

# Cleveland Public Library

February 13, 2024

Review as of December 31, 2023

Presented by:

Glen Danahey, CIMA®, AIF®, ChFC®

Senior Vice President

Senior Investment Advisor

PNC Institutional Asset Management

216-222-9736

[glen.danahey@pnc.com](mailto:glen.danahey@pnc.com)

- I. Taking Stock of the Markets
- II. Investment Policy Statement
- III. Portfolio Review
- IV. Investment Performance
- V. Appendix

# Taking Stock of the Markets

Investment Strategy

January 2024

# Asset Class Playbook Highlights

Thoughts and Takeaways for Broad Asset Classes

Investors kick off the new year with a number of unanswered macroeconomic questions, and we maintain our guidance for broadly diversified portfolios with tactical, opportunistic adjustments.

## Equities

*Global outlook dependent on earnings growth*



We continue to favor quality, global allocations that can weather elevated inflation and high interest rates amid a slowing economy.

## Fixed Income

*Core fixed income remains attractive at this phase in the credit cycle*



Given elevated long-term interest rates, we believe core fixed income remains attractive, diminishing the reward for outsized, below-investment-grade credit exposure.

## Alternatives

*Broad opportunity set for long-term investors*



Alternative investments offer various risk and return, correlation and liquidity profiles for differentiated alpha, potentially aiding risk-adjusted performance and dampening volatility.

*Scan the QR code using your smartphone's camera app to watch a video in which Dan Brady, PNC's Managing Director of Investment Strategy, discusses our current thoughts on asset allocation positioning.*



# The Good, The Bad and The Ugly

## A Quick Tour Around the Globe

### The Good

- Labor market strength supports economy
- Positive inflation-adjusted wage growth
- +** Easing financial conditions
- Resiliency of U.S. consumer spending
- Emerging artificial intelligence technology
- Durability of quality investments

### The Bad

- Weak Leading Economic Indicators
- Tightening lending standards & loan growth
- Inverted yield curve
- ▲** Decelerating, but still elevated inflation
- +** Tight global monetary policy
- Commercial real estate under pressure
- Negative global earnings revisions
- Commodity supply / demand imbalances
- Weakening consumer & business confidence
- Underwhelming economic recovery in China
- Elevated multi-asset volatility
- Falling savings; rising credit delinquencies

### The Ugly

- Global populism and election risks
- Global geopolitical conflicts
- Global deficits / debt levels
- U.S.-China power struggle
- De-globalization trends building

Higher ↑ Ordered by importance / potential for biggest market impact  
Lower ↓

- ▲** Denotes change in description or new additions relative to the prior version
- +** Denotes positive change relative to the prior version
- Denotes negative change relative to the prior version

# Views Through Our Investment Process Lens

Each facet of analysis plays a critical role in investment decision-making



## Business Cycle

- Different phases of the cycle offer tactical asset allocation opportunities.
- Puts valuations in context.



## Valuations

- Identify opportunities while maintaining a long-term view.
- Set return expectations.



## Technical

- Uncover momentum trends and near-term market behavior.

## Business Cycle: Tight labor market extends the cycle

- Leading economic indicators point to contracting manufacturing activity, whereas strong labor markets are supporting consumer spending, the largest component of U.S. GDP.

## Valuations: Global earnings multiples expand above long-term averages

- Equity valuations remain tied to the path of inflation and long-term interest rates, both of which fell rapidly in late 2023. If the earnings growth outlook continues to weaken in 2024, we expect valuations to remain rich.

## Technical: January performance is not an indicator for the rest of 2024

- The global market rally into year-end was finally broad-based, albeit with thin liquidity, thus it would not be surprising if volatility returns in January. Regardless, longer-term momentum remains positive for global equities as financial conditions have eased materially in recent months.

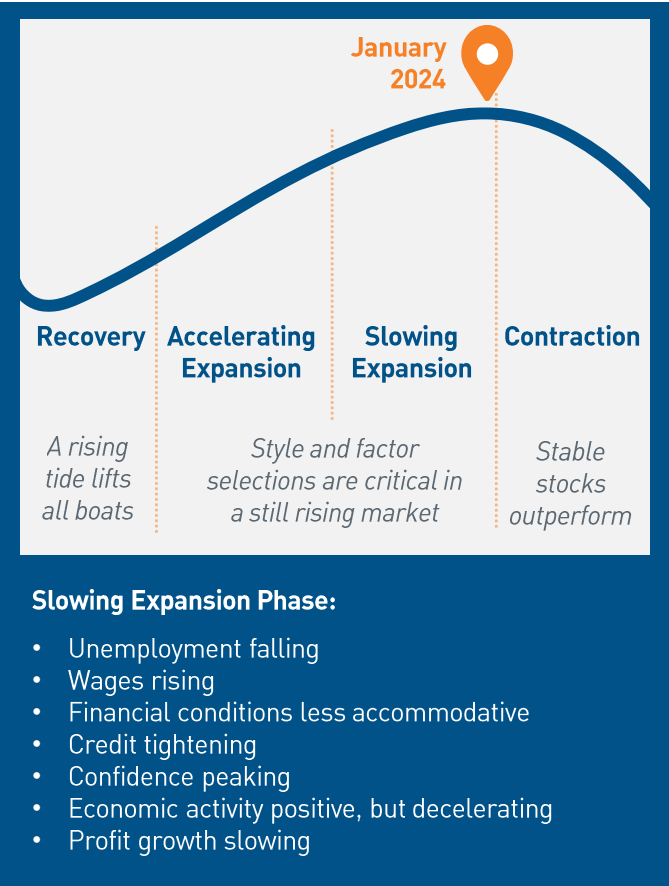
Scan the QR code using your smartphone's camera app to watch a video in which Dan Brady, PNC's Managing Director of Investment Strategy, provides views through our investment process lens.



# Business Cycle Outlook

## Potential Fed Pivot Could Lead to a “Slower for Longer” Cycle

We believe cyclical movements of the business cycle drive markets and impact asset allocation decisions.



### Leading indicators still pointing to a mild contraction

- The last six months have seen no change in leading economic indicators, and the easing of financial conditions in recent months takes considerable pressure off concerns of a material, imminent recession.

### Coincident indicators supported by consumer spending

- Strong holiday season spending data indicates consumers remain confident, and supported by a stable labor market.

### Lagging indicators positive but still weakening

- Inflation is a lagging indicator, and a decelerating growth rate is not necessarily positive at this stage in the cycle; it may indicate companies are no longer able to raise prices due to softening demand.

### Conference Board Economic Indicators

	1-Month Growth Rate	6-Month Trend
Leading	-7.6%	Flat
Coincident	1.7%	Flat
Lagging	1.3%	Weakening

As of 12/31/2023. Source: PNC, Bloomberg, L.P.

# Thinking Through Potential Scenarios

Where Do We Go From Here?

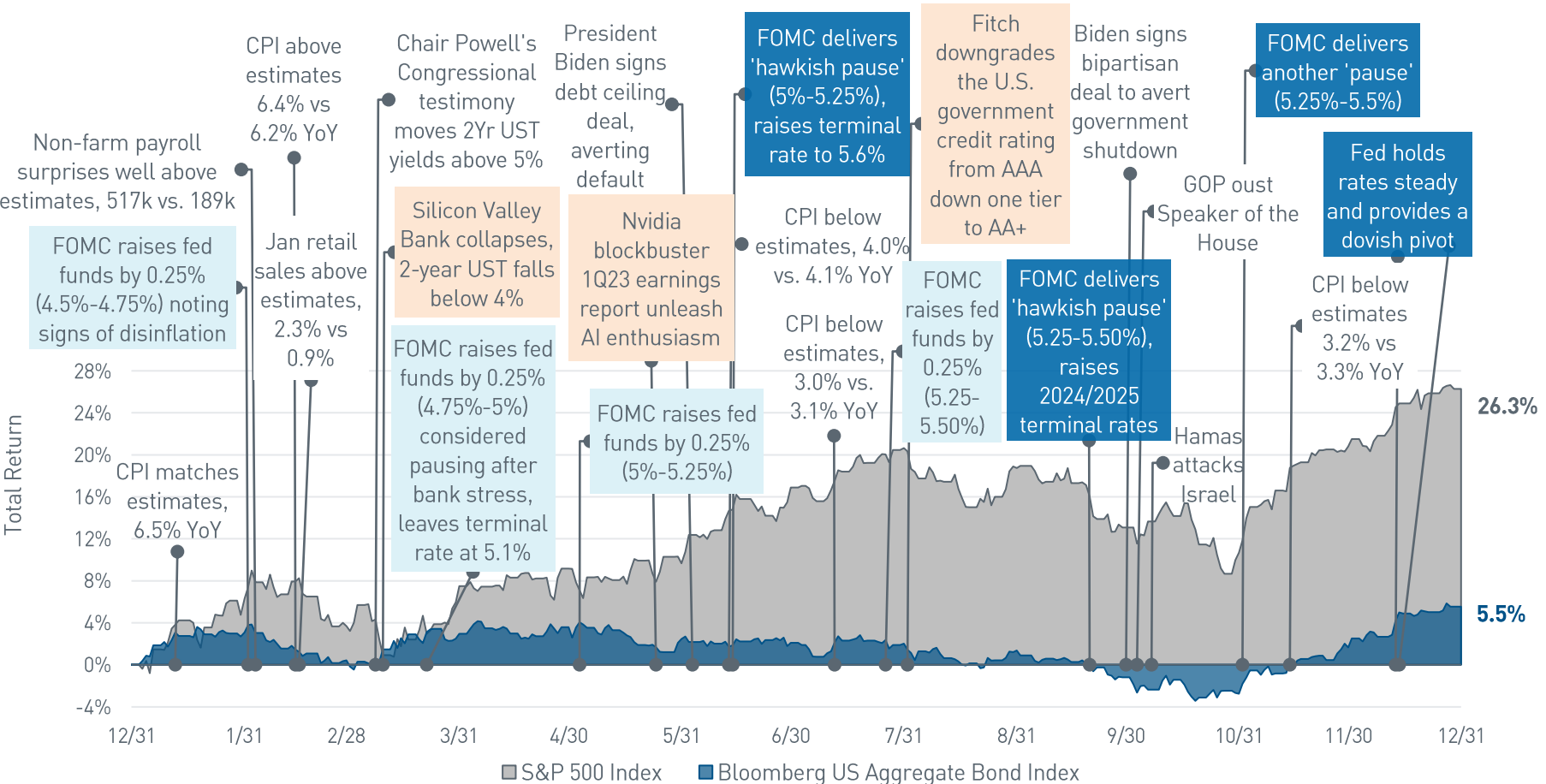
Factors	Base Case: Decelerating Growth	Bear Case: Deep and Long Recession	Bull Case: No Recession and Reacceleration
<b>Inflation</b>	Inflation decelerates at a manageable pace – not a straight line down – as global earnings growth contracts.	Stagflation of high inflation and low global employment sinks the economy into a challenging recession.	Inflation falls rapidly, as a mid-cycle slowdown turns to a reacceleration of the business cycle.
<b>Monetary Policy</b>	Not only are additional rate hikes no longer expected, but the Federal Reserve (Fed) shifts its focus to an opportune time to cut rates and ease monetary policy.	Central banks ease financial conditions too soon, and inflation rebounds higher just as labor markets weaken, which limits the options of monetary policy to stimulate the economy.	Global central banks are able to ease monetary policy as lower inflation has been achieved without dipping into recession.
<b>Geopolitics</b>	Multiple global wars do not materially impact global markets; U.S. political landscape remains uncertain in a presidential election year.	Multiple global wars potentially lead to higher inflation, in addition to the probability of a longer-than-expected U.S. government shutdown in an election year.	Multiple global wars do not materially impact global markets, a U.S. government shutdown continues to be avoided as investors focus on the election.
<b>Earnings Outlook</b>	Revisions for late 2023 and early 2024 decline as decelerating inflation remains a headwind to corporate margins.	Revisions for 2024 decline meaningfully as an economic slowdown is not fully reflected in consensus estimates.	A mid-cycle reacceleration leads to positive earnings revisions.
<b>2024 S&amp;P 500 Earnings Growth Rate</b>	<b>4% to 7%</b>	<b>-5% to 0%</b>	<b>8% to 12%</b>
<b>Trough Forward P/E</b>	<b>16x - 18x</b>	<b>12x - 15x</b>	<b>19x - 21x</b>
<b>Path of Long-Term Interest Rates</b>	<b>Volatile and modestly higher</b>	<b>Materially lower</b>	<b>Volatile and moderately lower</b>



# Investors Overcome Headwinds in 2023

Markets try to fight uncertainty about what is in store for the year ahead

The U.S. economy has been remarkably resilient with recession expectations delayed. As we begin 2024, uncertainty about where the economy is headed and how it will impact financial markets, remains.



As of 12/31/2023. Source: Morningstar, Inc. Indices are unmanaged, not available for direct investment, and not subject to management fees, transaction costs or other types of expenses that an account may incur.

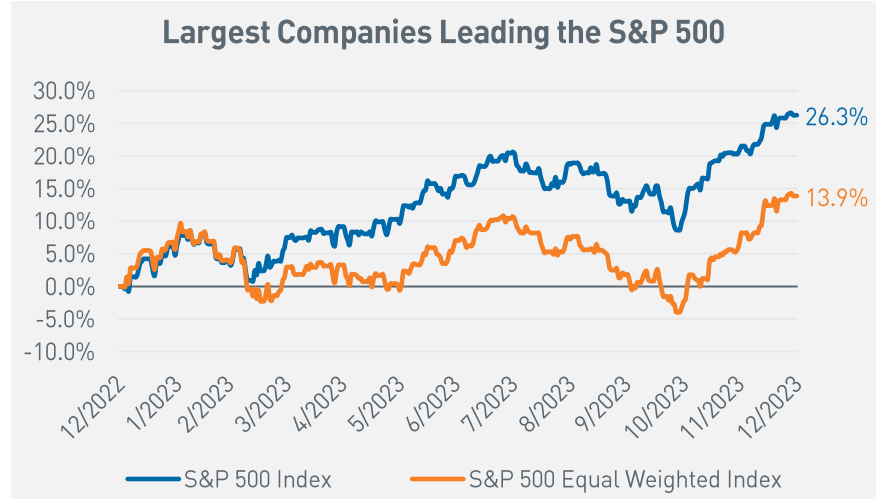
# Was 2023 a Really Strong Year for Markets?

A concentrated number of mega cap stocks are driving performance



## Year-to-date performance of the S&P 500® has been driven by the largest companies

- The divergence in returns between the S&P 500 and its Equal Weight counterpart in 2023 was the widest since 1998. We continue to believe concentrated returns are not a sign of a healthy market, and look to see a broader sustained rally in 2024 in order for momentum to remain positive.
- While mean reversion between the two indices has proven out over time – the Equal Weight Index is only lagging by 15 bps annualized over the past 20 years – return differentials can persist for multiple years before a trend reversal occurs.



## A reacceleration from the “bottom 493” is warranted for a successful 2024

- The largest companies, coined the “Magnificent 7” — Apple Inc.; Microsoft Corp.; Amazon.com, Inc.; Alphabet Inc.; Nvidia Corp.; Tesla Inc. and Meta Platforms, Inc. – have driven earnings growth in 2023, propelling the S&P 500 higher.
- In our view, success in 2024 requires global markets to catch up to those mega cap companies, which even in spite of the strength of returns in 2023 have yet to recover the all-time highs set in November 2021.

Index	2023 Total Return
“Magnificent 7” (weighted average)	90.6%
Nasdaq Composite Index	44.7%
S&P 500 Index	26.3%
S&P 500 Equal Weight	13.9%
Median S&P 500 stock return	9.7%

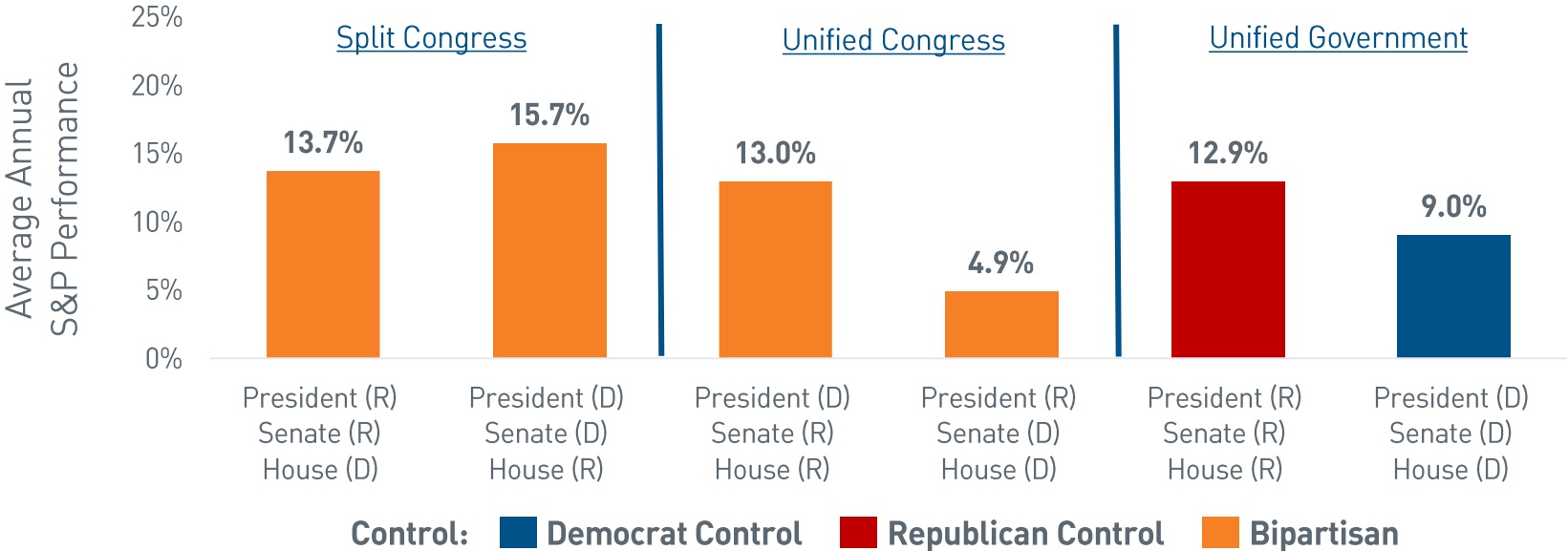
As of 12/31/2023. Source: FactSet®, FactSet® is a registered trademark of FactSet Research Systems, Inc., and its affiliates.

# U.S. Elections Take Centerstage in 2024

Fiscal policy tools could offset economic weakness ahead of the elections

Investors have historically favored divided government as compromises are required. However, markets may be underestimating the potential expanded fiscal support that could be provided ahead of the 2024 U.S. presidential election, which could work to stave off economic weakness and delay a recession.

## Partisan Control, Average Annual S&P Performance (1933-2023, excludes 2001-2002\*)



Scan the QR code using your smartphone's camera app to watch a video in which Dan Brady, PNC's Managing Director of Investment Strategy, discusses the potential impact of the U.S. Elections in 2024.



\*Data excludes 2001-2002 due to Senator James M. Jeffords leaving the Republican party in 2001 to become an Independent and caucus with the Democrats. As of 12/31/2023. Source: Strategas Securities, LLC, PNC

### Rising risks to future multiple expansion

- While no two scenarios are exactly alike, the decline in earnings estimates depends on the severity of the downturn. In a mild recession, earnings estimates typically decline around 10% peak-to-trough, whereas a severe recession typically experiences an average 25% decline.
- From their peak in summer 2022, S&P 500 forward earnings have now risen 3%. It can be helpful for investors to see different scenarios depicting what it would take for equity markets to climb higher or pull back, without being considered under- or overvalued.

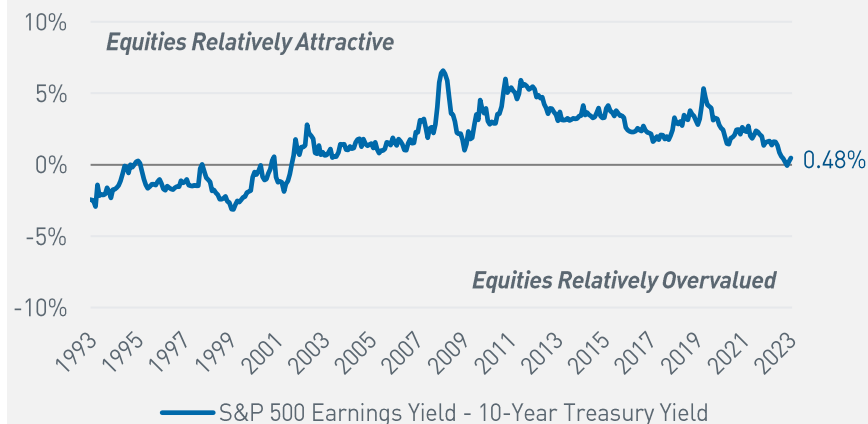
### Valuation analysis across asset classes

- In our view, valuations are relative not only to a security or asset class's own history, but also compared to other asset classes. One method that easily illustrates this comparison is the "Fed Model" which compares the earnings yield of the S&P 500 versus the 10-year U.S. Treasury yield.
- As interest rates rise, the equity risk premium, which is the additional return investors expect to earn for owning stocks over government bonds, continues to decline. Currently, it is still positive, which suggests equities continue to look favorable relative to bonds.

### Implied S&P 500 Price Level using Earnings per Share and Forward Price-to-Earnings (P/E) Ratio

NTM EPS	Hypothetical Scenario	Price to Earnings (P/E NTM)				
		16.5x	18.0x	19.5x	21.0x	22.5x
\$183	25% downside	3,026	3,301	3,576	3,852	4,127
\$220	10% downside	3,631	3,961	4,292	4,622	4,952
\$245	*NTM Peak Consensus Est.	4,034	4,401	4,768	5,135	5,502
\$269	10% upside	4,438	4,842	5,245	5,649	6,053
\$306	25% upside	5,043	5,502	5,961	6,419	6,878

### Relative Valuations Through the "Fed Model" Lens

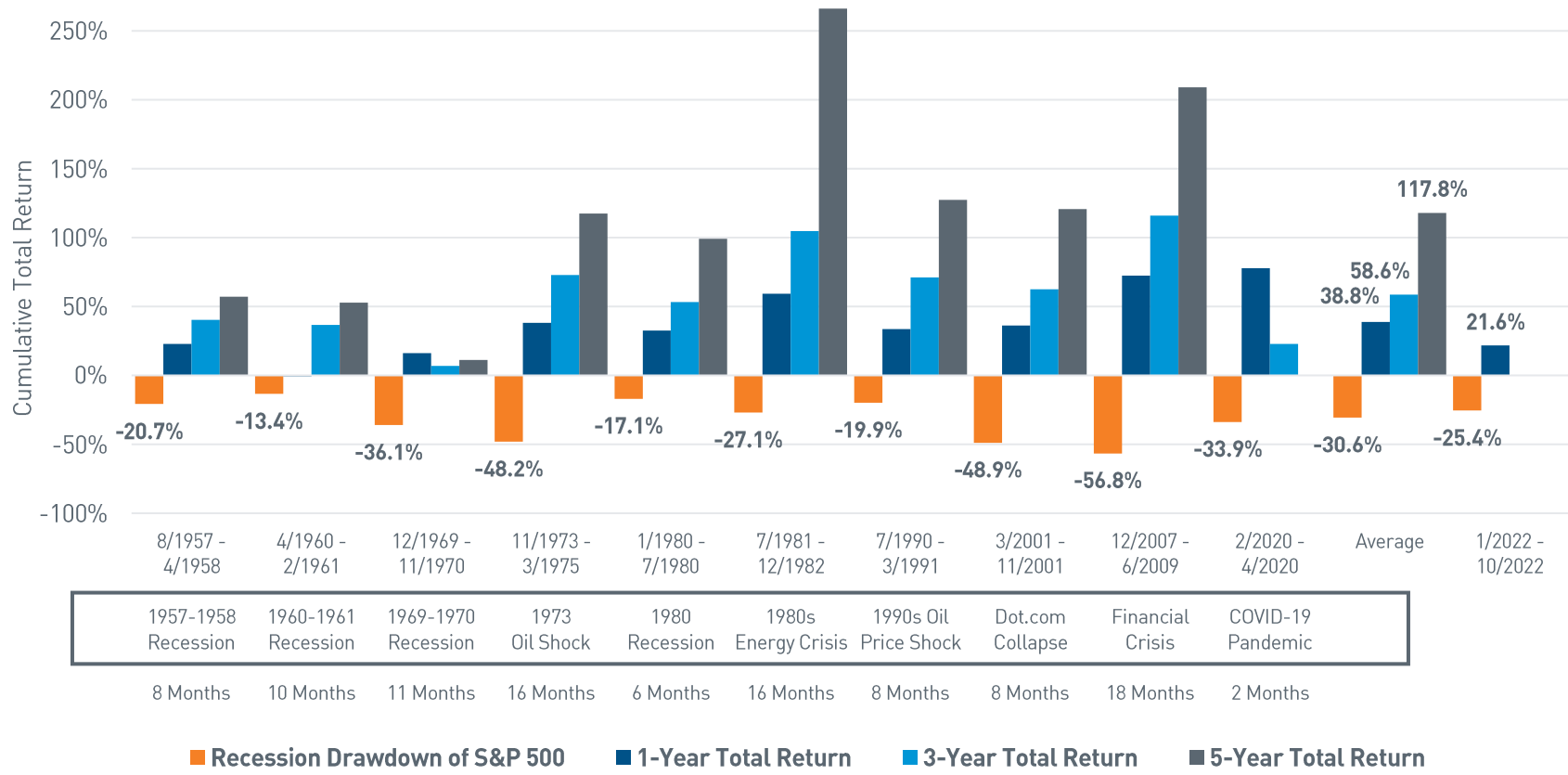


# Recession Drawdowns and Subsequent Returns

Market Pullbacks Often Moments of Opportunity



**S&P 500 Index: Recession Drawdowns and the Subsequent Years' Total Returns**



As of 12/31/2023. Source: Bloomberg L.P., Morningstar, Inc., PNC  
 Indices are unmanaged, not available for direct investment, and not subject to management fees, transaction costs or other types of expenses that an account may incur.

# Asset Class Performance

Leadership is Cyclical and Changes with the Business Cycle

After 2022 marked one of the worst years in market history, driven by a number of macro headwinds impacting both stocks and bonds, financial markets rallied in 2023 as investors believed the Fed to be nearing the end of its tightening cycle.

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	LEGEND	
	EM 82.36	Small-Cap 26.85		EM 18.68				Small-Cap 21.31	EM 36.83			Large Value 31.93			Large Growth 30.03	Large Cap	S&P 500®
	High Yield 58.21	Mid-Cap 26.64		Real Estate 18.59				Mid-Cap 20.74	Large Growth 27.44			Large Cap 31.49	Large Growth 33.47		Large Cap 26.29	Large Growth	S&P 500 Growth
	Mid-Cap 37.38	Real Estate 25.93		Mid-Cap 17.88	Small-Cap 38.82	Real Estate 24.91		Large Value 17.40	Intl Dev 24.21			Large Growth 31.13	Small-Cap 19.96	Real Estate 39.35	Large Value 22.23	Large Value	S&P 500 Value
	Intl Dev 33.67	EM 19.90		Large Value 17.68	Mid-Cap 33.50	Large Growth 14.89		High Yield 17.13	Large Cap 21.83			Real Estate 27.62	Large Cap 18.40	Large Growth 32.01	Intl Dev 17.94	Mid-Cap	S&P 400®
	Large Growth 31.57	High Yield 15.12		Intl Dev 16.41	Large Growth 32.75	Large Cap 13.69		Large Cap 11.96	Mid-Cap 16.24			Mid-Cap 26.20	EM 18.39	Large Cap 28.71	Small-Cap 16.93	Small-Cap	Russell 2000®
	Real Estate 27.22	Large Value 15.10	Core Bond 7.84	Small-Cap 16.35	Large Cap 32.39	Large Value 12.36		EM 9.90	Large Value 15.36			Small-Cap 25.52	Mid-Cap 13.66	Large Value 24.90	Mid-Cap 16.44	Intl Dev	MSCI World ex USA
	Small-Cap 27.17	Large Cap 15.06	High Yield 4.98	Large Cap 16.00	Large Value 31.99	Mid-Cap 9.77	Large Growth 5.52	Large Growth 6.89	Small-Cap 14.65			Intl Dev 22.49	Intl Dev 7.59	Mid-Cap 24.76	High Yield 13.44	EM	MSCI EM
	Large Cap 26.46	Large Growth 15.05	Real Estate 4.92	High Yield 15.81	Intl Dev 21.02	Core Bond 5.97	Large Cap 1.38	Real Estate 6.74	Real Estate 7.77			EM 17.65	Core Bond 7.51	Small-Cap 14.82	EM 11.67	Core Bond	Bloomberg US Aggregate
	Large Value 21.18	Intl Dev 8.95	Large Growth 4.65	Large Growth 14.61	High Yield 7.44	Small-Cap 4.89	Core Bond 0.55	Intl Dev 2.75	High Yield 7.50			High Yield 14.32	High Yield 7.11	Intl Dev 12.62	Real Estate 10.61	High Yield	Bloomberg US Corp High Yield
Core Bond 5.24	Core Bond 5.93	Core Bond 6.54	Large Cap 2.11	Core Bond 4.21	Real Estate 1.93	High Yield 2.45	Real Estate 0.21	Core Bond 2.65	Core Bond 3.54	Core Bond 0.01	Core Bond 8.72	Large Value 1.36	High Yield 5.28		Core Bond 5.53	Real Estate	MSCI USA IMI Real Estate 25/50
High Yield -26.16			Large Value -0.48		Core Bond -2.02	EM -1.79	Mid-Cap -2.18			Large Growth -0.01		Real Estate -5.57	EM -0.28	Large Value -5.22			
Small-Cap -33.79			Mid-Cap -1.73		EM -2.20	Intl Dev -4.32	Intl Dev -3.04			High Yield -2.08			Core Bond -1.54	High Yield -11.19			
Large Growth -34.92			Small-Cap -4.18				Large Value -3.13			Large Cap -4.38				Core Bond -13.01			
Mid-Cap -36.23			Intl Dev -12.21				Small-Cap -4.41			Real Estate -5.75				Mid-Cap -13.06			
Large Cap -37.00			EM -19.49				High Yield -4.47			Large Value -8.95				Intl Dev -14.29			
Large Value -39.22							EM -13.86			Small-Cap -11.01				Large Cap -18.11			
Real Estate -40.29										Mid-Cap -11.08				EM -19.83			
Intl Dev -43.56										Intl Dev -14.09				Small-Cap -20.44			
EM -53.78										EM -15.05				Real Estate -26.90			
														Large Growth -29.41			

As of 12/31/2023. Source: Morningstar, PNC. MSCI USA IMI Real Estate 25/50 Index includes the historical results of the MSCI USA IMI Real Estate Index prior to 2017. Indices are unmanaged, not available for direct investment, and not subject to management fees, transaction costs or other types of expenses that an account may incur.

# Index Total Returns - Equity

## Narrow 2023 Performance Leadership Masks Underlying Weakness

		Trailing Total Returns										PNC Capital Market Projections	
												10 Year Forecast (2024-33)	
Index		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Return	Volatility	
U.S. EQUITY	<b>U.S. Equity</b>	<b>Russell 3000</b>	<b>5.3%</b>	<b>12.1%</b>	<b>26.0%</b>	<b>26.0%</b>	<b>8.5%</b>	<b>15.2%</b>	<b>11.5%</b>	<b>13.8%</b>	<b>9.7%</b>		
	LCC	S&P 500	4.5%	11.7%	26.3%	26.3%	10.0%	15.7%	12.0%	14.0%	9.7%	8.30%	16.90%
	LCG	S&P 500 Growth	3.7%	10.1%	30.0%	30.0%	6.6%	16.2%	13.4%	15.3%	10.5%	8.45%	17.30%
	LCV	S&P 500 Value	5.5%	13.6%	22.2%	22.2%	13.1%	14.1%	10.0%	12.2%	8.5%	8.15%	17.80%
	Sector	S&P 500 Communication Services	4.8%	11.0%	55.8%	55.8%	4.4%	13.3%	7.8%	9.4%	8.0%		
	Sector	S&P 500 Consumer Discretionary	6.1%	12.4%	42.4%	42.4%	3.7%	13.7%	11.7%	16.8%	10.6%		
	Sector	S&P 500 Consumer Staples	2.7%	5.5%	0.5%	0.5%	5.8%	10.9%	8.5%	10.9%	9.2%		
	Sector	S&P 500 Energy	0.0%	-6.9%	-1.3%	-1.3%	36.2%	13.4%	3.5%	6.7%	8.3%		
	Sector	S&P 500 Financials	5.4%	14.0%	12.1%	12.1%	10.7%	12.0%	10.0%	11.3%	4.8%		
	Sector	S&P 500 Health Care	4.3%	6.4%	2.1%	2.1%	8.1%	11.6%	11.4%	13.6%	9.8%		
	Sector	S&P 500 Industrials	7.0%	13.1%	18.1%	18.1%	10.6%	14.2%	10.0%	13.2%	9.3%		
	Sector	S&P 500 Information Technology	3.8%	17.2%	57.8%	57.8%	15.1%	26.9%	20.8%	21.2%	13.8%		
	Sector	S&P 500 Materials	4.6%	9.7%	12.5%	12.5%	7.9%	13.6%	8.6%	11.9%	8.4%		
	Sector	S&P 500 Real Estate	8.7%	18.8%	12.4%	12.4%	6.7%	8.9%	8.9%	11.8%	8.6%		
	Sector	S&P 500 Utilities	1.9%	8.6%	-7.1%	-7.1%	3.6%	7.1%	8.9%	9.3%	9.1%		
	MCC	S&P 400	8.7%	11.7%	16.4%	16.4%	8.1%	12.6%	9.3%	13.3%	9.8%	9.00%	20.80%
	MCG	S&P 400 Growth	7.4%	9.9%	17.5%	17.5%	4.2%	11.9%	9.0%	13.6%	9.9%	8.95%	20.20%
	MCV	S&P 400 Value	10.2%	13.6%	15.4%	15.4%	12.0%	12.9%	9.2%	12.8%	9.6%	9.05%	22.30%
SCC	Russell 2000	12.2%	14.0%	16.9%	16.9%	2.2%	10.0%	7.2%	11.3%	8.1%	9.40%	22.00%	
SCG	Russell 2000 Growth	12.0%	12.7%	18.7%	18.7%	-3.5%	9.2%	7.2%	12.1%	8.3%	9.45%	23.90%	
SCV	Russell 2000 Value	12.4%	15.3%	14.6%	14.6%	7.9%	10.0%	6.8%	10.3%	7.7%	9.00%	23.70%	
REITs	MSCI USA IMI REAL ESTATE 25-50	9.2%	17.8%	10.6%	10.6%	4.1%	6.3%	--	--	--	8.00%	23.60%	
NON-U.S. EQUITY	<b>Non-U.S. Equity</b>	<b>MSCI ACWI Ex USA IMI</b>	<b>5.2%</b>	<b>9.8%</b>	<b>15.6%</b>	<b>15.6%</b>	<b>1.5%</b>	<b>7.2%</b>	<b>4.0%</b>	<b>7.0%</b>	<b>5.9%</b>		
	ILCC	MSCI World ex USA	5.5%	10.5%	17.9%	17.9%	4.4%	8.5%	4.3%	7.0%	5.7%	8.80%	18.80%
	ILCG	MSCI World Ex USA Growth	5.7%	12.5%	17.5%	17.5%	0.4%	8.9%	5.1%	7.5%	6.0%	8.90%	18.30%
	ILCV	MSCI World Ex USA Value	5.2%	8.6%	18.5%	18.5%	8.2%	7.5%	3.3%	6.3%	5.2%	8.70%	20.20%
	ISCC	MSCI World Ex USA Small Cap	7.2%	10.6%	12.6%	12.6%	-0.2%	7.1%	4.6%	9.0%	6.9%	9.30%	21.40%
	ISCG	MSCI World Ex USA Small Cap Growth	7.3%	11.2%	10.6%	10.6%	-4.2%	6.7%	4.9%	9.2%	6.9%	9.50%	21.40%
	ISCV	MSCI World Ex USA Small Cap Value	7.0%	10.0%	14.7%	14.7%	3.8%	7.1%	4.2%	8.8%	7.2%	9.10%	21.60%
	EM	MSCI Emerging Markets IMI	4.0%	8.0%	11.7%	11.7%	-3.7%	4.5%	3.0%	7.0%	7.1%	9.80%	24.60%
	<b>Global Equity</b>	<b>MSCI All Country</b>	<b>4.8%</b>	<b>11.0%</b>	<b>22.2%</b>	<b>22.2%</b>	<b>5.7%</b>	<b>11.7%</b>	<b>7.9%</b>	<b>10.2%</b>	<b>7.5%</b>		
	INFRA	S&P Global Infrastructure	4.2%	10.7%	5.8%	5.8%	5.2%	6.5%	4.8%	6.6%	7.1%	8.50%	17.60%

# Index Total Returns – Fixed Income and Alternatives

Elevated interest rate volatility impacts returns and valuations

		Trailing Total Returns										PNC Capital Market Projections 10 Year Forecast (2024-33)	
Index		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Return	Volatility	
FIXED INCOME	MUNI	Bloomberg Municipal Bond	2.3%	7.9%	6.4%	6.4%	-0.4%	2.3%	3.0%	4.0%	3.7%	3.20%	4.95%
	SHORT MUNI	Bloomberg Municipal 1-3 Year	0.7%	2.7%	3.3%	3.3%	0.5%	1.3%	1.1%	1.4%	1.8%	2.40%	1.40%
	<b>CORE</b>	<b>Bloomberg US Aggregate</b>	<b>3.8%</b>	<b>6.8%</b>	<b>5.5%</b>	<b>5.5%</b>	<b>-3.3%</b>	<b>1.1%</b>	<b>1.8%</b>	<b>2.7%</b>	<b>3.2%</b>	<b>4.50%</b>	<b>4.30%</b>
	SHORT	Bloomberg US Aggregate 1-3 Year	1.2%	2.7%	4.6%	4.6%	0.1%	1.5%	1.3%	1.6%	2.1%	3.70%	1.45%
	INTERM	Bloomberg US Govt/Credit Intermediate	2.3%	4.6%	5.2%	5.2%	-1.6%	1.6%	1.7%	2.5%	2.9%	4.20%	3.40%
	LONG	Bloomberg US Govt/Credit Long	7.9%	13.2%	7.1%	7.1%	-8.7%	1.1%	3.2%	4.3%	4.8%	5.80%	11.10%
	TIPS	Bloomberg US Treasury US TIPS	2.7%	4.7%	3.9%	3.9%	-1.0%	3.2%	2.4%	3.5%	3.6%	4.90%	6.50%
	BILLS	Bloomberg US Treasury Bills 1-3 Month	0.5%	1.4%	5.1%	5.1%	2.2%	1.9%	1.2%	0.8%	1.4%	3.50%	0.50%
	HY	Bloomberg US Corporate High Yield	3.7%	7.2%	13.4%	13.4%	2.0%	5.4%	4.6%	9.2%	6.6%	6.30%	10.50%
	LLOAN	Morningstar LSTA U.S. Leveraged Loan	1.6%	2.9%	13.3%	13.3%	5.8%	5.8%	4.4%	7.6%	4.8%	4.90%	7.75%
IBND	Bloomberg Global Aggregate	4.2%	8.1%	5.7%	5.7%	-5.5%	-0.3%	0.4%	1.5%	2.4%	5.50%	8.80%	
EMD	Bloomberg EM USD Aggregate	4.2%	8.1%	9.1%	9.1%	-3.1%	1.8%	3.0%	6.2%	5.7%	6.30%	9.60%	
ALTERNATIVES	Hedge Funds	HFRX Global Hedge Fund (USD)	1.4%	1.7%	3.1%	3.1%	0.7%	3.5%	1.4%	2.2%	1.2%	5.60%	7.00%
	Equity Hedge	HFRX Equity Hedge	1.6%	3.6%	6.9%	6.9%	5.1%	6.1%	2.9%	2.9%	1.6%		
	Event Driven	HFRX Event Driven	1.1%	1.3%	0.4%	0.4%	-2.2%	2.3%	0.4%	2.4%	1.7%		
	Macro-CTA	HFRX Macro	0.4%	-1.1%	-1.3%	-1.3%	0.5%	2.1%	1.0%	-0.6%	0.6%		
	Relative Value	HFRX Relative Value Arbitrage	2.1%	1.9%	4.7%	4.7%	-1.0%	2.3%	0.8%	3.4%	1.0%		
	Private Equity	Burgiss Global Private Equity ex-Venture	--	-0.1%	4.9%	8.3%	16.6%	15.2%	14.6%	12.8%	15.0%	10.65%	21.90%
	Private Debt	Burgiss Global Private Debt	--	2.1%	6.8%	10.1%	10.9%	7.6%	7.9%	8.6%	10.0%	7.70%	15.00%
	Private RE	Burgiss Global Private Real Estate	--	-2.4%	-3.9%	-4.5%	8.9%	6.4%	8.6%	4.0%	7.4%	8.30%	12.70%
Commodities	Bloomberg Commodity	-2.7%	-4.6%	-7.9%	-7.9%	10.8%	7.2%	-1.1%	-0.2%	-0.1%	6.20%	17.50%	

\*Private alternative investments are subject to reporting lag; data is available as of most recent reported data; Burgiss Global Private Equity ex-Venture Capital Funds Index, Burgiss Global Private Debt Funds Index, and Burgiss Global Real Estate Funds Index as of 9/30/2023.

As of 12/31/2023. Source: Morningstar, Inc., The Burgiss Group, LLC, FactSet ®



# Key Takeaways in Periods of Market Volatility

The Most Important Point: Stay Invested

## Consider the timeline

Pullbacks are a healthy, normal part of long-term investing.

## Market volatility is the rule, not the exception

In periods of heightened volatility, it is critical to remain focused on the underlying fundamentals that drive stocks in the long term.

## Occasional pullbacks are normal

Even in years of positive performance, intra-year pullbacks can be sizeable, thus it is important to distinguish between pullbacks in different phases of the cycle.

## Stay diversified and invested

The interaction effect of multi-asset portfolios adds value in times of stress, so consider using volatility to your advantage.

These materials are furnished for the use of PNC and its clients and do not constitute the provision of investment, legal, or tax advice to any person. They are not prepared with respect to the specific investment objectives, financial situation, or particular needs of any person. Use of these materials is dependent upon the judgment and analysis applied by duly authorized investment personnel who consider a client's individual account circumstances. Persons reading these materials should consult with their PNC account representative regarding the appropriateness of investing in any securities or adopting any investment strategies discussed or recommended herein and should understand that statements regarding future prospects may not be realized. The information contained herein was obtained from sources deemed reliable. Such information is not guaranteed as to its accuracy, timeliness, or completeness by PNC. The information contained and the opinions expressed herein are subject to change without notice. **Past performance is no guarantee of future results.** Neither the information presented nor any opinion expressed herein constitutes an offer to buy or sell, nor a recommendation to buy or sell, any security or financial instrument. Accounts managed by PNC and its affiliates may take positions from time to time in securities recommended and followed by PNC affiliates.

Indices or Benchmarks. Indices are unmanaged, are not available for direct investment, and are not subject to management fees, transaction costs or other types of expenses that an account may incur. Indices performance results do not represent, and are not necessarily indicative of, the results that may be achieved in accounts investing in the corresponding investment strategy; actual account returns may vary significantly. For definitions of Indices/Benchmarks used herein, please refer to [www.pnc.com/indexdefinitions](http://www.pnc.com/indexdefinitions).

The PNC Financial Services Group, Inc. ("PNC") uses the marketing name PNC Institutional Asset Management® for the various discretionary and non-discretionary institutional investment, trustee, custody, consulting, and related services provided by PNC Bank, National Association ("PNC Bank"), which is a **Member FDIC**, and investment management activities conducted by PNC Capital Advisors, LLC, an SEC-registered investment adviser and wholly owned subsidiary of PNC Bank.

PNC does not provide legal, tax, or accounting advice unless, with respect to tax advice, PNC Bank has entered into a written tax services agreement. PNC Bank is not registered as a municipal advisor under the Dodd-Frank Wall Street Reform and Consumer Protection Act.

"PNC Institutional Asset Management" is a registered mark of The PNC Financial Services Group, Inc.

**Investments: Not FDIC Insured. No Bank Guarantee. May Lose Value.**

©2024 The PNC Financial Services Group, Inc. All rights reserved.

# Investment Policy Statement



**PNC**  
INSTITUTIONAL  
ASSET MANAGEMENT

EXHIBIT 4

**CLEVELAND PUBLIC LIBRARY**

**Finance Committee**

January 19, 2021

**RESOLUTION REVISING THE LIBRARY'S INVESTMENT POLICY**

WHEREAS, On April 18, 2019, the Board of Library Trustees approved the Library's Investment Policy; and

WHEREAS, It is now deemed necessary to amend the Library's Investment Policy; now therefore be it

RESOLVED, That the Board of Library Trustees approves the attached Cleveland Public Library Investment Policy to become effective January 21, 2021; and be it further resolved

RESOLVED, That the Fiscal Officer obtain the required acknowledgments and convey this policy to the Auditor of State.

## CLEVELAND PUBLIC LIBRARY INVESTMENT POLICY

- I. Scope
- II. Standards of Care
  - A. Delegation of Authority
  - B. Prudence
  - C. Ethics and Conflicts of Interest
- III. The Portfolio
  - A. Investment Objectives
  - B. Authorized Investments
  - C. Safekeeping and Custody
  - D. Board of Trustees of the Library
  - E. Reporting
  - F. Selection of Investment Adviser and Broker/Dealers
  - G. Sale of Securities Prior to Maturity
  - H. Procedures for the Purchase and Sale of Securities
- IV. Endowments
  - A. Investment Objectives
  - B. Authorized Investments
  - C. Equity Guidelines
  - D. Fixed Income Guidelines
  - E. Liquidity Guidelines
  - F. Prohibited Investments
  - G. Investment Review
  - H. Endowment Fund Manager
- V. Amendments to Policy
- VI. Effective Date of Policy and Previous Revision Dates
- VII. Statements of Compliance
- VIII. Appendices
  - A. Agreement with Investment Adviser for the Portfolio
  - B. Agreement with Custodial Bank for the Portfolio
  - C. Sample of Monthly Investment Report to the Board
  - D. Agreement with Endowment Fund Manager
  - E. Agreement with Custodial Bank for the Endowment

## **I. Scope**

The scope of this investment policy encompasses the Library's investment and bond proceed funds (Section III) (hereafter referred to as the "Portfolio") and the Library's endowment funds (Section IV) (hereafter referred to as the "Endowments").

## **II. Standards of Care**

### **A. Delegation of Authority**

The Board of Trustees will retain ultimate fiduciary responsibility for the Portfolio and the Endowments. All participants in the investment process shall seek to act responsibly as custodians of the public trust. No officer or designee may engage in an investment transaction except as provided under the terms of this policy and internal operating procedures.

Authority to manage both the Portfolio and Endowment investment programs is delegated to the Fiscal Officer or the Deputy Fiscal Officer, which includes accounting, recordkeeping, and reporting functions. Investment guidelines for the Portfolio are based upon Ohio Revised Code Chapter 135.14 and prudent money management. Investment guidelines for the Endowment are based upon Ohio Revised Code Chapters 2109.37 and 2109.371 as delineated by a 1975 Cuyahoga County Probate Court Order and a ruling from the Cuyahoga County Prosecutor's Office.

### **B. Prudence**

The standard of prudence to be used by investment officials shall be the "prudent person" standard and shall be applied in the context of managing an overall portfolio. The "prudent person" standard means that investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.

Investment officers acting in accordance with this investment policy and exercising due diligence shall be relieved of personal liability for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

Any registered investment adviser retained by the Library will be held to the "prudent expert" standard. The "prudent expert" standard means that investments shall be made with the care, skill, prudence, and diligence, under circumstances then prevailing, which prudent persons acting in like capacities and familiar with such matters would use in the conduct of an enterprise of like character and with like aims, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.

### **C. Ethics and Conflicts of Interest**

The Fiscal Officer, Deputy Fiscal Officer, members of the Board of Trustees, and any other Library employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial investment decisions. They shall disclose any material interests in financial institutions with which they conduct business. They shall further disclose

any personal financial/investment positions that could be related to the performance of the Portfolio or the Endowments. They shall refrain from undertaking personal investment transactions with the same individual(s) with whom business is conducted on behalf of the Library.

### III. The Portfolio

#### A. Investment Objectives

The objectives of the Library's investment program include legality, safety, liquidity, and yield.

*Legality:*

The Library's investment program will comply with federal, state, and other legal requirements.

*Safety:*

Safety of principal is the most important objective of the Library's investment program. Investments of the Library shall be undertaken in a manner that seeks to ensure preservation of capital in the overall Portfolio. The objective will be to mitigate credit risk and interest rate risk.

Credit risk is the risk of loss due to the failure of a security issuer to pay principal or interest, or the failure of the security issuer to make timely payments of principal or interest. Credit risk will be minimized by (1) diversifying the Portfolio so that potential losses on individual securities will be minimized; (2) ensuring that required, minimum credit quality ratings exist prior to the purchase of commercial paper and bankers acceptances; (3) maintaining adequate collateralization of certificates of deposit and other deposit accounts pursuant to the method as determined by the Fiscal Officer; and (4) pre-qualifying the financial institutions, broker/dealers, and advisers with which the Library does business.

Interest rate risk is the risk that the market value of securities in the Portfolio will fluctuate due to changes in the level of interest rates. Interest rate risk will be minimized by (1) structuring the Portfolio so that securities mature to meet cash requirements for ongoing operations, thereby avoiding the need to sell securities prior to maturity; (2) diversification of maturities; and (3) diversification of assets.

*Liquidity:*

The Portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated. The Portfolio may be structured so that securities mature concurrently with cash needs. Furthermore, since all possible cash demands cannot be anticipated, the Portfolio should consist largely of securities with active secondary or resale markets. Minimum liquidity levels (as a percentage of average investable funds) may be established in order to meet all current obligations.

*Yield:*

The Portfolio shall be managed to consistently attain a market rate of return throughout budgetary and economic cycles, considering investment risk constraints and liquidity needs.

Return on investment is of secondary importance compared to safety and liquidity objectives. The Library may seek to augment returns above the market average through the implementation of active portfolio management strategies, consistent with risk limitations and prudent investment principles.

**B. Authorized Investments**

The Library is authorized to invest public funds pursuant to the requirements set forth in Ohio Revised Code Section 135.14, provided the Fiscal Officer and/or Deputy Fiscal Officer has completed additional training required for making investments authorized by divisions (B)(4) and (B)(7) of that section. The Library will not invest in prohibited investments defined in Ohio Revised Code Section 135.14. The Library will adhere to maximum maturity lengths specified in Ohio Revised Code Section 135.14.

**C. Safekeeping and Custody**

Securities purchased for the Library will be held in safekeeping by a qualified trustee (hereafter referred to as the "custodian"), as provided in Ohio Revised Code Section 135.18. Securities held in safekeeping by the custodian will be evidenced by a monthly statement describing such securities. The records of the custodian shall identify such securities in the name of the Library. The custodian may safekeep the Library's securities in (1) Federal Reserve Bank book entry form; (2) Depository Trust Company (DTC) book entry form in the account of the custodian or the custodian's correspondent bank; or (3) Non-book entry (physical) securities held by the custodian or the custodian's correspondent bank. All securities transactions will settle using standard delivery-vs-payment (DVP) procedures. Under no circumstances will the Library's investment assets be held in safekeeping by a broker/dealer firm, or a firm acting on behalf of a broker/dealer firm.

**D. Board of Trustees of the Library**

The Library Board of Trustees shall meet as necessary to review the Portfolio. Areas of review may include, but are not limited to, the investment inventory, transactions for the period, realized income, economic outlook, diversification and maturity structure, potential risks to the Library's funds, and the target rate of return on the Portfolio.

**E. Reporting**

The Library shall maintain an inventory of all Portfolio assets. This inventory will include each investment's CUSIP number, security type, issuer, principal cost, book cost, par (maturity) value, settlement (purchase/sale) date, maturity date, and interest (coupon/discount) rate. The inventory will also include a record of all security purchases and sales.

The Library will provide a monthly report on investments of interim deposits to the Board of Trustees. A supplemental monthly Portfolio report detailing the current inventory will also be provided.



#### **F. Selection of Investment Adviser and Broker/Dealers**

The Library may retain the services of a registered investment adviser, to be procured through a formal competitive process, who will meet the qualifications established in Ohio Revised Code Section 135.14(N). The investment adviser will manage the Library's Portfolio and will be responsible for the investment and reinvestment of such investment assets, including the execution of investment transactions.

Upon the request of the Fiscal Officer, the investment adviser will attend meetings and will provide a Portfolio review. The investment adviser will be required to issue Portfolio reports as defined in the Library's agreement with the investment adviser. These reports should include information such as the initial cost of the investment, stated yield, dates of purchase and maturity, market value, accrued interest income, and comparable information for the Portfolio as a whole.

The investment adviser may transact business (execute the purchase and/or sale of securities) with eligible Ohio financial institutions, primary securities dealers regularly reporting to the New York Federal Reserve Bank, and regional securities firms or broker dealers licensed with the Ohio Department of Commerce, Division of Securities, to transact business in the State of Ohio.

Under no circumstances will brokers or broker/dealer firms act as an investment adviser or in a similar capacity as an investment adviser, either directly or indirectly, if such broker/dealer participates in transaction business (purchase and sale of securities) with the Fiscal Officer or the Fiscal Officer's investment adviser.

#### **G. Sale of Securities Prior to Maturity**

Investments in the Portfolio are made with the expectation, at the time of making the investment, that the investment will be held until maturity. Portfolio securities may be "redeemed or sold" prior to maturity under the following conditions:

- (1) To meet additional liquidity needs,
- (2) To purchase another security to increase yield or current income,
- (3) To lengthen or shorten the Portfolio's average maturity (average duration),
- (4) To realize any capital gains and/or income, and/or
- (5) To adjust the Portfolio's asset allocation.

Such transactions may be referred to as a "sale and purchase" or a "bond swap." For purposes of this section, redeemed shall also mean "called" in the case of a callable security.

#### **H. Procedures for the Purchase and Sale of Securities**

Securities will be purchased or sold through approved broker/dealers on a "best price and execution" basis. All such investment transactions will be communicated by electronic transmission to the Fiscal Officer or to an authorized representative designated by the Fiscal Officer. A purchase or sale of securities will be represented by transaction advices issued by the Library's investment adviser. Notification will also be sent to the Library's designated custodian bank and will serve as an authorization to said custodian to receive or deliver securities versus payment.

#### IV. Endowments

##### A. Investment Objectives

The Library seeks to maximize the long-term total return of its Endowments. As a result, the maintenance and growth of the funds are the primary objectives. The Library's ability to achieve these returns will depend upon the acceptance of moderate risk, recognizing that a reasonable degree of volatility in market value is necessary to achieve long-term capital appreciation.

##### B. Authorized Investments

In recognition of the expected returns and volatility from financial assets, the Library will be invested in the following ranges with the target allocation noted:

	<u>Range</u>	<u>Target</u>
Equities	55-75%	65%
Fixed Income	15-35%	25%
Alternatives	0-20%	10%
Cash Equivalents	0-20%	

The midpoints of the above ranges will be considered the long-term or policy allocation. Any deviations beyond this mix of securities must have prior approval by the Board of Library Trustees. Allocations to cash equivalents are to be considered a subset of the Fixed Income allocation along with Convertible Assets.

Within the above ranges, the Library's Endowment Fund Manager will make all tactical asset allocation decisions (over-and-under-weights). Deviations outside of the above ranges require prior approval from the Library.

##### C. Equity Guidelines

*Objective:*

To achieve long term returns which exceed those of the overall equity market. Specialty equities (styles differing from the S&P 500) have been incorporated into this policy with the intention of delivering superior long-term performance and improved diversification.

In evaluating long term (full market cycle) performance, overall equity returns will be compared to the indices noted below.

In recognition of the expected returns and volatility provided by different segments of the equity market, equity assets will be invested in the following ranges with the policy allocation noted:

	<u>Range</u>	<u>% Allocation</u>
Large-Cap Stocks	40-80%	60%
Mid-Cap Stocks	0-20%	10%
Small-Cap Stocks	0-20%	10%
International Equities	10-30%	20%

Equity assets will be managed in accordance with the following:

- Equity investments should be broadly diversified. The equity investment in any single company should not exceed five percent of the equity portfolio, based on market value. Investments in funds are not subject to this limit. Short sales, private securities, letter stock, commodities, and put and call contracts are expressly prohibited.
- Investments in Mid-Cap, Small-Cap and International Equities may be made through the use of funds. Funds selected will be diversified and generally conform to the above-mentioned company and industry guidelines.
- Real estate investment will be implemented through REIT investments or through the use of an REIT-based fund.
- The overall equity benchmark is the MSCI ACWI. Managers will be measured against their respective category benchmark (i.e. Russell 2000 Index for domestic small cap stocks, S&P 500 Index for domestic large cap stocks, etc.).

#### **D. Fixed Income Guidelines**

*Objective:*

To achieve returns that exceed those of the investment grade aggregate bond market, provide diversification, income and enhance performance. The Fixed Income Investment style returns will be compared to the Barclays Capital U.S. Aggregate Bond Index.

Fixed income assets will be managed in accordance with the following:

- Minimum criteria for direct investment in a bond:

Par Value of issue	\$100 million outstanding at time of purchase
Quality of issue	A or better by Standard & Poor's or A2 or better by Moody's
- The market value of the aggregate holdings of an individual corporate debtor should not exceed five percent of the organization's debt related assets.
- The average duration of the bond portfolio should be within a +/- 25% range of the Barclays Capital U.S. Aggregate Bond Index. The investment manager will have full discretion to determine the average duration within this range.
- The maximum maturity for individual U.S. Treasuries, Agencies, and corporate bonds will be 20 years.
- Individual mortgage-backed securities (MBS) and asset-backed securities (ABS) may have maturities of greater than 20 years but the duration should not exceed 12 years.
- Fixed Income funds may be used to further enhance diversification, provide better coverage of the yield curve, and/or improve liquidity.

## **E. Liquidity Guidelines**

### *Objective:*

Cash equivalents will be invested in an appropriate cash-equivalent fund. Returns should be comparable to or benchmarked to the 90-day Bank of America Merrill-Lynch Treasury Bill Index.

Cash equivalent investments must be made in high quality obligations of the U.S. Government and its Agencies. Money market mutual funds may be used, so long as these mutual funds meet the high standards suitable for the funds of this nature.

## **F. Prohibited Investments**

The investment manager is prohibited from investments in the following:

- Fixed Income securities not denominated in U.S. Dollars or Eurodollars
- Venture Capital
- Guaranteed Insurance Contracts
- Commodities
- Precious Metals or Gems
- Options, futures, or any contract whose value is derived from the price of an underlying asset or index (derivatives)
- Short-selling and other hedging strategies
- Private Placements or “restricted” stock
- No investments in securities deemed to be in violation of prohibited transaction standard of ERISA.
- It is understood that investments into funds (i.e. mutual or ETF’s) may utilize derivatives and are exempted from the above exceptions.

## **G. Investment Review**

### *Objective:*

To achieve financial returns for the Library which preserve the principal asset value and are competitive relative to those offered by the financial markets.

### *Review:*

The Investment Committee will compare the investment performance of the Investment Manager to the following benchmarks:

- The blended performance of 60% MSCI ACWI and 40% Barclays Capital U.S. Aggregate Bond Index policy benchmark over a full market cycle and/or a blended benchmark in the same allocation at the portfolio.

In addition, the Investment Committee will compare the various asset classes to the following benchmarks:

1. The annual total return of U.S. equity securities will be compared to the Russell 3000 Index measured over a three-to five-year time period.
2. Within each equity allocation/style, performance will be compared to the respective manager benchmark.
3. The annual total return of fixed income securities will be compared to the Barclays Capital Aggregate Bond Index over a three-to five-year time period and/or the respective strategy benchmark.
4. Real estate investment will be compared to the NAREIT (applicable benchmark) Index. Convertible Assets will be compared to BoA/Merrill Lynch Investment Grade Convertible Securities Index.
5. The annual total return of cash equivalents will be compared to the BoA/Merrill Lynch 90-day T-Bill Index.

#### **H. Endowment Fund Manager**

The Board of Library Trustees shall select an endowment fund manager and custodian for the Library's Endowments by authorizing Board resolution. The Board of Library Trustees shall approve a separate written agreement with its selected endowment fund manager governing terms of service, compensation, and related issues.

#### **V. Amendments to Policy**

The Fiscal Officer may recommend revisions to this investment policy from time to time as deemed necessary to comply with the Ohio Revised Code, other legal requirements, and/or best practices for investing public funds. Any changes shall be approved by the Board of Trustees.

#### **VI. Effective Date of Policy and Previous Revision Dates**

The effective date of this policy is January 21, 2021 and represents a revision to the previously submitted policy, April 18, 2019. It is the sixth revision to the original submitted policy dated June 17, 2000 (first revision September 18, 2003; second revision September 15, 2005; third revision March 20, 2014; fourth revision June 16, 2016; fifth revision April 18, 2019). This policy includes best practices recommended by the Government Finance Officers Association for a comprehensive investment policy. This policy also simplifies the definition of "authorized investments" for the Portfolio.

**VII. Statements of Compliance**

This investment policy has been approved by the Library and the governing board and filed with the Auditor of State, pursuant to Ohio Revised Code 135.14 (O)(1).

All brokers, dealers, and financial institutions executing transactions initiated by the Library or the Library's investment adviser have signed the approved investment policy. Investment policies (signed by such brokers, dealers, and financial institutions) are filed with the Fiscal Officer of the Library.

The Library's Portfolio and Endowment investment advisers are registered with the Securities and Exchange Commission and/or the Comptroller of the Currency and possesses public funds investment management experience, specifically in the area of state and local government investment portfolios. The investment adviser has additionally signed the approved investment policy and the signed policy is filed with the Fiscal Officer of the Library.

Any amendments to this policy will be filed with the Auditor of State within fifteen days of the effective date of the amendment.

The following broker/dealer/financial institution/investment adviser or Endowment fund manager has signed, herein, this approved investment policy, having read the policy's contents thereby acknowledging comprehension and receipt:

For \_\_\_\_\_ 1/22/2021

Name of Broker/Dealer/Bank Adviser/Manager \_\_\_\_\_ Date  
*Glen Danahey* Glen Danahey

Signature of Registered Representative or \_\_\_\_\_ Print Name of Registered Representative  
Financial Institution Representative or Financial Institution Representative

## **VIII. Appendices**

Appendices to follow as attachments to policy:

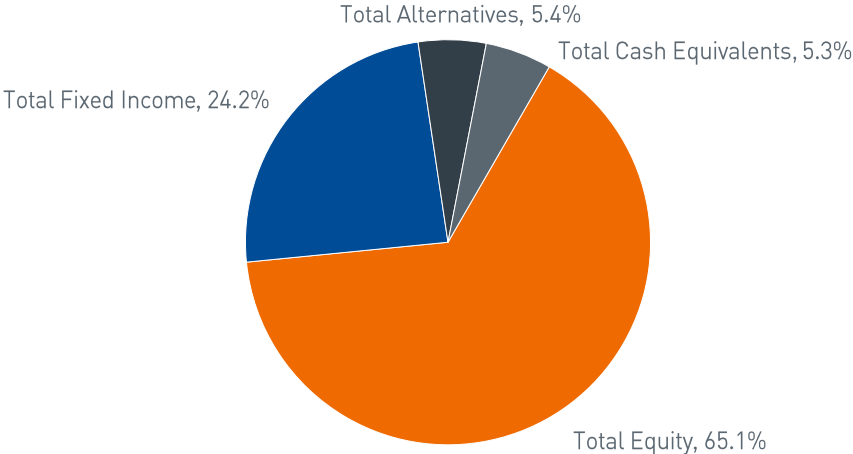
- A. Agreement with Investment Adviser for the Portfolio
- B. Agreement with Custodial Bank for the Portfolio
- C. Sample of Monthly Investment Report to the Board
- D. Agreement with Endowment Fund Manager
- E. Agreement with Custodial Bank for the Endowment

# Portfolio Review



# Asset Allocation

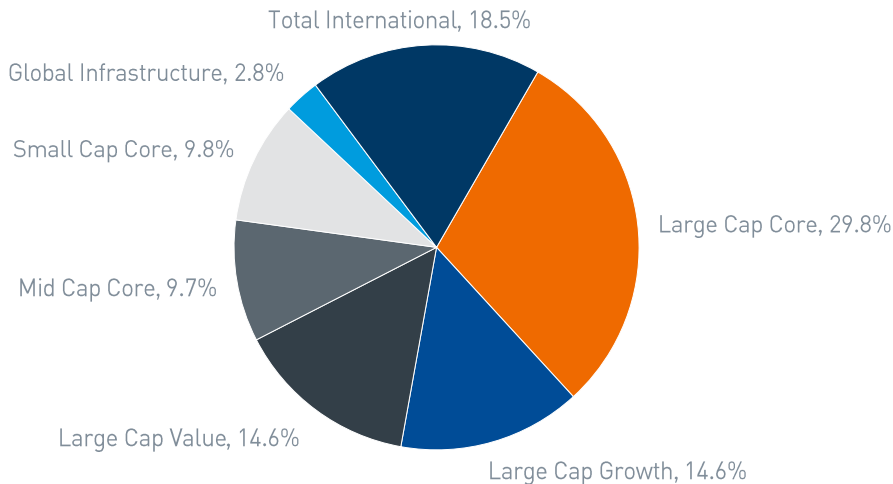
Cleveland Public Library  
As of December 31, 2023



Description	Market Value (\$)	Portfolio Allocation	Policy Target	Policy Range
<b>Total Equity</b>	<b>19,167,310</b>	<b>65.1%</b>	<b>65%</b>	<b>55-75%</b>
<i>Large Cap Equity</i>	11,322,814	38.5%		
<i>Mid Cap Equity</i>	1,862,100	6.3%		
<i>Small Cap Equity</i>	1,886,755	6.4%		
<i>Global Infrastructure</i>	544,091	1.9%		
<i>Total International</i>	3,551,551	12.1%		
<b>Total Fixed Income</b>	<b>7,132,857</b>	<b>24.2%</b>	<b>25%</b>	<b>15-35%</b>
<b>Total Alternatives</b>	<b>1,573,981</b>	<b>5.4%</b>	<b>10%</b>	<b>0-20%</b>
<b>Total Cash Equivalents</b>	<b>1,549,624</b>	<b>5.3%</b>		<b>0-20%</b>
<b>Total Portfolio</b>	<b>29,423,772</b>	<b>100.0%</b>	<b>100.0%</b>	

# Equity Asset Allocation

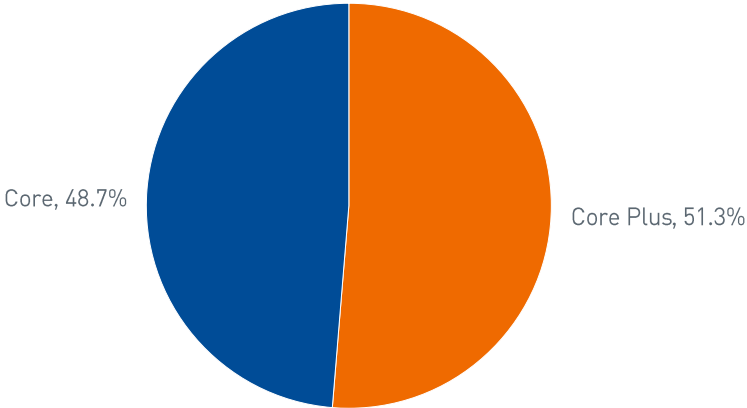
Cleveland Public Library  
As of December 31, 2023



Description	Market Value (\$)	Equity Allocation	Portfolio Allocation
Large Cap Core	5,719,142	29.8%	19.4%
Large Cap Growth	2,805,046	14.6%	9.5%
Large Cap Value	2,798,627	14.6%	9.5%
Mid Cap Core	1,862,100	9.7%	6.3%
Small Cap Core	1,886,755	9.8%	6.4%
Global Infrastructure	544,091	2.8%	1.9%
Total International	3,551,551	18.5%	12.1%
<b>Total Equity</b>	<b>19,167,310</b>	<b>100.0%</b>	<b>65.1%</b>

# Fixed Income Asset Allocation

Cleveland Public Library  
As of December 31, 2023



Description	Style	Market Value (\$)	Fixed Income Allocation	Portfolio Allocation
Dodge & Cox Income Fund	Core Plus	3,657,282	51.3%	12.4%
iShares Core US Aggregate Bond ETF	Core	3,475,437	48.7%	11.8%
<b>Total Fixed Income</b>		<b>7,132,857</b>	<b>100.0%</b>	<b>24.2%</b>

# Portfolio Holdings

Cleveland Public Library

As of December 31, 2023

Description	Ticker	Units	Market Value (\$)	% of Market Value
<b>Large Cap Core</b>				
iShares Core S&P 500 ETF	IVV	11,974	5,719,142	19.4%
<b>Large Cap Growth</b>				
Edgewood Management	-	N/A	2,805,046	9.5%
<b>Large Cap Value</b>				
Aristotle Capital Management	-	N/A	2,798,627	9.5%
<b>Mid Cap Core</b>				
iShares Russell Mid-Cap ETF	IWR	23,956	1,862,100	6.3%
<b>Small Cap Core</b>				
GW&K Investment Management SCC	-	N/A	1,104,474	3.8%
Vanguard Small Cap ETF	VB	3,667	782,281	2.7%
<b>Global Infrastructure</b>				
Lazard Global Listed Infrastructure Portfolio Fund	GLIFX	35,608	544,091	1.8%
<b>Total International</b>				
Federated International Equity Fund	PEIRX	84,302	2,002,178	6.8%
Seafarer Overseas Growth & Income Inst	SIGIX	99,739	1,264,687	4.3%
Vanguard FTSE All World Ex-US Index Fund ETF	VEU	5,071	284,686	1.0%
<b>Total Equity</b>			<b>19,167,310</b>	<b>65.1%</b>

# Portfolio Holdings (Continued)

Cleveland Public Library

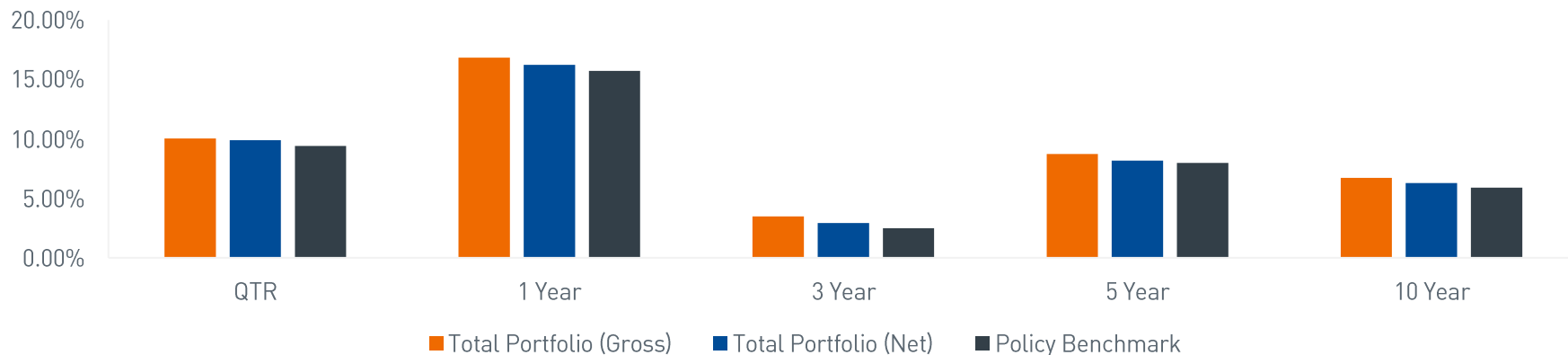
As of December 31, 2023

Description	Ticker	Units	Market Value (\$)	% of Market Value
<b>Fixed Income</b>				
Dodge & Cox Income Fund	DODIX	289,800	3,657,282	12.4%
iShares Core US Aggregate Bond ETF	AGG	35,017	3,475,437	11.8%
<b>Total Fixed Income</b>			<b>7,132,857</b>	<b>24.2%</b>
<b>Alternatives</b>				
Goldman Sachs Absolute Return Fund R6	GARUX	167,445	1,573,981	5.3%
<b>Total Alternatives</b>			<b>1,573,981</b>	<b>5.3%</b>
<b>Cash Equivalents</b>				
Cash Equivalents	-	1,549,624	1,549,624	5.3%
<b>Total Cash Equivalents</b>			<b>1,549,624</b>	<b>5.3%</b>
<b>Total Portfolio</b>			<b>29,423,772</b>	<b>100.0%</b>

# Investment Performance

# Total Portfolio Performance

Cleveland Public Library  
As of December 31, 2023



Description	QTR	1 Year	3 Year	5 Year	10 Year
<b>Total Portfolio (Net)</b>	<b>9.90%</b>	<b>16.22%</b>	<b>2.93%</b>	<b>8.19%</b>	<b>6.29%</b>
<b>Total Portfolio (Gross)</b>	<b>10.04%</b>	<b>16.83%</b>	<b>3.49%</b>	<b>8.74%</b>	<b>6.72%</b>
<i>Policy Benchmark*</i>	9.42%	15.71%	2.50%	7.99%	5.90%
<i>Allocation Benchmark*</i>	9.24%	15.38%	3.60%	8.64%	6.79%
<b>Total Equity</b>	<b>12.47%</b>	<b>22.03%</b>	<b>5.26%</b>	<b>12.40%</b>	<b>9.28%</b>
<i>MSCI ACWI Net</i>	11.03%	22.20%	5.75%	11.72%	7.93%
<i>Russell 3000</i>	12.07%	25.96%	8.54%	15.16%	11.48%
<b>Total Fixed Income</b>	<b>7.04%</b>	<b>6.71%</b>	<b>-0.66%</b>	<b>1.99%</b>	<b>1.85%</b>
<i>Bloomberg US Aggregate</i>	6.82%	5.53%	-3.31%	1.10%	1.81%
<i>Fixed Income Allocation Benchmark*</i>	6.82%	5.54%	-2.37%	1.75%	2.07%
<b>Total Alternatives</b>	<b>4.40%</b>	<b>10.75%</b>	<b>3.43%</b>	<b>2.78%</b>	-
<i>HFRX Global Hedge</i>	1.70%	3.10%	0.71%	3.46%	-

\*See Appendix – Policy Benchmark Composition for description of benchmarks.

Total Portfolio (Gross) shows performance gross of advisory fees and separately managed account (SMA) fees. Total Portfolio (Net) shows performance net of advisory fees, transaction costs, and all manager fees. Performance reflects reinvestment of dividends, interest and capital gain distributions and rebalancing. Indices are unmanaged, are not available for direct investment, and are not subject to management fees, transaction costs or other types of expenses that an account may incur. Past performance is not guarantee of future results.

# Manager Performance

Cleveland Public Library

As of December 31, 2023



Description	QTR	1 Year	3 Year	5 Year	10 Year	Inception Date
<b>Large Cap Core</b>	<b>11.67%</b>	<b>26.29%</b>	<b>10.01%</b>	<b>15.48%</b>	<b>11.96%</b>	
<b>iShares Core S&amp;P 500 ETF</b>	<b>11.67%</b>	<b>26.29%</b>	<b>10.01%</b>	<b>15.62%</b>	-	<b>11/2016</b>
<i>S&amp;P 500 TR</i>	11.69%	26.29%	10.00%	15.69%	-	
<b>Large Cap Growth</b>	<b>16.24%</b>	<b>41.33%</b>	<b>2.07%</b>	-	-	
<b>Edgewood Management</b>	<b>16.24%</b>	<b>41.33%</b>	<b>2.07%</b>	-	-	<b>9/2019</b>
<i>Russell 1000 Growth</i>	14.16%	42.68%	8.86%	-	-	
<b>Large Cap Value</b>	<b>14.11%</b>	<b>20.56%</b>	<b>8.21%</b>	-	-	
<b>Aristotle Capital Management</b>	<b>14.11%</b>	<b>20.56%</b>	<b>8.21%</b>	-	-	<b>9/2019</b>
<i>Russell 1000 Value</i>	9.50%	11.46%	8.86%	-	-	
<b>Mid Cap Core</b>	<b>12.74%</b>	<b>17.02%</b>	<b>5.74%</b>	<b>12.46%</b>	<b>9.25%</b>	
<b>iShares Russell Mid-Cap ETF</b>	<b>12.74%</b>	<b>17.02%</b>	<b>5.74%</b>	<b>12.46%</b>	<b>9.25%</b>	<b>1/2013</b>
<i>Russell Midcap</i>	12.82%	17.23%	5.92%	12.68%	9.42%	
<b>Small Cap Core</b>	<b>11.64%</b>	<b>12.44%</b>	<b>4.03%</b>	<b>11.64%</b>	<b>7.26%</b>	
<b>Vanguard Small Cap ETF</b>	<b>13.39%</b>	<b>18.21%</b>	<b>4.61%</b>	<b>11.67%</b>	-	<b>6/2017</b>
<i>Russell 2000</i>	14.03%	16.93%	2.22%	9.97%	-	
<b>GW&amp;K Investment Management SCC</b>	<b>10.43%</b>	<b>8.47%</b>	<b>3.72%</b>	-	-	<b>9/2019</b>
<i>Russell 2000</i>	14.03%	16.93%	2.22%	-	-	
<b>Total International</b>	<b>10.25%</b>	<b>14.66%</b>	<b>-0.61%</b>	<b>7.53%</b>	<b>4.55%</b>	
<b>Federated International Equity Fund</b>	<b>11.49%</b>	<b>14.62%</b>	<b>-1.30%</b>	<b>7.50%</b>	<b>4.89%</b>	<b>8/1997</b>
<i>MSCI ACWI Ex US Net</i>	9.75%	15.62%	1.55%	7.08%	3.83%	
<b>Vanguard FTSE All World Ex-US Index Fund ETF</b>	<b>9.88%</b>	<b>15.87%</b>	<b>1.92%</b>	<b>7.44%</b>	-	<b>7/2017</b>
<i>MSCI ACWI Ex US Net</i>	9.75%	15.62%	1.55%	7.08%	-	
<b>Seafarer Overseas Growth &amp; Income Inst</b>	<b>8.43%</b>	<b>14.31%</b>	<b>-0.47%</b>	<b>8.22%</b>	-	<b>12/2016</b>
<i>MSCI Emerging Market Net</i>	7.86%	9.83%	-5.08%	3.68%	-	

Performance is shown gross of advisory fees and separately managed account (SMA) fees. The effect of advisory fees on the portfolio could be material. If these fees were reflected, returns would be lower. Indices are unmanaged, are not available for direct investment, and are not subject to management fees, transaction costs or other types of expenses that an account may incur. Past performance is not guarantee of future results.



# Manager Performance (Continued)

Cleveland Public Library

As of December 31, 2023

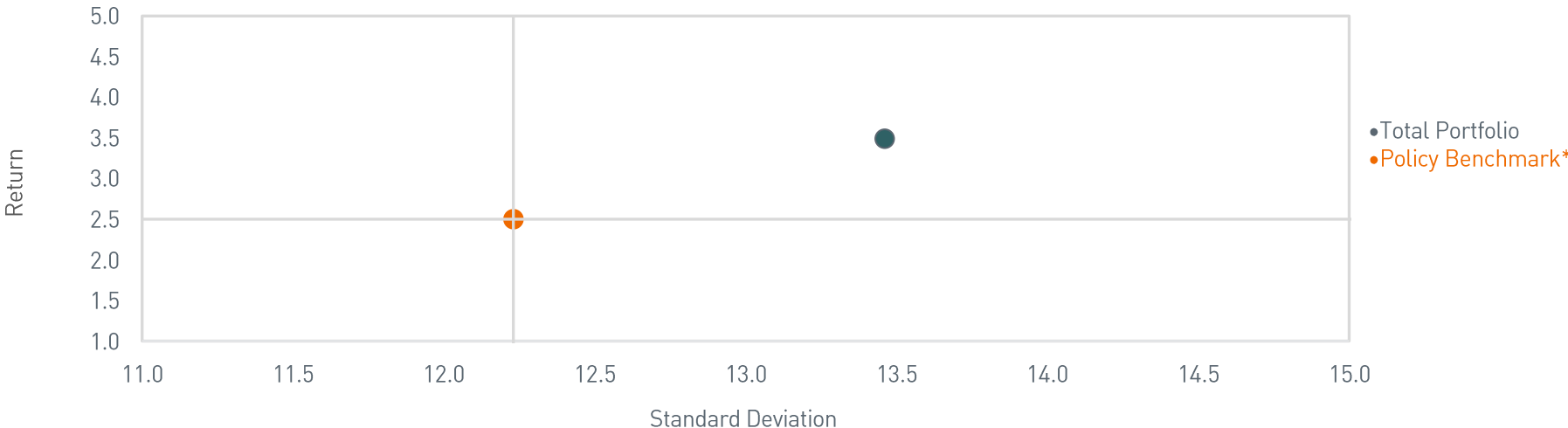


Description	QTR	1 Year	3 Year	5 Year	10 Year	Inception Date
<b>Global Infrastructure</b>	<b>10.41%</b>	<b>10.89%</b>	<b>9.48%</b>	-	-	
<b>Lazard Global Listed Infrastructure Portfolio</b>	<b>10.41%</b>	<b>10.89%</b>	<b>9.48%</b>	-	-	<b>6/2019</b>
<i>S&amp;P Global Infrastructure Index Net</i>	10.71%	5.78%	5.16%	-	-	
<b>Fixed Income</b>	<b>7.04%</b>	<b>6.71%</b>	<b>-0.66%</b>	<b>1.99%</b>	<b>1.85%</b>	
<b>Dodge &amp; Cox Income Fund</b>	<b>7.32%</b>	<b>7.70%</b>	<b>-1.66%</b>	<b>2.70%</b>	-	<b>3/2018</b>
<i>Bloomberg US Aggregate</i>	6.82%	5.53%	-3.31%	1.10%	1.81%	
<b>iShares Core US Aggregate Bond ETF</b>	<b>6.75%</b>	-	-	-	-	<b>5/2023</b>
<i>Bloomberg US Aggregate</i>	6.82%	-	-	-	-	
<b>Total Alternatives</b>	<b>4.40%</b>	<b>10.75%</b>	<b>3.43%</b>	<b>2.78%</b>	-	
<b>Goldman Sachs Absolute Return Fund R6</b>	<b>4.40%</b>	<b>10.75%</b>	<b>3.43%</b>	<b>4.92%</b>	-	<b>10/2018</b>
<i>HFRX Global Hedge</i>	1.70%	3.10%	0.71%	3.46%	-	
<b>Total Cash Equivalents</b>	<b>1.33%</b>	<b>4.65%</b>	<b>2.18%</b>	<b>1.79%</b>	<b>1.13%</b>	
<b>Cash Equivalents</b>	<b>1.33%</b>	<b>4.65%</b>	<b>2.18%</b>	<b>1.79%</b>	<b>1.13%</b>	
<i>Bloomberg US Treasury Bill 1-3 Month Blend</i>	1.38%	5.17%	2.22%	1.89%	1.25%	

Performance is shown gross of advisory fees and separately managed account (SMA) fees. The effect of advisory fees on the portfolio could be material. If these fees were reflected, returns would be lower. Indices are unmanaged, are not available for direct investment, and are not subject to management fees, transaction costs or other types of expenses that an account may incur. Past performance is not guarantee of future results.

# Risk Return Analysis (3 Year)

Cleveland Public Library  
As of December 31, 2023



Description	Total Portfolio	Policy Benchmark *
Return	3.49	2.50
Standard Deviation	13.46	12.23
Beta	1.09	-
Alpha	1.04	-
Sharpe Ratio	0.09	0.02

\*See Appendix - Policy Benchmark Composition, for description of Benchmarks.  
Reference Appendix for glossary.

Total Portfolio (Gross) shows performance gross of advisory fees and separately managed account (SMA) fees. Performance reflects reinvestment of dividends, interest and capital gain distributions and rebalancing. Indices are unmanaged, are not available for direct investment, and are not subject to management fees, transaction costs or other types of expenses that an account may incur. Past performance is not guarantee of future results.



# Thank you for your business.

How can we better serve your needs?

# Appendix

# Benchmark Composition

Cleveland Public Library

As of December 31, 2023

## Total Portfolio

### Policy Benchmark

July 2016	%
MSCI ACWI Gross	60.00
Bloomberg US Aggregate	40.00

April 2014	%
MSCI ACWI Gross	60.00
Bloomberg Int Govt/Cr	40.00

January 1991	%
S&P 500 TR	60.00
Bloomberg Int Govt/Cr	40.00

### Secondary Benchmark

December 2023	%
S&P 500 TR	19.54
Russell 2000	6.10
Russell 1000 Value	9.40
Russell 1000 Growth	9.41
Russell Midcap	6.18
MSCI Emerging Market Net	4.27
S&P Global Infrastructure Index Net	1.89
Bloomberg Mortgage	0.00
Bloomberg US Aggregate	24.56
HFRX Global Hedge	5.49
MSCI ACWI Ex US Net	7.81
Bloomberg US Treasury Bill 1-3 Mon	5.36

Indices are unmanaged, are not available for direct investment, and are not subject to management fees, transaction costs or other types of expenses that an account may incur. Indices performance results do not represent, and are not necessarily indicative of, the results that may be achieved in accounts investing in the corresponding investment strategy; actual account returns may vary significantly.

For definitions of Indices/Benchmarks used in this presentation, please refer to [www.pnc.com/indexdefinitions](http://www.pnc.com/indexdefinitions).

# Benchmark Composition

Cleveland Public Library

As of December 31, 2023



**Equity:**

<b>MSCI ACWI Net - December 2023</b>	%
MSCI ACWI Net	100.00

**Fixed Income:**

<b>Bloomberg US Aggregate - December 2023</b>	%
Bloomberg US Aggregate	100.00

<b>Blended Fixed Index - December 2023</b>	%
Bloomberg US Aggregate	100.00

**Alternatives:**

<b>HFRX Global Hedge - December 2023</b>	%
HFRX Global Hedge	100.00

*Indices are unmanaged, are not available for direct investment, and are not subject to management fees, transaction costs or other types of expenses that an account may incur. Indices performance results do not represent, and are not necessarily indicative of, the results that may be achieved in accounts investing in the corresponding investment strategy; actual account returns may vary significantly.*

For definitions of Indices/Benchmarks used in this presentation, please refer to [www.pnc.com/indexdefinitions](http://www.pnc.com/indexdefinitions).

**Standard Deviation:** Standard deviation indicates the historic volatility of an investment by measuring the spread of its returns around its average. The standard deviation is the square root of the variance, which is the weighted average squared deviation from the expected return

**Beta:** The average performance volatility relative to a market representative benchmark. This statistic captures the sensitivity of a stock's return compared to that of the market. A beta greater than 1.00 means that the fund is has greater systematic risk than the benchmark against which it is being compared. A beta less than 1.00 means that the fund has less systematic risk.

**Alpha:** The excess return of the selected model an investment relative to the return of the selected benchmark.

**R-Squared:** The portion of a fund's volatility that can be attributed to market volatility. For example, a portfolio or segment that has an R-squared of 1 behaves exactly like the market benchmark to which it is being compared. A portfolio or segment with an R-squared of 0.75 has three-fourths of its performance variation correlated with overall market movement and one-fourth of its variation unrelated to market movements.

**Sharpe Ratio:** Measures the performance of an investment relative to risk by dividing its return in excess of model benchmark 2's rate of return by the sector's standard deviation. The higher the Sharpe Ratio, the better the return relative to risk.

**Treynor Ratio:** Measures the performance relative to risk by dividing the return of the selected model sector in excess of the risk free rate, by the sector's Beta. The higher the Treynor Ratio, the better the return relative to risk.

**Tracking Error:** Measures how closely a portfolio's returns track those of a benchmark. Represents the standard deviation, or variability, of a portfolio's excess returns relative to the benchmark.

**Information Ratio:** The information ratio compares the average excess return of the portfolio over its associated benchmark divided by the tracking error.

**Downside Deviation:** The deviation of returns that fall below a minimum acceptable return (MAR).

**Downside Standard Deviation:** The deviation of returns that fall below the mean return.

**Sortino Ratio:** Measures return contribution per unit of downside risk, The Sortino ratio is similar to the Sharpe ratio, except it uses downside deviation for the denominator instead of standard deviation.

**Upside / Downside Capture:** The upside capture ratio reflects how a portfolio compares to the selected model benchmark during periods when the benchmark is up; the downside capture ratio reflects how a portfolio compares to a benchmark during periods when the benchmark is down.

**Batting Average:** Shows how consistently the portfolio return met or beat the market.

**Annualized Excess Return:** Shows the difference between the annualized linked returns of a portfolio and the model benchmark.

**Cumulative Excess Return:** Shows the difference between the cumulative linked returns of a portfolio and the model benchmark.

**Turnover:** Indicates how frequently assets are bought and sold within a portfolio.

**M-Squared:** The hypothetical return of the portfolio after its risk has been adjusted to match a benchmark.

**Residual Risk:** The amount of risk specific to the assets in a portfolio distinct from the market, represented by a benchmark.

This presentation is for informational purposes only and is intended to be used as a basis for further discussions with PNC Bank, National Association (“PNC Bank”) investment professionals and your legal, accounting and other financial advisors. Nothing in this presentation is or should be construed as an offer or recommendation to buy or sell any security or adopt any particular investment asset allocation or strategy. Diversification does not assure a profit nor protect against loss. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.

All data, facts, assumptions, opinions and analysis provided herein are as of the date of this presentation (or other stated date) and are subject to change without notice. PNC Bank assumes no responsibility to review or update this presentation or any data, facts, assumptions, opinions, analysis or other information provided herein.

This presentation was prepared using proprietary and third party data and software. PNC Bank makes no representation or warranty of any kind, express or implied, regarding the timeliness, accuracy or completeness of such data and assumes no liability for damages resulting from or arising out of the use of such data or software. All such data is provided on an “as is” basis. PNC Bank assumes no obligation to verify or update such data. The imprecision of such data, malfunctions of software or other technology and programming inaccuracies could compromise the accuracy of this report.

**Returns and other measures of performance in this presentation represent past performance. Past performance is no guarantee of future results, and investments may lose money.**

The PNC Financial Services Group, Inc. (“PNC”) uses the marketing name PNC Institutional Asset Management® for the various discretionary and non-discretionary institutional investment, trustee, custody, consulting, and related services provided by PNC Bank, National Association (“PNC Bank”), which is a Member FDIC, and investment management activities conducted by PNC Capital Advisors, LLC, an SEC-registered investment adviser and wholly-owned subsidiary of PNC Bank.

PNC does not provide legal, tax, or accounting advice unless, with respect to tax advice, PNC Bank has entered into a written tax services agreement. PNC Bank is not registered as a municipal advisor under the Dodd-Frank Wall Street Reform and Consumer Protection Act.

“PNC Institutional Asset Management” is a registered mark of The PNC Financial Services Group, Inc.

**Investments: Not FDIC Insured. No Bank Guarantee. May Lose Value.**

©2023 The PNC Financial Services Group, Inc. All rights reserved.



# Factsheets – Cleveland Public Library

## Aristotle Value Equity

## Strategy Overview

Investment Type	Separate Account
Morningstar Category	US SA Large Value
Benchmark	Russell 1000 Value TR USD
Sub-Style	Traditional Value

## Strategy Facts

# of Stock Holdings	42
Top 10 Holdings (%)	32
Turnover Ratio (%)	6
Inception Date	1/31/2001

## Operations

Firm Name	Aristotle Capital Managem
Vehicle Assets (Mil)	\$ 28,090
Investment Minimum	\$ 100,000
Management Fee	0.30%

## PNC Investment Advisor Research

AMG Status **Approved**

Platform Add Date 5/18/2007

Status Change Date

## Investment Philosophy/Process

Aristotle's approach to value investing begins with quality, emphasizing businesses with proven management teams and sustainable competitive advantages. Companies are analyzed from a global perspective in an effort to deepen the team's knowledge of a business as well as its global competitors, suppliers, and customers and to drive idea generation. Valuation is assessed through the lens of a business owner. Normalized financial statements are built that seek to smooth out the impacts of cyclical, accounting decisions, and capital allocation strategies. Catalysts are identified and act as yardsticks to measure the realization of the investment thesis. Quality, compelling valuation and catalysts for value creation are equally important when considering inclusion in the portfolio.

## Setting Expectations

Aristotle's philosophy emphasizes quality and value, while taking a long-term investment horizon. The team focuses on intrinsic value, which incorporates more notions of growth and quality than traditional low multiple / mean reversion approaches. The resulting portfolio tends to be more expensive than the Russell 1000® Value Index and modestly higher quality. In combination with Aristotle's long-term investment horizon and relatively concentrated portfolio, our expectation is for returns to be primarily driven by idiosyncratic outcomes (i.e., stock selection). Given the team's definition of value, the strategy is likely to face headwinds when cheap / low expectations stocks are in favor.

## Performance &amp; Peer Group Rankings

	QTR	%	YTD	%	1Yr	%	3Yr	%	5Yr	%	10Yr	%
Aristotle Value Equity	14.43	2	20.59	11	20.59	11	9.04	74	14.82	13	11.82	4
Russell 1000 Value TR U:	9.50	58	11.46	56	11.46	56	8.86	76	10.91	78	8.40	79
50th Percentile	9.80		12.37		12.37		10.31		12.30		9.38	

## Calendar Year Performance

	2023	%	2022	%	2021	%	2020	%	2019	%	2018	%
Aristotle Value Equity	20.59	11	-14.58	95	25.87	62	15.29	4	33.50	5	-8.25	67
Russell 1000 Value TR U:	11.46	56	-7.54	69	25.16	68	2.80	65	26.54	48	-8.27	67
50th Percentile	12.37		-5.16		26.93		4.58		26.34		-6.92	

## Attribution

## Relative Weights

Time Period: 10/1/2023 to 12/31/2023

Communication Services	-4.8
Consumer Discretionary	2.5
Consumer Staples	0.0
Energy	-4.3
Financials	-5.6
Health Care	-3.6
Industrials	-2.0
Information Technology	9.0
Materials	5.6
Real Estate	-1.2
Utilities	-0.3

## Active Return

Time Period: 10/1/2023 to 12/31/2023

	-0.1
	0.8
	0.1
	1.2
	0.1
	0.3
	0.5
	1.5
	0.3
	0.0
	0.1

## Contributors - Average Weights

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
Lennar Corp Class A	3.0	0.2	1.05
Capital One Financial Corp	2.4	0.2	0.87
Microsoft Corp	4.4	0.0	0.83
Qualcomm Inc	2.3	0.1	0.72
Martin Marietta Materials Inc	3.1	0.1	0.69

## Detractors - Average Weights

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
Corteva Inc	3.0	0.2	-0.20
Coterra Energy Inc Ordinary Shares	2.4	0.1	-0.13
Constellation Brands Inc Class A	1.9	0.2	-0.07
Veralto Corp	0.0	0.1	0.00
U.S. Bancorp	0.0	0.3	0.00

## Performance Analysis

The strategy outperformed the Russell 1000® Value Index by approximately 495 basis points (bps) during the quarter, placing it roughly 915 bps ahead of the benchmark for the year. For the quarter, the strategy added value in each month. A bias toward higher beta and more expensive stocks contributed, while a higher quality bias and underweight to non-earners detracted. Active sector/industry positioning contributed, particularly an underweight to Energy and overweight to Information Technology. Stock selection results were broadly positive, with nearly two-thirds of holdings contributing. Year to date, the strategy added value in three-quarters of months, with April being the only instance of material shortfall. Impact from the portfolio's stylistic attributes netted out, with tailwinds from tilts to higher beta and more expensive stocks offset by a higher quality bias, limited exposure to non-earners, and underweight to the highest volatility stocks. Active sector/industry positioning was a tailwind, driven by overweights to software and household durables. At the stock level, just over half of holdings contributed. Positions in Adobe (ADBE), Microsoft (MSFT), and Parker-Hannifin (PH) were notable contributors, while not owning Meta (META) and a position in Corteva (CTVA) were the biggest detractors.

## IAR's Take

Aristotle's recent performance is generally within IAR's expectations. The strategy performed well throughout much of the year, reflecting a shift in investor preferences since 2022. An overweight to software was a meaningful tailwind and, given the Aristotle's low turnover approach, a number of its biggest detractors in 2022 were top contributors in 2023. Positions in Adobe (ADBE) and Microsoft (MSFT) reflected this best. That said, contribution was broad based and there were seven positions that contributed more than 100 basis points (bps). Only one holding detracted by a similar magnitude, thus the portfolio benefited from a positive skew.

**Aristotle Value Equity**

**Top 10 Holdings - Ending Weights**

Portfolio Date: 12/31/2023

	Port Weight
Microsoft Corp	4.3
Adobe Inc	3.8
Parker Hannifin Corp	3.5
Lennar Corp Class A	3.4
Martin Marietta Materials Inc	3.2
Ameriprise Financial Inc	3.0
Microchip Technology Inc	3.0
Ansys Inc	2.8
Corteva Inc	2.8
Amgen Inc	2.6

**Portfolio Characteristics**

Calculation Benchmark: Russell 1000 Value TR USD

	Port	Index
WtgAvg MktCap (\$B)	174,810	137,815
Dividend Yield	2.13	2.40
Price/Earnings	16.6	14.7
Price/Book	2.6	2.1
Price/Cash Flow	9.2	9.7
Price/Sales	2.1	1.6
5 Yr EPS Growth	18.5	17.5
Return on Equity	20.9	16.0
Debt/Capital	39.7	40.6
Active Share (Avg)	91	

**Risk/Reward vs. Benchmark**

Calculation Benchmark: Russell 1000 Value TR USD

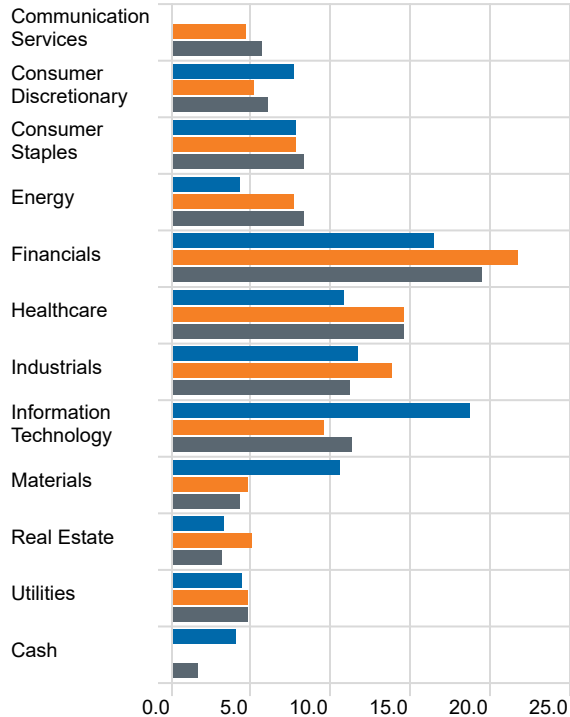
	3YR	5YR	10YR
Standard Deviation	17.70	19.04	15.76
Sharpe Ratio	0.44	0.72	0.71
Information Ratio	0.04	0.85	0.85
R2	92	94	93
Beta	1.01	0.98	0.99
Alpha	0.24	3.76	3.27
Tracking Error	4.89	4.58	4.05
Up Capture Ratio	100	104	107
Down Capture Ratio	99	91	91
Batting Average	53	65	61

**Manager Biographies**

Howard Gleicher

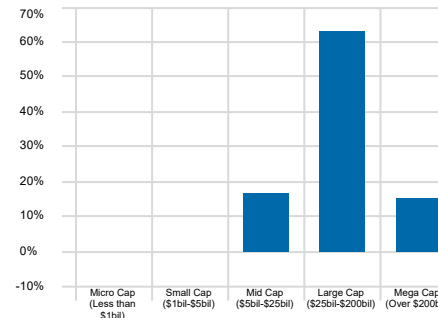
Howard serves as the portfolio manager since December 2012. Mr. Gleicher is Chief Executive Officer and Chief Investment Officer of Aristotle. Mr. Gleicher joined Aristotle in 2010. Prior to Aristotle, Mr. Gleicher was co-founder, Chief Executive Officer and Chief Investment Officer at Metropolitan West Capital Management, LLC (1997-2010). Mr. Gleicher serving as a Principal, Portfolio Manager and Investment Policy Committee member at Palley-Needelman Asset Management, Inc. (1988-1997), and as an Equity Portfolio Manager at Pacific Investment Management Company (PIMCO).

**GICS Sector Exposure**



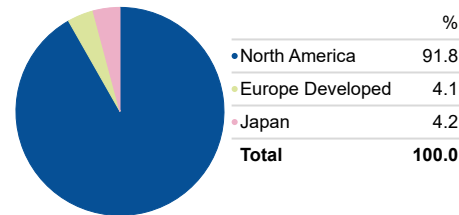
■ Aristotle Value Equity  
 ■ Russell 1000 Value TR USD  
 ■ US SA Large Value

**Market Cap Exposure**



**Equity Regional Exposure**

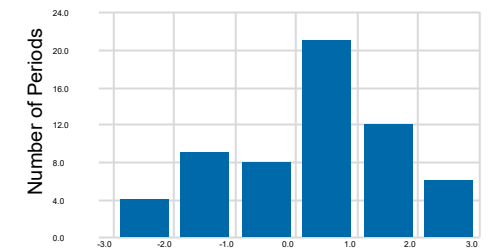
Portfolio Date: 12/31/2023



**Excess Return Distribution**

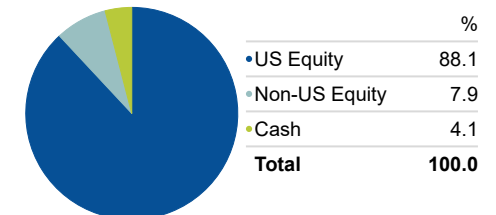
Time Period: 1/1/2019 to 12/31/2023

Calculation Benchmark: Russell 1000 Value TR USD



**Asset Allocation**

Portfolio Date: 12/31/2023



## Edgewood Mgt Lg-Cap Gr

## Strategy Overview

Investment Type	Separate Account
Morningstar Category	US SA Large Growth
Benchmark	Russell 1000 Growth TR USD
Sub-Style	Traditional Growth

## Strategy Facts

# of Stock Holdings	21
Top 10 Holdings (%)	58
Turnover Ratio (%)	24
Inception Date	1/2/1987

## Operations

Firm Name	Edgewood Management L
Vehicle Assets (Mil)	\$ 35,343
Investment Minimum	\$ 1,000,000
Management Fee	1.00%

## PNC Investment Advisor Research

AMG Status **Approved**

Platform Add Date 3/30/2016

Status Change Date

## Investment Philosophy/Process

Edgewood believes earnings growth drives stock prices over the long term and that a concentrated, best ideas portfolio (22 stocks) is the most effective way to produce superior and sustainable long-term results. The portfolio is broken into three buckets based on estimated long-term earnings-per-share (EPS) growth (10-15%; 16-20%; 21%+). Edgewood attempts to keep these buckets equally weighted, each comprising approximately 33% of the portfolio. Individual positions sizes range from 2-8%, with the largest generally representing what Edgewood perceives as the greatest discounts to present value with the biggest upside potential.

## Setting Expectations

By virtue of its highly concentrated nature, the impact of individual stock selection is expected to be significant and has the potential to overwhelm any volatility-reducing benefit derived from having exposure to companies with differing growth profiles. Although the growth buckets are equally weighted, the risk profiles of the bucket constituents can vary with the highest growth bucket names potentially contributing more volatility to the overall portfolio than its lower growth, perhaps more stable holdings. Historically the portfolio has performed best in environments where growth outperforms value and lagged when the opposite is the case.

## Performance &amp; Peer Group Rankings

	QTR	%	YTD	%	1Yr	%	3Yr	%	5Yr	%	10Yr	%
Edgewood Mgt Lg-Cap Gi	16.20	11	41.01	32	41.01	32	2.05	85	15.66	65	14.66	16
Russell 1000 Growth TR I	14.16	40	42.68	25	42.68	25	8.86	27	19.50	12	14.86	11
50th Percentile	13.72		35.75		35.75		6.80		16.67		12.88	

## Calendar Year Performance

	2023	%	2022	%	2021	%	2020	%	2019	%	2018	%
Edgewood Mgt Lg-Cap Gi	41.01	32	-39.66	95	24.91	45	43.82	20	35.39	36	3.57	13
Russell 1000 Growth TR I	42.68	25	-29.14	59	27.60	28	38.49	32	36.39	28	-1.51	57
50th Percentile	35.75		-27.43		24.43		33.41		33.91		-0.73	

## Attribution

## Relative Weights

Time Period: 10/1/2023 to 12/31/2023

Communication Services	-5.2
Consumer Discretionary	0.4
Consumer Staples	-0.6
Energy	-0.6
Financials	11.1
Health Care	6.0
Industrials	-5.9
Information Technology	-7.9
Materials	-0.7
Real Estate	1.0
Utilities	0.0

## Active Return

Time Period: 10/1/2023 to 12/31/2023

Communication Services	1.2
Consumer Discretionary	0.8
Consumer Staples	-0.4
Energy	0.1
Financials	0.7
Health Care	-1.0
Industrials	0.1
Information Technology	0.8
Materials	0.0
Real Estate	0.3
Utilities	0.0

## Contributors - Average Weights

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
Netflix Inc	6.2	0.9	1.69
ServiceNow Inc	6.0	0.6	1.53
Intuit Inc	6.1	0.7	1.41
ASML Holding NV ADR	4.8	0.0	1.36
Lululemon Athletica Inc	3.9	0.2	1.26

## Detractors - Average Weights

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
Align Technology Inc	2.1	0.1	-0.29
Airbnb Inc Ordinary Shares - Class A	4.1	0.2	-0.04
Uber Technologies Inc	0.0	0.4	0.00
Illumina Inc	2.5	0.0	0.04
The Estee Lauder Companies Inc Class A	3.7	0.0	0.07

## Performance Analysis

The strategy outperformed the Russell 1000® Growth Index by approximately 205 basis points (bps) during the quarter, yet it was roughly 165 bps behind the benchmark for the year. In the quarter, the impact of sector positioning was neutral, while the favorable industry positioning explained the majority of relative outperformance. Overweights to entertainment and textiles, apparel and luxury goods industries were the greatest sources of strength. Most portfolio holdings added value during the quarter with Netflix (NFLX) and ASML Holdings (ASML) among the greatest contributors. Positions in Align Technologies (ALGN) and Airbnb (ABNB) detracted most. For the full year, an overweight to companies with the highest forecasted earnings growth posed a significant factor tailwind. Sector positioning detracted led by an overweight to the lagging Health Care sector and underweight to the market-leading Information Technology sector. An underweight to Industrials offset some of the weakness. Portfolio breadth was weak with just over one-third of holdings adding value and skew was strongly negative. A position in Estee Lauder (EL) was the largest individual detractor, costing the portfolio more than 500 bps. Positions in Illumina (ILMN) and Danaher (DHR) were also sources of weakness. On the positive side, a position in Nvidia (NVDA) added roughly 475 bps.

## IAR's Take

Edgewood's relative performance in recent periods is within Investment Advisor Research's (IAR) expectations. Given the prevailing factor tailwinds favoring companies with high forecasted earnings growth, Edgewood's three-bucket framework has largely functioned as designed, in IAR's opinion; the high growth, high valuation "bucket three" positions were the greatest sources of strength, while the lower growth "bucket one" positions lagged. Given the portfolio's concentrated nature, the impact of individual positions can be significant, and this has been on display thus far in 2023 with NVIDIA (NVDA) to the upside and Estee Lauder (EL) to the downside. IAR continues to have conviction in the Edgewood team; however, we acknowledge how difficult the large-cap growth space has been for active management over the short and long term.

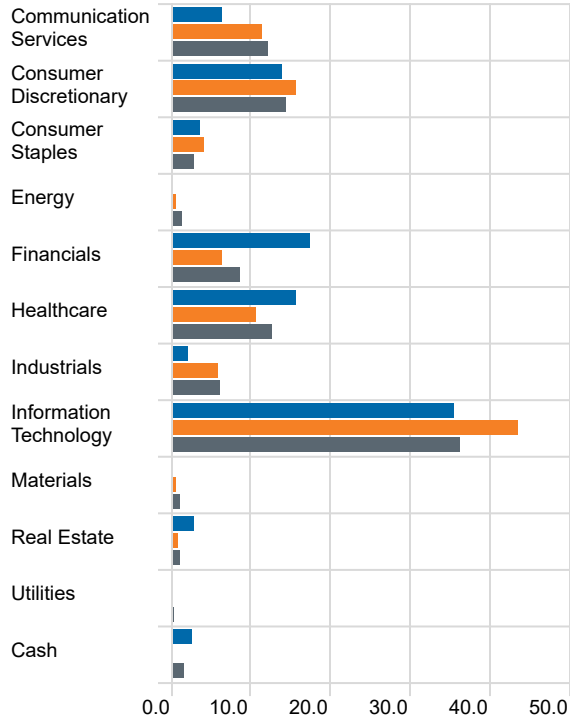
Edgewood Mgt Lg-Cap Gr

Top 10 Holdings - Ending Weights

Portfolio Date: 12/31/2023

	Port Weight
NVIDIA Corp	6.7
Intuit Inc	6.4
Visa Inc Class A	6.4
Netflix Inc	6.4
ServiceNow Inc	6.2
Adobe Inc	5.7
Microsoft Corp	5.3
Intuitive Surgical Inc	5.1
ASML Holding NV ADR	5.1
Airbnb Inc Ordinary Shares - Class A	4.9

GICS Sector Exposure



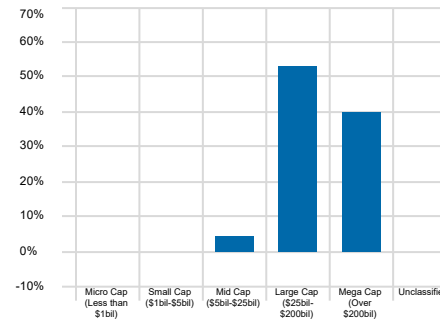
■ Edgewood Mgt Lg-Cap Gr  
 ■ Russell 1000 Growth TR USD  
 ■ US SA Large Growth

Portfolio Characteristics

Calculation Benchmark: Russell 1000 Growth TR USD

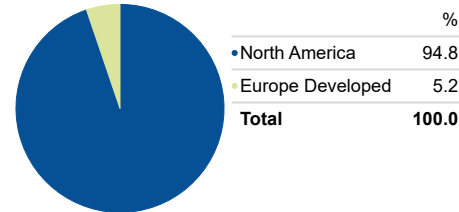
	Port	Index
WtgAvg MktCap (\$B)	342,468	967,314
Dividend Yield	0.64	0.79
Price/Earnings	33.7	26.0
Price/Book	8.5	8.1
Price/Cash Flow	28.2	18.7
Price/Sales	7.7	3.8
5 Yr EPS Growth	19.3	21.4
Return on Equity	26.3	30.1
Debt/Capital	33.0	41.1
Active Share (Avg)	80	

Market Cap Exposure



Equity Regional Exposure

Portfolio Date: 12/31/2023



Risk/Reward vs. Benchmark

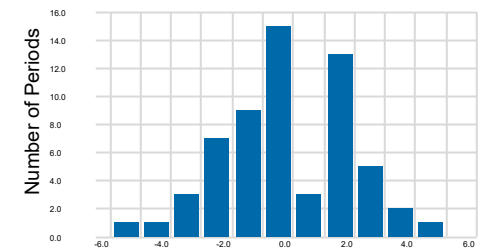
Calculation Benchmark: Russell 1000 Growth TR USD

	3YR	5YR	10YR
Standard Deviation	24.97	22.66	18.62
Sharpe Ratio	0.11	0.67	0.76
Information Ratio	-0.82	-0.53	-0.03
R2	90	90	89
Beta	1.14	1.03	1.03
Alpha	-6.67	-3.45	-0.34
Tracking Error	8.26	7.23	6.30
Up Capture Ratio	100	96	102
Down Capture Ratio	124	107	105
Batting Average	39	40	48

Excess Return Distribution

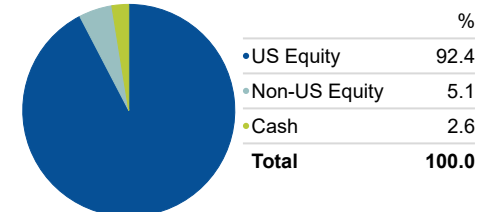
Time Period: 1/1/2019 to 12/31/2023

Calculation Benchmark: Russell 1000 Growth TR USD



Asset Allocation

Portfolio Date: 12/31/2023



Manager Biographies

**Alan W. Breed**  
 Alan Breed joined Edgewood Management in 1994 from First Boston Corporation where he was a vice-president in the institutional equity department and a member of the firm's stock selection committee. Alan graduated from Northwestern University's Kellogg School of Management with an MBA. He completed his undergraduate work at Emory University.

**Lawrence G. Creel**  
 Larry Creel joined Edgewood Management in 1997. Prior to joining Edgewood he spent 12 years at Donaldson Lufkin and Jenrette, a New York based investment bank. He is a graduate of Lake Forest College and attended the New York University Stern School of Business.

**Alexander M. Farman-Farmaian**  
 Alex Farman-Farmaian joined Edgewood Management in January 2006. Prior to that he was at W.P. Stewart & Co. for 19 years. Alex received a B.A. in Economics from Princeton University.

**Peter H. Jennison**  
 Peter Jennison joined Edgewood Management in January 2006. Prior to joining Edgewood Peter was at W.P. Stewart & Co. for 16 years. He was educated at Babson College and Columbia University.

**Kevin R. Seth**  
 Kevin Seth joined Edgewood Management in 1995 after 9 years at Credit Suisse First Boston. He is a graduate of Montana State University with a BS degree in Economics and Pre-Law.

**Nicholas A. Stephens**  
 Nick joined Edgewood Management in 1984 as an analyst after three years at Coopers & Lybrand as a management consultant. Nick graduated from Bennington College with a BA in Literature and from Columbia University Graduate School of Business with an MBA in Finance.

**Federated Hermes  
International Equity R6  
PEIRX**

**PNC Investment Advisor Research**

**AMG Status**      **Approved**

Platform Add Date    3/17/2010

Status Change Date   9/25/2019

**Investment Philosophy/Process**

Federated International Equity is a core portfolio that blends growth and value by utilizing a dual-manager approach, each receiving 50% of the fund's allocation. The growth component is managed by Federated and attempts to exploit the quality, growth and momentum anomalies. The team employs a two-pronged approach, with their country allocation framework (top-down) and the security selection model (bottom-up). The value component is managed by Polaris Capital Management who focuses on identifying the most undervalued companies based on their future stream of real free cash flow. While the process is mostly bottom-up driven, the team leverages a proprietary global valuation model to identify countries that appear over/undervalued.

**Setting Expectations**

Despite a 50/50 balance between the growth and value sleeves, the fund has historically plotted on the "growthier" side of the core style box, although this has been moderating in recent quarters. The growth sleeve's heightened focus on momentum and growth have traditionally overwhelmed the valuation discount of the value sleeve, pulling the portfolio to the right side of the core style box. As such, the strategy has outperformed in more growth, momentum-led markets. However, recent market movements have shifted the portfolio away from this historic tilt, and as such investors should not be surprised to see the portfolio's performance behave more like a core fund. While short-term market moves may drive relative performance, the fund should be held through the cycle to allow each sleeve of the portfolio to execute on its stated objectives.

**Strategy Overview**

Investment Type	Open-End Fund
Morningstar Category	US Fund Foreign Large Blend
Benchmark	MSCI ACWI Ex USA NR USD
Sub-Style	Core

**Fund Facts**

# of Stock Holdings	59
Top 10 Holdings (%)	61
Turnover Ratio (%)	15
Inception Date	6/8/2018

**Operations**

Advisor	Federated Global Investment Man
Subadvisor	Polaris Capital Management, LLC
Fund Size (mil)	\$ 1,313
Net Expense Ratio	0.90%

**Performance & Peer Group Rankings\***

	QTR	%	YTD	%	1Yr	%	3Yr	%	5Yr	%	10Yr	%
Federated Hermes Intern	11.49	12	14.62	68	14.62	68	-1.30	94	7.50	59	4.90	14
MSCI ACWI Ex USA NR U	9.75	55	15.62	56	15.62	56	1.55	64	7.08	74	3.83	59
50th Percentile	9.95		16.11		16.11		2.27		7.82		3.99	

**Calendar Year Performance\***

	2023	%	2022	%	2021	%	2020	%	2019	%	2018	%
Federated Hermes Intern	14.62	68	-22.37	95	8.07	70	21.81	8	22.57	47	-12.46	14
MSCI ACWI Ex USA NR U	15.62	56	-16.00	52	7.82	72	10.65	47	21.51	62	-14.20	38
50th Percentile	16.11		-15.92		10.27		10.23		22.41		-15.05	

**Attribution**

**Relative Weights**

Time Period: 10/1/2023 to 12/31/2023

Communication Services	1.6
Consumer Discretionary	7.6
Consumer Staples	-1.6
Energy	-1.9
Financials	-7.0
Health Care	0.3
Industrials	0.1
Information Technology	0.4
Materials	1.9
Real Estate	-0.9
Utilities	-3.2

**Active Return**

Time Period: 10/1/2023 to 12/31/2023

Communication Services	0.4
Consumer Discretionary	0.7
Consumer Staples	0.4
Energy	0.2
Financials	0.0
Health Care	-0.3
Industrials	-0.1
Information Technology	0.6
Materials	0.1
Real Estate	0.0
Utilities	-0.1

**Contributors - Average Weights**

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
Lasertec Corp	0.7	0.1	0.40
SK Hynix Inc	1.3	0.2	0.37
ASML Holding NV ADR	1.2	0.0	0.35
Kia Corp	1.1	0.1	0.33
Taylor Wimpey PLC	0.9	0.0	0.32

**Detractors - Average Weights**

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
argenx SE ADR	0.9	0.0	-0.21
Meituan Class B	0.4	0.3	-0.13
3R Petroleum Oleo E Gas SA Ordinary Shares	0.8	0.0	-0.11
Honda Motor Co Ltd	1.3	0.2	-0.11
Resona Holdings Inc	1.0	0.0	-0.09

**Performance Analysis**

Federated Hermes outperformed the MSCI ACWI ex USA Index by 174 basis points (bps) during the fourth quarter, bringing year-to-date (YTD) performance to 100 bps behind the index. International markets rallied in the fourth quarter, gaining 975 bps as measured by the MSCI ACWI ex USA Index. Within international markets, growth stocks outpaced their value counterparts by 270 bps in the quarter but still trailed by 327 bps YTD. Broad-based stock selection drove the fund's excess returns during the fourth quarter. The biggest contribution came from Consumer Discretionary stocks. It is the largest weighted sector in the portfolio and the fund outperformed the index by over 5% within it. Big contributions came from two U.K.-based property developers, Bellway plc (BWI-GB) and Taylor Wimpey plc (TW-GB). YTD underperformance stemmed from a mix of factor headwinds and stock selection. A few of the worst individual performers were stocks tied to the clean energy transition such as Alfen NV (ALFEN-NL), SolarEdge Technologies Inc. (SEDG-US) and Samsung SDI Corp. (6400-KR). The manager still views the long-term growth profile of these names as very attractive and thus has maintained the exposure. A group consisting of a basket of four gold and copper miners had a large positive impact this year relative to its weight in the portfolio.

**IAR's Take**

Federated capped off the year with a solid fourth quarter, a welcomed result following a disappointing second and third quarter. The magnitude of outperformance was not big enough to turn the tide for 2023, as the fund finished with below average results. There was a big disparity in how the fund's growth and value sleeves performed this year relative to their style benchmark. The fund's value sleeve, managed by Polaris, posted a top-quintile result. The fund's growth sleeve did not execute as expected. It finished the year in the bottom 5% among their peers as a result of poor stock selection. It's been a difficult 3-year period for the strategy due to the severe struggles in 2022. Long-term performance remains strong. The fund ranks just outside the top decile percentile of peers over the trailing 10-year period and has generated alpha in excess of 100 bps annualized over that time.

**Federated Hermes  
International Equity R6  
PEIRX**

**Manager Biographies**

Martin C. Schulz

Martin is a member of the Leadership Team and managing director of the International Equity team. Martin has previous investment experience, including positions in equity research and portfolio management. Martin received a B.A. in international relations from Cornell University, graduating magna cum laude, and an M.B.A. in international business and a J.D. from George Washington University. Martin speaks fluent German and French.

Bernard R. Horn

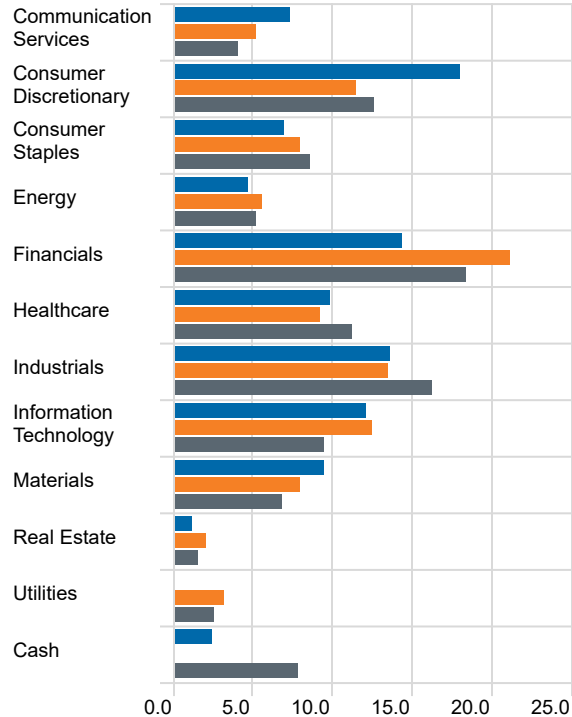
Bernard Horn Jr. is President and Chief Investment Officer since 1998; Founder and Portfolio Manager since 1995; Investment professional since 1980 of Polaris Capital Management, LLC, a Boston-based global and international value equity management firm that serves as the sub-advisor for RBC International Equity. Prior to founding Polaris Capital in 1995, Bernard served as an investment officer for MDT Advisers, Inc. He also worked as a portfolio manager for Freedom Capital Management Corporation. From 1980 to 1990, Bernard was the principal and founder of Horn & Company, an investment counseling firm that specialized in global portfolio management for individuals, trusts and tax-qualified accounts. He received a BS from Northeastern University and a MS in Management from the Massachusetts Institute of Technology.

**Top 10 Holdings - Ending Weights**

Portfolio Date: 12/31/2023

	Port Weight
Novo Nordisk A/S ADR	1.7
Publicis Groupe SA	1.5
ASML Holding NV ADR	1.4
AstraZeneca PLC ADR	1.4
Next PLC	1.3
SK Hynix Inc	1.3
Munchener Ruckversicherungs-Gesellschaft AG	1.2
Samsung Electronics Co Ltd	1.2
Linde PLC	1.2
Vinci SA	1.2

**GICS Sector Exposure**



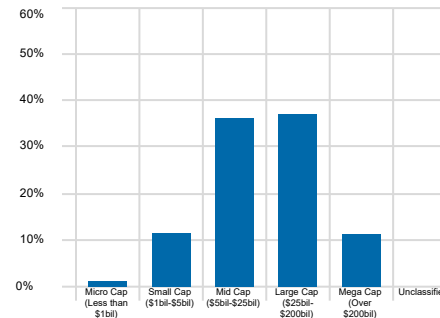
■ Federated Hermes International Equity R6  
■ MSCI ACWI Ex USA NR USD  
■ US Fund Foreign Large Blend

**Portfolio Characteristics**

Calculation Benchmark: MSCI ACWI Ex USA NR USD

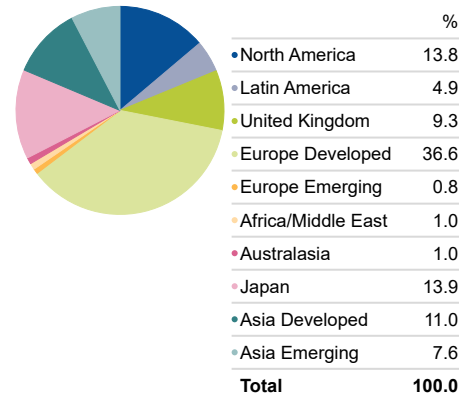
	Port	Index
WtgAvg MktCap (\$)	64,990	85,355
Dividend Yield	2.60	3.15
Price/Earnings	14.8	13.1
Price/Book	1.9	1.6
Price/Cash Flow	7.2	6.5
Price/Sales	1.2	1.3
5 Yr EPS Growth	11.9	10.0
Return on Equity	15.7	15.8
Debt/Capital	31.1	34.0
Active Share (Avg)	79	

**Market Cap Exposure**



**Equity Regional Exposure**

Portfolio Date: 12/31/2023



**Risk/Reward vs. Benchmark\***

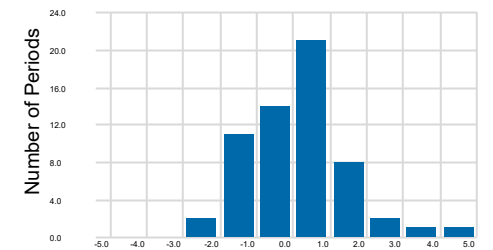
Calculation Benchmark: MSCI ACWI Ex USA NR USD

	3YR	5YR	10YR
Standard Deviation	18.09	20.23	16.53
Sharpe Ratio	-0.12	0.36	0.29
Information Ratio	-0.69	0.09	0.24
R2	95	96	93
Beta	1.08	1.11	1.05
Alpha	-2.56	0.12	1.06
Tracking Error	4.11	4.58	4.53
Up Capture Ratio	103	112	105
Down Capture Ratio	116	113	100
Batting Average	47	55	57

**Excess Return Distribution\***

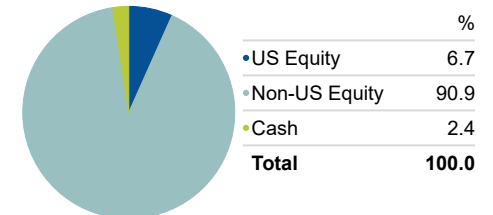
Time Period: 1/1/2019 to 12/31/2023

Calculation Benchmark: MSCI ACWI Ex USA NR USD



**Asset Allocation**

Portfolio Date: 12/31/2023



## GW&K Small Cap Core Strategy - Wrap

### PNC Investment Advisor Research

AMG Status **Approved**

Platform Add Date 8/30/2006

Status Change Date 5/3/2018

### Investment Philosophy/Process

GW&K believes companies with consistent long-term sustainable earnings growth will drive enhanced stock price performance over time. Bottom-up, fundamental research is performed to identify companies with these key attributes: a high quality management team, strong products or services that provide value to customers, leaders in attractive/niche markets, solid financial characteristics (e.g., free cash flow, high margins, return on investment capital [ROIC]) and appropriate valuations. The resulting portfolio has 55-85 holdings, with individual position sizes 1-3%, for the most part. Sector exposures are generally in line with the index. GW&K's long-term investment horizon and low portfolio turnover (<50%) tends to give the portfolio a small/mid-market cap tilt.

### Setting Expectations

GW&K's higher-quality and lower-risk characteristics generally serve as the primary drivers of relative performance. Given the team's company-specific work, stock-picking outcomes will also influence performance at any given time. Investment Advisor Research (IAR) generally expects the strategy to perform well during market volatility when investors seek safety in higher-quality investments. Conversely, we would expect the strategy to struggle during up markets, notably value-led recoveries and momentum-driven late expansions when the market's appetite for risk is strongest. The portfolio's modest growth tilt may serve as an additional headwind when value outperforms growth.

### Strategy Overview

Investment Type	Separate Account
Morningstar Category	US SA Small Blend
Benchmark	Russell 2000 TR USD
Sub-Style	Core

### Strategy Facts

# of Stock Holdings	88
Top 10 Holdings (%)	19
Turnover Ratio (%)	19
Inception Date	1/3/2000

### Operations

Firm Name	GW&K Investment Manag
Vehicle Assets (Mil)	\$ 639
Investment Minimum	\$ 100,000
Management Fee	0.50%

### Performance & Peer Group Rankings

	QTR	%	YTD	%	1Yr	%	3Yr	%	5Yr	%	10Yr	%
GW&K Small Cap Core S	10.58	77	9.25	92	9.25	92	4.29	84	12.45	50	8.65	52
Russell 2000 TR USD	14.03	22	16.93	55	16.93	55	2.22	95	9.97	83	7.16	86
50th Percentile	12.27		17.23		17.23		8.07		12.41		8.69	

### Calendar Year Performance

	2023	%	2022	%	2021	%	2020	%	2019	%	2018	%
GW&K Small Cap Core S	9.25	92	-15.54	56	22.94	70	19.73	26	32.38	11	-12.87	66
Russell 2000 TR USD	16.93	55	-20.44	87	14.82	95	19.96	24	25.52	51	-11.01	52
50th Percentile	17.23		-15.01		26.75		14.05		25.59		-10.89	

### Attribution

#### Relative Weights

Time Period: 10/1/2023 to 12/31/2023

Communication Services	-2.4	
Consumer Discretionary		2.5
Consumer Staples	-1.3	
Energy	-3.1	
Financials	-1.2	
Health Care		2.7
Industrials		2.3
Information Technology	-1.3	
Materials		1.2
Real Estate	-0.9	
Utilities	-0.5	

#### Active Return

Time Period: 10/1/2023 to 12/31/2023

	0.1
	-0.9
	0.0
	0.4
	-0.9
	-1.3
	-0.6
	-0.2
	0.2
	0.1
	0.0

### Contributors - Average Weights

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
Texas Roadhouse Inc	2.3	0.0	0.59
SPX Technologies Inc	2.1	0.2	0.51
Ryman Hospitality Properties Inc	1.6	0.2	0.49
UFP Industries Inc	2.0	0.3	0.47
Intra-Cellular Therapies Inc	1.3	0.2	0.45

### Detractors - Average Weights

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
Flywire Corp	1.8	0.1	-0.59
Fox Factory Holding Corp	0.9	0.2	-0.36
AtriCure Inc	1.1	0.1	-0.22
ChampionX Corp	0.9	0.3	-0.19
HealthEquity Inc	1.7	0.3	-0.16

### Performance Analysis

The strategy underperformed the Russell 2000® Index by 345 basis points (bps) during the quarter, placing it roughly 770 bps behind the benchmark for the year. In the quarter, the strategy lagged in all three months. Stylistically, a lower volatility bias and larger market cap tilt were factor headwinds. A sector-based attribution shows active positioning contributed; however, a more refined industry-based lens shows it detracted. Stock selection was negative due to subpar breadth (roughly 45% of holdings contributed) and negative skew. Weakness in Flywire (FLYW) and Fox Factory (FOXF) overshadowed strength in Texas Roadhouse (TXRH) and Ameris Bancorp (ABCB). For the year, a lower volatility bias was a factor headwind, though a larger market cap tilt was a partially offsetting tailwind. Active industry positioning was somewhat negative, driven by an overweight to life sciences tools & services. Stock selection was the main source of underperformance, owing to weak breadth (roughly 40% of holdings contributed) and negative skew. Weakness in Globus Medical (GMED), Halozyme Therapeutics (HALO) and Thoughtworks (TWKS) overshadowed strength in Industrials picks SPX Technologies (SPXC), UFP Industries (UFPI) and Alamo Group (ALG).

### IAR's Take

Relative performance in recent periods is within IAR's expectations. After providing downside protection during 2022, GW&K's lower-risk approach faced headwinds during 2023. Subpar stock selection and, to a lesser extent, unfavorable active industry positioning exacerbated the performance shortfall. Despite shorter-term underperformance, GW&K remains ahead of its benchmark over the trailing 3-, 5- and 10-year periods.



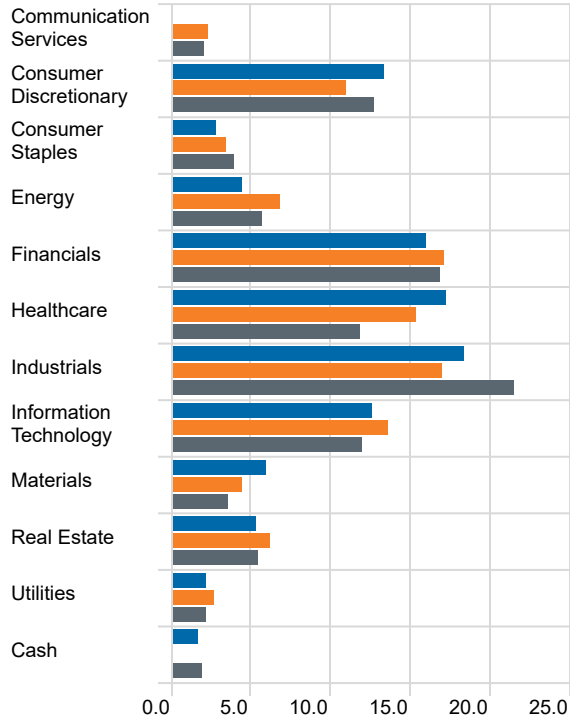
**GW&K Small Cap Core Strategy - Wrap**

**Top 10 Holdings - Ending Weights**

Portfolio Date: 12/31/2023

	Port Weight
SPX Technologies Inc	2.3
Texas Roadhouse Inc	2.0
RBC Bearings Inc	2.0
Matador Resources Co	1.9
Stag Industrial Inc	1.9
UFP Industries Inc	1.8
Novanta Inc	1.8
Medpace Holdings Inc	1.8
Avient Corp	1.8
MACOM Technology Solutions Holdings Inc	1.7

**GICS Sector Exposure**



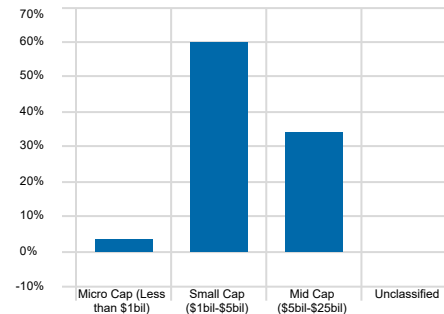
■ GW&K Small Cap Core Strategy - Wrap  
 ■ Russell 2000 TR USD  
 ■ US SA Small Blend

**Portfolio Characteristics**

Calculation Benchmark: Russell 2000 TR USD

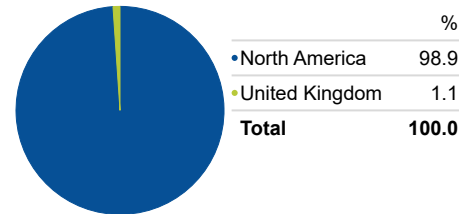
	Port	Index
WtgAvg MktCap (\$)	4,005	2,824
Dividend Yield	1.20	1.60
Price/Earnings	18.0	14.2
Price/Book	2.2	1.7
Price/Cash Flow	10.3	6.6
Price/Sales	1.7	1.0
5 Yr EPS Growth	17.6	17.6
Return on Equity	11.9	7.5
Debt/Capital	31.6	35.7
Active Share (Avg)	92	

**Market Cap Exposure**



**Equity Regional Exposure**

Portfolio Date: 12/31/2023



**Risk/Reward vs. Benchmark**

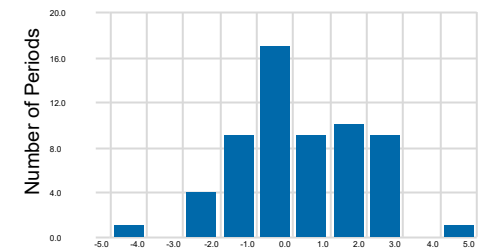
Calculation Benchmark: Russell 2000 TR USD

	3YR	5YR	10YR
Standard Deviation	20.35	22.68	18.68
Sharpe Ratio	0.18	0.54	0.47
Information Ratio	0.38	0.43	0.30
R2	94	95	94
Beta	0.92	0.91	0.90
Alpha	1.94	2.81	1.88
Tracking Error	5.45	5.73	5.02
Up Capture Ratio	98	98	94
Down Capture Ratio	91	89	86
Batting Average	50	48	48

**Excess Return Distribution**

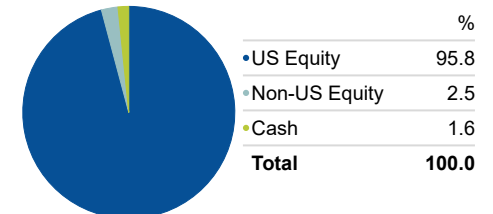
Time Period: 1/1/2019 to 12/31/2023

Calculation Benchmark: Russell 2000 TR USD



**Asset Allocation**

Portfolio Date: 12/31/2023



iShares Core S&P 500 ETF  
IVV

PNC Investment Advisor Research

AMG Status **Approved**

Platform Add Date 10/1/2002

Status Change Date

Index Description

The index measures the performance of 500 widely held stocks in US equity market. Standard and Poor's chooses member companies for the index based on market size, liquidity and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies. Since mid 1989, this composition has been more flexible and the number of issues in each sector has varied. It is market capitalization-weighted.

Investment Strategy

The investment seeks to track the investment results of the S&P 500 composed of large-capitalization U.S. equities. The index measures the performance of the large-capitalization sector of the U.S. equity market, as determined by SPDJI. The fund generally will invest at least 80% of its assets in the component securities of its index and in investments that have economic characteristics that are substantially identical to the component securities of its index and may invest up to 20% of its assets in certain futures, options and swap contracts, cash and cash equivalents.

Trading Data

Avg Daily Vol (3 Mo)	4,923,697
Prem/Disc (1 Yr Avg)	-0.01%
Bid/Ask Spread (\$)	\$ 0.02
Bid/Ask Spread (%)	0.000%

Strategy Overview

Investment Type	Exchange-Traded Fund
PNC Category	Large Cap Core - ETF
Tracking Index	S&P 500 TR USD

Strategy Facts

# of Stock Holdings	503
Top 10 Holdings (%)	31
Turnover Ratio (%)	3
Inception Date	5/15/2000

Operations

Net Expense Ratio	0.03
Fund Size (\$Mil)	397,621
Advisor	BlackRock Fund Advisors
Replication	Physical-Sample

Trailing Returns

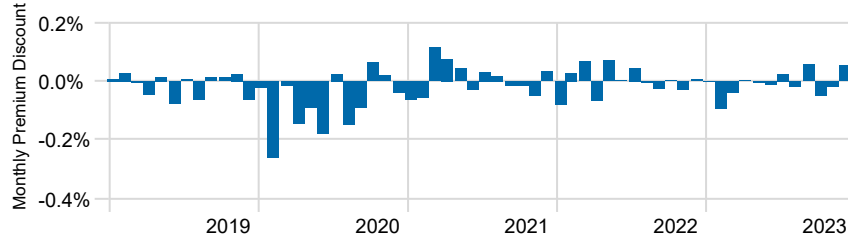
	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
iShares Core S&P 500 ETF	11.68	26.26	26.26	9.97	15.65	13.38	11.99
S&P 500 TR USD	11.69	26.29	26.29	10.00	15.69	13.42	12.03

Calendar Year Performance

	2023	2022	2021	2020	2019	2018	2017
iShares Core S&P 500 ETF	26.26	-18.13	28.66	18.37	31.44	-4.42	21.79
S&P 500 TR USD	26.29	-18.11	28.71	18.40	31.49	-4.38	21.83

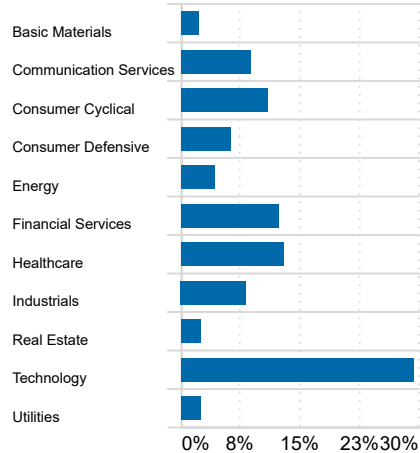
Historical Premium/Discount to NAV

Time Period: 1/1/2019 to 12/31/2023



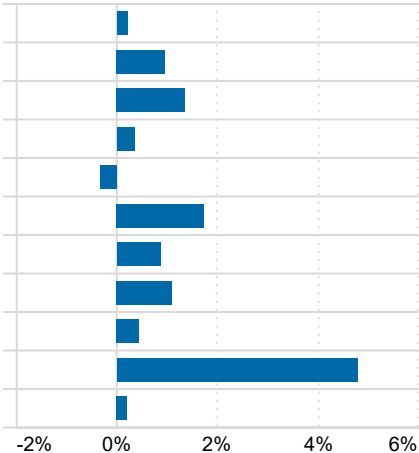
ETF Sector Weights

Time Period: 10/1/2023 to 12/31/2023



Return Contribution

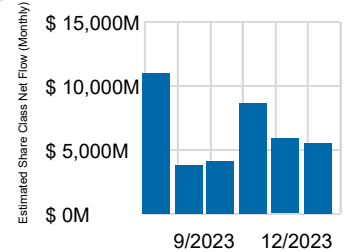
Time Period: 10/1/2023 to 12/31/2023



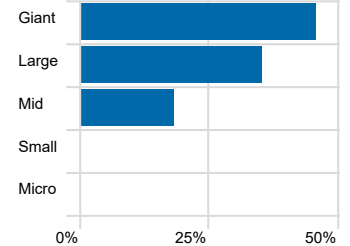
Portfolio Characteristics

Avg Market Cap (\$Mil)	230,451
Dividend Yield	1.7
Price/Earnings	18.7
Price/Book	3.6
Price/Sales	2.3
5 Yr EPS Growth	11.1
Return on Equity	31.5
Debt/Capital	40.4

6-Month Net Fund Flows



Market Capitalization



Top 15 Holdings

Portfolio Date: 12/29/2023

	Weight %
Apple Inc	7.01%
Microsoft Corp	6.96%
Amazon.com Inc	3.44%
NVIDIA Corp	3.05%
Alphabet Inc Class A	2.06%
Meta Platforms Inc Class A	1.96%
Alphabet Inc Class C	1.75%
Tesla Inc	1.71%
Berkshire Hathaway Inc Class B	1.62%
JPMorgan Chase & Co	1.22%
Broadcom Inc	1.22%
UnitedHealth Group Inc	1.21%
Eli Lilly and Co	1.16%
Visa Inc Class A	1.03%
Exxon Mobil Corp	1.00%

**iShares Russell Mid-Cap ETF  
IWR**

**PNC Investment Advisor Research**

**AMG Status** Approved

Platform Add Date 12/31/2003

Status Change Date

**Index Description**

The index measures the performance of the mid-cap segment of the US equity universe. It is a subset of Russell 1000 index and includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The index represents approximately 31% of the total market capitalization of the Russell 1000 companies.

**Investment Strategy**

The investment seeks to track the investment results of the Russell Midcap Index, which measures the performance of the mid-capitalization sector of the U.S. equity market. The fund generally invests at least 80% of its assets in the component securities of its underlying index and in investments that have economic characteristics that are substantially identical to the component securities of its underlying index (i.e., depositary receipts representing securities of the underlying index) and may invest up to 20% of its assets in certain futures, options and swap contracts, cash and cash equivalents.

**Trading Data**

Avg Daily Vol (3 Mo)	1,490,309
Prem/Disc (1 Yr Avg)	0.00%
Bid/Ask Spread (\$)	\$ 0.01
Bid/Ask Spread (%)	0.000%

**Strategy Overview**

Investment Type	Exchange-Traded Fund
PNC Category	Mid Cap Core - ETF
Tracking Index	Russell Mid Cap TR USD

**Strategy Facts**

# of Stock Holdings	815
Top 10 Holdings (%)	5
Turnover Ratio (%)	12
Inception Date	7/17/2001

**Operations**

Net Expense Ratio	0.19
Fund Size (\$Mil)	30,817
Advisor	BlackRock Fund Advisors
Replication	Physical-Sample

**Trailing Returns**

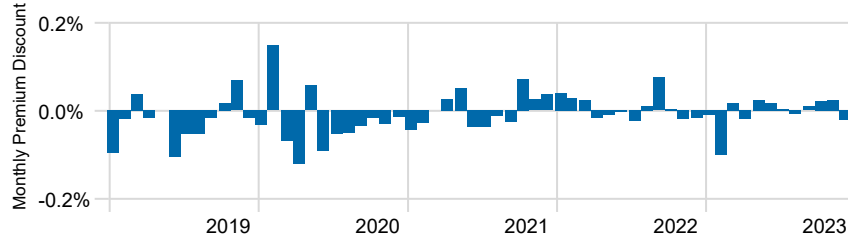
	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
iShares Russell Mid-Cap ET	12.78	17.07	17.07	5.76	12.50	9.91	9.26
Russell Mid Cap TR USD	12.82	17.23	17.23	5.92	12.68	10.07	9.42

**Calendar Year Performance**

	2023	2022	2021	2020	2019	2018	2017
iShares Russell Mid-Cap ET	17.07	-17.43	22.38	16.91	30.31	-9.13	18.32
Russell Mid Cap TR USD	17.23	-17.32	22.58	17.10	30.54	-9.06	18.52

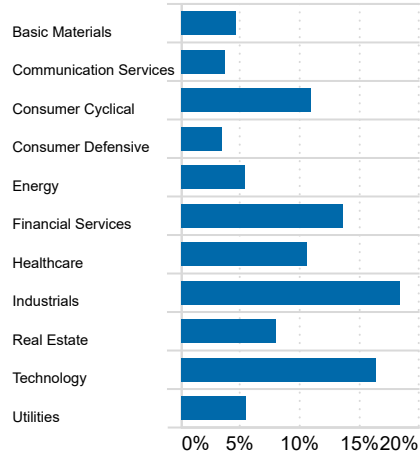
**Historical Premium/Discount to NAV**

Time Period: 1/1/2019 to 12/31/2023



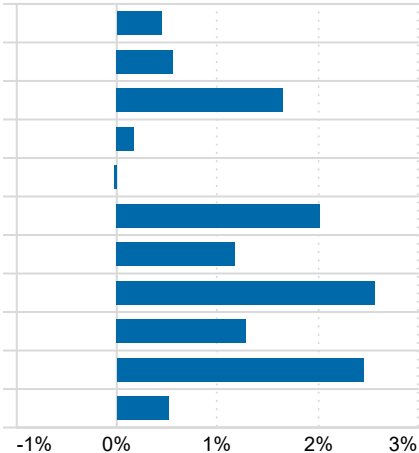
**ETF Sector Weights**

Time Period: 10/1/2023 to 12/31/2023



**Return Contribution**

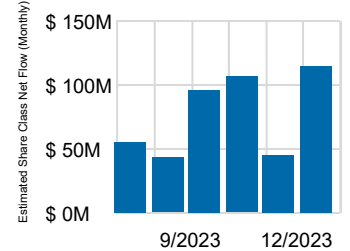
Time Period: 10/1/2023 to 12/31/2023



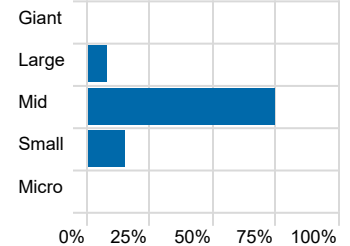
**Portfolio Characteristics**

Avg Market Cap (\$Mil)	18,059
Dividend Yield	1.9
Price/Earnings	15.8
Price/Book	2.3
Price/Sales	1.4
5 Yr EPS Growth	12.7
Return on Equity	16.7
Debt/Capital	42.1

**6-Month Net Fund Flows**



**Market Capitalization**



**Top 15 Holdings**

Portfolio Date: 12/29/2023

	Weight %
Phillips 66	0.56%
Parker Hannifin Corp	0.55%
Amphenol Corp Class A	0.54%
Trane Technologies PLC Class A	0.52%
KKR & Co Inc Ordinary Shares	0.52%
CrowdStrike Holdings Inc Class A	0.51%
TransDigm Group Inc	0.50%
Cintas Corp	0.49%
Marvell Technology Inc	0.48%
PACCAR Inc	0.47%
Aflac Inc	0.46%
Apollo Global Management Inc Class A	0.46%
Microchip Technology Inc	0.46%
Welltower Inc	0.45%
DexCom Inc	0.45%

**Lazard Global Listed Infrastructure Inst GLIFX**

**PNC Investment Advisor Research**

AMG Status **Approved**

Platform Add Date 11/4/2010

Status Change Date

**Investment Philosophy/Process**

**Investment Philosophy**

Lazard's philosophy on infrastructure investing is that consistency in revenues and earnings should result in a lower risk of capital loss while still providing inflation-linked returns. The team follows a bottom-up, fundamental process with a value bias to construct a portfolio of infrastructure securities. They first rank companies on factors related to revenue certainty, profitability and longevity before valuing each company from the bottom up. The outcome is a portfolio of 25-50 securities of the most attractively ranked stocks that the team believes have an expected return of at least inflation plus 5%.

**Investment Philosophy**

Lazard's philosophy on infrastructure investi...

**Setting Expectations**

**Setting Expectations**

Lazard's focus on investing in preferred infrastructure companies and valuation bias has resulted in a portfolio with excellent downside protection and good upside participation and a low standard deviation and beta. Its benchmark-agnostic approach typically leads to a portfolio that looks very different from the index, with high active share and tracking error. The fund generally will have little to no exposure in infrastructure securities with more commodity price sensitivity or in emerging markets, and it may lag the benchmark or peers if these areas are outperforming. Lazard's policy of fully hedging the portfolio back to the dollar also can have a significant impact on returns, since a large portion of the portfolio is invested outside of the United States. These hedges also affect the yield of the mutual fund, which incorporates the cost of the hedges....

**Strategy Overview**

Investment Type Open-End Fund  
 Morningstar Category US Fund Infrastructure  
 Benchmark S&P Global Infrastructure NR U  
 Sub-Style

**Fund Facts**

# of Stock Holdings 29  
 Top 10 Holdings (%) 57  
 Turnover Ratio (%) 39  
 Inception Date 12/31/2009

**Operations**

Advisor Lazard Asset Management LLC  
 Subadvisor  
 Fund Size (mil) \$ 8,706  
 Net Expense Ratio 0.97%

**Performance & Peer Group Rankings**

	QTR	%	YTD	%	1Yr	%	3Yr	%	5Yr	%	10Yr	%
Lazard Global Listed Infr	10.41	90	10.89	3	10.89	3	9.48	1	8.91	8	9.64	1
S&P Global Infrastructure	10.71	87	5.78	24	5.78	24	5.16	12	6.46	70	4.82	71
50th Percentile	11.70		3.63		3.63		3.53		6.83		5.43	

**Calendar Year Performance**

	2023	%	2022	%	2021	%	2020	%	2019	%	2018	%
Lazard Global Listed Infra	10.89	3	-1.30	1	19.87	6	-4.48	87	22.26	97	-3.73	7
S&P Global Infrastructure	5.78	24	-0.99	1	11.04	84	-6.49	97	25.75	74	-10.37	92
50th Percentile	3.63		-7.71		14.15		-1.92		27.85		-7.92	

**Attribution**

**Relative Weights**

Time Period: 10/1/2023 to 12/31/2023

Airports & Air Services	-19.8
Broadcasting	1.5
Communication Equipment	0.8
Conglomerates	-0.2
Engineering & Construction	4.9
Infrastructure Operations	4.5
Integrated Freight & Logistics	-1.8
Marine Shipping	-2.1
Oil & Gas Midstream	-20.3
Oil & Gas Refining & Marketing	-0.4
Railroads	14.8
Utilities - Diversified	-7.8
Utilities - Independent Power Producers	2.2
Utilities - Regulated Electric	-0.6
Utilities - Regulated Gas	6.6
Utilities - Regulated Water	10.3
Utilities - Renewable	-1.5

**Active Return**

Time Period: 10/1/2023 to 12/31/2023

Airports & Air Services	-0.1
Broadcasting	-0.2
Communication Equipment	-0.3
Conglomerates	0.0
Engineering & Construction	0.2
Infrastructure Operations	0.7
Integrated Freight & Logistics	-0.1
Marine Shipping	0.1
Oil & Gas Midstream	0.4
Oil & Gas Refining & Marketing	-0.1
Railroads	1.3
Utilities - Diversified	-0.4
Utilities - Independent Power Producers	0.3
Utilities - Regulated Electric	0.3
Utilities - Regulated Gas	-0.1
Utilities - Regulated Water	1.0
Utilities - Renewable	0.1

**IAR's Assessment & Analysis**

Lazard underperformed the S&P Global Listed Infrastructure Index by 30 basis points (bps) in the fourth quarter and was ahead of the index by 511 bps year to date. Global listed infrastructure participated in the broader equity rally during the quarter alongside investor optimism about potential interest rate cuts in 2024. Underperformance for the quarter was predominately driven by the fund's currency hedges, which detracted approximately 300 bps from return. Top stock detractors included French satellite company Eutelsat Communications (ETL) and U.S. utility Exelon (EXC). Eutelsat completed its merger with OneWeb at the beginning of the quarter, and despite releasing earnings better than expectations, the stock still fell. Satellite companies Eutelsat and SES (SESG) remain the two most attractively valued companies in Lazard's preferred infrastructure universe. An underweight in airports also hindered results for the quarter. On the positive side, GLIFX drew strength from U.S. railroads Norfolk Southern (NSC) and CSX (CSX) and toll roads Ferrovial (FER) and VINCI (DG). The railroads benefited from volume growth and falling interest rates. Ferrovial continued to report success with being able to raise tolls at inflation rates or better and recovering traffic levels. For the year, outperformance was predominately driven by European toll roads Ferrovial (FER) and VINCI (DG), as well as a lack of exposure to U.S. electric utility NextEra Energy, Inc. (NEE). Lazard is performing within expectations and after providing downside protection earlier in 2023, participated almost 100% on the upside during the fourth quarter rally. The team has demonstrated an ability to add value in a variety of market environments, and the fund is a top decile performer over the trailing 1-, 3-, 5- and 10-year time periods.

**Contributors - Average Weights**

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
Norfolk Southern Corp	8.2	0.0	1.89
Ferrovial SE	7.9	0.0	1.79
National Grid PLC	8.1	2.0	1.34
United Utilities Group PLC Class A	4.9	0.0	0.93
Severn Trent PLC	5.3	0.0	0.88

**Detractors - Average Weights**

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
Eutelsat Communications	0.8	0.0	-0.22
Exelon Corp	3.8	1.7	-0.18
Pinnacle West Capital Corp	2.0	0.0	-0.03
SES SA DR	1.5	0.0	0.01
Atlantica Sustainable Infrastructure PLC	0.2	0.0	0.03

**Lazard Global Listed Infrastructure Inst GLIFX**

**Manager Biography**

John Mulquiney

John Mulquiney, CFA—John Mulquiney is a portfolio manager/analyst on the Global Listed Infrastructure and Global Equity Franchise teams. He has been working in the investment field since 1997. Prior to joining Lazard in August 2005, Mulquiney worked at Tyndall Australia where he covered stocks in various sectors including financials, consumer discretionary, healthcare, and materials. Mulquiney was also in the Asset and Infrastructure Group at Macquarie Bank. Most recently, he spent four years at Nanyang Ventures.

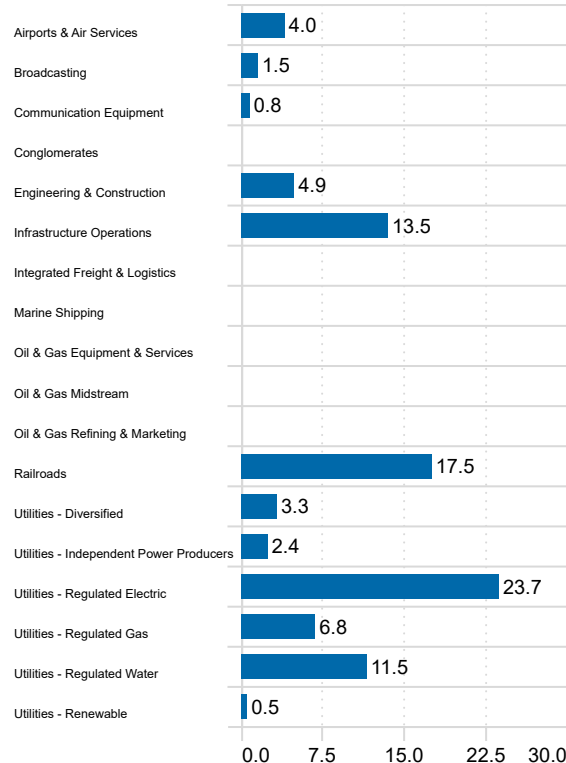
**Top 10 Holdings - Ending Weights**

Portfolio Date: 12/31/2023

	Port Weight
Ferrovial SE	8.5
National Grid PLC	8.3
Norfolk Southern Corp	8.3
Snam SpA	4.8
Vinci SA	4.8
CSX Corp	4.7
Severn Trent PLC	4.7
United Utilities Group PLC Class A	4.6
American Electric Power Co Inc	4.4
Terna SpA	4.3

**Industry Exposure - Ending Weight**

Time Period: 10/1/2023 to 12/31/2023

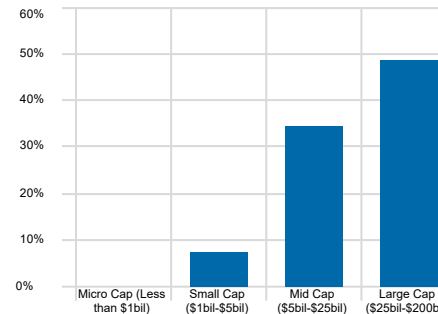


**Portfolio Characteristics**

Calculation Benchmark: iShares Global Infrastructure ETF

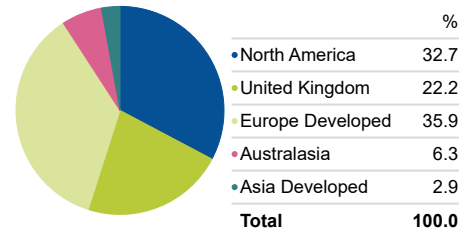
	Port	Index
WtgAvg MktCap (\$B)	24,765	34,029
Dividend Yield	3.53	3.63
Price/Earnings	15.7	19.5
Price/Book	2.1	2.0
Price/Cash Flow	7.9	9.2
Price/Sales	2.7	2.4
5 Yr EPS Growth	-6.0	-0.1
Return on Equity	14.3	11.8
Debt/Capital	55.5	51.1
Active Share (Avg)	83	

**Market Cap Exposure**



**Equity Regional Exposure**

Portfolio Date: 12/31/2023



**Risk/Reward vs. Benchmark**

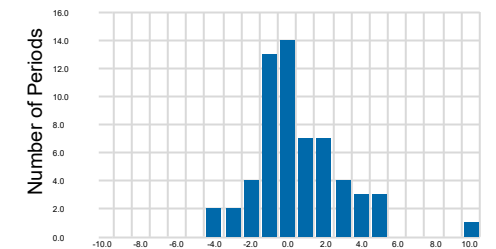
Calculation Benchmark: iShares Global Infrastructure ETF

	3YR	5YR	10YR
Standard Deviation	13.55	14.03	11.67
Sharpe Ratio	0.55	0.54	0.73
Information Ratio	0.58	0.26	0.59
R2	81	84	75
Beta	0.75	0.67	0.66
Alpha	4.46	3.28	5.45
Tracking Error	7.16	8.51	7.87
Up Capture Ratio	86	77	83
Down Capture Ratio	65	61	54
Batting Average	42	42	53

**Excess Return Distribution**

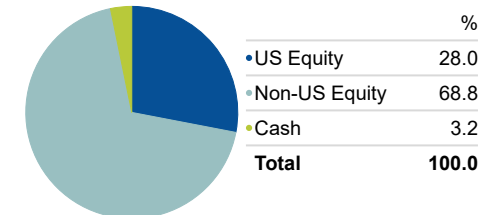
Time Period: 1/1/2019 to 12/31/2023

Calculation Benchmark: iShares Global Infrastructure ETF



**Asset Allocation**

Portfolio Date: 12/31/2023



**Seafarer Overseas Gr and Income Instl SIGIX**

**PNC Investment Advisor Research**

**AMG Status** Approved

Platform Add Date 9/30/2015

Status Change Date 2/10/2021

**Investment Philosophy/Process**

Seafarer believes that to outperform the MSCI Emerging Markets Index the strategy needs to be different from the benchmark, diversified, and focused first and foremost on capital preservation. As such, Seafarer seeks through a bottom-up process to invest in attractively valued companies that are well managed, consistent dividend payers and are growing free cash flow at a sustainable rate. The portfolio is split into three sleeves: core, growth and value. The core sleeve (20-60%) seeks moderate growth with moderate and sustainable income, the growth sleeve (20-40%) looks for higher earnings growth with lower current income yield while the value sleeve (20-40%) aims to invest in higher dividend yielding stocks with lower growth and cheaper valuation.

**Setting Expectations**

Seafarer aims to capture part of total return through capital gains, but most importantly considers cash dividends as both a significant portion of total return and as a tool to mitigate risk in down markets. Prolonged market environments of lower-quality leadership (early in the business recovery cycle or late in the cycle) or when the market is chasing growth at any price can be challenging for the fund. The portfolio should not be expected to perform well in either extreme of the market cycle, but should execute during normal market periods and through-the-cycle. The strategy takes large sector and country active exposures, possibly subjecting it to higher levels of idiosyncratic risks.

**Strategy Overview**

Investment Type	Open-End Fund
Morningstar Category	US Fund Diversified Emerging I
Benchmark	MSCI EM NR USD
Sub-Style	Value

**Fund Facts**

# of Stock Holdings	50
Top 10 Holdings (%)	32
Turnover Ratio (%)	16
Inception Date	2/15/2012

**Operations**

Advisor	Seafarer Capital Partners, LLC
Subadvisor	
Fund Size (mil)	\$ 3,206
Net Expense Ratio	0.89%

**Performance & Peer Group Rankings**

	QTR	%	YTD	%	1Yr	%	3Yr	%	5Yr	%	10Yr	%
Seafarer Overseas Gr and	8.43	35	14.31	28	14.31	28	-0.47	16	8.22	14	4.82	11
MSCI EM NR USD	7.86	48	9.83	60	9.83	60	-5.08	41	3.69	56	2.66	46
50th Percentile	7.77		10.93		10.93		-5.78		3.95		2.49	

**Calendar Year Performance**

	2023	%	2022	%	2021	%	2020	%	2019	%	2018	%
Seafarer Overseas Gr and	14.31	28	-11.69	3	-2.33	55	22.20	39	23.19	38	-18.12	69
MSCI EM NR USD	9.83	60	-20.09	27	-2.54	57	18.31	51	18.44	71	-14.58	25
50th Percentile	10.93		-22.65		-1.62		18.64		21.84		-16.41	

**Attribution**

**Relative Weights**

Time Period: 10/1/2023 to 12/31/2023

Communication Services	-4.1	
Consumer Discretionary	-3.5	
Consumer Staples		8.6
Energy	-2.0	
Financials	-6.0	
Health Care		5.0
Industrials		3.1
Information Technology	-3.0	
Materials	-2.8	
Real Estate		0.5
Utilities		0.5

**Active Return**

Time Period: 10/1/2023 to 12/31/2023

Communication Services		0.9
Consumer Discretionary		0.9
Consumer Staples		0.1
Energy	-0.4	
Financials		1.0
Health Care		0.2
Industrials		0.1
Information Technology	-1.0	
Materials		0.0
Real Estate	-0.1	
Utilities	-0.6	

**Performance Analysis**

Seafarer outpaced the MSCI Emerging Markets Index in the fourth quarter of the year by 57 basis points (bps), placing the fund 448 bps ahead of its benchmark for the year. Emerging markets rebounded in the quarter following a pullback in the third quarter of 2023. Information Technology was the leader, rising nearly 18%, while Communication Services and Consumer Discretionary were the laggards, barely breaking into positive territory. On the fund level, allocation effects were negligible as positive selection was the driver of the outperformance. The portfolio experienced positive selection effects in most sectors; however, weakness within Information Technology pared back overall performance. Country positioning was a notable contributor due to the large underweight to China in favor of an overweight to Korea. For the year, sector allocation effects were a notable detractor due to the overweight to Consumer Staples and Health Care, alongside the underweight to Information Technology. Positive selection was the key driver, led by Financials. The strategy's country positioning, namely the stark underweight to China in favor of a sizable overweight to Korea, was a notable contributor to performance. From a factor perspective, the fund's bias away from the most expensive stocks was also a tailwind to performance in 2023.

**IAR's Take**

Seafarer posted yet another quarter of outperformance in the final quarter of 2023, marking the 8th consecutive quarter of the fund outpacing its benchmark. This marks the continuation of very attractive performance results as it is the 5th straight calendar year of outpacing its benchmark. The portfolio's China positioning has been a key element of the recent strength in performance, notably the stark underweight exhibited, averaging more than 20% under the benchmark. China has been a key laggard in the market, not only in 2023, but over the last 3 years it is the worst performing country in the index, with the exception of Russia, which was marked to zero. This strength in performance has improved all trailing period results, which remains very impressive. The fund ranks in the top quintile of peers over the trailing 3- and 5-year periods, and near the top decile of peers over the trailing 10-year period.

**Contributors - Average Weights**

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
Novatek Microelectronics Corp	2.6	0.1	0.69
Samsung Electronics Co Ltd Participating Preference	3.2	0.5	0.64
Itau Unibanco Holding SA ADR	2.0	0.0	0.61
Coway	1.4	0.0	0.61
Samsung BioLogics Co Ltd	3.1	0.1	0.52

**Detractors - Average Weights**

Time Period: 10/1/2023 to 12/31/2023

	Port	Index	Contrib
Becle SAB de CV	1.4	0.0	-0.31
Alibaba Group Holding Ltd Ordinary Shares	2.5	2.6	-0.28
PetroVietnam Gas JSC	1.3	0.0	-0.24
Jardine Matheson Holdings Ltd	1.8	0.0	-0.23
DFI Retail Group Holdings Ltd	1.2	0.0	-0.13

**Seafarer Overseas Gr and Income Instl SIGIX**

**Manager Biographies**

Andrew Foster

Andrew Foster is the Lead Portfolio Manager of the Seafarer Overseas Growth and Income Fund, and has been so since its inception in February 2012. He is the Co-Portfolio Manager of the Seafarer Overseas Value Fund, and has been so since its inception in May 2016. He is also the Chief Executive Officer and Chief Investment Officer of Seafarer Capital Partners, LLC, investment adviser to the Funds.

Paul Espinosa

Before joining Seafarer Capital Partners in 2014, Mr. Espinosa was a London-based equity research analyst at Legg Mason, where he focused on global emerging markets. Prior to joining Legg Mason, Mr. Espinosa performed the same function with the same team at Citigroup Asset Management. His previous experience includes equity research at J.P. Morgan Investment Management. Mr. Espinosa holds an A.B. in Economics with Honors from Brown University. He is a Chartered Financial Analyst.

Lydia So

Lydia joined Seafarer Capital Partners in 2022. Lydia's career has focused on equity research and portfolio management in emerging markets. Prior to joining Seafarer, she was a portfolio manager at Rondure Global Advisors. Before Rondure, Lydia spent 15 years at Matthews International Capital Management, adviser to the Matthews Asia Funds, where she built and led a team focused on growth-oriented strategies in emerging Asia. While there, she launched and was the Lead Portfolio Manager of the Matthews Asia Small Companies Fund (known now as the Matthews Emerging Markets Small Companies Fund) from its inception in 2008 to 2020. Lydia holds a B.A. in Economics from the University of California, Davis and is a CFA charterholder.

**Top 10 Holdings - Ending Weights**

Portfolio Date: 9/30/2023

	Port Weight	Index
Hyundai Mobis Co Ltd	4.7	
Sanlam Ltd	3.3	
Accton Technology Corp	3.2	
Chemical Works of Gedeon Richter PLC	3.2	
Samsung Electronics Co Ltd Participating Preferred	3.1	
Rohm Co Ltd	3.0	
Samsung BioLogics Co Ltd	2.9	
XP Inc Class A	2.8	
Wal - Mart de Mexico SAB de CV	2.7	
Alibaba Group Holding Ltd Ordinary Shares	2.7	

**Portfolio Characteristics**

Calculation Benchmark: MSCI EM NR USD

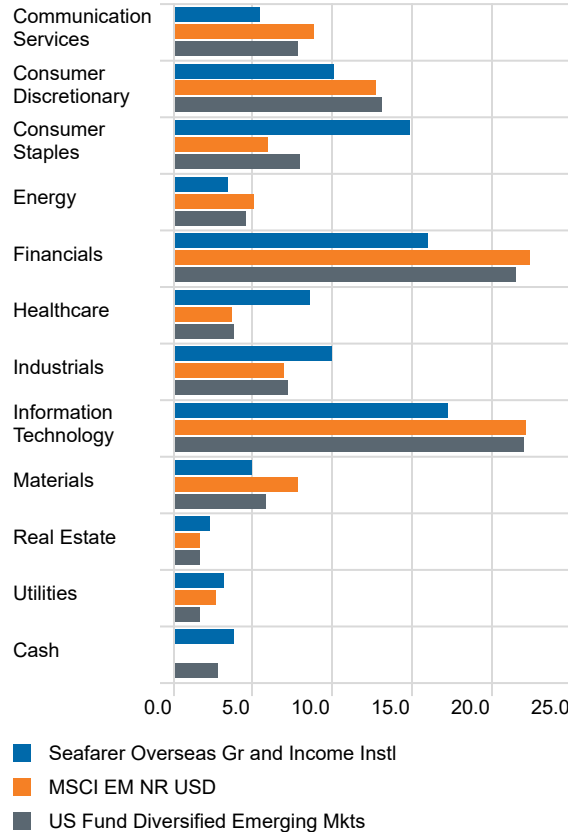
	Port	Index
WtgAvg MktCap (\$B)	39,437	102,025
Dividend Yield	3.19	3.02
Price/Earnings	13.6	9.5
Price/Book	1.5	1.5
Price/Cash Flow	6.7	5.4
Price/Sales	1.2	1.3
5 Yr EPS Growth	16.4	14.5
Return on Equity	16.7	15.6
Debt/Capital	17.0	25.8
Active Share (Avg)	89	

**Risk/Reward vs. Benchmark**

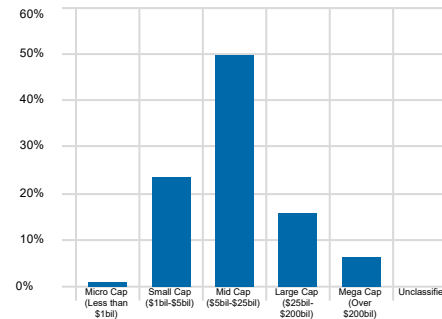
Calculation Benchmark: MSCI EM NR USD

	3YR	5YR	10YR
Standard Deviation	15.58	17.92	15.76
Sharpe Ratio	-0.11	0.42	0.29
Information Ratio	0.63	0.69	0.36
R2	82	88	88
Beta	0.81	0.88	0.86
Alpha	3.28	4.50	2.26
Tracking Error	7.31	6.57	6.09
Up Capture Ratio	89	95	91
Down Capture Ratio	73	77	80
Batting Average	53	57	54

**GICS Sector Exposure**



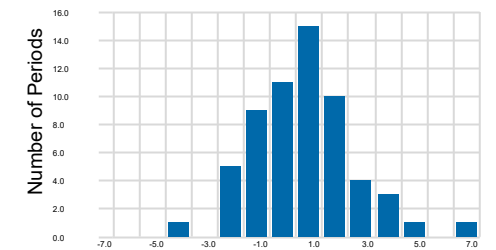
**Market Cap Exposure**



**Excess Return Distribution**

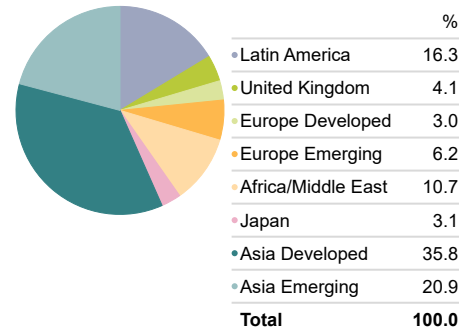
Time Period: 1/1/2019 to 12/31/2023

Calculation Benchmark: MSCI EM NR USD



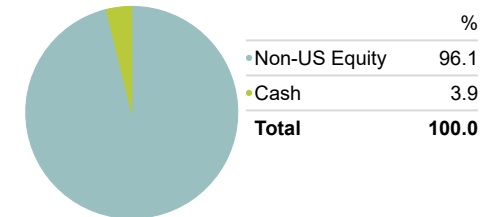
**Equity Regional Exposure**

Portfolio Date: 9/30/2023



**Asset Allocation**

Portfolio Date: 9/30/2023



**Vanguard FTSE All-Wld ex-US ETF VEU**

**PNC Investment Advisor Research**

AMG Status **Approved**

Platform Add Date 6/24/2008

Status Change Date

**Index Description**

The index measures the performance of Large and Midcap stocks providing coverage of Developed and Emerging Markets excluding the US. It is derived from the FTSE Global Equity Index Series (GEIS). The index is market-capitalization weighted.

**Investment Strategy**

The investment seeks to track the performance of a benchmark index that measures the investment return of stocks of companies located in developed and emerging markets outside of the United States. The fund employs an indexing investment approach designed to track the performance of the FTSE All-World ex US Index. The advisor attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

**Trading Data**

Avg Daily Vol (3 Mo)	2,753,238
Prem/Disc (1 Yr Avg)	0.03%
Bid/Ask Spread (\$)	\$ 0.01
Bid/Ask Spread (%)	0.000%

**Strategy Overview**

Investment Type	Exchange-Traded Fund
PNC Category	International Large Cap Core - I
Tracking Index	FTSE AW Ex US (US RIC) NR

**Strategy Facts**

# of Stock Holdings	3,764
Top 10 Holdings (%)	10
Turnover Ratio (%)	4
Inception Date	3/2/2007

**Operations**

Net Expense Ratio	0.08
Fund Size (\$Mil)	51,194
Advisor	Vanguard Group Inc
Replication	Physical-Full

**Trailing Returns**

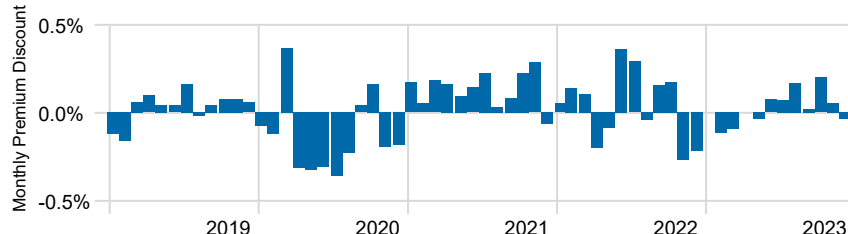
	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
Vanguard FTSE All-Wld ex-l	9.96	15.64	15.64	1.88	7.45	6.64	4.16
FTSE AW Ex US (US RIC) I	9.71	15.82	15.82	1.98	7.52	6.64	4.24

**Calendar Year Performance**

	2023	2022	2021	2020	2019	2018	2017
Vanguard FTSE All-Wld ex-l	15.64	-15.46	8.16	11.39	21.63	-13.97	27.27
FTSE AW Ex US (US RIC) I	15.82	-15.49	8.36	11.22	21.82	-14.13	27.11

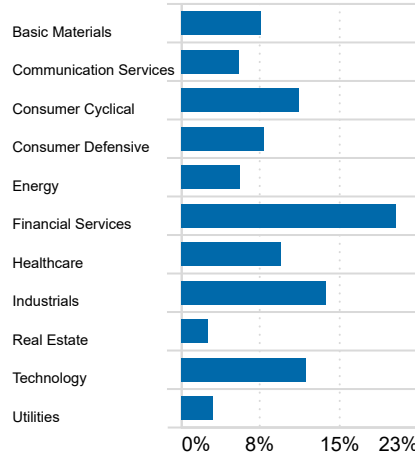
**Historical Premium/Discount to NAV**

Time Period: 1/1/2019 to 12/31/2023



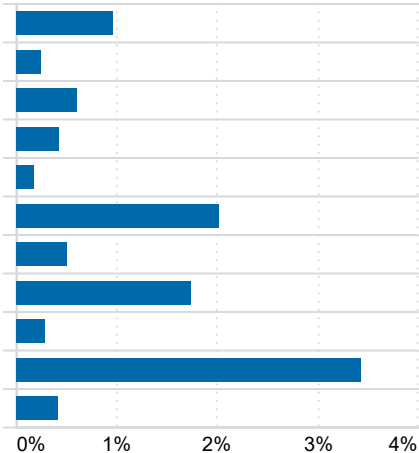
**ETF Sector Weights**

Time Period: 10/1/2023 to 12/31/2023



**Return Contribution**

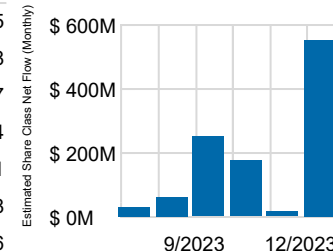
Time Period: 10/1/2023 to 12/31/2023



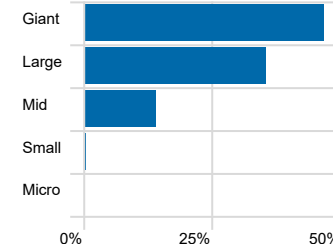
**Portfolio Characteristics**

Avg Market Cap (\$Mil)	34,365
Dividend Yield	3.8
Price/Earnings	11.7
Price/Book	1.4
Price/Sales	1.1
5 Yr EPS Growth	9.8
Return on Equity	17.6
Debt/Capital	33.3

**6-Month Net Fund Flows**



**Market Capitalization**



**Top 10 Country Exposure**

Time Period: 10/1/2023 to 12/31/2023

	Weight	Return	Contribution
Japan	16.39	7.83	1.29
United Kingdom	9.38	6.57	0.62
China	8.24	-3.99	-0.34
Switzerland	6.49	9.68	0.63
Canada	6.26	12.37	0.77
France	6.00	8.57	0.57
Germany	5.21	13.26	0.68
India	4.97	12.84	0.63
Australia	4.86	14.47	0.70
Taiwan	4.33	17.39	0.73



**Vanguard Small-Cap ETF  
VB**

**PNC Investment Advisor Research**

**AMG Status** Approved

Platform Add Date 10/28/2005

Status Change Date 8/28/2013

**Index Description**

The index measures the performance of US companies that fall between the bottom 2%-15% of the investable market capitalization. There is no lower limit in market capitalization, other than what is specified by investability screens. It includes securities traded on NYSE, NYSE Market, NASDAQ or ARCA.

**Investment Strategy**

The investment seeks to track the performance of the CRSP US Small Cap Index that measures the investment return of small-capitalization stocks. The fund employs an indexing investment approach designed to track the performance of the CRSP US Small Cap Index, a broadly diversified index of stocks of small U.S. companies. The advisor attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

**Trading Data**

Avg Daily Vol (3 Mo)	797,004
Prem/Disc (1 Yr Avg)	0.00%
Bid/Ask Spread (\$)	\$ 0.12
Bid/Ask Spread (%)	0.001%

**Strategy Overview**

Investment Type	Exchange-Traded Fund
PNC Category	Small Cap Core - ETF
Tracking Index	CRSP US Small Cap TR USD

**Strategy Facts**

# of Stock Holdings	1,422
Top 10 Holdings (%)	4
Turnover Ratio (%)	14
Inception Date	1/26/2004

**Operations**

Net Expense Ratio	0.05
Fund Size (\$Mil)	121,153
Advisor	Vanguard Group Inc
Replication	Physical-Full

**Trailing Returns**

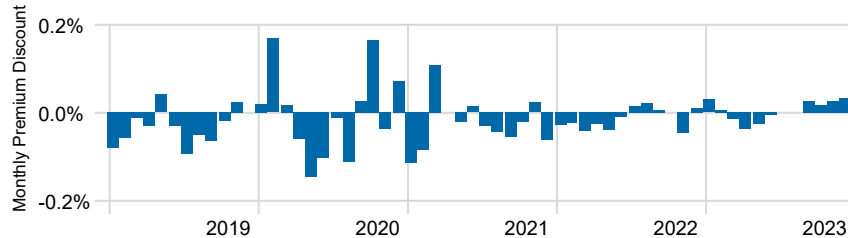
	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
Vanguard Small-Cap ETF	13.40	18.21	18.21	4.67	11.70	9.05	8.43
CRSP US Small Cap TR US	13.41	18.09	18.09	4.61	11.66	9.01	8.41

**Calendar Year Performance**

	2023	2022	2021	2020	2019	2018	2017
Vanguard Small-Cap ETF	18.21	-17.60	17.72	19.08	27.37	-9.30	16.24
CRSP US Small Cap TR US	18.09	-17.64	17.71	19.07	27.35	-9.33	16.24

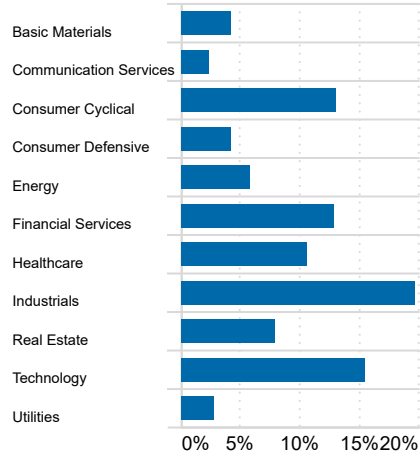
**Historical Premium/Discount to NAV**

Time Period: 1/1/2019 to 12/31/2023



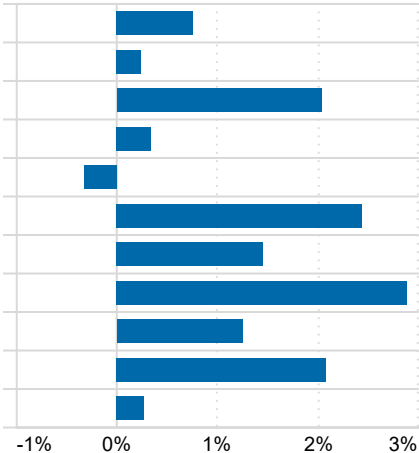
**ETF Sector Weights**

Time Period: 10/1/2023 to 12/31/2023



**Return Contribution**

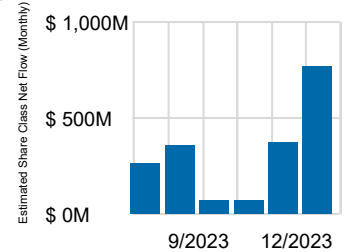
Time Period: 10/1/2023 to 12/31/2023



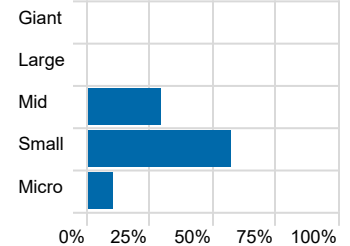
**Portfolio Characteristics**

Avg Market Cap (\$Mil)	5,431
Dividend Yield	2.0
Price/Earnings	14.1
Price/Book	1.9
Price/Sales	1.1
5 Yr EPS Growth	11.3
Return on Equity	12.7
Debt/Capital	40.2

**6-Month Net Fund Flows**



**Market Capitalization**



**Top 15 Holdings**

Portfolio Date: 11/30/2023

Company	Weight %
Targa Resources Corp	0.43%
PTC Inc	0.39%
Deckers Outdoor Corp	0.37%
Atmos Energy Corp	0.36%
Builders FirstSource Inc	0.35%
Bunge Global SA	0.35%
Booz Allen Hamilton Holding Corp Class A	0.35%
Axon Enterprise Inc	0.34%
Reliance Steel & Aluminum Co	0.34%
Entegris Inc	0.33%
IDEX Corp	0.32%
DraftKings Inc Ordinary Shares - Class A	0.32%
Vertiv Holdings Co Class A	0.32%
First Citizens BancShares Inc Class A	0.31%
Jabil Inc	0.30%

**Dodge & Cox Income I  
DODIX**

**PNC Investment Advisor Research**

<b>AMG Status</b>	<b>Approved</b>
Platform Add Date	4/29/2009
Status Change Date	3/24/2010

**Investment Philosophy/Process**

Dodge & Cox seeks to build a diversified portfolio with a yield advantage to the benchmark and peers, taking modest exposures to below-investment-grade (IG) credit, non-U.S. sovereigns, and asset-backed securities (ABS) in addition to the traditional core sectors of Treasuries, IG credit, and agency mortgage-backed securities (MBS). Derivatives usage is generally limited to Treasury futures, which are used to control duration. The fund managers have preferred to keep duration closer to levels seen by the index prior to its major extension during the credit crisis. The managers believe that matching the current duration of the Barclays Aggregate Bond Index would invite considerable volatility.

**Setting Expectations**

Relative to its peers, DODIX tends to be moderately shorter duration and similar with respect to credit risk undertaken. Accordingly, IAR believes the strategy should outperform during risk-on environments when credit spreads tighten and economic fundamentals are robust. The strategy will likely underperform the benchmark and conservative peers in risk-off environments when longer-dated Treasuries outperform or when credit spreads widen.

**Strategy Overview**

Investment Type	Open-End Fund
Morningstar Category	US Fund Intermediate Core-Plu:
Benchmark	Bloomberg US Agg Bond TR US
Style Category	Core Plus

**Fund Facts**

# of Bond Holdings	1,313
Top 10 Holdings (%)	16
Turnover Ratio (%)	118
Inception Date	1/3/1989

**Operations**

Advisor	Dodge & Cox
Subadvisor	
Fund Size (mil)	\$ 70,156
Net Expense Ratio	0.41%

**Performance & Peer Group Rankings**

	QTR	%	YTD	%	1Yr	%	3Yr	%	5Yr	%	10Yr	%
Dodge & Cox Income I	7.32	22	7.70	6	7.70	6	-1.65	7	2.70	5	2.79	6
Bloomberg US Agg Bond	6.82	59	5.53	71	5.53	71	-3.31	51	1.10	68	1.81	59
50th Percentile	6.93		6.17		6.17		-3.30		1.44		1.92	

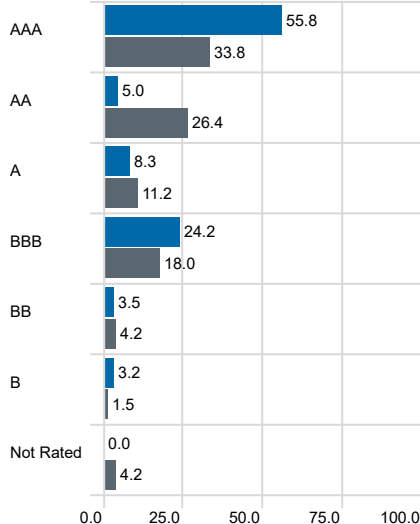
**Calendar Year Performance**

	2023	%	2022	%	2021	%	2020	%	2019	%	2018	%
Dodge & Cox Income I	7.70	6	-10.86	6	-0.91	54	9.45	23	9.73	33	-0.31	29
Bloomberg US Agg Bond	5.53	71	-13.01	26	-1.54	81	7.51	70	8.72	67	0.01	21
50th Percentile	6.17		-13.89		-0.83		8.41		9.26		-0.79	

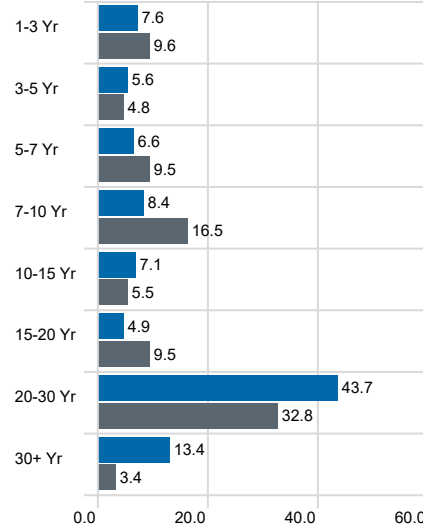
**Performance Analysis**

The fund outperformed its benchmark by 50 basis points (bps) during the quarter and by 117 bps for 2023. The Bloomberg US Aggregate Index jumped 6.82% for the quarter as Treasury yields declined significantly after a steep climb in October. With inflation continuing to slow, the Federal Reserve confirmed the better possibility of an easier policy in 2024, lending further momentum to the bond market rally that had begun earlier in the quarter. For perspective, the quarterly return of the index was its best showing since 1989, putting the bond market well into positive territory for 2023, with a 5.53% gain. Within the Aggregate Index, corporate credit was the best performer for the quarter, outpacing agency MBS, which in turn led Treasuries. A preference for higher-quality yield and longer duration assets drove investment grade corporates to outperform both high yield and bank loans. Structured credit markets, resilient for much of 2023, roundly lagged the broader bond market in the fourth quarter rally. A weaker dollar prompted non-U.S. markets to best the domestic market. Particularly, external emerging markets was helped by the decline in Treasury yields. For 2023, the Japanese yen dragged on the performance of non-U.S. developed, the year's laggard among foreign markets. The fund's performance was benefited by security selection, credit exposure and duration management throughout the quarter and year.

**Credit Quality**



**Maturity Distribution**



■ Dodge & Cox Income I      ■ US Fund Intermediate Core-Plus Bond

**IAR's Current Assessment**

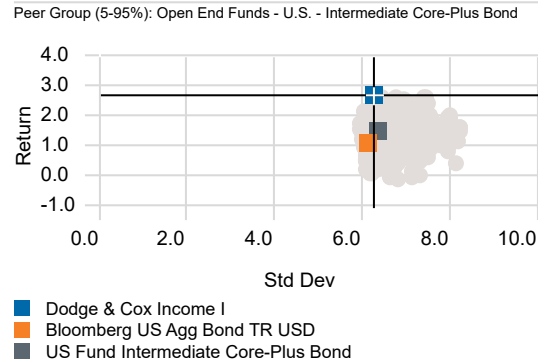
The fund performed in line with expectations. Exposure to corporates along with strong security selection benefited performance as credit spreads tightening in 2023. However, given strong performance and tight spreads, the managers are trimming corporate exposures. As the managers slowly subtracted from corporates they have added to agency MBS. The managers find value in MBS that trade well below par, reflecting low prepayment risk at spreads that are attractive. The fund's overweight exposure to MBS proved beneficial during the quarter as this sector rallied late in the year. The fund has long held a strategic underweight to duration, which contributed to returns as rates rose through much of the year. However, the managers did gradually increase duration in 2023 and the timing to increase it to six years during the quarter was beneficial as rates topped out in early November and the fund participated in the year-end rate rally. The manager's rationale for extending duration are expectations for rates to fall and finally being compensated for owning duration from a yield perspective.

**Dodge & Cox Income I  
DODIX**

**Portfolio Characteristics**

	Port	Peers
# of Bond Holdings	1,313	556
Average Eff Duration	5.97	6.18
Average Eff Maturity	10.25	8.87
Average Credit Quality	BBB	BBB
Average Coupon	4.42	4.49
Average Price	94.01	98.60
Yield to Maturity	5.33	5.26

**Risk/Reward - 5 Year**



**Risk/Reward vs. Benchmark**

Calculation Benchmark: Bloomberg US Agg Bond TR USD

	3YR	5YR	10YR
Standard Deviation	7.2	6.3	4.7
Sharpe Ratio	-0.6	0.1	0.3
Information Ratio	1.4	0.8	0.5
R2	97.2	89.9	84.7
Beta	1.0	1.0	0.9
Alpha	1.6	1.6	1.0
Tracking Error	1.2	2.0	1.9
Up Capture Ratio	101.6	108.3	99.7
Down Capture Ratio	86.3	88.3	80.5
Batting Average	75.0	73.3	65.8

**Manager Biographies**

**Dana M. Emery**

Dana M. Emery is President and Trustee, member of Dodge & Cox's U.S. Fixed Income Investment Committee and Dodge & Cox's Global Fixed Income Investment Committee. Emery was Chief Executive Officer, President, and Director of Dodge & Cox; Co-Director of Fixed Income (until 2020). Emery received her B.A. degree from Stanford University in 1983 and joined Dodge & Cox in 1983. Emery is President and a Trustee of the Dodge & Cox Funds. She is a Director and shareholder of the firm, a CFA charterholder, and a Chartered Investment Counselor.

**Lucy Johns**

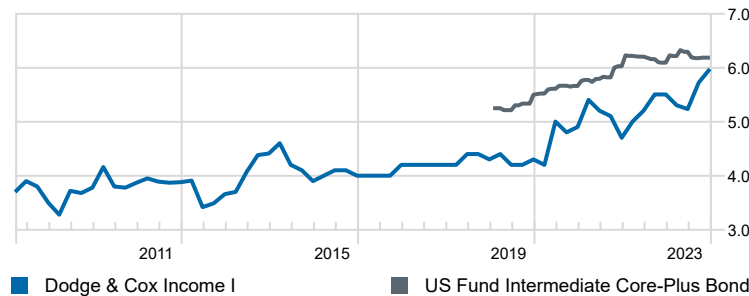
Lucy Johns is Vice President and Associate Director of Fixed Income. Johns received her B.A. degree (magna cum laude) from Williams College in 1996 and her M.B.A. degree from the University of California, Los Angeles Anderson School of Management in 2004. Prior to graduate school, she worked for approximately two years each at Merrill Lynch as a financial analyst, Dodge & Cox as a research assistant, and NBC Internet as a Senior Product Manager. Johns rejoined Dodge & Cox in 2004. She is a shareholder of the firm and a CFA charterholder.

**James Dignan**

James Dignan is Vice President of Dodge & Cox, who was Client Portfolio Manager, Research Analyst, and member of USFIC and GFIC. He graduated from Columbia University in 1991 with an A.B. in Philosophy / Economics. He received an M.A. in Economics from New York University in 1994 and his M.B.A. from Northwestern's J.L. Kellogg Graduate School of Management in 1996. Prior to joining Dodge & Cox in 1999, he worked in portfolio management for Fannie Mae. Dignan is a shareholder of the firm and a CFA charterholder.

**Average Effective Duration**

Time Period: 1/1/2008 to 12/31/2023



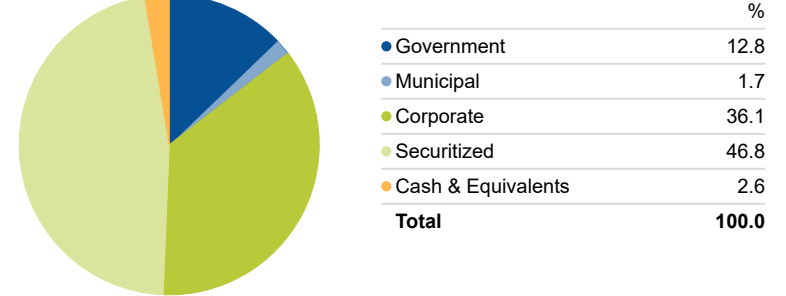
**Fixed Income Region Exposure**

Portfolio Date: 12/31/2023

	Port	Peers
North America	82.1	92.6
Latin America	4.0	1.8
United Kingdom	7.4	1.7
Europe Developed	6.3	2.7
Europe Emerging	0.0	0.1
Africa/Middle East	0.3	0.2
Australasia	0.0	0.4
Japan	0.0	0.3
Asia Developed	0.0	0.0
Asia Emerging	0.0	0.1

**Fixed Income Sector Exposure**

Portfolio Date: 12/31/2023



**Fixed Income Sector Breakdown**

Portfolio Date: 12/31/2023

	Port	Peers
Government	12.4	17.5
Government Related	0.4	9.4
Municipal Taxable	1.7	0.4
Municipal Tax-Exempt	0.0	0.1
Bank Loan	0.0	0.3
Convertible	0.0	0.1
Corporate Bond	35.4	25.8
Preferred Stock	0.7	0.4
Agency Mortgage-Backed	41.7	27.7
Non-Agency Residential Mortgage-Backed	0.0	0.2
Commercial Mortgage-Backed	0.0	1.3
Covered Bond	0.0	0.0
Asset-Backed	5.1	9.2
Cash & Equivalents	2.6	5.7
Swap	0.0	0.0
Forward/Future	0.0	2.0
Option/Warrant	0.0	0.0

**iShares Core US Aggregate Bond ETF  
AGG**

**PNC Investment Advisor Research**

**AMG Status** Approved  
**Platform Add Date** 10/29/2004  
**Status Change Date**

**Index Description**

The index measures the performance of investment grade, U.S. dollar-denominated, fixed rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-through), ABS, and CMBS. It rolls up into other Barclays flagship indices, such as the multicurrency Global Aggregate Index and the U.S. Universal Index, which includes high yield and emerging markets debt.

**Investment Strategy**

The investment seeks to track the investment results of the Bloomberg U.S. Aggregate Bond Index. The index measures the performance of the total U.S. investment-grade bond market. The fund will invest at least 80% of its assets in the component securities of the underlying index and TBAs that have economic characteristics that are substantially identical to the economic characteristics of the component securities of the underlying index, and the fund will invest at least 90% of its assets in fixed income securities of the types included in the underlying index that the advisor believes will help the fund track the underlying index.

**Trading Data**

Avg Daily Vol (3 Mo)	9,644,384
Prem/Disc (1 Yr Avg)	0.03%
Bid/Ask Spread (\$)	\$ 0.01
Bid/Ask Spread (%)	0.000%

**Strategy Overview**

Investment Type	Exchange-Traded Fund
PNC Category	Taxable FI (Core) - ETF
Tracking Index	Bloomberg US Agg Bond TR U:

**Strategy Facts**

# of Holdings	10,602
Top 10 Holdings (%)	4
Turnover Ratio (%)	104
Inception Date	9/22/2003

**Operations**

Net Expense Ratio	0.03
Fund Size (\$Mil)	101,029
Advisor	BlackRock Fund Advisors
Replication	Physical-Sample

**Trailing Returns**

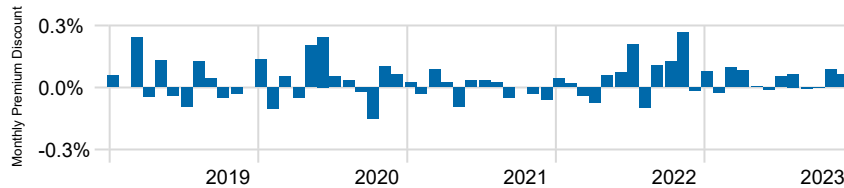
	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
iShares Core US Aggregate	6.69	5.59	5.59	-3.36	1.06	1.25	1.77
Bloomberg US Agg Bond TF	6.82	5.53	5.53	-3.31	1.10	1.29	1.81

**Calendar Year Performance**

	2023	2022	2021	2020	2019	2018	2017
iShares Core US Aggregate	5.59	-13.06	-1.67	7.42	8.68	-0.05	3.53
Bloomberg US Agg Bond TF	5.53	-13.01	-1.54	7.51	8.72	0.01	3.54

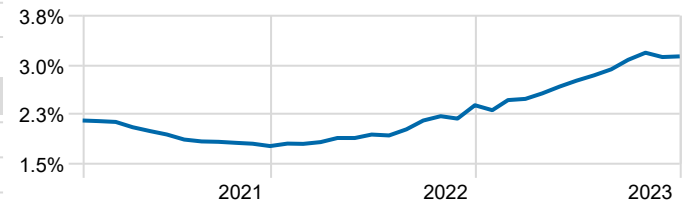
**Historical Premium/Discount to NAV**

Time Period: 1/1/2019 to 12/31/2023

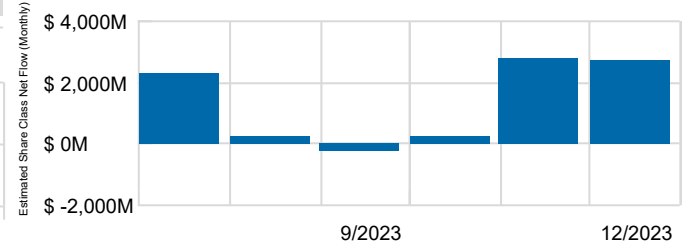


**Trailing 12 Month Yield**

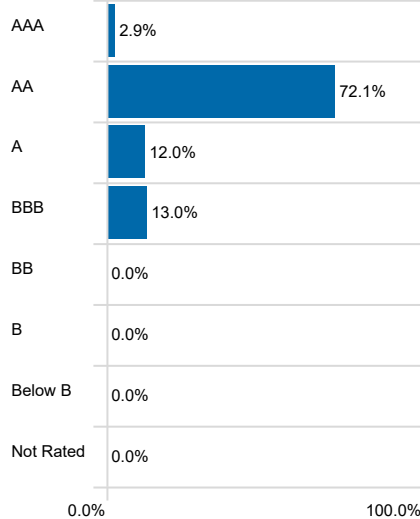
Time Period: 1/1/2021 to 12/31/2023



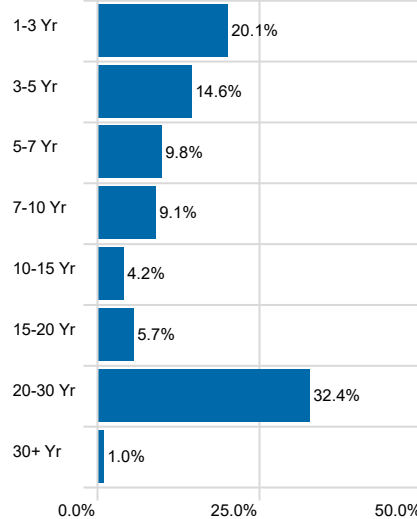
**6-Month Net Fund Flows**



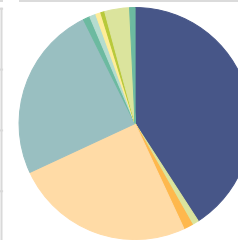
**Credit Quality Distribution**



**Maturity Distribution**



**Fixed Income Sector Exposure**



Sector	%
US Treasury	40.8
Non-US Government	0.9
Other Government Related	1.3
Corporate Bond	25.0
Agency MBS Pass Thru	24.6
Agency ARM	1.0
Agency CMO	0.9
Commercial Mortgage Backed	0.7
Municipal	0.6
Cash & Equivalents	3.5
Other	0.8

**PNC Cap Adv Intern Govt/  
Credit Fixed Inc**

**PNC Asset Management**

**AMG Status**      **Approved**

Platform Add Date      3/17/2010

Status Change Date

**Investment Philosophy/Process**

PNC believes risk is inefficiently priced in the bond market, therefore by adding risk to the portfolio through spread sector allocations when expected return is higher than the risk, and reducing these exposures when the perceived risks outweigh the reward, they can over time add value over the benchmark.

**Setting Expectations**

PNC employs a conservative approach across its suite of taxable fixed income strategies whereby the team's macroeconomic assessments form the basis for sector allocation and duration/yield curve positioning, and these decisions over time should serve as the drivers of performance. Investors should expect consistently high asset class representation with a focus on capital preservation. These characteristics should lend themselves to solid performance in challenging market environments, but the portfolio will likely underperform the majority of peers during periods when risk is in favor.

**Strategy Overview**

Investment Type	Separate Account
Morningstar Category	US SA Intermediate Core Bond
Benchmark	Bloomberg US Govt/Credit Inter
Style Category	Core Intermediate

**Strategy Facts**

# of Bond Holdings	196
Top 10 Holdings (%)	31
Turnover Ratio (%)	63
Inception Date	1/3/1995

**Operations**

Firm Name	PNC Capital Advisors
Vehicle Assets (Mil)	\$ 730
Investment Minimum	\$ 10,000,000
Management Fee	0.00%

**Performance & Peer Group Rankings**

	QTR	%	YTD	%	1Yr	%	3Yr	%	5Yr	%	10Yr	%
PNC Cap Adv Intern Govt	-0.89	12	0.94	16	2.64	18	-2.70	16	1.36	14	1.46	64
Bloomberg US Govt/Credi	-0.83	11	0.65	20	2.20	25	-2.93	21	1.02	30	1.27	82
50th Percentile	-2.99		-0.61		1.24		-4.61		0.65		1.57	

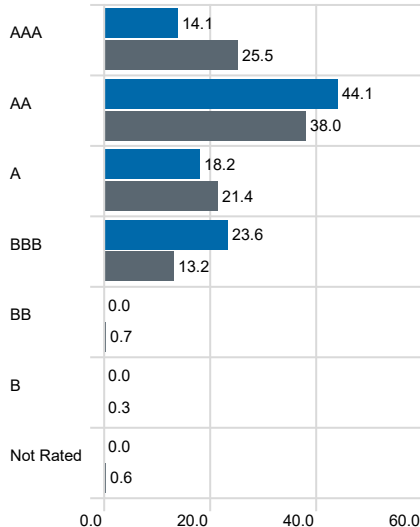
**Calendar Year Performance**

	2022	%	2021	%	2020	%	2019	%	2018	%	2017	%
PNC Cap Adv Intern Govt	-8.01	13	-1.34	60	7.54	64	7.09	79	0.81	22	2.45	89
Bloomberg US Govt/Credi	-8.23	16	-1.44	65	6.43	82	6.80	85	0.88	21	2.14	95
50th Percentile	-12.47		-1.20		8.08		9.00		0.21		3.80	

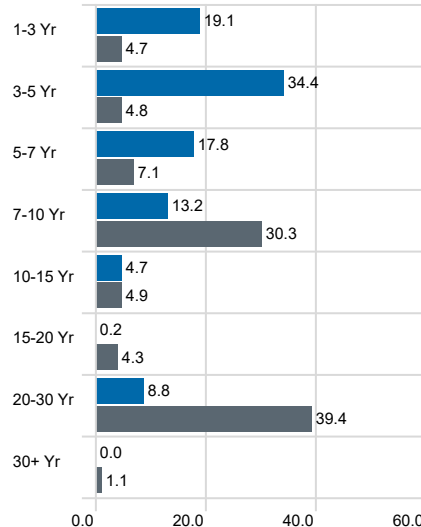
**Performance Analysis**

The strategy underperformed the Bloomberg Intermediate U.S. Government/Credit Bond Index during the 3Q. The better than expected trend of economic data raised hopes that a downturn may be avoided even as the Fed remains committed to restrictive policy in order to suppress inflation towards their 2% target. Given this trend, the Fed has largely migrated from communicating additional hikes towards trumpeting a "higher for longer" message on monetary policy. Financial markets have generally aligned with this thinking by moderating implied expectations for both the amount and timing of rate cuts in 2024. This has resulted in a noticeably steeper (or less inverted) yield curve as intermediate and long dated treasury yields jumped to cycle highs. The portfolio's modestly short duration positioning was a slight contributor to relative performance as intermediate yields moved higher. The portfolio's overweight allocation to corporate credit benefited performance during the quarter as credit rallied. The overweight to structured product was mixed as AAA-rated ABS was beneficial but the Agency-MBS allocation detracted from performance as the sector underperformed. The team maintains a defensive overweight in corporate credit and material overweights in AAA rated ABS and agency MBS.

**Credit Quality**



**Maturity Distribution**



■ PNC Cap Adv Intern Govt/Credit Fixed Inc    ■ US SA Intermediate Core Bond

**Current Assessment**

This product is Approved. The investment team has seen continued stability in recent years under the leadership of Chief Investment Officer Sean Rhoderick and has experienced no major departures since that of Tim Compan, head of Credit Research and portfolio manager on several taxable strategies, in late 2017. We have a favorable opinion of the team and believe they possess the credentials and industry experience to carry out the portfolio's process. Overall, performance falls within expectations given our understanding of the team's investment philosophy and process, and the portfolio delivers on PNC's goals of high asset class representation and capital preservation.

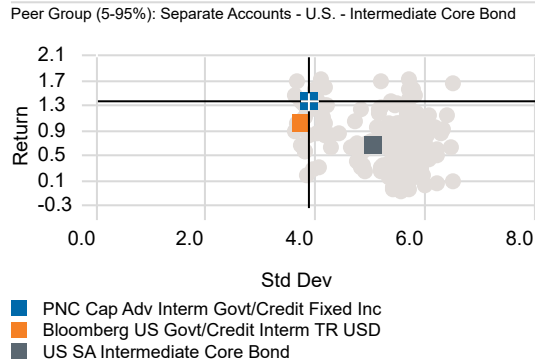


**PNC Cap Adv Interm Govt/  
Credit Fixed Inc**

**Portfolio Characteristics**

	Port	Peers
# of Bond Holdings	196	493
Average Eff Duration	3.72	5.92
Average Eff Maturity		8.48
Average Credit Quality	A	A
Average Coupon	3.25	3.57
Average Price	91.53	88.18
Yield to Maturity	5.56	5.69

**Risk/Reward - 5 Year**



**Risk/Reward vs. Benchmark**

Calculation Benchmark: Bloomberg US Govt/Credit Interm TR USD

	3YR	5YR	10YR
Standard Deviation	4.2	3.9	3.0
Sharpe Ratio	-1.1	-0.1	0.1
Information Ratio	0.6	0.7	0.5
R2	99.3	98.6	98.2
Beta	1.0	1.0	1.0
Alpha	0.3	0.4	0.2
Tracking Error	0.4	0.5	0.4
Up Capture Ratio	105.6	106.5	101.4
Down Capture Ratio	99.8	100.3	96.0
Batting Average	61.1	58.3	60.0

**Manager Biography**

**Sean T. Rhoderick, CFA, Chief Investment Officer**

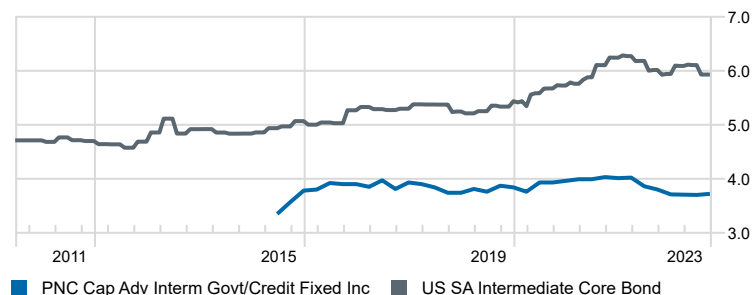
Sean is managing director and chief investment officer of PNC Capital Advisors. Drawing on his extensive experience in fixed income research and portfolio management, he leads the team's overall investment strategy and process and directs the implementation of these ideas across the firm's investment solutions.

**Jeffrey S. Bryant, CFA, Head of Credit Trading, Portfolio Manager**

Jeffrey is the head of credit trading, leading the implementation of purchase and sale decisions across portfolio strategies. He also serves as co-portfolio manager for intermediate duration strategies.

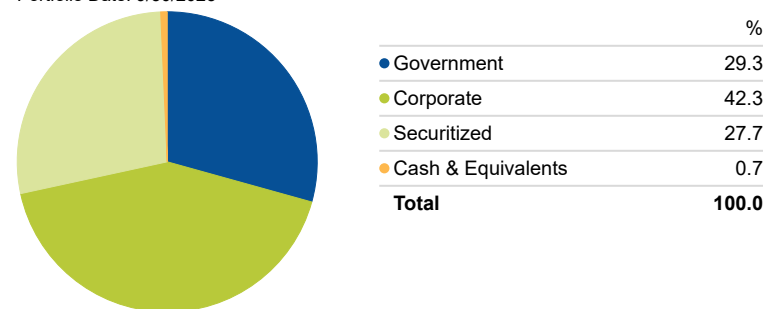
**Average Effective Duration**

Time Period: 1/1/2008 to 9/30/2023



**Fixed Income Sector Exposure**

Portfolio Date: 9/30/2023



**Fixed Income Region Exposure**

Portfolio Date: 9/30/2023

	Port	Peers
North America	97.1	94.5
Latin America	0.0	1.0
United Kingdom	1.9	1.5
Europe Developed	0.5	2.1
Europe Emerging	0.0	0.0
Africa/Middle East	0.0	0.1
Australasia	0.4	0.2
Japan	0.0	0.5
Asia Developed	0.0	0.1
Asia Emerging	0.0	0.1

**Fixed Income Sector Breakdown**

Portfolio Date: 9/30/2023

	Port	Peers
Government	29.3	28.8
Government Related	0.0	5.6
Municipal Taxable	0.0	0.7
Municipal Tax-Exempt	0.0	0.2
Bank Loan	0.0	0.0
Convertible	0.0	0.0
Corporate Bond	42.3	25.1
Preferred Stock	0.0	0.1
Agency Mortgage-Backed	14.2	30.6
Non-Agency Residential Mortgage-Backed	0.0	0.5
Commercial Mortgage-Backed	0.0	0.5
Covered Bond	0.0	0.0
Asset-Backed	13.5	5.0
Cash & Equivalents	0.7	2.5
Swap	0.0	0.4
Forward/Future	0.0	0.2
Option/Warrant	0.0	0.0

Report is intended for use with existing PNC clients invested in the strategy or fund described herein and is for informational purposes only. Please see glossary and disclosures beginning on page 3.

**Goldman Sachs Absolute Ret Trchr R6 GARUX**

**PNC Investment Advisor Research**

**AMG Status** Approved

Platform Add Date 3/24/2009

Status Change Date

**Investment Philosophy/Process**

The Goldman Sachs Absolute Return Tracker Fund is a hedge fund replication product that seeks to approximate the performance of the hedge fund universe, benchmarked by the HFRX Global Hedge Fund index. The algorithms update exposures based on statistical studies of hedge funds in the Goldman Sachs database and aggregated data from several prime brokers. Exposures incorporate efforts to replicate hedge fund exposures across four main strategies: long/short equity, global macro, event driven, and relative value. Futures contracts are heavily used to get exposure to broad asset classes. Equity exposures include both futures contracts for country, market cap, and sector exposures, and baskets of individual stocks to replicate the largest holdings of hedge funds based on 13F filings.

**Setting Expectations**

Goldman Sachs seeks to replicate through this fund the broad risk and return profile of the hedge fund industry. Thus, performance will generally follow the results of the HFRX Global Hedge Fund index. This index has historically generated relatively stable mid-single digit returns. Ultimately, returns will be driven by the decisions of a large number of hedge fund managers as identified by the algorithms used to build this portfolio, and this fund will usually generate gains when multiple hedge fund strategies are in favor and losses when those strategies face headwinds.

**Strategy Overview**

Investment Type	Alternative Mutual Fund
Trading Strategy	Multi-Strategy
Sub-Style	Absolute Return
Benchmark	HFRX Global Hedge Fund USD

**Fund Facts**

Inception Date	7/31/2015	Fund Size (Mil)	\$ 4,186
Prospectus Net Expense Ratio	0.71%	Top 10 Holdings (%)	20
Minimum Investment	\$ 0	Turnover Ratio (%)	184

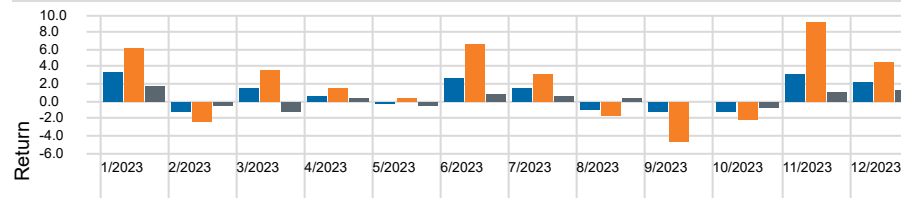
**Performance Returns**

	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
Goldman Sachs Absolu	4.40	10.74	10.74	3.40	4.91	4.17	3.48
HFRX Global Hedge Fu	1.70	3.10	3.10	0.71	3.46	2.29	1.41
S&P 500 TR USD	11.69	26.29	26.29	10.00	15.69	13.42	12.03

**Calendar Year Performance Returns**

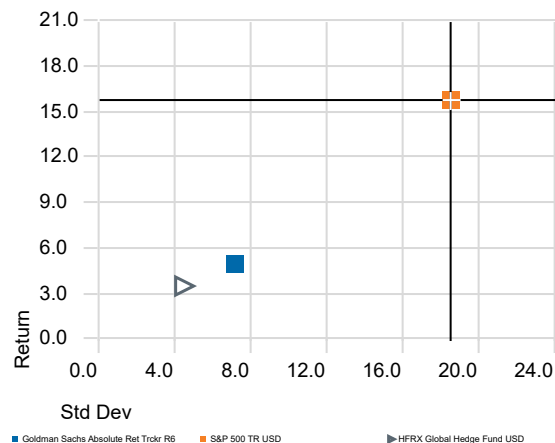
	2023	2022	2021	2020	2019	2018	2017	2016
Goldman Sachs Absolute R	10.74	-6.17	6.38	3.72	10.82	-2.46	7.36	4.86
HFRX Global Hedge Fund I	3.10	-4.41	3.65	6.81	8.62	-6.72	5.99	2.50
S&P 500 TR USD	26.29	-18.11	28.71	18.40	31.49	-4.38	21.83	11.96

**Performance, Trailing 12 Months**



**Risk-Reward**

Time Period: 1/1/2019 to 12/31/2023



**Risk/Reward vs. S&P 500**

	3YR	5YR
Standard Deviation	6.63	7.16
Sharpe Ratio	0.17	0.43
Max Drawdown	-9.82	-9.82
Alpha	-1.99	-2.17
Beta	0.36	0.36
Correlation	0.96	0.95
Up Capture Ratio	37	36
Down Capture Rat	39	39

**Risk/Reward vs. Bloomberg AI**

	3YR	5YR
Correlation	0.71	0.51
Up Capture Ratio	73	84
Down Capture Rat	22	32

**IAR's Assessment & Analysis**

GS Absolute Return Tracker Fund (GARUX) delivered a total return of 4.4% in the fourth quarter with a strong return of 2.38% in December and 10.7% for the year to date (YTD). In terms of styles, equity long/short, macro, relative value and event driven strategies all contributed to performance during the quarter and for the year. In the fourth quarter, equity long/short, the global stock selection factor with a positive beta, generated 249 basis points (bps). The next largest contributor was the relative value sector earning 111 bps, on back of the tightening of corporate credit and convertible bond sectors. Volatility arbitrage also added to return capturing the elevated volatility premium across asset classes. Macro strategies gained 70 bps over the quarter, avoiding missteps on several abrupt swings on medium-term trends in fixed income and currencies.

On a YTD basis, equity long/short was the main contributor as equity markets delivered very strong performance and the strategy had positive performance in both their beta and alpha positions. Meanwhile, long/short exposure to emerging market stocks posted negative returns, offsetting some gains but only marginally. Within macro strategies, exposure to developed equities contributed the most for the year, while long/short trend-following substrategy was challenged with trend signals adapting to the transitory phase of market regimes. Relative value and event driven contributed, as credit and event related strategies registered strong gains with improving market sentiments as the year progressed especially in the latter part of the fourth quarter.

Top-down strategy allocations have not changed over the quarter with the largest net exposures by asset class remain U.S. equities (21.8%), credit (19%) and emerging market and global equities (10% and 7%, respectively). Over the quarter, the fund has covered its exposure to its short U.S. dollar position. Looking forward, the ability to garner further equity alpha should increase as the breadth of the market improves. This portfolio runs with an average beta of 0.30 to the S&P, therefore, should participate in rallying equity markets. We continue to see opportunities for this strategy to provide differentiated alternatives exposures in a liquid format.

This Appendix contains one or more IAR Quarterly Review(s).

**Third Party Funds, ETFs, SMAs and Alternative Investments:** Quarterly Reviews for third party mutual funds ("Funds"), exchange Traded Funds ("ETFs") and separately managed accounts ("SMAs") are produced by PNC Bank, National Association ("PNC") Investment Advisor Research group ("IAR"). IAR is a group of investment professionals dedicated to selecting and monitoring investment managers for the PNC Bank platform, including Funds, ETFs, SMAs, and alternative investments. All views expressed in such Quarterly Reviews accurately reflect IAR's views as of the date of the relevant Quarterly Review and no part of the compensation of any member of IAR is, or will be, directly or indirectly related to the views expressed in a Quarterly Review or whether a particular investment is utilized in a client's portfolio.

**PNC Advantage Equity Strategies:** Quarterly Reviews for the PNC Advantage Equity Strategies are produced by The PNC Financial Services Group, Inc. ("PNC") for the benefit of PNC Bank, National Association ("PNC Bank") and its clients. PNC provides information for the section of the Quarterly Review titled Investment Philosophy/Process, Setting Expectations, and Performance Analysis. PNC Advantage Equity ("Advantage Equity"), a division of the Asset Management Group of PNC Bank offers discretionary investment management and advisory services, to separately managed accounts investing primarily in common stocks of publicly traded U.S. companies through a framework that integrates both quantitative and fundamental analysis. Advantage Equity performance prior to December 1, 2019 occurred while the Advantage Equity team was employed by PNC Capital Advisors, LLC ("PCA"), an affiliated firm. The Advantage Equity team has managed the strategies since inception of the composites. The historical investment performance generated by Advantage Equity while part of PCA has been linked to the results achieved by Advantage Equity beginning December 1, 2019.

**PNC Capital Advisor Strategies:** Quarterly Reviews for the PNC Capital Advisor Strategies are produced by PNC Capital Advisors, LLC ("PCA") and Envestnet Asset Management Inc. ("Envestnet") for the benefit of PNC Bank, National Association ("PNC Bank") and its clients. PCA is an SEC registered investment adviser and wholly-owned subsidiary of The PNC Financial Services Group, Inc. ("PNC"). Envestnet is a third party that provides ongoing monitoring and due diligence on PCA products to PNC Bank, National Association. PCA provides information for the section of the Quarterly Review titled Performance Analysis and Envestnet provides information for sections of the Quarterly Review titled Investment Philosophy/Process, Setting Expectations and Current Assessment.

**PNC Municipal Bond Strategies:** Quarterly Reviews for the PNC Municipal Bond Strategies are produced by The PNC Financial Services Group, Inc. ("PNC") for the benefit of PNC Bank, National Association ("PNC Bank") and its clients. PNC provides information for the section of the Quarterly Review titled Investment Philosophy/Process, Setting Expectations, and Performance Analysis. PNC Municipal Investment Group ("MIG"), a division of the Asset Management Group of PNC Bank offers discretionary investment management and advisory services, both active and passive, to separately managed accounts investing primarily in municipal fixed income securities through a process that integrates fundamental credit research and quantitative risk analysis. MIG performance prior to December 1, 2019 occurred while the MIG team was employed by PNC Capital Advisors, LLC ("PCA"), an affiliated firm. The MIG team has managed the strategies since inception of the composites. The historical investment performance generated by MIG while part of PCA has been linked to the results achieved by MIG beginning December 1, 2019.

**All Quarterly Reviews have been prepared for use with existing PNC clients invested in the relevant Fund, ETF, SMA or Strategy and are for informational purposes only.** All Quarterly Reviews are the intellectual property of PNC and may not be reproduced, distributed or published by any person for any purpose without PNC's express prior written consent. Quarterly Reviews do not constitute the provision by PNC of legal, tax, accounting, or investment advice to any person or a recommendation to buy, hold or sell any security or adopt any investment strategy and are not specifically directed to any particular client or intended to serve as a primary (or other) basis for a decision whether to invest in any security or adopt any investment strategy. The information provided in the Quarterly Reviews does not constitute "investment advice" that would make PNC or any affiliate thereof a "fiduciary" within the meaning of Section 3(21)(A)(ii) of the Employee Retirement Income Security Act of 1974, as amended. PNC shall not be liable for any investment losses incurred from reliance on Quarterly Reviews. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment. Accounts managed by PNC and its affiliates may take positions from time to time in securities recommended and followed by PNC affiliates.

All data, facts, assumptions, opinions, and analysis provided in a Quarterly Review are as of the date of the Quarterly Review (or other stated date) and are subject to change without notice. PNC assumes no responsibility to review or update any data, facts, assumptions, opinions, analysis or other information provided therein. The information contained in the Quarterly Reviews was obtained from sources deemed reliable and, in the case of Funds and SMAs, when deemed appropriate, performance is calculated using a proxy such as an ETF. Third party data and software were used in the preparation Quarterly Reviews. PNC makes no representation or warranty of any kind, express or implied, regarding the timeliness, accuracy or completeness of such data and assumes no liability for damages resulting from or arising out of the use of such data or software. All such data is provided on an "as is" basis. PNC assumes no obligation to verify or update such data.

**Returns and other measures of performance represent past performance. Past performance is no guarantee of future results, and investments may lose money. Carefully consider relevant investment objectives, risks associated with a particular investment strategy as well as applicable charges and expenses before making any investment decision.**

PNC Bank and its affiliates are not compensated by any fund or fund investment adviser in connection with their inclusion on the PNC Bank platform. PNC Bank and/or its affiliates or employees may have financial arrangements or other relationships with the funds and/or affiliates of the funds, including without limitation, as an investor in a fund or other investment vehicles managed by a fund's investment adviser, as well as investment advisory, custody, deposit accounts, lending relationships, and/or brokerage services. In each case, PNC Bank and its affiliates may derive direct or indirect financial and other benefits, which may be substantial. Funds may be introduced to PNC Bank as a result of such arrangements or relationships. PNC Bank evaluates funds based on the merit of the investment and does not include funds on the PNC Bank platform based on such arrangements or relationships.

Mutual Fund performance results reflect the deduction of manager fees, applicable trading expenses and other internal fund expenses but do not reflect the deduction of PNC Bank account level fees. Actual Performance results would have been lower if such PNC Bank account level fees were deducted. ETF performance results reflect the deduction of manager fees, applicable trading expenses and other internal fund expenses but do not reflect the deduction of PNC Bank account level fees. Actual Performance results would have been lower if such PNC Bank account level fees were deducted. Separately managed account performance reflects the deduction of applicable trading expenses but does not account for PNC Bank account level fees or fees charged and payable to separate account managers. Actual Performance results would have been lower if such PNC Bank account level fees and separate account manager fees, where applicable, were deducted.



**Glossary of Defined Terms and Explanatory Notes.** Please see the Glossary of Terms attached at the end of this disclosure for definitions of terms used in the Quarterly Reviews and the Explanatory Notes for other important disclosures and information regarding the Funds, ETFs and SMAs.

**Extended Performance:** Performance history in some Quarterly Reviews for Funds reflects "Linked Performance" if the Fund does not have at least 10 years of performance history. "Linked Performance" means performance of the Fund in that Quarterly Review has been extended by linking performance of the Fund share class to performance of an older share class. This is done in order to display a longer track record for the Fund. Performance of the older share class is linked to the actual, since inception date performance of the newer share class shown in that Quarterly Review. If the newer share class has higher fees and expenses than the older share class, the performance of the older share class will be recalculated downward to reflect this and, therefore, the performance shown may be lower than the actual returns. The different Fund share classes share the same portfolio and differ predominantly in the amount of expenses charged. The extended performance shown was computed by Morningstar. For actual performance of each of the newer and older share class, please refer to the "Extended Performance – Newer and Older Share Class Actual Performance" section at the end of this disclosure. QUARTERLY REVIEWS UTILIZING LINKED PERFORMANCE WILL BE DENOTED WITH AN ASTERISK (\*) IN SECTIONS OF THAT QUARTERLY REVIEW TITLED "PERFORMANCE RETURNS & PEER GROUP RANKINGS", "CALENDAR YEAR PERFORMANCE RETURNS", "RISK/REWARD VS. BENCHMARK" AND "EXCESS RETURN DISTRIBUTION".

**Indices or Benchmarks.** Indices are unmanaged, are not available for direct investment, and are not subject to management fees, transaction costs or other types of expenses that an account may incur. Indices performance results do not represent, and are not necessarily indicative of, the results that may be achieved in accounts investing in the corresponding investment strategy; actual account returns may vary significantly. For definitions of Indices/Benchmarks used herein, please refer to [www.pnc.com/indexdefinitions](http://www.pnc.com/indexdefinitions).

Mutual Fund and ETF Shares: Not a Deposit. Not FDIC Insured. No Bank or Federal Government Guarantee. May Lose Value. Returns and other measures of performance represent past performance. Past performance is no guarantee of future results, and investments may lose money. Fund and ETF share prices, yields and returns may vary, and you may have a gain or loss when you sell Fund and/or ETF shares. Current performance may be lower or higher than the performance data quoted. Carefully consider the Fund's or ETF's investment objectives, risk factors and charges and expenses before investing. This information may be found in the prospectus for the Fund or ETF. You should read the prospectus carefully before investing. You should obtain and carefully review the prospectus and other offering documents for each Fund and ETF included in this presentation. You should consult with your personal financial advisor before making any investment decisions.

SMAs: Returns and other measures of performance represent past performance. Past performance is no guarantee of future results, and investments may lose money. Current performance may be lower or higher than the performance data quoted. Carefully consider the manager's investment objectives, risks associated with an investment strategy offered by a manager, risk factors and charges and expenses before investing. You should obtain and carefully review Form ADV, Part II and Form CRS for the SMA managers referenced in this presentation for more information on that manager and its investment strategy.

Alternative investments involve significant risks, including a partial or total loss of invested funds, and you should not invest in such investments unless you have fully understood all such risks and have independently determined that such transactions are appropriate. Alternative investments are typically not registered with any regulatory authority and are not subject to the same accounting and disclosure requirements as a registered investment. Any discussion of the risks contained herein with respect to any product should not be considered to be a disclosure of all risks or a complete discussion of the risks that are mentioned. You should neither construe any of the material contained herein as business, financial, investment, hedging, trading, legal, regulatory, tax, or accounting advice. You are encouraged to consult your PNC account representative and/or other business advisor, attorney, and tax and accounting advisors concerning any contemplated transactions in alternative investments. Alternative investment strategies are available only to qualified investors who have reviewed detailed information concerning investment terms and risks. You should read the applicable fund offering documents carefully before investing.

Any discussion of the risks contained herein with respect to any product should not be considered to be a disclosure of all risks or a complete discussion of the risks that are mentioned.

The PNC Financial Services Group, Inc. ("PNC") provides investment consulting and wealth management, fiduciary services, FDIC-insured banking products and services, and lending of funds to individual clients through PNC Bank, National Association ("PNC Bank"), which is a **Member FDIC**, and provides specific fiduciary and agency services to individual clients through PNC Delaware Trust Company or PNC Ohio Trust Company. PNC provides various discretionary and non-discretionary investment, trustee, custody, consulting, and related services to institutional clients through PNC Bank, and investment management activities conducted by PNC Capital Advisors, LLC, an SEC-registered investment adviser and wholly-owned subsidiary of PNC Bank.

PNC does not provide legal, tax, or accounting advice unless, with respect to tax advice, PNC Bank has entered into a written tax services agreement. PNC Bank is not registered as a municipal advisor under the Dodd-Frank Wall Street Reform and Consumer Protection Act. "PNC" is a service mark of The PNC Financial Services Group, Inc.

**Investments: Not FDIC Insured. No Bank Guarantee. May Lose Value.**

© 2023 Morningstar. All Rights Reserved. The information contained in the Quarterly Report: (1) is proprietary to Morningstar and/or its content providers and (2) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Past performance is no guarantee of future results.

©2023 The PNC Financial Services Group, Inc. All rights reserved.

**Glossary of Terms**

**Active Share (Avg):** Represents the share of portfolio holdings that differs from benchmark index holdings; emphasizes how individual stocks are weighted differently in a portfolio compared with a benchmark.

**Allocation by Asset Type:** A breakdown of the portfolio into various asset types, such as U.S. direct lending, syndicated loans, and European direct lending, among others.

**Allocation by Industry:** The Allocation by Industry is the percentage of the portfolio invested in each market industry current as of the report date indicated (ending date) and classifies holdings by industry using an industry database maintained by Bloomberg. These industry classifications may differ from those used in other information that is provided to you or available from your financial advisors.

**Alpha:** A measure of risk-adjusted performance of a portfolio; the difference between a portfolio's expected returns based on its beta and actual returns. Alpha is often seen as a measurement of the value added or subtracted by a portfolio's manager.

**Approved:** This status is initially applied to a strategy when the Investment Advisor Research Committee (IARC) votes to add it to the PNC platform, and generally deems that the investment is suitable for use by PNC clients. The IARC may also return a strategy that was previously on Watch or Hold status back to Approved status if the concern that caused the Watch or Hold action is no longer applicable.

**Asset Class/Capitalization Descriptions:** Descriptions of asset classes and capitalization levels used in the Quarterly Review may not correspond to the asset classes and capitalization level descriptions used in other materials provided to you or available to your financial service provider.

**Attribution:** Active Return: The difference, either positive or negative, between the portfolio and the benchmark within a certain segment of the portfolio; generally used to assess a manager's stock picking skill within a certain area.

**Attribution:** Relative Weights: The difference, either positive or negative, between the weight of the portfolio and the benchmark within a certain segment of the portfolio.

**Asset Allocation:** A breakdown of the portfolio into major asset classes, such as equity, fixed income, and cash, which also displays U.S. and non-U.S. exposure.

**Average Coupon:** Coupon is the interest rate on a bond expressed as a percentage of the bond's face value. The average coupon of a portfolio is calculated by weighting each bond's coupon by its relative size in the portfolio.

**Average Credit Quality:** A weighted average of all of the credit qualities of the bonds in a portfolio, adjusted for the default rates at each notch on Morningstar's rating scale.

**Average Daily Volume:** The average daily trading volume of common shares over the specified time period, expressed in number of shares. The daily volume is collected, but the average daily volume is calculated.

**Average Effective Duration:** A weighted average of all of the durations of the bonds in a portfolio. Duration is a measure of a portfolio's interest-rate sensitivity. The longer a portfolio's duration, the more sensitive it is to interest-rate shifts.

**Average Effective Maturity:** A weighted average of all of the maturities of the bonds in a portfolio. Maturity refers to the period of time a financial instrument outstanding. Average effective maturity takes into account all mortgage prepayments, adjustable coupons, and other features of individual bonds.

**Average Weights:** Tables that display the top holdings contributors (securities that added the most value to absolute return) and detractors (securities that subtracted the most value from absolute return) over a given time period. The tables display the average weight of the security in the portfolio and the benchmark, the security's absolute return over the time period, and its contribution (portfolio weight x security return) to the portfolio over the time period.

**Bating Average:** A measure of a portfolio's ability to beat an index over a given time period.

**Beta:** Beta is a quantitative measure of the volatility of a portfolio or composite relative to its assigned benchmark. It measures the systematic risk associated with a composite. A portfolio with a beta greater than one is generally more volatile than its benchmark index, and a portfolio with a beta of less than one is generally less volatile than its benchmark index. As with any statistic based on past performance, there is no guarantee of future performance.

**Bid/Ask Spread:** This end-of-day figure is an average of all the spreads over a trading day. The calculation is based upon real time data; interim calculations are triggered when a new best ask or best bid price is received. The spread calculation used is Ask Price - Bid Price.

**Closed Status:** The Closed status is applied when the investment manager has closed the portfolio to asset inflows from new and existing clients.

**Correlation:** This indicates the strength and direction of a linear relationship between two random variables. The value will range between -1 and 1.

**Debt/Capital:** The debt/capital ratio of a portfolio is the weighted average of the debt/capital ratios of all stocks in the portfolio. This ratio measures a portfolio's financial leverage by calculating a portfolio's debt divided by its total capital.

**Diversification by Property Type:** A comparison of the breakdown of property type exposure (residential, industrial, retail, office, and other) between the portfolio and the benchmark.

**Dividend Yield:** The dividend yield of a portfolio is the weighted average of the dividend yields of all the stocks in a portfolio. Dividend Yield (usually shown as a percentage) compares the size of a company's dividends to its share price (dividends per share/market price per share).

**Down Market Capture:** The down market capture looks at the performance of a portfolio versus that of the market (that is, the appropriate index) in down markets. The better the capital protection given by the portfolio in down markets, the lower the down market capture.

**Excess Return:** This is a measure of an investment's return in excess of a benchmark.

**Exchange Traded Fund (ETF):** Hybrid instruments combining aspects of common stocks and mutual funds and offering some benefits of both. ETFs are products that trade like stocks on the American Stock Exchange. They mimic stock indexes and are passively managed just like an index fund.

**Exchange Traded Note (ETN):** A senior, unsecured debt security that provides investors with the returns linked to the performance of an underlying index.

**Exposure by Asset Class:** A breakdown of the portfolio into various asset classes, such as private equity, infrastructure, private debt, real estate, and real assets, among others.

**Exposure by Investment Type:** A breakdown of the portfolio into different private investment types, such as secondary, primary, and co-investments, among others.

**Gate:** A gate restricts the number of withdrawals from a hedge fund during the

redemption period. Gates can be implemented at the fund level (set as a percentage of the fund's net asset value) or at the investor level (set as a percentage of an investor's capital).

**Hold:** Status applied by the IAR Committee (IARC) to a strategy when IARC determines there are critical factors causing a moderate level of concern with the strategy that require further analysis and monitoring. New investments are not permitted in strategies on Hold status until IARC determines otherwise or unless the client so directs. Depending on the type of change in factor(s) and how quickly they occur, a strategy may not have been on Watch status prior to the change to Hold status.

**Information Ratio:** Measures the consistency with which a portfolio beats a benchmark. Calculated as annualized excess return divided by the standard deviation of excess return. A higher information ratio indicates consistent returns.

**Investment Growth:** Reflects a portfolio's performance based on how \$100 invested in the strategy would have grown over time with dividends reinvested.

**Liquidity:** The frequency with which an investor can redeem from a fund (for example, monthly, quarterly, annually, or other).

**Loan-to-Value:** Loan-to-Value is a ratio that looks at the loan used to buy an asset in relation to the actual value of that same asset. The loan-to-value of a portfolio is the sum of the debt of the portfolio divided by the portfolio's total asset value.

**Management Fee:** A management fee is the annual fee charged by the investment manager for managing the investment fund/operational costs.

**Market Capitalization Exposure:** A comparison of the breakdown of market capitalization classifications (giant, large, mid, small, and micro) between the portfolio, benchmark, and an average of the peer group.

**Maturity Distribution:** A comparison of the breakdown of maturity buckets (1-3 year, 3-5 year, and so on.) between the portfolio and an average of the peer group.

**Max Drawdown:** The peak to trough decline during a specific record period of an investment or fund. It is usually quoted as the percentage between the peak to the trough.

**Net Asset Value (NAV):** The total net assets of the fund divided by the total number of shares outstanding.

**Net Expense Ratio:** A portfolio's expense ratio is stated in the portfolio prospectus. The expense ratio is calculated by dividing a portfolio's annual operating expenses by the average dollar value of its assets under management. The net expense ratio is net of reimbursements.

**Peer Group Ranking:** Evaluation of the performance of a portfolio compared with its peers; helps determine how a particular portfolio ranks over various time periods compared with its peers.

**Performance Fee:** A fee that an investor will pay to the investment manager of the fund for making profits/positive returns. It can include a minimum threshold and can be calculated in different ways.

**Performance Returns:** Measures a portfolio's increase in value each year (or other stated period), including appreciation, compounded interest, and dividends. Also called compound rate of return.

**Premium/Discount:** The monthly premium/discount of ETF from its NAV to the closing price.

\*See Extended Performance Disclosure at the end of the Quarterly Reviews

Report is intended for use with existing PNC clients invested in the strategy or fund described herein and is for informational purposes only.

**Glossary of Terms (Cont.)**

**Price/Book:** The price/book (P/B) ratio of a portfolio is the weighted average of the P/B ratios of all the stocks in a portfolio. A company's P/B ratio is calculated by dividing the market price per share of its outstanding stock by the company's book value per share.

**Price/Cash Flow:** The price/cash flow (P/CF) ratio of a portfolio is the weighted average of the P/CF ratios of all the stocks in a portfolio. A company's P/CF ratio is a ratio of a stock's price to its cash flow per share. It is an indicator of a stock's valuation. A company's P/CF ratio can be calculated as the stock price per share divided by operating cash flow per share.

**Price/Earnings:** The price/earnings (P/E) ratio of a portfolio is the weighted average of the P/E ratios of all the stocks in the portfolio. A company's P/E ratio is calculated by dividing the market price per share of its outstanding stock by the company's trailing 12-month earnings per share.

**Price/Sales:** The price/sales (P/S) ratio of a portfolio is the weighted average of the P/S ratios of all the stocks in the portfolio. The P/S ratio compares a company's stock price to its revenues. It is a measure of the value placed on each dollar of a company's sales or revenues. A company's P/S ratio can be calculated in two ways: by dividing a company's market capitalization by its total sales over a 12-month period, or on a per-share basis by dividing the stock price by sales per share for a 12-month period.

**Replication:** Index-tracking products replicate the returns of the index they are tracking through a number of investment management techniques. The replication method data point explains which portfolio-management techniques are used.

**Return Contribution:** The difference, either positive or negative, between the fund and the benchmark within a certain segment of the portfolio; generally used to assess a manager's stock picking skill within a certain area.

**Return on Equity:** The return on equity (ROE) of a portfolio is the weighted average of the ROEs of all the stocks in a portfolio. A company's ROE is a measure of the amount of net income returned as a percentage of shareholders' equity. ROE is expressed as a percentage and is calculated as net income/shareholder's equity.

**R2:** A measure of correlation, r-squared ranges from 0 to 1 (or 0 to 100%) and reflects the percentage of a composite's variability that is explained by the variability of the benchmark. An r-squared measure of 0.25 (or 25%) means that the regression model explains only 25% of the variability. The higher the r-squared, the more useful the beta and annualized alpha statistics.

**SEC Yield:** This calculation is based on a 30-day period ending on the last day of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period. The figure listed lags by one month. When a dash appears, the yield available is more than 30 days old. This information is taken from portfolio surveys

**Sell:** Status applied by IARC to a strategy when there are critical factors causing a heightened or immediate concern regarding the strategy that require immediate action. Strategies with a Sell status are no longer an investment option for clients unless the client so directs. Any strategy rated as a Sell is no longer monitored by IARC.

**Sharpe Ratio:** The Sharpe ratio seeks to adjust the return of a portfolio based on the amount of risk taken to achieve it. It is calculated by dividing a portfolio's total risk premium by the standard deviation of its risk premium. The risk premium is defined as the return above the risk-free rate (usually T-bill rate).

**Soft Closed:** Status applied when a strategy has closed asset inflows from new clients but continues to allow asset inflows into the strategy from existing clients.

**Standard Deviation:** Measures the total volatility or range of a portfolio's return. It is often used to measure how much a portfolio's actual return deviates from its expected return for the measured period. Standard deviation measures total risk, which can be broken down into market risk and specific risk.

**Subscriptions:** The frequency with which an investor can invest new money into a fund (for example, daily, monthly, quarterly, or other).

**Turnover Ratio:** The turnover ratio is a measure of a portfolio's trading activity. It is expressed as the percentage of a portfolio's holdings that have been replaced with other holdings in a given year. Turnover ratio is calculated by dividing the lesser of purchases or sales by average monthly net assets.

**Tracking Error:** Measures how closely a portfolio's returns track those of a benchmark. Represents the standard deviation, or variability, of a portfolio's excess returns relative to the benchmark.

**Up Market Capture:** The up market capture looks at the performance of a portfolio versus that of the market (that is, the appropriate index) in up markets. The better the performance in comparison with the market, the higher the up market capture.

**Watch:** Status applied by IARC to a strategy when critical factors have changed and IARC determines that monitoring is warranted. A change to Watch status may be the result of an either a potentially positive or neutral event and should not automatically be considered a negative view of a strategy. Investments can still be made in strategies with a Watch status.

**X:** Times

**Yield to Maturity:** Yield to maturity, or redemption yield of a bond or other fixed-interest security such as gilts, is the internal rate of return earned by an investor who buys the bond today at the market price, assuming that the bond will be held until maturity, and that all coupon and principal payments will be made on schedule.

**EXPLANATORY NOTES**

**You should consider the investment objectives, risks, charges and expenses of the portfolio described in the portfolio's prospectus, which is available upon request from your PNC account manager. Read the prospectus carefully before you invest.**

**Limitations on Use of Benchmarks:** Benchmarks are broad-based indexes that should be used by investors for comparative purposes only and are selected because they are well known and easily recognized by investors. The information in the Quarterly Review regarding benchmarks is included to show the general trends in the periods indicated and is not intended to imply that the portfolio was similar to the benchmark in composition or risk. There are limitations on comparisons of a portfolio to benchmarks due to volatility and certain other material characteristics that may differ from the portfolio. Any index or other benchmark whose return or risk figures are shown for comparison purposes may include different holdings; a different number of holdings; and a different degree of investment in individual securities, industries, or economic sectors; and may have different risk and return characteristics than the portfolio to which it is compared. Indexes are unmanaged, are not available for direct investment and are not subject to advisory fees, transactions costs, or other types of expenses that may be incurred by the portfolio. Performance of indexes reflect reinvestment of dividends and, where applicable, capital gains distributions. Investors should carefully consider these limitations and differences when evaluating comparative benchmark/indexes data performance in the Quarterly Review.

**Portfolio Sales Charges:** You will not pay a front-end or deferred sales charge when investing in this portfolio through PNC, but you will pay PNC account-level fees based on the value of any portfolio shares that you hold in your account.

Please note that you may be able to purchase shares of this portfolio outside of PNC; however, such a purchase may be subject to any applicable sales charges. For information about returns reflecting applicable sales charges, see the portfolio's prospectus or contact your PNC account manager.

**Effect of Fees on Returns:** Mutual fund, ETF, and alternative investment performance results reflect the deduction of manager fees, applicable trading expenses and other internal fund expenses but do not reflect the deduction of PNC account level fees. SMA performance reflects the deduction of applicable trading expenses but does not account for PNC account level fees or fees charged and payable to SMA managers. Performance results would have been lower if such PNC account level fees and SMA manager fees, where applicable, were deducted.

**Limitations of Index Data:** Any index for which performance is shown is unmanaged, and its performance does not include any management fees, transaction costs, or other charges that may be incurred in connection with a client account, including any portfolio operating expenses.

**Top Ten/Fifteen Holdings, Ending Weights:** The list of Ten/Fifteen Largest Holdings by their weight in (percentage of) the portfolio is current as of the date of the report indicated (ending date) and does not indicate that the portfolio did hold any security listed on any prior date or will hold any security listed at any subsequent point. It should not be considered a recommendation to purchase or sell any particular security. The securities listed do not represent the strategy's entire portfolio as of the date indicated or as of any other date and may represent in the aggregate only a small percentage of the portfolio's holdings. It should not be assumed that any security listed was, or will prove to be, profitable.

**Detractors:** The holdings that had the most negative impact on portfolio performance over the reporting period.

**Contributors:** The portfolio holdings that contributed the most to the performance of the portfolio over the reporting period.

**Country Exposure:** The country exposure is current as of the date indicated and classifies holdings by country. These classifications may differ from those used in other information that is provided to you or available to your financial advisors.

**Equity Regional Exposure:** The Equity Regional Exposure is current as of the date indicated and classifies holdings by region. These region classifications may differ from those used in other information that is provided to you or available to your financial advisors.

**GICS Sector Exposure, Ending Weights/Sector Weights:** The GICS Sector Exposure is the percentage of the portfolio invested in each market sector current as of the report date indicated (ending date) and classifies holdings by sector using an industry database maintained by MSCI and Standard & Poor's. These sector classifications may differ from those used in other information that is provided to you or available to your financial advisors.

**Source of Data:** Data have been collected and assembled by IAR from data sources deemed to be reliable by IAR but has not been audited or verified by IAR or PNC.

## Extended Performance - Newer and Older Share Class Actual Performance - Domestic Large and Mid Cap Equities

	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
AB Concentrated Growth Advisor	12.84	19.70	19.70	5.86	14.97	14.04	11.72
AB Concentrated Growth Z	12.84	19.73	19.73	5.89	15.01	14.06	
Calvert Equity A	12.80	17.93	17.93	7.81	16.28	15.90	12.71
Calvert Equity R6	12.89	18.30	18.30	8.16	16.65		
Delaware Value® Inst	9.05	2.10	2.10	6.43	7.74	6.96	7.61
Delaware Value® R6	9.09	2.15	2.15	6.54	7.84	7.07	
Federated Hermes Strategic Value Div IS	8.62	-1.81	-1.81	8.98	7.36	6.04	6.78
Federated Hermes Strategic Value Div R6	8.62	-1.79	-1.79	9.01	7.38	6.06	
Goldman Sachs US Eq Div and Prem Instl	9.13	21.34	21.34	8.40	12.71	10.13	9.71
Goldman Sachs US Eq Div and Premium R6	9.14	21.36	21.36	8.42	12.72		
Harbor Capital Appreciation Instl	16.30	53.74	53.74	3.45	17.91	17.44	14.04
Harbor Capital Appreciation Retirement	16.31	53.86	53.86	3.54	18.00	17.53	
Harbor Large Cap Value Instl	14.23	19.67	19.67	8.35	14.09	11.58	11.11
Harbor Large Cap Value Retirement	14.31	19.83	19.83	8.46	14.20	11.66	
Harbor Mid Cap Value Instl	11.93	16.33	16.33	12.61	11.05	6.52	7.15
Harbor Mid Cap Value Retirement	11.92	16.42	16.42	12.69	11.14	6.61	
Hotchkis & Wiley Mid-Cap Value I	9.25	19.86	19.86	19.25	13.98	7.63	7.11
Hotchkis & Wiley Mid Cap Value Z	9.28	20.00	20.00	19.40			
Jensen Quality Growth J	9.62	16.66	16.66	8.20	14.10	13.56	11.96
Jensen Quality Growth Y	9.69	16.99	16.99	8.52	14.44	13.91	
Nuance Mid Cap Value Institutional	12.32	6.73	6.73	4.21	9.17	7.81	8.45
Nuance Mid Cap Value Z	12.34	6.84	6.84	4.31	9.30		
Parnassus Mid-Cap	13.61	12.67	12.67	0.95	8.76	7.37	7.73
Parnassus Mid Cap Institutional	13.65	12.92	12.92	1.16	8.99	7.61	
Parnassus Value Equity Investor	12.93	13.70	13.70	8.71	16.89	12.37	12.89
Parnassus Value Equity Institutional	13.00	13.94	13.94	8.95	17.14	12.61	
Principal MidCap R5	14.78	25.65	25.65	6.44	15.23	13.11	11.50
Principal MidCap R-6	14.83	25.97	25.97	6.69	15.52	13.38	
T. Rowe Price Growth Stock	11.99	45.27	45.27	1.44	13.33	13.81	11.71
T. Rowe Price Growth Stock I	12.02	45.44	45.44	1.57	13.48	13.96	
T. Rowe Price Mid-Cap Growth	11.72	20.11	20.11	2.30	11.82	11.47	10.61
T. Rowe Price Mid-Cap Growth I	11.76	20.26	20.26	2.43	11.96	11.61	
T. Rowe Price Mid-Cap Value	13.20	18.75	18.75	12.30	13.23	9.25	9.45
T. Rowe Price Mid-Cap Value I	13.25	18.89	18.89	12.45	13.38	9.39	
T. Rowe Price Value	9.64	12.12	12.12	8.88	12.48	9.92	9.13
T. Rowe Price Value I	9.68	12.27	12.27	9.02	12.62	10.07	
Touchstone Mid Cap Y	12.64	27.46	27.46	7.42	13.72	12.02	10.23
Touchstone Mid Cap R6	12.68	27.64	27.64				
Touchstone Mid Cap Growth A	13.60	24.20	24.20	2.05	13.92	12.58	10.57
Touchstone Mid Cap Growth R6	13.72	24.82	24.82	2.51			
Touchstone Sands Capital Select Growth Z	22.88	51.60	51.60	-7.96	11.79	13.78	9.25
Touchstone Sands Capital Select Gr R6	22.92	52.26	52.26	-7.57			

Extended Performance is used for the following funds and dates:

AB Concentrated Growth Z (12/31/2013 – 2/28/2014), Calvert Equity R6 (12/31/2013 – 10/3/2017), Delaware Value R6 (12/31/2013 – 5/2/2016), Federated Strategic Value Div R6 (12/31/2013 – 6/29/2016), Goldman Sachs US Eq Div R6 (12/31/2013 – 4/30/2018), Harbor Capital Appreciation Retirement (12/31/2013 – 3/1/2016), Harbor Large Cap Value Retirement (12/31/2013 – 3/1/2016), Harbor Mid Cap Value Retirement (12/31/2013 – 2/29/2016), Hotchkis & Wiley Mid Cap Value Z (12/31/2013 – 9/30/2019), Jensen Quality Growth Y (12/31/2013 – 9/30/2016), Nuance Mid Cap Value Z (12/31/2013 – 5/8/2017), Parnassus Value Equity Institutional (12/31/2013 – 4/30/2015), Parnassus Mid Cap Inst (12/31/2013 – 4/30/2015), Principal MidCap R-6 (12/31/2013 – 11/22/2016), T. Rowe Price Growth Stock I (12/31/2013 – 8/28/2015), T. Rowe Price Mid-Cap Growth I (12/31/2013 – 8/28/2015), T. Rowe Price Mid-Cap Value I (12/31/2013 – 8/28/2015), T. Rowe Price Value I (12/31/2013 – 8/28/2015), Touchstone Mid Cap Y (12/31/2013 – 2/22/2021), Touchstone Mid Cap Growth R6 (12/31/2013 – 2/10/2020), Touchstone Sands Capital Select Gr R6 (12/31/2013 – 9/1/2020).

**Extended Performance - Newer and Older Share Class Actual Performance - Domestic Small Cap And International Equities**

	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
AB Sustainable Intl Thematic A	11.62	13.09	13.09	-3.64	8.02	7.27	3.89
AB Sustainable International Thematic Z	11.66	13.39	13.39				
Alger Small Cap Focus I	13.23	9.88	9.88	-16.22	2.28	7.39	6.36
Alger Small Cap Focus Y	13.35	10.35	10.35	-15.93	2.62		
American Century Non-US Intrs Val G	9.78	24.22	24.22	8.47	6.10		
American Century Non-US Intrs Val I	9.36	22.90	22.90	7.38			
Baillie Gifford Emerging Markets Eqs 3	3.60	9.98	9.98	-9.66	4.13	6.91	4.11
Baillie Gifford Emerging Markets Eqs K	7.73	14.30	14.30	-8.58	4.85	7.41	4.55
Federated Hermes International Equity IS	11.50	14.57	14.57	-1.33	7.47	7.61	4.87
Federated Hermes International Equity R6	11.49	14.62	14.62	-1.30	7.50		
Harbor Small Cap Value Instl	11.49	15.07	15.07	6.08	11.74	8.59	8.61
Harbor Small Cap Value Retirement	11.52	15.16	15.16	6.16	11.82	8.67	
Meridian Small Cap Growth Legacy	13.64	14.06	14.06	-2.52	7.14	8.29	8.97
Meridian Small Cap Growth Institutional	13.67	14.19	14.19	-2.45	7.23	8.37	
Oakmark International Small Cap Investor	11.47	19.52	19.52	6.79	11.02	7.15	4.83
Oakmark International Small Cap R6	11.63	19.85	19.85	7.08			
Oberweis Small-Cap Opportunities	6.45	15.81	15.81	13.88	19.60	16.14	11.78
Oberweis Small-Cap Opportunities Instl	6.50	16.06	16.06	14.16	19.90		
PGIM Jennison International Opps Z	14.95	20.25	20.25	-4.95	13.04	13.35	7.50
PGIM Jennison International Opps R6	15.00	20.34	20.34	-4.88	13.11	13.42	
RBC Emerging Markets Equity I	8.59	12.14	12.14	-2.91	4.62	6.10	4.57
RBC Emerging Markets Equity R6	8.55	12.18	12.18	-2.92	4.61	6.09	
T. Rowe Price New Horizons	9.76	21.35	21.35	-5.70	12.74	13.93	11.53
T. Rowe Price New Horizons I	9.79	21.49	21.49	-5.58	12.87	14.07	
Touchstone Sands Cptl Emerg Mkts Gr Inst	6.14	11.01	11.01	-13.29	4.84	6.18	
Touchstone Sands Cptl Emerg Mkts Gr R6	6.13	11.01	11.01				
Wasatch International Opps Inv	14.71	10.64	10.64	-11.58	5.30	5.03	5.19
Wasatch International Opps Instl	14.86	10.45	10.45	-11.63	5.36	5.11	

Extended Performance is used for the following funds and dates:

AB Sustainable International Thematic Z (12/31/2013 – 7/26/2021), Alger Small Cap Focus Y (12/31/2013 – 2/28/2017), American Century Non-US Intrs Value I (12/06/2018 – 12/3/2019), Baillie Gifford Emerging Markets Eqs K (12/31/2013 – 4/28/2017), Federated International Equity R6 (12/31/2013 – 6/8/2018), Harbor Small Cap Value Retirement (12/31/2013 – 3/1/2016), Meridian Small Cap Growth Institutional (12/31/2013 – 12/23/2014), Oakmark International Small Cap R6 (12/31/2013 – 12/15/2020), Oberweis Small-Cap Opportunities Instl (12/31/2013 – 4/30/2017), PGIM Jennison International Opps R6 (12/31/2013 - 12/23/2015), RBC EM Equity R6 (12/31/2013 – 11/22/2016), T. Rowe Price New Horizons I (12/31/2013 – 8/28/2015), Touchstone Sands Cptl Emerg Mkts Gr R6 (5/12/2014 – 4/27/2021), Wasatch International Opps Inst (12/31/2013 – 2/1/2016).

## Extended Performance - Newer and Older Share Class Actual Performance - Fixed Income and Alternative Mutual Funds

	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
AQR Managed Futures Strategy N	-4.55	1.64	1.64	10.65	6.46	2.98	2.23
AQR Managed Futures Strategy R6	-4.45	2.02	2.02	11.02	6.84	3.33	
Calvert Green Bond I	6.58	6.90	6.90	-2.85	1.26	1.47	1.97
Calvert Green Bond R6	6.59	6.95	6.95	-2.80			
DoubleLine Flexible Income I	3.47	7.83	7.83	0.80	2.48	2.53	
DoubleLine Flexible Income R6	3.48	7.88	7.88	0.84			
DoubleLine Total Return Bond I	6.43	5.33	5.33	-2.63	0.34	1.03	1.83
DoubleLine Total Return Bond R6	6.44	5.28	5.28	-2.60			
Eaton Vance Gbl Macr Absolute Return I	2.08	6.98	6.98	2.86	4.35	3.21	3.21
Eaton Vance Gbl Macr Absolt Retrn R6	2.11	7.08	7.08	2.94	4.42		
Eaton Vance Gbl Macro Abs Ret Advtg I	2.88	8.37	8.37	3.28	5.78	3.64	4.18
Eaton Vance Gbl Macro Abs Ret Advtg R6	2.97	8.47	8.47	3.32	5.82		
Federated Hermes Total Return Bond IS	6.60	5.17	5.17	-2.67	2.08	1.98	2.39
Federated Hermes Total Return Bond R6	6.72	5.18	5.18	-2.63	2.10	2.01	
Goldman Sachs Absolute Ret Trckr Instl	4.37	10.83	10.83	3.42	4.91	4.18	3.48
Goldman Sachs Absolute Ret Trckr R6	4.40	10.74	10.74	3.40	4.91	4.17	
Payden Low Duration Fund	2.81	5.66	5.66	0.66	1.90	1.71	1.50
Payden Low Duration SI	2.83	5.71	5.71				
T. Rowe Price GA Tax-Free Bond	8.34	7.90	7.90	-0.33	2.08	2.23	2.83
T. Rowe Price Georgia Tax Free Bond I	8.48	8.03	8.03	-0.21	2.20		
T. Rowe Price High Yield	6.91	13.65	13.65	2.03	5.03	4.12	4.13
T. Rowe Price High Yield I	6.94	13.74	13.74	2.13	5.14	4.23	
T. Rowe Price Maryland Tax-Free Bond	7.87	6.67	6.67	-0.26	1.99	2.23	2.88
T. Rowe Price Maryland Tax-Free Bond I	7.88	6.74	6.74	-0.15	2.09		
T. Rowe Price NJ Tax-Free Bond	6.94	6.69	6.69	-0.34	2.02	2.38	3.03
T. Rowe Price New Jersey Tax-Free Bd I	6.98	6.74	6.74	-0.21	2.15		
T. Rowe Price Short-Term Bond	2.72	5.08	5.08	0.03	1.77	1.65	1.43
T. Rowe Price Short-Term Bond I	2.75	5.21	5.21	0.14	1.83	1.75	
T. Rowe Price Summit Municipal Inc Inv	7.57	7.28	7.28	-0.53	2.10	2.39	3.18
T. Rowe Price Summit Municipal Inc I	7.69	7.49	7.49	-0.42			
T. Rowe Price Summit Municipal Intm Inv	5.94	5.49	5.49	-0.34	1.95	2.10	2.44
T. Rowe Price Summit Municipal Intrm I	5.98	5.62	5.62	-0.22			
T. Rowe Price Virginia Tax Free Bond	8.39	6.61	6.61	-0.71	1.89	2.12	2.85
T. Rowe Price Virginia Tax Free Bond I	8.43	6.74	6.74	-0.59	2.01		

Extended Performance is used for the following funds and dates:

AQR Managed Futures Strategy R6 (12/31/2013 – 9/2/2014), Calvert Green Bond R6 (12/31/2013 – 2/1/2019), DoubleLine Flexible Income R6 (4/7/2014 – 7/31/2019), DoubleLine Total Return Bond R6 (12/31/2013 – 7/31/2019), Eaton Vance Gbl Macr Absolt Retrn R6 (12/31/2013 – 5/31/2017), Eaton Vance Gbl Macro Abs Ret Advtg R6 (12/31/2013 – 5/31/2017), Federated Total Return Bond R6 (12/31/2013 – 4/17/2015), Goldman Sachs Absolute Ret Trckr R6 (12/31/2013 – 7/31/2015), Payden Low Duration SI (12/31/2013 – 2/28/2022), T. Rowe Price GA Tax Free Bond I (12/31/2013 – 7/6/2017), T. Rowe Price High Yield I (12/31/2013 – 8/28/2015), T. Rowe Price MD Tax-Free Bond I (12/31/2013 – 7/6/2017), T. Rowe Price NJ Tax-Free Bond (12/31/2013 – 7/6/2017), T. Rowe Price Short-Term Bond I (12/31/2013 – 12/17/2015), T. Rowe Price Summit Municipal Inc I (12/31/2013 – 3/1/2019), T. Rowe Price Summit Municipal Intm I (12/31/2013 – 3/1/2019), T. Rowe Price VA Tax Free Bond I (12/31/2013 – 7/6/2017).