

Presented to:

# Cleveland Public Library

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Review as of December 31, 2022

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# Taking Stock of the Markets

Investment Strategy

January 2023

# Asset Class Playbook Highlights

Our Thoughts and Takeaways for Broad Asset Classes

After one of the worst performing years for the multi-asset class universe, we approach 2023 with caution, but also with a plan of action for each asset class.

## Equities

*Growth outlook remains dependent on the path of earnings in 2023*



- The fundamental outlook for equities remains dependent on positive earnings growth in the face of ongoing macroeconomic headwinds that still include elevated inflation and restrictive monetary policy.
- Heading into 2023 investors should take note that it is extremely rare for global equities to have back-to-back years of negative returns. In the last fifty years it happened to the MSCI World Index in the early 2000s and in the mid 1970s.

## Fixed Income

*Volatility impacted by global macroeconomic uncertainties*



- Interest rate volatility remains elevated as the Federal Reserve (Fed) and other global central banks are committed to monetary policy action that is dependent on falling inflation data.
- Given the highest interest rates in 15 years, we believe fixed income is beginning to look attractive with opportunity even in cash allocations, as yields climbed above 4% and are likely headed higher.

## Alternatives

*Broad opportunity set for long-term investors*



- Alternative investments offer different types of risk and return, correlation and liquidity profiles for differentiated alpha, risk-adjusted performance, and dampen volatility.
- The long-term opportunity continues to be supported by technological innovation and an increasing number of private companies across the broad asset class.



# The Good, the Bad and the Ugly...

## A Quick Tour Around the Globe

### The "Good"

- End of China COVID-19 restrictions
- U.S. Labor market strength
- Healthy U.S. consumer balance sheets
- ↓ Low absolute global equity valuations

### The "Bad"

- Persistently high inflation
- Longer for longer monetary policy
- Inverted yield curve signaling recession
- Deteriorating Leading Economic Indicators
- ↑ Profit margin pressures
- Deteriorating earnings revisions
- Low U.S. consumer/business confidence
- Real estate under pressure
- Commodity supply/demand imbalances
- Elevated market volatility
- Semiconductor shortages persisting

### The "Ugly"

- Russia-Ukraine war
- Global deficits/debt levels
- De-globalization trends building
- U.S.-China power struggle

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

- 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

Each Facet of Analysis Plays a Critical Role in Making Investment Decisions



## Business Cycle

- Assesses the business cycle and how positioning impacts asset class, sector and industry performance.
- Puts valuations into context.



## Valuations

- Identifies opportunities while maintaining a long-term view.
- Determines how assets are valued relative to history/other assets.



## Technical

- Uncover what price trends tell us about near-term market behavior.
- Supports shorter-term execution.

### Business Cycle: Slowdown concerns building

- Leading economic indicators are weakening across the globe as headwinds from last year — inflation, restrictive monetary policy, and the Russia-Ukraine war — remain unresolved.
- A key catalyst for the path forward continues to be clear evidence that inflation is falling, which can allow global central banks to pause aggressive rate hikes.

### Valuations: Earnings are the story in 2023

- We believe some stocks could see a further pullback as earnings weaken and thus not all “low” valuations should be considered cheap at this point in the cycle.
- Valuations are relative; quality companies with strong balance sheets, consistent earnings growth, and free cash flow generation may warrant higher multiples.

### Technical: Searching for momentum in either direction

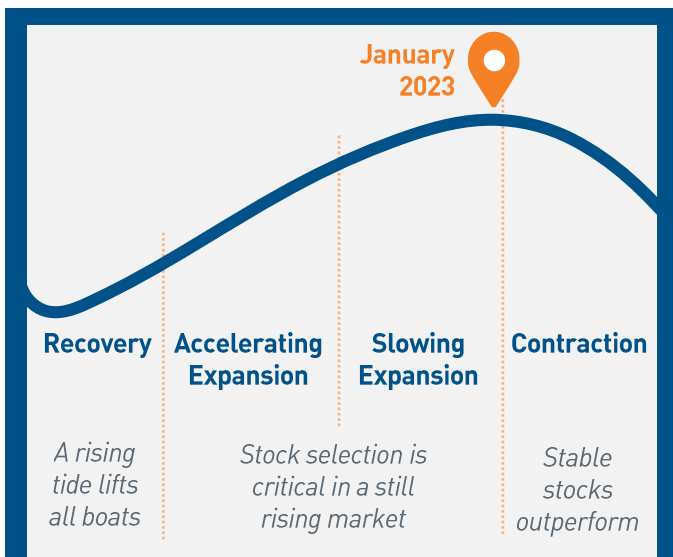
- After a “Santa rally” failed to materialize in December, the S&P 500® is essentially unchanged from late October in a directionless market.
- Volatility in both equities and fixed income remains well above historical averages, thus we caution investors against attempting to anticipate a change in Fed policy.



# Business Cycle Outlook

## Leading Indicators Suggest the Slowing Expansion Phase of the Cycle

We believe cyclical movements of the business cycle drive markets, which impacts asset allocation decisions. *History does not repeat, but often rhymes*, which is why the past is not always a reliable indicator of what lies ahead.



### Slowing Expansion Phase:

- Unemployment falling
- Wages rising
- Financial conditions less accommodative
- Credit tightening
- Confidence peaks
- Economic activity positive, but decelerating
- Profit growth slows

## Leading indicators start pointing to a slowdown

- The Conference Board Leading Economic Indicator Index fell 1.4% on a rolling six-month basis in November, suggesting leading indicators are showing early signs of contracting economic activity.
- Weakness for the month was driven by a slowdown in building permits, as the housing market begins to slow.
- An important leading indicators that remains robust is labor market data, however it continues to challenge efforts to curb inflationary pressures.

## The path forward

- Given this backdrop, we believe the business cycle remains in a slowing expansion with a high probability that it falls into contraction later this year.

## Conference Board Leading Economic Indicators (*prior month*)

Interest Rate Spread	<b>Worsening</b>	Manufacturing Avg. Hours	<b>Worsening</b>
Consumer Durables	<b>Improving</b>	Unemployment Claims	<b>Improving</b>
Core Durable Goods	<b>Worsening</b>	Consumer Expectations	<b>Worsening</b>
ISM Index of New Orders	<b>Improving</b>	Leading Credit Index	<b>Improving</b>
Building Permits	<b>Worsening</b>	S&P 500®	<b>Worsening</b>



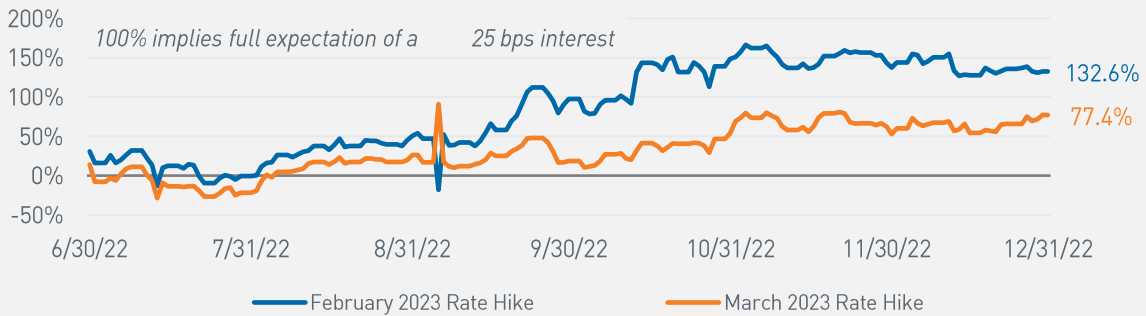
# Chart of the Quarter

February 2023 Rate Hike Expectations Have a Significant Market Influence

## The path forward is highly dependent on rate hike expectations

- Looking out to the future Federal Open Market Committee (FOMC) meetings, investors already anticipate the Fed may raise its policy rate by 50 basis points (bps) in 2023, but anything higher than that and the situation repeats where markets negatively react to a higher terminal rate.
- On the flipside, if those expectations fall over the next few months, the terminal rate also declines, which becomes a strong catalyst for equity multiple expansion.

### Markets Recalibrate for Smaller Rate Hikes in Early 2023



## The market expects a ‘pause’ after March

- Last year began with expectations the Fed would raise its policy rate by 50-75 bps throughout the entire year, not at individual meetings!
- As the Fed has been data dependent on inflation, it has kept markets guessing about the path forward for monetary policy, causing significant volatility. Markets already anticipate the Fed will pause rate hikes after the March meeting. Additional action could create further volatility across the multi-asset class universe.

### Rate Hike Expectations have been Too Optimistic

FOMC Meeting Month	Probability of a Hike Went above 100%	FOMC Meeting Date	S&P 500 Return Thru that FOMC Meeting
Jul 22	3/16/2022	7/27/2022	-7.2%
Sep 22	3/17/2022	9/21/2022	-13.4%
Nov 22	5/26/2022	11/02/2022	-6.7%
Dec 22	9/8/2022	12/14/2022	+0.2%
Feb 23	10/13/2022	2/01/2023	+5.0%*

\*As of 12/31/2022

As of 12/31/2022. Source: Bloomberg L.P.

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.



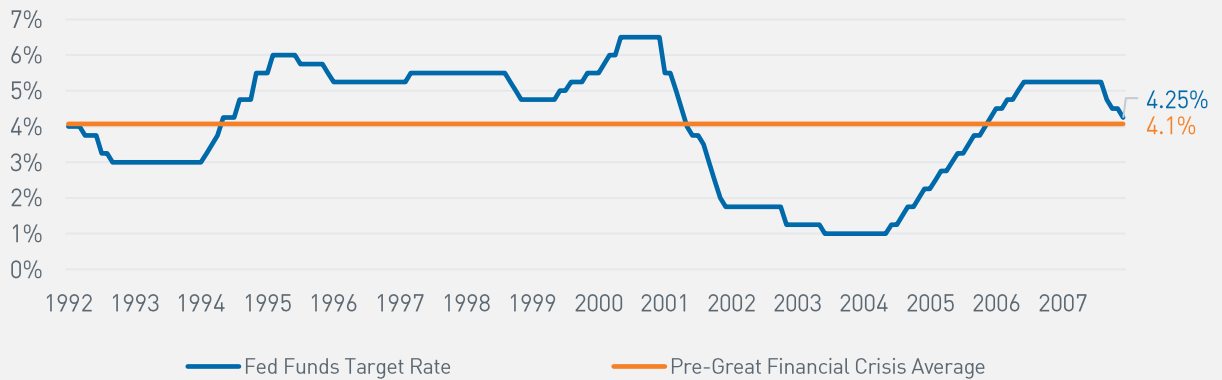
# The Case for Cash

Cash Has Not Been an Investment Option for 15 years!

## Life before the financial crisis included cash

- In the 15 years before the 2008 financial crisis, the federal funds rate had an average yield of 4.1%. For perspective, it traded in a range of 0.00-0.25% at the start of 2022.
- In prior business cycles, cash was typically used as an investment option alongside other fixed income strategies given its zero duration risk with a compelling yield.

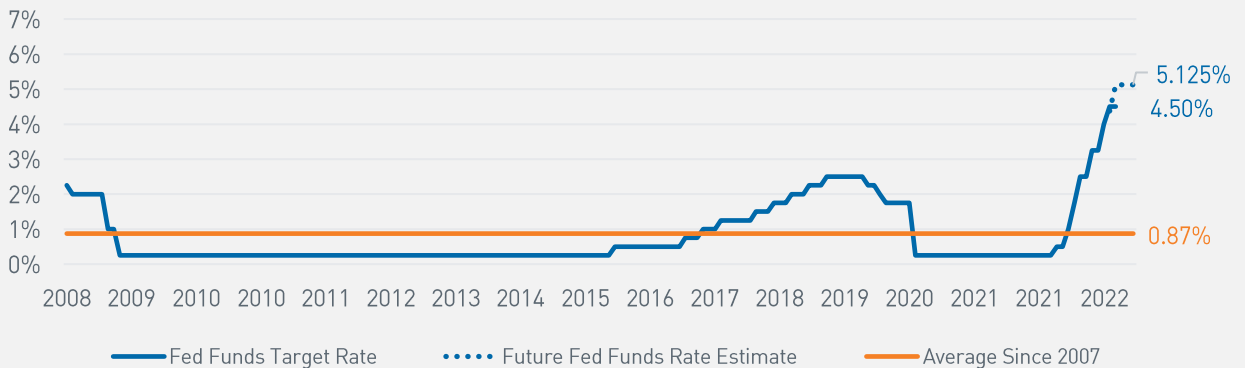
### Cash Used to Offer Compelling Yields!



## From “TINA” to “TARA”

- Since the Fed introduced its Zero Interest Rate Policy in 2008, cash has yielded essentially zero percent, making it the least attractive asset allocation given low upside potential.
- However, with the Fed’s terminal rate now up to 4.50%, the mantra of “TINA” (“There Is No Alternative” to equity investments), is evolving into “TARA” (There Are Reasonable Alternatives).
- We do not expect cash yields to stay near these levels for a very long time; however, as the Fed’s long-term inflation target of 2% suggests, the federal funds rate may return to that level in the coming years.

### And is Getting Back to Those Levels Due to Fed Rate Hikes



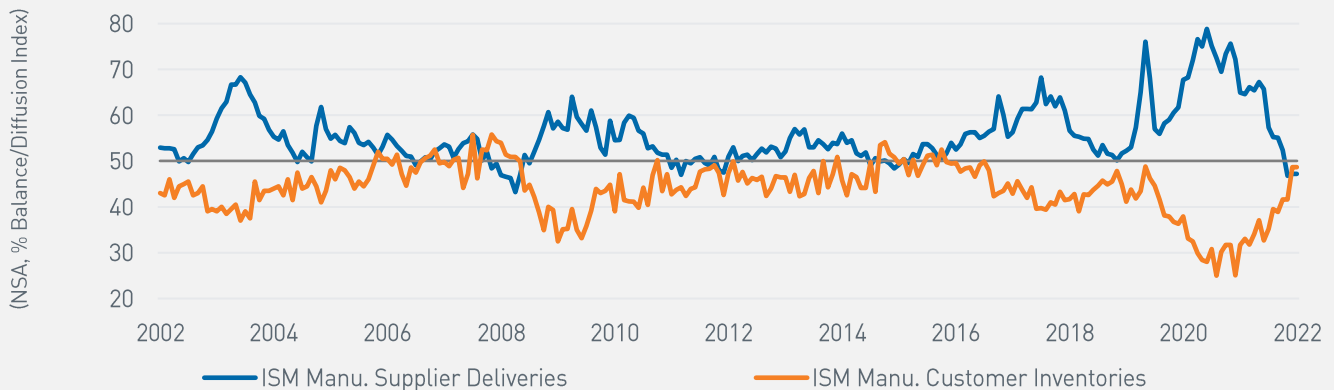
# Supply Chain Disruptions Drive Inflation

Markets are Turning the Corner with Supply Chain Bottlenecks Declining

## Deliveries vs. inventory levels are moderating

- Global supply chains were severely disrupted from the pandemic even after two years. It has taken considerably longer than expected for global trade to normalize, creating higher prices due to supply/demand imbalance.
- As the labor market continues to recover, we believe it will be the positive catalyst to ease supply disruption, which should further act to lower the pricing pressures that numerous industries face.

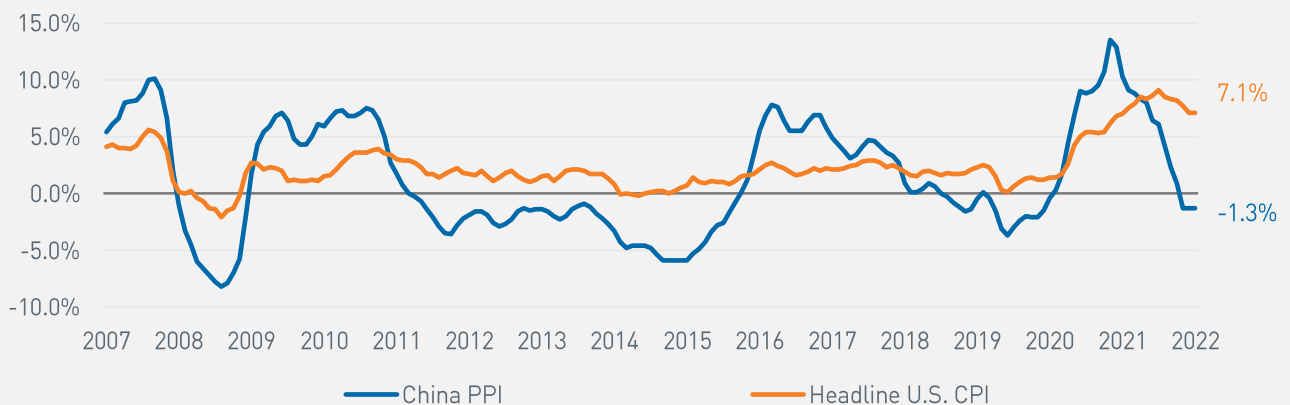
**Institute for Supply Management Manufacturing Deliveries versus Inventories**



## China PPI influences U.S. CPI

- China's producer price index (PPI) is improving relative to the highs of last year; however, COVID-19 risks remain as China is continuing to implement regional lockdown policies.
- Should China PPI continue its downward trend, we believe it will have a positive effect in lowering U.S. CPI from elevated levels in the coming months.

**China PPI and U.S. CPI**



As of 12/31/2022. Source: Bloomberg L.P.

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.

# Business Cycle Summary

The Slowing Expansion Phase Sees Activity Slowing but Still Growing

## United States

*Growth remains positive but weakening*

- Economic growth, as measured by GDP, rose decidedly positive in the third quarter of 2022, reversing two quarters of negative growth. In our view, the pace at which growth decelerates from here is highly dependent on the health of the global consumer amidst continued high inflation.
- Financial conditions have tightened to their highest level in almost 15 years, in contrast to 2021 when financial conditions were the easiest on record. From an investor lens, the concern is the Fed will maintain an aggressive tightening policy and result in a recession.

## Developed International

*Macroeconomic headwinds remain a concern*

- We remain cautious about the asset class as the Eurozone continues to face a variety of challenges to economic and earnings growth, given ongoing macro risks.
- Global central bank policies remain hawkish, with the exception of the Bank of Japan. The European Central Bank continues to aggressively raise interest rates due to elevated inflation, while the Bank of England faces some difficult choices between controlling inflation and stifling growth.

## Emerging Markets (EM)

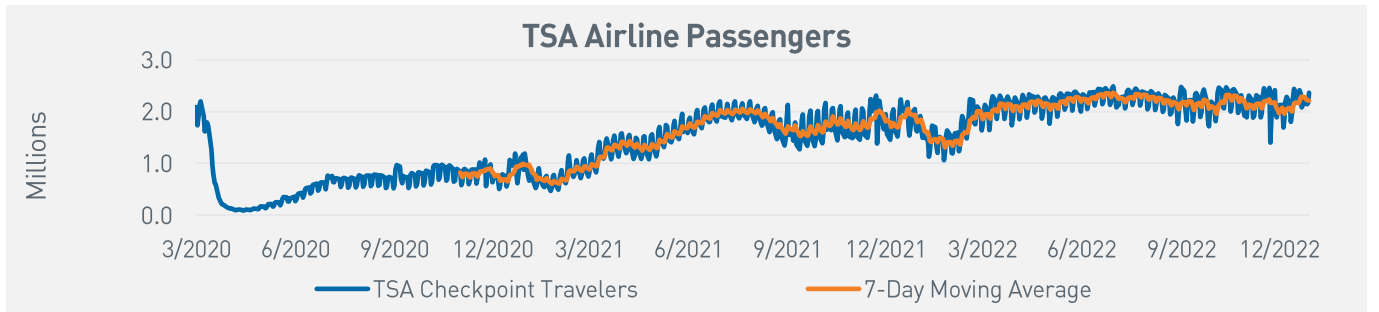
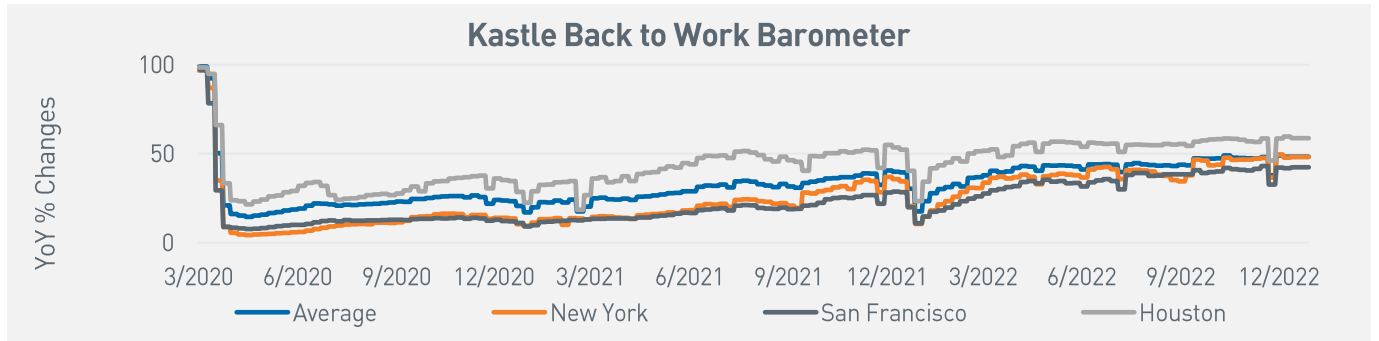
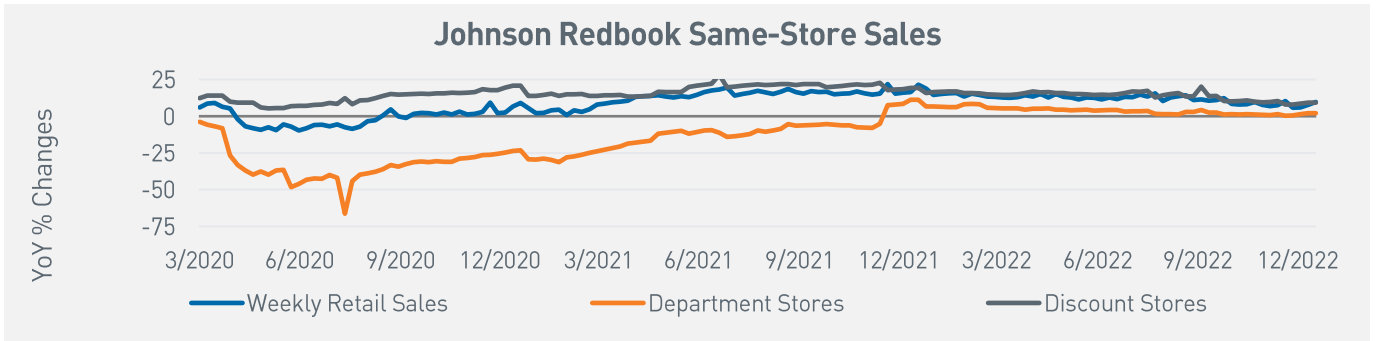
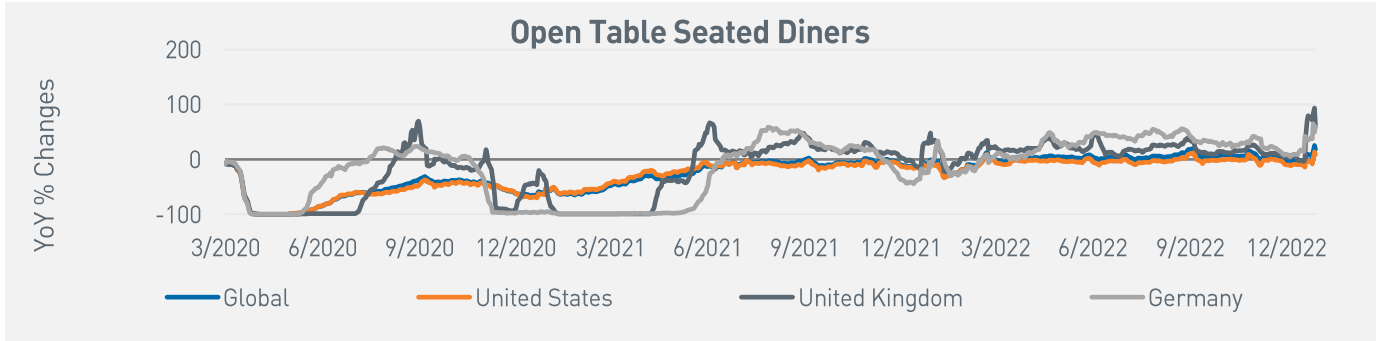
*Regulatory risks offset fundamental strength*

- Our long-term fundamental outlook for EM remains the strongest across the asset class universe and underpins our high-conviction view of the asset class.
- Regulatory risk remain a concern for EM investors, but China's pivot away from its Zero-COVID policy, and strong underlying growth fundamentals, and the continued evolution of the EM index toward higher-growth sectors should be supportive over the long term.

# High Frequency Data

## Consumer Activity Moderating Amid Rising Prices Across Goods and Services

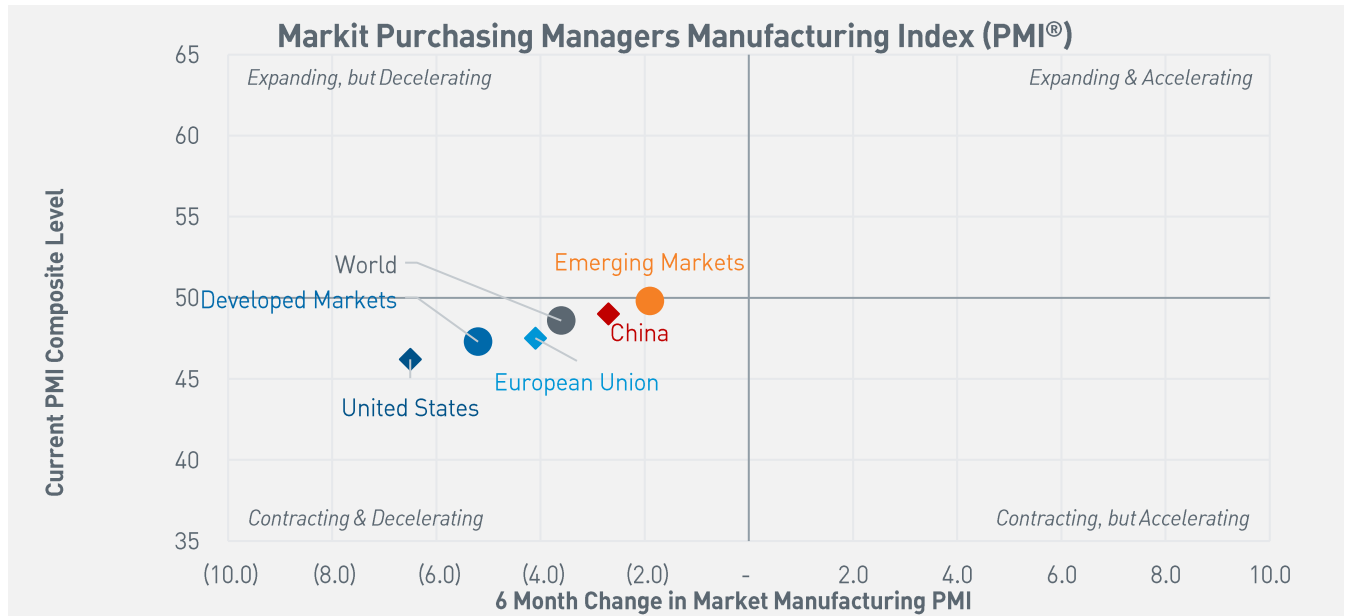
After tracking high-frequency consumer data responding to the pandemic, it is equally helpful to observe the reaction to the highest inflation in 40 years. In our view, consumer activity remains resilient yet is beginning to show signs of moderating.



# Global Manufacturing Activity

Global Manufacturing Contracts Under Higher Prices and Macro Uncertainty

Most global economies are decelerating as elevated inflation and central banks' tightening policies weighs on economic activity.



Global PMI Manufacturing Index Summary												
	12/22	11/22	10/22	9/22	8/22	7/22	6/22	5/22	4/22	3/22	2/22	1/22
<b>World</b>	48.6	48.8	49.4	49.8	50.3	51.1	52.2	52.3	52.3	52.9	53.7	53.2
<b>Developed Markets</b>	47.3	47.8	48.8	50.1	50.2	51.2	52.5	55.0	56.3	56.5	56.6	56.4
U.S.	46.2	47.7	50.4	52.0	51.5	52.2	52.7	57.0	59.2	58.8	57.3	55.5
U.K.	45.3	46.5	46.2	48.4	47.3	52.1	52.8	54.6	55.8	55.2	58.0	57.3
E.U.	47.5	46.7	46.1	48.1	49.1	49.3	51.6	54.2	55.3	56.3	57.9	58.5
Germany	47.1	46.2	45.1	47.8	49.1	49.3	52.0	54.8	54.6	56.9	58.4	59.8
France	49.2	48.3	47.2	47.7	50.6	49.5	51.4	54.6	55.7	54.7	57.2	55.5
Spain	46.4	45.7	44.7	49.0	49.9	48.7	52.6	53.8	53.3	54.2	56.9	56.2
Italy	48.5	48.4	46.5	48.3	48.0	48.5	50.9	51.9	54.5	55.8	58.3	58.3
Japan	48.8	49.0	50.7	50.8	51.5	52.1	52.7	53.3	53.5	54.1	52.7	55.4
<b>Emerging Markets</b>	49.8	49.7	49.8	49.4	50.2	50.8	51.7	49.5	48.1	49.2	50.9	50.0
China	49.0	49.4	49.2	48.1	49.5	50.4	51.7	48.1	46.0	48.1	50.4	49.1
Taiwan	44.6	41.6	41.5	42.2	42.7	44.6	49.8	50.0	51.7	54.1	54.3	55.1
S Korea	48.2	49.0	48.2	47.3	47.6	49.8	51.3	51.8	52.1	51.2	53.8	52.8
Vietnam	46.4	47.4	50.6	52.5	52.7	51.2	54.0	54.7	51.7	51.7	54.3	53.7
India	57.8	55.7	55.3	55.1	56.2	56.4	53.9	54.6	54.7	54.0	54.9	54.0
Brazil	44.2	44.3	50.8	51.1	51.9	54.0	54.1	54.2	51.8	52.3	49.6	47.8

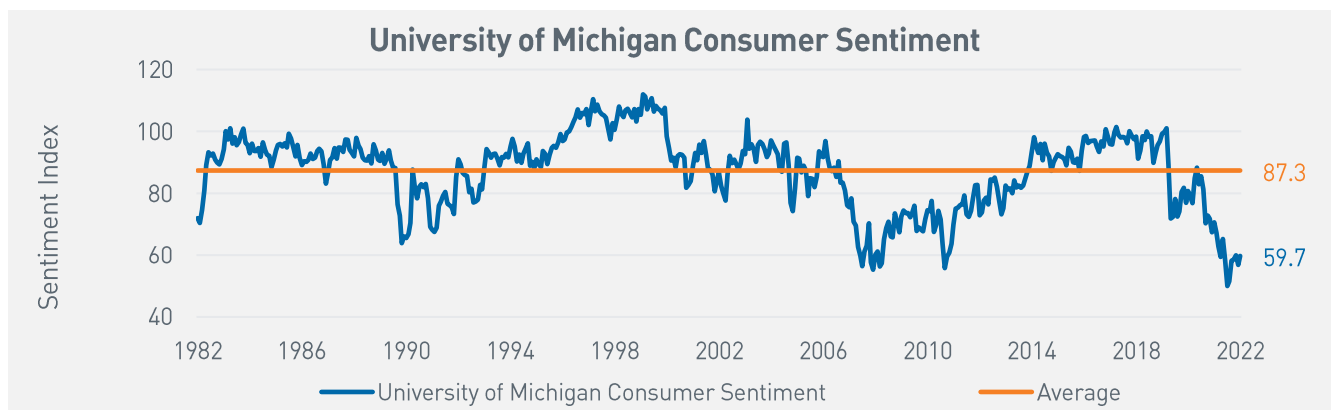
As of 12/31/2022. Source: Bloomberg L.P., Markit PMI: Purchasing Manager Indexes survey senior executives at private sector companies to help measure the overall health of an economy. An index reading above 50 suggests economic activity is expansionary and below 50 suggests contractionary economic activity.

# Sentiment Surveys

## Survey Data Highlights Inflation Concerns Amid an Uncertain Macro Backdrop

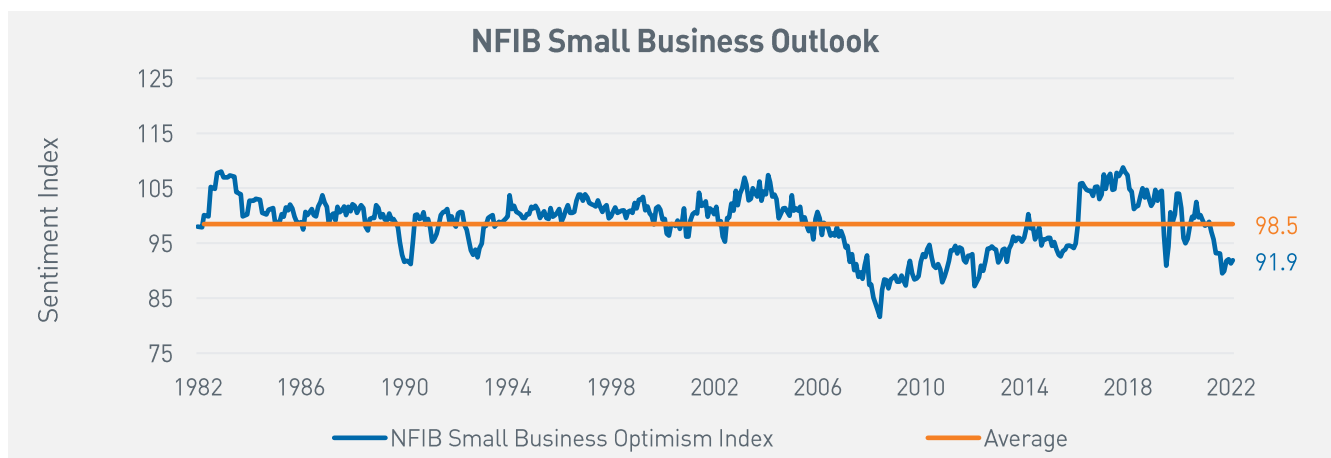
### University of Michigan Consumer Sentiment

- Consumer sentiment surveys are important due to their long-term correlation with equity prices. Therefore, it was notable that despite the stock market rally for much of 2021, consumer sentiment diverged sharply and even fell below the lows of March 2020.
- The number one issue in sentiment surveys is elevated inflation; Fed officials are very concerned rising prices may become a structural belief, hence the urgency to aggressively raise interest rates to bring down inflationary pressures.



### National Federation of Independent Business (NFIB) Small Business Outlook

- Considering small businesses make up the majority of firms in the United States, sentiment is an important gauge that serves as an indicator for other components such as capital expenditure plans, as well as hiring and wage growth expectations.
- Business sentiment surveys are comparable to consumer sentiment counterparts as lingering supply chain bottlenecks, elevated material costs and fallout from the Russia-Ukraine conflict weigh on optimism.



# Equity Market Themes and Outlook

Heightened Market Volatility Driven by a  
Number of Macro Headwinds

## Outlook

*Growth outlook  
remains positive,  
but moderating*

- Earnings growth remains positive in spite of rising inflation and interest rates across the globe. After only a modest decline in 2022, strong downward pressure on margins is expected in 2023.
- Key determinants for the path forward continue to be the pandemic and monetary policy, as we expect these issues to dictate the trajectory of inflation, supply chain normalization and earnings growth.

## Market Cap

*Small- and mid-cap  
overweight*

- Favorable aspects of small- and mid-cap companies include the U.S.-centric revenue exposure relative to large cap.
- Valuations for smaller-capitalization stocks have fallen below long-term averages, despite the earnings growth outlook remaining robust relative to large cap.

## Style

*Neutral style bias in  
an uncertain  
backdrop*

- When growth becomes scarce, market leadership is generally expected to shift toward companies expected to grow faster than the overall market.
- At the same time, in an inflationary regime, exposure to value is attractive given the industries that typically benefit from rising prices, therefore we recommend staying neutral on a style basis.

## Geography

*U.S. overweight,  
emerging market  
tilt*

- The consistency and leadership of U.S. markets over the long term continues to support a favorable view relative to other areas of the globe. This is not a “domestic bias” but the view that fundamentals remain strongest in the United States.
- Structural characteristics such as the reserve currency status of the U.S. dollar, breadth and liquidity of capital markets and strength of the U.S. consumer remain long-term tailwinds to maintain our positive view on the United States relative to other areas.

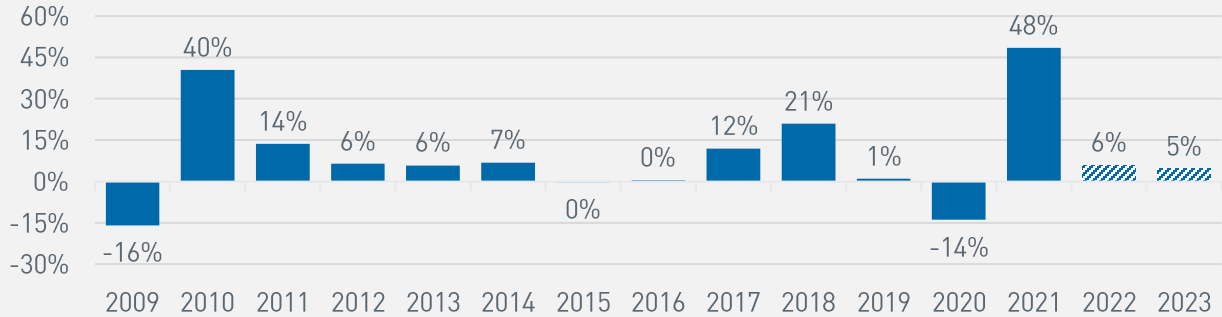
# U.S. Earnings Outlook

Revisions Trending Lower Yet 2023 Growth Estimates Firmly Positive

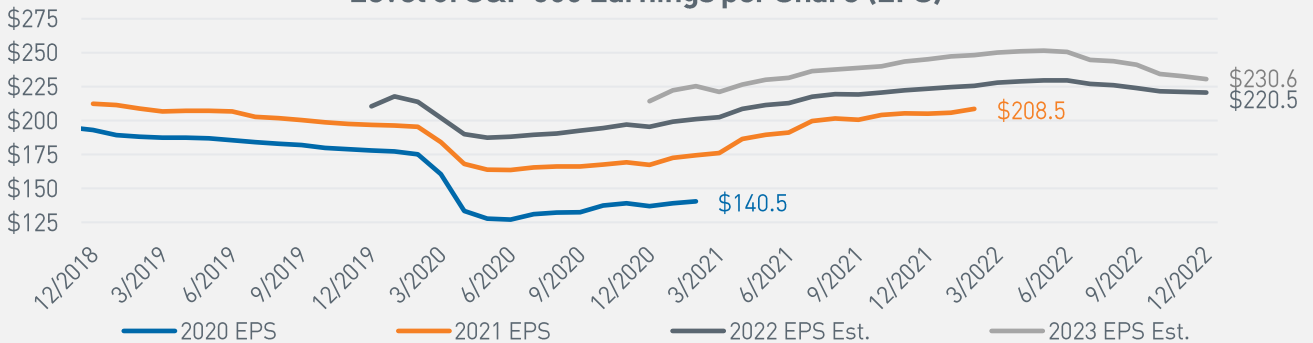


Consensus expects earnings growth to remain firmly positive throughout 2023, however we expect revisions will continue to move lower and possibly turn negative as elevated inflation and slowing global growth weigh on corporate profits.

### S&P 500<sup>®</sup> Annual Earnings Growth (YoY)



### Level of S&P 500 Earnings per Share (EPS)

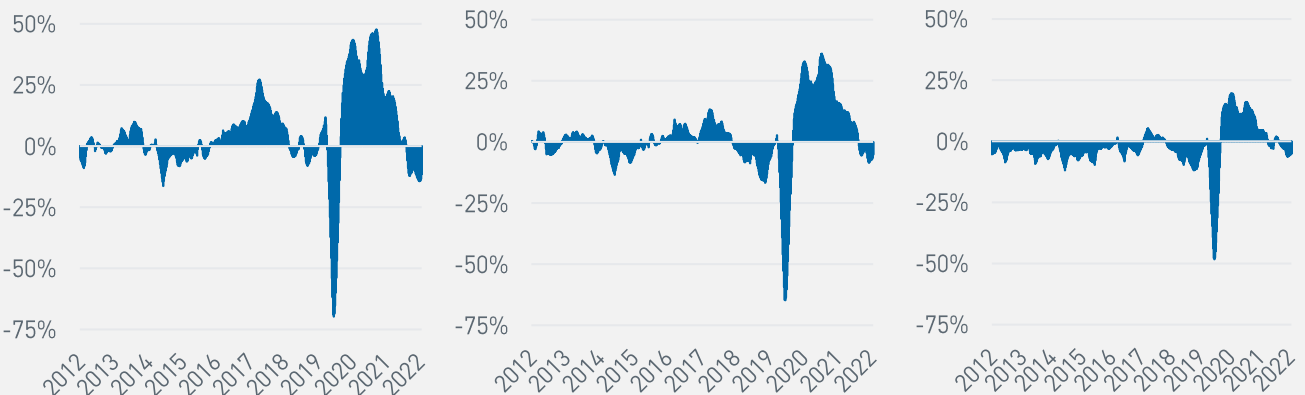


### Net EPS Revisions\*

#### S&P 500

#### S&P Mid Cap 400<sup>®</sup>

#### Russell 2000<sup>®</sup>



\*Three-month moving average of the number of companies upgrading guidance minus those downgrading guidance over the total number of companies revising guidance. As of 12/31/2022. Source: FactSet<sup>®</sup>, FactSet<sup>®</sup> is a registered trademark of FactSet Research Systems, Inc., and its affiliates.



# S&P 500 Valuations

## Valuation Scenario Analysis and Equity Risk Premium

### As earnings estimates fall so should valuations

- Consensus still expects positive earnings growth in 2023, however in the event of a mild or deep recession, downside scenarios indicate material downside.
- It is helpful for investors to see a number of scenarios of what it would take for equity markets to climb higher or pull back without being considered under- or overvalued.

#### 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)				
		14.7x	15.7x	16.7x	17.7x	18.7x
\$173	25% downside	2,534	2,707	2,880	3,053	3,225
\$208	10% downside	3,041	3,248	3,456	3,663	3,871
\$231	NTM Consensus estimate	3,378	3,609	<b>3,840</b>	4,070	4,301
\$254	10% upside	3,716	3,970	4,223	4,477	4,731
\$288	25% upside	4,223	4,511	4,799	5,088	5,376

### Valuation analysis across asset classes

- In our view, valuations are relative not only to a security or asset class's own history, but compared to other asset classes as well. 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 Treasury yield.
- With interest rates rising, the equity risk premium, which is the additional return investors expect to earn for owning stocks over government bonds, continues to decline, yet it is still positive, suggesting equities continue to look favorable relative to bonds.

#### Relative Valuations Through the “Fed Model” Lens



# Fixed Income Themes and Outlook

Rising Yields and Slowing Growth Make  
Fixed Income Look Attractive

## Core Fixed Income

*Neutral duration,  
unconstrained  
approach*

- Treasury yields have seen substantial increases across the curve, contributing to further curve inversion. We believe that elevated inflation, a tight labor market and slowing growth will keep the Fed on its tightening campaign into 2023.
- The credit cycle remains in a strong position, supported by vastly improved fundamentals compared to the prior cycle, but we continue to closely monitor market liquidity as volatility puts additional stress on funding markets.

## U.S. High Yield

*Fundamentals  
remain healthy at  
this stage in the  
cycle*

- Credit spreads remain highly volatile in part due to the significant price swings in the Treasury market in 2022, however refinancing risks remain low over the next twelve months due to more companies having taken advantage of low rates in 2020-2021.
- High yield has a higher exposure to commodity-linked sectors than equity markets, thus the trend in balance sheet improvements should continue.

## Leveraged Loans

*Senior secured debt  
compared to bonds*

- Leveraged loans performed exceptionally well in 2022 relative to other areas of fixed income given their low duration characteristics and adjusting coupon rates took advantage of rising rates.
- While we recommend leveraged loan allocations in well-diversified portfolios, we expect that performance leadership to cool off as capital markets activity slows.

## Emerging Markets (EM) Debt

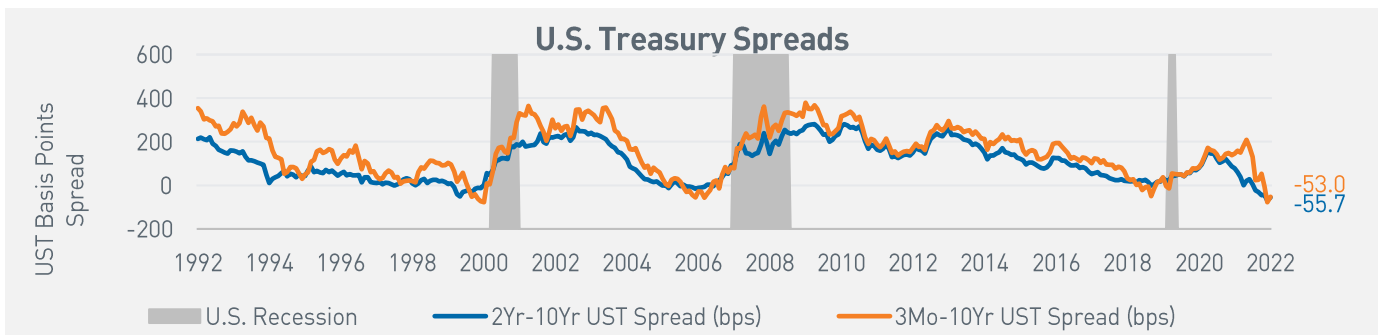
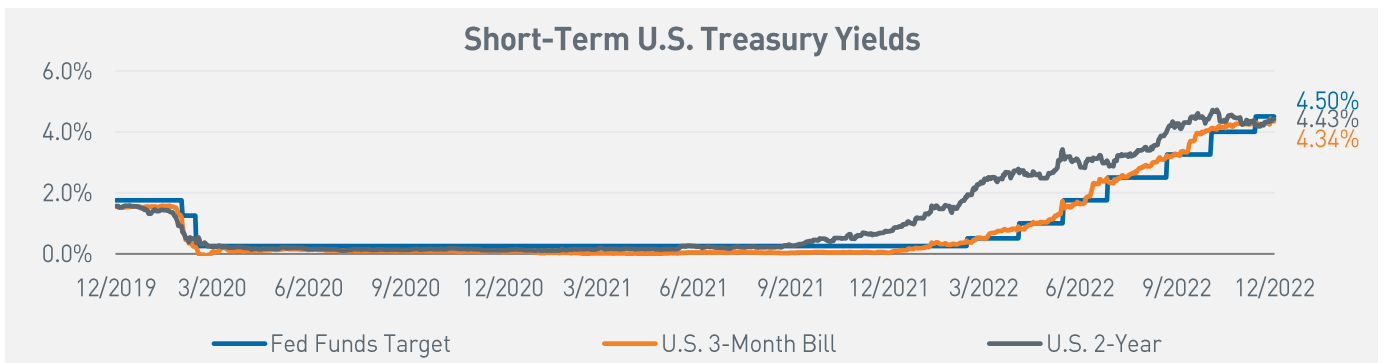
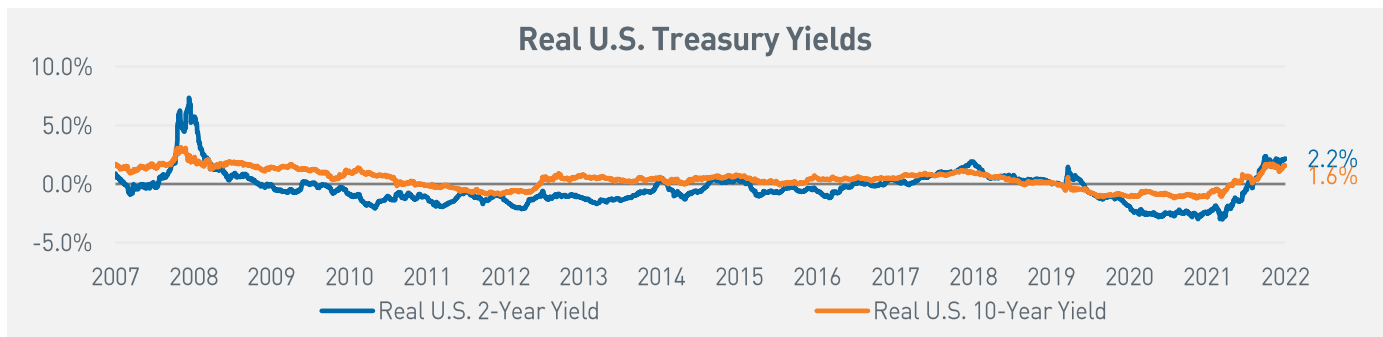
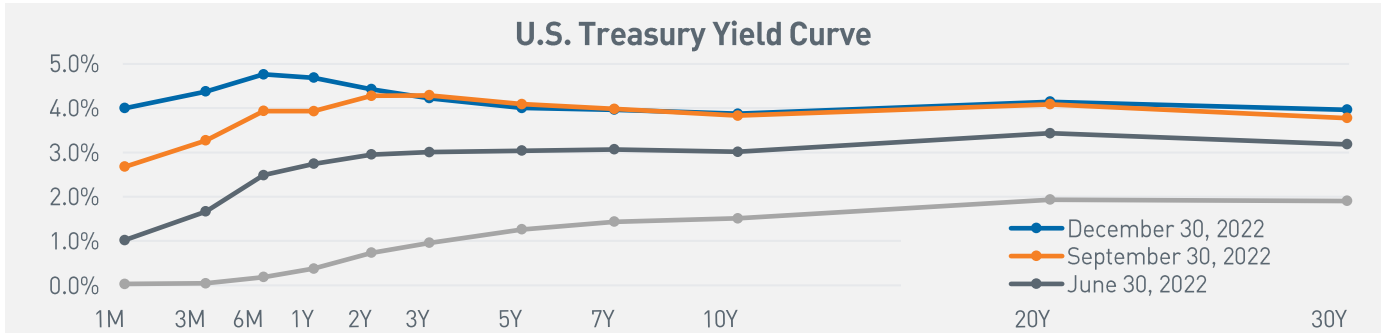
*Valuations remain  
rich in spite of  
macroeconomic  
headwinds*

- EM debt offers an attractive yield pickup relative to the developed world, especially on an inflation-adjusted basis. Despite China's recent repeal of COVID-19 restrictions, we are cautious in the short term as valuations remain rich despite geopolitical conflicts and ongoing supply chain disruptions.
- While U.S. dollar-denominated EM debt supports net-export countries, macroeconomic headwinds have become a material headwind in the near-term.

# Interest Rates

## Rapid Rises in Rates Have Led to Major Yield Curve Inversions

All key maturities on the U.S. Treasury (UST) yield curve rose as markets reacted to Fed projections of a higher terminal rate, slower growth and economic “pain” despite signs of easing inflation. Nearly all yield curves are inverted.

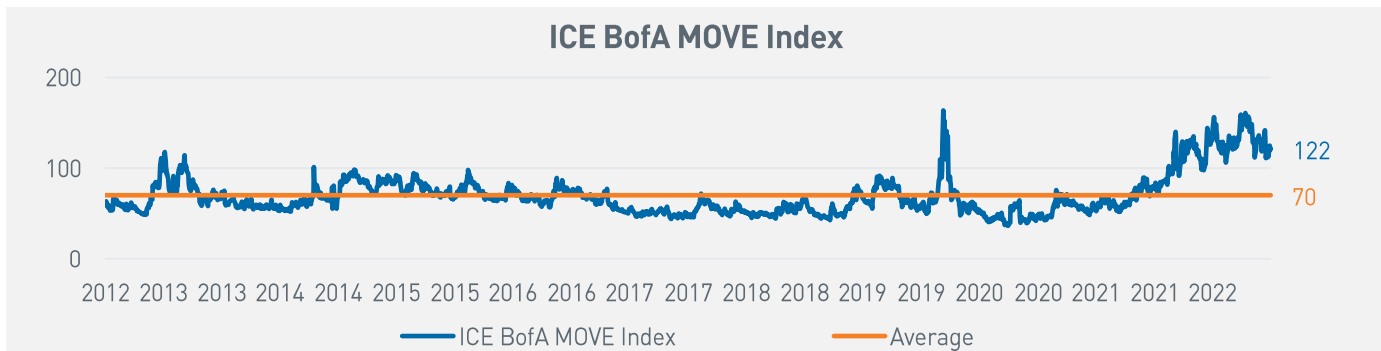
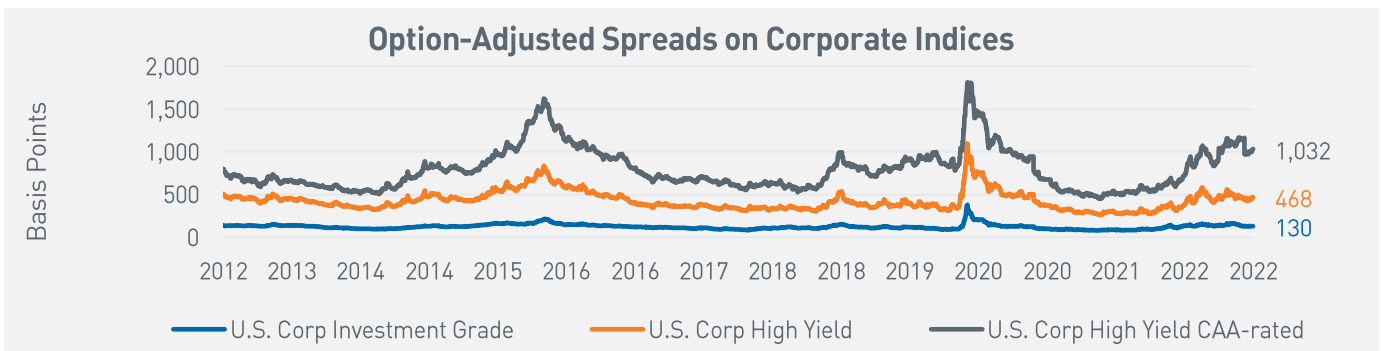
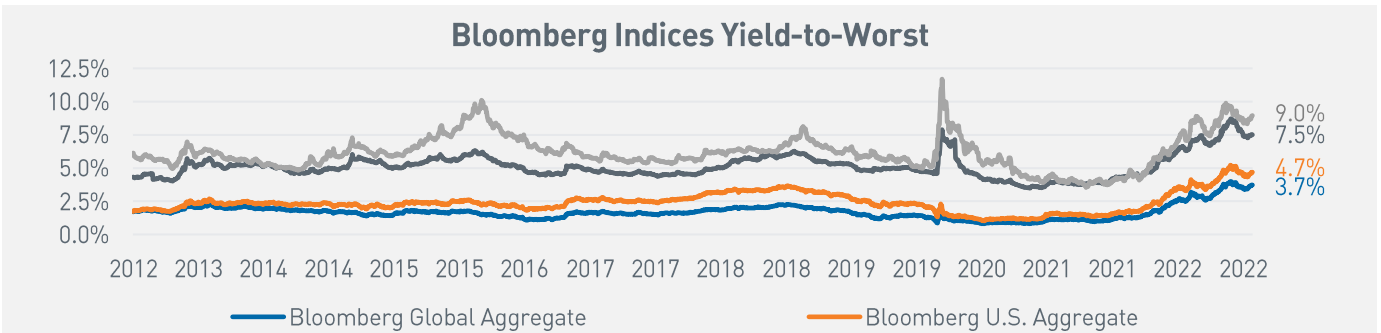


As of 12/31/2022. Source: Bloomberg L.P.

# Global Fixed Income

Fixed Income Looks Attractive for First Time in Years as Yields Rise Further

Higher nominal and real yields along with cheapening valuations provide opportunities for increased income potential and price appreciation.



As of 12/31/2022. Source: Bloomberg L.P.

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

Asset Class Leadership is Cyclical and Changes with the Business Cycle

After one of the best years in market history, 2022 has experienced a sharp reversal brought on by a number of macro headwinds which continue to impact both stocks and bonds.

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	Rank	LEGEND
	EM 78.51	Small-Cap 26.85		Real Estate 18.59				Small-Cap 21.31	EM 37.28		Large Value 31.93					Large Cap S&P 500
	High Yield 58.21	Mid-Cap 26.64		EM 18.22				Mid-Cap 20.74	Large Growth 27.44		Large Cap 31.49	Large Growth 33.47				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 39.26			Large Value S&P 500 Value
	Intl Dev 33.67	EM 18.88		Large Value 17.68	Mid-Cap 33.50	Large Growth 14.89		High Yield 17.13	Large Cap 21.83		Real Estate 27.57	Large Cap 18.40	Large Growth 32.01			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 18.31	Large Cap 28.71			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 11.19	Large Value 15.36		Small-Cap 25.52	Mid-Cap 13.66	Large Value 24.90			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			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 7.76		EM 18.44	Core Bond 7.51	Small-Cap 14.82			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			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			Real Estate MSCI USA IMI Real Estate
High Yield -26.16			Large Value -0.48		Core Bond -2.02	EM -2.19	Mid-Cap -2.18			Large Growth -0.01		Real Estate -5.58	Core Bond -1.54	Large Value -5.22		
Small-Cap -33.79			Mid-Cap -1.73		EM -2.60	Intl Dev -4.32	Intl Dev -3.04			High Yield -2.08			EM -2.54	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 -5.70				Mid-Cap -13.06		
Large Cap -37.00			EM -18.42				High Yield -4.47			Large Value -8.95				Intl Dev -14.29		
Large Value -39.22							EM -14.92			Small-Cap -11.01				Large Cap -18.11		
Real Estate -40.29										Mid-Cap -11.08				EM -20.09		
Intl Dev -43.56										Intl Dev -14.09				Small-Cap -20.44		
EM -53.33										EM -14.58				Real Estate -26.91		
														Large Growth -29.41		

As of 12/31/2022. Source: Morningstar, PNC

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# Index Total Returns

Performance Has Been Challenged in 2022  
Amid Macro Headwinds

		Trailing Total Returns									PNC Capital Market Projections	
Index		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	10 Year Forecast (2023-32)	Volatility
U.S. EQUITY	<b>U.S. Equity</b>	<b>Russell 3000</b>	<b>-5.9%</b>	<b>7.2%</b>	<b>-19.2%</b>	<b>-19.2%</b>	<b>7.1%</b>	<b>8.8%</b>	<b>12.1%</b>	<b>8.7%</b>	<b>9.9%</b>	
	LCC	S&P 500	-5.8%	7.6%	-18.1%	-18.1%	7.7%	9.4%	12.6%	8.8%	9.8%	7.15% 15.35%
	LCG	S&P 500 Growth	-7.6%	1.4%	-29.4%	-29.4%	7.5%	10.3%	13.6%	10.1%	10.3%	6.80% 15.45%
	LCV	S&P 500 Value	-3.9%	13.6%	-5.2%	-5.2%	6.3%	7.6%	10.9%	7.1%	8.9%	7.50% 16.05%
	Sector	S&P 500 Communication Services	-7.8%	-1.4%	-39.9%	-39.9%	-3.3%	1.0%	4.3%	3.7%	6.0%	
	Sector	S&P 500 Consumer Discretionary	-11.3%	-10.2%	-37.0%	-37.0%	1.5%	6.1%	11.7%	11.0%	10.4%	
	Sector	S&P 500 Consumer Staples	-2.8%	12.7%	-0.6%	-0.6%	9.3%	8.8%	11.0%	9.7%	9.8%	
	Sector	S&P 500 Energy	-2.9%	22.8%	65.7%	65.7%	19.3%	9.3%	6.0%	3.8%	9.7%	
	Sector	S&P 500 Financials	-5.2%	13.6%	-10.5%	-10.5%	5.9%	6.4%	12.2%	4.6%	5.6%	
	Sector	S&P 500 Health Care	-1.9%	12.8%	-2.0%	-2.0%	11.9%	12.5%	15.0%	11.5%	10.5%	
	Sector	S&P 500 Industrials	-3.0%	19.2%	-5.5%	-5.5%	8.3%	7.4%	11.9%	8.2%	9.9%	
	Sector	S&P 500 Information Technology	-8.4%	4.7%	-28.2%	-28.2%	11.6%	15.8%	18.3%	13.2%	13.4%	
	Sector	S&P 500 Materials	-5.6%	15.0%	-12.3%	-12.3%	10.5%	7.5%	9.8%	6.6%	9.5%	
	Sector	S&P 500 Real Estate	-4.8%	3.8%	-26.1%	-26.1%	1.8%	5.9%	7.8%	6.9%	9.3%	
	Sector	S&P 500 Utilities	-0.5%	8.6%	1.6%	1.6%	6.3%	9.6%	11.1%	7.4%	10.8%	
MCC	S&P 400®	-5.5%	10.8%	-13.1%	-13.1%	7.2%	6.7%	10.8%	8.9%	10.7%	8.40% 18.60%	
MCG	S&P 400 Growth	-6.0%	8.7%	-19.0%	-19.0%	5.8%	6.0%	10.4%	8.9%	10.5%	8.00% 19.10%	
MCV	S&P 400 Value	-5.0%	12.7%	-6.9%	-6.9%	8.0%	7.0%	10.8%	8.6%	10.6%	8.80% 18.85%	
SCC	Russell 2000®	-6.5%	6.2%	-20.4%	-20.4%	3.1%	4.1%	9.0%	7.2%	9.4%	8.85% 20.75%	
SCG	Russell 2000 Growth	-6.4%	4.1%	-26.4%	-26.4%	0.6%	3.5%	9.2%	7.3%	9.5%	8.90% 21.00%	
SCV	Russell 2000 Value	-6.6%	8.4%	-14.5%	-14.5%	4.7%	4.1%	8.5%	6.8%	9.0%	8.85% 20.95%	
NON-U.S. EQUITY	<b>Non-U.S. Equity</b>	<b>MSCI ACWI Ex USA IMI</b>	<b>-0.6%</b>	<b>14.1%</b>	<b>-16.6%</b>	<b>-16.6%</b>	<b>0.2%</b>	<b>0.8%</b>	<b>4.0%</b>	<b>1.7%</b>	<b>7.0%</b>	
	ILCC	MSCI World ex USA	-0.5%	16.2%	-14.3%	-14.3%	1.3%	1.8%	4.6%	1.8%	6.6%	8.00% 19.05%
	ILCG	MSCI World Ex USA Growth	-1.6%	14.3%	-22.7%	-22.7%	0.7%	2.6%	5.4%	2.4%	6.7%	8.05% 18.15%
	ILCV	MSCI World Ex USA Value	0.6%	18.1%	-5.6%	-5.6%	1.1%	0.6%	3.6%	1.1%	6.3%	8.55% 19.85%
	ISCC	MSCI World Ex USA Small Cap	0.6%	15.2%	-20.6%	-20.6%	-0.2%	0.5%	5.8%	3.6%	8.9%	9.10% 20.50%
	ISCG	MSCI World Ex USA Small Cap Growth	-0.3%	13.6%	-27.0%	-27.0%	-0.8%	0.5%	6.0%	3.6%	8.8%	9.15% 20.25%
	ISCV	MSCI World Ex USA Small Cap Value	1.5%	16.8%	-14.0%	-14.0%	0.0%	0.0%	5.3%	3.4%	8.9%	9.05% 20.70%
	EM	MSCI Emerging Markets	-1.4%	9.7%	-20.1%	-20.1%	-2.7%	-1.4%	1.4%	0.6%	8.7%	10.75% 26.25%
	<b>Global Equity</b>	<b>MSCI All Country</b>	<b>-3.9%</b>	<b>9.8%</b>	<b>-18.4%</b>	<b>-18.4%</b>	<b>4.0%</b>	<b>5.2%</b>	<b>8.0%</b>	<b>4.8%</b>	<b>8.0%</b>	
	REIT	MSCI USA IMI Real Estate	-5.2%	4.0%	-26.9%	-26.9%	-1.3%	2.9%	5.4%	4.8%		7.25% 23.00%
INFRA	S&P Global Infrastructure	-2.3%	10.8%	-1.0%	-1.0%	0.9%	3.0%	5.6%	2.7%	8.6%	6.95% 12.80%	

# Index Total Returns

Performance Has Been Challenged in 2022  
Amid Macro Headwinds

PNC Capital Market  
Projections

10 Year Forecast  
(2023-32)

Trailing Total Returns

	Index	Trailing Total Returns									10 Year Forecast (2023-32)		
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Return	Volatility	
FIXED INCOME	MUNI	Bloomberg Municipal Bond	0.3%	4.1%	-8.5%	-8.5%	-0.8%	1.3%	2.1%	3.4%	3.6%	3.70%	5.10%
	SHORT MUNI	Bloomberg Municipal 1-3 Year	0.0%	1.5%	-2.0%	-2.0%	0.1%	1.0%	0.9%	1.5%	1.7%	3.30%	1.55%
	<b>CORE</b>	<b>Bloomberg US Aggregate</b>	<b>-0.5%</b>	<b>1.9%</b>	<b>-13.0%</b>	<b>-13.0%</b>	<b>-2.7%</b>	<b>0.0%</b>	<b>1.1%</b>	<b>2.7%</b>	<b>3.1%</b>	<b>3.70%</b>	<b>4.15%</b>
	SHORT	Bloomberg US Aggregate 1-3 Year	0.2%	0.9%	-3.7%	-3.7%	-0.4%	0.9%	0.9%	1.6%	2.0%	3.40%	2.50%
	INTERM	Bloomberg US Govt/Credit Intermediate	-0.2%	1.5%	-8.2%	-8.2%	-1.3%	0.7%	1.1%	2.5%	2.9%	3.70%	5.45%
	LONG	Bloomberg US Govt/Credit Long	-1.4%	2.6%	-27.1%	-27.1%	-6.2%	-1.2%	1.6%	4.4%	4.7%	4.20%	9.40%
	TIPS	Bloomberg US Treasury US TIPS	-1.0%	2.0%	-11.8%	-11.8%	1.2%	2.1%	1.1%	3.1%	3.8%	4.50%	7.35%
	BILLS	Bloomberg US Treasury Bills 1-3 Month	0.4%	0.9%	1.5%	1.5%	0.7%	1.2%	0.7%	0.6%	1.2%	3.00%	0.50%
	HY	Bloomberg US Corporate High Yield	-0.6%	4.2%	-11.2%	-11.2%	0.0%	2.3%	4.0%	6.1%	7.3%	6.20%	12.20%
	LLOAN	Morningstar LSTA U.S. Leveraged Loan	0.4%	2.7%	-0.6%	-0.6%	2.5%	3.3%	3.7%	4.3%	4.7%	4.90%	9.05%
	IBND	Bloomberg Global Aggregate	0.5%	4.5%	-16.2%	-16.2%	-4.5%	-1.7%	-0.4%	1.5%	2.7%	5.70%	9.40%
	EMD	Bloomberg EM USD Aggregate	0.8%	6.6%	-15.3%	-15.3%	-3.9%	-0.4%	1.7%	4.5%	6.6%	6.20%	10.80%
ALTERNATIVES	Hedge Funds	HFRX Global Hedge Fund (USD)	0.1%	0.1%	-4.5%	-5.3%	2.6%	1.6%	1.9%	0.0%	1.8%	4.80%	7.55%
	Equity Hedge	HFRX Equity Hedge	1.0%	1.0%	-3.8%	-3.4%	4.8%	2.9%	3.3%	0.2%	2.0%		
	Event Driven	HFRX Event Driven	-1.7%	-1.7%	-6.9%	-9.0%	2.0%	-0.2%	1.9%	0.4%	2.7%		
	Macro-CTA	HFRX Macro	0.1%	0.1%	6.2%	4.2%	3.6%	2.3%	1.3%	0.0%	1.6%		
	Relative Value	HFRX Relative Value Arbitrage	0.7%	0.7%	-9.2%	-9.4%	0.0%	0.8%	0.7%	-0.3%	1.2%		
	Private Equity	Cambridge U.S. Private Equity*	--	-4.6%	-4.9%	8.1%	22.7%	19.7%	16.5%	12.7%	15.1%	10.65%	23.75%
	Private Debt	Bloomberg U.S. High Yield (Caa-Rated)	-0.9%	0.5%	-16.3%	-16.3%	-2.4%	-0.4%	3.5%	5.0%	7.8%	7.60%	16.95%
	Private RE	NCREIF Property Index**	--	0.6%	9.4%	16.1%	9.9%	8.6%	9.5%	7.0%	8.9%	7.35%	18.40%
	Timber	NCREIF Timber**	--	2.4%	7.6%	12.6%	5.8%	4.7%	5.9%	5.0%	6.8%	3.50%	12.15%
	Commodities	Bloomberg Commodity	-4.7%	10.1%	30.9%	30.9%	9.4%	4.1%	2.0%	5.4%	9.0%	8.35%	18.45%
	MLP	Alerian MLP	-2.4%	2.2%	16.1%	16.1%	12.7%	6.4%	-1.3%	-2.6%	1.4%	6.30%	18.95%

Private Alternative Investments subject to reporting lag; Data is available as of most recent reported data.

\*As of 6/30/2022. \*\*As of 9/30/2022. Source: Morningstar, Inc., FactSet ®

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# Investment Policy Statement

**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
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  - B. Prudence
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- 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
<i>Glen Danahey</i>	Glen Danahey
_____ Signature of Registered Representative or Financial Institution Representative	_____ Print Name of Registered Representative or Financial Institution Representative

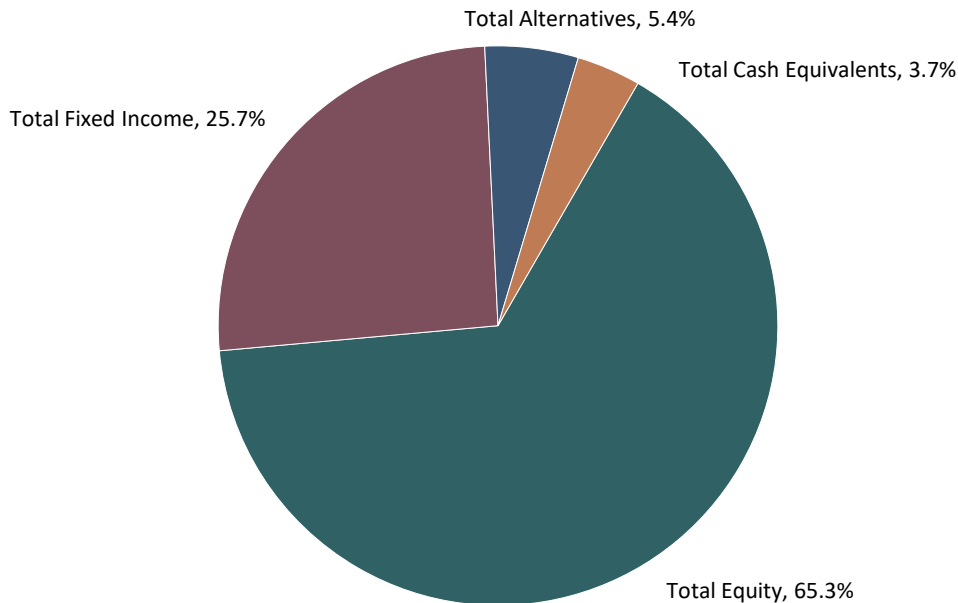
## **VIII. Appendices**

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

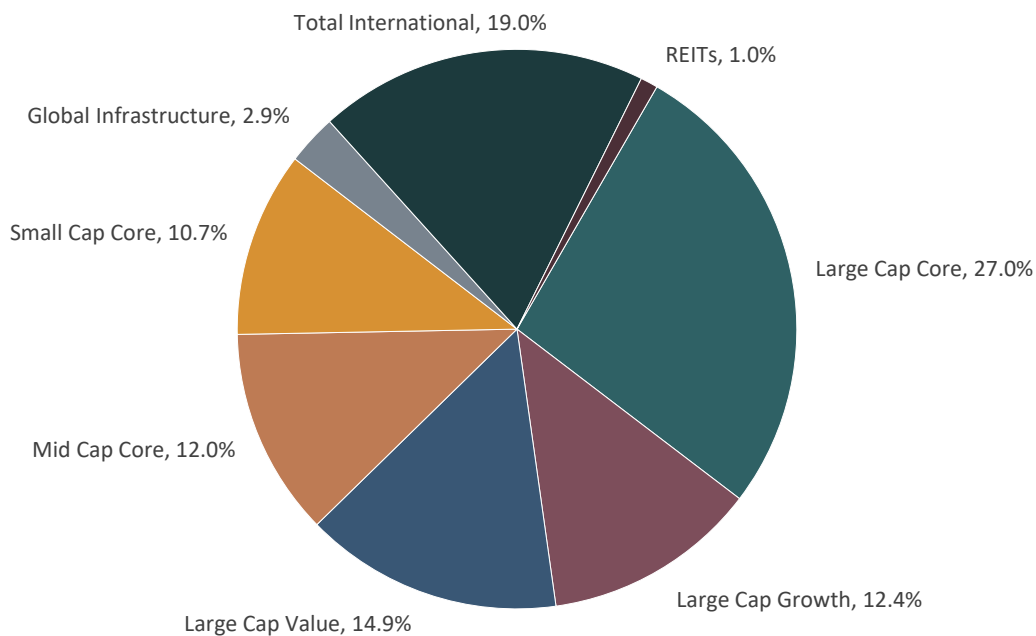
**Asset Allocation**  
 Cleveland Public Library  
 As of December 31, 2022



Description	Market Value (\$)	Portfolio Allocation	Policy Target	Policy Range
<b>Total Equity</b>	<b>17,108,847</b>	<b>65.3%</b>	<b>65%</b>	<b>55-75%</b>
<i>Large Cap Equity</i>	9,302,197	35.5%		
<i>Mid Cap Equity</i>	2,053,448	7.8%		
<i>Small Cap Equity</i>	1,834,152	7.0%		
<i>Global Infrastructure</i>	490,648	1.9%		
<i>Total International</i>	3,254,782	12.4%		
<i>REITs</i>	173,620	0.7%		
<b>Total Fixed Income</b>	<b>6,726,077</b>	<b>25.7%</b>	<b>25%</b>	<b>15-35%</b>
<b>Total Alternatives</b>	<b>1,421,271</b>	<b>5.4%</b>	<b>10%</b>	<b>0-20%</b>
<b>Total Cash Equivalents</b>	<b>959,530</b>	<b>3.7%</b>		<b>0-20%</b>
<b>Total Portfolio</b>	<b>26,215,725</b>	<b>100.0%</b>	<b>100.0%</b>	

# Equity Asset Allocation

Cleveland Public Library  
As of December 31, 2022



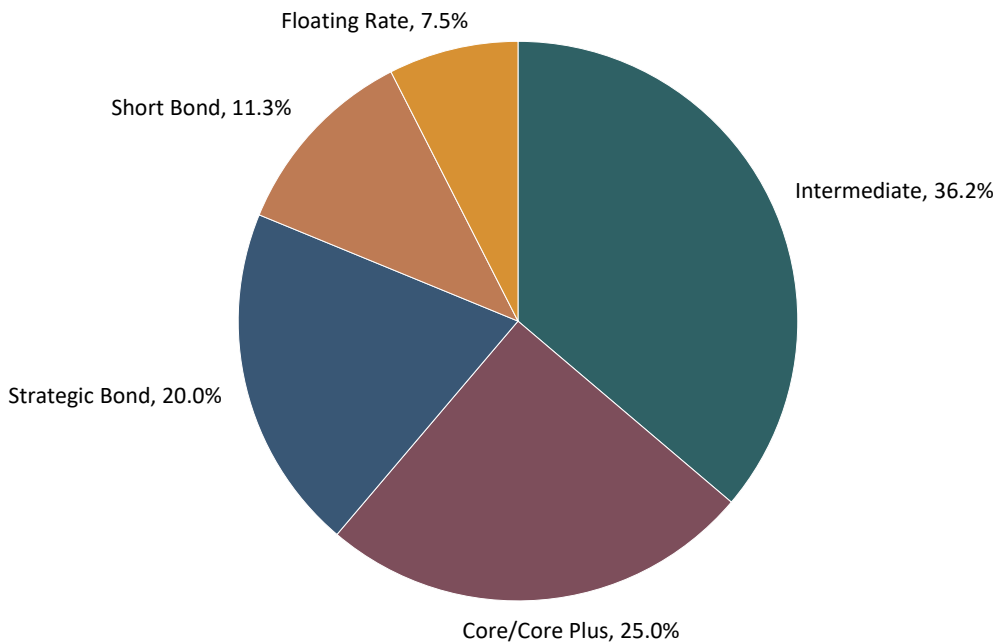
Description	Market Value (\$)	Equity Allocation	Portfolio Allocation
Large Cap Core	4,626,273	27.0%	17.7%
Large Cap Growth	2,123,924	12.4%	8.1%
Large Cap Value	2,551,999	14.9%	9.7%
Mid Cap Core	2,053,448	12.0%	7.8%
Small Cap Core	1,834,152	10.7%	7.0%
Global Infrastructure	490,648	2.9%	1.9%
Total International	3,254,782	19.0%	12.4%
REITs	173,620	1.0%	0.7%
<b>Total Equity</b>	<b>17,108,847</b>	<b>100.0%</b>	<b>65.3%</b>



# Fixed Income Asset Allocation

Cleveland Public Library

As of December 31, 2022



Description	Style	Market Value (\$)	Fixed Income Allocation	Portfolio Allocation
PNC Capital Advisors Int Govt/Credit	Intermediate	2,437,240	36.2%	9.3%
Dodge & Cox Income Fund	Core/Core Plus	1,679,880	25.0%	6.4%
Metropolitan West Unconstrained Bond Fund Class I	Strategic Bond	1,344,983	20.0%	5.1%
T. Rowe Price Short-Term Bond	Short Bond	757,462	11.3%	2.9%
T. Rowe Price Institutional Floating Rate Fund	Floating Rate	506,512	7.5%	1.9%
<b>Total Fixed Income</b>		<b>6,726,077</b>	<b>100.0%</b>	<b>25.7%</b>

**Portfolio Holdings**  
**Cleveland Public Library**  
 As of December 31, 2022

Description	Ticker	Units	Market Value (\$)	% of Market Value
<b>Large Cap Core</b>				
iShares Core S&P 500 ETF	IVV	12,041	4,626,273	17.6%
<b>Large Cap Growth</b>				
Edgewood Management	-	N/A	2,123,924	8.1%
<b>Large Cap Value</b>				
Aristotle Capital Management	-	N/A	2,551,999	9.7%
<b>Mid Cap Core</b>				
iShares Russell Mid-Cap ETF	IWR	30,444	2,053,448	7.8%
<b>Small Cap Core</b>				
GW&K Investment Management SCC	-	N/A	1,032,266	3.9%
Vanguard Small Cap ETF	VB	4,369	801,886	3.1%
<b>Global Infrastructure</b>				
Lazard Global Listed Infrastructure Portfolio Fund	GLIFX	34,553	490,648	1.9%
<b>Total International</b>				
Federated International Equity Fund	PEIRX	90,027	1,894,173	7.2%
Seafarer Overseas Growth & Income Inst	SIGIX	97,562	1,106,348	4.2%
Vanguard FTSE All World Ex-US Index Fund ETF	VEU	5,071	254,260	1.0%
<b>REITs</b>				
Vanguard Real Estate ETF	VNQ	2,105	173,620	0.7%
<b>Total Equity</b>			<b>17,108,847</b>	<b>65.3%</b>

## Portfolio Holdings (Continued)

Cleveland Public Library

As of December 31, 2022

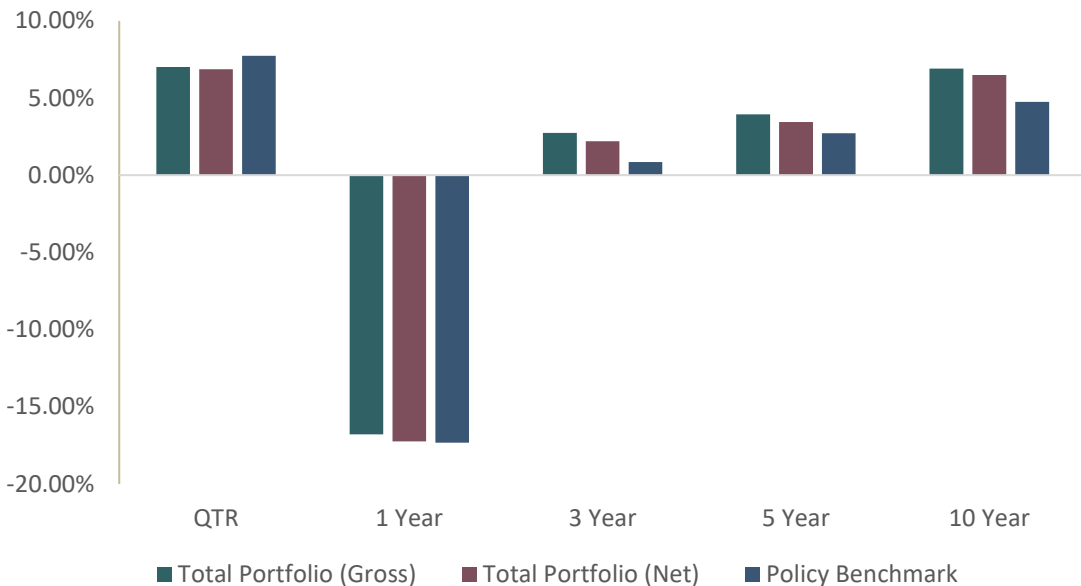
Description	Ticker	Units	Market Value (\$)	% of Market Value
<b>Fixed Income</b>				
Dodge & Cox Income Fund	DODIX	137,808	1,679,880	6.4%
Metropolitan West Unconstrained Bond Fund Class I	MWCIX	131,218	1,344,983	5.1%
PNC Capital Advisors Int Govt/Credit	-	N/A	2,437,240	9.3%
T. Rowe Price Institutional Floating Rate Fund	RPIFX	55,176	506,512	1.9%
T. Rowe Price Short-Term Bond	TBSIX	169,076	757,462	2.9%
<b>Total Fixed Income</b>			<b>6,726,077</b>	<b>25.7%</b>
<b>Alternatives</b>				
Goldman Sachs Absolute Return Fund R6	GARUX	162,990	1,421,271	5.4%
<b>Total Alternatives</b>			<b>1,421,271</b>	<b>5.4%</b>
<b>Cash Equivalents</b>				
Cash Equivalents	-	959,530	959,530	3.7%
<b>Total Cash Equivalents</b>			<b>959,530</b>	<b>3.7%</b>
<b>Total Portfolio</b>			<b>26,215,725</b>	<b>100.0%</b>

## Investment Performance

# Total Portfolio Performance

Cleveland Public Library

As of December 31, 2022



Description	QTR	1 Year	3 Year	5 Year	10 Year
<b>Total Portfolio (Net)</b>	<b>6.87%</b>	<b>-17.25%</b>	<b>2.20%</b>	<b>3.44%</b>	<b>6.49%</b>
<b>Total Portfolio (Gross)</b>	<b>7.01%</b>	<b>-16.80%</b>	<b>2.74%</b>	<b>3.93%</b>	<b>6.90%</b>
<i>60 MSCI ACWI Net / 40 Barclays US Agg</i>	7.74%	-17.33%	0.84%	2.71%	4.74%
<i>Allocation Benchmark*</i>	6.21%	-15.02%	2.83%	4.34%	7.24%
<b>Total Equity</b>	<b>9.57%</b>	<b>-20.90%</b>	<b>4.69%</b>	<b>5.95%</b>	<b>9.94%</b>
<i>MSCI ACWI Net</i>	9.76%	-18.36%	4.00%	5.23%	7.98%
<i>Russell 3000</i>	7.18%	-19.21%	7.07%	8.79%	12.13%
<b>Total Fixed Income</b>	<b>1.85%</b>	<b>-7.74%</b>	<b>-0.90%</b>	<b>0.88%</b>	<b>1.09%</b>
<i>Bloomberg Barclays US Aggregate</i>	1.87%	-13.01%	-2.71%	0.02%	1.06%
<i>Bloomberg Barclays US Aggregate (1-3 Yr.)</i>	0.90%	-3.72%	-0.42%	0.86%	0.86%
<b>Total Alternatives</b>	<b>4.05%</b>	<b>-6.16%</b>	<b>-0.75%</b>	<b>-1.66%</b>	-
<i>HFRX Global Hedge</i>	0.16%	-4.41%	1.91%	1.41%	-

\*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, 2022

Description	QTR	1 Year	3 Year	5 Year	10 Year	Inception Date
<b>Large Cap Core</b>	<b>7.61%</b>	<b>-18.12%</b>	<b>7.65%</b>	<b>8.74%</b>	<b>11.92%</b>	
<b>iShares Core S&amp;P 500 ETF</b>	<b>7.61%</b>	<b>-18.12%</b>	<b>7.65%</b>	<b>9.32%</b>	-	<b>11/2016</b>
<i>S&amp;P 500 TR</i>	7.56%	-18.11%	7.66%	9.42%	-	
<b>Large Cap Growth</b>	<b>9.52%</b>	<b>-39.85%</b>	<b>2.67%</b>	-	-	
<b>Edgewood Management</b>	<b>9.52%</b>	<b>-39.85%</b>	<b>2.67%</b>	-	-	<b>9/2019</b>
<i>Russell 1000 Growth</i>	2.20%	-29.14%	7.79%	-	-	
<b>Large Cap Value</b>	<b>10.22%</b>	<b>-15.88%</b>	<b>6.66%</b>	-	-	
<b>Aristotle Capital Management</b>	<b>10.22%</b>	<b>-15.88%</b>	<b>6.66%</b>	-	-	<b>9/2019</b>
<i>Russell 1000 Value</i>	12.42%	-7.54%	5.96%	-	-	
<b>Mid Cap Core</b>	<b>9.07%</b>	<b>-17.44%</b>	<b>5.70%</b>	<b>6.94%</b>	<b>10.46%</b>	
<b>iShares Russell Mid-Cap ETF</b>	<b>9.07%</b>	<b>-17.44%</b>	<b>5.70%</b>	<b>6.94%</b>	<b>10.46%</b>	<b>1/2013</b>
<i>Russell Midcap</i>	9.18%	-17.32%	5.88%	7.10%	10.96%	
<b>Small Cap Core</b>	<b>9.15%</b>	<b>-16.64%</b>	<b>6.12%</b>	<b>6.48%</b>	<b>9.80%</b>	
<b>Vanguard Small Cap ETF</b>	<b>7.99%</b>	<b>-17.54%</b>	<b>4.90%</b>	<b>5.93%</b>	-	<b>6/2017</b>
<i>Russell 2000</i>	6.23%	-20.44%	3.10%	4.13%	-	
<b>GW&amp;K Investment Management SCC</b>	<b>10.07%</b>	<b>-15.92%</b>	<b>7.14%</b>	-	-	<b>9/2019</b>
<i>Russell 2000</i>	6.23%	-20.44%	3.10%	-	-	
<b>Total International</b>	<b>13.02%</b>	<b>-18.33%</b>	<b>0.79%</b>	<b>1.49%</b>	<b>5.86%</b>	
<b>Federated International Equity Fund</b>	<b>14.12%</b>	<b>-22.37%</b>	<b>0.73%</b>	<b>1.85%</b>	<b>6.21%</b>	<b>8/1997</b>
<i>MSCI ACWI Ex US Net</i>	14.28%	-16.00%	0.07%	0.88%	3.80%	
<b>Vanguard FTSE All World Ex-US Index Fund ETF</b>	<b>14.78%</b>	<b>-15.34%</b>	<b>0.49%</b>	<b>1.18%</b>	-	<b>7/2017</b>
<i>MSCI ACWI Ex US Net</i>	14.28%	-16.00%	0.07%	0.88%	-	
<b>Seafarer Overseas Growth &amp; Income Inst</b>	<b>10.67%</b>	<b>-11.69%</b>	<b>1.77%</b>	<b>1.23%</b>	-	<b>12/2016</b>
<i>MSCI Emerging Market Net</i>	9.70%	-20.09%	-2.69%	-1.40%	-	
<b>REITs</b>	<b>3.48%</b>	<b>-26.85%</b>	<b>-0.67%</b>	<b>1.71%</b>	-	
<b>Vanguard Real Estate ETF</b>	<b>3.48%</b>	<b>-26.85%</b>	<b>-0.67%</b>	-	-	<b>9/2019</b>
<i>MSCI REIT BLEND</i>	4.03%	-26.90%	-1.29%	-	-	

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, 2022

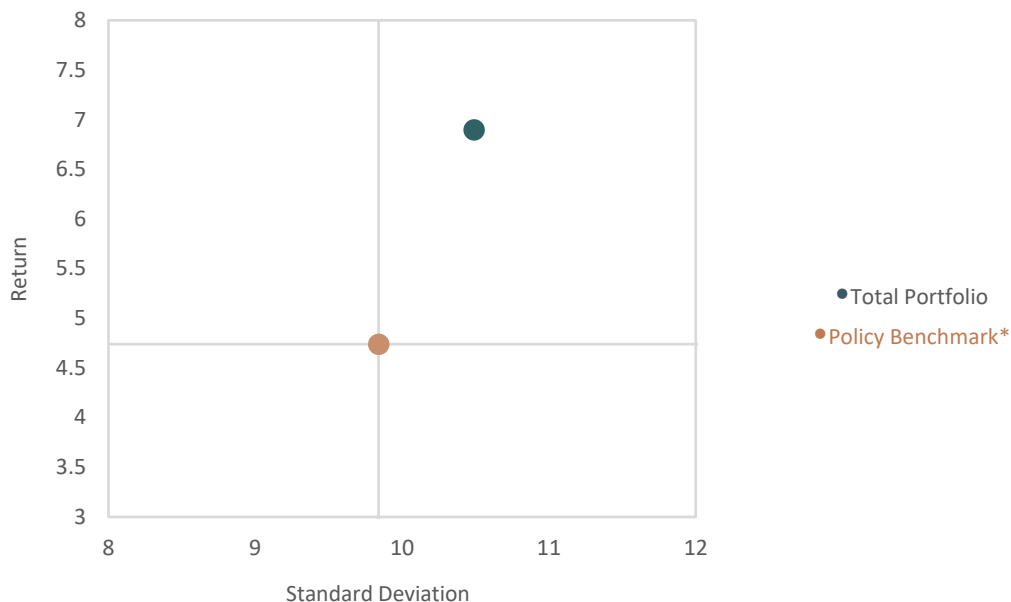
Description	QTR	1 Year	3 Year	5 Year	10 Year	Inception Date
<b>Global Infrastructure</b>	<b>9.67%</b>	<b>-1.30%</b>	<b>4.18%</b>	-	-	
<b>Lazard Global Listed Infrastructure</b>	<b>9.67%</b>	<b>-1.30%</b>	<b>4.18%</b>	-	-	<b>6/2019</b>
<i>S&amp;P Global Infrastructure (Net) Index</i>	10.83%	-0.99%	0.93%	-	-	
<b>Fixed Taxable</b>	<b>1.85%</b>	<b>-7.74%</b>	<b>-0.90%</b>	<b>0.88%</b>	<b>1.09%</b>	
<b>T. Rowe Price Institutional Floating Rate Fund</b>	<b>3.08%</b>	<b>-0.53%</b>	<b>2.08%</b>	<b>2.97%</b>	-	<b>7/2017</b>
<i>S&amp;P/LSTA US Leveraged Loan</i>	2.74%	-0.60%	2.55%	3.31%	-	
<b>Dodge &amp; Cox Income Fund</b>	<b>2.76%</b>	<b>-10.87%</b>	<b>-1.13%</b>	-	-	<b>3/2018</b>
<i>Bloomberg Barclays US Aggregate</i>	1.87%	-13.01%	-2.71%	-	-	
<b>T. Rowe Price Short-Term Bond</b>	<b>0.90%</b>	<b>-4.59%</b>	-	-	-	<b>1/2021</b>
<i>Bloomberg Barclays US Aggregate 1-3 Years</i>	0.90%	-3.72%	-	-	-	
<b>Metropolitan West Unconstrained Bond Fund</b>	<b>1.62%</b>	<b>-8.18%</b>	<b>-0.94%</b>	<b>0.88%</b>	-	<b>7/2017</b>
<i>Bloomberg Barclays US Universal</i>	2.24%	-12.99%	-2.54%	0.18%	-	
<b>PNC Capital Advisors Int Govt/Credit</b>	<b>1.43%</b>	<b>-7.79%</b>	<b>-0.85%</b>	<b>0.91%</b>	<b>1.11%</b>	<b>12/1990</b>
<i>Bloomberg Barclays Int Govt/Cr</i>	1.54%	-8.24%	-1.26%	0.73%	1.12%	
<b>Total Alternatives</b>	<b>4.05%</b>	<b>-6.16%</b>	<b>-0.75%</b>	<b>-1.66%</b>	-	
<b>Goldman Sachs Absolute Return Fund R6</b>	<b>4.05%</b>	<b>-6.16%</b>	<b>1.16%</b>	-	-	<b>10/2018</b>
<i>HFRX Global Hedge</i>	0.16%	-4.41%	1.91%	-	-	
<b>Total Cash Equivalents</b>	<b>0.87%</b>	<b>1.93%</b>	<b>0.78%</b>	<b>1.19%</b>	<b>0.67%</b>	
<b>Cash Equivalents</b>	<b>0.87%</b>	<b>1.93%</b>	<b>0.78%</b>	<b>1.19%</b>	<b>0.67%</b>	
<i>FTSE 90 T-Bill</i>	0.87%	1.50%	0.71%	1.25%	0.74%	

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 (10 Year)

Cleveland Public Library

As of December 31, 2022



Description	Total Portfolio	Policy Benchmark *
Return	6.90	4.74
Standard Deviation	10.49	9.84
Beta	1.01	-
Alpha	2.08	-
Sharpe Ratio	0.59	0.41

\*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.



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# Appendix

# ESG Risk Snapshot

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### ESG Risk Overview

**Environmental, social, and governance (ESG) factors** are a set of quantitative and qualitative standards used to evaluate material ESG risks at the portfolio-, manager-, and/or security-level.

Generally calculated on a sub-industry basis, material **ESG risks** are the assessment of ESG issues that could potentially affect the economic value of a company or portfolio.

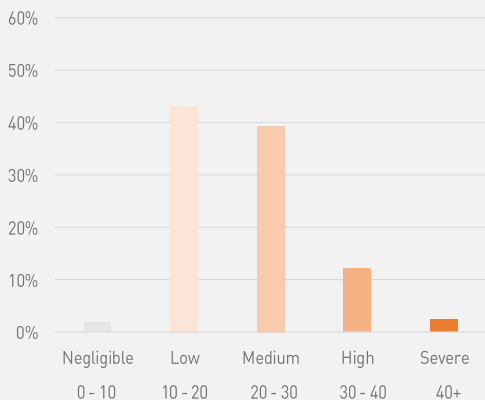
**ESG Risk Score**  
21.8



ESG risk ratings measure companies' exposure to and management of material ESG risks. On a scale of 0-100, the **ESG Risk Score** above is representative of unmanaged ESG risk in your portfolio.

### Severity

**ESG Risk Categories** classify the degree and magnitude to which the portfolio is exposed to unmanaged ESG risks. The chart below illustrates the different levels of ESG risks in your portfolio.



### Governance Issues

Below are the most prevalent governance issues that contributed most to your portfolio's total ESG Risk Score. For a detailed description of each issue, please see the Glossary on page 2.

Issue	% Port. Risk
Corporate Governance	18.6
Product Governance	13.6
Human Capital	13.1
Business Ethics	12.6
Data Privacy and Security	7.2

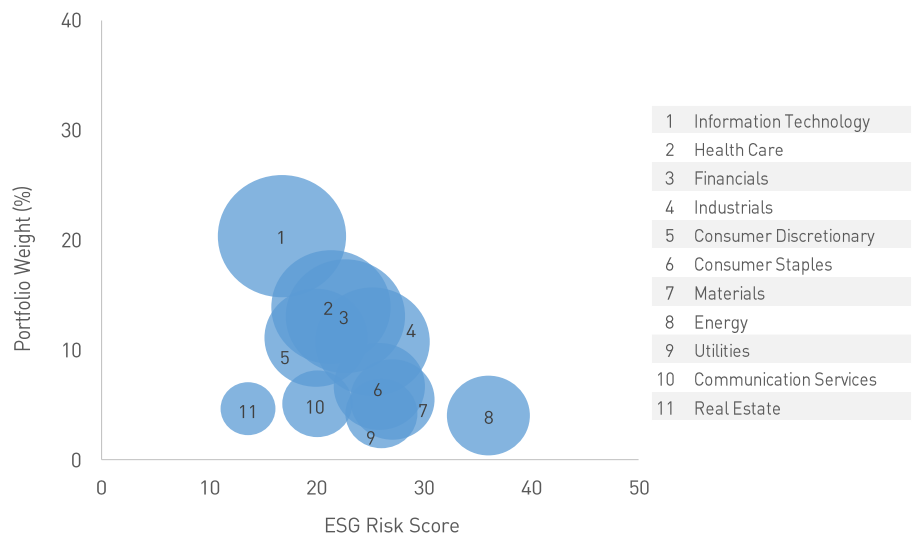
### Individual Contributors to ESG Risk

On a weighted basis, these companies contributed most to your portfolio's total ESG Risk Score.

Company	Risk Score	Port. Wt.	Contrib. to Risk
Microsoft Corporation (MSFT)	15.0	2.7	0.4
Apple Inc. (AAPL)	16.7	1.7	0.3
Amazon.com, Inc. (AMZN)	30.3	0.9	0.3
Corteva Inc (CTVA)	37.2	0.7	0.3
Intuitive Surgical, Inc. (ISRG)	23.7	0.9	0.2

### ESG Risk by Sector

This chart highlights which sectors, on a weighted basis, contributed the most to your ESG Risk Score.



## Glossary of Terms

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<b>Corporate Governance</b>	Corporate Governance comprises six pillars: Board/Management Quality & Integrity; Board Structure; Ownership & Shareholder Rights; Remuneration; Audit & Financial Reporting; and Stakeholder Governance. These six pillars represent foundational structures for the management of ESG risks.
<b>Product Governance</b>	Product Governance focuses on how companies manage their responsibilities vis-à-vis clients (quality and/or safety of their products and services). Emphasis is put on quality management systems, marketing practices, fair billing and post-sales responsibility. For Media companies, this issue also includes the management of content-related standards, such as journalistic standards and the protection of sources (Media Ethics).
<b>Human Capital</b>	Human Capital focuses on the management of human resources. It includes the management of risks related to scarcity of skilled labour through retention and recruitment programmes, and includes career development measures such as training programmes. Additionally, it includes labour relations issues, such as the management of freedom of association and non-discrimination, as well as working hours and minimum wages.
<b>Business Ethics</b>	Business Ethics focuses on the management of general professional ethics, such as taxation and accounting, anti-competitive practices and intellectual property issues. Business Ethics may include Bribery and Corruption for subindustries that do not have Bribery and Corruption as a separate material ESG issue. Additional subindustry-specific topics – such as Medical Ethics and Ethics regarding the provision of Financial Services, etc. – may also be included in this issue. In addition, ethical considerations related to customer selection may also be included here for some subindustries if products or services may be used to violate Human Rights, for example.
<b>Data Privacy and Security</b>	Data Privacy and Security focuses on data governance practices, including how companies collect, use, manage and protect data. The emphasis is on measures taken to ensure safe and secure use and/or maintenance of customers' personally identifiable data.

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*See important disclosures on the next page*

## Disclosures

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# Benchmark Composition

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### Total Portfolio

#### Policy Benchmark

January 1991	%
MSCI ACWI Net	60.00
Bloomberg Barclays Global Aggregate	40.00

#### Secondary Benchmark

December 2022	%
S&P 500 TR	18.11
Russell 2000	7.16
Russell 1000 Value	9.92
Russell 1000 Growth	8.28
Russell Midcap	8.01
Bloomberg Barclays US Aggregate 1-3 Years	2.78
MSCI Emerging Market Net	4.21
S&P Global Infrastructure (Net) Index	1.90
S&P/LSTA US Leveraged Loan	2.03
Bloomberg Barclays Int Govt/Cr	8.97
FTSE 90 T-Bill	3.09
Bloomberg Barclays US Aggregate	6.21
HFRX Global Hedge	5.35
Bloomberg Barclays US Universal	4.93
MSCI ACWI Ex US Net	8.20
MSCI REIT BLEND	0.86

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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

### Equity:

<b>MSCI ACWI Net - December 2022</b>	<b>%</b>
MSCI ACWI Net	100.00
<b>Russell 3000 - December 2022</b>	<b>%</b>
Russell 3000	100.00

### Fixed Income:

<b>Bloomberg Barclays US Aggregate 1-3 Years - December 2022</b>	<b>%</b>
Bloomberg Barclays US Aggregate 1-3 Years	100.00
<b>Bloomberg Barclays US Aggregate - December 2022</b>	<b>%</b>
Bloomberg Barclays US Aggregate	100.00

### Alternatives:

<b>HFRX Global Hedge - December 2022</b>	<b>%</b>
HFRX Global Hedge	100.00
<b>HFRF Fund of Funds - December 2022</b>	<b>%</b>
HFRF Fund of Funds	100.00

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## Glossary – Risk Statistics

**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 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.



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Factsheets – Cleveland Public Library

## 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 SPDJ. 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)	4,760,613
Prem/Disc (1 Yr Avg)	0.00%
Bid/Ask Spread (\$)	\$ 0.03
Bid/Ask Spread (%)	0.000%

Source: IAR, Morningstar

### 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 (%)	24
Turnover Ratio (%)	3
Inception Date	5/15/2000

### Operations

Net Expense Ratio	0.03
Fund Size (\$Mill)	288,261
Advisor	BlackRock Fund Advisors
Replication	Physical-Sample

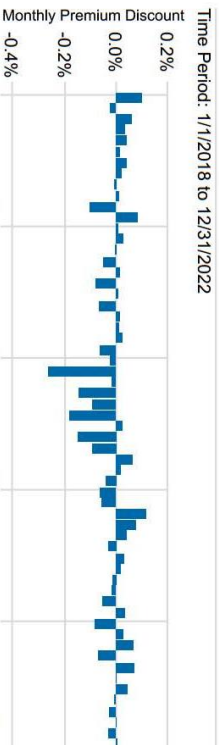
### Trailing Returns

	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
iShares Core S&P 500 ETF	7.55	-18.13	-18.13	7.63	9.39	11.44	12.52
S&P 500 TR USD	7.56	-18.11	-18.11	7.66	9.42	11.48	12.56

### Calendar Year Performance

	2022	2021	2020	2019	2018	2017	2016
iShares Core S&P 500 ETF	-18.13	28.66	18.37	31.44	-4.42	21.79	11.90
S&P 500 TR USD	-18.11	28.71	18.40	31.49	-4.38	21.83	11.96

### Historical Premium/Discount to NAV

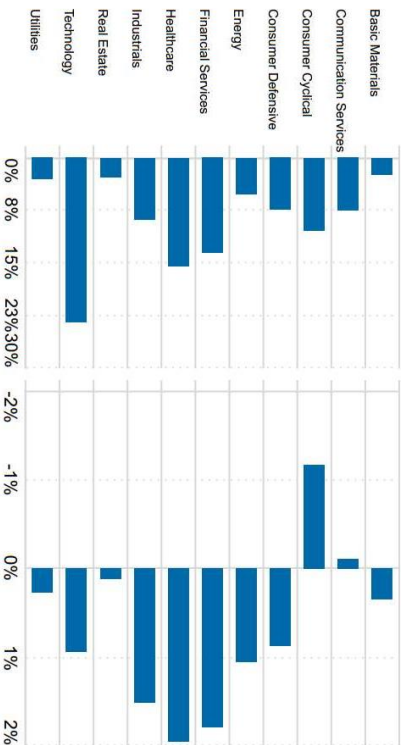


### ETF Sector Weights

Time Period: 10/1/2022 to 12/31/2022

### Return Contribution

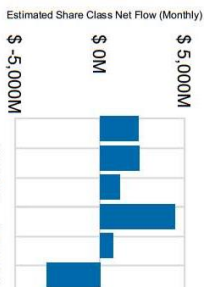
Time Period: 10/1/2022 to 12/31/2022



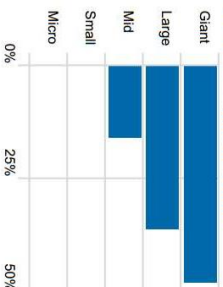
### Portfolio Characteristics

Avg Market Cap (\$Mill)	170,870
Dividend Yield	1.8
Price/Earnings	17.9
Price/Book	3.4
Price/Sales	2.1
5 Yr EPS Growth	11.7
Return on Equity	31.2
Debt/Capital	43.0

### 6-Month Net Fund Flows



### Market Capitalization



### Top 15 Holdings

Portfolio Date: 12/30/2022

Company	Weight %
Apple Inc	6.03%
Microsoft Corp	5.55%
Amazon.com Inc	2.31%
Berkshire Hathaway Inc Class B	1.73%
Alphabet Inc Class A	1.64%
UnitedHealth Group Inc	1.54%
Alphabet Inc Class C	1.46%
Johnson & Johnson	1.43%
Exxon Mobil Corp	1.41%
JPMorgan Chase & Co	1.22%
NVIDIA Corp	1.13%
Procter & Gamble Co	1.11%
Visa Inc Class A	1.05%
Tesla Inc	1.03%
The Home Depot Inc	1.00%

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## 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)	1,821,247
Prem/Disc (1 Yr Avg)	0.01%
Bid/Ask Spread (\$)	\$ 0.02
Bid/Ask Spread (%)	0.0006%

Source: IAR, Morningstar

### 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	818
Top 10 Holdings (%)	5
Turnover Ratio (%)	13
Inception Date	7/17/2001

### Operations

Net Expense Ratio	0.18
Fund Size (\$Mill)	27,107
Advisor	BlackRock Fund Advisors
Replication	Physical-Sample

### Trailing Returns

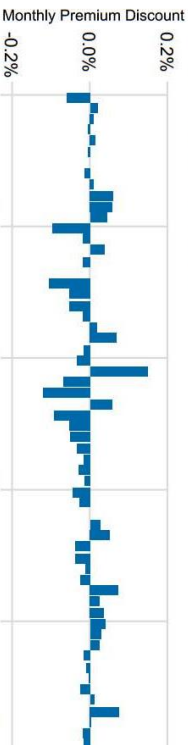
	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
iShares Russell Mid-Cap ET	9.14	-17.43	-17.43	5.71	6.95	9.44	10.78
Russell Mid Cap TR USD	9.18	-17.32	-17.32	5.88	7.10	9.61	10.96

### Calendar Year Performance

	2022	2021	2020	2019	2018	2017	2016
iShares Russell Mid-Cap ET	-17.43	22.38	16.91	30.31	-9.13	18.32	13.58
Russell Mid Cap TR USD	-17.32	22.58	17.10	30.54	-9.06	18.52	13.80

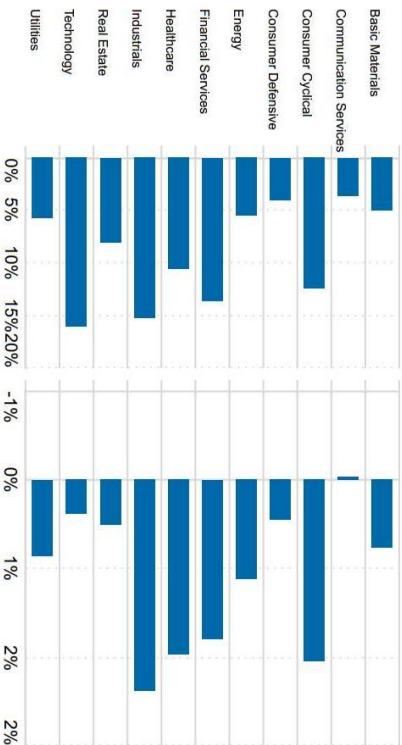
### Historical Premium/Discount to NAV

Time Period: 1/1/2018 to 12/31/2022



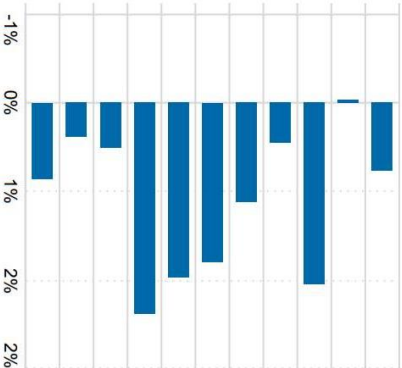
### ETF Sector Weights

Time Period: 10/1/2022 to 12/31/2022



### Return Contribution

Time Period: 10/1/2022 to 12/31/2022



### Top 15 Holdings

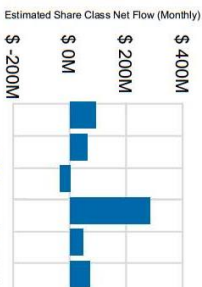
Portfolio Date: 12/30/2022

Company	Weight %
O'Reilly Automotive Inc	0.56%
Phillips 66	0.53%
Synopsys Inc	0.52%
AutoZone Inc	0.50%
Amphelph Corp Class A	0.48%
Aflac Inc	0.47%
Agilent Technologies Inc	0.47%
Cadence Design Systems Inc	0.47%
DexCom Inc	0.47%
Motorola Solutions Inc	0.45%
Corveva Inc	0.45%
Williams Companies Inc	0.43%
Devon Energy Corp	0.43%
Hess Corp	0.43%
Realty Income Corp	0.43%

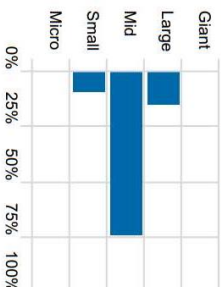
### Portfolio Characteristics

Avg Market Cap (\$Mill)	18,163
Dividend Yield	1.8
Price/Earnings	15.9
Price/Book	2.6
Price/Sales	1.4
5 Yr EPS Growth	13.9
Return on Equity	20.1
Debt/Capital	44.4

### 6-Month Net Fund Flows



### Market Capitalization



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## 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)	736,974
Prem/Disc (1 Yr Avg)	-0.01%
Bid/Ask Spread (\$)	\$ 0.13
Bid/Ask Spread (%)	0.001%

Source: IAR, Morningstar

### Strategy Overview

Investment Type	Exchange-Traded Fund	# of Stock Holdings	1,497
PNC Category	Small Cap Core - ETF	Top 10 Holdings (%)	3
Tracking Index	CRSP US Small Cap TR USD	Turnover Ratio (%)	17
		Inception Date	1/26/2004

### Strategy Facts

### Operations

Net Expense Ratio	0.05
Fund Size (\$Mill)	40,366
Advisor	Vanguard Group Inc
Replication	Physical-Full

### Trailing Returns

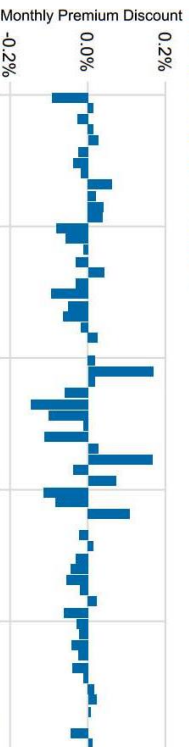
	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
Vanguard Small-Cap ETF	8.03	-17.56	-17.56	4.94	5.95	9.07	10.11
CRSP US Small Cap TR US	7.95	-17.64	-17.64	4.90	5.92	9.04	10.15

### Calendar Year Performance

	2022	2021	2020	2019	2018	2017	2016
Vanguard Small-Cap ETF	-17.56	17.72	19.08	27.37	-9.30	16.24	18.31
CRSP US Small Cap TR US	-17.64	17.71	19.07	27.35	-9.33	16.24	18.26

### Historical Premium/Discount to NAV

Time Period: 1/1/2018 to 12/31/2022

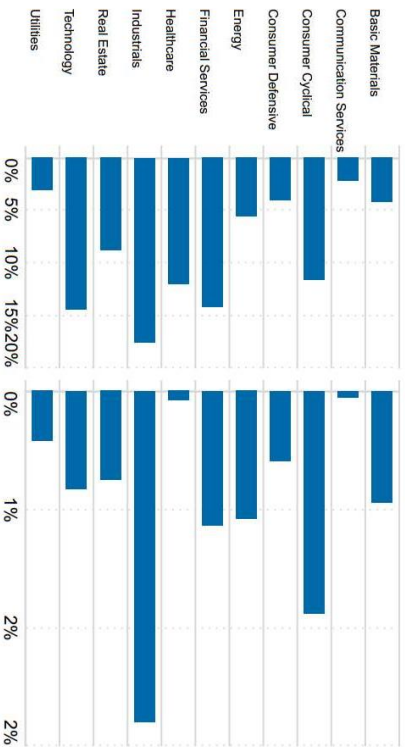


### ETF Sector Weights

Time Period: 10/1/2022 to 12/31/2022

### Return Contribution

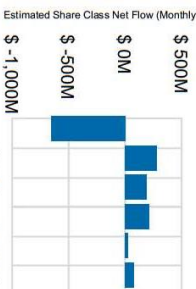
Time Period: 10/1/2022 to 12/31/2022



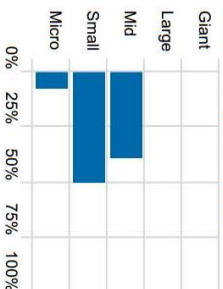
### Portfolio Characteristics

Avg Market Cap (\$Mill)	5,199
Dividend Yield	1.6
Price/Earnings	13.5
Price/Book	2.1
Price/Sales	1.1
5 Yr EPS Growth	12.4
Return on Equity	15.9
Debt/Capital	40.5

### 6-Month Net Fund Flows



### Market Capitalization



### Top 15 Holdings

Portfolio Date: 11/30/2022

Company	Weight %
Steel Dynamics Inc	0.38%
IDEX Corp	0.38%
Targa Resources Corp	0.36%
Atmos Energy Corp	0.36%
First Solar Inc	0.35%
Texas Pacific Land Corp	0.34%
Bunge Ltd	0.34%
Fair Isaac Corp	0.33%
APA Corp	0.33%
Ovintiv Inc	0.30%
Kimco Realty Corp	0.30%
Howmet Aerospace Inc	0.30%
Booz Allen Hamilton Holding Corp Class A	0.30%
Carlisle Companies Inc	0.29%
PTC Inc	0.29%

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Vanguard FTSE All-Wid 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)	5,358,874
Prem/Disc (1 Yr Avg)	0.04%
Bid/Ask Spread (\$)	\$ 0.01
Bid/Ask Spread (%)	0.000%

Source: IAR, Morningstar

Strategy Overview

Investment Type	Exchange-Traded Fund	Strategy Facts
PNC Category	International Large Cap Core -	# of Stock Holdings
Tracking Index	FTSE AW Ex US (US RIC) NR	Top 10 Holdings (%)
		Turnover Ratio (%)
		Inception Date

Operations

3,679	Net Expense Ratio	0.07
9	Fund Size (\$Mill)	32,804
5	Advisor	Vanguard Group Inc
3/2/2007	Replication	Physical-Full

Trailing Returns

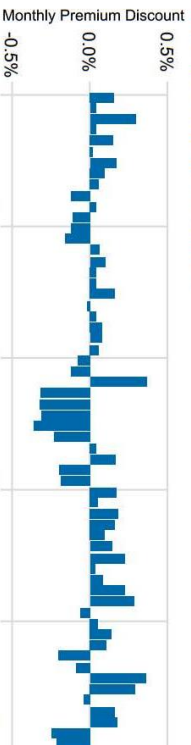
QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
Vanguard FTSE All-Wid ex-U	14.87	-15.46	-15.46	0.61	1.28	5.15
FTSE AW Ex US (US RIC) I	14.31	-15.49	-15.49	0.61	1.28	5.13
FTSE AW Ex US (US RIC) I	-15.49	8.36	11.22	21.82	-14.13	27.11
						4.80

Calendar Year Performance

2022	2021	2020	2019	2018	2017	2016
Vanguard FTSE All-Wid ex-U	-15.46	8.16	11.39	21.63	-13.97	27.27
FTSE AW Ex US (US RIC) I	-15.49	8.36	11.22	21.82	-14.13	27.11
						4.77
						4.80

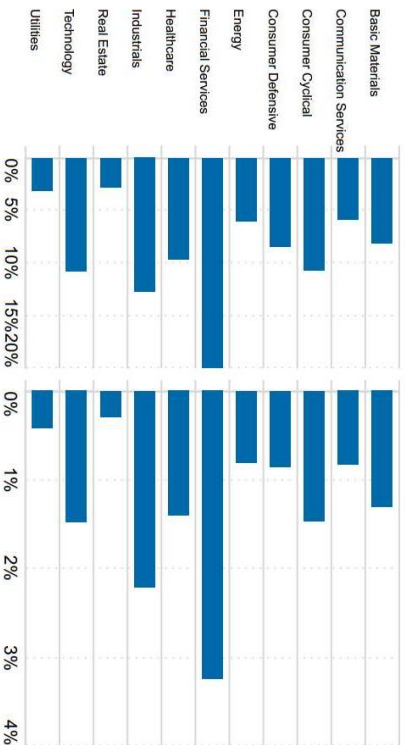
Historical Premium/Discount to NAV

Time Period: 1/1/2018 to 12/31/2022



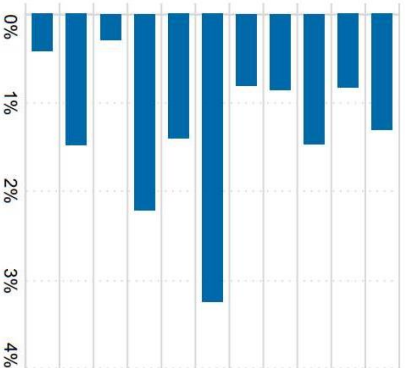
ETF Sector Weights

Time Period: 10/1/2022 to 12/31/2022



Return Contribution

Time Period: 10/1/2022 to 12/31/2022



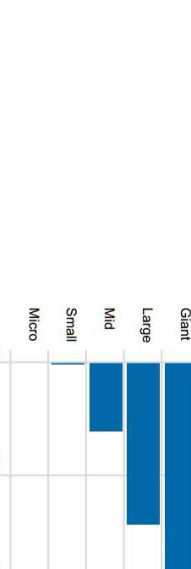
Top 10 Country Exposure

Time Period: 10/1/2022 to 12/31/2022

Country	Weight	Return	Contribution
Japan	15.65	12.86	2.03
United Kingdom	9.35	16.92	1.55
China	8.35	12.88	1.17
Canada	6.98	8.07	0.56
Switzerland	6.72	11.23	0.76
France	5.88	22.52	1.27
Australia	5.39	15.53	0.82
Germany	4.85	25.07	1.15
India	4.79	2.22	0.11
Taiwan	3.95	9.24	0.37

Market Capitalization

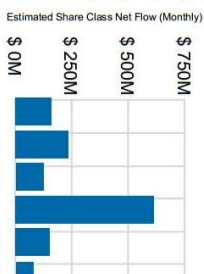
Time Period: 10/1/2022 to 12/31/2022



Portfolio Characteristics

Avg Market Cap (\$Mill)	34,390
Dividend Yield	3.9
Price/Earnings	12.0
Price/Book	1.5
Price/Sales	1.1
5 Yr EPS Growth	9.8
Return on Equity	18.2
Debt/Capital	33.8

6-Month Net Fund Flows



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## Vanguard Real Estate ETF VNQ

### PNC Investment Advisor Research

AMG Status **Approved**

Platform Add Date 8/4/2010

Status Change Date

#### Index Description

The MSCI US IMI Real Estate 25/50 Index is designed to capture the large, mid and small cap segments of the U.S. equity universe. All securities in the index are classified in the Real Estate sector as per the Global Industry Classification Standard (GICS®). The index also applies certain investment limits to help ensure diversification.

#### Investment Strategy

The investment seeks to provide a high level of income and moderate long-term capital appreciation by tracking the performance of the MSCI US Investable Market Real Estate 25/50 Index that measures the performance of publicly traded equity REITs and other real estate-related investments. The advisor attempts to track the index by investing all, or substantially all, of its assets either directly or indirectly through a wholly owned subsidiary, which is itself a registered investment company, in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index. The fund is non-diversified.

#### Trading Data

Avg Daily Vol (3 Mo)	5,640,579
Prem/Disc (1 Yr Avg)	0.00%
Bid/Ask Spread (\$)	\$ 0.01
Bid/Ask Spread (%)	0.000%

Source: IAR, Morningstar

#### Strategy Overview

Investment Type	Exchange-Traded Fund
PNC Category	Real Assets (US Real Estate) -
Tracking Index	MSCI US IMI/Real Estate 25-50

#### Strategy Facts

# of Stock Holdings	167
Top 10 Holdings (%)	47
Turnover Ratio (%)	7
Inception Date	9/23/2004

#### Operations

Net Expense Ratio	0.12
Fund Size (\$Mill)	33,352
Advisor	Vanguard Group Inc
Replication	Physical-Full

#### Trailing Returns

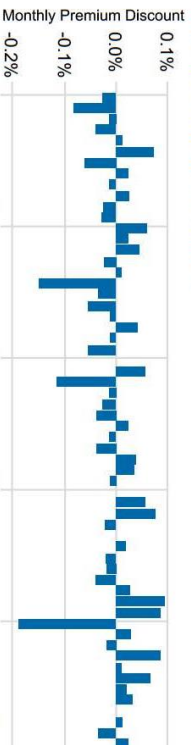
QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
Vanguard Real Estate ETF	4.32	-26.20	-26.20	-0.43	3.66	4.52
MSCI US IMI/Real Estate 2i	4.35	-26.12	-26.12	-0.29	4.06	6.41

#### Calendar Year Performance

	2022	2021	2020	2019	2018	2017	2016
Vanguard Real Estate ETF	-26.20	40.38	-4.72	28.91	-5.95	4.95	8.53
MSCI US IMI/Real Estate 2i	-26.12	40.56	-4.55	29.03	-4.59	9.05	

#### Historical Premium/Discount to NAV

Time Period: 1/1/2018 to 12/31/2022



#### Sub-Industry Weights and Performance

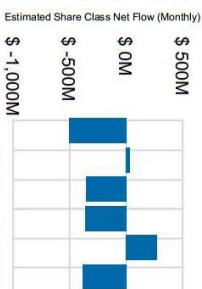
Time Period: 10/1/2022 to 12/31/2022

Sub-Industry	Weights	Return	Contribution
Specialized REITs	32.97	2.19	0.74
Residential REITs	12.61	-6.01	-0.80
Unclassified	11.90	4.35	0.52
Retail REITs	10.60	18.59	1.86
Industrial REITs	10.32	9.76	0.99
Health Care REITs	6.72	3.38	0.23
Office REITs	5.06	-0.65	-0.03
Real Estate Services	3.30	7.27	0.24
Diversified REITs	2.52	10.23	0.25
Hotel & Resort REITs	2.52	6.56	0.16

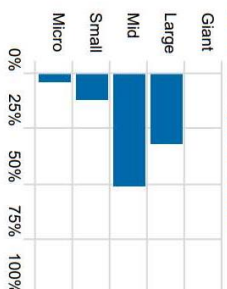
#### Portfolio Characteristics

Avg Market Cap (\$Mill)	21,106
Dividend Yield	3.7
Price/Earnings	31.9
Price/Book	2.2
Price/Sales	4.1
5 Yr EPS Growth	19.1
Return on Equity	17.9
Debt/Capital	51.7

#### 6-Month Net Fund Flows



#### Market Capitalization



#### Top 15 Holdings

Portfolio Date: 11/30/2022

Company	Weight %
Vanguard Real Estate II Index	11.95%
Prologis Inc	7.25%
American Tower Corp	6.87%
Equinix Inc	4.20%
Crown Castle Inc	4.09%
Public Storage	3.14%
Realty Income Corp	2.60%
Simon Property Group Inc	2.54%
SBA Communications Corp	2.15%
Welltower Inc	2.12%
Digital Realty Trust Inc	2.05%
VICI Properties Inc Ordinary Shares	1.92%
CBRE Group Inc Class A	1.70%
AvalonBay Communities Inc	1.63%
Weyerhaeuser Co	1.62%

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Source: IAR, Morningstar, PNC, Envestnet

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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	9.39	-24.61	-24.61	6.32	11.24	11.96	13.19
AB Concentrated Growth Z	9.42	-24.59	-24.59	6.35	11.27	12.01	13.19
Alspring Special Mid Cap Value Inst	14.04	-4.58	-4.58	8.23	8.34	10.55	11.83
Alspring Special Mid Cap Value R6	14.08	-4.50	-4.50	8.33	8.45	10.66	11.83
Calvert Equity A	9.83	-17.58	-17.58	9.71	13.82	13.57	13.85
Calvert Equity R6	9.94	-17.31	-17.31	10.06	13.98	13.98	13.85
Delaware Value® Inst	13.67	-3.51	-3.51	5.75	6.66	8.77	10.53
Delaware Value® R6	13.70	-3.42	-3.42	5.86	6.77	8.77	10.53
Federated Hermes Strategic Value Div IS	14.83	8.48	8.48	6.69	5.92	7.83	9.12
Federated Hermes Strategic Value Div R6	15.04	8.51	8.51	6.65	5.94	7.83	9.12
Godman Sachs US Eq Div and Prem Inst	7.90	-14.53	-14.53	6.22	7.03	9.05	10.05
Godman Sachs US Eq Div and Premium R6	7.91	-14.53	-14.53	6.23	7.03	9.05	10.05
Harbor Capital Appreciation Inst	-1.49	-37.72	-37.72	3.61	7.97	10.27	12.78
Harbor Capital Appreciation Retirement	-1.46	-37.67	-37.67	3.69	8.05	10.27	12.78
Harbor Large Cap Value Inst	10.51	-14.94	-14.94	6.74	8.03	11.24	12.04
Harbor Large Cap Value Retirement	10.57	-14.90	-14.90	6.81	8.10	11.24	12.04
Hotchkiss & Wiley Mid-Cap Value I	17.29	1.63	1.63	12.44	5.31	7.78	8.98
Hotchkiss & Wiley Mid-Cap Value Z	17.31	1.78	1.78	12.59	5.31	7.78	8.98
Jensen Quality Growth J	9.05	-16.52	-16.52	8.72	11.12	12.90	13.38
Jensen Quality Growth Y	9.14	-16.27	-16.27	9.04	11.46	12.90	13.38
Loomis Sayles Growth Y	6.20	-27.64	-27.64	4.20	7.76	10.73	12.96
Loomis Sayles Growth N	6.25	-27.56	-27.56	4.28	7.85	10.83	12.96
Nuance Mid Cap Value Institutional	12.08	-4.73	-4.73	3.53	6.64	9.72	11.45
Nuance Mid Cap Value Z	12.11	-4.64	-4.64	3.64	6.78	9.72	11.45
Parnassus Value Equity Investor	13.66	-13.81	-13.81	12.92	10.67	13.43	14.51
Parnassus Value Equity Institutional	13.75	-13.61	-13.61	13.17	10.83	13.68	14.51
Parnassus Mid Cap Institutional	8.69	-21.41	-21.41	1.82	4.98	8.06	9.13
Parnassus Mid-Cap	8.65	-21.56	-21.56	1.80	4.74	7.83	9.13
Principal Blue Chip Institutional	5.79	-30.74	-30.74	5.32	10.79	12.93	13.46
Principal Blue Chip R4	5.80	-30.68	-30.68	5.43	10.90	12.93	13.46
Principal MidCap R5	7.96	-23.28	-23.28	4.25	8.54	10.98	12.16
Principal MidCap R-6	8.02	-23.11	-23.11	4.51	8.81	10.98	12.16
T. Rowe Price Growth Stock	-2.26	-40.14	-40.14	-0.54	4.96	8.11	11.23
T. Rowe Price Growth Stock I	-2.23	-40.05	-40.05	-0.41	5.10	8.26	11.23
T. Rowe Price Mid-Cap Growth	8.28	-22.52	-22.52	3.44	7.36	9.54	12.07
T. Rowe Price Mid-Cap Growth I	8.30	-22.41	-22.41	3.57	7.49	9.69	12.07
T. Rowe Price Mid-Cap Value	13.60	-4.24	-4.24	9.43	6.98	9.97	10.58
T. Rowe Price Mid-Cap Value I	13.67	-4.08	-4.08	9.58	7.12	10.12	10.58
T. Rowe Price Value	10.97	-11.39	-11.39	8.36	7.77	9.76	11.37
T. Rowe Price Value I	11.01	-11.26	-11.26	8.49	7.91	9.76	11.37
Touchstone Mid Cap Y	5.96	-15.62	-15.62	3.06	7.63	10.48	10.90
Touchstone Mid Cap R6	5.99	-15.51	-15.51	3.06	7.63	10.48	10.90
Touchstone Mid Cap Growth A	6.79	-26.15	-26.15	2.82	8.24	9.85	11.47
Touchstone Mid Cap Growth R6	6.90	-25.82	-25.82	2.82	8.24	9.85	11.47
Touchstone Sands Capital Growth Z	1.44	-50.56	-50.56	-4.52	3.94	5.77	8.43
Touchstone Sands Capital Select Gr R6	1.60	-50.37	-50.37	-4.52	3.94	5.77	8.43

Extended Performance is used for the following funds and dates:

AB Concentrated Growth Z (12/31/2012 – 2/28/2014), Alspring Special Mid Cap Value R6 (12/31/2012 – 6/28/2013), Calvert Equity R6 (12/31/2012 – 10/31/2017), Delaware Value R6 (12/31/2012 – 6/21/2016), Federated Strategic Value Div R6 (12/31/2012 – 6/29/2016), Goldman Sachs US Eq Div R6 (12/31/2012 – 4/30/2018), Harbor Capital Appreciation Retirement (12/31/2012 – 3/1/2016), Harbor Large Cap Value Retirement (12/31/2012 – 3/1/2016), Hotchkiss & Wiley Mid Cap Value Z (12/31/2012 – 9/30/2019), Loomis Sayles Growth Y (12/31/2012 – 9/30/2016), Loomis Sayles Large Cap Growth N (12/31/2012 – 2/1/2013), Nuance Mid Cap Value Z (12/31/2013 – 5/8/2017), Parnassus Value Equity Institutional (12/31/2012 – 4/30/2015), Parnassus Mid Cap Inst (12/31/2012 – 4/30/2015), Principal Blue Chip R6 (12/31/2012 – 1/3/2017), Principal MidCap R-6 (12/31/2012 – 11/22/2016), T. Rowe Price Growth Stock (12/31/2012 – 6/28/2015), T. Rowe Price Mid-Cap (12/31/2012 – 8/28/2015), T. Rowe Price Mid-Cap Value I (12/31/2012 – 8/28/2015), T. Rowe Price Value I (12/31/2012 – 9/11/2020), Touchstone Sands Capital Select Gr R6 (12/31/2012 – 9/11/2020).



## 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	13.08	-26.80	-26.80	0.82	1.45	4.30	3.91
AB Sustainable International Thematic Z	13.17	-26.59	-26.59				
Alger Small Cap Focus I	0.12	-37.62	-37.62	-6.39	3.06	7.16	8.82
Alger Small Cap Focus Y	0.12	-37.42	-37.42	-6.10	3.39		
American Century Non-US Intrs Val G	22.13	-7.75	-7.75	-2.65			
American Century Non-US Intrs Val I	21.91	-8.72	-8.72	-3.65			
American Century Small Cap Value Inv	10.30	-14.72	-14.72	8.34	7.09	10.06	10.37
American Century Small Cap Value Y	10.38	-14.13	-14.13	8.84	7.53		
Baillie Gifford Emerging Markets Eqs 3	11.55	-26.39	-26.39	-4.56	-1.06	5.60	3.53
Baillie Gifford Emerging Markets Eqs K	11.48	-26.47	-26.47	-4.68	-1.16		
BNY Mellon International Stock Fund I	15.53	-22.05	-22.05	1.11	4.06	7.15	5.32
BNY Mellon International Stock Fund Y	15.55	-22.03	-22.03	1.15	4.09	7.18	
Federated Hermes International Equity IS	14.12	-22.38	-22.38	0.70	1.82	5.61	6.19
Federated Hermes International Equity R6	14.12	-22.37	-22.37	0.73			
Harbor Small Cap Value Instl	11.18	-9.53	-9.53	5.49	4.93	9.69	10.41
Harbor Small Cap Value Retirement	11.19	-9.47	-9.47	5.57	5.01		
Oakmark International Small Cap Investor	27.82	-14.46	-14.46	2.28	1.48	5.38	5.53
Oakmark International Small Cap R6	27.92	-14.20	-14.20				
PGIM Jennison International Opps Z	10.01	-36.95	-36.95	3.57	5.97	8.83	7.52
PGIM Jennison International Opps R6	10.03	-36.91	-36.91	3.62	6.05	8.91	
RBC Emerging Markets Equity I	13.46	-14.63	-14.63	-1.59	-0.03	5.15	
RBC Emerging Markets Equity R6	13.50	-14.70	-14.70	-1.61	-0.04		
T. Rowe Price New Horizons	0.49	-37.00	-37.00	2.92	9.33	12.02	13.85
T. Rowe Price New Horizons I	0.53	-36.91	-36.91	3.04	9.46	12.16	
Touchstone Sands Cpl Emerg Mkts Gr Inst	2.35	-34.75	-34.75	-3.65	-0.21	4.87	
Touchstone Sands Cpl Emerg Mkts Gr R6	2.45	-34.69	-34.69				
Victory RS Small Cap Growth A	0.49	-37.07	-37.07	-8.29	-0.64	4.24	8.12
Victory RS Small Cap Growth R6	0.56	-36.86	-36.86	-7.96	-0.29		
Wasatch International Opps Inv	12.35	-36.63	-36.63	-3.98	-0.03	4.14	5.99
Wasatch International Opps Instl	12.55	-36.50	-36.50	-3.92	0.09		

Extended Performance is used for the following funds and dates:

AB Sustainable International Thematic Z (12/31/2012 - 7/26/2021), Alger Small Cap Focus Y (12/31/2012 - 2/28/2017), American Century Non-US Intrs Value I (12/6/2018 - 12/29/2019), American Century Small Cap Value Y (12/31/2012 - 4/1/0/2017), Baillie Gifford Emerging Markets Eqs K (12/31/2012 - 4/28/2017), BNY Mellon International Stock Fund Y (12/31/2012 - 7/1/2013), Federated International Equity R6 (12/31/2012 - 6/8/2018), Harbor Small Cap Value Retirement (12/31/2012 - 3/1/2016), Oakmark International Small Cap R6 (12/31/2012 - 12/15/2020), PGIM Jennison International Opps R6 (12/31/2012 - 12/23/2015), RBC EM Equity R6 (12/20/2013 - 11/22/2016), T. Rowe Price New Horizons I (12/31/2012 - 8/28/2015), Touchstone Sands Cpl Emerg Mkts Gr R6 (5/1/2014 - 4/27/2021), Victory RS Small Cap Growth R6 (12/31/2012 - 7/12/2017), Wasatch International Opps Instl (12/31/2012 - 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
AB Global Bond A	1.11	-12.26	-12.26	-3.08	-0.46	0.84	1.09
AB Global Bond Z	1.18	-11.99	-11.99	-2.76	-0.13	1.17	
ACR Managed Futures Strategy N	-4.02	35.04	35.04	9.83	4.10	1.41	2.96
ACR Managed Futures Strategy R6	-3.95	35.41	35.41	10.17	4.45	1.74	
Calvert Green Bond I	1.37	-12.78	-12.78	-2.77	0.05	1.08	
Calvert Green Bond R6	1.39	-12.72	-12.72	-2.69			
Doubleline Flexible Income I	1.03	-8.48	-8.48	-0.75	0.96	2.20	
Doubleline Flexible Income R6	1.03	-8.45	-8.45	-0.71			
Eaton Vance Gbl Macro Absolute Return I	4.84	-0.46	-0.46	1.76	2.26	2.80	2.49
Eaton Vance Gbl Macro Absolt Return R6	4.86	-0.37	-0.37	1.83	2.35		
Eaton Vance Gbl Macro Abs Ret Advlg I	5.16	-1.94	-1.94	2.11	2.29	3.29	3.26
Eaton Vance Gbl Macro Abs Ret Advlg R6	5.14	-1.95	-1.95	2.15	2.36		
Federated Hermes Total Return Bond IS	1.50	-12.49	-12.49	-1.33	0.89	1.96	1.79
Federated Hermes Total Return Bond R6	1.61	-12.40	-12.40	-1.29	0.90	1.98	
Federated Hermes Ultrashort Bond R6	0.58	-0.88	-0.88	0.58			
Federated Hermes Ultrashort Bond Svc	0.55	-0.99	-0.99	0.47	1.19	1.23	0.90
Goldman Sachs Absolute Ret Trcker Instl	3.91	-6.27	-6.27	1.12	2.26	3.36	3.25
Goldman Sachs Absolute Ret Trcker R6	4.05	-6.17	-6.17	1.17	2.28	3.36	
Payden Low Duration Fund	0.91	-3.41	-3.41	-0.04	0.99	1.18	0.98
Payden Low Duration SI	0.92						
T. Rowe Price GA Tax-Free Bond	3.37	-10.51	-10.51	-1.31	0.64	1.12	1.75
T. Rowe Price Georgia Tax Free Bond I	3.40	-10.40	-10.40	-1.19	0.77		
T. Rowe Price High Yield	4.72	-11.14	-11.14	-0.64	1.69	4.23	3.70
T. Rowe Price High Yield I	4.75	-11.20	-11.20	-0.54	1.80	4.35	
T. Rowe Price Maryland Tax-Free Bond	3.61	-9.75	-9.75	-1.08	0.84	1.42	1.94
T. Rowe Price Maryland Tax-Free Bond I	3.63	-9.58	-9.58	-1.00	0.94		
T. Rowe Price NJ Tax-Free Bond	3.46	-9.64	-9.64	-0.96	0.97	1.52	2.04
T. Rowe Price New Jersey Tax-Free Bd I	3.50	-9.44	-9.44	-0.83	1.09		
T. Rowe Price Short-Term Bond	0.87	-4.52	-4.52	-0.14	1.04	1.16	0.96
T. Rowe Price Short-Term Bond I	0.90	-4.59	-4.59	-0.04	1.10	1.29	
T. Rowe Price Summit Municipal Inc Inv	3.05	-11.06	-11.06	-1.37	0.76	1.43	2.07
T. Rowe Price Summit Municipal Inc I	3.07	-10.97	-10.97	-1.25			
T. Rowe Price Summit Municipal Intm Inv	3.35	-7.54	-7.54	-0.67	1.02	1.31	1.77
T. Rowe Price Summit Municipal Intm I	3.39	-7.44	-7.44	-0.55			

Extended Performance is used for the following funds and dates:

AB Global Bond Z (12/31/2012 - 10/15/2013), ACR Managed Futures Strategy R6 (12/31/2012 - 9/2/2014), Calvert Green Bond R6 (10/31/2013 - 2/1/2019), Doubleline Flexible Income R6 (4/7/2014 - 7/31/2019), Eaton Vance Gbl Macro Absolt Return R6 (12/31/2012 - 5/31/2017), Eaton Vance Gbl Macro Abs Ret Advlg R6 (12/31/2012 - 5/31/2017), Federated Total Return Bond R6 (12/31/2012 - 4/17/2015), Federated Ultrashort Bond R6 (12/31/2012 - 5/29/2019), Goldman Sachs Absolute Ret Trcker R6 (12/31/2012 - 7/31/2015), Payden Low Duration SI (12/31/2012 - 2/28/2022), T. Rowe Price GA Tax Free Bond I (12/31/2012 - 7/6/2017), T. Rowe Price High Yield I (12/31/2012 - 8/28/2015), T. Rowe Price MD Tax-Free Bond I (12/31/2012 - 7/6/2017), T. Rowe Price NJ Tax-Free Bond (12/31/2012 - 7/6/2017), T. Rowe Price Short-Term Bond I (12/31/2012 - 12/17/2015), T. Rowe Price Summit Municipal Inc I (12/31/2012 - 3/1/2019), T. Rowe Price VA Tax Free Bond I (12/31/2012 - 7/6/2017), Virtus Sexx Floating Rate High Inc R6 (12/31/2012 - 2/2/2015).