



# Market & Portfolio Update

**Amy C. McGarrity**

Chief Investment Officer/Chief Operating Officer

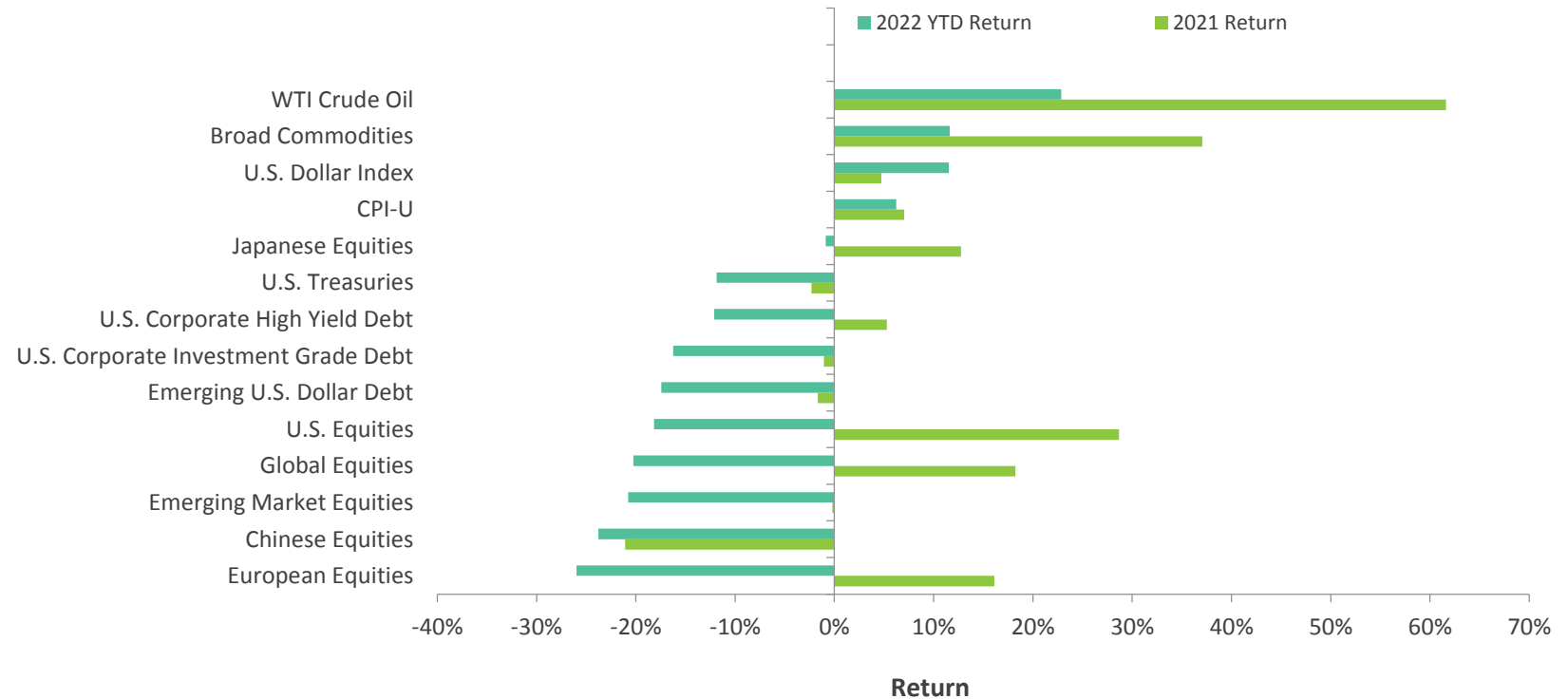
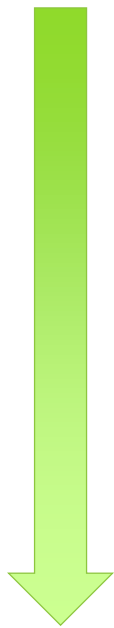
September 23, 2022



# Market Performance: 2022 YTD\* vs. 2021 Calendar Year

Oil and commodities are moving higher, but are off recent highs, while stock and bond markets are broadly selling off YTD

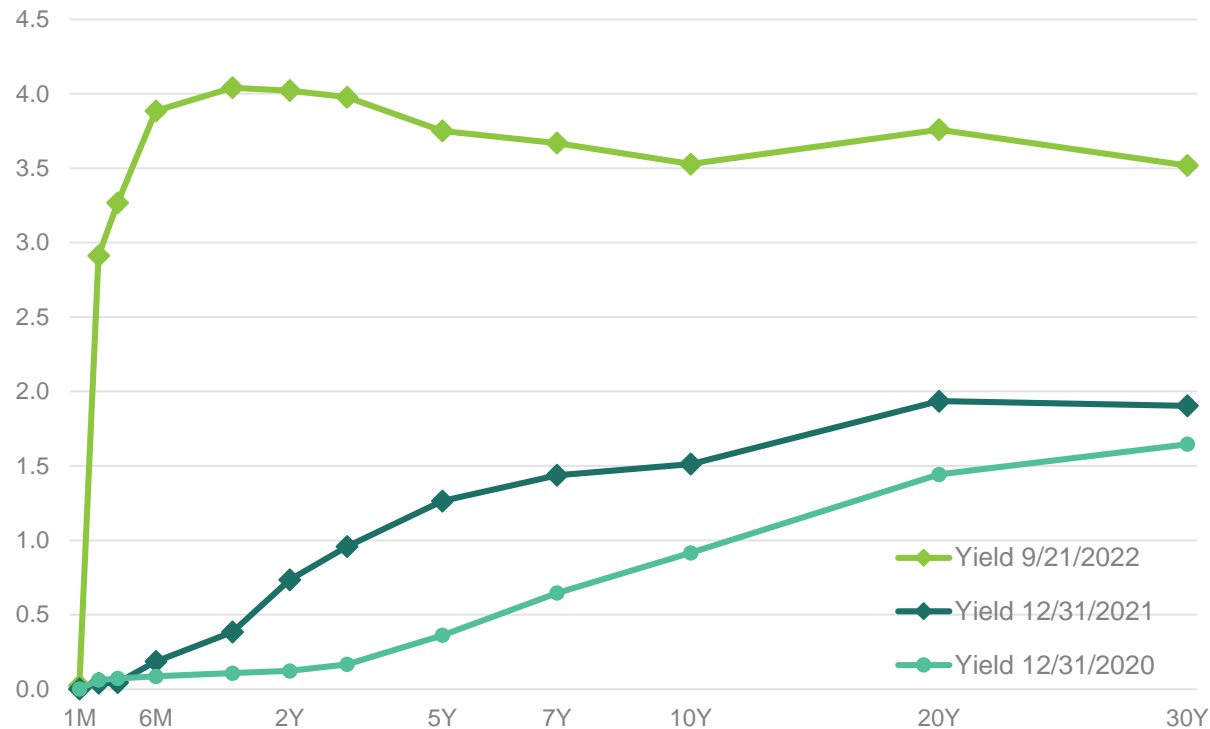
2022 Highest Performers



All returns are presented in unhedged USD terms  
CPI-U YTD is as of previous month end (8/31/2022)  
\*YTD as of 9/20/2022

# Treasury Yield Curve

Treasury Actives Curve - Mid YTM

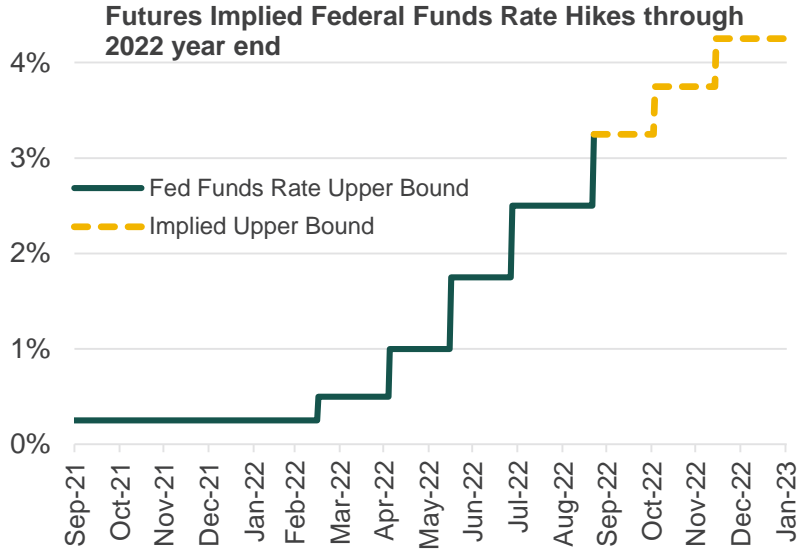
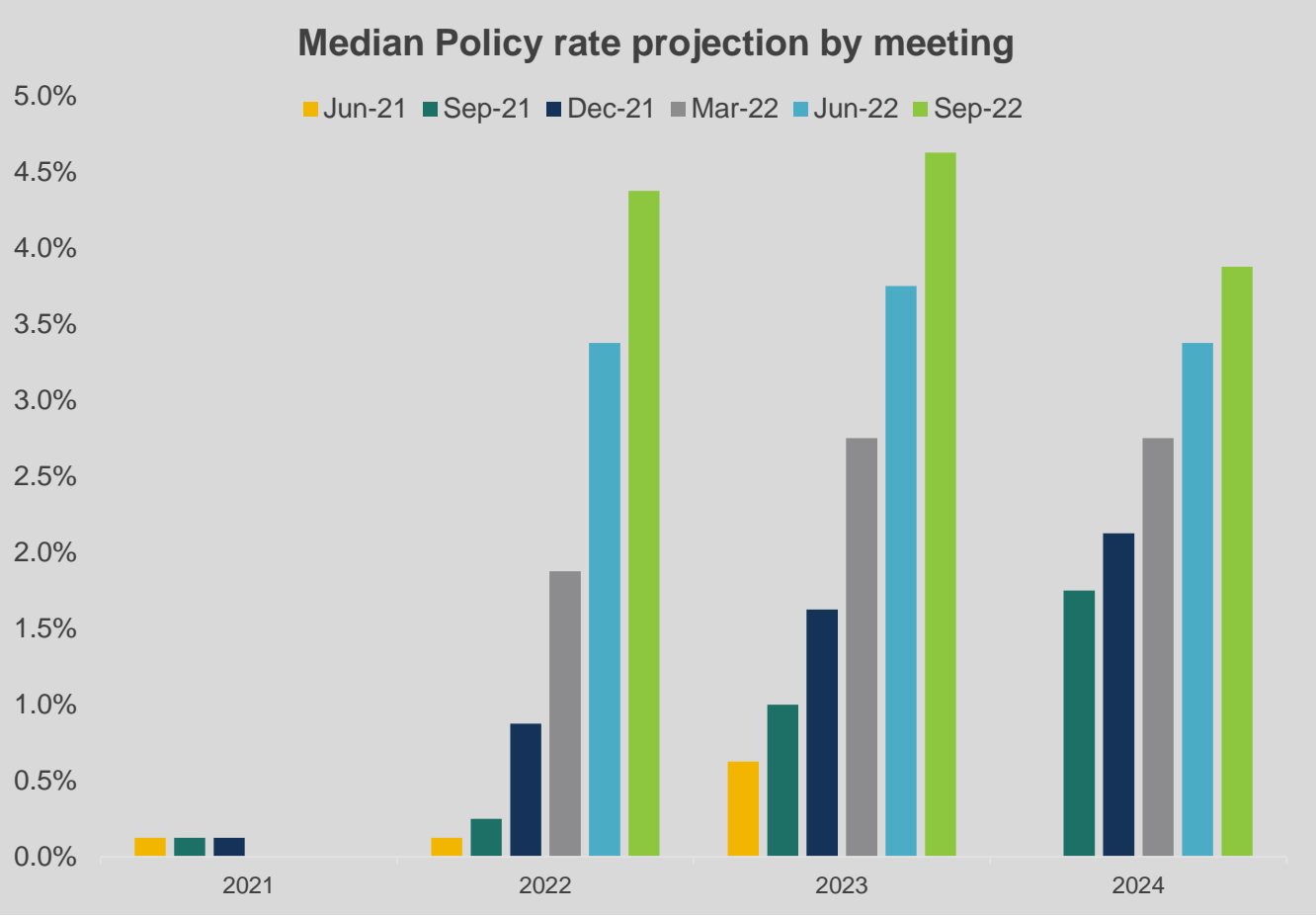


Tenor	Yield 9/21/2022	Yield 12/31/21	Yield 12/31/20	Change Dec 20 - Sep 22
1M	2.47%	0.03%	0.04%	2.43%
2M	2.91	0.04	0.06	2.85
3M	3.27	0.04	0.07	3.20
6M	3.89	0.19	0.09	3.80
1Y	4.04	0.38	0.11	3.93
2Y	4.02	0.73	0.12	3.90
3Y	3.98	0.96	0.17	3.81
5Y	3.75	1.26	0.36	3.39
7Y	3.67	1.44	0.65	3.02
10Y	3.53	1.51	0.92	2.61
20Y	3.76	1.94	1.44	2.32
30Y	3.52	1.90	1.65	1.87

- Concerns about inflation and the war in Ukraine are adding confusion to the economic picture
- Federal Funds Rate raised to 325 bps through September 21, 2022; market is pricing in 115 bps additional by year end

# Interest Rate Expectations

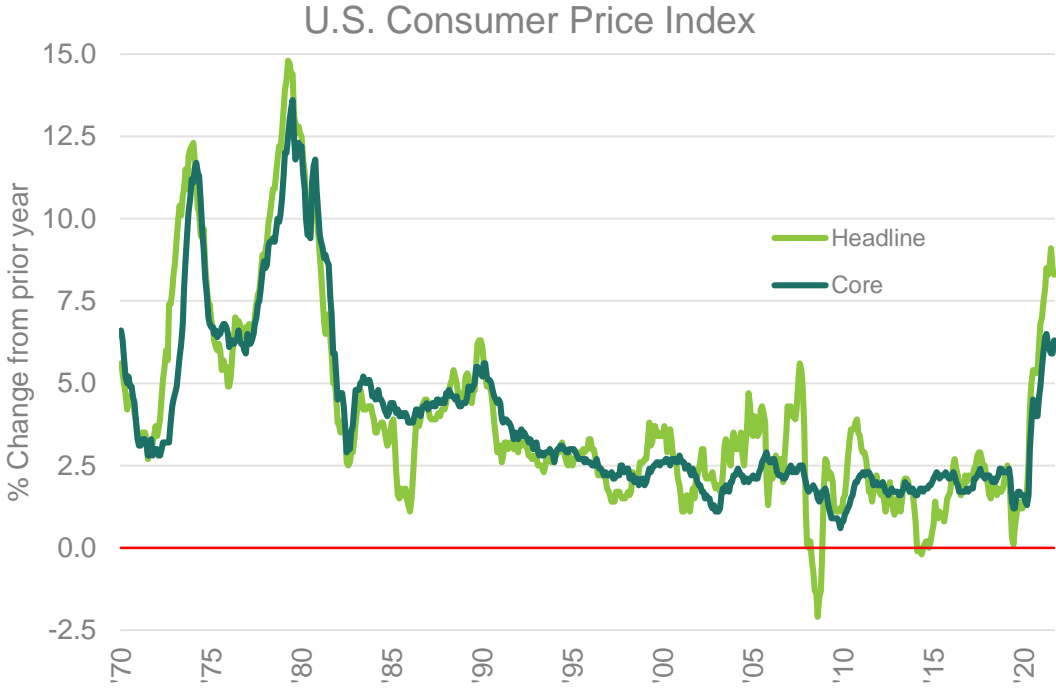
Since March 2021, the Fed has become increasingly hawkish



Source: FOMC Summary of Economic Projections

# Inflation Estimates

Economist surveys point to a renormalization of inflation trends over the next 18 months

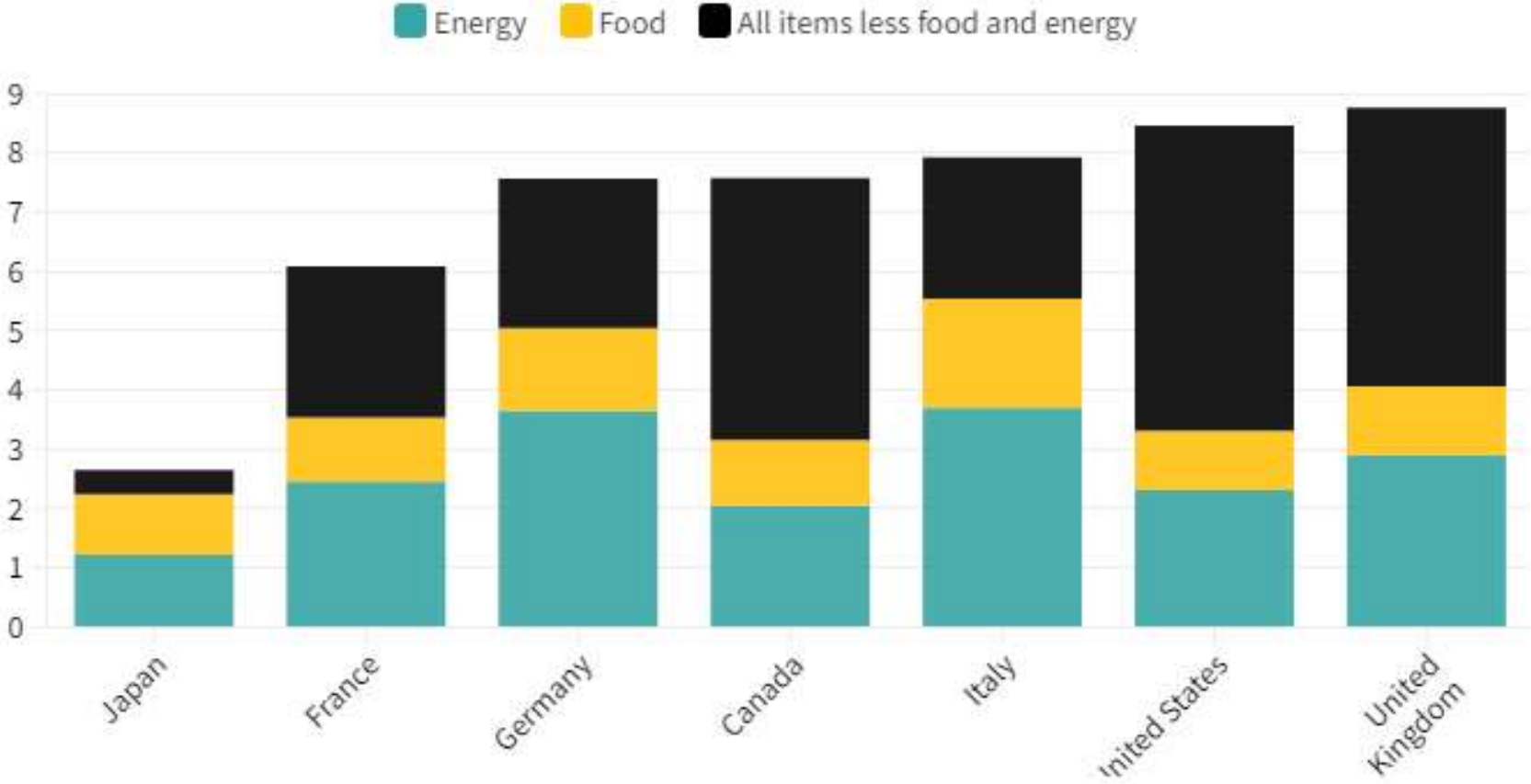


Source: Bureau of Labor Statistics

# CPI Inflation

Figure 2 - Contribution to year-on-year CPI inflation in the G7 countries

July 2022, percentage points

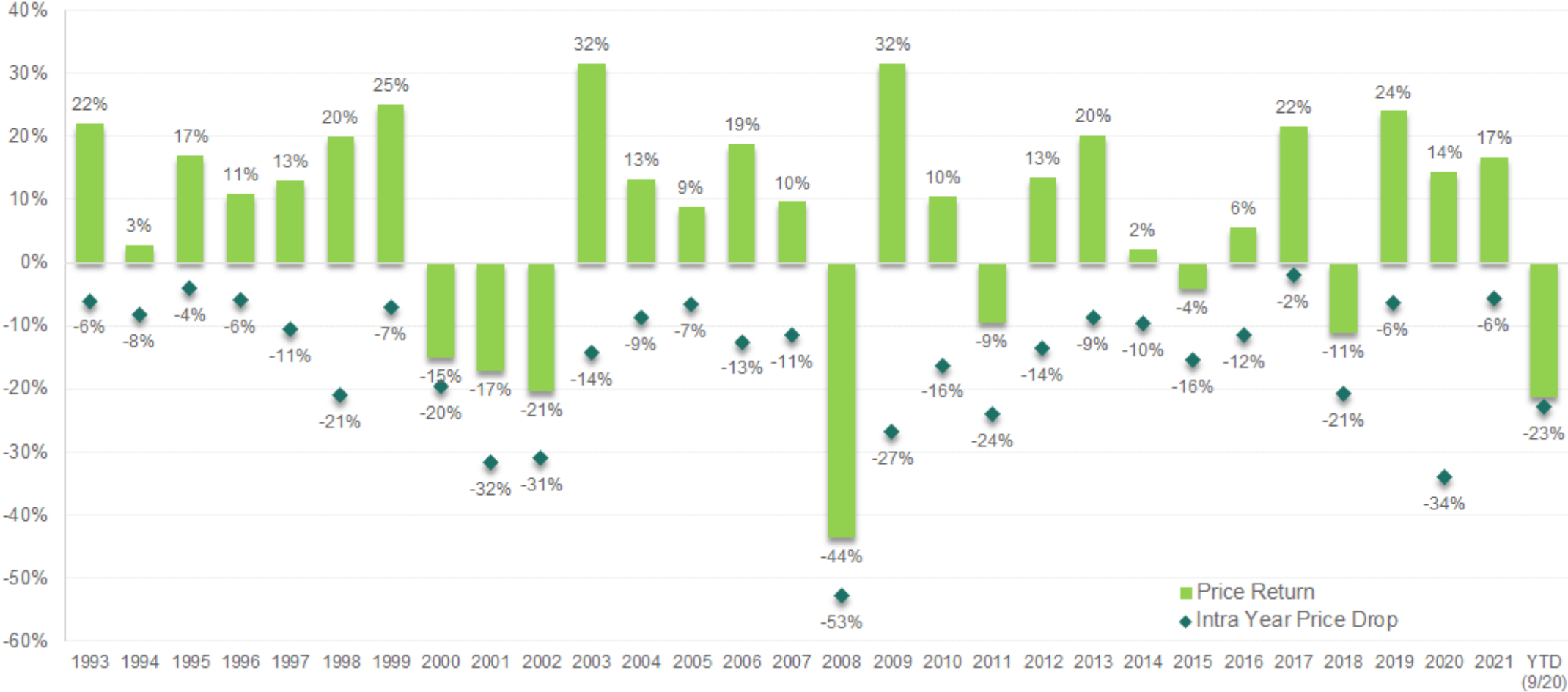


Source: OECD (2022) Consumer Prices (Database)



# Global Equity Market Volatility

MSCI ACWI Intra-Year Declines vs. Calendar Year Returns  
*Despite average intra-year decline of 15.6%, annual returns were positive in 22 of 30 years*





# 2022+ Projects: Investments/Collaborative

## Project

## Status

### Unitization – Fixed Income asset class

Project team completed the unitization of the Fixed Income asset class and subsequent inclusion in the PERAdvantage Fixed Income Fund in July 2022. Team to explore other unitization opportunities.

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### Refreshed Technology Roadmap

Project team focusing in on private asset classes, though ongoing upgrades, custodian bank services, and software evaluations are in process throughout department. Team is focused on efficient use and optimization of current technology.

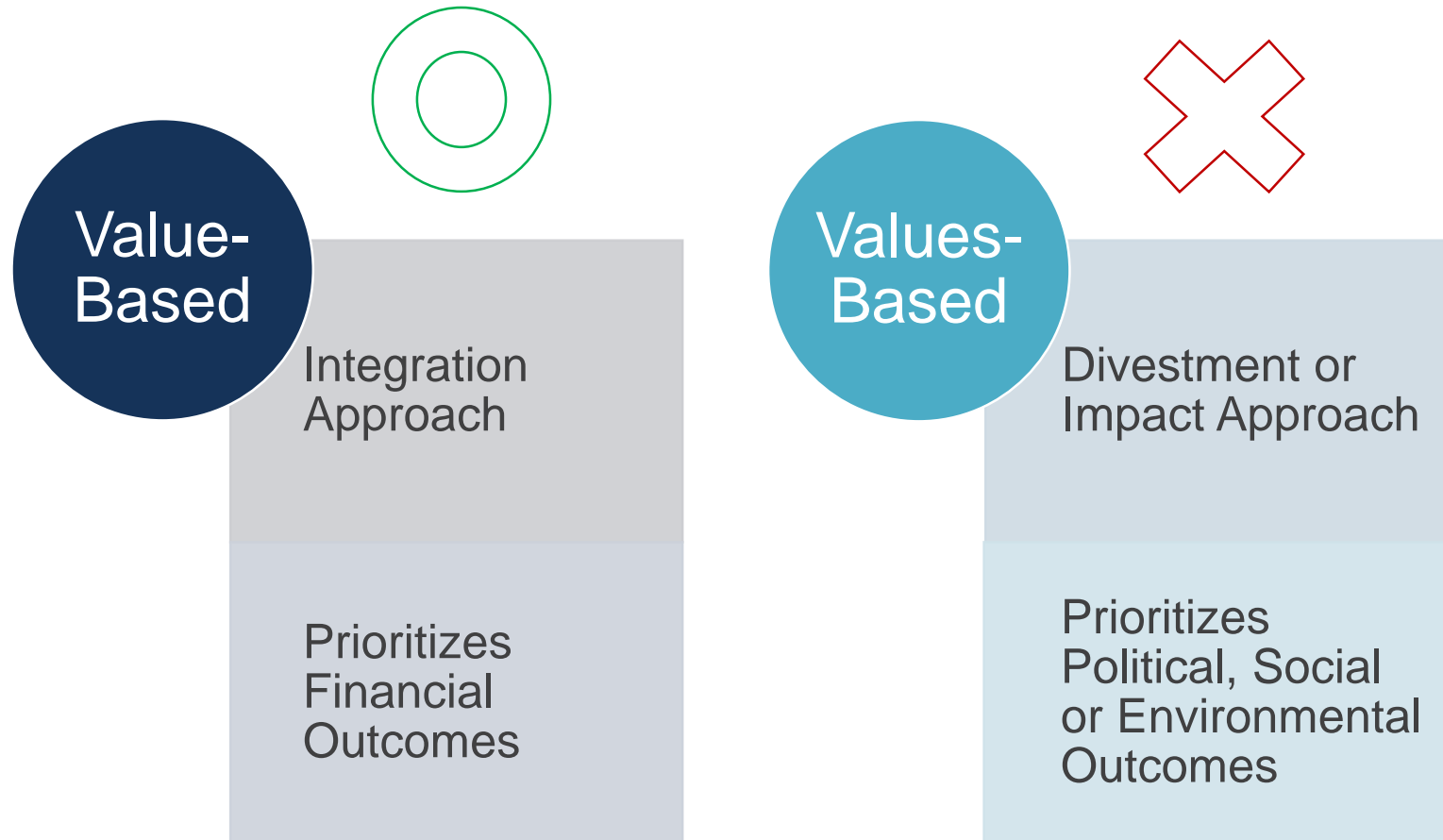




# Investment Activities

- Work continues on the Kyriba (cash management/forecasting software) implementation project, with expected completion in Q4
- 2022 Investment Stewardship Report campaign commenced in August
  - PERA Trivia and Ice Cream Social
- Began project to upgrade investment data warehouse
- Divestment engagement - Unilever


# Stewardship: Value- vs. Values-Based Investing



**We take a value-based, rather than values-based, approach to investing in order to fulfill the fiduciary duty we owe to nearly 650,000 members, retirees, and their beneficiaries.**

# Stewardship: ESG Infographic




**COLORADO PERA.**

## ABCDESG

### What's in a name?

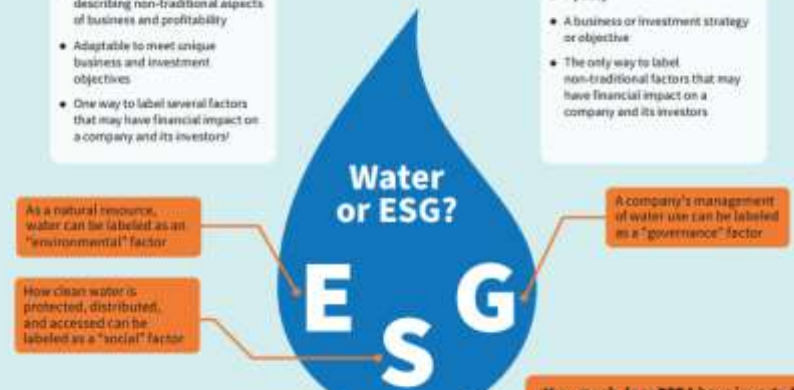
There are several risk and opportunity factors for investors to consider. Each can be categorized in many ways. Regardless of how factors we consider can be labeled, Colorado PERA prioritizes financial value, rather than personal values, in our active investment decisions.

#### ESG is...

- A labeling convention to represent environmental, social, and/or governance factors
- The most widely used acronym for describing non-traditional aspects of business and profitability
- Adaptable to meet unique business and investment objectives
- One way to label several factors that may have financial impact on a company and its investors!

#### ESG is not...

- A type of business or company
- A political affiliation or social movement
- A policy
- A business or investment strategy or objective
- The only way to label non-traditional factors that may have financial impact on a company and its investors



Water or ESG?

E S G

#### When could water be labeled as a financially relevant E, S, or G factor?

Consider a soda pop company. Water is a critical input to making soda pop. To remain competitive in the beverage industry, the manufacturer would need to:

- Manage this natural resource well (E)
- Not infringe on community access to clean water (S)
- Adapt business to changing supply, demand, policy, and technology (G)

Whether it's labeled as "H<sub>2</sub>O," "ESG," or "LMNOP," water and its management may be a financially material factor for businesses and investors to consider.

To learn more, visit [copera.org/investment-stewardship](http://copera.org/investment-stewardship) and download a copy of PERA's Investment Stewardship Report.

#### How much does PERA have invested with regard to ESG?

PERA does not have any ESG-centric investment mandates, nor do we screen our investments based on specific ESG criteria when deciding whether or not to include them in the portfolio. However, PERA staff will integrate factors that may be labeled under the ESG convention into our active fundamental investments, where financially material. As of December 31, 2021, PERA staff managed approximately 62% of the fund in-house with most of these assets in actively managed portfolios using this integrative approach. Our singular goal is to seek out investments that are expected to provide the best risk-adjusted returns over the long term.

\* See reverse for more information on the various investment risk and opportunity factors PERA may consider.


**COLORADO PERA.**

### No single risk factor dominates an investment decision.



### Risks are not without opportunity, and investors expect to be compensated for taking on risk.

To learn more, visit [copera.org/investment-stewardship](http://copera.org/investment-stewardship) and download a copy of PERA's Investment Stewardship Report.



# APPENDIX

# Asset Allocation Policy

## Policy

*Asset class weights will be within permissible ranges*

## Status

*All asset class weights within permissible ranges*

Asset Class	2022 Policy Benchmark Weight	Actual Weight* (June 30, 2022)	Range
Global Equity	55.0%	52.0%	49% - 61%
Fixed Income	23.5%	20.2%	18.5% - 28.5%
Private Equity	8.5%	10.5%	4% - 13%
Real Estate	8.5%	11.1%	4% - 13%
Alternatives	4.5%	5.7%	0% - 12%
Cash/Short Term**	0.0%	0.6%	0% - 3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	

\* Transitional cash remains within respective asset classes

\*\* Includes Cash Overlay

# Active Risk Policy

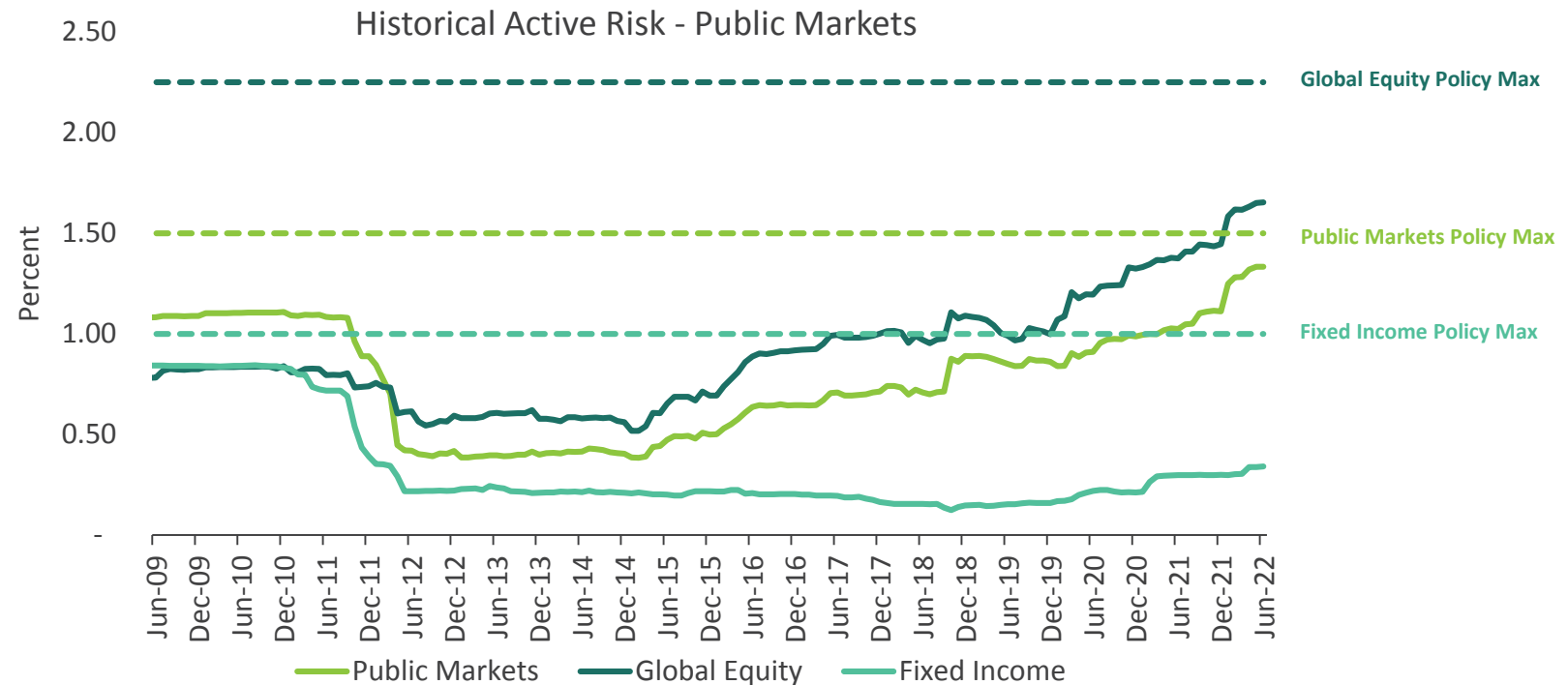
## Policy

Active risk within public market asset classes (i.e., Global Equity and Fixed Income) and the total public markets portfolio will not exceed maximums

## Status

Active risk levels are within policy limits

Active Risk		
Asset Class	Five-Year Tracking Error in Basis Points 30-Jun-22	Active Risk Policy Maximum in Basis Points
Global Equity	165	225
Fixed Income	34	100
<b>Total Public Markets</b>	<b>133</b>	<b>150</b>



\*Active risk measurement was changed from trailing three years to trailing five years as of January 2020



# Portfolio Monitor

## ASSET CLASS

## STRATEGY

### Global Equity

Portfolio retains higher quality bias. No material sector or geographic overweights or underweights relative to the benchmark.

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### Fixed Income

The portfolio is biased to be overweight spread product, take on limited duration risk, and generate the majority of outperformance from security selection and asset allocation. Short term dislocations may cause volatility in performance; however, long term the portfolio is expected to outperform the benchmark

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### Private Equity

Focus continues to be on building a high-quality vintage with experienced teams that have long-term track records. The fundraising cycle continues to move at a rapid pace, providing a number of actionable opportunities. The re-up pipeline continues to be full creating the need to be mindful of timing and selection regarding primary commitments. Liquidity options are being evaluated across the PE portfolio.

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### Real Estate

Real Estate fundamentals and supply dynamics remain strong in Industrial and Multifamily while traditional Office and Retail continue to tell a mixed story with winners and losers in terms of tenant demand. Cost of Real Estate debt is headed higher leading to rising capitalization rates. General economic concerns coupled with material shortages beginning to impact real estate values. Focus remain on durable well leased properties in high employment markets.

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### Alternatives

Real assets including infrastructure, agriculture and timber offer solid income in a low return environment and may benefit from rising inflation. Also, special situations in Europe and select Emerging Markets are becoming interesting due to rising volatility and macro uncertainty. Existing<sup>15</sup> distressed managers have substantial dry powder available to pursue value transactions in a risk off environment.