly, reflecting a small increase in discount rates. Plans that were fully hedged experienced minimal funded status volatility over the quarter.
- Closed plans' liabilities continue to shorten from aging participants. We are seeing more and more interest in intermediate fixed income.

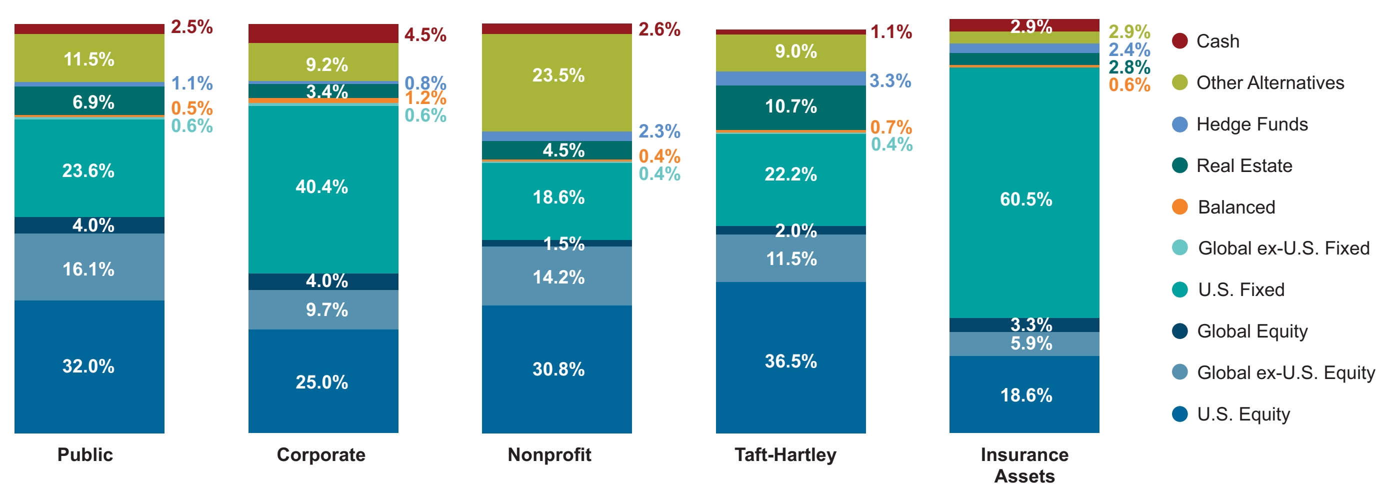
Nonprofits

- Interest in private credit remains strong. Inflation concerns continue to affect real returns. Finally, with fixed income yields approaching 5%, should allocations to fixed income be revisited?

Defined Contribution Plans

- Plan sponsors, recordkeepers, and payroll providers are actively engaging on what and how to implement SECURE 2.0; significant regulatory guidance is anticipated over the next two years.
- The IRS released guidance delaying the implementation of mandatory Roth catch-up contributions, based on income, until 2026.
  - An age 50 catch-up contribution must be Roth for those that earned more than $145,000 the previous year.
  - To comply, those plans that don't offer Roth will need to add Roth as a plan feature; OR
  - Plans not able to track the previous year's earnings and feed to the recordkeeper will need to eliminate all age 50 catch-up contributions.
- Guidance also resolved a drafting error in SECURE 2.0 that had accidentally removed a provision that authorized any age-50 catch-up contributions.

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

Tough quarter for all indices

– All U.S. equity indices posted negative absolute returns during 3Q23.
– The Russell 2000 Value Index led the pack during the quarter, which was a reversal of the previous two quarters when the Russell 1000 Growth Index led.
– Only 2 of the 11 S&P 500 Index sectors gained in 3Q; Energy was up 12% and Communication Services rose 3%.
– On a YTD basis, six sectors generated positive returns, with Information Technology, Communication Services, and Consumer Discretionary substantially leading the group.

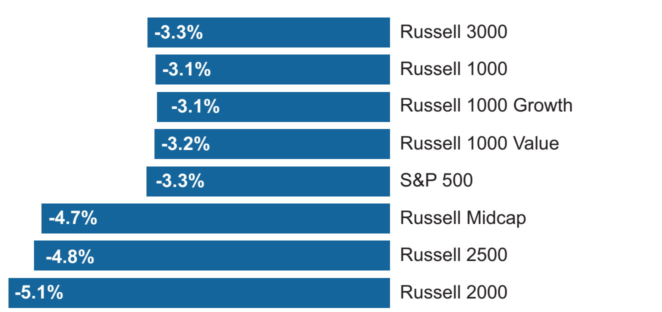
Active management remains challenging for large cap

– Index concentration stayed notable within the Russell 1000 Growth Index; the top 10 issuers comprised 51% of the index and the top 5 issuers comprised 40% of the index.
– YTD, 97% of the S&P 500's return has been driven by the 10 largest weighted stocks.
– The "Magnificent 7" has buoyed large cap index returns and has outperformed the broader market significantly. YTD, the Magnificent 7 alone is up 83%.
– No exposures or significant underweights to top benchmark names have been disadvantageous to absolute and relative performance for managers' portfolios.

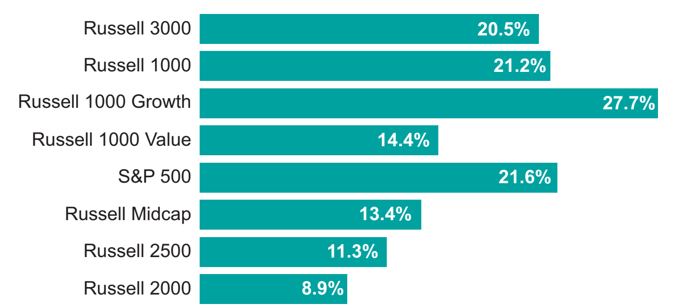
Compelling small cap valuations

– Small cap valuations, on both an absolute and relative (to large cap valuations) basis, continue to look compelling and may point to an attractive entry point for investors.
– What continues to pressure the asset class is the rhetoric around interest rates; as investors anticipate a higher-for-longer interest rate environment, there are concerns about small cap companies' ability to repay and re-finance debt.
– If inflation data continues to improve in 2023, the small cap market could be positioned for a boost to performance.

U.S. Equity: Quarterly Returns (9/30/23)

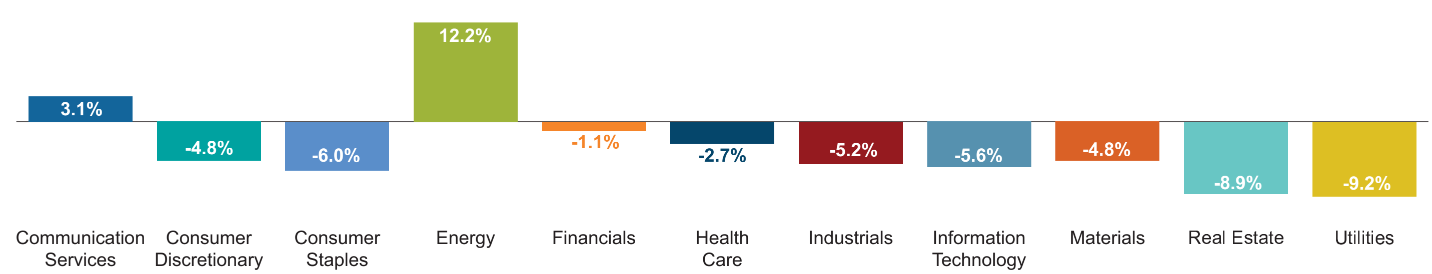


U.S. Equity: One-Year Returns (9/30/23)



Sources: FTSE Russell and S&P Dow Jones Indices

Quarterly Performance of Industry Sectors (9/30/23)



Source: S&P Dow Jones Indices

Global Equity

Most global markets were in the red for 3Q23.

Narrow market with India and Japan leading

- Global markets retreated in 3Q23 amid fears of a global recession driven by higher interest rates and slowing growth in regions outside the U.S.
- Emerging markets outperformed developed markets, buoyed by good results from India, whose economy grew nearly 8% on the heels of supportive infrastructure spending.
- Japan was strong again in local currency as it continues to benefit from post-COVID exuberance, easy monetary policy, and a new economic stimulus plan.

Value outpaces growth

- With energy as a strong outperformer on the heels of oil price increases, value outpaced growth by a wide margin in global ex-U.S. markets.

Strong U.S. dollar a headwind

- The stronger U.S. dollar, which gained 3% over the quarter, was a notable headwind for the period.

Market dispersion is low

- Global markets have seen a prolonged period of low dispersion, excluding the 2016-2018 challenges with Brexit and oil price volatility. The global markets have seen high correlations for most of the last 10 years.
- This was in conjunction with a period of universally tight monetary policies, which helped mitigate any volatility.
- With increased dispersion of central bank actions, we expect there to be fewer co-movements across countries, a period that may benefit active management.

China: Danger or opportunity

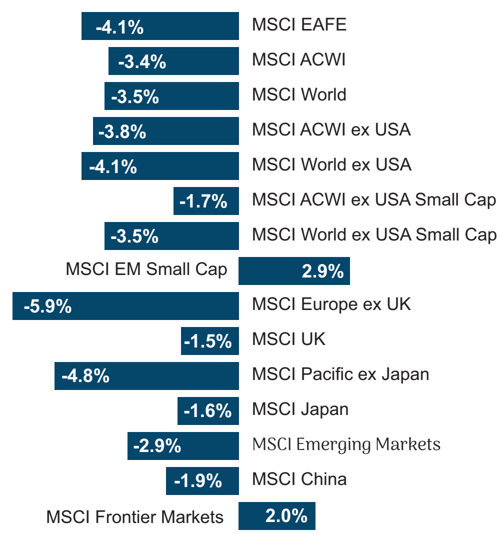
Merits

- *Long-term growth potential:* China has the second-largest GDP and the world's largest population of consumers.
- *Compelling valuation:* Forward earnings yield is at a decade high.

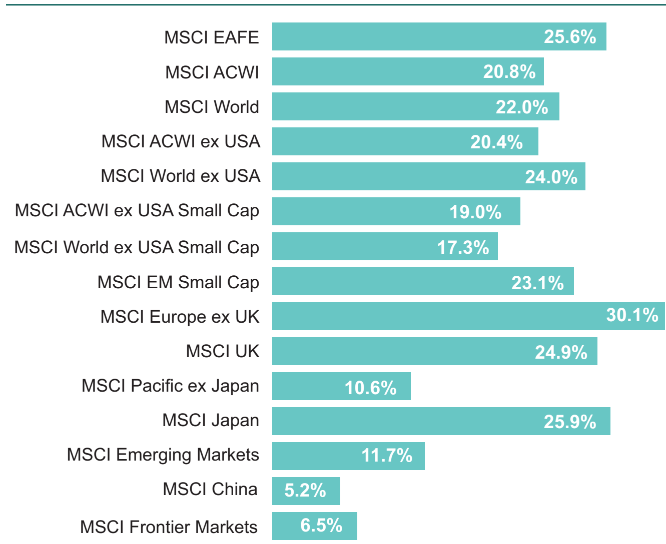
Considerations

- *Downside risk:* Chinese federal debt has continued to grow aggressively and may become unsustainable.
- *Political risk:* China is run by an authoritarian regime that may act against investors.
- *Old before rich:* China currently has 2.26 workers for every retiree—the U.S. has 2.8.

Global ex-U.S. Equity: Quarterly Returns (U.S. Dollar, 9/30/23)



Global ex-U.S. Equity: One-Year Returns (U.S. Dollar, 9/30/23)



Source: MSCI

Fixed Income

U.S. Fixed Income

U.S. fixed income fell for a second straight quarter

– The Bloomberg Aggregate Index is on track for a third calendar year of negative returns, with the rise in yields continuing to detract from performance.

U.S. Treasury 10-year yield climbed roughly 80 bps

– 10-year ended the quarter at 4.6%, its highest level since '07.
– The yield curve's inversion narrowed as it bear-steepened with long-term rates rising more than short-term rates.

TIPS outperformed nominal Treasuries

– 10-year break-even spreads widened over 10 bps.
– Fed policy rate held to 5.25%-5.50%
– The updated dot plot suggested an additional rate hike may be in the cards before year-end.

Lower-quality credit continued to outperform

– High yield spreads were flat, but the sector was buoyed by strong performance in July.
– IG corporate spreads tightened slightly and remain close to their 10-year average.
– Agency MBS underperformed other securitized sectors as interest rate volatility weighed on the sector.

Municipal Bonds

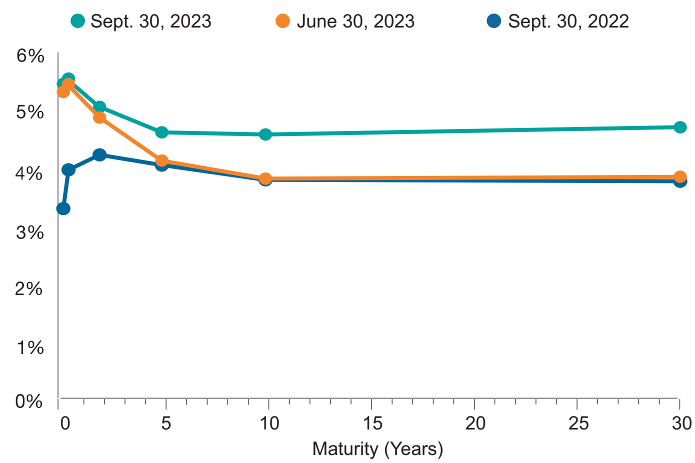
Bloomberg Aggregate down sharply in 3Q

– Corporate excess return: +84 bps; YTD +237 bps
– Mortgage excess return: -85 bps; YTD -58 bps
– High yield corporates excess return: +102 bps; YTD +516 bps
– Taxable equivalent yield is 7.3%

U.S. Treasury yield curve remains inverted

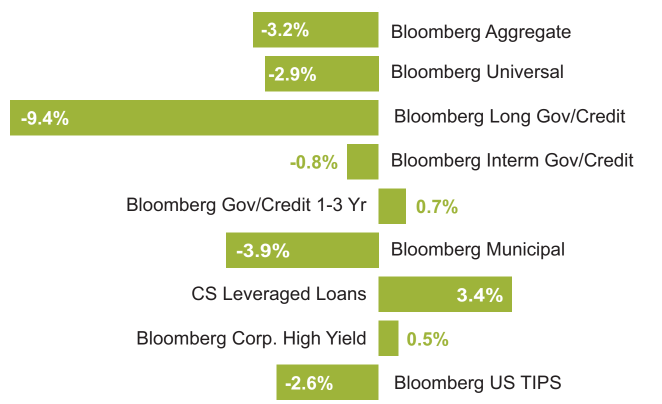
– 106 bps as of 6/30; 44 bps as of 9/30
– 2-year UST: 5.03%; 10-year UST: 4.59%
– Long rates rose more than short rates in a bear-steepening

U.S. Treasury Yield Curves



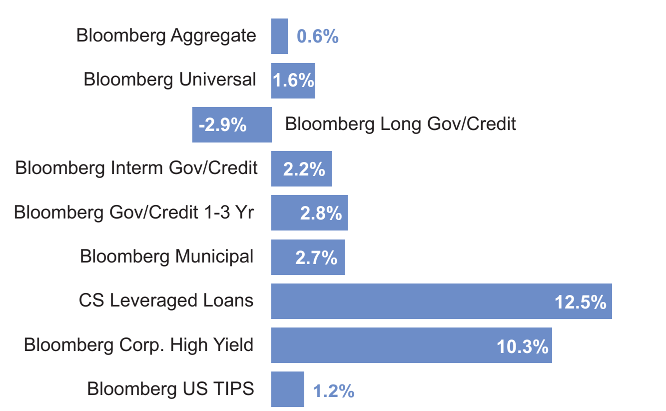
Source: Bloomberg

U.S. Fixed Income: Quarterly Returns (9/30/23)



Sources: Bloomberg and Credit Suisse

U.S. Fixed Income: One-Year Returns (9/30/23)



Fed Funds rate expectations

- "Higher for longer" theme prevails.
- Median expectation from Fed is 5.5% for year-end 2023.
- Market expectations are similar at 5.4%, up sharply from market expectations at the end of 1Q for cuts.

Valuations

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

Global Fixed Income

Down on both a hedged and unhedged basis

- Developed market rates sold off as long-term inflation and rate expectations in the U.S. moved higher.
- The ECB continued to tighten monetary policy in September, bringing rates to the highest level since launching the euro.

U.S. dollar strength detracted from unhedged returns

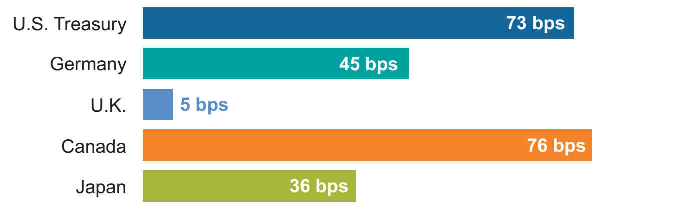
- U.S. dollar gained over 3% versus a basket of developed market currencies.

Emerging market debt indices also negative

- EM yield curves steepened; central banks in Latin America and Eastern Europe have begun monetary easing.
- Heightened geopolitical risk, war, commodity price volatility, and an economic slowdown in China remain significant headwinds to the sector.

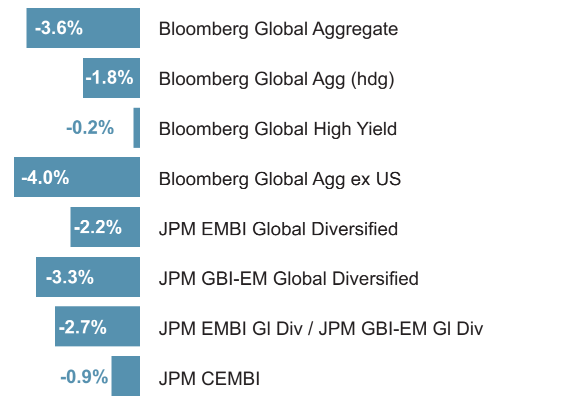
Change in 10-Year Global Government Bond Yields

2Q23 to 3Q23



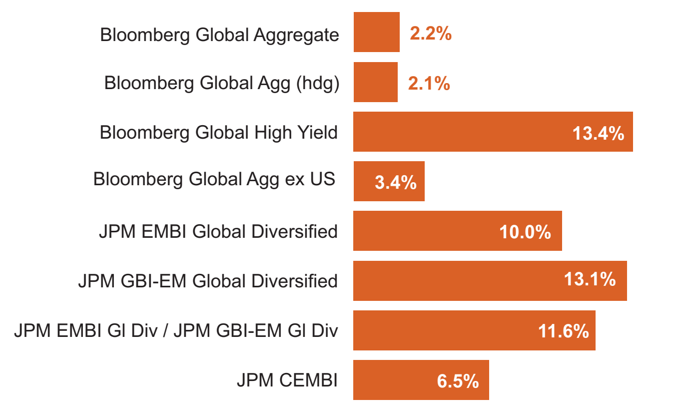
Source: Bloomberg

Global Fixed Income: Quarterly Returns (9/30/23)



Sources: Bloomberg and JPMorgan Chase

Global Fixed Income: One-Year Returns (9/30/23)



Sources: Bloomberg and JPMorgan Chase

Private Real Estate Falls While REITs Lag Equities

REAL ESTATE/REAL ASSETS | Munir Iman and Aaron Quach

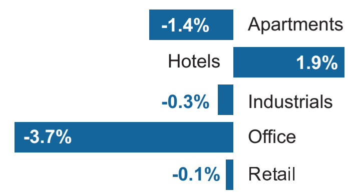
Private valuations reflect higher interest rates

- The NCREIF Property Index, a measure of U.S. institutional real estate assets, fell 1.4% during 3Q23. The income return was 1.1% while the appreciation return was –2.4%.
- Hotels, which represent a small portion of the index, led property sector performance with a gain of 1.9%. Office finished last with a loss of 3.7%.
- Regionally, the South led with a loss of 0.5%, while the West was the worst performer with a drop of 1.8%.
- Income returns were positive across sectors and regions.
- All property sectors and regions experienced negative appreciation.
- The NCREIF Open-End Diversified Core Equity (ODCE) Index, representing equity ownership positions in U.S. core real estate, fell 2.1% during 3Q.

REITs lag equities, globally and in the U.S.

- U.S. REITs fell 7.1% in 3Q23, in contrast with the S&P 500 Index, which declined 3.3%.
- The underperformance in the U.S. was driven by the resilient U.S. economy, but a stronger-than-expected economy spelled trouble for rate-sensitive stocks as real rates continued to rise and the yield curve steepened.
- Global REITs underperformed in 3Q23, falling 5.9% compared to a 3.5% decline for global equities (MSCI World).

Sector Quarterly Returns by Property Type (9/30/23)



Source: NCREIF

- REITs are now trading at a discount to NAV (-16%) and offer relative value given the recent selloff.
- Historically, global REITS have traded at a -5% discount to NAV.
- The FTSE EPRA Nareit Developed Asia Index (USD) fell 4.3% during the quarter.
- The FTSE EPRA Nareit Developed Europe Index (USD) increased by 1.2% during the quarter. German real estate stocks stood out as the top performers, benefiting from the European Central Bank's perceived shift to a more accommodative monetary policy stance, potentially marking the end of its rate-hiking cycle.
- Conversely, U.K. self-storage stocks underperformed due to reduced demand from businesses and the ongoing housing market sluggishness.

Callan Database Median and Index Returns* for Periods Ended 9/30/23

Private Real Assets	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years	15 Years
Real Estate ODCE Style	**-0.6**	**-7.9**	**-12.3**	**6.5**	**5.3**	**7.7**	**4.6**
NFI-ODCE (value-weighted, net)	-2.1	-8.1	-12.9	6.2	4.7	7.2	4.7
NCREIF Property	-1.4	-5.1	-8.4	6.0	5.3	7.4	6.0
NCREIF Farmland	-0.3	2.6	5.8	7.2	6.1	8.0	9.8
NCREIF Timberland	1.4	4.9	10.0	9.2	5.9	5.9	4.6
Public Real Estate							
Global Real Estate Style	**-5.4**	**-2.8**	**3.7**	**1.6**	**1.4**	**4.4**	**5.6**
FTSE EPRA Nareit Developed	-5.9	-4.9	1.6	0.6	-1.2	2.0	3.6
Global ex-U.S. Real Estate Style	**-3.5**	**-4.2**	**4.9**	**-3.9**	**-1.5**	**2.8**	**3.8**
FTSE EPRA Nareit Dev ex US	-3.0	-7.5	2.1	-4.8	-4.2	-0.5	2.5
U.S. REIT Style	**-7.4**	**-2.1**	**2.6**	**5.0**	**4.3**	**6.9**	**7.0**
FTSE EPRA Nareit Equity REITs	-7.1	-2.1	3.0	5.8	2.8	6.0	5.9

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

Focus on Exits

PRIVATE EQUITY | Gary Robertson

While private equity fundraising and investment measures in 3Q23 fell from 2Q, exits were a bright spot with dollar volume increases for buyout and venture M&A and buyout IPO volumes. The number of venture IPOs increased as well.

Fundraising ▶ Based on preliminary data, private equity partnerships holding final closes in 3Q totaled $171 billion, with 435 new partnerships formed (unless otherwise noted, all data are from PitchBook). The dollar volume fell 13% from 2Q23, and the number of funds holding final closes declined 19%. So far, capital raised is running only 22% behind YTD 2022, but the number of funds trails by 42%.

Buyouts ▶ New buyout transactions and dollar volume fell moderately. Funds closed 2,398 company investments with $123 billion of disclosed deal value, a 16% decrease in count and an 8% drop in dollar value from 2Q23.

VC Investments ▶ New financing rounds in venture capital companies totaled 8,977, with $82 billion of announced value. The number of investments was down 21% from the prior quarter, but the announced value fell only 1%.

Exits ▶ There were 507 private M&A exits of private equity-backed companies (excluding venture capital), with disclosed values totaling $123 billion. Exits fell 7% from the prior quarter but announced dollar volume increased 23%. There were 43 private equity-backed IPOs in 3Q raising $12 billion, the count fell by 2 IPOs but dollar volume leapt 50%.

Venture-backed M&A exits totaled 489 with disclosed value of $27 billion. The number of sales declined 10% but announced dollar volume jumped 93%. There were 102 VC-backed IPOs (up 19% from 2Q) but the combined float fell to $10 billion.

Returns ▶ With the significant 3Q rally in public equity markets, private equity trailed for the quarter and last 12 months. Private equity posted a third consecutive quarterly gain after the large retreat across most of 2022. Continued capital markets volatility is expected, and private equity should provide a beneficial dampening effect.

Funds Closed 1/1/23 to 9/30/23

Strategy	No. of Funds	Amt ($mm)	Share
Venture Capital	930	121,173	22%
Growth Equity	91	63,798	12%
Buyouts	319	239,538	43%
Mezzanine Debt	16	35,010	6%
Distressed/Special Credit	20	21,575	4%
Energy	6	3,008	1%
Secondary and Other	74	65,295	12%
Fund-of-funds	16	3,005	1%
Totals	**1,472**	**552,402**	**100%**

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

Private Equity Performance (%) (Pooled Horizon IRRs through 6/30/23*)

Strategy	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years
All Venture	-0.74	-9.26	20.20	18.89	18.21	13.19	12.58	19.11
Growth Equity	1.31	-0.33	17.20	15.61	15.04	12.78	14.14	14.25
All Buyouts	2.57	8.12	21.06	15.67	15.30	11.22	14.80	12.72
Mezzanine	3.17	10.75	15.01	11.14	11.17	10.49	11.29	9.92
Credit Opportunities	1.39	7.37	11.93	7.11	7.63	9.12	9.42	9.46
Control Distressed	1.17	4.88	22.37	13.61	11.99	10.75	11.69	11.40
All Private Equity	**1.59**	**2.72**	**19.68**	**15.58**	**15.03**	**11.59**	**13.74**	**13.25**
S&P 500	8.74	19.59	14.60	12.31	12.86	10.88	10.04	7.61
Russell 3000	8.39	18.95	13.89	11.39	12.34	10.61	10.05	7.72

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

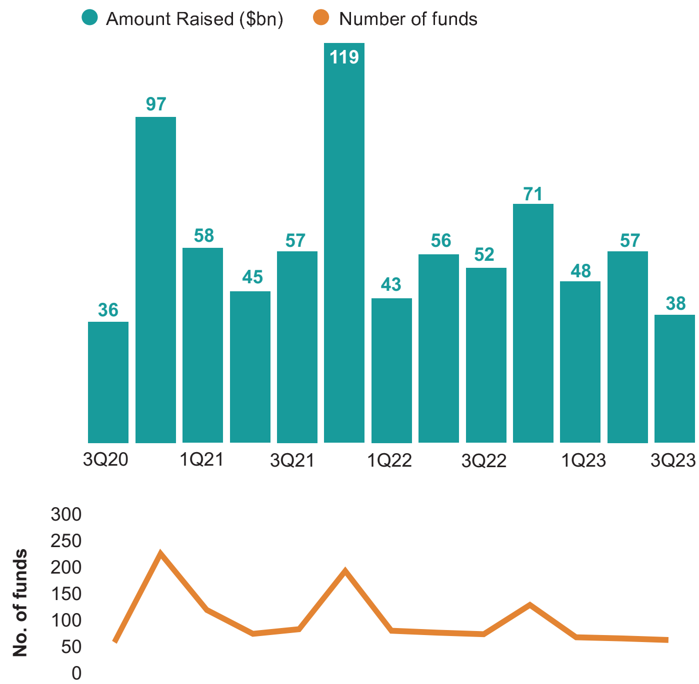
Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of the *Capital Markets Review* and other Callan publications.

Returns Exceed Those of Leveraged Loans

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 11.8%, outperforming leveraged loans as of June 30, 2023.
- It has also outperformed over longer time periods, with a net IRR of 9.5% over the last 20 years, compared to 5.3% for leveraged loans and 7.2% for corporate high yield.
- 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 pensions 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, asset-based lending, and opportunistic/special situations.
- Callan is seeing an uptick in stress for some individual names in direct lending portfolios due, in many cases, to a combination of input cost inflation and increased interest expense burden.
- Continued 3Q23 rate rises across the yield curve have made private credit even more attractive than in the past.
- Traditional lenders have not reentered the market in a meaningful way, allowing private credit to expand its opportunity set into larger companies, which are better credits but where loans still command high rates.
- With slight increases in default rates and rating agencies predicting further increases, both opportunistic (flexible) credit funds and dedicated distressed credit funds are seeing more investor interest.
- To foster ease of limited partner access and ongoing administration, more private credit general partners are launching evergreen structures and other legal structures.
- Based on the success of traditional private credit, more niche and targeted strategies are being launched such as legal assets, leasing, various royalties (pharma, music), and asset-backed industry-specific funds (shipping, energy).
- Finally, we are seeing a wave of consolidation across private credit asset managers as entities look to build out diversified product offerings and scale their businesses.

Private Credit Fundraising ($bn)



Source: Preqin

Private Credit Performance (%) (Pooled Horizon IRRs through 6/30/23*)

Strategy	Quarter	1 Year	3 Years	5 Years	8 Years	10 Years	15 Years	20 Years
Senior Debt	1.9	8.6	8.0	6.3	6.9	6.8	7.0	N/A
Mezzanine	3.2	10.7	15.0	11.1	11.2	11.2	10.7	10.6
Credit Opportunities	1.4	7.4	11.9	7.1	7.4	7.6	9.2	8.9
Total Private Credit	**1.9**	**8.4**	**11.8**	**7.9**	**8.2**	**8.3**	**9.2**	**9.0**

Source: Refinitiv/Cambridge
*Most recent data available at time of publication

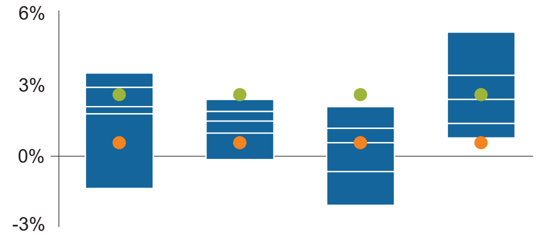
Most Strategies End Quarter Slightly Higher

HEDGE FUNDS/MACs | Joe McGuane

Equity markets retreated during 3Q23, as investors came to terms with the fact that central banks were likely to keep rates higher for longer. Inflationary pressures persisted and long-term government bonds sold off with the U.S. 10-year Treasury yield reaching a 16-year high, while crude oil prices surged amid Russia and OPEC supply cuts.

The S&P 500 detracted (-3%) with small-cap, growth, and technology stocks leading declines, as the realization of a longer period of tighter policy sank in and eroded the case for lofty valuations. European, emerging market, and Asian equity markets posted negative results for the quarter. Credit indices generated mixed returns, as U.S. high yield and leveraged loan indices ended the quarter flat to positive, while investment grade credit posted negative returns.

Hedge Fund Style Group Returns (9/30/23)



	Absolute Return FOF	Core Div. FOF	Long/Short Equity FOF	Institutional Hedge Funds
10th Percentile	3.4	2.3	2.0	5.1
25th Percentile	2.8	1.8	1.1	3.3
Median	2.0	1.4	0.5	2.3
75th Percentile	1.7	0.9	-0.7	1.3
90th Percentile	-1.4	-0.2	-2.1	0.7
HFRI Fund Wtd Index ●	0.5	0.5	0.5	0.5
90-Day T-Bills +5% ●	2.5	2.5	2.5	2.5

Sources: Callan, Credit Suisse, Federal Reserve

Callan Peer Group Median and Index Returns* for Periods Ended 9/30/23

Hedge Fund Universe	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years
Callan Institutional Hedge Fund Peer Group	**2.3**	**5.7**	**6.0**	**7.1**	**6.2**	**5.8**
Callan Fund-of-Funds Peer Group	**1.3**	**4.1**	**5.9**	**5.2**	**4.2**	**4.3**
Callan Absolute Return FOF Style	**2.0**	**3.2**	**4.9**	**6.4**	**4.5**	**4.4**
Callan Core Diversified FOF Style	**1.4**	**4.1**	**5.9**	**5.2**	**4.1**	**4.0**
Callan Long/Short Equity FOF Style	**0.5**	**4.7**	**7.8**	**2.3**	**3.9**	**4.0**
HFRI Fund-Weighted Index	0.5	3.9	6.3	6.7	5.0	4.5
HFRI Fixed Convertible Arbitrage	0.5	3.3	6.7	5.6	5.5	4.8
HFRI Distressed/Restructuring	1.2	3.5	4.3	8.2	4.5	4.1
HFRI Emerging Markets	-1.0	3.5	8.3	2.4	3.1	3.0
HFRI Equity Market Neutral	1.3	2.7	3.5	4.1	2.2	2.9
HFRI Event-Driven	2.4	4.9	8.2	7.8	4.6	4.5
HFRI Relative Value	1.5	4.1	5.6	5.4	3.6	4.0
HFRI Macro	1.4	0.6	-0.7	7.4	5.3	3.4
HFRI Equity Hedge	-1.0	4.7	9.1	6.5	5.2	5.1
HFRI Multi-Strategy	2.7	4.9	6.5	4.6	2.7	2.8
HFRI Merger Arbitrage	4.4	1.5	4.0	8.1	5.4	4.4
90-Day T-Bill + 5%	2.5	7.3	9.5	6.7	6.7	6.1

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

Hedge funds ended 3Q slightly higher, as equity markets sold off during the quarter when the excitement around technology names expected to benefit from the prospects of generative AI subsided and the view of elevated rates trimmed those lofty valuations. Equity hedge strategies ended the quarter negative, as sector-focused managers in health care, technology, and real estate struggled during the final month of the quarter. Event-driven strategies ended the quarter on a positive note, as a number of strategic deals either closed or received regulatory approval. Macro managers had a solid quarter, as they profited from rising sovereign bond yields and steeper yield curves.

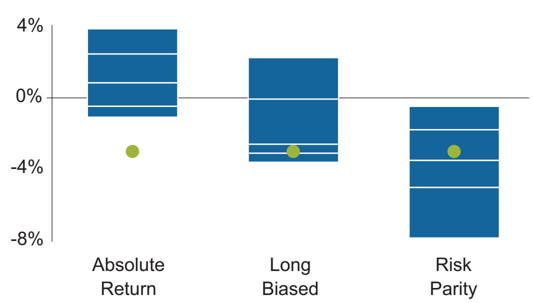
Serving as a proxy for large, broadly diversified hedge funds with low-beta exposure to equity markets, the median Callan Institutional Hedge Fund Peer Group rose 2.3%. Within this style group of 50 peers, the average hedge credit manager gained 4.0%, as lower-rated credits outperformed higher-rated peers later in the quarter. The median Callan institutional hedged rates manager rose 2.4%, largely driven by relative value bond trades in the U.S., given opportunities across the yield curve. Meanwhile, the average hedged equity manager added 1.0%, as managers were able to profit off the dispersion across small cap and growth names.

Within the HFRI indices, one of the best-performing strategy last quarter was the event-driven index (2.4%), as a number of strategic deals received regulatory approval. Relative value strategies ended up 1.5%, as fixed income trading drove gains. Macro strategies finished up 1.4%, as gains came from short positions in U.S., Japanese, and European rates, and short positions in U.S. equities.

Across the Callan Hedge Fund-of-Funds (FOF) Database, the median Callan Long-Short Equity FOF ended 0.5% higher, as generalist managers offset specialists during the quarter. Meanwhile, the median Callan Core Diverse FOF ended 1.4% higher, as macro and event-driven managers drove performance. Callan Absolute Return FOF ended 2.0% higher, as macro managers drove performance.

Within Callan's database of liquid alternative solutions, the Callan MAC Absolute Return peer group rose 0.8%, as commodities and currencies drove performance. The Callan MAC Risk Parity peer group fell 3.5%, as equities and fixed income moved lower during the quarter. The Callan MAC Long Biased peer group fell 2.6%, as equity investors dumped stocks after realizing interest rates were likely to be higher for longer.

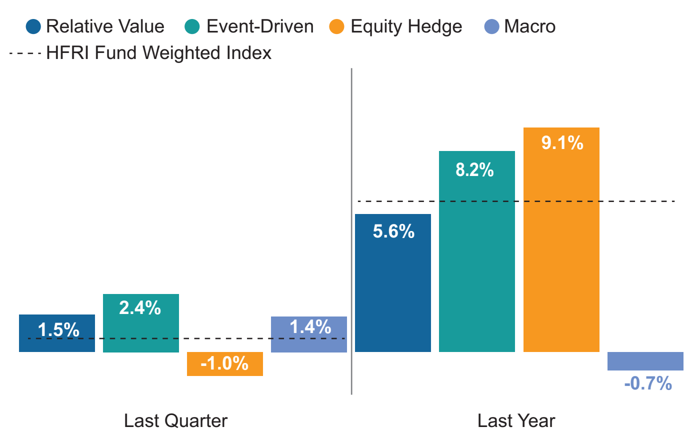
MAC Style Group Returns (9/30/23)



	Absolute Return	Long Biased	Risk Parity
10th Percentile	3.8	2.2	-0.5
25th Percentile	2.4	-0.1	-1.8
Median	0.8	-2.6	-3.5
75th Percentile	-0.5	-3.1	-5.0
90th Percentile	-1.1	-3.6	-7.8
60% ACWI / 40% Bloomberg Agg ●	-3.3	-3.3	-3.3

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

HFRI Hedge Fund-Weighted Strategy Returns (9/30/23)



Source: HFRI

Index Finishes 2Q23 with Third Straight Gain

DEFINED CONTRIBUTION | Scotty Lee

Performance: DC Index Gains 4.7%

– The Callan DC Index™ rose 4.7% in 2Q23, which brought the Index's trailing one-year gain to 11.7%. The Age 45 Target Date Fund (analogous to the 2040 vintage) had a slightly lower quarterly return (4.0%).

Growth Sources: Balances Grow Again

– Balances within the DC Index rose by 4.3% after a 5.3% increase in the previous quarter. Investment gains (4.7%) were the sole driver of the gain, while net flows (-0.4%) had a negligible effect.

Turnover: Material Fall in Net Transfers

– Turnover (i.e., net transfer activity levels within DC plans) in the DC Index decreased materially to 0.33% from the previous quarter's measure of 0.70%, which marked the Index's highest level since 2020.

Net Cash Flow Analysis: Stable Value Declines Sharply

– Target date funds (TDFs) got 67.4% of quarterly net flows.

– Stable value (-39.9%) saw relatively large outflows for the third consecutive quarter, while money market (6.1%) experienced small net inflows.

Equity Allocation: Exposure Rises Slightly

– The Index's overall allocation to equity (71.8%) rose from the previous quarter's level (70.8%), primarily driven by gains in equity markets. The current equity allocation continues to sit above the Index's historical average (68.4%).

Asset Allocation: Large Cap Gains

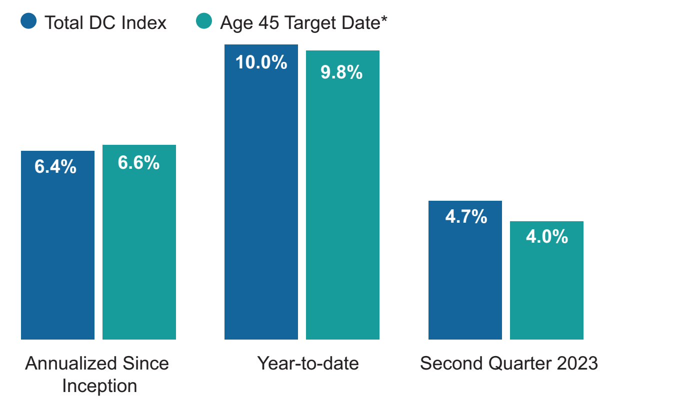
– U.S. large cap (26.4%) and target date funds (33.8%) were among the asset classes with the largest percentage increases in allocation.

Prevalence of Asset Class: Company Stock Rises

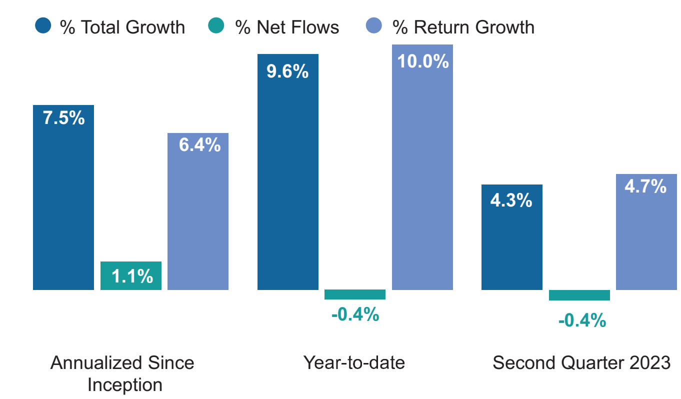
– The prevalence of company stock (21.8%) rose by 3.8 percentage points. Other notable movements included a 1.5 percentage point decrease in the prevalence of a brokerage window offering (39.9%) as well as a 1.5 percentage point decrease in the prevalence of stable value (71.4%).

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 (6/30/23)



Growth Sources (6/30/23)



Net Cash Flow Analysis (2Q23)
(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	67.4%
U.S. Fixed Income	11.8%
U.S. Large Cap	-27.6%
Stable Value	-39.9%
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.

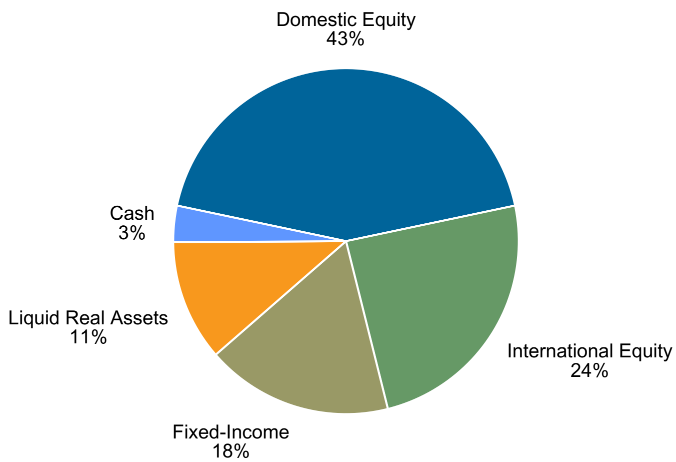
** Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

Asset Allocation
and Performance

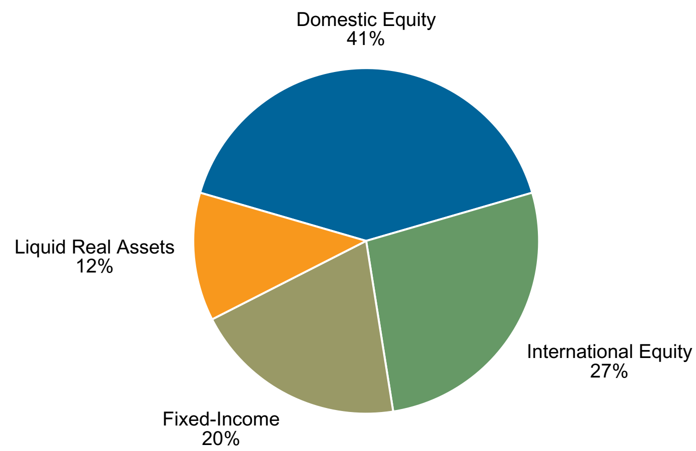
Actual vs Target Asset Allocation
As of September 30, 2023

The top left chart shows the Fund's asset allocation as of September 30, 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).

Actual Asset Allocation

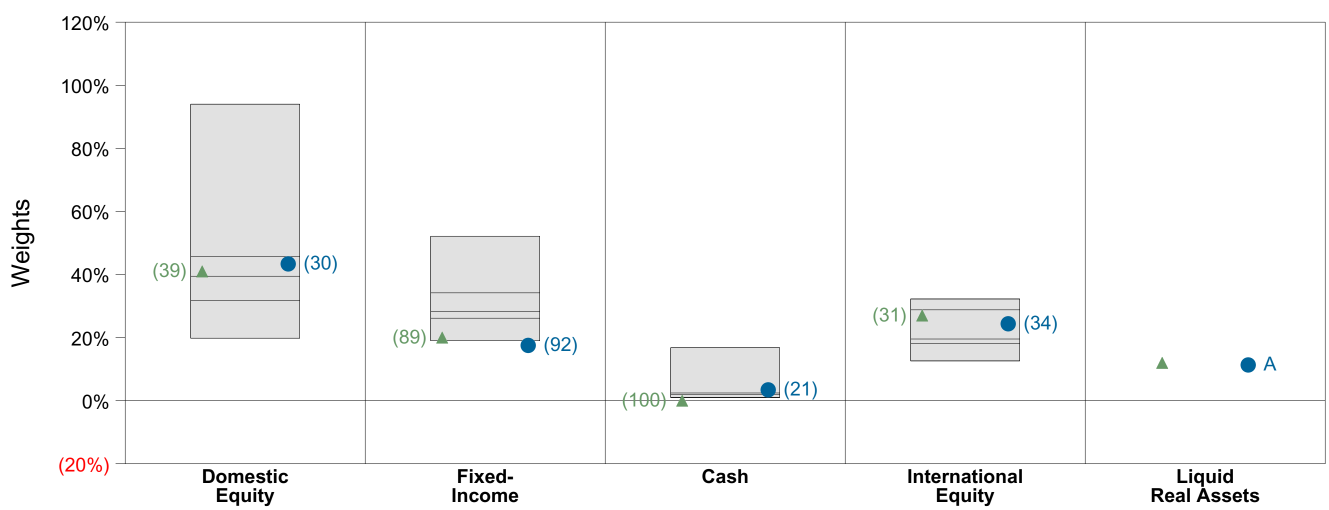


Target Asset Allocation



Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity	54,018	43.4%	41.0%	2.4%	2,934
International Equity	30,370	24.4%	27.0%	(2.6%)	(3,271)
Fixed-Income	21,825	17.5%	20.0%	(2.5%)	(3,094)
Liquid Real Assets	14,108	11.3%	12.0%	(0.7%)	(843)
Cash	4,274	3.4%	0.0%	3.4%	4,274
Total	124,595	100.0%	100.0%		

Asset Class Weights vs Callan Public Fund Spons - Sm DB (<100M)



	Domestic Equity	Fixed-Income	Cash	International Equity	Liquid Real Assets
10th Percentile	94.00	52.13	16.80	32.25	-
25th Percentile	45.66	34.18	2.43	28.80	-
Median	39.46	28.28	1.96	19.55	-
75th Percentile	31.74	26.15	1.05	18.05	-
90th Percentile	19.80	19.00	1.00	12.61	-
Fund ●	43.36	17.52	3.43	24.37	11.32
Target ▲	41.00	20.00	0.00	27.00	12.00
% Group Invested	100.00%	90.00%	80.00%	90.00%	0.00%

* 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 September 30, 2023, with the distribution as of June 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

	September 30, 2023				June 30, 2023	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Total Equity	**$84,387,978**	**67.73%**	**$0**	**$(3,107,116)**	**$87,495,094**	**67.97%**
Domestic Equity	**$54,018,302**	**43.36%**	**$0**	**$(1,837,429)**	**$55,855,731**	**43.39%**
Vanguard Total Stock Mrkt	54,018,302	43.36%	0	(1,837,429)	55,855,731	43.39%
International Equity	**$30,369,675**	**24.37%**	**$0**	**$(1,269,687)**	**$31,639,363**	**24.58%**
Vanguard Total Intl Stock	30,369,675	24.37%	0	(1,269,687)	31,639,363	24.58%
Fixed Income	**$21,825,026**	**17.52%**	**$(4,226)**	**$(748,990)**	**$22,578,242**	**17.54%**
Metropolitan West Fund	8,233,200	6.61%	0	(299,824)	8,533,025	6.63%
Prudential Cons Core Bond Fnd	13,591,826	10.91%	(4,226)	(449,166)	14,045,217	10.91%
Liquid Real Assets	**$14,107,926**	**11.32%**	**$0**	**$(318,051)**	**$14,425,977**	**11.21%**
PIMCO All Assets	14,107,926	11.32%	0	(318,051)	14,425,977	11.21%
Cash	**$4,273,937**	**3.43%**	**$(4,679)**	**$54,969**	**$4,223,646**	**3.28%**
Short Term Fund	4,273,937	3.43%	(4,679)	54,969	4,223,646	3.28%
Total Fund	**$124,594,866**	**100.0%**	**$(8,905)**	**$(4,119,188)**	**$128,722,959**	**100.0%**

Investment Manager Asset Allocation

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

Asset Distribution Across Investment Managers

	September 30, 2023					June 30, 2023		
	Market Value	Weight	(min)	Target	(max)	Market Value	Weight	Target
Total Equity	**$84,387,978**	**67.73%**	**53.00%**	**68.00%**	**83.00%**	**$87,495,094**	**67.97%**	**68.00%**
Domestic Equity	**$54,018,302**	**43.36%**	**31.00%**	**41.00%**	**51.00%**	**$55,855,731**	**43.39%**	**41.00%**
Vanguard Total Stock Mkt	54,018,302	43.36%				55,855,731	43.39%	
International Equity	**$30,369,675**	**24.37%**	**20.00%**	**27.00%**	**34.00%**	**$31,639,363**	**24.58%**	**27.00%**
Vanguard Total Int'l. Stock	30,369,675	24.37%				31,639,363	24.58%	
Fixed Income	**$21,825,026**	**17.52%**	**15.00%**	**20.00%**	**25.00%**	**$22,578,242**	**17.54%**	**20.00%**
Metropolitan West Fund	8,233,200	6.61%				8,533,025	6.63%	
Prudential Cons Core Bond	13,591,826	10.91%				14,045,217	10.91%	
Liquid Real Assets	**$14,107,926**	**11.32%**	**0.00%**	**12.00%**	**20.00%**	**$14,425,977**	**11.21%**	**12.00%**
PIMCO All Assets	14,107,926	11.32%				14,425,977	11.21%	
Cash	**$4,273,937**	**3.43%**	**0.00%**	**0.00%**	**0.00%**	**$4,223,646**	**3.28%**	**0.00%**
Short Term Fund	4,273,937	3.43%				4,223,646	3.28%	
Total Fund	**$124,594,866**	**100.00%**		**100.00%**		**$128,722,959**	**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 September 30, 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 September 30, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Total Equity	**(3.55%)**	**20.49%**	**7.19%**	**6.65%**	**8.97%**
Domestic Equity	**(3.29%)**	**20.38%**	**9.25%**	**9.06%**	**11.58%**
Vanguard Total Stock Market (1)	(3.29%)	20.38%	9.25%	9.06%	11.58%
Vanguard Total Stock Benchmark (2)	(3.30%)	20.37%	9.26%	9.07%	11.58%
Russell 3000 Index	(3.25%)	20.46%	9.38%	9.14%	11.64%
International Equity	**(4.01%)**	**20.50%**	**3.89%**	**2.76%**	**4.81%**
Vanguard Total Int'l. Stock (3)	(4.01%)	20.50%	3.89%	2.76%	4.81%
Vanguard International Benchmark (4)	(3.26%)	20.79%	4.45%	3.17%	5.25%
MSCI ACWI ex US	(3.77%)	20.39%	3.74%	2.58%	4.74%
Fixed-Income	**(3.32%)**	**0.88%**	**(5.26%)**	**0.17%**	**(0.01%)**
Prudential Conservative Core Bond (5)	(3.23%)	1.03%	(5.23%)	0.06%	(0.15%)
Metropolitan West Fund	(3.51%)	0.42%	(5.54%)	0.14%	0.03%
Blmbg Aggregate Index	(3.23%)	0.64%	(5.21%)	0.10%	(0.09%)
Liquid Real Assets	**(2.20%)**	**9.09%**	**5.25%**	**4.11%**	**4.55%**
PIMCO All Asset	(2.20%)	9.09%	5.25%	4.11%	4.55%
Blmbg US TIPS 1-10	(1.00%)	2.11%	(0.02%)	2.63%	1.90%
Cash	**1.30%**	**4.36%**	**1.63%**	**1.66%**	**1.51%**
Short Term Fund	1.30%	4.36%	1.63%	1.66%	1.51%
3-month Treasury Bill	1.31%	4.47%	1.70%	1.72%	1.55%
Total Fund	**(3.20%)**	**14.83%**	**4.63%**	**5.23%**	**6.56%**
Total Fund Benchmark*	(3.09%)	14.23%	3.95%	5.30%	6.37%

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.

	6/2023-9/2023	FY 2023	FY 2022	FY 2021	FY 2020
Total Equity	**(3.55%)**	**16.47%**	**(16.08%)**	**41.24%**	**2.43%**
Domestic Equity	**(3.29%)**	**18.93%**	**(14.24%)**	**44.33%**	**6.47%**
Vanguard Total Stock Market (1)	(3.29%)	18.93%	(14.24%)	44.33%	6.47%
Vanguard Total Stock Benchmark (2)	(3.30%)	18.94%	(14.22%)	44.35%	6.47%
Russell 3000 Index	(3.25%)	18.95%	(13.87%)	44.16%	6.53%
International Equity	**(4.01%)**	**12.34%**	**(18.92%)**	**36.54%**	**(4.07%)**
Vanguard Total Int'l. Stock (3)	(4.01%)	12.34%	(18.92%)	36.54%	(4.07%)
Vanguard International Benchmark (4)	(3.26%)	12.89%	(19.01%)	37.55%	(4.16%)
MSCI ACWI ex US	(3.77%)	12.72%	(19.42%)	35.72%	(4.80%)
Fixed-Income	**(3.32%)**	**(0.85%)**	**(10.95%)**	**0.45%**	**8.94%**
Prudential Cons Core Bond Fnd (5)	(3.23%)	(0.68%)	(10.70%)	(0.16%)	8.65%
Metropolitan West Fund	(3.51%)	(1.36%)	(11.56%)	1.36%	9.18%
Blmbg Aggregate Index	(3.23%)	(0.94%)	(10.29%)	(0.33%)	8.74%
Liquid Real Assets	**(2.20%)**	**4.68%**	**(9.85%)**	**29.55%**	**(2.23%)**
PIMCO All Asset	(2.20%)	4.68%	(9.85%)	29.55%	(2.23%)
Blmbg US TIPS 1-10	(1.00%)	(0.91%)	(2.03%)	6.60%	5.75%
Cash	**1.30%**	**3.43%**	**0.16%**	**0.09%**	**1.78%**
Short Term Fund	1.30%	3.43%	0.16%	0.09%	1.78%
3-month Treasury Bill	1.31%	3.59%	0.17%	0.09%	1.63%
Total Fund	**(3.20%)**	**11.12%**	**(14.34%)**	**31.50%**	**3.26%**
Total Fund Benchmark*	(3.09%)	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 September 30, 2023

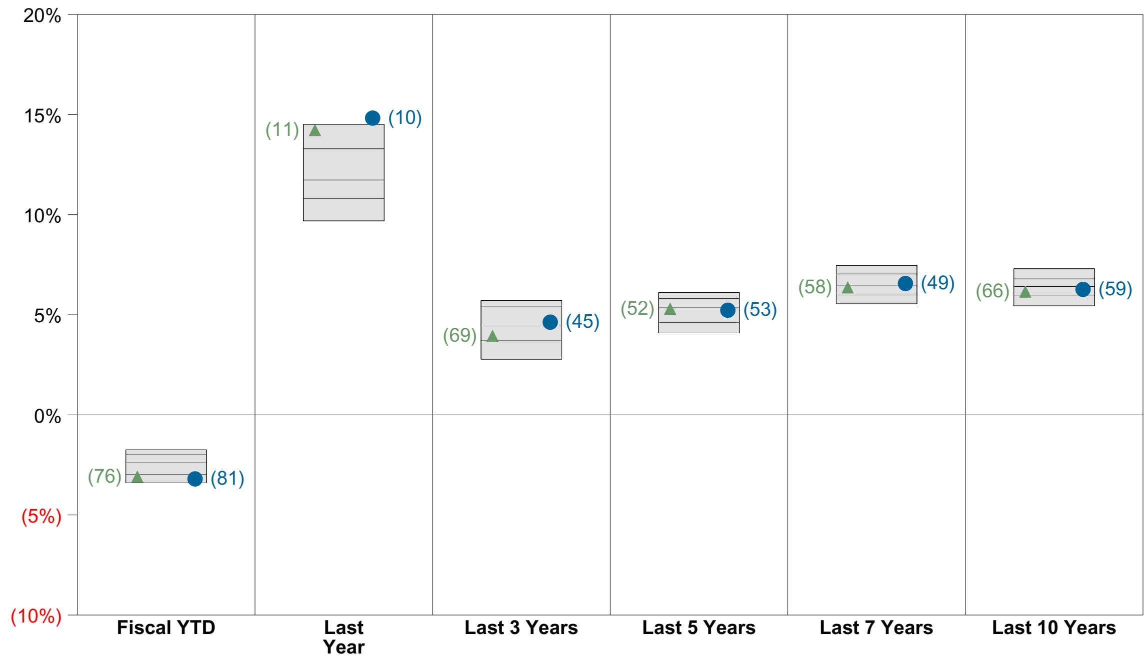
Quarterly Summary and Highlights

- Total Fund's portfolio posted a (3.20)% return for the quarter placing it in the 81 percentile of the Callan Public Fund Spons - Sm DB (<100M) group for the quarter and in the 10 percentile for the last year.
- Total Fund's portfolio underperformed the Target Benchmark by 0.11% for the quarter and outperformed the Target Benchmark for the year by 0.60%.

Quarterly Asset Growth

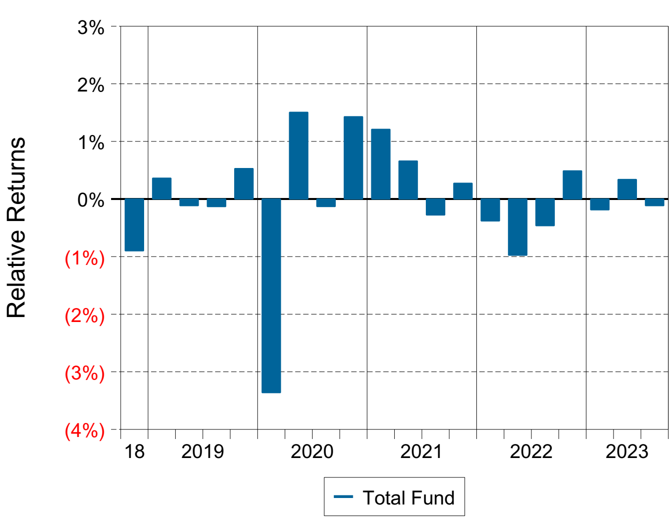
Beginning Market Value	$128,722,959
Net New Investment	$-8,905
Investment Gains/(Losses)	$-4,119,188
Ending Market Value	$124,594,866

Performance vs Callan Public Fund Spons - Sm DB (<100M) (Gross)

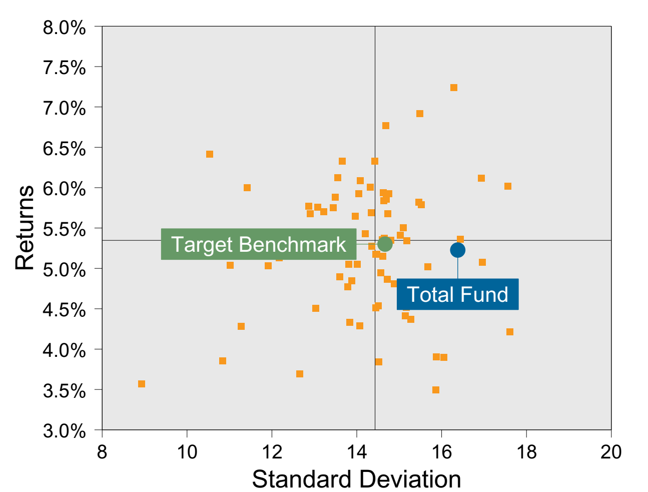


	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	(1.75)	14.52	5.71	6.12	7.47	7.30
25th Percentile	(1.99)	13.29	5.43	5.82	7.04	6.79
Median	(2.40)	11.73	4.49	5.35	6.48	6.41
75th Percentile	(2.99)	10.81	3.73	4.60	5.99	5.98
90th Percentile	(3.40)	9.69	2.78	4.09	5.55	5.44
Total Fund ●	(3.20)	14.83	4.63	5.23	6.56	6.27
Target Benchmark ▲	(3.09)	14.23	3.95	5.30	6.37	6.16

Relative Return vs Target Benchmark



Callan Public Fund Spons - Sm DB (<100M) (Gross)
Annualized Five Year Risk vs Return

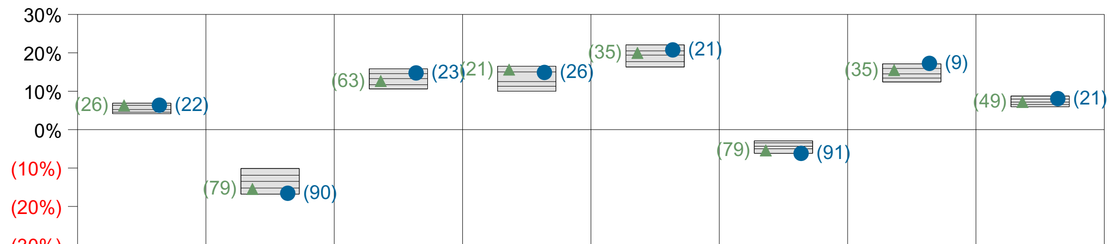


Total Fund
Return Analysis Summary

Return Analysis

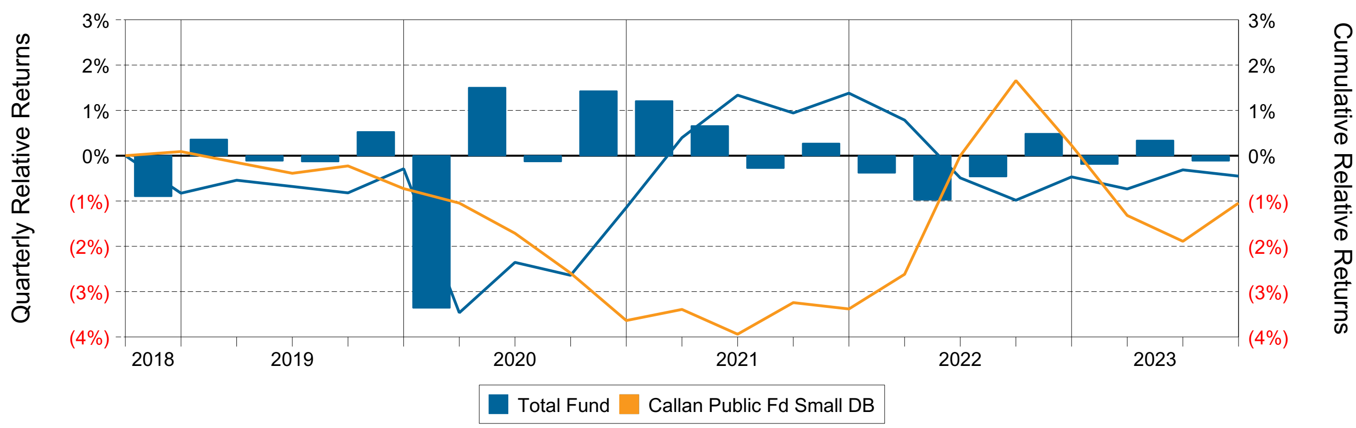
The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate 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)

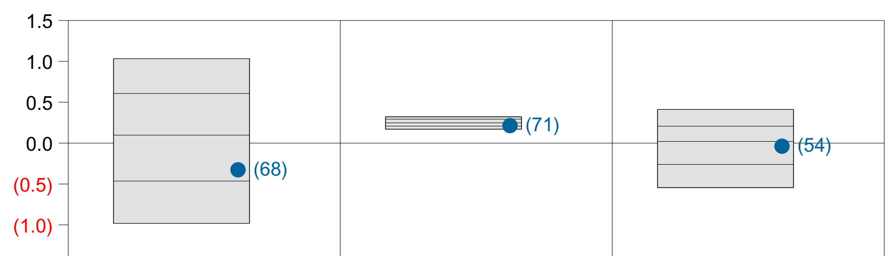


	12/22- 9/23	2022	2021	2020	2019	2018	2017	2016
10th Percentile	6.90	(10.11)	15.85	16.51	22.09	(2.91)	17.14	8.75
25th Percentile	6.33	(11.88)	14.58	15.03	20.51	(3.44)	15.93	7.96
Median	5.24	(13.47)	13.29	12.51	19.41	(4.33)	14.52	7.17
75th Percentile	4.54	(15.21)	11.70	11.30	17.71	(4.99)	13.43	6.54
90th Percentile	4.14	(16.81)	10.61	10.00	16.32	(6.18)	12.42	5.95
Total Fund ●	6.36	(16.57)	14.77	14.90	20.77	(6.18)	17.26	8.08
Total Fund Benchmark ▲	6.32	(15.44)	12.66	15.63	20.00	(5.40)	15.50	7.21

Cumulative and Quarterly Relative Returns vs Total Fund Benchmark



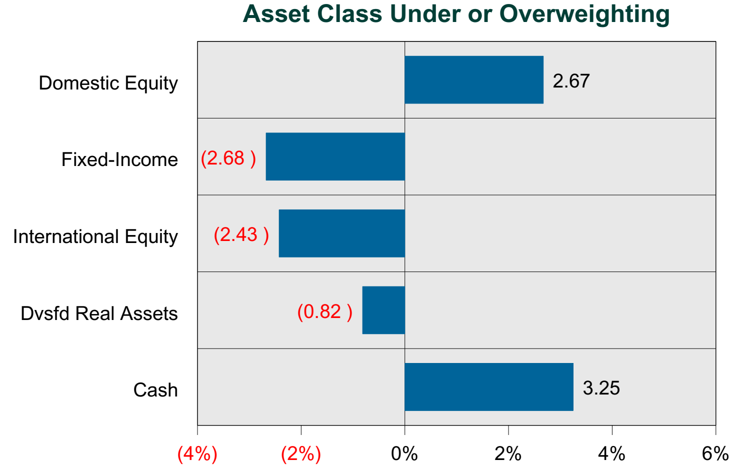
Risk Adjusted Return Measures vs Total Fund Benchmark
Rankings Against Callan Public Fund Spons - Sm DB (<100M) (Gross)
Five Years Ended September 30, 2023

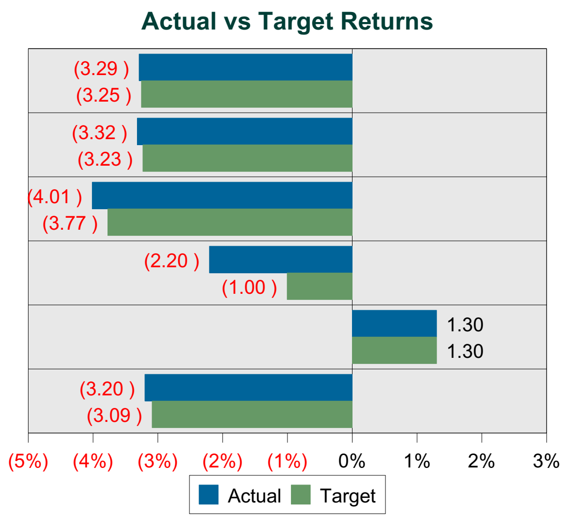


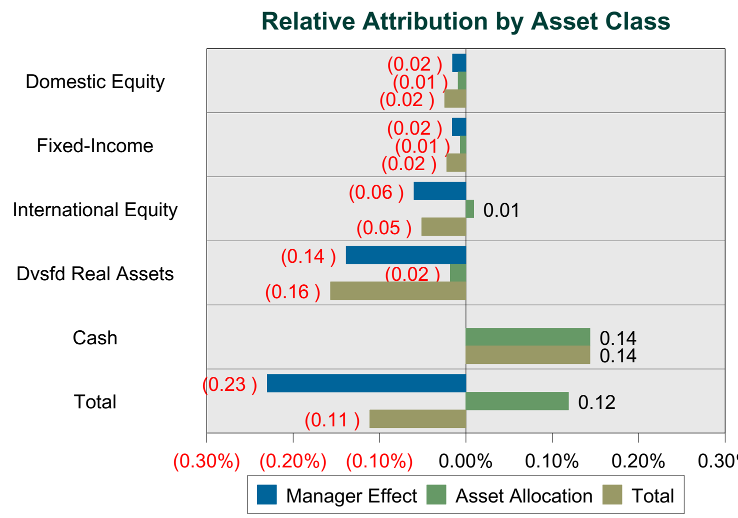
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	1.03	0.32	0.41
25th Percentile	0.61	0.29	0.21
Median	0.10	0.25	0.02
75th Percentile	(0.46)	0.21	(0.26)
90th Percentile	(0.98)	0.17	(0.54)
Total Fund ●	(0.33)	0.21	(0.04)

Quarterly Total Fund Relative Attribution - September 30, 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.







Relative Attribution Effects for Quarter ended September 30, 2023

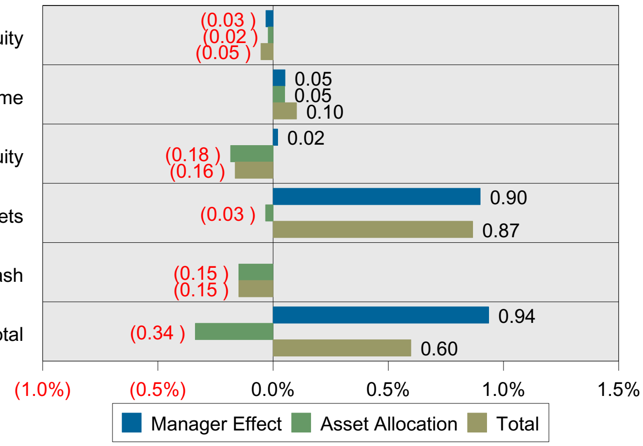
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	44%	41%	(3.29%)	(3.25%)	(0.02%)	(0.01%)	(0.02%)
Fixed-Income	17%	20%	(3.32%)	(3.23%)	(0.02%)	(0.01%)	(0.02%)
International Equity	25%	27%	(4.01%)	(3.77%)	(0.06%)	0.01%	(0.05%)
Dvsfd Real Assets	11%	12%	(2.20%)	(1.00%)	(0.14%)	(0.02%)	(0.16%)
Cash	3%	0%	1.30%	1.30%	0.00%	0.14%	0.14%
Total			**(3.20%) =**	**(3.09%) +**	**(0.23%) +**	**0.12%**	**(0.11%)**

* 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.

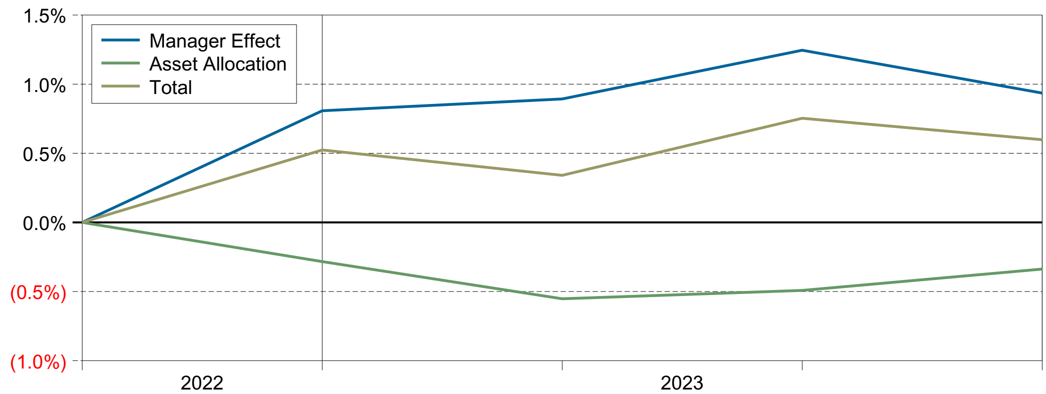
Cumulative Total Fund Relative Attribution - September 30, 2023

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

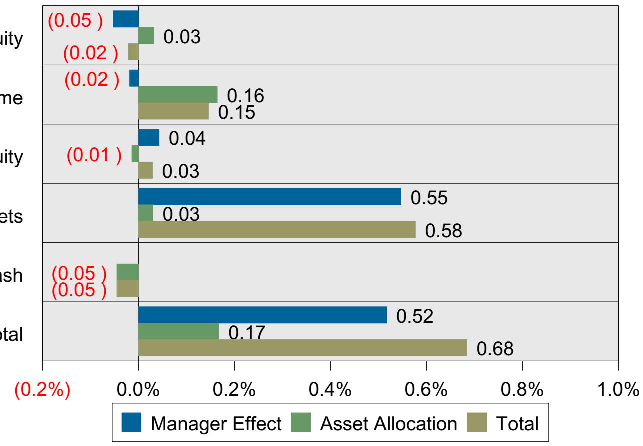
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	42%	41%	20.38%	20.46%	(0.03%)	(0.02%)	(0.05%)
Fixed-Income	18%	20%	0.88%	0.64%	0.05%	0.05%	0.10%
International Equity	25%	27%	20.50%	20.39%	0.02%	(0.18%)	(0.16%)
Dvsfd Real Assets	12%	12%	9.09%	2.11%	0.90%	(0.03%)	0.87%
Cash	3%	0%	4.36%	4.36%	0.00%	(0.15%)	(0.15%)
Total			**14.83% =**	**14.23% +**	**0.94% +**	**(0.34%)**	**0.60%**

* 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.

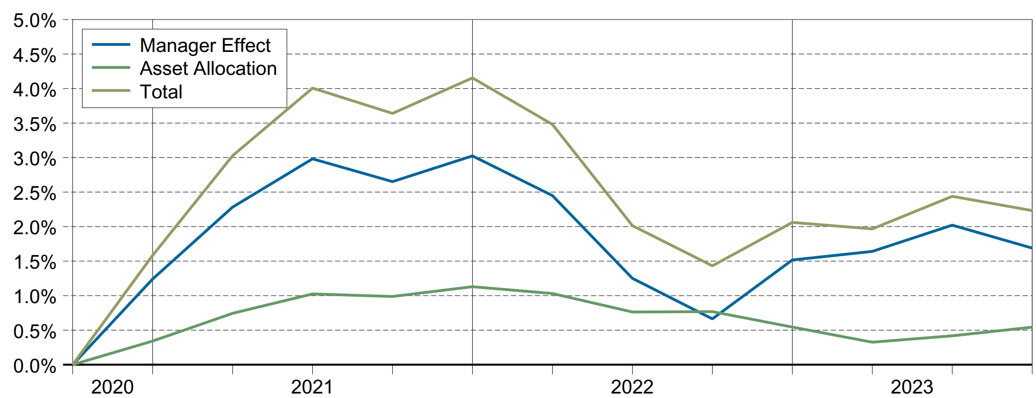
Cumulative Total Fund Relative Attribution - September 30, 2023

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

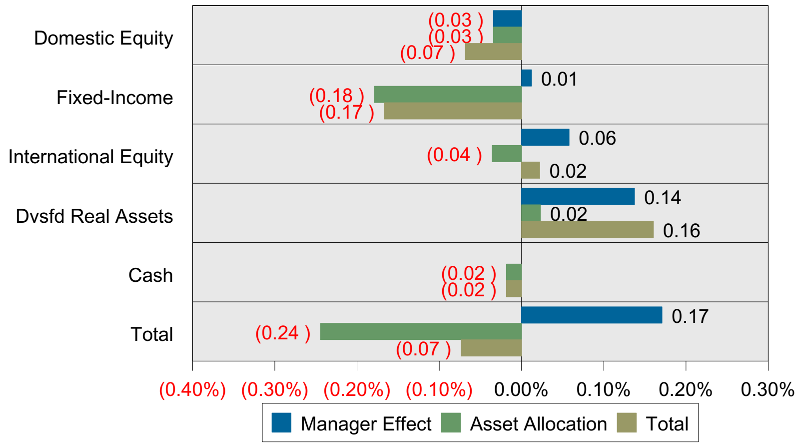
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	43%	41%	9.25%	9.38%	(0.05%)	0.03%	(0.02%)
Fixed-Income	18%	20%	(5.26%)	(5.21%)	(0.02%)	0.16%	0.15%
International Equity	26%	27%	3.89%	3.74%	0.04%	(0.01%)	0.03%
Dvsfd Real Assets	12%	12%	5.25%	(0.02%)	0.55%	0.03%	0.58%
Cash	1%	0%	1.63%	1.63%	0.00%	(0.05%)	(0.05%)
Total			**4.63% =**	**3.95% +**	**0.52% +**	**0.17%**	**0.68%**

* 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.

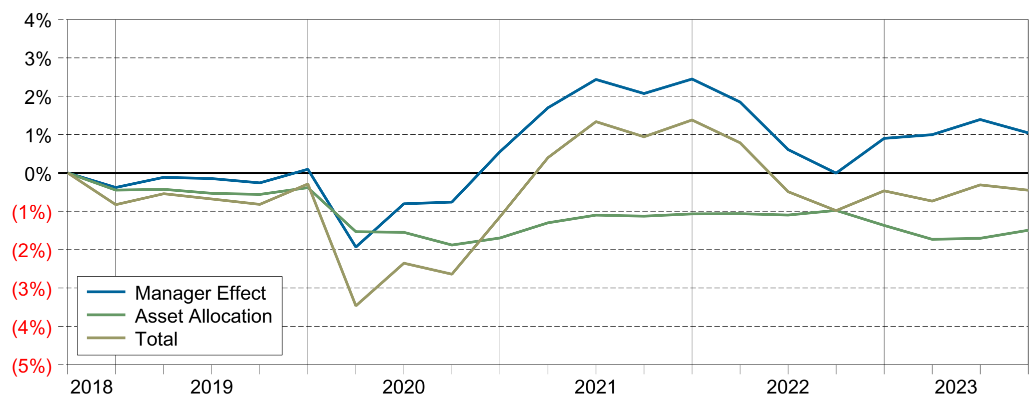
Cumulative Total Fund Relative Attribution - September 30, 2023

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%	9.06%	9.14%	(0.03%)	(0.03%)	(0.07%)
Fixed-Income	21%	23%	0.17%	0.10%	0.01%	(0.18%)	(0.17%)
International Equity	25%	26%	2.76%	2.58%	0.06%	(0.04%)	0.02%
Dvsfd Real Assets	11%	11%	4.11%	2.63%	0.14%	0.02%	0.16%
Cash	1%	0%	1.66%	1.66%	0.00%	(0.02%)	(0.02%)
Total			**5.23% =**	**5.30% +**	**0.17% +**	**(0.24%)**	**(0.07%)**

* 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 September 30, 2023

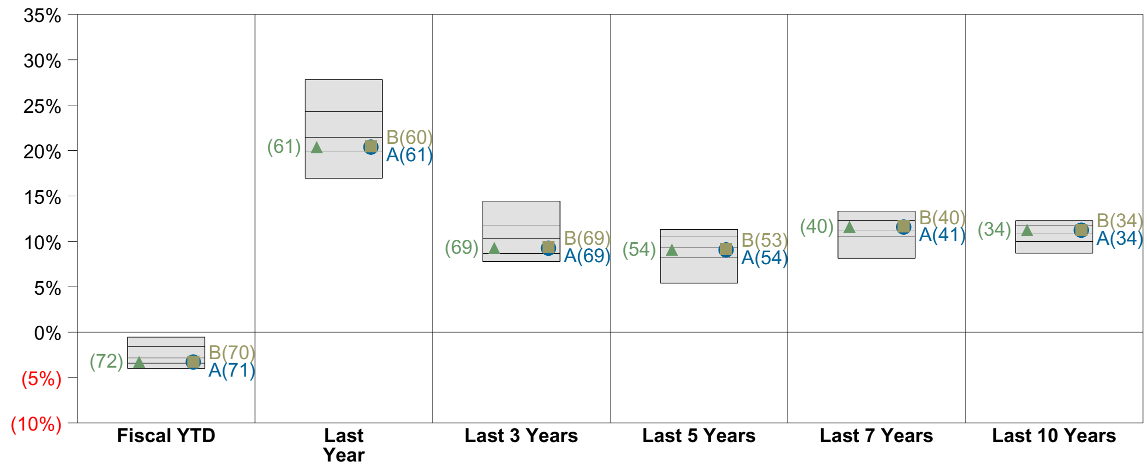
Investment Philosophy

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

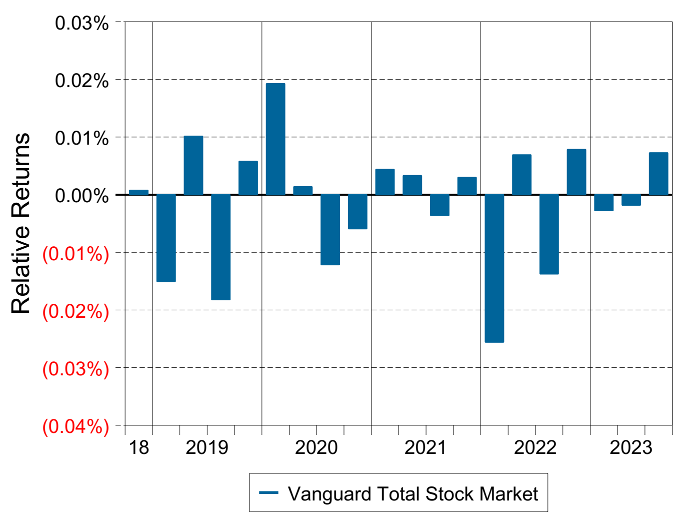
- Vanguard Total Stock Market's portfolio posted a (3.29)% return for the quarter placing it in the 71 percentile of the Callan Large Cap Core Mutual Funds group for the quarter and in the 61 percentile for the last year.
- Vanguard Total Stock Market's portfolio outperformed the Vanguard Total Stk Mrkt Benchmrk by 0.01% for the quarter and outperformed the Vanguard Total Stk Mrkt Benchmrk for the year by 0.01%.

Performance vs Callan Large Cap Core Mutual Funds (Institutional Net)

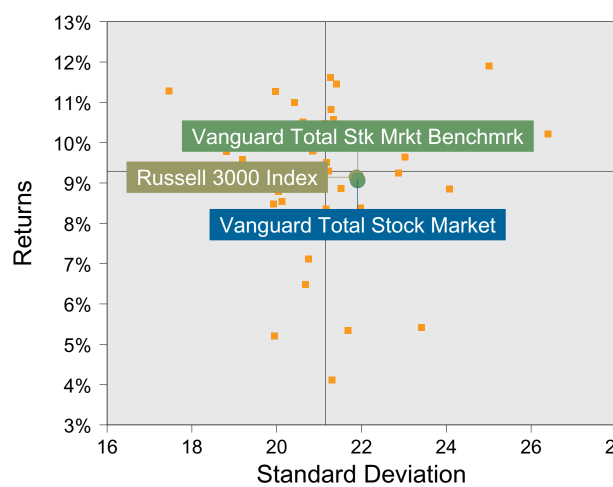


		Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile		(0.54)	27.82	14.43	11.32	13.33	12.27
25th Percentile		(1.58)	24.30	11.79	10.49	12.31	11.71
Median		(2.84)	21.45	10.34	9.29	11.25	10.91
75th Percentile		(3.42)	19.95	8.66	8.19	10.57	9.98
90th Percentile		(3.99)	16.95	7.79	5.40	8.15	8.71
Vanguard Total Stock Market	● A	(3.29)	20.38	9.25	9.06	11.58	11.23
Russell 3000 Index	■ B	(3.25)	20.46	9.38	9.14	11.64	11.28
Vanguard Total Stk Mrkt Benchmrk	▲	(3.30)	20.37	9.26	9.07	11.58	11.24

Relative Returns vs Vanguard Total Stk Mrkt Benchmrk



Callan Large Cap Core Mutual Funds (Institutional Net) Annualized Five Year Risk vs Return

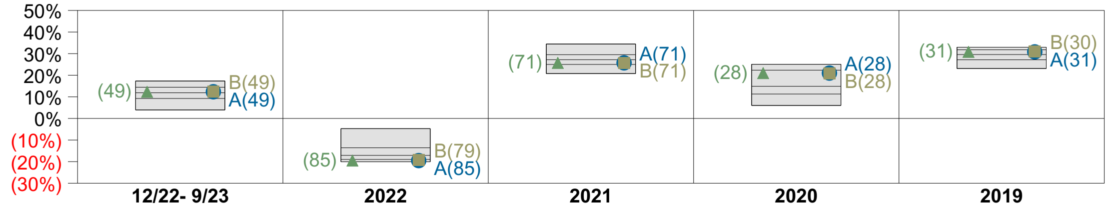


Vanguard Total Stock Market
Return Analysis Summary

Return Analysis

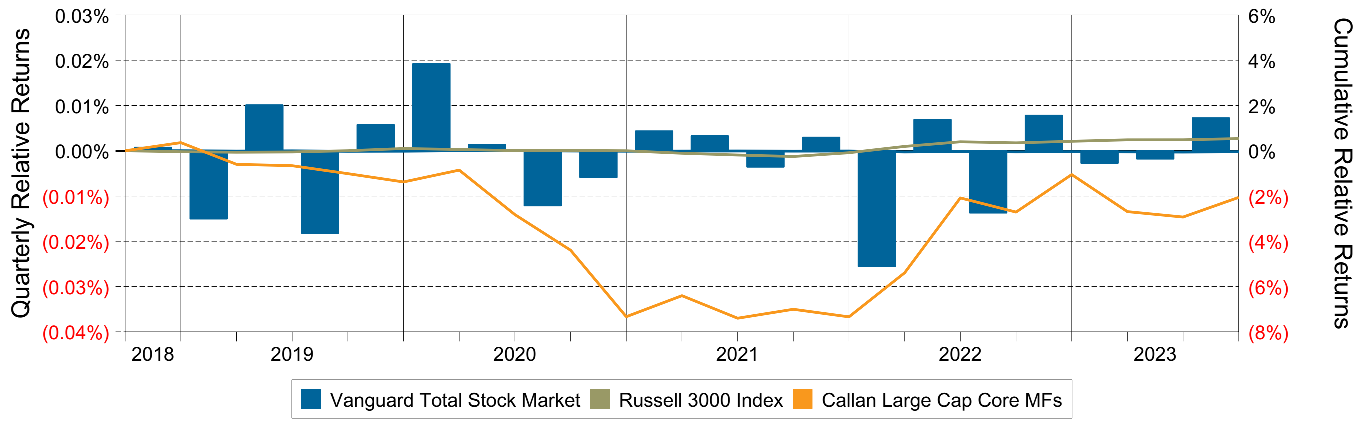
The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate 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)

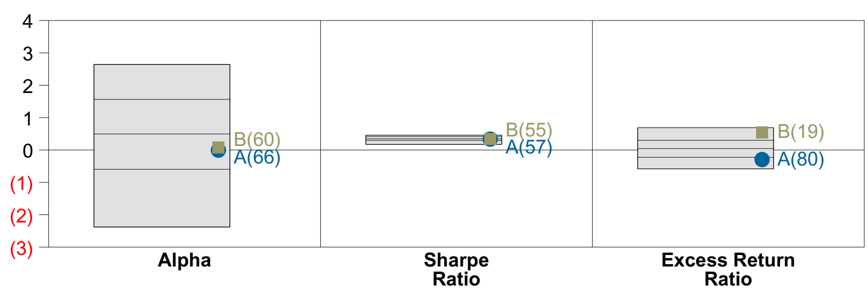


		12/22- 9/23	2022	2021	2020	2019
10th Percentile		17.33	(4.72)	34.46	25.07	32.96
25th Percentile		14.45	(13.58)	29.52	22.34	31.79
Median		11.89	(17.10)	27.20	14.87	29.58
75th Percentile		9.25	(18.99)	25.01	11.31	27.17
90th Percentile		3.94	(20.06)	20.78	6.01	23.12
Vanguard Total Stock Market	● A	12.34	(19.51)	25.73	21.00	30.81
Russell 3000 Index	■ B	12.39	(19.21)	25.66	20.89	31.02
Vanguard Total Stk Mrkt Benchmrk	▲	12.34	(19.49)	25.72	21.00	30.84

Cumulative and Quarterly Relative Returns vs Vanguard Total Stk Mrkt Benchmrk



Risk Adjusted Return Measures vs Vanguard Total Stk Mrkt Benchmrk
Rankings Against Callan Large Cap Core Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023



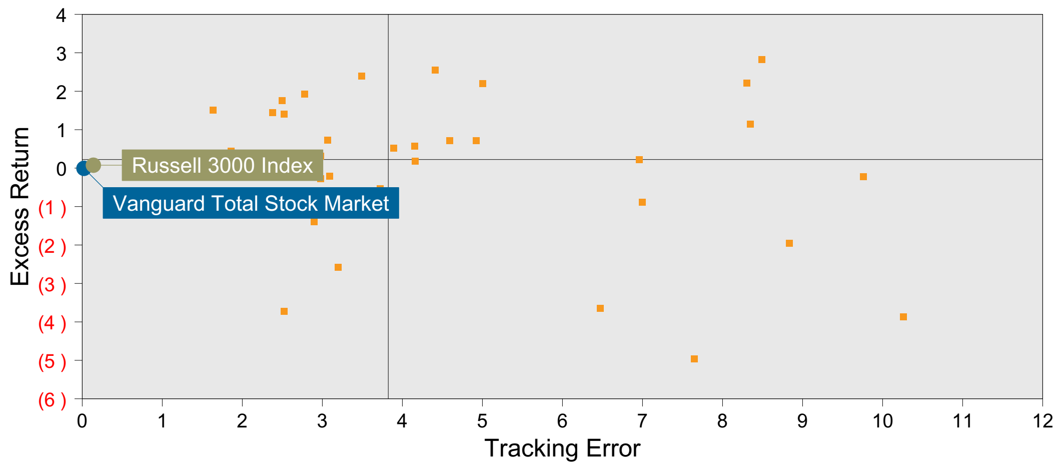
		Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile		2.64	0.46	0.69
25th Percentile		1.56	0.42	0.30
Median		0.50	0.34	0.04
75th Percentile		(0.59)	0.30	(0.23)
90th Percentile		(2.38)	0.17	(0.58)
Vanguard Total Stock Market	● A	(0.01)	0.34	(0.29)
Russell 3000 Index	■ B	0.08	0.34	0.55

Vanguard Total Stock Market
Risk Analysis Summary

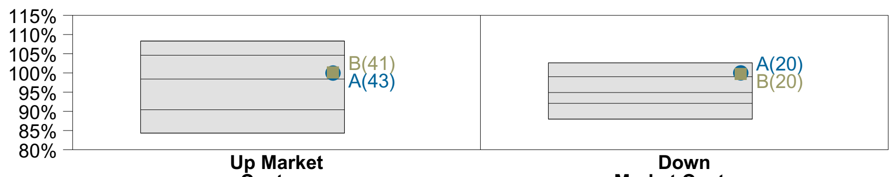
Risk Analysis

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 September 30, 2023

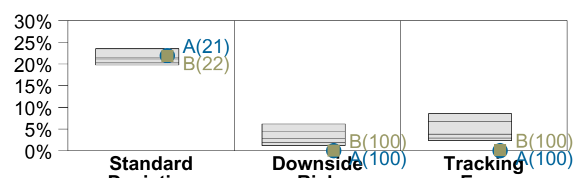


Market Capture vs Vanguard Total Stk Mrkt Benchmrk
Rankings Against Callan Large Cap Core Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023

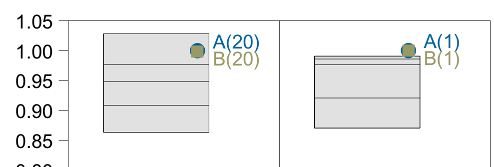


	Up Market Capture	Down Market Capture
10th Percentile	108.31	102.63
25th Percentile	104.61	99.01
Median	98.41	94.89
75th Percentile	90.41	92.09
90th Percentile	84.33	87.97
Vanguard Total Stock Market ● A	99.97	100.01
Russell 3000 Index ■ B	100.15	99.76

Risk Statistics Rankings vs Vanguard Total Stk Mrkt Benchmrk
Rankings Against Callan Large Cap Core Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023



	Standard Deviation	Downside Risk	Tracking Error
10th Percentile	23.52	6.19	8.55
25th Percentile	21.58	4.36	6.70
Median	21.15	2.78	3.82
75th Percentile	20.25	1.89	2.93
90th Percentile	19.75	1.19	2.34
Vanguard Total Stock Market ● A	21.91	0.02	0.02
Russell 3000 Index ■ B	21.88	0.06	0.14



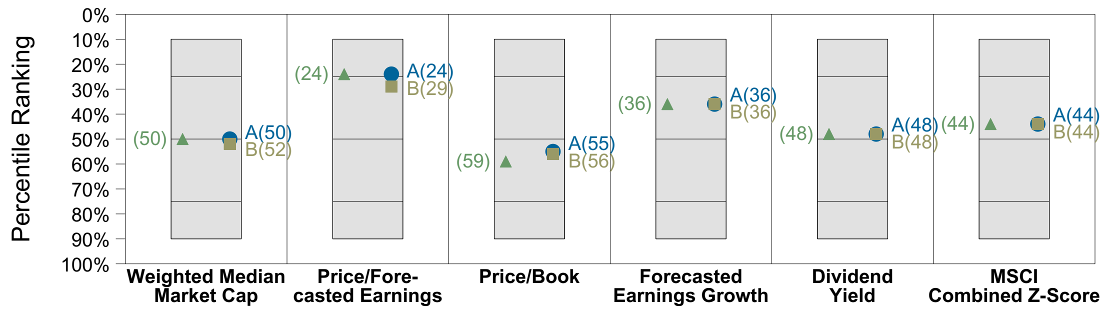
	Beta	R-Squared
10th Percentile	1.03	0.99
25th Percentile	0.98	0.99
Median	0.95	0.98
75th Percentile	0.91	0.92
90th Percentile	0.86	0.87
Vanguard Total Stock Market ● A	1.00	1.00
Russell 3000 Index ■ B	1.00	1.00

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 September 30, 2023

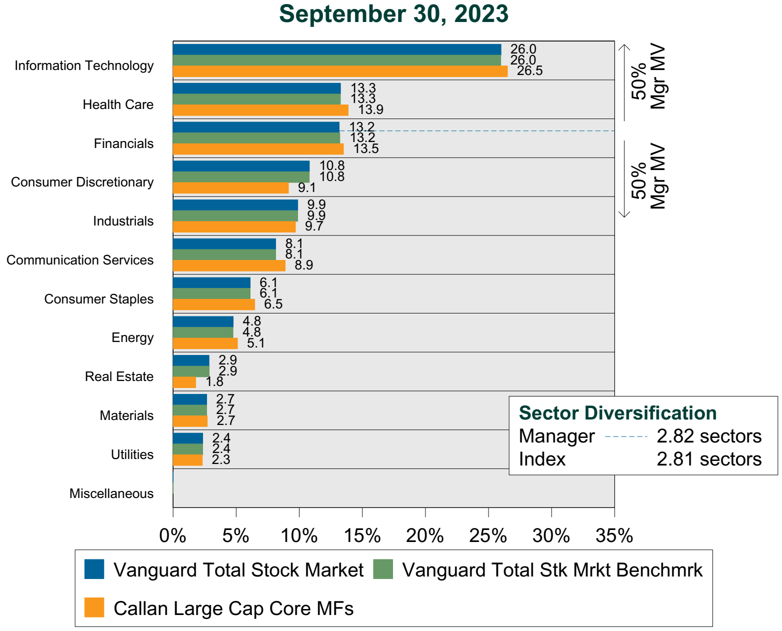


		Weighted Median Market Cap	Price/Fore-casted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile		290.95	19.93	4.40	14.90	2.16	0.32
25th Percentile		201.33	18.22	4.10	13.69	1.83	0.12
Median		124.56	17.06	3.44	11.68	1.54	(0.03)
75th Percentile		92.54	14.78	2.76	9.68	1.35	(0.19)
90th Percentile		66.40	12.77	2.23	8.26	1.22	(0.71)
Vanguard Total Stock Market	● A	124.01	18.29	3.37	12.76	1.56	0.01
Russell 3000 Index	■ B	122.22	18.18	3.36	12.71	1.56	0.01
Vanguard Total Stk Mrkt Benchmrk	▲	124.00	18.28	3.31	12.75	1.56	0.01

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.

Sector Allocation
September 30, 2023



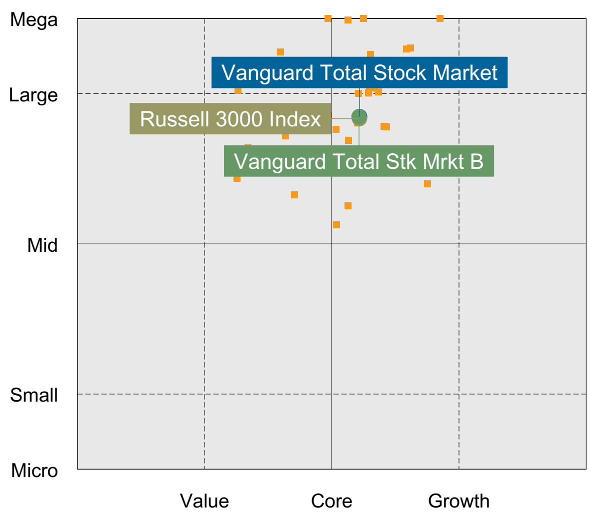
Diversification
September 30, 2023

		Number of Securities	Issue Diversification
10th Percentile		205	29
25th Percentile		134	22
Median		75	18
75th Percentile		46	13
90th Percentile		28	11
Vanguard Total Stock Market	●	3782	55
Vanguard Total Stk Mrkt Benchmrk	▲	3744	56

Current Holdings Based Style Analysis
Vanguard Total Stock Market
As of September 30, 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.

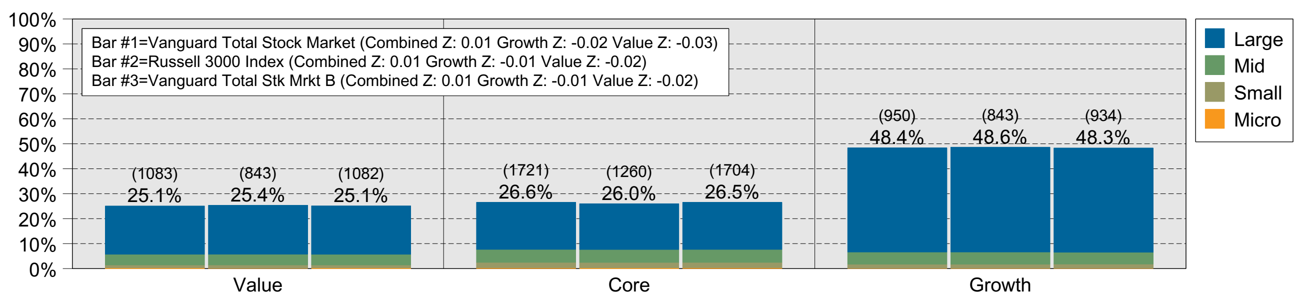
Style Map vs Callan Large Cap Core MFs
Holdings as of September 30, 2023



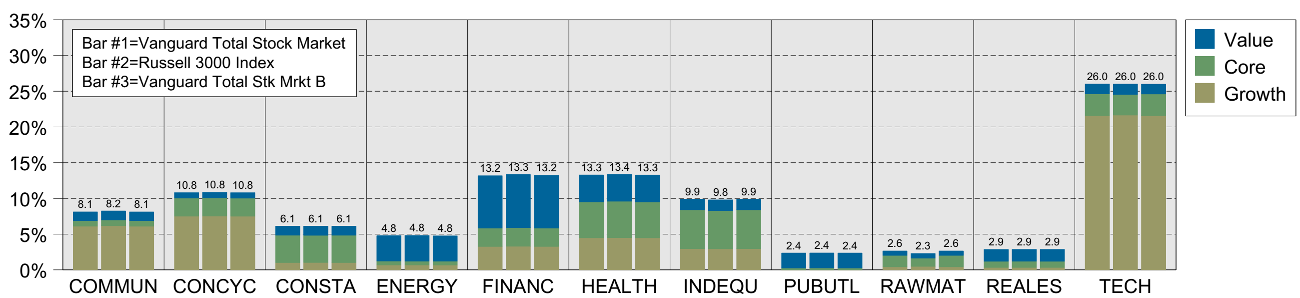
Style Exposure Matrix
Holdings as of September 30, 2023

	Value	Core	Growth	Total
Large	19.4% (100) 19.6% (99) 19.4% (100)	18.9% (90) 18.3% (87) 18.9% (90)	41.7% (105) 42.0% (108) 41.7% (105)	**80.0% (295)** **80.0% (294)** **80.0% (295)**
Mid	4.3% (156) 4.3% (157) 4.3% (156)	5.2% (219) 5.2% (218) 5.2% (218)	4.8% (215) 4.8% (214) 4.8% (215)	**14.3% (590)** **14.3% (589)** **14.3% (589)**
Small	1.2% (276) 1.2% (285) 1.2% (276)	2.2% (517) 2.2% (530) 2.2% (511)	1.7% (359) 1.7% (364) 1.7% (358)	**5.1% (1152)** **5.1% (1179)** **5.0% (1145)**
Micro	0.2% (551) 0.2% (302) 0.2% (550)	0.3% (895) 0.3% (425) 0.3% (885)	0.1% (271) 0.1% (157) 0.1% (256)	**0.7% (1717)** **0.6% (884)** **0.7% (1691)**
Total	**25.1% (1083)** **25.4% (843)** **25.1% (1082)**	**26.6% (1721)** **26.0% (1260)** **26.5% (1704)**	**48.4% (950)** **48.6% (843)** **48.3% (934)**	**100.0% (3754)** **100.0% (2946)** **100.0% (3720)**

Combined Z-Score Style Distribution
Holdings as of September 30, 2023



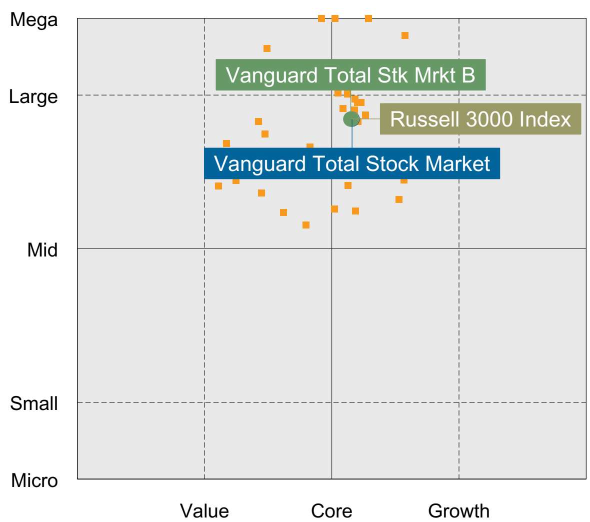
Sector Weights Distribution
Holdings as of September 30, 2023



Historical Holdings Based Style Analysis
Vanguard Total Stock Market
For Three Years Ended September 30, 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.

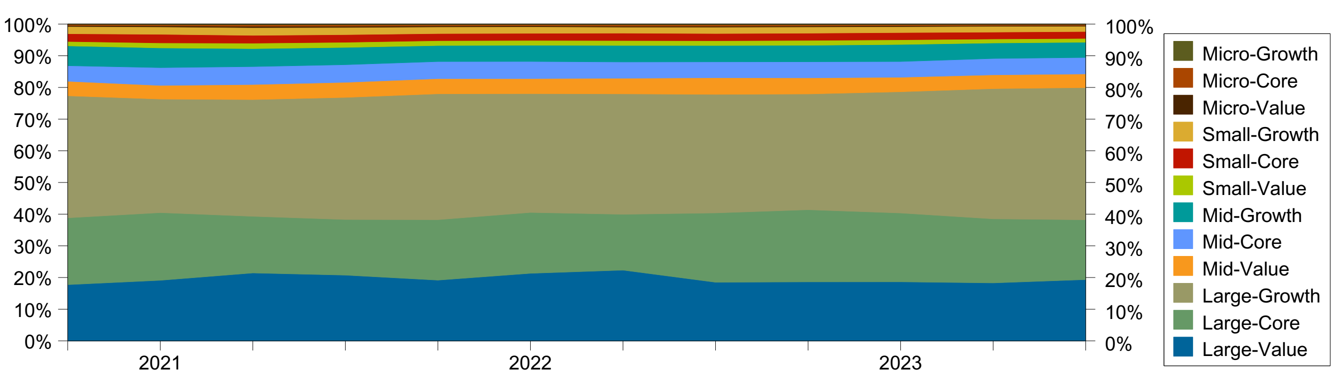
Average Style Map vs Callan Large Cap Core MFs
Holdings for Three Years Ended September 30, 2023



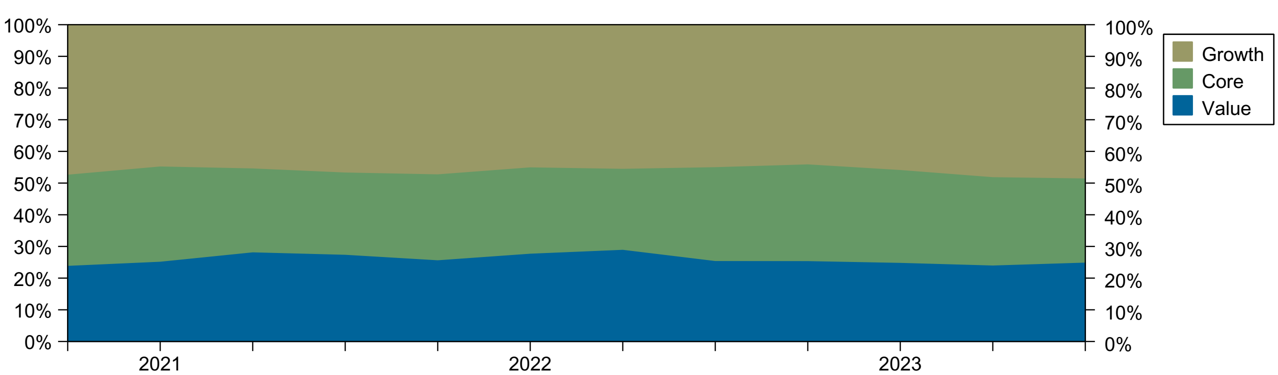
Average Style Exposure Matrix
Holdings for Three Years Ended September 30, 2023

	Value	Core	Growth	Total
Large	19.6% (100) 19.8% (98) 19.9% (100)	19.9% (98) 19.8% (95) 19.7% (97)	38.3% (104) 38.5% (104) 38.3% (104)	77.9% (302) 78.0% (297) 77.9% (301)
Mid	4.7% (163) 4.7% (165) 4.7% (163)	5.3% (217) 5.2% (214) 5.3% (215)	5.4% (216) 5.4% (216) 5.4% (216)	15.3% (596) 15.4% (595) 15.3% (594)
Small	1.5% (290) 1.5% (297) 1.5% (291)	2.3% (528) 2.3% (508) 2.3% (521)	2.1% (388) 2.1% (386) 2.1% (388)	5.9% (1206) 5.9% (1191) 5.9% (1200)
Micro	0.3% (641) 0.3% (305) 0.3% (657)	0.4% (870) 0.3% (431) 0.4% (878)	0.2% (261) 0.1% (158) 0.2% (262)	0.9% (1772) 0.7% (894) 0.9% (1797)
Total	26.1% (1194) 26.3% (865) 26.5% (1211)	27.9% (1713) 27.7% (1248) 27.7% (1711)	45.9% (969) 46.1% (864) 45.8% (970)	100.0% (3876) 100.0% (2977) 100.0% (3892)

Vanguard Total Stock Market Historical Cap/Style Exposures



Vanguard Total Stock Market Historical Style Only Exposures



Vanguard Total Int'l. Stock
Period Ended September 30, 2023

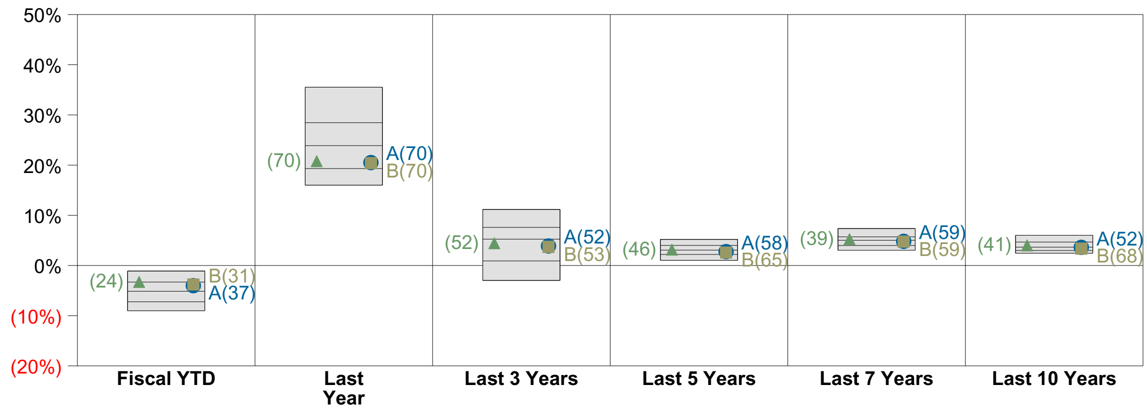
Investment Philosophy

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 MCSI 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

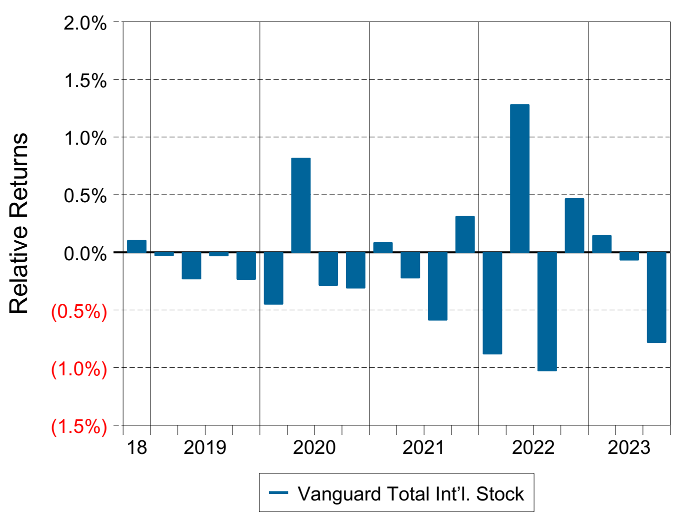
- Vanguard Total Int'l. Stock's portfolio posted a (4.01)% return for the quarter placing it in the 37 percentile of the Callan Non US Equity Mutual Funds group for the quarter and in the 70 percentile for the last year.
- Vanguard Total Int'l. Stock's portfolio underperformed the Vanguard Intl Benchmark by 0.75% for the quarter and underperformed the Vanguard Intl Benchmark for the year by 0.29%.

Performance vs Callan Non US Equity Mutual Funds (Institutional Net)

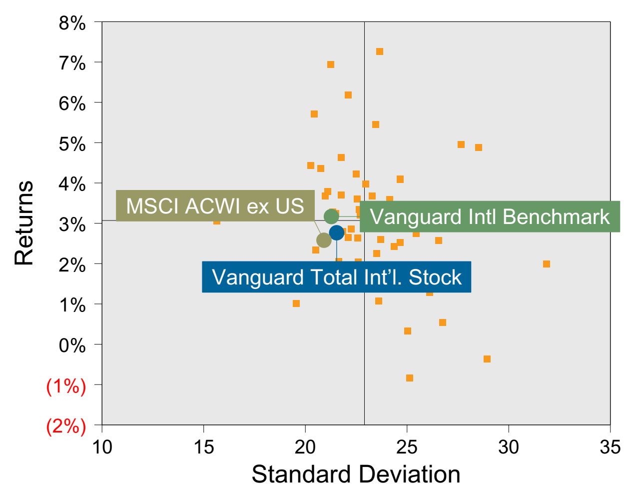


		Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile		(1.10)	35.52	11.17	5.20	7.36	6.03
25th Percentile		(3.30)	28.45	7.60	4.00	5.71	4.67
Median		(5.13)	23.88	5.25	3.07	5.03	3.66
75th Percentile		(7.23)	19.31	0.91	2.20	3.98	3.00
90th Percentile		(9.02)	16.00	(2.96)	1.04	3.04	2.45
Vanguard Total Int'l. Stock	● A	(4.01)	20.50	3.89	2.76	4.81	3.61
MSCI ACWI ex US	■ B	(3.77)	20.39	3.74	2.58	4.74	3.35
Vanguard Intl Benchmark	▲	(3.26)	20.79	4.45	3.17	5.25	4.02

Relative Return vs Vanguard Intl Benchmark



Callan Non US Equity Mutual Funds (Institutional Net)
Annualized Five Year Risk vs Return

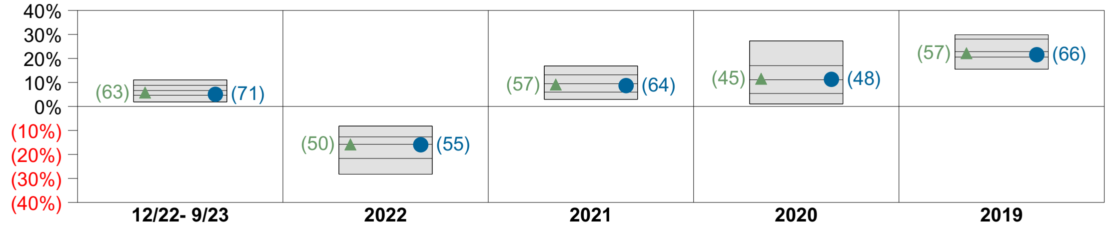


Vanguard Total Int'l. Stock
Return Analysis Summary

Return Analysis

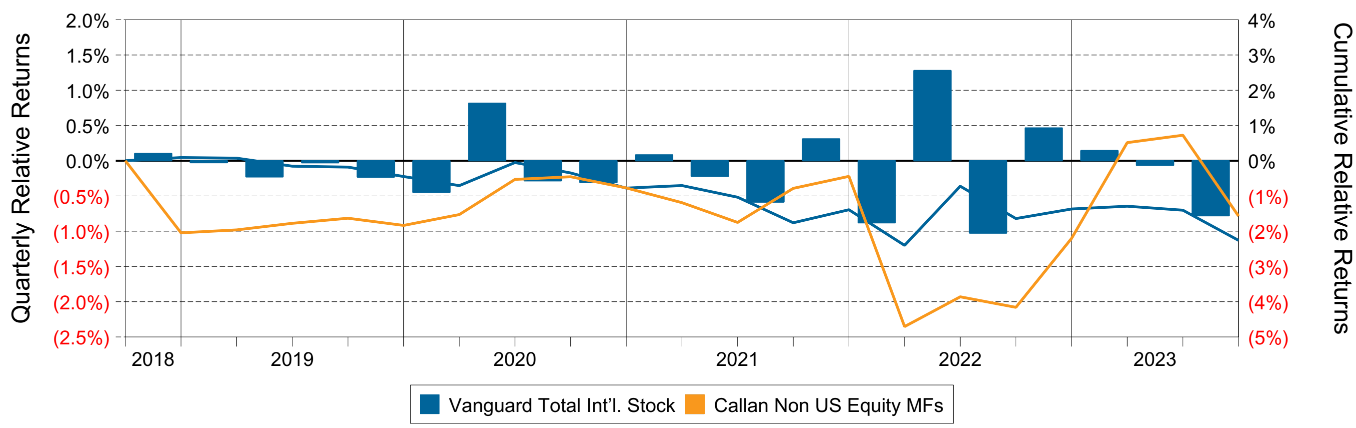
The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate 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)

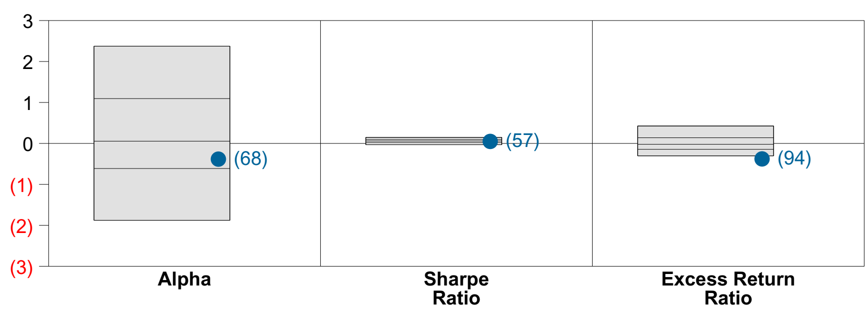


	12/22- 9/23	2022	2021	2020	2019
10th Percentile	11.06	(8.17)	16.88	27.31	29.86
25th Percentile	8.79	(12.68)	13.17	17.00	28.07
Median	6.64	(15.77)	9.47	11.12	22.83
75th Percentile	4.67	(21.67)	5.98	5.40	20.57
90th Percentile	1.88	(28.25)	2.94	1.05	15.53
Vanguard Total Int'l. Stock ●	5.04	(15.98)	8.68	11.28	21.56
Vanguard Intl Benchmark ▲	5.79	(15.83)	9.13	11.54	22.19

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 September 30, 2023



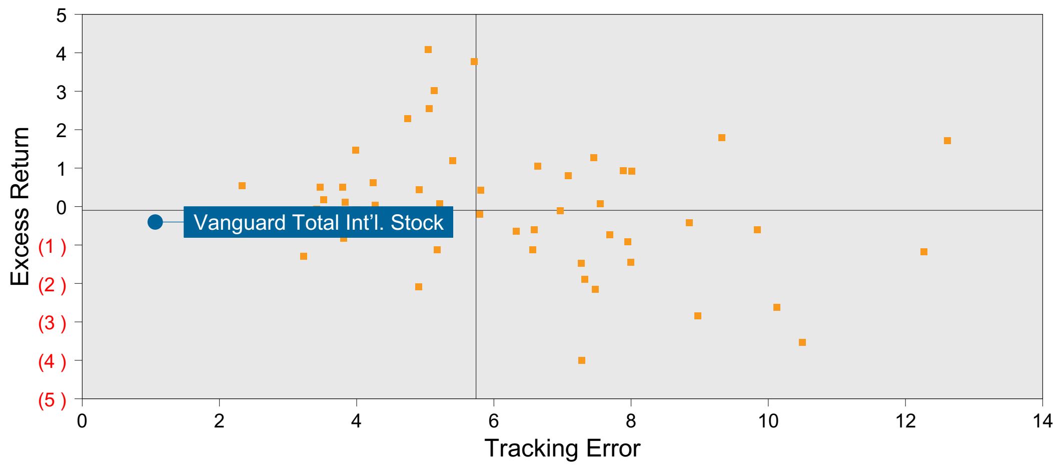
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	2.37	0.15	0.43
25th Percentile	1.09	0.10	0.14
Median	0.05	0.06	(0.02)
75th Percentile	(0.61)	0.02	(0.14)
90th Percentile	(1.88)	(0.03)	(0.30)
Vanguard Total Int'l. Stock ●	(0.38)	0.05	(0.38)

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.

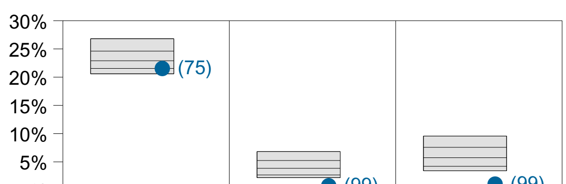
Risk Analysis vs Callan Non US Equity Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023

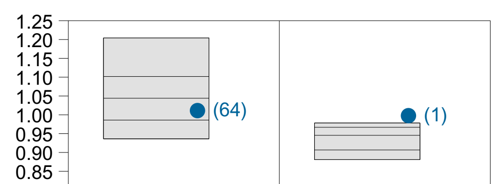


Market Capture vs Vanguard Intl Benchmark
Rankings Against Callan Non US Equity Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023

	Up Market Capture	Down Market Capture
10th Percentile	137.08	114.49
25th Percentile	124.17	107.59
Median	114.08	102.75
75th Percentile	106.57	98.75
90th Percentile	97.36	96.92
Vanguard Total Int'l. Stock ●	100.73	102.01

Risk Statistics Rankings vs Vanguard Intl Benchmark
Rankings Against Callan Non US Equity Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023





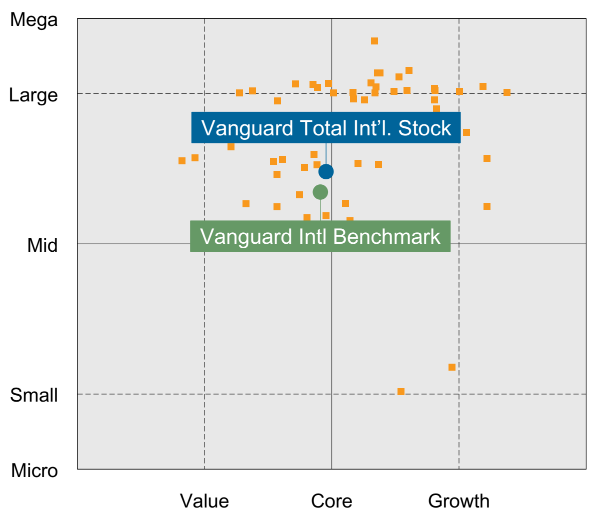
	Standard Deviation	Downside Risk	Tracking Error
10th Percentile	26.81	6.82	9.57
25th Percentile	24.61	5.24	7.57
Median	22.91	3.86	5.74
75th Percentile	21.55	2.69	4.22
90th Percentile	20.59	2.21	3.43
Vanguard Total Int'l. Stock ●	21.54	0.77	1.06

	Beta	R-Squared
10th Percentile	1.20	0.98
25th Percentile	1.10	0.97
Median	1.04	0.95
75th Percentile	0.99	0.91
90th Percentile	0.94	0.88
Vanguard Total Int'l. Stock ●	1.01	1.00

Current Holdings Based Style Analysis
Vanguard Total Int'l. Stock
As of September 30, 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.

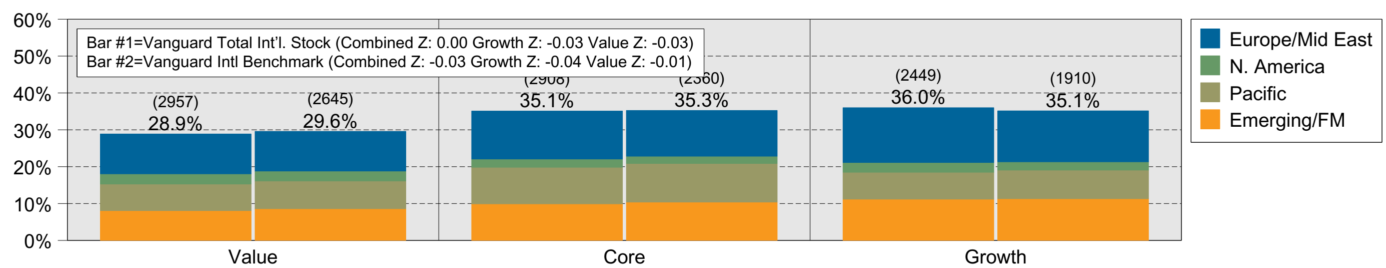
Style Map vs Callan Non US Equity MFs
Holdings as of September 30, 2023



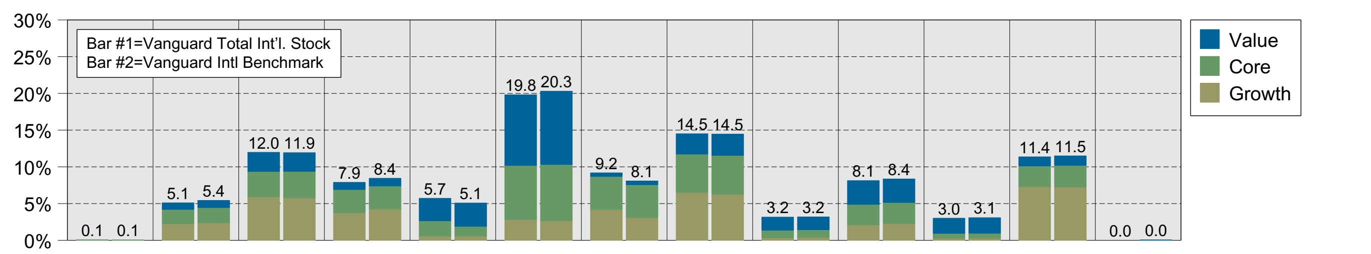
Style Exposure Matrix
Holdings as of September 30, 2023

	Value	Core	Growth	Total
Europe/ Mid East	10.8% (463)	13.0% (454)	14.8% (399)	**38.7% (1316)**
	10.8% (424)	12.4% (415)	13.8% (351)	**37.1% (1190)**
N. America	2.7% (62)	2.2% (72)	2.7% (52)	**7.7% (186)**
	2.7% (58)	1.9% (57)	2.2% (41)	**6.9% (156)**
Pacific	7.2% (808)	9.9% (643)	7.3% (530)	**24.5% (1981)**
	7.5% (794)	10.5% (627)	7.8% (524)	**25.8% (1945)**
Emerging/ FM	8.1% (1624)	9.9% (1739)	11.2% (1468)	**29.2% (4831)**
	8.6% (1369)	10.4% (1261)	11.3% (994)	**30.3% (3624)**
Total	**28.9% (2957)**	**35.1% (2908)**	**36.0% (2449)**	**100.0% (8314)**
	29.6% (2645)	**35.3% (2360)**	**35.1% (1910)**	**100.0% (6915)**

Combined Z-Score Style Distribution
Holdings as of September 30, 2023



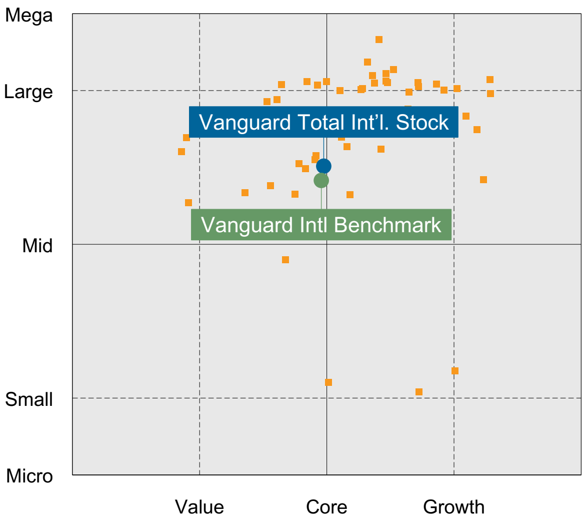
Sector Weights Distribution
Holdings as of September 30, 2023



Historical Holdings Based Style Analysis
Vanguard Total Int'l. Stock
For Three Years Ended September 30, 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.

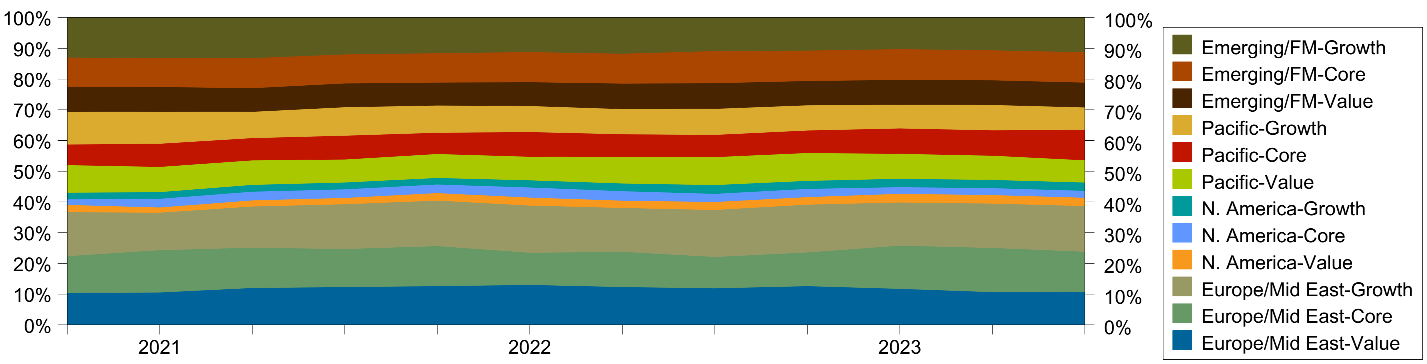
Average Style Map vs Callan Non US Equity MFs
Holdings for Three Years Ended September 30, 2023



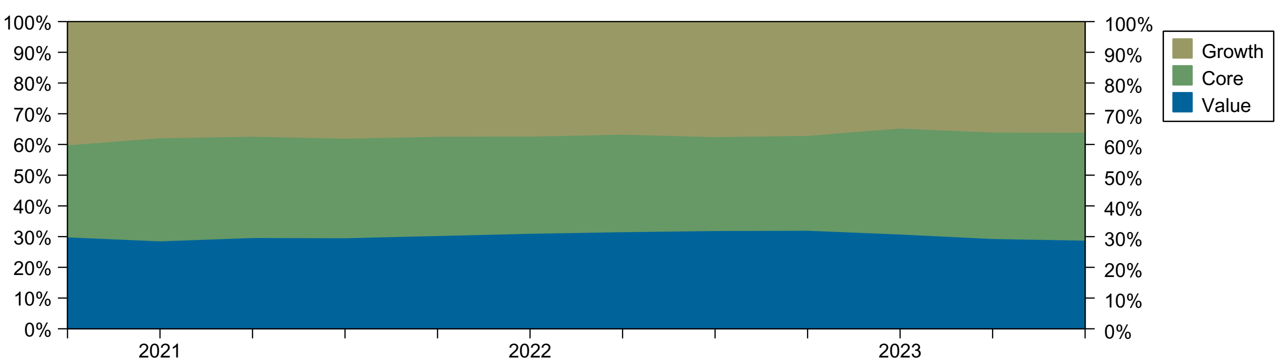
Average Style Exposure Matrix
Holdings for Three Years Ended September 30, 2023

	Value	Core	Growth	Total
Europe/ Mid East	11.8% (456) 11.4% (421)	12.4% (459) 12.2% (430)	14.4% (403) 14.0% (362)	**38.6% (1318)** **37.6% (1213)**
N. America	2.4% (65) 2.4% (61)	2.6% (74) 2.5% (67)	2.4% (53) 2.0% (43)	**7.5% (192)** **6.9% (171)**
Pacific	8.2% (766) 8.4% (757)	7.7% (639) 8.0% (631)	8.7% (536) 9.0% (532)	**24.6% (1941)** **25.4% (1920)**
Emerging/ FM	8.0% (1457) 8.4% (1328)	9.8% (1387) 10.1% (1137)	11.6% (1128) 11.7% (878)	**29.3% (3972)** **30.1% (3343)**
Total	**30.4% (2744)** **30.6% (2567)**	**32.5% (2559)** **32.8% (2265)**	**37.1% (2120)** **36.7% (1815)**	**100.0% (7423)** **100.0% (6647)**

Vanguard Total Int'l. Stock Historical Region/Style Exposures



Vanguard Total Int'l. Stock Historical Style Only Exposures

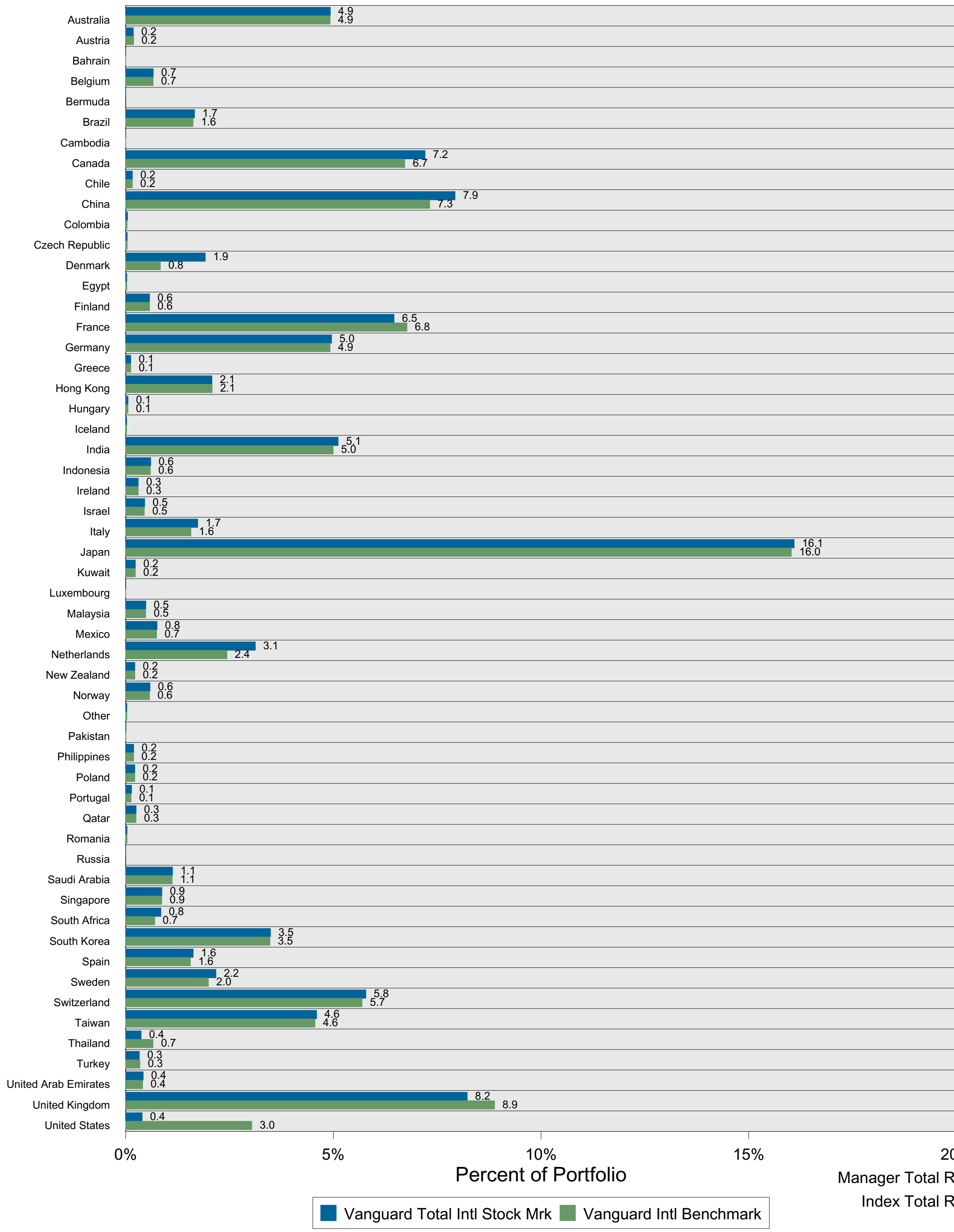


Country Allocation
Vanguard Total Intl Stock Mrk VS Vanguard Intl Benchmark

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 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 September 30, 2023



Country	Vanguard Total Intl Stock Mrk	Vanguard Intl Benchmark	Index Rtns
Australia	4.9	4.9	(3.33%)
Austria	0.2	0.2	0.11%
Bahrain			(1.42%)
Belgium	0.7	0.7	(0.17%)
Bermuda			-
Brazil	1.7	1.6	(3.49%)
Cambodia			-
Canada	7.2	6.7	(3.83%)
Chile	0.2	0.2	(9.67%)
China	7.9	7.3	(0.74%)
Colombia			0.60%
Czech Republic			0.97%
Denmark	1.9	0.8	2.48%
Egypt			15.32%
Finland	0.6	0.6	(5.40%)
France	6.5	6.8	(6.94%)
Germany	5.0	4.9	(7.71%)
Greece	0.1	0.1	(7.80%)
Hong Kong	2.1	2.1	(11.08%)
Hungary	0.1	0.1	0.51%
Iceland			(5.34%)
India	5.1	5.0	2.87%
Indonesia	0.6	0.6	(3.35%)
Ireland	0.3	0.3	(7.51%)
Israel	0.5	0.5	5.13%
Italy	1.7	1.6	(1.84%)
Japan	16.1	16.0	(1.45%)
Kuwait	0.2	0.2	(2.73%)
Luxembourg			-
Malaysia	0.5	0.5	4.49%
Mexico	0.8	0.7	(6.43%)
Netherlands	3.1	2.4	(13.50%)
New Zealand	0.2	0.2	(8.66%)
Norway	0.6	0.6	11.88%
Other			-
Pakistan			4.27%
Philippines	0.2	0.2	(3.54%)
Poland	0.2	0.2	(12.21%)
Portugal	0.1	0.1	(8.47%)
Qatar	0.3	0.3	0.06%
Romania			12.30%
Russia			-
Saudi Arabia	1.1	1.1	(4.34%)
Singapore	0.9	0.9	(0.30%)
South Africa	0.8	0.7	(4.39%)
South Korea	3.5	3.5	(6.57%)
Spain	1.6	1.6	(3.79%)
Sweden	2.2	2.0	(5.57%)
Switzerland	5.8	5.7	(5.31%)
Taiwan	4.6	4.6	(7.10%)
Thailand	0.4	0.7	(4.42%)
Turkey	0.3	0.3	32.78%
United Arab Emirates	0.4	0.4	6.11%
United Kingdom	8.2	8.9	(1.54%)
United States	0.4	3.0	(3.29%)

Manager Total Return: (4.01%)
Index Total Return: (3.26%)

Prudential Conservative Core Bond
Period Ended September 30, 2023

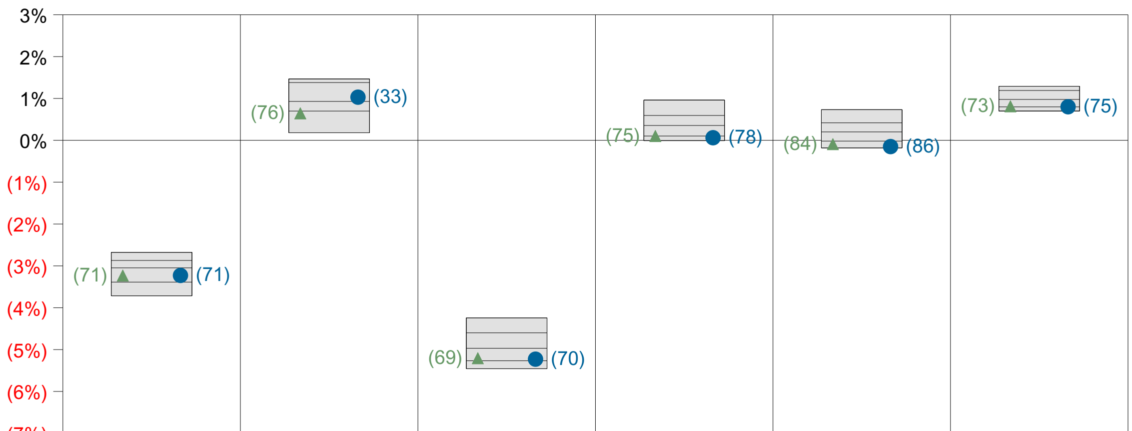
Investment Philosophy

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 occured in June 2014. On February 8, 2017 fund switched to Institutional Trust.

Quarterly Summary and Highlights

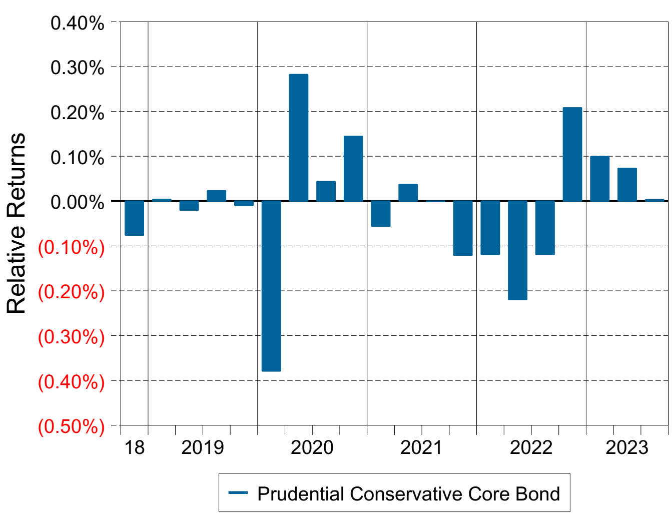
- Prudential Conservative Core Bond's portfolio posted a (3.23)% return for the quarter placing it in the 71 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 33 percentile for the last year.
- Prudential Conservative Core Bond's portfolio outperformed the Blmbg:Aggregate by 0.00% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.39%.

Performance vs Callan Core Bond Mutual Funds (Institutional Net)

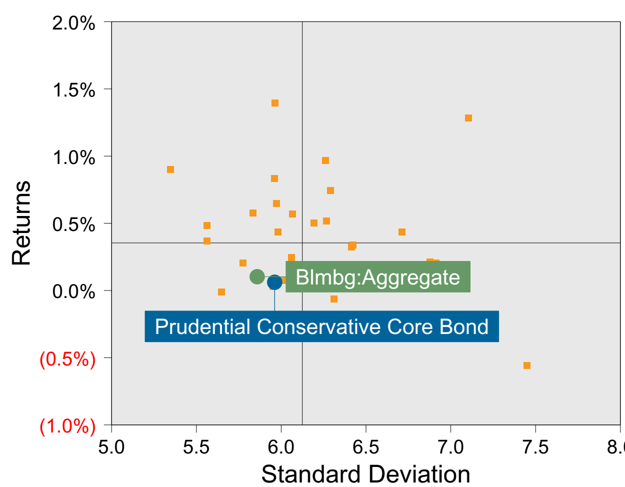


	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 9-1/4 Years
10th Percentile	(2.68)	1.47	(4.24)	0.96	0.73	1.29
25th Percentile	(2.87)	1.38	(4.60)	0.59	0.42	1.19
Median	(3.05)	0.93	(4.97)	0.35	0.20	0.98
75th Percentile	(3.39)	0.70	(5.27)	0.10	(0.02)	0.80
90th Percentile	(3.71)	0.18	(5.46)	(0.01)	(0.18)	0.70
Prudential Conservative Core Bond ●	(3.23)	1.03	(5.23)	0.06	(0.15)	0.80
Blmbg:Aggregate ▲	(3.23)	0.64	(5.21)	0.10	(0.09)	0.81

Relative Return vs Blmbg:Aggregate



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

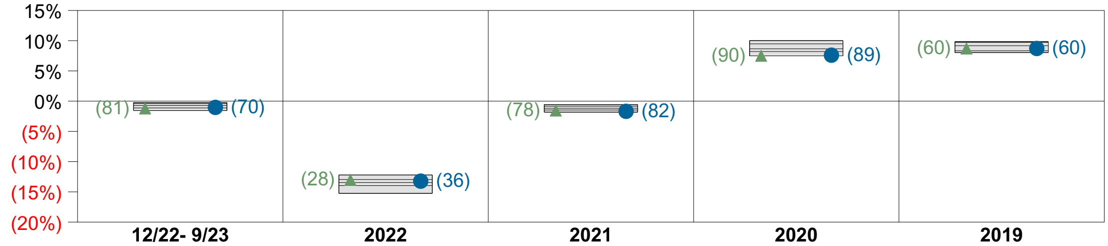


Prudential Cons Core Bond Fnd
Return Analysis Summary

Return Analysis

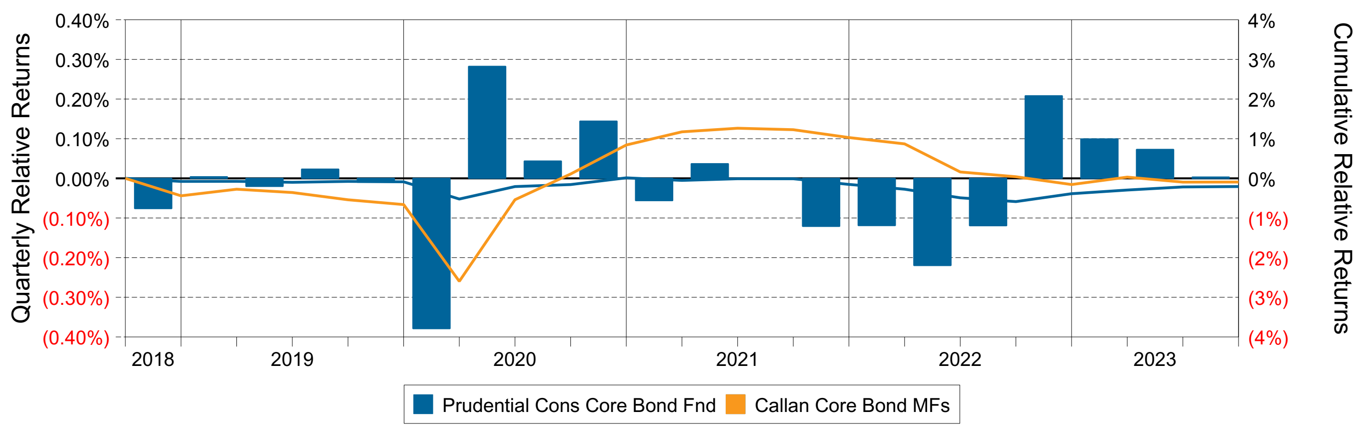
The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate 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)

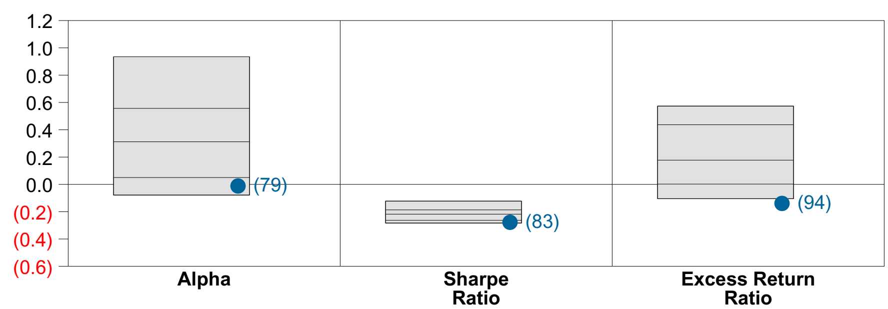


	12/22- 9/23	2022	2021	2020	2019
10th Percentile	(0.24)	(12.21)	(0.57)	10.01	9.85
25th Percentile	(0.41)	(12.96)	(0.84)	9.47	9.72
Median	(0.72)	(13.47)	(1.17)	8.65	9.17
75th Percentile	(1.12)	(13.97)	(1.46)	8.21	8.33
90th Percentile	(1.55)	(15.25)	(1.82)	7.49	8.04
Prudential Cons Core Bond Fnd ●	(1.03)	(13.23)	(1.68)	7.60	8.71
Blmbg:Aggregate ▲	(1.21)	(13.01)	(1.54)	7.51	8.72

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 September 30, 2023



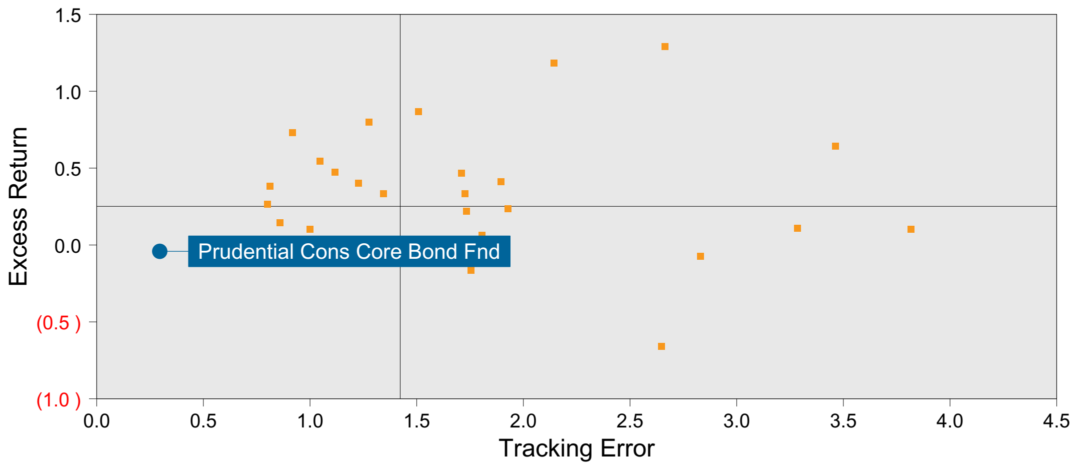
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	0.93	(0.12)	0.57
25th Percentile	0.56	(0.19)	0.44
Median	0.31	(0.22)	0.18
75th Percentile	0.05	(0.26)	0.00
90th Percentile	(0.08)	(0.28)	(0.10)
Prudential Cons Core Bond Fnd ●	(0.01)	(0.28)	(0.14)

Prudential Cons Core Bond Fnd
Risk Analysis Summary

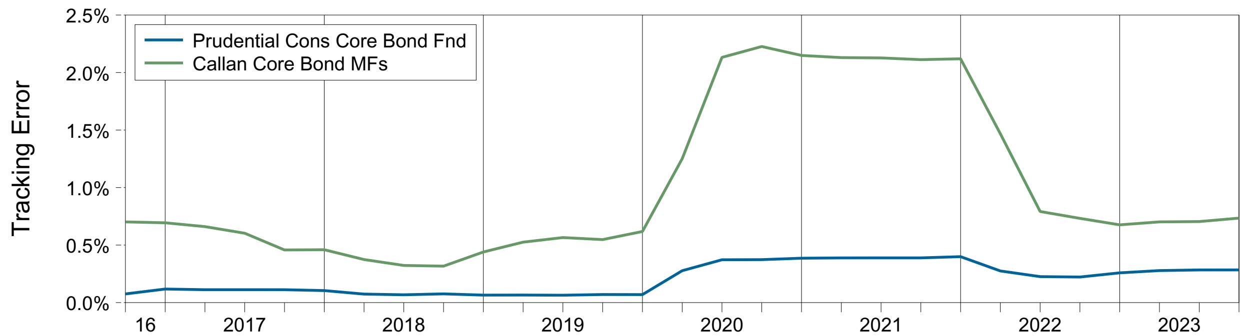
Risk Analysis

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.

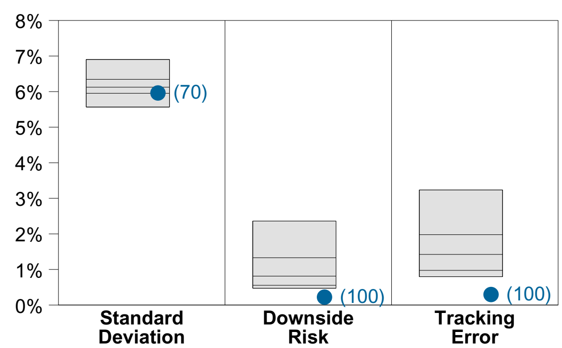
Risk Analysis vs Callan Core Bond Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023

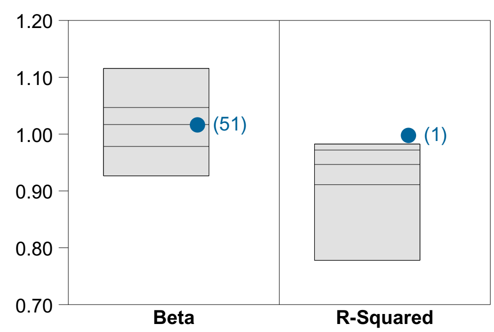


Rolling 8 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate
Rankings Against Callan Core Bond Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023





	Standard Deviation	Downside Risk	Tracking Error
10th Percentile	6.90	2.36	3.23
25th Percentile	6.35	1.33	1.98
Median	6.12	0.81	1.42
75th Percentile	5.95	0.56	0.97
90th Percentile	5.57	0.47	0.80
Prudential Cons Core Bond Fnd ●	5.96	0.22	0.30

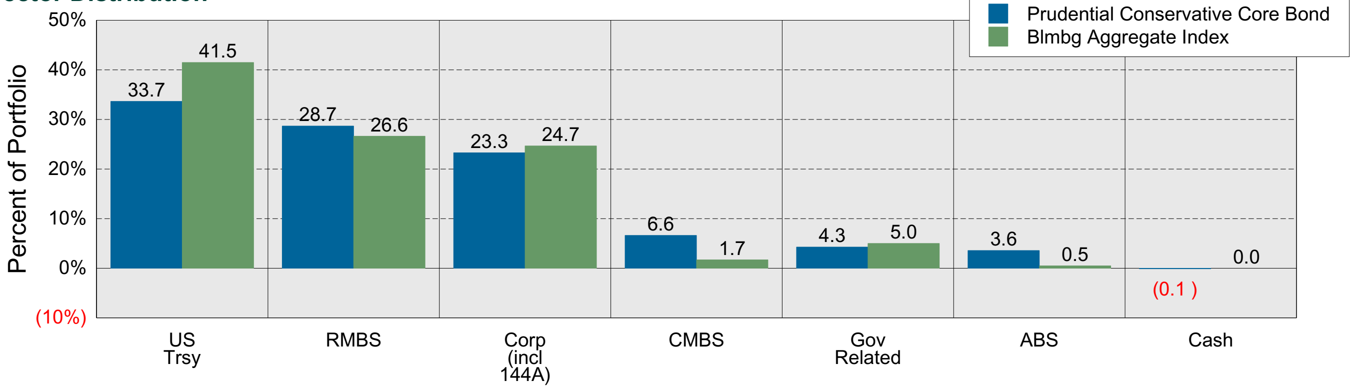
	Beta	R-Squared
10th Percentile	1.12	0.98
25th Percentile	1.05	0.97
Median	1.02	0.95
75th Percentile	0.98	0.91
90th Percentile	0.93	0.78
Prudential Cons Core Bond Fnd ●	1.02	1.00

Prudential Conservative Core Bond
Portfolio Characteristics Summary
As of September 30, 2023

Portfolio Structure Comparison

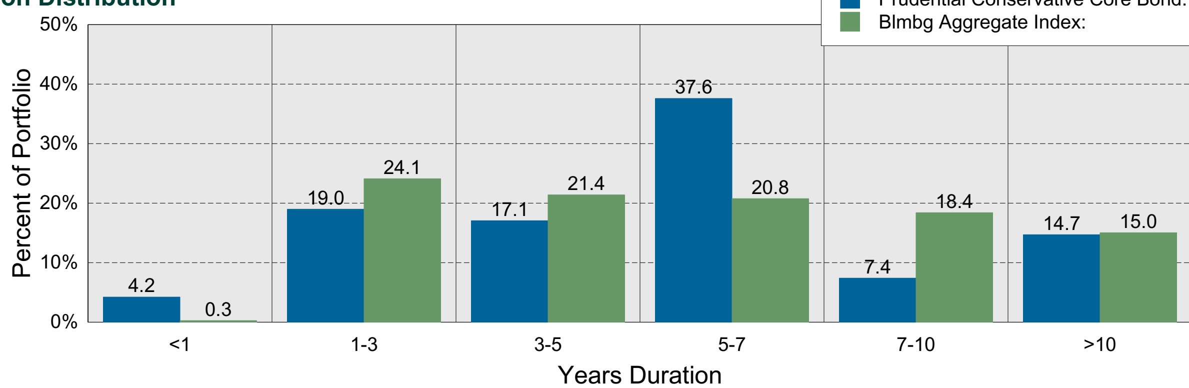
The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution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

Sector Distribution



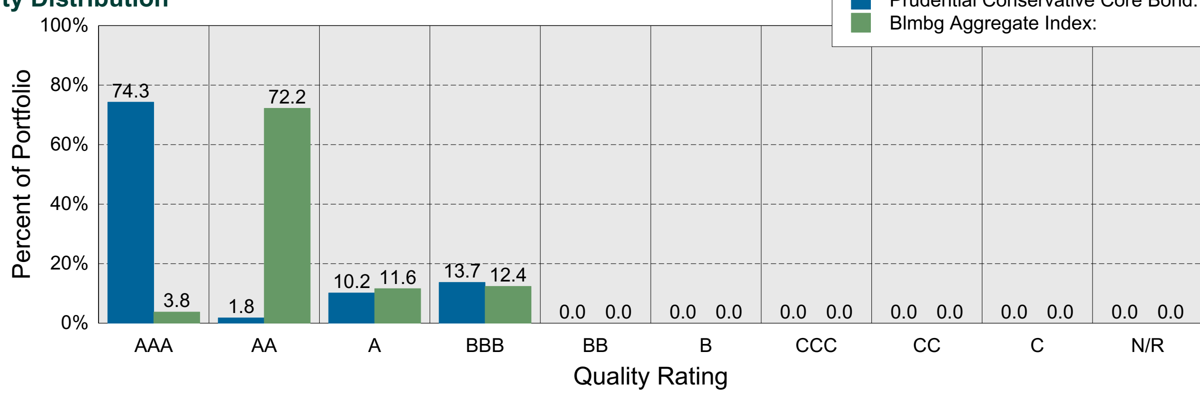
Duration Distribution

Weighted Average:	Duration
Prudential Conservative Core Bond:	**6.01**
Blmbg Aggregate Index:	**6.15**



Quality Distribution

Weighted Average:	Quality
Prudential Conservative Core Bond:	**AA**
Blmbg Aggregate Index:	**AA**

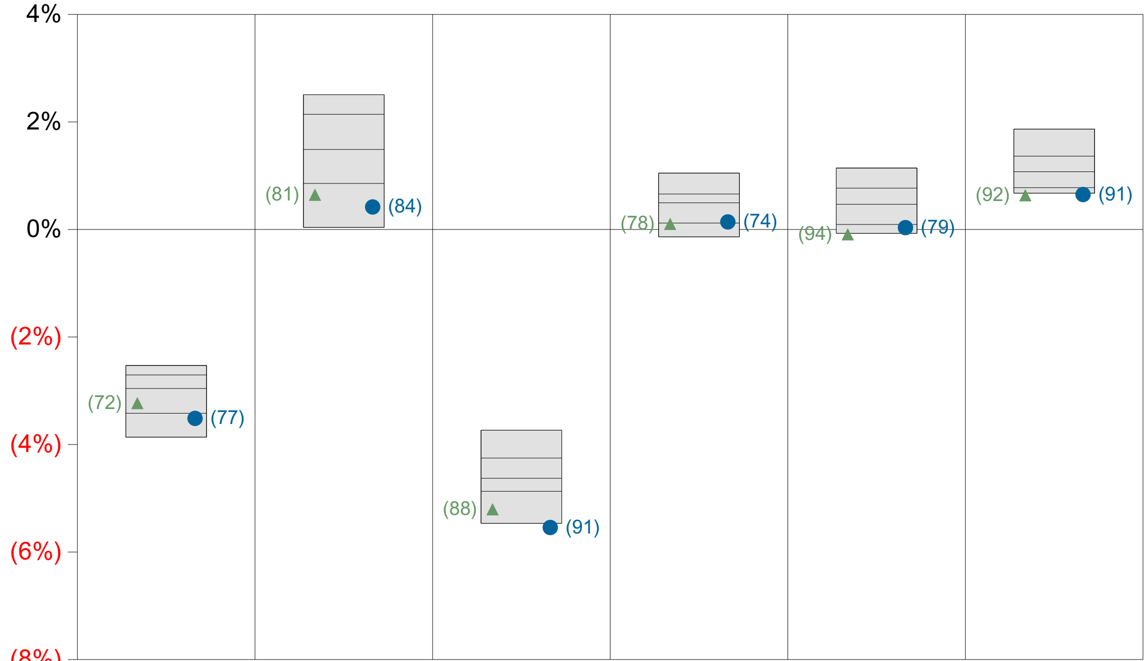


Metropolitan West Fund
Period Ended September 30, 2023

Quarterly Summary and Highlights

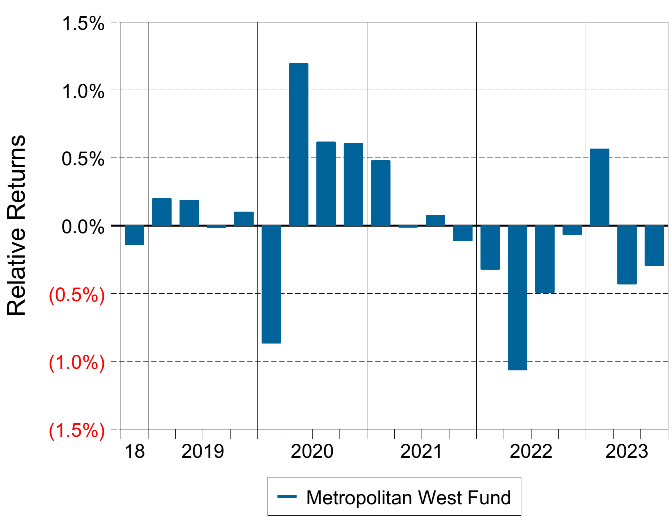
- Metropolitan West Fund's portfolio posted a (3.51)% return for the quarter placing it in the 77 percentile of the Callan Core Plus Mutual Funds group for the quarter and in the 84 percentile for the last year.
- Metropolitan West Fund's portfolio underperformed the Blmbg:Aggregate by 0.28% for the quarter and underperformed the Blmbg:Aggregate for the year by 0.23%.

Performance vs Callan Core Plus Mutual Funds (Institutional Net)

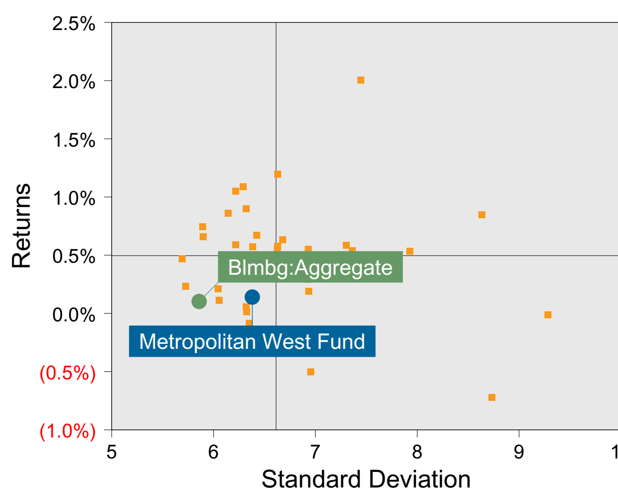


	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 8-3/4 Years
10th Percentile	(2.53)	2.51	(3.73)	1.05	1.14	1.87
25th Percentile	(2.71)	2.14	(4.25)	0.66	0.77	1.36
Median	(2.96)	1.49	(4.63)	0.50	0.47	1.07
75th Percentile	(3.42)	0.86	(4.87)	0.12	0.09	0.78
90th Percentile	(3.86)	0.04	(5.47)	(0.14)	(0.07)	0.68
Metropolitan West Fund ●	(3.51)	0.42	(5.54)	0.14	0.03	0.65
Blmbg:Aggregate ▲	(3.23)	0.64	(5.21)	0.10	(0.09)	0.64

Relative Return vs Blmbg:Aggregate



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

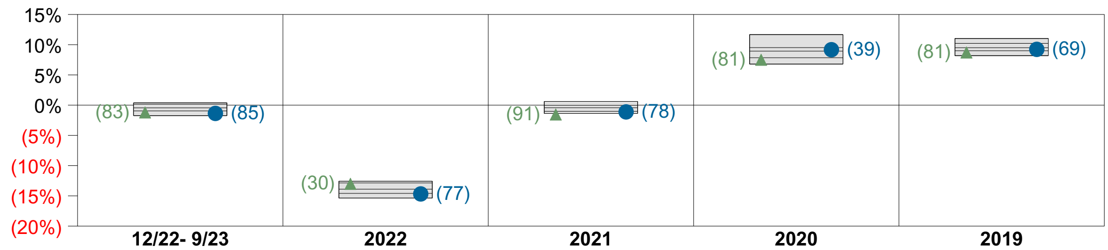


Metropolitan West Fund
Return Analysis Summary

Return Analysis

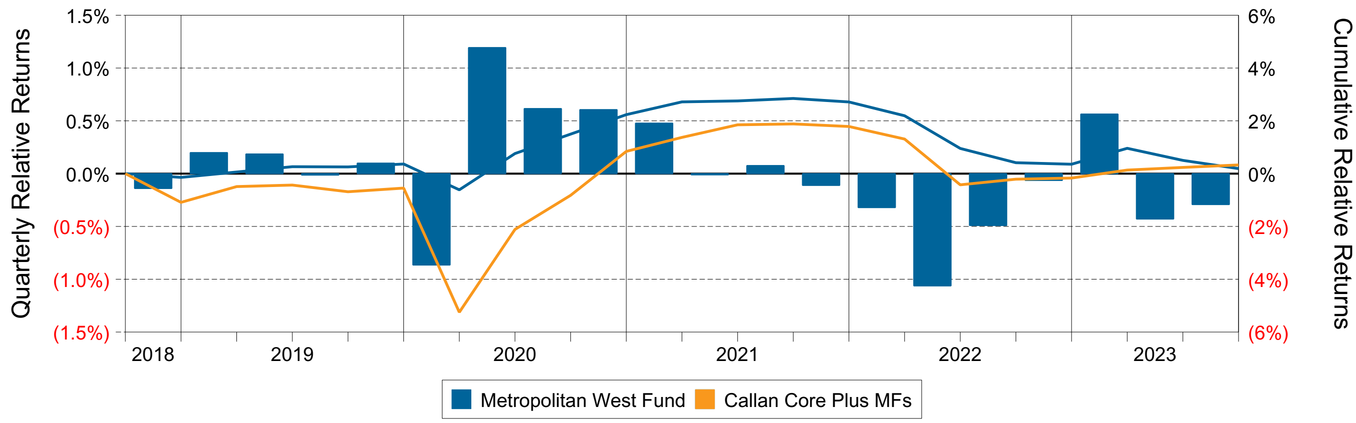
The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate 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)

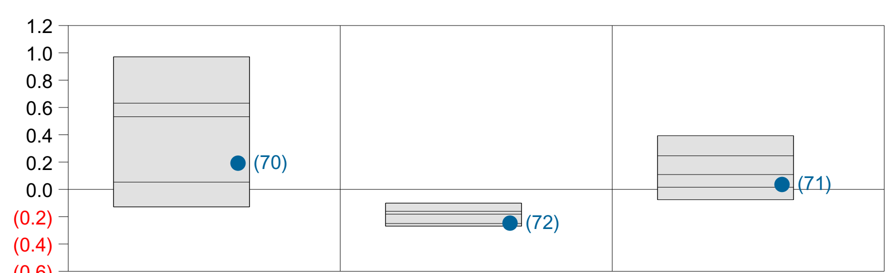


	12/22- 9/23	2022	2021	2020	2019
10th Percentile	0.39	(12.57)	0.62	11.67	11.02
25th Percentile	0.15	(12.86)	(0.02)	9.52	10.22
Median	(0.44)	(13.89)	(0.42)	8.94	9.50
75th Percentile	(0.95)	(14.59)	(1.02)	7.85	9.00
90th Percentile	(1.73)	(15.36)	(1.37)	6.80	8.18
Metropolitan West Fund ●	(1.36)	(14.69)	(1.12)	9.17	9.23
Blmbg:Aggregate ▲	(1.21)	(13.01)	(1.54)	7.51	8.72

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 September 30, 2023



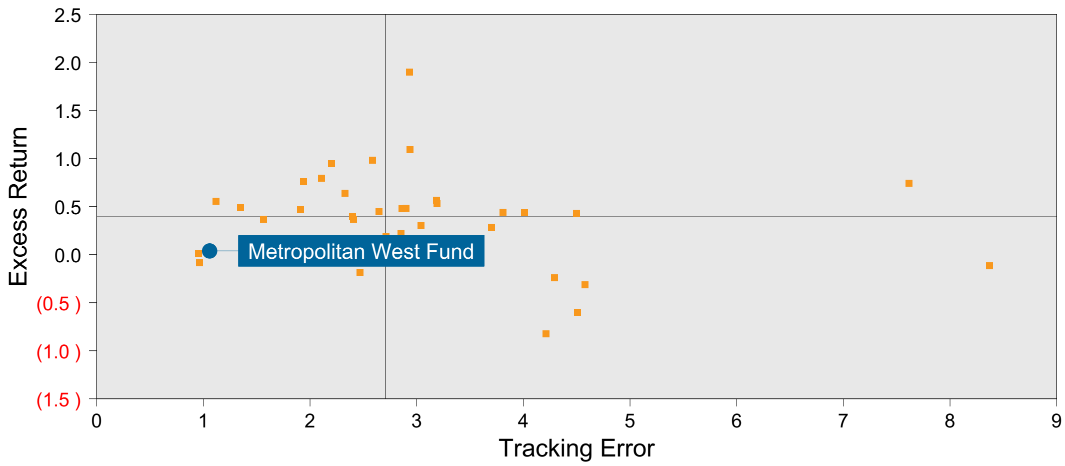
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	0.97	(0.10)	0.39
25th Percentile	0.63	(0.16)	0.25
Median	0.53	(0.18)	0.11
75th Percentile	0.05	(0.25)	0.02
90th Percentile	(0.13)	(0.27)	(0.08)
Metropolitan West Fund ●	0.19	(0.25)	0.04

Metropolitan West Fund
Risk Analysis Summary

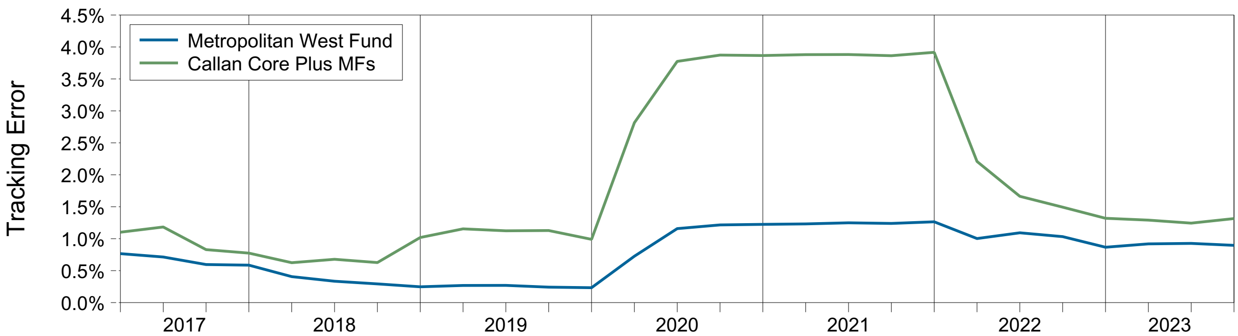
Risk Analysis

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.

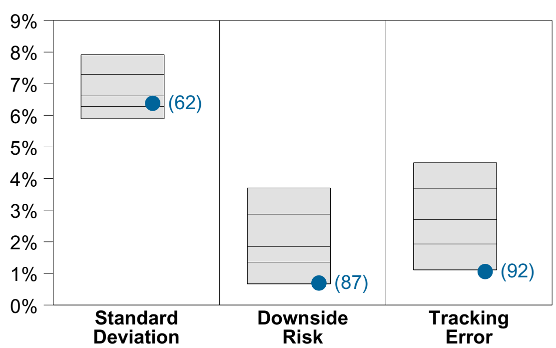
Risk Analysis vs Callan Core Plus Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023



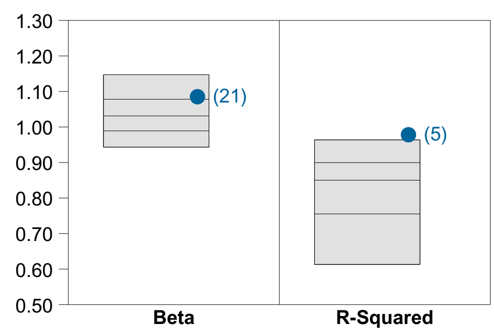
Rolling 8 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate
Rankings Against Callan Core Plus Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023



	Standard Deviation	Downside Risk	Tracking Error
10th Percentile	7.92	3.70	4.50
25th Percentile	7.29	2.87	3.69
Median	6.61	1.85	2.71
75th Percentile	6.28	1.36	1.93
90th Percentile	5.89	0.67	1.11
Metropolitan West Fund ●	6.38	0.70	1.06



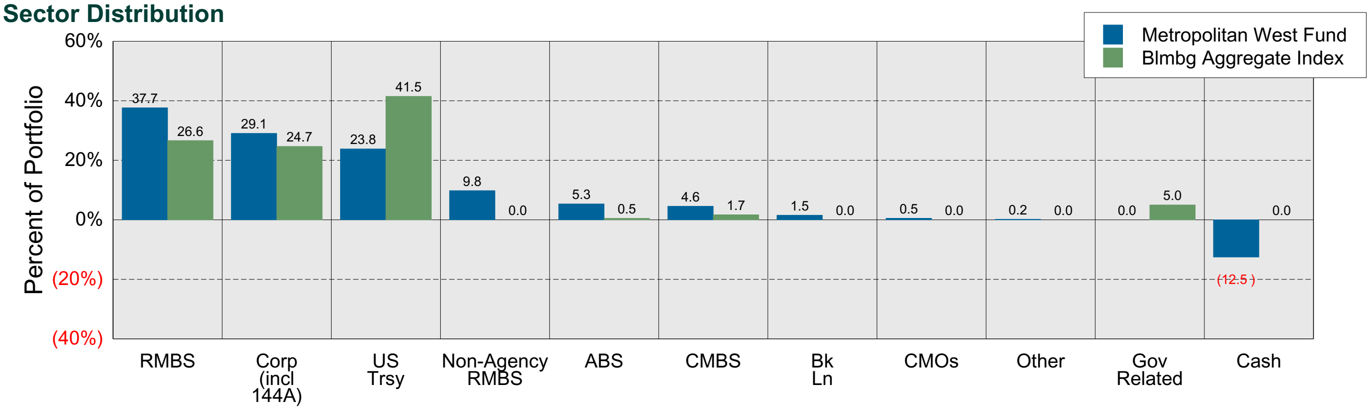
	Beta	R-Squared
10th Percentile	1.15	0.96
25th Percentile	1.08	0.90
Median	1.03	0.85
75th Percentile	0.99	0.76
90th Percentile	0.94	0.61
Metropolitan West Fund ●	1.09	0.98

Metropolitan West Fund
Portfolio Characteristics Summary
As of September 30, 2023

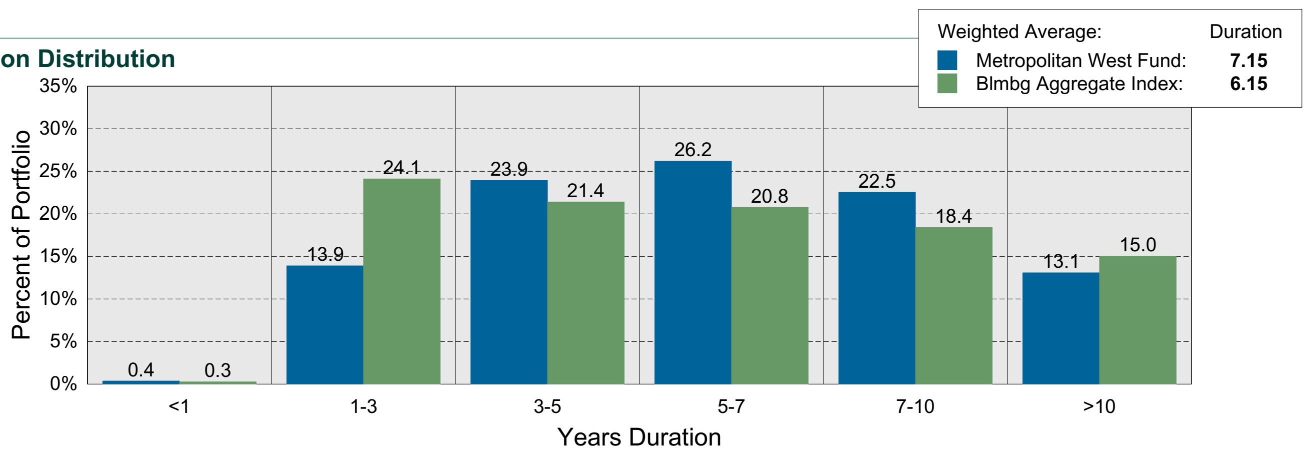
Portfolio Structure Comparison

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.

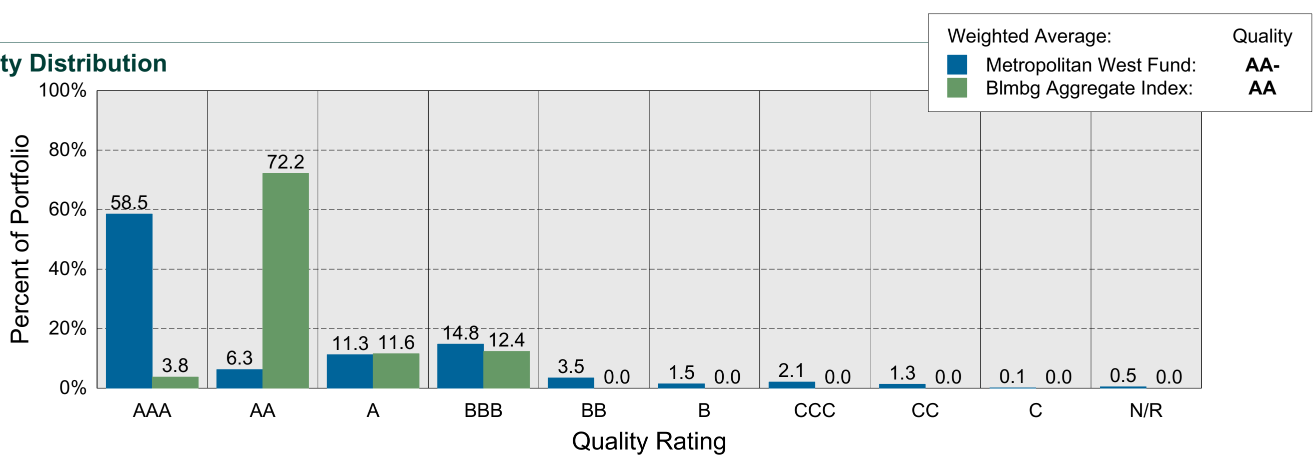
Sector Distribution



Duration Distribution



Quality Distribution

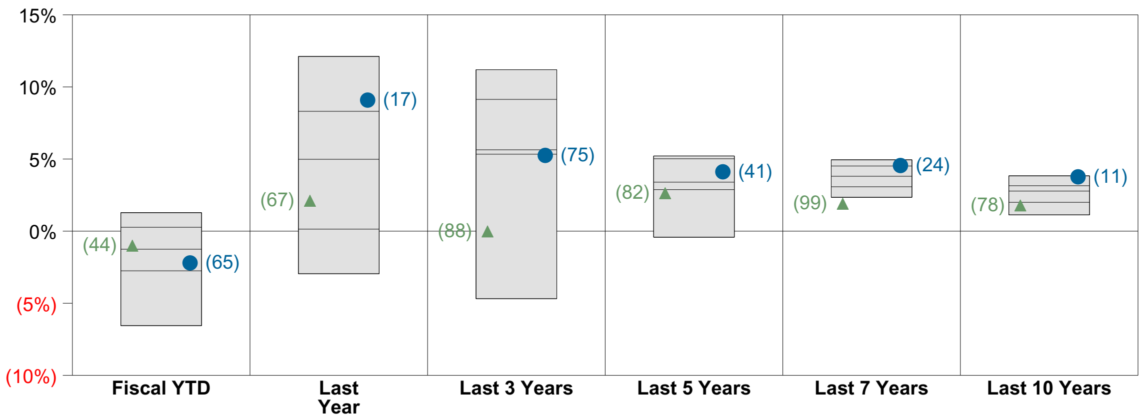


PIMCO All Asset Fund
Period Ended September 30, 2023

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.

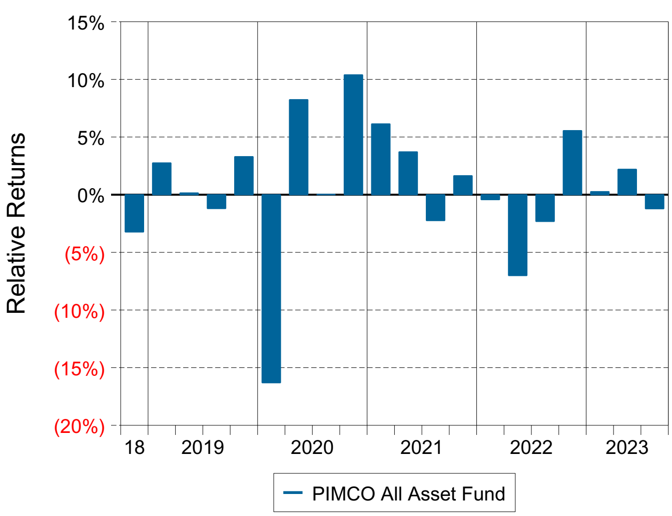
Quarterly Summary and Highlights
- PIMCO All Asset Fund's portfolio posted a (2.20)% return for the quarter placing it in the 65 percentile of the Callan Real Assets Mutual Funds group for the quarter and in the 17 percentile for the last year.
- PIMCO All Asset Fund's portfolio underperformed the Blmbg TIPS 1-10 Yr by 1.20% for the quarter and outperformed the Blmbg TIPS 1-10 Yr for the year by 6.98%.

Performance vs Callan Real Assets Mutual Funds (Institutional Net)

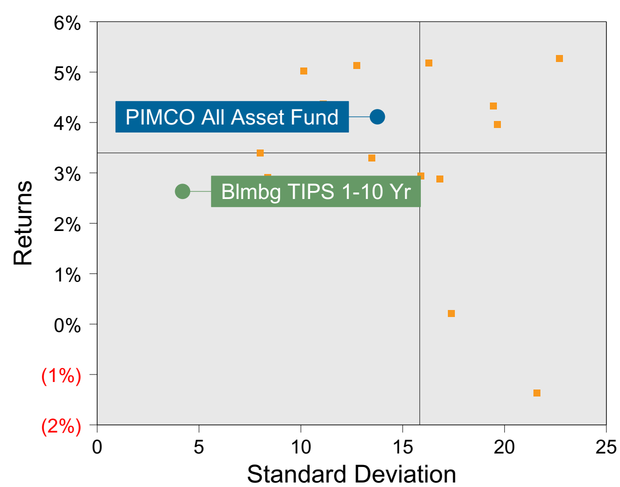


	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	1.28	12.12	11.19	5.21	4.95	3.84
25th Percentile	0.27	8.31	9.14	5.02	4.52	3.15
Median	(1.25)	4.98	5.64	3.40	3.81	2.78
75th Percentile	(2.75)	0.14	5.34	2.88	3.08	2.00
90th Percentile	(6.55)	(2.96)	(4.69)	(0.42)	2.35	1.13
PIMCO All Asset Fund ●	(2.20)	9.09	5.25	4.11	4.55	3.76
Blmbg TIPS 1-10 Yr ▲	(1.00)	2.11	(0.02)	2.63	1.90	1.78

Relative Return vs Blmbg TIPS 1-10 Yr



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

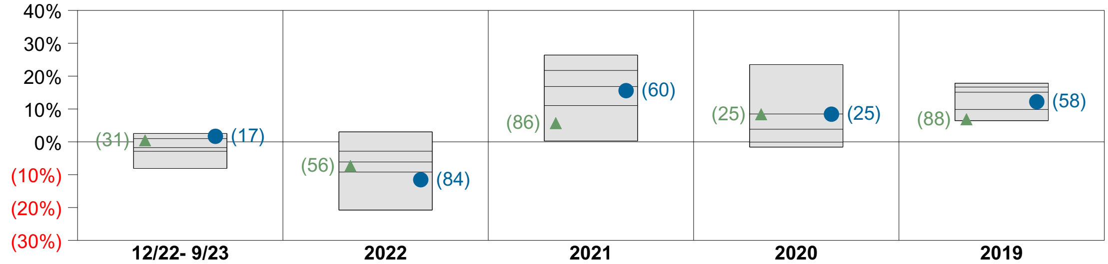


PIMCO All Asset Fund
Return Analysis Summary

Return Analysis

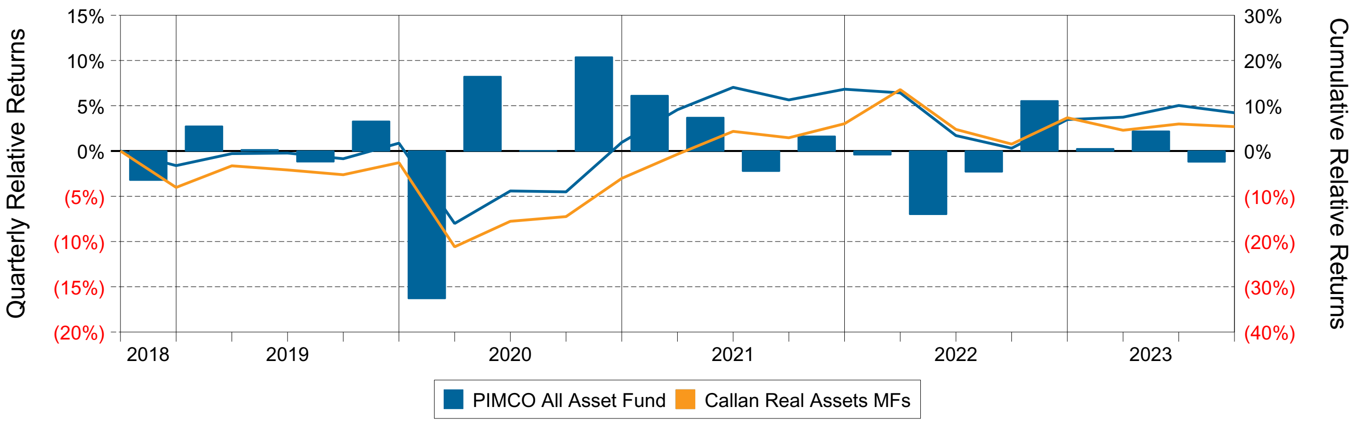
The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate 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)

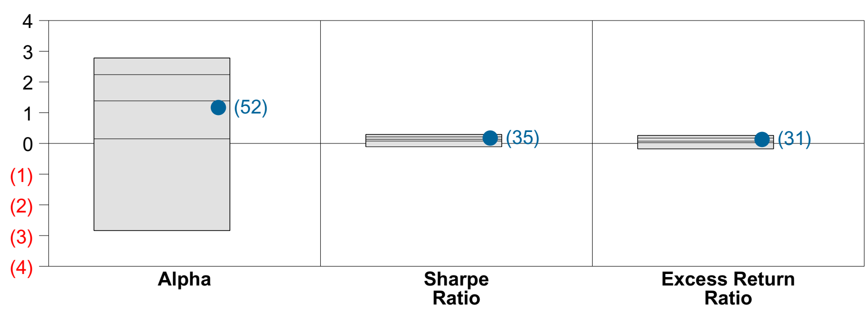


	12/22- 9/23	2022	2021	2020	2019
10th Percentile	2.55	3.03	26.41	23.51	17.84
25th Percentile	0.98	(2.86)	21.73	8.48	16.68
Median	(1.76)	(6.13)	16.83	3.84	15.10
75th Percentile	(2.89)	(9.20)	11.03	(0.09)	9.86
90th Percentile	(8.10)	(20.77)	0.26	(1.60)	6.44
PIMCO All Asset Fund ●	1.68	(11.53)	15.58	8.41	12.21
Blmbg TIPS 1-10 Yr ▲	0.46	(7.34)	5.69	8.39	6.85

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 (Institutional Net)
Five Years Ended September 30, 2023



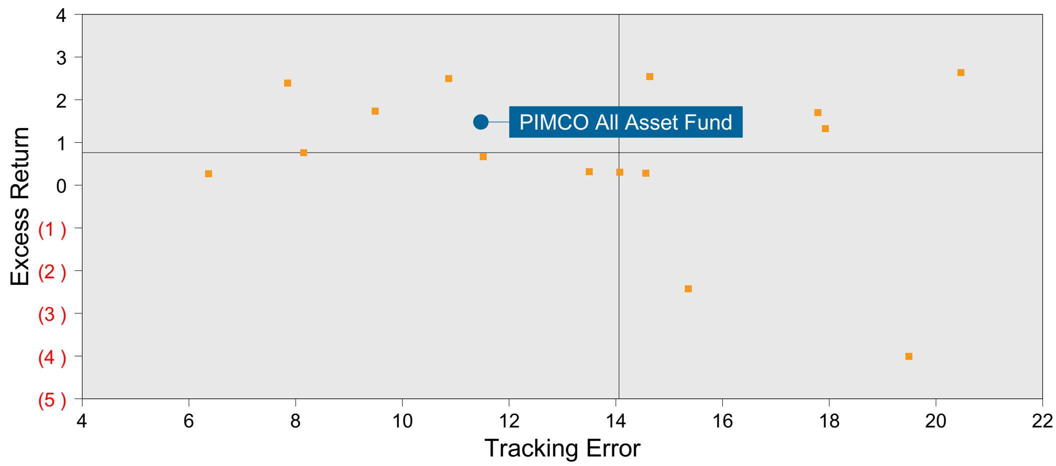
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	2.78	0.29	0.26
25th Percentile	2.24	0.21	0.17
Median	1.38	0.13	0.07
75th Percentile	0.15	0.08	0.02
90th Percentile	(2.84)	(0.11)	(0.18)
PIMCO All Asset Fund ●	1.17	0.17	0.13

PIMCO All Asset Fund
Risk Analysis Summary

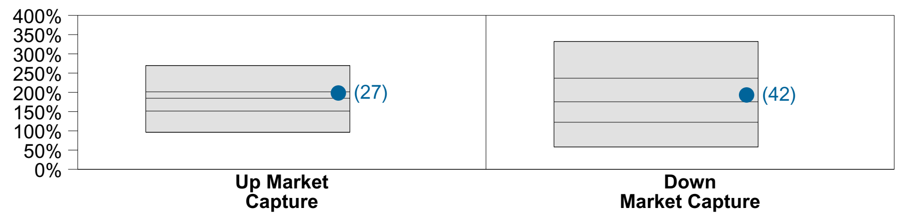
Risk Analysis

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 September 30, 2023

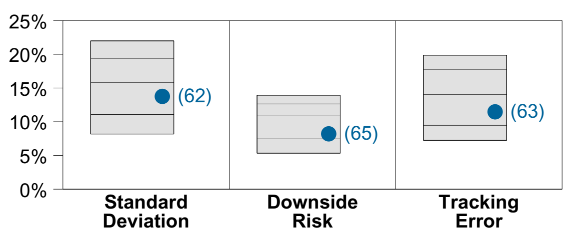


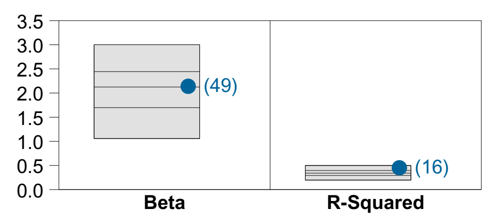
Market Capture vs Bloomberg TIPS 1-10 Yr
Rankings Against Callan Real Assets Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023



	Up Market Capture	Down Market Capture
10th Percentile	269.62	332.21
25th Percentile	201.37	236.70
Median	184.63	175.57
75th Percentile	151.41	122.28
90th Percentile	96.26	58.03
PIMCO All Asset Fund ●	198.31	193.19

Risk Statistics Rankings vs Bloomberg TIPS 1-10 Yr
Rankings Against Callan Real Assets Mutual Funds (Institutional Net)
Five Years Ended September 30, 2023





	Standard Deviation	Downside Risk	Tracking Error
10th Percentile	22.00	13.94	19.87
25th Percentile	19.41	12.64	17.77
Median	15.84	10.86	14.06
75th Percentile	11.06	7.46	9.47
90th Percentile	8.18	5.34	7.24
PIMCO All Asset Fund ●	13.76	8.21	11.47

	Beta	R-Squared
10th Percentile	3.00	0.50
25th Percentile	2.44	0.40
Median	2.12	0.34
75th Percentile	1.70	0.29
90th Percentile	1.06	0.20
PIMCO All Asset Fund ●	2.14	0.45

Callan Research
and Education

Callan Institute

Education

3rd Quarter 2023

Quarterly Highlights

The Callan Institute provides research to update clients on the latest industry trends and carefully structured educational programs to enhance the knowledge of industry 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

3Q23 Real Assets Reporter: Office-to-Residential Conversions
This paper discusses issues surrounding office-to-residential conversions and the key elements that institutional investors need to understand about these challenging projects.

Real Estate Indicators: Too Hot to Touch or Cool Enough to Handle? 2Q23 | Callan's Real Assets Consulting group identifies seven indicators—based on spreads in real estate and fixed income markets—that, combined with an understanding of prevailing market dynamics, have helped signal when the institutional real estate market is overheated or cooled.

Blog Highlights

Our First Private Credit Fees and Terms Study: What We Found in 2023 | Callan's 2023 Private Credit Fees and Terms Study is our inaugural study in the private credit space. The study is intended to help institutional investors better evaluate private credit funds.

An Investor's Guide to the Nasdaq-100's Special Rebalance
Over the summer, the Nasdaq-100 Index implemented a "Special Rebalance" to reduce the influence of a few key stocks, which had grown to have a large effect on the index.

Callan Discount Rate Reporter | These blog posts from our Corporate DB Plan Focus Group are monthly updates about the impact of interest rates on corporate defined benefit (DB) plans, designed to highlight trends in the market.

How Your Public DB Plan's Returns Compare | These blog posts provide context for public defined benefit (DB) plans about their returns over time, from our Public DB Plan Focus Group.

Quarterly Updates

Private Equity Update, 2Q23 | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 2Q23 | A comparison of active managers alongside relevant benchmarks over the long term

Market Pulse, 2Q23 | 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, 2Q23 | 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, 2Q23 | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Update, 2Q23 | A summary of market activity for real assets and private real estate during the quarter

Private Credit Update, 2Q23 | A review of performance and fundraising activity for private credit during the quarter

Callan Target Date Index™, 2Q23 | Allows plan sponsors, managers, and participants to track the performance and asset allocation of available target date mutual funds and collective trusts.

Callan DC Index™, 2Q23 | 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:

Webinar: Callan's Retirement Conundrum
Nov. 15, 2023 – Virtual

Webinar: Callan's 2024 Capital Markets Assumptions
Jan. 17, 2024 – Virtual

2024 National Conference
April 8-10, 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
3,700	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 5-7, 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

Disclosures

Callan

Quarterly List as of September 30, 2023

List of Callan's Investment Manager Clients

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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
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
AXA Investment Managers

Manager Name
Axion Investors LLC
Baillie Gifford International, LLC
Baird Advisors
Barings LLC
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
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.
Brookfield Public Securities Group LLC
Brown Brothers Harriman & Company

Manager Name
Capital Group
CastleArk Management, LLC
CIBC Asset Management Inc.
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Threadneedle Investments NA
Comvest Partners
CQS
Credit Suisse Asset Management, LLC
D.E. Shaw Investment Management, LLC
DePrince, Race & Zollo, Inc.
Dimensional Fund Advisors L.P.
Doubleline
DWS
EARNEST Partners, LLC
Eleos 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
Fort Washington Investment Advisors, Inc.
Franklin Templeton
Fred Alger Management, LLC
GAM (USA) Inc.
GAMCO Investors, Inc.
GlobeFlex Capital, L.P.
GoldenTree Asset Management, LP
Goldman Sachs
Golub Capital
Guggenheim Investments
GW&K Investment Management
Harbor Capital Advisors
Hardman Johnston Global Advisors LLC
Heitman LLC
Hotchkis & Wiley Capital Management, LLC
Impax Asset Management LLC

Manager Name
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. (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
Partners Group (USA) Inc.

Manager Name
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.
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
TD Global Investment Solutions – TD Epoch
T. Rowe Price Associates, Inc.
The TCW Group, Inc.
Thompson, Siegel & Walmsley LLC
Thrivent Investment Management, Inc.
Tri-Star Trust Bank
UBS Asset Management
ULLICO Investment Advisors, Inc.
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.

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Past performance is no guarantee of future results.

City of Norwalk - Pension Rebalancing Analysis

	Preliminary Market Values (as of 10/31/23)	Asset Allocation (as of 10/31/23)	Target Asset Allocation	Target Asset Allocation Ranges	Rebalance Amount	Updated Market Values	Updated Asset Allocation	Difference to Target
Total Equity	**$ 311,536,458**	**68.3%**	**69%**	**60% - 75%**	**$ (10,000,000)**	**$ 301,536,458.00**	**66.1%**	**-2.9%**
US Equity	**$ 165,571,256**	**36.3%**	**35%**	**27% - 40%**	**$ (10,000,000)**	**$ 155,571,256**	**34.1%**	**-0.9%**
BlackRock R1000 Index	$ 125,650,731	27.5%			$ (10,000,000)	$ 115,650,731	25.3%	
LSV	$ 20,791,658	4.6%			$ -	$ 20,791,658	4.6%	
Columbus Circle	$ 19,128,867	4.2%			$ -	$ 19,128,867	4.2%	
International Equity	**$ 103,539,185**	**22.7%**	**23%**	**18% - 28%**	**$ -**	**$ 103,539,185**	**22.7%**	**-0.3%**
Walter Scott	$ 29,438,697	6.5%			$ -	$ 29,438,697	6.5%	
Silchester	$ 56,307,683	12.3%			$ -	$ 56,307,683	12.3%	
BlackRock EM	$ 17,792,805	3.9%			$ -	$ 17,792,805	3.9%	
Global Equity/Long Short	**$ 19,748,986**	**4.3%**	**8%**	**4% - 12%**	**$ -**	**$ 19,748,986**	**4.3%**	**-3.7%**
ABS	$ 19,506,680	4.3%			$ -	$ 19,506,680	4.3%	
Blackstone	$ 242,306	0.1%			$ -	$ 242,306	0.1%	
Private Equity	**$ 22,677,031**	**5.0%**	**3%**	**0% - 6%**	**$ -**	**$ 22,677,031**	**5.0%**	**2.0%**
Domestic Fixed Income	**$ 79,918,514**	**17.5%**	**19%**	**14% - 24%**	**$ -**	**$ 79,918,514.00**	**17.5%**	**-1.5%**
Prudential	$ 35,598,839	7.8%			$ -	$ 35,598,839	7.8%	
MetWest	$ 44,319,675	9.7%			$ -	$ 44,319,675	9.7%	
Absolute Return - UBS	**$ 28,054,984**	**6.1%**	**4%**	**0% - 6%**	**$ -**	**$ 28,054,984**	**6.1%**	**2.1%**
Real Assets - PIMCO	**$ 30,966,795**	**6.8%**	**6%**	**4% - 10%**	**$ -**	**$ 30,966,795.00**	**6.8%**	**0.8%**
Cash*	**$ 5,877,366**	**1.3%**	**2%**	**0% - 4%**	**$ 10,000,000**	**$ 15,877,366**	**3.5%**	**1.5%**
TOTAL	**$ 456,354,118**	**100%**	**100%**		**$ -**	**$ 456,354,117**	**100%**	

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

City of Norwalk - Pension Rebalancing Analysis								
	Estimated Market Values Including November Index Returns**	Estimated Asset Allocation Including November Index Returns**	Target Asset Allocation	Target Asset Allocation Ranges	Rebalance Amount	Updated Estimated Market Values Including November Index Returns**	Updated Estimated Asset Allocation Including November Index Returns**	Difference to Target
Total Equity	$ 336,253,111	69.4%	69%	60% - 75%	$ (10,000,000)	$ 326,253,111	67.3%	-1.7%
US Equity	$ 180,969,383	37.3%	35%	27% - 40%	$ (10,000,000)	$ 170,969,383	35.3%	0.3%
BlackRock R1000 Index					$ -		0.0%	
LSV					$ -		0.0%	
Columbus Circle					$ -		0.0%	
International Equity	$ 112,857,712	23.3%	23%	18% - 28%	$ -	$ 112,857,712	23.3%	0.3%
Walter Scott					$ -		0.0%	
Silchester					$ -		0.0%	
BlackRock EM					$ -		0.0%	
Global Equity/Long Short	$ 19,748,986	4.1%	8%	4% - 12%	$ -	$ 19,748,986	4.1%	-3.9%
ABS					$ -		0.0%	
Blackstone					$ -		0.0%	
Private Equity	$ 22,677,031	4.7%	3%	0% - 6%	$ -	$ 22,677,031	4.7%	1.7%
Domestic Fixed Income	$ 83,538,823	17.2%	19%	14% - 24%	$ -	$ 83,538,823	17.2%	-1.8%
Prudential					$ -		0.0%	
MetWest					$ -		0.0%	
Absolute Return - UBS	$ 28,054,984	5.8%	4%	0% - 6%	$ -	$ 28,054,984	5.8%	1.8%
Real Assets - PIMCO	$ 30,966,795	6.4%	6%	4% - 10%	$ -	$ 30,966,795	6.4%	0.4%
Cash*	$ 5,877,366	1.2%	2%	0% - 4%	$ 10,000,000	$ 15,877,366	3.3%	1.3%
TOTAL	$ 484,691,079	100.0%	100%		$ -	$ 484,691,079	100%	

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

**Estimates for U.S. Equity, International Equity and Domestic Fixed Income asset class market values reflect updated market values utilizing asset class benchmark returns for November. All other asset classes represnt market values as of 10/31/23.